737-747 4TH AVENUE
BROOKLYN, NEW YORK
BLOCK 652, LOT 1

PHASE II
ENVIRONMENTAL SITE ASSESSMENT
(ASTM 1903-11)

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PWGC Project Number: TOT1802

AUGUST 2018

PHASE II ENVIRONMENTAL SITE ASSESSMENT
737-747 4TH AVENUE, BROOKLYN, NY

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ACRONYM	DEFINITION
ASP	Analytical Services Protocol
ASTM	American Society for Testing and Materials
CFR	Code of Federal Regulations
DER	Department of Environmental Remediation
ELAP	Environmental Laboratory Approval Program
EM	Electromagnetic
ESA	Environmental Site Assessment
GQS	Groundwater Quality Standard
GV	Guidance Value
NYCRR	New York Codes, Rules, and Regulations
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
PCB	Polychlorinated Biphenyl
PID	Photo-ionization Detector
PWGC	P.W. Grosser Consulting, Inc.
QA/QC	Quality Assurance / Quality Control
REC	Recognized Environmental Condition
SCO	Soil Cleanup Objective
SVOC	Semi-volatile Organic Compound
USCS	Unified Soil Classification System
USEPA	United States Environmental Protection Agency
UST	Underground Storage Tank
VOC	Volatile Organic Compound

1.0 INTRODUCTION

Totem Group, LLC (Client) retained P.W. Grosser Consulting, Inc. (PWGC) to prepare a Phase II Environmental Site Assessment (ESA) for the property located at 737-747 4th Avenue in Brooklyn NY. The purpose of the Phase II ESA was to further evaluate recognized environmental conditions (RECs) identified in the Phase I ESA to obtain sound, scientifically valid data concerning actual property conditions.

Work was conducted in accordance with the American Society for Testing and Materials (ASTM) Standard E 1903-11 (Standard Practices for Environmental Site Assessment: Phase II Environmental Site Assessment Process) and in substantial conformance with the New York State Department of Environmental Conservation's (NYSDEC's) Division of Environmental Remediation's (DER's) Technical Guidance for Site Investigation and Remediation, May 2010 (DER-10).

2.0 BACKGROUND

2.1 Site Description and Features

The subject property consists of one parcel located at 737-747 4th Avenue in the Greenwood Heights neighborhood of Brooklyn, NY. The property is identified in the Brooklyn Tax Map as Block 652, Lot 1. The subject property measures approximately 15,017 square feet and is improved with a Dunkin Donuts and an asphalt paved parking lot. A Site Location Map is included as **Figure 1** and a Site Plan is included as **Figure 2**.

2.2 Physical Setting

The topography of the site and surrounding area was reviewed from the USGS 7.5-minute series topographic map for the Brooklyn quadrangle. The property elevation is approximately 35 feet above the National Geodetic Vertical Datum (NGVD). Regional physiographic conditions are summarized below.

2.3 Site History and Land Use

Historical usage of the subject property indicates that it was first developed between 1906 and 1924 and used as a gasoline and auto repair service station up until at least 1997, was under construction from at least 2001 to 2003, and was used for commercial purposes from at least 2004 to 2015. Historical usage of the subject property is indicative of potential RECs because of the presence of gasoline tanks and an auto repair shop.

2.4 Adjacent Property Land Use

Review of historical information reviewed for the properties surrounding the subject property indicate that the area has been sparsely developed since at least 1888 and nearly fully developed since at least 1924. Surrounding properties have been used primarily as retail or industrial uses, including gasoline stations and electrical substations.

2.5 Summary of Previous Assessments

The subject property and neighboring properties have undergone several ESAs related to an open New York State Department of Environmental Conservation (NYSDEC) spill reported in 1993. Spill #93-05122 was opened when oil was observed seeping through the wall of the subway tunnel adjacent to the subject property. Each of these ESAs performed were conducted under the oversight of the NYSDEC and by their approved contractors; summaries of the ESAs are included in PWGC's Phase I ESA. There were approximately 25 monitoring wells installed on the subject property or on the adjacent sidewalk along 25th Street as part of these ESAs.

2.5.1 Phase I Environmental Site Assessment Report (March 2018)

A Phase I ESA was prepared for the subject property in March 2018 by PWGC. The Phase I ESA identified the following RECs associated with subject property:

- The site was historically utilized as a gasoline service station and auto repair shop for approximately 8 decades. This long history of usage has resulted in the site's inclusion in several environmental databases and the installation of numerous monitoring wells throughout the subject property and surrounding areas related to an active spill being investigated and remediated by the NYSDEC. Information from the NYSDEC indicates that there was likely some minor gasoline contamination in the soils beneath the site and that there is gasoline contamination in the groundwater beneath the site. It is unlikely that the plume of oil associated with spill #93-05122 originated from the subject property; however, there is the potential that the gasoline impact in the groundwater is originating from the subject property and/or other nearby properties. The presence of gasoline contamination beneath the site is considered a REC.
- The two closed on-site spill numbers appeared to be minimal in nature and actual spills or leaks of significant product was not identified. Due to the closed status of these spills, they are HRECs.
- Several off-site properties have been identified that have the potential to affect environmental conditions beneath the subject property related to the migration of groundwater and soil vapor beneath the subject property, most notably in the form of spill #93-05122. Due to the open status of these spills and their known migration onto the subject property, their presence is considered a REC.

The Phase I ESA recommended that a Phase II ESA be performed at subject property.

3.0 WORK PERFORMED AND RATIONALE

3.1 Scope of Assessment

The Phase II ESA included the following tasks:

- Soil Quality Evaluation
- Groundwater Quality Evaluation

3.2 Soil Quality Evaluation

To characterize soil quality, soil borings were installed throughout the subject property. This work was conducted on May 24, 2018. Boring locations were focused in areas of potential concern as identified by the Phase I ESA. A total of seven soil borings were installed during the investigation. Soil boring locations are illustrated on **Figure 3**. **Figure 3** also includes the approximate locations of the former tank field and pump island.

3.2.1 Soil Boring Protocol

Coastal Environmental Solutions, Inc. of Medford, NY provided environmental drilling services during the investigation. A Geoprobe 6610 drill rig was utilized to install the environmental soil borings. Prior to performing each soil boring, 10-mil polyethylene sheeting, sufficiently large to hold the anticipated number of soil cores was laid on the ground in the area where each soil boring was performed.

Soils were collected continuously from ground surface to an approximate depth of 25 feet below surface grade.

The soil cores were placed on the 10-mil polyethylene sheeting in the order they came out of the ground. The acetate liners were cut open and the soil core was screened for the presence of volatile organic vapors, which are commonly associated with petroleum products and industrial solvents, utilizing a photo-ionization detector (PID). Each soil core was classified by a hydrogeologist using the Unified Soil Classification System (USCS). A soil boring log was developed for each location (**Appendix A**) and includes the characterization and screening data.

Soils generally consisted of historic fill material in the first 2 to 5 feet of the boring with medium to fine grained sands at deeper depths. Groundwater was encountered around 22 feet in each boring. The lowest PID readings were obtained in soil borings SB005, SB006, and SB007 – these borings are located in the northern and eastern portions of the property. PID readings for the borings located in the western and southern portions of the property (SB001 through SB004) were low through most of the vadose zone, but higher readings were obtained closer to the water table with the highest reading obtained from SB003 at 500 ppm at the water table. Petroleum

odors were observed in borings SB001 through SB004 that followed the PID readings with stronger odors observed closer to the water table.

3.2.2 Sample Collection Protocol

Since gross impact was not observed in the vadose zone in the seven soil borings, samples were collected from the 2 foot interval above the groundwater table. Samples were analyzed for the following chemical analysis:

- Volatile Organic Compounds (VOCs) by United States Environmental Protection Agency (USEPA) Method 8260, CP-51 list
- Semi-Volatile Organic Compounds (SVOCs) by USEPA Method 8270, CP-51 list

The samples were limited to the CP-51 lists of compounds as this list specifically targets compounds related to gasoline and fuel oil. Samples collected for volatile organic analysis were collected directly from the acetate liners utilizing encore sampling devices. The remaining sample volumes were transferred to a stainless-steel bowl and homogenized. Once homogenized, samples were transferred to laboratory supplied glassware and packed in a cooler with ice and shipped under proper chain-of-custody procedures to Alpha Analytical Laboratories of Westborough, Massachusetts (Alpha), a New York State Department of Health (NYSDOH) Environmental Laboratory Approval Program (ELAP) certified laboratory, for the above analysis following NYSDEC Analytical Services Protocol (ASP)-Category A Deliverables.

3.2.3 Soil Analytical Results

Soil analytical results were compared to the NYSDEC's Title 6 New York Codes, Rules, and Regulations (NYCRR) Part 375 and Final Commissioner Policy, CP-51 Soil Cleanup Levels (SCOs) for fuel oil contaminated sites.

VOCs were detected at concentrations exceeding CP-51 SCOs in two of the soil borings, SB002 and SB004, which are located closest to 25th Street with the highest concentrations observed in SB004 (total VOC [TVOC] concentration of 247.8 mg/kg). According to the historic ESAs, groundwater flow direction is towards the north or northwest, indicating that SB004 is located on the up-gradient side of the property. Benzene was non-detect or contained an estimated concentration less than the reporting limit in each of the samples.

SVOCs were non-detect or less than CP-51 SCOs in each of the seven soil samples.

Analytical results are detailed in **Table 1** and the complete laboratory analytical report is included in **Appendix B**. **Figure 3** contains a spider diagram of VOC exceedances of CP-51 SCOs.

3.3 Groundwater Quality Evaluation

To characterize groundwater quality, groundwater samples were collected throughout the subject property. Groundwater sampling locations were focused in areas of potential concern as identified by the Phase I ESA and were collected from the previously installed monitoring wells. A total of ten groundwater samples were collected during the investigation. Eight of the groundwater samples were collected on April 6, 2018 and based upon those results, two additional groundwater samples were collected on May 24, 2018. Groundwater sampling locations are illustrated on **Figure 3**. The monitoring wells that were selected were in areas of concern, such as near the former tank field and pump island, areas where light non-aqueous phase liquid (LNAPL) had been encountered during the NYSDEC's investigations, and up-gradient and down-gradient of the site to determine general groundwater quality migrating on-site and off-site.

3.3.1 Sampling Collection Protocol

Prior to sampling, groundwater monitoring of the wells consisted of collecting and recording depth to water, depth to LNAPL if applicable, and total well depth measurements for the selected monitoring wells at the site. Water levels were collected using a Solinst Oil / Water Interface Probe or equivalent which was decontaminated between each well. LNAPL was detected in three of the monitoring wells: MW-8, MW-8A, and MW-31. Wells MW-8 and MW-8A are located in the sidewalk along 25th Street and MW-31 is located on the up-gradient side of the property. LNAPL thicknesses were between 0.85 feet and 1.42 feet and consisted of oil. Groundwater field data is detailed on **Table 2**.

Following the well gauging, wells were purged using a decontaminated submersible pump fitted with disposal polyethylene tubing. During purging, the groundwater parameters pH, temperature, conductivity, oxygen reduction potential (ORP), turbidity, and dissolved oxygen were recorded with a Horiba U52 water quality instrument. When purging was complete, the Horiba was disconnected and the groundwater sample was collected directly from the downhole tubing and placed in pre-cleaned laboratory-supplied glassware and stored in a cooler on ice for transport to Alpha. Groundwater samples were analyzed for the following:

- VOCs by USEPA Method 8260, CP-51 list
- SVOCs by USEPA Method 8270, CP-51 list

Copies of the groundwater sampling data sheets containing the field parameters recorded and purge volumes for each sampling point are attached in **Appendix C**.

3.3.2 Groundwater Analytical Results

Groundwater analytical results were compared to NYSDEC groundwater quality standards (GQS) / guidance values (GVs) specified in 6 NYCRR Part 703.

Monitoring wells MW-1, MW-3, MW-80, MW-81, and MW-90 were each non-detect for VOCs. Each of these wells is located on the north or eastern side of the property. MW-1, MW-3, and MW-80 are located down-gradient of the former tank field and/or the former pump island. MW-89 is also in the vicinity of the former pump island and contained minor VOC detections at concentrations less than GQS. Wells MW-84, MW-94, MW-6, and MW-86 each contained exceedances of at least one VOC GQS with MW-94 containing the highest concentrations (TVOC concentration of 1,077 µg/L). MW-94 is located on the up-gradient side of the property; MW-84 is located down-gradient of MW-94 and contains a benzene concentration of 300 µg/L which is an order of magnitude higher than the detectable benzene concentrations in the other samples.

There were several SVOCs detected at low level concentrations exceeding GQS in each sample except the one from MW-94; an elevated concentration of Naphthalene in MW-94 raised the reporting limits for each of the compounds in MW-94 to levels higher than most of the detectable concentrations in the other samples. Naphthalene is a compound that exhibits characteristics of both VOCs and SVOCs; the detected concentration in the SVOC sample is similar to the detected concentration in the VOC sample.

Analytical results are detailed in **Table 3** and the complete laboratory analytical report is included in **Appendix B**. **Figure 3** contains a spider diagram of VOC exceedances of GQS.

4.0 CONCLUSIONS

Based upon the recommendations of a March 2018 Phase I ESA prepared by PWGC, a Phase II was conducted. The Phase II ESA included an evaluation of soil and groundwater quality. The field work was conducted between April and May 2018.

Seven soil borings were conducted on-site. PID readings and olfactory observations indicated that impact was not observed in the vadose zone, but higher readings and stronger odors were obtained closer to the groundwater table. The highest PID readings were obtained at the groundwater table and in the borings closest to the up-gradient side of the property. VOCs were detected at concentrations exceeding CP-51 SCOs in two of the soil borings, SB002 and SB004, which are located closest to 25th Street with the highest concentrations observed in SB004 (TVOC concentration of 247.8 mg/kg). SVOC impact was not identified.

Ten previously installed groundwater monitoring wells were gauged and sampled. LNAPL was observed in three of the wells located on the up-gradient side of the property or on the adjacent sidewalk, measuring between 0.85 feet and 1.42 feet and consisting of oil. Groundwater analytical results indicated that VOC impact to the groundwater is limited to the up-gradient portion of the property and SVOC impact is observed site-wide at low level concentrations exceeding the GQS.

As NYSDEC indicated that they are in the process of closing Spill #93-05122, PWGC recommends no further action at this time.

5.0 SIGNATURE OF ENVIRONMENTAL PROFESSIONAL

I declare that, to the best of my professional knowledge and belief, I meet the definition of Environmental Professional as defined in Section 312.10 of 40 CFR 312. I have the specific qualifications based on education, training and experience to assess a property of the nature, history and setting of the subject property. I have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR 312.

Jennifer Lewis, PG
Senior Project Manager

James P. Rhodes, PG
COO

Report Completion Date: August 2, 2018

6.0 REFERENCES

6 NYCRR Part 375 Environmental Remediation Programs Subparts 375-1 to 375-4 & 375-6.

6 NYCRR Part 703 Surface Water and Groundwater Quality Standards and Groundwater Effluent Limitations.

CP-51 / Soil Cleanup Guidance.

DER-10 / Technical Guidance for Site Investigation and Remediation.

Standard practice for Environmental Site Assessments: Phase II Environmental Site Assessment Process, ASTM Standard E 1903-11.

PWGC, Phase I ESA, March 2018.

7.0 LIMITATIONS

The conclusions presented in this report are professional opinions based on the data described in this report. These opinions have been arrived at in accordance with currently accepted engineering and hydrogeologic standards and practices applicable to this location, and are subject to the following inherent limitations:

1. The data presented in this report are from visual inspections and examination of records prepared by others. The passage of time, manifestation of latent conditions, or occurrence of future events may require further exploration of the site, analysis of data, and re-evaluation of the findings, observations, and conclusions presented in this report.
2. The data reported and the findings, observations, and conclusions expressed are limited by the scope of work. The scope of work was defined by the request of the client.
3. No warranty or guarantee, whether expressed or implied, is made with respect to the data reported, findings, observations, or conclusions. These are based solely upon site conditions in existence at the time of the investigation, and other information obtained and reviewed by PWGC.
4. The conclusions presented in this report are professional opinions based on data described in this report. They are intended only for the purpose, site location, and project indicated. This report is not a definitive study of contamination at the site and should not be interpreted as such.
5. This report is based, in part, on information supplied to PWGC by third-party sources. While efforts have been made to substantiate this third-party information, PWGC cannot attest to the completeness or accuracy of information provided by others.

FIGURES

VICINITY MAP

737-747 4TH AVE
BROOKLYN, NY

0 ¼ ½ ¾ 1 Miles

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Project:	TOT1801
Date:	2/16/2018
Designed by:	LS
Drawn by:	JCG
Approved by:	LS
Figure No:	1

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DRAWING PREPARED FOR:

REVISION	DATE	INITIAL	COMMENTS

DRAWING INFORMATION:

Project:	TOT1802	Designed by:	LS
Date:	8/2/2018	Drawn by:	TS
Scale:	AS SHOWN	Approved by:	LS

SITE PLAN WITH EXISTING MONITORING WELL LOCATIONS

737-747 4TH AVE
BROOKLYN, NY

FIGURE NO:
2

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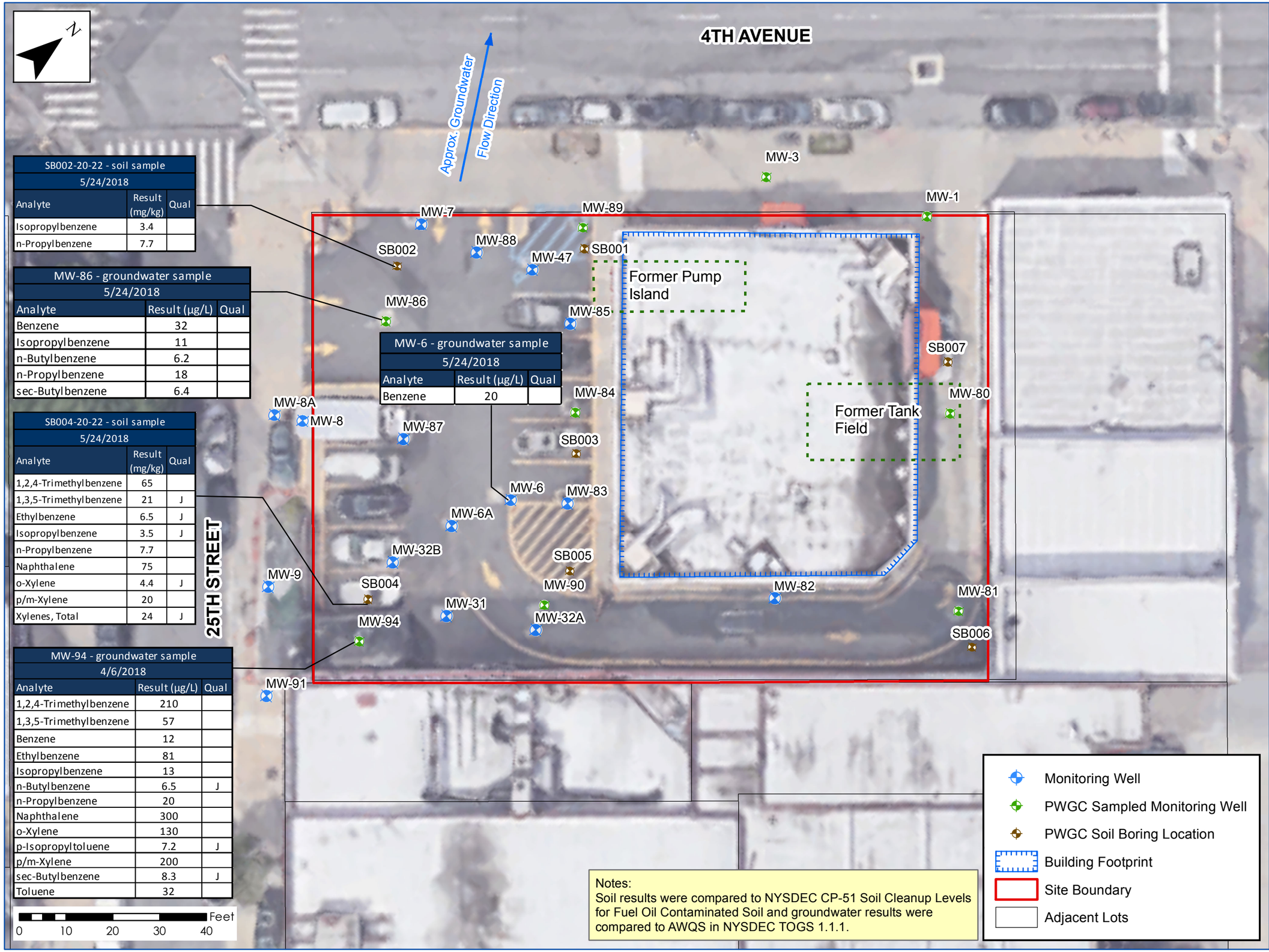

SB002-20-22 - soil sample		
5/24/2018		
Analyte	Result (mg/kg)	Qual
Isopropylbenzene	3.4	
n-Propylbenzene	7.7	

MW-86 - groundwater sample		
5/24/2018		
Analyte	Result (µg/L)	Qual
Benzene	32	
Isopropylbenzene	11	
n-Butylbenzene	6.2	
n-Propylbenzene	18	
sec-Butylbenzene	6.4	

MW-6 - groundwater sample		
5/24/2018		
Analyte	Result (µg/L)	Qual
Benzene	20	

SB004-20-22 - soil sample		
5/24/2018		
Analyte	Result (mg/kg)	Qual
1,2,4-Trimethylbenzene	65	
1,3,5-Trimethylbenzene	21	J
Ethylbenzene	6.5	J
Isopropylbenzene	3.5	J
n-Propylbenzene	7.7	
Naphthalene	75	
o-Xylene	4.4	J
p/m-Xylene	20	
Xylenes, Total	24	J

MW-94 - groundwater sample		
4/6/2018		
Analyte	Result (µg/L)	Qual
1,2,4-Trimethylbenzene	210	
1,3,5-Trimethylbenzene	57	
Benzene	12	
Ethylbenzene	81	
Isopropylbenzene	13	
n-Butylbenzene	6.5	J
n-Propylbenzene	20	
Naphthalene	300	
o-Xylene	130	
p-Isopropyltoluene	7.2	J
p/m-Xylene	200	
sec-Butylbenzene	8.3	J
Toluene	32	

Monitoring Well
PWGC Sampled Monitoring Well
PWGC Soil Boring Location
Building Footprint
Site Boundary
Adjacent Lots

Notes:
Soil results were compared to NYSDEC CP-51 Soil Cleanup Levels for Fuel Oil Contaminated Soil and groundwater results were compared to AWQS in NYSDEC TOGS 1.1.1.

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SITE PLAN
VOC EXCEEDANCES
737-747 4TH AVE
BROOKLYN, NY

FIGURE NO:
3

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TABLES

TABLE 1
Soil Analytical Data
VOC and SVOC CP-51

737-747 4th Avenue, Brooklyn, NY

Client Sample ID: Sample Depth: Laboratory ID: Sampling Date:	NYSDEC (1) CP-51 Soil Cleanup Levels	SB001 20-22' L1819421-01 5/24/2018	SB002 20-22' L1819421-02 5/24/2018	SB003 20-22' L1819421-03 5/24/2018	SB004 20-22' L1819421-04 5/24/2018	SB005 20-22' L1819421-05 5/24/2018	SB006 20-22' L1819421-06 5/24/2018	SB007 20-22' L1819421-07 5/24/2018
Volatile Organic Compounds (mg/kg)								
1,2,4-Trimethylbenzene	3.6	0.048 U	0.25 U	0.027 U	65	0.17	0.0046	0.00016 U
1,3,5-Trimethylbenzene	8.4	0.041 U	0.22 U	0.023 U	21 J	0.0086	0.0014 J	0.00013 U
Benzene	0.06	0.049 U	0.26 U	0.028 U	1.4 U	0.00021 U	0.00037 J	0.00016 U
Ethylbenzene	1.0	0.044 U	0.23 U	0.024 U	6.5 J	0.00071 J	0.00034 J	0.00014 U
Isopropylbenzene	2.3	0.52	3.4	0.049 J	3.5 J	0.017	0.00086	0.00016 U
Methyl tert butyl ether	0.93	0.039 U	0.21 U	0.022 U	1.1 U	0.00017 U	0.00012 U	0.00013 U
n-Butylbenzene	12	1.2	11	0.045 J	8.4	0.00025 U	0.003	0.00019 U
n-Propylbenzene	3.9	1.1	7.7	0.11 J	7.7	0.033	0.002	0.00018 U
Naphthalene	12	0.32 J	1.5 J	0.24 J	75	0.016 J	0.032	0.00016 J
o-Xylene	0.26	0.086 U	0.46 U	0.048 U	4.4 J	0.00037 U	0.00028 U	0.00028 U
p-Isopropyltoluene	10	0.052 U	0.38 J	0.034 J	5.7 J	0.037	0.00087	0.00017 U
p/m-Xylene	0.26	0.09 U	0.48 U	0.05 U	20	0.0031	0.00075 J	0.00029 U
sec-Butylbenzene	11	0.81	8.2	0.1 J	6.6 J	0.052	0.0015	0.00018 U
tert-Butylbenzene	5.9	0.11 J	0.91 J	0.035 U	1.8 U	0.011	0.00022 J	0.0002 U
Toluene	0.7	0.05 U	0.26 U	0.028 U	1.4 U	0.00021 U	0.00042 J	0.0002 J
Xylenes, Total	0.26	0.086 U	0.46 U	0.048 U	24 J	0.0031	0.00075 J	0.00028 U
Semi-Volatile Organic Compounds (mg/kg)								
Acenaphthene	20	0.32	4	0.96	6.2	0.23	0.019 U	0.019 U
Acenaphthylene	100	0.031 U	0.32 U	0.029 U	0.15 U	0.033 U	0.028 U	0.028 U
Anthracene	100	0.13	1.3	0.43	2	0.095 J	0.035 U	0.036 U
Benzo(a)anthracene	1	0.073 J	0.23 U	0.021 U	0.11 U	0.024 U	0.02 U	0.021 U
Benzo(a)pyrene	1	0.054 J	0.5 U	0.046 U	0.24 U	0.052 U	0.044 U	0.045 U
Benzo(b)fluoranthene	1	0.12	0.34 U	0.032 U	0.16 U	0.036 U	0.03 U	0.031 U
Benzo(ghi)perylene	100	0.046 J	0.24 U	0.022 U	0.11 U	0.025 U	0.021 U	0.022 U
Benzo(k)fluoranthene	0.8	0.032 U	0.33 U	0.03 U	0.16 U	0.034 U	0.029 U	0.029 U
Chrysene	1	0.1 J	0.21 U	0.02 U	0.1 U	0.022 U	0.02 J	0.019 U
Dibenzo(a,h)anthracene	0.33	0.023 U	0.24 U	0.022 U	0.11 U	0.024 U	0.021 U	0.021 U
Fluoranthene	100	0.21	0.26 J	0.057 J	0.31 J	0.024 U	0.033 J	0.021 U
Fluorene	30	0.59	8.3	1.7	12	0.45	0.019 J	0.018 U
Indeno(1,2,3-cd)pyrene	0.5	0.053 J	0.28 U	0.026 U	0.14 U	0.03 U	0.025 U	0.026 U
Phenanthrene	100	1.2	16	3.1	22	0.93	0.052 J	0.022 U
Pyrene	100	0.21	1 J	0.2	1.3	0.062 J	0.029 J	0.018 U

Notes:
(1) NYSDEC CP-51 Soil Cleanup Guidance, Table 3, dated Oct 2010.
U - The analyte was analyzed for, but was not detected above the reported sample quantification limit.
J - The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
Highlighted text denotes concentrations exceeding NYSDEC CP-51 SCO

TABLE 2
Well Monitoring Field Data

737-747 4th Ave, Brooklyn, NY

Well Designation	Date	Depth to Product (ft bmp)	Depth to Water (ft bmp)	Depth to Bottom (ft bmp)	Product Thickness (ft)
MW-32A	4/6/2018	NP	23.29	25.5	0.00
MW-31	4/6/2018	23.56	24.64	36.2	1.08
MW-32B	4/6/2018	NP	22.02	23.2	0.00
MW-87	4/6/2018	NP	22.15	33.8	0.00
MW-8	4/6/2018	21.40	22.82	32.0	1.42
MW-8A	4/6/2018	22.61	23.46	30.5	0.85
MW-9	4/6/2018	NP	23.60	28.9	0.00
MW-6	5/24/2018	NP	22.15	33.0	0.00
MW-86	5/24/2018	NP	22.76	NM	0.00

TABLE 3
Groundwater Sample Data
VOCs and SVOCs

737-747 4th Ave, Brooklyn, NY

LOCATION SAMPLING DATE LAB SAMPLE ID	NYSDEC AWQS[1]	MW-1 4/6/2018 L1812045-01	MW-3 4/6/2018 L1812045-02	MW-80 4/6/2018 L1812045-03	MW-81 4/6/2018 L1812045-04	MW-84 4/6/2018 L1812045-05	MW-89 4/6/2018 L1812045-06	MW-90 4/6/2018 L1812045-07	MW-94 4/6/2018 L1812045-08	MW-6 5/24/2018 L1819421-08	MW-86 5/24/2018 L1819421-09
Volatile Organic Compounds by USEPA method 8260 in µg/L											
1,2,4-Trimethylbenzene	5	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	210	0.7 U	0.7 U
1,3,5-Trimethylbenzene	5	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	57	0.7 U	0.7 U
Benzene	1	0.5 U	0.5 U	0.5 U	0.5 U	300	0.33 J	0.5 U	12	20	32
Ethylbenzene	5	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	81	0.7 U	0.7 U
Isopropylbenzene	5	2.5 U	2.5 U	2.5 U	2.5 U	2.4 J	2.6	2.5 U	13	3.7	11
Methyl tert butyl ether	10	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U	0.76 J	2.5 U	10 U	1.5 J	0.75 J
n-Butylbenzene	5	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	6.5 J	0.7 U	6.2
n-Propylbenzene	5	2.5 U	2.5 U	2.5 U	2.5 U	2.9 J	1.4 J	2.5 U	20	3.3	18
Naphthalene	10	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	300	0.99 J	2.2 J
o-Xylene	5	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	130	1.5 J	0.7 U
p-Isopropyltoluene	5	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	7.2 J	0.7 U	0.7 U
p/m-Xylene	5	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	200	0.7 U	0.7 U
sec-Butylbenzene	5	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U	1.3 J	2.5 U	8.3 J	1.4 J	6.4
tert-Butylbenzene	5	2.5 U	2.5 U	2.5 U	2.5 U	6.2 U	2.5 U	2.5 U	10 U	0.8 J	1.4 J
Toluene	5	2.5 U	2.5 U	2.5 U	2.5 U	3.6 J	2.5 U	2.5 U	32	0.9 J	0.7 U
Semi-Volatile Organic Compounds by USEPA method 8270 in µg/L											
Acenaphthene	20	0.1 U	0.12	1 U	0.1 U	1.4	1.9	1.4	9.1	3.2	5
Acenaphthylene	NS	0.1 U	0.1 U	1 U	0.1 U	0.1 U	0.1 U	0.21	3.2	0.69	0.03 U
Anthracene	50	0.1 U	0.1 U	1.3	0.1 U	0.61	0.16	0.13	2	0.43	1.3
Benz(a)anthracene	0.002	0.14	0.04 J	18	0.14	0.78	0.07 J	0.2	0.5 U	0.03 J	0.05 J
Benzo(a)pyrene	ND	0.18	0.05 J	24	0.3	0.61	0.08 J	0.15	0.5 U	0.04 U	0.05 J
Benzo(b)fluoranthene	0.002	0.44	0.14	62	0.84	2.3	0.32	0.52	0.5 U	0.09 J	0.11
Benzo(ghi)perylene	NS	0.23	0.1	29	1	0.83	0.16	0.23	0.5 U	0.04 U	0.04 U
Benzo(k)fluoranthene	0.002	0.13	0.1 U	19	0.19	0.49	0.08 J	0.12	0.5 U	0.04 U	0.04 U
Chrysene	0.002	0.19	0.08 J	43	0.34	1.6	0.23	0.4	0.5 U	0.08 J	0.11
Dibenzo(a,h)anthracene	NS	0.1 U	0.1 U	6.5	0.14	0.18	0.1 U	0.04 J	0.5 U	0.04 U	0.04 U
Fluoranthene	50	0.29	0.07 J	60	0.37	2.6	0.27	0.84	0.37 J	0.12	0.21
Fluorene	50	0.1 U	0.1 U	0.72 J	0.1 U	2.3	2.2	1.8	16	4.2	6.8
Indeno(1,2,3-cd)Pyrene	0.002	0.18	0.07 J	32	0.72	0.72	0.12	0.19	0.5 U	0.04 U	0.04 U
Naphthalene	10	0.1 U	0.1 U	1 U	0.1 U	0.74	0.1 U	0.06 J	130	NA	NA
Phenanthrene	50	0.1 U	0.1 U	4.9	0.13	4.2	0.56	0.08 J	25	3.2	9.5
Pyrene	50	0.24	0.07 J	38	0.31	2	0.25	0.61	1.4	0.32	0.82

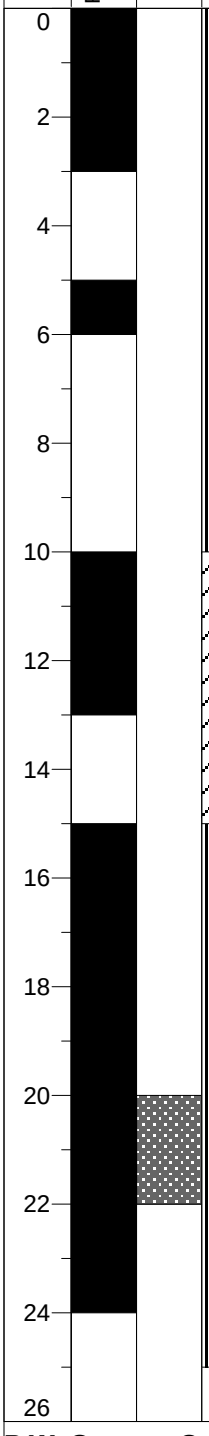
Notes:
1 - Ambient Water Quality Standards (AWQS), NYSDEC TOGS 1.1.1
Shaded text indicates exceedance of the NYDEC AWQS
U - Not detected at the reported detection limit for the sample.
J - Estimated value
ND - Non-detectable
NS - No standard established
NA - Not analyzed

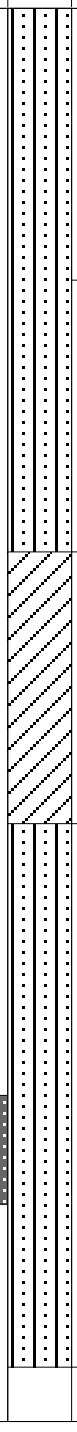
APPENDIX A
SOIL BORING LOGS

PROJECT #:	TOT1802
SITE ADDRESS:	737-747 4th Avenue, Brooklyn, NY
BORING ID:	SB001
WELL ID:	N/A
DRILLING CONTRACTOR:	Coastal Environmental Solutions, Inc.
DRILLING METHOD:	Direct Push
DRILLING EQUIPMENT:	Geoprobe 6610
SAMPLING METHOD:	Macrocore

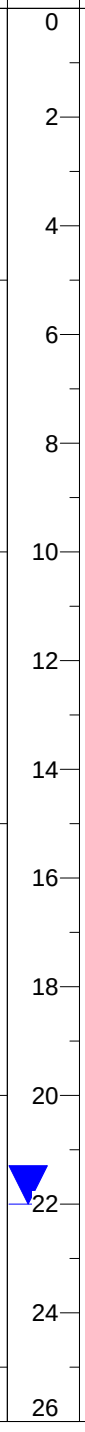
PWGC
Strategic Environmental Engineering Solutions

BORING DEPTH (FT): 25	CORE LENGTH (FT): 5
BORING DIAMETER (IN): 2	WELL DIAMETER (IN): N/A
DATE STARTED: 05/24/2018	DATE FINISHED: 05/24/2018
TIME STARTED: 08:00	TIME FINISHED: 08:30
LATITUDE: N/A	LONGITUDE: N/A
PROJECT MANAGER: Jennifer Lewis	LOGGED BY: Nick Russell





DESCRIPTION NAME (USCS): color, moist, plasticity, gravel, odor	PID Reading (ppm)
Sand - Medium to Fine - broken concrete and rocks	0.3
Sand - Medium to Fine	2.1
Sand - Clay Mixtures	2.5
Sand - Silt Mixtures	3.1
	56.5



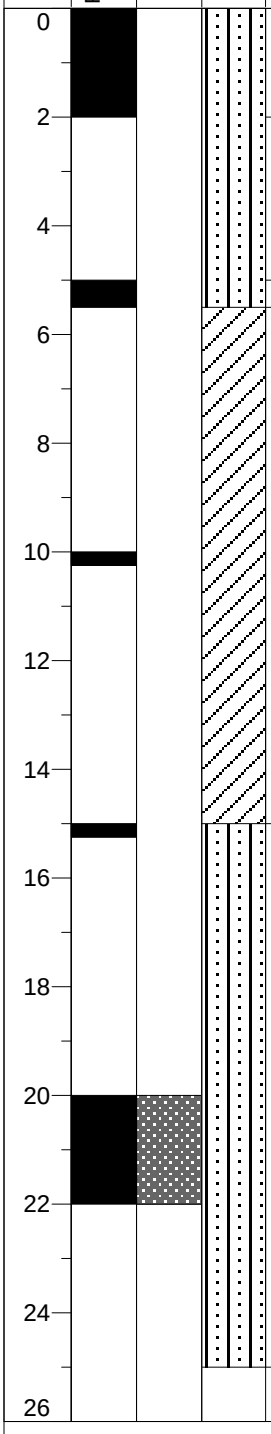
WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS

P.W. Grosser Consulting	**End of Boring Depth (feet):** 25	**Water Table Symbol:** ▼	Page 1 of 1

PROJECT #:	TOT1802
SITE ADDRESS:	737-747 4th Avenue, Brooklyn, NY
BORING ID:	SB002
WELL ID:	N/A
DRILLING CONTRACTOR:	Coastal Environmental Solutions, Inc.
DRILLING METHOD:	Direct Push
DRILLING EQUIPMENT:	Geoprobe 6610
SAMPLING METHOD:	Macrocore

PWGC
Strategic Environmental Engineering Solutions

BORING DEPTH (FT): 25	CORE LENGTH (FT): 5
BORING DIAMETER (IN): 2	WELL DIAMETER (IN): N/A
DATE STARTED: 05/24/2018	DATE FINISHED: 05/24/2018
TIME STARTED: 08:40	TIME FINISHED: 09:00
LATITUDE: N/A	LONGITUDE: N/A
PROJECT MANAGER: Jennifer Lewis	LOGGED BY: Nick Russell



DESCRIPTION NAME (USCS): color, moist, plasticity, gravel, odor	PID Reading (ppm)
Brick, concrete & rock fill	1.1
Tight, compact fines	2.1
Brick. concrete & rocks	2.1
Sand, clay mixtures - tightly compacted, strong odor	2.1
	39
Loose, compact medium fines - odor detected	37.2
	152

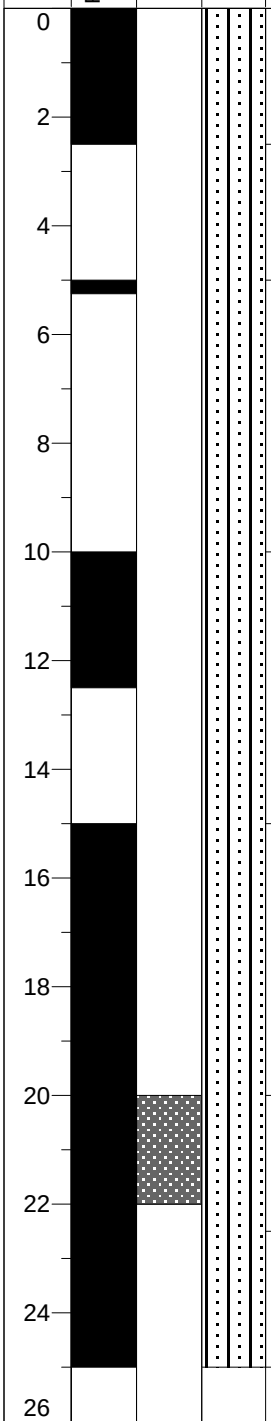
DEPTH (feet): 0, 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26

WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS

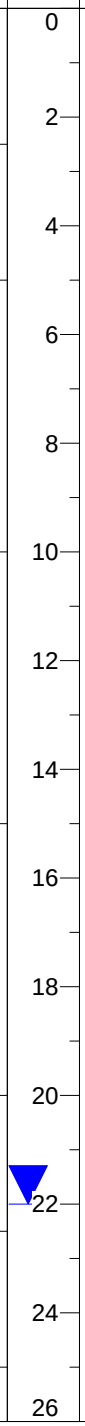
PROJECT #:	TOT1802
SITE ADDRESS:	737-747 4th Avenue, Brooklyn, NY
BORING ID:	SB003
WELL ID:	N/A
DRILLING CONTRACTOR:	Coastal Environmental Solutions, Inc.
DRILLING METHOD:	Direct Push
DRILLING EQUIPMENT:	Geoprobe 6610
SAMPLING METHOD:	Macrocore

PWGC
Strategic Environmental Engineering Solutions

BORING DEPTH (FT): 25	CORE LENGTH (FT): 5
BORING DIAMETER (IN): 2	WELL DIAMETER (IN): N/A
DATE STARTED: 05/24/2018	DATE FINISHED: 05/24/2018
TIME STARTED: 09:05	TIME FINISHED: 09:20
LATITUDE: N/A	LONGITUDE: N/A
PROJECT MANAGER: Jennifer Lewis	LOGGED BY: Nick Russell



DESCRIPTION NAME (USCS): color, moist, plasticity, gravel, odor	PID Reading (ppm)
Brick, concrete & rock	0.5
Tightly compacted, moist fines	0.5
Brick, concrete & rock	0.5
Tightly compacted, dry fines	0.5
Loose fines - some medium fines	35
Dry, loose, compacted, blackish sands	109
Tightly compacted, moist fines	500

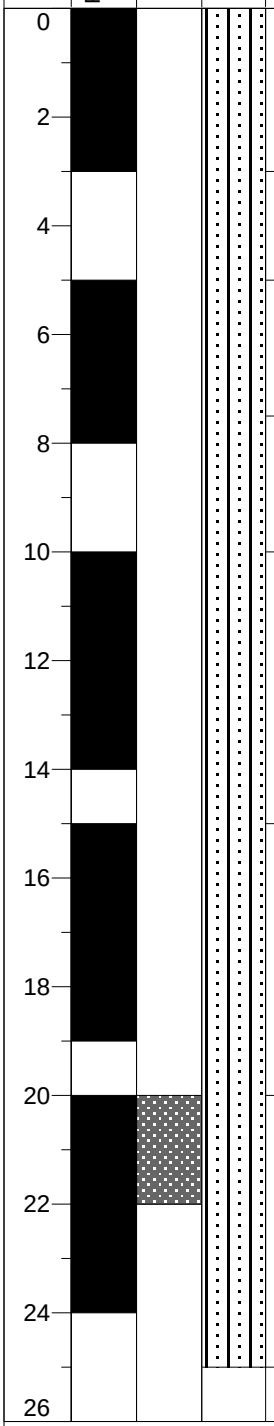


WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS

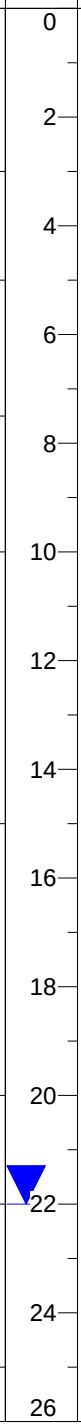
PROJECT #:	TOT1802
SITE ADDRESS:	737-747 4th Avenue, Brooklyn, NY
BORING ID:	SB004
WELL ID:	N/A
DRILLING CONTRACTOR:	Coastal Environmental Solutions, Inc.
DRILLING METHOD:	Direct Push
DRILLING EQUIPMENT:	Geoprobe 6610
SAMPLING METHOD:	Macrocore

PWGC
Strategic Environmental Engineering Solutions

BORING DEPTH (FT): 25	CORE LENGTH (FT): 5
BORING DIAMETER (IN): 2	WELL DIAMETER (IN): N/A
DATE STARTED: 05/24/2018	DATE FINISHED: 05/24/2018
TIME STARTED: 09:25	TIME FINISHED: 09:50
LATITUDE: N/A	LONGITUDE: N/A
PROJECT MANAGER: Jennifer Lewis	LOGGED BY: Nick Russell



DESCRIPTION NAME (USCS): color, moist, plasticity, gravel, odor	PID Reading (ppm)
Brick, concrete & rock	4.2
Medium fines with some reddish sand	4.2
Tightly compacted, dry fines	14.6
Firm, compacted, dry, medium fines	10.1
Tightly compacted dry fines	56.2
Firm, medium, dry fines	34.9
Moist, tightly compacted fines	148
	167

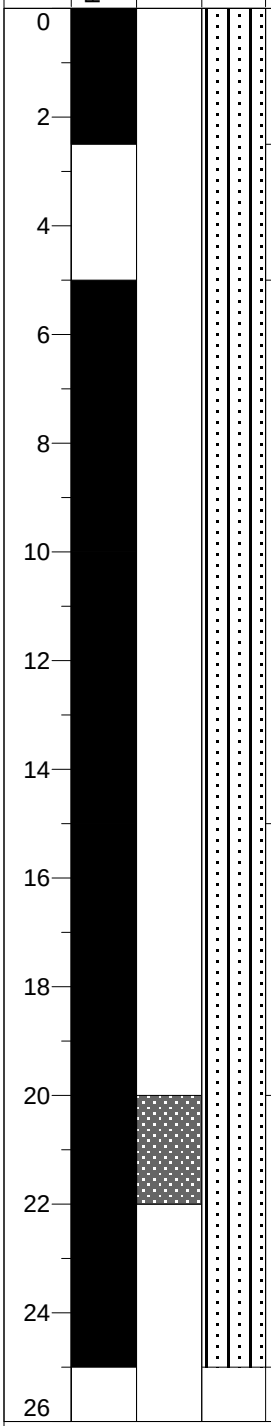


WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS

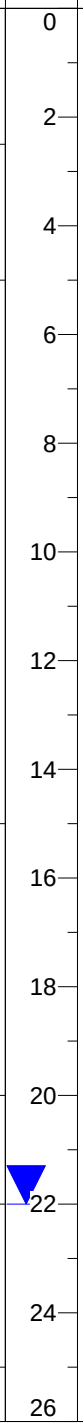
PROJECT #:	TOT1802
SITE ADDRESS:	737-747 4th Avenue, Brooklyn, NY
BORING ID:	SB005
WELL ID:	N/A
DRILLING CONTRACTOR:	Coastal Environmental Solutions, Inc.
DRILLING METHOD:	Direct Push
DRILLING EQUIPMENT:	Geoprobe 6610
SAMPLING METHOD:	Macrocore

PWGC
Strategic Environmental Engineering Solutions

BORING DEPTH (FT): 25	CORE LENGTH (FT): 5
BORING DIAMETER (IN): 2	WELL DIAMETER (IN): N/A
DATE STARTED: 05/24/2018	DATE FINISHED: 05/24/2018
TIME STARTED: 09:55	TIME FINISHED: 10:15
LATITUDE: N/A	LONGITUDE: N/A
PROJECT MANAGER: Jennifer Lewis	LOGGED BY: Nick Russell



DESCRIPTION NAME (USCS): color, moist, plasticity, gravel, odor	PID Reading (ppm)
Brick, concrete & rock fill	0.9
Tight, compact fines	0.9
Firm, medium, dry fines	0.9
Tight, compact fines	0.9
Moist, compact fines	30.2
	2.3



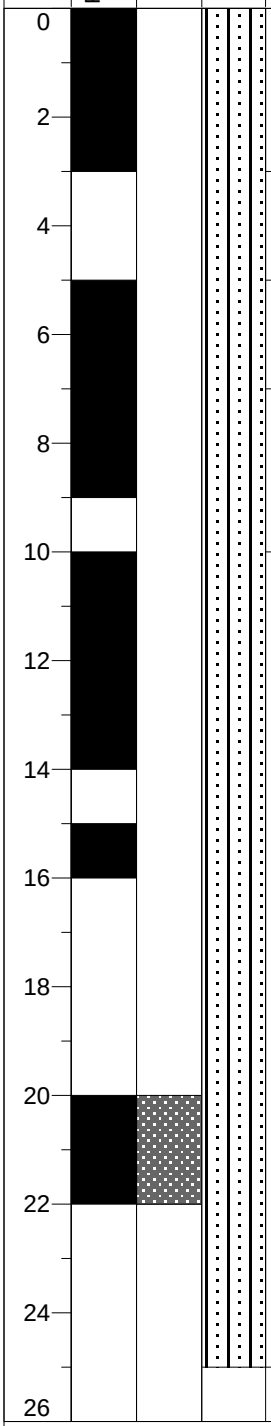
WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS

P.W. Grosser Consulting | **End of Boring Depth (feet):** 25 | **Water Table Symbol:** ▼ |

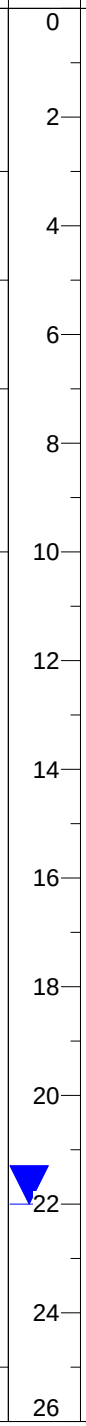
PROJECT #:	TOT1802
SITE ADDRESS:	737-747 4th Avenue, Brooklyn, NY
BORING ID:	SB006
WELL ID:	N/A
DRILLING CONTRACTOR:	Coastal Environmental Solutions, Inc.
DRILLING METHOD:	Direct Push
DRILLING EQUIPMENT:	Geoprobe 6610
SAMPLING METHOD:	Macrocore

PWGC
Strategic Environmental Engineering Solutions

BORING DEPTH (FT): 25	CORE LENGTH (FT): 5
BORING DIAMETER (IN): 2	WELL DIAMETER (IN): N/A
DATE STARTED: 05/24/2018	DATE FINISHED: 05/24/2018
TIME STARTED: 10:25	TIME FINISHED: 10:45
LATITUDE: N/A	LONGITUDE: N/A
PROJECT MANAGER: Jennifer Lewis	LOGGED BY: Nick Russell



DESCRIPTION NAME (USCS): color, moist, plasticity, gravel, odor	PID Reading (ppm)
Brick, concrete & rock fill	1.2
Tight, compact fines, moist	0.9
Medium fines with some reddish sand	0.9
Medium fines	0.5
Medium fines with some reddish sand	1.1

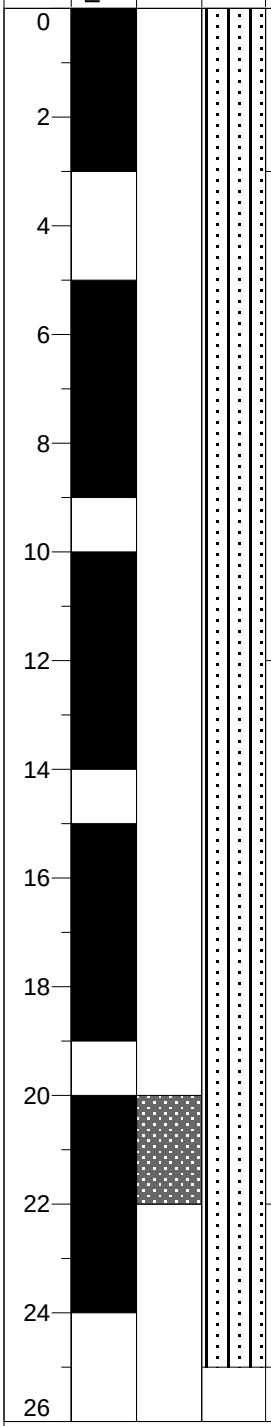


WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS

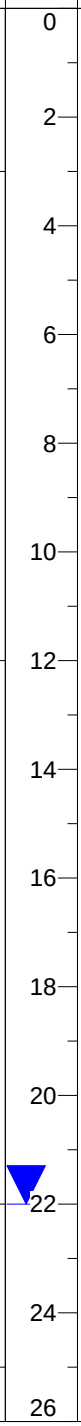
PROJECT #:	TOT1802
SITE ADDRESS:	737-747 4th Avenue, Brooklyn, NY
BORING ID:	SB007
WELL ID:	N/A
DRILLING CONTRACTOR:	Coastal Environmental Solutions, Inc.
DRILLING METHOD:	Direct Push
DRILLING EQUIPMENT:	Geoprobe 6610
SAMPLING METHOD:	Macrocore

PWGC
Strategic Environmental Engineering Solutions

BORING DEPTH (FT): 25	CORE LENGTH (FT): 5
BORING DIAMETER (IN): 2	WELL DIAMETER (IN): N/A
DATE STARTED: 05/24/2018	DATE FINISHED: 05/24/2018
TIME STARTED: 10:55	TIME FINISHED: 11:30
LATITUDE: N/A	LONGITUDE: N/A
PROJECT MANAGER: Jennifer Lewis	LOGGED BY: Nick Russell



USCS KEY	DESCRIPTION NAME (USCS): color, moist, plasticity, gravel, odor	PID Reading (ppm)
	Brick, concrete & rock fill	0.6
	Moist, tightly packed fine sands	0.6
	Dry, fine sands	0.6
	Moist, fine sands	0.6



WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS

P.W. Grosser Consulting | **End of Boring Depth (feet):** 25 | **Water Table Symbol:** ▼ |

APPENDIX B
LABORATORY ANALYTICAL REPORTS

ANALYTICAL REPORT

Lab Number:	L1812045
Client:	P. W. Grosser 630 Johnson Avenue Suite 7 Bohemia, NY 11716
ATTN:	Jennifer Lewis
Phone:	(631) 589-6353
Project Name:	TOT1801
Project Number:	TOT1801
Report Date:	04/16/18

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), NJ NELAP (MA935), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-14-00197).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: TOT1801
Project Number: TOT1801

Lab Number: L1812045
Report Date: 04/16/18

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1812045-01	MW-1	WATER	737-747 4TH AVE., BROOKLYN, NY	04/06/18 08:30	04/06/18
L1812045-02	MW-3	WATER	737-747 4TH AVE., BROOKLYN, NY	04/06/18 09:00	04/06/18
L1812045-03	MW-80	WATER	737-747 4TH AVE., BROOKLYN, NY	04/06/18 08:00	04/06/18
L1812045-04	MW-81	WATER	737-747 4TH AVE., BROOKLYN, NY	04/06/18 07:43	04/06/18
L1812045-05	MW-84	WATER	737-747 4TH AVE., BROOKLYN, NY	04/06/18 10:05	04/06/18
L1812045-06	MW-89	WATER	737-747 4TH AVE., BROOKLYN, NY	04/06/18 09:30	04/06/18
L1812045-07	MW-90	WATER	737-747 4TH AVE., BROOKLYN, NY	04/06/18 07:15	04/06/18
L1812045-08	MW-94	WATER	737-747 4TH AVE., BROOKLYN, NY	04/06/18 10:50	04/06/18

Project Name:	TOT1801	**Lab Number:**	L1812045
Project Number:	TOT1801	**Report Date:**	04/16/18

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY

For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.

Project Name:	TOT1801	**Lab Number:**	L1812045
Project Number:	TOT1801	**Report Date:**	04/16/18

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Semivolatile Organics by SIM

L1812045-03: The sample has elevated detection limits due to the dilution required by the sample matrix.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Melissa Cripps

Title: Technical Director/Representative Date: 04/16/18

ORGANICS

VOLATILES

Project Name: TOT1801 **Lab Number:** L1812045

Project Number: TOT1801 **Report Date:** 04/16/18

SAMPLE RESULTS

Lab ID: L1812045-01
Client ID: MW-1
Sample Location: 737-747 4TH AVE., BROOKLYN, NY

Date Collected: 04/06/18 08:30
Date Received: 04/06/18
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 04/11/18 16:19
Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	98		70-130

Project Name: TOT1801 **Lab Number:** L1812045

Project Number: TOT1801 **Report Date:** 04/16/18

SAMPLE RESULTS

Lab ID: L1812045-02
Client ID: MW-3
Sample Location: 737-747 4TH AVE., BROOKLYN, NY

Date Collected: 04/06/18 09:00
Date Received: 04/06/18
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 04/11/18 16:48
Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	98		70-130

Project Name: TOT1801 **Lab Number:** L1812045

Project Number: TOT1801 **Report Date:** 04/16/18

SAMPLE RESULTS

Lab ID: L1812045-03
Client ID: MW-80
Sample Location: 737-747 4TH AVE., BROOKLYN, NY

Date Collected: 04/06/18 08:00
Date Received: 04/06/18
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 04/11/18 17:16
Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	102		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	98		70-130

Project Name: TOT1801 **Lab Number:** L1812045

Project Number: TOT1801 **Report Date:** 04/16/18

SAMPLE RESULTS

Lab ID: L1812045-04 Date Collected: 04/06/18 07:43
Client ID: MW-81 Date Received: 04/06/18
Sample Location: 737-747 4TH AVE., BROOKLYN, NY Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 04/11/18 17:44
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	98		70-130

Project Name: TOT1801 **Lab Number:** L1812045

Project Number: TOT1801 **Report Date:** 04/16/18

SAMPLE RESULTS

Lab ID: L1812045-05 D
Client ID: MW-84
Sample Location: 737-747 4TH AVE., BROOKLYN, NY

Date Collected: 04/06/18 10:05
Date Received: 04/06/18
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 04/11/18 19:09
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	300		ug/l	1.2	0.40	2.5
Toluene	3.6	J	ug/l	6.2	1.8	2.5
Ethylbenzene	ND		ug/l	6.2	1.8	2.5
Methyl tert butyl ether	ND		ug/l	6.2	1.8	2.5
p/m-Xylene	ND		ug/l	6.2	1.8	2.5
o-Xylene	ND		ug/l	6.2	1.8	2.5
n-Butylbenzene	ND		ug/l	6.2	1.8	2.5
sec-Butylbenzene	ND		ug/l	6.2	1.8	2.5
tert-Butylbenzene	ND		ug/l	6.2	1.8	2.5
Isopropylbenzene	2.4	J	ug/l	6.2	1.8	2.5
p-Isopropyltoluene	ND		ug/l	6.2	1.8	2.5
Naphthalene	ND		ug/l	6.2	1.8	2.5
n-Propylbenzene	2.9	J	ug/l	6.2	1.8	2.5
1,3,5-Trimethylbenzene	ND		ug/l	6.2	1.8	2.5
1,2,4-Trimethylbenzene	ND		ug/l	6.2	1.8	2.5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	95		70-130

Project Name: TOT1801 **Lab Number:** L1812045

Project Number: TOT1801 **Report Date:** 04/16/18

SAMPLE RESULTS

Lab ID: L1812045-06 Date Collected: 04/06/18 09:30
Client ID: MW-89 Date Received: 04/06/18
Sample Location: 737-747 4TH AVE., BROOKLYN, NY Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 04/11/18 18:13
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	0.33	J	ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	0.76	J	ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	1.3	J	ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	2.6		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1
n-Propylbenzene	1.4	J	ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	96		70-130

Project Name: TOT1801 **Lab Number:** L1812045

Project Number: TOT1801 **Report Date:** 04/16/18

SAMPLE RESULTS

Lab ID: L1812045-07
Client ID: MW-90
Sample Location: 737-747 4TH AVE., BROOKLYN, NY

Date Collected: 04/06/18 07:15
Date Received: 04/06/18
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 04/11/18 18:41
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	102		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	98		70-130

Project Name: TOT1801 **Lab Number:** L1812045

Project Number: TOT1801 **Report Date:** 04/16/18

SAMPLE RESULTS

Lab ID: L1812045-08 D
Client ID: MW-94
Sample Location: 737-747 4TH AVE., BROOKLYN, NY

Date Collected: 04/06/18 10:50
Date Received: 04/06/18
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 04/11/18 19:37
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	12		ug/l	2.0	0.64	4
Toluene	32		ug/l	10	2.8	4
Ethylbenzene	81		ug/l	10	2.8	4
Methyl tert butyl ether	ND		ug/l	10	2.8	4
p/m-Xylene	200		ug/l	10	2.8	4
o-Xylene	130		ug/l	10	2.8	4
n-Butylbenzene	6.5	J	ug/l	10	2.8	4
sec-Butylbenzene	8.3	J	ug/l	10	2.8	4
tert-Butylbenzene	ND		ug/l	10	2.8	4
Isopropylbenzene	13		ug/l	10	2.8	4
p-Isopropyltoluene	7.2	J	ug/l	10	2.8	4
Naphthalene	300		ug/l	10	2.8	4
n-Propylbenzene	20		ug/l	10	2.8	4
1,3,5-Trimethylbenzene	57		ug/l	10	2.8	4
1,2,4-Trimethylbenzene	210		ug/l	10	2.8	4

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	97		70-130

Project Name: TOT1801 **Lab Number:** L1812045

Project Number: TOT1801 **Report Date:** 04/16/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 04/11/18 10:12
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-08 Batch: WG1105695-5					
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
n-Butylbenzene	ND		ug/l	2.5	0.70
sec-Butylbenzene	ND		ug/l	2.5	0.70
tert-Butylbenzene	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
p-Isopropyltoluene	ND		ug/l	2.5	0.70
Naphthalene	ND		ug/l	2.5	0.70
n-Propylbenzene	ND		ug/l	2.5	0.70
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	99		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: TOT1801
Project Number: TOT1801

Lab Number: L1812045
Report Date: 04/16/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-08 Batch: WG1105695-3 WG1105695-4								
Benzene	96		95		70-130	1		20
Toluene	92		91		70-130	1		20
Ethylbenzene	91		90		70-130	1		20
Methyl tert butyl ether	93		92		63-130	1		20
p/m-Xylene	90		90		70-130	0		20
o-Xylene	90		90		70-130	0		20
n-Butylbenzene	97		94		53-136	3		20
sec-Butylbenzene	94		93		70-130	1		20
tert-Butylbenzene	94		92		70-130	2		20
Isopropylbenzene	92		90		70-130	2		20
p-Isopropyltoluene	96		95		70-130	1		20
Naphthalene	91		90		70-130	1		20
n-Propylbenzene	92		91		69-130	1		20
1,3,5-Trimethylbenzene	91		90		64-130	1		20
1,2,4-Trimethylbenzene	92		91		70-130	1		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	103		102		70-130
Toluene-d8	100		99		70-130
4-Bromofluorobenzene	99		99		70-130
Dibromofluoromethane	100		99		70-130

SEMIVOLATILES

Project Name: TOT1801 **Lab Number:** L1812045

Project Number: TOT1801 **Report Date:** 04/16/18

SAMPLE RESULTS

Lab ID: L1812045-01
Client ID: MW-1
Sample Location: 737-747 4TH AVE., BROOKLYN, NY

Date Collected: 04/06/18 08:30
Date Received: 04/06/18
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 04/10/18 14:04
Analyst: CB

Extraction Method: EPA 3510C
Extraction Date: 04/08/18 23:49

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	0.04	1
Fluoranthene	0.29		ug/l	0.10	0.04	1
Naphthalene	ND		ug/l	0.10	0.04	1
Benzo(a)anthracene	0.14		ug/l	0.10	0.02	1
Benzo(a)pyrene	0.18		ug/l	0.10	0.04	1
Benzo(b)fluoranthene	0.44		ug/l	0.10	0.02	1
Benzo(k)fluoranthene	0.13		ug/l	0.10	0.04	1
Chrysene	0.19		ug/l	0.10	0.04	1
Acenaphthylene	ND		ug/l	0.10	0.04	1
Anthracene	ND		ug/l	0.10	0.04	1
Benzo(ghi)perylene	0.23		ug/l	0.10	0.04	1
Fluorene	ND		ug/l	0.10	0.04	1
Phenanthrene	ND		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.04	1
Indeno(1,2,3-cd)pyrene	0.18		ug/l	0.10	0.04	1
Pyrene	0.24		ug/l	0.10	0.04	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	55		21-120
Phenol-d6	40		10-120
Nitrobenzene-d5	77		23-120
2-Fluorobiphenyl	80		15-120
2,4,6-Tribromophenol	79		10-120
4-Terphenyl-d14	95		41-149

Project Name: TOT1801 **Lab Number:** L1812045

Project Number: TOT1801 **Report Date:** 04/16/18

SAMPLE RESULTS

Lab ID: L1812045-02
Client ID: MW-3
Sample Location: 737-747 4TH AVE., BROOKLYN, NY

Date Collected: 04/06/18 09:00
Date Received: 04/06/18
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 04/10/18 14:28
Analyst: CB

Extraction Method: EPA 3510C
Extraction Date: 04/08/18 23:49

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	0.12		ug/l	0.10	0.04	1
Fluoranthene	0.07	J	ug/l	0.10	0.04	1
Naphthalene	ND		ug/l	0.10	0.04	1
Benzo(a)anthracene	0.04	J	ug/l	0.10	0.02	1
Benzo(a)pyrene	0.05	J	ug/l	0.10	0.04	1
Benzo(b)fluoranthene	0.14		ug/l	0.10	0.02	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.04	1
Chrysene	0.08	J	ug/l	0.10	0.04	1
Acenaphthylene	ND		ug/l	0.10	0.04	1
Anthracene	ND		ug/l	0.10	0.04	1
Benzo(ghi)perylene	0.10		ug/l	0.10	0.04	1
Fluorene	ND		ug/l	0.10	0.04	1
Phenanthrene	ND		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.04	1
Indeno(1,2,3-cd)pyrene	0.07	J	ug/l	0.10	0.04	1
Pyrene	0.07	J	ug/l	0.10	0.04	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	47		21-120
Phenol-d6	36		10-120
Nitrobenzene-d5	70		23-120
2-Fluorobiphenyl	71		15-120
2,4,6-Tribromophenol	62		10-120
4-Terphenyl-d14	77		41-149

Project Name: TOT1801 **Lab Number:** L1812045

Project Number: TOT1801 **Report Date:** 04/16/18

SAMPLE RESULTS

Lab ID: L1812045-03 D
Client ID: MW-80
Sample Location: 737-747 4TH AVE., BROOKLYN, NY

Date Collected: 04/06/18 08:00
Date Received: 04/06/18
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 04/11/18 14:39
Analyst: KL

Extraction Method: EPA 3510C
Extraction Date: 04/08/18 23:49

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	1.0	0.35	10
Fluoranthene	60		ug/l	1.0	0.38	10
Naphthalene	ND		ug/l	1.0	0.43	10
Benzo(a)anthracene	18		ug/l	1.0	0.18	10
Benzo(a)pyrene	24		ug/l	1.0	0.39	10
Benzo(b)fluoranthene	62		ug/l	1.0	0.16	10
Benzo(k)fluoranthene	19		ug/l	1.0	0.42	10
Chrysene	43		ug/l	1.0	0.38	10
Acenaphthylene	ND		ug/l	1.0	0.35	10
Anthracene	1.3		ug/l	1.0	0.35	10
Benzo(ghi)perylene	29		ug/l	1.0	0.42	10
Fluorene	0.72	J	ug/l	1.0	0.37	10
Phenanthrene	4.9		ug/l	1.0	0.15	10
Dibenzo(a,h)anthracene	6.5		ug/l	1.0	0.39	10
Indeno(1,2,3-cd)pyrene	32		ug/l	1.0	0.40	10
Pyrene	38		ug/l	1.0	0.40	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	46		21-120
Phenol-d6	36		10-120
Nitrobenzene-d5	80		23-120
2-Fluorobiphenyl	69		15-120
2,4,6-Tribromophenol	58		10-120
4-Terphenyl-d14	65		41-149

Project Name: TOT1801 **Lab Number:** L1812045

Project Number: TOT1801 **Report Date:** 04/16/18

SAMPLE RESULTS

Lab ID: L1812045-04
Client ID: MW-81
Sample Location: 737-747 4TH AVE., BROOKLYN, NY

Date Collected: 04/06/18 07:43
Date Received: 04/06/18
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 04/10/18 15:18
Analyst: CB

Extraction Method: EPA 3510C
Extraction Date: 04/08/18 23:49

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	0.04	1
Fluoranthene	0.37		ug/l	0.10	0.04	1
Naphthalene	ND		ug/l	0.10	0.04	1
Benzo(a)anthracene	0.14		ug/l	0.10	0.02	1
Benzo(a)pyrene	0.30		ug/l	0.10	0.04	1
Benzo(b)fluoranthene	0.84		ug/l	0.10	0.02	1
Benzo(k)fluoranthene	0.19		ug/l	0.10	0.04	1
Chrysene	0.34		ug/l	0.10	0.04	1
Acenaphthylene	ND		ug/l	0.10	0.04	1
Anthracene	ND		ug/l	0.10	0.04	1
Benzo(ghi)perylene	1.0		ug/l	0.10	0.04	1
Fluorene	ND		ug/l	0.10	0.04	1
Phenanthrene	0.13		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	0.14		ug/l	0.10	0.04	1
Indeno(1,2,3-cd)pyrene	0.72		ug/l	0.10	0.04	1
Pyrene	0.31		ug/l	0.10	0.04	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	45		21-120
Phenol-d6	37		10-120
Nitrobenzene-d5	76		23-120
2-Fluorobiphenyl	70		15-120
2,4,6-Tribromophenol	51		10-120
4-Terphenyl-d14	88		41-149

Project Name: TOT1801 **Lab Number:** L1812045

Project Number: TOT1801 **Report Date:** 04/16/18

SAMPLE RESULTS

Lab ID: L1812045-05
Client ID: MW-84
Sample Location: 737-747 4TH AVE., BROOKLYN, NY

Date Collected: 04/06/18 10:05
Date Received: 04/06/18
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 04/10/18 15:43
Analyst: CB

Extraction Method: EPA 3510C
Extraction Date: 04/08/18 23:49

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	1.4		ug/l	0.10	0.04	1
Fluoranthene	2.6		ug/l	0.10	0.04	1
Naphthalene	0.74		ug/l	0.10	0.04	1
Benzo(a)anthracene	0.78		ug/l	0.10	0.02	1
Benzo(a)pyrene	0.61		ug/l	0.10	0.04	1
Benzo(b)fluoranthene	2.3		ug/l	0.10	0.02	1
Benzo(k)fluoranthene	0.49		ug/l	0.10	0.04	1
Chrysene	1.6		ug/l	0.10	0.04	1
Acenaphthylene	ND		ug/l	0.10	0.04	1
Anthracene	0.61		ug/l	0.10	0.04	1
Benzo(ghi)perylene	0.83		ug/l	0.10	0.04	1
Fluorene	2.3		ug/l	0.10	0.04	1
Phenanthrene	4.2		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	0.18		ug/l	0.10	0.04	1
Indeno(1,2,3-cd)pyrene	0.72		ug/l	0.10	0.04	1
Pyrene	2.0		ug/l	0.10	0.04	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	52		21-120
Phenol-d6	39		10-120
Nitrobenzene-d5	79		23-120
2-Fluorobiphenyl	75		15-120
2,4,6-Tribromophenol	55		10-120
4-Terphenyl-d14	94		41-149

Project Name: TOT1801 **Lab Number:** L1812045

Project Number: TOT1801 **Report Date:** 04/16/18

SAMPLE RESULTS

Lab ID: L1812045-06
Client ID: MW-89
Sample Location: 737-747 4TH AVE., BROOKLYN, NY

Date Collected: 04/06/18 09:30
Date Received: 04/06/18
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 04/10/18 16:09
Analyst: CB

Extraction Method: EPA 3510C
Extraction Date: 04/08/18 23:49

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	1.9		ug/l	0.10	0.04	1
Fluoranthene	0.27		ug/l	0.10	0.04	1
Naphthalene	ND		ug/l	0.10	0.04	1
Benzo(a)anthracene	0.07	J	ug/l	0.10	0.02	1
Benzo(a)pyrene	0.08	J	ug/l	0.10	0.04	1
Benzo(b)fluoranthene	0.32		ug/l	0.10	0.02	1
Benzo(k)fluoranthene	0.08	J	ug/l	0.10	0.04	1
Chrysene	0.23		ug/l	0.10	0.04	1
Acenaphthylene	ND		ug/l	0.10	0.04	1
Anthracene	0.16		ug/l	0.10	0.04	1
Benzo(ghi)perylene	0.16		ug/l	0.10	0.04	1
Fluorene	2.2		ug/l	0.10	0.04	1
Phenanthrene	0.56		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.04	1
Indeno(1,2,3-cd)pyrene	0.12		ug/l	0.10	0.04	1
Pyrene	0.25		ug/l	0.10	0.04	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	52		21-120
Phenol-d6	40		10-120
Nitrobenzene-d5	77		23-120
2-Fluorobiphenyl	79		15-120
2,4,6-Tribromophenol	58		10-120
4-Terphenyl-d14	103		41-149

Project Name: TOT1801 **Lab Number:** L1812045

Project Number: TOT1801 **Report Date:** 04/16/18

SAMPLE RESULTS

Lab ID: L1812045-07
Client ID: MW-90
Sample Location: 737-747 4TH AVE., BROOKLYN, NY

Date Collected: 04/06/18 07:15
Date Received: 04/06/18
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 04/10/18 16:33
Analyst: CB

Extraction Method: EPA 3510C
Extraction Date: 04/08/18 23:49

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	1.4		ug/l	0.10	0.04	1
Fluoranthene	0.84		ug/l	0.10	0.04	1
Naphthalene	0.06	J	ug/l	0.10	0.04	1
Benzo(a)anthracene	0.20		ug/l	0.10	0.02	1
Benzo(a)pyrene	0.15		ug/l	0.10	0.04	1
Benzo(b)fluoranthene	0.52		ug/l	0.10	0.02	1
Benzo(k)fluoranthene	0.12		ug/l	0.10	0.04	1
Chrysene	0.40		ug/l	0.10	0.04	1
Acenaphthylene	0.21		ug/l	0.10	0.04	1
Anthracene	0.13		ug/l	0.10	0.04	1
Benzo(ghi)perylene	0.23		ug/l	0.10	0.04	1
Fluorene	1.8		ug/l	0.10	0.04	1
Phenanthrene	0.08	J	ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	0.04	J	ug/l	0.10	0.04	1
Indeno(1,2,3-cd)pyrene	0.19		ug/l	0.10	0.04	1
Pyrene	0.61		ug/l	0.10	0.04	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	51		21-120
Phenol-d6	38		10-120
Nitrobenzene-d5	72		23-120
2-Fluorobiphenyl	76		15-120
2,4,6-Tribromophenol	67		10-120
4-Terphenyl-d14	84		41-149

Project Name: TOT1801 **Lab Number:** L1812045

Project Number: TOT1801 **Report Date:** 04/16/18

SAMPLE RESULTS

Lab ID: L1812045-08 D
Client ID: MW-94
Sample Location: 737-747 4TH AVE., BROOKLYN, NY

Date Collected: 04/06/18 10:50
Date Received: 04/06/18
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 04/15/18 12:34
Analyst: KL

Extraction Method: EPA 3510C
Extraction Date: 04/13/18 21:02

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	9.1		ug/l	0.50	0.18	5
Fluoranthene	0.37	J	ug/l	0.50	0.19	5
Naphthalene	130		ug/l	0.50	0.22	5
Benzo(a)anthracene	ND		ug/l	0.50	0.09	5
Benzo(a)pyrene	ND		ug/l	0.50	0.20	5
Benzo(b)fluoranthene	ND		ug/l	0.50	0.08	5
Benzo(k)fluoranthene	ND		ug/l	0.50	0.21	5
Chrysene	ND		ug/l	0.50	0.19	5
Acenaphthylene	3.2		ug/l	0.50	0.18	5
Anthracene	2.0		ug/l	0.50	0.18	5
Benzo(ghi)perylene	ND		ug/l	0.50	0.21	5
Fluorene	16		ug/l	0.50	0.18	5
Phenanthrene	25		ug/l	0.50	0.08	5
Dibenzo(a,h)anthracene	ND		ug/l	0.50	0.20	5
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.50	0.20	5
Pyrene	1.4		ug/l	0.50	0.20	5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	33		21-120
Phenol-d6	24		10-120
Nitrobenzene-d5	60		23-120
2-Fluorobiphenyl	46		15-120
2,4,6-Tribromophenol	70		10-120
4-Terphenyl-d14	54		41-149

Project Name: TOT1801 **Lab Number:** L1812045

Project Number: TOT1801 **Report Date:** 04/16/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 04/10/18 09:56
Analyst: CB

Extraction Method: EPA 3510C
Extraction Date: 04/08/18 23:49

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01-07 Batch: WG1104635-1					
Acenaphthene	ND		ug/l	0.10	0.04
Fluoranthene	ND		ug/l	0.10	0.04
Naphthalene	0.07	J	ug/l	0.10	0.04
Benzo(a)anthracene	ND		ug/l	0.10	0.02
Benzo(a)pyrene	ND		ug/l	0.10	0.04
Benzo(b)fluoranthene	ND		ug/l	0.10	0.02
Benzo(k)fluoranthene	ND		ug/l	0.10	0.04
Chrysene	ND		ug/l	0.10	0.04
Acenaphthylene	ND		ug/l	0.10	0.04
Anthracene	ND		ug/l	0.10	0.04
Benzo(ghi)perylene	ND		ug/l	0.10	0.04
Fluorene	ND		ug/l	0.10	0.04
Phenanthrene	ND		ug/l	0.10	0.02
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.04
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.04
Pyrene	ND		ug/l	0.10	0.04

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	45		21-120
Phenol-d6	35		10-120
Nitrobenzene-d5	64		23-120
2-Fluorobiphenyl	68		15-120
2,4,6-Tribromophenol	64		10-120
4-Terphenyl-d14	82		41-149

Project Name: TOT1801 **Lab Number:** L1812045

Project Number: TOT1801 **Report Date:** 04/16/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 04/14/18 15:27
Analyst: KL

Extraction Method: EPA 3510C
Extraction Date: 04/13/18 21:02

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 08 Batch: WG1106420-1					
Acenaphthene	ND		ug/l	0.10	0.04
Fluoranthene	ND		ug/l	0.10	0.04
Naphthalene	ND		ug/l	0.10	0.04
Benzo(a)anthracene	ND		ug/l	0.10	0.02
Benzo(a)pyrene	ND		ug/l	0.10	0.04
Benzo(b)fluoranthene	ND		ug/l	0.10	0.02
Benzo(k)fluoranthene	ND		ug/l	0.10	0.04
Chrysene	ND		ug/l	0.10	0.04
Acenaphthylene	ND		ug/l	0.10	0.04
Anthracene	ND		ug/l	0.10	0.04
Benzo(ghi)perylene	ND		ug/l	0.10	0.04
Fluorene	ND		ug/l	0.10	0.04
Phenanthrene	ND		ug/l	0.10	0.02
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.04
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.04
Pyrene	ND		ug/l	0.10	0.04

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	50		21-120
Phenol-d6	36		10-120
Nitrobenzene-d5	70		23-120
2-Fluorobiphenyl	71		15-120
2,4,6-Tribromophenol	63		10-120
4-Terphenyl-d14	77		41-149

Lab Control Sample Analysis
Batch Quality Control

Project Name: TOT1801
Project Number: TOT1801

Lab Number: L1812045
Report Date: 04/16/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-07 Batch: WG1104635-2 WG1104635-3								
Acenaphthene	76		85		40-140	11		40
Fluoranthene	82		73		40-140	12		40
Naphthalene	71		78		40-140	9		40
Benzo(a)anthracene	75		83		40-140	10		40
Benzo(a)pyrene	76		85		40-140	11		40
Benzo(b)fluoranthene	81		92		40-140	13		40
Benzo(k)fluoranthene	72		81		40-140	12		40
Chrysene	73		80		40-140	9		40
Acenaphthylene	70		78		40-140	11		40
Anthracene	79		85		40-140	7		40
Benzo(ghi)perylene	78		76		40-140	3		40
Fluorene	82		89		40-140	8		40
Phenanthrene	77		84		40-140	9		40
Dibenzo(a,h)anthracene	80		78		40-140	3		40
Indeno(1,2,3-cd)pyrene	79		76		40-140	4		40
Pyrene	78		86		40-140	10		40

Lab Control Sample Analysis

Batch Quality Control

Project Name: TOT1801
Project Number: TOT1801

Lab Number: L1812045
Report Date: 04/16/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-07 Batch: WG1104635-2 WG1104635-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	51		62		21-120
Phenol-d6	38		44		10-120
Nitrobenzene-d5	69		75		23-120
2-Fluorobiphenyl	73		79		15-120
2,4,6-Tribromophenol	63		76		10-120
4-Terphenyl-d14	80		88		41-149

Lab Control Sample Analysis

Batch Quality Control

Project Name: TOT1801

Project Number: TOT1801

Lab Number: L1812045

Report Date: 04/16/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 08 Batch: WG1106420-2 WG1106420-3								
Acenaphthene	67		80		40-140	18		40
Fluoranthene	72		87		40-140	19		40
Naphthalene	54		66		40-140	20		40
Benzo(a)anthracene	63		78		40-140	21		40
Benzo(a)pyrene	66		81		40-140	20		40
Benzo(b)fluoranthene	71		87		40-140	20		40
Benzo(k)fluoranthene	73		91		40-140	22		40
Chrysene	64		80		40-140	22		40
Acenaphthylene	62		74		40-140	18		40
Anthracene	66		80		40-140	19		40
Benzo(ghi)perylene	**32**	Q	46		40-140	36		40
Fluorene	70		84		40-140	18		40
Phenanthrene	62		77		40-140	22		40
Dibenzo(a,h)anthracene	42		59		40-140	34		40
Indeno(1,2,3-cd)pyrene	**38**	Q	53		40-140	33		40
Pyrene	65		79		40-140	19		40

Lab Control Sample Analysis
Batch Quality Control

Project Name: TOT1801
Project Number: TOT1801

Lab Number: L1812045
Report Date: 04/16/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 08 Batch: WG1106420-2 WG1106420-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	41		50		21-120
Phenol-d6	31		38		10-120
Nitrobenzene-d5	55		65		23-120
2-Fluorobiphenyl	52		61		15-120
2,4,6-Tribromophenol	80		94		10-120
4-Terphenyl-d14	65		77		41-149

Project Name: TOT1801
Project Number: TOT1801

Lab Number: L1812045
Report Date: 04/16/18

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent
B	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1812045-01A	Vial HCl preserved	A	NA		2.9	Y	Absent		NYTCL-8260(14)
L1812045-01B	Vial HCl preserved	A	NA		2.9	Y	Absent		NYTCL-8260(14)
L1812045-01C	Vial HCl preserved	A	NA		2.9	Y	Absent		NYTCL-8260(14)
L1812045-01D	Amber 1000ml unpreserved	A	7	7	2.9	Y	Absent		NYTCL-8270-SIM(7)
L1812045-01E	Amber 1000ml unpreserved	A	7	7	2.9	Y	Absent		NYTCL-8270-SIM(7)
L1812045-02A	Vial HCl preserved	A	NA		2.9	Y	Absent		NYTCL-8260(14)
L1812045-02B	Vial HCl preserved	A	NA		2.9	Y	Absent		NYTCL-8260(14)
L1812045-02C	Vial HCl preserved	A	NA		2.9	Y	Absent		NYTCL-8260(14)
L1812045-02D	Amber 1000ml unpreserved	A	7	7	2.9	Y	Absent		NYTCL-8270-SIM(7)
L1812045-02E	Amber 1000ml unpreserved	A	7	7	2.9	Y	Absent		NYTCL-8270-SIM(7)
L1812045-03A	Vial HCl preserved	A	NA		2.9	Y	Absent		NYTCL-8260(14)
L1812045-03B	Vial HCl preserved	A	NA		2.9	Y	Absent		NYTCL-8260(14)
L1812045-03C	Vial HCl preserved	A	NA		2.9	Y	Absent		NYTCL-8260(14)
L1812045-03D	Amber 1000ml unpreserved	A	7	7	2.9	Y	Absent		NYTCL-8270-SIM(7)
L1812045-03E	Amber 1000ml unpreserved	A	7	7	2.9	Y	Absent		NYTCL-8270-SIM(7)
L1812045-04A	Vial HCl preserved	A	NA		2.9	Y	Absent		NYTCL-8260(14)
L1812045-04B	Vial HCl preserved	A	NA		2.9	Y	Absent		NYTCL-8260(14)
L1812045-04C	Vial HCl preserved	A	NA		2.9	Y	Absent		NYTCL-8260(14)
L1812045-04D	Amber 1000ml unpreserved	A	7	7	2.9	Y	Absent		NYTCL-8270-SIM(7)
L1812045-04E	Amber 1000ml unpreserved	A	7	7	2.9	Y	Absent		NYTCL-8270-SIM(7)
L1812045-05A	Vial HCl preserved	B	NA		2.1	Y	Absent		NYTCL-8260(14)
L1812045-05B	Vial HCl preserved	B	NA		2.1	Y	Absent		NYTCL-8260(14)

*Values in parentheses indicate holding time in days

Project Name: TOT1801
Project Number: TOT1801

Lab Number: L1812045
Report Date: 04/16/18

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1812045-05C	Vial HCl preserved	B	NA		2.1	Y	Absent		NYTCL-8260(14)
L1812045-05D	Amber 1000ml unpreserved	B	7	7	2.1	Y	Absent		NYTCL-8270-SIM(7)
L1812045-05E	Amber 1000ml unpreserved	B	7	7	2.1	Y	Absent		NYTCL-8270-SIM(7)
L1812045-06A	Vial HCl preserved	B	NA		2.1	Y	Absent		NYTCL-8260(14)
L1812045-06B	Vial HCl preserved	B	NA		2.1	Y	Absent		NYTCL-8260(14)
L1812045-06C	Vial HCl preserved	B	NA		2.1	Y	Absent		NYTCL-8260(14)
L1812045-06D	Amber 1000ml unpreserved	B	7	7	2.1	Y	Absent		NYTCL-8270-SIM(7)
L1812045-06E	Amber 1000ml unpreserved	B	7	7	2.1	Y	Absent		NYTCL-8270-SIM(7)
L1812045-07A	Vial HCl preserved	A	NA		2.9	Y	Absent		NYTCL-8260(14)
L1812045-07B	Vial HCl preserved	A	NA		2.9	Y	Absent		NYTCL-8260(14)
L1812045-07C	Vial HCl preserved	A	NA		2.9	Y	Absent		NYTCL-8260(14)
L1812045-07D	Amber 1000ml unpreserved	A	7	7	2.9	Y	Absent		NYTCL-8270-SIM(7)
L1812045-07E	Amber 1000ml unpreserved	A	7	7	2.9	Y	Absent		NYTCL-8270-SIM(7)
L1812045-08A	Vial HCl preserved	B	NA		2.1	Y	Absent		NYTCL-8260(14)
L1812045-08B	Vial HCl preserved	B	NA		2.1	Y	Absent		NYTCL-8260(14)
L1812045-08C	Vial HCl preserved	B	NA		2.1	Y	Absent		NYTCL-8260(14)
L1812045-08D	Amber 1000ml unpreserved	B	7	7	2.1	Y	Absent		NYTCL-8270-SIM(7)
L1812045-08E	Amber 1000ml unpreserved	B	7	7	2.1	Y	Absent		NYTCL-8270-SIM(7)

*Values in parentheses indicate holding time in days

Project Name:	TOT1801	**Lab Number:**	L1812045
Project Number:	TOT1801	**Report Date:**	04/16/18

GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

1	- The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

A	- Spectra identified as "Aldol Condensation Product".
B	- The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related

Report Format: DU Report with 'J' Qualifiers

Project Name:	TOT1801	**Lab Number:**	L1812045
Project Number:	TOT1801	**Report Date:**	04/16/18

Data Qualifiers

projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers

Project Name:	TOT1801	**Lab Number:**	L1812045
Project Number:	TOT1801	**Report Date:**	04/16/18

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility
EPA 624: m/p-xylene, o-xylene
EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
EPA 300: DW: Bromide
EPA 6860: SCM: Perchlorate
EPA 9010: NPW and SCM: Amenable Cyanide Distillation
SM4500: NPW: Amenable Cyanide, Dissolved Oxygen; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility
SM 2540D: TSS
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water
EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B**
EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N**, EPA 351.1, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D.**
EPA 624: Volatile Halocarbons & Aromatics,
EPA 608: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, SM9222D.**

Mansfield Facility:

Drinking Water
EPA 200.7: Al, Ba, Be, Cd, Cr, Cu, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn.
EPA 245.1 Hg.
SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

NEW YORK CHAIN OF CUSTODY

ALPHA ANALYTICAL

Westborough, MA 01581
8 Walkup Dr.
TEL: 508-898-9220
FAX: 508-898-9193

Mansfield, MA 02048
320 Forbes Blvd
TEL: 508-822-9300
FAX: 508-822-3288

Service Centers
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Page 1 of 1

Date Rec'd in Lab: 4/7/18

ALPHA Job #: L1812045

Client Information

Client: PWGC
Address: 630 Johnson Ave
Bohemia, NY 11716
Phone: 631-589-6353
Fax:
Email: JenniferL@pwgresser.com

Project Information

Project Name:
Project Location: 737-747 4th Ave, Brooklyn, NY
Project # TOT1801
(Use Project name as Project #) ☒
Project Manager: Jennifer Lewis
ALPHAQuote #:

Turn-Around Time

Standard ☒ Due Date:
Rush (only if pre approved) ☐ # of Days:

Deliverables

☒ ASP-A ☐ ASP-B
☐ EQuIS (1 File) ☐ EQuIS (4 File)
☐ Other

Billing Information

☒ Same as Client Info
PO #

Regulatory Requirement

☐ NY TOGS ☐ NY Part 375
☐ AWQ Standards ☐ NY CP-51
☐ NY Restricted Use ☐ Other
☐ NY Unrestricted Use
☐ NYC Sewer Discharge

Disposal Site Information

Please identify below location of applicable disposal facilities.
Disposal Facility:
☐ NJ ☐ NY
☐ Other:

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:

Please specify Metals or TAL.

ANALYSIS

Sample Filtration
☐ Done
☐ Lab to do
Preservation
☐ Lab to do
(Please Specify below)

Total # Bottles

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	VOC (8-51)	SVOC (CP-51)	Sample Specific Comments	Total # Bottles
L1812045-01	MW-1	4-6-18	0830	GW	KC	X	X		5
-02	MW-3		0900						
-03	MW-80		0800						
-04	MW-81		0743						
-05	MW-84		1005						
-06	MW-89		0930						
-07	MW-90		0715						
-08	MW-94	↓	1050	↓	↓	↓	↓		↓

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

Container Code
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Container Type	V	A
Preservative	B	A

Relinquished By	Date/Time	Received By:	Date/Time
	4/6/18 1505	Paul Mazella	4/6/18 1505
Paul Mazella	4/6/18 2005		4/6/18 2:30
	4/7/18 200		4/7/18 0200

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)

Form No: 01-25 HC (rev. 30-Sept-2013)

ANALYTICAL REPORT

Lab Number:	L1819421
Client:	P. W. Grosser 630 Johnson Avenue Suite 7 Bohemia, NY 11716
ATTN:	Jennifer Lewis
Phone:	(631) 589-6353
Project Name:	TOT1802
Project Number:	TOT1802
Report Date:	06/04/18

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: TOT1802
Project Number: TOT1802

Lab Number: L1819421
Report Date: 06/04/18

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1819421-01	SB001-20-22	SOIL	737-747 4TH AVE., BROOKLYN NY	05/24/18 08:30	05/25/18
L1819421-02	SB002-20-22	SOIL	737-747 4TH AVE., BROOKLYN NY	05/24/18 09:00	05/25/18
L1819421-03	SB003-20-22	SOIL	737-747 4TH AVE., BROOKLYN NY	05/24/18 09:20	05/25/18
L1819421-04	SB004-20-22	SOIL	737-747 4TH AVE., BROOKLYN NY	05/24/18 09:50	05/25/18
L1819421-05	SB005-20-22	SOIL	737-747 4TH AVE., BROOKLYN NY	05/24/18 10:15	05/25/18
L1819421-06	SB006-20-22	SOIL	737-747 4TH AVE., BROOKLYN NY	05/24/18 10:45	05/25/18
L1819421-07	SB007-20-22	SOIL	737-747 4TH AVE., BROOKLYN NY	05/24/18 11:30	05/25/18
L1819421-08	MW-6	WATER	737-747 4TH AVE., BROOKLYN NY	05/24/18 08:15	05/25/18
L1819421-09	MW-86	WATER	737-747 4TH AVE., BROOKLYN NY	05/24/18 12:20	05/25/18
L1819421-10	TRIP BLANK	WATER	737-747 4TH AVE., BROOKLYN NY	05/24/18 00:00	05/25/18

Project Name: TOT1802
Project Number: TOT1802

Lab Number: L1819421
Report Date: 06/04/18

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY
For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.

Project Name:	TOT1802	**Lab Number:**	L1819421
Project Number:	TOT1802	**Report Date:**	06/04/18

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Sample Receipt

The Project Number was specified by the client.

L1819421-10: At the client's request, the sample was not analyzed.

Volatile Organics

L1819421-01, -02, -03, and -04: The sample has elevated detection limits due to the dilution required by the elevated concentrations of non-target compounds in the sample.

L1819421-05: The surrogate recovery is outside the acceptance criteria for 4-bromofluorobenzene (178%); however, the sample was not re-analyzed due to coelution with an obvious interference. A copy of the chromatogram is included as an attachment to this report. The results are not considered to be biased.

L1819421-05 was analyzed as a High Level Methanol in order to quantitate the sample within the calibration range. The result should be considered estimated, and is qualified with an E flag, for any compound that exceeded the calibration on the initial Low Level analysis. The results of both analyses are reported. Differences were noted between the results of the original analysis and the re-analysis on dilution which have been attributed to vial discrepancies. Further re-analysis could not be performed due to the existing vials being compromised.

Semivolatile Organics

L1819421-02 and -04: The sample has elevated detection limits due to the dilution required by the elevated concentrations of non-target compounds in the sample.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Melissa Cripps Melissa Cripps

Title: Technical Director/Representative Date: 06/04/18

ORGANICS

VOLATILES

Project Name: TOT1802 **Lab Number:** L1819421

Project Number: TOT1802 **Report Date:** 06/04/18

SAMPLE RESULTS

Lab ID: L1819421-01 D
Client ID: SB001-20-22
Sample Location: 737-747 4TH AVE., BROOKLYN NY

Date Collected: 05/24/18 08:30
Date Received: 05/25/18
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 05/31/18 21:00
Analyst: MV
Percent Solids: 82%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Benzene	ND		ug/kg	260	49.	4
Toluene	ND		ug/kg	380	50.	4
Ethylbenzene	ND		ug/kg	260	44.	4
Methyl tert butyl ether	ND		ug/kg	510	39.	4
p/m-Xylene	ND		ug/kg	510	90.	4
o-Xylene	ND		ug/kg	510	86.	4
Xylenes, Total	ND		ug/kg	510	86.	4
n-Butylbenzene	1200		ug/kg	260	58.	4
sec-Butylbenzene	810		ug/kg	260	56.	4
tert-Butylbenzene	110	J	ug/kg	1300	63.	4
Isopropylbenzene	520		ug/kg	260	50.	4
p-Isopropyltoluene	ND		ug/kg	260	52.	4
Naphthalene	320	J	ug/kg	1300	35.	4
n-Propylbenzene	1100		ug/kg	260	55.	4
1,3,5-Trimethylbenzene	ND		ug/kg	1300	41.	4
1,2,4-Trimethylbenzene	ND		ug/kg	1300	48.	4

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	110		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	108		70-130
Dibromofluoromethane	112		70-130

Project Name: TOT1802 **Lab Number:** L1819421

Project Number: TOT1802 **Report Date:** 06/04/18

SAMPLE RESULTS

Lab ID: L1819421-02 D
Client ID: SB002-20-22
Sample Location: 737-747 4TH AVE., BROOKLYN NY

Date Collected: 05/24/18 09:00
Date Received: 05/25/18
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 05/31/18 21:26
Analyst: MV
Percent Solids: 81%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Benzene	ND		ug/kg	1400	260	20
Toluene	ND		ug/kg	2000	260	20
Ethylbenzene	ND		ug/kg	1400	230	20
Methyl tert butyl ether	ND		ug/kg	2700	210	20
p/m-Xylene	ND		ug/kg	2700	480	20
o-Xylene	ND		ug/kg	2700	460	20
Xylenes, Total	ND		ug/kg	2700	460	20
n-Butylbenzene	11000		ug/kg	1400	310	20
sec-Butylbenzene	8200		ug/kg	1400	300	20
tert-Butylbenzene	910	J	ug/kg	6800	340	20
Isopropylbenzene	3400		ug/kg	1400	260	20
p-Isopropyltoluene	380	J	ug/kg	1400	280	20
Naphthalene	1500	J	ug/kg	6800	190	20
n-Propylbenzene	7700		ug/kg	1400	290	20
1,3,5-Trimethylbenzene	ND		ug/kg	6800	220	20
1,2,4-Trimethylbenzene	ND		ug/kg	6800	250	20

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	107		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	119		70-130
Dibromofluoromethane	114		70-130

Project Name: TOT1802 **Lab Number:** L1819421

Project Number: TOT1802 **Report Date:** 06/04/18

SAMPLE RESULTS

Lab ID: L1819421-03 D
Client ID: SB003-20-22
Sample Location: 737-747 4TH AVE., BROOKLYN NY

Date Collected: 05/24/18 09:20
Date Received: 05/25/18
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 05/31/18 21:51
Analyst: MV
Percent Solids: 86%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Benzene	ND		ug/kg	140	28.	2
Toluene	ND		ug/kg	220	28.	2
Ethylbenzene	ND		ug/kg	140	24.	2
Methyl tert butyl ether	ND		ug/kg	290	22.	2
p/m-Xylene	ND		ug/kg	290	50.	2
o-Xylene	ND		ug/kg	290	48.	2
Xylenes, Total	ND		ug/kg	290	48.	2
n-Butylbenzene	45	J	ug/kg	140	33.	2
sec-Butylbenzene	100	J	ug/kg	140	31.	2
tert-Butylbenzene	ND		ug/kg	720	35.	2
Isopropylbenzene	49	J	ug/kg	140	28.	2
p-Isopropyltoluene	34	J	ug/kg	140	29.	2
Naphthalene	240	J	ug/kg	720	20.	2
n-Propylbenzene	110	J	ug/kg	140	31.	2
1,3,5-Trimethylbenzene	ND		ug/kg	720	23.	2
1,2,4-Trimethylbenzene	ND		ug/kg	720	27.	2

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	107		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	108		70-130
Dibromofluoromethane	113		70-130

Project Name: TOT1802 **Lab Number:** L1819421

Project Number: TOT1802 **Report Date:** 06/04/18

SAMPLE RESULTS

Lab ID: L1819421-04 D
Client ID: SB004-20-22
Sample Location: 737-747 4TH AVE., BROOKLYN NY

Date Collected: 05/24/18 09:50
Date Received: 05/25/18
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 05/31/18 22:17
Analyst: MV
Percent Solids: 84%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Benzene	ND		ug/kg	7200	1400	100
Toluene	ND		ug/kg	11000	1400	100
Ethylbenzene	6500	J	ug/kg	7200	1200	100
Methyl tert butyl ether	ND		ug/kg	14000	1100	100
p/m-Xylene	20000		ug/kg	14000	2500	100
o-Xylene	4400	J	ug/kg	14000	2400	100
Xylenes, Total	24000	J	ug/kg	14000	2400	100
n-Butylbenzene	8400		ug/kg	7200	1600	100
sec-Butylbenzene	6600	J	ug/kg	7200	1600	100
tert-Butylbenzene	ND		ug/kg	36000	1800	100
Isopropylbenzene	3500	J	ug/kg	7200	1400	100
p-Isopropyltoluene	5700	J	ug/kg	7200	1400	100
Naphthalene	75000		ug/kg	36000	990	100
n-Propylbenzene	7700		ug/kg	7200	1500	100
1,3,5-Trimethylbenzene	21000	J	ug/kg	36000	1200	100
1,2,4-Trimethylbenzene	65000		ug/kg	36000	1300	100

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	107		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	114		70-130

Project Name: TOT1802 **Lab Number:** L1819421

Project Number: TOT1802 **Report Date:** 06/04/18

SAMPLE RESULTS

Lab ID: L1819421-05
Client ID: SB005-20-22
Sample Location: 737-747 4TH AVE., BROOKLYN NY

Date Collected: 05/24/18 10:15
Date Received: 05/25/18
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 06/01/18 17:13
Analyst: PK
Percent Solids: 77%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Benzene	ND		ug/kg	1.1	0.21	1
Toluene	ND		ug/kg	1.6	0.21	1
Ethylbenzene	0.71	J	ug/kg	1.1	0.19	1
Methyl tert butyl ether	ND		ug/kg	2.2	0.17	1
p/m-Xylene	3.1		ug/kg	2.2	0.38	1
o-Xylene	ND		ug/kg	2.2	0.37	1
Xylenes, Total	3.1		ug/kg	2.2	0.37	1
n-Butylbenzene	ND		ug/kg	1.1	0.25	1
sec-Butylbenzene	52		ug/kg	1.1	0.24	1
tert-Butylbenzene	11		ug/kg	5.5	0.27	1
Isopropylbenzene	17		ug/kg	1.1	0.21	1
p-Isopropyltoluene	37		ug/kg	1.1	0.22	1
Naphthalene	640	E	ug/kg	5.5	0.15	1
n-Propylbenzene	33		ug/kg	1.1	0.24	1
1,3,5-Trimethylbenzene	8.6		ug/kg	5.5	0.18	1
1,2,4-Trimethylbenzene	170		ug/kg	5.5	0.20	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	102		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	**178**	Q	70-130
Dibromofluoromethane	101		70-130

Project Name: TOT1802 **Lab Number:** L1819421

Project Number: TOT1802 **Report Date:** 06/04/18

SAMPLE RESULTS

Lab ID: L1819421-05
Client ID: SB005-20-22
Sample Location: 737-747 4TH AVE., BROOKLYN NY

Date Collected: 05/24/18 10:15
Date Received: 05/25/18
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 06/04/18 10:02
Analyst: MV
Percent Solids: 77%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Naphthalene	16	J	ug/kg	390	11.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	106		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	104		70-130

Project Name: TOT1802 **Lab Number:** L1819421

Project Number: TOT1802 **Report Date:** 06/04/18

SAMPLE RESULTS

Lab ID: L1819421-06
Client ID: SB006-20-22
Sample Location: 737-747 4TH AVE., BROOKLYN NY

Date Collected: 05/24/18 10:45
Date Received: 05/25/18
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 06/01/18 00:00
Analyst: MV
Percent Solids: 91%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Benzene	0.37	J	ug/kg	0.82	0.16	1
Toluene	0.42	J	ug/kg	1.2	0.16	1
Ethylbenzene	0.34	J	ug/kg	0.82	0.14	1
Methyl tert butyl ether	ND		ug/kg	1.6	0.12	1
p/m-Xylene	0.75	J	ug/kg	1.6	0.29	1
o-Xylene	ND		ug/kg	1.6	0.28	1
Xylenes, Total	0.75	J	ug/kg	1.6	0.28	1
n-Butylbenzene	3.0		ug/kg	0.82	0.19	1
sec-Butylbenzene	1.5		ug/kg	0.82	0.18	1
tert-Butylbenzene	0.22	J	ug/kg	4.1	0.20	1
Isopropylbenzene	0.86		ug/kg	0.82	0.16	1
p-Isopropyltoluene	0.87		ug/kg	0.82	0.16	1
Naphthalene	32		ug/kg	4.1	0.11	1
n-Propylbenzene	2.0		ug/kg	0.82	0.18	1
1,3,5-Trimethylbenzene	1.4	J	ug/kg	4.1	0.13	1
1,2,4-Trimethylbenzene	4.6		ug/kg	4.1	0.15	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	111		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	108		70-130
Dibromofluoromethane	115		70-130

Project Name: TOT1802 **Lab Number:** L1819421

Project Number: TOT1802 **Report Date:** 06/04/18

SAMPLE RESULTS

Lab ID: L1819421-07
Client ID: SB007-20-22
Sample Location: 737-747 4TH AVE., BROOKLYN NY

Date Collected: 05/24/18 11:30
Date Received: 05/25/18
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 06/01/18 00:26
Analyst: MV
Percent Solids: 88%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Benzene	ND		ug/kg	0.83	0.16	1
Toluene	0.20	J	ug/kg	1.2	0.16	1
Ethylbenzene	ND		ug/kg	0.83	0.14	1
Methyl tert butyl ether	ND		ug/kg	1.7	0.13	1
p/m-Xylene	ND		ug/kg	1.7	0.29	1
o-Xylene	ND		ug/kg	1.7	0.28	1
Xylenes, Total	ND		ug/kg	1.7	0.28	1
n-Butylbenzene	ND		ug/kg	0.83	0.19	1
sec-Butylbenzene	ND		ug/kg	0.83	0.18	1
tert-Butylbenzene	ND		ug/kg	4.2	0.20	1
Isopropylbenzene	ND		ug/kg	0.83	0.16	1
p-Isopropyltoluene	ND		ug/kg	0.83	0.17	1
Naphthalene	0.16	J	ug/kg	4.2	0.12	1
n-Propylbenzene	ND		ug/kg	0.83	0.18	1
1,3,5-Trimethylbenzene	ND		ug/kg	4.2	0.13	1
1,2,4-Trimethylbenzene	ND		ug/kg	4.2	0.16	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	112		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	115		70-130

Project Name: TOT1802 **Lab Number:** L1819421

Project Number: TOT1802 **Report Date:** 06/04/18

SAMPLE RESULTS

Lab ID: L1819421-08
Client ID: MW-6
Sample Location: 737-747 4TH AVE., BROOKLYN NY

Date Collected: 05/24/18 08:15
Date Received: 05/25/18
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 05/29/18 22:45
Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	20		ug/l	0.50	0.16	1
Toluene	0.90	J	ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	1.5	J	ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	1.5	J	ug/l	2.5	0.70	1
Xylenes, Total	1.5	J	ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	1.4	J	ug/l	2.5	0.70	1
tert-Butylbenzene	0.80	J	ug/l	2.5	0.70	1
Isopropylbenzene	3.7		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	0.99	J	ug/l	2.5	0.70	1
n-Propylbenzene	3.3		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	95		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	89		70-130

Project Name: TOT1802 **Lab Number:** L1819421

Project Number: TOT1802 **Report Date:** 06/04/18

SAMPLE RESULTS

Lab ID: L1819421-09
Client ID: MW-86
Sample Location: 737-747 4TH AVE., BROOKLYN NY

Date Collected: 05/24/18 12:20
Date Received: 05/25/18
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 05/31/18 13:46
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	32		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	0.75	J	ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
n-Butylbenzene	6.2		ug/l	2.5	0.70	1
sec-Butylbenzene	6.4		ug/l	2.5	0.70	1
tert-Butylbenzene	1.4	J	ug/l	2.5	0.70	1
Isopropylbenzene	11		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	2.2	J	ug/l	2.5	0.70	1
n-Propylbenzene	18		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	96		70-130
Toluene-d8	107		70-130
4-Bromofluorobenzene	117		70-130
Dibromofluoromethane	90		70-130

Project Name: TOT1802 **Lab Number:** L1819421

Project Number: TOT1802 **Report Date:** 06/04/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 05/29/18 20:53
Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 08 Batch: WG1120784-5					
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
Xylenes, Total	ND		ug/l	2.5	0.70
n-Butylbenzene	ND		ug/l	2.5	0.70
sec-Butylbenzene	ND		ug/l	2.5	0.70
tert-Butylbenzene	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
p-Isopropyltoluene	ND		ug/l	2.5	0.70
Naphthalene	ND		ug/l	2.5	0.70
n-Propylbenzene	ND		ug/l	2.5	0.70
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	95		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	92		70-130

Project Name: TOT1802 **Lab Number:** L1819421

Project Number: TOT1802 **Report Date:** 06/04/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 05/31/18 09:00
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 09 Batch: WG1121178-5					
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
Xylenes, Total	ND		ug/l	2.5	0.70
n-Butylbenzene	ND		ug/l	2.5	0.70
sec-Butylbenzene	ND		ug/l	2.5	0.70
tert-Butylbenzene	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
p-Isopropyltoluene	ND		ug/l	2.5	0.70
Naphthalene	ND		ug/l	2.5	0.70
n-Propylbenzene	ND		ug/l	2.5	0.70
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	94		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	106		70-130
Dibromofluoromethane	92		70-130

Project Name: TOT1802 **Lab Number:** L1819421

Project Number: TOT1802 **Report Date:** 06/04/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 05/31/18 20:35
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-04 Batch: WG1121385-5					
Benzene	ND		ug/kg	50	9.6
Toluene	ND		ug/kg	75	9.8
Ethylbenzene	ND		ug/kg	50	8.5
Methyl tert butyl ether	ND		ug/kg	100	7.6
p/m-Xylene	ND		ug/kg	100	18.
o-Xylene	ND		ug/kg	100	17.
Xylenes, Total	ND		ug/kg	100	17.
n-Butylbenzene	ND		ug/kg	50	11.
sec-Butylbenzene	ND		ug/kg	50	11.
tert-Butylbenzene	ND		ug/kg	250	12.
Isopropylbenzene	ND		ug/kg	50	9.7
p-Isopropyltoluene	ND		ug/kg	50	10.
Naphthalene	ND		ug/kg	250	6.9
n-Propylbenzene	ND		ug/kg	50	11.
1,3,5-Trimethylbenzene	ND		ug/kg	250	8.0
1,2,4-Trimethylbenzene	ND		ug/kg	250	9.3

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	107		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	114		70-130

Project Name: TOT1802 **Lab Number:** L1819421

Project Number: TOT1802 **Report Date:** 06/04/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 05/31/18 20:35
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by 8260/5035 - Westborough Lab for sample(s): 06-07 Batch: WG1121389-5					
Benzene	ND		ug/kg	1.0	0.19
Toluene	ND		ug/kg	1.5	0.20
Ethylbenzene	ND		ug/kg	1.0	0.17
Methyl tert butyl ether	ND		ug/kg	2.0	0.15
p/m-Xylene	ND		ug/kg	2.0	0.35
o-Xylene	ND		ug/kg	2.0	0.34
Xylenes, Total	ND		ug/kg	2.0	0.34
n-Butylbenzene	ND		ug/kg	1.0	0.23
sec-Butylbenzene	ND		ug/kg	1.0	0.22
tert-Butylbenzene	ND		ug/kg	5.0	0.25
Isopropylbenzene	ND		ug/kg	1.0	0.19
p-Isopropyltoluene	ND		ug/kg	1.0	0.20
Naphthalene	ND		ug/kg	5.0	0.14
n-Propylbenzene	ND		ug/kg	1.0	0.22
1,3,5-Trimethylbenzene	ND		ug/kg	5.0	0.16
1,2,4-Trimethylbenzene	ND		ug/kg	5.0	0.19

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	107		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	114		70-130

Project Name: TOT1802 **Lab Number:** L1819421

Project Number: TOT1802 **Report Date:** 06/04/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 06/01/18 08:50
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by 8260/5035 - Westborough Lab for sample(s): 05 Batch: WG1121549-5					
Benzene	ND		ug/kg	1.0	0.19
Toluene	ND		ug/kg	1.5	0.20
Ethylbenzene	ND		ug/kg	1.0	0.17
Methyl tert butyl ether	ND		ug/kg	2.0	0.15
p/m-Xylene	ND		ug/kg	2.0	0.35
o-Xylene	ND		ug/kg	2.0	0.34
Xylenes, Total	ND		ug/kg	2.0	0.34
n-Butylbenzene	ND		ug/kg	1.0	0.23
sec-Butylbenzene	ND		ug/kg	1.0	0.22
tert-Butylbenzene	ND		ug/kg	5.0	0.25
Isopropylbenzene	ND		ug/kg	1.0	0.19
p-Isopropyltoluene	ND		ug/kg	1.0	0.20
Naphthalene	ND		ug/kg	5.0	0.14
n-Propylbenzene	ND		ug/kg	1.0	0.22
1,3,5-Trimethylbenzene	ND		ug/kg	5.0	0.16
1,2,4-Trimethylbenzene	ND		ug/kg	5.0	0.19

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	98		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	100		70-130

Project Name: TOT1802 **Lab Number:** L1819421

Project Number: TOT1802 **Report Date:** 06/04/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 06/04/18 09:36
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 05 Batch: WG1122159-5					
Naphthalene	ND		ug/kg	250	6.9

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	108		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	105		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: TOT1802
Project Number: TOT1802

Lab Number: L1819421
Report Date: 06/04/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 08 Batch: WG1120784-3 WG1120784-4								
Benzene	88		82		70-130	7		20
Toluene	92		87		70-130	6		20
Ethylbenzene	89		86		70-130	3		20
Methyl tert butyl ether	92		93		63-130	1		20
p/m-Xylene	90		85		70-130	6		20
o-Xylene	90		85		70-130	6		20
n-Butylbenzene	95		89		53-136	7		20
sec-Butylbenzene	94		89		70-130	5		20
tert-Butylbenzene	91		86		70-130	6		20
Isopropylbenzene	95		89		70-130	7		20
p-Isopropyltoluene	91		87		70-130	4		20
Naphthalene	80		83		70-130	4		20
n-Propylbenzene	99		93		69-130	6		20
1,3,5-Trimethylbenzene	95		89		64-130	7		20
1,2,4-Trimethylbenzene	78		72		70-130	8		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	95		95		70-130
Toluene-d8	103		104		70-130
4-Bromofluorobenzene	105		104		70-130
Dibromofluoromethane	93		92		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: TOT1802
Project Number: TOT1802

Lab Number: L1819421
Report Date: 06/04/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 09 Batch: WG1121178-3 WG1121178-4								
Benzene	100		99		70-130	1		20
Toluene	100		100		70-130	0		20
Ethylbenzene	100		100		70-130	0		20
Methyl tert butyl ether	110		110		63-130	0		20
p/m-Xylene	100		100		70-130	0		20
o-Xylene	100		100		70-130	0		20
n-Butylbenzene	110		100		53-136	10		20
sec-Butylbenzene	100		100		70-130	0		20
tert-Butylbenzene	100		100		70-130	0		20
Isopropylbenzene	100		100		70-130	0		20
p-Isopropyltoluene	100		100		70-130	0		20
Naphthalene	91		98		70-130	7		20
n-Propylbenzene	110		110		69-130	0		20
1,3,5-Trimethylbenzene	100		100		64-130	0		20
1,2,4-Trimethylbenzene	84		83		70-130	1		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	94		95		70-130
Toluene-d8	103		102		70-130
4-Bromofluorobenzene	105		103		70-130
Dibromofluoromethane	93		91		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: TOT1802
Project Number: TOT1802

Lab Number: L1819421
Report Date: 06/04/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04 Batch: WG1121385-3 WG1121385-4								
Benzene	93		89		70-130	4		30
Toluene	82		79		70-130	4		30
Ethylbenzene	88		84		70-130	5		30
Methyl tert butyl ether	102		100		66-130	2		30
p/m-Xylene	87		84		70-130	4		30
o-Xylene	88		84		70-130	5		30
n-Butylbenzene	89		85		70-130	5		30
sec-Butylbenzene	87		83		70-130	5		30
tert-Butylbenzene	85		81		70-130	5		30
Isopropylbenzene	86		82		70-130	5		30
p-Isopropyltoluene	87		82		70-130	6		30
Naphthalene	94		91		70-130	3		30
n-Propylbenzene	88		84		70-130	5		30
1,3,5-Trimethylbenzene	87		83		70-130	5		30
1,2,4-Trimethylbenzene	87		84		70-130	4		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	107		108		70-130
Toluene-d8	96		96		70-130
4-Bromofluorobenzene	100		101		70-130
Dibromofluoromethane	115		115		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: TOT1802
Project Number: TOT1802

Lab Number: L1819421
Report Date: 06/04/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 06-07 Batch: WG1121389-3 WG1121389-4								
Benzene	93		89		70-130	4		30
Toluene	82		79		70-130	4		30
Ethylbenzene	88		84		70-130	5		30
Methyl tert butyl ether	102		100		66-130	2		30
p/m-Xylene	87		84		70-130	4		30
o-Xylene	88		84		70-130	5		30
n-Butylbenzene	89		85		70-130	5		30
sec-Butylbenzene	87		83		70-130	5		30
tert-Butylbenzene	85		81		70-130	5		30
Isopropylbenzene	86		82		70-130	5		30
p-Isopropyltoluene	87		82		70-130	6		30
Naphthalene	94		91		70-130	3		30
n-Propylbenzene	88		84		70-130	5		30
1,3,5-Trimethylbenzene	87		83		70-130	5		30
1,2,4-Trimethylbenzene	87		84		70-130	4		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	107		108		70-130
Toluene-d8	96		96		70-130
4-Bromofluorobenzene	100		101		70-130
Dibromofluoromethane	115		115		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: TOT1802
Project Number: TOT1802

Lab Number: L1819421
Report Date: 06/04/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 05 Batch: WG1121549-3 WG1121549-4								
Benzene	101		99		70-130	2		30
Toluene	103		101		70-130	2		30
Ethylbenzene	102		101		70-130	1		30
Methyl tert butyl ether	95		95		66-130	0		30
p/m-Xylene	101		99		70-130	2		30
o-Xylene	99		98		70-130	1		30
n-Butylbenzene	106		103		70-130	3		30
sec-Butylbenzene	106		103		70-130	3		30
tert-Butylbenzene	104		101		70-130	3		30
Isopropylbenzene	102		100		70-130	2		30
p-Isopropyltoluene	106		103		70-130	3		30
Naphthalene	99		99		70-130	0		30
n-Propylbenzene	104		102		70-130	2		30
1,3,5-Trimethylbenzene	104		101		70-130	3		30
1,2,4-Trimethylbenzene	105		102		70-130	3		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	95		93		70-130
Toluene-d8	101		102		70-130
4-Bromofluorobenzene	98		97		70-130
Dibromofluoromethane	96		96		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: TOT1802

Project Number: TOT1802

Lab Number: L1819421

Report Date: 06/04/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 05 Batch: WG1122159-3 WG1122159-4								
Naphthalene	88		90		70-130	2		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	108		108		70-130
Toluene-d8	97		97		70-130
4-Bromofluorobenzene	95		93		70-130
Dibromofluoromethane	102		104		70-130

SEMIVOLATILES

Project Name: TOT1802 **Lab Number:** L1819421

Project Number: TOT1802 **Report Date:** 06/04/18

SAMPLE RESULTS

Lab ID: L1819421-01
Client ID: SB001-20-22
Sample Location: 737-747 4TH AVE., BROOKLYN NY

Date Collected: 05/24/18 08:30
Date Received: 05/25/18
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 06/02/18 07:32
Analyst: EK
Percent Solids: 82%

Extraction Method: EPA 3546
Extraction Date: 05/31/18 09:03

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	320		ug/kg	160	21.	1
Fluoranthene	210		ug/kg	120	23.	1
Benzo(a)anthracene	73	J	ug/kg	120	23.	1
Benzo(a)pyrene	54	J	ug/kg	160	49.	1
Benzo(b)fluoranthene	120		ug/kg	120	34.	1
Benzo(k)fluoranthene	ND		ug/kg	120	32.	1
Chrysene	100	J	ug/kg	120	21.	1
Acenaphthylene	ND		ug/kg	160	31.	1
Anthracene	130		ug/kg	120	39.	1
Benzo(ghi)perylene	46	J	ug/kg	160	24.	1
Fluorene	590		ug/kg	200	20.	1
Phenanthrene	1200		ug/kg	120	24.	1
Dibenzo(a,h)anthracene	ND		ug/kg	120	23.	1
Indeno(1,2,3-cd)pyrene	53	J	ug/kg	160	28.	1
Pyrene	210		ug/kg	120	20.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	99		23-120
2-Fluorobiphenyl	95		30-120
4-Terphenyl-d14	80		18-120

Project Name: TOT1802 **Lab Number:** L1819421

Project Number: TOT1802 **Report Date:** 06/04/18

SAMPLE RESULTS

Lab ID: L1819421-02 D
Client ID: SB002-20-22
Sample Location: 737-747 4TH AVE., BROOKLYN NY

Date Collected: 05/24/18 09:00
Date Received: 05/25/18
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 06/03/18 20:19
Analyst: PS
Percent Solids: 81%

Extraction Method: EPA 3546
Extraction Date: 05/31/18 09:03

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	4000		ug/kg	1600	210	10
Fluoranthene	260	J	ug/kg	1200	240	10
Benzo(a)anthracene	ND		ug/kg	1200	230	10
Benzo(a)pyrene	ND		ug/kg	1600	500	10
Benzo(b)fluoranthene	ND		ug/kg	1200	340	10
Benzo(k)fluoranthene	ND		ug/kg	1200	330	10
Chrysene	ND		ug/kg	1200	210	10
Acenaphthylene	ND		ug/kg	1600	320	10
Anthracene	1300		ug/kg	1200	400	10
Benzo(ghi)perylene	ND		ug/kg	1600	240	10
Fluorene	8300		ug/kg	2000	200	10
Phenanthrene	16000		ug/kg	1200	250	10
Dibenzo(a,h)anthracene	ND		ug/kg	1200	240	10
Indeno(1,2,3-cd)pyrene	ND		ug/kg	1600	280	10
Pyrene	1000	J	ug/kg	1200	200	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	55		23-120
2-Fluorobiphenyl	78		30-120
4-Terphenyl-d14	56		18-120

Project Name: TOT1802 **Lab Number:** L1819421

Project Number: TOT1802 **Report Date:** 06/04/18

SAMPLE RESULTS

Lab ID: L1819421-03
Client ID: SB003-20-22
Sample Location: 737-747 4TH AVE., BROOKLYN NY

Date Collected: 05/24/18 09:20
Date Received: 05/25/18
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 06/01/18 15:23
Analyst: CB
Percent Solids: 86%

Extraction Method: EPA 3546
Extraction Date: 05/31/18 09:03

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	960		ug/kg	150	20.	1
Fluoranthene	57	J	ug/kg	110	22.	1
Benzo(a)anthracene	ND		ug/kg	110	21.	1
Benzo(a)pyrene	ND		ug/kg	150	46.	1
Benzo(b)fluoranthene	ND		ug/kg	110	32.	1
Benzo(k)fluoranthene	ND		ug/kg	110	30.	1
Chrysene	ND		ug/kg	110	20.	1
Acenaphthylene	ND		ug/kg	150	29.	1
Anthracene	430		ug/kg	110	37.	1
Benzo(ghi)perylene	ND		ug/kg	150	22.	1
Fluorene	1700		ug/kg	190	18.	1
Phenanthrene	3100		ug/kg	110	23.	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	22.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	150	26.	1
Pyrene	200		ug/kg	110	19.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	87		23-120
2-Fluorobiphenyl	81		30-120
4-Terphenyl-d14	60		18-120

Project Name: TOT1802 **Lab Number:** L1819421

Project Number: TOT1802 **Report Date:** 06/04/18

SAMPLE RESULTS

Lab ID: L1819421-04 D
Client ID: SB004-20-22
Sample Location: 737-747 4TH AVE., BROOKLYN NY

Date Collected: 05/24/18 09:50
Date Received: 05/25/18
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 06/03/18 20:44
Analyst: PS
Percent Solids: 84%

Extraction Method: EPA 3546
Extraction Date: 05/31/18 09:03

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	6200		ug/kg	780	100	5
Fluoranthene	310	J	ug/kg	580	110	5
Benzo(a)anthracene	ND		ug/kg	580	110	5
Benzo(a)pyrene	ND		ug/kg	780	240	5
Benzo(b)fluoranthene	ND		ug/kg	580	160	5
Benzo(k)fluoranthene	ND		ug/kg	580	160	5
Chrysene	ND		ug/kg	580	100	5
Acenaphthylene	ND		ug/kg	780	150	5
Anthracene	2000		ug/kg	580	190	5
Benzo(ghi)perylene	ND		ug/kg	780	110	5
Fluorene	12000		ug/kg	970	94.	5
Phenanthrene	22000		ug/kg	580	120	5
Dibenzo(a,h)anthracene	ND		ug/kg	580	110	5
Indeno(1,2,3-cd)pyrene	ND		ug/kg	780	140	5
Pyrene	1300		ug/kg	580	96.	5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	50		23-120
2-Fluorobiphenyl	68		30-120
4-Terphenyl-d14	57		18-120

Project Name: TOT1802 **Lab Number:** L1819421

Project Number: TOT1802 **Report Date:** 06/04/18

SAMPLE RESULTS

Lab ID: L1819421-05
Client ID: SB005-20-22
Sample Location: 737-747 4TH AVE., BROOKLYN NY

Date Collected: 05/24/18 10:15
Date Received: 05/25/18
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 06/01/18 16:16
Analyst: CB
Percent Solids: 77%

Extraction Method: EPA 3546
Extraction Date: 05/31/18 09:03

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	230		ug/kg	170	22.	1
Fluoranthene	ND		ug/kg	130	24.	1
Benzo(a)anthracene	ND		ug/kg	130	24.	1
Benzo(a)pyrene	ND		ug/kg	170	52.	1
Benzo(b)fluoranthene	ND		ug/kg	130	36.	1
Benzo(k)fluoranthene	ND		ug/kg	130	34.	1
Chrysene	ND		ug/kg	130	22.	1
Acenaphthylene	ND		ug/kg	170	33.	1
Anthracene	95	J	ug/kg	130	41.	1
Benzo(ghi)perylene	ND		ug/kg	170	25.	1
Fluorene	450		ug/kg	210	21.	1
Phenanthrene	930		ug/kg	130	26.	1
Dibenzo(a,h)anthracene	ND		ug/kg	130	24.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	170	30.	1
Pyrene	62	J	ug/kg	130	21.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	92		23-120
2-Fluorobiphenyl	79		30-120
4-Terphenyl-d14	61		18-120

Project Name: TOT1802 **Lab Number:** L1819421

Project Number: TOT1802 **Report Date:** 06/04/18

SAMPLE RESULTS

Lab ID: L1819421-06
Client ID: SB006-20-22
Sample Location: 737-747 4TH AVE., BROOKLYN NY

Date Collected: 05/24/18 10:45
Date Received: 05/25/18
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 06/01/18 16:42
Analyst: CB
Percent Solids: 91%

Extraction Method: EPA 3546
Extraction Date: 05/31/18 09:03

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	140	19.	1
Fluoranthene	33	J	ug/kg	110	21.	1
Benzo(a)anthracene	ND		ug/kg	110	20.	1
Benzo(a)pyrene	ND		ug/kg	140	44.	1
Benzo(b)fluoranthene	ND		ug/kg	110	30.	1
Benzo(k)fluoranthene	ND		ug/kg	110	29.	1
Chrysene	20	J	ug/kg	110	19.	1
Acenaphthylene	ND		ug/kg	140	28.	1
Anthracene	ND		ug/kg	110	35.	1
Benzo(ghi)perylene	ND		ug/kg	140	21.	1
Fluorene	19	J	ug/kg	180	18.	1
Phenanthrene	52	J	ug/kg	110	22.	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	21.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	140	25.	1
Pyrene	29	J	ug/kg	110	18.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	91		23-120
2-Fluorobiphenyl	74		30-120
4-Terphenyl-d14	62		18-120

Project Name: TOT1802 **Lab Number:** L1819421

Project Number: TOT1802 **Report Date:** 06/04/18

SAMPLE RESULTS

Lab ID: L1819421-07
Client ID: SB007-20-22
Sample Location: 737-747 4TH AVE., BROOKLYN NY

Date Collected: 05/24/18 11:30
Date Received: 05/25/18
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 06/01/18 17:09
Analyst: CB
Percent Solids: 88%

Extraction Method: EPA 3546
Extraction Date: 05/31/18 09:03

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	150	19.	1
Fluoranthene	ND		ug/kg	110	21.	1
Benzo(a)anthracene	ND		ug/kg	110	21.	1
Benzo(a)pyrene	ND		ug/kg	150	45.	1
Benzo(b)fluoranthene	ND		ug/kg	110	31.	1
Benzo(k)fluoranthene	ND		ug/kg	110	29.	1
Chrysene	ND		ug/kg	110	19.	1
Acenaphthylene	ND		ug/kg	150	28.	1
Anthracene	ND		ug/kg	110	36.	1
Benzo(ghi)perylene	ND		ug/kg	150	22.	1
Fluorene	ND		ug/kg	180	18.	1
Phenanthrene	ND		ug/kg	110	22.	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	21.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	150	26.	1
Pyrene	ND		ug/kg	110	18.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	76		23-120
2-Fluorobiphenyl	65		30-120
4-Terphenyl-d14	59		18-120

Project Name: TOT1802 **Lab Number:** L1819421

Project Number: TOT1802 **Report Date:** 06/04/18

SAMPLE RESULTS

Lab ID: L1819421-08
Client ID: MW-6
Sample Location: 737-747 4TH AVE., BROOKLYN NY

Date Collected: 05/24/18 08:15
Date Received: 05/25/18
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 05/29/18 13:32
Analyst: KL

Extraction Method: EPA 3510C
Extraction Date: 05/28/18 00:31

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	3.2		ug/l	0.10	0.04	1
Fluoranthene	0.12		ug/l	0.10	0.04	1
Benzo(a)anthracene	0.03	J	ug/l	0.10	0.02	1
Benzo(a)pyrene	ND		ug/l	0.10	0.04	1
Benzo(b)fluoranthene	0.09	J	ug/l	0.10	0.02	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.04	1
Chrysene	0.08	J	ug/l	0.10	0.04	1
Acenaphthylene	0.69		ug/l	0.10	0.04	1
Anthracene	0.43		ug/l	0.10	0.04	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.04	1
Fluorene	4.2		ug/l	0.10	0.04	1
Phenanthrene	3.2		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.04	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.04	1
Pyrene	0.32		ug/l	0.10	0.04	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	72		23-120
2-Fluorobiphenyl	66		15-120
4-Terphenyl-d14	78		41-149

Project Name: TOT1802 **Lab Number:** L1819421

Project Number: TOT1802 **Report Date:** 06/04/18

SAMPLE RESULTS

Lab ID: L1819421-09
Client ID: MW-86
Sample Location: 737-747 4TH AVE., BROOKLYN NY

Date Collected: 05/24/18 12:20
Date Received: 05/25/18
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 05/29/18 13:59
Analyst: KL

Extraction Method: EPA 3510C
Extraction Date: 05/28/18 00:31

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	5.0		ug/l	0.10	0.03	1
Fluoranthene	0.21		ug/l	0.10	0.04	1
Benzo(a)anthracene	0.05	J	ug/l	0.10	0.02	1
Benzo(a)pyrene	0.05	J	ug/l	0.10	0.04	1
Benzo(b)fluoranthene	0.11		ug/l	0.10	0.02	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.04	1
Chrysene	0.11		ug/l	0.10	0.04	1
Acenaphthylene	ND		ug/l	0.10	0.03	1
Anthracene	1.3		ug/l	0.10	0.03	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.04	1
Fluorene	6.8		ug/l	0.10	0.04	1
Phenanthrene	9.5		ug/l	0.10	0.01	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.04	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.04	1
Pyrene	0.82		ug/l	0.10	0.04	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	63		23-120
2-Fluorobiphenyl	60		15-120
4-Terphenyl-d14	72		41-149

Project Name: TOT1802 **Lab Number:** L1819421

Project Number: TOT1802 **Report Date:** 06/04/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 05/29/18 09:04
Analyst: KL

Extraction Method: EPA 3510C
Extraction Date: 05/28/18 00:31

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 08-09 Batch: WG1120026-1					
Acenaphthene	ND		ug/l	0.10	0.04
Fluoranthene	ND		ug/l	0.10	0.04
Benzo(a)anthracene	ND		ug/l	0.10	0.02
Benzo(a)pyrene	ND		ug/l	0.10	0.04
Benzo(b)fluoranthene	ND		ug/l	0.10	0.02
Benzo(k)fluoranthene	ND		ug/l	0.10	0.04
Chrysene	ND		ug/l	0.10	0.04
Acenaphthylene	ND		ug/l	0.10	0.04
Anthracene	ND		ug/l	0.10	0.04
Benzo(ghi)perylene	ND		ug/l	0.10	0.04
Fluorene	ND		ug/l	0.10	0.04
Phenanthrene	ND		ug/l	0.10	0.02
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.04
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.04
Pyrene	ND		ug/l	0.10	0.04

Surrogate	%Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	51		23-120
2-Fluorobiphenyl	53		15-120
4-Terphenyl-d14	81		41-149

Project Name: TOT1802 **Lab Number:** L1819421

Project Number: TOT1802 **Report Date:** 06/04/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 06/01/18 20:34
Analyst: CB

Extraction Method: EPA 3546
Extraction Date: 05/31/18 09:03

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-07 Batch: WG1121002-1					
Acenaphthene	ND		ug/kg	130	17.
Fluoranthene	ND		ug/kg	98	19.
Benzo(a)anthracene	ND		ug/kg	98	18.
Benzo(a)pyrene	ND		ug/kg	130	40.
Benzo(b)fluoranthene	ND		ug/kg	98	28.
Benzo(k)fluoranthene	ND		ug/kg	98	26.
Chrysene	ND		ug/kg	98	17.
Acenaphthylene	ND		ug/kg	130	25.
Anthracene	ND		ug/kg	98	32.
Benzo(ghi)perylene	ND		ug/kg	130	19.
Fluorene	ND		ug/kg	160	16.
Phenanthrene	ND		ug/kg	98	20.
Dibenzo(a,h)anthracene	ND		ug/kg	98	19.
Indeno(1,2,3-cd)pyrene	ND		ug/kg	130	23.
Pyrene	ND		ug/kg	98	16.

Tentatively Identified Compounds

Total TIC Compounds	168	J	ug/kg
Aldol Condensates	168	J	ug/kg

Project Name: TOT1802 **Lab Number:** L1819421

Project Number: TOT1802 **Report Date:** 06/04/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 06/01/18 20:34
Analyst: CB

Extraction Method: EPA 3546
Extraction Date: 05/31/18 09:03

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-07 Batch: WG1121002-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	80		25-120
Phenol-d6	83		10-120
Nitrobenzene-d5	76		23-120
2-Fluorobiphenyl	85		30-120
2,4,6-Tribromophenol	81		10-136
4-Terphenyl-d14	84		18-120

Lab Control Sample Analysis

Batch Quality Control

Project Name: TOT1802
Project Number: TOT1802

Lab Number: L1819421
Report Date: 06/04/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 08-09 Batch: WG1120026-2 WG1120026-3								
Acenaphthene	78		83		40-140	6		40
Fluoranthene	80		86		40-140	7		40
Benzo(a)anthracene	72		78		40-140	8		40
Benzo(a)pyrene	74		75		40-140	1		40
Benzo(b)fluoranthene	74		74		40-140	0		40
Benzo(k)fluoranthene	76		78		40-140	3		40
Chrysene	74		79		40-140	7		40
Acenaphthylene	75		80		40-140	6		40
Anthracene	77		82		40-140	6		40
Benzo(ghi)perylene	78		78		40-140	0		40
Fluorene	82		87		40-140	6		40
Phenanthrene	73		78		40-140	7		40
Dibenzo(a,h)anthracene	80		80		40-140	0		40
Indeno(1,2,3-cd)pyrene	78		79		40-140	1		40
Pyrene	77		83		40-140	8		40

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
Nitrobenzene-d5	75		79		23-120
2-Fluorobiphenyl	69		73		15-120
4-Terphenyl-d14	77		82		41-149

Lab Control Sample Analysis

Batch Quality Control

Project Name: TOT1802
Project Number: TOT1802

Lab Number: L1819421
Report Date: 06/04/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-07 Batch: WG1121002-2 WG1121002-3								
Acenaphthene	89		88		31-137	1		50
Fluoranthene	92		90		40-140	2		50
Benzo(a)anthracene	88		87		40-140	1		50
Benzo(a)pyrene	93		91		40-140	2		50
Benzo(b)fluoranthene	87		94		40-140	8		50
Benzo(k)fluoranthene	93		82		40-140	13		50
Chrysene	88		86		40-140	2		50
Acenaphthylene	92		93		40-140	1		50
Anthracene	92		92		40-140	0		50
Benzo(ghi)perylene	91		89		40-140	2		50
Fluorene	92		90		40-140	2		50
Phenanthrene	90		88		40-140	2		50
Dibenzo(a,h)anthracene	92		92		40-140	0		50
Indeno(1,2,3-cd)pyrene	94		94		40-140	0		50
Pyrene	91		92		35-142	1		50

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	78		74		25-120
Phenol-d6	80		79		10-120
Nitrobenzene-d5	74		73		23-120
2-Fluorobiphenyl	78		79		30-120
2,4,6-Tribromophenol	82		79		10-136
4-Terphenyl-d14	78		76		18-120

INORGANICS
&
MISCELLANEOUS

Project Name: TOT1802
Project Number: TOT1802

Lab Number: L1819421
Report Date: 06/04/18

SAMPLE RESULTS

Lab ID: L1819421-01
Client ID: SB001-20-22
Sample Location: 737-747 4TH AVE., BROOKLYN NY

Date Collected: 05/24/18 08:30
Date Received: 05/25/18
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	82.3		%	0.100	NA	1	-	05/29/18 09:46	121,2540G	JK

Project Name: TOT1802
Project Number: TOT1802

Lab Number: L1819421
Report Date: 06/04/18

SAMPLE RESULTS

Lab ID: L1819421-02
Client ID: SB002-20-22
Sample Location: 737-747 4TH AVE., BROOKLYN NY

Date Collected: 05/24/18 09:00
Date Received: 05/25/18
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	80.8		%	0.100	NA	1	-	05/29/18 09:46	121,2540G	JK

Project Name: TOT1802
Project Number: TOT1802

Lab Number: L1819421
Report Date: 06/04/18

SAMPLE RESULTS

Lab ID: L1819421-03
Client ID: SB003-20-22
Sample Location: 737-747 4TH AVE., BROOKLYN NY

Date Collected: 05/24/18 09:20
Date Received: 05/25/18
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	85.7		%	0.100	NA	1	-	05/29/18 09:46	121,2540G	JK

Project Name: TOT1802
Project Number: TOT1802

Lab Number: L1819421
Report Date: 06/04/18

SAMPLE RESULTS

Lab ID: L1819421-04
Client ID: SB004-20-22
Sample Location: 737-747 4TH AVE., BROOKLYN NY

Date Collected: 05/24/18 09:50
Date Received: 05/25/18
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	84.0		%	0.100	NA	1	-	05/29/18 23:35	121,2540G	FN

Project Name: TOT1802
Project Number: TOT1802

Lab Number: L1819421
Report Date: 06/04/18

SAMPLE RESULTS

Lab ID: L1819421-05
Client ID: SB005-20-22
Sample Location: 737-747 4TH AVE., BROOKLYN NY

Date Collected: 05/24/18 10:15
Date Received: 05/25/18
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	77.2		%	0.100	NA	1	-	05/29/18 23:35	121,2540G	FN

Project Name: TOT1802
Project Number: TOT1802

Lab Number: L1819421
Report Date: 06/04/18

SAMPLE RESULTS

Lab ID: L1819421-06
Client ID: SB006-20-22
Sample Location: 737-747 4TH AVE., BROOKLYN NY

Date Collected: 05/24/18 10:45
Date Received: 05/25/18
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	90.9		%	0.100	NA	1	-	05/29/18 23:35	121,2540G	FN

Project Name: TOT1802
Project Number: TOT1802

Lab Number: L1819421
Report Date: 06/04/18

SAMPLE RESULTS

Lab ID: L1819421-07
Client ID: SB007-20-22
Sample Location: 737-747 4TH AVE., BROOKLYN NY

Date Collected: 05/24/18 11:30
Date Received: 05/25/18
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	88.2		%	0.100	NA	1	-	05/29/18 23:35	121,2540G	FN

Lab Duplicate Analysis

Batch Quality Control

Project Name: TOT1802

Project Number: TOT1802

Lab Number: L1819421

Report Date: 06/04/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG1120187-1 QC Sample: L1818780-11 Client ID: DUP Sample						
Solids, Total	81.7	78.4	%	4		20
General Chemistry - Westborough Lab Associated sample(s): 04-07 QC Batch ID: WG1120405-1 QC Sample: L1819448-01 Client ID: DUP Sample						
Solids, Total	94.7	93.8	%	1		20

Project Name: TOT1802
Project Number: TOT1802

Lab Number: L1819421
Report Date: 06/04/18

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent
B	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1819421-01A	Vial MeOH preserved	A	NA		2.6	Y	Absent		NYCP51-8260HLW-G(14)
L1819421-01B	Vial water preserved	A	NA		2.6	Y	Absent	26-MAY-18 07:30	NYCP51-8260HLW-G(14)
L1819421-01C	Vial water preserved	A	NA		2.6	Y	Absent	26-MAY-18 07:30	NYCP51-8260HLW-G(14)
L1819421-01D	Plastic 2oz unpreserved for TS	A	NA		2.6	Y	Absent		TS(7)
L1819421-01E	Glass 120ml/4oz unpreserved	A	NA		2.6	Y	Absent		NYCP51-PAH(14)
L1819421-02A	Vial MeOH preserved	A	NA		2.6	Y	Absent		NYCP51-8260HLW-G(14)
L1819421-02B	Vial water preserved	A	NA		2.6	Y	Absent	26-MAY-18 07:30	NYCP51-8260HLW-G(14)
L1819421-02C	Vial water preserved	A	NA		2.6	Y	Absent	26-MAY-18 07:30	NYCP51-8260HLW-G(14)
L1819421-02D	Plastic 2oz unpreserved for TS	A	NA		2.6	Y	Absent		TS(7)
L1819421-02E	Glass 120ml/4oz unpreserved	A	NA		2.6	Y	Absent		NYCP51-PAH(14)
L1819421-03A	Vial MeOH preserved	A	NA		2.6	Y	Absent		NYCP51-8260HLW-G(14)
L1819421-03B	Vial water preserved	A	NA		2.6	Y	Absent	26-MAY-18 07:30	NYCP51-8260HLW-G(14)
L1819421-03C	Vial water preserved	A	NA		2.6	Y	Absent	26-MAY-18 07:30	NYCP51-8260HLW-G(14)
L1819421-03D	Plastic 2oz unpreserved for TS	A	NA		2.6	Y	Absent		TS(7)
L1819421-03E	Glass 120ml/4oz unpreserved	A	NA		2.6	Y	Absent		NYCP51-PAH(14)
L1819421-04A	Vial MeOH preserved	A	NA		2.6	Y	Absent		NYCP51-8260HLW-G(14)
L1819421-04B	Vial water preserved	A	NA		2.6	Y	Absent	26-MAY-18 07:30	NYCP51-8260HLW-G(14)
L1819421-04C	Vial water preserved	A	NA		2.6	Y	Absent	26-MAY-18 07:30	NYCP51-8260HLW-G(14)
L1819421-04D	Plastic 2oz unpreserved for TS	A	NA		2.6	Y	Absent		TS(7)
L1819421-04E	Glass 120ml/4oz unpreserved	A	NA		2.6	Y	Absent		NYCP51-PAH(14)
L1819421-05A	Vial MeOH preserved	A	NA		2.6	Y	Absent		NYCP51-8260H-G(14),NYCP51-8260HLW-G(14)

*Values in parentheses indicate holding time in days

Project Name: TOT1802
Project Number: TOT1802

Lab Number: L1819421
Report Date: 06/04/18

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1819421-05B	Vial water preserved	A	NA		2.6	Y	Absent	26-MAY-18 07:30	NYCP51-8260H-G(14),NYCP51-8260HLW-G(14)
L1819421-05C	Vial water preserved	A	NA		2.6	Y	Absent	26-MAY-18 07:30	NYCP51-8260H-G(14),NYCP51-8260HLW-G(14)
L1819421-05D	Plastic 2oz unpreserved for TS	A	NA		2.6	Y	Absent		TS(7)
L1819421-05E	Glass 120ml/4oz unpreserved	A	NA		2.6	Y	Absent		NYCP51-PAH(14)
L1819421-06A	Vial MeOH preserved	A	NA		2.6	Y	Absent		NYCP51-8260HLW-G(14)
L1819421-06B	Vial water preserved	A	NA		2.6	Y	Absent	26-MAY-18 07:30	NYCP51-8260HLW-G(14)
L1819421-06C	Vial water preserved	A	NA		2.6	Y	Absent	26-MAY-18 07:30	NYCP51-8260HLW-G(14)
L1819421-06D	Plastic 2oz unpreserved for TS	A	NA		2.6	Y	Absent		TS(7)
L1819421-06E	Glass 120ml/4oz unpreserved	A	NA		2.6	Y	Absent		NYCP51-PAH(14)
L1819421-07A	Vial MeOH preserved	A	NA		2.6	Y	Absent		NYCP51-8260HLW-G(14)
L1819421-07B	Vial water preserved	A	NA		2.6	Y	Absent	26-MAY-18 07:30	NYCP51-8260HLW-G(14)
L1819421-07C	Vial water preserved	A	NA		2.6	Y	Absent	26-MAY-18 07:30	NYCP51-8260HLW-G(14)
L1819421-07D	Plastic 2oz unpreserved for TS	A	NA		2.6	Y	Absent		TS(7)
L1819421-07E	Glass 120ml/4oz unpreserved	A	NA		2.6	Y	Absent		NYCP51-PAH(14)
L1819421-08A	Vial HCl preserved	B	NA		2.4	Y	Absent		NYCP51-8260-G(14)
L1819421-08B	Vial HCl preserved	B	NA		2.4	Y	Absent		NYCP51-8260-G(14)
L1819421-08C	Vial HCl preserved	B	NA		2.4	Y	Absent		NYCP51-8260-G(14)
L1819421-08D	Amber 1000ml unpreserved	B	NA		2.4	Y	Absent		NYCP51-PAHSIM(7)
L1819421-08E	Amber 1000ml unpreserved	B	NA		2.4	Y	Absent		NYCP51-PAHSIM(7)
L1819421-09A	Vial HCl preserved	B	NA		2.4	Y	Absent		NYCP51-8260-G(14)
L1819421-09B	Vial HCl preserved	B	NA		2.4	Y	Absent		NYCP51-8260-G(14)
L1819421-09C	Vial HCl preserved	B	NA		2.4	Y	Absent		NYCP51-8260-G(14)
L1819421-09D	Amber 1000ml unpreserved	B	NA		2.4	Y	Absent		NYCP51-PAHSIM(7)
L1819421-09E	Amber 1000ml unpreserved	B	NA		2.4	Y	Absent		NYCP51-PAHSIM(7)
L1819421-10A	Vial HCl preserved	B	NA		2.4	Y	Absent		ARCHIVE()
L1819421-10B	Vial HCl preserved	B	NA		2.4	Y	Absent		ARCHIVE()

*Values in parentheses indicate holding time in days

Project Name:	TOT1802	**Lab Number:**	L1819421
Project Number:	TOT1802	**Report Date:**	06/04/18

GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

1	- The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

A	- Spectra identified as "Aldol Condensation Product".
B	- The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related

Report Format: DU Report with 'J' Qualifiers

Project Name:	TOT1802	**Lab Number:**	L1819421
Project Number:	TOT1802	**Report Date:**	06/04/18

Data Qualifiers

projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers

Project Name:	TOT1802	**Lab Number:**	L1819421
Project Number:	TOT1802	**Report Date:**	06/04/18

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility
EPA 624: m/p-xylene, o-xylene
EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
EPA 300: DW: Bromide
EPA 6860: SCM: Perchlorate
EPA 9010: NPW and SCM: Amenable Cyanide Distillation
SM4500: NPW: Amenable Cyanide, Dissolved Oxygen; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility
SM 2540D: TSS
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water
EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B**
EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N**, EPA 351.1, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D.**
EPA 624: Volatile Halocarbons & Aromatics,
EPA 608: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, SM9222D.**

Mansfield Facility:

Drinking Water
EPA 200.7: Al, Ba, Be, Cd, Cr, Cu, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn.
EPA 245.1 Hg.
SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

ALPHA

NEW YORK CHAIN OF CUSTODY

Westborough, MA 01581
8 Walkup Dr.
TEL: 508-898-9220
FAX: 508-898-9193

Mansfield, MA 02048
320 Forbes Blvd
TEL: 508-822-9300
FAX: 508-822-3288

Service Centers
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Page 1 of 2

Date Rec'd in Lab: 5/26/18

ALPHA Job #: L1819421

Client Information
Client: PWGC
Address: 630 Johnson Ave. St. 7
Bohemia NY 11716
Phone: 631-589-6353
Fax:
Email: Jennifer.L@pwgrasses.com

Project Information
Project Name: TOT1602
Project Location: 737-747 4th Av, Brooklyn NY
Project #: TOT1602
(Use Project name as Project #) ☐
Project Manager: Jennifer Lewis
ALPHAQuote #:

Turn-Around Time
Standard ☒ Due Date:
Rush (only if pre approved) ☐ # of Days:

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:

Please specify Metals or TAL.

Deliverables
☐ ASP-A ☐ ASP-B
☐ EQuIS (1 File) ☐ EQuIS (4 File)
☐ Other

Regulatory Requirement
☐ NY TOGS ☐ NY Part 375
☐ AWQ Standards ☒ NY CP-51
☐ NY Restricted Use ☐ Other
☐ NY Unrestricted Use
☐ NYC Sewer Discharge

Billing Information
☒ Same as Client Info
PO #

Disposal Site Information
Please identify below location of applicable disposal facilities.
Disposal Facility:
☐ NJ ☐ NY
☐ Other:

Sample Filtration
☐ Done
☐ Lab to do
Preservation
☐ Lab to do
(Please Specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	VOCs (CP-51)	SVOCs (CP-51)	Sample Specific Comments	Total Bottle
19421-01	SB001-20-22	5-24-18	830	S	NR	X	X		5
-02	SB002-20-22		900			X	X		
-03	SB003-20-22		920			X	X		
-04	SB004-20-22		950			X	X		
-05	SB005-20-22		1015			X	X		
-06	SB006-20-22		1045			X	X		
-07	SB007-20-22		1130			X	X		

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

Container Code
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Container Type									
Preservative									

Relinquished By:	Date/Time	Received By:	Date/Time
	5-24-18 1630		5/25/18 1259
	5/25/18 1900		5/25/18 2000
	5/26/18 0125		5/26/18 0125

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)

Form No: 01-25 HC (rev. 30-Sept-2013)

NEW YORK CHAIN OF CUSTODY

ALPHA ANALYTICAL

Westborough, MA 01581
8 Walkup Dr.
TEL: 508-898-9220
FAX: 508-898-9193

Mansfield, MA 02048
320 Forbes Blvd
TEL: 508-822-9300
FAX: 508-822-3288

Service Centers
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Page 2 of 2

Date Rec'd in Lab: 5/26/18

ALPHA Job #: L1819421

Client Information
Client: PWGC
Address: 630 Sunrise Hwy. Ste. 7
Bohemia NY 11716
Phone: 631-589-6353
Fax:
Email: Jennifer.Lewis@pwgcorp.com

Project Information
Project Name: TOT1802
Project Location: 737-747 4th Ave Brooklyn NY
Project #: TOT1802
(Use Project name as Project #) ☒
Project Manager: Jennifer Lewis
ALPHAQuote #:

Turn-Around Time
Standard ☒ Due Date:
Rush (only if pre approved) ☐ # of Days:

Deliverables
☐ ASP-A ☐ ASP-B
☐ EQuIS (1 File) ☐ EQuIS (4 File)
☐ Other

Regulatory Requirement
☐ NY TOGS ☐ NY Part 375
☐ AWQ Standards ☒ NY CP-51
☐ NY Restricted Use ☐ Other
☐ NY Unrestricted Use
☐ NYC Sewer Discharge

Billing Information
☒ Same as Client Info
PO #

Disposal Site Information
Please identify below location of applicable disposal facilities.
Disposal Facility:
☐ NJ ☐ NY
☐ Other:

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:

Please specify Metals or TAL.

ANALYSIS

Sample Filtration
☐ Done
☐ Lab to do
Preservation
☐ Lab to do
(Please Specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	VOCs (CP-51)	SVOCs (CP-51)	Sample Specific Comments	Total Bottle
19421-08	MW-6	5-24-18	815	GW	NK	X	X		3
-09	MW-86	↓	1220	↓	↓	X	X		3
-10	Trip Blank					X			

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

Container Code
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Container Type									
Preservative									

Relinquished By:	Date/Time	Received By:	Date/Time
	5/24/18 1635		5/25/18 1259
	5/25/18 1950		5/25/18 2114
	5/26/18 1131		5/26/18 0125

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)

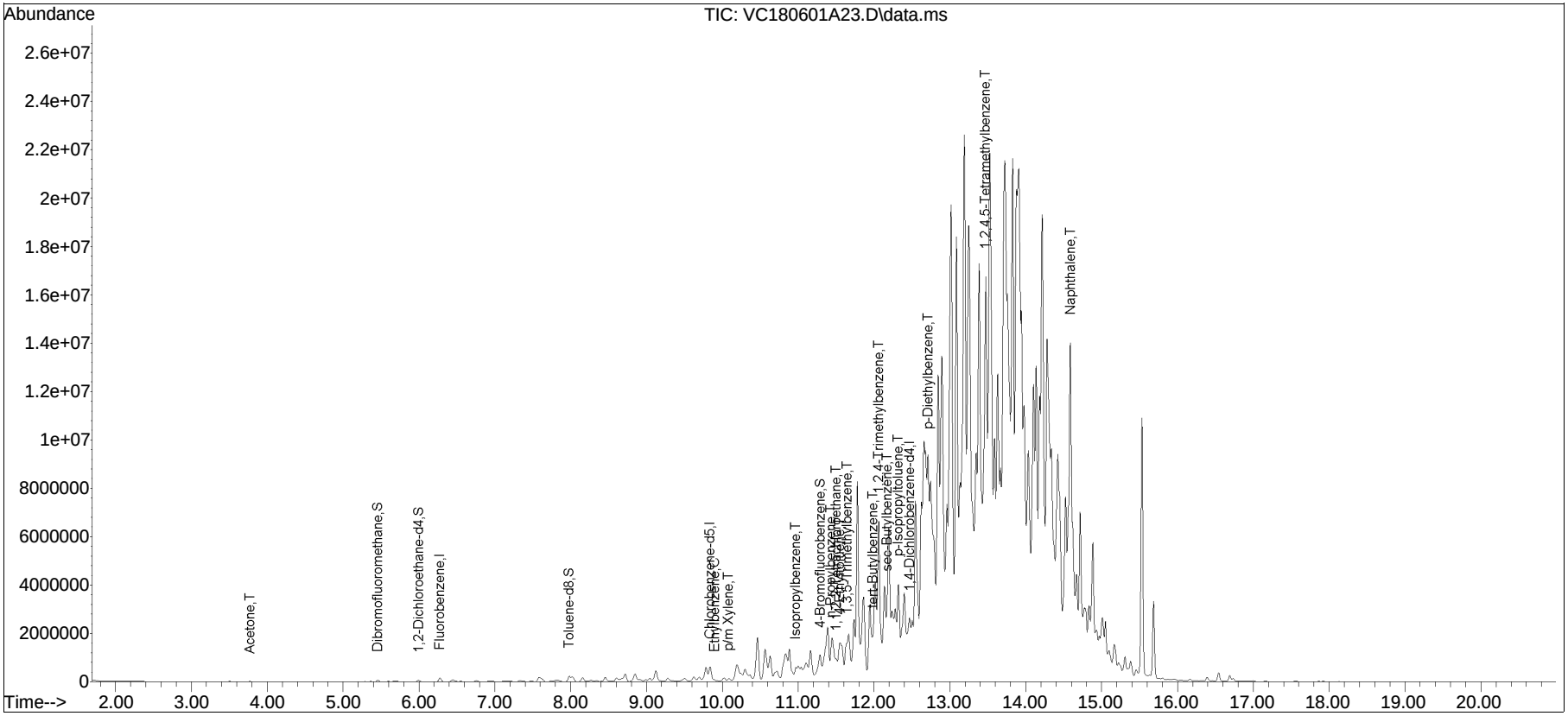
Form No: 01-25 HC (rev. 30-Sept-2013)

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Charlie\2018\180601A\
Data File : VC180601A23.D
Acq On : 1 Jun 2018 5:13 pm
Operator : CHARLIE:PK
Sample : l1819421-05,31,5.9,5,,b
Misc : WG1121549,ICAL14685
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Jun 01 20:50:34 2018
Quant Method : I:\VOLATILES\Charlie\2018\180601A\C_180501_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed May 02 18:34:14 2018
Response via : Initial Calibration

Sub List : 8260-NYTCL - Megamix plus Diox180601A\VC180601A01.D•



C_180501_8260.m Fri Jun 01 21:08:05 2018 Page: 4

APPENDIX C
GROUNDWATER SAMPLING LOGS

P.W. GROSSER CONSULTING, Inc

Well Sampling Log

Well Designation:	MW-1	**Sampled By:**	KC
Site Address:	737-747 4th Ave, Brooklyn, NY	**Project Manager:**	Jennifer Lewis
Project Name:	Totem	**Project Number:**	TOT1802

Reference Elevation (ft):	NM	**Well Use:**	Monitoring/Observation
Depth to Product (ft):	NP	**Product Elevation (ft):**	NM
Depth to Water (ft):	23.09	**Groundwater Elevation (ft):**	NM
Depth to Bottom (ft):	31.00	**Bottom Elevation (ft):**	NM
Height of Water Column (ft):	NM	**Well Diameter (in):**	4
Standing Water Volume (gal):	NM	**Calculated Purge Volume (gal):**	N/A
Sample Date:	4/6/2018	**Begin Purge Time:**	8:09
Sample Time:	8:30	**Complete Purge Time:**	8:24
Purge Method:	Low Flow - Grundfos	**Sample Method:**	Low Flow - Grundfos
Purge Rate (gpm):	0.20	**Purge Time (min):**	15
Actual Purge Volume (gal):	3	**Casing Volumes Removed:**	N/A
Sample Appearance:	Clear	**Odors Observed:**	None
Analytical Laboratory:	Alpha Analytical	**Notes:**	
Date Shipped:			
Headspace (ppm)			
Analyses Requested:			
VOC (CP-51); SVOC (CP-51)			

Field Indicator Parameters

Reading	Time	Temp. (ºC)	pH	Turbidity NTU	ORP mV	Cond. (mS/cm)	DO mg/L		
1	8:09	17.15	6.54	764	50	4.44	0		
2	8:12	17.18	6.58	328	30	4.15	0		
3	8:15	17.21	6.62	89.1	4	3.58	3.91		
4	8:18	17.74	6.63	50.8	0	3.34	1.77		
5	8:21	17.82	6.61	44.4	-2	3.28	3.28		
6	8:24	17.86	6.61	36.9	-3	3.30	3.34		

Take readings every three minutes

P.W. GROSSER CONSULTING, Inc

Well Sampling Log

Well Designation:	MW-3	**Sampled By:**	KC
Site Address:	737-747 4th Ave, Brooklyn, NY	**Project Manager:**	Jennifer Lewis
Project Name:	Totem	**Project Number:**	TOT1802

Reference Elevation (ft):	NM	**Well Use:**	Monitoring/Observation
Depth to Product (ft):	NP	**Product Elevation (ft):**	NM
Depth to Water (ft):	23.65	**Groundwater Elevation (ft):**	NM
Depth to Bottom (ft):	36.50	**Bottom Elevation (ft):**	NM
Height of Water Column (ft):	NM	**Well Diameter (in):**	4
Standing Water Volume (gal):	NM	**Calculated Purge Volume (gal):**	N/A
Sample Date:	4/6/2018	**Begin Purge Time:**	8:38
Sample Time:	9:00	**Complete Purge Time:**	8:53
Purge Method:	Low Flow - Grundfos	**Sample Method:**	Low Flow - Grundfos
Purge Rate (gpm):	0.20	**Purge Time (min):**	15
Actual Purge Volume (gal):	3	**Casing Volumes Removed:**	N/A
Sample Appearance:	Clear	**Odors Observed:**	None
Analytical Laboratory:	Alpha Analytical	**Notes:**	
Date Shipped:	4/6/2018		
Headspace (ppm)	NA		
Analyses Requested:			
VOC (CP-51); SVOC (CP-51)			

Field Indicator Parameters

Reading	Time	Temp. (ºC)	pH	Turbidity NTU	ORP mV	Cond. (mS/cm)	DO mg/L		
1	8:38	15.14	7.07	78	-50	4.56	1.19		
2	8:41	16.56	6.71	14	-25	4.52	0		
3	8:44	17.37	6.69	20.3	-28	4.34	0		
4	8:47	17.49	6.69	19.4	-29	4,23	0		
5	8:50	17.45	6.68	15.6	-29	4.04	0		
6	8:53	17.44	6.67	10	-30	3.95	0		

Take readings every three minutes

P.W. GROSSER CONSULTING, Inc

Well Sampling Log

Well Designation:	MW-80	**Sampled By:**	KC
Site Address:	737-747 4th Ave, Brooklyn, NY	**Project Manager:**	Jennifer Lewis
Project Name:	Totem	**Project Number:**	TOT1802

Reference Elevation (ft):	NM	**Well Use:**	Monitoring/Observation
Depth to Product (ft):	NP	**Product Elevation (ft):**	NM
Depth to Water (ft):	24.65	**Groundwater Elevation (ft):**	NM
Depth to Bottom (ft):	32.90	**Bottom Elevation (ft):**	NM
Height of Water Column (ft):	NM	**Well Diameter (in):**	4
Standing Water Volume (gal):	NM	**Calculated Purge Volume (gal):**	N/A
Sample Date:	4/6/2018	**Begin Purge Time:**	NA
Sample Time:	8:00	**Complete Purge Time:**	NA
Purge Method:	Low Flow - Grundfos	**Sample Method:**	Low Flow - Grundfos
Purge Rate (gpm):	NM	**Purge Time (min):**	NA
Actual Purge Volume (gal):	0	**Casing Volumes Removed:**	N/A
Sample Appearance:	Turbid	**Odors Observed:**	Organic
Analytical Laboratory:	Alpha Analytical	**Notes:**	Purged dry almost instantly; took grab sample when well recharged; sheen on sample water
Date Shipped:	4/6/2018		
Headspace (ppm)	NA		
Analyses Requested:			
VOC (CP-51); SVOC (CP-51)			

Field Indicator Parameters

Reading	Time	Temp. (ºC)	pH	Turbidity NTU	ORP mV	Cond. (mS/cm)	DO mg/L		
1									
2									
3									
4									
5									
6									

Take readings every three minutes

P.W. GROSSER CONSULTING, Inc

Well Sampling Log

Well Designation:	MW-81	**Sampled By:**	KC
Site Address:	737-747 4th Ave, Brooklyn, NY	**Project Manager:**	Jennifer Lewis
Project Name:	Totem	**Project Number:**	TOT1802

Reference Elevation (ft):	NM	**Well Use:**	Monitoring/Observation
Depth to Product (ft):	NP	**Product Elevation (ft):**	NM
Depth to Water (ft):	24.72	**Groundwater Elevation (ft):**	NM
Depth to Bottom (ft):	37.00	**Bottom Elevation (ft):**	NM
Height of Water Column (ft):	NM	**Well Diameter (in):**	4
Standing Water Volume (gal):	NM	**Calculated Purge Volume (gal):**	N/A
Sample Date:	4/6/2018	**Begin Purge Time:**	7:28
Sample Time:	7:43	**Complete Purge Time:**	7:43
Purge Method:	Low Flow - Grundfos	**Sample Method:**	Low Flow - Grundfos
Purge Rate (gpm):	0.20	**Purge Time (min):**	15
Actual Purge Volume (gal):	3	**Casing Volumes Removed:**	N/A
Sample Appearance:	Clear	**Odors Observed:**	None
Analytical Laboratory:	Alpha Analytical	**Notes:**	
Date Shipped:	4/6/2018		
Headspace (ppm)	NA		
Analyses Requested:			
VOC (CP-51); SVOC (CP-51)			

Field Indicator Parameters

Reading	Time	Temp. (ºC)	pH	Turbidity NTU	ORP mV	Cond. (mS/cm)	DO mg/L		
1	7:28	15.88	7.69	168	-107	0.694	2.88		
2	7:31	17.07	6.97	109	-16	0.644	0.07		
3	7:34	17.5	6.86	94.3	8	0.633	0.14		
4	7:37	17.76	6.83	71.5	27	0.602	0.62		
5	7:40	17.72	6.84	58.6	42	0.572	1.14		
6	7:43	17.89	6.84	44.7	50	0.564	1.27		

Take readings every three minutes

P.W. GROSSER CONSULTING, Inc

Well Sampling Log

Well Designation:	MW-84	**Sampled By:**	KC
Site Address:	737-747 4th Ave, Brooklyn, NY	**Project Manager:**	Jennifer Lewis
Project Name:	Totem	**Project Number:**	TOT1802

Reference Elevation (ft):	NM	**Well Use:**	Monitoring/Observation
Depth to Product (ft):	NP	**Product Elevation (ft):**	NM
Depth to Water (ft):	21.64	**Groundwater Elevation (ft):**	NM
Depth to Bottom (ft):	31.50	**Bottom Elevation (ft):**	NM
Height of Water Column (ft):	NM	**Well Diameter (in):**	4
Standing Water Volume (gal):	NM	**Calculated Purge Volume (gal):**	N/A
Sample Date:	4/6/2018	**Begin Purge Time:**	9:45
Sample Time:	10:05	**Complete Purge Time:**	10:00
Purge Method:	Low Flow - Grundfos	**Sample Method:**	Low Flow - Grundfos
Purge Rate (gpm):	0.27	**Purge Time (min):**	15
Actual Purge Volume (gal):	4	**Casing Volumes Removed:**	N/A
Sample Appearance:	Clear	**Odors Observed:**	Petroleum
Analytical Laboratory:	Alpha Analytical	**Notes:**	Sheen on purge water; well vault door in bad shape
Date Shipped:	4/6/2018		
Headspace (ppm)	NA		
Analyses Requested:			
VOC (CP-51); SVOC (CP-51)			

Field Indicator Parameters

Reading	Time	Temp. (ºC)	pH	Turbidity NTU	ORP mV	Cond. (mS/cm)	DO mg/L		
1	9:45	15.93	6.5	292	-50	0.983	0		
2	9:48	17.4	6.4	90.5	-50	1.05	0		
3	9:51	17.97	6.44	52.5	-58	1.05	0		
4	9:54	17.93	6.47	45.8	-65	1.09	0		
5	9:57	18.02	6.48	49.0	-69	1.14	0		
6	10:00	18.06	6.49	47.5	-72	1.17	0		

Take readings every three minutes

P.W. GROSSER CONSULTING, Inc

Well Sampling Log

Well Designation:	MW-89	**Sampled By:**	KC
Site Address:	737-747 4th Ave, Brooklyn, NY	**Project Manager:**	Jennifer Lewis
Project Name:	Totem	**Project Number:**	TOT1802

Reference Elevation (ft):	NM	**Well Use:**	Monitoring/Observation
Depth to Product (ft):	NP	**Product Elevation (ft):**	NM
Depth to Water (ft):	20.76	**Groundwater Elevation (ft):**	NM
Depth to Bottom (ft):	35.10	**Bottom Elevation (ft):**	NM
Height of Water Column (ft):	NM	**Well Diameter (in):**	4
Standing Water Volume (gal):	NM	**Calculated Purge Volume (gal):**	N/A
Sample Date:	4/6/2018	**Begin Purge Time:**	9:13
Sample Time:	9:30	**Complete Purge Time:**	9:28
Purge Method:	Low Flow - Grundfos	**Sample Method:**	Low Flow - Grundfos
Purge Rate (gpm):	0.33	**Purge Time (min):**	15
Actual Purge Volume (gal):	5	**Casing Volumes Removed:**	N/A
Sample Appearance:	Clear	**Odors Observed:**	None
Analytical Laboratory:	Alpha Analytical	**Notes:**	
Date Shipped:	4/6/2018		
Headspace (ppm)	NA		
Analyses Requested:			
VOC (CP-51); SVOC (CP-51)			

Field Indicator Parameters

Reading	Time	Temp. (ºC)	pH	Turbidity NTU	ORP mV	Cond. (mS/cm)	DO mg/L		
1	9:13	16.90	6.96	45.4	-75	0.42	0		
2	9:16	16.94	6.73	39.5	-88	0.417	0		
3	9:19	17.14	6.71	26.1	-91	0.415	0		
4	9:22	17.24	6.7	14.8	-94	0.416	0		
5	9:25	17.13	6.7	15.2	-95	0.416	0		
6	9:28	17.11	6.71	14.5	-95	0.417	0		

Take readings every three minutes

P.W. GROSSER CONSULTING, Inc

Well Sampling Log

Well Designation:	MW-90	**Sampled By:**	KC
Site Address:	737-747 4th Ave, Brooklyn, NY	**Project Manager:**	Jennifer Lewis
Project Name:	Totem	**Project Number:**	TOT1802

Reference Elevation (ft):	NM	**Well Use:**	Monitoring/Observation
Depth to Product (ft):	NP	**Product Elevation (ft):**	NM
Depth to Water (ft):	23.09	**Groundwater Elevation (ft):**	NM
Depth to Bottom (ft):	33.50	**Bottom Elevation (ft):**	NM
Height of Water Column (ft):	NM	**Well Diameter (in):**	4
Standing Water Volume (gal):	NM	**Calculated Purge Volume (gal):**	N/A
Sample Date:	4/6/2018	**Begin Purge Time:**	7:01
Sample Time:	7:15	**Complete Purge Time:**	7:13
Purge Method:	Low Flow - Grundfos	**Sample Method:**	Low Flow - Grundfos
Purge Rate (gpm):	0.21	**Purge Time (min):**	12
Actual Purge Volume (gal):	2.5	**Casing Volumes Removed:**	N/A
Sample Appearance:	Clear	**Odors Observed:**	None
Analytical Laboratory:	Alpha Analytical	**Notes:**	MW-32A on original sampling plan had absorbent sock in 2" well. Purged dry almost instantly, unable to sample. MW-90 right next to MW-32A.
Date Shipped:	4/6/2018		
Headspace (ppm)	NA		
Analyses Requested:			
VOC (CP-51); SVOC (CP-51)			

Field Indicator Parameters

Reading	Time	Temp. (ºC)	pH	Turbidity NTU	ORP mV	Cond. (mS/cm)	DO mg/L		
1	7:01	17.21	6.62	155.0	-86	3.050	0.00		
2	7:04	17.37	6.55	52.5	-84	3.080	0.00		
3	7:07	18.26	6.57	84.3	-92	3.04	0.00		
4	7:10	18.54	6.58	55.3	-98	3.06	0.00		
5	7:13	18.57	6.58	49.0	-100	3.05	0.00		

Take readings every three minutes

P.W. GROSSER CONSULTING, Inc

Well Sampling Log

Well Designation:	MW-94	**Sampled By:**	KC
Site Address:	737-747 4th Ave, Brooklyn, NY	**Project Manager:**	Jennifer Lewis
Project Name:	Totem	**Project Number:**	TOT1802

Reference Elevation (ft):	NM	**Well Use:**	Monitoring/Observation
Depth to Product (ft):	NP	**Product Elevation (ft):**	NM
Depth to Water (ft):	23.50	**Groundwater Elevation (ft):**	NM
Depth to Bottom (ft):	26.80	**Bottom Elevation (ft):**	NM
Height of Water Column (ft):	NM	**Well Diameter (in):**	2
Standing Water Volume (gal):	NM	**Calculated Purge Volume (gal):**	N/A
Sample Date:	4/6/2018	**Begin Purge Time:**	10:23
Sample Time:	10:50	**Complete Purge Time:**	10:24
Purge Method:	Low Flow - Grundfos	**Sample Method:**	Low Flow - Grundfos
Purge Rate (gpm):	0.25	**Purge Time (min):**	1
Actual Purge Volume (gal):	0.25	**Casing Volumes Removed:**	N/A
Sample Appearance:	Turbid	**Odors Observed:**	Organic
Analytical Laboratory:	Alpha Analytical	**Notes:**	Purged dry after 1 reading; collected grab sanple when well recharged; well had sock in it
Date Shipped:	4/6/2018		
Headspace (ppm)	NA		
Analyses Requested:			
VOC (CP-51); SVOC (CP-51)			

Field Indicator Parameters

Reading	Time	Temp. (ºC)	pH	Turbidity NTU	ORP mV	Cond. (mS/cm)	DO mg/L		
1	10:23	13.67	6.71	>1000	-37	2.7	0		

Take readings every three minutes

P.W. GROSSER CONSULTING, Inc

Well Sampling Log

Well Designation:	MW-80	**Sampled By:**	NR
Site Address:	737-747 4th Ave, Brooklyn, NY	**Project Manager:**	Jennifer Lewis
Project Name:	Totem	**Project Number:**	TOT1802

Reference Elevation (ft):	NM	**Well Use:**	Monitoring/Observation
Depth to Product (ft):	NP	**Product Elevation (ft):**	NM
Depth to Water (ft):	22.15	**Groundwater Elevation (ft):**	NM
Depth to Bottom (ft):	33.0	**Bottom Elevation (ft):**	NM
Height of Water Column (ft):	NM	**Well Diameter (in):**	4
Standing Water Volume (gal):	NM	**Calculated Purge Volume (gal):**	N/A
Sample Date:	5/24/2018	**Begin Purge Time:**	7:54
Sample Time:	08:15	**Complete Purge Time:**	8:12
Purge Method:	Low Flow - Grundfos	**Sample Method:**	Low Flow - Grundfos
Purge Rate (gpm):	0.14	**Purge Time (min):**	18
Actual Purge Volume (gal):	2.5	**Casing Volumes Removed:**	N/A
Sample Appearance:		**Odors Observed:**	
Analytical Laboratory:	Alpha Analytical	**Notes:**	
Date Shipped:	5/24/2018		
Headspace (ppm)	NA		
Analyses Requested:			
VOC (CP-51); SVOC (CP-51)			

Field Indicator Parameters

Reading	Time	Temp. (ºC)	pH	Turbidity NTU	ORP mV	Cond. (mS/cm)	DO mg/L		
1	7:54	18.91	6.67	24	-81	3.36	.53		
2	7:57	18.90	6.66	20.9	-81	3.39	.11		
3	8:00	19.01	6.65	22	-89	3.47	0		
4	8:03	19.12	6.65	23.4	-90	3.47	0		
5	8:06	19.13	6.65	21	-91	3.49	0		
6	8:09	19.25	6.64	21.4	-92	3.48	0		
7	8:12	19.27	6.64	22.2	-92	3.48	0		
8	8:15	19.26	6..65	21.6	-92	3.49	0		

Take readings every three minutes

P.W. GROSSER CONSULTING, Inc

Well Sampling Log

Well Designation:	MW-86	**Sampled By:**	NR
Site Address:	737-747 4th Ave, Brooklyn, NY	**Project Manager:**	Jennifer Lewis
Project Name:	Totem	**Project Number:**	TOT1802

Reference Elevation (ft):	NM	**Well Use:**	Monitoring/Observation
Depth to Product (ft):	NP	**Product Elevation (ft):**	NM
Depth to Water (ft):	22.76	**Groundwater Elevation (ft):**	NM
Depth to Bottom (ft):	NM	**Bottom Elevation (ft):**	NM
Height of Water Column (ft):	NM	**Well Diameter (in):**	2
Standing Water Volume (gal):	NM	**Calculated Purge Volume (gal):**	N/A
Sample Date:	5/24/2018	**Begin Purge Time:**	11:54
Sample Time:	12:20	**Complete Purge Time:**	12:18
Purge Method:	Low Flow - Grundfos	**Sample Method:**	Low Flow - Grundfos
Purge Rate (gpm):	0.25	**Purge Time (min):**	1
Actual Purge Volume (gal):	0.25	**Casing Volumes Removed:**	N/A
Sample Appearance:		**Odors Observed:**	
Analytical Laboratory:	Alpha Analytical	**Notes:**	
Date Shipped:	5/24/2018		
Headspace (ppm)	NA		
Analyses Requested:			
VOC (CP-51); SVOC (CP-51)			

Field Indicator Parameters

Reading	Time	Temp. (ºC)	pH	Turbidity NTU	ORP mV	Cond. (mS/cm)	DO mg/L		
1	11:54	23.15	6.78	435	-90	3.05	0		
2	11:57	22.15	6.75	355	-87	3.07	0		
3	12:00	20.35	6.70	134	-86	3.17	0		
4	12:03	20.08	6.69	104	-86	3.21	0		
5	12:06	19.89	6.66	58.6	-87	3.22	0		
6	12:09	20.05	6.66	59.5	-87	3.22	0		
7	12:12	19*.99	6.63	51.9	-86	3.25	0		
8	12:15	20.05	6.62	50.2	-86	3.26	0		
9	12:18	20.02	6.62	50.4	-86	3.27	0		

Take readings every three minutes