
Phase II Environmental Site Investigation 450 Johnson Avenue Brooklyn, New York

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**24 September 2019
170588001**

LANGAN

24 September 2019

Ms. Janet Frentzel
Prologis, Inc.
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San Francisco, California 94111

**Subject: Phase II Environmental Site Investigation
450 Johnson Avenue
Brooklyn, New York
Langan Project: 170588001**

Dear Ms. Frentzel:

Langan Engineering, Environmental, Surveying, Landscape Architecture and Geology, D.P.C. (Langan) is submitting the enclosed *Phase II Environmental Site Investigation (ESI) – 450 Johnson Avenue, Brooklyn, New York*. Our scope of services for this project consisted of advancing exploratory soil borings to 21 feet below ground surface and collecting and analyzing soil, groundwater, sub-slab soil vapor and indoor air samples.

We appreciate the opportunity to assist you with this project. If you have questions or need information clarified, please call Mr. Andrew Kerr at (510) 874-7015.

Sincerely,

Langan Engineering, Environmental, Surveying, Landscape Architecture and Geology, D.P.C.



Andrew Kerr, P.G. (Calif)
Associate



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Principal/Vice President

170588001

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PHASE II ENVIRONMENTAL SITE INVESTIGATION
450 Johnson Avenue
Brooklyn, New York

1.0 INTRODUCTION

This Phase II Environmental Site Investigation (ESI) was performed for the property referred to as 450 Johnson Avenue (the Site). The Site is a 0.80-acre parcel of land in the East Williamsburg neighborhood of Brooklyn, New York. The Site is located on the city block bound by Johnson Avenue to the north, Porter Avenue to the east, Ingraham Street to the south, and Knickerbocker Avenue to the west. A site location map is provided as **Figure 1** and a sampling location plan is provided as **Figure 2**.

Langan Engineering, Environmental, Surveying, Landscape Architecture and Geology, D.P.C (Langan) conducted a Phase I Environmental Site Assessment (ESA) for the Site in July 2019. The results of the assessment identified two Recognized Environmental Conditions (RECs) and two Business Environmental Risks (BERs).

This Phase II ESI was performed to obtain additional environmental information regarding the two RECs. This summary report describes the scope of services conducted and the results of the investigation. Background information is presented below, with additional information available in the Phase I ESA report (Langan, 2019).

2.0 BACKGROUND

2.1 Site

The Site is comprised of Kings County Tax Block 2992, Lots 17, 21, and 55 and is located in an industrial and commercial section of the East Williamsburg neighborhood of Brooklyn. The Site is developed with three inter-connected buildings and a parking lot:

Lot 17: a two-story, 2,500 square foot (ft²) warehouse and office building and one-story, 7,500 ft² warehouse

Lot 21: a one-story, 20,000 ft² warehouse

Lot 55: a 5,000 ft² asphalt-paved parking lot

The warehouses at the Site are interconnected and used for envelope manufacturing.

2.2 Phase I ESA Findings

The Phase I ESA for Site was conducted in July 2019 as referenced above. The findings of the assessment included the identification of two RECs and two BERs as summarized below:

REC 1 – Current and Historical Site Use

REC 2 – Current and Historical Operations of Surrounding Properties

BER 1 – Historic Fill

BER 2 – Asbestos Containing Material (ACM) and Lead Based Paint (LBP)

Additional detail regarding these findings is provided in the Phase I ESA report, dated August 23, 2019 (Langan, 2019).

This Phase II ESI was designed to collect additional information regarding the RECs.

3.0 PHASE II EVALUATIONS

3.1 Scope and Timing

Langan completed the following scope of services as part of this Phase II ESI:

- Investigated the floor drain network, the potential subsurface municipal sewer line on-property, and potential presence underground storage tanks (USTs).
- Collected 19 soil samples from 16 exploratory soil borings advanced to a maximum depth of 21 feet below ground surface (bgs).
- Collected seven groundwater samples from six temporary wells.
- Collected three co-located sub-slab vapor and indoor air samples.

The Phase II ESI scope of services was completed between July 15 and 19, 2019.

A summary of the analysis performed on soil, groundwater, soil vapor and indoor air samples is presented in **Table 1**, with the location of completed investigation points shown on **Figure 2**.

3.2 Field Investigation Methods

The field investigation methods used to complete the Phase II ESI are summarized below. The activities are described in the general order of completion.

Pre-investigation Tasks

The soil and groundwater sampling was completed after the following pre-investigation tasks:

- Eastern Environmental Solutions, Inc. (Eastern) of Manorville, New York submitted a New York State One Call ticket prior to the initiation of drilling activities. Utility mark outs were limited to public property (i.e. the street and sidewalk immediately adjoining the Site to the north and south).
- Proposed boring locations were located to investigate RECs identified in the Phase I ESA and to evaluate the subsurface conditions on each of the different lots. The tentative locations of each boring were spray-painted on the surface of the Site.

Geophysical

Prior to intrusive drilling activities, Subsurface Environmental Technologies Inc. (SET) of Pennington, New Jersey conducted a geophysical survey on July 15, 2019. The geophysical survey was observed by a Langan field scientist and included the use of ground penetrating radar (GPR) and electromagnetic (EM) detectors to attempt to locate potential subsurface utilities, USTs and/or subsurface structures and to clear proposed boring locations. Borings were relocated as necessary to avoid buried structures. The geophysical report prepared by SET is included in **Appendix A**.

Exploratory Borings and Soil Sampling

Sixteen (16) exploratory borings were drilled between July 16 and 19, 2019. Borings were advanced by Eastern using a portable Geoprobe 420M direct push machine rig. The boreholes were advanced by hydraulically pushing a 2.25-inch diameter stainless steel sampler containing 3-foot-long acetate liners into the subsurface. The boreholes were advanced to between 6 and 21 feet bgs. Groundwater was typically encountered at 8 to 15 feet bgs.

Soils were logged based on the Unified Soil Classification System (USCS) system, with completed boring logs are included in **Appendix B**. Soils retrieved from the acetate liner were screened for the presence of volatile organic compounds (VOCs) using a photo-ionization detector (PID) with a 10.6 eV bulb and calibrated with 100 parts per million (ppm) isobutylene reference gas.

Nineteen (19) soil samples were collected, including 17 samples from the historic fill layer and one sample and a duplicate from the native soil. Samples were collected by removing the soil in the acetate liner from the chosen sample depth and placing the soil into laboratory-provided containers. Sample jars were sealed and stored in a cooler with ice for transport to the analytical laboratory.

Temporary Monitoring Wells and Groundwater Sampling

Six borings were converted to temporary monitoring wells by inserting a 1-inch diameter poly-vinyl chloride (PVC) casing into select soil boreholes. The temporary well annulus was packed with No. 2 sand. The wells were gauged with a precleaned oil/water interface probe to the nearest 0.01 foot to measure static groundwater levels prior to sampling. Prior to sampling, a peristaltic pump fitted with dedicated, disposable polyethylene tubing was used to purge each groundwater monitoring well. Monitoring well effluent was pumped into a flow-through cell with a water quality monitoring probe attached. The probe was used to monitor pH, conductivity, turbidity, dissolved oxygen, temperature, and oxidation-reduction potential. Groundwater samples were collected into laboratory-supplied sample jars using low flow techniques.

Sample jars were secured in plastic bags or laboratory-provided, bubble-wrap pouches, and stored in a cooler with ice for transport to the analytical laboratory. Dissolved metals samples were filtered in the field using a 10 micron filter and appropriately denoted on the chain of custody. Groundwater sampling logs are provided in **Appendix C**.

Sub-slab Vapor and Indoor Air Sampling

Three sub-slab soil vapor points were installed using the New York State Department of Health (NYSDOH) Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York (October 2006) and its subsequent updates. Sub-slab vapor points were installed using a portable Geoprobe 420M direct push machine rig to about 2 inches beneath the base of the foundation slab. The vapor collection points consisted of 2-inch-long probes and inert polyethylene. The annulus (i.e., the sampling zone) around the probe was filled with a No. 2 sand followed by a hydrated bentonite seal to the top of the floor slab.

Before collecting vapor samples, a minimum of three implant volumes (i.e., the volume of the sample probe and tubing) was purged from each sample port at a rate of less than 0.2 liters per minute while monitoring for VOCs using a RAE Systems MultiRAE® meter.

A helium tracer gas was used consistent the NYSDOH protocols to confirm the integrity of each soil vapor sampling point seal before and after sampling. The tracer gas was introduced into a container, which shrouded the vapor point and seal. Helium was measured from the sampling tube and inside the container. If the sample tubing contained more than 10% of the tracer gas concentration that was introduced into the container, then the seal was considered compromised. Sub-slab vapor construction and sampling logs are provided in **Appendix D**.

The co-located indoor air samples were collected at a height above the ground to represent the breathing zone (about 3 to 5 feet). Sub-slab vapor and indoor air samples were collected over an 8-hour sampling period.

Laboratory Analysis

The soil, groundwater, sub-slab vapor, and indoor air samples were transported to a NYSDOH Environmental Laboratory Approval Program (ELAP)-certified laboratory (Alpha Analytical, Inc. of Westborough, MA [ELAP ID #11148]). Soil analysis included target compound list (TCL) VOCs, TCL semivolatile organic compounds (SVOCs), target analyte list (TAL) metals and/or polychlorinated biphenyls (PCBs). Groundwater analysis included TCL VOCs, TCL SVOCs, and dissolved metals. Sub-slab vapor and indoor air samples were analyzed for VOCs.

4.0 RESULTS

4.1 Geophysical Survey

The geophysical survey was conducted across the Site, with the exception of areas blocked by manufacturing equipment. The geophysical survey revealed the following:

- Inferred subsurface conveyance piping connecting the floor drains in the northeast portion of Lot 21.
- A septic tank in a subsurface vault in the northeast portion of Lot 21, with subsurface drain lines from the nearby floor drains in the area appearing to trace toward and connecting to the tank.
- No indicators of the potential sewer or combined sewer relief line discussed in the Phase I ESA (Langan, 2019). The sewer relief line may still exist onsite as the vertical extent of the geophysical survey was limited to about 5 feet bgs given the presence of a reinforced concrete slab and fill material.
- No observed geophysical patterns or anomalies indicative of a UST.

4.2 Lithology and Presence of Groundwater

The lithology encountered at the Site included a surficial layer of 5-inch thick asphalt or 6-inch thick concrete, underlain by historic fill to depths of about 8 to 17 feet bgs. Historic fill generally consisted of gray, orange brown, and brown silt and sand with varying amounts of brick, glass, coal, coal ash,

and tile pieces. Petroleum-like odors and/or elevated PID readings were encountered/measured in SB03 from 10 to 14 feet bgs, SB04 from 8 to 15 feet bgs, and SB16 from 0.5 to 6 feet bgs.

Native soil underlying historic fill was identified from about 8 feet to 21 feet bgs (deepest boring terminus) and generally consisted of brown, orange brown, brown and gray silty fine sand with varying amounts of gravel, clay, organics and silt. Bedrock was not encountered during this investigation.

Groundwater was encountered between about 8 and 15 feet bgs.

4.3 Soil Analytical Results

Soil analytical results from 19 soil samples, including one duplicate, are summarized in **Table 2**. The table includes applicable reference soil cleanup objectives. A copy of the laboratory analytical reports is attached in **Appendix E**.

The following is a summary of the results:

- Selected VOCs were detected, but only one result (vinyl chloride at 15 mg/kg) was at a concentration above the Restricted Use Commercial (RUC) or Restricted Use Industrial (RUI) Soil Cleanup Objectives (SCOs).
- Periodic SVOCs were also detected, but only benzo(a)pyrene and dibenzo(a,h)anthracene in samples from soil borings SB08, SB09, SB10, and SB15 were at concentrations above the RUC or RUI SCOs.
- Metal detections, but with only four compounds (arsenic, barium, lead, and mercury) detected at concentrations above the RUC SCOs. Also, the detections above the RUC SCO were in only five of the 19 samples, including the samples from soil borings SB07, SB09, SB11, SB13 and SB16. Only one metal (arsenic) in one sample (SB07_4.5-5.0), was detected at a concentration above the RUI SCO.
- PCBs not detected in any of the collected soil samples.

4.4 Groundwater Analytical Results

Groundwater analytical results from the seven groundwater samples, including one duplicate, are summarized in **Table 3**. The tables include applicable reference standards and guidance values. A copy of the laboratory analytical reports is attached in **Appendix E**.

The following is a summary of the results:

- Eleven VOCs, including 1,2,4,5-tetramethylbenzene, chloroform, cis-1,2-dichloroethene, isopropylbenzene, n-butylbenzene, n-propylbenzene, sec-butylbenzene, tert-butyl methyl ether, tetrachloroethene (PCE), trichloroethene (TCE), and vinyl chloride, were detected at concentrations above the New York State Department of Environmental Conservation (NYSDEC) Technical and Operation Guidance Series (TOGS) 1.1.1. Ambient Water Quality Standards and Guidance Values for Class GA Groundwater (SGVs). The detections above SGVs were in four of the seven temporary groundwater monitoring wells, including wells TMW03, TMW04, TMW07, and TMW08.
- Six SVOCs, including benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, and indeno(1,2,3-c,d)pyrene, were detected at concentrations above the SGVs. The detections above SGVs were in six of the seven temporary groundwater monitoring wells, including wells TMW02, TMW03, TMW04, TMW07, and TMW08.
- Four dissolved metals, including iron, magnesium, manganese, and sodium, were detected at concentrations above the SGVs. The detections above SGVs were in each of temporary groundwater monitoring wells.

4.5 Sub Slab Soil Vapor and Indoor Air Analytical Results

Air analytical results from the three co-located sub-slab vapor and indoor air samples are summarized in **Table 4**. The tables include applicable reference guidance values. A copy of the laboratory analytical reports is attached in **Appendix E**.

A summary of the sub-slab vapor and indoor results is the following:

- Petroleum-related and chlorinated VOCs were detected in sub-slab soil vapor samples. Total VOCs were detected at concentrations ranging from 2,907 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) in SSV03 to 5,593 $\mu\text{g}/\text{m}^3$ in SSV01. Total VOCs were detected in indoor air samples at concentrations ranging from 305 $\mu\text{g}/\text{m}^3$ in IA01 to 989 $\mu\text{g}/\text{m}^3$ in IA02.
- VOCs in indoor air were not detected above the NYSDOH Air Guidance Values (AGVs).

New York State currently does not have standards or criteria for allowable concentrations of VOCs in soil vapor. In lieu of regulatory standards, Decision Matrices published in the 2006 NYSDOH Soil

Vapor Intrusion Guidance, updated in 2017, were used to evaluate sub-slab vapor and indoor air concentrations. NYSDOH Decision Matrices (Matrices A, B, and C) address the compounds PCE, TCE, 1,1,1-trichloroethane (1,1,1-TCA), 1,1-dichloroethene, cis-1,2-dichloroethene, vinyl chloride, methylene chloride and carbon tetrachloride. The comparison indicate the following items:

- Sub-slab and indoor air concentrations of PCE, 1,1,1-TCA, 1,1-dichloroethene, cis-1,2-dichloroethene, vinyl chloride, and carbon tetrachloride yield recommendations ranging from “no further action” to “identify source and resample or mitigate”.
- Sub-slab and indoor air concentrations of carbon tetrachloride in SSV01 and IA01 yields a recommendation of “monitor”.
- Sub-slab and indoor air concentrations of TCE in SSV02 and IA02 yields a recommendation of “monitor”.
- Sub-slab and indoor air concentrations of methylene chloride in SSV03 and IA03 yields a recommendation of “identify sources and resample or mitigate”.

5.0 FINDINGS

The following is a summary of findings from the Phase II ESI:

- Floor drains with a network of subsurface conveyance piping area present in the northeast portion of Lot 21. A septic tank was identified in this same area, with the geophysical surveys suggesting the conveyance piping of the floor drains route to the tank.
- Historical fill is present from surface grade to approximately 8 feet bgs, with groundwater present at a depth of approximately 8 to 15 feet bgs. The presumed groundwater flow direction is to the north, based on the location of the English Kills waterway and groundwater maps from the Ingraham St Sidewalk site.
- An area of weathered petroleum appears located in the northeast portion of Lot 21 based on field observations and the presence of petroleum related compounds identified in groundwater samples from wells TMW03 and TMW04. The source is unknown, but the proximity of this area to the nearby partial cellar is noted, given that it houses the existing facility boiler and formerly housed an oil-powered boiler.

- Impacts typically associated with urban fill including periodic detections of SVOCs (specifically PAHs) and metals are present in surficial soils at the Site. Detections of SVOCs ranged from 0.28 mg/kg to 4.3 mg/kg, but with only four results of benzo(a)pyrene (2, 2, 2.3, and 4.3 mg/kg) being over the RUI SCO. Detections of metals were variable, but with only the detection of arsenic in one sample at 67 mg/kg being above the RUI SCO.
- Chlorinated VOC impacts appear to principally be PCE, TCE, vinyl chloride, and breakdown products in groundwater, with some detections of vinyl chloride and the cis and trans 1,2-dichloroethene (DCE) compounds in a water-bearing zone depth soil sample in the boring SB08 area. There is a known historic presence of CVOCs in groundwater in the Ingraham Street Sidewalk project, which adjoin the Site to the south¹. Generally, concentrations of CVOCs in groundwater at the Site were highest in TMW07 and TMW08 along the southern boundary, appearing to grade to lower or not detected at TMW04 located in the northeast part of the Site. Concentrations of CVOCs in TMW07 and TMW08 ranged from 32 ug/L to 250 ug/L, one to two orders of magnitude lower than concentrations of CVOCs observed in wells in the Ingraham Sidewalk site, which had detections of 620 ug/L of PCE and 13,000 ug/L of cis 1,2-DCE in 2012, and 540 ug/L of vinyl chloride and 1,800 ug/L of cis 1,2-DCE in 2014. The soil CVOc results were more limited, with only one exceedance of the RUC SCO (vinyl chloride at 15 mg/kg) and each of the detections being in a 14 to 14.5 foot sample from boring SB08, which was co-located with temporary well TMW08. The detected CVOc concentrations in both soil and groundwater likely represent the known CVOcs from an off-site source rather than a source within the Site, given the concentration gradient of CVOcs and the historic northward direction of groundwater flow.
- Petroleum-related and chlorinated VOCs were detected in sub-slab soil vapor and indoor air samples, but with none of the indoor air results being in excess of NYSDOH AGVs. The total VOCs detected in sub-slab vapor ranged from 2,907 µg/m³ in SSV03 to 5,593 µg/m³ in SSV01, with detections in indoor air ranging from 305 µg/m³ in IA01 to 989 µg/m³ in IA02. When applying sub-slab vapor and indoor air samples to the NYSDOH Decision Matrices, the resulting recommendations range from “no further action” to

¹ Regulatory site Ingraham Street Sidewalk GW (case ID No. 224142) is an active site in the New York State Hazardous Waste Program. This listing includes groundwater identified in the Ingraham Street sidewalk as impacted with CVOcs exceeding applicable groundwater standards.

"monitor". Detected concentrations of VOCs in indoor air did not exceed NYSDOH AGVs.

REFERENCES

Langan, 2019. Phase I Environmental Site Assessment 450 Johnson Avenue, Brooklyn, New York. 23 August 2019.

The Shaw Group Inc, 2015. Final Site Characterization Report, Rev. 2; Ingraham Street Sidewalk Plume Trackdown. 1 February 2015

TABLES

Table 1
Phase II Environmental Site Investigation
Sample Summary Table

450 Johnson Avenue
Brooklyn, New York
Langan Project No.: 170588001

Sample No.	Lot	Sample Location	Sample ID	Sample Depth/ Screened Interval (feet bgs)	Sample Date	Analyses	
Soil							
1	Lot 17	SB01	SB01_1.0-1.5	1 - 1.5	7/17/2019	VOCs, SVOCs, PCBs, Total Metals	
2			SB01_8.0-8.5	8 - 8.5			
3			SB02_8.0-8.5	8 - 8.5			
4		SB11	SB11_5.0-5.5	5 - 5.5	7/18/2019	VOCs, SVOCs, Total Metals	
5			SB12_6.5-7.0	6.5 - 7			
6			SB14_4.5-5.0	4.5 - 5			
7			SB18_4.0-4.5	4 - 4.5			
8	Lot 21	SB03	SB03_14.0-14.5	14 - 14.5	7/16/2019	VOCs, SVOCs, PCBs, Total Metals	
9		SB04	SB04_11.0-11.5	11 - 11.5	7/18/2019	VOCs, SVOCs, Total Metals	
10		SB08	SB08_5.0-5.5	5 - 5.5			
11			SB08_14.0-14.5	14 - 14.5			
12		SB09	SB09_3.0-3.5	3 - 3.5			7/17/2019
13		SB13	SB13_8.0-8.5	8 - 8.5			7/16/2019
14		Lot 55	SB07	SB07_4.5-5.0	4.5 - 5	7/18/2019	VOCs, SVOCs, PCBs, Total Metals
15	SB10		SB10_5.0-5.5	5 - 5.5	7/19/2019	VOCs, SVOCs, Total Metals	
16	SB15		SB15_8.0-8.5	8 - 8.5			
17	SB16		SB16_3.0-3.5	3 - 3.5			
18	SB17		SB17_13.0-13.5	13 - 13.5			
Groundwater							
1	Lot 17	TMW01	TMW01_071719	5 - 20	7/17/2019	VOCs, SVOCs, Dissolved Metals	
2		TMW02	TMW02_071819	5 - 15	7/18/2019		
3	Lot 21	TMW03	TMW03_071719	5 - 20	7/17/2019		
4		TMW04	TMW04_071719	5 - 20			
5		TMW08	TMW08_071819	10 - 20	7/18/2019		
6	Lot 55	TMW07	TMW07_071919	5 - 25	7/19/2019		
Soil Vapor							
1	Lot 17	IA01	IA01_071819	-	7/18/2019	VOCs	
2		IA02	IA02_071919	-	7/19/2019		
3		SSV01	SSV01_071819	1.5 - 2.5	7/18/2019		
4		SSV02	SSV02_071919	1.5 - 2.5	7/19/2019		
5	Lot 21	IA03	IA03_071919	-			
6		SSV03	SSV03_071919	1.5 - 2.5			
Quality Assurance/Quality Control							
1	Lot 17	TMW02	DUP02_071819	5 - 15	7/18/2019	VOCs, SVOCs, Dissolved Metals	
2	Lot 21	SB03	DUP01_071619	14 - 14.5	7/16/2019	VOCs, SVOCs, PCBs, Total Metals	
3	N/A	Trip Blank	TB_071919	N/A		VOCs	

Notes:

1. VOC = volatile organic compound
2. SVOC = semivolatile organic compound
3. PCB = polychlorinated biphenyl
4. N/A = Not applicable
5. IA = Indoor air
6. Indoor air samples were collected at about 3 to 5 feet above the ground surface

Table 2

Phase II Environmental Site Investigation

Soil Sample Analytical Results Summary

450 Johnson Avenue

Brooklyn, New York

Langan Project No.: 170588001

Lot Location Sample ID Laboratory ID Sample Date Sample Depth (feet bgs)	NYSDEC Part 375 Restricted Use Commercial SCOs	NYSDEC Part 375 Restricted Use Industrial SCOs	Lot 17							
			SB01	SB01	SB02	SB11	SB12	SB14	SB18	
			SB01_1.0-1.5	SB01_8.0-8.5	SB02_8.0-8.5	SB11_5.0-5.5	SB12_6.5-7.0	SB14_4.5-5.0	SB18_4.0-4.5	
			L1931524-01	L1931524-03	L1931524-02	L1931524-05	L1931803-06	L1931803-08	L1932118-06	
			7/17/2019	7/17/2019	7/17/2019	7/17/2019	7/18/2019	7/18/2019	7/19/2019	
			1-1.5	8-8.5	8-8.5	5-5.5	6.5-7	4.5-5	4-4.5	
Volatile Organic Compounds (mg/kg)										
1,2,4,5-Tetramethylbenzene	--	--	0.0022 U	0.0019 U	0.0023 U	0.0022 U	0.0021 U	0.0018 U	0.0025 U	
1,2,4-Trimethylbenzene	190	380	0.0022 U	0.0019 U	0.0023 U	0.0022 U	0.0021 U	0.0018 U	0.0025 U	
1,3,5-Trimethylbenzene (Mesitylene)	190	380	0.0022 U	0.0019 U	0.0023 U	0.0022 U	0.0021 U	0.0018 U	0.0025 U	
1,4-Diethyl Benzene	--	--	0.0022 U	0.0019 U	0.0023 U	0.0022 U	0.0021 U	0.0018 U	0.0025 U	
4-Ethyltoluene	--	--	0.0022 U	0.0019 U	0.0023 U	0.0022 U	0.0021 U	0.0018 U	0.0025 U	
Acetone	500	1,000	0.011	0.0062 J	0.012 U	0.015	0.022	0.0083 J	0.012 U	
Benzene	44	89	0.00055 U	0.00048 U	0.00058 U	0.00054 U	0.00053 U	0.00045 U	0.00062 U	
Chloroform	350	700	0.0017 U	0.0014 U	0.0017 U	0.0016 U	0.0016 U	0.0014 U	0.00089 J	
Chloromethane	--	--	0.0044 U	0.0038 U	0.0046 U	0.0043 U	0.0043 U	0.0036 U	0.005 U	
Cis-1,2-Dichloroethene	500	1,000	0.0011 U	0.00095 U	0.0012 U	0.0011 U	0.0011 U	0.00091 U	0.0012 U	
Cymene	--	--	0.0011 U	0.00095 U	0.0012 U	0.0011 U	0.0011 U	0.00091 U	0.0012 U	
Ethylbenzene	390	780	0.0011 U	0.00095 U	0.0012 U	0.0011 U	0.0011 U	0.00091 U	0.0012 U	
Isopropylbenzene (Cumene)	--	--	0.0011 U	0.00095 U	0.0012 U	0.0011 U	0.0011 U	0.00091 U	0.0012 U	
Methyl Ethyl Ketone (2-Butanone)	500	1,000	0.011 U	0.0095 U	0.012 U	0.011 U	0.011 U	0.0091 U	0.012 U	
Naphthalene	500	1,000	0.0044 U	0.0038 U	0.0046 U	0.0043 U	0.0043 U	0.0036 U	0.005 U	
n-Butylbenzene	500	1,000	0.0011 U	0.00095 U	0.0012 U	0.0011 U	0.0011 U	0.00091 U	0.0012 U	
n-Propylbenzene	500	1,000	0.0011 U	0.00095 U	0.0012 U	0.0011 U	0.0011 U	0.00091 U	0.0012 U	
o-Xylene (1,2-Dimethylbenzene)	--	--	0.0011 U	0.00095 U	0.0012 U	0.0011 U	0.0011 U	0.00091 U	0.0012 U	
Sec-Butylbenzene	500	1,000	0.0011 U	0.00095 U	0.0012 U	0.0011 U	0.0011 U	0.00091 U	0.0012 U	
T-Butylbenzene	500	1,000	0.0022 U	0.0019 U	0.0023 U	0.0022 U	0.0021 U	0.0018 U	0.0025 U	
Tert-Butyl Methyl Ether	500	1,000	0.0022 U	0.0002 J	0.0023 U	0.00023 J	0.00028 J	0.0018 U	0.0025 U	
Tetrachloroethene (PCE)	150	300	0.00055 U	0.00048 U	0.00058 U	0.00054 U	0.0021	0.00045 U	0.0022 U	
Toluene	500	1,000	0.0011 U	0.00095 U	0.0012 U	0.0011 U	0.0011 U	0.00091 U	0.0012 U	
Total 1,2-Dichloroethene (Cis and Trans)	--	--	0.0011 U	0.00095 U	0.0012 U	0.0011 U	0.0011 U	0.00091 U	0.0012 U	
Total Xylenes	500	1,000	0.0011 U	0.00095 U	0.0012 U	0.0011 U	0.0011 U	0.00091 U	0.0012 U	
Trans-1,2-Dichloroethene	500	1,000	0.0017 U	0.0014 U	0.0017 U	0.0016 U	0.0016 U	0.0014 U	0.0019 U	
Trichloroethene (TCE)	200	400	0.00055 U	0.00048 U	0.00019 J	0.0024	0.00053 U	0.013	0.00062 U	
Vinyl Chloride	13	27	0.0011 U	0.00095 U	0.0012 U	0.0011 U	0.0011 U	0.0004 J	0.0012 U	
Semivolatile Organic Compounds (mg/kg)										
2,4-Dinitrotoluene	--	--	0.19 U	0.19 U	0.2 U	0.22 U	0.19 U	0.18 U	0.19 U	
2-Methylnaphthalene	--	--	0.03 J	0.23 U	0.24 U	0.16 J	0.22 U	0.22 U	0.032 J	
2-Methylphenol (o-Cresol)	500	1,000	0.19 U	0.19 U	0.2 U	0.22 U	0.19 U	0.18 U	0.19 U	
3 & 4 Methylphenol (m&p Cresol)	--	--	0.27 U	0.28 U	0.29 U	0.31 U	0.27 U	0.26 U	0.27 U	
Acenaphthene	500	1,000	0.11 J	0.15 U	0.16 U	0.48	0.15 U	0.036 J	0.28	
Acenaphthylene	500	1,000	0.077 J	0.15 U	0.16 U	0.034 J	0.15 U	0.14 U	0.029 J	
Anthracene	500	1,000	0.32	0.11 U	0.12 U	0.86	0.048 J	0.074 J	0.54	
Benzo(a)Anthracene	5.6	11	0.88	0.11 U	0.022 J	1.3	0.14	0.21	1.2	
Benzo(a)Pyrene	1	1.1	0.78	0.15 U	0.16 U	0.96	0.16	0.23	0.92	
Benzo(b)Fluoranthene	5.6	11	0.96	0.11 U	0.12 U	1.2	0.17	0.25	1.1	
Benzo(g,h,i)Perylene	500	1,000	0.44	0.15 U	0.16 U	0.43	0.081 J	0.1 J	0.52	
Benzo(k)Fluoranthene	56	110	0.34	0.11 U	0.12 U	0.45	0.054 J	0.091 J	0.43	
Benzyl Butyl Phthalate	--	--	0.19 U	0.19 U	0.2 U	0.22 U	0.19 U	0.18 U	0.19 U	
Biphenyl (Diphenyl)	--	--	0.43 U	0.44 U	0.46 U	0.49 U	0.42 U	0.42 U	0.43 U	
Bis(2-Ethylhexyl) Phthalate	--	--	0.19 U	0.19 U	0.2 U	0.22 U	0.19 U	0.18 U	0.19 U	
Carbazole	--	--	0.1 J	0.19 U	0.2 U	0.41	0.02 J	0.043 J	0.18 J	
Chrysene	56	110	0.81	0.11 U	0.12 U	1.1	0.13	0.2	0.97	
Dibenz(a,h)Anthracene	0.56	1.1	0.1 J	0.11 U	0.12 U	0.14	0.023 J	0.034 J	0.14	
Dibenzofuran	350	1,000	0.076 J	0.19 U	0.2 U	0.35	0.19 U	0.03 J	0.12 J	
Fluoranthene	500	1,000	1.9	0.11 U	0.041 J	2.9	0.31	0.51	2.3	
Fluorene	500	1,000	0.09 J	0.19 U	0.2 U	0.42	0.19 U	0.034 J	0.21	
Indeno(1,2,3-c,d)Pyrene	5.6	11	0.46	0.15 U	0.16 U	0.5	0.091 J	0.13 J	0.6	
Naphthalene	500	1,000	0.058 J	0.19 U	0.2 U	0.21 J	0.19 U	0.027 J	0.043 J	
Phenanthrene	500	1,000	1.4	0.11 U	0.03 J	3.5	0.22	0.4	2.2	
Phenol	500	1,000	0.19 U	0.19 U	0.2 U	0.22 U	0.19 U	0.18 U	0.19 U	
Pyrene	500	1,000	1.7	0.11 U	0.035 J	2.4	0.28	0.42	2	
Polychlorinated Biphenyls (mg/kg)										
PCB-1260 (Aroclor 1260)	--	--	0.0368 U	0.0372 U	NA	NA	NA	0.0355 U	NA	
PCB-1268 (Aroclor 1268)	--	--	0.0368 U	0.0372 U	NA	NA	NA	0.0355 U	NA	
Total PCBs	1	25	0.0368 U	0.0372 U	NA	NA	NA	0.0355 U	NA	
Inorganics (mg/kg)										
Aluminum	--	--	6,610	7,760	6,150	6,150	5,340	6,400	6,310	
Antimony	--	--	1.3 J	0.764 J	1.02 J	1.36 J	2.01 J	2.03 J	0.648 J	
Arsenic	16	16	5.75	2.5	4.15	6.5	11.2	5.18	5.9	
Barium	400	10,000	68.4	33.6	60.8	84.8	94.9	81.8	260	
Beryllium	590	2,700	0.336 J	0.355 J	0.411 J	0.385 J	0.331 J	0.436	0.228 J	
Cadmium	9.3	60	1.49	1.09	1.7	1.67	0.896 U	0.871 U	0.394 J	
Calcium	--	--	2,820	570	1,200	1,690	4,270	1,880	55,700	
Chromium, Total	--	--	15.5	14	17.6	12.1	13.8	14.6	12.2	
Cobalt	--	--	7.5	7.79	9.86	6.49	5.76	6.57	5.28	
Copper	270	10,000	44.9	12.8	30	43.7	38.2	32.5	23.8	
Iron	--	--	16,100	15,400	17,200	18,700	16,800	27,000	13,200	
Lead	1000	3,900	172	5.75	95.9	369	193	170	167	
Magnesium	--	--	1,900	2,050	1,330	1,210	1,640	2,530	1,880	
Manganese	10,000	10,000	317	395	212	231	321	466	415	
Mercury	2.8	5.7	1.96	0.073 U	0.411	3.57	0.772	0.725	0.742	
Nickel	310	10,000	15.1	12.8	20.8	13.5	12.2	24.2	10.6	
Potassium	--	--	887	764	602	452	588	715	555	
Selenium	1,500	6,800	0.849 J	0.533 J	0.888 J	0.894 J	1.79 U	1.74 U	1.75 U	
Silver	1,500	6,800	0.884 U	0.888 U	0.935 U	1.04 U	0.896 U	0.871 U	0.876 U	
Sodium	--	--	87.6 J	48 J	64.3 J	66 J	163 J	86.4 J	154 J	
Thallium	--	--	1.77 U	1.78 U	1.87 U	2.08 U	1.79 U	1.74 U	1.75 U	
Vanadium	--	--	25.2	23.8	26.7	20.1	20	33.5	17.6	
Zinc	10,000	10,000	178	24.7	431	502	158	416	97.5	
General Chemistry (%)										
Total Solids	--	--	88.5	86.1	82.2	75.7	89.3	90.3	85.8	

- Notes:**
- Soil sample analytical results are compared to the New York State Department of Environmental Conservation (NYSDEC) Title 6 of the Official Compilation of New York Codes, Rules, and Regulations (NYCRR) Part 375 Restricted Use Commercial and Restricted Use Industrial Soil Cleanup Objectives (SCO).
 - Only detected analytes are shown in the table.
 - Analytes detected with concentrations above Restricted Use Commercial SCOs are **bolded**.
 - Analytes detected with concentrations above Restricted Use Industrial SCOs are shaded.
 - Analytical results with reporting limits (RL) above the lowest applicable criteria are italicized.
 - Sample DUP01_071619 is a duplicate sample of SB03_14.0-14.5.
 - = Regulatory limit for this analyte does not exist
 - bgs = below grade surface
 - mg/kg = milligrams per kilogram
 - % = percent
 - NA = Not analyzed

Qualifiers:

J = The analyte was detected above the Method Detection Limit (MDL), but below the RL; therefore, the result is an estimated concentration.

U = The analyte was analyzed for, but was not detected at a level greater than or equal to the RL; the value shown in the table is the RL.

Table 2

Phase II Environmental Site Investigation

Soil Sample Analytical Results Summary

450 Johnson Avenue

Brooklyn, New York

Langan Project No.: 170588001

Lot Location Sample ID Laboratory ID Sample Date Sample Depth (feet bgs)	NYSDEC Part 375 Restricted Use Commercial SCOs	NYSDEC Part 375 Restricted Use Industrial SCOs	Lot 21													
			SB03	SB03	SB04	SB08	SB08	SB09	SB13							
			SB03_14.0-14.5	DUP01_071619	SB04_11.0-11.5	SB08_5.0-5.5	SB08_14.0-14.5	SB09_3.0-3.5	SB13_8.0-8.5							
			L1931245-02	L1931245-01	L1931245-03	L1931803-04	L1931803-05	L1931524-04	L1931245-04							
			7/16/2019	7/16/2019	7/16/2019	7/18/2019	7/18/2019	7/17/2019	7/16/2019							
14-14.5	14-14.5	11-11.5	5-5.5	14-14.5	3-3.5	8-8.5										
Volatile Organic Compounds (mg/kg)																
1,2,4,5-Tetramethylbenzene	--	--	2.9		2.4	11	0.0014	U	0.18	U	0.0021	U	0.0029	U		
1,2,4-Trimethylbenzene	190	380	1.1	U	0.17	U	0.2	U	0.0014	U	0.18	U	0.0021	U	0.0029	U
1,3,5-Trimethylbenzene (Mesitylene)	190	380	1.1	U	0.17	U	0.2	U	0.0014	U	0.18	U	0.0021	U	0.0029	U
1,4-Diethyl Benzene	--	--	1.2		0.98		3		0.0014	U	0.18	U	0.0021	U	0.0029	U
4-Ethyltoluene	--	--	1.1	U	0.17	U	0.2	U	0.0014	U	0.18	U	0.0021	U	0.0029	U
Acetone	500	1,000	5.5	U	0.86	U	1	U	0.019		0.89	U	0.013		0.16	
Benzene	44	89	0.28	U	0.043	U	0.051	U	0.00034	U	0.044	U	0.00054	U	0.00072	U
Chloroform	350	700	0.83	U	0.13	U	0.15	U	0.001	U	0.13	U	0.0016	U	0.0021	U
Chloromethane	--	--	2.2	U	0.34	U	0.41	U	0.0027	U	0.36	U	0.0043	U	0.0057	U
Cis-1,2-Dichloroethene	500	1,000	0.55	U	0.086	U	0.1	U	0.00068	U	12		0.0011	U	0.0014	U
Cymene	--	--	0.55	U	0.086	U	0.1	U	0.00068	U	0.089	U	0.0011	U	0.0014	U
Ethylbenzene	390	780	0.55	U	0.086	U	0.017	J	0.00068	U	0.089	U	0.0011	U	0.0014	U
Isopropylbenzene (Cumene)	--	--	0.27	J	0.21		3.2		0.00068	U	0.089	U	0.0011	U	0.0014	U
Methyl Ethyl Ketone (2-Butanone)	500	1,000	5.5	U	0.86	U	1	U	0.0068	U	0.89	U	0.011	U	0.033	
Naphthalene	500	1,000	2.2	U	0.21	J	0.72		0.0027	U	0.36	U	0.0043	U	0.0057	U
n-Butylbenzene	500	1,000	1		0.85		5.2		0.00068	U	0.089	U	0.0011	U	0.0014	U
n-Propylbenzene	500	1,000	0.31	J	0.24		6.7		0.00068	U	0.089	U	0.0011	U	0.0014	U
o-Xylene (1,2-Dimethylbenzene)	--	--	0.55	U	0.086	U	0.044	J	0.00068	U	0.089	U	0.0011	U	0.0014	U
Sec-Butylbenzene	500	1,000	1.6		1.4		4.7		0.00068	U	0.089	U	0.0011	U	0.0014	U
T-Butylbenzene	500	1,000	0.26	J	0.22		0.21		0.0014	U	0.18	U	0.0021	U	0.0029	U
Tert-Butyl Methyl Ether	500	1,000	1.1	U	0.17	U	0.2	U	0.00017	J	0.18	U	0.0021	U	0.00035	J
Tetrachloroethene (PCE)	150	300	0.28	U	0.043	U	0.051	U	0.0087		0.33		0.00054	U	0.00072	U
Toluene	500	1,000	0.55	U	0.086	U	0.1	U	0.00037	J	0.16		0.0011	U	0.0014	U
Total 1,2-Dichloroethene (Cis and Trans)	--	--	0.55	U	0.086	U	0.1	U	0.00068	U	14		0.0011	U	0.0014	U
Total Xylenes	500	1,000	0.55	U	0.086	U	0.044	J	0.00068	U	0.089	U	0.0011	U	0.0014	U
Trans-1,2-Dichloroethene	500	1,000	0.83	U	0.13	U	0.15	U	0.001	U	1.6		0.0016	U	0.0021	U
Trichloroethene (TCE)	200	400	0.28	U	0.043	U	0.051	U	0.0003	J	0.29		0.00054	U	0.00072	U
Vinyl Chloride	13	27	0.55	U	0.086	U	0.1	U	0.00068	U	15		0.0011	U	0.0014	U
Semivolatile Organic Compounds (mg/kg)																
2,4-Dinitrotoluene	--	--	0.19	U	0.072	J	0.19	U	0.18	U	0.23	U	0.18	U	0.24	U
2-Methylnaphthalene	--	--	0.043	J	0.21	U	0.23	U	0.17	J	0.27	U	0.22		0.29	U
2-Methylphenol (o-Cresol)	500	1,000	0.19	U	0.17	U	0.19	U	0.18	U	0.23	U	0.18	U	0.24	U
3 & 4 Methylphenol (m&p Cresol)	--	--	1.1		0.25	U	0.27	U	0.054	J	0.33	U	0.26	U	0.35	U
Acenaphthene	500	1,000	0.063	J	0.12	J	0.67		0.21		0.18	U	0.96		0.2	U
Acenaphthylene	500	1,000	0.049	J	0.14	U	0.15	U	0.24		0.18	U	0.058	J	0.2	U
Anthracene	500	1,000	0.15		0.063	J	0.29		0.66		0.14	U	1.5		0.12	J
Benzo(a)Anthracene	5.6	11	0.4		0.041	J	0.11	U	2.2		0.14	U	3		0.15	U
Benzo(a)Pyrene	1	1.1	0.39		0.14	U	0.15	U	2		0.18	U	2.3		0.2	U
Benzo(b)Fluoranthene	5.6	11	0.49		0.041	J	0.11	U	2.3		0.14	U	3.2		0.15	U
Benzo(g,h,i)Perylene	500	1,000	0.22		0.021	J	0.15	U	1.1		0.18	U	1.3		0.2	U
Benzo(k)Fluoranthene	56	110	0.16		0.1	U	0.11	U	0.94		0.14	U	1		0.15	U
Benzyl Butyl Phthalate	--	--	0.19	U	0.17	U	0.19	U	0.044	J	0.23	U	0.18	U	0.24	U
Biphenyl (Diphenyl)	--	--	0.43	U	0.4	U	0.43	U	0.4	U	0.52	U	0.065	J	0.56	U
Bis(2-Ethylhexyl) Phthalate	--	--	0.19	U	0.17	U	0.19	U	0.18	U	0.23	U	0.18	U	0.24	U
Carbazole	--	--	0.059	J	0.17	U	0.19	U	0.24		0.23	U	0.82		0.24	U
Chrysene	56	110	0.37		0.045	J	0.037	J	1.7		0.14	U	2.6		0.15	U
Dibenz(a,h)Anthracene	0.56	1.1	0.054	J	0.1	U	0.11	U	0.3		0.14	U	0.34		0.15	U
Dibenzofuran	350	1,000	0.068	J	0.095	J	0.53		0.2		0.23	U	0.49		0.24	U
Fluoranthene	500	1,000	0.77		0.078	J	0.11	U	3.1		0.14	U	6.5		0.049	J
Fluorene	500	1,000	0.086	J	0.26		1.4		0.26		0.23	U	0.72		0.49	
Indeno(1,2,3-c,d)Pyrene	5.6	11	0.24		0.14	U	0.15	U	1.2		0.18	U	1.5		0.2	U
Naphthalene	500	1,000	0.15	J	0.076	J	0.34		0.43		0.23	U	0.57		0.12	J
Phenanthrene	500	1,000	0.54		0.52		2.8		1.9		0.14	U	6.2		1.1	
Phenol	500	1,000	0.15	J	0.17	U	0.19	U	0.034	J	0.23	U	0.18	U	0.24	U
Pyrene	500	1,000	0.66		0.15		0.36		3		0.14	U	5.3		0.16	
Polychlorinated Biphenyls (mg/kg)																
PCB-1260 (Aroclor 1260)	--	--	0.0371	U	0.0338	U	NA		NA		NA		NA		NA	
PCB-1268 (Aroclor 1268)	--	--	0.0371	U	0.0338	U	NA		NA		NA		NA		NA	
Total PCBs	1	25	0.0371	U	0.0338	U	NA		NA		NA		NA		NA	
Inorganics (mg/kg)																
Aluminum	--	--	7,840		8,110		7,030		6,070		8,780		5,920		3,350	
Antimony	--	--	4.56	U	4.12	U	4.38	U	0.942	J	1.51	J	15		0.852	J
Arsenic	16	16	2.31		3.88		1.73		2.22		3.89		14.3		14.6	
Barium	400	10,000	45.9		44.5		41.2		34.8		45.7		176		175	
Beryllium	590	2,700	0.474		0.329	J	0.525		0.336	J	0.521	J	0.33	J	0.276	J
Cadmium	9.3	60	0.912	U	0.823	U	0.876	U	0.841	U	1.11	U	3.8		1.15	U
Calcium	--	--	1,020		774		1,040		977		1,190		4,600		7,630	
Chromium, Total	--	--	15.5		20.3		15.7		17.6		22.6		25.8		15.1	
Cobalt	--	--	8.63		7.66		6.43		5.69		15.3		8.44		7.17	
Copper	270	10,000	10.9		15.4		9.6		14		18		136		89.4	
Iron	--	--	21,000		15,900		25,900		16,700		28,900		23,500		12,600	
Lead	1000	3,900	35.2		23.5		17.4		41.2		64.2		1,050		610	
Magnesium	--	--	1,950		2,830		1,510		1,420		1,810		2,180		958	
Manganese	10,000	10,000	274		186		590		284		309		630		174	
Mercury	2.8	5.7	0.144		0.09		0.073	U	0.281		0.501		2.53		3.12	
Nickel	310	10,000	10.6		12.5		8.46		9.4		32.3		16.6		11.4	
Potassium	--	--	598		809		645		637		588		865		497	
Selenium	1,500	6,800	1.82	U	1.65	U	1.75	U	1.68	U	2.22	U	1.81		1.98	J
Silver	1,500	6,800	0.912	U	0.823	U	0.876	U	0.841	U	1.11	U	0.812	J	1.15	U
Sodium	--	--	171	J	243		38.3	J	48.5	J	175	J	124	J	198	J
Thallium	--	--	1.82	U	1.65	U	1.75	U	1.68	U	2.22	U	1.69	U	2.3	U
Vanadium	--	--	24.3		25.4		12.6		22.8		30.6		27.8		14.4	
Zinc	10,000	10,000	32.4		27.8		27.4		33		37.5		650		244	
General Chemistry (%)																
Total Solids	--	--	86.3		94.1		86		91.8		71.5		89.5		66.8	

Table 2
Phase II Environmental Site Investigation
Soil Sample Analytical Results Summary
450 Johnson Avenue
Brooklyn, New York
Langan Project No.: 170588001

Lot Location Sample ID Laboratory ID Sample Date Sample Depth (feet bgs)	NYSDEC Part 375 Restricted Use Commercial SCOs	NYSDEC Part 375 Restricted Use Industrial SCOs	Lot 55					
			SB07		SB10		SB15	
			SB07_4.5-5.0		SB10_5.0-5.5		SB15_8.0-8.5	
			L1931803-07		L1932118-03		L1932118-01	
			7/18/2019		7/19/2019		7/19/2019	
			4.5-5		5-5.5		8-8.5	
							3-3.5	
							13-13.5	
Volatile Organic Compounds (mg/kg)								
1,2,4,5-Tetramethylbenzene	--	--	0.0022 U		0.004 U		0.0021 U	
1,2,4-Trimethylbenzene	190	380	0.0022 U		0.004 U		0.0021 U	
1,3,5-Trimethylbenzene (Mesitylene)	190	380	0.0022 U		0.004 U		0.0021 U	
1,4-Diethyl Benzene	--	--	0.0022 U		0.004 U		0.0021 U	
4-Ethyltoluene	--	--	0.0022 U		0.004 U		0.0021 U	
Acetone	500	1,000	0.027		0.038		0.045	
Benzene	44	89	0.00054 U		0.00099 U		0.00052 U	
Chloroform	350	700	0.0016 U		0.003 U		0.0016 U	
Chloromethane	--	--	0.0043 U		0.0018 J		0.0041 U	
Cis-1,2-Dichloroethene	500	1,000	0.0011 U		0.002 U		0.001 U	
Cymene	--	--	0.0011 U		0.002 U		0.001 U	
Ethylbenzene	390	780	0.0011 U		0.002 U		0.001 U	
Isopropylbenzene (Cumene)	--	--	0.0011 U		0.002 U		0.001 U	
Methyl Ethyl Ketone (2-Butanone)	500	1,000	0.011 U		0.02 U		0.01 U	
Naphthalene	500	1,000	0.0043 U		0.008 U		0.0041 U	
n-Butylbenzene	500	1,000	0.0011 U		0.002 U		0.001 U	
n-Propylbenzene	500	1,000	0.0011 U		0.002 U		0.001 U	
o-Xylene (1,2-Dimethylbenzene)	--	--	0.0011 U		0.002 U		0.001 U	
Sec-Butylbenzene	500	1,000	0.0011 U		0.002 U		0.001 U	
T-Butylbenzene	500	1,000	0.0022 U		0.004 U		0.0021 U	
Tert-Butyl Methyl Ether	500	1,000	0.0022 U		0.00045 J		0.00027 J	
Tetrachloroethene (PCE)	150	300	0.021		0.00099 U		0.00052 U	
Toluene	500	1,000	0.0011 U		0.002 U		0.001 U	
Total 1,2-Dichloroethene (Cis and Trans)	--	--	0.0011 U		0.002 U		0.001 U	
Total Xylenes	500	1,000	0.0011 U		0.002 U		0.001 U	
Trans-1,2-Dichloroethene	500	1,000	0.0016 U		0.003 U		0.0016 U	
Trichloroethene (TCE)	200	400	0.00054 U		0.00099 U		0.00052 U	
Vinyl Chloride	13	27	0.00074 J		0.002 U		0.001 U	
Semivolatile Organic Compounds (mg/kg)								
2,4-Dinitrotoluene	--	--	0.19 U		0.59 U		0.2 U	
2-Methylnaphthalene	--	--	0.03 J		0.7 U		0.13 J	
2-Methylphenol (o-Cresol)	500	1,000	0.19 U		0.59 U		0.069 J	
3 & 4 Methylphenol (m&p Cresol)	--	--	0.27 U		0.84 U		0.29	
Acenaphthene	500	1,000	0.074 J		0.33 J		0.16	
Acenaphthylene	500	1,000	0.035 J		0.1 J		1.2	
Anthracene	500	1,000	0.19		0.7		0.89	
Benzo(a)Anthracene	5.6	11	0.65		2.9		3.5	
Benzo(a)Pyrene	1	1.1	0.7		2		4.3	
Benzo(b)Fluoranthene	5.6	11	0.9		2.2		5.2	
Benzo(g,h,i)Perylene	500	1,000	0.4		1.2		3.2	
Benzo(k)Fluoranthene	56	110	0.28		0.76		1	
Benzyl Butyl Phthalate	--	--	0.19 U		0.59 U		0.2 U	
Biphenyl (Diphenyl)	--	--	0.43 U		1.3 U		0.46 U	
Bis(2-Ethylhexyl) Phthalate	--	--	0.1 J		0.59 U		0.2 U	
Carbazole	--	--	0.077 J		0.16 J		0.42	
Chrysene	56	110	0.67		2.7		2.9	
Dibenz(a,h)Anthracene	0.56	1.1	0.1 J		0.28 J		0.79	
Dibenzofuran	350	1,000	0.044 J		0.082 J		0.15 J	
Fluoranthene	500	1,000	1.2		4.3		5	
Fluorene	500	1,000	0.055 J		0.25 J		0.22	
Indeno(1,2,3-c,d)Pyrene	5.6	11	0.43		1.2		3.1	
Naphthalene	500	1,000	0.065 J		0.59 U		0.69	
Phenanthrene	500	1,000	0.69		4		2.4	
Phenol	500	1,000	0.19 U		0.59 U		0.19 J	
Pyrene	500	1,000	1.1		5.5		4.9	
Polychlorinated Biphenyls (mg/kg)								
PCB-1260 (Aroclor 1260)	--	--	0.0368 U		NA		NA	
PCB-1268 (Aroclor 1268)	--	--	0.0368 U		NA		NA	
Total PCBs	1	25	0.0368 U		NA		NA	
Inorganics (mg/kg)								
Aluminum	--	--	2,490		3,190		4,590	
Antimony	--	--	4.48		0.779 J		1.62 J	
Arsenic	16	16	67		6.01		11.5	
Barium	400	10,000	84.3		177		59.2	
Beryllium	590	2,700	0.167 J		0.241 J		0.121 J	
Cadmium	9.3	60	1.27		1.11		0.821 J	
Calcium	--	--	17,300		2,540		2,450	
Chromium, Total	--	--	14.8		7.75		11.7	
Cobalt	--	--	9.14		4.87		5.36	
Copper	270	10,000	42		67		41.8	
Iron	--	--	58,000		7,380		17,200	
Lead	1000	3,900	131		442		544	
Magnesium	--	--	9,700		431		698	
Manganese	10,000	10,000	329		140		342	
Mercury	2.8	5.7	0.527		0.489		1.18	
Nickel	310	10,000	16.9		12.8		10.3	
Potassium	--	--	428		500		454	
Selenium	1,500	6,800	7.85		1.77 J		0.765 J	
Silver	1,500	6,800	0.881 U		0.928 U		0.933 U	
Sodium	--	--	136 J		141 J		106 J	
Thallium	--	--	0.634 J		1.86 U		0.364 J	
Vanadium	--	--	31.8		15.2		19.3	
Zinc	10,000	10,000	197		291		336	
General Chemistry (%)								
Total Solids	--	--	88.2		82.2		81.3	

Notes:

- Soil sample analytical results are compared to the New York State Department of Environmental Conservation (NYSDEC) Title 6 of the Official Compilation of New York Codes, Rules, and Regulations (NYCRR) Part 375 Restricted Use Commercial and Restricted Use Industrial Soil Cleanup Objectives (SCO).
- Only detected analytes are shown in the table.
- Analytes detected with concentrations above Restricted Use Commercial SCOs are **bolded**.
- Analytes detected with concentrations above Restricted Use Industrial SCOs are shaded.
- Analytical results with reporting limits (RL) above the lowest applicable criteria are italicized.
- Sample DUP01_071619 is a duplicate sample of SB03_14.0-14.5.
- = Regulatory limit for this analyte does not exist
- bgs = below grade surface
- mg/kg = milligrams per kilogram
- % = percent
- NA = Not analyzed

Qualifiers:

J = The analyte was detected above the Method Detection Limit (MDL), but below the RL; therefore, the result is an estimated concentration.

U = The analyte was analyzed for, but was not detected at a level greater than or equal to the RL; the value shown in the table is the RL.

Table 3
Phase II Environmental Site Investigation
Groundwater Sample Analytical Results Summary

450 Johnson Avenue
Brooklyn, New York
Langan Project No.: 170588001

Lot Location Sample ID Laboratory ID Sample Date	NYSDEC SGVs	Lot 17			Lot 21			Lot 55	
		TMW01	TMW02	TMW02	TMW03	TMW04	TMW08	TMW07	
		TMW01_071719	TMW02_071819	DUP02_071819	TMW03_071719	TMW04_071719	TMW08_071819	TMW07_071919	
		L1931524-07	L1931803-01	L1931803-03	L1931524-08	L1931524-06	L1931803-02	L1932118-07	
		7/17/2019	7/18/2019	7/18/2019	7/17/2019	7/17/2019	7/18/2019	7/19/2019	
Volatile Organic Compounds (µg/L)									
1,1-Dichloroethane	5	2.5 U	2.5 U	2.5 U	0.93 J	2.5 U	2.5 U	2.5 U	
1,1-Dichloroethene	5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.31 J	1.1	
1,2,4,5-Tetramethylbenzene	5	2 U	2 U	2 U	7.6	34	2 U	2 U	
1,4-Diethyl Benzene	~	2 U	2 U	2 U	1.9 J	7.2	2 U	2 U	
2-Hexanone	50	5 U	5 U	5 U	5 U	5 U	2.2 J	5 U	
Acetone	50	5 U	5 U	5 U	4.2 J	2.2 J	19	5.8	
Benzene	1	0.5 U	0.5 U	0.5 U	0.24 J	0.19 J	0.23 J	0.24 J	
Chloroform	7	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	13	5.3	
Cis-1,2-Dichloroethene	5	1.5 J	2.5 U	2.5 U	2.5 U	2.5 U	170	250	
Isopropylbenzene (Cumene)	5	2.5 U	2.5 U	2.5 U	2.5 U	6.6	2.5 U	2.5 U	
Methyl Ethyl Ketone (2-Butanone)	50	5 U	5 U	5 U	5 U	5 U	3.5 J	2 J	
n-Butylbenzene	5	2.5 U	2.5 U	2.5 U	1.5 J	9.4	2.5 U	2.5 U	
n-Propylbenzene	5	2.5 U	2.5 U	2.5 U	2.5 U	7	2.5 U	2.5 U	
Sec-Butylbenzene	5	2.5 U	2.5 U	2.5 U	1.7 J	7.3	2.5 U	2.5 U	
T-Butylbenzene	5	2.5 U	2.5 U	2.5 U	2.5 U	1.1 J	2.5 U	2.5 U	
Tert-Butyl Methyl Ether	10	2.4 J	0.91 J	0.78 J	15	11	7.9	2.5 U	
Tetrachloroethene (PCE)	5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	64	150	
Total 1,2-Dichloroethene (Cis and Trans)	~	1.5 J	2.5 U	2.5 U	2.5 U	2.5 U	170 J	250 J	
Trans-1,2-Dichloroethene	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.3 J	1.8 J	
Trichloroethene (TCE)	5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	72	70	
Vinyl Chloride	2	0.08 J	1 U	0.08 J	0.38 J	31	170	3.2	
Semivolatile Organic Compounds (µg/L)									
2-Methylnaphthalene	~	0.1 U	0.17	1.9	0.13	0.65	0.58	0.03 J	
Acenaphthene	20	0.1 U	0.1	2.5	2.5	14	0.65	0.03 J	
Acenaphthylene	~	0.1 U	0.1 U	0.69	0.55	4.1	0.04 J	0.1 U	
Anthracene	50	0.1 U	0.03 J	1.9	0.4	3.7	0.16	0.06 J	
Benzo(a)Anthracene	0.002	0.1 U	0.04 J	6	0.11	0.89	0.13	0.25	
Benzo(a)Pyrene	0	0.1 U	0.1 U	5.9	0.08	0.61	0.11	0.22	
Benzo(b)Fluoranthene	0.002	0.1 U	0.1 U	7.2	0.1	0.76	0.14	0.31	
Benzo(g,h,i)Perylene	~	0.1 U	0.1 U	4	0.07 J	0.41	0.1 J	0.2	
Benzo(k)Fluoranthene	0.002	0.1 U	0.1 U	2.8	0.05	0.27	0.05 J	0.11	
Benzoic Acid	~	50 U	50 U	50 U	12 J	50 U	16 J	9.4 J	
Bis(2-Ethylhexyl) Phthalate	5	3	2.2 J	3 U	3 U	1.8 J	3 U	3 U	
Carbazole	~	2 U	2 U	1.2 J	2 U	2 U	2 U	2 U	
Chrysene	0.002	0.1 U	0.03 J	5.3	0.11	1.1	0.11	0.26	
Dibenz(a,h)Anthracene	~	0.1 U	0.1 U	1	0.1 U	0.11	0.1 U	0.04 J	
Dibenzofuran	~	2 U	2 U	1.5 J	0.77 J	5	2 U	2 U	
Diethyl Phthalate	50	5 U	5 U	5 U	5 U	5 U	0.55 J	5 U	
Fluoranthene	50	0.1 U	0.06 J	12	0.32	2.7	0.34	0.46	
Fluorene	50	0.1 U	0.1 J	2.2	3.3	20	0.41	0.03 J	
Indeno(1,2,3-c,d)Pyrene	0.002	0.1 U	0.1 U	4.1	0.07	0.41	0.1 J	0.21	
Naphthalene	10	0.1 U	0.35	4.3	0.57	1.8	1.1	0.87	
Phenanthrene	50	0.1 U	0.13	9.2	5.4	46	1.2	0.25	
Pyrene	50	0.1 U	0.05 J	10	0.58	5.6	0.29	0.45	
Dissolved - Inorganics (µg/L)									
Aluminum	~	46	4.99 J	1,240	3.34 J	8.24 J	299	13.8	
Antimony	3	0.5 J	0.78 J	0.89 J	1.13 J	0.57 J	1.21 J	1.47 J	
Arsenic	25	0.21 J	0.24 J	0.87	0.76	2.91	0.65	1.59	
Barium	1,000	124.2	73.12	90.16	226.6	186.2	56.89	97.96	
Cadmium	5	0.2 U	0.2 U	0.08 J	0.2 U	0.2 U	0.2 U	0.2 U	
Calcium	~	82,700	58,300	58,600	75,900	80,900	90,900	74,800	
Chromium, Total	50	0.29 J	0.36 J	3.85	0.26 J	0.6 J	1.03	0.22 J	
Cobalt	~	0.89	2.35	3.49	1.89	0.99	2.56	8.71	
Copper	200	1.39	0.39 J	6.87	0.71 J	0.99 J	2.26	6.73	
Iron	300	4,720	66.3	2,650	25,800	16,500	476	2,780	
Lead	25	1.37	1 U	19.81	1 U	1 U	3.35	2.09	
Magnesium	35,000	17,100	4,410	4,860	54,000	29,400	7,690	10,900	
Manganese	300	610.6	443.7	493	1,807	1,254	1,631	4,586	
Nickel	100	1.55 J	2.04	4.36	1.32 J	1.32 J	3.13	6.5	
Potassium	~	12,000	5,950	6,160	22,400	16,200	13,400	13,500	
Selenium	10	5 U	3.76 J	3.07 J	5 U	5 U	3.22 J	5 U	
Sodium	20,000	58,100	10,200	10,600	109,000	68,200	62,900	64,800	
Vanadium	~	5 U	5 U	4.01 J	5 U	5 U	5 U	5 U	
Zinc	2,000	9.74 J	18.94	40.48	4.45 J	10 U	3.89 J	21.34	

Notes:

- Only detected analytes are shown in the table.
- Groundwater sample analytical results are compared to the New York State Department of Environmental Conservation (NYSDEC) Title 6 of the Official Compilation of New York Codes, Rules and Regulations (NYCRR) Part 703.5 and the NYSDC Technical and Operational Guidance Series (TOGS) 1.1.1 Ambient Water Quality Standards and Guidance Values for Class GA Water (NYSDEC SGVs).
- Analytes detected with concentrations above NYSDC SGVs are bolded and shaded.
- Analytical results with reporting limits (RL) above NYSDC SGVs are italicized.
- Sample DUP02_071819 is a duplicate sample of TMW02_071819.
- ~ = Regulatory limit for this analyte does not exist
- µg/L = micrograms per liter
- NA = Not analyzed

Qualifiers:

J = The analyte was detected above the Method Detection Limit (MDL), but below the RL; therefore, the result is an estimated concentration.
U = The analyte was analyzed for, but was not detected at a level greater than or equal to the RL; the value shown in the table is the RL.

Table 4
Phase II Environmental Site Investigation
Sub-Slab Vapor and Indoor Air Sample Analytical Results Summary

450 Johnson Avenue
Brooklyn, New York
Langan Project No.: 170588001

Lot Location Sample ID Laboratory ID Sample Date Sample Type	NYSDOH AGVs	NYSDOH Decision Matrices Minimum Concentration	Lot 17				Lot 21				
			IA01	SSV01	IA02	SSV02	IA03	SSV03			
			IA01_071819	SSV01_071819	IA02_071919	SSV02_071919	IA03_071919	SSV03_071919			
			L1931865-01	L1931865-02	L1932180-03	L1932180-01	L1932180-04	L1932180-02			
			7/18/2019	7/18/2019	7/19/2019	7/19/2019	7/19/2019	7/19/2019			
			IA	SSV	IA	SSV	IA	SSV			
Volatile Organic Compounds (µg/m³)											
1,1,1-Trichloroethane	~	100	0.295	10.9	U	0.251	4.2	U	8.46	3.64	U
1,2,4-Trimethylbenzene	~	~	3.26	199		32	152		8.9	128	
1,3,5-Trimethylbenzene (Mesitylene)	~	~	1.88	64.9		8.8	53.1		2.11	46.1	
1,3-Butadiene	~	~	3.36	4.42	U	12.3	1.7	U	3.47	1.48	U
1,4-Dichlorobenzene	~	~	1.55	12	U	1.2	4.62	U	1.2	4.01	U
2,2,4-Trimethylpentane	~	~	7.43	120		27.6	200		7.1	143	
4-Ethyltoluene	~	~	1.17	61.9		6.78	33.6		1.37	27.4	
Acetone	~	~	19.7	198		15.4	95		21.5	65.1	
Benzene	~	~	13.9	113		53.4	98.4		16.6	56.9	
Carbon Disulfide	~	~	0.981	6.23	U	0.623	14.4		0.623	10.7	
Carbon Tetrachloride	~	6	0.447	12.6	U	0.585	4.84	U	0.56	4.2	U
Chloroform	~	~	1.43	9.86		1.1	3.76	U	0.977	3.26	U
Chloromethane	~	~	1.49	4.13	U	1.5	1.59	U	1.55	1.38	U
Cis-1,2-Dichloroethene	~	6	0.079	7.93	U	0.079	3.05	U	0.143	2.64	U
Cyclohexane	~	~	3.79	86.7		23	128		4.78	85.4	
Dichlorodifluoromethane	~	~	2.4	9.89	U	2.75	3.92		2.69	3.38	
Ethanol	~	~	93.3	94.2	U	347	36.2	U	133	31.5	U
Ethylbenzene	~	~	4.01	317		26.8	249		6.82	195	
Isopropanol	~	~	14	12.3	U	7.23	4.72	U	8.87	4.1	U
M,P-Xylene	~	~	13.2	964		82.1	634		21.1	517	
Methyl Ethyl Ketone (2-Butanone)	~	~	3.45	71.4		3.66	51.9		4.42	32.4	
Methylene Chloride	60	100	2.97	17.4	U	2.63	6.67	U	24.5	5.8	U
n-Heptane	~	~	7.05	443		43.9	409		10.2	268	
n-Hexane	~	~	12.7	230		64.8	244		13.5	125	
o-Xylene (1,2-Dimethylbenzene)	~	~	4.69	350		31.1	288		7.95	238	
Styrene	~	~	1.75	8.52	U	4.21	3.27	U	2.24	2.84	U
Tert-Butyl Alcohol	~	~	1.52	15.2	U	1.52	22.8		1.52	16.8	
Tetrachloroethene (PCE)	30	100	1.21	13.6	U	0.556	6.65		1.41	39.9	
Tetrahydrofuran	~	~	15.3	14.7	U	1.47	5.66	U	3.72	4.93	U
Toluene	~	~	31.9	1,750		149	1,020		41.1	716	
Trichloroethene (TCE)	2	6	0.193	10.7	U	0.263	7.69		0.924	3.58	U
Trichlorofluoromethane	~	~	1.12	11.2	U	1.52	4.32	U	1.55	3.75	U

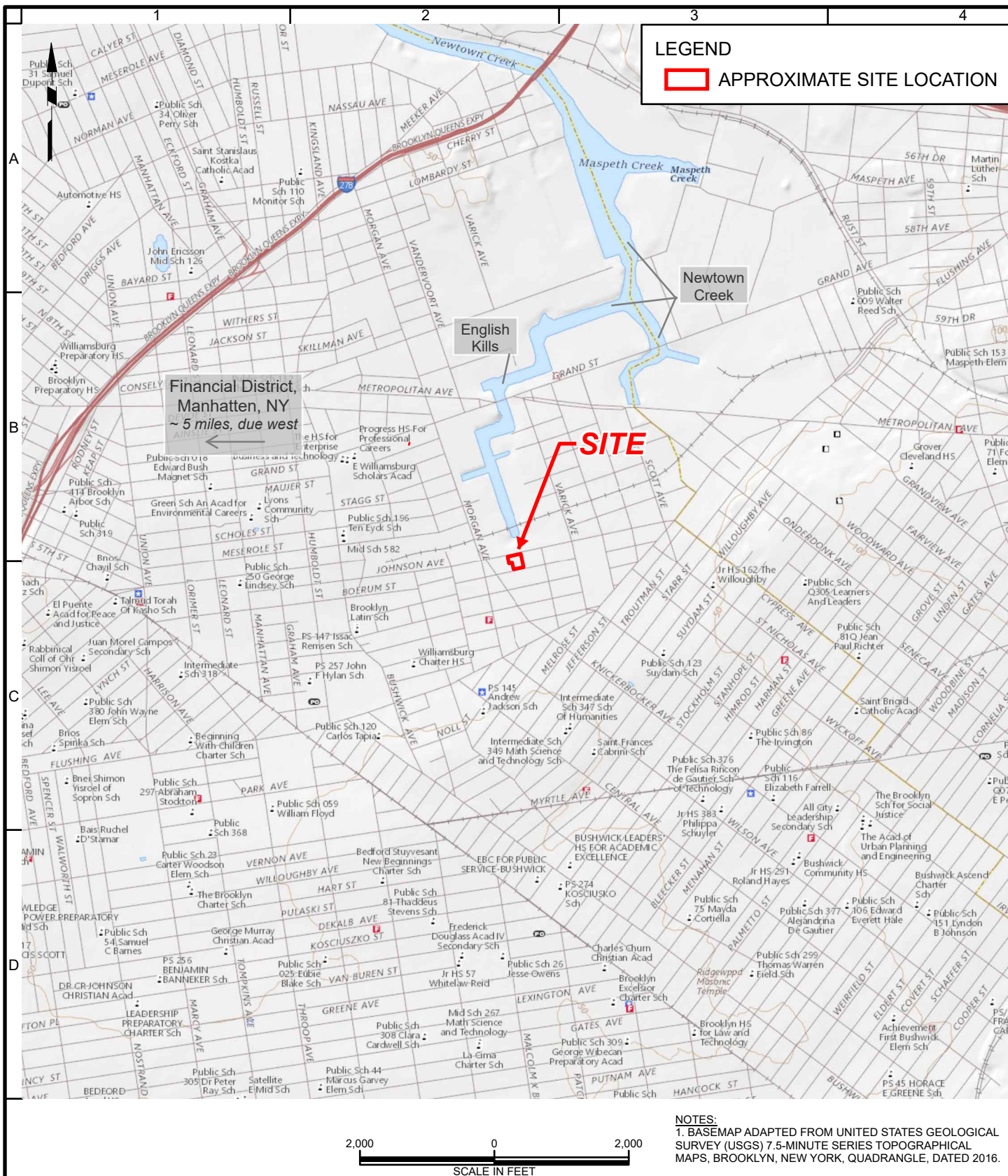
Notes:

- Only detected analytes are shown in the table.
- Co-located sub-slab vapor and indoor air sample analytical results are evaluated with the New York State Department of Health (NYSDOH) October 2006 Guidance for Evaluating Soil Vapor Intrusion in the State of New York Decision Matrices for Sub-Slab Vapor and Indoor Air and subsequent updates (2017).
- The NYSDOH Decision Matrices Minimum Concentrations are shown for reference only.
- Indoor air sample analytical results are evaluated with the NYSDOH Air Guideline Values (AGVs) as set forth in the NYSDOH October 2006 Guidance for Evaluating Soil Vapor Intrusion in the State of New York and subsequent updates (2013, 2015).
- Detected analytical results evaluated to recommend monitoring are bolded.
- Detected analytical results evaluated to recommend identify sources and resample or mitigation are shaded.
- Detected analytical results evaluated to recommend mitigation are bolded and shaded.
- µg/m³ = micrograms per cubic meter
- ~ = Regulatory criteria for this analyte does not exist
- IA = Indoor Air
- SSV = Sub-slab Soil Vapor

Qualifiers:

U = The analyte was analyzed for, but was not detected at a level greater than or equal to the RL; the value shown in the table is the RL.

FIGURES



LANGAN

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Langan Engineering & Environmental Services, Inc.
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 Landscape Architecture and Geology, D.P.C.
 Langan International LLC

Collectively known as Langan

Project

450 JOHNSON AVENUE

BLOCK No. 2992, LOT No. 17, 21, 55

BROOKLYN

KINGS COUNTY

NEW YORK

Figure Title

SITE LOCATION MAP

Project No.

170588001

Date

6/21/2019

Scale

1"=2,000'

Drawn By

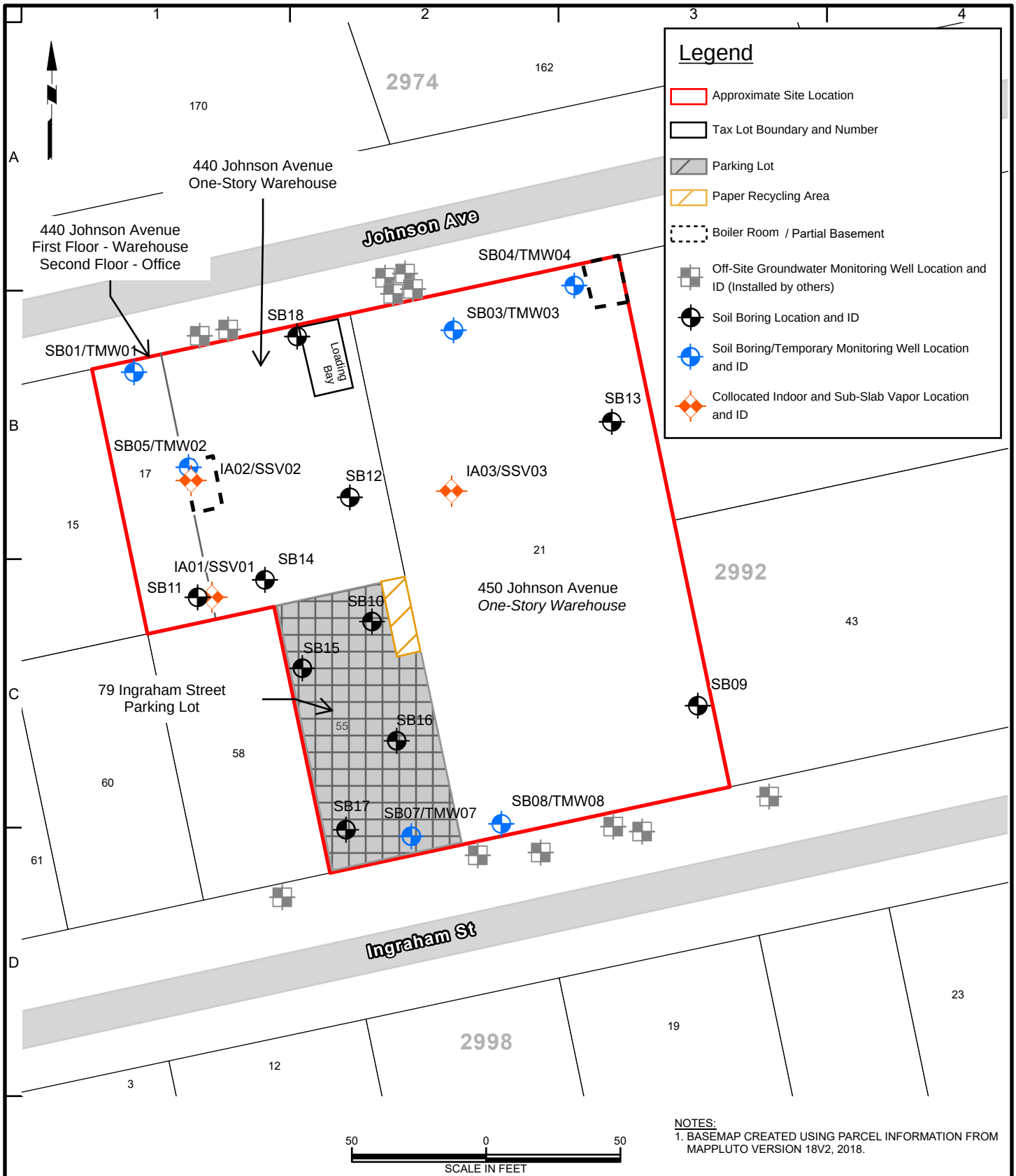
AB

Submission Date

6/21/2019

Figure No.

1



LANGAN

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**450 JOHNSON
AVENUE**

BLOCK No. 2992, LOT No. 17, 21, 55

BROOKLYN

KINGS COUNTY

NEW YORK

Figure Title

**SAMPLING
LOCATION
PLAN**

Project No.

170588001

Date

8/2/2019

Scale

1"=50'

Drawn By

MG

Submission Date

8/2/2019

Figure No.

2

Sheet 2 of 2

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APPENDIX A

GEOPHYSICAL SURVEY REPORT



Subsurface Environmental Technologies, LLC.
19 Brookside Avenue
Pennington, New Jersey 08534
Phone: (609) 730-0005
Fax: (609) 730-1222

August 29, 2019

Ref No: 19-243G

Deirdre Casey
LANGAN
21 Penn Plaza
360 West 31st St., 8th Floor
New York, NY 10001-2727

Subject: Geophysical Investigation Results
450 Johnson Avenue
Brooklyn, New York 11237

Dear Ms. Casey:

Subsurface Environmental Technologies, LLC (SET) is pleased to present this letter report to *LANGAN* of New York, New York describing the methods and results of a geophysical investigation conducted at the Johnson Avenue Site in Brooklyn, New York. The survey areas for this investigation were primarily focused on twenty-five (25) roughly 20-foot by 20-foot areas surrounding proposed soil boring (SB) locations indicated on Figures 2-5 below. SET was also requested to survey the sidewalk along the northern side of the warehouse as well as the parking lot located to the south along Ingraham Avenue (see Figure 1). The terrain within the investigation areas was relatively flat, relatively free of surface obstructions, and was comprised primarily paved-asphalt, concrete, and sporadic gravels. The field activities for this project were completed by SET personnel on July 15, 2019.

Objectives

The primary objective of this geophysical investigation was to identify potential underground hazards such as utility pipelines, USTs, or anomalous subsurface features that may adversely affect planned drilling events at twenty-five (25) proposed SB locations. The secondary objective of this geophysical investigation was to perform a GPR survey to identify underground storage tanks (USTs) or evidence of prior removal such as possible excavations or areas of disturbed soils that may be related to former USTs. To meet these objectives, SET used a GSSI SIR 3000 System (GPR) with 350 and 400-megahertz (MHz) ground-penetrating radar antennas, a Fisher TW-6 M-Scope, and an RD7000 radio frequency (RF) device by Radiodetection, Inc.

Instrumentation

Ground Penetrating Radar (GPR)

Ground Penetrating Radar (GPR) is a near surface geophysical method based on the transmission of repetitive, high-frequency electromagnetic (EM) pulses emitted from a transmitting antenna to probe the Earth. The EM pulses emitted from the transmitting antenna

propagate through the subsurface at a velocity that is directly related to the electrical properties of the subsurface. When an EM wave contacts an interface of differing electrical properties (e.g. dielectric constant), part of that energy is returned to surface in the form of a reflected signal. The reflected signal is detected by a receiving transducer, displayed on the control unit screen, and recorded on an internal hard drive. The control unit records a continuous cross-section of the subsurface by plotting the two-way travel time of the EM pulse, relative to the distance traveled by the GPR antenna along to ground surface. To determine depth, two-way travel time values are converted using known soil velocity functions. GPR field procedures include system calibration, test run completion, and profile collection and interpretation. GPR Data collected in the field can be analyzed both in the field and in the office, should further analysis be required.

Fisher TW-6 M-Scope

The M-Scope is an electromagnetic (EM) instrument used to detect the presence of buried metallic objects such as buried drums, metallic conduits, or miscellaneous metallic debris buried within the upper 3 to 5 feet of the subsurface. The Fisher M-Scope uses the principle of electromagnetic induction. A primary coil broadcasts a radio signal from a transmitting antenna and induces secondary electrical currents along buried metallic objects. This secondary electrical current in turn produces a secondary magnetic field, which is then detected by a receiving antenna. Peak responses are observed when the instrument is moved directly over a metallic object. Peak responses are observed by the operator in real time using the analog meter and audible output signals.

Radio-Frequency Method (RF)

The Radio Detection RD4000 multi-frequency utility locating system was used directly over and around each proposed SB location. This instrument consists of a receiver/tracer and a remote transmitter, which operates at frequencies between 8 kilohertz (kHz) and 200 kHz. The unit provides audio and visual feedback to the operator when a utility that is coupled with the transmitted signal is crossed. The transmitter produces a radio-frequency signal in the utility to be traced by either induction coupling or direct hookup. The receiver output provides measured field strength of the received signal and varies an audible pitch that is dependent upon the distance to the utility. By carefully adjusting the gain of the receiver, it is possible to determine the location of the utility and to separate it from possible adjacent utilities. In addition, the receiver can be used in 60 kHz passive mode to identify active electrical lines or lines that possess an induced current.

Field Survey Design and Procedures

SET utilized the industry standard protocol for geophysical field surveys during this investigation. This standard protocol includes proper equipment setup, equipment calibration,

multiple test-run completions, observation of surface metals, the assessment of data quality in the field, and overall quality assurance during final report preparation and presentation. Because of the size and nature of the anomalies targeted for this investigation, SET used a tight spacing for collecting geophysical data. The GPR transects were collected in varying orientations across the site. These GPR transects were spaced at approximately 2-foot intervals throughout the survey areas except where obstructions were encountered at the ground surface such as production equipment, shelving units, and other miscellaneous site features. SET typically collects a minimum of 5-10 profiles over each anomalous GPR response or area of concern to provide a more detailed perspective of the subsurface. It was not possible to collect GPR data in areas where surface obstructions were present.

Results and Discussion

Underground Storage Tanks

SET did not observe any geophysical responses that may indicate the presence of a buried UST within the survey areas. All M-Scope and GPR responses were analyzed for characteristic signatures such as anomalously high or low EM responses, or strong, hyperbolic GPR signatures of reasonable dimension. SET did observe an affixed vent pipe near the northeastern corner of the property along the Johnson Avenue sidewalk, but no geophysical evidence suggested the presence of a UST. Additionally, SET did not observed evidence of prior UST removal such as an area of disturbed soil, excavation flank walls, or other evidence of prior earthwork.

Interior Area of Disturbed Soil/Concrete and Visible Supply/Return Lines

SET visually observed a set of supply/return lines exiting the boiler room to the north (see Site photo 11 on Figure 3). These pipes were exposed at the ground surface at the time of this survey and extended roughly 18 feet north-northwest of the boiler room entrance and abruptly changed to a westerly orientation and into a block wall. At the same location on the opposite side of the wall (see Site Photo 7 on Figure 3), SET observed a small, roughly 3-foot wide by 6-foot long area of disturbed soil and cut concrete. GPR data in this area displayed a more chaotic response than the surrounding area, suggesting that this area had possibly been re-worked at some point in the past. SET was limited in survey space at this location but attempted to move shelving to image the area. No geophysical evidence of a UST was detected in this vicinity.

Soil Boring Location Surveying and Utility Locating

SET performed a geophysical survey and private utility mark-out (PUM) surrounding a total of twenty-five (25) proposed drilling locations. The locations selected as a final drilling point displayed geophysical characteristics which were not indicative of buried utility pipelines, USTs, or anomalous zones that may adversely affect drilling operations. SET determined these points as final when both the RF and M-Scope instrument responses were constant, and when GPR

Deirdre Casey
LANGAN
SET: 19-243G

responses were did not indicate the presence of buried objects. All locations deemed free of subsurface obstructions were marked on site with white spray paint (shown as a common crosshair symbol). The approximate positions of these features can be seen below in Figures 1-6. These positions are intended for general reference purposes only; refer to field markings for actual locations and ground positions.

Suspected Septic Holding Tank

SET detected one suspected septic holding tank (SSHT) near the washroom in the northeastern portion of the warehouse (see Figure 1). The SSHT was identified upon removing a sheet metal cover which exposed a large, roughly 4-foot by 6-foot vault which had a sewage-like odor. Additionally, piping could be seen extending to the north from this structure and are likely associated with drainage from the adjacent washrooms. SET also observed what appeared to be an outlet pipe extending toward Johnson Avenue from the north side of the tank. Characteristic GPR signatures were observed over this SSHT such as a strong, flat reflector (see GPR 158 on Figure 1). This type of response has been consistently observed by SET over this type of target at many sites. No other septic system components such as vents, lateral lines, or leach fields were detected on site.

Closing

The geophysical data collection and interpretation methods used in this investigation are consistent with standard practices applied to similar geophysical investigations. The correlation of geophysical responses is based on the past results of similar surveys, although it is possible that some variation could exist at this site. Due to the nature of geophysical data, no guarantees have been made or inferred regarding the presence or absence of additional objects or targets beyond those identified or beyond the detection limits of the instrumentation used in this investigation.

It was a pleasure working with you on this project, and we look forward to conducting geophysical investigations for you in the future.

Sincerely,

Subsurface Environmental Technologies, LLC.
Geophysics Group

A handwritten signature in dark ink, appearing to read 'Corey Miller', is positioned above the printed name.

Corey Miller | Project Geophysicist

Deirdre Casey
LANGAN
SET: 19-243G

Encl.:

Figure 1

ANNOTATED HIGH-RESOLUTION GEOREFERENCED ORTHOPHOTO SHOWING SITE, EXTERIOR SURVEY BOUNDARIES, SITE PHOTO, & GPR PROFILE OF A SUSPECTED INTERIOR SEPTIC HOLDING TANK

Figure 2

ANNOTATED SITE PHOTOS SHOWING PROPOSED DRILLING LOCATIONS, DETECTED UTILITY PIPELINES, AND PERTINENT SITE FEATURES

Figure 3

ANNOTATED SITE PHOTOS SHOWING PROPOSED DRILLING LOCATIONS, DETECTED UTILITY PIPELINES, AND PERTINENT SITE FEATURES

Figure 4

ANNOTATED SITE PHOTOS SHOWING PROPOSED DRILLING LOCATIONS, DETECTED UTILITY PIPELINES, AND PERTINENT SITE FEATURES

Figure 5

ANNOTATED SITE PHOTOS SHOWING PROPOSED DRILLING LOCATIONS, DETECTED UTILITY PIPELINES, AND PERTINENT SITE FEATURES



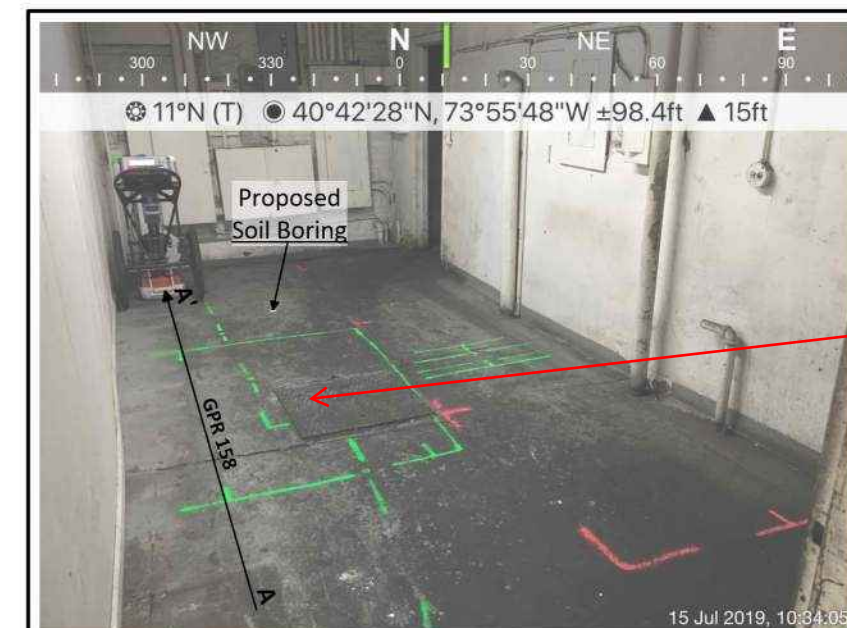
Notes:

- (1) The objective of this geophysical investigation was to identify potential underground hazards such as utility pipelines, USTs, or anomalous subsurface features that may adversely affect planned drilling events at numerous proposed SB locations. To meet these objectives, SET used a GSSI SIR 3000 System (GPR) with a 400-megahertz (MHz) ground-penetrating radar antenna, a Fisher TW-6 M-Scope, and an RD7000 radiofrequency (RF) device by Radiodetection, Inc.
- (2) All locations deemed free of subsurface obstructions were marked on site with white spray paint (shown as a crosshair symbol). The approximate positions of these features can be seen in the data table above. Note that these positions are of sub-meter accuracy and were not obtained by a licensed land surveyor. These positions are intended for general reference purposes only.
- (3) The items on this figure may not be all inclusive. SET does not warrant the fact that additional buried features may be present at this site.

Legend:

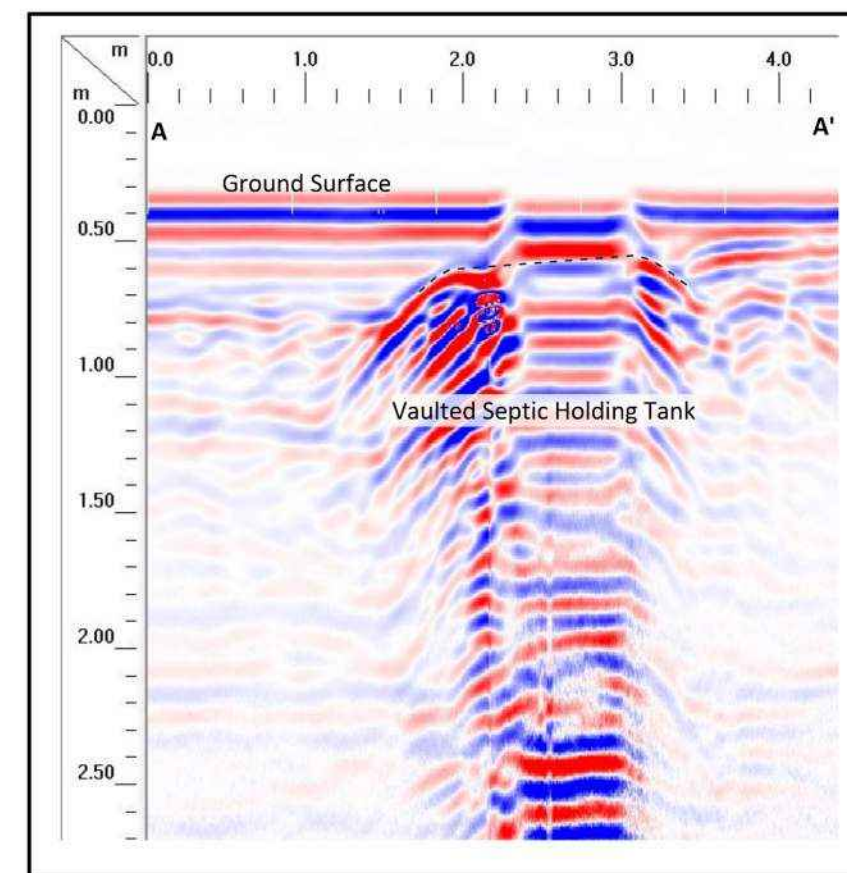
- Exterior Survey Area Boundaries
- Interior Survey Area Boundaries

Site Photo 1



Site Photo 1 showing a suspected interior septic holding tank (SSHT), inlet piping, GPR transect and interpreted extents of a basement below the slab (dashed-pink lines). Note the orientation of the GPR transect on image shows the approximate location of the GPR profile below. SET could not determine all four extents of the SSHP due to the wall (image left).

GPR Profile: GPR158



PROJECT:	19-243G	SUBSURFACE ENVIRONMENTAL TECHNOLOGIES, LLC.
FIGURE DATE:	AUGUST 29, 2019	DRAWN BY: C. MILLER, PROJECT GEOPHYSICIST

SITE: JOHNSON AVENUE SITE
ANNOTATED HIGH-RESOLUTION GEOREFERENCED ORTHOPHOTO SHOWING SITE, EXTERIOR SURVEY BOUNDARIES, SITE PHOTO, & GPR PROFILE OF A SUSPECTED INTERIOR SEPTIC HOLDING TANK

ADDRESS: 450 JOHNSON AVE. BROOKLYN, NY 11237

CLIENT: DEIRDRE CASEY, LANGAN

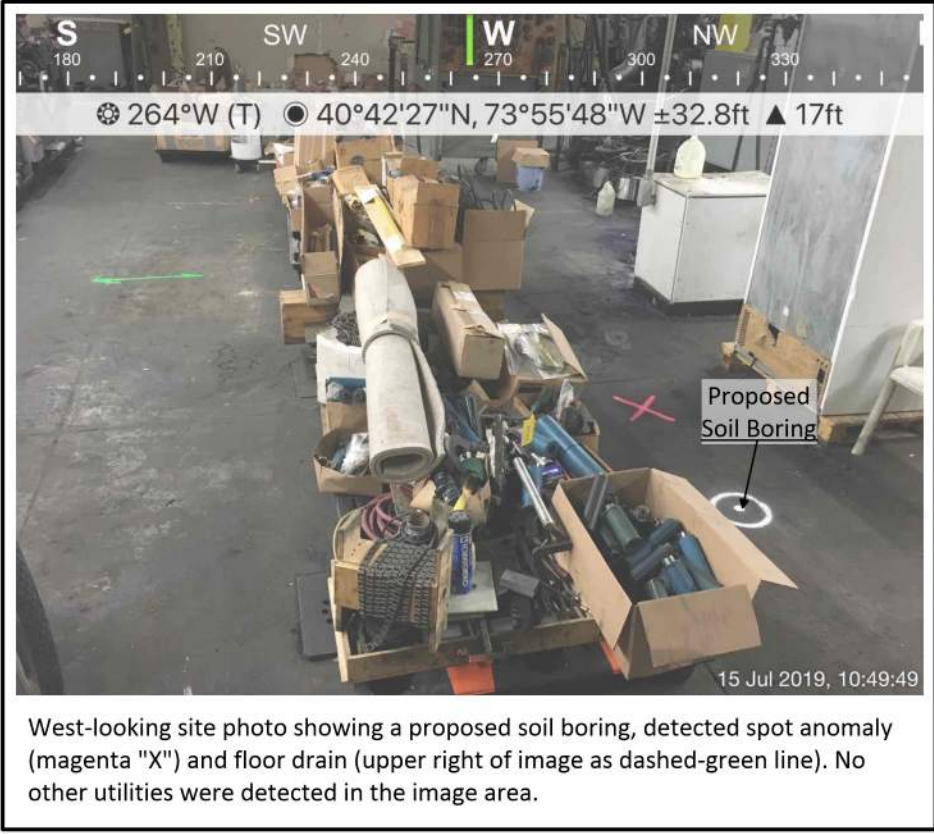
FIGURE

1

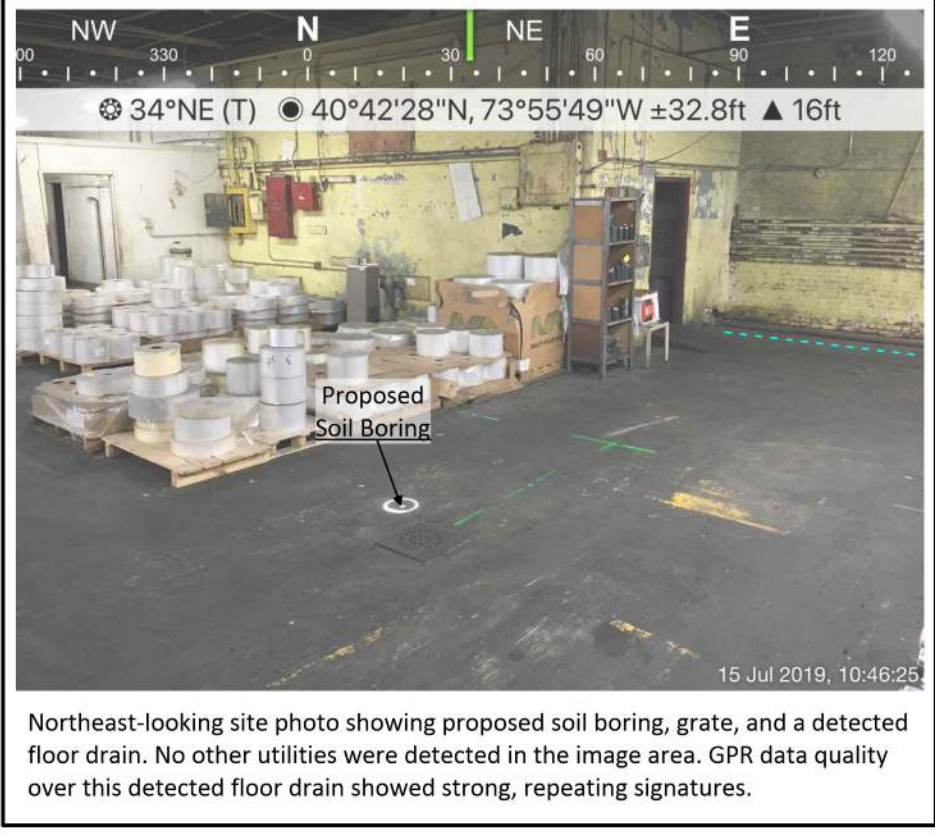
Site Photo 2



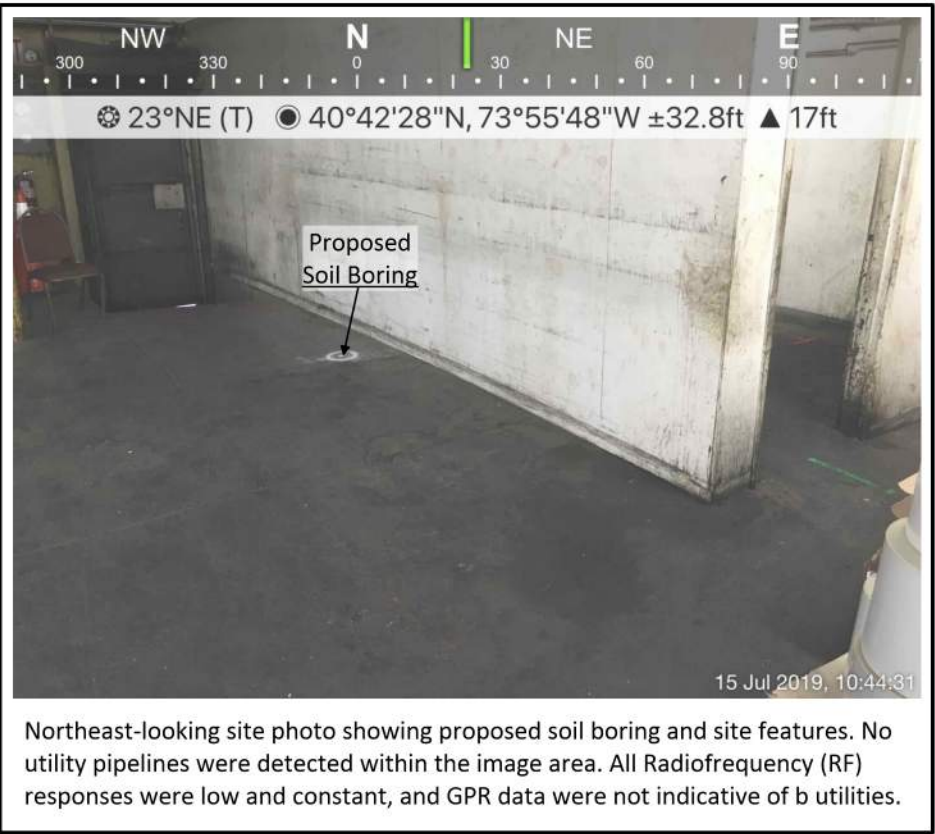
Site Photo 3



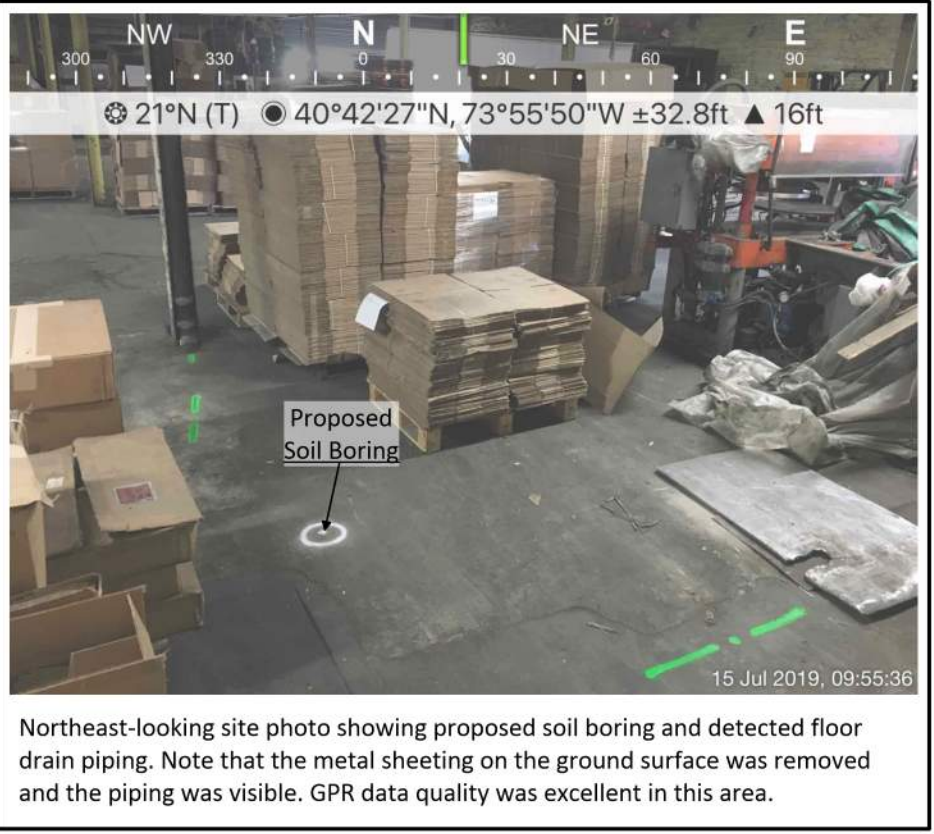
Site Photo 4



Site Photo 5



Site Photo 6



Legend:

--- Floor Drain
--- Unknown Line
⊕ Proposed Drilling Location
X Spot Anomaly

Notes:

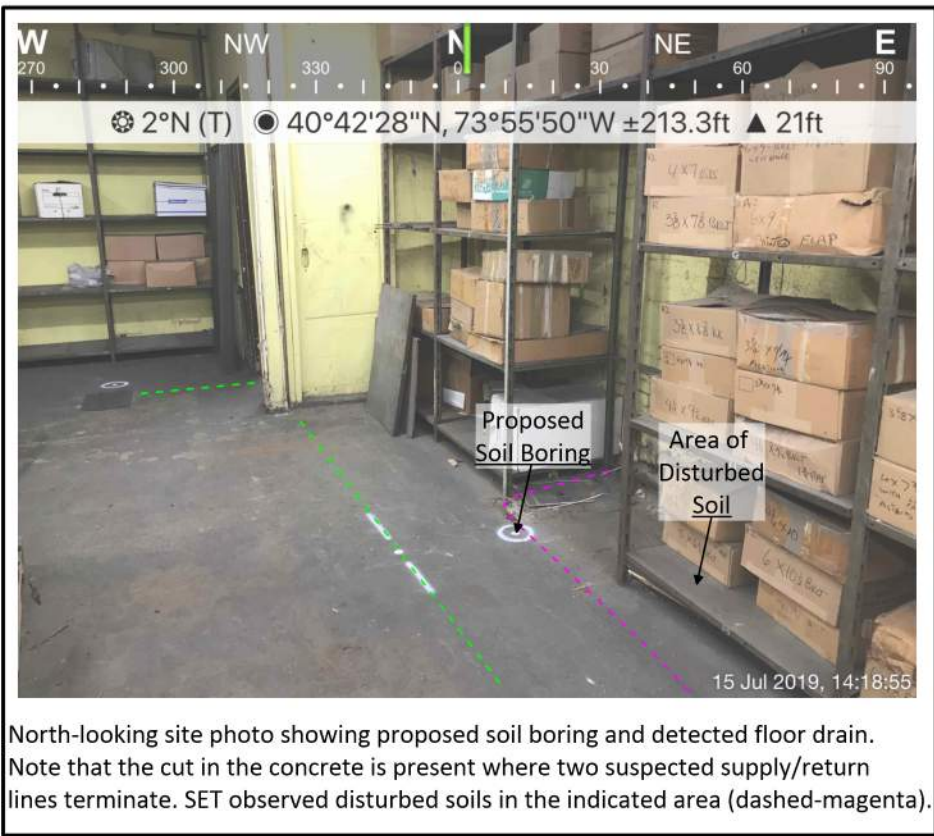
(1) The objective of this geophysical investigation was to identify potential underground hazards such as utility pipelines, USTs, or anomalous subsurface features that may adversely affect planned drilling events at numerous proposed SB locations. To meet these objectives, SET used a GSSI SIR 3000 System (GPR) with a 400-megahertz (MHz) ground-penetrating radar antenna, a Fisher TW-6 M-Scope, and an RD7000 radiofrequency (RF) device by Radiodetection, Inc.

(2) All locations deemed free of subsurface obstructions were marked on site with white spray paint (shown as a crosshair symbol). The approximate positions of these features can be seen in the data table above. Note that these positions are of sub-meter accuracy and were not obtained by a licensed land surveyor. These positions are intended for general reference purposes only.

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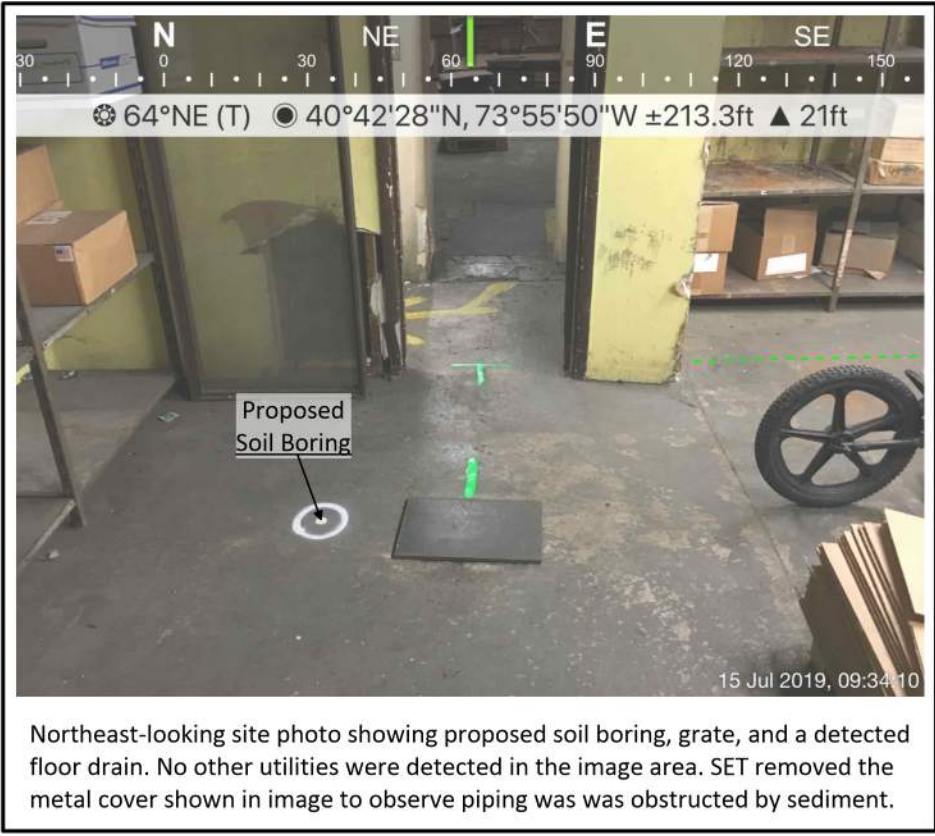
 SET GEOPHYSICS & DRILLING SERVICES SUBSURFACE ENVIRONMENTAL TECH., LLC. 19 BROOKSIDE AVENUE PENNINGTON, NJ 08534		SITE: JOHNSON AVENUE SITE ANNOTATED SITE PHOTOS SHOWING PROPOSED DRILLING LOCATIONS, DETECTED UTILITY PIPELINES, AND PERTINENT SITE FEATURES ADDRESS: 450 JOHNSON AVE. BROOKLYN, NY 11237 CLIENT: DEIRDRE CASEY, LANGAN	
PROJECT:	19-243G	SUBSURFACE ENVIRONMENTAL TECHNOLOGIES, LLC.	FIGURE 2
FIGURE DATE:	AUGUST 29, 2019	DRAWN BY: C. MILLER, PROJECT GEOPHYSICIST	

Site Photo 7



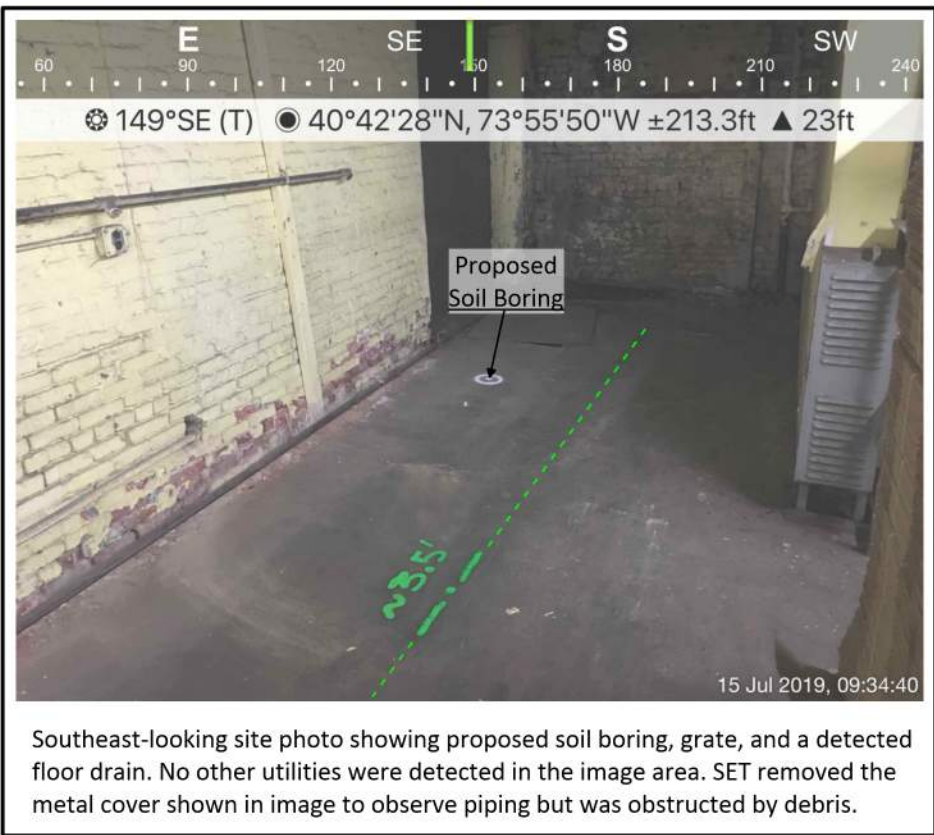
North-looking site photo showing proposed soil boring and detected floor drain. Note that the cut in the concrete is present where two suspected supply/return lines terminate. SET observed disturbed soils in the indicated area (dashed-magenta).

Site Photo 8



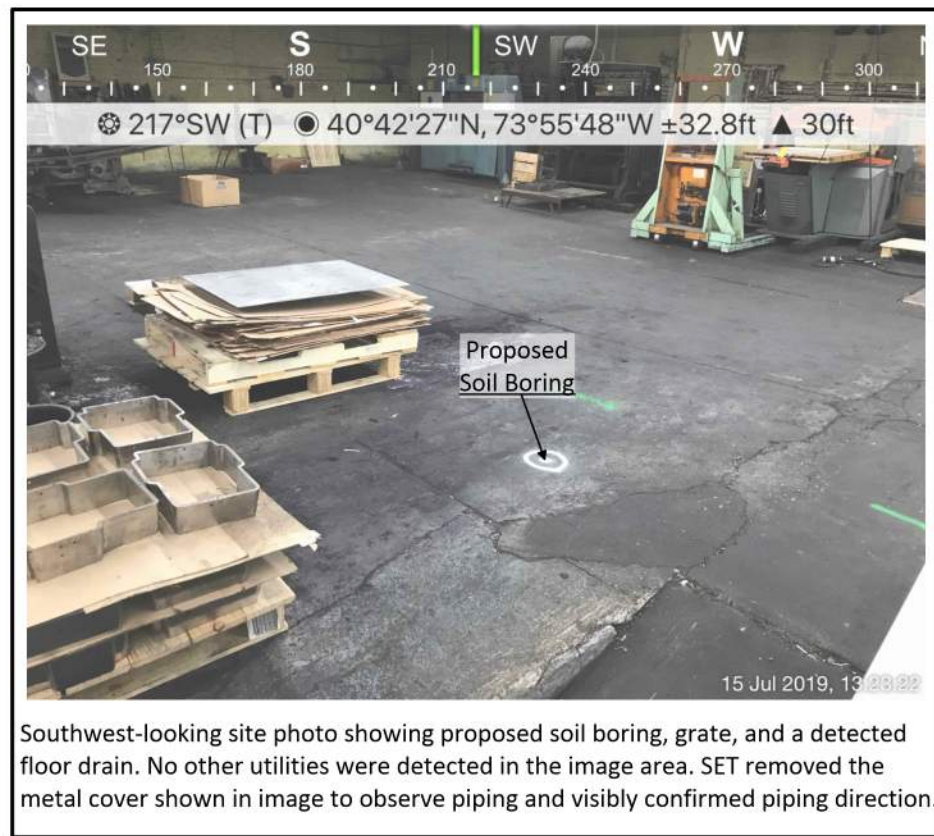
Northeast-looking site photo showing proposed soil boring, grate, and a detected floor drain. No other utilities were detected in the image area. SET removed the metal cover shown in image to observe piping was obstructed by sediment.

Site Photo 9



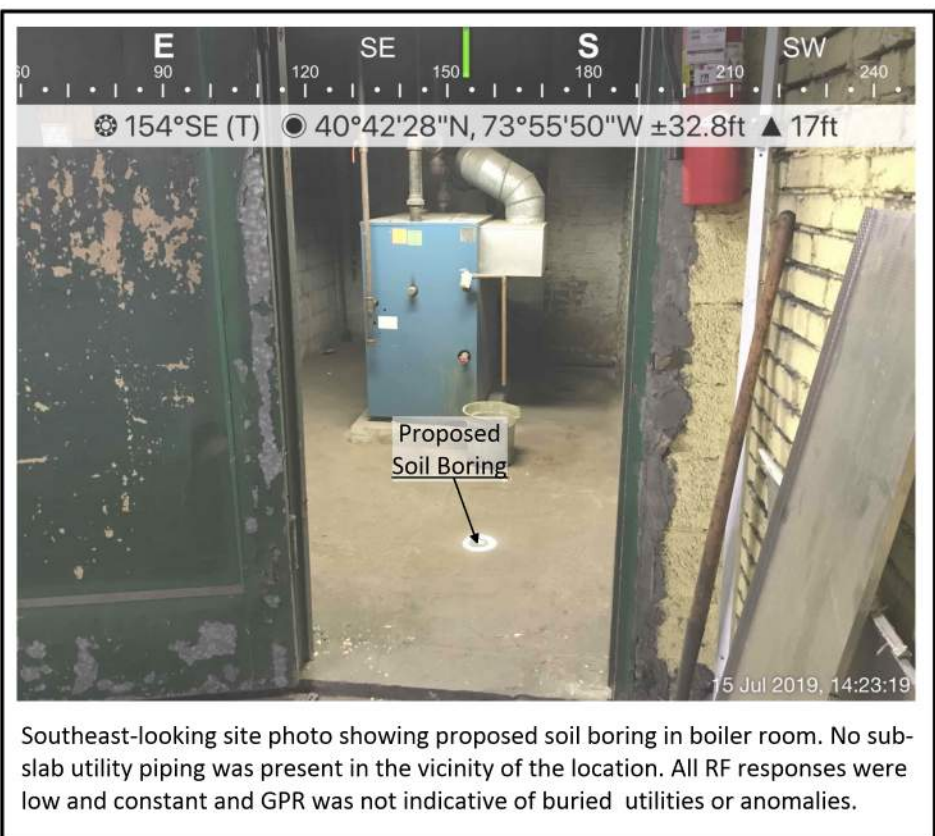
Southeast-looking site photo showing proposed soil boring, grate, and a detected floor drain. No other utilities were detected in the image area. SET removed the metal cover shown in image to observe piping but was obstructed by debris.

Site Photo 10



Southwest-looking site photo showing proposed soil boring, grate, and a detected floor drain. No other utilities were detected in the image area. SET removed the metal cover shown in image to observe piping and visibly confirmed piping direction.

Site Photo 11



Southeast-looking site photo showing proposed soil boring in boiler room. No sub-slab utility piping was present in the vicinity of the location. All RF responses were low and constant and GPR was not indicative of buried utilities or anomalies.

Legend:

- Floor Drain
- Area of Disturbed Soil
- ⊕ Proposed Drilling Location

Notes:

(1) The objective of this geophysical investigation was to identify potential underground hazards such as utility pipelines, USTs, or anomalous subsurface features that may adversely affect planned drilling events at numerous proposed SB locations. To meet these objectives, SET used a GSSI SIR 3000 System (GPR) with a 400-megahertz (MHz) ground-penetrating radar antenna, a Fisher TW-6 M-Scope, and an RD7000 radiofrequency (RF) device by Radiodetection, Inc.

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Site Photo 12



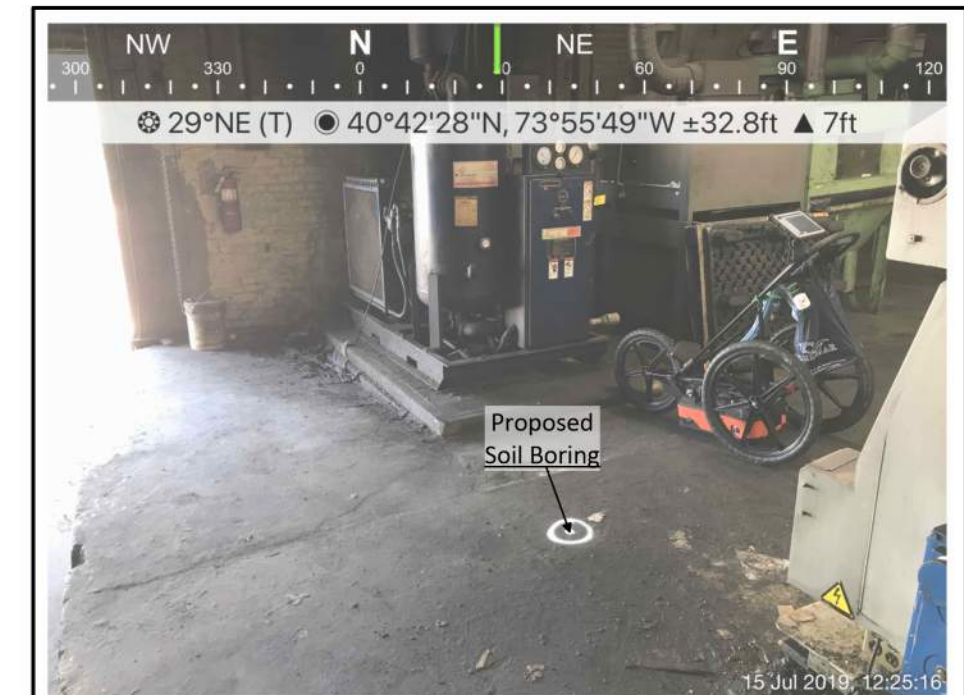
Northwest-looking site photo showing proposed soil boring and site features. No utility pipelines were detected within the image area. All Radiofrequency (RF) responses were low and constant, and GPR data were not indicative of utilities.

Site Photo 13



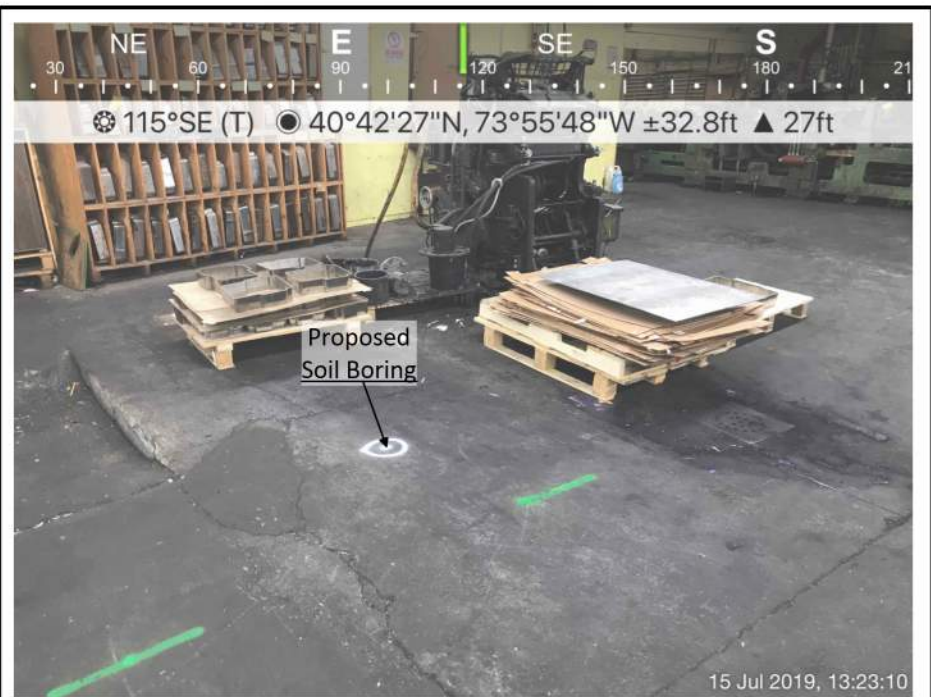
Northeast-looking site photo showing proposed soil boring and detected floor drain piping. Note that the metal grate on the ground surface was removed and the piping was visible. GPR data quality was excellent in this area.

Site Photo 14



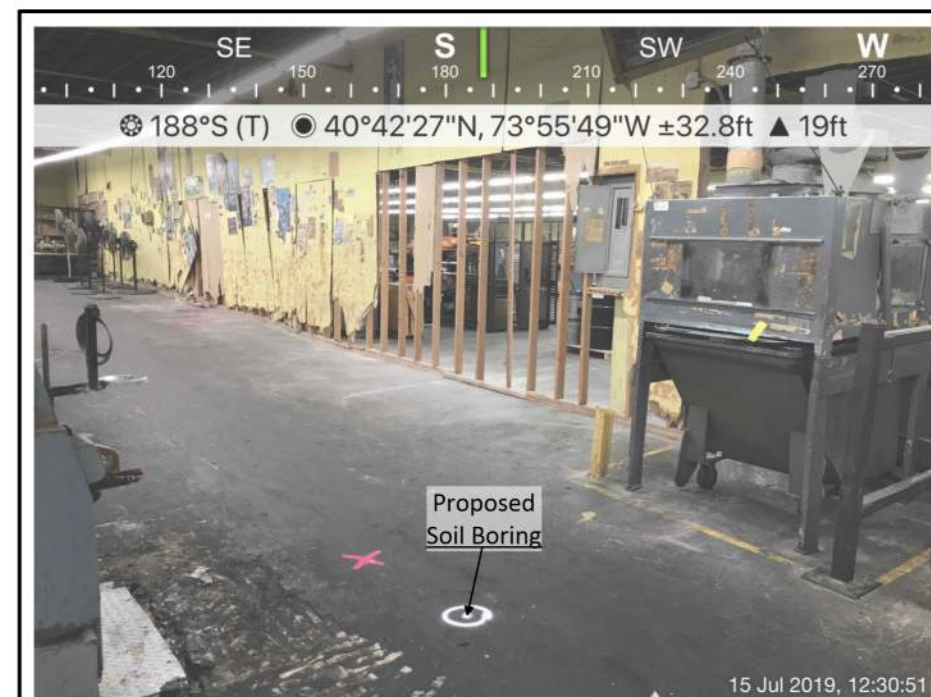
Northeast-looking site photo showing proposed soil boring and site features. No utility pipelines were detected within the image area. All Radiofrequency (RF) responses were low and constant, and GPR data were not indicative of utilities.

Site Photo 15



Southeast-looking site photo showing proposed soil boring and detected floor drain piping. Note that the metal grate on the ground surface was removed and the piping was visible. GPR data quality was excellent in this area.

Site Photo 16



South-looking site photo showing a proposed soil boring, detected spot anomaly (magenta "X"). No other utilities were detected in the image area. GPR data were excellent and all RF responses were low and constant.

- Legend:**
- Floor Drain
 - ⊕ Proposed Drilling Location
 - X Spot Anomaly

- Notes:**
- (1) The objective of this geophysical investigation was to identify potential underground hazards such as utility pipelines, USTs, or anomalous subsurface features that may adversely affect planned drilling events at numerous proposed SB locations. To meet these objectives, SET used a GSSI SIR 3000 System (GPR) with a 400-megahertz (MHz) ground-penetrating radar antenna, a Fisher TW-6 M-Scope, and an RD7000 radiofrequency (RF) device by Radiodetection, Inc.
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PROJECT:	19-243G	SUBSURFACE ENVIRONMENTAL TECHNOLOGIES, LLC.	FIGURE 4
FIGURE DATE:	AUGUST 29, 2019	DRAWN BY: C. MILLER, PROJECT GEOPHYSICIST	

Site Photo 17



Northeast-looking site photo showing proposed soil boring and site features. No utility pipelines were detected within the image area. All Radiofrequency (RF) responses were low and constant, and GPR data were not indicative of utilities.

Site Photo 18



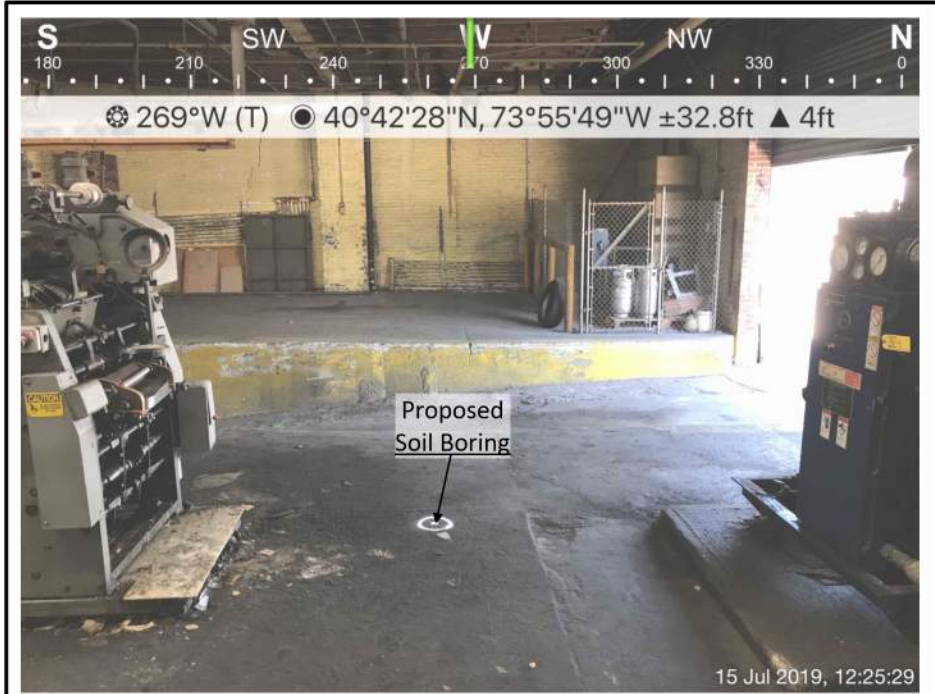
Southeast-looking site photo showing proposed soil boring and detected floor drain. Note that the cut in the concrete is present where two suspected supply/return lines terminate. SET observed disturbed soils in the indicated area (dashed-magenta).

Site Photo 19



Southeast-looking site photo showing proposed soil boring and site features. No utility pipelines were detected within the image area. Note that this proposed SB location was placed where significant staining was preset at the ground surface.

Site Photo 20



West-looking site photo showing proposed soil boring and site features. No utility pipelines were detected within the image area. All Radiofrequency (RF) responses were low and constant, and GPR data were not indicative of utilities.

Site Photo 21



Southeast-looking site photo showing a proposed soil boring, detected spot anomaly (magenta "X"). No other utilities were detected in the image area. GPR data were excellent and all RF responses were low and constant.

Legend:

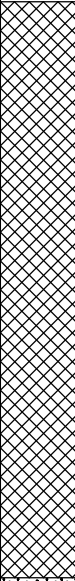
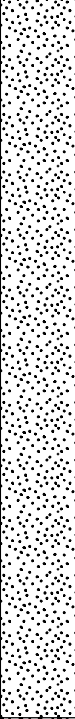
---	Floor Drain	⊕	Proposed Drilling Location
---	Area of Disturbed Soil	X	Spot Anomaly

- Notes:**
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APPENDIX B

Soil Boring Logs

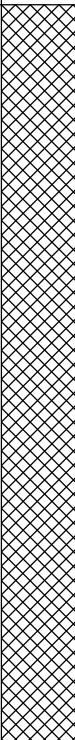
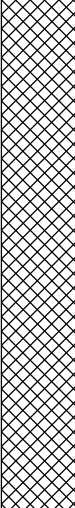
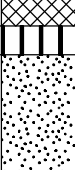
PROJECT 450 Johnson Avenue	PROJECT NO. 170588001			
LOCATION Brooklyn	ELEVATION AND DATUM NA			
DRILLING EQUIPMENT 420 Geoprobe MT	DATE STARTED 7/17/19	DATE FINISHED 7/17/19	COMPLETION DEPTH 15 ft.	
SIZE AND TYPE OF BIT 2 1/4 inch x 5 foot steel	NUMBER OF SAMPLES 5	DIST. 5	UNDIST.	CORE --
CASING DIAMETER (in) 2-inch	CASING DEPTH(ft) NA	WATER LEVEL (ft.) 8.25	FIRST 8.25	COMPL. --
SAMPLER 2-inch x 3-foot acetate lined macrocore	DRILLING FOREMAN Josh Falk (Eastern)			
SAMPLER HAMMER NA	WEIGHT(lbs) NA	DROP(in) NA	INSPECTING ENGINEER Deirdre Casey (Langan)	

ELEV. (ft)	SAMPLE DESCRIPTION	SYMBOL LOG	DEPTH SCALE	NUMBER	TYPE	RECOV. (in)	PENETR. RESIST BL/ft	N-VALUE BLOWS PER FT	PID Reading (ppm)	REMARKS (DRILLING FLUID, DEPTH OF CASING, FLUID LOSS, DRILLING RESISTANCE, ETC.)
	R1a (0-6") Concrete									
	R1b (6-27") Orange brown to brown silty coarse SAND, trace fine gravel (moist) [FILL]		1	R1	MACROCORE	27"			0.0	Sample SB01_1.0-1.5 collected at 14:25 for TCL VOCs, TCL SVOCs, PCBs, and Metals.
			2						0.0	
			3						0.0	
	R2a (0-3") Orange brown to brown silty coarse SAND, trace fine gravel (moist) [FILL]		4	R2	MACROCORE	23"			0.0	
	R2b (3-23") Orange brown SILT, trace fine sand (moist) [FILL]		5						0.0	
	R3 (0-13") Brownish orange fine SAND, silt, trace fine gravel (saturated) [SP-SM]		6						0.0	Sample SB01_8.0-8.5 collected at 14:30 for TCL VOCs, TCL SVOCs, and TAL Metals with PCBs on HOLD.
			7	R3	MACROCORE	13"			0.0	
			8						0.0	
	R4 (0-24") Brownish orange fine SAND, silt, trace fine gravel (saturated) [SP-SM]		9	R4	MACROCORE	25"			0.0	
			10						0.0	
			11						0.0	
	R5a (0-8") Brownish orange fine SAND, silt, trace fine gravel (saturated) [SP-SM]		12						0.0	
	R5b (8-18") Gray brown silty fine SAND, trace fine gravel (moist) [SM]		13	R5	MACROCORE	34"			0.0	
			14						0.0	
	R5c (18-34") Black clayey SILT, some organics (moist) [PT]								0.0	

PROJECT 450 Johnson Avenue		PROJECT NO. 170588001	
LOCATION Brooklyn		ELEVATION AND DATUM NA	

ELEV. (ft)	SAMPLE DESCRIPTION	SYMBOL LOG	DEPTH SCALE	SAMPLE DATA							PID Reading (ppm)	REMARKS (DRILLING FLUID, DEPTH OF CASING, FLUID LOSS, DRILLING RESISTANCE, ETC.)
				NUMBER	TYPE	RECOV. (in)	PENETR. RESIST	BL/ft	N-VALUE BLOWS PER FT			
	End of boring at 15 ft. bgs.		16									TMW01 installed on 7/17/2019 to 20' bgs. Screened from 5-20' bgs with 10-slot screen. Removed on 7/19/19. Borehole backfilled with fill-pro sand and bentonite. The surface was restored with concrete.
			17									
			18									
			19									
			20									
			21									
			22									
			23									
			24									
			25									
			26									
			27									
			28									
			29									
			30									
			31									
			32									

PROJECT 450 Johnson Avenue	PROJECT NO. 170588001		
LOCATION Brooklyn	ELEVATION AND DATUM NA		
DRILLING EQUIPMENT 420 Geoprobe MT	DATE STARTED 7/17/19	DATE FINISHED 7/17/19	COMPLETION DEPTH 15 ft.
SIZE AND TYPE OF BIT 2 1/4 inch x 5 foot steel	NUMBER OF SAMPLES 5	DIST. 5	UNDIST. --
CASING DIAMETER (in) 2-inch	CASING DEPTH(ft) NA	WATER LEVEL (ft.) FIRST 8	COMPL. --
SAMPLER 2-inch x 3-foot acetate lined macrocore	DRILLING FOREMAN Josh Falk (Eastern)		
SAMPLER HAMMER NA	WEIGHT(lbs) NA	DROP(in) NA	INSPECTING ENGINEER Deirdre Casey (Langan)

ELEV. (ft)	SAMPLE DESCRIPTION	SYMBOL LOG	DEPTH SCALE	SAMPLE DATA						PID Reading (ppm)	REMARKS (DRILLING FLUID, DEPTH OF CASING, FLUID LOSS, DRILLING RESISTANCE, ETC.)
				NUMBER	TYPE	RECOV (in)	PENETR RESIST BL/6in	N-VALUE BLOWS PER FT			
	R1a (0-6") Concrete		1	R1	MACROCORE	24"				0	Sample SB02_ 8.0-8.5 collected at 15:30 for TCL VOCs, TCL SVOCs, and TAL Metals with PCBs on HOLD.
	R1b (6-24") Orange brown to black silty coarse SAND, trace fine gravel (moist) [FILL]		2							0	
			3							0	
	R2a (0-6") Orange brown to black silty coarse SAND, trace fine gravel (moist) [FILL]		4	R2	MACROCORE	24"				0	
	R2b (6-24") Orange brown SILT, trace fine sand (moist) [FILL]		5							0	
			6							0	
	R3 (0-30") Brownish orange fine SAND, little silt, trace fine gravel (saturated) [FILL]		7	R3	MACROCORE	30"				0	
			8							0	
			9							0	
	R4 (0-28") Brownish orange fine SAND, little silt, trace fine gravel (saturated) [FILL]		10	R4	MACROCORE	28"				0	
			11							0	
			12							0	
			13							0	
	R5a (0-9") Brownish orange fine SAND, little silt, trace fine gravel (saturated) [FILL]		14	R5	MACROCORE	34"				0	
	R5c (14-34") Black clayey SILT, some organics (moist) [PT]									0	
	R5b (9-14") Gray brown silty fine SAND, trace fine gravel (moist) [SM]									0	

Sample SB02 8.0-8.5 collected at 15:30 for TCL VOCs, TCL SVOCs, and TAL Metals with PCBs on HOLD.

PROJECT 450 Johnson Avenue		PROJECT NO. 170588001	
LOCATION Brooklyn		ELEVATION AND DATUM NA	

ELEV. (ft)	SAMPLE DESCRIPTION	SYMBOL LOG	DEPTH SCALE	SAMPLE DATA						PID Reading (ppm)	REMARKS (DRILLING FLUID, DEPTH OF CASING, FLUID LOSS, DRILLING RESISTANCE, ETC.)
				NUMBER	TYPE	RECOV. (in)	PENETR. RESIST	BL/ft	N-VALUE BLOWS PER FT		
	End of boring at 15 ft. bgs		16								TMW02 installed on 7/17/2019 to 15' bgs. Screened from 5-15' bgs with 10-slot screen. Removed on 7/19/19. Borehole backfilled with fill-pro sand and bentonite. The surface was restored with concrete.
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			18								
			19								
			20								
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PROJECT 450 Johnson Avenue	PROJECT NO. 170588001			
LOCATION Brooklyn	ELEVATION AND DATUM NA			
DRILLING EQUIPMENT 420 Geoprobe MT	DATE STARTED 7/16/19	DATE FINISHED 7/16/19	COMPLETION DEPTH 15 ft.	
SIZE AND TYPE OF BIT 2 1/4 inch x 5 foot steel	NUMBER OF SAMPLES 5	DIST. 5	UNDIST.	CORE --
CASING DIAMETER (in) 2-inch	CASING DEPTH(ft) NA	WATER LEVEL (ft.) 13	FIRST 13	COMPL. --
SAMPLER 2-inch x 3-foot acetate lined macrocore	DRILLING FOREMAN Josh Falk (Eastern)			
SAMPLER HAMMER NA	WEIGHT(lbs) NA	DROP(in) NA	INSPECTING ENGINEER Deirdre Casey (Langan)	

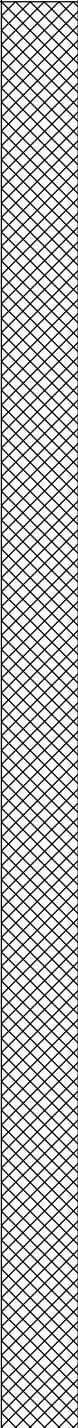
ELEV. (ft)	SAMPLE DESCRIPTION	SYMBOL LOG	DEPTH SCALE	NUMBER	TYPE	RECOV. (in)	PENETR. RESIST BL/ft	N-VALUE BLOWS PER FT	PID Reading (ppm)	REMARKS (DRILLING FLUID, DEPTH OF CASING, FLUID LOSS, DRILLING RESISTANCE, ETC.)
	R1a (0-6") Concrete									
	R1b (6-20") Light to dark brown coarse SAND, some fine gravel, trace silt (moist) [FILL]		1	R1	MACROCORE	20"			0.0	
			2						0.0	
	R2a (0-13") Dark brown coarse SAND, some fine gravel, trace silt (moist) [FILL]		3	R2	MACROCORE	27"			0.0	
	R2b (13-27") Orange brown fine sandy SILT, trace fine gravel (moist) [FILL]		4						0.0	
			5						0.1	
			6						0.0	
	R3 (0-21") Reddish brown silty fine SAND, trace fine gravel (moist) [FILL]		7	R3	MACROCORE	21"			0.0	
			8						0.3	
	R4a (0-8") Reddish brown silty fine SAND (moist) [FILL]		9	R4	MACROCORE	24"			3.4	
	R4b (8-17") Brown SILT, some fine sand (moist) [FILL]		10							(17-36") Petroleum odor
	R4c (17-36") Brown/black fine SAND, some silt (saturated) [FILL]		11						0.1	
			12						1.8	
			13						24.4	
	R5a (0-23") Dark brown silty fine SAND, some coarse sand (saturated) [SM]		14	R5	MACROCORE	31"			206.5	
									196.2	
									126.4	(0-31") Petroleum odor
									388.8	
	R5b (23-31") Gray brown clayey SILT (saturated) [ML]								289.5	Sample SB03_14.0-14.5 collected at 9:20 for TCL VOCs, TCL SVOCs, PCBs, and TAL Metals and DUP_071619.
									33.7	

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PROJECT 450 Johnson Avenue		PROJECT NO. 170588001	
LOCATION Brooklyn		ELEVATION AND DATUM NA	

ELEV. (ft)	SAMPLE DESCRIPTION	SYMBOL LOG	DEPTH SCALE	SAMPLE DATA							PID Reading (ppm)	REMARKS (DRILLING FLUID, DEPTH OF CASING, FLUID LOSS, DRILLING RESISTANCE, ETC.)
				NUMBER	TYPE	RECOV. (in)	PENETR. RESIST	BL/ft	N-VALUE BLOWS PER FT			
	End of boring at 15 ft. bgs		16									TMW03 installed on 7/16/2019 to 20' bgs. Screened from 5-20' bgs with 10-slot screen. Removed on 7/19/19. Borehole backfilled with fill-pro sand and bentonite. The surface was restored with concrete.
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			18									
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			27									
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			31									
			32									

PROJECT 450 Johnson Avenue	PROJECT NO. 170588001		
LOCATION Brooklyn	ELEVATION AND DATUM NA		
DRILLING EQUIPMENT 420 Geoprobe MT	DATE STARTED 7/16/19	DATE FINISHED 7/16/19	COMPLETION DEPTH 15 ft.
SIZE AND TYPE OF BIT 2 1/4 inch x 5 foot steel	NUMBER OF SAMPLES 5	DIST. 5	UNDIST. --
CASING DIAMETER (in) 2-inch	CASING DEPTH(ft) NA	WATER LEVEL (ft.) 11	CORE --
SAMPLER 2-inch x 3-foot acetate lined macrocore	DRILLING FOREMAN Josh Falk (Eastern)		
SAMPLER HAMMER NA	WEIGHT(lbs) NA	DROP(in) NA	INSPECTING ENGINEER Deirdre Casey (Langan)

ELEV. (ft)	SAMPLE DESCRIPTION	SYMBOL LOG	DEPTH SCALE	SAMPLE DATA						PID Reading (ppm)	REMARKS (DRILLING FLUID, DEPTH OF CASING, FLUID LOSS, DRILLING RESISTANCE, ETC.)
				NUMBER	TYPE	RECOV. (in)	PENETR. RESIST BL/6in	N-VALUE BLOWS PER FT			
	R1a (0-15") Concrete sub-base								2.1		
	R1b (15-23") Light brown silty coarse SAND, trace coarse gravel (moist) [FILL]		1	R1	MACROCORE	23"					
			2								
	R2a (0-6") Brick [FILL]		3								
	R2b (6-16") Light brown silty coarse SAND, trace fine gravel (moist) [FILL]		4	R2	MACROCORE	20"				1.8	
			5							1.2	
	R2c (16-20") Grayish brown clayey SILT, trace fine clay (moist) [FILL]		6							0.5	
	R3a (0-3") Gray brown clayey SILT, trace fine clay (moist) [FILL]		7	R3	MACROCORE	27"				7.9	
	R3b (3-9") Concrete, Light brown sandy coarse GRAVEL (moist) [FILL]		8							6.1	
	R3c (9-18") Orange brown fine to coarse SAND, some silt (saturated) [FILL]		9							4.7	
	R3d (18-21") Brick [FILL]		10							126.2	
	R3e (21-27") Gray brown fine sandy SILT, trace clay (moist) [FILL]		11	R4	MACROCORE	22"				194.0	
	R4 (0-22") Dark gray brown fine SAND, some silt (saturated) [FILL]		12							184.7	
			13							262.2	
	R5a (0-25") Dark gray brown fine SAND, some silt (saturated) [FILL]	14	R5	MACROCORE	35"				139.6		
									50.2		
									144.5		
									76.0		
									228.0		
									172.2		
	R5b (25-35") Dark gray brown fine SAND, some silt, with blue-grey mottles (saturated) [FILL]								154.0		

PROJECT 450 Johnson Avenue		PROJECT NO. 170588001	
LOCATION Brooklyn		ELEVATION AND DATUM NA	

ELEV. (ft)	SAMPLE DESCRIPTION	SYMBOL LOG	DEPTH SCALE	SAMPLE DATA						PID Reading (ppm)	REMARKS (DRILLING FLUID, DEPTH OF CASING, FLUID LOSS, DRILLING RESISTANCE, ETC.)
				NUMBER	TYPE	RECOV. (in)	PENETR. RESIST	BL/ft	N-VALUE BLOWS PER FT		
	End of boring at 15 ft. bgs		16								TMW04 installed on 7/16/2019 to 20' bgs. Screened from 5-20' bgs with 10-slot screen. Removed on 7/19/19. Borehole backfilled with fill-pro sand and bentonite. The surface was restored with concrete.
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			18								
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			20								
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			23								
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			30								
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			32								

PROJECT 450 Johnson Avenue	PROJECT NO. 170588001			
LOCATION Brooklyn	ELEVATION AND DATUM NA			
DRILLING EQUIPMENT 420 Geoprobe MT	DATE STARTED 7/18/19	DATE FINISHED 7/18/19	COMPLETION DEPTH 21 ft.	
SIZE AND TYPE OF BIT 2 1/4 inch x 5 foot steel	NUMBER OF SAMPLES 7	DIST. 7	UNDIST.	CORE --
CASING DIAMETER (in) 2-inch	CASING DEPTH(ft) NA	WATER LEVEL (ft.) 15	FIRST 15	COMPL. --
SAMPLER 2-inch x 3-foot acetate lined macrocore	DRILLING FOREMAN Josh Falk (Eastern)			
SAMPLER HAMMER NA	WEIGHT(lbs) NA	DROP(in) NA	INSPECTING ENGINEER Deirdre Casey (Langan)	

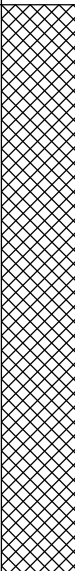
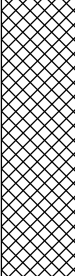
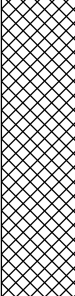
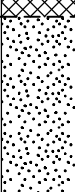
ELEV. (ft)	SAMPLE DESCRIPTION	SYMBOL LOG	DEPTH SCALE	NUMBER	TYPE	RECOV. (in)	PENETR. RESIST BL/ft	N-VALUE BLOWS PER FT	PID Reading (ppm)	REMARKS (DRILLING FLUID, DEPTH OF CASING, FLUID LOSS, DRILLING RESISTANCE, ETC.)
	R1a (0-6") Asphalt								0.0	
	R1b (6-8") Gray dark brown coarse SAND, little silt, trace fine gravel [FILL]		1	R1	MACROCORE	27"			0.0	
	R1c (8-27") Orange brown to brown fine coarse SAND, some silt, trace fine gravel, brick, glass (moist) [FILL]		2						0.0	
	R2a (0-20") Black/brown coarse SAND, trace silt, some fine gravel, coal, coal ash [FILL]		3						0.0	
	R2b (20-23") Orange silty coarse to fine SAND (moist) [FILL]		4	R2	MACROCORE	23"			0.0	
	R3a (0-2) Brownish orange silty fine to coarse SAND, trace fine gravel, trace clay, brick, slag (moist) [FILL]		5						0.0	
	R3b (2-23") Brownish orange silty fine to coarse SAND, trace fine gravel, trace clay, (moist) [FILL]		6						0.0	
	R4 (0-23") Brownish orange silty fine SAND, trace fine gravel (moist) [FILL]		7	R3	MACROCORE	23"			0.0	
			8						0.0	
			9						0.0	
			10	R4	MACROCORE	23"			0.0	
			11						0.0	
			12						0.0	
	R5 (0-17") Brownish orange silty fine SAND, trace fine gravel (moist) [FILL]		13	R5	MACROCORE	17"			0.0	
			14						0.0	

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Sample SB07_4.5-5.0 collected at 15:00 for TCL VOCs, TCL SVOCs, PCBs, and TAL Metals with Pesticides on HOLD.

PROJECT 450 Johnson Avenue			PROJECT NO. 170588001							
LOCATION Brooklyn			ELEVATION AND DATUM NA							
ELEV. (ft)	SAMPLE DESCRIPTION	SYMBOL LOG	DEPTH SCALE	SAMPLE DATA					PID Reading (ppm)	REMARKS (DRILLING FLUID, DEPTH OF CASING, FLUID LOSS, DRILLING RESISTANCE, ETC.)
	R6a (0-8") Orange silty fine SAND (saturated) [SM]			NUMBER	TYPE	RECOV. (in)	PENETR. RESIST BL/6in	N-VALUE BLOWS PER FT		
	R6b (8-16") Gray silty fine SAND (saturated) [SM]		16	R6	MACROCORE	34"				
	R6c (16-34") Dark gray to black silty fine SAND, trace clay, mottles (saturated) [SM]		17						0.0	
	R7 (0-7") Dark gray to black silty fine SAND, trace clay, mottles (saturated) [SM]		18						0.0	
			19	R7	MACROCORE	7"				
			20						0.0	
			21						0.0	
	End of boring at 21 ft. bgs.		22							TMW07 installed on 7/18/2019 to 25' bgs. Screened from 5-25' bgs with 10-slot screen. Removed on 7/19/19. Borehole backfilled with fill-pro sand and bentonite. The surface was restored with asphalt.
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			25							
			26							
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			28							
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			31							
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PROJECT 450 Johnson Avenue	PROJECT NO. 170588001			
LOCATION Brooklyn	ELEVATION AND DATUM NA			
DRILLING EQUIPMENT 420 Geoprobe MT	DATE STARTED 7/18/19	DATE FINISHED 7/18/19	COMPLETION DEPTH 15 ft.	
SIZE AND TYPE OF BIT 2 1/4 inch x 5 foot steel	NUMBER OF SAMPLES 4	DIST. 4	UNDIST. --	CORE --
CASING DIAMETER (in) 2-inch	CASING DEPTH(ft) NA	WATER LEVEL (ft.) 12	FIRST 12	COMPL. --
SAMPLER 2-inch x 3-foot acetate lined macrocore	DRILLING FOREMAN Josh Falk (Eastern)			
SAMPLER HAMMER NA	WEIGHT(lbs) NA	DROP(in) NA	INSPECTING ENGINEER Deirdre Casey (Langan)	

ELEV. (ft)	SAMPLE DESCRIPTION	SYMBOL LOG	DEPTH SCALE	SAMPLE DATA						PID Reading (ppm)	REMARKS (DRILLING FLUID, DEPTH OF CASING, FLUID LOSS, DRILLING RESISTANCE, ETC.)
				NUMBER	TYPE	RECOV. (in)	PENETR. RESIST BL/6in	N-VALUE BLOWS PER FT.			
	R1a (0-6") Concrete R1b (6-12") Dark brown coarse SAND, some silt, trace fine to coarse, glass, brick (moist) [FILL] R1c (12" - 6') Orange brown coarse SAND, some silt, trace fine gravel (moist) [FILL]		1	R1	HAND AUGER	72"					Sample SB08_5.0-5.5 collected at 11:20 for TCL VOCs, TCL SVOCs, and TAL Metals with PCBs on HOLD.
			2								
			3								
			4								
			5								
			6								
	R2 (0-13") Brown fine to coarse SAND, some silt, trace fine gravel, coal ash (moist) [FILL]		7	R2	MACROCORE	13"					
			8								
			9								
			10								
	R3 (0-9") Brown fine to coarse SAND, some silt, trace fine gravel (moist) [FILL]		11	R3	MACROCORE	9"					
			12								
			13								
			14								
	R4a (0-24") Orange brown coarse to fine SAND, some silt, trace fine gravel (saturated) [SW-SM]		12	R4	MACROCORE	30"			0.0	Sample SB08_14.0-14.5 collected at 11:10 for TCL VOCs, TCL SVOCs, and TAL Metals with PCBs on HOLD.	
			13						0.0		
			14						0.0		
									0.0		
	R4b (24-30") Dark brown with black mottles SILT, some fine sand (saturated) [ML]		14						0.8		

Sample SB08_5.0-5.5 collected at 11:20 for TCL VOCs, TCL SVOCs, and TAL Metals with PCBs on HOLD.

Sample SB08_14.0-14.5 collected at 11:10 for TCL VOCs, TCL SVOCs, and TAL Metals with PCBs on HOLD.

PROJECT 450 Johnson Avenue		PROJECT NO. 170588001	
LOCATION Brooklyn		ELEVATION AND DATUM NA	

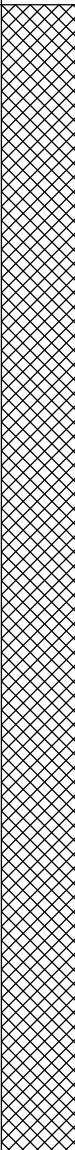
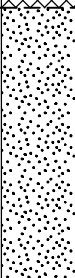
ELEV. (ft)	SAMPLE DESCRIPTION	SYMBOL LOG	DEPTH SCALE	SAMPLE DATA						PID Reading (ppm)	REMARKS (DRILLING FLUID, DEPTH OF CASING, FLUID LOSS, DRILLING RESISTANCE, ETC.)
				NUMBER	TYPE	RECOV. (in)	PENETR. RESIST	BL/ft	N-VALUE BLOWS PER FT		
	End of boring at 15 ft. bgs		16								TMW08 installed on 7/18/2019 to 20' bgs. Screened from 10-20' bgs with 10-slot screen. Removed on 7/19/19. Borehole backfilled with fill-pro sand and bentonite. The surface was restored with concrete.
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			30								
			31								
			32								

PROJECT 450 Johnson Avenue	PROJECT NO. 170588001			
LOCATION Brooklyn	ELEVATION AND DATUM NA			
DRILLING EQUIPMENT 420 Geoprobe MT	DATE STARTED 7/17/19	DATE FINISHED 7/17/19	COMPLETION DEPTH 15 ft.	
SIZE AND TYPE OF BIT 2 1/4 inch x 5 foot steel	NUMBER OF SAMPLES 5	DIST. 5	UNDIST. --	CORE --
CASING DIAMETER (in) 2-inch	CASING DEPTH(ft) NA	WATER LEVEL (ft.) 13	FIRST 13	COMPL. --
SAMPLER 2-inch x 3-foot acetate lined macrocore	DRILLING FOREMAN Josh Falk (Eastern)			
SAMPLER HAMMER NA	WEIGHT(lbs) NA	DROP(in) NA	INSPECTING ENGINEER Deirdre Casey (Langan)	

ELEV. (ft)	SAMPLE DESCRIPTION	SYMBOL LOG	DEPTH SCALE	NUMBER	TYPE	RECOV. (in)	PENETR. RESIST BL/ft	N-VALUE BLOWS PER FT	PID Reading (ppm)	REMARKS (DRILLING FLUID, DEPTH OF CASING, FLUID LOSS, DRILLING RESISTANCE, ETC.)
	R1a (0-6") Concrete									
	R1b (6-12") Dark brown coarse sandy gravel, trace silt, brick [FILL]		1	R1	MACROCORE	19"			0.3	
	R1c (12-19") Dark brown coarse sandy gravel, trace silt [FILL]		2						0.3	
	R2 (0-32") Orange brown to dark brown coarse sandy SILT, some coarse gravel (moist) [FILL]		3	R2	MACROCORE	32"			0.3	
			4						0.5	
			5						0.6	
	R3a (0-7") Orange brown to dark brown coarse to fine sandy SILT, some fine gravel, coal ash (moist) [FILL]		6	R3	MACROCORE	33"			0.4	
	R3b (7-33") Orange brown to dark brown coarse to fine sandy SILT, some fine gravel (moist) [FILL]		7						0.5	
			8						0.5	
			9						0.4	
	R4a (0-9") Dark brown silty coarse SAND, trace fine gravel (moist) [FILL]		10	R4	MACROCORE	33"			0.3	
	R4b (9-33") Orange brown fine sandy SILT, trace clay, trace coarse gravel (moist) [FILL]		11						0.3	
			12						0.4	
	R5a (0-14") Grayish dark brown SILT, some fine sand, trace organics (moist) [FILL]		13	R5	MACROCORE	23"			0.4	
			14						0.4	
	R5b (14-23") Brown/olive silty fine SAND, trace fine gravel, wood (saturated) [FILL]								0.3	

PROJECT 450 Johnson Avenue		PROJECT NO. 170588001										
LOCATION Brooklyn		ELEVATION AND DATUM NA										
ELEV. (ft)	SAMPLE DESCRIPTION	SYMBOL LOG	DEPTH SCALE	SAMPLE DATA							PID Reading (ppm)	REMARKS (DRILLING FLUID, DEPTH OF CASING, FLUID LOSS, DRILLING RESISTANCE, ETC.)
				NUMBER	TYPE	RECOV. (in)	PENETR. RESIST	BL/ft	N-VALUE BLOWS PER FT			
	End of boring at 15 ft. bgs		16									Borehole backfilled with fill-pro sand and bentonite. The surface was restored with concrete.
			17									
			18									
			19									
			20									
			21									
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			23									
			24									
			25									
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			28									
			29									
			30									
			31									
			32									

PROJECT 450 Johnson Avenue	PROJECT NO. 170588001		
LOCATION Brooklyn	ELEVATION AND DATUM NA		
DRILLING EQUIPMENT 420 Geoprobe MT	DATE STARTED 7/19/19	DATE FINISHED 7/19/19	COMPLETION DEPTH 21 ft.
SIZE AND TYPE OF BIT 2 1/4 inch x 5 foot steel	NUMBER OF SAMPLES 7	DIST. 7	UNDIST. --
CASING DIAMETER (in) 2-inch	CASING DEPTH(ft) NA	WATER LEVEL (ft.) 11	CORE --
SAMPLER 2-inch x 3-foot acetate lined macrocore	DRILLING FOREMAN Josh Falk (Eastern)		
SAMPLER HAMMER NA	WEIGHT(lbs) NA	DROP(in) NA	INSPECTING ENGINEER Deirdre Casey (Langan)

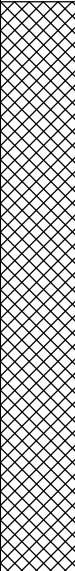
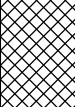
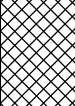
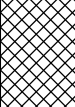
ELEV. (ft)	SAMPLE DESCRIPTION	SYMBOL LOG	DEPTH SCALE	SAMPLE DATA						PID Reading (ppm)	REMARKS (DRILLING FLUID, DEPTH OF CASING, FLUID LOSS, DRILLING RESISTANCE, ETC.)
				NUMBER	TYPE	RECOV (in)	PENETR RESIST BL/6in	N-VALUE BLOWS PER FT			
	R1a (0-6") Asphalt										
	R1b (6-25") Brown to dark brown fine sandy SILT, trace fine gravel (moist) [FILL]		1	R1	MACROCORE	28"				0.0	
			2							0.0	
			3							0.0	
	R2a (0-4") Olive brown fine SAND, fine silt, trace fine gravel (moist) [FILL]		4	R2	MACROCORE	28"				0.0	
	R2b (4-16") Black and brown fine gravelly coarse SAND, little fine sand, coal ash (moist) [FILL]		5							0.0	
	R2c (16-28") Orange brown SILT, some fine to coarse sand, trace fine to coarse gravel (moist) [FILL]		6							0.0	
	R3 (0-12") Orange brown silty fine SAND, trace coarse gravel (moist) [FILL]		7	R3	MACROCORE	12"				0.0	
			8							0.0	
	R4 (0-19") Olive to grayish brown silty fine to coarse SAND (moist) [FILL]		9	R4	MACROCORE	19"				0.0	
			10							0.0	
			11							0.0	
		12	R5	MACROCORE	6"				0.0		
	R5 (0-6") Orange brown silty fine SAND (saturated) [SM]		13						0.0		
			14							0.0	
										0.0	

PROJECT			PROJECT NO.								
450 Johnson Avenue			170588001								
LOCATION			ELEVATION AND DATUM								
Brooklyn			NA								
ELEV. (ft)	SAMPLE DESCRIPTION	SYMBOL LOG	DEPTH SCALE	SAMPLE DATA					PID Reading (ppm)	REMARKS (DRILLING FLUID, DEPTH OF CASING, FLUID LOSS, DRILLING RESISTANCE, ETC.)	
				NUMBER	TYPE	RECOV. (in)	PENETR. RESIST	BL/ft			N-VALUE BLOWS PER FT
	R6a (0-9") Orange brown fine SAND, some silt (moist) [SP-SM]		16	R6	MACROCORE	17"				0.0	
	R6b (9-17") Grayish brown silty fine SAND (moist) [SM]		17								
	R7a (0-10") Brown fine SAND with some silt, trace fine gravel (saturated) [SP-SM]		18								
	R7b (10-16") Olive gray fine sandy SILT, trace clay (saturated) [ML]		19	R7	MACROCORE	22"				0.0	
	R7c (16-22") Black SILT, trace fine sand and organics (moist) [PT]		20								
	End of boring at 21 ft. bgs		21								
			22							0.0	TMW10 installed on 7/19/2019 to 25' bgs. Screened from 10-25' bgs with 10-slot screen. No water in well. Removed on 7/19/19. Borehole backfilled with fill-pro sand and bentonite. The surface was restored with asphalt.
			23								
			24								
			25								
			26								
			27								
			28								
			29								
			30								
			31								
			32								

\\LANGAN.COM\DATA\NYC\DATA\17058800\PROJECT DATA\DISCIPLINE\ENVIRONMENTAL\GINT\LOGS\450 JOHNSON AVENUE BORING LOGS.GPJ ... 8/15/2019 11:27:23 AM ... Report: Log - BORING

PROJECT 450 Johnson Avenue		PROJECT NO. 170588001								
LOCATION Brooklyn		ELEVATION AND DATUM NA								
ELEV. (ft)	SAMPLE DESCRIPTION	SYMBOL LOG	DEPTH SCALE	SAMPLE DATA						REMARKS (DRILLING FLUID, DEPTH OF CASING, FLUID LOSS, DRILLING RESISTANCE, ETC.)
				NUMBER	TYPE	RECOV. (in)	PENETR. RESIST	BL/ft	N-VALUE BLOWS PER FT	
	End of boring at 15 ft. bgs		16							Borehole backfilled with fill-pro sand and bentonite. The surface was restored with concrete.
			17							
			18							
			19							
			20							
			21							
			22							
			23							
			24							
			25							
			26							
			27							
			28							
			29							
			30							
			31							
			32							

PROJECT 450 Johnson Avenue	PROJECT NO. 170588001			
LOCATION Brooklyn	ELEVATION AND DATUM NA			
DRILLING EQUIPMENT 420 Geoprobe MT	DATE STARTED 7/18/19	DATE FINISHED 7/18/19	COMPLETION DEPTH 15 ft.	
SIZE AND TYPE OF BIT 2 1/4 inch x 5 foot steel	NUMBER OF SAMPLES 4	DIST. 4	UNDIST. --	CORE --
CASING DIAMETER (in) 2-inch	CASING DEPTH(ft) NA	WATER LEVEL (ft.) 7	FIRST 7	COMPL. --
SAMPLER 2-inch x 3-foot acetate lined macrocore	DRILLING FOREMAN Josh Falk (Eastern)			
SAMPLER HAMMER NA	WEIGHT(lbs) NA	DROP(in) NA	INSPECTING ENGINEER Deirdre Casey (Langan)	

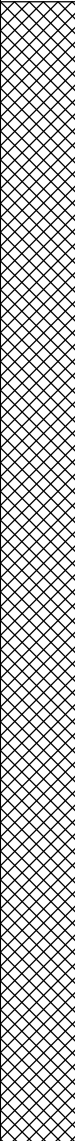
ELEV. (ft)	SAMPLE DESCRIPTION	SYMBOL LOG	DEPTH SCALE	NUMBER	TYPE	RECOV. (in)	PENETR. RESIST BL/6in	N-VALUE BLOWS PER FT	PID Reading (ppm)	REMARKS (DRILLING FLUID, DEPTH OF CASING, FLUID LOSS, DRILLING RESISTANCE, ETC.)
	R1a Hand auger (0-6") Concrete		1							
	R1b Hand auger (6" - 6") brown silty coarse SAND, little coarse gravel (moist) [FILL]		2							
			3	R1	HAND AUGER	72"				
			4							
			5							
			6							
	R2a (0-14") Brown silty coarse to fine SAND, little fine gravel, brick (moist) [FILL]		7							
	R2b (14-22") Orange brown silty coarse SAND, trace clay, trace fine gravel (moist) [FILL]		8	R2	MACROCORE	22"			0.0	
			9						0.0	
	R3 (0-9") Orange brown silty coarse SAND, trace fine gravel, brick (moist) [FILL]		10						0.0	
			11	R3	MACROCORE	9"			0.0	
			12						0.0	
	R4a (0-4") Orange brown SILT, some coarse sand (saturated) [ML]		13						0.0	
	R4b (4-10") Gray brown coarse sandy SILT (saturated) [ML]		14						0.0	
	R4c (10-17") Gray with black mottles, fine sandy SILT, trace clay (saturated) [ML]			R4	MACROCORE	17"			0.0	
									0.0	

Sample SB12_6.5-7.0 collected at 10:15 for TCL VOCs, TCL SVOCs, and TAL Metals with PCBs on HOLD.

PROJECT 450 Johnson Avenue		PROJECT NO. 170588001	
LOCATION Brooklyn		ELEVATION AND DATUM NA	

ELEV. (ft)	SAMPLE DESCRIPTION	SYMBOL LOG	DEPTH SCALE	SAMPLE DATA						PID Reading (ppm)	REMARKS (DRILLING FLUID, DEPTH OF CASING, FLUID LOSS, DRILLING RESISTANCE, ETC.)
				NUMBER	TYPE	RECOV. (in)	PENETR. RESIST	BL/ft	N-VALUE BLOWS PER FT		
	End of boring at 15 ft. bgs										Borehole backfilled with fill-pro sand and bentonite. The surface was restored with concrete.
			16								
			17								
			18								
			19								
			20								
			21								
			22								
			23								
			24								
			25								
			26								
			27								
			28								
			29								
			30								
			31								
			32								

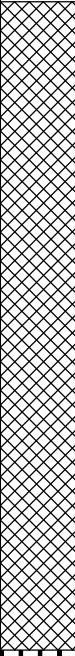
PROJECT 450 Johnson Avenue	PROJECT NO. 170588001			
LOCATION Brooklyn	ELEVATION AND DATUM NA			
DRILLING EQUIPMENT 420 Geoprobe MT	DATE STARTED 7/16/19	DATE FINISHED 7/16/19	COMPLETION DEPTH 15 ft.	
SIZE AND TYPE OF BIT 2 1/4 inch x 5 foot steel	NUMBER OF SAMPLES 5	DIST. 5	UNDIST. --	CORE --
CASING DIAMETER (in) 2-inch	CASING DEPTH(ft) NA	WATER LEVEL (ft.) 12	FIRST 12	COMPL. --
SAMPLER 2-inch x 3-foot acetate lined macrocore	DRILLING FOREMAN Josh Falk (Eastern)			
SAMPLER HAMMER NA	WEIGHT(lbs) NA	DROP(in) NA	INSPECTING ENGINEER Deirdre Casey (Langan)	

ELEV. (ft)	SAMPLE DESCRIPTION	SYMBOL LOG	DEPTH SCALE	SAMPLE DATA						PID Reading (ppm)	REMARKS (DRILLING FLUID, DEPTH OF CASING, FLUID LOSS, DRILLING RESISTANCE, ETC.)
				NUMBER	TYPE	RECOV. (in)	PENETR. RESIST BL/ft	N-VALUE BLOWS PER FT			
	R1a (0-5") Concrete									0.0	
	R1b (5-22") Light to dark brown silty fine SAND, trace fine gravel, brick, glass (moist) [FILL]		1	R1	MACROCORE	22"				1.2	
			2							3.9	
	R2 (0-34") Dark reddish brown fine sandy SILT, some coarse gravel (moist) [FILL]		3	R2	MACROCORE	34"					
			4							0.0	
			5							0.0	
			6							0.0	
	R3a (0-7") Dark brown fine SAND, some silt (moist) [FILL]		7	R3	MACROCORE	27"				0.0	
	R3b (7-12") Black fine sandy SILT (moist) [FILL]		8							0.0	
	R3c (12-27") Gray brown fine sandy SILT, trace fine gravel (moist) [FILL]		9							0.0	
	R4 (0-7") Reddish brown SILT, some fine sand (moist) [FILL]		10	R4	MACROCORE	7"				0.0	
			11							0.0	
	R5 (0-36") Gray brown fine sandy SILT with black mottles between (15-22") (saturated) [ML]		12	R5	MACROCORE	36"				0.0	
			13							0.0	
			14							0.0	

Sample SB13 8.0-8.5 collected at 13:52 for TCL VOCs, TCL SVOCs, and TAL Metals with PCBs on HOLD.

PROJECT 450 Johnson Avenue		PROJECT NO. 170588001										
LOCATION Brooklyn		ELEVATION AND DATUM NA										
ELEV. (ft)	SAMPLE DESCRIPTION	SYMBOL LOG	DEPTH SCALE	SAMPLE DATA							PID Reading (ppm)	REMARKS (DRILLING FLUID, DEPTH OF CASING, FLUID LOSS, DRILLING RESISTANCE, ETC.)
				NUMBER	TYPE	RECOV. (in)	PENETR. RESIST	BL/ft	N-VALUE BLOWS PER FT			
	End of boring at 15 ft. bgs		16									Borehole backfilled with fill-pro sand and bentonite. The surface was restored with concrete.
			17									
			18									
			19									
			20									
			21									
			22									
			23									
			24									
			25									
			26									
			27									
			28									
			29									
			30									
			31									
			32									

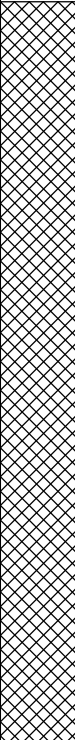
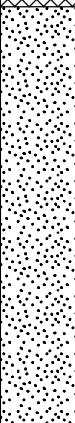
PROJECT 450 Johnson Avenue			PROJECT NO. 170588001			
LOCATION Brooklyn			ELEVATION AND DATUM NA			
DRILLING EQUIPMENT 420 Geoprobe MT			DATE STARTED 7/18/19		DATE FINISHED 7/18/19	COMPLETION DEPTH 12 ft.
SIZE AND TYPE OF BIT 2 1/4 inch x 5 foot steel			NUMBER OF SAMPLES 5	DIST. 5	UNDIST. --	CORE --
CASING DIAMETER (in) 2-inch		CASING DEPTH(ft) NA	WATER LEVEL (ft.) 8	FIRST 8	COMPL. --	24 HR. --
SAMPLER 2-inch x 3-foot acetate lined macrocore			DRILLING FOREMAN Josh Falk (Eastern)			
SAMPLER HAMMER NA	WEIGHT(lbs) NA	DROP(in) NA	INSPECTING ENGINEER Deirdre Casey (Langan)			

ELEV. (ft)	SAMPLE DESCRIPTION	SYMBOL LOG	DEPTH SCALE	SAMPLE DATA						PID Reading (ppm)	REMARKS (DRILLING FLUID, DEPTH OF CASING, FLUID LOSS, DRILLING RESISTANCE, ETC.)
				NUMBER	TYPE	RECOV. (in)	PENETR. RESIST BL/6in	N-VALUE BLOWS PER FT			
	R1a (0-12") Concrete									0.0	
	R1b (12-16") Brown SILT, some coarse SAND, some coarse gravel (moist) [FILL]		1	R1	MACROCORE	4"					
			2								
	R2a (0-11") Brown coarse to fine SAND, some silt, trace coarse to fine gravel, coal ash (moist) [FILL]		3								
	R2b (11-24") Dark brown coarse SAND, some silt, trace coarse to fine gravel, coal ash (moist) [FILL]		4	R2	MACROCORE	24"				0.0	
			5							0.0	
	R3a (0-9") Dark brown silty fine to coarse SAND, some fine gravel (moist) [FILL]		6							0.0	
	R3b (9-23") Brown to coarse sandy SILT, trace fine gravel (saturated) [ML]		7	R3	MACROCORE	23"				0.0	
			8							0.0	
			9							0.0	
	NO RECOVERY 9' to 12' DEPTH		10	R4	MACROCORE	0"				0.0	
			11								
	End of boring at 12 ft. bgs		12								
			13								
			14								

Sample SB14_4.5-5.0 collected at 14:05 for TCL VOCs, TCL SVOCs, TAL Metals and PCBs.

Borehole backfilled with fill-pro sand and bentonite. The surface was restored with concrete.

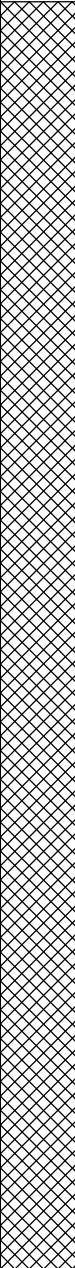
PROJECT 450 Johnson Avenue			PROJECT NO. 170588001			
LOCATION Brooklyn			ELEVATION AND DATUM NA			
DRILLING EQUIPMENT 420 Geoprobe MT			DATE STARTED 7/19/19		DATE FINISHED 7/19/19	COMPLETION DEPTH 18 ft.
SIZE AND TYPE OF BIT 2 1/4 inch x 5 foot steel			NUMBER OF SAMPLES 6	DIST. 6	UNDIST. --	CORE --
CASING DIAMETER (in) 2-inch		CASING DEPTH(ft) NA	WATER LEVEL (ft.) 8	FIRST 8	COMPL. --	24 HR. --
SAMPLER 2-inch x 3-foot acetate lined macrocore			DRILLING FOREMAN Josh Falk (Eastern)			
SAMPLER HAMMER NA	WEIGHT(lbs) NA	DROP(in) NA	INSPECTING ENGINEER Deirdre Casey (Langan)			

ELEV. (ft)	SAMPLE DESCRIPTION	SYMBOL LOG	DEPTH SCALE	SAMPLE DATA						PID Reading (ppm)	REMARKS (DRILLING FLUID, DEPTH OF CASING, FLUID LOSS, DRILLING RESISTANCE, ETC.)
				NUMBER	TYPE	RECOV. (in)	PENETR. RESIST BL/ft	N-VALUE BLOWS PER FT			
	R1a (0-15") Asphalt and Concrete									0.0	
	R1b (15-26") Black and orange fine to coarse SAND, some fine gravel, trace silt, coal ash (moist) [FILL]		1	R1	MACROCORE	26"				0.0	
			2							0.0	
	R2a (0-14") Orange brown fine SAND, some silt, trace fine gravel (moist) [FILL]		3							0.0	
			4	R2	MACROCORE	25"				0.0	
	R2b (14-25") Light brown to brown fine SAND, some silt, trace fine gravel, coal ash (moist) [FILL]		5							0.0	
			6							0.0	
	R3a (0-6") Brown fine SAND, some silt, trace fine gravel (moist) [FILL] R3b (6-12") Dark brown to black fine to coarse SAND, little silt, coal (saturated) [FILL] R3c (12-22") Brown fine to coarse SAND, little silt (saturated) [FILL]		7	R3	MACROCORE	28"				0.0	
	R3d (22-28") Orange brown to brown fine SAND, some silt (moist) [FILL]		8							0.0	
	R4a (0-18") Dark brown fine SAND, some silt, concrete (saturated) [FILL]		9							0.0	
			10	R4	MACROCORE	22"				0.0	
	R4b (18-22") Gray to orange brown silty fine SAND (saturated) [SM]		11							0.0	
			12							0.0	
	R5 (0-10") Grayish orange brown mottles, silty fine SAND (saturated) [SM]		13	R5	MACROCORE	10"				0.0	
			14							0.0	
										0.0	

Sample SB15_8.0-8.5 collected at 11:20 for TCL VOCs, TCL SVOCs, and TAL Metals with PCBs on HOLD.

PROJECT			450 Johnson Avenue			PROJECT NO.			170588001		
LOCATION			Brooklyn			ELEVATION AND DATUM			NA		
ELEV. (ft)	SAMPLE DESCRIPTION	SYMBOL LOG	DEPTH SCALE	SAMPLE DATA						PID Reading (ppm)	REMARKS (DRILLING FLUID, DEPTH OF CASING, FLUID LOSS, DRILLING RESISTANCE, ETC.)
				NUMBER	TYPE	RECOV. (in)	PENETR. RESIST	BL/6in	N-VALUE BLOWS PER FT		
	R6 (0-32") Olive brown fine sandy SILT (saturated) [ML]		16	R6	MACROCORE	32"				0.0	Borehole backfilled with fill-pro sand and bentonite. The surface was restored with asphalt.
			17							0.0	
			18							0.0	
	End of boring at 18 ft. bgs		19							0.0	
			20								
			21								
			22								
			23								
			24								
			25								
			26								
			27								
			28								
			29								
			30								
			31								
			32								

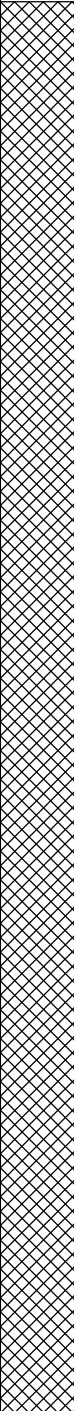
PROJECT 450 Johnson Avenue	PROJECT NO. 170588001		
LOCATION Brooklyn	ELEVATION AND DATUM NA		
DRILLING EQUIPMENT 420 Geoprobe MT	DATE STARTED 7/19/19	DATE FINISHED 7/19/19	COMPLETION DEPTH 15 ft.
SIZE AND TYPE OF BIT 2 1/4 inch x 5 foot steel	NUMBER OF SAMPLES 5	DIST. 5	UNDIST. --
CASING DIAMETER (in) 2-inch	CASING DEPTH(ft) NA	WATER LEVEL (ft.) 14	FIRST 14
SAMPLER 2-inch x 3-foot acetate lined macrocore	DRILLING FOREMAN Josh Falk (Eastern)		
SAMPLER HAMMER NA	WEIGHT(lbs) NA	DROP(in) NA	INSPECTING ENGINEER Deirdre Casey (Langan)

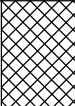
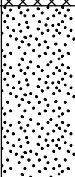
ELEV. (ft)	SAMPLE DESCRIPTION	SYMBOL LOG	DEPTH SCALE	NUMBER	TYPE	RECOV. (in)	PENETR. RESIST BL/6in	N-VALUE BLOWS PER FT	PID Reading (ppm)	REMARKS (DRILLING FLUID, DEPTH OF CASING, FLUID LOSS, DRILLING RESISTANCE, ETC.)
	R1a (0-5") Asphalt								0.0	
	R1b (5-19") Dark gray fine to coarse sand, trace fine gravel, brick (moist) [FILL]								0.0	(0-34") Petroleum like odor
			1	R1	MACROCORE	34"			66.6	
	R1c (19-23") Black silty fine SAND, trace fine gravel (moist) [FILL]								302.7	
	R1d (23-34") Gray to orange brown fine SAND, some silt, trace fine gravel (moist) [FILL]		2						188.8	
									43.2	
	R2a (0-6") Black fine SAND, some silt, trace fine gravel (moist) [FILL]		3	R2	MACROCORE	33"				
	R2b (6-33") Dark orange brown silty fine SAND, trace fine gravel, brick and coal (moist) [FILL]								385.0	Sample SB16_3.0-3.5 collected at 12:15 for TCL VOCs, TCL SVOCs, TAL Metals and PCBs.
			4						31.2	(0-13") Petroleum like odor
									79.4	
			5						6.3	
									6.5	
	R3a (0-23") Dark orange brown silty fine SAND, trace fine gravel, brick, coal, glazed tile (moist) [FILL]		6	R3	MACROCORE	27"			9.5	
									48.5	
	R3b (23-27") Brown fine to coarse SAND, trace silt, brick, coal, glazed tile (moist) [FILL]		7						2.1	
									3.6	
			8						3.0	
	R4 (0-25") Brown silty fine SAND, brick, coal ash [FILL]		9	R4	MACROCORE	25"			5.0	
									3.5	
			10						1.4	
									0.7	
			11						1.0	
									2.0	
	R5a (0-15") Brown silty fine SAND, trace fine gravel, glazed tile (moist) [FILL]		12	R5	MACROCORE	23"			2.1	
									0.8	
			13						0.4	
	R5b (15-23") Dark orange brown silty fine SAND, trace clay, glazed tile (saturated) [SM]								0.6	
			14							

PROJECT 450 Johnson Avenue		PROJECT NO. 170588001	
LOCATION Brooklyn		ELEVATION AND DATUM NA	

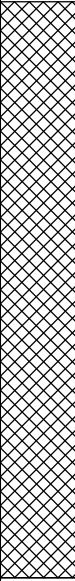
ELEV. (ft)	SAMPLE DESCRIPTION	SYMBOL LOG	DEPTH SCALE	SAMPLE DATA						PID Reading (ppm)	REMARKS (DRILLING FLUID, DEPTH OF CASING, FLUID LOSS, DRILLING RESISTANCE, ETC.)	
				NUMBER	TYPE	RECOV. (in)	PENETR. RESIST	BL/ft	N-VALUE BLOWS PER FT			
	End of boring at 15 ft. bgs											Borehole backfilled with fill-pro sand and bentonite. The surface was restored with asphalt.
			16									
			17									
			18									
			19									
			20									
			21									
			22									
			23									
			24									
			25									
			26									
			27									
			28									
			29									
			30									
			31									
			32									

\\LANGAN.COM\DATA\NYC\DATA\170588001\PROJECT DATA\DISCIPLINE\ENVIRONMENTAL\GINTLOGS\450 JOHNSON AVENUE BORING LOGS.GPJ ... 8/15/2019 11:27:32 AM ... Report: Log - BORING

ELEV. (ft)	SAMPLE DESCRIPTION	SYMBOL LOG	DEPTH SCALE	SAMPLE DATA						PID Reading (ppm)	REMARKS (DRILLING FLUID, DEPTH OF CASING, FLUID LOSS, DRILLING RESISTANCE, ETC.)				
				NUMBER	TYPE	RECOV. (in)	PENETR. RESIST	BL/6in	N-VALUE BLOWS PER FT						
	R1a (0-3') Brown fine SAND, some silt, some fine to coarse gravel, brick, concrete (moist) [FILL]		1	R1	HAND AUGER	36"				0.0					
															0.0
															0.0
															0.0
															0.0
	R1b (3-6') Dark brown to fine SAND, little silt, fine to coarse gravel, brick, coal (moist) [FILL]		3							0.0					
			4							0.0					
			5							0.0					
			6							0.0					
	R2a (0-13") Black fine GRAVEL, little coarse sand, coal ash (moist) [FILL]		7	R3	MACROCORE	34"				1.4					
	R2b (13-34") Orange brown fine SAND, little silt, trace fine gravel, organics (roots), ceramics (moist) [FILL]		8												1.3
			9												0.1
			10							0.1					
	R3 (0-26") Orange brown fine SAND, some silt, trace fine gravel, coal (moist) [FILL]		11	R4	MACROCORE	26"				0.0					
		12											0.3		
		13											0.1		
		14							0.0						
	R4 (0-19") Dark brown to black with orange coarse to fine SAND, trace silt, coal, brick (moist) [FILL]	15	R5	MACROCORE	19"				0.0						
		16											0.1		
		17											0.0		
		18											0.0		
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PROJECT			450 Johnson Avenue			PROJECT NO.			170588001		
LOCATION			Brooklyn			ELEVATION AND DATUM			NA		
ELEV. (ft)	SAMPLE DESCRIPTION	SYMBOL LOG	DEPTH SCALE	SAMPLE DATA					PID Reading (ppm)	REMARKS (DRILLING FLUID, DEPTH OF CASING, FLUID LOSS, DRILLING RESISTANCE, ETC.)	
	R5a (0-14") Dark brown to black with orange coarse to fine SAND, trace silt (moist) [FILL]		16	R6	MACROCORE	RECOV. (in)	PENETR. RESIST	BL/6in	N-VALUE BLOWS PER FT	0.2 0.5 1.2	Borehole backfilled with fill-pro sand and bentonite. The surface was restored with asphalt.
	R5b (14-20") Gray brown silty fine SAND, trace fine gravel (saturated) [SM]		17								
	End of boring at 18 ft. bgs		18								
			19								
			20								
			21								
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PROJECT 450 Johnson Avenue			PROJECT NO. 170588001		
LOCATION Brooklyn			ELEVATION AND DATUM NA		
DRILLING EQUIPMENT 420 Geoprobe MT			DATE STARTED 7/19/19		DATE FINISHED 7/19/19
SIZE AND TYPE OF BIT 2 1/4 inch x 5 foot steel			NUMBER OF SAMPLES 2		COMPLETION DEPTH 6 ft.
CASING DIAMETER (in) 2-inch	CASING DEPTH(ft) NA		WATER LEVEL (ft.) ▽	FIRST ▽	UNDIST. ---
SAMPLER 2-inch x 3-foot acetate lined macrocore			DRILLING FOREMAN Josh Falk (Eastern)		
SAMPLER HAMMER NA	WEIGHT(lbs) NA	DROP(in) NA	INSPECTING ENGINEER Deirdre Casey (Langan)		

ELEV. (ft)	SAMPLE DESCRIPTION	SYMBOL LOG	DEPTH SCALE	SAMPLE DATA							PID Reading (ppm)	REMARKS (DRILLING FLUID, DEPTH OF CASING, FLUID LOSS, DRILLING RESISTANCE, ETC.)
				NUMBER	TYPE	RECOV. (in)	PENETR. RESIST BL/ft	N-VALUE BLOWS PER FT				
	R1a (0-12") Concrete										0.0	
	R1b (12-28") Brick cobbles, little light brown coarse to fine SAND with silt, brick (moist) [FILL]		1	R1	MACROCORE	28"					0.0	
			2								0.0	
	R2 (0-19") Brown fine SAND, little silt, trace fine to coarse gravel, brick (saturated at 4.5 ft.) [FILL]		3	R2	MACROCORE	19"						
			4									
			5								0.0	
	End of boring at 6 ft. bgs		6								0.0	Sample SB18 4.0-4.5 collected at 14:00 for TCL VOCs, TCL SVOCs, and TAL Metals with PCBs on HOLD.
			7									Borehole backfilled with fill-pro sand and bentonite. The surface was restored with concrete.
			8									
			9									
			10									
			11									
			12									
			13									
			14									

\\LANGAN.COM\DATA\IN\PROJECT DATA\DISCIPLINE\ENVIRONMENTAL\GINTLOGS\450 JOHNSON AVENUE BORING LOGS.GPJ ... 8/15/2019 11:27:34 AM ... Report: Log - BORING

APPENDIX C

Groundwater Sampling Logs

450 Johnson Avenue
Brooklyn, New York
Langan Project No.: 170588001

Notes:

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

Page 1 of 6

450 Johnson Avenue
Brooklyn, New York
Langan Project No.: 170588001

Notes:

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

450 Johnson Avenue
Brooklyn, New York
Langan Project No.: 170588001

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450 Johnson Avenue
Brooklyn, New York
Langan Project No.: 170588001

Notes: 1. Well depths and groundwater depths were measured in feet below the top of well casing. 2. Well and tubing diameters are measured in inches. 3. PID = Photoionization Detector 4. PPM = Parts per million 5. pH = Hydrogen ion concentration 6. ORP = Oxidation-reduction potential, measured in millivolts (mV) 7. DO = Dissolved Oxygen, measured in milligrams per liter (mg/L) 8. DTW = Depth to water 9. mS/cm = milli-Siemens per centimeter 10. NTU = Nephelometric Turbidity Unit
LANGAN Engineering, Environmental, Surveying, Landscape Architecture and Geology, D.P.C. 21 Penn Plaza, 360 West 31st Street, 8th Floor, New York

450 Johnson Avenue
Brooklyn, New York
Langan Project No.: 170588001

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

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

450 Johnson Avenue
Brooklyn, New York
Langan Project No.: 170588001

Notes: 1. Well depths and groundwater depths were measured in feet below the top of well casing. 2. Well and tubing diameters are measured in inches. 3. PID = Photoionization Detector 4. PPM = Parts per million 5. pH = Hydrogen ion concentration 6. ORP = Oxidation-reduction potential, measured in millivolts (mV) 7. DO = Dissolved Oxygen, measured in milligrams per liter (mg/L) 8. DTW = Depth to water 9. mS/cm = milli-Siemens per centimeter 10. NTU = Nephelometric Turbidity Unit
LANGAN Engineering, Environmental, Surveying, Landscape Architecture and Geology, D.P.C. 21 Penn Plaza, 360 West 31st Street, 8th Floor, New York

APPENDIX D

Sub-Slab Vapor Construction Logs

SUB-SLAB SOIL VAPOR SAMPLING LOG SHEET					
Sample Number: SSV01_071719					
PROJECT: 450 Johnson Avenue			PROJECT NO.: 170588001		
LOCATION: Brooklyn, NY			SURFACE ELEVATION AND DATUM: NA		
DRILLING FIRM OR LANGAN INSTALLER: Eastern Environmental Solutions, Inc.			INSTALLATION DATE STARTED: 7/17/2019		DATE FINISHED: 7/17/2019
INSTALLATION FOREMAN: Josh Falk (Eastern)			SAMPLE DATE STARTED: 7/18/2019		DATE FINISHED: 7/18/2019
INSTALLATION EQUIPMENT: Geoprobe® 420 M			TYPE OF SAMPLING DEVICE: 2.7-Liter Summa Canister		
INSPECTOR: Deirdre Casey (Langan)			SAMPLER: Deirdre Casey (Langan)		
POTENTIAL SAMPLE INTERFERENCES: Drilling occurring in the adjoining warehouse space.			WEATHER CONDITIONS (PRECIP., TEMP., PRESS., WIND SPEED AND DIR.): Temp: 73-95° Fahrenheit Wind: NE 0-10 mph Precipitation: Overcast, rain 0900-1100 Pressure: 29.9 in Hg		
METHOD OF INSTALLATION AND PURGING: Eastern Environmental advanced sub-slab vapor point to 3 inches below the top of the slab. A small amount of No. 2 sand was backfilled into the borehole to set the vapor tubing. No. 2 sand was backfilled around the tubing to 1 inch bgs, and the remainder of the borehole was sealed with bentonite.					
TUBING TYPE/DIAMETER: 1/4-Inch Teflon-lined Polyethylene Tubing			TYPE OF MATERIAL ABOVE SEAL: Bentonite		
IMPLANT SCREEN TYPE/LENGTH/DIAMETER: None			SEAL MATERIAL (Bentonite, Beeswax, Modeling Clay, etc.): Bentonite		
BOREHOLE DIAMETER: 2-Inch			FILTER PACK MATERIAL (Sand or Glass Beads): No. 2 Sand		
PURGE VOLUME (L): 0.01			IMPLANT/PROBE DETAILS (SEAL, FILTER, ETC.)		DEPTH (FEET FROM SURFACE)
PURGE FLOW RATE (ML/MIN): 200			SURFACE		6" concrete slab
PID AFTER PURGE (PPM): 0.2			SURFACE		
HELIUM TESTS Pre-sampling Post-sampling					
HELIUM TEST IN BUCKET(%): 11.0% 10.2%					
HELIUM TEST IN TUBE (PPM): 0.0% 0.0%					
SAMPLE START TIME: 8:17					
SAMPLE STOP TIME: 15:07					
TOTAL SAMPLE TIME (MIN): 410					
REGULATOR FLOW RATE (L/MIN): 0.005					
VOLUME OF SAMPLE (LITERS): 2.7					
PID AFTER SAMPLE (PPM): 0					
SAMPLE MOISTURE CONTENT: -					
CAN SERIAL NUMBER: 2037					
REGULATOR SERIAL NUMBER: 957					
CAN START VACUUM PRESS. (" HG): -29.91					
CAN STOP VACUUM PRESS. (" HG): -8.49					
SAMPLE LOCATION SKETCH					
See Sample Location Plan			Top of Seal Top of Pack Tube Depth		
NOTES					
Sample Name: SSV01_071819					

SUB-SLAB SOIL VAPOR SAMPLING LOG SHEET					
Sample Number: SSV02_071919					
PROJECT: 450 Johnson Avenue			PROJECT NO.: 170588001		
LOCATION: Brooklyn, NY			SURFACE ELEVATION AND DATUM: NA		
DRILLING FIRM OR LANGAN INSTALLER: Eastern Environmental Solutions, Inc.			INSTALLATION DATE STARTED: 7/17/2019		DATE FINISHED: 7/17/2019
INSTALLATION FOREMAN: Josh Falk (Eastern)			SAMPLE DATE STARTED: 7/19/2019		DATE FINISHED: 7/19/2019
INSTALLATION EQUIPMENT: Geoprobe® 420 M			TYPE OF SAMPLING DEVICE: 2.7-Liter Summa Canister		
INSPECTOR: Deirdre Casey (Langan)			SAMPLER: Deirdre Casey (Langan)		
POTENTIAL SAMPLE INTERFERENCES: Drilling occurring in the adjoining warehouse space.			WEATHER CONDITIONS (PRECIP., TEMP., PRESS., WIND SPEED AND DIR.): Temp: 72-89° Fahrenheit Wind: NE 5-12 mph Precipitation: None (sampling indoors) Pressure: 29.8 in Hg		
METHOD OF INSTALLATION AND PURGING: Eastern Environmental advanced sub-slab vapor point to 3 inches below the top of the slab. A small amount of No. 2 sand was backfilled into the borehole to set the vapor tubing. No. 2 sand was backfilled around the tubing to 1 inch bgs, and the remainder of the borehole was sealed with bentonite.					
TUBING TYPE/DIAMETER: 1/4-Inch Teflon-lined Polyethylene Tubing			TYPE OF MATERIAL ABOVE SEAL: Bentonite		
IMPLANT SCREEN TYPE/LENGTH/DIAMETER: None			SEAL MATERIAL (Bentonite, Beeswax, Modeling Clay, etc.): Bentonite		
BOREHOLE DIAMETER: 2-Inch			FILTER PACK MATERIAL (Sand or Glass Beads): No. 2 Sand		
PURGE VOLUME (L): 0.01			IMPLANT/PROBE DETAILS (SEAL, FILTER, ETC.)		DEPTH (FEET FROM SURFACE)
PURGE FLOW RATE (ML/MIN): 200					
PID AFTER PURGE (PPM): 0.6			SURFACE		NOTES 6" concrete slab
HELIUM TESTS			SURFACE		
HELIUM TEST IN BUCKET(%): 11.5% 11.0%			Top of Seal		
HELIUM TEST IN TUBE (PPM): 0.0% 0.0%			Top of Pack		
SAMPLE START TIME: 7:56			Probe Depth		
SAMPLE STOP TIME: 15:08			0		
TOTAL SAMPLE TIME (MIN): 432			1"		
REGULATOR FLOW RATE (L/MIN): 0.005			3"		
VOLUME OF SAMPLE (LITERS): 2.7					
PID AFTER SAMPLE (PPM): 0					
SAMPLE MOISTURE CONTENT: -					
CAN SERIAL NUMBER: 2824					
REGULATOR SERIAL NUMBER: 1248					
CAN START VACUUM PRESS. (" HG): -29.93					
CAN STOP VACUUM PRESS. (" HG): -9.49					
SAMPLE LOCATION SKETCH					
See Sample Location Plan			NOTES		
			Sample Name: SSV02_071919		
Langan Engineering, Environmental, Surveying, Landscape Architecture, and Geology D.P.C. 21 Penn Plaza, 360 West 31st Street, 8th Floor, New York, New York 10001-2727					

SUB-SLAB SOIL VAPOR SAMPLING LOG SHEET					
Sample Number: SSV03_071919					
PROJECT: 450 Johnson Avenue			PROJECT NO.: 170588001		
LOCATION: Brooklyn, NY			SURFACE ELEVATION AND DATUM: NA		
DRILLING FIRM OR LANGAN INSTALLER: Eastern Environmental Solutions, Inc.			INSTALLATION DATE STARTED: 7/17/2019		DATE FINISHED: 7/17/2019
INSTALLATION FOREMAN: Josh Falk (Eastern)			SAMPLE DATE STARTED: 7/19/2019		DATE FINISHED: 7/19/2019
INSTALLATION EQUIPMENT: Geoprobe® 420 M			TYPE OF SAMPLING DEVICE: 2.7-Liter Summa Canister		
INSPECTOR: Deirdre Casey (Langan)			SAMPLER: Deirdre Casey (Langan)		
POTENTIAL SAMPLE INTERFERENCES: Drilling occurring in the adjoining warehouse space.			WEATHER CONDITIONS (PRECIP., TEMP., PRESS., WIND SPEED AND DIR.): Temp: 72-89° Fahrenheit Wind: NE 5-12 mph Precipitation: None (sampling indoors) Pressure: 29.8 in Hg		
METHOD OF INSTALLATION AND PURGING: Eastern Environmental advanced sub-slab vapor point to 3 inches below the top of the slab. A small amount of No. 2 sand was backfilled into the borehole to set the vapor tubing. No. 2 sand was backfilled around the tubing to 1 inch bgs, and the remainder of the borehole was sealed with bentonite.					
TUBING TYPE/DIAMETER: 1/4-Inch Teflon-lined Polyethylene Tubing			TYPE OF MATERIAL ABOVE SEAL: Bentonite		
IMPLANT SCREEN TYPE/LENGTH/DIAMETER: None			SEAL MATERIAL (Bentonite, Beeswax, Modeling Clay, etc.): Bentonite		
BOREHOLE DIAMETER: 2-Inch			FILTER PACK MATERIAL (Sand or Glass Beads): No. 2 Sand		
PURGE VOLUME (L):		0.01			DEPTH (FEET FROM SURFACE)
PURGE FLOW RATE (ML/MIN):		200			
PID AFTER PURGE (PPM):		1.3			NOTES
HELIUM TESTS		Pre-sampling Post-sampling			
HELIUM TEST IN BUCKET(%):		11.5% 11.0%			6" concrete slab
HELIUM TEST IN TUBE (PPM):		0.0% 0.0%			
SAMPLE START TIME:		7:56			0
SAMPLE STOP TIME:		15:08			
TOTAL SAMPLE TIME (MIN):		432			1"
REGULATOR FLOW RATE (L/MIN):		0.005			
VOLUME OF SAMPLE (LITERS):		2.7			3"
PID AFTER SAMPLE (PPM):		0			
SAMPLE MOISTURE CONTENT:		-			
CAN SERIAL NUMBER:		230			
REGULATOR SERIAL NUMBER:		0492			
CAN START VACUUM PRESS. (" HG):		-29.93			
CAN STOP VACUUM PRESS. (" HG):		-9.49			
SAMPLE LOCATION SKETCH					
See Sample Location Plan			NOTES		
			Sample Name: SSV02_071919		
Langan Engineering, Environmental, Surveying, Landscape Architecture, and Geology D.P.C. 21 Penn Plaza, 360 West 31st Street, 8th Floor, New York, New York 10001-2727					

AIR SAMPLING LOG SHEET

Sample Number: IA01_071819

PROJECT: 450 Johnson Avenue		PROJECT NO.: 170588001	
LOCATION: Brooklyn, NY		SURFACE ELEVATION AND DATUM: N/A	
SAMPLER: Eastern Environmental Solutions, Inc.		SAMPLE DATE STARTED: 7/18/2019	DATE FINISHED: 7/18/2019
INSPECTOR: Deirdre Casey		TYPE OF SAMPLING DEVICE: 2.7-Liter Summa Canister	
POTENTIAL SAMPLE INTERFERENCES: Drilling occurring in the adjoining warehouse space.		WEATHER CONDITIONS (PRECIP., TEMP., PRESS., WIND SPEED AND DIR.): Temp: 73-95° Fahrenheit Wind: NE 0-10 mph Precipitation: Overcast, rain 0900-1100 Pressure: 29.9 in Hg	
METHOD OF INSTALLATION AND SAMPLING: Langan field screened the sample location with a MiniRAE 3000 photoionization detector prior to sampling. Sample consisted of 2.7L Summa canister fitted with an 8-hour flow control valve. The flow controller valve was opened to initiate the 8-hour sample collection. The sample and flow controller were checked each hour during sampling to ensure proper operation.			
SAMPLE DETAILS		SAMPLE LOCATION SKETCH	
HEIGHT ABOVE GROUND (FT):	4.5	See Sample Location Plan	
PID BEFORE SAMPLE (PPM):	0.0		
SAMPLE START TIME:	8:16		
SAMPLE STOP TIME:	15:06		
TOTAL SAMPLE TIME (MIN):	410		
REGULATOR FLOW RATE (L/MIN):	0.005		
VOLUME OF SAMPLE (LITERS):	2.7		
PID AFTER SAMPLE (PPM):	0.0		
SAMPLE MOISTURE CONTENT:	-		
CAN SERIAL NUMBER:	2793		
REGULATOR SERIAL NUMBER:	0702		
CAN START VACUUM PRESS. (" HG):	-30.47		
CAN STOP VACUUM PRESS. (" HG):	-9.16		
NOTES			
Sample Name: IA01_071819			
Langan Engineering, Environmental, Surveying, Landscape Architecture, and Geology D.P.C. 21 Penn Plaza, 360 West 31st Street, 8th Floor, New York, New York 10001-2727			

AIR SAMPLING LOG SHEET

Sample Number: IA02_071919

PROJECT: 450 Johnson Avenue	PROJECT NO.: 170588001	
LOCATION: Brooklyn, NY	SURFACE ELEVATION AND DATUM: N/A	
SAMPLER: Eastern Environmental Solutions, Inc.	SAMPLE DATE STARTED: 7/19/2019	DATE FINISHED: 7/19/2019
INSPECTOR: Deirdre Casey	TYPE OF SAMPLING DEVICE: 2.7-Liter Summa Canister	
POTENTIAL SAMPLE INTERFERENCES: Drilling occurring in the adjoining warehouse space.	WEATHER CONDITIONS (PRECIP., TEMP., PRESS., WIND SPEED AND DIR.): Temp: 72-89° Farenheit Wind: NE 5-12 mph Precipitation: None Pressure: 29.8 in Hg	

METHOD OF INSTALLATION AND SAMPLING:
Langan field screened the sample location with a MiniRAE 3000 photoionization detector prior to sampling. Sample consisted of 2.7L Summa canister fitted with an 8-hour flow control valve. The flow controller valve was opened to initiate the 8-hour sample collection. The sample and flow controller were checked each hour during sampling to ensure proper operation.

SAMPLE DETAILS		SAMPLE LOCATION SKETCH
HEIGHT ABOVE GROUND (FT):	4	See Sample Location Plan
PID BEFORE SAMPLE (PPM):	0.0	
SAMPLE START TIME:	7:57	
SAMPLE STOP TIME:	15:04	
TOTAL SAMPLE TIME (MIN):	427	
REGULATOR FLOW RATE (L/MIN):	0.005	
VOLUME OF SAMPLE (LITERS):	2.7	
PID AFTER SAMPLE (PPM):	N/A	
SAMPLE MOISTURE CONTENT:	-	
CAN SERIAL NUMBER:	2872	
REGULATOR SERIAL NUMBER:	0813	
CAN START VACUUM PRESS. (" HG):	-30.03	
CAN STOP VACUUM PRESS. (" HG):	-7.68	

NOTES

Sample Name: IA02_071919

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

AIR SAMPLING LOG SHEET

Sample Number: IA03_071919

PROJECT: 450 Johnson Avenue		PROJECT NO.: 170588001	
LOCATION: Brooklyn, NY		SURFACE ELEVATION AND DATUM: N/A	
SAMPLER: Eastern Environmental Solutions, Inc.		SAMPLE DATE STARTED: 7/19/2019	DATE FINISHED: 7/19/2019
INSPECTOR: Deirdre Casey		TYPE OF SAMPLING DEVICE: 2.7-Liter Summa Canister	
POTENTIAL SAMPLE INTERFERENCES: Drilling occurring in the adjoining warehouse space.		WEATHER CONDITIONS (PRECIP., TEMP., PRESS., WIND SPEED AND DIR.): Temp: 72-89° Farenheit Wind: NE 5-12 mph Precipitation: None Pressure: 29.8 inHg	
METHOD OF INSTALLATION AND SAMPLING: Langan field screened the sample location with a MiniRAE 3000 photoionization detector prior to sampling. Sample consisted of 2.7L Summa canister fitted with an 8-hour flow control valve. The flow controller valve was opened to initiate the 8-hour sample collection. The sample and flow controller were checked each hour during sampling to ensure proper operation.			
SAMPLE DETAILS		SAMPLE LOCATION SKETCH	
HEIGHT ABOVE GROUND (FT):	4	See Sample Location Plan	
PID BEFORE SAMPLE (PPM):	0.0		
SAMPLE START TIME:	7:44		
SAMPLE STOP TIME:	14:50		
TOTAL SAMPLE TIME (MIN):	426		
REGULATOR FLOW RATE (L/MIN):	0.005		
VOLUME OF SAMPLE (LITERS):	2.7		
PID AFTER SAMPLE (PPM):	0.0		
SAMPLE MOISTURE CONTENT:	-		
CAN SERIAL NUMBER:	2825		
REGULATOR SERIAL NUMBER:	0432		
CAN START VACUUM PRESS. (" HG):	-30.46		
CAN STOP VACUUM PRESS. (" HG):	-8.75		
NOTES			
Sample Name: IA03_071919			
Langan Engineering, Environmental, Surveying, Landscape Architecture, and Geology D.P.C. 21 Penn Plaza, 360 West 31st Street, 8th Floor, New York, New York 10001-2727			

APPENDIX E

Analytical Laboratory Reports



ANALYTICAL REPORT

Lab Number:	L1931245
Client:	Langan Engineering & Environmental 21 Penn Plaza 360 W. 31st Street, 8th Floor New York, NY 10001-2727
ATTN:	Julia Leung
Phone:	(212) 479-5400
Project Name:	450 JOHNSON AVENUE
Project Number:	170588001
Report Date:	08/01/19

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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: 450 JOHNSON AVENUE
Project Number: 170588001

Lab Number: L1931245
Report Date: 08/01/19

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1931245-01	DUP01_071619	SOIL	BROOKLYN, NY	07/16/19 00:00	07/16/19
L1931245-02	SB03_14.0-14.5	SOIL	BROOKLYN, NY	07/16/19 09:20	07/16/19
L1931245-03	SB04_11.0-11.5	SOIL	BROOKLYN, NY	07/16/19 11:45	07/16/19
L1931245-04	SB13_8.0-8.5	SOIL	BROOKLYN, NY	07/16/19 13:52	07/16/19

Project Name: 450 JOHNSON AVENUE
Project Number: 170588001

Lab Number: L1931245
Report Date: 08/01/19

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. 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 Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data 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.

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 Alpha Project Manager 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 Project Management at 800-624-9220 with any questions.

Project Name: 450 JOHNSON AVENUE
Project Number: 170588001

Lab Number: L1931245
Report Date: 08/01/19

Case Narrative (continued)

Report Submission

August 01, 2019: This final report includes the results of all requested analyses.

July 18, 2019: This is a preliminary report.

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

Sample Receipt

L1931245-01: The Client ID was specified by the client.

Volatile Organics

L1931245-01, -02 and -03: The sample has elevated detection limits due to the dilution required by the elevated concentrations of non-target compounds in the sample.

L1931245-01: The surrogate recoveries are outside the acceptance criteria for toluene-d8 (136%) and 4-bromofluorobenzene (254%); 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.

L1931245-02: The surrogate recovery is outside the acceptance criteria for 4-bromofluorobenzene (133%); 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.

Total Metals

L1931245-01, -02, -03 and -04: The sample has elevated detection limits for all elements, with the exception of mercury, due to the dilution required by matrix interferences encountered during analysis.

The WG1260848-3 MS recovery, performed on L1931245-01, is outside the acceptance criteria for mercury (171%). A post digestion spike was performed and was within acceptance criteria.

The WG1260871-3 MS recoveries for aluminum (379%), iron (0%) and manganese (161%), performed on L1931245-01, do not apply because the sample concentrations are greater than four times the spike amounts

Project Name: 450 JOHNSON AVENUE
Project Number: 170588001

Lab Number: L1931245
Report Date: 08/01/19

Case Narrative (continued)

added.

The WG1260871-3 MS recoveries, performed on L1931245-01, are outside the acceptance criteria for cadmium (56%), chromium (46%), nickel (72%) and thallium (70%). A post digestion spike was performed and yielded unacceptable recoveries for cadmium (64%), chromium (74%), nickel (79%) and thallium (79%). The serial dilution recovery was not applicable; therefore, this element fails the matrix test and the result reported in the native sample should be considered estimated.

The WG1260871-3 MS recovery, performed on L1931245-01, is outside the acceptance criteria for potassium (73%). A post digestion spike was performed and was within acceptance criteria.

The WG1260871-3 MS recovery, performed on L1931245-01, is outside the acceptance criteria for magnesium (0%). A post digestion spike was performed and yielded an unacceptable recovery of 52%. The serial dilution recovery was acceptable; therefore, the matrix test passed for the sample matrix.

The WG1260871-4 Laboratory Duplicate RPDs for chromium (24%), lead (27%), magnesium (67%), manganese (42%) and potassium (35%), performed on L1931245-01, are outside the acceptance criteria. The elevated RPDs have been attributed to the non-homogeneous nature of the native 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 Sturgis Melissa Sturgis

Title: Technical Director/Representative

Date: 08/01/19

ORGANICS

VOLATILES

Project Name: 450 JOHNSON AVENUE
Project Number: 170588001

Lab Number: L1931245
Report Date: 08/01/19

SAMPLE RESULTS

Lab ID: L1931245-01 D
Client ID: DUP01_071619
Sample Location: BROOKLYN, NY

Date Collected: 07/16/19 00:00
Date Received: 07/16/19
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 07/17/19 07:16
Analyst: MV
Percent Solids: 94%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Methylene chloride	ND		ug/kg	430	200	2
1,1-Dichloroethane	ND		ug/kg	86	12.	2
Chloroform	ND		ug/kg	130	12.	2
Carbon tetrachloride	ND		ug/kg	86	20.	2
1,2-Dichloropropane	ND		ug/kg	86	11.	2
Dibromochloromethane	ND		ug/kg	86	12.	2
1,1,2-Trichloroethane	ND		ug/kg	86	23.	2
Tetrachloroethene	ND		ug/kg	43	17.	2
Chlorobenzene	ND		ug/kg	43	11.	2
Trichlorofluoromethane	ND		ug/kg	340	60.	2
1,2-Dichloroethane	ND		ug/kg	86	22.	2
1,1,1-Trichloroethane	ND		ug/kg	43	14.	2
Bromodichloromethane	ND		ug/kg	43	9.3	2
trans-1,3-Dichloropropene	ND		ug/kg	86	23.	2
cis-1,3-Dichloropropene	ND		ug/kg	43	14.	2
1,3-Dichloropropene, Total	ND		ug/kg	43	14.	2
1,1-Dichloropropene	ND		ug/kg	43	14.	2
Bromoform	ND		ug/kg	340	21.	2
1,1,2,2-Tetrachloroethane	ND		ug/kg	43	14.	2
Benzene	ND		ug/kg	43	14.	2
Toluene	ND		ug/kg	86	46.	2
Ethylbenzene	ND		ug/kg	86	12.	2
Chloromethane	ND		ug/kg	340	80.	2
Bromomethane	ND		ug/kg	170	50.	2
Vinyl chloride	ND		ug/kg	86	29.	2
Chloroethane	ND		ug/kg	170	39.	2
1,1-Dichloroethene	ND		ug/kg	86	20.	2
trans-1,2-Dichloroethene	ND		ug/kg	130	12.	2

Project Name: 450 JOHNSON AVENUE**Lab Number:** L1931245**Project Number:** 170588001**Report Date:** 08/01/19**SAMPLE RESULTS**

Lab ID: L1931245-01 D

Date Collected: 07/16/19 00:00

Client ID: DUP01_071619

Date Received: 07/16/19

Sample Location: BROOKLYN, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Trichloroethene	ND		ug/kg	43	12.	2
1,2-Dichlorobenzene	ND		ug/kg	170	12.	2
1,3-Dichlorobenzene	ND		ug/kg	170	13.	2
1,4-Dichlorobenzene	ND		ug/kg	170	15.	2
Methyl tert butyl ether	ND		ug/kg	170	17.	2
p/m-Xylene	ND		ug/kg	170	48.	2
o-Xylene	ND		ug/kg	86	25.	2
Xylenes, Total	ND		ug/kg	86	25.	2
cis-1,2-Dichloroethene	ND		ug/kg	86	15.	2
1,2-Dichloroethene, Total	ND		ug/kg	86	12.	2
Dibromomethane	ND		ug/kg	170	20.	2
Styrene	ND		ug/kg	86	17.	2
Dichlorodifluoromethane	ND		ug/kg	860	78.	2
Acetone	ND		ug/kg	860	410	2
Carbon disulfide	ND		ug/kg	860	390	2
2-Butanone	ND		ug/kg	860	190	2
Vinyl acetate	ND		ug/kg	860	180	2
4-Methyl-2-pentanone	ND		ug/kg	860	110	2
1,2,3-Trichloropropane	ND		ug/kg	170	11.	2
2-Hexanone	ND		ug/kg	860	100	2
Bromochloromethane	ND		ug/kg	170	18.	2
2,2-Dichloropropane	ND		ug/kg	170	17.	2
1,2-Dibromoethane	ND		ug/kg	86	24.	2
1,3-Dichloropropane	ND		ug/kg	170	14.	2
1,1,1,2-Tetrachloroethane	ND		ug/kg	43	11.	2
Bromobenzene	ND		ug/kg	170	12.	2
n-Butylbenzene	850		ug/kg	86	14.	2
sec-Butylbenzene	1400		ug/kg	86	12.	2
tert-Butylbenzene	220		ug/kg	170	10.	2
o-Chlorotoluene	ND		ug/kg	170	16.	2
p-Chlorotoluene	ND		ug/kg	170	9.2	2
1,2-Dibromo-3-chloropropane	ND		ug/kg	260	86.	2
Hexachlorobutadiene	ND		ug/kg	340	14.	2
Isopropylbenzene	210		ug/kg	86	9.3	2
p-Isopropyltoluene	ND		ug/kg	86	9.3	2
Naphthalene	210	J	ug/kg	340	56.	2
Acrylonitrile	ND		ug/kg	340	98.	2

Project Name: 450 JOHNSON AVENUE
Project Number: 170588001

Lab Number: L1931245
Report Date: 08/01/19

SAMPLE RESULTS

Lab ID: L1931245-01 D
Client ID: DUP01_071619
Sample Location: BROOKLYN, NY

Date Collected: 07/16/19 00:00
Date Received: 07/16/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
n-Propylbenzene	240		ug/kg	86	15.	2
1,2,3-Trichlorobenzene	ND		ug/kg	170	28.	2
1,2,4-Trichlorobenzene	ND		ug/kg	170	23.	2
1,3,5-Trimethylbenzene	ND		ug/kg	170	16.	2
1,2,4-Trimethylbenzene	ND		ug/kg	170	29.	2
1,4-Dioxane	ND		ug/kg	6800	3000	2
p-Diethylbenzene	980		ug/kg	170	15.	2
p-Ethyltoluene	ND		ug/kg	170	33.	2
1,2,4,5-Tetramethylbenzene	2400		ug/kg	170	16.	2
Ethyl ether	ND		ug/kg	170	29.	2
trans-1,4-Dichloro-2-butene	ND		ug/kg	430	120	2

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	98		70-130
Toluene-d8	136	Q	70-130
4-Bromofluorobenzene	254	Q	70-130
Dibromofluoromethane	92		70-130

Project Name: 450 JOHNSON AVENUE
Project Number: 170588001

Lab Number: L1931245
Report Date: 08/01/19

SAMPLE RESULTS

Lab ID: L1931245-02 D
Client ID: SB03_14.0-14.5
Sample Location: BROOKLYN, NY

Date Collected: 07/16/19 09:20
Date Received: 07/16/19
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 07/17/19 07:41
Analyst: MV
Percent Solids: 86%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Methylene chloride	ND		ug/kg	2800	1300	10
1,1-Dichloroethane	ND		ug/kg	550	80.	10
Chloroform	ND		ug/kg	830	78.	10
Carbon tetrachloride	ND		ug/kg	550	130	10
1,2-Dichloropropane	ND		ug/kg	550	69.	10
Dibromochloromethane	ND		ug/kg	550	78.	10
1,1,2-Trichloroethane	ND		ug/kg	550	150	10
Tetrachloroethene	ND		ug/kg	280	110	10
Chlorobenzene	ND		ug/kg	280	70.	10
Trichlorofluoromethane	ND		ug/kg	2200	380	10
1,2-Dichloroethane	ND		ug/kg	550	140	10
1,1,1-Trichloroethane	ND		ug/kg	280	92.	10
Bromodichloromethane	ND		ug/kg	280	60.	10
trans-1,3-Dichloropropene	ND		ug/kg	550	150	10
cis-1,3-Dichloropropene	ND		ug/kg	280	88.	10
1,3-Dichloropropene, Total	ND		ug/kg	280	88.	10
1,1-Dichloropropene	ND		ug/kg	280	88.	10
Bromoform	ND		ug/kg	2200	140	10
1,1,2,2-Tetrachloroethane	ND		ug/kg	280	92.	10
Benzene	ND		ug/kg	280	92.	10
Toluene	ND		ug/kg	550	300	10
Ethylbenzene	ND		ug/kg	550	78.	10
Chloromethane	ND		ug/kg	2200	520	10
Bromomethane	ND		ug/kg	1100	320	10
Vinyl chloride	ND		ug/kg	550	180	10
Chloroethane	ND		ug/kg	1100	250	10
1,1-Dichloroethene	ND		ug/kg	550	130	10
trans-1,2-Dichloroethene	ND		ug/kg	830	76.	10

Project Name: 450 JOHNSON AVENUE**Lab Number:** L1931245**Project Number:** 170588001**Report Date:** 08/01/19**SAMPLE RESULTS**

Lab ID: L1931245-02 D

Date Collected: 07/16/19 09:20

Client ID: SB03_14.0-14.5

Date Received: 07/16/19

Sample Location: BROOKLYN, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Trichloroethene	ND		ug/kg	280	76.	10
1,2-Dichlorobenzene	ND		ug/kg	1100	80.	10
1,3-Dichlorobenzene	ND		ug/kg	1100	82.	10
1,4-Dichlorobenzene	ND		ug/kg	1100	95.	10
Methyl tert butyl ether	ND		ug/kg	1100	110	10
p/m-Xylene	ND		ug/kg	1100	310	10
o-Xylene	ND		ug/kg	550	160	10
Xylenes, Total	ND		ug/kg	550	160	10
cis-1,2-Dichloroethene	ND		ug/kg	550	97.	10
1,2-Dichloroethene, Total	ND		ug/kg	550	76.	10
Dibromomethane	ND		ug/kg	1100	130	10
Styrene	ND		ug/kg	550	110	10
Dichlorodifluoromethane	ND		ug/kg	5500	510	10
Acetone	ND		ug/kg	5500	2700	10
Carbon disulfide	ND		ug/kg	5500	2500	10
2-Butanone	ND		ug/kg	5500	1200	10
Vinyl acetate	ND		ug/kg	5500	1200	10
4-Methyl-2-pentanone	ND		ug/kg	5500	710	10
1,2,3-Trichloropropane	ND		ug/kg	1100	70.	10
2-Hexanone	ND		ug/kg	5500	650	10
Bromochloromethane	ND		ug/kg	1100	110	10
2,2-Dichloropropane	ND		ug/kg	1100	110	10
1,2-Dibromoethane	ND		ug/kg	550	150	10
1,3-Dichloropropane	ND		ug/kg	1100	92.	10
1,1,1,2-Tetrachloroethane	ND		ug/kg	280	73.	10
Bromobenzene	ND		ug/kg	1100	80.	10
n-Butylbenzene	1000		ug/kg	550	92.	10
sec-Butylbenzene	1600		ug/kg	550	81.	10
tert-Butylbenzene	260	J	ug/kg	1100	65.	10
o-Chlorotoluene	ND		ug/kg	1100	100	10
p-Chlorotoluene	ND		ug/kg	1100	60.	10
1,2-Dibromo-3-chloropropane	ND		ug/kg	1700	550	10
Hexachlorobutadiene	ND		ug/kg	2200	94.	10
Isopropylbenzene	270	J	ug/kg	550	60.	10
p-Isopropyltoluene	ND		ug/kg	550	60.	10
Naphthalene	ND		ug/kg	2200	360	10
Acrylonitrile	ND		ug/kg	2200	640	10

Project Name: 450 JOHNSON AVENUE
Project Number: 170588001

Lab Number: L1931245
Report Date: 08/01/19

SAMPLE RESULTS

Lab ID: L1931245-02 D
Client ID: SB03_14.0-14.5
Sample Location: BROOKLYN, NY

Date Collected: 07/16/19 09:20
Date Received: 07/16/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
n-Propylbenzene	310	J	ug/kg	550	95.	10
1,2,3-Trichlorobenzene	ND		ug/kg	1100	180	10
1,2,4-Trichlorobenzene	ND		ug/kg	1100	150	10
1,3,5-Trimethylbenzene	ND		ug/kg	1100	110	10
1,2,4-Trimethylbenzene	ND		ug/kg	1100	180	10
1,4-Dioxane	ND		ug/kg	44000	19000	10
p-Diethylbenzene	1200		ug/kg	1100	98.	10
p-Ethyltoluene	ND		ug/kg	1100	210	10
1,2,4,5-Tetramethylbenzene	2900		ug/kg	1100	100	10
Ethyl ether	ND		ug/kg	1100	190	10
trans-1,4-Dichloro-2-butene	ND		ug/kg	2800	790	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	98		70-130
Toluene-d8	112		70-130
4-Bromofluorobenzene	133	Q	70-130
Dibromofluoromethane	92		70-130

Project Name: 450 JOHNSON AVENUE
Project Number: 170588001

Lab Number: L1931245
Report Date: 08/01/19

SAMPLE RESULTS

Lab ID: L1931245-03 D
Client ID: SB04_11.0-11.5
Sample Location: BROOKLYN, NY

Date Collected: 07/16/19 11:45
Date Received: 07/16/19
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 07/17/19 08:07
Analyst: MV
Percent Solids: 86%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Methylene chloride	ND		ug/kg	510	230	2
1,1-Dichloroethane	ND		ug/kg	100	15.	2
Chloroform	ND		ug/kg	150	14.	2
Carbon tetrachloride	ND		ug/kg	100	23.	2
1,2-Dichloropropane	ND		ug/kg	100	13.	2
Dibromochloromethane	ND		ug/kg	100	14.	2
1,1,2-Trichloroethane	ND		ug/kg	100	27.	2
Tetrachloroethene	ND		ug/kg	51	20.	2
Chlorobenzene	ND		ug/kg	51	13.	2
Trichlorofluoromethane	ND		ug/kg	410	71.	2
1,2-Dichloroethane	ND		ug/kg	100	26.	2
1,1,1-Trichloroethane	ND		ug/kg	51	17.	2
Bromodichloromethane	ND		ug/kg	51	11.	2
trans-1,3-Dichloropropene	ND		ug/kg	100	28.	2
cis-1,3-Dichloropropene	ND		ug/kg	51	16.	2
1,3-Dichloropropene, Total	ND		ug/kg	51	16.	2
1,1-Dichloropropene	ND		ug/kg	51	16.	2
Bromoform	ND		ug/kg	410	25.	2
1,1,2,2-Tetrachloroethane	ND		ug/kg	51	17.	2
Benzene	ND		ug/kg	51	17.	2
Toluene	ND		ug/kg	100	55.	2
Ethylbenzene	17	J	ug/kg	100	14.	2
Chloromethane	ND		ug/kg	410	95.	2
Bromomethane	ND		ug/kg	200	59.	2
Vinyl chloride	ND		ug/kg	100	34.	2
Chloroethane	ND		ug/kg	200	46.	2
1,1-Dichloroethene	ND		ug/kg	100	24.	2
trans-1,2-Dichloroethene	ND		ug/kg	150	14.	2

Project Name: 450 JOHNSON AVENUE**Lab Number:** L1931245**Project Number:** 170588001**Report Date:** 08/01/19**SAMPLE RESULTS**

Lab ID: L1931245-03 D

Date Collected: 07/16/19 11:45

Client ID: SB04_11.0-11.5

Date Received: 07/16/19

Sample Location: BROOKLYN, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Trichloroethene	ND		ug/kg	51	14.	2
1,2-Dichlorobenzene	ND		ug/kg	200	15.	2
1,3-Dichlorobenzene	ND		ug/kg	200	15.	2
1,4-Dichlorobenzene	ND		ug/kg	200	17.	2
Methyl tert butyl ether	ND		ug/kg	200	20.	2
p/m-Xylene	ND		ug/kg	200	57.	2
o-Xylene	44	J	ug/kg	100	30.	2
Xylenes, Total	44	J	ug/kg	100	30.	2
cis-1,2-Dichloroethene	ND		ug/kg	100	18.	2
1,2-Dichloroethene, Total	ND		ug/kg	100	14.	2
Dibromomethane	ND		ug/kg	200	24.	2
Styrene	ND		ug/kg	100	20.	2
Dichlorodifluoromethane	ND		ug/kg	1000	93.	2
Acetone	ND		ug/kg	1000	490	2
Carbon disulfide	ND		ug/kg	1000	460	2
2-Butanone	ND		ug/kg	1000	230	2
Vinyl acetate	ND		ug/kg	1000	220	2
4-Methyl-2-pentanone	ND		ug/kg	1000	130	2
1,2,3-Trichloropropane	ND		ug/kg	200	13.	2
2-Hexanone	ND		ug/kg	1000	120	2
Bromochloromethane	ND		ug/kg	200	21.	2
2,2-Dichloropropane	ND		ug/kg	200	20.	2
1,2-Dibromoethane	ND		ug/kg	100	28.	2
1,3-Dichloropropane	ND		ug/kg	200	17.	2
1,1,1,2-Tetrachloroethane	ND		ug/kg	51	13.	2
Bromobenzene	ND		ug/kg	200	15.	2
n-Butylbenzene	5200		ug/kg	100	17.	2
sec-Butylbenzene	4700		ug/kg	100	15.	2
tert-Butylbenzene	210		ug/kg	200	12.	2
o-Chlorotoluene	ND		ug/kg	200	19.	2
p-Chlorotoluene	ND		ug/kg	200	11.	2
1,2-Dibromo-3-chloropropane	ND		ug/kg	300	100	2
Hexachlorobutadiene	ND		ug/kg	410	17.	2
Isopropylbenzene	3200		ug/kg	100	11.	2
p-Isopropyltoluene	ND		ug/kg	100	11.	2
Naphthalene	720		ug/kg	410	66.	2
Acrylonitrile	ND		ug/kg	410	120	2

Project Name: 450 JOHNSON AVENUE
Project Number: 170588001

Lab Number: L1931245
Report Date: 08/01/19

SAMPLE RESULTS

Lab ID: L1931245-03 D
Client ID: SB04_11.0-11.5
Sample Location: BROOKLYN, NY

Date Collected: 07/16/19 11:45
Date Received: 07/16/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
n-Propylbenzene	6700		ug/kg	100	17.	2
1,2,3-Trichlorobenzene	ND		ug/kg	200	33.	2
1,2,4-Trichlorobenzene	ND		ug/kg	200	28.	2
1,3,5-Trimethylbenzene	ND		ug/kg	200	20.	2
1,2,4-Trimethylbenzene	ND		ug/kg	200	34.	2
1,4-Dioxane	ND		ug/kg	8200	3600	2
p-Diethylbenzene	3000		ug/kg	200	18.	2
p-Ethyltoluene	ND		ug/kg	200	39.	2
1,2,4,5-Tetramethylbenzene	11000		ug/kg	200	19.	2
Ethyl ether	ND		ug/kg	200	35.	2
trans-1,4-Dichloro-2-butene	ND		ug/kg	510	140	2

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	98		70-130
Toluene-d8	112		70-130
4-Bromofluorobenzene	129		70-130
Dibromofluoromethane	91		70-130

Project Name: 450 JOHNSON AVENUE
Project Number: 170588001

Lab Number: L1931245
Report Date: 08/01/19

SAMPLE RESULTS

Lab ID: L1931245-04
Client ID: SB13_8.0-8.5
Sample Location: BROOKLYN, NY

Date Collected: 07/16/19 13:52
Date Received: 07/16/19
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 07/17/19 08:32
Analyst: MV
Percent Solids: 67%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	7.2	3.3	1
1,1-Dichloroethane	ND		ug/kg	1.4	0.21	1
Chloroform	ND		ug/kg	2.1	0.20	1
Carbon tetrachloride	ND		ug/kg	1.4	0.33	1
1,2-Dichloropropane	ND		ug/kg	1.4	0.18	1
Dibromochloromethane	ND		ug/kg	1.4	0.20	1
1,1,2-Trichloroethane	ND		ug/kg	1.4	0.38	1
Tetrachloroethene	ND		ug/kg	0.72	0.28	1
Chlorobenzene	ND		ug/kg	0.72	0.18	1
Trichlorofluoromethane	ND		ug/kg	5.7	0.99	1
1,2-Dichloroethane	ND		ug/kg	1.4	0.37	1
1,1,1-Trichloroethane	ND		ug/kg	0.72	0.24	1
Bromodichloromethane	ND		ug/kg	0.72	0.16	1
trans-1,3-Dichloropropene	ND		ug/kg	1.4	0.39	1
cis-1,3-Dichloropropene	ND		ug/kg	0.72	0.23	1
1,3-Dichloropropene, Total	ND		ug/kg	0.72	0.23	1
1,1-Dichloropropene	ND		ug/kg	0.72	0.23	1
Bromoform	ND		ug/kg	5.7	0.35	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.72	0.24	1
Benzene	ND		ug/kg	0.72	0.24	1
Toluene	ND		ug/kg	1.4	0.78	1
Ethylbenzene	ND		ug/kg	1.4	0.20	1
Chloromethane	ND		ug/kg	5.7	1.3	1
Bromomethane	ND		ug/kg	2.9	0.83	1
Vinyl chloride	ND		ug/kg	1.4	0.48	1
Chloroethane	ND		ug/kg	2.9	0.65	1
1,1-Dichloroethene	ND		ug/kg	1.4	0.34	1
trans-1,2-Dichloroethene	ND		ug/kg	2.1	0.20	1

Project Name: 450 JOHNSON AVENUE
Project Number: 170588001

Lab Number: L1931245
Report Date: 08/01/19

SAMPLE RESULTS

Lab ID: L1931245-04
Client ID: SB13_8.0-8.5
Sample Location: BROOKLYN, NY

Date Collected: 07/16/19 13:52
Date Received: 07/16/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.72	0.20	1
1,2-Dichlorobenzene	ND		ug/kg	2.9	0.21	1
1,3-Dichlorobenzene	ND		ug/kg	2.9	0.21	1
1,4-Dichlorobenzene	ND		ug/kg	2.9	0.24	1
Methyl tert butyl ether	0.35	J	ug/kg	2.9	0.29	1
p/m-Xylene	ND		ug/kg	2.9	0.80	1
o-Xylene	ND		ug/kg	1.4	0.42	1
Xylenes, Total	ND		ug/kg	1.4	0.42	1
cis-1,2-Dichloroethene	ND		ug/kg	1.4	0.25	1
1,2-Dichloroethene, Total	ND		ug/kg	1.4	0.20	1
Dibromomethane	ND		ug/kg	2.9	0.34	1
Styrene	ND		ug/kg	1.4	0.28	1
Dichlorodifluoromethane	ND		ug/kg	14	1.3	1
Acetone	160		ug/kg	14	6.9	1
Carbon disulfide	ND		ug/kg	14	6.5	1
2-Butanone	33		ug/kg	14	3.2	1
Vinyl acetate	ND		ug/kg	14	3.1	1
4-Methyl-2-pentanone	ND		ug/kg	14	1.8	1
1,2,3-Trichloropropane	ND		ug/kg	2.9	0.18	1
2-Hexanone	ND		ug/kg	14	1.7	1
Bromochloromethane	ND		ug/kg	2.9	0.29	1
2,2-Dichloropropane	ND		ug/kg	2.9	0.29	1
1,2-Dibromoethane	ND		ug/kg	1.4	0.40	1
1,3-Dichloropropane	ND		ug/kg	2.9	0.24	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.72	0.19	1
Bromobenzene	ND		ug/kg	2.9	0.21	1
n-Butylbenzene	ND		ug/kg	1.4	0.24	1
sec-Butylbenzene	ND		ug/kg	1.4	0.21	1
tert-Butylbenzene	ND		ug/kg	2.9	0.17	1
o-Chlorotoluene	ND		ug/kg	2.9	0.27	1
p-Chlorotoluene	ND		ug/kg	2.9	0.15	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	4.3	1.4	1
Hexachlorobutadiene	ND		ug/kg	5.7	0.24	1
Isopropylbenzene	ND		ug/kg	1.4	0.16	1
p-Isopropyltoluene	ND		ug/kg	1.4	0.16	1
Naphthalene	ND		ug/kg	5.7	0.93	1
Acrylonitrile	ND		ug/kg	5.7	1.6	1

Project Name: 450 JOHNSON AVENUE
Project Number: 170588001

Lab Number: L1931245
Report Date: 08/01/19

SAMPLE RESULTS

Lab ID: L1931245-04
Client ID: SB13_8.0-8.5
Sample Location: BROOKLYN, NY

Date Collected: 07/16/19 13:52
Date Received: 07/16/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.4	0.24	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.9	0.46	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.9	0.39	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.9	0.28	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.9	0.48	1
1,4-Dioxane	ND		ug/kg	110	50.	1
p-Diethylbenzene	ND		ug/kg	2.9	0.25	1
p-Ethyltoluene	ND		ug/kg	2.9	0.55	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.9	0.27	1
Ethyl ether	ND		ug/kg	2.9	0.49	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	7.2	2.0	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	105		70-130
Toluene-d8	115		70-130
4-Bromofluorobenzene	117		70-130
Dibromofluoromethane	99		70-130

Project Name: 450 JOHNSON AVENUE
Project Number: 170588001

Lab Number: L1931245
Report Date: 08/01/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 07/17/19 05:59
 Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 High - Westborough Lab for sample(s): 01-03 Batch: WG1260933-5					
Methylene chloride	ND		ug/kg	250	110
1,1-Dichloroethane	ND		ug/kg	50	7.2
Chloroform	ND		ug/kg	75	7.0
Carbon tetrachloride	ND		ug/kg	50	12.
1,2-Dichloropropane	ND		ug/kg	50	6.2
Dibromochloromethane	ND		ug/kg	50	7.0
1,1,2-Trichloroethane	ND		ug/kg	50	13.
Tetrachloroethene	ND		ug/kg	25	9.8
Chlorobenzene	ND		ug/kg	25	6.4
Trichlorofluoromethane	ND		ug/kg	200	35.
1,2-Dichloroethane	ND		ug/kg	50	13.
1,1,1-Trichloroethane	ND		ug/kg	25	8.4
Bromodichloromethane	ND		ug/kg	25	5.4
trans-1,3-Dichloropropene	ND		ug/kg	50	14.
cis-1,3-Dichloropropene	ND		ug/kg	25	7.9
1,3-Dichloropropene, Total	ND		ug/kg	25	7.9
1,1-Dichloropropene	ND		ug/kg	25	8.0
Bromoform	ND		ug/kg	200	12.
1,1,2,2-Tetrachloroethane	ND		ug/kg	25	8.3
Benzene	ND		ug/kg	25	8.3
Toluene	ND		ug/kg	50	27.
Ethylbenzene	ND		ug/kg	50	7.0
Chloromethane	ND		ug/kg	200	47.
Bromomethane	ND		ug/kg	100	29.
Vinyl chloride	ND		ug/kg	50	17.
Chloroethane	ND		ug/kg	100	23.
1,1-Dichloroethene	ND		ug/kg	50	12.
trans-1,2-Dichloroethene	ND		ug/kg	75	6.8
Trichloroethene	ND		ug/kg	25	6.8

Project Name: 450 JOHNSON AVENUE

Lab Number: L1931245

Project Number: 170588001

Report Date: 08/01/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C

Analytical Date: 07/17/19 05:59

Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 High - Westborough Lab for sample(s): 01-03 Batch: WG1260933-5					
1,2-Dichlorobenzene	ND		ug/kg	100	7.2
1,3-Dichlorobenzene	ND		ug/kg	100	7.4
1,4-Dichlorobenzene	ND		ug/kg	100	8.6
Methyl tert butyl ether	ND		ug/kg	100	10.
p/m-Xylene	ND		ug/kg	100	28.
o-Xylene	ND		ug/kg	50	14.
Xylenes, Total	ND		ug/kg	50	14.
cis-1,2-Dichloroethene	ND		ug/kg	50	8.8
1,2-Dichloroethene, Total	ND		ug/kg	50	6.8
Dibromomethane	ND		ug/kg	100	12.
Styrene	ND		ug/kg	50	9.8
Dichlorodifluoromethane	ND		ug/kg	500	46.
Acetone	ND		ug/kg	500	240
Carbon disulfide	ND		ug/kg	500	230
2-Butanone	ND		ug/kg	500	110
Vinyl acetate	ND		ug/kg	500	110
4-Methyl-2-pentanone	ND		ug/kg	500	64.
1,2,3-Trichloropropane	ND		ug/kg	100	6.4
2-Hexanone	ND		ug/kg	500	59.
Bromochloromethane	ND		ug/kg	100	10.
2,2-Dichloropropane	ND		ug/kg	100	10.
1,2-Dibromoethane	ND		ug/kg	50	14.
1,3-Dichloropropane	ND		ug/kg	100	8.4
1,1,1,2-Tetrachloroethane	ND		ug/kg	25	6.6
Bromobenzene	ND		ug/kg	100	7.2
n-Butylbenzene	ND		ug/kg	50	8.4
sec-Butylbenzene	ND		ug/kg	50	7.3
tert-Butylbenzene	ND		ug/kg	100	5.9
o-Chlorotoluene	ND		ug/kg	100	9.6

Project Name: 450 JOHNSON AVENUE
Project Number: 170588001

Lab Number: L1931245
Report Date: 08/01/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 07/17/19 05:59
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 High - Westborough Lab for sample(s):				01-03	Batch: WG1260933-5
p-Chlorotoluene	ND		ug/kg	100	5.4
1,2-Dibromo-3-chloropropane	ND		ug/kg	150	50.
Hexachlorobutadiene	ND		ug/kg	200	8.4
Isopropylbenzene	ND		ug/kg	50	5.4
p-Isopropyltoluene	ND		ug/kg	50	5.4
Naphthalene	ND		ug/kg	200	32.
Acrylonitrile	ND		ug/kg	200	58.
n-Propylbenzene	ND		ug/kg	50	8.6
1,2,3-Trichlorobenzene	ND		ug/kg	100	16.
1,2,4-Trichlorobenzene	ND		ug/kg	100	14.
1,3,5-Trimethylbenzene	ND		ug/kg	100	9.6
1,2,4-Trimethylbenzene	ND		ug/kg	100	17.
1,4-Dioxane	ND		ug/kg	4000	1800
p-Diethylbenzene	ND		ug/kg	100	8.8
p-Ethyltoluene	ND		ug/kg	100	19.
1,2,4,5-Tetramethylbenzene	ND		ug/kg	100	9.6
Ethyl ether	ND		ug/kg	100	17.
trans-1,4-Dichloro-2-butene	ND		ug/kg	250	71.

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	106		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	95		70-130

Project Name: 450 JOHNSON AVENUE

Lab Number: L1931245

Project Number: 170588001

Report Date: 08/01/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 07/17/19 05:59
 Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 04 Batch: WG1260940-5					
Methylene chloride	ND		ug/kg	5.0	2.3
1,1-Dichloroethane	ND		ug/kg	1.0	0.14
Chloroform	ND		ug/kg	1.5	0.14
Carbon tetrachloride	ND		ug/kg	1.0	0.23
1,2-Dichloropropane	ND		ug/kg	1.0	0.12
Dibromochloromethane	ND		ug/kg	1.0	0.14
1,1,2-Trichloroethane	ND		ug/kg	1.0	0.27
Tetrachloroethene	ND		ug/kg	0.50	0.20
Chlorobenzene	ND		ug/kg	0.50	0.13
Trichlorofluoromethane	ND		ug/kg	4.0	0.70
1,2-Dichloroethane	ND		ug/kg	1.0	0.26
1,1,1-Trichloroethane	ND		ug/kg	0.50	0.17
Bromodichloromethane	ND		ug/kg	0.50	0.11
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.27
cis-1,3-Dichloropropene	ND		ug/kg	0.50	0.16
1,3-Dichloropropene, Total	ND		ug/kg	0.50	0.16
1,1-Dichloropropene	ND		ug/kg	0.50	0.16
Bromoform	ND		ug/kg	4.0	0.25
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.50	0.17
Benzene	ND		ug/kg	0.50	0.17
Toluene	ND		ug/kg	1.0	0.54
Ethylbenzene	ND		ug/kg	1.0	0.14
Chloromethane	ND		ug/kg	4.0	0.93
Bromomethane	ND		ug/kg	2.0	0.58
Vinyl chloride	ND		ug/kg	1.0	0.34
Chloroethane	ND		ug/kg	2.0	0.45
1,1-Dichloroethene	ND		ug/kg	1.0	0.24
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.14
Trichloroethene	ND		ug/kg	0.50	0.14

Project Name: 450 JOHNSON AVENUE

Lab Number: L1931245

Project Number: 170588001

Report Date: 08/01/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 07/17/19 05:59
 Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 04 Batch: WG1260940-5					
1,2-Dichlorobenzene	ND		ug/kg	2.0	0.14
1,3-Dichlorobenzene	ND		ug/kg	2.0	0.15
1,4-Dichlorobenzene	ND		ug/kg	2.0	0.17
Methyl tert butyl ether	ND		ug/kg	2.0	0.20
p/m-Xylene	ND		ug/kg	2.0	0.56
o-Xylene	ND		ug/kg	1.0	0.29
Xylenes, Total	ND		ug/kg	1.0	0.29
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.18
1,2-Dichloroethene, Total	ND		ug/kg	1.0	0.14
Dibromomethane	ND		ug/kg	2.0	0.24
Styrene	ND		ug/kg	1.0	0.20
Dichlorodifluoromethane	ND		ug/kg	10	0.92
Acetone	ND		ug/kg	10	4.8
Carbon disulfide	ND		ug/kg	10	4.6
2-Butanone	ND		ug/kg	10	2.2
Vinyl acetate	ND		ug/kg	10	2.2
4-Methyl-2-pentanone	ND		ug/kg	10	1.3
1,2,3-Trichloropropane	ND		ug/kg	2.0	0.13
2-Hexanone	ND		ug/kg	10	1.2
Bromochloromethane	ND		ug/kg	2.0	0.20
2,2-Dichloropropane	ND		ug/kg	2.0	0.20
1,2-Dibromoethane	ND		ug/kg	1.0	0.28
1,3-Dichloropropane	ND		ug/kg	2.0	0.17
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.50	0.13
Bromobenzene	ND		ug/kg	2.0	0.14
n-Butylbenzene	ND		ug/kg	1.0	0.17
sec-Butylbenzene	ND		ug/kg	1.0	0.15
tert-Butylbenzene	ND		ug/kg	2.0	0.12
o-Chlorotoluene	ND		ug/kg	2.0	0.19

Project Name: 450 JOHNSON AVENUE
Project Number: 170588001

Lab Number: L1931245
Report Date: 08/01/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 07/17/19 05:59
 Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 04 Batch: WG1260940-5					
p-Chlorotoluene	ND		ug/kg	2.0	0.11
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.0	1.0
Hexachlorobutadiene	ND		ug/kg	4.0	0.17
Isopropylbenzene	ND		ug/kg	1.0	0.11
p-Isopropyltoluene	ND		ug/kg	1.0	0.11
Naphthalene	ND		ug/kg	4.0	0.65
Acrylonitrile	ND		ug/kg	4.0	1.2
n-Propylbenzene	ND		ug/kg	1.0	0.17
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	0.32
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	0.27
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	0.19
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	0.33
1,4-Dioxane	ND		ug/kg	80	35.
p-Diethylbenzene	ND		ug/kg	2.0	0.18
p-Ethyltoluene	ND		ug/kg	2.0	0.38
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.0	0.19
Ethyl ether	ND		ug/kg	2.0	0.34
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.0	1.4

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	106		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	95		70-130

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 450 JOHNSON AVENUE

Project Number: 170588001

Lab Number: L1931245

Report Date: 08/01/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 01-03 Batch: WG1260933-3 WG1260933-4								
Methylene chloride	76		75		70-130	1		30
1,1-Dichloroethane	90		88		70-130	2		30
Chloroform	86		84		70-130	2		30
Carbon tetrachloride	86		85		70-130	1		30
1,2-Dichloropropane	89		89		70-130	0		30
Dibromochloromethane	95		94		70-130	1		30
1,1,2-Trichloroethane	94		93		70-130	1		30
Tetrachloroethene	96		92		70-130	4		30
Chlorobenzene	94		93		70-130	1		30
Trichlorofluoromethane	67	Q	63	Q	70-139	6		30
1,2-Dichloroethane	88		88		70-130	0		30
1,1,1-Trichloroethane	89		87		70-130	2		30
Bromodichloromethane	86		87		70-130	1		30
trans-1,3-Dichloropropene	97		96		70-130	1		30
cis-1,3-Dichloropropene	88		87		70-130	1		30
1,1-Dichloropropene	89		87		70-130	2		30
Bromoform	88		91		70-130	3		30
1,1,2,2-Tetrachloroethane	99		101		70-130	2		30
Benzene	86		85		70-130	1		30
Toluene	94		91		70-130	3		30
Ethylbenzene	95		92		70-130	3		30
Chloromethane	105		102		52-130	3		30
Bromomethane	59		56	Q	57-147	5		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: 450 JOHNSON AVENUE

Project Number: 170588001

Lab Number: L1931245

Report Date: 08/01/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 01-03 Batch: WG1260933-3 WG1260933-4								
Vinyl chloride	76		72		67-130	5		30
Chloroethane	59		56		50-151	5		30
1,1-Dichloroethene	85		82		65-135	4		30
trans-1,2-Dichloroethene	86		83		70-130	4		30
Trichloroethene	87		86		70-130	1		30
1,2-Dichlorobenzene	95		95		70-130	0		30
1,3-Dichlorobenzene	96		97		70-130	1		30
1,4-Dichlorobenzene	96		96		70-130	0		30
Methyl tert butyl ether	84		85		66-130	1		30
p/m-Xylene	96		94		70-130	2		30
o-Xylene	94		92		70-130	2		30
cis-1,2-Dichloroethene	84		82		70-130	2		30
Dibromomethane	84		85		70-130	1		30
Styrene	93		91		70-130	2		30
Dichlorodifluoromethane	81		78		30-146	4		30
Acetone	124		127		54-140	2		30
Carbon disulfide	82		79		59-130	4		30
2-Butanone	115		112		70-130	3		30
Vinyl acetate	112		112		70-130	0		30
4-Methyl-2-pentanone	103		104		70-130	1		30
1,2,3-Trichloropropane	94		98		68-130	4		30
2-Hexanone	121		122		70-130	1		30
Bromochloromethane	84		84		70-130	0		30

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 450 JOHNSON AVENUE

Project Number: 170588001

Lab Number: L1931245

Report Date: 08/01/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 01-03 Batch: WG1260933-3 WG1260933-4								
2,2-Dichloropropane	87		84		70-130	4		30
1,2-Dibromoethane	96		96		70-130	0		30
1,3-Dichloropropane	95		94		69-130	1		30
1,1,1,2-Tetrachloroethane	95		93		70-130	2		30
Bromobenzene	94		94		70-130	0		30
n-Butylbenzene	102		101		70-130	1		30
sec-Butylbenzene	100		99		70-130	1		30
tert-Butylbenzene	97		97		70-130	0		30
o-Chlorotoluene	96		96		70-130	0		30
p-Chlorotoluene	97		97		70-130	0		30
1,2-Dibromo-3-chloropropane	89		96		68-130	8		30
Hexachlorobutadiene	93		92		67-130	1		30
Isopropylbenzene	99		97		70-130	2		30
p-Isopropyltoluene	100		99		70-130	1		30
Naphthalene	97		101		70-130	4		30
Acrylonitrile	106		109		70-130	3		30
n-Propylbenzene	99		100		70-130	1		30
1,2,3-Trichlorobenzene	97		100		70-130	3		30
1,2,4-Trichlorobenzene	100		101		70-130	1		30
1,3,5-Trimethylbenzene	98		97		70-130	1		30
1,2,4-Trimethylbenzene	97		96		70-130	1		30
1,4-Dioxane	92		95		65-136	3		30
p-Diethylbenzene	99		98		70-130	1		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: 450 JOHNSON AVENUE

Project Number: 170588001

Lab Number: L1931245

Report Date: 08/01/19

Parameter	LCS %Recovery	Qual	LCS %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 01-03 Batch: WG1260933-3 WG1260933-4								
p-Ethyltoluene	100		100		70-130	0		30
1,2,4,5-Tetramethylbenzene	97		98		70-130	1		30
Ethyl ether	83		82		67-130	1		30
trans-1,4-Dichloro-2-butene	116		116		70-130	0		30

Surrogate	LCS %Recovery	Qual	LCS %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	100		100		70-130
Toluene-d8	106		106		70-130
4-Bromofluorobenzene	100		101		70-130
Dibromofluoromethane	95		97		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: 450 JOHNSON AVENUE

Project Number: 170588001

Lab Number: L1931245

Report Date: 08/01/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 04 Batch: WG1260940-3 WG1260940-4								
Methylene chloride	76		75		70-130	1		30
1,1-Dichloroethane	90		88		70-130	2		30
Chloroform	86		84		70-130	2		30
Carbon tetrachloride	86		85		70-130	1		30
1,2-Dichloropropane	89		89		70-130	0		30
Dibromochloromethane	95		94		70-130	1		30
1,1,2-Trichloroethane	94		93		70-130	1		30
Tetrachloroethene	96		92		70-130	4		30
Chlorobenzene	94		93		70-130	1		30
Trichlorofluoromethane	67	Q	63	Q	70-139	6		30
1,2-Dichloroethane	88		88		70-130	0		30
1,1,1-Trichloroethane	89		87		70-130	2		30
Bromodichloromethane	86		87		70-130	1		30
trans-1,3-Dichloropropene	97		96		70-130	1		30
cis-1,3-Dichloropropene	88		87		70-130	1		30
1,1-Dichloropropene	89		87		70-130	2		30
Bromoform	88		91		70-130	3		30
1,1,2,2-Tetrachloroethane	99		101		70-130	2		30
Benzene	86		85		70-130	1		30
Toluene	94		91		70-130	3		30
Ethylbenzene	95		92		70-130	3		30
Chloromethane	105		102		52-130	3		30
Bromomethane	59		56	Q	57-147	5		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: 450 JOHNSON AVENUE

Project Number: 170588001

Lab Number: L1931245

Report Date: 08/01/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 04 Batch: WG1260940-3 WG1260940-4								
Vinyl chloride	76		72		67-130	5		30
Chloroethane	59		56		50-151	5		30
1,1-Dichloroethene	85		82		65-135	4		30
trans-1,2-Dichloroethene	86		83		70-130	4		30
Trichloroethene	87		86		70-130	1		30
1,2-Dichlorobenzene	95		95		70-130	0		30
1,3-Dichlorobenzene	96		97		70-130	1		30
1,4-Dichlorobenzene	96		96		70-130	0		30
Methyl tert butyl ether	84		85		66-130	1		30
p/m-Xylene	96		94		70-130	2		30
o-Xylene	94		92		70-130	2		30
cis-1,2-Dichloroethene	84		82		70-130	2		30
Dibromomethane	84		85		70-130	1		30
Styrene	93		91		70-130	2		30
Dichlorodifluoromethane	81		78		30-146	4		30
Acetone	124		127		54-140	2		30
Carbon disulfide	82		79		59-130	4		30
2-Butanone	115		112		70-130	3		30
Vinyl acetate	112		112		70-130	0		30
4-Methyl-2-pentanone	103		104		70-130	1		30
1,2,3-Trichloropropane	94		98		68-130	4		30
2-Hexanone	121		122		70-130	1		30
Bromochloromethane	84		84		70-130	0		30

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 450 JOHNSON AVENUE

Lab Number: L1931245

Project Number: 170588001

Report Date: 08/01/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 04 Batch: WG1260940-3 WG1260940-4								
2,2-Dichloropropane	87		84		70-130	4		30
1,2-Dibromoethane	96		96		70-130	0		30
1,3-Dichloropropane	95		94		69-130	1		30
1,1,1,2-Tetrachloroethane	95		93		70-130	2		30
Bromobenzene	94		94		70-130	0		30
n-Butylbenzene	102		101		70-130	1		30
sec-Butylbenzene	100		99		70-130	1		30
tert-Butylbenzene	97		97		70-130	0		30
o-Chlorotoluene	96		96		70-130	0		30
p-Chlorotoluene	97		97		70-130	0		30
1,2-Dibromo-3-chloropropane	89		96		68-130	8		30
Hexachlorobutadiene	93		92		67-130	1		30
Isopropylbenzene	99		97		70-130	2		30
p-Isopropyltoluene	100		99		70-130	1		30
Naphthalene	97		101		70-130	4		30
Acrylonitrile	106		109		70-130	3		30
n-Propylbenzene	99		100		70-130	1		30
1,2,3-Trichlorobenzene	97		100		70-130	3		30
1,2,4-Trichlorobenzene	100		101		70-130	1		30
1,3,5-Trimethylbenzene	98		97		70-130	1		30
1,2,4-Trimethylbenzene	97		96		70-130	1		30
1,4-Dioxane	92		95		65-136	3		30
p-Diethylbenzene	99		98		70-130	1		30

Lab Control Sample Analysis Batch Quality Control

Project Name: 450 JOHNSON AVENUE

Lab Number: L1931245

Project Number: 170588001

Report Date: 08/01/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 04 Batch: WG1260940-3 WG1260940-4								
p-Ethyltoluene	100		100		70-130	0		30
1,2,4,5-Tetramethylbenzene	97		98		70-130	1		30
Ethyl ether	83		82		67-130	1		30
trans-1,4-Dichloro-2-butene	116		116		70-130	0		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	100		100		70-130
Toluene-d8	106		106		70-130
4-Bromofluorobenzene	100		101		70-130
Dibromofluoromethane	95		97		70-130

SEMIVOLATILES

Project Name: 450 JOHNSON AVENUE
Project Number: 170588001

Lab Number: L1931245
Report Date: 08/01/19

SAMPLE RESULTS

Lab ID: L1931245-01
Client ID: DUP01_071619
Sample Location: BROOKLYN, NY

Date Collected: 07/16/19 00:00
Date Received: 07/16/19
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 07/17/19 20:04
Analyst: CB
Percent Solids: 94%

Extraction Method: EPA 3546
Extraction Date: 07/16/19 23:54

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	120	J	ug/kg	140	18.	1
1,2,4-Trichlorobenzene	ND		ug/kg	170	20.	1
Hexachlorobenzene	ND		ug/kg	100	20.	1
Bis(2-chloroethyl)ether	ND		ug/kg	160	24.	1
2-Chloronaphthalene	ND		ug/kg	170	17.	1
1,2-Dichlorobenzene	ND		ug/kg	170	31.	1
1,3-Dichlorobenzene	ND		ug/kg	170	30.	1
1,4-Dichlorobenzene	ND		ug/kg	170	30.	1
3,3'-Dichlorobenzidine	ND		ug/kg	170	46.	1
2,4-Dinitrotoluene	72	J	ug/kg	170	35.	1
2,6-Dinitrotoluene	ND		ug/kg	170	30.	1
Fluoranthene	78	J	ug/kg	100	20.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	170	19.	1
4-Bromophenyl phenyl ether	ND		ug/kg	170	27.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	210	30.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	190	17.	1
Hexachlorobutadiene	ND		ug/kg	170	26.	1
Hexachlorocyclopentadiene	ND		ug/kg	500	160	1
Hexachloroethane	ND		ug/kg	140	28.	1
Isophorone	ND		ug/kg	160	23.	1
Naphthalene	76	J	ug/kg	170	21.	1
Nitrobenzene	ND		ug/kg	160	26.	1
NDPA/DPA	ND		ug/kg	140	20.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	170	27.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	170	60.	1
Butyl benzyl phthalate	ND		ug/kg	170	44.	1
Di-n-butylphthalate	ND		ug/kg	170	33.	1
Di-n-octylphthalate	ND		ug/kg	170	59.	1

Project Name: 450 JOHNSON AVENUE**Lab Number:** L1931245**Project Number:** 170588001**Report Date:** 08/01/19**SAMPLE RESULTS**

Lab ID: L1931245-01
 Client ID: DUP01_071619
 Sample Location: BROOKLYN, NY

Date Collected: 07/16/19 00:00
 Date Received: 07/16/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	170	16.	1
Dimethyl phthalate	ND		ug/kg	170	37.	1
Benzo(a)anthracene	41	J	ug/kg	100	20.	1
Benzo(a)pyrene	ND		ug/kg	140	43.	1
Benzo(b)fluoranthene	41	J	ug/kg	100	29.	1
Benzo(k)fluoranthene	ND		ug/kg	100	28.	1
Chrysene	45	J	ug/kg	100	18.	1
Acenaphthylene	ND		ug/kg	140	27.	1
Anthracene	63	J	ug/kg	100	34.	1
Benzo(ghi)perylene	21	J	ug/kg	140	20.	1
Fluorene	260		ug/kg	170	17.	1
Phenanthrene	520		ug/kg	100	21.	1
Dibenzo(a,h)anthracene	ND		ug/kg	100	20.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	140	24.	1
Pyrene	150		ug/kg	100	17.	1
Biphenyl	ND		ug/kg	400	40.	1
4-Chloroaniline	ND		ug/kg	170	32.	1
2-Nitroaniline	ND		ug/kg	170	34.	1
3-Nitroaniline	ND		ug/kg	170	33.	1
4-Nitroaniline	ND		ug/kg	170	72.	1
Dibenzofuran	95	J	ug/kg	170	16.	1
2-Methylnaphthalene	ND		ug/kg	210	21.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	170	18.	1
Acetophenone	ND		ug/kg	170	22.	1
2,4,6-Trichlorophenol	ND		ug/kg	100	33.	1
p-Chloro-m-cresol	ND		ug/kg	170	26.	1
2-Chlorophenol	ND		ug/kg	170	21.	1
2,4-Dichlorophenol	ND		ug/kg	160	28.	1
2,4-Dimethylphenol	ND		ug/kg	170	58.	1
2-Nitrophenol	ND		ug/kg	380	66.	1
4-Nitrophenol	ND		ug/kg	240	71.	1
2,4-Dinitrophenol	ND		ug/kg	840	81.	1
4,6-Dinitro-o-cresol	ND		ug/kg	450	84.	1
Pentachlorophenol	ND		ug/kg	140	38.	1
Phenol	ND		ug/kg	170	26.	1
2-Methylphenol	ND		ug/kg	170	27.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	250	27.	1

Project Name: 450 JOHNSON AVENUE
Project Number: 170588001

Lab Number: L1931245
Report Date: 08/01/19

SAMPLE RESULTS

Lab ID: L1931245-01
Client ID: DUP01_071619
Sample Location: BROOKLYN, NY

Date Collected: 07/16/19 00:00
Date Received: 07/16/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	170	33.	1
Benzoic Acid	ND		ug/kg	560	180	1
Benzyl Alcohol	ND		ug/kg	170	53.	1
Carbazole	ND		ug/kg	170	17.	1
1,4-Dioxane	ND		ug/kg	26	8.0	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	60		25-120
Phenol-d6	59		10-120
Nitrobenzene-d5	67		23-120
2-Fluorobiphenyl	55		30-120
2,4,6-Tribromophenol	56		10-136
4-Terphenyl-d14	52		18-120

Project Name: 450 JOHNSON AVENUE
Project Number: 170588001

Lab Number: L1931245
Report Date: 08/01/19

SAMPLE RESULTS

Lab ID: L1931245-02
Client ID: SB03_14.0-14.5
Sample Location: BROOKLYN, NY

Date Collected: 07/16/19 09:20
Date Received: 07/16/19
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 07/17/19 23:25
Analyst: CB
Percent Solids: 86%

Extraction Method: EPA 3546
Extraction Date: 07/16/19 23:55

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	63	J	ug/kg	150	20.	1
1,2,4-Trichlorobenzene	ND		ug/kg	190	22.	1
Hexachlorobenzene	ND		ug/kg	110	21.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	26.	1
2-Chloronaphthalene	ND		ug/kg	190	19.	1
1,2-Dichlorobenzene	ND		ug/kg	190	34.	1
1,3-Dichlorobenzene	ND		ug/kg	190	33.	1
1,4-Dichlorobenzene	ND		ug/kg	190	33.	1
3,3'-Dichlorobenzidine	ND		ug/kg	190	50.	1
2,4-Dinitrotoluene	ND		ug/kg	190	38.	1
2,6-Dinitrotoluene	ND		ug/kg	190	32.	1
Fluoranthene	770		ug/kg	110	22.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	190	20.	1
4-Bromophenyl phenyl ether	ND		ug/kg	190	29.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	230	32.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	19.	1
Hexachlorobutadiene	ND		ug/kg	190	28.	1
Hexachlorocyclopentadiene	ND		ug/kg	540	170	1
Hexachloroethane	ND		ug/kg	150	31.	1
Isophorone	ND		ug/kg	170	25.	1
Naphthalene	150	J	ug/kg	190	23.	1
Nitrobenzene	ND		ug/kg	170	28.	1
NDPA/DPA	ND		ug/kg	150	22.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	190	29.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	190	66.	1
Butyl benzyl phthalate	ND		ug/kg	190	48.	1
Di-n-butylphthalate	ND		ug/kg	190	36.	1
Di-n-octylphthalate	ND		ug/kg	190	64.	1

Project Name: 450 JOHNSON AVENUE**Lab Number:** L1931245**Project Number:** 170588001**Report Date:** 08/01/19**SAMPLE RESULTS**

Lab ID: L1931245-02
 Client ID: SB03_14.0-14.5
 Sample Location: BROOKLYN, NY

Date Collected: 07/16/19 09:20
 Date Received: 07/16/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	190	18.	1
Dimethyl phthalate	ND		ug/kg	190	40.	1
Benzo(a)anthracene	400		ug/kg	110	21.	1
Benzo(a)pyrene	390		ug/kg	150	46.	1
Benzo(b)fluoranthene	490		ug/kg	110	32.	1
Benzo(k)fluoranthene	160		ug/kg	110	30.	1
Chrysene	370		ug/kg	110	20.	1
Acenaphthylene	49	J	ug/kg	150	29.	1
Anthracene	150		ug/kg	110	37.	1
Benzo(ghi)perylene	220		ug/kg	150	22.	1
Fluorene	86	J	ug/kg	190	18.	1
Phenanthrene	540		ug/kg	110	23.	1
Dibenzo(a,h)anthracene	54	J	ug/kg	110	22.	1
Indeno(1,2,3-cd)pyrene	240		ug/kg	150	26.	1
Pyrene	660		ug/kg	110	19.	1
Biphenyl	ND		ug/kg	430	44.	1
4-Chloroaniline	ND		ug/kg	190	34.	1
2-Nitroaniline	ND		ug/kg	190	37.	1
3-Nitroaniline	ND		ug/kg	190	36.	1
4-Nitroaniline	ND		ug/kg	190	78.	1
Dibenzofuran	68	J	ug/kg	190	18.	1
2-Methylnaphthalene	43	J	ug/kg	230	23.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	190	20.	1
Acetophenone	ND		ug/kg	190	24.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	36.	1
p-Chloro-m-cresol	ND		ug/kg	190	28.	1
2-Chlorophenol	ND		ug/kg	190	22.	1
2,4-Dichlorophenol	ND		ug/kg	170	30.	1
2,4-Dimethylphenol	ND		ug/kg	190	63.	1
2-Nitrophenol	ND		ug/kg	410	71.	1
4-Nitrophenol	ND		ug/kg	260	77.	1
2,4-Dinitrophenol	ND		ug/kg	910	88.	1
4,6-Dinitro-o-cresol	ND		ug/kg	490	91.	1
Pentachlorophenol	ND		ug/kg	150	42.	1
Phenol	150	J	ug/kg	190	29.	1
2-Methylphenol	ND		ug/kg	190	29.	1
3-Methylphenol/4-Methylphenol	1100		ug/kg	270	30.	1

Project Name: 450 JOHNSON AVENUE
Project Number: 170588001

Lab Number: L1931245
Report Date: 08/01/19

SAMPLE RESULTS

Lab ID: L1931245-02
Client ID: SB03_14.0-14.5
Sample Location: BROOKLYN, NY

Date Collected: 07/16/19 09:20
Date Received: 07/16/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	190	36.	1
Benzoic Acid	ND		ug/kg	620	190	1
Benzyl Alcohol	ND		ug/kg	190	58.	1
Carbazole	59	J	ug/kg	190	18.	1
1,4-Dioxane	ND		ug/kg	28	8.7	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	67		25-120
Phenol-d6	65		10-120
Nitrobenzene-d5	65		23-120
2-Fluorobiphenyl	62		30-120
2,4,6-Tribromophenol	72		10-136
4-Terphenyl-d14	50		18-120

Project Name: 450 JOHNSON AVENUE
Project Number: 170588001

Lab Number: L1931245
Report Date: 08/01/19

SAMPLE RESULTS

Lab ID: L1931245-03
Client ID: SB04_11.0-11.5
Sample Location: BROOKLYN, NY

Date Collected: 07/16/19 11:45
Date Received: 07/16/19
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 07/17/19 23:00
Analyst: CB
Percent Solids: 86%

Extraction Method: EPA 3546
Extraction Date: 07/16/19 23:55

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	670		ug/kg	150	20.	1
1,2,4-Trichlorobenzene	ND		ug/kg	190	22.	1
Hexachlorobenzene	ND		ug/kg	110	21.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	26.	1
2-Chloronaphthalene	ND		ug/kg	190	19.	1
1,2-Dichlorobenzene	ND		ug/kg	190	34.	1
1,3-Dichlorobenzene	ND		ug/kg	190	32.	1
1,4-Dichlorobenzene	ND		ug/kg	190	33.	1
3,3'-Dichlorobenzidine	ND		ug/kg	190	50.	1
2,4-Dinitrotoluene	ND		ug/kg	190	38.	1
2,6-Dinitrotoluene	ND		ug/kg	190	32.	1
Fluoranthene	ND		ug/kg	110	22.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	190	20.	1
4-Bromophenyl phenyl ether	ND		ug/kg	190	29.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	230	32.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	19.	1
Hexachlorobutadiene	ND		ug/kg	190	28.	1
Hexachlorocyclopentadiene	ND		ug/kg	540	170	1
Hexachloroethane	ND		ug/kg	150	30.	1
Isophorone	ND		ug/kg	170	24.	1
Naphthalene	340		ug/kg	190	23.	1
Nitrobenzene	ND		ug/kg	170	28.	1
NDPA/DPA	ND		ug/kg	150	21.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	190	29.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	190	65.	1
Butyl benzyl phthalate	ND		ug/kg	190	48.	1
Di-n-butylphthalate	ND		ug/kg	190	36.	1
Di-n-octylphthalate	ND		ug/kg	190	64.	1

Project Name: 450 JOHNSON AVENUE**Lab Number:** L1931245**Project Number:** 170588001**Report Date:** 08/01/19**SAMPLE RESULTS**

Lab ID: L1931245-03
 Client ID: SB04_11.0-11.5
 Sample Location: BROOKLYN, NY

Date Collected: 07/16/19 11:45
 Date Received: 07/16/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	190	17.	1
Dimethyl phthalate	ND		ug/kg	190	40.	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	37	J	ug/kg	110	20.	1
Acenaphthylene	ND		ug/kg	150	29.	1
Anthracene	290		ug/kg	110	37.	1
Benzo(ghi)perylene	ND		ug/kg	150	22.	1
Fluorene	1400		ug/kg	190	18.	1
Phenanthrene	2800		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	360		ug/kg	110	19.	1
Biphenyl	ND		ug/kg	430	44.	1
4-Chloroaniline	ND		ug/kg	190	34.	1
2-Nitroaniline	ND		ug/kg	190	36.	1
3-Nitroaniline	ND		ug/kg	190	36.	1
4-Nitroaniline	ND		ug/kg	190	78.	1
Dibenzofuran	530		ug/kg	190	18.	1
2-Methylnaphthalene	ND		ug/kg	230	23.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	190	20.	1
Acetophenone	ND		ug/kg	190	23.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	36.	1
p-Chloro-m-cresol	ND		ug/kg	190	28.	1
2-Chlorophenol	ND		ug/kg	190	22.	1
2,4-Dichlorophenol	ND		ug/kg	170	30.	1
2,4-Dimethylphenol	ND		ug/kg	190	62.	1
2-Nitrophenol	ND		ug/kg	410	71.	1
4-Nitrophenol	ND		ug/kg	260	77.	1
2,4-Dinitrophenol	ND		ug/kg	900	88.	1
4,6-Dinitro-o-cresol	ND		ug/kg	490	90.	1
Pentachlorophenol	ND		ug/kg	150	42.	1
Phenol	ND		ug/kg	190	28.	1
2-Methylphenol	ND		ug/kg	190	29.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	270	30.	1

Project Name: 450 JOHNSON AVENUE
Project Number: 170588001

Lab Number: L1931245
Report Date: 08/01/19

SAMPLE RESULTS

Lab ID: L1931245-03
Client ID: SB04_11.0-11.5
Sample Location: BROOKLYN, NY

Date Collected: 07/16/19 11:45
Date Received: 07/16/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	190	36.	1
Benzoic Acid	ND		ug/kg	610	190	1
Benzyl Alcohol	ND		ug/kg	190	58.	1
Carbazole	ND		ug/kg	190	18.	1
1,4-Dioxane	ND		ug/kg	28	8.7	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	67		25-120
Phenol-d6	67		10-120
Nitrobenzene-d5	96		23-120
2-Fluorobiphenyl	64		30-120
2,4,6-Tribromophenol	58		10-136
4-Terphenyl-d14	56		18-120

Project Name: 450 JOHNSON AVENUE
Project Number: 170588001

Lab Number: L1931245
Report Date: 08/01/19

SAMPLE RESULTS

Lab ID: L1931245-04
Client ID: SB13_8.0-8.5
Sample Location: BROOKLYN, NY

Date Collected: 07/16/19 13:52
Date Received: 07/16/19
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 07/17/19 22:35
Analyst: CB
Percent Solids: 67%

Extraction Method: EPA 3546
Extraction Date: 07/16/19 23:55

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	200	25.	1
1,2,4-Trichlorobenzene	ND		ug/kg	240	28.	1
Hexachlorobenzene	ND		ug/kg	150	27.	1
Bis(2-chloroethyl)ether	ND		ug/kg	220	33.	1
2-Chloronaphthalene	ND		ug/kg	240	24.	1
1,2-Dichlorobenzene	ND		ug/kg	240	44.	1
1,3-Dichlorobenzene	ND		ug/kg	240	42.	1
1,4-Dichlorobenzene	ND		ug/kg	240	43.	1
3,3'-Dichlorobenzidine	ND		ug/kg	240	65.	1
2,4-Dinitrotoluene	ND		ug/kg	240	49.	1
2,6-Dinitrotoluene	ND		ug/kg	240	42.	1
Fluoranthene	49	J	ug/kg	150	28.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	240	26.	1
4-Bromophenyl phenyl ether	ND		ug/kg	240	37.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	290	42.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	260	24.	1
Hexachlorobutadiene	ND		ug/kg	240	36.	1
Hexachlorocyclopentadiene	ND		ug/kg	700	220	1
Hexachloroethane	ND		ug/kg	200	40.	1
Isophorone	ND		ug/kg	220	32.	1
Naphthalene	120	J	ug/kg	240	30.	1
Nitrobenzene	ND		ug/kg	220	36.	1
NDPA/DPA	ND		ug/kg	200	28.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	240	38.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	240	84.	1
Butyl benzyl phthalate	ND		ug/kg	240	62.	1
Di-n-butylphthalate	ND		ug/kg	240	46.	1
Di-n-octylphthalate	ND		ug/kg	240	83.	1

Project Name: 450 JOHNSON AVENUE**Lab Number:** L1931245**Project Number:** 170588001**Report Date:** 08/01/19**SAMPLE RESULTS**

Lab ID: L1931245-04
 Client ID: SB13_8.0-8.5
 Sample Location: BROOKLYN, NY

Date Collected: 07/16/19 13:52
 Date Received: 07/16/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	240	23.	1
Dimethyl phthalate	ND		ug/kg	240	51.	1
Benzo(a)anthracene	ND		ug/kg	150	28.	1
Benzo(a)pyrene	ND		ug/kg	200	60.	1
Benzo(b)fluoranthene	ND		ug/kg	150	41.	1
Benzo(k)fluoranthene	ND		ug/kg	150	39.	1
Chrysene	ND		ug/kg	150	25.	1
Acenaphthylene	ND		ug/kg	200	38.	1
Anthracene	120	J	ug/kg	150	48.	1
Benzo(ghi)perylene	ND		ug/kg	200	29.	1
Fluorene	490		ug/kg	240	24.	1
Phenanthrene	1100		ug/kg	150	30.	1
Dibenzo(a,h)anthracene	ND		ug/kg	150	28.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	200	34.	1
Pyrene	160		ug/kg	150	24.	1
Biphenyl	ND		ug/kg	560	57.	1
4-Chloroaniline	ND		ug/kg	240	44.	1
2-Nitroaniline	ND		ug/kg	240	47.	1
3-Nitroaniline	ND		ug/kg	240	46.	1
4-Nitroaniline	ND		ug/kg	240	100	1
Dibenzofuran	ND		ug/kg	240	23.	1
2-Methylnaphthalene	ND		ug/kg	290	30.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	240	26.	1
Acetophenone	ND		ug/kg	240	30.	1
2,4,6-Trichlorophenol	ND		ug/kg	150	46.	1
p-Chloro-m-cresol	ND		ug/kg	240	36.	1
2-Chlorophenol	ND		ug/kg	240	29.	1
2,4-Dichlorophenol	ND		ug/kg	220	39.	1
2,4-Dimethylphenol	ND		ug/kg	240	81.	1
2-Nitrophenol	ND		ug/kg	530	92.	1
4-Nitrophenol	ND		ug/kg	340	100	1
2,4-Dinitrophenol	ND		ug/kg	1200	110	1
4,6-Dinitro-o-cresol	ND		ug/kg	640	120	1
Pentachlorophenol	ND		ug/kg	200	54.	1
Phenol	ND		ug/kg	240	37.	1
2-Methylphenol	ND		ug/kg	240	38.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	350	38.	1

Project Name: 450 JOHNSON AVENUE
Project Number: 170588001

Lab Number: L1931245
Report Date: 08/01/19

SAMPLE RESULTS

Lab ID: L1931245-04
Client ID: SB13_8.0-8.5
Sample Location: BROOKLYN, NY

Date Collected: 07/16/19 13:52
Date Received: 07/16/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	240	47.	1
Benzoic Acid	ND		ug/kg	790	250	1
Benzyl Alcohol	ND		ug/kg	240	75.	1
Carbazole	ND		ug/kg	240	24.	1
1,4-Dioxane	ND		ug/kg	37	11.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	72		25-120
Phenol-d6	73		10-120
Nitrobenzene-d5	79		23-120
2-Fluorobiphenyl	70		30-120
2,4,6-Tribromophenol	71		10-136
4-Terphenyl-d14	65		18-120

Project Name: 450 JOHNSON AVENUE

Lab Number: L1931245

Project Number: 170588001

Report Date: 08/01/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D
 Analytical Date: 07/16/19 23:10
 Analyst: RC

Extraction Method: EPA 3546
 Extraction Date: 07/16/19 00:43

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-04 Batch: WG1260218-1					
Acenaphthene	ND		ug/kg	130	17.
1,2,4-Trichlorobenzene	ND		ug/kg	160	19.
Hexachlorobenzene	ND		ug/kg	98	18.
Bis(2-chloroethyl)ether	ND		ug/kg	150	22.
2-Chloronaphthalene	ND		ug/kg	160	16.
1,2-Dichlorobenzene	ND		ug/kg	160	29.
1,3-Dichlorobenzene	ND		ug/kg	160	28.
1,4-Dichlorobenzene	ND		ug/kg	160	29.
3,3'-Dichlorobenzidine	ND		ug/kg	160	44.
2,4-Dinitrotoluene	ND		ug/kg	160	33.
2,6-Dinitrotoluene	ND		ug/kg	160	28.
Fluoranthene	ND		ug/kg	98	19.
4-Chlorophenyl phenyl ether	ND		ug/kg	160	18.
4-Bromophenyl phenyl ether	ND		ug/kg	160	25.
Bis(2-chloroisopropyl)ether	ND		ug/kg	200	28.
Bis(2-chloroethoxy)methane	ND		ug/kg	180	16.
Hexachlorobutadiene	ND		ug/kg	160	24.
Hexachlorocyclopentadiene	ND		ug/kg	470	150
Hexachloroethane	ND		ug/kg	130	26.
Isophorone	ND		ug/kg	150	21.
Naphthalene	ND		ug/kg	160	20.
Nitrobenzene	ND		ug/kg	150	24.
NDPA/DPA	ND		ug/kg	130	19.
n-Nitrosodi-n-propylamine	ND		ug/kg	160	25.
Bis(2-ethylhexyl)phthalate	ND		ug/kg	160	57.
Butyl benzyl phthalate	ND		ug/kg	160	41.
Di-n-butylphthalate	ND		ug/kg	160	31.
Di-n-octylphthalate	ND		ug/kg	160	56.
Diethyl phthalate	ND		ug/kg	160	15.

Project Name: 450 JOHNSON AVENUE
Project Number: 170588001

Lab Number: L1931245
Report Date: 08/01/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 07/16/19 23:10
Analyst: RC

Extraction Method: EPA 3546
Extraction Date: 07/16/19 00:43

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-04 Batch: WG1260218-1					
Dimethyl phthalate	ND		ug/kg	160	34.
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.
Biphenyl	ND		ug/kg	370	38.
4-Chloroaniline	ND		ug/kg	160	30.
2-Nitroaniline	ND		ug/kg	160	32.
3-Nitroaniline	ND		ug/kg	160	31.
4-Nitroaniline	ND		ug/kg	160	68.
Dibenzofuran	ND		ug/kg	160	16.
2-Methylnaphthalene	ND		ug/kg	200	20.
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	160	17.
Acetophenone	ND		ug/kg	160	20.
2,4,6-Trichlorophenol	ND		ug/kg	98	31.
p-Chloro-m-cresol	ND		ug/kg	160	24.
2-Chlorophenol	ND		ug/kg	160	19.
2,4-Dichlorophenol	ND		ug/kg	150	26.
2,4-Dimethylphenol	ND		ug/kg	160	54.
2-Nitrophenol	ND		ug/kg	350	62.

Project Name: 450 JOHNSON AVENUE
Project Number: 170588001

Lab Number: L1931245
Report Date: 08/01/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 07/16/19 23:10
Analyst: RC

Extraction Method: EPA 3546
Extraction Date: 07/16/19 00:43

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-04 Batch: WG1260218-1					
4-Nitrophenol	ND		ug/kg	230	67.
2,4-Dinitrophenol	ND		ug/kg	790	76.
4,6-Dinitro-o-cresol	ND		ug/kg	430	79.
Pentachlorophenol	ND		ug/kg	130	36.
Phenol	ND		ug/kg	160	25.
2-Methylphenol	ND		ug/kg	160	25.
3-Methylphenol/4-Methylphenol	ND		ug/kg	240	26.
2,4,5-Trichlorophenol	ND		ug/kg	160	31.
Benzoic Acid	ND		ug/kg	530	170
Benzyl Alcohol	ND		ug/kg	160	50.
Carbazole	ND		ug/kg	160	16.
1,4-Dioxane	ND		ug/kg	25	7.6

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	41		25-120
Phenol-d6	43		10-120
Nitrobenzene-d5	42		23-120
2-Fluorobiphenyl	40		30-120
2,4,6-Tribromophenol	43		10-136
4-Terphenyl-d14	39		18-120

Lab Control Sample Analysis

Batch Quality Control

Project Name: 450 JOHNSON AVENUE

Project Number: 170588001

Lab Number: L1931245

Report Date: 08/01/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04 Batch: WG1260218-2 WG1260218-3								
Acenaphthene	53		50		31-137	6		50
1,2,4-Trichlorobenzene	50		47		38-107	6		50
Hexachlorobenzene	54		51		40-140	6		50
Bis(2-chloroethyl)ether	50		47		40-140	6		50
2-Chloronaphthalene	53		49		40-140	8		50
1,2-Dichlorobenzene	49		46		40-140	6		50
1,3-Dichlorobenzene	48		45		40-140	6		50
1,4-Dichlorobenzene	48		45		28-104	6		50
3,3'-Dichlorobenzidine	47		45		40-140	4		50
2,4-Dinitrotoluene	57		54		40-132	5		50
2,6-Dinitrotoluene	55		54		40-140	2		50
Fluoranthene	55		51		40-140	8		50
4-Chlorophenyl phenyl ether	53		50		40-140	6		50
4-Bromophenyl phenyl ether	53		51		40-140	4		50
Bis(2-chloroisopropyl)ether	48		44		40-140	9		50
Bis(2-chloroethoxy)methane	52		49		40-117	6		50
Hexachlorobutadiene	52		48		40-140	8		50
Hexachlorocyclopentadiene	54		51		40-140	6		50
Hexachloroethane	47		45		40-140	4		50
Isophorone	53		51		40-140	4		50
Naphthalene	50		48		40-140	4		50
Nitrobenzene	53		50		40-140	6		50
NDPA/DPA	54		52		36-157	4		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: 450 JOHNSON AVENUE

Project Number: 170588001

Lab Number: L1931245

Report Date: 08/01/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04 Batch: WG1260218-2 WG1260218-3								
n-Nitrosodi-n-propylamine	54		51		32-121	6		50
Bis(2-ethylhexyl)phthalate	50		48		40-140	4		50
Butyl benzyl phthalate	52		49		40-140	6		50
Di-n-butylphthalate	54		52		40-140	4		50
Di-n-octylphthalate	56		52		40-140	7		50
Diethyl phthalate	53		51		40-140	4		50
Dimethyl phthalate	54		52		40-140	4		50
Benzo(a)anthracene	53		50		40-140	6		50
Benzo(a)pyrene	58		55		40-140	5		50
Benzo(b)fluoranthene	54		50		40-140	8		50
Benzo(k)fluoranthene	53		50		40-140	6		50
Chrysene	49		47		40-140	4		50
Acenaphthylene	55		52		40-140	6		50
Anthracene	55		52		40-140	6		50
Benzo(ghi)perylene	53		49		40-140	8		50
Fluorene	54		52		40-140	4		50
Phenanthrene	52		49		40-140	6		50
Dibenzo(a,h)anthracene	52		49		40-140	6		50
Indeno(1,2,3-cd)pyrene	55		52		40-140	6		50
Pyrene	52		50		35-142	4		50
Biphenyl	57		54		54-104	5		50
4-Chloroaniline	41		39	Q	40-140	5		50
2-Nitroaniline	57		56		47-134	2		50

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 450 JOHNSON AVENUE

Project Number: 170588001

Lab Number: L1931245

Report Date: 08/01/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04 Batch: WG1260218-2 WG1260218-3								
3-Nitroaniline	47		45		26-129	4		50
4-Nitroaniline	53		52		41-125	2		50
Dibenzofuran	52		49		40-140	6		50
2-Methylnaphthalene	53		50		40-140	6		50
1,2,4,5-Tetrachlorobenzene	56		52		40-117	7		50
Acetophenone	58		55		14-144	5		50
2,4,6-Trichlorophenol	60		57		30-130	5		50
p-Chloro-m-cresol	56		54		26-103	4		50
2-Chlorophenol	53		50		25-102	6		50
2,4-Dichlorophenol	56		53		30-130	6		50
2,4-Dimethylphenol	54		52		30-130	4		50
2-Nitrophenol	58		56		30-130	4		50
4-Nitrophenol	54		53		11-114	2		50
2,4-Dinitrophenol	57		57		4-130	0		50
4,6-Dinitro-o-cresol	60		60		10-130	0		50
Pentachlorophenol	55		54		17-109	2		50
Phenol	48		46		26-90	4		50
2-Methylphenol	53		51		30-130.	4		50
3-Methylphenol/4-Methylphenol	53		51		30-130	4		50
2,4,5-Trichlorophenol	57		55		30-130	4		50
Benzoic Acid	51		51		10-110	0		50
Benzyl Alcohol	53		50		40-140	6		50
Carbazole	53	Q	51	Q	54-128	4		50

Lab Control Sample Analysis**Batch Quality Control****Project Name:** 450 JOHNSON AVENUE**Lab Number:** L1931245**Project Number:** 170588001**Report Date:** 08/01/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04 Batch: WG1260218-2 WG1260218-3								
1,4-Dioxane	48		46		40-140	4		50

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	53		51		25-120
Phenol-d6	53		51		10-120
Nitrobenzene-d5	54		51		23-120
2-Fluorobiphenyl	52		50		30-120
2,4,6-Tribromophenol	59		57		10-136
4-Terphenyl-d14	50		48		18-120

PCBS

Project Name: 450 JOHNSON AVENUE
Project Number: 170588001

Lab Number: L1931245
Report Date: 08/01/19

SAMPLE RESULTS

Lab ID: L1931245-01
Client ID: DUP01_071619
Sample Location: BROOKLYN, NY

Date Collected: 07/16/19 00:00
Date Received: 07/16/19
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 07/18/19 17:10
Analyst: AWS
Percent Solids: 94%

Extraction Method: EPA 3546
Extraction Date: 07/17/19 00:18
Cleanup Method: EPA 3665A
Cleanup Date: 07/17/19
Cleanup Method: EPA 3660B
Cleanup Date: 07/17/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	33.8	3.00	1	A
Aroclor 1221	ND		ug/kg	33.8	3.38	1	A
Aroclor 1232	ND		ug/kg	33.8	7.16	1	A
Aroclor 1242	ND		ug/kg	33.8	4.55	1	A
Aroclor 1248	ND		ug/kg	33.8	5.07	1	A
Aroclor 1254	ND		ug/kg	33.8	3.70	1	A
Aroclor 1260	ND		ug/kg	33.8	6.24	1	A
Aroclor 1262	ND		ug/kg	33.8	4.29	1	A
Aroclor 1268	ND		ug/kg	33.8	3.50	1	A
PCBs, Total	ND		ug/kg	33.8	3.00	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	48		30-150	A
Decachlorobiphenyl	40		30-150	A
2,4,5,6-Tetrachloro-m-xylene	47		30-150	B
Decachlorobiphenyl	50		30-150	B

Project Name: 450 JOHNSON AVENUE
Project Number: 170588001

Lab Number: L1931245
Report Date: 08/01/19

SAMPLE RESULTS

Lab ID: L1931245-02
Client ID: SB03_14.0-14.5
Sample Location: BROOKLYN, NY

Date Collected: 07/16/19 09:20
Date Received: 07/16/19
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 07/18/19 17:23
Analyst: AWS
Percent Solids: 86%

Extraction Method: EPA 3546
Extraction Date: 07/17/19 00:18
Cleanup Method: EPA 3665A
Cleanup Date: 07/17/19
Cleanup Method: EPA 3660B
Cleanup Date: 07/17/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	37.1	3.29	1	A
Aroclor 1221	ND		ug/kg	37.1	3.71	1	A
Aroclor 1232	ND		ug/kg	37.1	7.86	1	A
Aroclor 1242	ND		ug/kg	37.1	5.00	1	A
Aroclor 1248	ND		ug/kg	37.1	5.56	1	A
Aroclor 1254	ND		ug/kg	37.1	4.06	1	A
Aroclor 1260	ND		ug/kg	37.1	6.85	1	A
Aroclor 1262	ND		ug/kg	37.1	4.71	1	A
Aroclor 1268	ND		ug/kg	37.1	3.84	1	A
PCBs, Total	ND		ug/kg	37.1	3.29	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	69		30-150	A
Decachlorobiphenyl	62		30-150	A
2,4,5,6-Tetrachloro-m-xylene	67		30-150	B
Decachlorobiphenyl	72		30-150	B

Project Name: 450 JOHNSON AVENUE
Project Number: 170588001

Lab Number: L1931245
Report Date: 08/01/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8082A
Analytical Date: 07/17/19 17:37
Analyst: AWS

Extraction Method: EPA 3546
Extraction Date: 07/17/19 00:18
Cleanup Method: EPA 3665A
Cleanup Date: 07/17/19
Cleanup Method: EPA 3660B
Cleanup Date: 07/17/19

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01-02 Batch: WG1260710-1						
Aroclor 1016	ND		ug/kg	32.4	2.88	A
Aroclor 1221	ND		ug/kg	32.4	3.25	A
Aroclor 1232	ND		ug/kg	32.4	6.88	A
Aroclor 1242	ND		ug/kg	32.4	4.37	A
Aroclor 1248	ND		ug/kg	32.4	4.87	A
Aroclor 1254	ND		ug/kg	32.4	3.55	A
Aroclor 1260	ND		ug/kg	32.4	6.00	A
Aroclor 1262	ND		ug/kg	32.4	4.12	A
Aroclor 1268	ND		ug/kg	32.4	3.36	A
PCBs, Total	ND		ug/kg	32.4	2.88	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	63		30-150	A
Decachlorobiphenyl	68		30-150	A
2,4,5,6-Tetrachloro-m-xylene	63		30-150	B
Decachlorobiphenyl	64		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: 450 JOHNSON AVENUE

Project Number: 170588001

Lab Number: L1931245

Report Date: 08/01/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01-02 Batch: WG1260710-2 WG1260710-3									
Aroclor 1016	59		59		40-140	0		50	A
Aroclor 1260	55		54		40-140	2		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	66		65		30-150	A
Decachlorobiphenyl	66		64		30-150	A
2,4,5,6-Tetrachloro-m-xylene	65		64		30-150	B
Decachlorobiphenyl	63		61		30-150	B

METALS

Project Name: 450 JOHNSON AVENUE**Lab Number:** L1931245**Project Number:** 170588001**Report Date:** 08/01/19**SAMPLE RESULTS**

Lab ID: L1931245-01

Date Collected: 07/16/19 00:00

Client ID: DUP01_071619

Date Received: 07/16/19

Sample Location: BROOKLYN, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 94%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	8110		mg/kg	8.23	2.22	2	07/17/19 10:45	07/17/19 13:30	EPA 3050B	1,6010D	LC
Antimony, Total	ND		mg/kg	4.12	0.313	2	07/17/19 10:45	07/17/19 13:30	EPA 3050B	1,6010D	LC
Arsenic, Total	3.88		mg/kg	0.823	0.171	2	07/17/19 10:45	07/17/19 13:30	EPA 3050B	1,6010D	LC
Barium, Total	44.5		mg/kg	0.823	0.143	2	07/17/19 10:45	07/17/19 13:30	EPA 3050B	1,6010D	LC
Beryllium, Total	0.329	J	mg/kg	0.412	0.027	2	07/17/19 10:45	07/17/19 13:30	EPA 3050B	1,6010D	LC
Cadmium, Total	ND		mg/kg	0.823	0.081	2	07/17/19 10:45	07/17/19 13:30	EPA 3050B	1,6010D	LC
Calcium, Total	774		mg/kg	8.23	2.88	2	07/17/19 10:45	07/17/19 13:30	EPA 3050B	1,6010D	LC
Chromium, Total	20.3		mg/kg	0.823	0.079	2	07/17/19 10:45	07/17/19 13:30	EPA 3050B	1,6010D	LC
Cobalt, Total	7.66		mg/kg	1.65	0.137	2	07/17/19 10:45	07/17/19 13:30	EPA 3050B	1,6010D	LC
Copper, Total	15.4		mg/kg	0.823	0.212	2	07/17/19 10:45	07/17/19 13:30	EPA 3050B	1,6010D	LC
Iron, Total	15900		mg/kg	4.12	0.743	2	07/17/19 10:45	07/17/19 13:30	EPA 3050B	1,6010D	LC
Lead, Total	23.5		mg/kg	4.12	0.221	2	07/17/19 10:45	07/17/19 13:30	EPA 3050B	1,6010D	LC
Magnesium, Total	2830		mg/kg	8.23	1.27	2	07/17/19 10:45	07/17/19 13:30	EPA 3050B	1,6010D	LC
Manganese, Total	186		mg/kg	0.823	0.131	2	07/17/19 10:45	07/17/19 13:30	EPA 3050B	1,6010D	LC
Mercury, Total	0.090		mg/kg	0.067	0.044	1	07/17/19 09:10	07/18/19 11:38	EPA 7471B	1,7471B	GD
Nickel, Total	12.5		mg/kg	2.06	0.199	2	07/17/19 10:45	07/17/19 13:30	EPA 3050B	1,6010D	LC
Potassium, Total	809		mg/kg	206	11.8	2	07/17/19 10:45	07/17/19 13:30	EPA 3050B	1,6010D	LC
Selenium, Total	ND		mg/kg	1.65	0.212	2	07/17/19 10:45	07/17/19 13:30	EPA 3050B	1,6010D	LC
Silver, Total	ND		mg/kg	0.823	0.233	2	07/17/19 10:45	07/17/19 13:30	EPA 3050B	1,6010D	LC
Sodium, Total	243		mg/kg	165	2.59	2	07/17/19 10:45	07/17/19 13:30	EPA 3050B	1,6010D	LC
Thallium, Total	ND		mg/kg	1.65	0.259	2	07/17/19 10:45	07/17/19 13:30	EPA 3050B	1,6010D	LC
Vanadium, Total	25.4		mg/kg	0.823	0.167	2	07/17/19 10:45	07/17/19 13:30	EPA 3050B	1,6010D	LC
Zinc, Total	27.8		mg/kg	4.12	0.241	2	07/17/19 10:45	07/17/19 13:30	EPA 3050B	1,6010D	LC



Project Name: 450 JOHNSON AVENUE**Lab Number:** L1931245**Project Number:** 170588001**Report Date:** 08/01/19**SAMPLE RESULTS**

Lab ID: L1931245-02

Date Collected: 07/16/19 09:20

Client ID: SB03_14.0-14.5

Date Received: 07/16/19

Sample Location: BROOKLYN, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 86%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	7840		mg/kg	9.12	2.46	2	07/17/19 10:45	07/18/19 00:25	EPA 3050B	1,6010D	MC
Antimony, Total	ND		mg/kg	4.56	0.346	2	07/17/19 10:45	07/18/19 14:35	EPA 3050B	1,6010D	LC
Arsenic, Total	2.31		mg/kg	0.912	0.190	2	07/17/19 10:45	07/18/19 14:35	EPA 3050B	1,6010D	LC
Barium, Total	45.9		mg/kg	0.912	0.159	2	07/17/19 10:45	07/18/19 00:25	EPA 3050B	1,6010D	MC
Beryllium, Total	0.474		mg/kg	0.456	0.030	2	07/17/19 10:45	07/18/19 00:25	EPA 3050B	1,6010D	MC
Cadmium, Total	ND		mg/kg	0.912	0.089	2	07/17/19 10:45	07/18/19 00:25	EPA 3050B	1,6010D	MC
Calcium, Total	1020		mg/kg	9.12	3.19	2	07/17/19 10:45	07/18/19 00:25	EPA 3050B	1,6010D	MC
Chromium, Total	15.5		mg/kg	0.912	0.088	2	07/17/19 10:45	07/18/19 00:25	EPA 3050B	1,6010D	MC
Cobalt, Total	8.63		mg/kg	1.82	0.151	2	07/17/19 10:45	07/18/19 00:25	EPA 3050B	1,6010D	MC
Copper, Total	10.9		mg/kg	0.912	0.235	2	07/17/19 10:45	07/18/19 00:25	EPA 3050B	1,6010D	MC
Iron, Total	21000		mg/kg	4.56	0.823	2	07/17/19 10:45	07/18/19 00:25	EPA 3050B	1,6010D	MC
Lead, Total	35.2		mg/kg	4.56	0.244	2	07/17/19 10:45	07/18/19 00:25	EPA 3050B	1,6010D	MC
Magnesium, Total	1950		mg/kg	9.12	1.40	2	07/17/19 10:45	07/18/19 00:25	EPA 3050B	1,6010D	MC
Manganese, Total	274		mg/kg	0.912	0.145	2	07/17/19 10:45	07/18/19 00:25	EPA 3050B	1,6010D	MC
Mercury, Total	0.144		mg/kg	0.074	0.048	1	07/17/19 09:10	07/18/19 12:10	EPA 7471B	1,7471B	GD
Nickel, Total	10.6		mg/kg	2.28	0.221	2	07/17/19 10:45	07/18/19 00:25	EPA 3050B	1,6010D	MC
Potassium, Total	598		mg/kg	228	13.1	2	07/17/19 10:45	07/18/19 00:25	EPA 3050B	1,6010D	MC
Selenium, Total	ND		mg/kg	1.82	0.235	2	07/17/19 10:45	07/18/19 00:25	EPA 3050B	1,6010D	MC
Silver, Total	ND		mg/kg	0.912	0.258	2	07/17/19 10:45	07/18/19 00:25	EPA 3050B	1,6010D	MC
Sodium, Total	171	J	mg/kg	182	2.87	2	07/17/19 10:45	07/18/19 00:25	EPA 3050B	1,6010D	MC
Thallium, Total	ND		mg/kg	1.82	0.287	2	07/17/19 10:45	07/18/19 00:25	EPA 3050B	1,6010D	MC
Vanadium, Total	24.3		mg/kg	0.912	0.185	2	07/17/19 10:45	07/18/19 00:25	EPA 3050B	1,6010D	MC
Zinc, Total	32.4		mg/kg	4.56	0.267	2	07/17/19 10:45	07/18/19 00:25	EPA 3050B	1,6010D	MC



Project Name: 450 JOHNSON AVENUE**Lab Number:** L1931245**Project Number:** 170588001**Report Date:** 08/01/19**SAMPLE RESULTS**

Lab ID: L1931245-03

Date Collected: 07/16/19 11:45

Client ID: SB04_11.0-11.5

Date Received: 07/16/19

Sample Location: BROOKLYN, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 86%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	7030		mg/kg	8.76	2.36	2	07/17/19 10:45	07/18/19 00:29	EPA 3050B	1,6010D	MC
Antimony, Total	ND		mg/kg	4.38	0.333	2	07/17/19 10:45	07/18/19 14:39	EPA 3050B	1,6010D	LC
Arsenic, Total	1.73		mg/kg	0.876	0.182	2	07/17/19 10:45	07/18/19 14:39	EPA 3050B	1,6010D	LC
Barium, Total	41.2		mg/kg	0.876	0.152	2	07/17/19 10:45	07/18/19 00:29	EPA 3050B	1,6010D	MC
Beryllium, Total	0.525		mg/kg	0.438	0.029	2	07/17/19 10:45	07/18/19 00:29	EPA 3050B	1,6010D	MC
Cadmium, Total	ND		mg/kg	0.876	0.086	2	07/17/19 10:45	07/18/19 00:29	EPA 3050B	1,6010D	MC
Calcium, Total	1040		mg/kg	8.76	3.06	2	07/17/19 10:45	07/18/19 00:29	EPA 3050B	1,6010D	MC
Chromium, Total	15.7		mg/kg	0.876	0.084	2	07/17/19 10:45	07/18/19 00:29	EPA 3050B	1,6010D	MC
Cobalt, Total	6.43		mg/kg	1.75	0.145	2	07/17/19 10:45	07/18/19 00:29	EPA 3050B	1,6010D	MC
Copper, Total	9.60		mg/kg	0.876	0.226	2	07/17/19 10:45	07/18/19 00:29	EPA 3050B	1,6010D	MC
Iron, Total	25900		mg/kg	4.38	0.791	2	07/17/19 10:45	07/18/19 00:29	EPA 3050B	1,6010D	MC
Lead, Total	17.4		mg/kg	4.38	0.235	2	07/17/19 10:45	07/18/19 00:29	EPA 3050B	1,6010D	MC
Magnesium, Total	1510		mg/kg	8.76	1.35	2	07/17/19 10:45	07/18/19 00:29	EPA 3050B	1,6010D	MC
Manganese, Total	590		mg/kg	0.876	0.139	2	07/17/19 10:45	07/18/19 00:29	EPA 3050B	1,6010D	MC
Mercury, Total	ND		mg/kg	0.073	0.048	1	07/17/19 09:10	07/18/19 12:12	EPA 7471B	1,7471B	GD
Nickel, Total	8.46		mg/kg	2.19	0.212	2	07/17/19 10:45	07/18/19 00:29	EPA 3050B	1,6010D	MC
Potassium, Total	645		mg/kg	219	12.6	2	07/17/19 10:45	07/18/19 00:29	EPA 3050B	1,6010D	MC
Selenium, Total	ND		mg/kg	1.75	0.226	2	07/17/19 10:45	07/18/19 00:29	EPA 3050B	1,6010D	MC
Silver, Total	ND		mg/kg	0.876	0.248	2	07/17/19 10:45	07/18/19 00:29	EPA 3050B	1,6010D	MC
Sodium, Total	38.3	J	mg/kg	175	2.76	2	07/17/19 10:45	07/18/19 00:29	EPA 3050B	1,6010D	MC
Thallium, Total	ND		mg/kg	1.75	0.276	2	07/17/19 10:45	07/18/19 00:29	EPA 3050B	1,6010D	MC
Vanadium, Total	12.6		mg/kg	0.876	0.178	2	07/17/19 10:45	07/18/19 00:29	EPA 3050B	1,6010D	MC
Zinc, Total	27.4		mg/kg	4.38	0.256	2	07/17/19 10:45	07/18/19 00:29	EPA 3050B	1,6010D	MC



Project Name: 450 JOHNSON AVENUE**Lab Number:** L1931245**Project Number:** 170588001**Report Date:** 08/01/19**SAMPLE RESULTS**

Lab ID: L1931245-04

Date Collected: 07/16/19 13:52

Client ID: SB13_8.0-8.5

Date Received: 07/16/19

Sample Location: BROOKLYN, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 67%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	3350		mg/kg	11.5	3.11	2	07/17/19 10:45	07/18/19 00:34	EPA 3050B	1,6010D	MC
Antimony, Total	0.852	J	mg/kg	5.76	0.438	2	07/17/19 10:45	07/18/19 14:44	EPA 3050B	1,6010D	LC
Arsenic, Total	14.6		mg/kg	1.15	0.240	2	07/17/19 10:45	07/18/19 14:44	EPA 3050B	1,6010D	LC
Barium, Total	175		mg/kg	1.15	0.200	2	07/17/19 10:45	07/18/19 00:34	EPA 3050B	1,6010D	MC
Beryllium, Total	0.276	J	mg/kg	0.576	0.038	2	07/17/19 10:45	07/18/19 00:34	EPA 3050B	1,6010D	MC
Cadmium, Total	ND		mg/kg	1.15	0.113	2	07/17/19 10:45	07/18/19 00:34	EPA 3050B	1,6010D	MC
Calcium, Total	7630		mg/kg	11.5	4.03	2	07/17/19 10:45	07/18/19 00:34	EPA 3050B	1,6010D	MC
Chromium, Total	15.1		mg/kg	1.15	0.110	2	07/17/19 10:45	07/18/19 00:34	EPA 3050B	1,6010D	MC
Cobalt, Total	7.17		mg/kg	2.30	0.191	2	07/17/19 10:45	07/18/19 00:34	EPA 3050B	1,6010D	MC
Copper, Total	89.4		mg/kg	1.15	0.297	2	07/17/19 10:45	07/18/19 00:34	EPA 3050B	1,6010D	MC
Iron, Total	12600		mg/kg	5.76	1.04	2	07/17/19 10:45	07/18/19 00:34	EPA 3050B	1,6010D	MC
Lead, Total	610		mg/kg	5.76	0.309	2	07/17/19 10:45	07/18/19 00:34	EPA 3050B	1,6010D	MC
Magnesium, Total	958		mg/kg	11.5	1.77	2	07/17/19 10:45	07/18/19 00:34	EPA 3050B	1,6010D	MC
Manganese, Total	174		mg/kg	1.15	0.183	2	07/17/19 10:45	07/18/19 00:34	EPA 3050B	1,6010D	MC
Mercury, Total	3.12		mg/kg	0.094	0.061	1	07/17/19 09:10	07/18/19 12:14	EPA 7471B	1,7471B	GD
Nickel, Total	11.4		mg/kg	2.88	0.279	2	07/17/19 10:45	07/18/19 00:34	EPA 3050B	1,6010D	MC
Potassium, Total	497		mg/kg	288	16.6	2	07/17/19 10:45	07/18/19 00:34	EPA 3050B	1,6010D	MC
Selenium, Total	1.98	J	mg/kg	2.30	0.297	2	07/17/19 10:45	07/18/19 00:34	EPA 3050B	1,6010D	MC
Silver, Total	ND		mg/kg	1.15	0.326	2	07/17/19 10:45	07/18/19 00:34	EPA 3050B	1,6010D	MC
Sodium, Total	198	J	mg/kg	230	3.63	2	07/17/19 10:45	07/18/19 00:34	EPA 3050B	1,6010D	MC
Thallium, Total	ND		mg/kg	2.30	0.363	2	07/17/19 10:45	07/18/19 00:34	EPA 3050B	1,6010D	MC
Vanadium, Total	14.4		mg/kg	1.15	0.234	2	07/17/19 10:45	07/18/19 00:34	EPA 3050B	1,6010D	MC
Zinc, Total	244		mg/kg	5.76	0.337	2	07/17/19 10:45	07/18/19 00:34	EPA 3050B	1,6010D	MC



Project Name: 450 JOHNSON AVENUE

Lab Number: L1931245

Project Number: 170588001

Report Date: 08/01/19

Method Blank Analysis Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-04 Batch: WG1260848-1										
Mercury, Total	ND		mg/kg	0.083	0.054	1	07/17/19 09:10	07/18/19 11:34	1,7471B	GD

Prep Information

Digestion Method: EPA 7471B

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-04 Batch: WG1260871-1										
Aluminum, Total	ND		mg/kg	4.00	1.08	1	07/17/19 10:45	07/17/19 13:21	1,6010D	LC
Antimony, Total	ND		mg/kg	2.00	0.152	1	07/17/19 10:45	07/17/19 13:21	1,6010D	LC
Arsenic, Total	ND		mg/kg	0.400	0.083	1	07/17/19 10:45	07/17/19 13:21	1,6010D	LC
Barium, Total	ND		mg/kg	0.400	0.070	1	07/17/19 10:45	07/17/19 13:21	1,6010D	LC
Beryllium, Total	ND		mg/kg	0.200	0.013	1	07/17/19 10:45	07/17/19 13:21	1,6010D	LC
Cadmium, Total	ND		mg/kg	0.400	0.039	1	07/17/19 10:45	07/17/19 13:21	1,6010D	LC
Calcium, Total	ND		mg/kg	4.00	1.40	1	07/17/19 10:45	07/17/19 13:21	1,6010D	LC
Chromium, Total	ND		mg/kg	0.400	0.038	1	07/17/19 10:45	07/17/19 13:21	1,6010D	LC
Cobalt, Total	ND		mg/kg	0.800	0.066	1	07/17/19 10:45	07/17/19 13:21	1,6010D	LC
Copper, Total	ND		mg/kg	0.400	0.103	1	07/17/19 10:45	07/17/19 13:21	1,6010D	LC
Iron, Total	0.996	J	mg/kg	2.00	0.361	1	07/17/19 10:45	07/17/19 13:21	1,6010D	LC
Lead, Total	ND		mg/kg	2.00	0.107	1	07/17/19 10:45	07/17/19 13:21	1,6010D	LC
Magnesium, Total	ND		mg/kg	4.00	0.616	1	07/17/19 10:45	07/17/19 13:21	1,6010D	LC
Manganese, Total	0.192	J	mg/kg	0.400	0.064	1	07/17/19 10:45	07/17/19 13:21	1,6010D	LC
Nickel, Total	ND		mg/kg	1.00	0.097	1	07/17/19 10:45	07/17/19 13:21	1,6010D	LC
Potassium, Total	ND		mg/kg	100	5.76	1	07/17/19 10:45	07/17/19 13:21	1,6010D	LC
Selenium, Total	0.144	J	mg/kg	0.800	0.103	1	07/17/19 10:45	07/17/19 13:21	1,6010D	LC
Silver, Total	ND		mg/kg	0.400	0.113	1	07/17/19 10:45	07/17/19 13:21	1,6010D	LC
Sodium, Total	1.50	J	mg/kg	80.0	1.26	1	07/17/19 10:45	07/17/19 13:21	1,6010D	LC
Thallium, Total	ND		mg/kg	0.800	0.126	1	07/17/19 10:45	07/17/19 13:21	1,6010D	LC
Vanadium, Total	ND		mg/kg	0.400	0.081	1	07/17/19 10:45	07/17/19 13:21	1,6010D	LC
Zinc, Total	ND		mg/kg	2.00	0.117	1	07/17/19 10:45	07/17/19 13:21	1,6010D	LC



Project Name: 450 JOHNSON AVENUE

Lab Number: L1931245

Project Number: 170588001

Report Date: 08/01/19

Method Blank Analysis Batch Quality Control

Prep Information

Digestion Method: EPA 3050B

Lab Control Sample Analysis**Batch Quality Control****Project Name:** 450 JOHNSON AVENUE**Project Number:** 170588001**Lab Number:** L1931245**Report Date:** 08/01/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-04 Batch: WG1260848-2 SRM Lot Number: D105-540								
Mercury, Total	104		-		60-141	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: 450 JOHNSON AVENUE

Project Number: 170588001

Lab Number: L1931245

Report Date: 08/01/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-04 Batch: WG1260871-2 SRM Lot Number: D105-540					
Aluminum, Total	60	-	51-149	-	
Antimony, Total	160	-	19-249	-	
Arsenic, Total	105	-	70-130	-	
Barium, Total	89	-	75-125	-	
Beryllium, Total	89	-	75-125	-	
Cadmium, Total	87	-	75-125	-	
Calcium, Total	81	-	73-127	-	
Chromium, Total	88	-	70-130	-	
Cobalt, Total	92	-	75-125	-	
Copper, Total	93	-	75-125	-	
Iron, Total	83	-	38-162	-	
Lead, Total	94	-	71-128	-	
Magnesium, Total	75	-	63-137	-	
Manganese, Total	82	-	76-124	-	
Nickel, Total	91	-	70-131	-	
Potassium, Total	77	-	60-140	-	
Selenium, Total	100	-	63-137	-	
Silver, Total	92	-	69-131	-	
Sodium, Total	89	-	37-162	-	
Thallium, Total	89	-	68-132	-	
Vanadium, Total	88	-	65-135	-	

Lab Control Sample Analysis
Batch Quality Control**Project Name:** 450 JOHNSON AVENUE**Project Number:** 170588001**Lab Number:** L1931245**Report Date:** 08/01/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-04 Batch: WG1260871-2 SRM Lot Number: D105-540					
Zinc, Total	93	-	70-130	-	

Matrix Spike Analysis

Batch Quality Control

Project Name: 450 JOHNSON AVENUE

Lab Number: L1931245

Project Number: 170588001

Report Date: 08/01/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-04			QC Batch ID: WG1260848-3			QC Sample: L1931245-01			Client ID: DUP01_071619			
Mercury, Total	0.090	0.136	0.232	171	Q	-	-		80-120	-		20

Matrix Spike Analysis **Batch Quality Control**

Project Name: 450 JOHNSON AVENUE

Project Number: 170588001

Lab Number: L1931245

Report Date: 08/01/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery		MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-04			QC Batch ID: WG1260871-3		QC Sample: L1931245-01		Client ID: DUP01_071619			
Aluminum, Total	8110	161	8720	379	Q	-	-	75-125	-	20
Antimony, Total	ND	40.2	32.9	82		-	-	75-125	-	20
Arsenic, Total	3.88	9.66	11.6	80		-	-	75-125	-	20
Barium, Total	44.5	161	193	92		-	-	75-125	-	20
Beryllium, Total	0.329J	4.02	3.79	94		-	-	75-125	-	20
Cadmium, Total	ND	4.1	2.28	56	Q	-	-	75-125	-	20
Calcium, Total	774	805	1480	88		-	-	75-125	-	20
Chromium, Total	20.3	16.1	27.7	46	Q	-	-	75-125	-	20
Cobalt, Total	7.66	40.2	37.9	75		-	-	75-125	-	20
Copper, Total	15.4	20.1	32.7	86		-	-	75-125	-	20
Iron, Total	15900	80.5	15700	0	Q	-	-	75-125	-	20
Lead, Total	23.5	41	56.2	80		-	-	75-125	-	20
Magnesium, Total	2830	805	2120	0	Q	-	-	75-125	-	20
Manganese, Total	186	40.2	251	161	Q	-	-	75-125	-	20
Nickel, Total	12.5	40.2	41.7	72	Q	-	-	75-125	-	20
Potassium, Total	809	805	1400	73	Q	-	-	75-125	-	20
Selenium, Total	ND	9.66	8.37	87		-	-	75-125	-	20
Silver, Total	ND	24.2	21.4	89		-	-	75-125	-	20
Sodium, Total	243	805	969	90		-	-	75-125	-	20
Thallium, Total	ND	9.66	6.81	70	Q	-	-	75-125	-	20
Vanadium, Total	25.4	40.2	57.1	79		-	-	75-125	-	20

Matrix Spike Analysis
Batch Quality Control**Project Name:** 450 JOHNSON AVENUE**Project Number:** 170588001**Lab Number:** L1931245**Report Date:** 08/01/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-04 QC Batch ID: WG1260871-3 QC Sample: L1931245-01 Client ID: DUP01_071619									
Zinc, Total	27.8	40.2	61.7	84	-	-	75-125	-	20

Lab Duplicate Analysis

Batch Quality Control

Project Name: 450 JOHNSON AVENUE

Project Number: 170588001

Lab Number: L1931245

Report Date: 08/01/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-04 QC Batch ID: WG1260848-4 QC Sample: L1931245-01 Client ID: DUP01_071619						
Mercury, Total	0.090	0.045J	mg/kg	NC		20

Lab Duplicate Analysis *Batch Quality Control*

Project Name: 450 JOHNSON AVENUE

Project Number: 170588001

Lab Number: L1931245

Report Date: 08/01/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-04 QC Batch ID: WG1260871-4 QC Sample: L1931245-01 Client ID: DUP01_071619					
Aluminum, Total	8110	7330	mg/kg	10	20
Antimony, Total	ND	0.463J	mg/kg	NC	20
Arsenic, Total	3.88	3.67	mg/kg	6	20
Barium, Total	44.5	43.2	mg/kg	3	20
Beryllium, Total	0.329J	0.380J	mg/kg	NC	20
Cadmium, Total	ND	ND	mg/kg	NC	20
Calcium, Total	774	832	mg/kg	7	20
Chromium, Total	20.3	15.9	mg/kg	24	Q 20
Cobalt, Total	7.66	6.91	mg/kg	10	20
Copper, Total	15.4	15.4	mg/kg	0	20
Iron, Total	15900	19400	mg/kg	20	20
Lead, Total	23.5	30.8	mg/kg	27	Q 20
Magnesium, Total	2830	1410	mg/kg	67	Q 20
Manganese, Total	186	285	mg/kg	42	Q 20
Nickel, Total	12.5	11.1	mg/kg	12	20
Potassium, Total	809	570	mg/kg	35	Q 20
Selenium, Total	ND	ND	mg/kg	NC	20
Silver, Total	ND	ND	mg/kg	NC	20
Sodium, Total	243	202	mg/kg	18	20

Lab Duplicate Analysis

Batch Quality Control

Project Name: 450 JOHNSON AVENUE

Project Number: 170588001

Lab Number: L1931245

Report Date: 08/01/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-04 QC Batch ID: WG1260871-4 QC Sample: L1931245-01 Client ID: DUP01_071619					
Thallium, Total	ND	ND	mg/kg	NC	20
Vanadium, Total	25.4	29.0	mg/kg	13	20
Zinc, Total	27.8	31.0	mg/kg	11	20

INORGANICS & MISCELLANEOUS

Project Name: 450 JOHNSON AVENUE
Project Number: 170588001

Lab Number: L1931245
Report Date: 08/01/19

SAMPLE RESULTS

Lab ID: L1931245-01
Client ID: DUP01_071619
Sample Location: BROOKLYN, NY

Date Collected: 07/16/19 00:00
Date Received: 07/16/19
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	94.1		%	0.100	NA	1	-	07/17/19 02:54	121,2540G	YA



Project Name: 450 JOHNSON AVENUE
Project Number: 170588001

Lab Number: L1931245
Report Date: 08/01/19

SAMPLE RESULTS

Lab ID: L1931245-02
Client ID: SB03_14.0-14.5
Sample Location: BROOKLYN, NY

Date Collected: 07/16/19 09:20
Date Received: 07/16/19
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	86.3		%	0.100	NA	1	-	07/17/19 02:54	121,2540G	YA



Project Name: 450 JOHNSON AVENUE
Project Number: 170588001

Lab Number: L1931245
Report Date: 08/01/19

SAMPLE RESULTS

Lab ID: L1931245-03
Client ID: SB04_11.0-11.5
Sample Location: BROOKLYN, NY

Date Collected: 07/16/19 11:45
Date Received: 07/16/19
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	86.0		%	0.100	NA	1	-	07/17/19 02:54	121,2540G	YA



Project Name: 450 JOHNSON AVENUE
Project Number: 170588001

Lab Number: L1931245
Report Date: 08/01/19

SAMPLE RESULTS

Lab ID: L1931245-04
Client ID: SB13_8.0-8.5
Sample Location: BROOKLYN, NY

Date Collected: 07/16/19 13:52
Date Received: 07/16/19
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	66.8		%	0.100	NA	1	-	07/17/19 02:54	121,2540G	YA



Project Name: 450 JOHNSON AVENUE**Project Number:** 170588001**Lab Duplicate Analysis***Batch Quality Control***Lab Number:** L1931245**Report Date:** 08/01/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-04 QC Batch ID: WG1260752-1 QC Sample: L1931095-03 Client ID: DUP Sample						
Solids, Total	86.8	87.0	%	0		20

Project Name: 450 JOHNSON AVENUE
Project Number: 170588001

Serial_No:08011910:40
Lab Number: L1931245
Report Date: 08/01/19

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1931245-01A	Vial MeOH preserved	A	NA		2.7	Y	Absent		NYTCL-8260HLW(14)
L1931245-01B	Vial water preserved	A	NA		2.7	Y	Absent	16-JUL-19 23:31	NYTCL-8260HLW(14)
L1931245-01C	Vial water preserved	A	NA		2.7	Y	Absent	16-JUL-19 23:31	NYTCL-8260HLW(14)
L1931245-01D	Plastic 2oz unpreserved for TS	A	NA		2.7	Y	Absent		TS(7)
L1931245-01E	Glass 60mL/2oz unpreserved	A	NA		2.7	Y	Absent		BE-Ti(180),AS-Ti(180),BA-Ti(180),AG-Ti(180),AL-Ti(180),CR-Ti(180),NI-Ti(180),TL-Ti(180),CU-Ti(180),PB-Ti(180),SB-Ti(180),SE-Ti(180),ZN-Ti(180),CO-Ti(180),V-Ti(180),FE-Ti(180),HG-T(28),MG-Ti(180),MN-Ti(180),CA-Ti(180),CD-Ti(180),K-Ti(180),NA-Ti(180)
L1931245-01F	Glass 60mL/2oz unpreserved	A	NA		2.7	Y	Absent		NYTCL-8270(14),NYTCL-8082(14)
L1931245-01G	Glass 120ml/4oz unpreserved	A	NA		2.7	Y	Absent		NYTCL-8270(14),NYTCL-8082(14)
L1931245-02A	Vial MeOH preserved	A	NA		2.7	Y	Absent		NYTCL-8260HLW(14)
L1931245-02B	Vial water preserved	A	NA		2.7	Y	Absent	16-JUL-19 23:31	NYTCL-8260HLW(14)
L1931245-02C	Vial water preserved	A	NA		2.7	Y	Absent	16-JUL-19 23:31	NYTCL-8260HLW(14)
L1931245-02D	Plastic 2oz unpreserved for TS	A	NA		2.7	Y	Absent		TS(7)
L1931245-02E	Glass 60mL/2oz unpreserved	A	NA		2.7	Y	Absent		BE-Ti(180),AS-Ti(180),BA-Ti(180),AG-Ti(180),AL-Ti(180),CR-Ti(180),NI-Ti(180),TL-Ti(180),CU-Ti(180),PB-Ti(180),SB-Ti(180),SE-Ti(180),ZN-Ti(180),CO-Ti(180),V-Ti(180),FE-Ti(180),HG-T(28),MG-Ti(180),MN-Ti(180),CA-Ti(180),CD-Ti(180),K-Ti(180),NA-Ti(180)
L1931245-02F	Glass 60mL/2oz unpreserved	A	NA		2.7	Y	Absent		NYTCL-8270(14),NYTCL-8082(14)
L1931245-02G	Glass 120ml/4oz unpreserved	A	NA		2.7	Y	Absent		NYTCL-8270(14),NYTCL-8082(14)
L1931245-03A	Vial MeOH preserved	A	NA		2.7	Y	Absent		NYTCL-8260HLW(14)
L1931245-03B	Vial water preserved	A	NA		2.7	Y	Absent	16-JUL-19 23:31	NYTCL-8260HLW(14)
L1931245-03C	Vial water preserved	A	NA		2.7	Y	Absent	16-JUL-19 23:31	NYTCL-8260HLW(14)
L1931245-03D	Plastic 2oz unpreserved for TS	A	NA		2.7	Y	Absent		TS(7)

Project Name: 450 JOHNSON AVENUE
Project Number: 170588001

Serial_No: 08011910:40
Lab Number: L1931245
Report Date: 08/01/19

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1931245-03E	Glass 60mL/2oz unpreserved	A	NA		2.7	Y	Absent		BE-Ti(180),AS-Ti(180),BA-Ti(180),AG-Ti(180),AL-Ti(180),CR-Ti(180),NI-Ti(180),TL-Ti(180),CU-Ti(180),PB-Ti(180),SB-Ti(180),SE-Ti(180),ZN-Ti(180),CO-Ti(180),V-Ti(180),FE-Ti(180),HG-T(28),MG-Ti(180),MN-Ti(180),CA-Ti(180),CD-Ti(180),K-Ti(180),NA-Ti(180)
L1931245-03F	Glass 60mL/2oz unpreserved	A	NA		2.7	Y	Absent		NYTCL-8270(14),HOLD-8082(14)
L1931245-03G	Glass 120ml/4oz unpreserved	A	NA		2.7	Y	Absent		NYTCL-8270(14),HOLD-8082(14)
L1931245-04A	Vial MeOH preserved	A	NA		2.7	Y	Absent		NYTCL-8260HLW(14)
L1931245-04B	Vial water preserved	A	NA		2.7	Y	Absent	16-JUL-19 23:31	NYTCL-8260HLW(14)
L1931245-04C	Vial water preserved	A	NA		2.7	Y	Absent	16-JUL-19 23:31	NYTCL-8260HLW(14)
L1931245-04D	Plastic 2oz unpreserved for TS	A	NA		2.7	Y	Absent		TS(7)
L1931245-04E	Glass 60mL/2oz unpreserved	A	NA		2.7	Y	Absent		BE-Ti(180),AS-Ti(180),BA-Ti(180),AG-Ti(180),AL-Ti(180),CR-Ti(180),NI-Ti(180),TL-Ti(180),CU-Ti(180),PB-Ti(180),SB-Ti(180),SE-Ti(180),ZN-Ti(180),CO-Ti(180),V-Ti(180),FE-Ti(180),HG-T(28),MG-Ti(180),MN-Ti(180),CA-Ti(180),CD-Ti(180),K-Ti(180),NA-Ti(180)
L1931245-04F	Glass 60mL/2oz unpreserved	A	NA		2.7	Y	Absent		NYTCL-8270(14),HOLD-8082(14)
L1931245-04G	Glass 120ml/4oz unpreserved	A	NA		2.7	Y	Absent		NYTCL-8270(14),HOLD-8082(14)

Project Name: 450 JOHNSON AVENUE
Project Number: 170588001

Lab Number: L1931245
Report Date: 08/01/19

GLOSSARY

Acronyms

DL	- 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 limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
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).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
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.
LCS D	- 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.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
	Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
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. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
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.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
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

Report Format: DU Report with 'J' Qualifiers



Project Name: 450 JOHNSON AVENUE
Project Number: 170588001

Lab Number: L1931245
Report Date: 08/01/19

- 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.

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

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.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. If a 'Total' result is requested, the results of its individual components will also be reported.

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 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.
- 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).
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.
- 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.

Report Format: DU Report with 'J' Qualifiers



Project Name: 450 JOHNSON AVENUE
Project Number: 170588001

Lab Number: L1931245
Report Date: 08/01/19

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.



Alpha Analytical, Inc.

ID No.:17873

Facility: **Company-wide**

Revision 13

Department: **Quality Assurance**

Published Date: 7/30/2019 3:17:52 PM

Title: **Certificate/Approval Program Summary**

Page 1 of 1

Certification Information

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

Westborough Facility**EPA 624/624.1:** m/p-xylene, o-xylene**EPA 8260C:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.**EPA 8270D:** NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.**SM4500:** NPW: Amenable Cyanide; 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, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-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, **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 300:** Chloride, Sulfate, Nitrate.**EPA 624.1:** Volatile Halocarbons & Aromatics,**EPA 608.3:** 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 625.1:** SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.**Microbiology:** **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.****Mansfield Facility:****Drinking Water****EPA 200.7:** Al, Ba, Cd, Cr, Cu, Fe, 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, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.**EPA 245.1 Hg.****SM2340B**

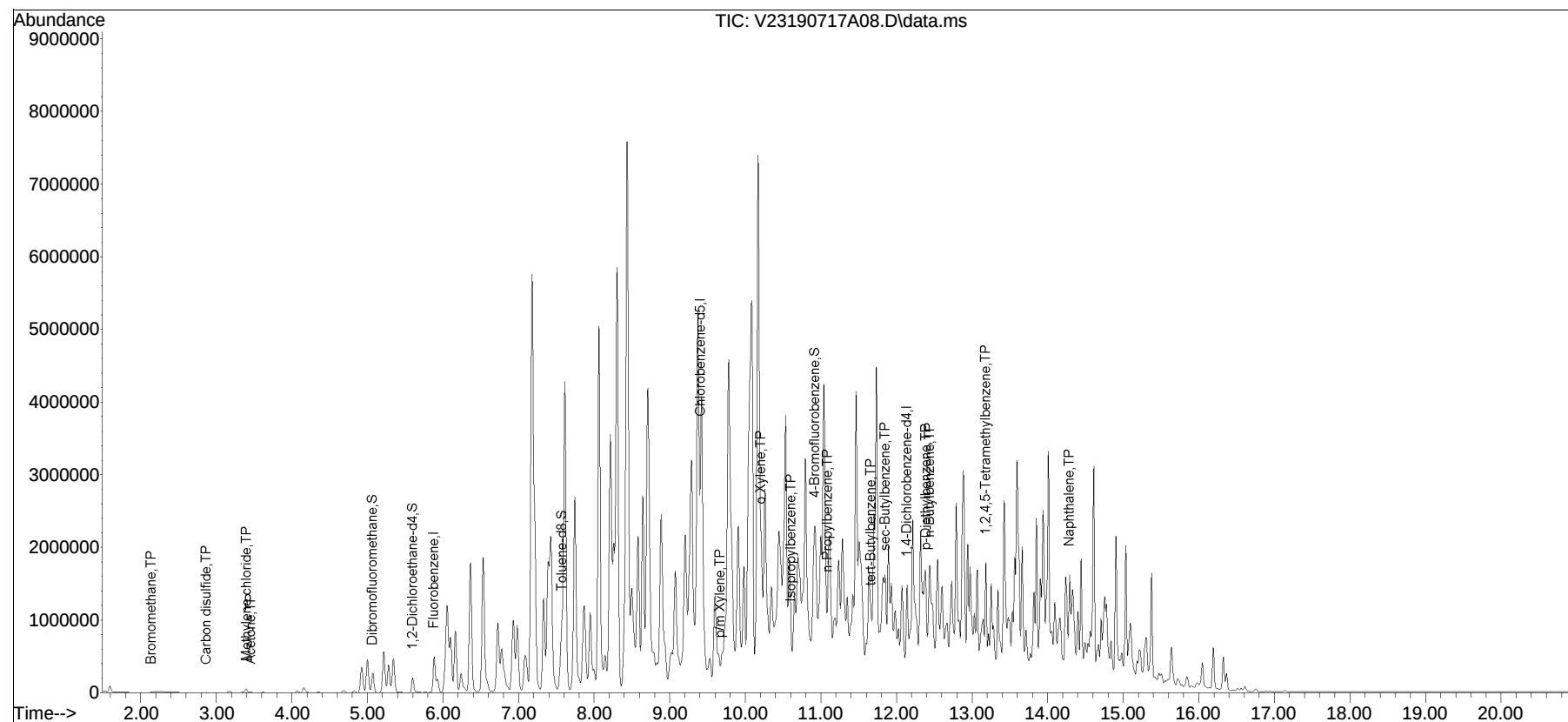
For a complete listing of analytes and methods, please contact your Alpha Project Manager.

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA123\2019\190717A\
Data File : V23190717A08.D
Acq On : 17 Jul 2019 07:16 am
Operator : VOA123:mv
Sample : l1931245-01D,31H,6.69,5,0.050,,a
Misc : WG1260933,ICAL15898
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jul 17 08:47:38 2019
Quant Method : I:\VOLATILES\VOA123\2019\190717A\V123_190621_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Tue Jun 25 09:48:51 2019
Response via : Initial Calibration

Sub List : 8260-NYTCL - Megamix plus Diox90717A\V23190717A01.D•

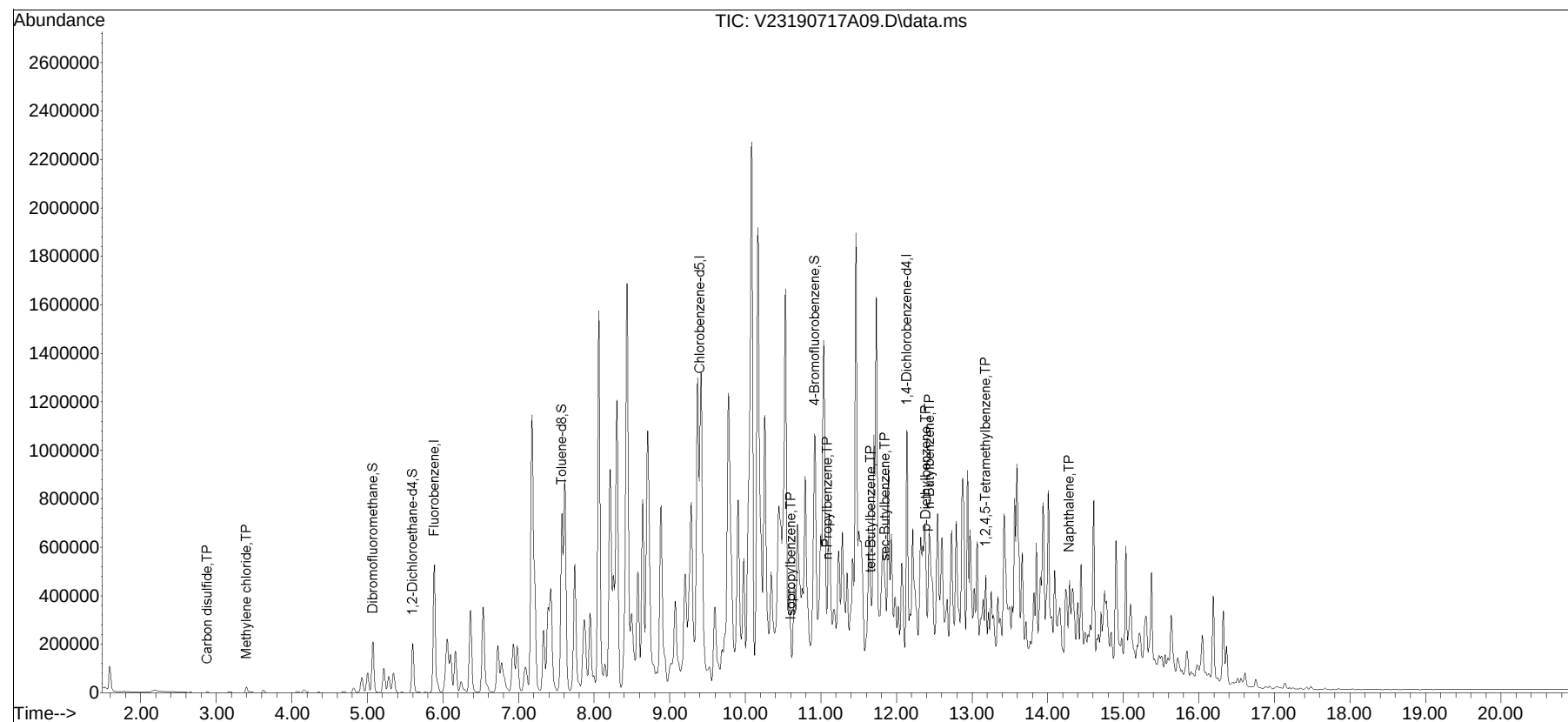


Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA123\2019\190717A\
Data File : V23190717A09.D
Acq On : 17 Jul 2019 07:41 am
Operator : VOA123:mv
Sample : l1931245-02D, 31H, 6.10, 5, 0.010, , a
Misc : WG1260933, ICAL15898
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jul 17 08:48:53 2019
Quant Method : I:\VOLATILES\VOA123\2019\190717A\V123_190621_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Tue Jun 25 09:48:51 2019
Response via : Initial Calibration

Sub List : 8260-NYTCL - Megamix plus Diox90717A\V23190717A01.D•





ANALYTICAL REPORT

Lab Number:	L1931524
Client:	Langan Engineering & Environmental 21 Penn Plaza 360 W. 31st Street, 8th Floor New York, NY 10001-2727
ATTN:	Julia Leung
Phone:	(212) 479-5400
Project Name:	450 JOHNSON AVE.
Project Number:	170588001
Report Date:	08/02/19

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

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: 450 JOHNSON AVE.

Project Number: 170588001

Lab Number: L1931524

Report Date: 08/02/19

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1931524-01	SB01_1.0-1.5	SOIL	BROOKLYN, NY	07/17/19 14:25	07/17/19
L1931524-02	SB02_8.0-8.5	SOIL	BROOKLYN, NY	07/17/19 15:30	07/17/19
L1931524-03	SB01_8.0-8.5	SOIL	BROOKLYN, NY	07/17/19 14:30	07/17/19
L1931524-04	SB09_3.0-3.5	SOIL	BROOKLYN, NY	07/17/19 08:40	07/17/19
L1931524-05	SB11_5.0-5.5	SOIL	BROOKLYN, NY	07/17/19 10:40	07/17/19
L1931524-06	TMW04_071719	WATER	BROOKLYN, NY	07/17/19 13:00	07/17/19
L1931524-07	TMW01_071719	WATER	BROOKLYN, NY	07/17/19 13:25	07/17/19
L1931524-08	TMW03_071719	WATER	BROOKLYN, NY	07/17/19 11:00	07/17/19
L1931524-09	TMW04_071719 (UF SVOC)	WATER	BROOKLYN, NY	07/17/19 13:00	07/17/19
L1931524-10	TMW01_071719 (UF SVOC)	WATER	BROOKLYN, NY	07/17/19 13:25	07/17/19
L1931524-11	TMW03_071719 (UF SVOC)	WATER	BROOKLYN, NY	07/17/19 11:00	07/17/19

Project Name: 450 JOHNSON AVE.
Project Number: 170588001

Lab Number: L1931524
Report Date: 08/02/19

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. 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 Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data 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.

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 Alpha Project Manager 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 Project Management at 800-624-9220 with any questions.

Project Name: 450 JOHNSON AVE.
Project Number: 170588001

Lab Number: L1931524
Report Date: 08/02/19

Case Narrative (continued)

Report Submission

August 02, 2019: This final report includes the results of all requested analyses.

July 19, 2019: This is a preliminary report.

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

Sample Receipt

The analyses performed were specified by the client.

L1931524-06, -07 and -08: The Client IDs were specified by the client.

L1931524-06, -07 and -08: The sample was received above the appropriate pH for the Dissolved Metals analysis. The laboratory added additional HNO₃ to a pH <2.

L1931524-06, -07 and -08: At the client's request, unfiltered Semivolatile Organics analysis was performed; the results are reported as L1931524-09, -10 and -11, respectively.

Semivolatile Organics

The WG1261662-2/-3 LCS/LCSD recoveries, associated with L1931524-09 through -11, are below the acceptance criteria for benzoic acid (0%/0%); however, it has been identified as a "difficult" analyte. The results of the associated samples are reported.

Total Metals

L1931524-01 through -05: The sample has elevated detection limits for all elements, with the exception of mercury, due to the dilution required by matrix interferences encountered during analysis.

Dissolved Metals

The WG1261422-3 MS recoveries, performed on L1931524-08, are outside the acceptance criteria for antimony (144%) and manganese (126%). A post digestion spike was performed and was within acceptance

Project Name: 450 JOHNSON AVE.
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Case Narrative (continued)

criteria.

The WG1261422-3 MS recoveries for calcium (153%), iron (270%) and magnesium (141%), performed on L1931524-08, do not apply because the sample concentrations are greater than four times the spike amounts added.

The WG1261422-4 Laboratory Duplicate RPDs for arsenic (29%), performed on L1931524-08, is above the acceptance criteria; however, the sample and duplicate results are less than five times the reporting limit.

Therefore, the RPD is valid.

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:



Lisa Westerlind

Title: Technical Director/Representative

Date: 08/02/19

ORGANICS

VOLATILES

Project Name: 450 JOHNSON AVE.**Lab Number:** L1931524**Project Number:** 170588001**Report Date:** 08/02/19**SAMPLE RESULTS**

Lab ID: L1931524-01
 Client ID: SB01_1.0-1.5
 Sample Location: BROOKLYN, NY

Date Collected: 07/17/19 14:25
 Date Received: 07/17/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 07/18/19 07:26
 Analyst: MV
 Percent Solids: 89%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	5.5	2.5	1
1,1-Dichloroethane	ND		ug/kg	1.1	0.16	1
Chloroform	ND		ug/kg	1.7	0.16	1
Carbon tetrachloride	ND		ug/kg	1.1	0.25	1
1,2-Dichloropropane	ND		ug/kg	1.1	0.14	1
Dibromochloromethane	ND		ug/kg	1.1	0.16	1
1,1,2-Trichloroethane	ND		ug/kg	1.1	0.30	1
Tetrachloroethene	ND		ug/kg	0.55	0.22	1
Chlorobenzene	ND		ug/kg	0.55	0.14	1
Trichlorofluoromethane	ND		ug/kg	4.4	0.77	1
1,2-Dichloroethane	ND		ug/kg	1.1	0.28	1
1,1,1-Trichloroethane	ND		ug/kg	0.55	0.18	1
Bromodichloromethane	ND		ug/kg	0.55	0.12	1
trans-1,3-Dichloropropene	ND		ug/kg	1.1	0.30	1
cis-1,3-Dichloropropene	ND		ug/kg	0.55	0.18	1
1,3-Dichloropropene, Total	ND		ug/kg	0.55	0.18	1
1,1-Dichloropropene	ND		ug/kg	0.55	0.18	1
Bromoform	ND		ug/kg	4.4	0.27	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.55	0.18	1
Benzene	ND		ug/kg	0.55	0.18	1
Toluene	ND		ug/kg	1.1	0.60	1
Ethylbenzene	ND		ug/kg	1.1	0.16	1
Chloromethane	ND		ug/kg	4.4	1.0	1
Bromomethane	ND		ug/kg	2.2	0.64	1
Vinyl chloride	ND		ug/kg	1.1	0.37	1
Chloroethane	ND		ug/kg	2.2	0.50	1
1,1-Dichloroethene	ND		ug/kg	1.1	0.26	1
trans-1,2-Dichloroethene	ND		ug/kg	1.7	0.15	1

Project Name: 450 JOHNSON AVE.**Lab Number:** L1931524**Project Number:** 170588001**Report Date:** 08/02/19**SAMPLE RESULTS****Lab ID:** L1931524-01**Date Collected:** 07/17/19 14:25**Client ID:** SB01_1.0-1.5**Date Received:** 07/17/19**Sample Location:** BROOKLYN, NY**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.55	0.15	1
1,2-Dichlorobenzene	ND		ug/kg	2.2	0.16	1
1,3-Dichlorobenzene	ND		ug/kg	2.2	0.16	1
1,4-Dichlorobenzene	ND		ug/kg	2.2	0.19	1
Methyl tert butyl ether	ND		ug/kg	2.2	0.22	1
p/m-Xylene	ND		ug/kg	2.2	0.62	1
o-Xylene	ND		ug/kg	1.1	0.32	1
Xylenes, Total	ND		ug/kg	1.1	0.32	1
cis-1,2-Dichloroethene	ND		ug/kg	1.1	0.19	1
1,2-Dichloroethene, Total	ND		ug/kg	1.1	0.15	1
Dibromomethane	ND		ug/kg	2.2	0.26	1
Styrene	ND		ug/kg	1.1	0.22	1
Dichlorodifluoromethane	ND		ug/kg	11	1.0	1
Acetone	11		ug/kg	11	5.3	1
Carbon disulfide	ND		ug/kg	11	5.0	1
2-Butanone	ND		ug/kg	11	2.4	1
Vinyl acetate	ND		ug/kg	11	2.4	1
4-Methyl-2-pentanone	ND		ug/kg	11	1.4	1
1,2,3-Trichloropropane	ND		ug/kg	2.2	0.14	1
2-Hexanone	ND		ug/kg	11	1.3	1
Bromochloromethane	ND		ug/kg	2.2	0.23	1
2,2-Dichloropropane	ND		ug/kg	2.2	0.22	1
1,2-Dibromoethane	ND		ug/kg	1.1	0.31	1
1,3-Dichloropropane	ND		ug/kg	2.2	0.18	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.55	0.15	1
Bromobenzene	ND		ug/kg	2.2	0.16	1
n-Butylbenzene	ND		ug/kg	1.1	0.18	1
sec-Butylbenzene	ND		ug/kg	1.1	0.16	1
tert-Butylbenzene	ND		ug/kg	2.2	0.13	1
o-Chlorotoluene	ND		ug/kg	2.2	0.21	1
p-Chlorotoluene	ND		ug/kg	2.2	0.12	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.3	1.1	1
Hexachlorobutadiene	ND		ug/kg	4.4	0.19	1
Isopropylbenzene	ND		ug/kg	1.1	0.12	1
p-Isopropyltoluene	ND		ug/kg	1.1	0.12	1
Naphthalene	ND		ug/kg	4.4	0.72	1
Acrylonitrile	ND		ug/kg	4.4	1.3	1

Project Name: 450 JOHNSON AVE.
Project Number: 170588001

Lab Number: L1931524
Report Date: 08/02/19

SAMPLE RESULTS

Lab ID: L1931524-01
Client ID: SB01_1.0-1.5
Sample Location: BROOKLYN, NY

Date Collected: 07/17/19 14:25
Date Received: 07/17/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.1	0.19	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.2	0.36	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.2	0.30	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.2	0.21	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.2	0.37	1
1,4-Dioxane	ND		ug/kg	89	39.	1
p-Diethylbenzene	ND		ug/kg	2.2	0.20	1
p-Ethyltoluene	ND		ug/kg	2.2	0.42	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.2	0.21	1
Ethyl ether	ND		ug/kg	2.2	0.38	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.5	1.6	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	92		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	94		70-130

Project Name: 450 JOHNSON AVE.**Lab Number:** L1931524**Project Number:** 170588001**Report Date:** 08/02/19**SAMPLE RESULTS**

Lab ID: L1931524-02
 Client ID: SB02_8.0-8.5
 Sample Location: BROOKLYN, NY

Date Collected: 07/17/19 15:30
 Date Received: 07/17/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 07/18/19 07:51
 Analyst: MV
 Percent Solids: 82%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	5.8	2.6	1
1,1-Dichloroethane	ND		ug/kg	1.2	0.17	1
Chloroform	ND		ug/kg	1.7	0.16	1
Carbon tetrachloride	ND		ug/kg	1.2	0.27	1
1,2-Dichloropropane	ND		ug/kg	1.2	0.14	1
Dibromochloromethane	ND		ug/kg	1.2	0.16	1
1,1,2-Trichloroethane	ND		ug/kg	1.2	0.31	1
Tetrachloroethene	ND		ug/kg	0.58	0.23	1
Chlorobenzene	ND		ug/kg	0.58	0.15	1
Trichlorofluoromethane	ND		ug/kg	4.6	0.80	1
1,2-Dichloroethane	ND		ug/kg	1.2	0.30	1
1,1,1-Trichloroethane	ND		ug/kg	0.58	0.19	1
Bromodichloromethane	ND		ug/kg	0.58	0.13	1
trans-1,3-Dichloropropene	ND		ug/kg	1.2	0.32	1
cis-1,3-Dichloropropene	ND		ug/kg	0.58	0.18	1
1,3-Dichloropropene, Total	ND		ug/kg	0.58	0.18	1
1,1-Dichloropropene	ND		ug/kg	0.58	0.18	1
Bromoform	ND		ug/kg	4.6	0.28	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.58	0.19	1
Benzene	ND		ug/kg	0.58	0.19	1
Toluene	ND		ug/kg	1.2	0.63	1
Ethylbenzene	ND		ug/kg	1.2	0.16	1
Chloromethane	ND		ug/kg	4.6	1.1	1
Bromomethane	ND		ug/kg	2.3	0.67	1
Vinyl chloride	ND		ug/kg	1.2	0.39	1
Chloroethane	ND		ug/kg	2.3	0.52	1
1,1-Dichloroethene	ND		ug/kg	1.2	0.28	1
trans-1,2-Dichloroethene	ND		ug/kg	1.7	0.16	1

Project Name: 450 JOHNSON AVE.**Lab Number:** L1931524**Project Number:** 170588001**Report Date:** 08/02/19**SAMPLE RESULTS**

Lab ID: L1931524-02
 Client ID: SB02_8.0-8.5
 Sample Location: BROOKLYN, NY

Date Collected: 07/17/19 15:30
 Date Received: 07/17/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	0.19	J	ug/kg	0.58	0.16	1
1,2-Dichlorobenzene	ND		ug/kg	2.3	0.17	1
1,3-Dichlorobenzene	ND		ug/kg	2.3	0.17	1
1,4-Dichlorobenzene	ND		ug/kg	2.3	0.20	1
Methyl tert butyl ether	ND		ug/kg	2.3	0.23	1
p/m-Xylene	ND		ug/kg	2.3	0.65	1
o-Xylene	ND		ug/kg	1.2	0.34	1
Xylenes, Total	ND		ug/kg	1.2	0.34	1
cis-1,2-Dichloroethene	ND		ug/kg	1.2	0.20	1
1,2-Dichloroethene, Total	ND		ug/kg	1.2	0.16	1
Dibromomethane	ND		ug/kg	2.3	0.28	1
Styrene	ND		ug/kg	1.2	0.23	1
Dichlorodifluoromethane	ND		ug/kg	12	1.1	1
Acetone	ND		ug/kg	12	5.6	1
Carbon disulfide	ND		ug/kg	12	5.3	1
2-Butanone	ND		ug/kg	12	2.6	1
Vinyl acetate	ND		ug/kg	12	2.5	1
4-Methyl-2-pentanone	ND		ug/kg	12	1.5	1
1,2,3-Trichloropropane	ND		ug/kg	2.3	0.15	1
2-Hexanone	ND		ug/kg	12	1.4	1
Bromochloromethane	ND		ug/kg	2.3	0.24	1
2,2-Dichloropropane	ND		ug/kg	2.3	0.23	1
1,2-Dibromoethane	ND		ug/kg	1.2	0.32	1
1,3-Dichloropropane	ND		ug/kg	2.3	0.19	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.58	0.15	1
Bromobenzene	ND		ug/kg	2.3	0.17	1
n-Butylbenzene	ND		ug/kg	1.2	0.19	1
sec-Butylbenzene	ND		ug/kg	1.2	0.17	1
tert-Butylbenzene	ND		ug/kg	2.3	0.14	1
o-Chlorotoluene	ND		ug/kg	2.3	0.22	1
p-Chlorotoluene	ND		ug/kg	2.3	0.12	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.5	1.2	1
Hexachlorobutadiene	ND		ug/kg	4.6	0.20	1
Isopropylbenzene	ND		ug/kg	1.2	0.13	1
p-Isopropyltoluene	ND		ug/kg	1.2	0.13	1
Naphthalene	ND		ug/kg	4.6	0.75	1
Acrylonitrile	ND		ug/kg	4.6	1.3	1

Project Name: 450 JOHNSON AVE.**Lab Number:** L1931524**Project Number:** 170588001**Report Date:** 08/02/19**SAMPLE RESULTS****Lab ID:** L1931524-02**Date Collected:** 07/17/19 15:30**Client ID:** SB02_8.0-8.5**Date Received:** 07/17/19**Sample Location:** BROOKLYN, NY**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.2	0.20	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.3	0.37	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.3	0.32	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.3	0.22	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.3	0.39	1
1,4-Dioxane	ND		ug/kg	93	41.	1
p-Diethylbenzene	ND		ug/kg	2.3	0.20	1
p-Ethyltoluene	ND		ug/kg	2.3	0.44	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.3	0.22	1
Ethyl ether	ND		ug/kg	2.3	0.40	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.8	1.6	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	91		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	94		70-130

Project Name: 450 JOHNSON AVE.**Lab Number:** L1931524**Project Number:** 170588001**Report Date:** 08/02/19**SAMPLE RESULTS**

Lab ID: L1931524-03
 Client ID: SB01_8.0-8.5
 Sample Location: BROOKLYN, NY

Date Collected: 07/17/19 14:30
 Date Received: 07/17/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 07/18/19 08:17
 Analyst: MV
 Percent Solids: 86%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	4.8	2.2	1
1,1-Dichloroethane	ND		ug/kg	0.95	0.14	1
Chloroform	ND		ug/kg	1.4	0.13	1
Carbon tetrachloride	ND		ug/kg	0.95	0.22	1
1,2-Dichloropropane	ND		ug/kg	0.95	0.12	1
Dibromochloromethane	ND		ug/kg	0.95	0.13	1
1,1,2-Trichloroethane	ND		ug/kg	0.95	0.25	1
Tetrachloroethene	ND		ug/kg	0.48	0.19	1
Chlorobenzene	ND		ug/kg	0.48	0.12	1
Trichlorofluoromethane	ND		ug/kg	3.8	0.66	1
1,2-Dichloroethane	ND		ug/kg	0.95	0.24	1
1,1,1-Trichloroethane	ND		ug/kg	0.48	0.16	1
Bromodichloromethane	ND		ug/kg	0.48	0.10	1
trans-1,3-Dichloropropene	ND		ug/kg	0.95	0.26	1
cis-1,3-Dichloropropene	ND		ug/kg	0.48	0.15	1
1,3-Dichloropropene, Total	ND		ug/kg	0.48	0.15	1
1,1-Dichloropropene	ND		ug/kg	0.48	0.15	1
Bromoform	ND		ug/kg	3.8	0.23	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.48	0.16	1
Benzene	ND		ug/kg	0.48	0.16	1
Toluene	ND		ug/kg	0.95	0.52	1
Ethylbenzene	ND		ug/kg	0.95	0.13	1
Chloromethane	ND		ug/kg	3.8	0.89	1
Bromomethane	ND		ug/kg	1.9	0.55	1
Vinyl chloride	ND		ug/kg	0.95	0.32	1
Chloroethane	ND		ug/kg	1.9	0.43	1
1,1-Dichloroethene	ND		ug/kg	0.95	0.23	1
trans-1,2-Dichloroethene	ND		ug/kg	1.4	0.13	1

Project Name: 450 JOHNSON AVE.

Lab Number: L1931524

Project Number: 170588001

Report Date: 08/02/19

SAMPLE RESULTS

Lab ID: L1931524-03
 Client ID: SB01_8.0-8.5
 Sample Location: BROOKLYN, NY

Date Collected: 07/17/19 14:30
 Date Received: 07/17/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.48	0.13	1
1,2-Dichlorobenzene	ND		ug/kg	1.9	0.14	1
1,3-Dichlorobenzene	ND		ug/kg	1.9	0.14	1
1,4-Dichlorobenzene	ND		ug/kg	1.9	0.16	1
Methyl tert butyl ether	0.20	J	ug/kg	1.9	0.19	1
p/m-Xylene	ND		ug/kg	1.9	0.53	1
o-Xylene	ND		ug/kg	0.95	0.28	1
Xylenes, Total	ND		ug/kg	0.95	0.28	1
cis-1,2-Dichloroethene	ND		ug/kg	0.95	0.17	1
1,2-Dichloroethene, Total	ND		ug/kg	0.95	0.13	1
Dibromomethane	ND		ug/kg	1.9	0.23	1
Styrene	ND		ug/kg	0.95	0.19	1
Dichlorodifluoromethane	ND		ug/kg	9.5	0.87	1
Acetone	6.2	J	ug/kg	9.5	4.6	1
Carbon disulfide	ND		ug/kg	9.5	4.3	1
2-Butanone	ND		ug/kg	9.5	2.1	1
Vinyl acetate	ND		ug/kg	9.5	2.0	1
4-Methyl-2-pentanone	ND		ug/kg	9.5	1.2	1
1,2,3-Trichloropropane	ND		ug/kg	1.9	0.12	1
2-Hexanone	ND		ug/kg	9.5	1.1	1
Bromochloromethane	ND		ug/kg	1.9	0.20	1
2,2-Dichloropropane	ND		ug/kg	1.9	0.19	1
1,2-Dibromoethane	ND		ug/kg	0.95	0.26	1
1,3-Dichloropropane	ND		ug/kg	1.9	0.16	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.48	0.12	1
Bromobenzene	ND		ug/kg	1.9	0.14	1
n-Butylbenzene	ND		ug/kg	0.95	0.16	1
sec-Butylbenzene	ND		ug/kg	0.95	0.14	1
tert-Butylbenzene	ND		ug/kg	1.9	0.11	1
o-Chlorotoluene	ND		ug/kg	1.9	0.18	1
p-Chlorotoluene	ND		ug/kg	1.9	0.10	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	2.8	0.95	1
Hexachlorobutadiene	ND		ug/kg	3.8	0.16	1
Isopropylbenzene	ND		ug/kg	0.95	0.10	1
p-Isopropyltoluene	ND		ug/kg	0.95	0.10	1
Naphthalene	ND		ug/kg	3.8	0.62	1
Acrylonitrile	ND		ug/kg	3.8	1.1	1

Project Name: 450 JOHNSON AVE.
Project Number: 170588001

Lab Number: L1931524
Report Date: 08/02/19

SAMPLE RESULTS

Lab ID: L1931524-03
Client ID: SB01_8.0-8.5
Sample Location: BROOKLYN, NY

Date Collected: 07/17/19 14:30
Date Received: 07/17/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	0.95	0.16	1
1,2,3-Trichlorobenzene	ND		ug/kg	1.9	0.31	1
1,2,4-Trichlorobenzene	ND		ug/kg	1.9	0.26	1
1,3,5-Trimethylbenzene	ND		ug/kg	1.9	0.18	1
1,2,4-Trimethylbenzene	ND		ug/kg	1.9	0.32	1
1,4-Dioxane	ND		ug/kg	76	33.	1
p-Diethylbenzene	ND		ug/kg	1.9	0.17	1
p-Ethyltoluene	ND		ug/kg	1.9	0.36	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	1.9	0.18	1
Ethyl ether	ND		ug/kg	1.9	0.32	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	4.8	1.4	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	95		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	96		70-130

Project Name: 450 JOHNSON AVE.**Lab Number:** L1931524**Project Number:** 170588001**Report Date:** 08/02/19**SAMPLE RESULTS**

Lab ID: L1931524-04
 Client ID: SB09_3.0-3.5
 Sample Location: BROOKLYN, NY

Date Collected: 07/17/19 08:40
 Date Received: 07/17/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 07/18/19 08:43
 Analyst: MV
 Percent Solids: 90%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	5.4	2.5	1
1,1-Dichloroethane	ND		ug/kg	1.1	0.16	1
Chloroform	ND		ug/kg	1.6	0.15	1
Carbon tetrachloride	ND		ug/kg	1.1	0.25	1
1,2-Dichloropropane	ND		ug/kg	1.1	0.13	1
Dibromochloromethane	ND		ug/kg	1.1	0.15	1
1,1,2-Trichloroethane	ND		ug/kg	1.1	0.29	1
Tetrachloroethene	ND		ug/kg	0.54	0.21	1
Chlorobenzene	ND		ug/kg	0.54	0.14	1
Trichlorofluoromethane	ND		ug/kg	4.3	0.75	1
1,2-Dichloroethane	ND		ug/kg	1.1	0.28	1
1,1,1-Trichloroethane	ND		ug/kg	0.54	0.18	1
Bromodichloromethane	ND		ug/kg	0.54	0.12	1
trans-1,3-Dichloropropene	ND		ug/kg	1.1	0.29	1
cis-1,3-Dichloropropene	ND		ug/kg	0.54	0.17	1
1,3-Dichloropropene, Total	ND		ug/kg	0.54	0.17	1
1,1-Dichloropropene	ND		ug/kg	0.54	0.17	1
Bromoform	ND		ug/kg	4.3	0.26	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.54	0.18	1
Benzene	ND		ug/kg	0.54	0.18	1
Toluene	ND		ug/kg	1.1	0.58	1
Ethylbenzene	ND		ug/kg	1.1	0.15	1
Chloromethane	ND		ug/kg	4.3	1.0	1
Bromomethane	ND		ug/kg	2.1	0.62	1
Vinyl chloride	ND		ug/kg	1.1	0.36	1
Chloroethane	ND		ug/kg	2.1	0.48	1
1,1-Dichloroethene	ND		ug/kg	1.1	0.26	1
trans-1,2-Dichloroethene	ND		ug/kg	1.6	0.15	1

Project Name: 450 JOHNSON AVE.

Lab Number: L1931524

Project Number: 170588001

Report Date: 08/02/19

SAMPLE RESULTS

Lab ID: L1931524-04
 Client ID: SB09_3.0-3.5
 Sample Location: BROOKLYN, NY

Date Collected: 07/17/19 08:40
 Date Received: 07/17/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.54	0.15	1
1,2-Dichlorobenzene	ND		ug/kg	2.1	0.15	1
1,3-Dichlorobenzene	ND		ug/kg	2.1	0.16	1
1,4-Dichlorobenzene	ND		ug/kg	2.1	0.18	1
Methyl tert butyl ether	ND		ug/kg	2.1	0.22	1
p/m-Xylene	ND		ug/kg	2.1	0.60	1
o-Xylene	ND		ug/kg	1.1	0.31	1
Xylenes, Total	ND		ug/kg	1.1	0.31	1
cis-1,2-Dichloroethene	ND		ug/kg	1.1	0.19	1
1,2-Dichloroethene, Total	ND		ug/kg	1.1	0.15	1
Dibromomethane	ND		ug/kg	2.1	0.26	1
Styrene	ND		ug/kg	1.1	0.21	1
Dichlorodifluoromethane	ND		ug/kg	11	0.98	1
Acetone	13		ug/kg	11	5.2	1
Carbon disulfide	ND		ug/kg	11	4.9	1
2-Butanone	ND		ug/kg	11	2.4	1
Vinyl acetate	ND		ug/kg	11	2.3	1
4-Methyl-2-pentanone	ND		ug/kg	11	1.4	1
1,2,3-Trichloropropane	ND		ug/kg	2.1	0.14	1
2-Hexanone	ND		ug/kg	11	1.3	1
Bromochloromethane	ND		ug/kg	2.1	0.22	1
2,2-Dichloropropane	ND		ug/kg	2.1	0.22	1
1,2-Dibromoethane	ND		ug/kg	1.1	0.30	1
1,3-Dichloropropane	ND		ug/kg	2.1	0.18	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.54	0.14	1
Bromobenzene	ND		ug/kg	2.1	0.16	1
n-Butylbenzene	ND		ug/kg	1.1	0.18	1
sec-Butylbenzene	ND		ug/kg	1.1	0.16	1
tert-Butylbenzene	ND		ug/kg	2.1	0.13	1
o-Chlorotoluene	ND		ug/kg	2.1	0.20	1
p-Chlorotoluene	ND		ug/kg	2.1	0.12	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.2	1.1	1
Hexachlorobutadiene	ND		ug/kg	4.3	0.18	1
Isopropylbenzene	ND		ug/kg	1.1	0.12	1
p-Isopropyltoluene	ND		ug/kg	1.1	0.12	1
Naphthalene	ND		ug/kg	4.3	0.70	1
Acrylonitrile	ND		ug/kg	4.3	1.2	1

Project Name: 450 JOHNSON AVE.
Project Number: 170588001

Lab Number: L1931524
Report Date: 08/02/19

SAMPLE RESULTS

Lab ID: L1931524-04
Client ID: SB09_3.0-3.5
Sample Location: BROOKLYN, NY

Date Collected: 07/17/19 08:40
Date Received: 07/17/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.1	0.18	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.1	0.34	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.1	0.29	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.1	0.21	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.1	0.36	1
1,4-Dioxane	ND		ug/kg	86	38.	1
p-Diethylbenzene	ND		ug/kg	2.1	0.19	1
p-Ethyltoluene	ND		ug/kg	2.1	0.41	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.1	0.20	1
Ethyl ether	ND		ug/kg	2.1	0.37	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.4	1.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	96		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	97		70-130

Project Name: 450 JOHNSON AVE.**Lab Number:** L1931524**Project Number:** 170588001**Report Date:** 08/02/19**SAMPLE RESULTS**

Lab ID: L1931524-05
 Client ID: SB11_5.0-5.5
 Sample Location: BROOKLYN, NY

Date Collected: 07/17/19 10:40
 Date Received: 07/17/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 07/18/19 09:08
 Analyst: MV
 Percent Solids: 76%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	5.4	2.5	1
1,1-Dichloroethane	ND		ug/kg	1.1	0.16	1
Chloroform	ND		ug/kg	1.6	0.15	1
Carbon tetrachloride	ND		ug/kg	1.1	0.25	1
1,2-Dichloropropane	ND		ug/kg	1.1	0.14	1
Dibromochloromethane	ND		ug/kg	1.1	0.15	1
1,1,2-Trichloroethane	ND		ug/kg	1.1	0.29	1
Tetrachloroethene	ND		ug/kg	0.54	0.21	1
Chlorobenzene	ND		ug/kg	0.54	0.14	1
Trichlorofluoromethane	ND		ug/kg	4.3	0.75	1
1,2-Dichloroethane	ND		ug/kg	1.1	0.28	1
1,1,1-Trichloroethane	ND		ug/kg	0.54	0.18	1
Bromodichloromethane	ND		ug/kg	0.54	0.12	1
trans-1,3-Dichloropropene	ND		ug/kg	1.1	0.30	1
cis-1,3-Dichloropropene	ND		ug/kg	0.54	0.17	1
1,3-Dichloropropene, Total	ND		ug/kg	0.54	0.17	1
1,1-Dichloropropene	ND		ug/kg	0.54	0.17	1
Bromoform	ND		ug/kg	4.3	0.26	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.54	0.18	1
Benzene	ND		ug/kg	0.54	0.18	1
Toluene	ND		ug/kg	1.1	0.59	1
Ethylbenzene	ND		ug/kg	1.1	0.15	1
Chloromethane	ND		ug/kg	4.3	1.0	1
Bromomethane	ND		ug/kg	2.2	0.63	1
Vinyl chloride	ND		ug/kg	1.1	0.36	1
Chloroethane	ND		ug/kg	2.2	0.49	1
1,1-Dichloroethene	ND		ug/kg	1.1	0.26	1
trans-1,2-Dichloroethene	ND		ug/kg	1.6	0.15	1

Project Name: 450 JOHNSON AVE.

Lab Number: L1931524

Project Number: 170588001

Report Date: 08/02/19

SAMPLE RESULTS

Lab ID: L1931524-05
 Client ID: SB11_5.0-5.5
 Sample Location: BROOKLYN, NY

Date Collected: 07/17/19 10:40
 Date Received: 07/17/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	2.4		ug/kg	0.54	0.15	1
1,2-Dichlorobenzene	ND		ug/kg	2.2	0.16	1
1,3-Dichlorobenzene	ND		ug/kg	2.2	0.16	1
1,4-Dichlorobenzene	ND		ug/kg	2.2	0.18	1
Methyl tert butyl ether	0.23	J	ug/kg	2.2	0.22	1
p/m-Xylene	ND		ug/kg	2.2	0.60	1
o-Xylene	ND		ug/kg	1.1	0.31	1
Xylenes, Total	ND		ug/kg	1.1	0.31	1
cis-1,2-Dichloroethene	ND		ug/kg	1.1	0.19	1
1,2-Dichloroethene, Total	ND		ug/kg	1.1	0.15	1
Dibromomethane	ND		ug/kg	2.2	0.26	1
Styrene	ND		ug/kg	1.1	0.21	1
Dichlorodifluoromethane	ND		ug/kg	11	0.99	1
Acetone	15		ug/kg	11	5.2	1
Carbon disulfide	ND		ug/kg	11	4.9	1
2-Butanone	ND		ug/kg	11	2.4	1
Vinyl acetate	ND		ug/kg	11	2.3	1
4-Methyl-2-pentanone	ND		ug/kg	11	1.4	1
1,2,3-Trichloropropane	ND		ug/kg	2.2	0.14	1
2-Hexanone	ND		ug/kg	11	1.3	1
Bromochloromethane	ND		ug/kg	2.2	0.22	1
2,2-Dichloropropane	ND		ug/kg	2.2	0.22	1
1,2-Dibromoethane	ND		ug/kg	1.1	0.30	1
1,3-Dichloropropane	ND		ug/kg	2.2	0.18	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.54	0.14	1
Bromobenzene	ND		ug/kg	2.2	0.16	1
n-Butylbenzene	ND		ug/kg	1.1	0.18	1
sec-Butylbenzene	ND		ug/kg	1.1	0.16	1
tert-Butylbenzene	ND		ug/kg	2.2	0.13	1
o-Chlorotoluene	ND		ug/kg	2.2	0.21	1
p-Chlorotoluene	ND		ug/kg	2.2	0.12	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.2	1.1	1
Hexachlorobutadiene	ND		ug/kg	4.3	0.18	1
Isopropylbenzene	ND		ug/kg	1.1	0.12	1
p-Isopropyltoluene	ND		ug/kg	1.1	0.12	1
Naphthalene	ND		ug/kg	4.3	0.70	1
Acrylonitrile	ND		ug/kg	4.3	1.2	1

Project Name: 450 JOHNSON AVE.**Lab Number:** L1931524**Project Number:** 170588001**Report Date:** 08/02/19**SAMPLE RESULTS****Lab ID:** L1931524-05**Date Collected:** 07/17/19 10:40**Client ID:** SB11_5.0-5.5**Date Received:** 07/17/19**Sample Location:** BROOKLYN, NY**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.1	0.18	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.2	0.35	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.2	0.29	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.2	0.21	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.2	0.36	1
1,4-Dioxane	ND		ug/kg	86	38.	1
p-Diethylbenzene	ND		ug/kg	2.2	0.19	1
p-Ethyltoluene	ND		ug/kg	2.2	0.42	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.2	0.21	1
Ethyl ether	ND		ug/kg	2.2	0.37	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.4	1.5	1

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

Project Name: 450 JOHNSON AVE.
Project Number: 170588001

Lab Number: L1931524
Report Date: 08/02/19

SAMPLE RESULTS

Lab ID: L1931524-06
Client ID: TMW04_071719
Sample Location: BROOKLYN, NY

Date Collected: 07/17/19 13:00
Date Received: 07/17/19
Field Prep: None

Sample Depth:

Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 07/18/19 09:39
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	0.19	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
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	31		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: 450 JOHNSON AVE.

Lab Number: L1931524

Project Number: 170588001

Report Date: 08/02/19

SAMPLE RESULTS

Lab ID: L1931524-06
 Client ID: TMW04_071719
 Sample Location: BROOKLYN, NY

Date Collected: 07/17/19 13:00
 Date Received: 07/17/19
 Field Prep: None

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	11		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
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	2.2	J	ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	9.4		ug/l	2.5	0.70	1
sec-Butylbenzene	7.3		ug/l	2.5	0.70	1
tert-Butylbenzene	1.1	J	ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	6.6		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	3.0		ug/l	2.5	0.70	1

Project Name: 450 JOHNSON AVE.**Lab Number:** L1931524**Project Number:** 170588001**Report Date:** 08/02/19**SAMPLE RESULTS****Lab ID:** L1931524-06**Date Collected:** 07/17/19 13:00**Client ID:** TMW04_071719**Date Received:** 07/17/19**Sample Location:** BROOKLYN, NY**Field Prep:** None**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	7.0		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	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
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	7.2		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	34		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	93		70-130
Toluene-d8	105		70-130
4-Bromofluorobenzene	114		70-130
Dibromofluoromethane	97		70-130

Project Name: 450 JOHNSON AVE.**Lab Number:** L1931524**Project Number:** 170588001**Report Date:** 08/02/19**SAMPLE RESULTS**

Lab ID: L1931524-07
 Client ID: TMW01_071719
 Sample Location: BROOKLYN, NY

Date Collected: 07/17/19 13:25
 Date Received: 07/17/19
 Field Prep: None

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 07/18/19 10:36
 Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
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
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	0.08	J	ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: 450 JOHNSON AVE.**Lab Number:** L1931524**Project Number:** 170588001**Report Date:** 08/02/19**SAMPLE RESULTS**

Lab ID: L1931524-07
Client ID: TMW01_071719
Sample Location: BROOKLYN, NY

Date Collected: 07/17/19 13:25
Date Received: 07/17/19
Field Prep: None

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	2.4	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
cis-1,2-Dichloroethene	1.5	J	ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	1.5	J	ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	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
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	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

Project Name: 450 JOHNSON AVE.**Lab Number:** L1931524**Project Number:** 170588001**Report Date:** 08/02/19**SAMPLE RESULTS****Lab ID:** L1931524-07**Date Collected:** 07/17/19 13:25**Client ID:** TMW01_071719**Date Received:** 07/17/19**Sample Location:** BROOKLYN, NY**Field Prep:** None**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	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
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	74		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	93		70-130

Project Name: 450 JOHNSON AVE.
Project Number: 170588001

Lab Number: L1931524
Report Date: 08/02/19

SAMPLE RESULTS

Lab ID: L1931524-08
Client ID: TMW03_071719
Sample Location: BROOKLYN, NY

Date Collected: 07/17/19 11:00
Date Received: 07/17/19
Field Prep: None

Sample Depth:

Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 07/18/19 10:08
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	0.93	J	ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	0.24	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
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	0.38	J	ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: 450 JOHNSON AVE.**Lab Number:** L1931524**Project Number:** 170588001**Report Date:** 08/02/19**SAMPLE RESULTS**

Lab ID: L1931524-08
 Client ID: TMW03_071719
 Sample Location: BROOKLYN, NY

Date Collected: 07/17/19 11:00
 Date Received: 07/17/19
 Field Prep: None

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	15		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
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	4.2	J	ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	1.5	J	ug/l	2.5	0.70	1
sec-Butylbenzene	1.7	J	ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	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	0.81	J	ug/l	2.5	0.70	1

Project Name: 450 JOHNSON AVE.
Project Number: 170588001

Lab Number: L1931524
Report Date: 08/02/19

SAMPLE RESULTS

Lab ID: L1931524-08
Client ID: TMW03_071719
Sample Location: BROOKLYN, NY

Date Collected: 07/17/19 11:00
Date Received: 07/17/19
Field Prep: None

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	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
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	1.9	J	ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	7.6		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	75		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	92		70-130

Project Name: 450 JOHNSON AVE.
Project Number: 170588001

Lab Number: L1931524
Report Date: 08/02/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 07/18/19 06:34
 Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 01-05 Batch: WG1261466-5					
Methylene chloride	ND		ug/kg	5.0	2.3
1,1-Dichloroethane	ND		ug/kg	1.0	0.14
Chloroform	ND		ug/kg	1.5	0.14
Carbon tetrachloride	ND		ug/kg	1.0	0.23
1,2-Dichloropropane	ND		ug/kg	1.0	0.12
Dibromochloromethane	ND		ug/kg	1.0	0.14
1,1,2-Trichloroethane	ND		ug/kg	1.0	0.27
Tetrachloroethene	ND		ug/kg	0.50	0.20
Chlorobenzene	ND		ug/kg	0.50	0.13
Trichlorofluoromethane	ND		ug/kg	4.0	0.70
1,2-Dichloroethane	ND		ug/kg	1.0	0.26
1,1,1-Trichloroethane	ND		ug/kg	0.50	0.17
Bromodichloromethane	ND		ug/kg	0.50	0.11
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.27
cis-1,3-Dichloropropene	ND		ug/kg	0.50	0.16
1,3-Dichloropropene, Total	ND		ug/kg	0.50	0.16
1,1-Dichloropropene	ND		ug/kg	0.50	0.16
Bromoform	ND		ug/kg	4.0	0.25
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.50	0.17
Benzene	ND		ug/kg	0.50	0.17
Toluene	ND		ug/kg	1.0	0.54
Ethylbenzene	ND		ug/kg	1.0	0.14
Chloromethane	ND		ug/kg	4.0	0.93
Bromomethane	ND		ug/kg	2.0	0.58
Vinyl chloride	ND		ug/kg	1.0	0.34
Chloroethane	ND		ug/kg	2.0	0.45
1,1-Dichloroethene	ND		ug/kg	1.0	0.24
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.14
Trichloroethene	ND		ug/kg	0.50	0.14

Project Name: 450 JOHNSON AVE.
Project Number: 170588001

Lab Number: L1931524
Report Date: 08/02/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 07/18/19 06:34
 Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 01-05 Batch: WG1261466-5					
1,2-Dichlorobenzene	ND		ug/kg	2.0	0.14
1,3-Dichlorobenzene	ND		ug/kg	2.0	0.15
1,4-Dichlorobenzene	ND		ug/kg	2.0	0.17
Methyl tert butyl ether	ND		ug/kg	2.0	0.20
p/m-Xylene	ND		ug/kg	2.0	0.56
o-Xylene	ND		ug/kg	1.0	0.29
Xylenes, Total	ND		ug/kg	1.0	0.29
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.18
1,2-Dichloroethene, Total	ND		ug/kg	1.0	0.14
Dibromomethane	ND		ug/kg	2.0	0.24
Styrene	ND		ug/kg	1.0	0.20
Dichlorodifluoromethane	ND		ug/kg	10	0.92
Acetone	ND		ug/kg	10	4.8
Carbon disulfide	ND		ug/kg	10	4.6
2-Butanone	ND		ug/kg	10	2.2
Vinyl acetate	ND		ug/kg	10	2.2
4-Methyl-2-pentanone	ND		ug/kg	10	1.3
1,2,3-Trichloropropane	ND		ug/kg	2.0	0.13
2-Hexanone	ND		ug/kg	10	1.2
Bromochloromethane	ND		ug/kg	2.0	0.20
2,2-Dichloropropane	ND		ug/kg	2.0	0.20
1,2-Dibromoethane	ND		ug/kg	1.0	0.28
1,3-Dichloropropane	ND		ug/kg	2.0	0.17
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.50	0.13
Bromobenzene	ND		ug/kg	2.0	0.14
n-Butylbenzene	ND		ug/kg	1.0	0.17
sec-Butylbenzene	ND		ug/kg	1.0	0.15
tert-Butylbenzene	ND		ug/kg	2.0	0.12
o-Chlorotoluene	ND		ug/kg	2.0	0.19

Project Name: 450 JOHNSON AVE.
Project Number: 170588001

Lab Number: L1931524
Report Date: 08/02/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 07/18/19 06:34
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 01-05 Batch: WG1261466-5					
p-Chlorotoluene	ND		ug/kg	2.0	0.11
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.0	1.0
Hexachlorobutadiene	ND		ug/kg	4.0	0.17
Isopropylbenzene	ND		ug/kg	1.0	0.11
p-Isopropyltoluene	ND		ug/kg	1.0	0.11
Naphthalene	ND		ug/kg	4.0	0.65
Acrylonitrile	ND		ug/kg	4.0	1.2
n-Propylbenzene	ND		ug/kg	1.0	0.17
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	0.32
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	0.27
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	0.19
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	0.33
1,4-Dioxane	ND		ug/kg	80	35.
p-Diethylbenzene	ND		ug/kg	2.0	0.18
p-Ethyltoluene	ND		ug/kg	2.0	0.38
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.0	0.19
Ethyl ether	ND		ug/kg	2.0	0.34
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.0	1.4

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	92		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	93		70-130

Project Name: 450 JOHNSON AVE.
Project Number: 170588001

Lab Number: L1931524
Report Date: 08/02/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 07/18/19 08:15
 Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 06-08 Batch: WG1261556-5					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14
1,1-Dichloropropene	ND		ug/l	2.5	0.70
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18

Project Name: 450 JOHNSON AVE.
Project Number: 170588001

Lab Number: L1931524
Report Date: 08/02/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 07/18/19 08:15
 Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 06-08 Batch: WG1261556-5					
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70
1,4-Dichlorobenzene	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
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70
Dibromomethane	ND		ug/l	5.0	1.0
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70
Acrylonitrile	ND		ug/l	5.0	1.5
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
Vinyl acetate	ND		ug/l	5.0	1.0
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
2,2-Dichloropropane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,3-Dichloropropane	ND		ug/l	2.5	0.70
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70
Bromobenzene	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

Project Name: 450 JOHNSON AVE.
Project Number: 170588001

Lab Number: L1931524
Report Date: 08/02/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 07/18/19 08:15
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 06-08 Batch: WG1261556-5					
o-Chlorotoluene	ND		ug/l	2.5	0.70
p-Chlorotoluene	ND		ug/l	2.5	0.70
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Hexachlorobutadiene	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
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	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
1,4-Dioxane	ND		ug/l	250	61.
p-Diethylbenzene	ND		ug/l	2.0	0.70
p-Ethyltoluene	ND		ug/l	2.0	0.70
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54
Ethyl ether	ND		ug/l	2.5	0.70
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	94		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	100		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: 450 JOHNSON AVE.

Project Number: 170588001

Lab Number: L1931524

Report Date: 08/02/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01-05 Batch: WG1261466-3 WG1261466-4								
Methylene chloride	86		85		70-130	1		30
1,1-Dichloroethane	98		99		70-130	1		30
Chloroform	100		100		70-130	0		30
Carbon tetrachloride	100		99		70-130	1		30
1,2-Dichloropropane	102		101		70-130	1		30
Dibromochloromethane	95		93		70-130	2		30
1,1,2-Trichloroethane	102		99		70-130	3		30
Tetrachloroethene	98		94		70-130	4		30
Chlorobenzene	94		92		70-130	2		30
Trichlorofluoromethane	99		98		70-139	1		30
1,2-Dichloroethane	92		90		70-130	2		30
1,1,1-Trichloroethane	104		103		70-130	1		30
Bromodichloromethane	102		103		70-130	1		30
trans-1,3-Dichloropropene	100		98		70-130	2		30
cis-1,3-Dichloropropene	104		102		70-130	2		30
1,1-Dichloropropene	105		104		70-130	1		30
Bromoform	94		90		70-130	4		30
1,1,2,2-Tetrachloroethane	91		88		70-130	3		30
Benzene	101		100		70-130	1		30
Toluene	99		97		70-130	2		30
Ethylbenzene	103		100		70-130	3		30
Chloromethane	88		85		52-130	3		30
Bromomethane	98		100		57-147	2		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: 450 JOHNSON AVE.

Project Number: 170588001

Lab Number: L1931524

Report Date: 08/02/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01-05 Batch: WG1261466-3 WG1261466-4								
Vinyl chloride	103		102		67-130	1		30
Chloroethane	112		111		50-151	1		30
1,1-Dichloroethene	100		100		65-135	0		30
trans-1,2-Dichloroethene	99		100		70-130	1		30
Trichloroethene	103		103		70-130	0		30
1,2-Dichlorobenzene	88		86		70-130	2		30
1,3-Dichlorobenzene	89		87		70-130	2		30
1,4-Dichlorobenzene	89		86		70-130	3		30
Methyl tert butyl ether	88		88		66-130	0		30
p/m-Xylene	99		97		70-130	2		30
o-Xylene	99		96		70-130	3		30
cis-1,2-Dichloroethene	102		102		70-130	0		30
Dibromomethane	102		101		70-130	1		30
Styrene	99		95		70-130	4		30
Dichlorodifluoromethane	80		79		30-146	1		30
Acetone	68		66		54-140	3		30
Carbon disulfide	93		93		59-130	0		30
2-Butanone	65	Q	67	Q	70-130	3		30
Vinyl acetate	84		84		70-130	0		30
4-Methyl-2-pentanone	91		89		70-130	2		30
1,2,3-Trichloropropane	89		88		68-130	1		30
2-Hexanone	73		72		70-130	1		30
Bromochloromethane	100		95		70-130	5		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: 450 JOHNSON AVE.

Project Number: 170588001

Lab Number: L1931524

Report Date: 08/02/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01-05 Batch: WG1261466-3 WG1261466-4								
2,2-Dichloropropane	102		101		70-130	1		30
1,2-Dibromoethane	96		92		70-130	4		30
1,3-Dichloropropane	96		93		69-130	3		30
1,1,1,2-Tetrachloroethane	98		93		70-130	5		30
Bromobenzene	90		88		70-130	2		30
n-Butylbenzene	101		98		70-130	3		30
sec-Butylbenzene	93		91		70-130	2		30
tert-Butylbenzene	92		90		70-130	2		30
o-Chlorotoluene	80		80		70-130	0		30
p-Chlorotoluene	96		94		70-130	2		30
1,2-Dibromo-3-chloropropane	79		80		68-130	1		30
Hexachlorobutadiene	109		103		67-130	6		30
Isopropylbenzene	92		91		70-130	1		30
p-Isopropyltoluene	94		92		70-130	2		30
Naphthalene	82		78		70-130	5		30
Acrylonitrile	81		82		70-130	1		30
n-Propylbenzene	98		96		70-130	2		30
1,2,3-Trichlorobenzene	89		84		70-130	6		30
1,2,4-Trichlorobenzene	92		89		70-130	3		30
1,3,5-Trimethylbenzene	93		91		70-130	2		30
1,2,4-Trimethylbenzene	92		90		70-130	2		30
1,4-Dioxane	76		70		65-136	8		30
p-Diethylbenzene	93		92		70-130	1		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: 450 JOHNSON AVE.

Project Number: 170588001

Lab Number: L1931524

Report Date: 08/02/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01-05 Batch: WG1261466-3 WG1261466-4								
p-Ethyltoluene	93		90		70-130	3		30
1,2,4,5-Tetramethylbenzene	92		89		70-130	3		30
Ethyl ether	92		88		67-130	4		30
trans-1,4-Dichloro-2-butene	83		78		70-130	6		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	94		93		70-130
Toluene-d8	99		99		70-130
4-Bromofluorobenzene	97		95		70-130
Dibromofluoromethane	95		97		70-130

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 450 JOHNSON AVE.

Project Number: 170588001

Lab Number: L1931524

Report Date: 08/02/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 06-08 Batch: WG1261556-3 WG1261556-4								
Methylene chloride	110		110		70-130	0		20
1,1-Dichloroethane	98		98		70-130	0		20
Chloroform	100		100		70-130	0		20
Carbon tetrachloride	100		100		63-132	0		20
1,2-Dichloropropane	90		95		70-130	5		20
Dibromochloromethane	100		100		63-130	0		20
1,1,2-Trichloroethane	100		100		70-130	0		20
Tetrachloroethene	100		100		70-130	0		20
Chlorobenzene	110		100		75-130	10		20
Trichlorofluoromethane	100		97		62-150	3		20
1,2-Dichloroethane	93		92		70-130	1		20
1,1,1-Trichloroethane	100		100		67-130	0		20
Bromodichloromethane	98		99		67-130	1		20
trans-1,3-Dichloropropene	100		100		70-130	0		20
cis-1,3-Dichloropropene	86		92		70-130	7		20
1,1-Dichloropropene	98		99		70-130	1		20
Bromoform	94		98		54-136	4		20
1,1,2,2-Tetrachloroethane	100		100		67-130	0		20
Benzene	100		110		70-130	10		20
Toluene	110		110		70-130	0		20
Ethylbenzene	100		100		70-130	0		20
Chloromethane	87		87		64-130	0		20
Bromomethane	86		92		39-139	7		20

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 450 JOHNSON AVE.

Project Number: 170588001

Lab Number: L1931524

Report Date: 08/02/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 06-08 Batch: WG1261556-3 WG1261556-4								
Vinyl chloride	94		91		55-140	3		20
Chloroethane	97		96		55-138	1		20
1,1-Dichloroethene	100		100		61-145	0		20
trans-1,2-Dichloroethene	100		100		70-130	0		20
Trichloroethene	100		100		70-130	0		20
1,2-Dichlorobenzene	100		100		70-130	0		20
1,3-Dichlorobenzene	100		100		70-130	0		20
1,4-Dichlorobenzene	100		100		70-130	0		20
Methyl tert butyl ether	88		100		63-130	13		20
p/m-Xylene	105		105		70-130	0		20
o-Xylene	105		105		70-130	0		20
cis-1,2-Dichloroethene	100		110		70-130	10		20
Dibromomethane	95		95		70-130	0		20
1,2,3-Trichloropropane	99		100		64-130	1		20
Acrylonitrile	99		96		70-130	3		20
Styrene	100		100		70-130	0		20
Dichlorodifluoromethane	110		110		36-147	0		20
Acetone	110		100		58-148	10		20
Carbon disulfide	100		100		51-130	0		20
2-Butanone	88		93		63-138	6		20
Vinyl acetate	87		87		70-130	0		20
4-Methyl-2-pentanone	92		96		59-130	4		20
2-Hexanone	86		84		57-130	2		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: 450 JOHNSON AVE.

Project Number: 170588001

Lab Number: L1931524

Report Date: 08/02/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 06-08 Batch: WG1261556-3 WG1261556-4								
Bromochloromethane	110		110		70-130	0		20
2,2-Dichloropropane	100		100		63-133	0		20
1,2-Dibromoethane	100		100		70-130	0		20
1,3-Dichloropropane	100		100		70-130	0		20
1,1,1,2-Tetrachloroethane	100		100		64-130	0		20
Bromobenzene	100		100		70-130	0		20
n-Butylbenzene	100		100		53-136	0		20
sec-Butylbenzene	80		80		70-130	0		20
tert-Butylbenzene	100		100		70-130	0		20
o-Chlorotoluene	110		110		70-130	0		20
p-Chlorotoluene	110		100		70-130	10		20
1,2-Dibromo-3-chloropropane	95		99		41-144	4		20
Hexachlorobutadiene	93		96		63-130	3		20
Isopropylbenzene	110		100		70-130	10		20
p-Isopropyltoluene	110		100		70-130	10		20
Naphthalene	93		98		70-130	5		20
n-Propylbenzene	100		100		69-130	0		20
1,2,3-Trichlorobenzene	98		98		70-130	0		20
1,2,4-Trichlorobenzene	99		98		70-130	1		20
1,3,5-Trimethylbenzene	110		100		64-130	10		20
1,2,4-Trimethylbenzene	100		110		70-130	10		20
1,4-Dioxane	128		136		56-162	6		20
p-Diethylbenzene	100		100		70-130	0		20

Lab Control Sample Analysis Batch Quality Control

Project Name: 450 JOHNSON AVE.

Project Number: 170588001

Lab Number: L1931524

Report Date: 08/02/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 06-08 Batch: WG1261556-3 WG1261556-4								
p-Ethyltoluene	110		110		70-130	0		20
1,2,4,5-Tetramethylbenzene	100		100		70-130	0		20
Ethyl ether	100		100		59-134	0		20
trans-1,4-Dichloro-2-butene	98		97		70-130	1		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	95		98		70-130
Toluene-d8	106		104		70-130
4-Bromofluorobenzene	99		97		70-130
Dibromofluoromethane	101		102		70-130

SEMIVOLATILES

Project Name: 450 JOHNSON AVE.
Project Number: 170588001

Lab Number: L1931524
Report Date: 08/02/19

SAMPLE RESULTS

Lab ID: L1931524-01
Client ID: SB01_1.0-1.5
Sample Location: BROOKLYN, NY

Date Collected: 07/17/19 14:25
Date Received: 07/17/19
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 07/19/19 02:28
Analyst: RC
Percent Solids: 89%

Extraction Method: EPA 3546
Extraction Date: 07/18/19 04:02

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	110	J	ug/kg	150	19.	1
1,2,4-Trichlorobenzene	ND		ug/kg	190	21.	1
Hexachlorobenzene	ND		ug/kg	110	21.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	25.	1
2-Chloronaphthalene	ND		ug/kg	190	19.	1
1,2-Dichlorobenzene	ND		ug/kg	190	34.	1
1,3-Dichlorobenzene	ND		ug/kg	190	32.	1
1,4-Dichlorobenzene	ND		ug/kg	190	33.	1
3,3'-Dichlorobenzidine	ND		ug/kg	190	50.	1
2,4-Dinitrotoluene	ND		ug/kg	190	38.	1
2,6-Dinitrotoluene	ND		ug/kg	190	32.	1
Fluoranthene	1900		ug/kg	110	22.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	190	20.	1
4-Bromophenyl phenyl ether	ND		ug/kg	190	29.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	32.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	19.	1
Hexachlorobutadiene	ND		ug/kg	190	27.	1
Hexachlorocyclopentadiene	ND		ug/kg	540	170	1
Hexachloroethane	ND		ug/kg	150	30.	1
Isophorone	ND		ug/kg	170	24.	1
Naphthalene	58	J	ug/kg	190	23.	1
Nitrobenzene	ND		ug/kg	170	28.	1
NDPA/DPA	ND		ug/kg	150	21.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	190	29.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	190	65.	1
Butyl benzyl phthalate	ND		ug/kg	190	47.	1
Di-n-butylphthalate	ND		ug/kg	190	36.	1
Di-n-octylphthalate	ND		ug/kg	190	64.	1

Project Name: 450 JOHNSON AVE.

Lab Number: L1931524

Project Number: 170588001

Report Date: 08/02/19

SAMPLE RESULTS

Lab ID: L1931524-01
 Client ID: SB01_1.0-1.5
 Sample Location: BROOKLYN, NY

Date Collected: 07/17/19 14:25
 Date Received: 07/17/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	190	17.	1
Dimethyl phthalate	ND		ug/kg	190	39.	1
Benzo(a)anthracene	880		ug/kg	110	21.	1
Benzo(a)pyrene	780		ug/kg	150	46.	1
Benzo(b)fluoranthene	960		ug/kg	110	32.	1
Benzo(k)fluoranthene	340		ug/kg	110	30.	1
Chrysene	810		ug/kg	110	20.	1
Acenaphthylene	77	J	ug/kg	150	29.	1
Anthracene	320		ug/kg	110	37.	1
Benzo(ghi)perylene	440		ug/kg	150	22.	1
Fluorene	90	J	ug/kg	190	18.	1
Phenanthrene	1400		ug/kg	110	23.	1
Dibenzo(a,h)anthracene	100	J	ug/kg	110	22.	1
Indeno(1,2,3-cd)pyrene	460		ug/kg	150	26.	1
Pyrene	1700		ug/kg	110	19.	1
Biphenyl	ND		ug/kg	430	44.	1
4-Chloroaniline	ND		ug/kg	190	34.	1
2-Nitroaniline	ND		ug/kg	190	36.	1
3-Nitroaniline	ND		ug/kg	190	35.	1
4-Nitroaniline	ND		ug/kg	190	78.	1
Dibenzofuran	76	J	ug/kg	190	18.	1
2-Methylnaphthalene	30	J	ug/kg	220	23.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	190	20.	1
Acetophenone	ND		ug/kg	190	23.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	36.	1
p-Chloro-m-cresol	ND		ug/kg	190	28.	1
2-Chlorophenol	ND		ug/kg	190	22.	1
2,4-Dichlorophenol	ND		ug/kg	170	30.	1
2,4-Dimethylphenol	ND		ug/kg	190	62.	1
2-Nitrophenol	ND		ug/kg	400	71.	1
4-Nitrophenol	ND		ug/kg	260	77.	1
2,4-Dinitrophenol	ND		ug/kg	900	88.	1
4,6-Dinitro-o-cresol	ND		ug/kg	490	90.	1
Pentachlorophenol	ND		ug/kg	150	41.	1
Phenol	ND		ug/kg	190	28.	1
2-Methylphenol	ND		ug/kg	190	29.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	270	29.	1

Project Name: 450 JOHNSON AVE.**Lab Number:** L1931524**Project Number:** 170588001**Report Date:** 08/02/19**SAMPLE RESULTS****Lab ID:** L1931524-01**Date Collected:** 07/17/19 14:25**Client ID:** SB01_1.0-1.5**Date Received:** 07/17/19**Sample Location:** BROOKLYN, NY**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	190	36.	1
Benzoic Acid	ND		ug/kg	610	190	1
Benzyl Alcohol	ND		ug/kg	190	57.	1
Carbazole	100	J	ug/kg	190	18.	1
1,4-Dioxane	ND		ug/kg	28	8.6	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	49		25-120
Phenol-d6	51		10-120
Nitrobenzene-d5	50		23-120
2-Fluorobiphenyl	52		30-120
2,4,6-Tribromophenol	57		10-136
4-Terphenyl-d14	42		18-120

Project Name: 450 JOHNSON AVE.**Lab Number:** L1931524**Project Number:** 170588001**Report Date:** 08/02/19**SAMPLE RESULTS**

Lab ID: L1931524-02
 Client ID: SB02_8.0-8.5
 Sample Location: BROOKLYN, NY

Date Collected: 07/17/19 15:30
 Date Received: 07/17/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 07/19/19 01:12
 Analyst: RC
 Percent Solids: 82%

Extraction Method: EPA 3546
 Extraction Date: 07/18/19 04:02

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	160	21.	1
1,2,4-Trichlorobenzene	ND		ug/kg	200	23.	1
Hexachlorobenzene	ND		ug/kg	120	22.	1
Bis(2-chloroethyl)ether	ND		ug/kg	180	27.	1
2-Chloronaphthalene	ND		ug/kg	200	20.	1
1,2-Dichlorobenzene	ND		ug/kg	200	36.	1
1,3-Dichlorobenzene	ND		ug/kg	200	34.	1
1,4-Dichlorobenzene	ND		ug/kg	200	35.	1
3,3'-Dichlorobenzidine	ND		ug/kg	200	53.	1
2,4-Dinitrotoluene	ND		ug/kg	200	40.	1
2,6-Dinitrotoluene	ND		ug/kg	200	34.	1
Fluoranthene	41	J	ug/kg	120	23.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	200	21.	1
4-Bromophenyl phenyl ether	ND		ug/kg	200	30.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	240	34.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	220	20.	1
Hexachlorobutadiene	ND		ug/kg	200	29.	1
Hexachlorocyclopentadiene	ND		ug/kg	570	180	1
Hexachloroethane	ND		ug/kg	160	32.	1
Isophorone	ND		ug/kg	180	26.	1
Naphthalene	ND		ug/kg	200	24.	1
Nitrobenzene	ND		ug/kg	180	30.	1
NDPA/DPA	ND		ug/kg	160	23.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	200	31.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	200	69.	1
Butyl benzyl phthalate	ND		ug/kg	200	50.	1
Di-n-butylphthalate	ND		ug/kg	200	38.	1
Di-n-octylphthalate	ND		ug/kg	200	68.	1

Project Name: 450 JOHNSON AVE.

Lab Number: L1931524

Project Number: 170588001

Report Date: 08/02/19

SAMPLE RESULTS

Lab ID: L1931524-02
 Client ID: SB02_8.0-8.5
 Sample Location: BROOKLYN, NY

Date Collected: 07/17/19 15:30
 Date Received: 07/17/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	200	18.	1
Dimethyl phthalate	ND		ug/kg	200	42.	1
Benzo(a)anthracene	22	J	ug/kg	120	22.	1
Benzo(a)pyrene	ND		ug/kg	160	49.	1
Benzo(b)fluoranthene	ND		ug/kg	120	34.	1
Benzo(k)fluoranthene	ND		ug/kg	120	32.	1
Chrysene	ND		ug/kg	120	21.	1
Acenaphthylene	ND		ug/kg	160	31.	1
Anthracene	ND		ug/kg	120	39.	1
Benzo(ghi)perylene	ND		ug/kg	160	24.	1
Fluorene	ND		ug/kg	200	19.	1
Phenanthrene	30	J	ug/kg	120	24.	1
Dibenzo(a,h)anthracene	ND		ug/kg	120	23.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	160	28.	1
Pyrene	35	J	ug/kg	120	20.	1
Biphenyl	ND		ug/kg	460	46.	1
4-Chloroaniline	ND		ug/kg	200	36.	1
2-Nitroaniline	ND		ug/kg	200	38.	1
3-Nitroaniline	ND		ug/kg	200	38.	1
4-Nitroaniline	ND		ug/kg	200	83.	1
Dibenzofuran	ND		ug/kg	200	19.	1
2-Methylnaphthalene	ND		ug/kg	240	24.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	200	21.	1
Acetophenone	ND		ug/kg	200	25.	1
2,4,6-Trichlorophenol	ND		ug/kg	120	38.	1
p-Chloro-m-cresol	ND		ug/kg	200	30.	1
2-Chlorophenol	ND		ug/kg	200	24.	1
2,4-Dichlorophenol	ND		ug/kg	180	32.	1
2,4-Dimethylphenol	ND		ug/kg	200	66.	1
2-Nitrophenol	ND		ug/kg	430	75.	1
4-Nitrophenol	ND		ug/kg	280	82.	1
2,4-Dinitrophenol	ND		ug/kg	960	93.	1
4,6-Dinitro-o-cresol	ND		ug/kg	520	96.	1
Pentachlorophenol	ND		ug/kg	160	44.	1
Phenol	ND		ug/kg	200	30.	1
2-Methylphenol	ND		ug/kg	200	31.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	290	31.	1

Project Name: 450 JOHNSON AVE.**Lab Number:** L1931524**Project Number:** 170588001**Report Date:** 08/02/19**SAMPLE RESULTS****Lab ID:** L1931524-02**Date Collected:** 07/17/19 15:30**Client ID:** SB02_8.0-8.5**Date Received:** 07/17/19**Sample Location:** BROOKLYN, NY**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	200	38.	1
Benzoic Acid	ND		ug/kg	650	200	1
Benzyl Alcohol	ND		ug/kg	200	61.	1
Carbazole	ND		ug/kg	200	19.	1
1,4-Dioxane	ND		ug/kg	30	9.2	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	68		25-120
Phenol-d6	67		10-120
Nitrobenzene-d5	65		23-120
2-Fluorobiphenyl	74		30-120
2,4,6-Tribromophenol	71		10-136
4-Terphenyl-d14	72		18-120

Project Name: 450 JOHNSON AVE.**Lab Number:** L1931524**Project Number:** 170588001**Report Date:** 08/02/19**SAMPLE RESULTS**

Lab ID: L1931524-03
 Client ID: SB01_8.0-8.5
 Sample Location: BROOKLYN, NY

Date Collected: 07/17/19 14:30
 Date Received: 07/17/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 07/19/19 00:47
 Analyst: RC
 Percent Solids: 86%

Extraction Method: EPA 3546
 Extraction Date: 07/18/19 04:02

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	150	20.	1
1,2,4-Trichlorobenzene	ND		ug/kg	190	22.	1
Hexachlorobenzene	ND		ug/kg	110	21.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	26.	1
2-Chloronaphthalene	ND		ug/kg	190	19.	1
1,2-Dichlorobenzene	ND		ug/kg	190	34.	1
1,3-Dichlorobenzene	ND		ug/kg	190	33.	1
1,4-Dichlorobenzene	ND		ug/kg	190	33.	1
3,3'-Dichlorobenzidine	ND		ug/kg	190	51.	1
2,4-Dinitrotoluene	ND		ug/kg	190	38.	1
2,6-Dinitrotoluene	ND		ug/kg	190	33.	1
Fluoranthene	ND		ug/kg	110	22.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	190	20.	1
4-Bromophenyl phenyl ether	ND		ug/kg	190	29.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	230	33.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	210	19.	1
Hexachlorobutadiene	ND		ug/kg	190	28.	1
Hexachlorocyclopentadiene	ND		ug/kg	550	170	1
Hexachloroethane	ND		ug/kg	150	31.	1
Isophorone	ND		ug/kg	170	25.	1
Naphthalene	ND		ug/kg	190	23.	1
Nitrobenzene	ND		ug/kg	170	28.	1
NDPA/DPA	ND		ug/kg	150	22.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	190	30.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	190	66.	1
Butyl benzyl phthalate	ND		ug/kg	190	48.	1
Di-n-butylphthalate	ND		ug/kg	190	36.	1
Di-n-octylphthalate	ND		ug/kg	190	65.	1

Project Name: 450 JOHNSON AVE.**Lab Number:** L1931524**Project Number:** 170588001**Report Date:** 08/02/19**SAMPLE RESULTS****Lab ID:** L1931524-03**Date Collected:** 07/17/19 14:30**Client ID:** SB01_8.0-8.5**Date Received:** 07/17/19**Sample Location:** BROOKLYN, NY**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	190	18.	1
Dimethyl phthalate	ND		ug/kg	190	40.	1
Benzo(a)anthracene	ND		ug/kg	110	22.	1
Benzo(a)pyrene	ND		ug/kg	150	47.	1
Benzo(b)fluoranthene	ND		ug/kg	110	32.	1
Benzo(k)fluoranthene	ND		ug/kg	110	31.	1
Chrysene	ND		ug/kg	110	20.	1
Acenaphthylene	ND		ug/kg	150	30.	1
Anthracene	ND		ug/kg	110	37.	1
Benzo(ghi)perylene	ND		ug/kg	150	22.	1
Fluorene	ND		ug/kg	190	18.	1
Phenanthrene	ND		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	27.	1
Pyrene	ND		ug/kg	110	19.	1
Biphenyl	ND		ug/kg	440	44.	1
4-Chloroaniline	ND		ug/kg	190	35.	1
2-Nitroaniline	ND		ug/kg	190	37.	1
3-Nitroaniline	ND		ug/kg	190	36.	1
4-Nitroaniline	ND		ug/kg	190	79.	1
Dibenzofuran	ND		ug/kg	190	18.	1
2-Methylnaphthalene	ND		ug/kg	230	23.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	190	20.	1
Acetophenone	ND		ug/kg	190	24.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	36.	1
p-Chloro-m-cresol	ND		ug/kg	190	28.	1
2-Chlorophenol	ND		ug/kg	190	23.	1
2,4-Dichlorophenol	ND		ug/kg	170	31.	1
2,4-Dimethylphenol	ND		ug/kg	190	63.	1
2-Nitrophenol	ND		ug/kg	410	72.	1
4-Nitrophenol	ND		ug/kg	270	78.	1
2,4-Dinitrophenol	ND		ug/kg	920	89.	1
4,6-Dinitro-o-cresol	ND		ug/kg	500	92.	1
Pentachlorophenol	ND		ug/kg	150	42.	1
Phenol	ND		ug/kg	190	29.	1
2-Methylphenol	ND		ug/kg	190	30.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	280	30.	1

Project Name: 450 JOHNSON AVE.
Project Number: 170588001

Lab Number: L1931524
Report Date: 08/02/19

SAMPLE RESULTS

Lab ID: L1931524-03
Client ID: SB01_8.0-8.5
Sample Location: BROOKLYN, NY

Date Collected: 07/17/19 14:30
Date Received: 07/17/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	190	37.	1
Benzoic Acid	ND		ug/kg	620	190	1
Benzyl Alcohol	ND		ug/kg	190	58.	1
Carbazole	ND		ug/kg	190	18.	1
1,4-Dioxane	ND		ug/kg	29	8.8	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	71		25-120
Phenol-d6	70		10-120
Nitrobenzene-d5	64		23-120
2-Fluorobiphenyl	74		30-120
2,4,6-Tribromophenol	77		10-136
4-Terphenyl-d14	67		18-120

Project Name: 450 JOHNSON AVE.
Project Number: 170588001

Lab Number: L1931524
Report Date: 08/02/19

SAMPLE RESULTS

Lab ID: L1931524-04
Client ID: SB09_3.0-3.5
Sample Location: BROOKLYN, NY

Date Collected: 07/17/19 08:40
Date Received: 07/17/19
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 07/19/19 03:43
Analyst: RC
Percent Solids: 90%

Extraction Method: EPA 3546
Extraction Date: 07/18/19 04:02

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	960		ug/kg	140	19.	1
1,2,4-Trichlorobenzene	ND		ug/kg	180	21.	1
Hexachlorobenzene	ND		ug/kg	110	20.	1
Bis(2-chloroethyl)ether	ND		ug/kg	160	24.	1
2-Chloronaphthalene	ND		ug/kg	180	18.	1
1,2-Dichlorobenzene	ND		ug/kg	180	32.	1
1,3-Dichlorobenzene	ND		ug/kg	180	31.	1
1,4-Dichlorobenzene	ND		ug/kg	180	32.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	48.	1
2,4-Dinitrotoluene	ND		ug/kg	180	36.	1
2,6-Dinitrotoluene	ND		ug/kg	180	31.	1
Fluoranthene	6500		ug/kg	110	21.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	19.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	28.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	31.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	190	18.	1
Hexachlorobutadiene	ND		ug/kg	180	26.	1
Hexachlorocyclopentadiene	ND		ug/kg	520	160	1
Hexachloroethane	ND		ug/kg	140	29.	1
Isophorone	ND		ug/kg	160	23.	1
Naphthalene	570		ug/kg	180	22.	1
Nitrobenzene	ND		ug/kg	160	27.	1
NDPA/DPA	ND		ug/kg	140	20.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	28.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	180	62.	1
Butyl benzyl phthalate	ND		ug/kg	180	45.	1
Di-n-butylphthalate	ND		ug/kg	180	34.	1
Di-n-octylphthalate	ND		ug/kg	180	61.	1

Project Name: 450 JOHNSON AVE.**Lab Number:** L1931524**Project Number:** 170588001**Report Date:** 08/02/19**SAMPLE RESULTS****Lab ID:** L1931524-04**Date Collected:** 07/17/19 08:40**Client ID:** SB09_3.0-3.5**Date Received:** 07/17/19**Sample Location:** BROOKLYN, NY**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	180	17.	1
Dimethyl phthalate	ND		ug/kg	180	38.	1
Benzo(a)anthracene	3000		ug/kg	110	20.	1
Benzo(a)pyrene	2300		ug/kg	140	44.	1
Benzo(b)fluoranthene	3200		ug/kg	110	30.	1
Benzo(k)fluoranthene	1000		ug/kg	110	29.	1
Chrysene	2600		ug/kg	110	19.	1
Acenaphthylene	58	J	ug/kg	140	28.	1
Anthracene	1500		ug/kg	110	35.	1
Benzo(ghi)perylene	1300		ug/kg	140	21.	1
Fluorene	720		ug/kg	180	18.	1
Phenanthrene	6200		ug/kg	110	22.	1
Dibenzo(a,h)anthracene	340		ug/kg	110	21.	1
Indeno(1,2,3-cd)pyrene	1500		ug/kg	140	25.	1
Pyrene	5300		ug/kg	110	18.	1
Biphenyl	65	J	ug/kg	410	42.	1
4-Chloroaniline	ND		ug/kg	180	33.	1
2-Nitroaniline	ND		ug/kg	180	35.	1
3-Nitroaniline	ND		ug/kg	180	34.	1
4-Nitroaniline	ND		ug/kg	180	75.	1
Dibenzofuran	490		ug/kg	180	17.	1
2-Methylnaphthalene	220		ug/kg	220	22.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	19.	1
Acetophenone	ND		ug/kg	180	22.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	34.	1
p-Chloro-m-cresol	ND		ug/kg	180	27.	1
2-Chlorophenol	ND		ug/kg	180	21.	1
2,4-Dichlorophenol	ND		ug/kg	160	29.	1
2,4-Dimethylphenol	ND		ug/kg	180	60.	1
2-Nitrophenol	ND		ug/kg	390	68.	1
4-Nitrophenol	ND		ug/kg	250	74.	1
2,4-Dinitrophenol	ND		ug/kg	870	84.	1
4,6-Dinitro-o-cresol	ND		ug/kg	470	87.	1
Pentachlorophenol	ND		ug/kg	140	40.	1
Phenol	ND		ug/kg	180	27.	1
2-Methylphenol	ND		ug/kg	180	28.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	260	28.	1

Project Name: 450 JOHNSON AVE.**Lab Number:** L1931524**Project Number:** 170588001**Report Date:** 08/02/19**SAMPLE RESULTS****Lab ID:** L1931524-04**Date Collected:** 07/17/19 08:40**Client ID:** SB09_3.0-3.5**Date Received:** 07/17/19**Sample Location:** BROOKLYN, NY**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	180	34.	1
Benzoic Acid	ND		ug/kg	580	180	1
Benzyl Alcohol	ND		ug/kg	180	55.	1
Carbazole	820		ug/kg	180	18.	1
1,4-Dioxane	ND		ug/kg	27	8.3	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	60		25-120
Phenol-d6	63		10-120
Nitrobenzene-d5	60		23-120
2-Fluorobiphenyl	59		30-120
2,4,6-Tribromophenol	74		10-136
4-Terphenyl-d14	48		18-120

Project Name: 450 JOHNSON AVE.
Project Number: 170588001

Lab Number: L1931524
Report Date: 08/02/19

SAMPLE RESULTS

Lab ID: L1931524-05
Client ID: SB11_5.0-5.5
Sample Location: BROOKLYN, NY

Date Collected: 07/17/19 10:40
Date Received: 07/17/19
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 07/19/19 02:53
Analyst: RC
Percent Solids: 76%

Extraction Method: EPA 3546
Extraction Date: 07/18/19 04:02

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	480		ug/kg	170	22.	1
1,2,4-Trichlorobenzene	ND		ug/kg	220	25.	1
Hexachlorobenzene	ND		ug/kg	130	24.	1
Bis(2-chloroethyl)ether	ND		ug/kg	190	29.	1
2-Chloronaphthalene	ND		ug/kg	220	21.	1
1,2-Dichlorobenzene	ND		ug/kg	220	39.	1
1,3-Dichlorobenzene	ND		ug/kg	220	37.	1
1,4-Dichlorobenzene	ND		ug/kg	220	38.	1
3,3'-Dichlorobenzidine	ND		ug/kg	220	57.	1
2,4-Dinitrotoluene	ND		ug/kg	220	43.	1
2,6-Dinitrotoluene	ND		ug/kg	220	37.	1
Fluoranthene	2900		ug/kg	130	25.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	220	23.	1
4-Bromophenyl phenyl ether	ND		ug/kg	220	33.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	260	37.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	230	22.	1
Hexachlorobutadiene	ND		ug/kg	220	32.	1
Hexachlorocyclopentadiene	ND		ug/kg	620	200	1
Hexachloroethane	ND		ug/kg	170	35.	1
Isophorone	ND		ug/kg	190	28.	1
Naphthalene	210	J	ug/kg	220	26.	1
Nitrobenzene	ND		ug/kg	190	32.	1
NDPA/DPA	ND		ug/kg	170	24.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	220	33.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	220	74.	1
Butyl benzyl phthalate	ND		ug/kg	220	54.	1
Di-n-butylphthalate	ND		ug/kg	220	41.	1
Di-n-octylphthalate	ND		ug/kg	220	73.	1

Project Name: 450 JOHNSON AVE.**Lab Number:** L1931524**Project Number:** 170588001**Report Date:** 08/02/19**SAMPLE RESULTS**

Lab ID: L1931524-05
 Client ID: SB11_5.0-5.5
 Sample Location: BROOKLYN, NY

Date Collected: 07/17/19 10:40
 Date Received: 07/17/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	220	20.	1
Dimethyl phthalate	ND		ug/kg	220	45.	1
Benzo(a)anthracene	1300		ug/kg	130	24.	1
Benzo(a)pyrene	960		ug/kg	170	52.	1
Benzo(b)fluoranthene	1200		ug/kg	130	36.	1
Benzo(k)fluoranthene	450		ug/kg	130	34.	1
Chrysene	1100		ug/kg	130	22.	1
Acenaphthylene	34	J	ug/kg	170	33.	1
Anthracene	860		ug/kg	130	42.	1
Benzo(ghi)perylene	430		ug/kg	170	25.	1
Fluorene	420		ug/kg	220	21.	1
Phenanthrene	3500		ug/kg	130	26.	1
Dibenzo(a,h)anthracene	140		ug/kg	130	25.	1
Indeno(1,2,3-cd)pyrene	500		ug/kg	170	30.	1
Pyrene	2400		ug/kg	130	21.	1
Biphenyl	ND		ug/kg	490	50.	1
4-Chloroaniline	ND		ug/kg	220	39.	1
2-Nitroaniline	ND		ug/kg	220	42.	1
3-Nitroaniline	ND		ug/kg	220	41.	1
4-Nitroaniline	ND		ug/kg	220	89.	1
Dibenzofuran	350		ug/kg	220	20.	1
2-Methylnaphthalene	160	J	ug/kg	260	26.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	220	22.	1
Acetophenone	ND		ug/kg	220	27.	1
2,4,6-Trichlorophenol	ND		ug/kg	130	41.	1
p-Chloro-m-cresol	ND		ug/kg	220	32.	1
2-Chlorophenol	ND		ug/kg	220	25.	1
2,4-Dichlorophenol	ND		ug/kg	190	35.	1
2,4-Dimethylphenol	ND		ug/kg	220	71.	1
2-Nitrophenol	ND		ug/kg	460	81.	1
4-Nitrophenol	ND		ug/kg	300	88.	1
2,4-Dinitrophenol	ND		ug/kg	1000	100	1
4,6-Dinitro-o-cresol	ND		ug/kg	560	100	1
Pentachlorophenol	ND		ug/kg	170	47.	1
Phenol	ND		ug/kg	220	32.	1
2-Methylphenol	ND		ug/kg	220	33.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	310	34.	1

Project Name: 450 JOHNSON AVE.**Lab Number:** L1931524**Project Number:** 170588001**Report Date:** 08/02/19**SAMPLE RESULTS****Lab ID:** L1931524-05**Date Collected:** 07/17/19 10:40**Client ID:** SB11_5.0-5.5**Date Received:** 07/17/19**Sample Location:** BROOKLYN, NY**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	220	41.	1
Benzoic Acid	ND		ug/kg	700	220	1
Benzyl Alcohol	ND		ug/kg	220	66.	1
Carbazole	410		ug/kg	220	21.	1
1,4-Dioxane	ND		ug/kg	32	9.9	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	70		25-120
Phenol-d6	69		10-120
Nitrobenzene-d5	71		23-120
2-Fluorobiphenyl	69		30-120
2,4,6-Tribromophenol	66		10-136
4-Terphenyl-d14	49		18-120

Project Name: 450 JOHNSON AVE.**Lab Number:** L1931524**Project Number:** 170588001**Report Date:** 08/02/19**SAMPLE RESULTS**

Lab ID: L1931524-09
 Client ID: TMW04_071719 (UF SVOC)
 Sample Location: BROOKLYN, NY

Date Collected: 07/17/19 13:00
 Date Received: 07/17/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D
 Analytical Date: 07/19/19 07:36
 Analyst: JG

Extraction Method: EPA 3510C
 Extraction Date: 07/18/19 15:43

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	1.8	J	ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1

Project Name: 450 JOHNSON AVE.**Lab Number:** L1931524**Project Number:** 170588001**Report Date:** 08/02/19**SAMPLE RESULTS****Lab ID:** L1931524-09**Date Collected:** 07/17/19 13:00**Client ID:** TMW04_071719 (UF SVOC)**Date Received:** 07/17/19**Sample Location:** BROOKLYN, NY**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Dibenzofuran	5.0		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Benzoic Acid	ND		ug/l	50	2.6	1
Benzyl Alcohol	ND		ug/l	2.0	0.59	1
Carbazole	ND		ug/l	2.0	0.49	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	76		21-120
Phenol-d6	65		10-120
Nitrobenzene-d5	78		23-120
2-Fluorobiphenyl	99		15-120
2,4,6-Tribromophenol	102		10-120
4-Terphenyl-d14	106		41-149

Project Name: 450 JOHNSON AVE.**Project Number:** 170588001**Lab Number:** L1931524**Report Date:** 08/02/19**SAMPLE RESULTS**

Lab ID: L1931524-09
 Client ID: TMW04_071719 (UF SVOC)
 Sample Location: BROOKLYN, NY

Date Collected: 07/17/19 13:00
 Date Received: 07/17/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D-SIM
 Analytical Date: 07/19/19 12:26
 Analyst: DV

Extraction Method: EPA 3510C
 Extraction Date: 07/18/19 15:43

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	14		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	2.7		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	1.8		ug/l	0.10	0.05	1
Benzo(a)anthracene	0.89		ug/l	0.10	0.02	1
Benzo(a)pyrene	0.61		ug/l	0.10	0.02	1
Benzo(b)fluoranthene	0.76		ug/l	0.10	0.01	1
Benzo(k)fluoranthene	0.27		ug/l	0.10	0.01	1
Chrysene	1.1		ug/l	0.10	0.01	1
Acenaphthylene	4.1		ug/l	0.10	0.01	1
Anthracene	3.7		ug/l	0.10	0.01	1
Benzo(ghi)perylene	0.41		ug/l	0.10	0.01	1
Fluorene	20		ug/l	0.10	0.01	1
Phenanthrene	46		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	0.11		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	0.41		ug/l	0.10	0.01	1
Pyrene	5.6		ug/l	0.10	0.02	1
2-Methylnaphthalene	0.65		ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: 450 JOHNSON AVE.**Lab Number:** L1931524**Project Number:** 170588001**Report Date:** 08/02/19**SAMPLE RESULTS**

Lab ID: L1931524-09

Date Collected: 07/17/19 13:00

Client ID: TMW04_071719 (UF SVOC)

Date Received: 07/17/19

Sample Location: BROOKLYN, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	69		21-120
Phenol-d6	60		10-120
Nitrobenzene-d5	149	Q	23-120
2-Fluorobiphenyl	91		15-120
2,4,6-Tribromophenol	102		10-120
4-Terphenyl-d14	97		41-149

Project Name: 450 JOHNSON AVE.**Lab Number:** L1931524**Project Number:** 170588001**Report Date:** 08/02/19**SAMPLE RESULTS**

Lab ID: L1931524-10
 Client ID: TMW01_071719 (UF SVOC)
 Sample Location: BROOKLYN, NY

Date Collected: 07/17/19 13:25
 Date Received: 07/17/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D
 Analytical Date: 07/19/19 08:01
 Analyst: JG

Extraction Method: EPA 3510C
 Extraction Date: 07/18/19 15:43

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	3.0		ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1

Project Name: 450 JOHNSON AVE.**Lab Number:** L1931524**Project Number:** 170588001**Report Date:** 08/02/19**SAMPLE RESULTS****Lab ID:** L1931524-10**Date Collected:** 07/17/19 13:25**Client ID:** TMW01_071719 (UF SVOC)**Date Received:** 07/17/19**Sample Location:** BROOKLYN, NY**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Benzoic Acid	ND		ug/l	50	2.6	1
Benzyl Alcohol	ND		ug/l	2.0	0.59	1
Carbazole	ND		ug/l	2.0	0.49	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	41		21-120
Phenol-d6	33		10-120
Nitrobenzene-d5	45		23-120
2-Fluorobiphenyl	51		15-120
2,4,6-Tribromophenol	54		10-120
4-Terphenyl-d14	55		41-149

Project Name: 450 JOHNSON AVE.**Project Number:** 170588001**Lab Number:** L1931524**Report Date:** 08/02/19**SAMPLE RESULTS**

Lab ID: L1931524-10
 Client ID: TMW01_071719 (UF SVOC)
 Sample Location: BROOKLYN, NY

Date Collected: 07/17/19 13:25
 Date Received: 07/17/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D-SIM
 Analytical Date: 07/19/19 12:43
 Analyst: DV

Extraction Method: EPA 3510C
 Extraction Date: 07/18/19 15:43

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	ND		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	ND		ug/l	0.10	0.05	1
Benzo(a)anthracene	ND		ug/l	0.10	0.02	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Chrysene	ND		ug/l	0.10	0.01	1
Acenaphthylene	ND		ug/l	0.10	0.01	1
Anthracene	ND		ug/l	0.10	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1
Fluorene	ND		ug/l	0.10	0.01	1
Phenanthrene	ND		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Pyrene	ND		ug/l	0.10	0.02	1
2-Methylnaphthalene	ND		ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: 450 JOHNSON AVE.**Lab Number:** L1931524**Project Number:** 170588001**Report Date:** 08/02/19**SAMPLE RESULTS****Lab ID:** L1931524-10**Date Collected:** 07/17/19 13:25**Client ID:** TMW01_071719 (UF SVOC)**Date Received:** 07/17/19**Sample Location:** BROOKLYN, NY**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	42		21-120
Phenol-d6	34		10-120
Nitrobenzene-d5	53		23-120
2-Fluorobiphenyl	51		15-120
2,4,6-Tribromophenol	64		10-120
4-Terphenyl-d14	59		41-149

Project Name: 450 JOHNSON AVE.**Lab Number:** L1931524**Project Number:** 170588001**Report Date:** 08/02/19**SAMPLE RESULTS**

Lab ID: L1931524-11
 Client ID: TMW03_071719 (UF SVOC)
 Sample Location: BROOKLYN, NY

Date Collected: 07/17/19 11:00
 Date Received: 07/17/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D
 Analytical Date: 07/19/19 08:27
 Analyst: JG

Extraction Method: EPA 3510C
 Extraction Date: 07/18/19 15:43

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1

Project Name: 450 JOHNSON AVE.**Lab Number:** L1931524**Project Number:** 170588001**Report Date:** 08/02/19**SAMPLE RESULTS****Lab ID:** L1931524-11**Date Collected:** 07/17/19 11:00**Client ID:** TMW03_071719 (UF SVOC)**Date Received:** 07/17/19**Sample Location:** BROOKLYN, NY**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Dibenzofuran	0.77	J	ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Benzoic Acid	12.	J	ug/l	50	2.6	1
Benzyl Alcohol	ND		ug/l	2.0	0.59	1
Carbazole	ND		ug/l	2.0	0.49	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	80		21-120
Phenol-d6	66		10-120
Nitrobenzene-d5	91		23-120
2-Fluorobiphenyl	103		15-120
2,4,6-Tribromophenol	97		10-120
4-Terphenyl-d14	121		41-149

Project Name: 450 JOHNSON AVE.**Project Number:** 170588001**Lab Number:** L1931524**Report Date:** 08/02/19**SAMPLE RESULTS**

Lab ID: L1931524-11
 Client ID: TMW03_071719 (UF SVOC)
 Sample Location: BROOKLYN, NY

Date Collected: 07/17/19 11:00
 Date Received: 07/17/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D-SIM
 Analytical Date: 07/19/19 12:59
 Analyst: DV

Extraction Method: EPA 3510C
 Extraction Date: 07/18/19 15:43

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	2.5		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	0.32		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	0.57		ug/l	0.10	0.05	1
Benzo(a)anthracene	0.11		ug/l	0.10	0.02	1
Benzo(a)pyrene	0.08	J	ug/l	0.10	0.02	1
Benzo(b)fluoranthene	0.10		ug/l	0.10	0.01	1
Benzo(k)fluoranthene	0.05	J	ug/l	0.10	0.01	1
Chrysene	0.11		ug/l	0.10	0.01	1
Acenaphthylene	0.55		ug/l	0.10	0.01	1
Anthracene	0.40		ug/l	0.10	0.01	1
Benzo(ghi)perylene	0.07	J	ug/l	0.10	0.01	1
Fluorene	3.3		ug/l	0.10	0.01	1
Phenanthrene	5.4		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	0.07	J	ug/l	0.10	0.01	1
Pyrene	0.58		ug/l	0.10	0.02	1
2-Methylnaphthalene	0.13		ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: 450 JOHNSON AVE.**Lab Number:** L1931524**Project Number:** 170588001**Report Date:** 08/02/19**SAMPLE RESULTS****Lab ID:** L1931524-11**Date Collected:** 07/17/19 11:00**Client ID:** TMW03_071719 (UF SVOC)**Date Received:** 07/17/19**Sample Location:** BROOKLYN, NY**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	70		21-120
Phenol-d6	60		10-120
Nitrobenzene-d5	98		23-120
2-Fluorobiphenyl	91		15-120
2,4,6-Tribromophenol	110		10-120
4-Terphenyl-d14	98		41-149

Project Name: 450 JOHNSON AVE.
Project Number: 170588001

Lab Number: L1931524
Report Date: 08/02/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 07/17/19 21:38
Analyst: RC

Extraction Method: EPA 3546
Extraction Date: 07/17/19 05:18

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-05 Batch: WG1260798-1					
Acenaphthene	ND		ug/kg	130	17.
1,2,4-Trichlorobenzene	ND		ug/kg	160	19.
Hexachlorobenzene	ND		ug/kg	98	18.
Bis(2-chloroethyl)ether	ND		ug/kg	150	22.
2-Chloronaphthalene	ND		ug/kg	160	16.
1,2-Dichlorobenzene	ND		ug/kg	160	29.
1,3-Dichlorobenzene	ND		ug/kg	160	28.
1,4-Dichlorobenzene	ND		ug/kg	160	29.
3,3'-Dichlorobenzidine	ND		ug/kg	160	44.
2,4-Dinitrotoluene	ND		ug/kg	160	33.
2,6-Dinitrotoluene	ND		ug/kg	160	28.
Fluoranthene	ND		ug/kg	98	19.
4-Chlorophenyl phenyl ether	ND		ug/kg	160	18.
4-Bromophenyl phenyl ether	ND		ug/kg	160	25.
Bis(2-chloroisopropyl)ether	ND		ug/kg	200	28.
Bis(2-chloroethoxy)methane	ND		ug/kg	180	16.
Hexachlorobutadiene	ND		ug/kg	160	24.
Hexachlorocyclopentadiene	ND		ug/kg	470	150
Hexachloroethane	ND		ug/kg	130	26.
Isophorone	ND		ug/kg	150	21.
Naphthalene	ND		ug/kg	160	20.
Nitrobenzene	ND		ug/kg	150	24.
NDPA/DPA	ND		ug/kg	130	19.
n-Nitrosodi-n-propylamine	ND		ug/kg	160	25.
Bis(2-ethylhexyl)phthalate	ND		ug/kg	160	57.
Butyl benzyl phthalate	ND		ug/kg	160	41.
Di-n-butylphthalate	ND		ug/kg	160	31.
Di-n-octylphthalate	ND		ug/kg	160	56.
Diethyl phthalate	ND		ug/kg	160	15.

Project Name: 450 JOHNSON AVE.
Project Number: 170588001

Lab Number: L1931524
Report Date: 08/02/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 07/17/19 21:38
Analyst: RC

Extraction Method: EPA 3546
Extraction Date: 07/17/19 05:18

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-05 Batch: WG1260798-1					
Dimethyl phthalate	97	J	ug/kg	160	34.
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.
Biphenyl	ND		ug/kg	370	38.
4-Chloroaniline	ND		ug/kg	160	30.
2-Nitroaniline	ND		ug/kg	160	32.
3-Nitroaniline	ND		ug/kg	160	31.
4-Nitroaniline	ND		ug/kg	160	68.
Dibenzofuran	ND		ug/kg	160	16.
2-Methylnaphthalene	ND		ug/kg	200	20.
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	160	17.
Acetophenone	ND		ug/kg	160	20.
2,4,6-Trichlorophenol	ND		ug/kg	98	31.
p-Chloro-m-cresol	ND		ug/kg	160	24.
2-Chlorophenol	ND		ug/kg	160	19.
2,4-Dichlorophenol	ND		ug/kg	150	26.
2,4-Dimethylphenol	ND		ug/kg	160	54.
2-Nitrophenol	ND		ug/kg	350	62.

Project Name: 450 JOHNSON AVE.
Project Number: 170588001

Lab Number: L1931524
Report Date: 08/02/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 07/17/19 21:38
Analyst: RC

Extraction Method: EPA 3546
Extraction Date: 07/17/19 05:18

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-05 Batch: WG1260798-1					
4-Nitrophenol	ND		ug/kg	230	67.
2,4-Dinitrophenol	ND		ug/kg	790	76.
4,6-Dinitro-o-cresol	ND		ug/kg	430	79.
Pentachlorophenol	ND		ug/kg	130	36.
Phenol	ND		ug/kg	160	25.
2-Methylphenol	ND		ug/kg	160	25.
3-Methylphenol/4-Methylphenol	ND		ug/kg	240	26.
2,4,5-Trichlorophenol	ND		ug/kg	160	31.
Benzoic Acid	ND		ug/kg	530	160
Benzyl Alcohol	ND		ug/kg	160	50.
Carbazole	ND		ug/kg	160	16.
1,4-Dioxane	ND		ug/kg	24	7.5

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	76		25-120
Phenol-d6	80		10-120
Nitrobenzene-d5	72		23-120
2-Fluorobiphenyl	68		30-120
2,4,6-Tribromophenol	84		10-136
4-Terphenyl-d14	76		18-120

Project Name: 450 JOHNSON AVE.
Project Number: 170588001

Lab Number: L1931524
Report Date: 08/02/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 07/19/19 05:53
Analyst: JG

Extraction Method: EPA 3510C
Extraction Date: 07/18/19 15:43

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 09-11 Batch: WG1261662-1					
Acenaphthene	ND		ug/l	2.0	0.44
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50
Hexachlorobenzene	ND		ug/l	2.0	0.46
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50
2-Chloronaphthalene	ND		ug/l	2.0	0.44
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93
Fluoranthene	ND		ug/l	2.0	0.26
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50
Hexachlorobutadiene	ND		ug/l	2.0	0.66
Hexachlorocyclopentadiene	ND		ug/l	20	0.69
Hexachloroethane	ND		ug/l	2.0	0.58
Isophorone	ND		ug/l	5.0	1.2
Naphthalene	ND		ug/l	2.0	0.46
Nitrobenzene	ND		ug/l	2.0	0.77
NDPA/DPA	ND		ug/l	2.0	0.42
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5
Butyl benzyl phthalate	ND		ug/l	5.0	1.2
Di-n-butylphthalate	ND		ug/l	5.0	0.39
Di-n-octylphthalate	ND		ug/l	5.0	1.3
Diethyl phthalate	ND		ug/l	5.0	0.38

Project Name: 450 JOHNSON AVE.
Project Number: 170588001

Lab Number: L1931524
Report Date: 08/02/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 07/19/19 05:53
Analyst: JG

Extraction Method: EPA 3510C
Extraction Date: 07/18/19 15:43

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 09-11 Batch: WG1261662-1					
Dimethyl phthalate	ND		ug/l	5.0	1.8
Benzo(a)anthracene	ND		ug/l	2.0	0.32
Benzo(a)pyrene	ND		ug/l	2.0	0.41
Benzo(b)fluoranthene	ND		ug/l	2.0	0.35
Benzo(k)fluoranthene	ND		ug/l	2.0	0.37
Chrysene	ND		ug/l	2.0	0.34
Acenaphthylene	ND		ug/l	2.0	0.46
Anthracene	ND		ug/l	2.0	0.33
Benzo(ghi)perylene	ND		ug/l	2.0	0.30
Fluorene	ND		ug/l	2.0	0.41
Phenanthrene	ND		ug/l	2.0	0.33
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.32
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.40
Pyrene	ND		ug/l	2.0	0.28
Biphenyl	ND		ug/l	2.0	0.46
4-Chloroaniline	ND		ug/l	5.0	1.1
2-Nitroaniline	ND		ug/l	5.0	0.50
3-Nitroaniline	ND		ug/l	5.0	0.81
4-Nitroaniline	ND		ug/l	5.0	0.80
Dibenzofuran	ND		ug/l	2.0	0.50
2-Methylnaphthalene	ND		ug/l	2.0	0.45
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44
Acetophenone	ND		ug/l	5.0	0.53
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61
p-Chloro-m-cresol	ND		ug/l	2.0	0.35
2-Chlorophenol	ND		ug/l	2.0	0.48
2,4-Dichlorophenol	ND		ug/l	5.0	0.41
2,4-Dimethylphenol	ND		ug/l	5.0	1.8
2-Nitrophenol	ND		ug/l	10	0.85

Project Name: 450 JOHNSON AVE.
Project Number: 170588001

Lab Number: L1931524
Report Date: 08/02/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 07/19/19 05:53
Analyst: JG

Extraction Method: EPA 3510C
Extraction Date: 07/18/19 15:43

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 09-11 Batch: WG1261662-1					
4-Nitrophenol	ND		ug/l	10	0.67
2,4-Dinitrophenol	ND		ug/l	20	6.6
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8
Pentachlorophenol	ND		ug/l	10	1.8
Phenol	ND		ug/l	5.0	0.57
2-Methylphenol	ND		ug/l	5.0	0.49
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77
Benzoic Acid	ND		ug/l	50	2.6
Benzyl Alcohol	ND		ug/l	2.0	0.59
Carbazole	ND		ug/l	2.0	0.49

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	63		21-120
Phenol-d6	52		10-120
Nitrobenzene-d5	77		23-120
2-Fluorobiphenyl	71		15-120
2,4,6-Tribromophenol	59		10-120
4-Terphenyl-d14	100		41-149

Project Name: 450 JOHNSON AVE.
Project Number: 170588001

Lab Number: L1931524
Report Date: 08/02/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 07/19/19 10:14
Analyst: DV

Extraction Method: EPA 3510C
Extraction Date: 07/18/19 15:43

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 09-11 Batch: WG1261673-1					
Acenaphthene	ND		ug/l	0.10	0.01
2-Chloronaphthalene	ND		ug/l	0.20	0.02
Fluoranthene	ND		ug/l	0.10	0.02
Hexachlorobutadiene	ND		ug/l	0.50	0.05
Naphthalene	ND		ug/l	0.10	0.05
Benzo(a)anthracene	ND		ug/l	0.10	0.02
Benzo(a)pyrene	ND		ug/l	0.10	0.02
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01
Chrysene	ND		ug/l	0.10	0.01
Acenaphthylene	ND		ug/l	0.10	0.01
Anthracene	ND		ug/l	0.10	0.01
Benzo(ghi)perylene	ND		ug/l	0.10	0.01
Fluorene	ND		ug/l	0.10	0.01
Phenanthrene	ND		ug/l	0.10	0.02
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01
Pyrene	ND		ug/l	0.10	0.02
2-Methylnaphthalene	ND		ug/l	0.10	0.02
Pentachlorophenol	ND		ug/l	0.80	0.01
Hexachlorobenzene	ND		ug/l	0.80	0.01
Hexachloroethane	ND		ug/l	0.80	0.06

Project Name: 450 JOHNSON AVE.
Project Number: 170588001

Lab Number: L1931524
Report Date: 08/02/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
 Analytical Date: 07/19/19 10:14
 Analyst: DV

Extraction Method: EPA 3510C
 Extraction Date: 07/18/19 15:43

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 09-11 Batch: WG1261673-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	59		21-120
Phenol-d6	49		10-120
Nitrobenzene-d5	73		23-120
2-Fluorobiphenyl	70		15-120
2,4,6-Tribromophenol	81		10-120
4-Terphenyl-d14	90		41-149

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 450 JOHNSON AVE.

Project Number: 170588001

Lab Number: L1931524

Report Date: 08/02/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05 Batch: WG1260798-2 WG1260798-3								
Acenaphthene	76		79		31-137	4		50
1,2,4-Trichlorobenzene	73		78		38-107	7		50
Hexachlorobenzene	84		90		40-140	7		50
Bis(2-chloroethyl)ether	72		79		40-140	9		50
2-Chloronaphthalene	72		76		40-140	5		50
1,2-Dichlorobenzene	77		83		40-140	8		50
1,3-Dichlorobenzene	72		77		40-140	7		50
1,4-Dichlorobenzene	73		79		28-104	8		50
3,3'-Dichlorobenzidine	77		83		40-140	8		50
2,4-Dinitrotoluene	90		93		40-132	3		50
2,6-Dinitrotoluene	83		87		40-140	5		50
Fluoranthene	81		83		40-140	2		50
4-Chlorophenyl phenyl ether	75		78		40-140	4		50
4-Bromophenyl phenyl ether	82		86		40-140	5		50
Bis(2-chloroisopropyl)ether	58		61		40-140	5		50
Bis(2-chloroethoxy)methane	74		79		40-117	7		50
Hexachlorobutadiene	76		80		40-140	5		50
Hexachlorocyclopentadiene	55		60		40-140	9		50
Hexachloroethane	74		80		40-140	8		50
Isophorone	78		83		40-140	6		50
Naphthalene	76		78		40-140	3		50
Nitrobenzene	78		84		40-140	7		50
NDPA/DPA	79		82		36-157	4		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: 450 JOHNSON AVE.

Project Number: 170588001

Lab Number: L1931524

Report Date: 08/02/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05 Batch: WG1260798-2 WG1260798-3								
n-Nitrosodi-n-propylamine	81		85		32-121	5		50
Bis(2-ethylhexyl)phthalate	80		83		40-140	4		50
Butyl benzyl phthalate	89		92		40-140	3		50
Di-n-butylphthalate	89		91		40-140	2		50
Di-n-octylphthalate	90		92		40-140	2		50
Diethyl phthalate	80		83		40-140	4		50
Dimethyl phthalate	82		84		40-140	2		50
Benzo(a)anthracene	83		86		40-140	4		50
Benzo(a)pyrene	79		80		40-140	1		50
Benzo(b)fluoranthene	87		92		40-140	6		50
Benzo(k)fluoranthene	73		74		40-140	1		50
Chrysene	74		78		40-140	5		50
Acenaphthylene	77		80		40-140	4		50
Anthracene	81		83		40-140	2		50
Benzo(ghi)perylene	84		87		40-140	4		50
Fluorene	79		82		40-140	4		50
Phenanthrene	76		82		40-140	8		50
Dibenzo(a,h)anthracene	85		90		40-140	6		50
Indeno(1,2,3-cd)pyrene	86		96		40-140	11		50
Pyrene	78		82		35-142	5		50
Biphenyl	79		82		54-104	4		50
4-Chloroaniline	60		66		40-140	10		50
2-Nitroaniline	88		93		47-134	6		50

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 450 JOHNSON AVE.

Project Number: 170588001

Lab Number: L1931524

Report Date: 08/02/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05 Batch: WG1260798-2 WG1260798-3								
3-Nitroaniline	69		74		26-129	7		50
4-Nitroaniline	79		84		41-125	6		50
Dibenzofuran	80		83		40-140	4		50
2-Methylnaphthalene	74		78		40-140	5		50
1,2,4,5-Tetrachlorobenzene	82		85		40-117	4		50
Acetophenone	84		89		14-144	6		50
2,4,6-Trichlorophenol	85		88		30-130	3		50
p-Chloro-m-cresol	86		91		26-103	6		50
2-Chlorophenol	85		88		25-102	3		50
2,4-Dichlorophenol	83		88		30-130	6		50
2,4-Dimethylphenol	80		86		30-130	7		50
2-Nitrophenol	86		92		30-130	7		50
4-Nitrophenol	84		91		11-114	8		50
2,4-Dinitrophenol	77		82		4-130	6		50
4,6-Dinitro-o-cresol	101		104		10-130	3		50
Pentachlorophenol	75		79		17-109	5		50
Phenol	77		81		26-90	5		50
2-Methylphenol	89		93		30-130.	4		50
3-Methylphenol/4-Methylphenol	92		97		30-130	5		50
2,4,5-Trichlorophenol	87		93		30-130	7		50
Benzoic Acid	60		61		10-110	2		50
Benzyl Alcohol	86		92		40-140	7		50
Carbazole	82		86		54-128	5		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: 450 JOHNSON AVE.

Project Number: 170588001

Lab Number: L1931524

Report Date: 08/02/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05 Batch: WG1260798-2 WG1260798-3								
1,4-Dioxane	61		67		40-140	9		50

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	88		93		25-120
Phenol-d6	90		94		10-120
Nitrobenzene-d5	82		89		23-120
2-Fluorobiphenyl	74		78		30-120
2,4,6-Tribromophenol	92		100		10-136
4-Terphenyl-d14	82		84		18-120

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 450 JOHNSON AVE.

Project Number: 170588001

Lab Number: L1931524

Report Date: 08/02/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 09-11 Batch: WG1261662-2 WG1261662-3								
Acenaphthene	69		81		37-111	16		30
1,2,4-Trichlorobenzene	73		81		39-98	10		30
Hexachlorobenzene	85		98		40-140	14		30
Bis(2-chloroethyl)ether	68		79		40-140	15		30
2-Chloronaphthalene	79		89		40-140	12		30
1,2-Dichlorobenzene	68		79		40-140	15		30
1,3-Dichlorobenzene	66		77		40-140	15		30
1,4-Dichlorobenzene	69		79		36-97	14		30
3,3'-Dichlorobenzidine	75		89		40-140	17		30
2,4-Dinitrotoluene	74		85		48-143	14		30
2,6-Dinitrotoluene	84		93		40-140	10		30
Fluoranthene	93		95		40-140	2		30
4-Chlorophenyl phenyl ether	75		90		40-140	18		30
4-Bromophenyl phenyl ether	89		98		40-140	10		30
Bis(2-chloroisopropyl)ether	85		110		40-140	26		30
Bis(2-chloroethoxy)methane	76		100		40-140	27		30
Hexachlorobutadiene	78		90		40-140	14		30
Hexachlorocyclopentadiene	80		94		40-140	16		30
Hexachloroethane	69		83		40-140	18		30
Isophorone	80		94		40-140	16		30
Naphthalene	71		85		40-140	18		30
Nitrobenzene	80		93		40-140	15		30
NDPA/DPA	78		90		40-140	14		30

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 450 JOHNSON AVE.

Project Number: 170588001

Lab Number: L1931524

Report Date: 08/02/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 09-11 Batch: WG1261662-2 WG1261662-3								
n-Nitrosodi-n-propylamine	85		101		29-132	17		30
Bis(2-ethylhexyl)phthalate	95		98		40-140	3		30
Butyl benzyl phthalate	98		106		40-140	8		30
Di-n-butylphthalate	88		98		40-140	11		30
Di-n-octylphthalate	101		108		40-140	7		30
Diethyl phthalate	86		97		40-140	12		30
Dimethyl phthalate	92		98		40-140	6		30
Benzo(a)anthracene	90		95		40-140	5		30
Benzo(a)pyrene	93		105		40-140	12		30
Benzo(b)fluoranthene	101		107		40-140	6		30
Benzo(k)fluoranthene	85		99		40-140	15		30
Chrysene	84		93		40-140	10		30
Acenaphthylene	82		93		45-123	13		30
Anthracene	85		96		40-140	12		30
Benzo(ghi)perylene	93		96		40-140	3		30
Fluorene	73		87		40-140	18		30
Phenanthrene	81		92		40-140	13		30
Dibenzo(a,h)anthracene	87		96		40-140	10		30
Indeno(1,2,3-cd)pyrene	84		92		40-140	9		30
Pyrene	91		92		26-127	1		30
Biphenyl	71		81		40-140	13		30
4-Chloroaniline	74		94		40-140	24		30
2-Nitroaniline	83		91		52-143	9		30

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 450 JOHNSON AVE.

Project Number: 170588001

Lab Number: L1931524

Report Date: 08/02/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 09-11 Batch: WG1261662-2 WG1261662-3								
3-Nitroaniline	64		77		25-145	18		30
4-Nitroaniline	72		83		51-143	14		30
Dibenzofuran	71		83		40-140	16		30
2-Methylnaphthalene	71		82		40-140	14		30
1,2,4,5-Tetrachlorobenzene	74		83		2-134	11		30
Acetophenone	66		79		39-129	18		30
2,4,6-Trichlorophenol	79		93		30-130	16		30
p-Chloro-m-cresol	88		95		23-97	8		30
2-Chlorophenol	74		86		27-123	15		30
2,4-Dichlorophenol	75		90		30-130	18		30
2,4-Dimethylphenol	59		87		30-130	38	Q	30
2-Nitrophenol	80		94		30-130	16		30
4-Nitrophenol	78		82	Q	10-80	5		30
2,4-Dinitrophenol	74		78		20-130	5		30
4,6-Dinitro-o-cresol	89		100		20-164	12		30
Pentachlorophenol	80		91		9-103	13		30
Phenol	63		67		12-110	6		30
2-Methylphenol	70		88		30-130	23		30
3-Methylphenol/4-Methylphenol	73		82		30-130	12		30
2,4,5-Trichlorophenol	86		99		30-130	14		30
Benzoic Acid	0	Q	0	Q	10-164	NC		30
Benzyl Alcohol	78		87		26-116	11		30
Carbazole	87		96		55-144	10		30

Lab Control Sample Analysis Batch Quality Control

Project Name: 450 JOHNSON AVE.

Project Number: 170588001

Lab Number: L1931524

Report Date: 08/02/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 09-11 Batch: WG1261662-2 WG1261662-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	65		77		21-120
Phenol-d6	64		70		10-120
Nitrobenzene-d5	84		96		23-120
2-Fluorobiphenyl	82		95		15-120
2,4,6-Tribromophenol	80		93		10-120
4-Terphenyl-d14	100		94		41-149

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 450 JOHNSON AVE.

Project Number: 170588001

Lab Number: L1931524

Report Date: 08/02/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 09-11 Batch: WG1261673-2 WG1261673-3								
Acenaphthene	92		92		40-140	0		40
2-Chloronaphthalene	86		84		40-140	2		40
Fluoranthene	166	Q	100		40-140	50	Q	40
Hexachlorobutadiene	70		67		40-140	4		40
Naphthalene	80		76		40-140	5		40
Benzo(a)anthracene	134		105		40-140	24		40
Benzo(a)pyrene	134		110		40-140	20		40
Benzo(b)fluoranthene	138		104		40-140	28		40
Benzo(k)fluoranthene	117		106		40-140	10		40
Chrysene	135		104		40-140	26		40
Acenaphthylene	92		87		40-140	6		40
Anthracene	100		103		40-140	3		40
Benzo(ghi)perylene	129		134		40-140	4		40
Fluorene	92		92		40-140	0		40
Phenanthrene	106		98		40-140	8		40
Dibenzo(a,h)anthracene	115		126		40-140	9		40
Indeno(1,2,3-cd)pyrene	133		126		40-140	5		40
Pyrene	162	Q	101		40-140	46	Q	40
2-Methylnaphthalene	84		82		40-140	2		40
Pentachlorophenol	108		119		40-140	10		40
Hexachlorobenzene	102		105		40-140	3		40
Hexachloroethane	72		68		40-140	6		40

Lab Control Sample Analysis Batch Quality Control

Project Name: 450 JOHNSON AVE.

Project Number: 170588001

Lab Number: L1931524

Report Date: 08/02/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 09-11 Batch: WG1261673-2 WG1261673-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	63		59		21-120
Phenol-d6	55		53		10-120
Nitrobenzene-d5	83		80		23-120
2-Fluorobiphenyl	84		82		15-120
2,4,6-Tribromophenol	98		99		10-120
4-Terphenyl-d14	106		105		41-149

PCBS

Project Name: 450 JOHNSON AVE.
Project Number: 170588001

Lab Number: L1931524
Report Date: 08/02/19

SAMPLE RESULTS

Lab ID: L1931524-01
Client ID: SB01_1.0-1.5
Sample Location: BROOKLYN, NY

Date Collected: 07/17/19 14:25
Date Received: 07/17/19
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 07/18/19 19:49
Analyst: WR
Percent Solids: 89%

Extraction Method: EPA 3546
Extraction Date: 07/18/19 04:41
Cleanup Method: EPA 3665A
Cleanup Date: 07/18/19
Cleanup Method: EPA 3660B
Cleanup Date: 07/18/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	36.8	3.27	1	A
Aroclor 1221	ND		ug/kg	36.8	3.69	1	A
Aroclor 1232	ND		ug/kg	36.8	7.81	1	A
Aroclor 1242	ND		ug/kg	36.8	4.96	1	A
Aroclor 1248	ND		ug/kg	36.8	5.52	1	A
Aroclor 1254	ND		ug/kg	36.8	4.03	1	A
Aroclor 1260	ND		ug/kg	36.8	6.81	1	A
Aroclor 1262	ND		ug/kg	36.8	4.68	1	A
Aroclor 1268	ND		ug/kg	36.8	3.82	1	A
PCBs, Total	ND		ug/kg	36.8	3.27	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	88		30-150	A
Decachlorobiphenyl	55		30-150	A
2,4,5,6-Tetrachloro-m-xylene	78		30-150	B
Decachlorobiphenyl	61		30-150	B

Project Name: 450 JOHNSON AVE.
Project Number: 170588001

Lab Number: L1931524
Report Date: 08/02/19

SAMPLE RESULTS

Lab ID: L1931524-03
Client ID: SB01_8.0-8.5
Sample Location: BROOKLYN, NY

Date Collected: 07/17/19 14:30
Date Received: 07/17/19
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 07/18/19 20:02
Analyst: WR
Percent Solids: 86%

Extraction Method: EPA 3546
Extraction Date: 07/18/19 04:41
Cleanup Method: EPA 3665A
Cleanup Date: 07/18/19
Cleanup Method: EPA 3660B
Cleanup Date: 07/18/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	37.2	3.30	1	A
Aroclor 1221	ND		ug/kg	37.2	3.72	1	A
Aroclor 1232	ND		ug/kg	37.2	7.88	1	A
Aroclor 1242	ND		ug/kg	37.2	5.01	1	A
Aroclor 1248	ND		ug/kg	37.2	5.58	1	A
Aroclor 1254	ND		ug/kg	37.2	4.07	1	A
Aroclor 1260	ND		ug/kg	37.2	6.87	1	A
Aroclor 1262	ND		ug/kg	37.2	4.72	1	A
Aroclor 1268	ND		ug/kg	37.2	3.85	1	A
PCBs, Total	ND		ug/kg	37.2	3.30	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	100		30-150	A
Decachlorobiphenyl	61		30-150	A
2,4,5,6-Tetrachloro-m-xylene	93		30-150	B
Decachlorobiphenyl	75		30-150	B

Project Name: 450 JOHNSON AVE.
Project Number: 170588001

Lab Number: L1931524
Report Date: 08/02/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8082A
Analytical Date: 07/18/19 16:18
Analyst: AWS

Extraction Method: EPA 3546
Extraction Date: 07/18/19 00:58
Cleanup Method: EPA 3665A
Cleanup Date: 07/18/19
Cleanup Method: EPA 3660B
Cleanup Date: 07/18/19

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01,03 Batch: WG1261257-1						
Aroclor 1016	ND		ug/kg	33.0	2.93	A
Aroclor 1221	ND		ug/kg	33.0	3.31	A
Aroclor 1232	ND		ug/kg	33.0	7.00	A
Aroclor 1242	ND		ug/kg	33.0	4.45	A
Aroclor 1248	ND		ug/kg	33.0	4.95	A
Aroclor 1254	ND		ug/kg	33.0	3.61	A
Aroclor 1260	ND		ug/kg	33.0	6.10	A
Aroclor 1262	ND		ug/kg	33.0	4.19	A
Aroclor 1268	ND		ug/kg	33.0	3.42	A
PCBs, Total	ND		ug/kg	33.0	2.93	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	92		30-150	A
Decachlorobiphenyl	53		30-150	A
2,4,5,6-Tetrachloro-m-xylene	86		30-150	B
Decachlorobiphenyl	65		30-150	B

Lab Control Sample Analysis Batch Quality Control

Project Name: 450 JOHNSON AVE.

Lab Number: L1931524

Project Number: 170588001

Report Date: 08/02/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01,03 Batch: WG1261257-2 WG1261257-3									
Aroclor 1016	88		96		40-140	9		50	A
Aroclor 1260	56		63		40-140	12		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	92		99		30-150	A
Decachlorobiphenyl	53		56		30-150	A
2,4,5,6-Tetrachloro-m-xylene	86		93		30-150	B
Decachlorobiphenyl	67		71		30-150	B

METALS

Project Name: 450 JOHNSON AVE.**Lab Number:** L1931524**Project Number:** 170588001**Report Date:** 08/02/19**SAMPLE RESULTS**

Lab ID: L1931524-01

Date Collected: 07/17/19 14:25

Client ID: SB01_1.0-1.5

Date Received: 07/17/19

Sample Location: BROOKLYN, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 89%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	6610		mg/kg	8.84	2.39	2	07/18/19 08:30	07/18/19 14:04	EPA 3050B	1,6010D	LC
Antimony, Total	1.30	J	mg/kg	4.42	0.336	2	07/18/19 08:30	07/18/19 14:04	EPA 3050B	1,6010D	LC
Arsenic, Total	5.75		mg/kg	0.884	0.184	2	07/18/19 08:30	07/18/19 14:04	EPA 3050B	1,6010D	LC
Barium, Total	68.4		mg/kg	0.884	0.154	2	07/18/19 08:30	07/18/19 14:04	EPA 3050B	1,6010D	LC
Beryllium, Total	0.336	J	mg/kg	0.442	0.029	2	07/18/19 08:30	07/18/19 14:04	EPA 3050B	1,6010D	LC
Cadmium, Total	1.49		mg/kg	0.884	0.087	2	07/18/19 08:30	07/18/19 14:04	EPA 3050B	1,6010D	LC
Calcium, Total	2820		mg/kg	8.84	3.09	2	07/18/19 08:30	07/18/19 14:04	EPA 3050B	1,6010D	LC
Chromium, Total	15.5		mg/kg	0.884	0.085	2	07/18/19 08:30	07/18/19 14:04	EPA 3050B	1,6010D	LC
Cobalt, Total	7.50		mg/kg	1.77	0.147	2	07/18/19 08:30	07/18/19 14:04	EPA 3050B	1,6010D	LC
Copper, Total	44.9		mg/kg	0.884	0.228	2	07/18/19 08:30	07/18/19 14:04	EPA 3050B	1,6010D	LC
Iron, Total	16100		mg/kg	4.42	0.798	2	07/18/19 08:30	07/18/19 14:04	EPA 3050B	1,6010D	LC
Lead, Total	172		mg/kg	4.42	0.237	2	07/18/19 08:30	07/18/19 14:04	EPA 3050B	1,6010D	LC
Magnesium, Total	1900		mg/kg	8.84	1.36	2	07/18/19 08:30	07/18/19 14:04	EPA 3050B	1,6010D	LC
Manganese, Total	317		mg/kg	0.884	0.140	2	07/18/19 08:30	07/18/19 14:04	EPA 3050B	1,6010D	LC
Mercury, Total	1.96		mg/kg	0.071	0.046	1	07/18/19 06:30	07/18/19 13:08	EPA 7471B	1,7471B	GD
Nickel, Total	15.1		mg/kg	2.21	0.214	2	07/18/19 08:30	07/18/19 14:04	EPA 3050B	1,6010D	LC
Potassium, Total	887		mg/kg	221	12.7	2	07/18/19 08:30	07/18/19 14:04	EPA 3050B	1,6010D	LC
Selenium, Total	0.849	J	mg/kg	1.77	0.228	2	07/18/19 08:30	07/18/19 14:04	EPA 3050B	1,6010D	LC
Silver, Total	ND		mg/kg	0.884	0.250	2	07/18/19 08:30	07/18/19 14:04	EPA 3050B	1,6010D	LC
Sodium, Total	87.6	J	mg/kg	177	2.78	2	07/18/19 08:30	07/18/19 14:04	EPA 3050B	1,6010D	LC
Thallium, Total	ND		mg/kg	1.77	0.278	2	07/18/19 08:30	07/18/19 14:04	EPA 3050B	1,6010D	LC
Vanadium, Total	25.2		mg/kg	0.884	0.179	2	07/18/19 08:30	07/18/19 14:04	EPA 3050B	1,6010D	LC
Zinc, Total	178		mg/kg	4.42	0.259	2	07/18/19 08:30	07/18/19 14:04	EPA 3050B	1,6010D	LC



Project Name: 450 JOHNSON AVE.**Lab Number:** L1931524**Project Number:** 170588001**Report Date:** 08/02/19**SAMPLE RESULTS**

Lab ID: L1931524-02

Date Collected: 07/17/19 15:30

Client ID: SB02_8.0-8.5

Date Received: 07/17/19

Sample Location: BROOKLYN, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 82%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	6150		mg/kg	9.35	2.52	2	07/18/19 08:30	07/18/19 14:32	EPA 3050B	1,6010D	LC
Antimony, Total	1.02	J	mg/kg	4.68	0.355	2	07/18/19 08:30	07/18/19 14:32	EPA 3050B	1,6010D	LC
Arsenic, Total	4.15		mg/kg	0.935	0.194	2	07/18/19 08:30	07/18/19 14:32	EPA 3050B	1,6010D	LC
Barium, Total	60.8		mg/kg	0.935	0.163	2	07/18/19 08:30	07/18/19 14:32	EPA 3050B	1,6010D	LC
Beryllium, Total	0.411	J	mg/kg	0.468	0.031	2	07/18/19 08:30	07/18/19 14:32	EPA 3050B	1,6010D	LC
Cadmium, Total	1.70		mg/kg	0.935	0.092	2	07/18/19 08:30	07/18/19 14:32	EPA 3050B	1,6010D	LC
Calcium, Total	1200		mg/kg	9.35	3.27	2	07/18/19 08:30	07/18/19 14:32	EPA 3050B	1,6010D	LC
Chromium, Total	17.6		mg/kg	0.935	0.090	2	07/18/19 08:30	07/18/19 14:32	EPA 3050B	1,6010D	LC
Cobalt, Total	9.86		mg/kg	1.87	0.155	2	07/18/19 08:30	07/18/19 14:32	EPA 3050B	1,6010D	LC
Copper, Total	30.0		mg/kg	0.935	0.241	2	07/18/19 08:30	07/18/19 14:32	EPA 3050B	1,6010D	LC
Iron, Total	17200		mg/kg	4.68	0.844	2	07/18/19 08:30	07/18/19 14:32	EPA 3050B	1,6010D	LC
Lead, Total	95.9		mg/kg	4.68	0.251	2	07/18/19 08:30	07/18/19 14:32	EPA 3050B	1,6010D	LC
Magnesium, Total	1330		mg/kg	9.35	1.44	2	07/18/19 08:30	07/18/19 14:32	EPA 3050B	1,6010D	LC
Manganese, Total	212		mg/kg	0.935	0.149	2	07/18/19 08:30	07/18/19 14:32	EPA 3050B	1,6010D	LC
Mercury, Total	0.411		mg/kg	0.076	0.050	1	07/18/19 06:30	07/18/19 13:10	EPA 7471B	1,7471B	GD
Nickel, Total	20.8		mg/kg	2.34	0.226	2	07/18/19 08:30	07/18/19 14:32	EPA 3050B	1,6010D	LC
Potassium, Total	602		mg/kg	234	13.5	2	07/18/19 08:30	07/18/19 14:32	EPA 3050B	1,6010D	LC
Selenium, Total	0.888	J	mg/kg	1.87	0.241	2	07/18/19 08:30	07/18/19 14:32	EPA 3050B	1,6010D	LC
Silver, Total	ND		mg/kg	0.935	0.265	2	07/18/19 08:30	07/18/19 14:32	EPA 3050B	1,6010D	LC
Sodium, Total	64.3	J	mg/kg	187	2.94	2	07/18/19 08:30	07/18/19 14:32	EPA 3050B	1,6010D	LC
Thallium, Total	ND		mg/kg	1.87	0.294	2	07/18/19 08:30	07/18/19 14:32	EPA 3050B	1,6010D	LC
Vanadium, Total	26.7		mg/kg	0.935	0.190	2	07/18/19 08:30	07/18/19 14:32	EPA 3050B	1,6010D	LC
Zinc, Total	431		mg/kg	4.68	0.274	2	07/18/19 08:30	07/18/19 14:32	EPA 3050B	1,6010D	LC



Project Name: 450 JOHNSON AVE.**Lab Number:** L1931524**Project Number:** 170588001**Report Date:** 08/02/19**SAMPLE RESULTS**

Lab ID: L1931524-03

Date Collected: 07/17/19 14:30

Client ID: SB01_8.0-8.5

Date Received: 07/17/19

Sample Location: BROOKLYN, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 86%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	7760		mg/kg	8.88	2.40	2	07/18/19 08:30	07/18/19 14:37	EPA 3050B	1,6010D	LC
Antimony, Total	0.764	J	mg/kg	4.44	0.337	2	07/18/19 08:30	07/18/19 14:37	EPA 3050B	1,6010D	LC
Arsenic, Total	2.50		mg/kg	0.888	0.185	2	07/18/19 08:30	07/18/19 14:37	EPA 3050B	1,6010D	LC
Barium, Total	33.6		mg/kg	0.888	0.154	2	07/18/19 08:30	07/18/19 14:37	EPA 3050B	1,6010D	LC
Beryllium, Total	0.355	J	mg/kg	0.444	0.029	2	07/18/19 08:30	07/18/19 14:37	EPA 3050B	1,6010D	LC
Cadmium, Total	1.09		mg/kg	0.888	0.087	2	07/18/19 08:30	07/18/19 14:37	EPA 3050B	1,6010D	LC
Calcium, Total	570		mg/kg	8.88	3.11	2	07/18/19 08:30	07/18/19 14:37	EPA 3050B	1,6010D	LC
Chromium, Total	14.0		mg/kg	0.888	0.085	2	07/18/19 08:30	07/18/19 14:37	EPA 3050B	1,6010D	LC
Cobalt, Total	7.79		mg/kg	1.78	0.147	2	07/18/19 08:30	07/18/19 14:37	EPA 3050B	1,6010D	LC
Copper, Total	12.8		mg/kg	0.888	0.229	2	07/18/19 08:30	07/18/19 14:37	EPA 3050B	1,6010D	LC
Iron, Total	15400		mg/kg	4.44	0.802	2	07/18/19 08:30	07/18/19 14:37	EPA 3050B	1,6010D	LC
Lead, Total	5.75		mg/kg	4.44	0.238	2	07/18/19 08:30	07/18/19 14:37	EPA 3050B	1,6010D	LC
Magnesium, Total	2050		mg/kg	8.88	1.37	2	07/18/19 08:30	07/18/19 14:37	EPA 3050B	1,6010D	LC
Manganese, Total	395		mg/kg	0.888	0.141	2	07/18/19 08:30	07/18/19 14:37	EPA 3050B	1,6010D	LC
Mercury, Total	ND		mg/kg	0.073	0.047	1	07/18/19 06:30	07/18/19 13:12	EPA 7471B	1,7471B	GD
Nickel, Total	12.8		mg/kg	2.22	0.215	2	07/18/19 08:30	07/18/19 14:37	EPA 3050B	1,6010D	LC
Potassium, Total	764		mg/kg	222	12.8	2	07/18/19 08:30	07/18/19 14:37	EPA 3050B	1,6010D	LC
Selenium, Total	0.533	J	mg/kg	1.78	0.229	2	07/18/19 08:30	07/18/19 14:37	EPA 3050B	1,6010D	LC
Silver, Total	ND		mg/kg	0.888	0.251	2	07/18/19 08:30	07/18/19 14:37	EPA 3050B	1,6010D	LC
Sodium, Total	48.0	J	mg/kg	178	2.80	2	07/18/19 08:30	07/18/19 14:37	EPA 3050B	1,6010D	LC
Thallium, Total	ND		mg/kg	1.78	0.280	2	07/18/19 08:30	07/18/19 14:37	EPA 3050B	1,6010D	LC
Vanadium, Total	23.8		mg/kg	0.888	0.180	2	07/18/19 08:30	07/18/19 14:37	EPA 3050B	1,6010D	LC
Zinc, Total	24.7		mg/kg	4.44	0.260	2	07/18/19 08:30	07/18/19 14:37	EPA 3050B	1,6010D	LC



Project Name: 450 JOHNSON AVE.**Lab Number:** L1931524**Project Number:** 170588001**Report Date:** 08/02/19**SAMPLE RESULTS**

Lab ID: L1931524-04

Date Collected: 07/17/19 08:40

Client ID: SB09_3.0-3.5

Date Received: 07/17/19

Sample Location: BROOKLYN, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 90%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	5920		mg/kg	8.46	2.28	2	07/18/19 08:30	07/18/19 14:42	EPA 3050B	1,6010D	LC
Antimony, Total	15.0		mg/kg	4.23	0.322	2	07/18/19 08:30	07/18/19 14:42	EPA 3050B	1,6010D	LC
Arsenic, Total	14.3		mg/kg	0.846	0.176	2	07/18/19 08:30	07/18/19 14:42	EPA 3050B	1,6010D	LC
Barium, Total	176		mg/kg	0.846	0.147	2	07/18/19 08:30	07/18/19 14:42	EPA 3050B	1,6010D	LC
Beryllium, Total	0.330	J	mg/kg	0.423	0.028	2	07/18/19 08:30	07/18/19 14:42	EPA 3050B	1,6010D	LC
Cadmium, Total	3.80		mg/kg	0.846	0.083	2	07/18/19 08:30	07/18/19 14:42	EPA 3050B	1,6010D	LC
Calcium, Total	4600		mg/kg	8.46	2.96	2	07/18/19 08:30	07/18/19 14:42	EPA 3050B	1,6010D	LC
Chromium, Total	25.8		mg/kg	0.846	0.081	2	07/18/19 08:30	07/18/19 14:42	EPA 3050B	1,6010D	LC
Cobalt, Total	8.44		mg/kg	1.69	0.140	2	07/18/19 08:30	07/18/19 14:42	EPA 3050B	1,6010D	LC
Copper, Total	136		mg/kg	0.846	0.218	2	07/18/19 08:30	07/18/19 14:42	EPA 3050B	1,6010D	LC
Iron, Total	23500		mg/kg	4.23	0.764	2	07/18/19 08:30	07/18/19 14:42	EPA 3050B	1,6010D	LC
Lead, Total	1050		mg/kg	4.23	0.227	2	07/18/19 08:30	07/18/19 14:42	EPA 3050B	1,6010D	LC
Magnesium, Total	2180		mg/kg	8.46	1.30	2	07/18/19 08:30	07/18/19 14:42	EPA 3050B	1,6010D	LC
Manganese, Total	630		mg/kg	0.846	0.134	2	07/18/19 08:30	07/18/19 14:42	EPA 3050B	1,6010D	LC
Mercury, Total	2.53		mg/kg	0.071	0.046	1	07/18/19 06:30	07/18/19 13:18	EPA 7471B	1,7471B	GD
Nickel, Total	16.6		mg/kg	2.12	0.205	2	07/18/19 08:30	07/18/19 14:42	EPA 3050B	1,6010D	LC
Potassium, Total	865		mg/kg	212	12.2	2	07/18/19 08:30	07/18/19 14:42	EPA 3050B	1,6010D	LC
Selenium, Total	1.81		mg/kg	1.69	0.218	2	07/18/19 08:30	07/18/19 14:42	EPA 3050B	1,6010D	LC
Silver, Total	0.812	J	mg/kg	0.846	0.240	2	07/18/19 08:30	07/18/19 14:42	EPA 3050B	1,6010D	LC
Sodium, Total	124	J	mg/kg	169	2.67	2	07/18/19 08:30	07/18/19 14:42	EPA 3050B	1,6010D	LC
Thallium, Total	ND		mg/kg	1.69	0.267	2	07/18/19 08:30	07/18/19 14:42	EPA 3050B	1,6010D	LC
Vanadium, Total	27.8		mg/kg	0.846	0.172	2	07/18/19 08:30	07/18/19 14:42	EPA 3050B	1,6010D	LC
Zinc, Total	650		mg/kg	4.23	0.248	2	07/18/19 08:30	07/18/19 14:42	EPA 3050B	1,6010D	LC



Project Name: 450 JOHNSON AVE.**Lab Number:** L1931524**Project Number:** 170588001**Report Date:** 08/02/19**SAMPLE RESULTS**

Lab ID: L1931524-05

Date Collected: 07/17/19 10:40

Client ID: SB11_5.0-5.5

Date Received: 07/17/19

Sample Location: BROOKLYN, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 76%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	6150		mg/kg	10.4	2.81	2	07/18/19 08:30	07/18/19 14:46	EPA 3050B	1,6010D	LC
Antimony, Total	1.36	J	mg/kg	5.20	0.395	2	07/18/19 08:30	07/18/19 14:46	EPA 3050B	1,6010D	LC
Arsenic, Total	6.50		mg/kg	1.04	0.216	2	07/18/19 08:30	07/18/19 14:46	EPA 3050B	1,6010D	LC
Barium, Total	84.8		mg/kg	1.04	0.181	2	07/18/19 08:30	07/18/19 14:46	EPA 3050B	1,6010D	LC
Beryllium, Total	0.385	J	mg/kg	0.520	0.034	2	07/18/19 08:30	07/18/19 14:46	EPA 3050B	1,6010D	LC
Cadmium, Total	1.67		mg/kg	1.04	0.102	2	07/18/19 08:30	07/18/19 14:46	EPA 3050B	1,6010D	LC
Calcium, Total	1690		mg/kg	10.4	3.64	2	07/18/19 08:30	07/18/19 14:46	EPA 3050B	1,6010D	LC
Chromium, Total	12.1		mg/kg	1.04	0.100	2	07/18/19 08:30	07/18/19 14:46	EPA 3050B	1,6010D	LC
Cobalt, Total	6.49		mg/kg	2.08	0.173	2	07/18/19 08:30	07/18/19 14:46	EPA 3050B	1,6010D	LC
Copper, Total	43.7		mg/kg	1.04	0.268	2	07/18/19 08:30	07/18/19 14:46	EPA 3050B	1,6010D	LC
Iron, Total	18700		mg/kg	5.20	0.939	2	07/18/19 08:30	07/18/19 14:46	EPA 3050B	1,6010D	LC
Lead, Total	369		mg/kg	5.20	0.279	2	07/18/19 08:30	07/18/19 14:46	EPA 3050B	1,6010D	LC
Magnesium, Total	1210		mg/kg	10.4	1.60	2	07/18/19 08:30	07/18/19 14:46	EPA 3050B	1,6010D	LC
Manganese, Total	231		mg/kg	1.04	0.165	2	07/18/19 08:30	07/18/19 14:46	EPA 3050B	1,6010D	LC
Mercury, Total	3.57		mg/kg	0.166	0.108	2	07/18/19 06:30	07/18/19 14:57	EPA 7471B	1,7471B	GD
Nickel, Total	13.5		mg/kg	2.60	0.252	2	07/18/19 08:30	07/18/19 14:46	EPA 3050B	1,6010D	LC
Potassium, Total	452		mg/kg	260	15.0	2	07/18/19 08:30	07/18/19 14:46	EPA 3050B	1,6010D	LC
Selenium, Total	0.894	J	mg/kg	2.08	0.268	2	07/18/19 08:30	07/18/19 14:46	EPA 3050B	1,6010D	LC
Silver, Total	ND		mg/kg	1.04	0.294	2	07/18/19 08:30	07/18/19 14:46	EPA 3050B	1,6010D	LC
Sodium, Total	66.0	J	mg/kg	208	3.28	2	07/18/19 08:30	07/18/19 14:46	EPA 3050B	1,6010D	LC
Thallium, Total	ND		mg/kg	2.08	0.328	2	07/18/19 08:30	07/18/19 14:46	EPA 3050B	1,6010D	LC
Vanadium, Total	20.1		mg/kg	1.04	0.211	2	07/18/19 08:30	07/18/19 14:46	EPA 3050B	1,6010D	LC
Zinc, Total	502		mg/kg	5.20	0.305	2	07/18/19 08:30	07/18/19 14:46	EPA 3050B	1,6010D	LC



Project Name: 450 JOHNSON AVE.

Lab Number: L1931524

Project Number: 170588001

Report Date: 08/02/19

SAMPLE RESULTS

Lab ID: L1931524-06

Date Collected: 07/17/19 13:00

Client ID: TMW04_071719

Date Received: 07/17/19

Sample Location: BROOKLYN, NY

Field Prep: None

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab											
Aluminum, Dissolved	0.00824	J	mg/l	0.0100	0.00327	1	07/18/19 09:19	07/18/19 13:03	EPA 3005A	1,6020B	AM
Antimony, Dissolved	0.00057	J	mg/l	0.00400	0.00042	1	07/18/19 09:19	07/18/19 13:03	EPA 3005A	1,6020B	AM
Arsenic, Dissolved	0.00291		mg/l	0.00050	0.00016	1	07/18/19 09:19	07/18/19 13:03	EPA 3005A	1,6020B	AM
Barium, Dissolved	0.1862		mg/l	0.00050	0.00017	1	07/18/19 09:19	07/18/19 13:03	EPA 3005A	1,6020B	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	07/18/19 09:19	07/18/19 13:03	EPA 3005A	1,6020B	AM
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	07/18/19 09:19	07/18/19 13:03	EPA 3005A	1,6020B	AM
Calcium, Dissolved	80.9		mg/l	0.100	0.0394	1	07/18/19 09:19	07/18/19 13:03	EPA 3005A	1,6020B	AM
Chromium, Dissolved	0.00060	J	mg/l	0.00100	0.00017	1	07/18/19 09:19	07/18/19 13:03	EPA 3005A	1,6020B	AM
Cobalt, Dissolved	0.00099		mg/l	0.00050	0.00016	1	07/18/19 09:19	07/18/19 13:03	EPA 3005A	1,6020B	AM
Copper, Dissolved	0.00099	J	mg/l	0.00100	0.00038	1	07/18/19 09:19	07/18/19 13:03	EPA 3005A	1,6020B	AM
Iron, Dissolved	16.5		mg/l	0.0500	0.0191	1	07/18/19 09:19	07/18/19 13:03	EPA 3005A	1,6020B	AM
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	07/18/19 09:19	07/18/19 13:03	EPA 3005A	1,6020B	AM
Magnesium, Dissolved	29.4		mg/l	0.0700	0.0242	1	07/18/19 09:19	07/18/19 13:03	EPA 3005A	1,6020B	AM
Manganese, Dissolved	1.254		mg/l	0.00100	0.00044	1	07/18/19 09:19	07/18/19 13:03	EPA 3005A	1,6020B	AM
Mercury, Dissolved	ND		mg/l	0.00020	0.00009	1	07/18/19 11:15	07/18/19 14:58	EPA 7470A	1,7470A	GD
Nickel, Dissolved	0.00132	J	mg/l	0.00200	0.00055	1	07/18/19 09:19	07/18/19 13:03	EPA 3005A	1,6020B	AM
Potassium, Dissolved	16.2		mg/l	0.100	0.0309	1	07/18/19 09:19	07/18/19 13:03	EPA 3005A	1,6020B	AM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	07/18/19 09:19	07/18/19 13:03	EPA 3005A	1,6020B	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	07/18/19 09:19	07/18/19 13:03	EPA 3005A	1,6020B	AM
Sodium, Dissolved	68.2		mg/l	0.100	0.0293	1	07/18/19 09:19	07/18/19 13:03	EPA 3005A	1,6020B	AM
Thallium, Dissolved	ND		mg/l	0.00050	0.00014	1	07/18/19 09:19	07/18/19 13:03	EPA 3005A	1,6020B	AM
Vanadium, Dissolved	ND		mg/l	0.00500	0.00157	1	07/18/19 09:19	07/18/19 13:03	EPA 3005A	1,6020B	AM
Zinc, Dissolved	ND		mg/l	0.01000	0.00341	1	07/18/19 09:19	07/18/19 13:03	EPA 3005A	1,6020B	AM



Project Name: 450 JOHNSON AVE.**Lab Number:** L1931524**Project Number:** 170588001**Report Date:** 08/02/19**SAMPLE RESULTS**

Lab ID: L1931524-07

Date Collected: 07/17/19 13:25

Client ID: TMW01_071719

Date Received: 07/17/19

Sample Location: BROOKLYN, NY

Field Prep: None

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab											
Aluminum, Dissolved	0.0460		mg/l	0.0100	0.00327	1	07/18/19 09:19	07/18/19 13:07	EPA 3005A	1,6020B	AM
Antimony, Dissolved	0.00050	J	mg/l	0.00400	0.00042	1	07/18/19 09:19	07/18/19 13:07	EPA 3005A	1,6020B	AM
Arsenic, Dissolved	0.00021	J	mg/l	0.00050	0.00016	1	07/18/19 09:19	07/18/19 13:07	EPA 3005A	1,6020B	AM
Barium, Dissolved	0.1242		mg/l	0.00050	0.00017	1	07/18/19 09:19	07/18/19 13:07	EPA 3005A	1,6020B	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	07/18/19 09:19	07/18/19 13:07	EPA 3005A	1,6020B	AM
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	07/18/19 09:19	07/18/19 13:07	EPA 3005A	1,6020B	AM
Calcium, Dissolved	82.7		mg/l	0.100	0.0394	1	07/18/19 09:19	07/18/19 13:07	EPA 3005A	1,6020B	AM
Chromium, Dissolved	0.00029	J	mg/l	0.00100	0.00017	1	07/18/19 09:19	07/18/19 13:07	EPA 3005A	1,6020B	AM
Cobalt, Dissolved	0.00089		mg/l	0.00050	0.00016	1	07/18/19 09:19	07/18/19 13:07	EPA 3005A	1,6020B	AM
Copper, Dissolved	0.00139		mg/l	0.00100	0.00038	1	07/18/19 09:19	07/18/19 13:07	EPA 3005A	1,6020B	AM
Iron, Dissolved	4.72		mg/l	0.0500	0.0191	1	07/18/19 09:19	07/18/19 13:07	EPA 3005A	1,6020B	AM
Lead, Dissolved	0.00137		mg/l	0.00100	0.00034	1	07/18/19 09:19	07/18/19 13:07	EPA 3005A	1,6020B	AM
Magnesium, Dissolved	17.1		mg/l	0.0700	0.0242	1	07/18/19 09:19	07/18/19 13:07	EPA 3005A	1,6020B	AM
Manganese, Dissolved	0.6106		mg/l	0.00100	0.00044	1	07/18/19 09:19	07/18/19 13:07	EPA 3005A	1,6020B	AM
Mercury, Dissolved	ND		mg/l	0.00020	0.00009	1	07/18/19 11:15	07/18/19 15:00	EPA 7470A	1,7470A	GD
Nickel, Dissolved	0.00155	J	mg/l	0.00200	0.00055	1	07/18/19 09:19	07/18/19 13:07	EPA 3005A	1,6020B	AM
Potassium, Dissolved	12.0		mg/l	0.100	0.0309	1	07/18/19 09:19	07/18/19 13:07	EPA 3005A	1,6020B	AM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	07/18/19 09:19	07/18/19 13:07	EPA 3005A	1,6020B	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	07/18/19 09:19	07/18/19 13:07	EPA 3005A	1,6020B	AM
Sodium, Dissolved	58.1		mg/l	0.100	0.0293	1	07/18/19 09:19	07/18/19 13:07	EPA 3005A	1,6020B	AM
Thallium, Dissolved	ND		mg/l	0.00050	0.00014	1	07/18/19 09:19	07/18/19 13:07	EPA 3005A	1,6020B	AM
Vanadium, Dissolved	ND		mg/l	0.00500	0.00157	1	07/18/19 09:19	07/18/19 13:07	EPA 3005A	1,6020B	AM
Zinc, Dissolved	0.00974	J	mg/l	0.01000	0.00341	1	07/18/19 09:19	07/18/19 13:07	EPA 3005A	1,6020B	AM



Project Name: 450 JOHNSON AVE.

Lab Number: L1931524

Project Number: 170588001

Report Date: 08/02/19

SAMPLE RESULTS

Lab ID: L1931524-08

Date Collected: 07/17/19 11:00

Client ID: TMW03_071719

Date Received: 07/17/19

Sample Location: BROOKLYN, NY

Field Prep: None

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab											
Aluminum, Dissolved	0.00334	J	mg/l	0.0100	0.00327	1	07/18/19 09:19	07/18/19 12:54	EPA 3005A	1,6020B	AM
Antimony, Dissolved	0.00113	J	mg/l	0.00400	0.00042	1	07/18/19 09:19	07/18/19 12:54	EPA 3005A	1,6020B	AM
Arsenic, Dissolved	0.00076		mg/l	0.00050	0.00016	1	07/18/19 09:19	07/18/19 12:54	EPA 3005A	1,6020B	AM
Barium, Dissolved	0.2266		mg/l	0.00050	0.00017	1	07/18/19 09:19	07/18/19 12:54	EPA 3005A	1,6020B	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	07/18/19 09:19	07/18/19 12:54	EPA 3005A	1,6020B	AM
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	07/18/19 09:19	07/18/19 12:54	EPA 3005A	1,6020B	AM
Calcium, Dissolved	75.9		mg/l	0.100	0.0394	1	07/18/19 09:19	07/18/19 12:54	EPA 3005A	1,6020B	AM
Chromium, Dissolved	0.00026	J	mg/l	0.00100	0.00017	1	07/18/19 09:19	07/18/19 12:54	EPA 3005A	1,6020B	AM
Cobalt, Dissolved	0.00189		mg/l	0.00050	0.00016	1	07/18/19 09:19	07/18/19 12:54	EPA 3005A	1,6020B	AM
Copper, Dissolved	0.00071	J	mg/l	0.00100	0.00038	1	07/18/19 09:19	07/18/19 12:54	EPA 3005A	1,6020B	AM
Iron, Dissolved	25.8		mg/l	0.0500	0.0191	1	07/18/19 09:19	07/18/19 12:54	EPA 3005A	1,6020B	AM
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	07/18/19 09:19	07/18/19 12:54	EPA 3005A	1,6020B	AM
Magnesium, Dissolved	54.0		mg/l	0.0700	0.0242	1	07/18/19 09:19	07/18/19 12:54	EPA 3005A	1,6020B	AM
Manganese, Dissolved	1.807		mg/l	0.00100	0.00044	1	07/18/19 09:19	07/18/19 12:54	EPA 3005A	1,6020B	AM
Mercury, Dissolved	ND		mg/l	0.00020	0.00009	1	07/18/19 11:15	07/18/19 15:01	EPA 7470A	1,7470A	GD
Nickel, Dissolved	0.00132	J	mg/l	0.00200	0.00055	1	07/18/19 09:19	07/18/19 12:54	EPA 3005A	1,6020B	AM
Potassium, Dissolved	22.4		mg/l	0.100	0.0309	1	07/18/19 09:19	07/18/19 12:54	EPA 3005A	1,6020B	AM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	07/18/19 09:19	07/18/19 12:54	EPA 3005A	1,6020B	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	07/18/19 09:19	07/18/19 12:54	EPA 3005A	1,6020B	AM
Sodium, Dissolved	109.		mg/l	0.100	0.0293	1	07/18/19 09:19	07/18/19 12:54	EPA 3005A	1,6020B	AM
Thallium, Dissolved	ND		mg/l	0.00050	0.00014	1	07/18/19 09:19	07/18/19 12:54	EPA 3005A	1,6020B	AM
Vanadium, Dissolved	ND		mg/l	0.00500	0.00157	1	07/18/19 09:19	07/18/19 12:54	EPA 3005A	1,6020B	AM
Zinc, Dissolved	0.00445	J	mg/l	0.01000	0.00341	1	07/18/19 09:19	07/18/19 12:54	EPA 3005A	1,6020B	AM



Project Name: 450 JOHNSON AVE.

Lab Number: L1931524

Project Number: 170588001

Report Date: 08/02/19

Method Blank Analysis Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-05 Batch: WG1261345-1										
Mercury, Total	ND		mg/kg	0.083	0.054	1	07/18/19 06:30	07/18/19 12:56	1,7471B	GD

Prep Information

Digestion Method: EPA 7471B

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-05 Batch: WG1261381-1										
Aluminum, Total	1.16	J	mg/kg	4.00	1.08	1	07/18/19 08:30	07/18/19 13:36	1,6010D	LC
Antimony, Total	ND		mg/kg	2.00	0.152	1	07/18/19 08:30	07/18/19 13:36	1,6010D	LC
Arsenic, Total	ND		mg/kg	0.400	0.083	1	07/18/19 08:30	07/18/19 13:36	1,6010D	LC
Barium, Total	ND		mg/kg	0.400	0.070	1	07/18/19 08:30	07/18/19 13:36	1,6010D	LC
Beryllium, Total	ND		mg/kg	0.200	0.013	1	07/18/19 08:30	07/18/19 13:36	1,6010D	LC
Cadmium, Total	ND		mg/kg	0.400	0.039	1	07/18/19 08:30	07/18/19 13:36	1,6010D	LC
Calcium, Total	1.49	J	mg/kg	4.00	1.40	1	07/18/19 08:30	07/18/19 16:38	1,6010D	AB
Chromium, Total	0.068	J	mg/kg	0.400	0.038	1	07/18/19 08:30	07/18/19 13:36	1,6010D	LC
Cobalt, Total	ND		mg/kg	0.800	0.066	1	07/18/19 08:30	07/18/19 13:36	1,6010D	LC
Copper, Total	ND		mg/kg	0.400	0.103	1	07/18/19 08:30	07/18/19 13:36	1,6010D	LC
Iron, Total	1.47	J	mg/kg	2.00	0.361	1	07/18/19 08:30	07/18/19 13:36	1,6010D	LC
Lead, Total	ND		mg/kg	2.00	0.107	1	07/18/19 08:30	07/18/19 13:36	1,6010D	LC
Magnesium, Total	ND		mg/kg	4.00	0.616	1	07/18/19 08:30	07/18/19 13:36	1,6010D	LC
Manganese, Total	0.220	J	mg/kg	0.400	0.064	1	07/18/19 08:30	07/18/19 16:38	1,6010D	AB
Nickel, Total	ND		mg/kg	1.00	0.097	1	07/18/19 08:30	07/18/19 13:36	1,6010D	LC
Potassium, Total	6.85	J	mg/kg	100	5.76	1	07/18/19 08:30	07/18/19 13:36	1,6010D	LC
Selenium, Total	ND		mg/kg	0.800	0.103	1	07/18/19 08:30	07/18/19 13:36	1,6010D	LC
Silver, Total	ND		mg/kg	0.400	0.113	1	07/18/19 08:30	07/18/19 13:36	1,6010D	LC
Sodium, Total	10.7	J	mg/kg	80.0	1.26	1	07/18/19 08:30	07/18/19 13:36	1,6010D	LC
Thallium, Total	ND		mg/kg	0.800	0.126	1	07/18/19 08:30	07/18/19 13:36	1,6010D	LC
Vanadium, Total	ND		mg/kg	0.400	0.081	1	07/18/19 08:30	07/18/19 13:36	1,6010D	LC
Zinc, Total	ND		mg/kg	2.00	0.117	1	07/18/19 08:30	07/18/19 13:36	1,6010D	LC



Project Name: 450 JOHNSON AVE.

Lab Number: L1931524

Project Number: 170588001

Report Date: 08/02/19

Method Blank Analysis Batch Quality Control

Prep Information

Digestion Method: EPA 3050B

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab for sample(s): 06-08 Batch: WG1261422-1										
Aluminum, Dissolved	ND		mg/l	0.0100	0.00327	1	07/18/19 09:19	07/18/19 12:33	1,6020B	AM
Antimony, Dissolved	0.00063	J	mg/l	0.00400	0.00042	1	07/18/19 09:19	07/18/19 12:33	1,6020B	AM
Arsenic, Dissolved	ND		mg/l	0.00050	0.00016	1	07/18/19 09:19	07/18/19 12:33	1,6020B	AM
Barium, Dissolved	ND		mg/l	0.00050	0.00017	1	07/18/19 09:19	07/18/19 12:33	1,6020B	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	07/18/19 09:19	07/18/19 12:33	1,6020B	AM
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	07/18/19 09:19	07/18/19 12:33	1,6020B	AM
Calcium, Dissolved	ND		mg/l	0.100	0.0394	1	07/18/19 09:19	07/18/19 12:33	1,6020B	AM
Chromium, Dissolved	ND		mg/l	0.00100	0.00017	1	07/18/19 09:19	07/18/19 12:33	1,6020B	AM
Cobalt, Dissolved	ND		mg/l	0.00050	0.00016	1	07/18/19 09:19	07/18/19 12:33	1,6020B	AM
Copper, Dissolved	ND		mg/l	0.00100	0.00038	1	07/18/19 09:19	07/18/19 12:33	1,6020B	AM
Iron, Dissolved	0.0281	J	mg/l	0.0500	0.0191	1	07/18/19 09:19	07/18/19 12:33	1,6020B	AM
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	07/18/19 09:19	07/18/19 12:33	1,6020B	AM
Magnesium, Dissolved	ND		mg/l	0.0700	0.0242	1	07/18/19 09:19	07/18/19 12:33	1,6020B	AM
Manganese, Dissolved	ND		mg/l	0.00100	0.00044	1	07/18/19 09:19	07/18/19 12:33	1,6020B	AM
Nickel, Dissolved	ND		mg/l	0.00200	0.00055	1	07/18/19 09:19	07/18/19 12:33	1,6020B	AM
Potassium, Dissolved	ND		mg/l	0.100	0.0309	1	07/18/19 09:19	07/18/19 12:33	1,6020B	AM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	07/18/19 09:19	07/18/19 12:33	1,6020B	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	07/18/19 09:19	07/18/19 12:33	1,6020B	AM
Sodium, Dissolved	0.0348	J	mg/l	0.100	0.0293	1	07/18/19 09:19	07/18/19 12:33	1,6020B	AM
Thallium, Dissolved	0.00024	J	mg/l	0.00050	0.00014	1	07/18/19 09:19	07/18/19 12:33	1,6020B	AM
Vanadium, Dissolved	ND		mg/l	0.00500	0.00157	1	07/18/19 09:19	07/18/19 12:33	1,6020B	AM
Zinc, Dissolved	ND		mg/l	0.01000	0.00341	1	07/18/19 09:19	07/18/19 12:33	1,6020B	AM

Prep Information

Digestion Method: EPA 3005A



Project Name: 450 JOHNSON AVE.

Lab Number: L1931524

Project Number: 170588001

Report Date: 08/02/19

Method Blank Analysis Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab for sample(s): 06-08 Batch: WG1261524-1										
Mercury, Dissolved	ND		mg/l	0.00020	0.00009	1	07/18/19 11:15	07/18/19 14:44	1,7470A	GD

Prep Information

Digestion Method: EPA 7470A

Lab Control Sample Analysis

Batch Quality Control

Project Name: 450 JOHNSON AVE.

Project Number: 170588001

Lab Number: L1931524

Report Date: 08/02/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-05 Batch: WG1261345-2 SRM Lot Number: D105-540								
Mercury, Total	113		-		72-128	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: 450 JOHNSON AVE.

Project Number: 170588001

Lab Number: L1931524

Report Date: 08/02/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-05 Batch: WG1261381-2 SRM Lot Number: D105-540					
Aluminum, Total	59	-	51-149	-	
Antimony, Total	168	-	19-249	-	
Arsenic, Total	114	-	70-130	-	
Barium, Total	93	-	75-125	-	
Beryllium, Total	94	-	75-125	-	
Cadmium, Total	97	-	75-125	-	
Calcium, Total	88	-	73-127	-	
Chromium, Total	94	-	70-130	-	
Cobalt, Total	99	-	75-125	-	
Copper, Total	104	-	75-125	-	
Iron, Total	78	-	38-162	-	
Lead, Total	104	-	71-128	-	
Magnesium, Total	79	-	63-137	-	
Manganese, Total	87	-	76-124	-	
Nickel, Total	101	-	70-131	-	
Potassium, Total	81	-	60-140	-	
Selenium, Total	107	-	63-137	-	
Silver, Total	100	-	69-131	-	
Sodium, Total	98	-	37-162	-	
Thallium, Total	100	-	68-132	-	
Vanadium, Total	94	-	65-135	-	

Lab Control Sample Analysis
Batch Quality Control**Project Name:** 450 JOHNSON AVE.**Project Number:** 170588001**Lab Number:** L1931524**Report Date:** 08/02/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-05 Batch: WG1261381-2 SRM Lot Number: D105-540					
Zinc, Total	98	-	70-130	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: 450 JOHNSON AVE.

Project Number: 170588001

Lab Number: L1931524

Report Date: 08/02/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 06-08 Batch: WG1261422-2					
Aluminum, Dissolved	104	-	80-120	-	
Antimony, Dissolved	91	-	80-120	-	
Arsenic, Dissolved	104	-	80-120	-	
Barium, Dissolved	104	-	80-120	-	
Beryllium, Dissolved	110	-	80-120	-	
Cadmium, Dissolved	104	-	80-120	-	
Calcium, Dissolved	102	-	80-120	-	
Chromium, Dissolved	102	-	80-120	-	
Cobalt, Dissolved	102	-	80-120	-	
Copper, Dissolved	98	-	80-120	-	
Iron, Dissolved	106	-	80-120	-	
Lead, Dissolved	107	-	80-120	-	
Magnesium, Dissolved	110	-	80-120	-	
Manganese, Dissolved	99	-	80-120	-	
Nickel, Dissolved	102	-	80-120	-	
Potassium, Dissolved	106	-	80-120	-	
Selenium, Dissolved	107	-	80-120	-	
Silver, Dissolved	100	-	80-120	-	
Sodium, Dissolved	107	-	80-120	-	
Thallium, Dissolved	103	-	80-120	-	
Vanadium, Dissolved	102	-	80-120	-	

Lab Control Sample Analysis Batch Quality Control

Project Name: 450 JOHNSON AVE.

Project Number: 170588001

Lab Number: L1931524

Report Date: 08/02/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 06-08 Batch: WG1261422-2					
Zinc, Dissolved	107	-	80-120	-	
Dissolved Metals - Mansfield Lab Associated sample(s): 06-08 Batch: WG1261524-2					
Mercury, Dissolved	101	-	80-120	-	

Matrix Spike Analysis **Batch Quality Control**

Project Name: 450 JOHNSON AVE.

Lab Number: L1931524

Project Number: 170588001

Report Date: 08/02/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-05 QC Batch ID: WG1261345-3 QC Sample: L1931408-01 Client ID: MS Sample												
Mercury, Total	ND	0.145	0.160	110		-	-		80-120	-		20

Matrix Spike Analysis

Batch Quality Control

Project Name: 450 JOHNSON AVE.

Project Number: 170588001

Lab Number: L1931524

Report Date: 08/02/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits	
Total Metals - Mansfield Lab Associated sample(s): 01-05			QC Batch ID: WG1261381-3		QC Sample: L1931408-01		Client ID: MS Sample			
Aluminum, Total	4600	178	5130	297	Q	-	-	75-125	-	20
Antimony, Total	0.462J	44.6	43.6	98		-	-	75-125	-	20
Arsenic, Total	1.99	10.7	13.1	104		-	-	75-125	-	20
Barium, Total	15.5	178	194	100		-	-	75-125	-	20
Beryllium, Total	0.253J	4.46	4.61	103		-	-	75-125	-	20
Cadmium, Total	0.592J	4.55	4.98	110		-	-	75-125	-	20
Calcium, Total	510	892	1480	109		-	-	75-125	-	20
Chromium, Total	11.1	17.8	27.2	90		-	-	75-125	-	20
Cobalt, Total	4.26	44.6	46.0	94		-	-	75-125	-	20
Copper, Total	10.3	22.3	32.9	101		-	-	75-125	-	20
Iron, Total	8190	89.2	8470	314	Q	-	-	75-125	-	20
Lead, Total	12.8	45.5	59.3	102		-	-	75-125	-	20
Magnesium, Total	1970	892	2600	71	Q	-	-	75-125	-	20
Manganese, Total	113	44.6	169	126	Q	-	-	75-125	-	20
Nickel, Total	23.3	44.6	63.1	89		-	-	75-125	-	20
Potassium, Total	355	892	1240	99		-	-	75-125	-	20
Selenium, Total	0.357J	10.7	11.3	106		-	-	75-125	-	20
Silver, Total	ND	26.8	25.6	96		-	-	75-125	-	20
Sodium, Total	54.1J	892	972	109		-	-	75-125	-	20
Thallium, Total	ND	10.7	10.2	95		-	-	75-125	-	20
Vanadium, Total	20.1	44.6	59.4	88		-	-	75-125	-	20

Matrix Spike Analysis

Batch Quality Control

Project Name: 450 JOHNSON AVE.

Lab Number: L1931524

Project Number: 170588001

Report Date: 08/02/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-05 QC Batch ID: WG1261381-3 QC Sample: L1931408-01 Client ID: MS Sample									
Zinc, Total	24.3	44.6	68.6	99	-	-	75-125	-	20

Matrix Spike Analysis **Batch Quality Control**

Project Name: 450 JOHNSON AVE.

Project Number: 170588001

Lab Number: L1931524

Report Date: 08/02/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery		MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 06-08 QC Batch ID: WG1261422-3 QC Sample: L1931524-08 Client ID: TMW03_071719										
Aluminum, Dissolved	0.00334J	2	2.19	110		-	-	75-125	-	20
Antimony, Dissolved	0.00113J	0.5	0.7222	144	Q	-	-	75-125	-	20
Arsenic, Dissolved	0.00076	0.12	0.1312	109		-	-	75-125	-	20
Barium, Dissolved	0.2266	2	2.419	110		-	-	75-125	-	20
Beryllium, Dissolved	ND	0.05	0.05579	112		-	-	75-125	-	20
Cadmium, Dissolved	ND	0.051	0.05340	105		-	-	75-125	-	20
Calcium, Dissolved	75.9	10	91.2	153	Q	-	-	75-125	-	20
Chromium, Dissolved	0.00026J	0.2	0.2183	109		-	-	75-125	-	20
Cobalt, Dissolved	0.00189	0.5	0.5418	108		-	-	75-125	-	20
Copper, Dissolved	0.00071J	0.25	0.2598	104		-	-	75-125	-	20
Iron, Dissolved	25.8	1	28.5	270	Q	-	-	75-125	-	20
Lead, Dissolved	ND	0.51	0.5613	110		-	-	75-125	-	20
Magnesium, Dissolved	54.0	10	68.1	141	Q	-	-	75-125	-	20
Manganese, Dissolved	1.807	0.5	2.436	126	Q	-	-	75-125	-	20
Nickel, Dissolved	0.00132J	0.5	0.5364	107		-	-	75-125	-	20
Potassium, Dissolved	22.4	10	34.5	121		-	-	75-125	-	20
Selenium, Dissolved	ND	0.12	0.136	113		-	-	75-125	-	20
Silver, Dissolved	ND	0.05	0.05278	106		-	-	75-125	-	20
Sodium, Dissolved	109.	10	117	80		-	-	75-125	-	20
Thallium, Dissolved	ND	0.12	0.1295	108		-	-	75-125	-	20
Vanadium, Dissolved	ND	0.5	0.5445	109		-	-	75-125	-	20

Matrix Spike Analysis

Batch Quality Control

Project Name: 450 JOHNSON AVE.

Project Number: 170588001

Lab Number: L1931524

Report Date: 08/02/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 06-08 QC Batch ID: WG1261422-3 QC Sample: L1931524-08 Client ID: TMW03_071719									
Zinc, Dissolved	0.00445J	0.5	0.5570	111	-	-	75-125	-	20
Dissolved Metals - Mansfield Lab Associated sample(s): 06-08 QC Batch ID: WG1261524-3 QC Sample: L1930447-11 Client ID: MS Sample									
Mercury, Dissolved	ND	0.005	0.00502	100	-	-	75-125	-	20

Lab Duplicate Analysis
*Batch Quality Control***Project Name:** 450 JOHNSON AVE.**Project Number:** 170588001**Lab Number:** L1931524**Report Date:** 08/02/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-05 QC Batch ID: WG1261345-4 QC Sample: L1931408-01 Client ID: DUP Sample						
Mercury, Total	ND	ND	mg/kg	NC		20

Lab Duplicate Analysis *Batch Quality Control*

Project Name: 450 JOHNSON AVE.

Project Number: 170588001

Lab Number: L1931524

Report Date: 08/02/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-05 QC Batch ID: WG1261381-4 QC Sample: L1931408-01 Client ID: DUP Sample					
Aluminum, Total	4600	4210	mg/kg	9	20
Antimony, Total	0.462J	0.464J	mg/kg	NC	20
Arsenic, Total	1.99	2.12	mg/kg	6	20
Barium, Total	15.5	18.1	mg/kg	15	20
Beryllium, Total	0.253J	0.245J	mg/kg	NC	20
Cadmium, Total	0.592J	0.605J	mg/kg	NC	20
Calcium, Total	510	575	mg/kg	12	20
Chromium, Total	11.1	8.84	mg/kg	23	Q 20
Cobalt, Total	4.26	4.13	mg/kg	3	20
Copper, Total	10.3	10.3	mg/kg	0	20
Iron, Total	8190	8060	mg/kg	2	20
Lead, Total	12.8	15.2	mg/kg	17	20
Magnesium, Total	1970	1770	mg/kg	11	20
Manganese, Total	113	118	mg/kg	4	20
Nickel, Total	23.3	21.3	mg/kg	9	20
Potassium, Total	355	284	mg/kg	22	Q 20
Selenium, Total	0.357J	0.456J	mg/kg	NC	20
Silver, Total	ND	ND	mg/kg	NC	20
Sodium, Total	54.1J	49.7J	mg/kg	NC	20

Lab Duplicate Analysis

Batch Quality Control

Project Name: 450 JOHNSON AVE.

Project Number: 170588001

Lab Number: L1931524

Report Date: 08/02/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-05 QC Batch ID: WG1261381-4 QC Sample: L1931408-01 Client ID: DUP Sample					
Thallium, Total	ND	ND	mg/kg	NC	20
Vanadium, Total	20.1	15.4	mg/kg	26 Q	20
Zinc, Total	24.3	28.3	mg/kg	15	20

Lab Duplicate Analysis

Batch Quality Control

Project Name: 450 JOHNSON AVE.

Project Number: 170588001

Lab Number: L1931524

Report Date: 08/02/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 06-08 QC Batch ID: WG1261422-4 QC Sample: L1931524-08 Client ID: TMW03_071719					
Aluminum, Dissolved	0.00334J	0.00328J	mg/l	NC	20
Antimony, Dissolved	0.00113J	0.00308J	mg/l	NC	20
Arsenic, Dissolved	0.00076	0.00102	mg/l	29	Q 20
Barium, Dissolved	0.2266	0.2258	mg/l	0	20
Beryllium, Dissolved	ND	ND	mg/l	NC	20
Cadmium, Dissolved	ND	ND	mg/l	NC	20
Calcium, Dissolved	75.9	75.1	mg/l	1	20
Chromium, Dissolved	0.00026J	0.00026J	mg/l	NC	20
Cobalt, Dissolved	0.00189	0.00190	mg/l	1	20
Copper, Dissolved	0.00071J	0.00077J	mg/l	NC	20
Iron, Dissolved	25.8	25.7	mg/l	0	20
Lead, Dissolved	ND	ND	mg/l	NC	20
Magnesium, Dissolved	54.0	53.6	mg/l	1	20
Manganese, Dissolved	1.807	1.800	mg/l	0	20
Nickel, Dissolved	0.00132J	0.00130J	mg/l	NC	20
Potassium, Dissolved	22.4	22.1	mg/l	1	20
Selenium, Dissolved	ND	ND	mg/l	NC	20
Silver, Dissolved	ND	ND	mg/l	NC	20
Sodium, Dissolved	109.	110	mg/l	1	20

Lab Duplicate Analysis

Batch Quality Control

Project Name: 450 JOHNSON AVE.

Project Number: 170588001

Lab Number: L1931524

Report Date: 08/02/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 06-08 QC Batch ID: WG1261422-4 QC Sample: L1931524-08 Client ID: TMW03_071719					
Thallium, Dissolved	ND	0.00015J	mg/l	NC	20
Vanadium, Dissolved	ND	ND	mg/l	NC	20
Zinc, Dissolved	0.00445J	0.00398J	mg/l	NC	20
Dissolved Metals - Mansfield Lab Associated sample(s): 06-08 QC Batch ID: WG1261524-4 QC Sample: L1930447-11 Client ID: DUP Sample					
Mercury, Dissolved	ND	ND	mg/l	NC	20

INORGANICS & MISCELLANEOUS

Project Name: 450 JOHNSON AVE.**Project Number:** 170588001**Lab Number:** L1931524**Report Date:** 08/02/19**SAMPLE RESULTS****Lab ID:** L1931524-01**Client ID:** SB01_1.0-1.5**Sample Location:** BROOKLYN, NY**Date Collected:** 07/17/19 14:25**Date Received:** 07/17/19**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	88.5		%	0.100	NA	1	-	07/18/19 04:27	121,2540G	YA



Project Name: 450 JOHNSON AVE.**Project Number:** 170588001**Lab Number:** L1931524**Report Date:** 08/02/19**SAMPLE RESULTS****Lab ID:** L1931524-02**Client ID:** SB02_8.0-8.5**Sample Location:** BROOKLYN, NY**Date Collected:** 07/17/19 15:30**Date Received:** 07/17/19**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	82.2		%	0.100	NA	1	-	07/18/19 04:27	121,2540G	YA



Project Name: 450 JOHNSON AVE.**Project Number:** 170588001**Lab Number:** L1931524**Report Date:** 08/02/19**SAMPLE RESULTS****Lab ID:** L1931524-03**Client ID:** SB01_8.0-8.5**Sample Location:** BROOKLYN, NY**Date Collected:** 07/17/19 14:30**Date Received:** 07/17/19**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	86.1		%	0.100	NA	1	-	07/18/19 04:27	121,2540G	YA



Project Name: 450 JOHNSON AVE.**Project Number:** 170588001**Lab Number:** L1931524**Report Date:** 08/02/19**SAMPLE RESULTS****Lab ID:** L1931524-04**Client ID:** SB09_3.0-3.5**Sample Location:** BROOKLYN, NY**Date Collected:** 07/17/19 08:40**Date Received:** 07/17/19**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	89.5		%	0.100	NA	1	-	07/18/19 04:27	121,2540G	YA



Project Name: 450 JOHNSON AVE.**Project Number:** 170588001**Lab Number:** L1931524**Report Date:** 08/02/19**SAMPLE RESULTS****Lab ID:** L1931524-05**Client ID:** SB11_5.0-5.5**Sample Location:** BROOKLYN, NY**Date Collected:** 07/17/19 10:40**Date Received:** 07/17/19**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	75.7		%	0.100	NA	1	-	07/18/19 04:27	121,2540G	YA



Lab Duplicate Analysis
*Batch Quality Control***Project Name:** 450 JOHNSON AVE.**Project Number:** 170588001**Lab Number:** L1931524**Report Date:** 08/02/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-05 QC Batch ID: WG1261301-1 QC Sample: L1931582-06 Client ID: DUP Sample						
Solids, Total	86.8	85.7	%	1		20

Project Name: 450 JOHNSON AVE.
Project Number: 170588001

Serial_No:08021906:22
Lab Number: L1931524
Report Date: 08/02/19

Sample Receipt and Container Information

Were project specific reporting limits specified?

YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1931524-01A	Vial MeOH preserved	A	NA		2.8	Y	Absent		NYTCL-8260HLW(14)
L1931524-01B	Vial water preserved	A	NA		2.8	Y	Absent	18-JUL-19 03:16	NYTCL-8260HLW(14)
L1931524-01C	Vial water preserved	A	NA		2.8	Y	Absent	18-JUL-19 03:16	NYTCL-8260HLW(14)
L1931524-01D	Plastic 2oz unpreserved for TS	A	NA		2.8	Y	Absent		TS(7)
L1931524-01E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		2.8	Y	Absent		BE-Ti(180),AS-Ti(180),BA-Ti(180),AG-Ti(180),AL-Ti(180),CR-Ti(180),NI-Ti(180),TL-Ti(180),CU-Ti(180),PB-Ti(180),SB-Ti(180),SE-Ti(180),ZN-Ti(180),CO-Ti(180),V-Ti(180),FE-Ti(180),HG-T(28),MG-Ti(180),MN-Ti(180),CA-Ti(180),CD-Ti(180),K-Ti(180),NA-Ti(180)
L1931524-01F	Glass 60mL/2oz unpreserved	A	NA		2.8	Y	Absent		NYTCL-8270(14),NYTCL-8082(14)
L1931524-01G	Glass 120ml/4oz unpreserved	A	NA		2.8	Y	Absent		NYTCL-8270(14),NYTCL-8082(14)
L1931524-02A	Vial MeOH preserved	A	NA		2.8	Y	Absent		NYTCL-8260HLW(14)
L1931524-02B	Vial water preserved	A	NA		2.8	Y	Absent	18-JUL-19 03:16	NYTCL-8260HLW(14)
L1931524-02C	Vial water preserved	A	NA		2.8	Y	Absent	18-JUL-19 03:16	NYTCL-8260HLW(14)
L1931524-02D	Plastic 2oz unpreserved for TS	A	NA		2.8	Y	Absent		TS(7)
L1931524-02E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		2.8	Y	Absent		BE-Ti(180),AS-Ti(180),BA-Ti(180),AG-Ti(180),AL-Ti(180),CR-Ti(180),NI-Ti(180),TL-Ti(180),CU-Ti(180),PB-Ti(180),SB-Ti(180),SE-Ti(180),ZN-Ti(180),CO-Ti(180),V-Ti(180),FE-Ti(180),HG-T(28),MG-Ti(180),MN-Ti(180),CA-Ti(180),CD-Ti(180),K-Ti(180),NA-Ti(180)
L1931524-02F	Glass 60mL/2oz unpreserved	A	NA		2.8	Y	Absent		NYTCL-8270(14)
L1931524-02G	Glass 120ml/4oz unpreserved	A	NA		2.8	Y	Absent		NYTCL-8270(14)
L1931524-03A	Vial MeOH preserved	A	NA		2.8	Y	Absent		NYTCL-8260HLW(14)
L1931524-03B	Vial water preserved	A	NA		2.8	Y	Absent	18-JUL-19 03:16	NYTCL-8260HLW(14)
L1931524-03C	Vial water preserved	A	NA		2.8	Y	Absent	18-JUL-19 03:16	NYTCL-8260HLW(14)
L1931524-03D	Plastic 2oz unpreserved for TS	A	NA		2.8	Y	Absent		TS(7)

Project Name: 450 JOHNSON AVE.**Lab Number:** L1931524**Project Number:** 170588001**Report Date:** 08/02/19**Container Information**

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1931524-03E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		2.8	Y	Absent		BE-Ti(180),AS-Ti(180),BA-Ti(180),AG-Ti(180),AL-Ti(180),CR-Ti(180),NI-Ti(180),TL-Ti(180),CU-Ti(180),PB-Ti(180),SB-Ti(180),SE-Ti(180),ZN-Ti(180),CO-Ti(180),V-Ti(180),FE-Ti(180),HG-T(28),MG-Ti(180),MN-Ti(180),CA-Ti(180),CD-Ti(180),K-Ti(180),NA-Ti(180)
L1931524-03F	Glass 60mL/2oz unpreserved	A	NA		2.8	Y	Absent		NYTCL-8270(14),NYTCL-8082(14)
L1931524-03G	Glass 120ml/4oz unpreserved	A	NA		2.8	Y	Absent		NYTCL-8270(14),NYTCL-8082(14)
L1931524-04A	Vial MeOH preserved	A	NA		2.8	Y	Absent		NYTCL-8260HLW(14)
L1931524-04B	Vial water preserved	A	NA		2.8	Y	Absent	18-JUL-19 03:16	NYTCL-8260HLW(14)
L1931524-04C	Vial water preserved	A	NA		2.8	Y	Absent	18-JUL-19 03:16	NYTCL-8260HLW(14)
L1931524-04D	Plastic 2oz unpreserved for TS	A	NA		2.8	Y	Absent		TS(7)
L1931524-04E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		2.8	Y	Absent		BE-Ti(180),AS-Ti(180),BA-Ti(180),AG-Ti(180),AL-Ti(180),CR-Ti(180),NI-Ti(180),TL-Ti(180),CU-Ti(180),PB-Ti(180),SB-Ti(180),SE-Ti(180),ZN-Ti(180),CO-Ti(180),V-Ti(180),FE-Ti(180),HG-T(28),MG-Ti(180),MN-Ti(180),CA-Ti(180),CD-Ti(180),K-Ti(180),NA-Ti(180)
L1931524-04F	Glass 60mL/2oz unpreserved	A	NA		2.8	Y	Absent		NYTCL-8270(14)
L1931524-04G	Glass 120ml/4oz unpreserved	A	NA		2.8	Y	Absent		NYTCL-8270(14)
L1931524-05A	Vial MeOH preserved	A	NA		2.8	Y	Absent		NYTCL-8260HLW(14)
L1931524-05B	Vial water preserved	A	NA		2.8	Y	Absent	18-JUL-19 03:16	NYTCL-8260HLW(14)
L1931524-05C	Vial water preserved	A	NA		2.8	Y	Absent	18-JUL-19 03:16	NYTCL-8260HLW(14)
L1931524-05D	Metals Only-Glass 60mL/2oz unpreserved	A	NA		2.8	Y	Absent		BE-Ti(180),AS-Ti(180),BA-Ti(180),AG-Ti(180),AL-Ti(180),CR-Ti(180),NI-Ti(180),TL-Ti(180),CU-Ti(180),PB-Ti(180),SB-Ti(180),SE-Ti(180),ZN-Ti(180),CO-Ti(180),V-Ti(180),FE-Ti(180),HG-T(28),MG-Ti(180),MN-Ti(180),CA-Ti(180),CD-Ti(180),K-Ti(180),NA-Ti(180)
L1931524-05E	Glass 60mL/2oz unpreserved	A	NA		2.8	Y	Absent		NYTCL-8270(14),TS(7),HOLD-8082(14)
L1931524-05F	Glass 120ml/4oz unpreserved	A	NA		2.8	Y	Absent		NYTCL-8270(14),TS(7),HOLD-8082(14)
L1931524-06A	Vial HCl preserved	A	NA		2.8	Y	Absent		NYTCL-8260(14)
L1931524-06B	Vial HCl preserved	A	NA		2.8	Y	Absent		NYTCL-8260(14)
L1931524-06C	Vial HCl preserved	A	NA		2.8	Y	Absent		NYTCL-8260(14)

Project Name: 450 JOHNSON AVE.
Project Number: 170588001

Serial_No:08021906:22
Lab Number: L1931524
Report Date: 08/02/19

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1931524-06D	Plastic 250ml HNO3 preserved split	A	7	<2	2.8	N	Absent		CU-6020S(180),K-6020S(180),SE-6020S(180),V-6020S(180),MN-6020S(180),BE-6020S(180),CO-6020S(180),MG-6020S(180),ZN-6020S(180),CA-6020S(180),CR-6020S(180),FE-6020S(180),BA-6020S(180),NA-6020S(180),NI-6020S(180),PB-6020S(180),TL-6020S(180),AG-6020S(180),AS-6020S(180),SB-6020S(180),AL-6020S(180),CD-6020S(180),HG-S(28)
L1931524-06E	Amber 250ml unpreserved	A	7	7	2.8	Y	Absent		L-EXT-8270(7),L-EXT-8270SIM(7)
L1931524-06F	Amber 250ml unpreserved	A	7	7	2.8	Y	Absent		L-EXT-8270(7),L-EXT-8270SIM(7)
L1931524-06G	Amber 250ml unpreserved	A	7	7	2.8	Y	Absent		-
L1931524-06H	Amber 250ml unpreserved	A	7	7	2.8	Y	Absent		-
L1931524-07A	Vial HCl preserved	A	NA		2.8	Y	Absent		NYTCL-8260(14)
L1931524-07B	Vial HCl preserved	A	NA		2.8	Y	Absent		NYTCL-8260(14)
L1931524-07C	Vial HCl preserved	A	NA		2.8	Y	Absent		NYTCL-8260(14)
L1931524-07D	Plastic 250ml HNO3 preserved split	A	7	<2	2.8	N	Absent		CU-6020S(180),K-6020S(180),SE-6020S(180),V-6020S(180),MN-6020S(180),BE-6020S(180),CO-6020S(180),MG-6020S(180),ZN-6020S(180),CA-6020S(180),CR-6020S(180),FE-6020S(180),BA-6020S(180),NA-6020S(180),NI-6020S(180),PB-6020S(180),TL-6020S(180),AG-6020S(180),AS-6020S(180),SB-6020S(180),AL-6020S(180),CD-6020S(180),HG-S(28)
L1931524-07E	Amber 250ml unpreserved	A	7	7	2.8	Y	Absent		L-EXT-8270(7),L-EXT-8270SIM(7)
L1931524-07F	Amber 250ml unpreserved	A	7	7	2.8	Y	Absent		L-EXT-8270(7),L-EXT-8270SIM(7)
L1931524-07G	Amber 250ml unpreserved	A	7	7	2.8	Y	Absent		-
L1931524-07H	Amber 250ml unpreserved	A	7	7	2.8	Y	Absent		-
L1931524-08A	Vial HCl preserved	A	NA		2.8	Y	Absent		NYTCL-8260(14)
L1931524-08B	Vial HCl preserved	A	NA		2.8	Y	Absent		NYTCL-8260(14)
L1931524-08C	Vial HCl preserved	A	NA		2.8	Y	Absent		NYTCL-8260(14)

Project Name: 450 JOHNSON AVE.
Project Number: 170588001

Serial_No: 08021906:22
Lab Number: L1931524
Report Date: 08/02/19

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1931524-08D	Plastic 250ml HNO3 preserved split	A	7	<2	2.8	N	Absent		CU-6020S(180),K-6020S(180),SE-6020S(180),V-6020S(180),MN-6020S(180),BE-6020S(180),CO-6020S(180),MG-6020S(180),ZN-6020S(180),CA-6020S(180),CR-6020S(180),FE-6020S(180),BA-6020S(180),NA-6020S(180),NI-6020S(180),PB-6020S(180),TL-6020S(180),AG-6020S(180),AS-6020S(180),SB-6020S(180),AL-6020S(180),CD-6020S(180),HG-S(28)
L1931524-08E	Amber 250ml unpreserved	A	7	7	2.8	Y	Absent		L-EXT-8270(7),L-EXT-8270SIM(7)
L1931524-08F	Amber 250ml unpreserved	A	7	7	2.8	Y	Absent		L-EXT-8270(7),L-EXT-8270SIM(7)
L1931524-08G	Amber 250ml unpreserved	A	7	7	2.8	Y	Absent		-
L1931524-08H	Amber 250ml unpreserved	A	7	7	2.8	Y	Absent		-
L1931524-09A	Amber 250ml unpreserved	A	7	7	2.8	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1931524-09B	Amber 250ml unpreserved	A	7	7	2.8	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1931524-10A	Amber 250ml unpreserved	A	7	7	2.8	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1931524-10B	Amber 250ml unpreserved	A	7	7	2.8	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1931524-11A	Amber 250ml unpreserved	A	7	7	2.8	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1931524-11B	Amber 250ml unpreserved	A	7	7	2.8	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)

Project Name: 450 JOHNSON AVE.**Lab Number:** L1931524**Project Number:** 170588001**Report Date:** 08/02/19

GLOSSARY

Acronyms

DL	- 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 limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
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).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
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.
LCS D	- 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.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
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. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
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.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
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

Report Format: DU Report with 'J' Qualifiers

Project Name: 450 JOHNSON AVE.**Lab Number:** L1931524**Project Number:** 170588001**Report Date:** 08/02/19

- 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.

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

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.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. If a 'Total' result is requested, the results of its individual components will also be reported.

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 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.
- 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).
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.
- 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.

Report Format: DU Report with 'J' Qualifiers



Project Name: 450 JOHNSON AVE.
Project Number: 170588001

Lab Number: L1931524
Report Date: 08/02/19

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.



Alpha Analytical, Inc.Facility: **Company-wide**Department: **Quality Assurance**Title: **Certificate/Approval Program Summary**ID No.: **17873**

Revision 13

Published Date: 7/30/2019 3:17:52 PM

Page 1 of 1

Certification Information

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

Westborough Facility**EPA 624/624.1:** m/p-xylene, o-xylene**EPA 8260C:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.**EPA 8270D:** NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.**SM4500:** NPW: Amenable Cyanide; 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, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-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, **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 300:** Chloride, Sulfate, Nitrate.**EPA 624.1:** Volatile Halocarbons & Aromatics,**EPA 608.3:** 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 625.1:** SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.**Microbiology:** **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.****Mansfield Facility:****Drinking Water****EPA 200.7:** Al, Ba, Cd, Cr, Cu, Fe, 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, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.**EPA 245.1** Hg.**SM2340B**

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

7/18/19

ALPHA Job #
L1931524

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

ALPHA Job #
L1931524

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.)



ANALYTICAL REPORT

Lab Number:	L1931803
Client:	Langan Engineering & Environmental 21 Penn Plaza 360 W. 31st Street, 8th Floor New York, NY 10001-2727
ATTN:	Julia Leung
Phone:	(212) 479-5400
Project Name:	450 JOHNSON AVE.
Project Number:	170588001
Report Date:	07/23/19

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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: 450 JOHNSON AVE.

Project Number: 170588001

Lab Number: L1931803

Report Date: 07/23/19

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1931803-01	TMW02_071819	WATER	BROOKLYN, NY	07/18/19 09:17	07/18/19
L1931803-02	TMW08_071819	WATER	BROOKLYN, NY	07/18/19 11:25	07/18/19
L1931803-03	DUP02_071819	WATER	BROOKLYN, NY	07/18/19 00:00	07/18/19
L1931803-04	SB08_5.0-5.5	SOIL	BROOKLYN, NY	07/18/19 11:20	07/18/19
L1931803-05	SB08_14.0-14.5	SOIL	BROOKLYN, NY	07/18/19 11:10	07/18/19
L1931803-06	SB12_6.5-7.0	SOIL	BROOKLYN, NY	07/18/19 10:15	07/18/19
L1931803-07	SB07_4.5-5.0	SOIL	BROOKLYN, NY	07/18/19 15:00	07/18/19
L1931803-08	SB14_4.5-5.0	SOIL	BROOKLYN, NY	07/18/19 14:05	07/18/19
L1931803-09	TMW02_071819 (UF SVOC)	WATER	BROOKLYN, NY	07/18/19 09:17	07/18/19
L1931803-10	TMW08_071819 (UF SVOC)	WATER	BROOKLYN, NY	07/18/19 11:25	07/18/19
L1931803-11	DUP02_071819 (UF SVOC)	WATER	BROOKLYN, NY	07/18/19 00:00	07/18/19

Project Name: 450 JOHNSON AVE.
Project Number: 170588001

Lab Number: L1931803
Report Date: 07/23/19

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. 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 Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data 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.

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 Alpha Project Manager 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 Project Management at 800-624-9220 with any questions.

Project Name: 450 JOHNSON AVE.
Project Number: 170588001

Lab Number: L1931803
Report Date: 07/23/19

Case Narrative (continued)

Report Submission

July 23, 2019: This final report includes the results of all requested analyses.

July 23, 2019: This is a preliminary report.

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

Sample Receipt

The Client IDs and analyses performed were specified by the client.

Volatile Organics

L1931803-07: The internal standard (IS) response for 1,4-dichlorobenzene-d4 (42%) and the surrogate recovery for 4-bromofluorobenzene (137%) were outside the acceptance criteria; however, re-analysis achieved similar results: 1,4-dichlorobenzene-d4 (41%) and 4-bromofluorobenzene (143%). The results of both analyses are reported.

Semivolatile Organics

The WG1261662-2/-3 LCS/LCSD recoveries, associated with L1931803-09 through -11, are below the acceptance criteria for benzoic acid (0%/0%); however, it has been identified as a "difficult" analyte. The results of the associated samples are reported.

Total Metals

L1931803-04 through -08: The sample has elevated detection limits for all elements, with the exception of mercury, due to the dilution required by matrix interferences encountered during analysis.

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:



Michelle M. Morris

Title: Technical Director/Representative

Date: 07/23/19

ORGANICS

VOLATILES

Project Name: 450 JOHNSON AVE.
Project Number: 170588001

Lab Number: L1931803
Report Date: 07/23/19

SAMPLE RESULTS

Lab ID: L1931803-01
Client ID: TMW02_071819
Sample Location: BROOKLYN, NY

Date Collected: 07/18/19 09:17
Date Received: 07/18/19
Field Prep: Refer to COC

Sample Depth:

Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 07/19/19 12:26
Analyst: KJD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
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
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: 450 JOHNSON AVE.**Lab Number:** L1931803**Project Number:** 170588001**Report Date:** 07/23/19**SAMPLE RESULTS****Lab ID:** L1931803-01**Date Collected:** 07/18/19 09:17**Client ID:** TMW02_071819**Date Received:** 07/18/19**Sample Location:** BROOKLYN, NY**Field Prep:** Refer to COC**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	0.91	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
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	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
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	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	2.0	J	ug/l	2.5	0.70	1

Project Name: 450 JOHNSON AVE.
Project Number: 170588001

Lab Number: L1931803
Report Date: 07/23/19

SAMPLE RESULTS

Lab ID: L1931803-01
Client ID: TMW02_071819
Sample Location: BROOKLYN, NY

Date Collected: 07/18/19 09:17
Date Received: 07/18/19
Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	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
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	86		70-130
Toluene-d8	87		70-130
4-Bromofluorobenzene	87		70-130
Dibromofluoromethane	96		70-130

Project Name: 450 JOHNSON AVE.
Project Number: 170588001

Lab Number: L1931803
Report Date: 07/23/19

SAMPLE RESULTS

Lab ID: L1931803-02
Client ID: TMW08_071819
Sample Location: BROOKLYN, NY

Date Collected: 07/18/19 11:25
Date Received: 07/18/19
Field Prep: Refer to COC

Sample Depth:

Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 07/19/19 12:52
Analyst: KJD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	13		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	64		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	0.23	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
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	220	E	ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	0.31	J	ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	2.3	J	ug/l	2.5	0.70	1

Project Name: 450 JOHNSON AVE.**Lab Number:** L1931803**Project Number:** 170588001**Report Date:** 07/23/19**SAMPLE RESULTS**

Lab ID: L1931803-02
Client ID: TMW08_071819
Sample Location: BROOKLYN, NY

Date Collected: 07/18/19 11:25
Date Received: 07/18/19
Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	72		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	7.9		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
cis-1,2-Dichloroethene	170		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	170	J	ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	19		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	3.5	J	ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	2.2	J	ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	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
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	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	1.4	J	ug/l	2.5	0.70	1

Project Name: 450 JOHNSON AVE.
Project Number: 170588001

Lab Number: L1931803
Report Date: 07/23/19

SAMPLE RESULTS

Lab ID: L1931803-02
Client ID: TMW08_071819
Sample Location: BROOKLYN, NY

Date Collected: 07/18/19 11:25
Date Received: 07/18/19
Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	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
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	86		70-130
Toluene-d8	87		70-130
4-Bromofluorobenzene	88		70-130
Dibromofluoromethane	100		70-130

Project Name: 450 JOHNSON AVE.
Project Number: 170588001

Lab Number: L1931803
Report Date: 07/23/19

SAMPLE RESULTS

Lab ID: L1931803-02 D
Client ID: TMW08_071819
Sample Location: BROOKLYN, NY

Date Collected: 07/18/19 11:25
Date Received: 07/18/19
Field Prep: Refer to COC

Sample Depth:

Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 07/22/19 08:45
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Volatile Organics by GC/MS - Westborough Lab						

Vinyl chloride	170		ug/l	4.0	0.28	4

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	85		70-130
Toluene-d8	85		70-130
4-Bromofluorobenzene	88		70-130
Dibromofluoromethane	100		70-130

Project Name: 450 JOHNSON AVE.
Project Number: 170588001

Lab Number: L1931803
Report Date: 07/23/19

SAMPLE RESULTS

Lab ID: L1931803-03
Client ID: DUP02_071819
Sample Location: BROOKLYN, NY

Date Collected: 07/18/19 00:00
Date Received: 07/18/19
Field Prep: Refer to COC

Sample Depth:

Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 07/19/19 13:17
Analyst: KJD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
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
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	0.08	J	ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: 450 JOHNSON AVE.**Lab Number:** L1931803**Project Number:** 170588001**Report Date:** 07/23/19**SAMPLE RESULTS**

Lab ID: L1931803-03
 Client ID: DUP02_071819
 Sample Location: BROOKLYN, NY

Date Collected: 07/18/19 00:00
 Date Received: 07/18/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	0.78	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
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	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
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	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	1.3	J	ug/l	2.5	0.70	1

Project Name: 450 JOHNSON AVE.
Project Number: 170588001

Lab Number: L1931803
Report Date: 07/23/19

SAMPLE RESULTS

Lab ID: L1931803-03
Client ID: DUP02_071819
Sample Location: BROOKLYN, NY

Date Collected: 07/18/19 00:00
Date Received: 07/18/19
Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	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
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	85		70-130
Toluene-d8	88		70-130
4-Bromofluorobenzene	88		70-130
Dibromofluoromethane	96		70-130

Project Name: 450 JOHNSON AVE.**Lab Number:** L1931803**Project Number:** 170588001**Report Date:** 07/23/19**SAMPLE RESULTS**

Lab ID: L1931803-04
 Client ID: SB08_5.0-5.5
 Sample Location: BROOKLYN, NY

Date Collected: 07/18/19 11:20
 Date Received: 07/18/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 07/19/19 17:23
 Analyst: JC
 Percent Solids: 92%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	3.4	1.6	1
1,1-Dichloroethane	ND		ug/kg	0.68	0.10	1
Chloroform	ND		ug/kg	1.0	0.10	1
Carbon tetrachloride	ND		ug/kg	0.68	0.16	1
1,2-Dichloropropane	ND		ug/kg	0.68	0.09	1
Dibromochloromethane	ND		ug/kg	0.68	0.10	1
1,1,2-Trichloroethane	ND		ug/kg	0.68	0.18	1
Tetrachloroethene	8.7		ug/kg	0.34	0.13	1
Chlorobenzene	ND		ug/kg	0.34	0.09	1
Trichlorofluoromethane	ND		ug/kg	2.7	0.47	1
1,2-Dichloroethane	ND		ug/kg	0.68	0.17	1
1,1,1-Trichloroethane	ND		ug/kg	0.34	0.11	1
Bromodichloromethane	ND		ug/kg	0.34	0.07	1
trans-1,3-Dichloropropene	ND		ug/kg	0.68	0.18	1
cis-1,3-Dichloropropene	ND		ug/kg	0.34	0.11	1
1,3-Dichloropropene, Total	ND		ug/kg	0.34	0.11	1
1,1-Dichloropropene	ND		ug/kg	0.34	0.11	1
Bromoform	ND		ug/kg	2.7	0.17	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.34	0.11	1
Benzene	ND		ug/kg	0.34	0.11	1
Toluene	0.37	J	ug/kg	0.68	0.37	1
Ethylbenzene	ND		ug/kg	0.68	0.10	1
Chloromethane	ND		ug/kg	2.7	0.63	1
Bromomethane	ND		ug/kg	1.4	0.40	1
Vinyl chloride	ND		ug/kg	0.68	0.23	1
Chloroethane	ND		ug/kg	1.4	0.31	1
1,1-Dichloroethene	ND		ug/kg	0.68	0.16	1
trans-1,2-Dichloroethene	ND		ug/kg	1.0	0.09	1

Project Name: 450 JOHNSON AVE.**Lab Number:** L1931803**Project Number:** 170588001**Report Date:** 07/23/19**SAMPLE RESULTS****Lab ID:** L1931803-04**Date Collected:** 07/18/19 11:20**Client ID:** SB08_5.0-5.5**Date Received:** 07/18/19**Sample Location:** BROOKLYN, NY**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	0.30	J	ug/kg	0.34	0.09	1
1,2-Dichlorobenzene	ND		ug/kg	1.4	0.10	1
1,3-Dichlorobenzene	ND		ug/kg	1.4	0.10	1
1,4-Dichlorobenzene	ND		ug/kg	1.4	0.12	1
Methyl tert butyl ether	0.17	J	ug/kg	1.4	0.14	1
p/m-Xylene	ND		ug/kg	1.4	0.38	1
o-Xylene	ND		ug/kg	0.68	0.20	1
Xylenes, Total	ND		ug/kg	0.68	0.20	1
cis-1,2-Dichloroethene	ND		ug/kg	0.68	0.12	1
1,2-Dichloroethene, Total	ND		ug/kg	0.68	0.09	1
Dibromomethane	ND		ug/kg	1.4	0.16	1
Styrene	ND		ug/kg	0.68	0.13	1
Dichlorodifluoromethane	ND		ug/kg	6.8	0.62	1
Acetone	19		ug/kg	6.8	3.3	1
Carbon disulfide	ND		ug/kg	6.8	3.1	1
2-Butanone	ND		ug/kg	6.8	1.5	1
Vinyl acetate	ND		ug/kg	6.8	1.5	1
4-Methyl-2-pentanone	ND		ug/kg	6.8	0.87	1
1,2,3-Trichloropropane	ND		ug/kg	1.4	0.09	1
2-Hexanone	ND		ug/kg	6.8	0.80	1
Bromochloromethane	ND		ug/kg	1.4	0.14	1
2,2-Dichloropropane	ND		ug/kg	1.4	0.14	1
1,2-Dibromoethane	ND		ug/kg	0.68	0.19	1
1,3-Dichloropropane	ND		ug/kg	1.4	0.11	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.34	0.09	1
Bromobenzene	ND		ug/kg	1.4	0.10	1
n-Butylbenzene	ND		ug/kg	0.68	0.11	1
sec-Butylbenzene	ND		ug/kg	0.68	0.10	1
tert-Butylbenzene	ND		ug/kg	1.4	0.08	1
o-Chlorotoluene	ND		ug/kg	1.4	0.13	1
p-Chlorotoluene	ND		ug/kg	1.4	0.07	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	2.0	0.68	1
Hexachlorobutadiene	ND		ug/kg	2.7	0.12	1
Isopropylbenzene	ND		ug/kg	0.68	0.07	1
p-Isopropyltoluene	ND		ug/kg	0.68	0.07	1
Naphthalene	ND		ug/kg	2.7	0.44	1
Acrylonitrile	ND		ug/kg	2.7	0.78	1

Project Name: 450 JOHNSON AVE.**Lab Number:** L1931803**Project Number:** 170588001**Report Date:** 07/23/19**SAMPLE RESULTS****Lab ID:** L1931803-04**Date Collected:** 07/18/19 11:20**Client ID:** SB08_5.0-5.5**Date Received:** 07/18/19**Sample Location:** BROOKLYN, NY**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	0.68	0.12	1
1,2,3-Trichlorobenzene	ND		ug/kg	1.4	0.22	1
1,2,4-Trichlorobenzene	ND		ug/kg	1.4	0.18	1
1,3,5-Trimethylbenzene	ND		ug/kg	1.4	0.13	1
1,2,4-Trimethylbenzene	ND		ug/kg	1.4	0.23	1
1,4-Dioxane	ND		ug/kg	54	24.	1
p-Diethylbenzene	ND		ug/kg	1.4	0.12	1
p-Ethyltoluene	ND		ug/kg	1.4	0.26	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	1.4	0.13	1
Ethyl ether	ND		ug/kg	1.4	0.23	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	3.4	0.97	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	109		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	115		70-130
Dibromofluoromethane	101		70-130

Project Name: 450 JOHNSON AVE.**Lab Number:** L1931803**Project Number:** 170588001**Report Date:** 07/23/19**SAMPLE RESULTS**

Lab ID: L1931803-05
 Client ID: SB08_14.0-14.5
 Sample Location: BROOKLYN, NY

Date Collected: 07/18/19 11:10
 Date Received: 07/18/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 07/19/19 19:55
 Analyst: MV
 Percent Solids: 72%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Methylene chloride	ND		ug/kg	440	200	1
1,1-Dichloroethane	ND		ug/kg	89	13.	1
Chloroform	ND		ug/kg	130	12.	1
Carbon tetrachloride	ND		ug/kg	89	20.	1
1,2-Dichloropropane	ND		ug/kg	89	11.	1
Dibromochloromethane	ND		ug/kg	89	12.	1
1,1,2-Trichloroethane	ND		ug/kg	89	24.	1
Tetrachloroethene	330		ug/kg	44	17.	1
Chlorobenzene	ND		ug/kg	44	11.	1
Trichlorofluoromethane	ND		ug/kg	360	62.	1
1,2-Dichloroethane	ND		ug/kg	89	23.	1
1,1,1-Trichloroethane	ND		ug/kg	44	15.	1
Bromodichloromethane	ND		ug/kg	44	9.7	1
trans-1,3-Dichloropropene	ND		ug/kg	89	24.	1
cis-1,3-Dichloropropene	ND		ug/kg	44	14.	1
1,3-Dichloropropene, Total	ND		ug/kg	44	14.	1
1,1-Dichloropropene	ND		ug/kg	44	14.	1
Bromoform	ND		ug/kg	360	22.	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	44	15.	1
Benzene	ND		ug/kg	44	15.	1
Toluene	160		ug/kg	89	48.	1
Ethylbenzene	ND		ug/kg	89	12.	1
Chloromethane	ND		ug/kg	360	83.	1
Bromomethane	ND		ug/kg	180	52.	1
Vinyl chloride	15000		ug/kg	89	30.	1
Chloroethane	ND		ug/kg	180	40.	1
1,1-Dichloroethene	ND		ug/kg	89	21.	1
trans-1,2-Dichloroethene	1600		ug/kg	130	12.	1

Project Name: 450 JOHNSON AVE.**Lab Number:** L1931803**Project Number:** 170588001**Report Date:** 07/23/19**SAMPLE RESULTS**

Lab ID: L1931803-05
 Client ID: SB08_14.0-14.5
 Sample Location: BROOKLYN, NY

Date Collected: 07/18/19 11:10
 Date Received: 07/18/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Trichloroethene	290		ug/kg	44	12.	1
1,2-Dichlorobenzene	ND		ug/kg	180	13.	1
1,3-Dichlorobenzene	ND		ug/kg	180	13.	1
1,4-Dichlorobenzene	ND		ug/kg	180	15.	1
Methyl tert butyl ether	ND		ug/kg	180	18.	1
p/m-Xylene	ND		ug/kg	180	50.	1
o-Xylene	ND		ug/kg	89	26.	1
Xylenes, Total	ND		ug/kg	89	26.	1
cis-1,2-Dichloroethene	12000		ug/kg	89	16.	1
1,2-Dichloroethene, Total	14000		ug/kg	89	12.	1
Dibromomethane	ND		ug/kg	180	21.	1
Styrene	ND		ug/kg	89	17.	1
Dichlorodifluoromethane	ND		ug/kg	890	81.	1
Acetone	ND		ug/kg	890	430	1
Carbon disulfide	ND		ug/kg	890	400	1
2-Butanone	ND		ug/kg	890	200	1
Vinyl acetate	ND		ug/kg	890	190	1
4-Methyl-2-pentanone	ND		ug/kg	890	110	1
1,2,3-Trichloropropane	ND		ug/kg	180	11.	1
2-Hexanone	ND		ug/kg	890	100	1
Bromochloromethane	ND		ug/kg	180	18.	1
2,2-Dichloropropane	ND		ug/kg	180	18.	1
1,2-Dibromoethane	ND		ug/kg	89	25.	1
1,3-Dichloropropane	ND		ug/kg	180	15.	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	44	12.	1
Bromobenzene	ND		ug/kg	180	13.	1
n-Butylbenzene	ND		ug/kg	89	15.	1
sec-Butylbenzene	ND		ug/kg	89	13.	1
tert-Butylbenzene	ND		ug/kg	180	10.	1
o-Chlorotoluene	ND		ug/kg	180	17.	1
p-Chlorotoluene	ND		ug/kg	180	9.6	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	270	88.	1
Hexachlorobutadiene	ND		ug/kg	360	15.	1
Isopropylbenzene	ND		ug/kg	89	9.7	1
p-Isopropyltoluene	ND		ug/kg	89	9.7	1
Naphthalene	ND		ug/kg	360	58.	1
Acrylonitrile	ND		ug/kg	360	100	1

Project Name: 450 JOHNSON AVE.
Project Number: 170588001

Lab Number: L1931803
Report Date: 07/23/19

SAMPLE RESULTS

Lab ID: L1931803-05
Client ID: SB08_14.0-14.5
Sample Location: BROOKLYN, NY

Date Collected: 07/18/19 11:10
Date Received: 07/18/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
n-Propylbenzene	ND		ug/kg	89	15.	1
1,2,3-Trichlorobenzene	ND		ug/kg	180	28.	1
1,2,4-Trichlorobenzene	ND		ug/kg	180	24.	1
1,3,5-Trimethylbenzene	ND		ug/kg	180	17.	1
1,2,4-Trimethylbenzene	ND		ug/kg	180	30.	1
1,4-Dioxane	ND		ug/kg	7100	3100	1
p-Diethylbenzene	ND		ug/kg	180	16.	1
p-Ethyltoluene	ND		ug/kg	180	34.	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	180	17.	1
Ethyl ether	ND		ug/kg	180	30.	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	440	130	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	91		70-130
4-Bromofluorobenzene	87		70-130
Dibromofluoromethane	103		70-130

Project Name: 450 JOHNSON AVE.**Lab Number:** L1931803**Project Number:** 170588001**Report Date:** 07/23/19**SAMPLE RESULTS**

Lab ID: L1931803-06
 Client ID: SB12_6.5-7.0
 Sample Location: BROOKLYN, NY

Date Collected: 07/18/19 10:15
 Date Received: 07/18/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 07/19/19 17:49
 Analyst: JC
 Percent Solids: 89%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	5.3	2.4	1
1,1-Dichloroethane	ND		ug/kg	1.1	0.15	1
Chloroform	ND		ug/kg	1.6	0.15	1
Carbon tetrachloride	ND		ug/kg	1.1	0.24	1
1,2-Dichloropropane	ND		ug/kg	1.1	0.13	1
Dibromochloromethane	ND		ug/kg	1.1	0.15	1
1,1,2-Trichloroethane	ND		ug/kg	1.1	0.28	1
Tetrachloroethene	2.1		ug/kg	0.53	0.21	1
Chlorobenzene	ND		ug/kg	0.53	0.14	1
Trichlorofluoromethane	ND		ug/kg	4.3	0.74	1
1,2-Dichloroethane	ND		ug/kg	1.1	0.27	1
1,1,1-Trichloroethane	ND		ug/kg	0.53	0.18	1
Bromodichloromethane	ND		ug/kg	0.53	0.12	1
trans-1,3-Dichloropropene	ND		ug/kg	1.1	0.29	1
cis-1,3-Dichloropropene	ND		ug/kg	0.53	0.17	1
1,3-Dichloropropene, Total	ND		ug/kg	0.53	0.17	1
1,1-Dichloropropene	ND		ug/kg	0.53	0.17	1
Bromoform	ND		ug/kg	4.3	0.26	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.53	0.18	1
Benzene	ND		ug/kg	0.53	0.18	1
Toluene	ND		ug/kg	1.1	0.58	1
Ethylbenzene	ND		ug/kg	1.1	0.15	1
Chloromethane	ND		ug/kg	4.3	0.99	1
Bromomethane	ND		ug/kg	2.1	0.62	1
Vinyl chloride	ND		ug/kg	1.1	0.36	1
Chloroethane	ND		ug/kg	2.1	0.48	1
1,1-Dichloroethene	ND		ug/kg	1.1	0.25	1
trans-1,2-Dichloroethene	ND		ug/kg	1.6	0.15	1

Project Name: 450 JOHNSON AVE.

Lab Number: L1931803

Project Number: 170588001

Report Date: 07/23/19

SAMPLE RESULTS

Lab ID: L1931803-06

Date Collected: 07/18/19 10:15

Client ID: SB12_6.5-7.0

Date Received: 07/18/19

Sample Location: BROOKLYN, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.53	0.15	1
1,2-Dichlorobenzene	ND		ug/kg	2.1	0.15	1
1,3-Dichlorobenzene	ND		ug/kg	2.1	0.16	1
1,4-Dichlorobenzene	ND		ug/kg	2.1	0.18	1
Methyl tert butyl ether	0.28	J	ug/kg	2.1	0.21	1
p/m-Xylene	ND		ug/kg	2.1	0.60	1
o-Xylene	ND		ug/kg	1.1	0.31	1
Xylenes, Total	ND		ug/kg	1.1	0.31	1
cis-1,2-Dichloroethene	ND		ug/kg	1.1	0.19	1
1,2-Dichloroethene, Total	ND		ug/kg	1.1	0.15	1
Dibromomethane	ND		ug/kg	2.1	0.25	1
Styrene	ND		ug/kg	1.1	0.21	1
Dichlorodifluoromethane	ND		ug/kg	11	0.98	1
Acetone	22		ug/kg	11	5.1	1
Carbon disulfide	ND		ug/kg	11	4.8	1
2-Butanone	ND		ug/kg	11	2.4	1
Vinyl acetate	ND		ug/kg	11	2.3	1
4-Methyl-2-pentanone	ND		ug/kg	11	1.4	1
1,2,3-Trichloropropane	ND		ug/kg	2.1	0.14	1
2-Hexanone	ND		ug/kg	11	1.2	1
Bromochloromethane	ND		ug/kg	2.1	0.22	1
2,2-Dichloropropane	ND		ug/kg	2.1	0.22	1
1,2-Dibromoethane	ND		ug/kg	1.1	0.30	1
1,3-Dichloropropane	ND		ug/kg	2.1	0.18	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.53	0.14	1
Bromobenzene	ND		ug/kg	2.1	0.15	1
n-Butylbenzene	ND		ug/kg	1.1	0.18	1
sec-Butylbenzene	ND		ug/kg	1.1	0.16	1
tert-Butylbenzene	ND		ug/kg	2.1	0.12	1
o-Chlorotoluene	ND		ug/kg	2.1	0.20	1
p-Chlorotoluene	ND		ug/kg	2.1	0.12	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.2	1.1	1
Hexachlorobutadiene	ND		ug/kg	4.3	0.18	1
Isopropylbenzene	ND		ug/kg	1.1	0.12	1
p-Isopropyltoluene	ND		ug/kg	1.1	0.12	1
Naphthalene	ND		ug/kg	4.3	0.69	1
Acrylonitrile	ND		ug/kg	4.3	1.2	1

Project Name: 450 JOHNSON AVE.**Lab Number:** L1931803**Project Number:** 170588001**Report Date:** 07/23/19**SAMPLE RESULTS****Lab ID:** L1931803-06**Date Collected:** 07/18/19 10:15**Client ID:** SB12_6.5-7.0**Date Received:** 07/18/19**Sample Location:** BROOKLYN, NY**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.1	0.18	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.1	0.34	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.1	0.29	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.1	0.20	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.1	0.36	1
1,4-Dioxane	ND		ug/kg	85	37.	1
p-Diethylbenzene	ND		ug/kg	2.1	0.19	1
p-Ethyltoluene	ND		ug/kg	2.1	0.41	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.1	0.20	1
Ethyl ether	ND		ug/kg	2.1	0.36	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.3	1.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	107		70-130
Toluene-d8	105		70-130
4-Bromofluorobenzene	119		70-130
Dibromofluoromethane	99		70-130

Project Name: 450 JOHNSON AVE.
Project Number: 170588001

Lab Number: L1931803
Report Date: 07/23/19

SAMPLE RESULTS

Lab ID: L1931803-07
Client ID: SB07_4.5-5.0
Sample Location: BROOKLYN, NY

Date Collected: 07/18/19 15:00
Date Received: 07/18/19
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 07/19/19 18:15
Analyst: JC
Percent Solids: 88%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	5.4	2.5	1
1,1-Dichloroethane	ND		ug/kg	1.1	0.16	1
Chloroform	ND		ug/kg	1.6	0.15	1
Carbon tetrachloride	ND		ug/kg	1.1	0.25	1
1,2-Dichloropropane	ND		ug/kg	1.1	0.13	1
Dibromochloromethane	ND		ug/kg	1.1	0.15	1
1,1,2-Trichloroethane	ND		ug/kg	1.1	0.29	1
Tetrachloroethene	20		ug/kg	0.54	0.21	1
Chlorobenzene	ND		ug/kg	0.54	0.14	1
Trichlorofluoromethane	ND		ug/kg	4.3	0.75	1
1,2-Dichloroethane	ND		ug/kg	1.1	0.28	1
1,1,1-Trichloroethane	ND		ug/kg	0.54	0.18	1
Bromodichloromethane	ND		ug/kg	0.54	0.12	1
trans-1,3-Dichloropropene	ND		ug/kg	1.1	0.29	1
cis-1,3-Dichloropropene	ND		ug/kg	0.54	0.17	1
1,3-Dichloropropene, Total	ND		ug/kg	0.54	0.17	1
1,1-Dichloropropene	ND		ug/kg	0.54	0.17	1
Bromoform	ND		ug/kg	4.3	0.26	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.54	0.18	1
Benzene	ND		ug/kg	0.54	0.18	1
Toluene	ND		ug/kg	1.1	0.59	1
Ethylbenzene	ND		ug/kg	1.1	0.15	1
Chloromethane	ND		ug/kg	4.3	1.0	1
Bromomethane	ND		ug/kg	2.2	0.63	1
Vinyl chloride	0.74	J	ug/kg	1.1	0.36	1
Chloroethane	ND		ug/kg	2.2	0.49	1
1,1-Dichloroethene	ND		ug/kg	1.1	0.26	1
trans-1,2-Dichloroethene	ND		ug/kg	1.6	0.15	1

Project Name: 450 JOHNSON AVE.**Lab Number:** L1931803**Project Number:** 170588001**Report Date:** 07/23/19**SAMPLE RESULTS**

Lab ID: L1931803-07
Client ID: SB07_4.5-5.0
Sample Location: BROOKLYN, NY

Date Collected: 07/18/19 15:00
Date Received: 07/18/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.54	0.15	1
1,2-Dichlorobenzene	ND		ug/kg	2.2	0.16	1
1,3-Dichlorobenzene	ND		ug/kg	2.2	0.16	1
1,4-Dichlorobenzene	ND		ug/kg	2.2	0.18	1
Methyl tert butyl ether	ND		ug/kg	2.2	0.22	1
p/m-Xylene	ND		ug/kg	2.2	0.60	1
o-Xylene	ND		ug/kg	1.1	0.31	1
Xylenes, Total	ND		ug/kg	1.1	0.31	1
cis-1,2-Dichloroethene	ND		ug/kg	1.1	0.19	1
1,2-Dichloroethene, Total	ND		ug/kg	1.1	0.15	1
Dibromomethane	ND		ug/kg	2.2	0.26	1
Styrene	ND		ug/kg	1.1	0.21	1
Dichlorodifluoromethane	ND		ug/kg	11	0.99	1
Acetone	27		ug/kg	11	5.2	1
Carbon disulfide	ND		ug/kg	11	4.9	1
2-Butanone	ND		ug/kg	11	2.4	1
Vinyl acetate	ND		ug/kg	11	2.3	1
4-Methyl-2-pentanone	ND		ug/kg	11	1.4	1
1,2,3-Trichloropropane	ND		ug/kg	2.2	0.14	1
2-Hexanone	ND		ug/kg	11	1.3	1
Bromochloromethane	ND		ug/kg	2.2	0.22	1
2,2-Dichloropropane	ND		ug/kg	2.2	0.22	1
1,2-Dibromoethane	ND		ug/kg	1.1	0.30	1
1,3-Dichloropropane	ND		ug/kg	2.2	0.18	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.54	0.14	1
Bromobenzene	ND		ug/kg	2.2	0.16	1
n-Butylbenzene	ND		ug/kg	1.1	0.18	1
sec-Butylbenzene	ND		ug/kg	1.1	0.16	1
tert-Butylbenzene	ND		ug/kg	2.2	0.13	1
o-Chlorotoluene	ND		ug/kg	2.2	0.21	1
p-Chlorotoluene	ND		ug/kg	2.2	0.12	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.2	1.1	1
Hexachlorobutadiene	ND		ug/kg	4.3	0.18	1
Isopropylbenzene	ND		ug/kg	1.1	0.12	1
p-Isopropyltoluene	ND		ug/kg	1.1	0.12	1
Naphthalene	ND		ug/kg	4.3	0.70	1
Acrylonitrile	ND		ug/kg	4.3	1.2	1

Project Name: 450 JOHNSON AVE.

Lab Number: L1931803

Project Number: 170588001

Report Date: 07/23/19

SAMPLE RESULTS

Lab ID: L1931803-07

Date Collected: 07/18/19 15:00

Client ID: SB07_4.5-5.0

Date Received: 07/18/19

Sample Location: BROOKLYN, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.1	0.18	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.2	0.35	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.2	0.29	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.2	0.21	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.2	0.36	1
1,4-Dioxane	ND		ug/kg	86	38.	1
p-Diethylbenzene	ND		ug/kg	2.2	0.19	1
p-Ethyltoluene	ND		ug/kg	2.2	0.41	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.2	0.21	1
Ethyl ether	ND		ug/kg	2.2	0.37	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.4	1.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	109		70-130
Toluene-d8	111		70-130
4-Bromofluorobenzene	137	Q	70-130
Dibromofluoromethane	101		70-130

Project Name: 450 JOHNSON AVE.**Lab Number:** L1931803**Project Number:** 170588001**Report Date:** 07/23/19**SAMPLE RESULTS**

Lab ID: L1931803-07 R

Date Collected: 07/18/19 15:00

Client ID: SB07_4.5-5.0

Date Received: 07/18/19

Sample Location: BROOKLYN, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Analytical Method: 1,8260C

Analytical Date: 07/22/19 08:03

Analyst: MV

Percent Solids: 88%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	5.4	2.5	1
1,1-Dichloroethane	ND		ug/kg	1.1	0.16	1
Chloroform	ND		ug/kg	1.6	0.15	1
Carbon tetrachloride	ND		ug/kg	1.1	0.25	1
1,2-Dichloropropane	ND		ug/kg	1.1	0.14	1
Dibromochloromethane	ND		ug/kg	1.1	0.15	1
1,1,2-Trichloroethane	ND		ug/kg	1.1	0.29	1
Tetrachloroethene	21		ug/kg	0.54	0.21	1
Chlorobenzene	ND		ug/kg	0.54	0.14	1
Trichlorofluoromethane	ND		ug/kg	4.3	0.75	1
1,2-Dichloroethane	ND		ug/kg	1.1	0.28	1
1,1,1-Trichloroethane	ND		ug/kg	0.54	0.18	1
Bromodichloromethane	ND		ug/kg	0.54	0.12	1
trans-1,3-Dichloropropene	ND		ug/kg	1.1	0.30	1
cis-1,3-Dichloropropene	ND		ug/kg	0.54	0.17	1
1,3-Dichloropropene, Total	ND		ug/kg	0.54	0.17	1
1,1-Dichloropropene	ND		ug/kg	0.54	0.17	1
Bromoform	ND		ug/kg	4.3	0.27	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.54	0.18	1
Benzene	ND		ug/kg	0.54	0.18	1
Toluene	ND		ug/kg	1.1	0.59	1
Ethylbenzene	ND		ug/kg	1.1	0.15	1
Chloromethane	ND		ug/kg	4.3	1.0	1
Bromomethane	ND		ug/kg	2.2	0.63	1
Vinyl chloride	ND		ug/kg	1.1	0.36	1
Chloroethane	ND		ug/kg	2.2	0.49	1
1,1-Dichloroethene	ND		ug/kg	1.1	0.26	1
trans-1,2-Dichloroethene	ND		ug/kg	1.6	0.15	1

Project Name: 450 JOHNSON AVE.**Lab Number:** L1931803**Project Number:** 170588001**Report Date:** 07/23/19**SAMPLE RESULTS**

Lab ID: L1931803-07 R

Date Collected: 07/18/19 15:00

Client ID: SB07_4.5-5.0

Date Received: 07/18/19

Sample Location: BROOKLYN, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.54	0.15	1
1,2-Dichlorobenzene	ND		ug/kg	2.2	0.16	1
1,3-Dichlorobenzene	ND		ug/kg	2.2	0.16	1
1,4-Dichlorobenzene	ND		ug/kg	2.2	0.18	1
Methyl tert butyl ether	ND		ug/kg	2.2	0.22	1
p/m-Xylene	ND		ug/kg	2.2	0.61	1
o-Xylene	ND		ug/kg	1.1	0.32	1
Xylenes, Total	ND		ug/kg	1.1	0.32	1
cis-1,2-Dichloroethene	ND		ug/kg	1.1	0.19	1
1,2-Dichloroethene, Total	ND		ug/kg	1.1	0.15	1
Dibromomethane	ND		ug/kg	2.2	0.26	1
Styrene	ND		ug/kg	1.1	0.21	1
Dichlorodifluoromethane	ND		ug/kg	11	0.99	1
Acetone	ND		ug/kg	11	5.2	1
Carbon disulfide	ND		ug/kg	11	4.9	1
2-Butanone	ND		ug/kg	11	2.4	1
Vinyl acetate	ND		ug/kg	11	2.3	1
4-Methyl-2-pentanone	ND		ug/kg	11	1.4	1
1,2,3-Trichloropropane	ND		ug/kg	2.2	0.14	1
2-Hexanone	ND		ug/kg	11	1.3	1
Bromochloromethane	ND		ug/kg	2.2	0.22	1
2,2-Dichloropropane	ND		ug/kg	2.2	0.22	1
1,2-Dibromoethane	ND		ug/kg	1.1	0.30	1
1,3-Dichloropropane	ND		ug/kg	2.2	0.18	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.54	0.14	1
Bromobenzene	ND		ug/kg	2.2	0.16	1
n-Butylbenzene	ND		ug/kg	1.1	0.18	1
sec-Butylbenzene	ND		ug/kg	1.1	0.16	1
tert-Butylbenzene	ND		ug/kg	2.2	0.13	1
o-Chlorotoluene	ND		ug/kg	2.2	0.21	1
p-Chlorotoluene	ND		ug/kg	2.2	0.12	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.2	1.1	1
Hexachlorobutadiene	ND		ug/kg	4.3	0.18	1
Isopropylbenzene	ND		ug/kg	1.1	0.12	1
p-Isopropyltoluene	ND		ug/kg	1.1	0.12	1
Naphthalene	ND		ug/kg	4.3	0.70	1
Acrylonitrile	ND		ug/kg	4.3	1.2	1

Project Name: 450 JOHNSON AVE.**Lab Number:** L1931803**Project Number:** 170588001**Report Date:** 07/23/19**SAMPLE RESULTS**

Lab ID: L1931803-07 R

Date Collected: 07/18/19 15:00

Client ID: SB07_4.5-5.0

Date Received: 07/18/19

Sample Location: BROOKLYN, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.1	0.18	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.2	0.35	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.2	0.30	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.2	0.21	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.2	0.36	1
1,4-Dioxane	ND		ug/kg	87	38.	1
p-Diethylbenzene	ND		ug/kg	2.2	0.19	1
p-Ethyltoluene	ND		ug/kg	2.2	0.42	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.2	0.21	1
Ethyl ether	ND		ug/kg	2.2	0.37	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.4	1.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	126		70-130
Toluene-d8	119		70-130
4-Bromofluorobenzene	143	Q	70-130
Dibromofluoromethane	112		70-130

Project Name: 450 JOHNSON AVE.**Lab Number:** L1931803**Project Number:** 170588001**Report Date:** 07/23/19**SAMPLE RESULTS**

Lab ID: L1931803-08
 Client ID: SB14_4.5-5.0
 Sample Location: BROOKLYN, NY

Date Collected: 07/18/19 14:05
 Date Received: 07/18/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 07/19/19 18:42
 Analyst: JC
 Percent Solids: 90%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	4.5	2.1	1
1,1-Dichloroethane	ND		ug/kg	0.91	0.13	1
Chloroform	ND		ug/kg	1.4	0.13	1
Carbon tetrachloride	ND		ug/kg	0.91	0.21	1
1,2-Dichloropropane	ND		ug/kg	0.91	0.11	1
Dibromochloromethane	ND		ug/kg	0.91	0.13	1
1,1,2-Trichloroethane	ND		ug/kg	0.91	0.24	1
Tetrachloroethene	ND		ug/kg	0.45	0.18	1
Chlorobenzene	ND		ug/kg	0.45	0.12	1
Trichlorofluoromethane	ND		ug/kg	3.6	0.63	1
1,2-Dichloroethane	ND		ug/kg	0.91	0.23	1
1,1,1-Trichloroethane	ND		ug/kg	0.45	0.15	1
Bromodichloromethane	ND		ug/kg	0.45	0.10	1
trans-1,3-Dichloropropene	ND		ug/kg	0.91	0.25	1
cis-1,3-Dichloropropene	ND		ug/kg	0.45	0.14	1
1,3-Dichloropropene, Total	ND		ug/kg	0.45	0.14	1
1,1-Dichloropropene	ND		ug/kg	0.45	0.14	1
Bromoform	ND		ug/kg	3.6	0.22	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.45	0.15	1
Benzene	ND		ug/kg	0.45	0.15	1
Toluene	ND		ug/kg	0.91	0.49	1
Ethylbenzene	ND		ug/kg	0.91	0.13	1
Chloromethane	ND		ug/kg	3.6	0.84	1
Bromomethane	ND		ug/kg	1.8	0.53	1
Vinyl chloride	0.40	J	ug/kg	0.91	0.30	1
Chloroethane	ND		ug/kg	1.8	0.41	1
1,1-Dichloroethene	ND		ug/kg	0.91	0.22	1
trans-1,2-Dichloroethene	ND		ug/kg	1.4	0.12	1

Project Name: 450 JOHNSON AVE.

Lab Number: L1931803

Project Number: 170588001

Report Date: 07/23/19

SAMPLE RESULTS

Lab ID: L1931803-08

Date Collected: 07/18/19 14:05

Client ID: SB14_4.5-5.0

Date Received: 07/18/19

Sample Location: BROOKLYN, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	13		ug/kg	0.45	0.12	1
1,2-Dichlorobenzene	ND		ug/kg	1.8	0.13	1
1,3-Dichlorobenzene	ND		ug/kg	1.8	0.13	1
1,4-Dichlorobenzene	ND		ug/kg	1.8	0.16	1
Methyl tert butyl ether	ND		ug/kg	1.8	0.18	1
p/m-Xylene	ND		ug/kg	1.8	0.51	1
o-Xylene	ND		ug/kg	0.91	0.26	1
Xylenes, Total	ND		ug/kg	0.91	0.26	1
cis-1,2-Dichloroethene	ND		ug/kg	0.91	0.16	1
1,2-Dichloroethene, Total	ND		ug/kg	0.91	0.12	1
Dibromomethane	ND		ug/kg	1.8	0.22	1
Styrene	ND		ug/kg	0.91	0.18	1
Dichlorodifluoromethane	ND		ug/kg	9.1	0.83	1
Acetone	8.3	J	ug/kg	9.1	4.4	1
Carbon disulfide	ND		ug/kg	9.1	4.1	1
2-Butanone	ND		ug/kg	9.1	2.0	1
Vinyl acetate	ND		ug/kg	9.1	2.0	1
4-Methyl-2-pentanone	ND		ug/kg	9.1	1.2	1
1,2,3-Trichloropropane	ND		ug/kg	1.8	0.12	1
2-Hexanone	ND		ug/kg	9.1	1.1	1
Bromochloromethane	ND		ug/kg	1.8	0.19	1
2,2-Dichloropropane	ND		ug/kg	1.8	0.18	1
1,2-Dibromoethane	ND		ug/kg	0.91	0.25	1
1,3-Dichloropropane	ND		ug/kg	1.8	0.15	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.45	0.12	1
Bromobenzene	ND		ug/kg	1.8	0.13	1
n-Butylbenzene	ND		ug/kg	0.91	0.15	1
sec-Butylbenzene	ND		ug/kg	0.91	0.13	1
tert-Butylbenzene	ND		ug/kg	1.8	0.11	1
o-Chlorotoluene	ND		ug/kg	1.8	0.17	1
p-Chlorotoluene	ND		ug/kg	1.8	0.10	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	2.7	0.90	1
Hexachlorobutadiene	ND		ug/kg	3.6	0.15	1
Isopropylbenzene	ND		ug/kg	0.91	0.10	1
p-Isopropyltoluene	ND		ug/kg	0.91	0.10	1
Naphthalene	ND		ug/kg	3.6	0.59	1
Acrylonitrile	ND		ug/kg	3.6	1.0	1

Project Name: 450 JOHNSON AVE.
Project Number: 170588001

Lab Number: L1931803
Report Date: 07/23/19

SAMPLE RESULTS

Lab ID: L1931803-08
Client ID: SB14_4.5-5.0
Sample Location: BROOKLYN, NY

Date Collected: 07/18/19 14:05
Date Received: 07/18/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	0.91	0.16	1
1,2,3-Trichlorobenzene	ND		ug/kg	1.8	0.29	1
1,2,4-Trichlorobenzene	ND		ug/kg	1.8	0.25	1
1,3,5-Trimethylbenzene	ND		ug/kg	1.8	0.18	1
1,2,4-Trimethylbenzene	ND		ug/kg	1.8	0.30	1
1,4-Dioxane	ND		ug/kg	73	32.	1
p-Diethylbenzene	ND		ug/kg	1.8	0.16	1
p-Ethyltoluene	ND		ug/kg	1.8	0.35	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	1.8	0.17	1
Ethyl ether	ND		ug/kg	1.8	0.31	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	4.5	1.3	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	109		70-130
Toluene-d8	106		70-130
4-Bromofluorobenzene	122		70-130
Dibromofluoromethane	103		70-130

Project Name: 450 JOHNSON AVE.
Project Number: 170588001

Lab Number: L1931803
Report Date: 07/23/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 07/22/19 08:20
 Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02 Batch: WG1262084-12					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14
1,1-Dichloropropene	ND		ug/l	2.5	0.70
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18

Project Name: 450 JOHNSON AVE.
Project Number: 170588001

Lab Number: L1931803
Report Date: 07/23/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 07/22/19 08:20
 Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02 Batch: WG1262084-12					
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70
1,4-Dichlorobenzene	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
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70
Dibromomethane	ND		ug/l	5.0	1.0
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70
Acrylonitrile	ND		ug/l	5.0	1.5
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
Vinyl acetate	ND		ug/l	5.0	1.0
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
2,2-Dichloropropane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,3-Dichloropropane	ND		ug/l	2.5	0.70
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70
Bromobenzene	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

Project Name: 450 JOHNSON AVE.
Project Number: 170588001

Lab Number: L1931803
Report Date: 07/23/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 07/22/19 08:20
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02 Batch: WG1262084-12					
o-Chlorotoluene	ND		ug/l	2.5	0.70
p-Chlorotoluene	ND		ug/l	2.5	0.70
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Hexachlorobutadiene	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
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	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
1,4-Dioxane	ND		ug/l	250	61.
p-Diethylbenzene	ND		ug/l	2.0	0.70
p-Ethyltoluene	ND		ug/l	2.0	0.70
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54
Ethyl ether	ND		ug/l	2.5	0.70
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	86		70-130
Toluene-d8	86		70-130
4-Bromofluorobenzene	87		70-130
Dibromofluoromethane	98		70-130

Project Name: 450 JOHNSON AVE.
Project Number: 170588001

Lab Number: L1931803
Report Date: 07/23/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 07/19/19 08:14
 Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-03 Batch: WG1262084-5					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14
1,1-Dichloropropene	ND		ug/l	2.5	0.70
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18

Project Name: 450 JOHNSON AVE.
Project Number: 170588001

Lab Number: L1931803
Report Date: 07/23/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 07/19/19 08:14
 Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-03 Batch: WG1262084-5					
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70
1,4-Dichlorobenzene	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
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70
Dibromomethane	ND		ug/l	5.0	1.0
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70
Acrylonitrile	ND		ug/l	5.0	1.5
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
Vinyl acetate	ND		ug/l	5.0	1.0
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
2,2-Dichloropropane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,3-Dichloropropane	ND		ug/l	2.5	0.70
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70
Bromobenzene	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

Project Name: 450 JOHNSON AVE.
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Lab Number: L1931803
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Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 07/19/19 08:14
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-03 Batch: WG1262084-5					
o-Chlorotoluene	ND		ug/l	2.5	0.70
p-Chlorotoluene	ND		ug/l	2.5	0.70
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Hexachlorobutadiene	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
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	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
1,4-Dioxane	ND		ug/l	250	61.
p-Diethylbenzene	ND		ug/l	2.0	0.70
p-Ethyltoluene	ND		ug/l	2.0	0.70
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54
Ethyl ether	ND		ug/l	2.5	0.70
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	93		70-130
Toluene-d8	87		70-130
4-Bromofluorobenzene	88		70-130
Dibromofluoromethane	99		70-130

Project Name: 450 JOHNSON AVE.

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Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 07/22/19 07:37
 Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 07 Batch: WG1262130-10					
Methylene chloride	ND		ug/kg	5.0	2.3
1,1-Dichloroethane	ND		ug/kg	1.0	0.14
Chloroform	ND		ug/kg	1.5	0.14
Carbon tetrachloride	ND		ug/kg	1.0	0.23
1,2-Dichloropropane	ND		ug/kg	1.0	0.12
Dibromochloromethane	ND		ug/kg	1.0	0.14
1,1,2-Trichloroethane	ND		ug/kg	1.0	0.27
Tetrachloroethene	ND		ug/kg	0.50	0.20
Chlorobenzene	ND		ug/kg	0.50	0.13
Trichlorofluoromethane	ND		ug/kg	4.0	0.70
1,2-Dichloroethane	ND		ug/kg	1.0	0.26
1,1,1-Trichloroethane	ND		ug/kg	0.50	0.17
Bromodichloromethane	ND		ug/kg	0.50	0.11
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.27
cis-1,3-Dichloropropene	ND		ug/kg	0.50	0.16
1,3-Dichloropropene, Total	ND		ug/kg	0.50	0.16
1,1-Dichloropropene	ND		ug/kg	0.50	0.16
Bromoform	ND		ug/kg	4.0	0.25
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.50	0.17
Benzene	ND		ug/kg	0.50	0.17
Toluene	ND		ug/kg	1.0	0.54
Ethylbenzene	ND		ug/kg	1.0	0.14
Chloromethane	ND		ug/kg	4.0	0.93
Bromomethane	ND		ug/kg	2.0	0.58
Vinyl chloride	ND		ug/kg	1.0	0.34
Chloroethane	ND		ug/kg	2.0	0.45
1,1-Dichloroethene	ND		ug/kg	1.0	0.24
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.14
Trichloroethene	ND		ug/kg	0.50	0.14

Project Name: 450 JOHNSON AVE.

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Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C

Analytical Date: 07/22/19 07:37

Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 07 Batch: WG1262130-10					
1,2-Dichlorobenzene	ND		ug/kg	2.0	0.14
1,3-Dichlorobenzene	ND		ug/kg	2.0	0.15
1,4-Dichlorobenzene	ND		ug/kg	2.0	0.17
Methyl tert butyl ether	ND		ug/kg	2.0	0.20
p/m-Xylene	ND		ug/kg	2.0	0.56
o-Xylene	ND		ug/kg	1.0	0.29
Xylenes, Total	ND		ug/kg	1.0	0.29
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.18
1,2-Dichloroethene, Total	ND		ug/kg	1.0	0.14
Dibromomethane	ND		ug/kg	2.0	0.24
Styrene	ND		ug/kg	1.0	0.20
Dichlorodifluoromethane	ND		ug/kg	10	0.92
Acetone	ND		ug/kg	10	4.8
Carbon disulfide	ND		ug/kg	10	4.6
2-Butanone	ND		ug/kg	10	2.2
Vinyl acetate	ND		ug/kg	10	2.2
4-Methyl-2-pentanone	ND		ug/kg	10	1.3
1,2,3-Trichloropropane	ND		ug/kg	2.0	0.13
2-Hexanone	ND		ug/kg	10	1.2
Bromochloromethane	ND		ug/kg	2.0	0.20
2,2-Dichloropropane	ND		ug/kg	2.0	0.20
1,2-Dibromoethane	ND		ug/kg	1.0	0.28
1,3-Dichloropropane	ND		ug/kg	2.0	0.17
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.50	0.13
Bromobenzene	ND		ug/kg	2.0	0.14
n-Butylbenzene	ND		ug/kg	1.0	0.17
sec-Butylbenzene	ND		ug/kg	1.0	0.15
tert-Butylbenzene	ND		ug/kg	2.0	0.12
o-Chlorotoluene	ND		ug/kg	2.0	0.19

Project Name: 450 JOHNSON AVE.
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Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 07/22/19 07:37
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 07 Batch: WG1262130-10					
p-Chlorotoluene	ND		ug/kg	2.0	0.11
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.0	1.0
Hexachlorobutadiene	ND		ug/kg	4.0	0.17
Isopropylbenzene	ND		ug/kg	1.0	0.11
p-Isopropyltoluene	ND		ug/kg	1.0	0.11
Naphthalene	ND		ug/kg	4.0	0.65
Acrylonitrile	ND		ug/kg	4.0	1.2
n-Propylbenzene	ND		ug/kg	1.0	0.17
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	0.32
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	0.27
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	0.19
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	0.33
1,4-Dioxane	ND		ug/kg	80	35.
p-Diethylbenzene	ND		ug/kg	2.0	0.18
p-Ethyltoluene	ND		ug/kg	2.0	0.38
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.0	0.19
Ethyl ether	ND		ug/kg	2.0	0.34
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.0	1.4

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	122		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	109		70-130
Dibromofluoromethane	106		70-130

Project Name: 450 JOHNSON AVE.

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Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 07/19/19 10:25
 Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 04,06-08 Batch: WG1262130-5					
Methylene chloride	ND		ug/kg	5.0	2.3
1,1-Dichloroethane	ND		ug/kg	1.0	0.14
Chloroform	ND		ug/kg	1.5	0.14
Carbon tetrachloride	ND		ug/kg	1.0	0.23
1,2-Dichloropropane	ND		ug/kg	1.0	0.12
Dibromochloromethane	ND		ug/kg	1.0	0.14
1,1,2-Trichloroethane	ND		ug/kg	1.0	0.27
Tetrachloroethene	ND		ug/kg	0.50	0.20
Chlorobenzene	ND		ug/kg	0.50	0.13
Trichlorofluoromethane	ND		ug/kg	4.0	0.70
1,2-Dichloroethane	ND		ug/kg	1.0	0.26
1,1,1-Trichloroethane	ND		ug/kg	0.50	0.17
Bromodichloromethane	ND		ug/kg	0.50	0.11
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.27
cis-1,3-Dichloropropene	ND		ug/kg	0.50	0.16
1,3-Dichloropropene, Total	ND		ug/kg	0.50	0.16
1,1-Dichloropropene	ND		ug/kg	0.50	0.16
Bromoform	ND		ug/kg	4.0	0.25
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.50	0.17
Benzene	ND		ug/kg	0.50	0.17
Toluene	ND		ug/kg	1.0	0.54
Ethylbenzene	ND		ug/kg	1.0	0.14
Chloromethane	ND		ug/kg	4.0	0.93
Bromomethane	ND		ug/kg	2.0	0.58
Vinyl chloride	ND		ug/kg	1.0	0.34
Chloroethane	ND		ug/kg	2.0	0.45
1,1-Dichloroethene	ND		ug/kg	1.0	0.24
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.14
Trichloroethene	ND		ug/kg	0.50	0.14

Project Name: 450 JOHNSON AVE.
Project Number: 170588001

Lab Number: L1931803
Report Date: 07/23/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 07/19/19 10:25
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 04,06-08 Batch: WG1262130-5					
1,2-Dichlorobenzene	ND		ug/kg	2.0	0.14
1,3-Dichlorobenzene	ND		ug/kg	2.0	0.15
1,4-Dichlorobenzene	ND		ug/kg	2.0	0.17
Methyl tert butyl ether	0.20	J	ug/kg	2.0	0.20
p/m-Xylene	ND		ug/kg	2.0	0.56
o-Xylene	ND		ug/kg	1.0	0.29
Xylenes, Total	ND		ug/kg	1.0	0.29
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.18
1,2-Dichloroethene, Total	ND		ug/kg	1.0	0.14
Dibromomethane	ND		ug/kg	2.0	0.24
Styrene	ND		ug/kg	1.0	0.20
Dichlorodifluoromethane	ND		ug/kg	10	0.92
Acetone	ND		ug/kg	10	4.8
Carbon disulfide	ND		ug/kg	10	4.6
2-Butanone	ND		ug/kg	10	2.2
Vinyl acetate	ND		ug/kg	10	2.2
4-Methyl-2-pentanone	ND		ug/kg	10	1.3
1,2,3-Trichloropropane	ND		ug/kg	2.0	0.13
2-Hexanone	ND		ug/kg	10	1.2
Bromochloromethane	ND		ug/kg	2.0	0.20
2,2-Dichloropropane	ND		ug/kg	2.0	0.20
1,2-Dibromoethane	ND		ug/kg	1.0	0.28
1,3-Dichloropropane	ND		ug/kg	2.0	0.17
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.50	0.13
Bromobenzene	ND		ug/kg	2.0	0.14
n-Butylbenzene	ND		ug/kg	1.0	0.17
sec-Butylbenzene	ND		ug/kg	1.0	0.15
tert-Butylbenzene	ND		ug/kg	2.0	0.12
o-Chlorotoluene	ND		ug/kg	2.0	0.19

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Project Number: 170588001

Lab Number: L1931803
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Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 07/19/19 10:25
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 04,06-08 Batch: WG1262130-5					
p-Chlorotoluene	ND		ug/kg	2.0	0.11
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.0	1.0
Hexachlorobutadiene	ND		ug/kg	4.0	0.17
Isopropylbenzene	ND		ug/kg	1.0	0.11
p-Isopropyltoluene	ND		ug/kg	1.0	0.11
Naphthalene	ND		ug/kg	4.0	0.65
Acrylonitrile	ND		ug/kg	4.0	1.2
n-Propylbenzene	ND		ug/kg	1.0	0.17
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	0.32
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	0.27
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	0.19
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	0.33
1,4-Dioxane	ND		ug/kg	80	35.
p-Diethylbenzene	ND		ug/kg	2.0	0.18
p-Ethyltoluene	ND		ug/kg	2.0	0.38
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.0	0.19
Ethyl ether	ND		ug/kg	2.0	0.34
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.0	1.4

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	102		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	113		70-130
Dibromofluoromethane	93		70-130

Project Name: 450 JOHNSON AVE.
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Lab Number: L1931803
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Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 07/19/19 10:13
 Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 High - Westborough Lab for sample(s): 05 Batch: WG1262697-5					
Methylene chloride	ND		ug/kg	250	110
1,1-Dichloroethane	ND		ug/kg	50	7.2
Chloroform	ND		ug/kg	75	7.0
Carbon tetrachloride	ND		ug/kg	50	12.
1,2-Dichloropropane	ND		ug/kg	50	6.2
Dibromochloromethane	ND		ug/kg	50	7.0
1,1,2-Trichloroethane	ND		ug/kg	50	13.
Tetrachloroethene	ND		ug/kg	25	9.8
Chlorobenzene	ND		ug/kg	25	6.4
Trichlorofluoromethane	ND		ug/kg	200	35.
1,2-Dichloroethane	ND		ug/kg	50	13.
1,1,1-Trichloroethane	ND		ug/kg	25	8.4
Bromodichloromethane	ND		ug/kg	25	5.4
trans-1,3-Dichloropropene	ND		ug/kg	50	14.
cis-1,3-Dichloropropene	ND		ug/kg	25	7.9
1,3-Dichloropropene, Total	ND		ug/kg	25	7.9
1,1-Dichloropropene	ND		ug/kg	25	8.0
Bromoform	ND		ug/kg	200	12.
1,1,2,2-Tetrachloroethane	ND		ug/kg	25	8.3
Benzene	ND		ug/kg	25	8.3
Toluene	ND		ug/kg	50	27.
Ethylbenzene	ND		ug/kg	50	7.0
Chloromethane	ND		ug/kg	200	47.
Bromomethane	ND		ug/kg	100	29.
Vinyl chloride	ND		ug/kg	50	17.
Chloroethane	ND		ug/kg	100	23.
1,1-Dichloroethene	ND		ug/kg	50	12.
trans-1,2-Dichloroethene	ND		ug/kg	75	6.8
Trichloroethene	ND		ug/kg	25	6.8

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Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 07/19/19 10:13
 Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 High - Westborough Lab for sample(s): 05 Batch: WG1262697-5					
1,2-Dichlorobenzene	ND		ug/kg	100	7.2
1,3-Dichlorobenzene	ND		ug/kg	100	7.4
1,4-Dichlorobenzene	ND		ug/kg	100	8.6
Methyl tert butyl ether	ND		ug/kg	100	10.
p/m-Xylene	ND		ug/kg	100	28.
o-Xylene	ND		ug/kg	50	14.
Xylenes, Total	ND		ug/kg	50	14.
cis-1,2-Dichloroethene	ND		ug/kg	50	8.8
1,2-Dichloroethene, Total	ND		ug/kg	50	6.8
Dibromomethane	ND		ug/kg	100	12.
Styrene	ND		ug/kg	50	9.8
Dichlorodifluoromethane	ND		ug/kg	500	46.
Acetone	ND		ug/kg	500	240
Carbon disulfide	ND		ug/kg	500	230
2-Butanone	ND		ug/kg	500	110
Vinyl acetate	ND		ug/kg	500	110
4-Methyl-2-pentanone	ND		ug/kg	500	64.
1,2,3-Trichloropropane	ND		ug/kg	100	6.4
2-Hexanone	ND		ug/kg	500	59.
Bromochloromethane	ND		ug/kg	100	10.
2,2-Dichloropropane	ND		ug/kg	100	10.
1,2-Dibromoethane	ND		ug/kg	50	14.
1,3-Dichloropropane	ND		ug/kg	100	8.4
1,1,1,2-Tetrachloroethane	ND		ug/kg	25	6.6
Bromobenzene	ND		ug/kg	100	7.2
n-Butylbenzene	ND		ug/kg	50	8.4
sec-Butylbenzene	ND		ug/kg	50	7.3
tert-Butylbenzene	ND		ug/kg	100	5.9
o-Chlorotoluene	ND		ug/kg	100	9.6

Project Name: 450 JOHNSON AVE.
Project Number: 170588001

Lab Number: L1931803
Report Date: 07/23/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 07/19/19 10:13
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 High - Westborough Lab for sample(s): 05 Batch: WG1262697-5					
p-Chlorotoluene	ND		ug/kg	100	5.4
1,2-Dibromo-3-chloropropane	ND		ug/kg	150	50.
Hexachlorobutadiene	ND		ug/kg	200	8.4
Isopropylbenzene	ND		ug/kg	50	5.4
p-Isopropyltoluene	ND		ug/kg	50	5.4
Naphthalene	ND		ug/kg	200	32.
Acrylonitrile	ND		ug/kg	200	58.
n-Propylbenzene	ND		ug/kg	50	8.6
1,2,3-Trichlorobenzene	ND		ug/kg	100	16.
1,2,4-Trichlorobenzene	ND		ug/kg	100	14.
1,3,5-Trimethylbenzene	ND		ug/kg	100	9.6
1,2,4-Trimethylbenzene	ND		ug/kg	100	17.
1,4-Dioxane	ND		ug/kg	4000	1800
p-Diethylbenzene	ND		ug/kg	100	8.8
p-Ethyltoluene	ND		ug/kg	100	19.
1,2,4,5-Tetramethylbenzene	ND		ug/kg	100	9.6
Ethyl ether	ND		ug/kg	100	17.
trans-1,4-Dichloro-2-butene	ND		ug/kg	250	71.

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	98		70-130
Toluene-d8	91		70-130
4-Bromofluorobenzene	87		70-130
Dibromofluoromethane	100		70-130

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 450 JOHNSON AVE.

Project Number: 170588001

Lab Number: L1931803

Report Date: 07/23/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02 Batch: WG1262084-10 WG1262084-11								
Methylene chloride	90		88		70-130	2		20
1,1-Dichloroethane	90		90		70-130	0		20
Chloroform	88		86		70-130	2		20
Carbon tetrachloride	100		99		63-132	1		20
1,2-Dichloropropane	93		93		70-130	0		20
Dibromochloromethane	87		85		63-130	2		20
1,1,2-Trichloroethane	79		76		70-130	4		20
Tetrachloroethene	96		93		70-130	3		20
Chlorobenzene	88		87		75-130	1		20
Trichlorofluoromethane	88		85		62-150	3		20
1,2-Dichloroethane	87		86		70-130	1		20
1,1,1-Trichloroethane	92		90		67-130	2		20
Bromodichloromethane	87		84		67-130	4		20
trans-1,3-Dichloropropene	68	Q	66	Q	70-130	3		20
cis-1,3-Dichloropropene	82		80		70-130	2		20
1,1-Dichloropropene	93		91		70-130	2		20
Bromoform	75		72		54-136	4		20
1,1,2,2-Tetrachloroethane	74		72		67-130	3		20
Benzene	93		92		70-130	1		20
Toluene	85		82		70-130	4		20
Ethylbenzene	84		82		70-130	2		20
Chloromethane	110		100		64-130	10		20
Bromomethane	70		69		39-139	1		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: 450 JOHNSON AVE.

Project Number: 170588001

Lab Number: L1931803

Report Date: 07/23/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02 Batch: WG1262084-10 WG1262084-11								
Vinyl chloride	94		92		55-140	2		20
Chloroethane	80		79		55-138	1		20
1,1-Dichloroethene	96		96		61-145	0		20
trans-1,2-Dichloroethene	98		95		70-130	3		20
Trichloroethene	92		89		70-130	3		20
1,2-Dichlorobenzene	92		89		70-130	3		20
1,3-Dichlorobenzene	91		89		70-130	2		20
1,4-Dichlorobenzene	91		89		70-130	2		20
Methyl tert butyl ether	89		86		63-130	3		20
p/m-Xylene	90		90		70-130	0		20
o-Xylene	90		90		70-130	0		20
cis-1,2-Dichloroethene	99		96		70-130	3		20
Dibromomethane	93		92		70-130	1		20
1,2,3-Trichloropropane	72		70		64-130	3		20
Acrylonitrile	100		98		70-130	2		20
Styrene	95		90		70-130	5		20
Dichlorodifluoromethane	110		100		36-147	10		20
Acetone	90		86		58-148	5		20
Carbon disulfide	90		88		51-130	2		20
2-Butanone	89		84		63-138	6		20
Vinyl acetate	94		89		70-130	5		20
4-Methyl-2-pentanone	77		76		59-130	1		20
2-Hexanone	75		71		57-130	5		20

Lab Control Sample Analysis Batch Quality Control

Project Name: 450 JOHNSON AVE.

Project Number: 170588001

Lab Number: L1931803

Report Date: 07/23/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02 Batch: WG1262084-10 WG1262084-11								
Bromochloromethane	110		110		70-130	0		20
2,2-Dichloropropane	95		91		63-133	4		20
1,2-Dibromoethane	87		84		70-130	4		20
1,3-Dichloropropane	78		75		70-130	4		20
1,1,1,2-Tetrachloroethane	90		87		64-130	3		20
Bromobenzene	90		88		70-130	2		20
n-Butylbenzene	84		80		53-136	5		20
sec-Butylbenzene	90		87		70-130	3		20
tert-Butylbenzene	94		90		70-130	4		20
o-Chlorotoluene	82		80		70-130	2		20
p-Chlorotoluene	83		80		70-130	4		20
1,2-Dibromo-3-chloropropane	72		71		41-144	1		20
Hexachlorobutadiene	87		84		63-130	4		20
Isopropylbenzene	91		89		70-130	2		20
p-Isopropyltoluene	95		92		70-130	3		20
Naphthalene	80		77		70-130	4		20
n-Propylbenzene	85		83		69-130	2		20
1,2,3-Trichlorobenzene	86		83		70-130	4		20
1,2,4-Trichlorobenzene	86		84		70-130	2		20
1,3,5-Trimethylbenzene	88		85		64-130	3		20
1,2,4-Trimethylbenzene	89		86		70-130	3		20
1,4-Dioxane	104		96		56-162	8		20
p-Diethylbenzene	93		90		70-130	3		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: 450 JOHNSON AVE.

Project Number: 170588001

Lab Number: L1931803

Report Date: 07/23/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02 Batch: WG1262084-10 WG1262084-11								
p-Ethyltoluene	91		88		70-130	3		20
1,2,4,5-Tetramethylbenzene	86		83		70-130	4		20
Ethyl ether	78		76		59-134	3		20
trans-1,4-Dichloro-2-butene	73		58	Q	70-130	23	Q	20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	89		89		70-130
Toluene-d8	87		88		70-130
4-Bromofluorobenzene	87		86		70-130
Dibromofluoromethane	101		100		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: 450 JOHNSON AVE.

Project Number: 170588001

Lab Number: L1931803

Report Date: 07/23/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG1262084-3 WG1262084-4								
Methylene chloride	92		92		70-130	0		20
1,1-Dichloroethane	95		95		70-130	0		20
Chloroform	92		92		70-130	0		20
Carbon tetrachloride	110		110		63-132	0		20
1,2-Dichloropropane	96		96		70-130	0		20
Dibromochloromethane	96		93		63-130	3		20
1,1,2-Trichloroethane	86		85		70-130	1		20
Tetrachloroethene	100		98		70-130	2		20
Chlorobenzene	94		91		75-130	3		20
Trichlorofluoromethane	100		97		62-150	3		20
1,2-Dichloroethane	96		97		70-130	1		20
1,1,1-Trichloroethane	100		98		67-130	2		20
Bromodichloromethane	90		90		67-130	0		20
trans-1,3-Dichloropropene	74		73		70-130	1		20
cis-1,3-Dichloropropene	84		84		70-130	0		20
1,1-Dichloropropene	98		98		70-130	0		20
Bromoform	81		82		54-136	1		20
1,1,2,2-Tetrachloroethane	82		82		67-130	0		20
Benzene	94		95		70-130	1		20
Toluene	89		86		70-130	3		20
Ethylbenzene	90		87		70-130	3		20
Chloromethane	120		120		64-130	0		20
Bromomethane	92		86		39-139	7		20

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 450 JOHNSON AVE.

Project Number: 170588001

Lab Number: L1931803

Report Date: 07/23/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG1262084-3 WG1262084-4								
Vinyl chloride	100		100		55-140	0		20
Chloroethane	85		84		55-138	1		20
1,1-Dichloroethene	100		98		61-145	2		20
trans-1,2-Dichloroethene	100		100		70-130	0		20
Trichloroethene	95		94		70-130	1		20
1,2-Dichlorobenzene	97		96		70-130	1		20
1,3-Dichlorobenzene	97		94		70-130	3		20
1,4-Dichlorobenzene	97		94		70-130	3		20
Methyl tert butyl ether	93		96		63-130	3		20
p/m-Xylene	95		95		70-130	0		20
o-Xylene	95		95		70-130	0		20
cis-1,2-Dichloroethene	100		99		70-130	1		20
Dibromomethane	98		99		70-130	1		20
1,2,3-Trichloropropane	80		82		64-130	2		20
Acrylonitrile	110		120		70-130	9		20
Styrene	100		95		70-130	5		20
Dichlorodifluoromethane	130		120		36-147	8		20
Acetone	98		100		58-148	2		20
Carbon disulfide	94		93		51-130	1		20
2-Butanone	100		110		63-138	10		20
Vinyl acetate	110		110		70-130	0		20
4-Methyl-2-pentanone	88		88		59-130	0		20
2-Hexanone	82		85		57-130	4		20

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 450 JOHNSON AVE.

Project Number: 170588001

Lab Number: L1931803

Report Date: 07/23/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG1262084-3 WG1262084-4								
Bromochloromethane	110		110		70-130	0		20
2,2-Dichloropropane	100		99		63-133	1		20
1,2-Dibromoethane	93		95		70-130	2		20
1,3-Dichloropropane	84		83		70-130	1		20
1,1,1,2-Tetrachloroethane	96		94		64-130	2		20
Bromobenzene	94		92		70-130	2		20
n-Butylbenzene	90		87		53-136	3		20
sec-Butylbenzene	97		93		70-130	4		20
tert-Butylbenzene	99		96		70-130	3		20
o-Chlorotoluene	87		84		70-130	4		20
p-Chlorotoluene	88		84		70-130	5		20
1,2-Dibromo-3-chloropropane	78		80		41-144	3		20
Hexachlorobutadiene	92		89		63-130	3		20
Isopropylbenzene	97		94		70-130	3		20
p-Isopropyltoluene	100		98		70-130	2		20
Naphthalene	90		94		70-130	4		20
n-Propylbenzene	92		89		69-130	3		20
1,2,3-Trichlorobenzene	98		98		70-130	0		20
1,2,4-Trichlorobenzene	94		93		70-130	1		20
1,3,5-Trimethylbenzene	94		90		64-130	4		20
1,2,4-Trimethylbenzene	94		91		70-130	3		20
1,4-Dioxane	108		108		56-162	0		20
p-Diethylbenzene	100		96		70-130	4		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: 450 JOHNSON AVE.

Project Number: 170588001

Lab Number: L1931803

Report Date: 07/23/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG1262084-3 WG1262084-4								
p-Ethyltoluene	96		92		70-130	4		20
1,2,4,5-Tetramethylbenzene	91		89		70-130	2		20
Ethyl ether	83		85		59-134	2		20
trans-1,4-Dichloro-2-butene	92		93		70-130	1		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	96		97		70-130
Toluene-d8	90		87		70-130
4-Bromofluorobenzene	88		87		70-130
Dibromofluoromethane	101		103		70-130

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 450 JOHNSON AVE.

Project Number: 170588001

Lab Number: L1931803

Report Date: 07/23/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 04,06-08 Batch: WG1262130-3 WG1262130-4								
Methylene chloride	96		86		70-130	11		30
1,1-Dichloroethane	108		94		70-130	14		30
Chloroform	101		89		70-130	13		30
Carbon tetrachloride	90		76		70-130	17		30
1,2-Dichloropropane	106		94		70-130	12		30
Dibromochloromethane	90		86		70-130	5		30
1,1,2-Trichloroethane	99		94		70-130	5		30
Tetrachloroethene	91		78		70-130	15		30
Chlorobenzene	93		82		70-130	13		30
Trichlorofluoromethane	58	Q	49	Q	70-139	17		30
1,2-Dichloroethane	96		90		70-130	6		30
1,1,1-Trichloroethane	98		84		70-130	15		30
Bromodichloromethane	94		87		70-130	8		30
trans-1,3-Dichloropropene	103		95		70-130	8		30
cis-1,3-Dichloropropene	99		91		70-130	8		30
1,1-Dichloropropene	103		86		70-130	18		30
Bromoform	86		84		70-130	2		30
1,1,2,2-Tetrachloroethane	100		100		70-130	0		30
Benzene	100		86		70-130	15		30
Toluene	100		86		70-130	15		30
Ethylbenzene	99		86		70-130	14		30
Chloromethane	120		96		52-130	22		30
Bromomethane	55	Q	46	Q	57-147	18		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: 450 JOHNSON AVE.

Project Number: 170588001

Lab Number: L1931803

Report Date: 07/23/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 04,06-08 Batch: WG1262130-3 WG1262130-4								
Vinyl chloride	84		68		67-130	21		30
Chloroethane	67		57		50-151	16		30
1,1-Dichloroethene	102		85		65-135	18		30
trans-1,2-Dichloroethene	98		83		70-130	17		30
Trichloroethene	95		81		70-130	16		30
1,2-Dichlorobenzene	89		82		70-130	8		30
1,3-Dichlorobenzene	91		81		70-130	12		30
1,4-Dichlorobenzene	90		81		70-130	11		30
Methyl tert butyl ether	100		96		66-130	4		30
p/m-Xylene	94		82		70-130	14		30
o-Xylene	93		82		70-130	13		30
cis-1,2-Dichloroethene	95		84		70-130	12		30
Dibromomethane	87		84		70-130	4		30
Styrene	93		82		70-130	13		30
Dichlorodifluoromethane	81		66		30-146	20		30
Acetone	112		111		54-140	1		30
Carbon disulfide	99		82		59-130	19		30
2-Butanone	112		112		70-130	0		30
Vinyl acetate	101		97		70-130	4		30
4-Methyl-2-pentanone	107		108		70-130	1		30
1,2,3-Trichloropropane	100		99		68-130	1		30
2-Hexanone	108		108		70-130	0		30
Bromochloromethane	89		82		70-130	8		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: 450 JOHNSON AVE.

Lab Number: L1931803

Project Number: 170588001

Report Date: 07/23/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 04,06-08 Batch: WG1262130-3 WG1262130-4								
2,2-Dichloropropane	104		88		70-130	17		30
1,2-Dibromoethane	91		88		70-130	3		30
1,3-Dichloropropane	102		96		69-130	6		30
1,1,1,2-Tetrachloroethane	93		84		70-130	10		30
Bromobenzene	91		83		70-130	9		30
n-Butylbenzene	102		87		70-130	16		30
sec-Butylbenzene	101		86		70-130	16		30
tert-Butylbenzene	98		84		70-130	15		30
o-Chlorotoluene	104		91		70-130	13		30
p-Chlorotoluene	102		91		70-130	11		30
1,2-Dibromo-3-chloropropane	79		81		68-130	3		30
Hexachlorobutadiene	92		79		67-130	15		30
Isopropylbenzene	101		86		70-130	16		30
p-Isopropyltoluene	98		84		70-130	15		30
Naphthalene	88		86		70-130	2		30
Acrylonitrile	107		108		70-130	1		30
n-Propylbenzene	103		88		70-130	16		30
1,2,3-Trichlorobenzene	86		80		70-130	7		30
1,2,4-Trichlorobenzene	85		79		70-130	7		30
1,3,5-Trimethylbenzene	101		88		70-130	14		30
1,2,4-Trimethylbenzene	100		88		70-130	13		30
1,4-Dioxane	86		91		65-136	6		30
p-Diethylbenzene	96		82		70-130	16		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: 450 JOHNSON AVE.

Project Number: 170588001

Lab Number: L1931803

Report Date: 07/23/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 04,06-08 Batch: WG1262130-3 WG1262130-4								
p-Ethyltoluene	101		87		70-130	15		30
1,2,4,5-Tetramethylbenzene	94		83		70-130	12		30
Ethyl ether	69		65	Q	67-130	6		30
trans-1,4-Dichloro-2-butene	111		111		70-130	0		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	101		103		70-130
Toluene-d8	103		103		70-130
4-Bromofluorobenzene	115		113		70-130
Dibromofluoromethane	94		96		70-130

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 450 JOHNSON AVE.

Project Number: 170588001

Lab Number: L1931803

Report Date: 07/23/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 07 Batch: WG1262130-8 WG1262130-9								
Methylene chloride	89		87		70-130	2		30
1,1-Dichloroethane	96		94		70-130	2		30
Chloroform	104		99		70-130	5		30
Carbon tetrachloride	107		105		70-130	2		30
1,2-Dichloropropane	88		89		70-130	1		30
Dibromochloromethane	105		104		70-130	1		30
1,1,2-Trichloroethane	96		94		70-130	2		30
Tetrachloroethene	99		95		70-130	4		30
Chlorobenzene	94		93		70-130	1		30
Trichlorofluoromethane	62	Q	61	Q	70-139	2		30
1,2-Dichloroethane	105		107		70-130	2		30
1,1,1-Trichloroethane	111		110		70-130	1		30
Bromodichloromethane	102		100		70-130	2		30
trans-1,3-Dichloropropene	103		102		70-130	1		30
cis-1,3-Dichloropropene	93		93		70-130	0		30
1,1-Dichloropropene	93		93		70-130	0		30
Bromoform	95		95		70-130	0		30
1,1,2,2-Tetrachloroethane	91		93		70-130	2		30
Benzene	90		88		70-130	2		30
Toluene	96		94		70-130	2		30
Ethylbenzene	98		96		70-130	2		30
Chloromethane	119		125		52-130	5		30
Bromomethane	39	Q	42	Q	57-147	7		30

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 450 JOHNSON AVE.

Project Number: 170588001

Lab Number: L1931803

Report Date: 07/23/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 07 Batch: WG1262130-8 WG1262130-9								
Vinyl chloride	77		82		67-130	6		30
Chloroethane	37	Q	42	Q	50-151	13		30
1,1-Dichloroethene	89		87		65-135	2		30
trans-1,2-Dichloroethene	90		89		70-130	1		30
Trichloroethene	96		94		70-130	2		30
1,2-Dichlorobenzene	94		93		70-130	1		30
1,3-Dichlorobenzene	95		94		70-130	1		30
1,4-Dichlorobenzene	96		94		70-130	2		30
Methyl tert butyl ether	92		95		66-130	3		30
p/m-Xylene	95		93		70-130	2		30
o-Xylene	94		93		70-130	1		30
cis-1,2-Dichloroethene	90		88		70-130	2		30
Dibromomethane	93		94		70-130	1		30
Styrene	98		96		70-130	2		30
Dichlorodifluoromethane	102		99		30-146	3		30
Acetone	91		91		54-140	0		30
Carbon disulfide	83		82		59-130	1		30
2-Butanone	82		86		70-130	5		30
Vinyl acetate	82		84		70-130	2		30
4-Methyl-2-pentanone	86		87		70-130	1		30
1,2,3-Trichloropropane	97		99		68-130	2		30
2-Hexanone	80		82		70-130	2		30
Bromochloromethane	88		89		70-130	1		30

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 450 JOHNSON AVE.

Project Number: 170588001

Lab Number: L1931803

Report Date: 07/23/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 07 Batch: WG1262130-8 WG1262130-9								
2,2-Dichloropropane	109		106		70-130	3		30
1,2-Dibromoethane	94		92		70-130	2		30
1,3-Dichloropropane	95		95		69-130	0		30
1,1,1,2-Tetrachloroethane	106		104		70-130	2		30
Bromobenzene	94		92		70-130	2		30
n-Butylbenzene	100		98		70-130	2		30
sec-Butylbenzene	98		98		70-130	0		30
tert-Butylbenzene	97		96		70-130	1		30
o-Chlorotoluene	100		100		70-130	0		30
p-Chlorotoluene	102		100		70-130	2		30
1,2-Dibromo-3-chloropropane	74		87		68-130	16		30
Hexachlorobutadiene	89		102		67-130	14		30
Isopropylbenzene	94		93		70-130	1		30
p-Isopropyltoluene	100		98		70-130	2		30
Naphthalene	66	Q	91		70-130	32	Q	30
Acrylonitrile	84		86		70-130	2		30
n-Propylbenzene	97		95		70-130	2		30
1,2,3-Trichlorobenzene	88		93		70-130	6		30
1,2,4-Trichlorobenzene	71		91		70-130	25		30
1,3,5-Trimethylbenzene	102		99		70-130	3		30
1,2,4-Trimethylbenzene	102		101		70-130	1		30
1,4-Dioxane	74		79		65-136	7		30
p-Diethylbenzene	97		96		70-130	1		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: 450 JOHNSON AVE.

Project Number: 170588001

Lab Number: L1931803

Report Date: 07/23/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 07 Batch: WG1262130-8 WG1262130-9								
p-Ethyltoluene	98		96		70-130	2		30
1,2,4,5-Tetramethylbenzene	100		97		70-130	3		30
Ethyl ether	45	Q	31	Q	67-130	37	Q	30
trans-1,4-Dichloro-2-butene	105		108		70-130	3		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	118		120		70-130
Toluene-d8	106		104		70-130
4-Bromofluorobenzene	110		106		70-130
Dibromofluoromethane	106		105		70-130

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 450 JOHNSON AVE.

Lab Number: L1931803

Project Number: 170588001

Report Date: 07/23/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 05 Batch: WG1262697-3 WG1262697-4								
Methylene chloride	83		83		70-130	0		30
1,1-Dichloroethane	93		92		70-130	1		30
Chloroform	99		98		70-130	1		30
Carbon tetrachloride	125		127		70-130	2		30
1,2-Dichloropropane	86		87		70-130	1		30
Dibromochloromethane	99		100		70-130	1		30
1,1,2-Trichloroethane	81		80		70-130	1		30
Tetrachloroethene	111		110		70-130	1		30
Chlorobenzene	95		93		70-130	2		30
Trichlorofluoromethane	123		122		70-139	1		30
1,2-Dichloroethane	98		99		70-130	1		30
1,1,1-Trichloroethane	114		113		70-130	1		30
Bromodichloromethane	98		98		70-130	0		30
trans-1,3-Dichloropropene	86		86		70-130	0		30
cis-1,3-Dichloropropene	94		94		70-130	0		30
1,1-Dichloropropene	101		101		70-130	0		30
Bromoform	96		94		70-130	2		30
1,1,2,2-Tetrachloroethane	73		72		70-130	1		30
Benzene	92		91		70-130	1		30
Toluene	92		90		70-130	2		30
Ethylbenzene	94		94		70-130	0		30
Chloromethane	87		86		52-130	1		30
Bromomethane	83		84		57-147	1		30

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 450 JOHNSON AVE.

Project Number: 170588001

Lab Number: L1931803

Report Date: 07/23/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 05 Batch: WG1262697-3 WG1262697-4								
Vinyl chloride	82		81		67-130	1		30
Chloroethane	74		73		50-151	1		30
1,1-Dichloroethene	104		104		65-135	0		30
trans-1,2-Dichloroethene	104		102		70-130	2		30
Trichloroethene	102		101		70-130	1		30
1,2-Dichlorobenzene	95		94		70-130	1		30
1,3-Dichlorobenzene	97		97		70-130	0		30
1,4-Dichlorobenzene	97		96		70-130	1		30
Methyl tert butyl ether	96		96		66-130	0		30
p/m-Xylene	100		100		70-130	0		30
o-Xylene	100		99		70-130	1		30
cis-1,2-Dichloroethene	100		101		70-130	1		30
Dibromomethane	93		94		70-130	1		30
Styrene	101		102		70-130	1		30
Dichlorodifluoromethane	89		89		30-146	0		30
Acetone	85		77		54-140	10		30
Carbon disulfide	87		86		59-130	1		30
2-Butanone	95		91		70-130	4		30
Vinyl acetate	89		90		70-130	1		30
4-Methyl-2-pentanone	81		79		70-130	3		30
1,2,3-Trichloropropane	76		76		68-130	0		30
2-Hexanone	77		75		70-130	3		30
Bromochloromethane	108		109		70-130	1		30

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 450 JOHNSON AVE.

Project Number: 170588001

Lab Number: L1931803

Report Date: 07/23/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 05 Batch: WG1262697-3 WG1262697-4								
2,2-Dichloropropane	109		107		70-130	2		30
1,2-Dibromoethane	91		91		70-130	0		30
1,3-Dichloropropane	80		79		69-130	1		30
1,1,1,2-Tetrachloroethane	101		104		70-130	3		30
Bromobenzene	95		93		70-130	2		30
n-Butylbenzene	92		92		70-130	0		30
sec-Butylbenzene	96		94		70-130	2		30
tert-Butylbenzene	100		100		70-130	0		30
o-Chlorotoluene	88		85		70-130	3		30
p-Chlorotoluene	88		87		70-130	1		30
1,2-Dibromo-3-chloropropane	94		98		68-130	4		30
Hexachlorobutadiene	110		110		67-130	0		30
Isopropylbenzene	95		93		70-130	2		30
p-Isopropyltoluene	104		103		70-130	1		30
Naphthalene	98		100		70-130	2		30
Acrylonitrile	94		93		70-130	1		30
n-Propylbenzene	87		87		70-130	0		30
1,2,3-Trichlorobenzene	102		103		70-130	1		30
1,2,4-Trichlorobenzene	101		102		70-130	1		30
1,3,5-Trimethylbenzene	96		95		70-130	1		30
1,2,4-Trimethylbenzene	96		95		70-130	1		30
1,4-Dioxane	84		82		65-136	2		30
p-Diethylbenzene	103		101		70-130	2		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: 450 JOHNSON AVE.

Project Number: 170588001

Lab Number: L1931803

Report Date: 07/23/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 05 Batch: WG1262697-3 WG1262697-4								
p-Ethyltoluene	95		93		70-130	2		30
1,2,4,5-Tetramethylbenzene	100		100		70-130	0		30
Ethyl ether	88		87		67-130	1		30
trans-1,4-Dichloro-2-butene	78		81		70-130	4		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	102		103		70-130
Toluene-d8	91		91		70-130
4-Bromofluorobenzene	86		86		70-130
Dibromofluoromethane	105		105		70-130

SEMIVOLATILES

Project Name: 450 JOHNSON AVE.
Project Number: 170588001

Lab Number: L1931803
Report Date: 07/23/19

SAMPLE RESULTS

Lab ID: L1931803-04
Client ID: SB08_5.0-5.5
Sample Location: BROOKLYN, NY

Date Collected: 07/18/19 11:20
Date Received: 07/18/19
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 07/20/19 03:17
Analyst: RC
Percent Solids: 92%

Extraction Method: EPA 3546
Extraction Date: 07/19/19 03:02

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	210		ug/kg	140	18.	1
1,2,4-Trichlorobenzene	ND		ug/kg	180	20.	1
Hexachlorobenzene	ND		ug/kg	100	20.	1
Bis(2-chloroethyl)ether	ND		ug/kg	160	24.	1
2-Chloronaphthalene	ND		ug/kg	180	17.	1
1,2-Dichlorobenzene	ND		ug/kg	180	32.	1
1,3-Dichlorobenzene	ND		ug/kg	180	30.	1
1,4-Dichlorobenzene	ND		ug/kg	180	31.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	47.	1
2,4-Dinitrotoluene	ND		ug/kg	180	35.	1
2,6-Dinitrotoluene	ND		ug/kg	180	30.	1
Fluoranthene	3100		ug/kg	100	20.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	19.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	27.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	210	30.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	190	18.	1
Hexachlorobutadiene	ND		ug/kg	180	26.	1
Hexachlorocyclopentadiene	ND		ug/kg	500	160	1
Hexachloroethane	ND		ug/kg	140	28.	1
Isophorone	ND		ug/kg	160	23.	1
Naphthalene	430		ug/kg	180	21.	1
Nitrobenzene	ND		ug/kg	160	26.	1
NDPA/DPA	ND		ug/kg	140	20.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	27.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	180	61.	1
Butyl benzyl phthalate	44	J	ug/kg	180	44.	1
Di-n-butylphthalate	ND		ug/kg	180	33.	1
Di-n-octylphthalate	ND		ug/kg	180	60.	1

Project Name: 450 JOHNSON AVE.

Lab Number: L1931803

Project Number: 170588001

Report Date: 07/23/19

SAMPLE RESULTS

Lab ID: L1931803-04
 Client ID: SB08_5.0-5.5
 Sample Location: BROOKLYN, NY

Date Collected: 07/18/19 11:20
 Date Received: 07/18/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	180	16.	1
Dimethyl phthalate	ND		ug/kg	180	37.	1
Benzo(a)anthracene	2200		ug/kg	100	20.	1
Benzo(a)pyrene	2000		ug/kg	140	43.	1
Benzo(b)fluoranthene	2300		ug/kg	100	30.	1
Benzo(k)fluoranthene	940		ug/kg	100	28.	1
Chrysene	1700		ug/kg	100	18.	1
Acenaphthylene	240		ug/kg	140	27.	1
Anthracene	660		ug/kg	100	34.	1
Benzo(ghi)perylene	1100		ug/kg	140	21.	1
Fluorene	260		ug/kg	180	17.	1
Phenanthrene	1900		ug/kg	100	21.	1
Dibenzo(a,h)anthracene	300		ug/kg	100	20.	1
Indeno(1,2,3-cd)pyrene	1200		ug/kg	140	24.	1
Pyrene	3000		ug/kg	100	18.	1
Biphenyl	ND		ug/kg	400	41.	1
4-Chloroaniline	ND		ug/kg	180	32.	1
2-Nitroaniline	ND		ug/kg	180	34.	1
3-Nitroaniline	ND		ug/kg	180	33.	1
4-Nitroaniline	ND		ug/kg	180	73.	1
Dibenzofuran	200		ug/kg	180	17.	1
2-Methylnaphthalene	170	J	ug/kg	210	21.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	18.	1
Acetophenone	ND		ug/kg	180	22.	1
2,4,6-Trichlorophenol	ND		ug/kg	100	33.	1
p-Chloro-m-cresol	ND		ug/kg	180	26.	1
2-Chlorophenol	ND		ug/kg	180	21.	1
2,4-Dichlorophenol	ND		ug/kg	160	28.	1
2,4-Dimethylphenol	ND		ug/kg	180	58.	1
2-Nitrophenol	ND		ug/kg	380	66.	1
4-Nitrophenol	ND		ug/kg	250	72.	1
2,4-Dinitrophenol	ND		ug/kg	840	82.	1
4,6-Dinitro-o-cresol	ND		ug/kg	460	84.	1
Pentachlorophenol	ND		ug/kg	140	39.	1
Phenol	34	J	ug/kg	180	26.	1
2-Methylphenol	ND		ug/kg	180	27.	1
3-Methylphenol/4-Methylphenol	54	J	ug/kg	250	28.	1

Project Name: 450 JOHNSON AVE.**Lab Number:** L1931803**Project Number:** 170588001**Report Date:** 07/23/19**SAMPLE RESULTS****Lab ID:** L1931803-04**Date Collected:** 07/18/19 11:20**Client ID:** SB08_5.0-5.5**Date Received:** 07/18/19**Sample Location:** BROOKLYN, NY**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	180	34.	1
Benzoic Acid	ND		ug/kg	570	180	1
Benzyl Alcohol	ND		ug/kg	180	54.	1
Carbazole	240		ug/kg	180	17.	1
1,4-Dioxane	ND		ug/kg	26	8.1	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	108		25-120
Phenol-d6	115		10-120
Nitrobenzene-d5	115		23-120
2-Fluorobiphenyl	92		30-120
2,4,6-Tribromophenol	123		10-136
4-Terphenyl-d14	88		18-120

Project Name: 450 JOHNSON AVE.
Project Number: 170588001

Lab Number: L1931803
Report Date: 07/23/19

SAMPLE RESULTS

Lab ID: L1931803-05
Client ID: SB08_14.0-14.5
Sample Location: BROOKLYN, NY

Date Collected: 07/18/19 11:10
Date Received: 07/18/19
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 07/21/19 19:48
Analyst: RC
Percent Solids: 72%

Extraction Method: EPA 3546
Extraction Date: 07/19/19 03:02

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	180	24.	1
1,2,4-Trichlorobenzene	ND		ug/kg	230	26.	1
Hexachlorobenzene	ND		ug/kg	140	26.	1
Bis(2-chloroethyl)ether	ND		ug/kg	210	31.	1
2-Chloronaphthalene	ND		ug/kg	230	23.	1
1,2-Dichlorobenzene	ND		ug/kg	230	41.	1
1,3-Dichlorobenzene	ND		ug/kg	230	39.	1
1,4-Dichlorobenzene	ND		ug/kg	230	40.	1
3,3'-Dichlorobenzidine	ND		ug/kg	230	61.	1
2,4-Dinitrotoluene	ND		ug/kg	230	46.	1
2,6-Dinitrotoluene	ND		ug/kg	230	39.	1
Fluoranthene	ND		ug/kg	140	26.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	230	24.	1
4-Bromophenyl phenyl ether	ND		ug/kg	230	35.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	270	39.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	250	23.	1
Hexachlorobutadiene	ND		ug/kg	230	34.	1
Hexachlorocyclopentadiene	ND		ug/kg	650	210	1
Hexachloroethane	ND		ug/kg	180	37.	1
Isophorone	ND		ug/kg	210	30.	1
Naphthalene	ND		ug/kg	230	28.	1
Nitrobenzene	ND		ug/kg	210	34.	1
NDPA/DPA	ND		ug/kg	180	26.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	230	35.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	230	79.	1
Butyl benzyl phthalate	ND		ug/kg	230	58.	1
Di-n-butylphthalate	ND		ug/kg	230	43.	1
Di-n-octylphthalate	ND		ug/kg	230	78.	1

Project Name: 450 JOHNSON AVE.**Lab Number:** L1931803**Project Number:** 170588001**Report Date:** 07/23/19**SAMPLE RESULTS**

Lab ID: L1931803-05
 Client ID: SB08_14.0-14.5
 Sample Location: BROOKLYN, NY

Date Collected: 07/18/19 11:10
 Date Received: 07/18/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	230	21.	1
Dimethyl phthalate	ND		ug/kg	230	48.	1
Benzo(a)anthracene	ND		ug/kg	140	26.	1
Benzo(a)pyrene	ND		ug/kg	180	56.	1
Benzo(b)fluoranthene	ND		ug/kg	140	38.	1
Benzo(k)fluoranthene	ND		ug/kg	140	37.	1
Chrysene	ND		ug/kg	140	24.	1
Acenaphthylene	ND		ug/kg	180	35.	1
Anthracene	ND		ug/kg	140	45.	1
Benzo(ghi)perylene	ND		ug/kg	180	27.	1
Fluorene	ND		ug/kg	230	22.	1
Phenanthrene	ND		ug/kg	140	28.	1
Dibenzo(a,h)anthracene	ND		ug/kg	140	26.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	180	32.	1
Pyrene	ND		ug/kg	140	23.	1
Biphenyl	ND		ug/kg	520	53.	1
4-Chloroaniline	ND		ug/kg	230	42.	1
2-Nitroaniline	ND		ug/kg	230	44.	1
3-Nitroaniline	ND		ug/kg	230	43.	1
4-Nitroaniline	ND		ug/kg	230	95.	1
Dibenzofuran	ND		ug/kg	230	22.	1
2-Methylnaphthalene	ND		ug/kg	270	28.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	230	24.	1
Acetophenone	ND		ug/kg	230	28.	1
2,4,6-Trichlorophenol	ND		ug/kg	140	43.	1
p-Chloro-m-cresol	ND		ug/kg	230	34.	1
2-Chlorophenol	ND		ug/kg	230	27.	1
2,4-Dichlorophenol	ND		ug/kg	210	37.	1
2,4-Dimethylphenol	ND		ug/kg	230	76.	1
2-Nitrophenol	ND		ug/kg	490	86.	1
4-Nitrophenol	ND		ug/kg	320	93.	1
2,4-Dinitrophenol	ND		ug/kg	1100	110	1
4,6-Dinitro-o-cresol	ND		ug/kg	600	110	1
Pentachlorophenol	ND		ug/kg	180	50.	1
Phenol	ND		ug/kg	230	34.	1
2-Methylphenol	ND		ug/kg	230	35.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	330	36.	1

Project Name: 450 JOHNSON AVE.**Lab Number:** L1931803**Project Number:** 170588001**Report Date:** 07/23/19**SAMPLE RESULTS****Lab ID:** L1931803-05**Date Collected:** 07/18/19 11:10**Client ID:** SB08_14.0-14.5**Date Received:** 07/18/19**Sample Location:** BROOKLYN, NY**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	230	44.	1
Benzoic Acid	ND		ug/kg	740	230	1
Benzyl Alcohol	ND		ug/kg	230	70.	1
Carbazole	ND		ug/kg	230	22.	1
1,4-Dioxane	ND		ug/kg	34	10.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	75		25-120
Phenol-d6	76		10-120
Nitrobenzene-d5	74		23-120
2-Fluorobiphenyl	77		30-120
2,4,6-Tribromophenol	91		10-136
4-Terphenyl-d14	68		18-120

Project Name: 450 JOHNSON AVE.**Lab Number:** L1931803**Project Number:** 170588001**Report Date:** 07/23/19**SAMPLE RESULTS**

Lab ID: L1931803-06
 Client ID: SB12_6.5-7.0
 Sample Location: BROOKLYN, NY

Date Collected: 07/18/19 10:15
 Date Received: 07/18/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 07/21/19 20:13
 Analyst: RC
 Percent Solids: 89%

Extraction Method: EPA 3546
 Extraction Date: 07/19/19 03:02

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	150	19.	1
1,2,4-Trichlorobenzene	ND		ug/kg	190	21.	1
Hexachlorobenzene	ND		ug/kg	110	21.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	25.	1
2-Chloronaphthalene	ND		ug/kg	190	18.	1
1,2-Dichlorobenzene	ND		ug/kg	190	33.	1
1,3-Dichlorobenzene	ND		ug/kg	190	32.	1
1,4-Dichlorobenzene	ND		ug/kg	190	32.	1
3,3'-Dichlorobenzidine	ND		ug/kg	190	50.	1
2,4-Dinitrotoluene	ND		ug/kg	190	37.	1
2,6-Dinitrotoluene	ND		ug/kg	190	32.	1
Fluoranthene	310		ug/kg	110	21.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	190	20.	1
4-Bromophenyl phenyl ether	ND		ug/kg	190	28.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	32.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	19.	1
Hexachlorobutadiene	ND		ug/kg	190	27.	1
Hexachlorocyclopentadiene	ND		ug/kg	530	170	1
Hexachloroethane	ND		ug/kg	150	30.	1
Isophorone	ND		ug/kg	170	24.	1
Naphthalene	ND		ug/kg	190	23.	1
Nitrobenzene	ND		ug/kg	170	28.	1
NDPA/DPA	ND		ug/kg	150	21.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	190	29.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	190	64.	1
Butyl benzyl phthalate	ND		ug/kg	190	47.	1
Di-n-butylphthalate	ND		ug/kg	190	35.	1
Di-n-octylphthalate	ND		ug/kg	190	63.	1

Project Name: 450 JOHNSON AVE.**Lab Number:** L1931803**Project Number:** 170588001**Report Date:** 07/23/19**SAMPLE RESULTS**

Lab ID: L1931803-06
 Client ID: SB12_6.5-7.0
 Sample Location: BROOKLYN, NY

Date Collected: 07/18/19 10:15
 Date Received: 07/18/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	190	17.	1
Dimethyl phthalate	ND		ug/kg	190	39.	1
Benzo(a)anthracene	140		ug/kg	110	21.	1
Benzo(a)pyrene	160		ug/kg	150	45.	1
Benzo(b)fluoranthene	170		ug/kg	110	31.	1
Benzo(k)fluoranthene	54	J	ug/kg	110	30.	1
Chrysene	130		ug/kg	110	19.	1
Acenaphthylene	ND		ug/kg	150	29.	1
Anthracene	48	J	ug/kg	110	36.	1
Benzo(ghi)perylene	81	J	ug/kg	150	22.	1
Fluorene	ND		ug/kg	190	18.	1
Phenanthrene	220		ug/kg	110	23.	1
Dibenzo(a,h)anthracene	23	J	ug/kg	110	22.	1
Indeno(1,2,3-cd)pyrene	91	J	ug/kg	150	26.	1
Pyrene	280		ug/kg	110	18.	1
Biphenyl	ND		ug/kg	420	43.	1
4-Chloroaniline	ND		ug/kg	190	34.	1
2-Nitroaniline	ND		ug/kg	190	36.	1
3-Nitroaniline	ND		ug/kg	190	35.	1
4-Nitroaniline	ND		ug/kg	190	77.	1
Dibenzofuran	ND		ug/kg	190	18.	1
2-Methylnaphthalene	ND		ug/kg	220	22.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	190	19.	1
Acetophenone	ND		ug/kg	190	23.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	35.	1
p-Chloro-m-cresol	ND		ug/kg	190	28.	1
2-Chlorophenol	ND		ug/kg	190	22.	1
2,4-Dichlorophenol	ND		ug/kg	170	30.	1
2,4-Dimethylphenol	ND		ug/kg	190	61.	1
2-Nitrophenol	ND		ug/kg	400	70.	1
4-Nitrophenol	ND		ug/kg	260	76.	1
2,4-Dinitrophenol	ND		ug/kg	890	87.	1
4,6-Dinitro-o-cresol	ND		ug/kg	480	89.	1
Pentachlorophenol	ND		ug/kg	150	41.	1
Phenol	ND		ug/kg	190	28.	1
2-Methylphenol	ND		ug/kg	190	29.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	270	29.	1

Project Name: 450 JOHNSON AVE.**Lab Number:** L1931803**Project Number:** 170588001**Report Date:** 07/23/19**SAMPLE RESULTS****Lab ID:** L1931803-06**Date Collected:** 07/18/19 10:15**Client ID:** SB12_6.5-7.0**Date Received:** 07/18/19**Sample Location:** BROOKLYN, NY**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	190	36.	1
Benzoic Acid	ND		ug/kg	600	190	1
Benzyl Alcohol	ND		ug/kg	190	57.	1
Carbazole	20	J	ug/kg	190	18.	1
1,4-Dioxane	ND		ug/kg	28	8.6	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	71		25-120
Phenol-d6	75		10-120
Nitrobenzene-d5	83		23-120
2-Fluorobiphenyl	77		30-120
2,4,6-Tribromophenol	94		10-136
4-Terphenyl-d14	67		18-120

Project Name: 450 JOHNSON AVE.**Lab Number:** L1931803**Project Number:** 170588001**Report Date:** 07/23/19**SAMPLE RESULTS**

Lab ID: L1931803-07
 Client ID: SB07_4.5-5.0
 Sample Location: BROOKLYN, NY

Date Collected: 07/18/19 15:00
 Date Received: 07/18/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 07/22/19 16:42
 Analyst: IM
 Percent Solids: 88%

Extraction Method: EPA 3546
 Extraction Date: 07/21/19 01:57

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	74	J	ug/kg	150	19.	1
1,2,4-Trichlorobenzene	ND		ug/kg	190	21.	1
Hexachlorobenzene	ND		ug/kg	110	21.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	25.	1
2-Chloronaphthalene	ND		ug/kg	190	18.	1
1,2-Dichlorobenzene	ND		ug/kg	190	34.	1
1,3-Dichlorobenzene	ND		ug/kg	190	32.	1
1,4-Dichlorobenzene	ND		ug/kg	190	33.	1
3,3'-Dichlorobenzidine	ND		ug/kg	190	50.	1
2,4-Dinitrotoluene	ND		ug/kg	190	37.	1
2,6-Dinitrotoluene	ND		ug/kg	190	32.	1
Fluoranthene	1200		ug/kg	110	21.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	190	20.	1
4-Bromophenyl phenyl ether	ND		ug/kg	190	28.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	32.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	19.	1
Hexachlorobutadiene	ND		ug/kg	190	27.	1
Hexachlorocyclopentadiene	ND		ug/kg	530	170	1
Hexachloroethane	ND		ug/kg	150	30.	1
Isophorone	ND		ug/kg	170	24.	1
Naphthalene	65	J	ug/kg	190	23.	1
Nitrobenzene	ND		ug/kg	170	28.	1
NDPA/DPA	ND		ug/kg	150	21.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	190	29.	1
Bis(2-ethylhexyl)phthalate	100	J	ug/kg	190	65.	1
Butyl benzyl phthalate	ND		ug/kg	190	47.	1
Di-n-butylphthalate	ND		ug/kg	190	35.	1
Di-n-octylphthalate	ND		ug/kg	190	64.	1

Project Name: 450 JOHNSON AVE.

Lab Number: L1931803

Project Number: 170588001

Report Date: 07/23/19

SAMPLE RESULTS

Lab ID: L1931803-07
 Client ID: SB07_4.5-5.0
 Sample Location: BROOKLYN, NY

Date Collected: 07/18/19 15:00
 Date Received: 07/18/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	190	17.	1
Dimethyl phthalate	ND		ug/kg	190	39.	1
Benzo(a)anthracene	650		ug/kg	110	21.	1
Benzo(a)pyrene	700		ug/kg	150	46.	1
Benzo(b)fluoranthene	900		ug/kg	110	31.	1
Benzo(k)fluoranthene	280		ug/kg	110	30.	1
Chrysene	670		ug/kg	110	19.	1
Acenaphthylene	35	J	ug/kg	150	29.	1
Anthracene	190		ug/kg	110	36.	1
Benzo(ghi)perylene	400		ug/kg	150	22.	1
Fluorene	55	J	ug/kg	190	18.	1
Phenanthrene	690		ug/kg	110	23.	1
Dibenzo(a,h)anthracene	100	J	ug/kg	110	22.	1
Indeno(1,2,3-cd)pyrene	430		ug/kg	150	26.	1
Pyrene	1100		ug/kg	110	18.	1
Biphenyl	ND		ug/kg	430	43.	1
4-Chloroaniline	ND		ug/kg	190	34.	1
2-Nitroaniline	ND		ug/kg	190	36.	1
3-Nitroaniline	ND		ug/kg	190	35.	1
4-Nitroaniline	ND		ug/kg	190	77.	1
Dibenzofuran	44	J	ug/kg	190	18.	1
2-Methylnaphthalene	30	J	ug/kg	220	22.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	190	20.	1
Acetophenone	ND		ug/kg	190	23.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	35.	1
p-Chloro-m-cresol	ND		ug/kg	190	28.	1
2-Chlorophenol	ND		ug/kg	190	22.	1
2,4-Dichlorophenol	ND		ug/kg	170	30.	1
2,4-Dimethylphenol	ND		ug/kg	190	62.	1
2-Nitrophenol	ND		ug/kg	400	70.	1
4-Nitrophenol	ND		ug/kg	260	76.	1
2,4-Dinitrophenol	ND		ug/kg	900	87.	1
4,6-Dinitro-o-cresol	ND		ug/kg	490	90.	1
Pentachlorophenol	ND		ug/kg	150	41.	1
Phenol	ND		ug/kg	190	28.	1
2-Methylphenol	ND		ug/kg	190	29.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	270	29.	1

Project Name: 450 JOHNSON AVE.**Lab Number:** L1931803**Project Number:** 170588001**Report Date:** 07/23/19**SAMPLE RESULTS****Lab ID:** L1931803-07**Date Collected:** 07/18/19 15:00**Client ID:** SB07_4.5-5.0**Date Received:** 07/18/19**Sample Location:** BROOKLYN, NY**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	190	36.	1
Benzoic Acid	ND		ug/kg	600	190	1
Benzyl Alcohol	ND		ug/kg	190	57.	1
Carbazole	77	J	ug/kg	190	18.	1
1,4-Dioxane	ND		ug/kg	28	8.6	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	76		25-120
Phenol-d6	77		10-120
Nitrobenzene-d5	86		23-120
2-Fluorobiphenyl	87		30-120
2,4,6-Tribromophenol	102		10-136
4-Terphenyl-d14	58		18-120

Project Name: 450 JOHNSON AVE.**Lab Number:** L1931803**Project Number:** 170588001**Report Date:** 07/23/19**SAMPLE RESULTS**

Lab ID: L1931803-08
 Client ID: SB14_4.5-5.0
 Sample Location: BROOKLYN, NY

Date Collected: 07/18/19 14:05
 Date Received: 07/18/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 07/21/19 20:39
 Analyst: RC
 Percent Solids: 90%

Extraction Method: EPA 3546
 Extraction Date: 07/19/19 03:02

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	36	J	ug/kg	140	19.	1
1,2,4-Trichlorobenzene	ND		ug/kg	180	21.	1
Hexachlorobenzene	ND		ug/kg	110	20.	1
Bis(2-chloroethyl)ether	ND		ug/kg	160	25.	1
2-Chloronaphthalene	ND		ug/kg	180	18.	1
1,2-Dichlorobenzene	ND		ug/kg	180	33.	1
1,3-Dichlorobenzene	ND		ug/kg	180	31.	1
1,4-Dichlorobenzene	ND		ug/kg	180	32.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	48.	1
2,4-Dinitrotoluene	ND		ug/kg	180	36.	1
2,6-Dinitrotoluene	ND		ug/kg	180	31.	1
Fluoranthene	510		ug/kg	110	21.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	20.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	28.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	31.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	18.	1
Hexachlorobutadiene	ND		ug/kg	180	27.	1
Hexachlorocyclopentadiene	ND		ug/kg	520	160	1
Hexachloroethane	ND		ug/kg	140	29.	1
Isophorone	ND		ug/kg	160	24.	1
Naphthalene	27	J	ug/kg	180	22.	1
Nitrobenzene	ND		ug/kg	160	27.	1
NDPA/DPA	ND		ug/kg	140	21.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	28.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	180	63.	1
Butyl benzyl phthalate	ND		ug/kg	180	46.	1
Di-n-butylphthalate	ND		ug/kg	180	34.	1
Di-n-octylphthalate	ND		ug/kg	180	62.	1

Project Name: 450 JOHNSON AVE.**Lab Number:** L1931803**Project Number:** 170588001**Report Date:** 07/23/19**SAMPLE RESULTS****Lab ID:** L1931803-08**Date Collected:** 07/18/19 14:05**Client ID:** SB14_4.5-5.0**Date Received:** 07/18/19**Sample Location:** BROOKLYN, NY**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	180	17.	1
Dimethyl phthalate	ND		ug/kg	180	38.	1
Benzo(a)anthracene	210		ug/kg	110	20.	1
Benzo(a)pyrene	230		ug/kg	140	44.	1
Benzo(b)fluoranthene	250		ug/kg	110	31.	1
Benzo(k)fluoranthene	91	J	ug/kg	110	29.	1
Chrysene	200		ug/kg	110	19.	1
Acenaphthylene	ND		ug/kg	140	28.	1
Anthracene	74	J	ug/kg	110	36.	1
Benzo(ghi)perylene	100	J	ug/kg	140	21.	1
Fluorene	34	J	ug/kg	180	18.	1
Phenanthrene	400		ug/kg	110	22.	1
Dibenzo(a,h)anthracene	34	J	ug/kg	110	21.	1
Indeno(1,2,3-cd)pyrene	130	J	ug/kg	140	25.	1
Pyrene	420		ug/kg	110	18.	1
Biphenyl	ND		ug/kg	420	42.	1
4-Chloroaniline	ND		ug/kg	180	33.	1
2-Nitroaniline	ND		ug/kg	180	35.	1
3-Nitroaniline	ND		ug/kg	180	34.	1
4-Nitroaniline	ND		ug/kg	180	75.	1
Dibenzofuran	30	J	ug/kg	180	17.	1
2-Methylnaphthalene	ND		ug/kg	220	22.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	19.	1
Acetophenone	ND		ug/kg	180	22.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	34.	1
p-Chloro-m-cresol	ND		ug/kg	180	27.	1
2-Chlorophenol	ND		ug/kg	180	22.	1
2,4-Dichlorophenol	ND		ug/kg	160	29.	1
2,4-Dimethylphenol	ND		ug/kg	180	60.	1
2-Nitrophenol	ND		ug/kg	390	68.	1
4-Nitrophenol	ND		ug/kg	260	74.	1
2,4-Dinitrophenol	ND		ug/kg	870	85.	1
4,6-Dinitro-o-cresol	ND		ug/kg	470	87.	1
Pentachlorophenol	ND		ug/kg	140	40.	1
Phenol	ND		ug/kg	180	28.	1
2-Methylphenol	ND		ug/kg	180	28.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	260	28.	1

Project Name: 450 JOHNSON AVE.
Project Number: 170588001

Lab Number: L1931803
Report Date: 07/23/19

SAMPLE RESULTS

Lab ID: L1931803-08
Client ID: SB14_4.5-5.0
Sample Location: BROOKLYN, NY

Date Collected: 07/18/19 14:05
Date Received: 07/18/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	180	35.	1
Benzoic Acid	ND		ug/kg	590	180	1
Benzyl Alcohol	ND		ug/kg	180	56.	1
Carbazole	43	J	ug/kg	180	18.	1
1,4-Dioxane	ND		ug/kg	27	8.4	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	69		25-120
Phenol-d6	72		10-120
Nitrobenzene-d5	77		23-120
2-Fluorobiphenyl	74		30-120
2,4,6-Tribromophenol	85		10-136
4-Terphenyl-d14	64		18-120

Project Name: 450 JOHNSON AVE.**Lab Number:** L1931803**Project Number:** 170588001**Report Date:** 07/23/19**SAMPLE RESULTS**

Lab ID: L1931803-09
 Client ID: TMW02_071819 (UF SVOC)
 Sample Location: BROOKLYN, NY

Date Collected: 07/18/19 09:17
 Date Received: 07/18/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D
 Analytical Date: 07/20/19 02:55
 Analyst: ALS

Extraction Method: EPA 3510C
 Extraction Date: 07/19/19 04:18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	2.2	J	ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1

Project Name: 450 JOHNSON AVE.**Lab Number:** L1931803**Project Number:** 170588001**Report Date:** 07/23/19**SAMPLE RESULTS****Lab ID:** L1931803-09**Date Collected:** 07/18/19 09:17**Client ID:** TMW02_071819 (UF SVOC)**Date Received:** 07/18/19**Sample Location:** BROOKLYN, NY**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Benzoic Acid	ND		ug/l	50	2.6	1
Benzyl Alcohol	ND		ug/l	2.0	0.59	1
Carbazole	ND		ug/l	2.0	0.49	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	58		21-120
Phenol-d6	13		10-120
Nitrobenzene-d5	66		23-120
2-Fluorobiphenyl	74		15-120
2,4,6-Tribromophenol	65		10-120
4-Terphenyl-d14	86		41-149

Project Name: 450 JOHNSON AVE.**Lab Number:** L1931803**Project Number:** 170588001**Report Date:** 07/23/19**SAMPLE RESULTS**

Lab ID: L1931803-09
 Client ID: TMW02_071819 (UF SVOC)
 Sample Location: BROOKLYN, NY

Date Collected: 07/18/19 09:17
 Date Received: 07/18/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D-SIM
 Analytical Date: 07/19/19 16:20
 Analyst: DV

Extraction Method: EPA 3510C
 Extraction Date: 07/19/19 04:22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	0.10		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	0.06	J	ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	0.35		ug/l	0.10	0.05	1
Benzo(a)anthracene	0.04	J	ug/l	0.10	0.02	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Chrysene	0.03	J	ug/l	0.10	0.01	1
Acenaphthylene	ND		ug/l	0.10	0.01	1
Anthracene	0.03	J	ug/l	0.10	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1
Fluorene	0.10	J	ug/l	0.10	0.01	1
Phenanthrene	0.13		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Pyrene	0.05	J	ug/l	0.10	0.02	1
2-Methylnaphthalene	0.17		ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: 450 JOHNSON AVE.**Lab Number:** L1931803**Project Number:** 170588001**Report Date:** 07/23/19**SAMPLE RESULTS****Lab ID:** L1931803-09**Date Collected:** 07/18/19 09:17**Client ID:** TMW02_071819 (UF SVOC)**Date Received:** 07/18/19**Sample Location:** BROOKLYN, NY**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	59		21-120
Phenol-d6	19		10-120
Nitrobenzene-d5	76		23-120
2-Fluorobiphenyl	75		15-120
2,4,6-Tribromophenol	95		10-120
4-Terphenyl-d14	85		41-149

Project Name: 450 JOHNSON AVE.**Lab Number:** L1931803**Project Number:** 170588001**Report Date:** 07/23/19**SAMPLE RESULTS**

Lab ID: L1931803-10
 Client ID: TMW08_071819 (UF SVOC)
 Sample Location: BROOKLYN, NY

Date Collected: 07/18/19 11:25
 Date Received: 07/18/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D
 Analytical Date: 07/20/19 03:21
 Analyst: ALS

Extraction Method: EPA 3510C
 Extraction Date: 07/19/19 04:18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	0.55	J	ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1

Project Name: 450 JOHNSON AVE.**Lab Number:** L1931803**Project Number:** 170588001**Report Date:** 07/23/19**SAMPLE RESULTS****Lab ID:** L1931803-10**Date Collected:** 07/18/19 11:25**Client ID:** TMW08_071819 (UF SVOC)**Date Received:** 07/18/19**Sample Location:** BROOKLYN, NY**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Benzoic Acid	16.	J	ug/l	50	2.6	1
Benzyl Alcohol	ND		ug/l	2.0	0.59	1
Carbazole	ND		ug/l	2.0	0.49	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	80		21-120
Phenol-d6	65		10-120
Nitrobenzene-d5	89		23-120
2-Fluorobiphenyl	90		15-120
2,4,6-Tribromophenol	90		10-120
4-Terphenyl-d14	98		41-149

Project Name: 450 JOHNSON AVE.**Project Number:** 170588001**Lab Number:** L1931803**Report Date:** 07/23/19**SAMPLE RESULTS**

Lab ID: L1931803-10
 Client ID: TMW08_071819 (UF SVOC)
 Sample Location: BROOKLYN, NY

Date Collected: 07/18/19 11:25
 Date Received: 07/18/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D-SIM
 Analytical Date: 07/19/19 16:37
 Analyst: DV

Extraction Method: EPA 3510C
 Extraction Date: 07/19/19 04:22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	0.65		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	0.34		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	1.1		ug/l	0.10	0.05	1
Benzo(a)anthracene	0.13		ug/l	0.10	0.02	1
Benzo(a)pyrene	0.11		ug/l	0.10	0.02	1
Benzo(b)fluoranthene	0.14		ug/l	0.10	0.01	1
Benzo(k)fluoranthene	0.05	J	ug/l	0.10	0.01	1
Chrysene	0.11		ug/l	0.10	0.01	1
Acenaphthylene	0.04	J	ug/l	0.10	0.01	1
Anthracene	0.16		ug/l	0.10	0.01	1
Benzo(ghi)perylene	0.10	J	ug/l	0.10	0.01	1
Fluorene	0.41		ug/l	0.10	0.01	1
Phenanthrene	1.2		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	0.10	J	ug/l	0.10	0.01	1
Pyrene	0.29		ug/l	0.10	0.02	1
2-Methylnaphthalene	0.58		ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: 450 JOHNSON AVE.**Lab Number:** L1931803**Project Number:** 170588001**Report Date:** 07/23/19**SAMPLE RESULTS****Lab ID:** L1931803-10**Date Collected:** 07/18/19 11:25**Client ID:** TMW08_071819 (UF SVOC)**Date Received:** 07/18/19**Sample Location:** BROOKLYN, NY**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	69		21-120
Phenol-d6	60		10-120
Nitrobenzene-d5	86		23-120
2-Fluorobiphenyl	80		15-120
2,4,6-Tribromophenol	102		10-120
4-Terphenyl-d14	88		41-149

Project Name: 450 JOHNSON AVE.**Lab Number:** L1931803**Project Number:** 170588001**Report Date:** 07/23/19**SAMPLE RESULTS**

Lab ID: L1931803-11
 Client ID: DUP02_071819 (UF SVOC)
 Sample Location: BROOKLYN, NY

Date Collected: 07/18/19 00:00
 Date Received: 07/18/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D
 Analytical Date: 07/20/19 08:29
 Analyst: ALS

Extraction Method: EPA 3510C
 Extraction Date: 07/19/19 04:18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1

Project Name: 450 JOHNSON AVE.**Lab Number:** L1931803**Project Number:** 170588001**Report Date:** 07/23/19**SAMPLE RESULTS****Lab ID:** L1931803-11**Date Collected:** 07/18/19 00:00**Client ID:** DUP02_071819 (UF SVOC)**Date Received:** 07/18/19**Sample Location:** BROOKLYN, NY**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Dibenzofuran	1.5	J	ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Benzoic Acid	ND		ug/l	50	2.6	1
Benzyl Alcohol	ND		ug/l	2.0	0.59	1
Carbazole	1.2	J	ug/l	2.0	0.49	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	74		21-120
Phenol-d6	64		10-120
Nitrobenzene-d5	87		23-120
2-Fluorobiphenyl	90		15-120
2,4,6-Tribromophenol	82		10-120
4-Terphenyl-d14	91		41-149

Project Name: 450 JOHNSON AVE.**Lab Number:** L1931803**Project Number:** 170588001**Report Date:** 07/23/19**SAMPLE RESULTS**

Lab ID: L1931803-11
 Client ID: DUP02_071819 (UF SVOC)
 Sample Location: BROOKLYN, NY

Date Collected: 07/18/19 00:00
 Date Received: 07/18/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D-SIM
 Analytical Date: 07/19/19 16:53
 Analyst: DV

Extraction Method: EPA 3510C
 Extraction Date: 07/19/19 04:22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	2.5		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	12		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	4.3		ug/l	0.10	0.05	1
Benzo(a)anthracene	6.0		ug/l	0.10	0.02	1
Benzo(a)pyrene	5.9		ug/l	0.10	0.02	1
Benzo(b)fluoranthene	7.2		ug/l	0.10	0.01	1
Benzo(k)fluoranthene	2.8		ug/l	0.10	0.01	1
Chrysene	5.3		ug/l	0.10	0.01	1
Acenaphthylene	0.69		ug/l	0.10	0.01	1
Anthracene	1.9		ug/l	0.10	0.01	1
Benzo(ghi)perylene	4.0		ug/l	0.10	0.01	1
Fluorene	2.2		ug/l	0.10	0.01	1
Phenanthrene	9.2		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	1.0		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	4.1		ug/l	0.10	0.01	1
Pyrene	10		ug/l	0.10	0.02	1
2-Methylnaphthalene	1.9		ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: 450 JOHNSON AVE.**Lab Number:** L1931803**Project Number:** 170588001**Report Date:** 07/23/19**SAMPLE RESULTS****Lab ID:** L1931803-11**Date Collected:** 07/18/19 00:00**Client ID:** DUP02_071819 (UF SVOC)**Date Received:** 07/18/19**Sample Location:** BROOKLYN, NY**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	72		21-120
Phenol-d6	61		10-120
Nitrobenzene-d5	92		23-120
2-Fluorobiphenyl	85		15-120
2,4,6-Tribromophenol	103		10-120
4-Terphenyl-d14	88		41-149

Project Name: 450 JOHNSON AVE.
Project Number: 170588001

Lab Number: L1931803
Report Date: 07/23/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 07/18/19 16:42
Analyst: JG

Extraction Method: EPA 3546
Extraction Date: 07/18/19 10:16

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 04-06,08 Batch: WG1261483-1					
Acenaphthene	ND		ug/kg	130	17.
1,2,4-Trichlorobenzene	ND		ug/kg	160	19.
Hexachlorobenzene	ND		ug/kg	99	18.
Bis(2-chloroethyl)ether	ND		ug/kg	150	22.
2-Chloronaphthalene	ND		ug/kg	160	16.
1,2-Dichlorobenzene	ND		ug/kg	160	30.
1,3-Dichlorobenzene	ND		ug/kg	160	28.
1,4-Dichlorobenzene	ND		ug/kg	160	29.
3,3'-Dichlorobenzidine	ND		ug/kg	160	44.
2,4-Dinitrotoluene	ND		ug/kg	160	33.
2,6-Dinitrotoluene	ND		ug/kg	160	28.
Fluoranthene	ND		ug/kg	99	19.
4-Chlorophenyl phenyl ether	ND		ug/kg	160	18.
4-Bromophenyl phenyl ether	ND		ug/kg	160	25.
Bis(2-chloroisopropyl)ether	ND		ug/kg	200	28.
Bis(2-chloroethoxy)methane	ND		ug/kg	180	16.
Hexachlorobutadiene	ND		ug/kg	160	24.
Hexachlorocyclopentadiene	ND		ug/kg	470	150
Hexachloroethane	ND		ug/kg	130	27.
Isophorone	ND		ug/kg	150	21.
Naphthalene	ND		ug/kg	160	20.
Nitrobenzene	ND		ug/kg	150	24.
NDPA/DPA	ND		ug/kg	130	19.
n-Nitrosodi-n-propylamine	ND		ug/kg	160	26.
Bis(2-ethylhexyl)phthalate	ND		ug/kg	160	57.
Butyl benzyl phthalate	ND		ug/kg	160	42.
Di-n-butylphthalate	ND		ug/kg	160	31.
Di-n-octylphthalate	ND		ug/kg	160	56.
Diethyl phthalate	ND		ug/kg	160	15.

Project Name: 450 JOHNSON AVE.
Project Number: 170588001

Lab Number: L1931803
Report Date: 07/23/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 07/18/19 16:42
Analyst: JG

Extraction Method: EPA 3546
Extraction Date: 07/18/19 10:16

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 04-06,08 Batch: WG1261483-1					
Dimethyl phthalate	ND		ug/kg	160	35.
Benzo(a)anthracene	ND		ug/kg	99	19.
Benzo(a)pyrene	ND		ug/kg	130	40.
Benzo(b)fluoranthene	ND		ug/kg	99	28.
Benzo(k)fluoranthene	ND		ug/kg	99	26.
Chrysene	ND		ug/kg	99	17.
Acenaphthylene	ND		ug/kg	130	26.
Anthracene	ND		ug/kg	99	32.
Benzo(ghi)perylene	ND		ug/kg	130	19.
Fluorene	ND		ug/kg	160	16.
Phenanthrene	ND		ug/kg	99	20.
Dibenzo(a,h)anthracene	ND		ug/kg	99	19.
Indeno(1,2,3-cd)pyrene	ND		ug/kg	130	23.
Pyrene	ND		ug/kg	99	16.
Biphenyl	ND		ug/kg	380	38.
4-Chloroaniline	ND		ug/kg	160	30.
2-Nitroaniline	ND		ug/kg	160	32.
3-Nitroaniline	ND		ug/kg	160	31.
4-Nitroaniline	ND		ug/kg	160	68.
Dibenzofuran	ND		ug/kg	160	16.
2-Methylnaphthalene	ND		ug/kg	200	20.
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	160	17.
Acetophenone	ND		ug/kg	160	20.
2,4,6-Trichlorophenol	ND		ug/kg	99	31.
p-Chloro-m-cresol	ND		ug/kg	160	25.
2-Chlorophenol	ND		ug/kg	160	20.
2,4-Dichlorophenol	ND		ug/kg	150	26.
2,4-Dimethylphenol	ND		ug/kg	160	54.
2-Nitrophenol	ND		ug/kg	360	62.

Project Name: 450 JOHNSON AVE.
Project Number: 170588001

Lab Number: L1931803
Report Date: 07/23/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 07/18/19 16:42
Analyst: JG

Extraction Method: EPA 3546
Extraction Date: 07/18/19 10:16

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 04-06,08 Batch: WG1261483-1					
4-Nitrophenol	ND		ug/kg	230	67.
2,4-Dinitrophenol	ND		ug/kg	790	77.
4,6-Dinitro-o-cresol	ND		ug/kg	430	79.
Pentachlorophenol	ND		ug/kg	130	36.
Phenol	ND		ug/kg	160	25.
2-Methylphenol	ND		ug/kg	160	26.
3-Methylphenol/4-Methylphenol	ND		ug/kg	240	26.
2,4,5-Trichlorophenol	ND		ug/kg	160	32.
Benzoic Acid	ND		ug/kg	540	170
Benzyl Alcohol	ND		ug/kg	160	50.
Carbazole	ND		ug/kg	160	16.
1,4-Dioxane	ND		ug/kg	25	7.6

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	74		25-120
Phenol-d6	74		10-120
Nitrobenzene-d5	76		23-120
2-Fluorobiphenyl	77		30-120
2,4,6-Tribromophenol	87		10-136
4-Terphenyl-d14	84		18-120

Project Name: 450 JOHNSON AVE.
Project Number: 170588001

Lab Number: L1931803
Report Date: 07/23/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 07/19/19 05:53
Analyst: JG

Extraction Method: EPA 3510C
Extraction Date: 07/18/19 15:43

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 09-11 Batch: WG1261662-1					
Acenaphthene	ND		ug/l	2.0	0.44
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50
Hexachlorobenzene	ND		ug/l	2.0	0.46
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50
2-Chloronaphthalene	ND		ug/l	2.0	0.44
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93
Fluoranthene	ND		ug/l	2.0	0.26
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50
Hexachlorobutadiene	ND		ug/l	2.0	0.66
Hexachlorocyclopentadiene	ND		ug/l	20	0.69
Hexachloroethane	ND		ug/l	2.0	0.58
Isophorone	ND		ug/l	5.0	1.2
Naphthalene	ND		ug/l	2.0	0.46
Nitrobenzene	ND		ug/l	2.0	0.77
NDPA/DPA	ND		ug/l	2.0	0.42
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5
Butyl benzyl phthalate	ND		ug/l	5.0	1.2
Di-n-butylphthalate	ND		ug/l	5.0	0.39
Di-n-octylphthalate	ND		ug/l	5.0	1.3
Diethyl phthalate	ND		ug/l	5.0	0.38

Project Name: 450 JOHNSON AVE.
Project Number: 170588001

Lab Number: L1931803
Report Date: 07/23/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 07/19/19 05:53
Analyst: JG

Extraction Method: EPA 3510C
Extraction Date: 07/18/19 15:43

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 09-11 Batch: WG1261662-1					
Dimethyl phthalate	ND		ug/l	5.0	1.8
Benzo(a)anthracene	ND		ug/l	2.0	0.32
Benzo(a)pyrene	ND		ug/l	2.0	0.41
Benzo(b)fluoranthene	ND		ug/l	2.0	0.35
Benzo(k)fluoranthene	ND		ug/l	2.0	0.37
Chrysene	ND		ug/l	2.0	0.34
Acenaphthylene	ND		ug/l	2.0	0.46
Anthracene	ND		ug/l	2.0	0.33
Benzo(ghi)perylene	ND		ug/l	2.0	0.30
Fluorene	ND		ug/l	2.0	0.41
Phenanthrene	ND		ug/l	2.0	0.33
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.32
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.40
Pyrene	ND		ug/l	2.0	0.28
Biphenyl	ND		ug/l	2.0	0.46
4-Chloroaniline	ND		ug/l	5.0	1.1
2-Nitroaniline	ND		ug/l	5.0	0.50
3-Nitroaniline	ND		ug/l	5.0	0.81
4-Nitroaniline	ND		ug/l	5.0	0.80
Dibenzofuran	ND		ug/l	2.0	0.50
2-Methylnaphthalene	ND		ug/l	2.0	0.45
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44
Acetophenone	ND		ug/l	5.0	0.53
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61
p-Chloro-m-cresol	ND		ug/l	2.0	0.35
2-Chlorophenol	ND		ug/l	2.0	0.48
2,4-Dichlorophenol	ND		ug/l	5.0	0.41
2,4-Dimethylphenol	ND		ug/l	5.0	1.8
2-Nitrophenol	ND		ug/l	10	0.85

Project Name: 450 JOHNSON AVE.
Project Number: 170588001

Lab Number: L1931803
Report Date: 07/23/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 07/19/19 05:53
Analyst: JG

Extraction Method: EPA 3510C
Extraction Date: 07/18/19 15:43

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 09-11 Batch: WG1261662-1					
4-Nitrophenol	ND		ug/l	10	0.67
2,4-Dinitrophenol	ND		ug/l	20	6.6
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8
Pentachlorophenol	ND		ug/l	10	1.8
Phenol	ND		ug/l	5.0	0.57
2-Methylphenol	ND		ug/l	5.0	0.49
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77
Benzoic Acid	ND		ug/l	50	2.6
Benzyl Alcohol	ND		ug/l	2.0	0.59
Carbazole	ND		ug/l	2.0	0.49

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	63		21-120
Phenol-d6	52		10-120
Nitrobenzene-d5	77		23-120
2-Fluorobiphenyl	71		15-120
2,4,6-Tribromophenol	59		10-120
4-Terphenyl-d14	100		41-149

Project Name: 450 JOHNSON AVE.
Project Number: 170588001

Lab Number: L1931803
Report Date: 07/23/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 07/19/19 10:14
Analyst: DV

Extraction Method: EPA 3510C
Extraction Date: 07/18/19 15:43

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 09-11 Batch: WG1261673-1					
Acenaphthene	ND		ug/l	0.10	0.01
2-Chloronaphthalene	ND		ug/l	0.20	0.02
Fluoranthene	ND		ug/l	0.10	0.02
Hexachlorobutadiene	ND		ug/l	0.50	0.05
Naphthalene	ND		ug/l	0.10	0.05
Benzo(a)anthracene	ND		ug/l	0.10	0.02
Benzo(a)pyrene	ND		ug/l	0.10	0.02
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01
Chrysene	ND		ug/l	0.10	0.01
Acenaphthylene	ND		ug/l	0.10	0.01
Anthracene	ND		ug/l	0.10	0.01
Benzo(ghi)perylene	ND		ug/l	0.10	0.01
Fluorene	ND		ug/l	0.10	0.01
Phenanthrene	ND		ug/l	0.10	0.02
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01
Pyrene	ND		ug/l	0.10	0.02
2-Methylnaphthalene	ND		ug/l	0.10	0.02
Pentachlorophenol	ND		ug/l	0.80	0.01
Hexachlorobenzene	ND		ug/l	0.80	0.01
Hexachloroethane	ND		ug/l	0.80	0.06

Project Name: 450 JOHNSON AVE.
Project Number: 170588001

Lab Number: L1931803
Report Date: 07/23/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 07/19/19 10:14
Analyst: DV

Extraction Method: EPA 3510C
Extraction Date: 07/18/19 15:43

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 09-11 Batch: WG1261673-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	59		21-120
Phenol-d6	49		10-120
Nitrobenzene-d5	73		23-120
2-Fluorobiphenyl	70		15-120
2,4,6-Tribromophenol	81		10-120
4-Terphenyl-d14	90		41-149

Project Name: 450 JOHNSON AVE.
Project Number: 170588001

Lab Number: L1931803
Report Date: 07/23/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 07/22/19 09:32
Analyst: IM

Extraction Method: EPA 3546
Extraction Date: 07/21/19 01:57

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 07 Batch: WG1262549-1					
Acenaphthene	ND		ug/kg	130	17.
1,2,4-Trichlorobenzene	ND		ug/kg	160	19.
Hexachlorobenzene	ND		ug/kg	98	18.
Bis(2-chloroethyl)ether	ND		ug/kg	150	22.
2-Chloronaphthalene	ND		ug/kg	160	16.
1,2-Dichlorobenzene	ND		ug/kg	160	29.
1,3-Dichlorobenzene	ND		ug/kg	160	28.
1,4-Dichlorobenzene	ND		ug/kg	160	29.
3,3'-Dichlorobenzidine	ND		ug/kg	160	44.
2,4-Dinitrotoluene	ND		ug/kg	160	33.
2,6-Dinitrotoluene	ND		ug/kg	160	28.
Fluoranthene	ND		ug/kg	98	19.
4-Chlorophenyl phenyl ether	ND		ug/kg	160	18.
4-Bromophenyl phenyl ether	ND		ug/kg	160	25.
Bis(2-chloroisopropyl)ether	ND		ug/kg	200	28.
Bis(2-chloroethoxy)methane	ND		ug/kg	180	16.
Hexachlorobutadiene	ND		ug/kg	160	24.
Hexachlorocyclopentadiene	ND		ug/kg	470	150
Hexachloroethane	ND		ug/kg	130	26.
Isophorone	ND		ug/kg	150	21.
Naphthalene	ND		ug/kg	160	20.
Nitrobenzene	ND		ug/kg	150	24.
NDPA/DPA	ND		ug/kg	130	19.
n-Nitrosodi-n-propylamine	ND		ug/kg	160	25.
Bis(2-ethylhexyl)phthalate	ND		ug/kg	160	57.
Butyl benzyl phthalate	ND		ug/kg	160	41.
Di-n-butylphthalate	ND		ug/kg	160	31.
Di-n-octylphthalate	ND		ug/kg	160	56.
Diethyl phthalate	ND		ug/kg	160	15.

Project Name: 450 JOHNSON AVE.
Project Number: 170588001

Lab Number: L1931803
Report Date: 07/23/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 07/22/19 09:32
Analyst: IM

Extraction Method: EPA 3546
Extraction Date: 07/21/19 01:57

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 07 Batch: WG1262549-1					
Dimethyl phthalate	ND		ug/kg	160	34.
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.
Biphenyl	ND		ug/kg	370	38.
4-Chloroaniline	ND		ug/kg	160	30.
2-Nitroaniline	ND		ug/kg	160	32.
3-Nitroaniline	ND		ug/kg	160	31.
4-Nitroaniline	ND		ug/kg	160	68.
Dibenzofuran	ND		ug/kg	160	16.
2-Methylnaphthalene	ND		ug/kg	200	20.
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	160	17.
Acetophenone	ND		ug/kg	160	20.
2,4,6-Trichlorophenol	ND		ug/kg	98	31.
p-Chloro-m-cresol	ND		ug/kg	160	24.
2-Chlorophenol	ND		ug/kg	160	19.
2,4-Dichlorophenol	ND		ug/kg	150	26.
2,4-Dimethylphenol	ND		ug/kg	160	54.
2-Nitrophenol	ND		ug/kg	350	62.

Project Name: 450 JOHNSON AVE.
Project Number: 170588001

Lab Number: L1931803
Report Date: 07/23/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 07/22/19 09:32
Analyst: IM

Extraction Method: EPA 3546
Extraction Date: 07/21/19 01:57

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 07 Batch: WG1262549-1					
4-Nitrophenol	ND		ug/kg	230	67.
2,4-Dinitrophenol	ND		ug/kg	790	76.
4,6-Dinitro-o-cresol	ND		ug/kg	430	79.
Pentachlorophenol	ND		ug/kg	130	36.
Phenol	ND		ug/kg	160	25.
2-Methylphenol	ND		ug/kg	160	25.
3-Methylphenol/4-Methylphenol	ND		ug/kg	240	26.
2,4,5-Trichlorophenol	ND		ug/kg	160	31.
Benzoic Acid	ND		ug/kg	530	160
Benzyl Alcohol	ND		ug/kg	160	50.
Carbazole	ND		ug/kg	160	16.
1,4-Dioxane	ND		ug/kg	24	7.5

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	75		25-120
Phenol-d6	76		10-120
Nitrobenzene-d5	76		23-120
2-Fluorobiphenyl	80		30-120
2,4,6-Tribromophenol	92		10-136
4-Terphenyl-d14	84		18-120

Lab Control Sample Analysis

Batch Quality Control

Project Name: 450 JOHNSON AVE.

Project Number: 170588001

Lab Number: L1931803

Report Date: 07/23/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 04-06,08 Batch: WG1261483-2 WG1261483-3								
Acenaphthene	72		77		31-137	7		50
1,2,4-Trichlorobenzene	70		74		38-107	6		50
Hexachlorobenzene	80		84		40-140	5		50
Bis(2-chloroethyl)ether	67		72		40-140	7		50
2-Chloronaphthalene	76		80		40-140	5		50
1,2-Dichlorobenzene	66		70		40-140	6		50
1,3-Dichlorobenzene	64		69		40-140	8		50
1,4-Dichlorobenzene	65		70		28-104	7		50
3,3'-Dichlorobenzidine	61		62		40-140	2		50
2,4-Dinitrotoluene	81		87		40-132	7		50
2,6-Dinitrotoluene	84		90		40-140	7		50
Fluoranthene	78		85		40-140	9		50
4-Chlorophenyl phenyl ether	76		80		40-140	5		50
4-Bromophenyl phenyl ether	79		84		40-140	6		50
Bis(2-chloroisopropyl)ether	63		66		40-140	5		50
Bis(2-chloroethoxy)methane	74		78		40-117	5		50
Hexachlorobutadiene	70		74		40-140	6		50
Hexachlorocyclopentadiene	75		80		40-140	6		50
Hexachloroethane	64		68		40-140	6		50
Isophorone	76		82		40-140	8		50
Naphthalene	69		73		40-140	6		50
Nitrobenzene	73		78		40-140	7		50
NDPA/DPA	79		84		36-157	6		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: 450 JOHNSON AVE.

Project Number: 170588001

Lab Number: L1931803

Report Date: 07/23/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 04-06,08 Batch: WG1261483-2 WG1261483-3								
n-Nitrosodi-n-propylamine	76		81		32-121	6		50
Bis(2-ethylhexyl)phthalate	74		78		40-140	5		50
Butyl benzyl phthalate	77		82		40-140	6		50
Di-n-butylphthalate	81		86		40-140	6		50
Di-n-octylphthalate	82		86		40-140	5		50
Diethyl phthalate	78		83		40-140	6		50
Dimethyl phthalate	82		88		40-140	7		50
Benzo(a)anthracene	76		82		40-140	8		50
Benzo(a)pyrene	86		92		40-140	7		50
Benzo(b)fluoranthene	78		83		40-140	6		50
Benzo(k)fluoranthene	78		84		40-140	7		50
Chrysene	70		76		40-140	8		50
Acenaphthylene	81		86		40-140	6		50
Anthracene	78		83		40-140	6		50
Benzo(ghi)perylene	77		82		40-140	6		50
Fluorene	76		80		40-140	5		50
Phenanthrene	72		78		40-140	8		50
Dibenzo(a,h)anthracene	77		82		40-140	6		50
Indeno(1,2,3-cd)pyrene	82		86		40-140	5		50
Pyrene	76		82		35-142	8		50
Biphenyl	82		87		54-104	6		50
4-Chloroaniline	62		65		40-140	5		50
2-Nitroaniline	85		92		47-134	8		50

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 450 JOHNSON AVE.

Project Number: 170588001

Lab Number: L1931803

Report Date: 07/23/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 04-06,08 Batch: WG1261483-2 WG1261483-3								
3-Nitroaniline	72		74		26-129	3		50
4-Nitroaniline	79		83		41-125	5		50
Dibenzofuran	74		77		40-140	4		50
2-Methylnaphthalene	74		79		40-140	7		50
1,2,4,5-Tetrachlorobenzene	79		83		40-117	5		50
Acetophenone	81		86		14-144	6		50
2,4,6-Trichlorophenol	88		94		30-130	7		50
p-Chloro-m-cresol	83		89		26-103	7		50
2-Chlorophenol	74		79		25-102	7		50
2,4-Dichlorophenol	83		88		30-130	6		50
2,4-Dimethylphenol	82		86		30-130	5		50
2-Nitrophenol	84		90		30-130	7		50
4-Nitrophenol	78		83		11-114	6		50
2,4-Dinitrophenol	92		91		4-130	1		50
4,6-Dinitro-o-cresol	87		94		10-130	8		50
Pentachlorophenol	84		89		17-109	6		50
Phenol	68		72		26-90	6		50
2-Methylphenol	76		80		30-130.	5		50
3-Methylphenol/4-Methylphenol	77		81		30-130	5		50
2,4,5-Trichlorophenol	87		93		30-130	7		50
Benzoic Acid	87		72		10-110	19		50
Benzyl Alcohol	76		80		40-140	5		50
Carbazole	75		80		54-128	6		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: 450 JOHNSON AVE.

Project Number: 170588001

Lab Number: L1931803

Report Date: 07/23/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 04-06,08 Batch: WG1261483-2 WG1261483-3								
1,4-Dioxane	60		66		40-140	10		50

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	70		75		25-120
Phenol-d6	72		78		10-120
Nitrobenzene-d5	75		81		23-120
2-Fluorobiphenyl	74		80		30-120
2,4,6-Tribromophenol	82		89		10-136
4-Terphenyl-d14	73		79		18-120

Lab Control Sample Analysis

Batch Quality Control

Project Name: 450 JOHNSON AVE.

Project Number: 170588001

Lab Number: L1931803

Report Date: 07/23/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 09-11 Batch: WG1261662-2 WG1261662-3								
Acenaphthene	69		81		37-111	16		30
1,2,4-Trichlorobenzene	73		81		39-98	10		30
Hexachlorobenzene	85		98		40-140	14		30
Bis(2-chloroethyl)ether	68		79		40-140	15		30
2-Chloronaphthalene	79		89		40-140	12		30
1,2-Dichlorobenzene	68		79		40-140	15		30
1,3-Dichlorobenzene	66		77		40-140	15		30
1,4-Dichlorobenzene	69		79		36-97	14		30
3,3'-Dichlorobenzidine	75		89		40-140	17		30
2,4-Dinitrotoluene	74		85		48-143	14		30
2,6-Dinitrotoluene	84		93		40-140	10		30
Fluoranthene	93		95		40-140	2		30
4-Chlorophenyl phenyl ether	75		90		40-140	18		30
4-Bromophenyl phenyl ether	89		98		40-140	10		30
Bis(2-chloroisopropyl)ether	85		110		40-140	26		30
Bis(2-chloroethoxy)methane	76		100		40-140	27		30
Hexachlorobutadiene	78		90		40-140	14		30
Hexachlorocyclopentadiene	80		94		40-140	16		30
Hexachloroethane	69		83		40-140	18		30
Isophorone	80		94		40-140	16		30
Naphthalene	71		85		40-140	18		30
Nitrobenzene	80		93		40-140	15		30
NDPA/DPA	78		90		40-140	14		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: 450 JOHNSON AVE.

Project Number: 170588001

Lab Number: L1931803

Report Date: 07/23/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 09-11 Batch: WG1261662-2 WG1261662-3								
n-Nitrosodi-n-propylamine	85		101		29-132	17		30
Bis(2-ethylhexyl)phthalate	95		98		40-140	3		30
Butyl benzyl phthalate	98		106		40-140	8		30
Di-n-butylphthalate	88		98		40-140	11		30
Di-n-octylphthalate	101		108		40-140	7		30
Diethyl phthalate	86		97		40-140	12		30
Dimethyl phthalate	92		98		40-140	6		30
Benzo(a)anthracene	90		95		40-140	5		30
Benzo(a)pyrene	93		105		40-140	12		30
Benzo(b)fluoranthene	101		107		40-140	6		30
Benzo(k)fluoranthene	85		99		40-140	15		30
Chrysene	84		93		40-140	10		30
Acenaphthylene	82		93		45-123	13		30
Anthracene	85		96		40-140	12		30
Benzo(ghi)perylene	93		96		40-140	3		30
Fluorene	73		87		40-140	18		30
Phenanthrene	81		92		40-140	13		30
Dibenzo(a,h)anthracene	87		96		40-140	10		30
Indeno(1,2,3-cd)pyrene	84		92		40-140	9		30
Pyrene	91		92		26-127	1		30
Biphenyl	71		81		40-140	13		30
4-Chloroaniline	74		94		40-140	24		30
2-Nitroaniline	83		91		52-143	9		30

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 450 JOHNSON AVE.

Project Number: 170588001

Lab Number: L1931803

Report Date: 07/23/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 09-11 Batch: WG1261662-2 WG1261662-3								
3-Nitroaniline	64		77		25-145	18		30
4-Nitroaniline	72		83		51-143	14		30
Dibenzofuran	71		83		40-140	16		30
2-Methylnaphthalene	71		82		40-140	14		30
1,2,4,5-Tetrachlorobenzene	74		83		2-134	11		30
Acetophenone	66		79		39-129	18		30
2,4,6-Trichlorophenol	79		93		30-130	16		30
p-Chloro-m-cresol	88		95		23-97	8		30
2-Chlorophenol	74		86		27-123	15		30
2,4-Dichlorophenol	75		90		30-130	18		30
2,4-Dimethylphenol	59		87		30-130	38	Q	30
2-Nitrophenol	80		94		30-130	16		30
4-Nitrophenol	78		82	Q	10-80	5		30
2,4-Dinitrophenol	74		78		20-130	5		30
4,6-Dinitro-o-cresol	89		100		20-164	12		30
Pentachlorophenol	80		91		9-103	13		30
Phenol	63		67		12-110	6		30
2-Methylphenol	70		88		30-130	23		30
3-Methylphenol/4-Methylphenol	73		82		30-130	12		30
2,4,5-Trichlorophenol	86		99		30-130	14		30
Benzoic Acid	0	Q	0	Q	10-164	NC		30
Benzyl Alcohol	78		87		26-116	11		30
Carbazole	87		96		55-144	10		30

Lab Control Sample Analysis**Batch Quality Control****Project Name:** 450 JOHNSON AVE.**Project Number:** 170588001**Lab Number:** L1931803**Report Date:** 07/23/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits

Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 09-11 Batch: WG1261662-2 WG1261662-3

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	65		77		21-120
Phenol-d6	64		70		10-120
Nitrobenzene-d5	84		96		23-120
2-Fluorobiphenyl	82		95		15-120
2,4,6-Tribromophenol	80		93		10-120
4-Terphenyl-d14	100		94		41-149

Lab Control Sample Analysis Batch Quality Control

Project Name: 450 JOHNSON AVE.

Project Number: 170588001

Lab Number: L1931803

Report Date: 07/23/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 09-11 Batch: WG1261673-2 WG1261673-3								
Acenaphthene	92		92		40-140	0		40
2-Chloronaphthalene	86		84		40-140	2		40
Fluoranthene	166	Q	100		40-140	50	Q	40
Hexachlorobutadiene	70		67		40-140	4		40
Naphthalene	80		76		40-140	5		40
Benzo(a)anthracene	134		105		40-140	24		40
Benzo(a)pyrene	134		110		40-140	20		40
Benzo(b)fluoranthene	138		104		40-140	28		40
Benzo(k)fluoranthene	117		106		40-140	10		40
Chrysene	135		104		40-140	26		40
Acenaphthylene	92		87		40-140	6		40
Anthracene	100		103		40-140	3		40
Benzo(ghi)perylene	129		134		40-140	4		40
Fluorene	92		92		40-140	0		40
Phenanthrene	106		98		40-140	8		40
Dibenzo(a,h)anthracene	115		126		40-140	9		40
Indeno(1,2,3-cd)pyrene	133		126		40-140	5		40
Pyrene	162	Q	101		40-140	46	Q	40
2-Methylnaphthalene	84		82		40-140	2		40
Pentachlorophenol	108		119		40-140	10		40
Hexachlorobenzene	102		105		40-140	3		40
Hexachloroethane	72		68		40-140	6		40

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 450 JOHNSON AVE.

Project Number: 170588001

Lab Number: L1931803

Report Date: 07/23/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 09-11 Batch: WG1261673-2 WG1261673-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	63		59		21-120
Phenol-d6	55		53		10-120
Nitrobenzene-d5	83		80		23-120
2-Fluorobiphenyl	84		82		15-120
2,4,6-Tribromophenol	98		99		10-120
4-Terphenyl-d14	106		105		41-149

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 450 JOHNSON AVE.

Project Number: 170588001

Lab Number: L1931803

Report Date: 07/23/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 07 Batch: WG1262549-2 WG1262549-3								
Acenaphthene	72		78		31-137	8		50
1,2,4-Trichlorobenzene	69		74		38-107	7		50
Hexachlorobenzene	80		88		40-140	10		50
Bis(2-chloroethyl)ether	67		71		40-140	6		50
2-Chloronaphthalene	74		81		40-140	9		50
1,2-Dichlorobenzene	65		69		40-140	6		50
1,3-Dichlorobenzene	64		67		40-140	5		50
1,4-Dichlorobenzene	64		68		28-104	6		50
3,3'-Dichlorobenzidine	69		70		40-140	1		50
2,4-Dinitrotoluene	79		88		40-132	11		50
2,6-Dinitrotoluene	82		91		40-140	10		50
Fluoranthene	78		84		40-140	7		50
4-Chlorophenyl phenyl ether	75		81		40-140	8		50
4-Bromophenyl phenyl ether	80		87		40-140	8		50
Bis(2-chloroisopropyl)ether	61		65		40-140	6		50
Bis(2-chloroethoxy)methane	72		78		40-117	8		50
Hexachlorobutadiene	69		75		40-140	8		50
Hexachlorocyclopentadiene	71		79		40-140	11		50
Hexachloroethane	64		67		40-140	5		50
Isophorone	76		81		40-140	6		50
Naphthalene	68		74		40-140	8		50
Nitrobenzene	72		77		40-140	7		50
NDPA/DPA	78		85		36-157	9		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: 450 JOHNSON AVE.

Project Number: 170588001

Lab Number: L1931803

Report Date: 07/23/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 07 Batch: WG1262549-2 WG1262549-3								
n-Nitrosodi-n-propylamine	74		79		32-121	7		50
Bis(2-ethylhexyl)phthalate	73		78		40-140	7		50
Butyl benzyl phthalate	78		83		40-140	6		50
Di-n-butylphthalate	79		87		40-140	10		50
Di-n-octylphthalate	80		85		40-140	6		50
Diethyl phthalate	77		82		40-140	6		50
Dimethyl phthalate	84		91		40-140	8		50
Benzo(a)anthracene	76		81		40-140	6		50
Benzo(a)pyrene	87		91		40-140	4		50
Benzo(b)fluoranthene	78		82		40-140	5		50
Benzo(k)fluoranthene	78		83		40-140	6		50
Chrysene	69		75		40-140	8		50
Acenaphthylene	79		86		40-140	8		50
Anthracene	76		83		40-140	9		50
Benzo(ghi)perylene	73		79		40-140	8		50
Fluorene	74		80		40-140	8		50
Phenanthrene	72		78		40-140	8		50
Dibenzo(a,h)anthracene	75		82		40-140	9		50
Indeno(1,2,3-cd)pyrene	78		84		40-140	7		50
Pyrene	76		82		35-142	8		50
Biphenyl	82		89		54-104	8		50
4-Chloroaniline	66		71		40-140	7		50
2-Nitroaniline	85		93		47-134	9		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: 450 JOHNSON AVE.

Project Number: 170588001

Lab Number: L1931803

Report Date: 07/23/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 07 Batch: WG1262549-2 WG1262549-3								
3-Nitroaniline	71		76		26-129	7		50
4-Nitroaniline	78		84		41-125	7		50
Dibenzofuran	72		78		40-140	8		50
2-Methylnaphthalene	73		80		40-140	9		50
1,2,4,5-Tetrachlorobenzene	77		84		40-117	9		50
Acetophenone	80		86		14-144	7		50
2,4,6-Trichlorophenol	88		95		30-130	8		50
p-Chloro-m-cresol	82		90		26-103	9		50
2-Chlorophenol	74		79		25-102	7		50
2,4-Dichlorophenol	81		89		30-130	9		50
2,4-Dimethylphenol	79		87		30-130	10		50
2-Nitrophenol	83		91		30-130	9		50
4-Nitrophenol	78		84		11-114	7		50
2,4-Dinitrophenol	91		96		4-130	5		50
4,6-Dinitro-o-cresol	90		97		10-130	7		50
Pentachlorophenol	82		88		17-109	7		50
Phenol	67		73		26-90	9		50
2-Methylphenol	75		81		30-130	8		50
3-Methylphenol/4-Methylphenol	76		82		30-130	8		50
2,4,5-Trichlorophenol	87		95		30-130	9		50
Benzoic Acid	82		75		10-110	9		50
Benzyl Alcohol	73		80		40-140	9		50
Carbazole	75		81		54-128	8		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: 450 JOHNSON AVE.

Project Number: 170588001

Lab Number: L1931803

Report Date: 07/23/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 07 Batch: WG1262549-2 WG1262549-3								
1,4-Dioxane	59		62		40-140	5		50

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	73		79		25-120
Phenol-d6	75		83		10-120
Nitrobenzene-d5	78		85		23-120
2-Fluorobiphenyl	78		85		30-120
2,4,6-Tribromophenol	90		98		10-136
4-Terphenyl-d14	81		87		18-120

PCBS

Project Name: 450 JOHNSON AVE.
Project Number: 170588001

Lab Number: L1931803
Report Date: 07/23/19

SAMPLE RESULTS

Lab ID: L1931803-07
Client ID: SB07_4.5-5.0
Sample Location: BROOKLYN, NY

Date Collected: 07/18/19 15:00
Date Received: 07/18/19
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 07/23/19 10:56
Analyst: WR
Percent Solids: 88%

Extraction Method: EPA 3546
Extraction Date: 07/21/19 19:15
Cleanup Method: EPA 3665A
Cleanup Date: 07/22/19
Cleanup Method: EPA 3660B
Cleanup Date: 07/23/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	36.8	3.27	1	A
Aroclor 1221	ND		ug/kg	36.8	3.69	1	A
Aroclor 1232	ND		ug/kg	36.8	7.81	1	A
Aroclor 1242	ND		ug/kg	36.8	4.96	1	A
Aroclor 1248	ND		ug/kg	36.8	5.52	1	A
Aroclor 1254	ND		ug/kg	36.8	4.03	1	A
Aroclor 1260	ND		ug/kg	36.8	6.81	1	B
Aroclor 1262	ND		ug/kg	36.8	4.68	1	A
Aroclor 1268	ND		ug/kg	36.8	3.82	1	A
PCBs, Total	ND		ug/kg	36.8	3.27	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	65		30-150	A
Decachlorobiphenyl	73		30-150	A
2,4,5,6-Tetrachloro-m-xylene	64		30-150	B
Decachlorobiphenyl	82		30-150	B

Project Name: 450 JOHNSON AVE.
Project Number: 170588001

Lab Number: L1931803
Report Date: 07/23/19

SAMPLE RESULTS

Lab ID: L1931803-08
Client ID: SB14_4.5-5.0
Sample Location: BROOKLYN, NY

Date Collected: 07/18/19 14:05
Date Received: 07/18/19
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 07/23/19 11:09
Analyst: WR
Percent Solids: 90%

Extraction Method: EPA 3546
Extraction Date: 07/21/19 19:15
Cleanup Method: EPA 3665A
Cleanup Date: 07/22/19
Cleanup Method: EPA 3660B
Cleanup Date: 07/23/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	35.5	3.15	1	A
Aroclor 1221	ND		ug/kg	35.5	3.55	1	A
Aroclor 1232	ND		ug/kg	35.5	7.52	1	A
Aroclor 1242	ND		ug/kg	35.5	4.78	1	A
Aroclor 1248	ND		ug/kg	35.5	5.32	1	A
Aroclor 1254	ND		ug/kg	35.5	3.88	1	A
Aroclor 1260	ND		ug/kg	35.5	6.56	1	A
Aroclor 1262	ND		ug/kg	35.5	4.50	1	A
Aroclor 1268	ND		ug/kg	35.5	3.67	1	A
PCBs, Total	ND		ug/kg	35.5	3.15	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	72		30-150	A
Decachlorobiphenyl	76		30-150	A
2,4,5,6-Tetrachloro-m-xylene	72		30-150	B
Decachlorobiphenyl	83		30-150	B

Project Name: 450 JOHNSON AVE.
Project Number: 170588001

Lab Number: L1931803
Report Date: 07/23/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8082A
Analytical Date: 07/23/19 10:19
Analyst: WR

Extraction Method: EPA 3546
Extraction Date: 07/21/19 03:07
Cleanup Method: EPA 3665A
Cleanup Date: 07/22/19

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 07-08 Batch: WG1262555-1						
Aroclor 1016	ND		ug/kg	32.8	2.92	A
Aroclor 1221	ND		ug/kg	32.8	3.29	A
Aroclor 1232	ND		ug/kg	32.8	6.96	A
Aroclor 1242	ND		ug/kg	32.8	4.43	A
Aroclor 1248	ND		ug/kg	32.8	4.93	A
Aroclor 1254	ND		ug/kg	32.8	3.59	A
Aroclor 1260	ND		ug/kg	32.8	6.07	A
Aroclor 1262	ND		ug/kg	32.8	4.17	A
Aroclor 1268	ND		ug/kg	32.8	3.40	A
PCBs, Total	ND		ug/kg	32.8	2.92	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	72		30-150	A
Decachlorobiphenyl	77		30-150	A
2,4,5,6-Tetrachloro-m-xylene	73		30-150	B
Decachlorobiphenyl	86		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: 450 JOHNSON AVE.

Project Number: 170588001

Lab Number: L1931803

Report Date: 07/23/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 07-08 Batch: WG1262555-2 WG1262555-3									
Aroclor 1016	79		79		40-140	0		50	A
Aroclor 1260	72		71		40-140	1		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	77		76		30-150	A
Decachlorobiphenyl	80		78		30-150	A
2,4,5,6-Tetrachloro-m-xylene	78		76		30-150	B
Decachlorobiphenyl	90		85		30-150	B

METALS

Project Name: 450 JOHNSON AVE.**Lab Number:** L1931803**Project Number:** 170588001**Report Date:** 07/23/19**SAMPLE RESULTS**

Lab ID: L1931803-01

Date Collected: 07/18/19 09:17

Client ID: TMW02_071819

Date Received: 07/18/19

Sample Location: BROOKLYN, NY

Field Prep: Refer to COC

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab											
Aluminum, Dissolved	0.00499	J	mg/l	0.0100	0.00327	1	07/19/19 16:31	07/22/19 12:59	EPA 3005A	1,6020B	AM
Antimony, Dissolved	0.00078	J	mg/l	0.00400	0.00042	1	07/19/19 16:31	07/22/19 12:59	EPA 3005A	1,6020B	AM
Arsenic, Dissolved	0.00024	J	mg/l	0.00050	0.00016	1	07/19/19 16:31	07/22/19 12:59	EPA 3005A	1,6020B	AM
Barium, Dissolved	0.07312		mg/l	0.00050	0.00017	1	07/19/19 16:31	07/22/19 12:59	EPA 3005A	1,6020B	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	07/19/19 16:31	07/22/19 12:59	EPA 3005A	1,6020B	AM
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	07/19/19 16:31	07/22/19 12:59	EPA 3005A	1,6020B	AM
Calcium, Dissolved	58.3		mg/l	0.100	0.0394	1	07/19/19 16:31	07/22/19 12:59	EPA 3005A	1,6020B	AM
Chromium, Dissolved	0.00036	J	mg/l	0.00100	0.00017	1	07/19/19 16:31	07/22/19 12:59	EPA 3005A	1,6020B	AM
Cobalt, Dissolved	0.00235		mg/l	0.00050	0.00016	1	07/19/19 16:31	07/22/19 12:59	EPA 3005A	1,6020B	AM
Copper, Dissolved	0.00039	J	mg/l	0.00100	0.00038	1	07/19/19 16:31	07/22/19 12:59	EPA 3005A	1,6020B	AM
Iron, Dissolved	0.0663		mg/l	0.0500	0.0191	1	07/19/19 16:31	07/22/19 12:59	EPA 3005A	1,6020B	AM
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	07/19/19 16:31	07/22/19 12:59	EPA 3005A	1,6020B	AM
Magnesium, Dissolved	4.41		mg/l	0.0700	0.0242	1	07/19/19 16:31	07/22/19 12:59	EPA 3005A	1,6020B	AM
Manganese, Dissolved	0.4437		mg/l	0.00100	0.00044	1	07/19/19 16:31	07/22/19 12:59	EPA 3005A	1,6020B	AM
Mercury, Dissolved	ND		mg/l	0.00020	0.00009	1	07/19/19 14:27	07/22/19 12:27	EPA 7470A	1,7470A	GD
Nickel, Dissolved	0.00204		mg/l	0.00200	0.00055	1	07/19/19 16:31	07/22/19 12:59	EPA 3005A	1,6020B	AM
Potassium, Dissolved	5.95		mg/l	0.100	0.0309	1	07/19/19 16:31	07/22/19 12:59	EPA 3005A	1,6020B	AM
Selenium, Dissolved	0.00376	J	mg/l	0.00500	0.00173	1	07/19/19 16:31	07/22/19 12:59	EPA 3005A	1,6020B	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	07/19/19 16:31	07/22/19 12:59	EPA 3005A	1,6020B	AM
Sodium, Dissolved	10.2		mg/l	0.100	0.0293	1	07/19/19 16:31	07/22/19 12:59	EPA 3005A	1,6020B	AM
Thallium, Dissolved	ND		mg/l	0.00050	0.00014	1	07/19/19 16:31	07/22/19 12:59	EPA 3005A	1,6020B	AM
Vanadium, Dissolved	ND		mg/l	0.00500	0.00157	1	07/19/19 16:31	07/22/19 12:59	EPA 3005A	1,6020B	AM
Zinc, Dissolved	0.01894		mg/l	0.01000	0.00341	1	07/19/19 16:31	07/22/19 12:59	EPA 3005A	1,6020B	AM



Project Name: 450 JOHNSON AVE.**Lab Number:** L1931803**Project Number:** 170588001**Report Date:** 07/23/19**SAMPLE RESULTS**

Lab ID: L1931803-02

Date Collected: 07/18/19 11:25

Client ID: TMW08_071819

Date Received: 07/18/19

Sample Location: BROOKLYN, NY

Field Prep: Refer to COC

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab											
Aluminum, Dissolved	0.299		mg/l	0.0100	0.00327	1	07/19/19 16:31	07/22/19 13:03	EPA 3005A	1,6020B	AM
Antimony, Dissolved	0.00121	J	mg/l	0.00400	0.00042	1	07/19/19 16:31	07/22/19 13:03	EPA 3005A	1,6020B	AM
Arsenic, Dissolved	0.00065		mg/l	0.00050	0.00016	1	07/19/19 16:31	07/22/19 13:03	EPA 3005A	1,6020B	AM
Barium, Dissolved	0.05689		mg/l	0.00050	0.00017	1	07/19/19 16:31	07/22/19 13:03	EPA 3005A	1,6020B	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	07/19/19 16:31	07/22/19 13:03	EPA 3005A	1,6020B	AM
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	07/19/19 16:31	07/22/19 13:03	EPA 3005A	1,6020B	AM
Calcium, Dissolved	90.9		mg/l	0.100	0.0394	1	07/19/19 16:31	07/22/19 13:03	EPA 3005A	1,6020B	AM
Chromium, Dissolved	0.00103		mg/l	0.00100	0.00017	1	07/19/19 16:31	07/22/19 13:03	EPA 3005A	1,6020B	AM
Cobalt, Dissolved	0.00256		mg/l	0.00050	0.00016	1	07/19/19 16:31	07/22/19 13:03	EPA 3005A	1,6020B	AM
Copper, Dissolved	0.00226		mg/l	0.00100	0.00038	1	07/19/19 16:31	07/22/19 13:03	EPA 3005A	1,6020B	AM
Iron, Dissolved	0.476		mg/l	0.0500	0.0191	1	07/19/19 16:31	07/22/19 13:03	EPA 3005A	1,6020B	AM
Lead, Dissolved	0.00335		mg/l	0.00100	0.00034	1	07/19/19 16:31	07/22/19 13:03	EPA 3005A	1,6020B	AM
Magnesium, Dissolved	7.69		mg/l	0.0700	0.0242	1	07/19/19 16:31	07/22/19 13:03	EPA 3005A	1,6020B	AM
Manganese, Dissolved	1.631		mg/l	0.00100	0.00044	1	07/19/19 16:31	07/22/19 13:03	EPA 3005A	1,6020B	AM
Mercury, Dissolved	ND		mg/l	0.00020	0.00009	1	07/22/19 09:18	07/22/19 12:15	EPA 7470A	1,7470A	GD
Nickel, Dissolved	0.00313		mg/l	0.00200	0.00055	1	07/19/19 16:31	07/22/19 13:03	EPA 3005A	1,6020B	AM
Potassium, Dissolved	13.4		mg/l	0.100	0.0309	1	07/19/19 16:31	07/22/19 13:03	EPA 3005A	1,6020B	AM
Selenium, Dissolved	0.00322	J	mg/l	0.00500	0.00173	1	07/19/19 16:31	07/22/19 13:03	EPA 3005A	1,6020B	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	07/19/19 16:31	07/22/19 13:03	EPA 3005A	1,6020B	AM
Sodium, Dissolved	62.9		mg/l	0.100	0.0293	1	07/19/19 16:31	07/22/19 13:03	EPA 3005A	1,6020B	AM
Thallium, Dissolved	ND		mg/l	0.00050	0.00014	1	07/19/19 16:31	07/22/19 13:03	EPA 3005A	1,6020B	AM
Vanadium, Dissolved	ND		mg/l	0.00500	0.00157	1	07/19/19 16:31	07/22/19 13:03	EPA 3005A	1,6020B	AM
Zinc, Dissolved	0.00389	J	mg/l	0.01000	0.00341	1	07/19/19 16:31	07/22/19 13:03	EPA 3005A	1,6020B	AM



Project Name: 450 JOHNSON AVE.**Lab Number:** L1931803**Project Number:** 170588001**Report Date:** 07/23/19**SAMPLE RESULTS**

Lab ID: L1931803-03

Date Collected: 07/18/19 00:00

Client ID: DUP02_071819

Date Received: 07/18/19

Sample Location: BROOKLYN, NY

Field Prep: Refer to COC

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab											
Aluminum, Dissolved	1.24		mg/l	0.0100	0.00327	1	07/19/19 16:31	07/22/19 13:08	EPA 3005A	1,6020B	AM
Antimony, Dissolved	0.00089	J	mg/l	0.00400	0.00042	1	07/19/19 16:31	07/22/19 13:08	EPA 3005A	1,6020B	AM
Arsenic, Dissolved	0.00087		mg/l	0.00050	0.00016	1	07/19/19 16:31	07/22/19 13:08	EPA 3005A	1,6020B	AM
Barium, Dissolved	0.09016		mg/l	0.00050	0.00017	1	07/19/19 16:31	07/22/19 13:08	EPA 3005A	1,6020B	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	07/19/19 16:31	07/22/19 13:08	EPA 3005A	1,6020B	AM
Cadmium, Dissolved	0.00008	J	mg/l	0.00020	0.00005	1	07/19/19 16:31	07/22/19 13:08	EPA 3005A	1,6020B	AM
Calcium, Dissolved	58.6		mg/l	0.100	0.0394	1	07/19/19 16:31	07/22/19 13:08	EPA 3005A	1,6020B	AM
Chromium, Dissolved	0.00385		mg/l	0.00100	0.00017	1	07/19/19 16:31	07/22/19 13:08	EPA 3005A	1,6020B	AM
Cobalt, Dissolved	0.00349		mg/l	0.00050	0.00016	1	07/19/19 16:31	07/22/19 13:08	EPA 3005A	1,6020B	AM
Copper, Dissolved	0.00687		mg/l	0.00100	0.00038	1	07/19/19 16:31	07/22/19 13:08	EPA 3005A	1,6020B	AM
Iron, Dissolved	2.65		mg/l	0.0500	0.0191	1	07/19/19 16:31	07/22/19 13:08	EPA 3005A	1,6020B	AM
Lead, Dissolved	0.01981		mg/l	0.00100	0.00034	1	07/19/19 16:31	07/22/19 13:08	EPA 3005A	1,6020B	AM
Magnesium, Dissolved	4.86		mg/l	0.0700	0.0242	1	07/19/19 16:31	07/22/19 13:08	EPA 3005A	1,6020B	AM
Manganese, Dissolved	0.4930		mg/l	0.00100	0.00044	1	07/19/19 16:31	07/22/19 13:08	EPA 3005A	1,6020B	AM
Mercury, Dissolved	ND		mg/l	0.00020	0.00009	1	07/19/19 14:27	07/22/19 12:32	EPA 7470A	1,7470A	GD
Nickel, Dissolved	0.00436		mg/l	0.00200	0.00055	1	07/19/19 16:31	07/22/19 13:08	EPA 3005A	1,6020B	AM
Potassium, Dissolved	6.16		mg/l	0.100	0.0309	1	07/19/19 16:31	07/22/19 13:08	EPA 3005A	1,6020B	AM
Selenium, Dissolved	0.00307	J	mg/l	0.00500	0.00173	1	07/19/19 16:31	07/22/19 13:08	EPA 3005A	1,6020B	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	07/19/19 16:31	07/22/19 13:08	EPA 3005A	1,6020B	AM
Sodium, Dissolved	10.6		mg/l	0.100	0.0293	1	07/19/19 16:31	07/22/19 13:08	EPA 3005A	1,6020B	AM
Thallium, Dissolved	ND		mg/l	0.00050	0.00014	1	07/19/19 16:31	07/22/19 13:08	EPA 3005A	1,6020B	AM
Vanadium, Dissolved	0.00401	J	mg/l	0.00500	0.00157	1	07/19/19 16:31	07/22/19 13:08	EPA 3005A	1,6020B	AM
Zinc, Dissolved	0.04048		mg/l	0.01000	0.00341	1	07/19/19 16:31	07/22/19 13:08	EPA 3005A	1,6020B	AM



Project Name: 450 JOHNSON AVE.**Lab Number:** L1931803**Project Number:** 170588001**Report Date:** 07/23/19**SAMPLE RESULTS**

Lab ID: L1931803-04

Date Collected: 07/18/19 11:20

Client ID: SB08_5.0-5.5

Date Received: 07/18/19

Sample Location: BROOKLYN, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 92%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	6070		mg/kg	8.41	2.27	2	07/19/19 17:50	07/22/19 13:55	EPA 3050B	1,6010D	LC
Antimony, Total	0.942	J	mg/kg	4.20	0.320	2	07/19/19 17:50	07/22/19 13:55	EPA 3050B	1,6010D	LC
Arsenic, Total	2.22		mg/kg	0.841	0.175	2	07/19/19 17:50	07/22/19 13:55	EPA 3050B	1,6010D	LC
Barium, Total	34.8		mg/kg	0.841	0.146	2	07/19/19 17:50	07/22/19 13:55	EPA 3050B	1,6010D	LC
Beryllium, Total	0.336	J	mg/kg	0.420	0.028	2	07/19/19 17:50	07/22/19 13:55	EPA 3050B	1,6010D	LC
Cadmium, Total	ND		mg/kg	0.841	0.082	2	07/19/19 17:50	07/22/19 13:55	EPA 3050B	1,6010D	LC
Calcium, Total	977		mg/kg	8.41	2.94	2	07/19/19 17:50	07/22/19 13:55	EPA 3050B	1,6010D	LC
Chromium, Total	17.6		mg/kg	0.841	0.081	2	07/19/19 17:50	07/22/19 13:55	EPA 3050B	1,6010D	LC
Cobalt, Total	5.69		mg/kg	1.68	0.140	2	07/19/19 17:50	07/22/19 13:55	EPA 3050B	1,6010D	LC
Copper, Total	14.0		mg/kg	0.841	0.217	2	07/19/19 17:50	07/22/19 13:55	EPA 3050B	1,6010D	LC
Iron, Total	16700		mg/kg	4.20	0.760	2	07/19/19 17:50	07/22/19 13:55	EPA 3050B	1,6010D	LC
Lead, Total	41.2		mg/kg	4.20	0.225	2	07/19/19 17:50	07/22/19 13:55	EPA 3050B	1,6010D	LC
Magnesium, Total	1420		mg/kg	8.41	1.30	2	07/19/19 17:50	07/22/19 13:55	EPA 3050B	1,6010D	LC
Manganese, Total	284		mg/kg	0.841	0.134	2	07/19/19 17:50	07/22/19 13:55	EPA 3050B	1,6010D	LC
Mercury, Total	0.281		mg/kg	0.070	0.045	1	07/19/19 08:50	07/22/19 12:53	EPA 7471B	1,7471B	GD
Nickel, Total	9.40		mg/kg	2.10	0.204	2	07/19/19 17:50	07/22/19 13:55	EPA 3050B	1,6010D	LC
Potassium, Total	637		mg/kg	210	12.1	2	07/19/19 17:50	07/22/19 13:55	EPA 3050B	1,6010D	LC
Selenium, Total	ND		mg/kg	1.68	0.217	2	07/19/19 17:50	07/22/19 13:55	EPA 3050B	1,6010D	LC
Silver, Total	ND		mg/kg	0.841	0.238	2	07/19/19 17:50	07/22/19 13:55	EPA 3050B	1,6010D	LC
Sodium, Total	48.5	J	mg/kg	168	2.65	2	07/19/19 17:50	07/22/19 13:55	EPA 3050B	1,6010D	LC
Thallium, Total	ND		mg/kg	1.68	0.265	2	07/19/19 17:50	07/22/19 13:55	EPA 3050B	1,6010D	LC
Vanadium, Total	22.8		mg/kg	0.841	0.171	2	07/19/19 17:50	07/22/19 13:55	EPA 3050B	1,6010D	LC
Zinc, Total	33.0		mg/kg	4.20	0.246	2	07/19/19 17:50	07/22/19 13:55	EPA 3050B	1,6010D	LC



Project Name: 450 JOHNSON AVE.**Lab Number:** L1931803**Project Number:** 170588001**Report Date:** 07/23/19**SAMPLE RESULTS**

Lab ID: L1931803-05

Date Collected: 07/18/19 11:10

Client ID: SB08_14.0-14.5

Date Received: 07/18/19

Sample Location: BROOKLYN, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 72%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	8780		mg/kg	11.1	2.99	2	07/19/19 17:50	07/22/19 14:12	EPA 3050B	1,6010D	LC
Antimony, Total	1.51	J	mg/kg	5.54	0.421	2	07/19/19 17:50	07/22/19 14:12	EPA 3050B	1,6010D	LC
Arsenic, Total	3.89		mg/kg	1.11	0.230	2	07/19/19 17:50	07/22/19 14:12	EPA 3050B	1,6010D	LC
Barium, Total	45.7		mg/kg	1.11	0.193	2	07/19/19 17:50	07/22/19 14:12	EPA 3050B	1,6010D	LC
Beryllium, Total	0.521	J	mg/kg	0.554	0.037	2	07/19/19 17:50	07/22/19 14:12	EPA 3050B	1,6010D	LC
Cadmium, Total	ND		mg/kg	1.11	0.109	2	07/19/19 17:50	07/22/19 14:12	EPA 3050B	1,6010D	LC
Calcium, Total	1190		mg/kg	11.1	3.88	2	07/19/19 17:50	07/22/19 14:12	EPA 3050B	1,6010D	LC
Chromium, Total	22.6		mg/kg	1.11	0.106	2	07/19/19 17:50	07/22/19 14:12	EPA 3050B	1,6010D	LC
Cobalt, Total	15.3		mg/kg	2.22	0.184	2	07/19/19 17:50	07/22/19 14:12	EPA 3050B	1,6010D	LC
Copper, Total	18.0		mg/kg	1.11	0.286	2	07/19/19 17:50	07/22/19 14:12	EPA 3050B	1,6010D	LC
Iron, Total	28900		mg/kg	5.54	1.00	2	07/19/19 17:50	07/22/19 14:12	EPA 3050B	1,6010D	LC
Lead, Total	64.2		mg/kg	5.54	0.297	2	07/19/19 17:50	07/22/19 14:12	EPA 3050B	1,6010D	LC
Magnesium, Total	1810		mg/kg	11.1	1.71	2	07/19/19 17:50	07/22/19 14:12	EPA 3050B	1,6010D	LC
Manganese, Total	309		mg/kg	1.11	0.176	2	07/19/19 17:50	07/22/19 14:12	EPA 3050B	1,6010D	LC
Mercury, Total	0.501		mg/kg	0.088	0.057	1	07/19/19 08:50	07/22/19 12:55	EPA 7471B	1,7471B	GD
Nickel, Total	32.3		mg/kg	2.77	0.268	2	07/19/19 17:50	07/22/19 14:12	EPA 3050B	1,6010D	LC
Potassium, Total	588		mg/kg	277	16.0	2	07/19/19 17:50	07/22/19 14:12	EPA 3050B	1,6010D	LC
Selenium, Total	ND		mg/kg	2.22	0.286	2	07/19/19 17:50	07/22/19 14:12	EPA 3050B	1,6010D	LC
Silver, Total	ND		mg/kg	1.11	0.314	2	07/19/19 17:50	07/22/19 14:12	EPA 3050B	1,6010D	LC
Sodium, Total	175	J	mg/kg	222	3.49	2	07/19/19 17:50	07/22/19 14:12	EPA 3050B	1,6010D	LC
Thallium, Total	ND		mg/kg	2.22	0.349	2	07/19/19 17:50	07/22/19 14:12	EPA 3050B	1,6010D	LC
Vanadium, Total	30.6		mg/kg	1.11	0.225	2	07/19/19 17:50	07/22/19 14:12	EPA 3050B	1,6010D	LC
Zinc, Total	37.5		mg/kg	5.54	0.325	2	07/19/19 17:50	07/22/19 14:12	EPA 3050B	1,6010D	LC



Project Name: 450 JOHNSON AVE.**Lab Number:** L1931803**Project Number:** 170588001**Report Date:** 07/23/19**SAMPLE RESULTS**

Lab ID: L1931803-06

Date Collected: 07/18/19 10:15

Client ID: SB12_6.5-7.0

Date Received: 07/18/19

Sample Location: BROOKLYN, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 89%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	5340		mg/kg	8.96	2.42	2	07/19/19 17:50	07/22/19 14:16	EPA 3050B	1,6010D	LC
Antimony, Total	2.01	J	mg/kg	4.48	0.340	2	07/19/19 17:50	07/22/19 14:16	EPA 3050B	1,6010D	LC
Arsenic, Total	11.2		mg/kg	0.896	0.186	2	07/19/19 17:50	07/22/19 14:16	EPA 3050B	1,6010D	LC
Barium, Total	94.9		mg/kg	0.896	0.156	2	07/19/19 17:50	07/22/19 14:16	EPA 3050B	1,6010D	LC
Beryllium, Total	0.331	J	mg/kg	0.448	0.030	2	07/19/19 17:50	07/22/19 14:16	EPA 3050B	1,6010D	LC
Cadmium, Total	ND		mg/kg	0.896	0.088	2	07/19/19 17:50	07/22/19 14:16	EPA 3050B	1,6010D	LC
Calcium, Total	4270		mg/kg	8.96	3.14	2	07/19/19 17:50	07/22/19 14:16	EPA 3050B	1,6010D	LC
Chromium, Total	13.8		mg/kg	0.896	0.086	2	07/19/19 17:50	07/22/19 14:16	EPA 3050B	1,6010D	LC
Cobalt, Total	5.76		mg/kg	1.79	0.149	2	07/19/19 17:50	07/22/19 14:16	EPA 3050B	1,6010D	LC
Copper, Total	38.2		mg/kg	0.896	0.231	2	07/19/19 17:50	07/22/19 14:16	EPA 3050B	1,6010D	LC
Iron, Total	16800		mg/kg	4.48	0.809	2	07/19/19 17:50	07/22/19 14:16	EPA 3050B	1,6010D	LC
Lead, Total	193		mg/kg	4.48	0.240	2	07/19/19 17:50	07/22/19 14:16	EPA 3050B	1,6010D	LC
Magnesium, Total	1640		mg/kg	8.96	1.38	2	07/19/19 17:50	07/22/19 14:16	EPA 3050B	1,6010D	LC
Manganese, Total	321		mg/kg	0.896	0.142	2	07/19/19 17:50	07/22/19 14:16	EPA 3050B	1,6010D	LC
Mercury, Total	0.772		mg/kg	0.071	0.046	1	07/19/19 08:50	07/22/19 12:57	EPA 7471B	1,7471B	GD
Nickel, Total	12.2		mg/kg	2.24	0.217	2	07/19/19 17:50	07/22/19 14:16	EPA 3050B	1,6010D	LC
Potassium, Total	588		mg/kg	224	12.9	2	07/19/19 17:50	07/22/19 14:16	EPA 3050B	1,6010D	LC
Selenium, Total	ND		mg/kg	1.79	0.231	2	07/19/19 17:50	07/22/19 14:16	EPA 3050B	1,6010D	LC
Silver, Total	ND		mg/kg	0.896	0.254	2	07/19/19 17:50	07/22/19 14:16	EPA 3050B	1,6010D	LC
Sodium, Total	163	J	mg/kg	179	2.82	2	07/19/19 17:50	07/22/19 14:16	EPA 3050B	1,6010D	LC
Thallium, Total	ND		mg/kg	1.79	0.282	2	07/19/19 17:50	07/22/19 14:16	EPA 3050B	1,6010D	LC
Vanadium, Total	20.0		mg/kg	0.896	0.182	2	07/19/19 17:50	07/22/19 14:16	EPA 3050B	1,6010D	LC
Zinc, Total	158		mg/kg	4.48	0.262	2	07/19/19 17:50	07/22/19 14:16	EPA 3050B	1,6010D	LC



Project Name: 450 JOHNSON AVE.**Lab Number:** L1931803**Project Number:** 170588001**Report Date:** 07/23/19**SAMPLE RESULTS**

Lab ID: L1931803-07

Date Collected: 07/18/19 15:00

Client ID: SB07_4.5-5.0

Date Received: 07/18/19

Sample Location: BROOKLYN, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 88%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	2490		mg/kg	8.81	2.38	2	07/19/19 17:50	07/22/19 14:20	EPA 3050B	1,6010D	LC
Antimony, Total	4.48		mg/kg	4.40	0.335	2	07/19/19 17:50	07/22/19 14:20	EPA 3050B	1,6010D	LC
Arsenic, Total	67.0		mg/kg	0.881	0.183	2	07/19/19 17:50	07/22/19 14:20	EPA 3050B	1,6010D	LC
Barium, Total	84.3		mg/kg	0.881	0.153	2	07/19/19 17:50	07/22/19 14:20	EPA 3050B	1,6010D	LC
Beryllium, Total	0.167	J	mg/kg	0.440	0.029	2	07/19/19 17:50	07/22/19 14:20	EPA 3050B	1,6010D	LC
Cadmium, Total	1.27		mg/kg	0.881	0.086	2	07/19/19 17:50	07/22/19 14:20	EPA 3050B	1,6010D	LC
Calcium, Total	17300		mg/kg	8.81	3.08	2	07/19/19 17:50	07/22/19 14:20	EPA 3050B	1,6010D	LC
Chromium, Total	14.8		mg/kg	0.881	0.085	2	07/19/19 17:50	07/22/19 14:20	EPA 3050B	1,6010D	LC
Cobalt, Total	9.14		mg/kg	1.76	0.146	2	07/19/19 17:50	07/22/19 14:20	EPA 3050B	1,6010D	LC
Copper, Total	42.0		mg/kg	0.881	0.227	2	07/19/19 17:50	07/22/19 14:20	EPA 3050B	1,6010D	LC
Iron, Total	58000		mg/kg	4.40	0.796	2	07/19/19 17:50	07/22/19 14:20	EPA 3050B	1,6010D	LC
Lead, Total	131		mg/kg	4.40	0.236	2	07/19/19 17:50	07/22/19 14:20	EPA 3050B	1,6010D	LC
Magnesium, Total	9700		mg/kg	8.81	1.36	2	07/19/19 17:50	07/22/19 14:20	EPA 3050B	1,6010D	LC
Manganese, Total	329		mg/kg	0.881	0.140	2	07/19/19 17:50	07/22/19 14:20	EPA 3050B	1,6010D	LC
Mercury, Total	0.527		mg/kg	0.072	0.047	1	07/19/19 08:50	07/22/19 12:59	EPA 7471B	1,7471B	GD
Nickel, Total	16.9		mg/kg	2.20	0.213	2	07/19/19 17:50	07/22/19 14:20	EPA 3050B	1,6010D	LC
Potassium, Total	428		mg/kg	220	12.7	2	07/19/19 17:50	07/22/19 14:20	EPA 3050B	1,6010D	LC
Selenium, Total	7.85		mg/kg	1.76	0.227	2	07/19/19 17:50	07/22/19 14:20	EPA 3050B	1,6010D	LC
Silver, Total	ND		mg/kg	0.881	0.249	2	07/19/19 17:50	07/22/19 14:20	EPA 3050B	1,6010D	LC
Sodium, Total	136	J	mg/kg	176	2.78	2	07/19/19 17:50	07/22/19 14:20	EPA 3050B	1,6010D	LC
Thallium, Total	0.634	J	mg/kg	1.76	0.278	2	07/19/19 17:50	07/22/19 14:20	EPA 3050B	1,6010D	LC
Vanadium, Total	31.8		mg/kg	0.881	0.179	2	07/19/19 17:50	07/22/19 14:20	EPA 3050B	1,6010D	LC
Zinc, Total	197		mg/kg	4.40	0.258	2	07/19/19 17:50	07/22/19 14:20	EPA 3050B	1,6010D	LC



Project Name: 450 JOHNSON AVE.**Lab Number:** L1931803**Project Number:** 170588001**Report Date:** 07/23/19**SAMPLE RESULTS**

Lab ID: L1931803-08

Date Collected: 07/18/19 14:05

Client ID: SB14_4.5-5.0

Date Received: 07/18/19

Sample Location: BROOKLYN, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 90%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	6400		mg/kg	8.71	2.35	2	07/19/19 17:50	07/22/19 14:24	EPA 3050B	1,6010D	LC
Antimony, Total	2.03	J	mg/kg	4.36	0.331	2	07/19/19 17:50	07/22/19 14:24	EPA 3050B	1,6010D	LC
Arsenic, Total	5.18		mg/kg	0.871	0.181	2	07/19/19 17:50	07/22/19 14:24	EPA 3050B	1,6010D	LC
Barium, Total	81.8		mg/kg	0.871	0.152	2	07/19/19 17:50	07/22/19 14:24	EPA 3050B	1,6010D	LC
Beryllium, Total	0.436		mg/kg	0.436	0.029	2	07/19/19 17:50	07/22/19 14:24	EPA 3050B	1,6010D	LC
Cadmium, Total	ND		mg/kg	0.871	0.085	2	07/19/19 17:50	07/22/19 14:24	EPA 3050B	1,6010D	LC
Calcium, Total	1880		mg/kg	8.71	3.05	2	07/19/19 17:50	07/22/19 14:24	EPA 3050B	1,6010D	LC
Chromium, Total	14.6		mg/kg	0.871	0.084	2	07/19/19 17:50	07/22/19 14:24	EPA 3050B	1,6010D	LC
Cobalt, Total	6.57		mg/kg	1.74	0.145	2	07/19/19 17:50	07/22/19 14:24	EPA 3050B	1,6010D	LC
Copper, Total	32.5		mg/kg	0.871	0.225	2	07/19/19 17:50	07/22/19 14:24	EPA 3050B	1,6010D	LC
Iron, Total	27000		mg/kg	4.36	0.787	2	07/19/19 17:50	07/22/19 14:24	EPA 3050B	1,6010D	LC
Lead, Total	170		mg/kg	4.36	0.234	2	07/19/19 17:50	07/22/19 14:24	EPA 3050B	1,6010D	LC
Magnesium, Total	2530		mg/kg	8.71	1.34	2	07/19/19 17:50	07/22/19 14:24	EPA 3050B	1,6010D	LC
Manganese, Total	466		mg/kg	0.871	0.138	2	07/19/19 17:50	07/22/19 14:24	EPA 3050B	1,6010D	LC
Mercury, Total	0.725		mg/kg	0.070	0.046	1	07/19/19 08:50	07/22/19 13:00	EPA 7471B	1,7471B	GD
Nickel, Total	24.2		mg/kg	2.18	0.211	2	07/19/19 17:50	07/22/19 14:24	EPA 3050B	1,6010D	LC
Potassium, Total	715		mg/kg	218	12.5	2	07/19/19 17:50	07/22/19 14:24	EPA 3050B	1,6010D	LC
Selenium, Total	ND		mg/kg	1.74	0.225	2	07/19/19 17:50	07/22/19 14:24	EPA 3050B	1,6010D	LC
Silver, Total	ND		mg/kg	0.871	0.246	2	07/19/19 17:50	07/22/19 14:24	EPA 3050B	1,6010D	LC
Sodium, Total	86.4	J	mg/kg	174	2.74	2	07/19/19 17:50	07/22/19 14:24	EPA 3050B	1,6010D	LC
Thallium, Total	ND		mg/kg	1.74	0.274	2	07/19/19 17:50	07/22/19 14:24	EPA 3050B	1,6010D	LC
Vanadium, Total	33.5		mg/kg	0.871	0.177	2	07/19/19 17:50	07/22/19 14:24	EPA 3050B	1,6010D	LC
Zinc, Total	416		mg/kg	4.36	0.255	2	07/19/19 17:50	07/22/19 14:24	EPA 3050B	1,6010D	LC



Project Name: 450 JOHNSON AVE.

Lab Number: L1931803

Project Number: 170588001

Report Date: 07/23/19

Method Blank Analysis Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 04-08 Batch: WG1261950-1										
Mercury, Total	ND		mg/kg	0.083	0.054	1	07/19/19 08:50	07/22/19 12:26	1,7471B	GD

Prep Information

Digestion Method: EPA 7471B

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab for sample(s): 01,03 Batch: WG1262134-1										
Mercury, Dissolved	ND		mg/l	0.00020	0.00009	1	07/19/19 14:27	07/22/19 12:23	1,7470A	GD

Prep Information

Digestion Method: EPA 7470A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab for sample(s): 01-03 Batch: WG1262151-1										
Aluminum, Dissolved	ND		mg/l	0.0100	0.00327	1	07/19/19 16:31	07/22/19 10:52	1,6020B	AM
Antimony, Dissolved	0.00110	J	mg/l	0.00400	0.00042	1	07/19/19 16:31	07/22/19 10:52	1,6020B	AM
Arsenic, Dissolved	ND		mg/l	0.00050	0.00016	1	07/19/19 16:31	07/22/19 10:52	1,6020B	AM
Barium, Dissolved	ND		mg/l	0.00050	0.00017	1	07/19/19 16:31	07/22/19 10:52	1,6020B	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	07/19/19 16:31	07/22/19 10:52	1,6020B	AM
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	07/19/19 16:31	07/22/19 10:52	1,6020B	AM
Calcium, Dissolved	ND		mg/l	0.100	0.0394	1	07/19/19 16:31	07/22/19 10:52	1,6020B	AM
Chromium, Dissolved	ND		mg/l	0.00100	0.00017	1	07/19/19 16:31	07/22/19 10:52	1,6020B	AM
Cobalt, Dissolved	ND		mg/l	0.00050	0.00016	1	07/19/19 16:31	07/22/19 10:52	1,6020B	AM
Copper, Dissolved	ND		mg/l	0.00100	0.00038	1	07/19/19 16:31	07/22/19 10:52	1,6020B	AM
Iron, Dissolved	0.0288	J	mg/l	0.0500	0.0191	1	07/19/19 16:31	07/22/19 10:52	1,6020B	AM
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	07/19/19 16:31	07/22/19 10:52	1,6020B	AM
Magnesium, Dissolved	ND		mg/l	0.0700	0.0242	1	07/19/19 16:31	07/22/19 10:52	1,6020B	AM
Manganese, Dissolved	ND		mg/l	0.00100	0.00044	1	07/19/19 16:31	07/22/19 10:52	1,6020B	AM
Nickel, Dissolved	ND		mg/l	0.00200	0.00055	1	07/19/19 16:31	07/22/19 10:52	1,6020B	AM



Project Name: 450 JOHNSON AVE.

Lab Number: L1931803

Project Number: 170588001

Report Date: 07/23/19

Method Blank Analysis Batch Quality Control

Potassium, Dissolved	ND	mg/l	0.100	0.0309	1	07/19/19 16:31	07/22/19 10:52	1,6020B	AM
Selenium, Dissolved	ND	mg/l	0.00500	0.00173	1	07/19/19 16:31	07/22/19 10:52	1,6020B	AM
Silver, Dissolved	ND	mg/l	0.00040	0.00016	1	07/19/19 16:31	07/22/19 10:52	1,6020B	AM
Sodium, Dissolved	0.0495 J	mg/l	0.100	0.0293	1	07/19/19 16:31	07/22/19 10:52	1,6020B	AM
Thallium, Dissolved	ND	mg/l	0.00050	0.00014	1	07/19/19 16:31	07/22/19 10:52	1,6020B	AM
Vanadium, Dissolved	ND	mg/l	0.00500	0.00157	1	07/19/19 16:31	07/22/19 10:52	1,6020B	AM
Zinc, Dissolved	ND	mg/l	0.01000	0.00341	1	07/19/19 16:31	07/22/19 10:52	1,6020B	AM

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 04-08 Batch: WG1262216-1										
Aluminum, Total	ND		mg/kg	4.00	1.08	1	07/19/19 17:50	07/22/19 13:20	1,6010D	LC
Antimony, Total	ND		mg/kg	2.00	0.152	1	07/19/19 17:50	07/22/19 13:20	1,6010D	LC
Arsenic, Total	ND		mg/kg	0.400	0.083	1	07/19/19 17:50	07/22/19 13:20	1,6010D	LC
Barium, Total	ND		mg/kg	0.400	0.070	1	07/19/19 17:50	07/22/19 13:20	1,6010D	LC
Beryllium, Total	ND		mg/kg	0.200	0.013	1	07/19/19 17:50	07/22/19 13:20	1,6010D	LC
Cadmium, Total	ND		mg/kg	0.400	0.039	1	07/19/19 17:50	07/22/19 13:20	1,6010D	LC
Calcium, Total	ND		mg/kg	4.00	1.40	1	07/19/19 17:50	07/22/19 13:20	1,6010D	LC
Chromium, Total	ND		mg/kg	0.400	0.038	1	07/19/19 17:50	07/22/19 13:20	1,6010D	LC
Cobalt, Total	ND		mg/kg	0.800	0.066	1	07/19/19 17:50	07/22/19 13:20	1,6010D	LC
Copper, Total	ND		mg/kg	0.400	0.103	1	07/19/19 17:50	07/22/19 13:20	1,6010D	LC
Iron, Total	ND		mg/kg	2.00	0.361	1	07/19/19 17:50	07/22/19 13:20	1,6010D	LC
Lead, Total	ND		mg/kg	2.00	0.107	1	07/19/19 17:50	07/22/19 13:20	1,6010D	LC
Magnesium, Total	ND		mg/kg	4.00	0.616	1	07/19/19 17:50	07/22/19 13:20	1,6010D	LC
Manganese, Total	ND		mg/kg	0.400	0.064	1	07/19/19 17:50	07/22/19 13:20	1,6010D	LC
Nickel, Total	ND		mg/kg	1.00	0.097	1	07/19/19 17:50	07/22/19 13:20	1,6010D	LC
Potassium, Total	ND		mg/kg	100	5.76	1	07/19/19 17:50	07/22/19 13:20	1,6010D	LC
Selenium, Total	ND		mg/kg	0.800	0.103	1	07/19/19 17:50	07/22/19 13:20	1,6010D	LC
Silver, Total	ND		mg/kg	0.400	0.113	1	07/19/19 17:50	07/22/19 13:20	1,6010D	LC
Sodium, Total	2.01	J	mg/kg	80.0	1.26	1	07/19/19 17:50	07/22/19 13:20	1,6010D	LC
Thallium, Total	ND		mg/kg	0.800	0.126	1	07/19/19 17:50	07/22/19 13:20	1,6010D	LC
Vanadium, Total	ND		mg/kg	0.400	0.081	1	07/19/19 17:50	07/22/19 13:20	1,6010D	LC
Zinc, Total	ND		mg/kg	2.00	0.117	1	07/19/19 17:50	07/22/19 13:20	1,6010D	LC



Project Name: 450 JOHNSON AVE.

Lab Number: L1931803

Project Number: 170588001

Report Date: 07/23/19

Method Blank Analysis Batch Quality Control

Prep Information

Digestion Method: EPA 3050B

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab for sample(s): 02 Batch: WG1262746-1										
Mercury, Dissolved	ND		mg/l	0.00020	0.00009	1	07/22/19 09:18	07/22/19 12:11	1,7470A	GD

Prep Information

Digestion Method: EPA 7470A



Lab Control Sample Analysis

Batch Quality Control

Project Name: 450 JOHNSON AVE.

Project Number: 170588001

Lab Number: L1931803

Report Date: 07/23/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 04-08 Batch: WG1261950-2 SRM Lot Number: D105-540								
Mercury, Total	94		-		60-141	-		
Dissolved Metals - Mansfield Lab Associated sample(s): 01,03 Batch: WG1262134-2								
Mercury, Dissolved	95		-		80-120	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: 450 JOHNSON AVE.

Project Number: 170588001

Lab Number: L1931803

Report Date: 07/23/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-03 Batch: WG1262151-2					
Aluminum, Dissolved	108	-	80-120	-	
Antimony, Dissolved	104	-	80-120	-	
Arsenic, Dissolved	107	-	80-120	-	
Barium, Dissolved	106	-	80-120	-	
Beryllium, Dissolved	109	-	80-120	-	
Cadmium, Dissolved	108	-	80-120	-	
Calcium, Dissolved	114	-	80-120	-	
Chromium, Dissolved	107	-	80-120	-	
Cobalt, Dissolved	106	-	80-120	-	
Copper, Dissolved	102	-	80-120	-	
Iron, Dissolved	120	-	80-120	-	
Lead, Dissolved	107	-	80-120	-	
Magnesium, Dissolved	108	-	80-120	-	
Manganese, Dissolved	103	-	80-120	-	
Nickel, Dissolved	107	-	80-120	-	
Potassium, Dissolved	102	-	80-120	-	
Selenium, Dissolved	100	-	80-120	-	
Silver, Dissolved	104	-	80-120	-	
Sodium, Dissolved	101	-	80-120	-	
Thallium, Dissolved	105	-	80-120	-	
Vanadium, Dissolved	107	-	80-120	-	

Lab Control Sample Analysis**Batch Quality Control****Project Name:** 450 JOHNSON AVE.**Project Number:** 170588001**Lab Number:** L1931803**Report Date:** 07/23/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-03 Batch: WG1262151-2					
Zinc, Dissolved	110	-	80-120	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: 450 JOHNSON AVE.

Project Number: 170588001

Lab Number: L1931803

Report Date: 07/23/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 04-08 Batch: WG1262216-2 SRM Lot Number: D105-540					
Aluminum, Total	59	-	51-149	-	
Antimony, Total	128	-	19-249	-	
Arsenic, Total	97	-	70-130	-	
Barium, Total	89	-	75-125	-	
Beryllium, Total	100	-	75-125	-	
Cadmium, Total	101	-	75-125	-	
Calcium, Total	85	-	73-127	-	
Chromium, Total	87	-	70-130	-	
Cobalt, Total	96	-	75-125	-	
Copper, Total	91	-	75-125	-	
Iron, Total	74	-	38-162	-	
Lead, Total	87	-	71-128	-	
Magnesium, Total	80	-	63-137	-	
Manganese, Total	86	-	76-124	-	
Nickel, Total	98	-	70-131	-	
Potassium, Total	73	-	60-140	-	
Selenium, Total	94	-	63-137	-	
Silver, Total	88	-	69-131	-	
Sodium, Total	97	-	37-162	-	
Thallium, Total	97	-	68-132	-	
Vanadium, Total	86	-	65-135	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: 450 JOHNSON AVE.

Project Number: 170588001

Lab Number: L1931803

Report Date: 07/23/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 04-08 Batch: WG1262216-2 SRM Lot Number: D105-540					
Zinc, Total	92	-	70-130	-	
Dissolved Metals - Mansfield Lab Associated sample(s): 02 Batch: WG1262746-2					
Mercury, Dissolved	105	-	80-120	-	

Matrix Spike Analysis

Batch Quality Control

Project Name: 450 JOHNSON AVE.

Lab Number: L1931803

Project Number: 170588001

Report Date: 07/23/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 04-08 QC Batch ID: WG1261950-3 QC Sample: L1931536-01 Client ID: MS Sample												
Mercury, Total	ND	0.182	0.223	123	Q	-	-		80-120	-		20
Dissolved Metals - Mansfield Lab Associated sample(s): 01,03 QC Batch ID: WG1262134-3 QC Sample: L1930207-01 Client ID: MS Sample												
Mercury, Dissolved	ND	0.005	0.00487	97		-	-		75-125	-		20

Matrix Spike Analysis

Batch Quality Control

Project Name: 450 JOHNSON AVE.

Project Number: 170588001

Lab Number: L1931803

Report Date: 07/23/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-03 QC Batch ID: WG1262151-3 QC Sample: L1930207-01 Client ID: MS Sample									
Aluminum, Dissolved	ND	2	2.15	108	-	-	75-125	-	20
Antimony, Dissolved	0.00124J	0.5	0.4509	90	-	-	75-125	-	20
Arsenic, Dissolved	ND	0.12	0.1346	112	-	-	75-125	-	20
Barium, Dissolved	0.1433	2	2.259	106	-	-	75-125	-	20
Beryllium, Dissolved	ND	0.05	0.05161	103	-	-	75-125	-	20
Cadmium, Dissolved	ND	0.051	0.05688	112	-	-	75-125	-	20
Calcium, Dissolved	82.2	10	94.2	120	-	-	75-125	-	20
Chromium, Dissolved	0.00064J	0.2	0.2056	103	-	-	75-125	-	20
Cobalt, Dissolved	0.00035J	0.5	0.5142	103	-	-	75-125	-	20
Copper, Dissolved	0.00115	0.25	0.2509	100	-	-	75-125	-	20
Iron, Dissolved	0.0352J	1	1.17	117	-	-	75-125	-	20
Lead, Dissolved	ND	0.51	0.5890	115	-	-	75-125	-	20
Magnesium, Dissolved	12.7	10	23.9	112	-	-	75-125	-	20
Manganese, Dissolved	0.1118	0.5	0.6271	103	-	-	75-125	-	20
Nickel, Dissolved	0.00127J	0.5	0.5193	104	-	-	75-125	-	20
Potassium, Dissolved	6.88	10	16.9	100	-	-	75-125	-	20
Selenium, Dissolved	0.00420J	0.12	0.136	113	-	-	75-125	-	20
Silver, Dissolved	ND	0.05	0.05266	105	-	-	75-125	-	20
Sodium, Dissolved	82.6	10	88.8	62	Q	-	75-125	-	20
Thallium, Dissolved	ND	0.12	0.1331	111	-	-	75-125	-	20
Vanadium, Dissolved	ND	0.5	0.5288	106	-	-	75-125	-	20

Matrix Spike Analysis
Batch Quality Control**Project Name:** 450 JOHNSON AVE.**Project Number:** 170588001**Lab Number:** L1931803**Report Date:** 07/23/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-03 QC Batch ID: WG1262151-3 QC Sample: L1930207-01 Client ID: MS Sample									
Zinc, Dissolved	ND	0.5	0.5460	109	-	-	75-125	-	20

Matrix Spike Analysis **Batch Quality Control**

Project Name: 450 JOHNSON AVE.

Project Number: 170588001

Lab Number: L1931803

Report Date: 07/23/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 04-08			QC Batch ID: WG1262216-3		QC Sample: L1931033-01		Client ID: MS Sample		
Aluminum, Total	9590	177	10400	457	Q	-	75-125	-	20
Antimony, Total	0.756J	44.3	33.2	75		-	75-125	-	20
Arsenic, Total	12.8	10.6	24.4	109		-	75-125	-	20
Barium, Total	113	177	304	108		-	75-125	-	20
Beryllium, Total	0.378J	4.43	4.63	104		-	75-125	-	20
Cadmium, Total	0.117J	4.52	4.31	95		-	75-125	-	20
Calcium, Total	8020	886	10000	223	Q	-	75-125	-	20
Chromium, Total	21.8	17.7	37.6	89		-	75-125	-	20
Cobalt, Total	8.88	44.3	49.0	90		-	75-125	-	20
Copper, Total	40.5	22.2	69.4	130	Q	-	75-125	-	20
Iron, Total	17100	88.6	20700	4060	Q	-	75-125	-	20
Lead, Total	108	45.2	148	88		-	75-125	-	20
Magnesium, Total	3120	886	3830	80		-	75-125	-	20
Manganese, Total	335	44.3	644	697	Q	-	75-125	-	20
Nickel, Total	16.8	44.3	54.5	85		-	75-125	-	20
Potassium, Total	2040	886	3260	138	Q	-	75-125	-	20
Selenium, Total	0.540J	10.6	11.0	103		-	75-125	-	20
Silver, Total	ND	26.6	25.4	95		-	75-125	-	20
Sodium, Total	203	886	1110	102		-	75-125	-	20
Thallium, Total	ND	10.6	8.97	84		-	75-125	-	20
Vanadium, Total	28.5	44.3	70.8	95		-	75-125	-	20

Matrix Spike Analysis

Batch Quality Control

Project Name: 450 JOHNSON AVE.

Project Number: 170588001

Lab Number: L1931803

Report Date: 07/23/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 04-08 QC Batch ID: WG1262216-3 QC Sample: L1931033-01 Client ID: MS Sample									
Zinc, Total	142	44.3	217	169	Q	-	-	75-125	- 20
Dissolved Metals - Mansfield Lab Associated sample(s): 02 QC Batch ID: WG1262746-3 QC Sample: L1931803-02 Client ID: TMW08_071819									
Mercury, Dissolved	ND	0.005	0.00475	95	-	-	-	75-125	- 20

Lab Duplicate Analysis

Batch Quality Control

Project Name: 450 JOHNSON AVE.

Project Number: 170588001

Lab Number: L1931803

Report Date: 07/23/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 04-08 QC Batch ID: WG1261950-4 QC Sample: L1931536-01 Client ID: DUP Sample						
Mercury, Total	ND	ND	mg/kg	NC		20
Dissolved Metals - Mansfield Lab Associated sample(s): 01,03 QC Batch ID: WG1262134-4 QC Sample: L1930207-01 Client ID: DUP Sample						
Mercury, Dissolved	ND	ND	mg/l	NC		20

Project Name: 450 JOHNSON AVE.
Project Number: 170588001

Lab Duplicate Analysis
Batch Quality Control

Lab Number: L1931803
Report Date: 07/23/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-03 QC Batch ID: WG1262151-4 QC Sample: L1930207-01 Client ID: DUP Sample					
Aluminum, Dissolved	ND	ND	mg/l	NC	20
Antimony, Dissolved	0.00124J	0.00333J	mg/l	NC	20
Arsenic, Dissolved	ND	0.00023J	mg/l	NC	20
Barium, Dissolved	0.1433	0.1421	mg/l	1	20
Beryllium, Dissolved	ND	ND	mg/l	NC	20
Cadmium, Dissolved	ND	ND	mg/l	NC	20
Calcium, Dissolved	82.2	83.2	mg/l	1	20
Chromium, Dissolved	0.00064J	0.00065J	mg/l	NC	20
Cobalt, Dissolved	0.00035J	0.00032J	mg/l	NC	20
Copper, Dissolved	0.00115	0.00110	mg/l	4	20
Iron, Dissolved	0.0352J	0.0566	mg/l	NC	20
Lead, Dissolved	ND	ND	mg/l	NC	20
Magnesium, Dissolved	12.7	12.8	mg/l	1	20
Manganese, Dissolved	0.1118	0.1136	mg/l	2	20
Nickel, Dissolved	0.00127J	0.00131J	mg/l	NC	20
Potassium, Dissolved	6.88	6.79	mg/l	1	20
Selenium, Dissolved	0.00420J	0.00450J	mg/l	NC	20
Silver, Dissolved	ND	ND	mg/l	NC	20
Sodium, Dissolved	82.6	82.9	mg/l	0	20

Lab Duplicate Analysis *Batch Quality Control*

Project Name: 450 JOHNSON AVE.

Project Number: 170588001

Lab Number: L1931803

Report Date: 07/23/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-03 QC Batch ID: WG1262151-4 QC Sample: L1930207-01 Client ID: DUP Sample					
Thallium, Dissolved	ND	0.00027J	mg/l	NC	20
Vanadium, Dissolved	ND	ND	mg/l	NC	20
Zinc, Dissolved	ND	ND	mg/l	NC	20

Lab Duplicate Analysis *Batch Quality Control*

Project Name: 450 JOHNSON AVE.

Project Number: 170588001

Lab Number: L1931803

Report Date: 07/23/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 04-08 QC Batch ID: WG1262216-4 QC Sample: L1931033-01 Client ID: DUP Sample					
Aluminum, Total	9590	8410	mg/kg	13	20
Antimony, Total	0.756J	0.792J	mg/kg	NC	20
Arsenic, Total	12.8	11.7	mg/kg	9	20
Barium, Total	113	94.8	mg/kg	18	20
Beryllium, Total	0.378J	0.356J	mg/kg	NC	20
Cadmium, Total	0.117J	0.142J	mg/kg	NC	20
Calcium, Total	8020	7120	mg/kg	12	20
Chromium, Total	21.8	19.0	mg/kg	14	20
Cobalt, Total	8.88	9.16	mg/kg	3	20
Copper, Total	40.5	39.5	mg/kg	3	20
Iron, Total	17100	16000	mg/kg	7	20
Lead, Total	108	86.4	mg/kg	22	Q 20
Magnesium, Total	3120	3020	mg/kg	3	20
Manganese, Total	335	413	mg/kg	21	Q 20
Nickel, Total	16.8	14.4	mg/kg	15	20
Potassium, Total	2040	1810	mg/kg	12	20
Selenium, Total	0.540J	0.649J	mg/kg	NC	20
Silver, Total	ND	ND	mg/kg	NC	20
Sodium, Total	203	237	mg/kg	15	20

Lab Duplicate Analysis *Batch Quality Control*

Project Name: 450 JOHNSON AVE.

Project Number: 170588001

Lab Number: L1931803

Report Date: 07/23/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 04-08 QC Batch ID: WG1262216-4 QC Sample: L1931033-01 Client ID: DUP Sample					
Thallium, Total	ND	ND	mg/kg	NC	20
Vanadium, Total	28.5	27.4	mg/kg	4	20
Zinc, Total	142	147	mg/kg	3	20
Dissolved Metals - Mansfield Lab Associated sample(s): 02 QC Batch ID: WG1262746-4 QC Sample: L1931803-02 Client ID: TMW08_071819					
Mercury, Dissolved	ND	ND	mg/l	NC	20

INORGANICS & MISCELLANEOUS

Project Name: 450 JOHNSON AVE.**Project Number:** 170588001**Lab Number:** L1931803**Report Date:** 07/23/19**SAMPLE RESULTS****Lab ID:** L1931803-04**Client ID:** SB08_5.0-5.5**Sample Location:** BROOKLYN, NY**Date Collected:** 07/18/19 11:20**Date Received:** 07/18/19**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	91.8		%	0.100	NA	1	-	07/19/19 03:46	121,2540G	YA



Project Name: 450 JOHNSON AVE.**Project Number:** 170588001**Lab Number:** L1931803**Report Date:** 07/23/19**SAMPLE RESULTS****Lab ID:** L1931803-05**Client ID:** SB08_14.0-14.5**Sample Location:** BROOKLYN, NY**Date Collected:** 07/18/19 11:10**Date Received:** 07/18/19**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	71.5		%	0.100	NA	1	-	07/19/19 03:46	121,2540G	YA



Project Name: 450 JOHNSON AVE.**Project Number:** 170588001**Lab Number:** L1931803**Report Date:** 07/23/19**SAMPLE RESULTS****Lab ID:** L1931803-06**Client ID:** SB12_6.5-7.0**Sample Location:** BROOKLYN, NY**Date Collected:** 07/18/19 10:15**Date Received:** 07/18/19**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	89.3		%	0.100	NA	1	-	07/19/19 03:46	121,2540G	YA



Project Name: 450 JOHNSON AVE.**Project Number:** 170588001**Lab Number:** L1931803**Report Date:** 07/23/19**SAMPLE RESULTS****Lab ID:** L1931803-07**Client ID:** SB07_4.5-5.0**Sample Location:** BROOKLYN, NY**Date Collected:** 07/18/19 15:00**Date Received:** 07/18/19**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	-	07/19/19 03:46	121,2540G	YA



Project Name: 450 JOHNSON AVE.

Project Number: 170588001

Lab Number: L1931803

Report Date: 07/23/19

SAMPLE RESULTS

Lab ID: L1931803-08

Client ID: SB14_4.5-5.0

Sample Location: BROOKLYN, NY

Date Collected: 07/18/19 14:05

Date Received: 07/18/19

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	90.3		%	0.100	NA	1	-	07/19/19 03:46	121,2540G	YA



Lab Duplicate Analysis
*Batch Quality Control***Project Name:** 450 JOHNSON AVE.**Project Number:** 170588001**Lab Number:** L1931803**Report Date:** 07/23/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 04-08 QC Batch ID: WG1261874-1 QC Sample: L1931923-01 Client ID: DUP Sample						
Solids, Total	57.0	61.7	%	8		20

Project Name: 450 JOHNSON AVE.
Project Number: 170588001

Serial_No:07231919:09
Lab Number: L1931803
Report Date: 07/23/19

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1931803-01A	Vial HCl preserved	A	NA		4.6	Y	Absent		NYTCL-8260(14)
L1931803-01B	Vial HCl preserved	A	NA		4.6	Y	Absent		NYTCL-8260(14)
L1931803-01C	Vial HCl preserved	A	NA		4.6	Y	Absent		NYTCL-8260(14)
L1931803-01D	Plastic 250ml HNO3 preserved	A	<2	<2	4.6	Y	Absent		CU-6020S(180),K-6020S(180),SE-6020S(180),V-6020S(180),MN-6020S(180),BE-6020S(180),CO-6020S(180),MG-6020S(180),ZN-6020S(180),CA-6020S(180),CR-6020S(180),FE-6020S(180),BA-6020S(180),NA-6020S(180),NI-6020S(180),PB-6020S(180),TL-6020S(180),AG-6020S(180),AS-6020S(180),SB-6020S(180),AL-6020S(180),CD-6020S(180),HG-S(28)
L1931803-01E	Amber 1000ml unpreserved	A	7	7	4.6	Y	Absent		HOLD-8270(7)
L1931803-02A	Vial HCl preserved	A	NA		4.6	Y	Absent		NYTCL-8260(14)
L1931803-02B	Vial HCl preserved	A	NA		4.6	Y	Absent		NYTCL-8260(14)
L1931803-02C	Vial HCl preserved	A	NA		4.6	Y	Absent		NYTCL-8260(14)
L1931803-02D	Amber 250ml unpreserved	A	7	7	4.6	Y	Absent		HOLD-8270(7)
L1931803-02F	Amber 250ml unpreserved	A	7	7	4.6	Y	Absent		ARCHIVE()
L1931803-02W	Plastic 250ml HNO3 preserved split	A	<2	<2	4.6	Y	Absent		CU-6020S(180),K-6020S(180),SE-6020S(180),V-6020S(180),MN-6020S(180),BE-6020S(180),CO-6020S(180),MG-6020S(180),ZN-6020S(180),CA-6020S(180),CR-6020S(180),FE-6020S(180),BA-6020S(180),NA-6020S(180),NI-6020S(180),PB-6020S(180),TL-6020S(180),AG-6020S(180),AS-6020S(180),SB-6020S(180),AL-6020S(180),CD-6020S(180),HG-S(28)
L1931803-03A	Vial HCl preserved	A	NA		4.6	Y	Absent		NYTCL-8260(14)
L1931803-03B	Vial HCl preserved	A	NA		4.6	Y	Absent		NYTCL-8260(14)
L1931803-03C	Vial HCl preserved	A	NA		4.6	Y	Absent		NYTCL-8260(14)

Project Name: 450 JOHNSON AVE.
Project Number: 170588001

Serial_No:07231919:09
Lab Number: L1931803
Report Date: 07/23/19

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1931803-03D	Plastic 250ml HNO3 preserved	A	<2	<2	4.6	Y	Absent		CU-6020S(180),K-6020S(180),SE-6020S(180),V-6020S(180),MN-6020S(180),BE-6020S(180),CO-6020S(180),MG-6020S(180),ZN-6020S(180),CA-6020S(180),CR-6020S(180),FE-6020S(180),BA-6020S(180),NA-6020S(180),NI-6020S(180),PB-6020S(180),TL-6020S(180),AG-6020S(180),AS-6020S(180),SB-6020S(180),AL-6020S(180),CD-6020S(180),HG-S(28)
L1931803-03E	Amber 250ml unpreserved	A	7	7	4.6	Y	Absent		HOLD-8270(7)
L1931803-03F	Amber 250ml unpreserved	A	7	7	4.6	Y	Absent		HOLD-8270(7)
L1931803-04A	Vial MeOH preserved	A	NA		4.6	Y	Absent		NYTCL-8260HLW(14)
L1931803-04B	Vial water preserved	A	NA		4.6	Y	Absent	19-JUL-19 02:37	NYTCL-8260HLW(14)
L1931803-04C	Vial water preserved	A	NA		4.6	Y	Absent	19-JUL-19 02:37	NYTCL-8260HLW(14)
L1931803-04D	Plastic 2oz unpreserved for TS	A	NA		4.6	Y	Absent		TS(7)
L1931803-04E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		4.6	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1931803-04F	Glass 120ml/4oz unpreserved	A	NA		4.6	Y	Absent		NYTCL-8270(14),HOLD-8082(14)
L1931803-04G	Glass 120ml/4oz unpreserved	A	NA		4.6	Y	Absent		NYTCL-8270(14),HOLD-8082(14)
L1931803-05A	Vial MeOH preserved	A	NA		4.6	Y	Absent		NYTCL-8260HLW(14)
L1931803-05B	Vial water preserved	A	NA		4.6	Y	Absent	19-JUL-19 02:37	NYTCL-8260HLW(14)
L1931803-05C	Vial water preserved	A	NA		4.6	Y	Absent	19-JUL-19 02:37	NYTCL-8260HLW(14)
L1931803-05D	Plastic 2oz unpreserved for TS	A	NA		4.6	Y	Absent		TS(7)
L1931803-05E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		4.6	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1931803-05F	Glass 60mL/2oz unpreserved	A	NA		4.6	Y	Absent		NYTCL-8270(14),HOLD-8082(14)
L1931803-05G	Glass 120ml/4oz unpreserved	A	NA		4.6	Y	Absent		NYTCL-8270(14),HOLD-8082(14)
L1931803-06A	Vial MeOH preserved	A	NA		4.6	Y	Absent		NYTCL-8260HLW(14)
L1931803-06B	Vial water preserved	A	NA		4.6	Y	Absent	19-JUL-19 02:37	NYTCL-8260HLW(14)

Project Name: 450 JOHNSON AVE.
Project Number: 170588001

Serial_No: 07231919:09
Lab Number: L1931803
Report Date: 07/23/19

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1931803-06C	Vial water preserved	A	NA		4.6	Y	Absent	19-JUL-19 02:37	NYTCL-8260HLW(14)
L1931803-06D	Plastic 2oz unpreserved for TS	A	NA		4.6	Y	Absent		TS(7)
L1931803-06E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		4.6	Y	Absent		BE-Ti(180),AS-Ti(180),BA-Ti(180),AG-Ti(180),AL-Ti(180),CR-Ti(180),NI-Ti(180),TL-Ti(180),CU-Ti(180),PB-Ti(180),SB-Ti(180),SE-Ti(180),ZN-Ti(180),CO-Ti(180),V-Ti(180),FE-Ti(180),HG-T(28),MG-Ti(180),MN-Ti(180),CA-Ti(180),CD-Ti(180),K-Ti(180),NA-Ti(180)
L1931803-06F	Glass 60mL/2oz unpreserved	A	NA		4.6	Y	Absent		NYTCL-8270(14),HOLD-8082(14)
L1931803-06G	Glass 120ml/4oz unpreserved	A	NA		4.6	Y	Absent		NYTCL-8270(14),HOLD-8082(14)
L1931803-07A	Vial MeOH preserved	A	NA		4.6	Y	Absent		NYTCL-8260HLW(14)
L1931803-07B	Vial water preserved	A	NA		4.6	Y	Absent	19-JUL-19 02:37	NYTCL-8260HLW(14)
L1931803-07C	Vial water preserved	A	NA		4.6	Y	Absent	19-JUL-19 02:37	NYTCL-8260HLW(14)
L1931803-07D	Plastic 2oz unpreserved for TS	A	NA		4.6	Y	Absent		TS(7)
L1931803-07E	Glass 60mL/2oz unpreserved	A	NA		4.6	Y	Absent		BE-Ti(180),AS-Ti(180),BA-Ti(180),AG-Ti(180),AL-Ti(180),CR-Ti(180),NI-Ti(180),TL-Ti(180),CU-Ti(180),PB-Ti(180),SB-Ti(180),SE-Ti(180),ZN-Ti(180),CO-Ti(180),V-Ti(180),FE-Ti(180),HG-T(28),MG-Ti(180),MN-Ti(180),CA-Ti(180),CD-Ti(180),K-Ti(180),NA-Ti(180)
L1931803-07F	Glass 60mL/2oz unpreserved	A	NA		4.6	Y	Absent		NYTCL-8270(14),HOLD-8081(14),NYTCL-8082(14)
L1931803-07G	Glass 60mL/2oz unpreserved	A	NA		4.6	Y	Absent		NYTCL-8270(14),HOLD-8081(14),NYTCL-8082(14)
L1931803-07H	Glass 120ml/4oz unpreserved	A	NA		4.6	Y	Absent		NYTCL-8270(14),HOLD-8081(14),NYTCL-8082(14)
L1931803-08A	Vial MeOH preserved	A	NA		4.6	Y	Absent		NYTCL-8260HLW(14)
L1931803-08B	Vial water preserved	A	NA		4.6	Y	Absent	19-JUL-19 02:37	NYTCL-8260HLW(14)
L1931803-08C	Vial water preserved	A	NA		4.6	Y	Absent	19-JUL-19 02:37	NYTCL-8260HLW(14)
L1931803-08D	Plastic 2oz unpreserved for TS	A	NA		4.6	Y	Absent		TS(7)
L1931803-08E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		4.6	Y	Absent		BE-Ti(180),AS-Ti(180),BA-Ti(180),AG-Ti(180),AL-Ti(180),CR-Ti(180),NI-Ti(180),TL-Ti(180),CU-Ti(180),PB-Ti(180),SB-Ti(180),SE-Ti(180),ZN-Ti(180),CO-Ti(180),V-Ti(180),FE-Ti(180),HG-T(28),MG-Ti(180),MN-Ti(180),CA-Ti(180),CD-Ti(180),K-Ti(180),NA-Ti(180)
L1931803-08F	Glass 60mL/2oz unpreserved	A	NA		4.6	Y	Absent		NYTCL-8270(14)
L1931803-08G	Glass 120ml/4oz unpreserved	A	NA		4.6	Y	Absent		NYTCL-8270(14)

Project Name: 450 JOHNSON AVE.
Project Number: 170588001

Serial_No: 07231919:09
Lab Number: L1931803
Report Date: 07/23/19

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1931803-09A	Amber 250ml unpreserved	A	7	7	4.6	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1931803-09B	Amber 250ml unpreserved	A	7	7	4.6	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1931803-10A	Amber 250ml unpreserved	A	7	7	4.6	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1931803-10B	Amber 250ml unpreserved	A	7	7	4.6	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1931803-11A	Amber 250ml unpreserved	A	7	7	4.6	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1931803-11B	Amber 250ml unpreserved	A	7	7	4.6	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)

Project Name: 450 JOHNSON AVE.**Lab Number:** L1931803**Project Number:** 170588001**Report Date:** 07/23/19

GLOSSARY

Acronyms

DL	- 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 limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
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).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
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.
LCS D	- 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.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
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. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
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.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
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

Report Format: DU Report with 'J' Qualifiers

Project Name: 450 JOHNSON AVE.
Project Number: 170588001

Lab Number: L1931803
Report Date: 07/23/19

- 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.

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

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.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. If a 'Total' result is requested, the results of its individual components will also be reported.

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 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.
- 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).
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.
- 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.

Report Format: DU Report with 'J' Qualifiers



Project Name: 450 JOHNSON AVE.
Project Number: 170588001

Lab Number: L1931803
Report Date: 07/23/19

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.



Alpha Analytical, Inc.

ID No.:17873

Facility: **Company-wide**

Revision 12

Department: **Quality Assurance**

Published Date: 10/9/2018 4:58:19 PM

Title: **Certificate/Approval Program Summary**

Page 1 of 1

Certification Information

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

Westborough Facility**EPA 624/624.1:** 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 6860:** SCM: Perchlorate**SM4500:** NPW: Amenable Cyanide; 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, **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 300:** Chloride, Sulfate, Nitrate.**EPA 624.1:** Volatile Halocarbons & Aromatics,**EPA 608.3:** 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 625.1:** SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.**Microbiology:** **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.****Mansfield Facility:****Drinking Water****EPA 200.7:** Al, Ba, Cd, Cr, Cu, Fe, 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, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.**EPA 245.1 Hg.****SM2340B**

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

[illegible]

[illegible]



ANALYTICAL REPORT

Lab Number:	L1931865
Client:	Langan Engineering & Environmental 21 Penn Plaza 360 W. 31st Street, 8th Floor New York, NY 10001-2727
ATTN:	Julia Leung
Phone:	(212) 479-5400
Project Name:	450 JOHNSON AVE.
Project Number:	17058801
Report Date:	07/22/19

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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).

320 Forbes Boulevard, Mansfield, MA 02048-1806
508-822-9300 (Fax) 508-822-3288 800-624-9220 - www.alphalab.com



Project Name: 450 JOHNSON AVE.
Project Number: 17058801

Lab Number: L1931865
Report Date: 07/22/19

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1931865-01	IA01	AIR	BROOKLYN, NY	07/18/19 15:06	07/18/19
L1931865-02	SSV01	SOIL_VAPOR	BROOKLYN, NY	07/18/19 15:07	07/18/19

Project Name: 450 JOHNSON AVE.
Project Number: 17058801

Lab Number: L1931865
Report Date: 07/22/19

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. 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 Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data 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.

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 Alpha Project Manager 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 Project Management at 800-624-9220 with any questions.

Project Name: 450 JOHNSON AVE.
Project Number: 17058801

Lab Number: L1931865
Report Date: 07/22/19

Case Narrative (continued)

Volatile Organics in Air

Canisters were released from the laboratory on July 17, 2019. The canister certification results are provided as an addendum.

L1931865-02: The sample has elevated detection limits due to the dilution required by the elevated concentrations of 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:  Christopher J. Anderson

Title: Technical Director/Representative

Date: 07/22/19

AIR

Project Name: 450 JOHNSON AVE.**Project Number:** 17058801**Lab Number:** L1931865**Report Date:** 07/22/19**SAMPLE RESULTS**

Lab ID: L1931865-01
 Client ID: IA01
 Sample Location: BROOKLYN, NY

Date Collected: 07/18/19 15:06
 Date Received: 07/18/19
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 48,TO-15
 Analytical Date: 07/20/19 20:56
 Analyst: RY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.485	0.200	--	2.40	0.989	--		1
Chloromethane	0.722	0.200	--	1.49	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	1.52	0.200	--	3.36	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	49.5	5.00	--	93.3	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	8.29	1.00	--	19.7	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	5.68	0.500	--	14.0	1.23	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	0.856	0.500	--	2.97	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	0.315	0.200	--	0.981	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	1.17	0.500	--	3.45	1.47	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	0.292	0.200	--	1.43	0.977	--		1
Tetrahydrofuran	5.18	0.500	--	15.3	1.47	--		1



Project Name: 450 JOHNSON AVE.**Lab Number:** L1931865**Project Number:** 17058801**Report Date:** 07/22/19**SAMPLE RESULTS**

Lab ID: L1931865-01
 Client ID: IA01
 Sample Location: BROOKLYN, NY

Date Collected: 07/18/19 15:06
 Date Received: 07/18/19
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	3.60	0.200	--	12.7	0.705	--		1
Benzene	4.34	0.200	--	13.9	0.639	--		1
Cyclohexane	1.10	0.200	--	3.79	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	1.59	0.200	--	7.43	0.934	--		1
Heptane	1.72	0.200	--	7.05	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	8.47	0.200	--	31.9	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	0.923	0.200	--	4.01	0.869	--		1
p/m-Xylene	3.04	0.400	--	13.2	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	0.412	0.200	--	1.75	0.852	--		1
1,1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	1.08	0.200	--	4.69	0.869	--		1
4-Ethyltoluene	0.238	0.200	--	1.17	0.983	--		1
1,3,5-Trimethylbenzene	0.383	0.200	--	1.88	0.983	--		1



Project Name: 450 JOHNSON AVE.**Lab Number:** L1931865**Project Number:** 17058801**Report Date:** 07/22/19**SAMPLE RESULTS**

Lab ID: L1931865-01
 Client ID: IA01
 Sample Location: BROOKLYN, NY

Date Collected: 07/18/19 15:06
 Date Received: 07/18/19
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
1,2,4-Trimethylbenzene	0.663	0.200	--	3.26	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	0.258	0.200	--	1.55	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	94		60-140
Bromochloromethane	95		60-140
chlorobenzene-d5	90		60-140



Project Name: 450 JOHNSON AVE.**Project Number:** 17058801**Lab Number:** L1931865**Report Date:** 07/22/19**SAMPLE RESULTS**

Lab ID: L1931865-01
 Client ID: IA01
 Sample Location: BROOKLYN, NY

Date Collected: 07/18/19 15:06
 Date Received: 07/18/19
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 48,TO-15-SIM
 Analytical Date: 07/20/19 20:56
 Analyst: RY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	0.054	0.020	--	0.295	0.109	--		1
Carbon tetrachloride	0.071	0.020	--	0.447	0.126	--		1
Trichloroethene	0.036	0.020	--	0.193	0.107	--		1
Tetrachloroethene	0.179	0.020	--	1.21	0.136	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	97		60-140
bromochloromethane	96		60-140
chlorobenzene-d5	94		60-140



Project Name: 450 JOHNSON AVE.**Project Number:** 17058801**Lab Number:** L1931865**Report Date:** 07/22/19**SAMPLE RESULTS**

Lab ID: L1931865-02 D

Client ID: SSV01

Sample Location: BROOKLYN, NY

Date Collected: 07/18/19 15:07

Date Received: 07/18/19

Field Prep: Not Specified

Sample Depth:

Matrix: Soil_Vapor

Analytical Method: 48,TO-15

Analytical Date: 07/20/19 22:12

Analyst: RY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	ND	2.00	--	ND	9.89	--		10
Chloromethane	ND	2.00	--	ND	4.13	--		10
Freon-114	ND	2.00	--	ND	14.0	--		10
Vinyl chloride	ND	2.00	--	ND	5.11	--		10
1,3-Butadiene	ND	2.00	--	ND	4.42	--		10
Bromomethane	ND	2.00	--	ND	7.77	--		10
Chloroethane	ND	2.00	--	ND	5.28	--		10
Ethanol	ND	50.0	--	ND	94.2	--		10
Vinyl bromide	ND	2.00	--	ND	8.74	--		10
Acetone	83.2	10.0	--	198	23.8	--		10
Trichlorofluoromethane	ND	2.00	--	ND	11.2	--		10
Isopropanol	ND	5.00	--	ND	12.3	--		10
1,1-Dichloroethene	ND	2.00	--	ND	7.93	--		10
Tertiary butyl Alcohol	5.00	5.00	--	15.2	15.2	--		10
Methylene chloride	ND	5.00	--	ND	17.4	--		10
3-Chloropropene	ND	2.00	--	ND	6.26	--		10
Carbon disulfide	ND	2.00	--	ND	6.23	--		10
Freon-113	ND	2.00	--	ND	15.3	--		10
trans-1,2-Dichloroethene	ND	2.00	--	ND	7.93	--		10
1,1-Dichloroethane	ND	2.00	--	ND	8.09	--		10
Methyl tert butyl ether	ND	2.00	--	ND	7.21	--		10
2-Butanone	24.2	5.00	--	71.4	14.7	--		10
cis-1,2-Dichloroethene	ND	2.00	--	ND	7.93	--		10



Project Name: 450 JOHNSON AVE.**Lab Number:** L1931865**Project Number:** 17058801**Report Date:** 07/22/19**SAMPLE RESULTS**

Lab ID: L1931865-02 D

Client ID: SSV01

Sample Location: BROOKLYN, NY

Date Collected: 07/18/19 15:07

Date Received: 07/18/19

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	5.00	--	ND	18.0	--		10
Chloroform	2.02	2.00	--	9.86	9.77	--		10
Tetrahydrofuran	ND	5.00	--	ND	14.7	--		10
1,2-Dichloroethane	ND	2.00	--	ND	8.09	--		10
n-Hexane	65.3	2.00	--	230	7.05	--		10
1,1,1-Trichloroethane	ND	2.00	--	ND	10.9	--		10
Benzene	35.4	2.00	--	113	6.39	--		10
Carbon tetrachloride	ND	2.00	--	ND	12.6	--		10
Cyclohexane	25.2	2.00	--	86.7	6.88	--		10
1,2-Dichloropropane	ND	2.00	--	ND	9.24	--		10
Bromodichloromethane	ND	2.00	--	ND	13.4	--		10
1,4-Dioxane	ND	2.00	--	ND	7.21	--		10
Trichloroethene	ND	2.00	--	ND	10.7	--		10
2,2,4-Trimethylpentane	25.7	2.00	--	120	9.34	--		10
Heptane	108	2.00	--	443	8.20	--		10
cis-1,3-Dichloropropene	ND	2.00	--	ND	9.08	--		10
4-Methyl-2-pentanone	ND	5.00	--	ND	20.5	--		10
trans-1,3-Dichloropropene	ND	2.00	--	ND	9.08	--		10
1,1,2-Trichloroethane	ND	2.00	--	ND	10.9	--		10
Toluene	465	2.00	--	1750	7.54	--		10
2-Hexanone	ND	2.00	--	ND	8.20	--		10
Dibromochloromethane	ND	2.00	--	ND	17.0	--		10
1,2-Dibromoethane	ND	2.00	--	ND	15.4	--		10
Tetrachloroethene	ND	2.00	--	ND	13.6	--		10
Chlorobenzene	ND	2.00	--	ND	9.21	--		10
Ethylbenzene	72.9	2.00	--	317	8.69	--		10



Project Name: 450 JOHNSON AVE.**Lab Number:** L1931865**Project Number:** 17058801**Report Date:** 07/22/19**SAMPLE RESULTS**

Lab ID: L1931865-02 D

Client ID: SSV01

Sample Location: BROOKLYN, NY

Date Collected: 07/18/19 15:07

Date Received: 07/18/19

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
p/m-Xylene	222	4.00	--	964	17.4	--		10
Bromoform	ND	2.00	--	ND	20.7	--		10
Styrene	ND	2.00	--	ND	8.52	--		10
1,1,2,2-Tetrachloroethane	ND	2.00	--	ND	13.7	--		10
o-Xylene	80.5	2.00	--	350	8.69	--		10
4-Ethyltoluene	12.6	2.00	--	61.9	9.83	--		10
1,3,5-Trimethylbenzene	13.2	2.00	--	64.9	9.83	--		10
1,2,4-Trimethylbenzene	40.5	2.00	--	199	9.83	--		10
Benzyl chloride	ND	2.00	--	ND	10.4	--		10
1,3-Dichlorobenzene	ND	2.00	--	ND	12.0	--		10
1,4-Dichlorobenzene	ND	2.00	--	ND	12.0	--		10
1,2-Dichlorobenzene	ND	2.00	--	ND	12.0	--		10
1,2,4-Trichlorobenzene	ND	2.00	--	ND	14.8	--		10
Hexachlorobutadiene	ND	2.00	--	ND	21.3	--		10

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	95		60-140
Bromochloromethane	95		60-140
chlorobenzene-d5	95		60-140



Project Name: 450 JOHNSON AVE.

Lab Number: L1931865

Project Number: 17058801

Report Date: 07/22/19

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15

Analytical Date: 07/20/19 14:52

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab for sample(s): 01-02 Batch: WG1262520-4								
Propylene	ND	0.500	--	ND	0.861	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1



Project Name: 450 JOHNSON AVE.

Lab Number: L1931865

Project Number: 17058801

Report Date: 07/22/19

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15

Analytical Date: 07/20/19 14:52

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab for sample(s): 01-02 Batch: WG1262520-4								
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1



Project Name: 450 JOHNSON AVE.

Lab Number: L1931865

Project Number: 17058801

Report Date: 07/22/19

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15

Analytical Date: 07/20/19 14:52

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab for sample(s): 01-02 Batch: WG1262520-4								
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1



Project Name: 450 JOHNSON AVE.**Lab Number:** L1931865**Project Number:** 17058801**Report Date:** 07/22/19

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15-SIM

Analytical Date: 07/20/19 15:31

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab for sample(s): 01 Batch: WG1262521-4								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1



Lab Control Sample Analysis

Batch Quality Control

Project Name: 450 JOHNSON AVE.

Project Number: 17058801

Lab Number: L1931865

Report Date: 07/22/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-02 Batch: WG1262520-3								
Propylene	102		-		70-130	-		
Dichlorodifluoromethane	92		-		70-130	-		
Chloromethane	98		-		70-130	-		
Freon-114	98		-		70-130	-		
Vinyl chloride	88		-		70-130	-		
1,3-Butadiene	104		-		70-130	-		
Bromomethane	93		-		70-130	-		
Chloroethane	87		-		70-130	-		
Ethanol	95		-		40-160	-		
Vinyl bromide	89		-		70-130	-		
Acetone	72		-		40-160	-		
Trichlorofluoromethane	85		-		70-130	-		
Isopropanol	80		-		40-160	-		
1,1-Dichloroethene	87		-		70-130	-		
Tertiary butyl Alcohol	86		-		70-130	-		
Methylene chloride	102		-		70-130	-		
3-Chloropropene	93		-		70-130	-		
Carbon disulfide	90		-		70-130	-		
Freon-113	89		-		70-130	-		
trans-1,2-Dichloroethene	84		-		70-130	-		
1,1-Dichloroethane	86		-		70-130	-		
Methyl tert butyl ether	92		-		70-130	-		
Vinyl acetate	94		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: 450 JOHNSON AVE.

Project Number: 17058801

Lab Number: L1931865

Report Date: 07/22/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-02 Batch: WG1262520-3								
2-Butanone	90		-		70-130	-		
cis-1,2-Dichloroethene	87		-		70-130	-		
Ethyl Acetate	83		-		70-130	-		
Chloroform	92		-		70-130	-		
Tetrahydrofuran	93		-		70-130	-		
1,2-Dichloroethane	81		-		70-130	-		
n-Hexane	91		-		70-130	-		
1,1,1-Trichloroethane	90		-		70-130	-		
Benzene	99		-		70-130	-		
Carbon tetrachloride	102		-		70-130	-		
Cyclohexane	89		-		70-130	-		
1,2-Dichloropropane	90		-		70-130	-		
Bromodichloromethane	98		-		70-130	-		
1,4-Dioxane	93		-		70-130	-		
Trichloroethene	90		-		70-130	-		
2,2,4-Trimethylpentane	96		-		70-130	-		
Heptane	109		-		70-130	-		
cis-1,3-Dichloropropene	114		-		70-130	-		
4-Methyl-2-pentanone	110		-		70-130	-		
trans-1,3-Dichloropropene	98		-		70-130	-		
1,1,2-Trichloroethane	92		-		70-130	-		
Toluene	95		-		70-130	-		
2-Hexanone	119		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: 450 JOHNSON AVE.

Project Number: 17058801

Lab Number: L1931865

Report Date: 07/22/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-02 Batch: WG1262520-3								
Dibromochloromethane	102		-		70-130	-		
1,2-Dibromoethane	108		-		70-130	-		
Tetrachloroethene	104		-		70-130	-		
Chlorobenzene	110		-		70-130	-		
Ethylbenzene	96		-		70-130	-		
p/m-Xylene	99		-		70-130	-		
Bromoform	106		-		70-130	-		
Styrene	108		-		70-130	-		
1,1,2,2-Tetrachloroethane	108		-		70-130	-		
o-Xylene	103		-		70-130	-		
4-Ethyltoluene	108		-		70-130	-		
1,3,5-Trimethylbenzene	109		-		70-130	-		
1,2,4-Trimethylbenzene	113		-		70-130	-		
Benzyl chloride	104		-		70-130	-		
1,3-Dichlorobenzene	110		-		70-130	-		
1,4-Dichlorobenzene	107		-		70-130	-		
1,2-Dichlorobenzene	109		-		70-130	-		
1,2,4-Trichlorobenzene	117		-		70-130	-		
Hexachlorobutadiene	116		-		70-130	-		

Lab Control Sample Analysis Batch Quality Control

Project Name: 450 JOHNSON AVE.

Project Number: 17058801

Lab Number: L1931865

Report Date: 07/22/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 01 Batch: WG1262521-3								
Vinyl chloride	84		-		70-130	-		25
1,1-Dichloroethene	84		-		70-130	-		25
cis-1,2-Dichloroethene	82		-		70-130	-		25
1,1,1-Trichloroethane	88		-		70-130	-		25
Carbon tetrachloride	98		-		70-130	-		25
Trichloroethene	81		-		70-130	-		25
Tetrachloroethene	103		-		70-130	-		25

Project Name: 450 JOHNSON AVE.

Serial_No:07221916:32
Lab Number: L1931865

Project Number: 17058801

Report Date: 07/22/19

Canister and Flow Controller Information

Samplenum	Client ID	Media ID	Media Type	Date Prepared	Bottle Order	Cleaning Batch ID	Can Leak Check	Initial Pressure (in. Hg)	Pressure on Receipt (in. Hg)	Flow Controller Leak Chk	Flow Out mL/min	Flow In mL/min	% RPD
L1931865-01	IA01	0702	Flow 5	07/17/19	297202		-	-	-	Pass	4.5	5.2	14
L1931865-01	IA01	2793	2.7L Can	07/17/19	297202	L1930221-06	Pass	-29.5	-9.1	-	-	-	-
L1931865-02	SSV01	0959	Flow 5	07/17/19	297202		-	-	-	Pass	4.5	4.6	2
L1931865-02	SSV01	2037	2.7L Can	07/17/19	297202	L1930221-06	Pass	-29.5	-8.9	-	-	-	-

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1930221
Report Date: 07/22/19

Air Canister Certification Results

Lab ID: L1930221-06
Client ID: CAN 453 SHELF 10
Sample Location:

Date Collected: 06/11/19 09:00
Date Received: 07/11/19
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15
Analytical Date: 07/11/19 21:44
Analyst: TS

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1930221
Report Date: 07/22/19

Air Canister Certification Results

Lab ID: L1930221-06
Client ID: CAN 453 SHELF 10
Sample Location:

Date Collected: 06/11/19 09:00
Date Received: 07/11/19
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Xylenes, total	ND	0.600	--	ND	0.869	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,2-Dichloroethene (total)	ND	1.00	--	ND	1.00	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1930221
Report Date: 07/22/19

Air Canister Certification Results

Lab ID: L1930221-06
Client ID: CAN 453 SHELF 10
Sample Location:

Date Collected: 06/11/19 09:00
Date Received: 07/11/19
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1



Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L1930221**Project Number:** CANISTER QC BAT**Report Date:** 07/22/19**Air Canister Certification Results**

Lab ID: L1930221-06

Date Collected: 06/11/19 09:00

Client ID: CAN 453 SHELF 10

Date Received: 07/11/19

Sample Location:

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	1.05	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1



Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L1930221**Project Number:** CANISTER QC BAT**Report Date:** 07/22/19**Air Canister Certification Results**

Lab ID: L1930221-06

Date Collected: 06/11/19 09:00

Client ID: CAN 453 SHELF 10

Date Received: 07/11/19

Sample Location:

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								

Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds				

No Tentatively Identified Compounds

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	99		60-140
Bromochloromethane	99		60-140
chlorobenzene-d5	101		60-140



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1930221
Report Date: 07/22/19

Air Canister Certification Results

Lab ID: L1930221-06
Client ID: CAN 453 SHELF 10
Sample Location:

Date Collected: 06/11/19 09:00
Date Received: 07/11/19
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15-SIM
Analytical Date: 07/11/19 21:44
Analyst: TS

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.100	--	ND	0.264	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
Freon-113	ND	0.050	--	ND	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1930221
Report Date: 07/22/19

Air Canister Certification Results

Lab ID: L1930221-06
Client ID: CAN 453 SHELF 10
Sample Location:

Date Collected: 06/11/19 09:00
Date Received: 07/11/19
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.050	--	ND	0.188	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethybenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1930221
Report Date: 07/22/19

Air Canister Certification Results

Lab ID: L1930221-06
Client ID: CAN 453 SHELF 10
Sample Location:

Date Collected: 06/11/19 09:00
Date Received: 07/11/19
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	98		60-140
bromochloromethane	99		60-140
chlorobenzene-d5	102		60-140



Project Name: 450 JOHNSON AVE.
Project Number: 17058801

Serial_No:07221916:32
Lab Number: L1931865
Report Date: 07/22/19

Sample Receipt and Container Information

Were project specific reporting limits specified?

YES

Cooler Information

Cooler	Custody Seal
N/A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1931865-01A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)
L1931865-02A	Canister - 6 Liter	N/A	NA			Y	Absent		TO15-LL(30)

Project Name: 450 JOHNSON AVE.**Lab Number:** L1931865**Project Number:** 17058801**Report Date:** 07/22/19

GLOSSARY

Acronyms

DL	- 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 limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
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).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
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.
LCS D	- 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.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
	Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
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. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
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.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
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

Report Format: Data Usability Report

Project Name: 450 JOHNSON AVE.
Project Number: 17058801

Lab Number: L1931865
Report Date: 07/22/19

- 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.

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

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.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. If a 'Total' result is requested, the results of its individual components will also be reported.

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 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.
- J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- ND** - Not detected at the reporting limit (RL) for the sample.
- 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.

Report Format: Data Usability Report



Project Name: 450 JOHNSON AVE.
Project Number: 17058801

Lab Number: L1931865
Report Date: 07/22/19

REFERENCES

- 48 Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air. Second Edition. EPA/625/R-96/010b, January 1999.

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.



Alpha Analytical, Inc.

ID No.:17873

Facility: **Company-wide**

Revision 12

Department: **Quality Assurance**

Published Date: 10/9/2018 4:58:19 PM

Title: **Certificate/Approval Program Summary**

Page 1 of 1

Certification Information

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

Westborough Facility**EPA 624/624.1:** 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 6860:** SCM: Perchlorate**SM4500:** NPW: Amenable Cyanide; 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, **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 300:** Chloride, Sulfate, Nitrate.**EPA 624.1:** Volatile Halocarbons & Aromatics,**EPA 608.3:** 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 625.1:** SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.**Microbiology:** **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.****Mansfield Facility:****Drinking Water****EPA 200.7:** Al, Ba, Cd, Cr, Cu, Fe, 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, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.**EPA 245.1 Hg.****SM2340B**

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



ANALYTICAL REPORT

Lab Number:	L1932118
Client:	Langan Engineering & Environmental 21 Penn Plaza 360 W. 31st Street, 8th Floor New York, NY 10001-2727
ATTN:	Julia Leung
Phone:	(212) 479-5400
Project Name:	450 JOHNSON AVE
Project Number:	170588001
Report Date:	08/06/19

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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: 450 JOHNSON AVE

Project Number: 170588001

Lab Number: L1932118

Report Date: 08/06/19

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1932118-01	SB15_8.0-8.5	SOIL	BROOKLYN	07/19/19 11:20	07/19/19
L1932118-02	SB10_10.5-11.0	SOIL	BROOKLYN	07/19/19 09:50	07/19/19
L1932118-03	SB10_5.0-5.5	SOIL	BROOKLYN	07/19/19 09:40	07/19/19
L1932118-04	SB16_3.0-3.5	SOIL	BROOKLYN	07/19/19 12:15	07/19/19
L1932118-05	SB17_13.0-13.5	SOIL	BROOKLYN	07/19/19 13:20	07/19/19
L1932118-06	SB18_4.0-4.5	SOIL	BROOKLYN	07/19/19 14:00	07/19/19
L1932118-07	TMW07_071919	WATER	BROOKLYN	07/19/19 09:00	07/19/19
L1932118-08	TMW07_071919 (FIELD FILTERED)	WATER	BROOKLYN	07/19/19 09:00	07/19/19
L1932118-09	TB_071919	WATER	BROOKLYN	07/16/19 00:00	07/19/19
L1932118-10	DISPOSAL	WATER	BROOKLYN	07/19/19 09:00	07/19/19

Project Name: 450 JOHNSON AVE
Project Number: 170588001

Lab Number: L1932118
Report Date: 08/06/19

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. 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 Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data 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.

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 Alpha Project Manager 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 Project Management at 800-624-9220 with any questions.

Project Name: 450 JOHNSON AVE
Project Number: 170588001

Lab Number: L1932118
Report Date: 08/06/19

Case Narrative (continued)

Report Submission

August 06, 2019: This final report includes the results of all requested analyses.

July 24, 2019: This is a preliminary report.

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

Sample Receipt

L1932118-08: The sample was received above the appropriate pH for the Dissolved Metals analysis. The laboratory added HNO₃ to a pH <2.

L1932118-09: A sample identified as "TB_071919" was received but not listed on the Chain of Custody. At the client's request, this sample was analyzed.

L1932118-10: A sample identified as "DISPOSAL" was received but not listed on the Chain of Custody. This sample was not analyzed.

Volatile Organics

L1932118-04: The sample has elevated detection limits due to the dilution required by the elevated concentrations of non-target compounds in the sample.

Semivolatile Organics

L1932118-03: The sample has elevated detection limits due to the limited sample volume utilized during extraction, as required by the sample matrix.

The WG1262491-2 LCS recovery, associated with L1932118-01, -03, -04, -05, and -06, is below the acceptance criteria for benzoic acid (0%); however, it has been identified as a "difficult" analyte. The results of the associated samples are reported.

Total Metals

Project Name: 450 JOHNSON AVE
Project Number: 170588001

Lab Number: L1932118
Report Date: 08/06/19

Case Narrative (continued)

L1932118-01, 03, -04, -05 and -06: The sample has elevated detection limits for all elements, with the exception of mercury, due to the dilution required by matrix interferences encountered during analysis. The WG1262372-1 Method Blank, associated with L1932118-01, -03, -04, -05, and -06, has a concentration above the reporting limit for manganese. Since the associated sample concentrations are greater than 10x the blank concentration for this analyte, no corrective action is required.

Dissolved Metals

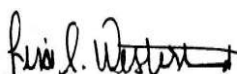
L1932118-08: The sample has an elevated detection limit for mercury due to the dilution required by the limited sample volume available for analysis.

The WG1262423-3 MS recovery, performed on L1932118-08, is outside the acceptance criteria for antimony (132%). A post digestion spike was performed and was within acceptance criteria.

The WG1262423-4 Laboratory Duplicate RPDs for copper (31%), lead (49%) and nickel (31%), performed on L1932118-08, are above the acceptance criteria; however, the sample and duplicate results are less than five times the reporting limits. Therefore, the RPDs are valid.

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:

 Lisa Westerlind

Title: Technical Director/Representative

Date: 08/06/19

ORGANICS

VOLATILES

Project Name: 450 JOHNSON AVE
Project Number: 170588001

Lab Number: L1932118
Report Date: 08/06/19

SAMPLE RESULTS

Lab ID: L1932118-01
Client ID: SB15_8.0-8.5
Sample Location: BROOKLYN

Date Collected: 07/19/19 11:20
Date Received: 07/19/19
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 07/22/19 15:45
Analyst: JC
Percent Solids: 81%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	5.2	2.4	1
1,1-Dichloroethane	ND		ug/kg	1.0	0.15	1
Chloroform	ND		ug/kg	1.6	0.14	1
Carbon tetrachloride	ND		ug/kg	1.0	0.24	1
1,2-Dichloropropane	ND		ug/kg	1.0	0.13	1
Dibromochloromethane	ND		ug/kg	1.0	0.14	1
1,1,2-Trichloroethane	ND		ug/kg	1.0	0.28	1
Tetrachloroethene	ND		ug/kg	0.52	0.20	1
Chlorobenzene	ND		ug/kg	0.52	0.13	1
Trichlorofluoromethane	ND		ug/kg	4.1	0.72	1
1,2-Dichloroethane	ND		ug/kg	1.0	0.27	1
1,1,1-Trichloroethane	ND		ug/kg	0.52	0.17	1
Bromodichloromethane	ND		ug/kg	0.52	0.11	1
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.28	1
cis-1,3-Dichloropropene	ND		ug/kg	0.52	0.16	1
1,3-Dichloropropene, Total	ND		ug/kg	0.52	0.16	1
1,1-Dichloropropene	ND		ug/kg	0.52	0.16	1
Bromoform	ND		ug/kg	4.1	0.25	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.52	0.17	1
Benzene	ND		ug/kg	0.52	0.17	1
Toluene	ND		ug/kg	1.0	0.56	1
Ethylbenzene	ND		ug/kg	1.0	0.14	1
Chloromethane	ND		ug/kg	4.1	0.96	1
Bromomethane	ND		ug/kg	2.1	0.60	1
Vinyl chloride	ND		ug/kg	1.0	0.35	1
Chloroethane	ND		ug/kg	2.1	0.47	1
1,1-Dichloroethene	ND		ug/kg	1.0	0.25	1
trans-1,2-Dichloroethene	ND		ug/kg	1.6	0.14	1

Project Name: 450 JOHNSON AVE

Lab Number: L1932118

Project Number: 170588001

Report Date: 08/06/19

SAMPLE RESULTS

Lab ID: L1932118-01

Date Collected: 07/19/19 11:20

Client ID: SB15_8.0-8.5

Date Received: 07/19/19

Sample Location: BROOKLYN

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.52	0.14	1
1,2-Dichlorobenzene	ND		ug/kg	2.1	0.15	1
1,3-Dichlorobenzene	ND		ug/kg	2.1	0.15	1
1,4-Dichlorobenzene	ND		ug/kg	2.1	0.18	1
Methyl tert butyl ether	0.27	J	ug/kg	2.1	0.21	1
p/m-Xylene	ND		ug/kg	2.1	0.58	1
o-Xylene	ND		ug/kg	1.0	0.30	1
Xylenes, Total	ND		ug/kg	1.0	0.30	1
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.18	1
1,2-Dichloroethene, Total	ND		ug/kg	1.0	0.14	1
Dibromomethane	ND		ug/kg	2.1	0.25	1
Styrene	ND		ug/kg	1.0	0.20	1
Dichlorodifluoromethane	ND		ug/kg	10	0.95	1
Acetone	45		ug/kg	10	5.0	1
Carbon disulfide	ND		ug/kg	10	4.7	1
2-Butanone	ND		ug/kg	10	2.3	1
Vinyl acetate	ND		ug/kg	10	2.2	1
4-Methyl-2-pentanone	ND		ug/kg	10	1.3	1
1,2,3-Trichloropropane	ND		ug/kg	2.1	0.13	1
2-Hexanone	ND		ug/kg	10	1.2	1
Bromochloromethane	ND		ug/kg	2.1	0.21	1
2,2-Dichloropropane	ND		ug/kg	2.1	0.21	1
1,2-Dibromoethane	ND		ug/kg	1.0	0.29	1
1,3-Dichloropropane	ND		ug/kg	2.1	0.17	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.52	0.14	1
Bromobenzene	ND		ug/kg	2.1	0.15	1
n-Butylbenzene	ND		ug/kg	1.0	0.17	1
sec-Butylbenzene	ND		ug/kg	1.0	0.15	1
tert-Butylbenzene	ND		ug/kg	2.1	0.12	1
o-Chlorotoluene	ND		ug/kg	2.1	0.20	1
p-Chlorotoluene	ND		ug/kg	2.1	0.11	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.1	1.0	1
Hexachlorobutadiene	ND		ug/kg	4.1	0.17	1
Isopropylbenzene	ND		ug/kg	1.0	0.11	1
p-Isopropyltoluene	ND		ug/kg	1.0	0.11	1
Naphthalene	ND		ug/kg	4.1	0.67	1
Acrylonitrile	ND		ug/kg	4.1	1.2	1

Project Name: 450 JOHNSON AVE**Lab Number:** L1932118**Project Number:** 170588001**Report Date:** 08/06/19**SAMPLE RESULTS****Lab ID:** L1932118-01**Date Collected:** 07/19/19 11:20**Client ID:** SB15_8.0-8.5**Date Received:** 07/19/19**Sample Location:** BROOKLYN**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.0	0.18	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.1	0.33	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.1	0.28	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.1	0.20	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.1	0.34	1
1,4-Dioxane	ND		ug/kg	83	36.	1
p-Diethylbenzene	ND		ug/kg	2.1	0.18	1
p-Ethyltoluene	ND		ug/kg	2.1	0.40	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.1	0.20	1
Ethyl ether	ND		ug/kg	2.1	0.35	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.2	1.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	119		70-130
Toluene-d8	118		70-130
4-Bromofluorobenzene	117		70-130
Dibromofluoromethane	98		70-130

Project Name: 450 JOHNSON AVE**Lab Number:** L1932118**Project Number:** 170588001**Report Date:** 08/06/19**SAMPLE RESULTS**

Lab ID: L1932118-03

Date Collected: 07/19/19 09:40

Client ID: SB10_5.0-5.5

Date Received: 07/19/19

Sample Location: BROOKLYN

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Analytical Method: 1,8260C

Analytical Date: 07/21/19 16:31

Analyst: JC

Percent Solids: 82%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	9.9	4.6	1
1,1-Dichloroethane	ND		ug/kg	2.0	0.29	1
Chloroform	ND		ug/kg	3.0	0.28	1
Carbon tetrachloride	ND		ug/kg	2.0	0.46	1
1,2-Dichloropropane	ND		ug/kg	2.0	0.25	1
Dibromochloromethane	ND		ug/kg	2.0	0.28	1
1,1,2-Trichloroethane	ND		ug/kg	2.0	0.53	1
Tetrachloroethene	ND		ug/kg	0.99	0.39	1
Chlorobenzene	ND		ug/kg	0.99	0.25	1
Trichlorofluoromethane	ND		ug/kg	8.0	1.4	1
1,2-Dichloroethane	ND		ug/kg	2.0	0.51	1
1,1,1-Trichloroethane	ND		ug/kg	0.99	0.33	1
Bromodichloromethane	ND		ug/kg	0.99	0.22	1
trans-1,3-Dichloropropene	ND		ug/kg	2.0	0.54	1
cis-1,3-Dichloropropene	ND		ug/kg	0.99	0.31	1
1,3-Dichloropropene, Total	ND		ug/kg	0.99	0.31	1
1,1-Dichloropropene	ND		ug/kg	0.99	0.32	1
Bromoform	ND		ug/kg	8.0	0.49	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.99	0.33	1
Benzene	ND		ug/kg	0.99	0.33	1
Toluene	ND		ug/kg	2.0	1.1	1
Ethylbenzene	ND		ug/kg	2.0	0.28	1
Chloromethane	1.8	J	ug/kg	8.0	1.8	1
Bromomethane	ND		ug/kg	4.0	1.2	1
Vinyl chloride	ND		ug/kg	2.0	0.66	1
Chloroethane	ND		ug/kg	4.0	0.90	1
1,1-Dichloroethene	ND		ug/kg	2.0	0.47	1
trans-1,2-Dichloroethene	ND		ug/kg	3.0	0.27	1

Project Name: 450 JOHNSON AVE

Lab Number: L1932118

Project Number: 170588001

Report Date: 08/06/19

SAMPLE RESULTS

Lab ID: L1932118-03

Date Collected: 07/19/19 09:40

Client ID: SB10_5.0-5.5

Date Received: 07/19/19

Sample Location: BROOKLYN

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.99	0.27	1
1,2-Dichlorobenzene	ND		ug/kg	4.0	0.29	1
1,3-Dichlorobenzene	ND		ug/kg	4.0	0.29	1
1,4-Dichlorobenzene	ND		ug/kg	4.0	0.34	1
Methyl tert butyl ether	0.45	J	ug/kg	4.0	0.40	1
p/m-Xylene	ND		ug/kg	4.0	1.1	1
o-Xylene	ND		ug/kg	2.0	0.58	1
Xylenes, Total	ND		ug/kg	2.0	0.58	1
cis-1,2-Dichloroethene	ND		ug/kg	2.0	0.35	1
1,2-Dichloroethene, Total	ND		ug/kg	2.0	0.27	1
Dibromomethane	ND		ug/kg	4.0	0.47	1
Styrene	ND		ug/kg	2.0	0.39	1
Dichlorodifluoromethane	ND		ug/kg	20	1.8	1
Acetone	38		ug/kg	20	9.6	1
Carbon disulfide	ND		ug/kg	20	9.0	1
2-Butanone	ND		ug/kg	20	4.4	1
Vinyl acetate	ND		ug/kg	20	4.3	1
4-Methyl-2-pentanone	ND		ug/kg	20	2.5	1
1,2,3-Trichloropropane	ND		ug/kg	4.0	0.25	1
2-Hexanone	ND		ug/kg	20	2.3	1
Bromochloromethane	ND		ug/kg	4.0	0.41	1
2,2-Dichloropropane	ND		ug/kg	4.0	0.40	1
1,2-Dibromoethane	ND		ug/kg	2.0	0.55	1
1,3-Dichloropropane	ND		ug/kg	4.0	0.33	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.99	0.26	1
Bromobenzene	ND		ug/kg	4.0	0.29	1
n-Butylbenzene	ND		ug/kg	2.0	0.33	1
sec-Butylbenzene	ND		ug/kg	2.0	0.29	1
tert-Butylbenzene	ND		ug/kg	4.0	0.23	1
o-Chlorotoluene	ND		ug/kg	4.0	0.38	1
p-Chlorotoluene	ND		ug/kg	4.0	0.21	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	6.0	2.0	1
Hexachlorobutadiene	ND		ug/kg	8.0	0.34	1
Isopropylbenzene	ND		ug/kg	2.0	0.22	1
p-Isopropyltoluene	ND		ug/kg	2.0	0.22	1
Naphthalene	ND		ug/kg	8.0	1.3	1
Acrylonitrile	ND		ug/kg	8.0	2.3	1

Project Name: 450 JOHNSON AVE**Lab Number:** L1932118**Project Number:** 170588001**Report Date:** 08/06/19**SAMPLE RESULTS****Lab ID:** L1932118-03**Date Collected:** 07/19/19 09:40**Client ID:** SB10_5.0-5.5**Date Received:** 07/19/19**Sample Location:** BROOKLYN**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	2.0	0.34	1
1,2,3-Trichlorobenzene	ND		ug/kg	4.0	0.64	1
1,2,4-Trichlorobenzene	ND		ug/kg	4.0	0.54	1
1,3,5-Trimethylbenzene	ND		ug/kg	4.0	0.38	1
1,2,4-Trimethylbenzene	ND		ug/kg	4.0	0.66	1
1,4-Dioxane	ND		ug/kg	160	70.	1
p-Diethylbenzene	ND		ug/kg	4.0	0.35	1
p-Ethyltoluene	ND		ug/kg	4.0	0.76	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	4.0	0.38	1
Ethyl ether	ND		ug/kg	4.0	0.68	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	9.9	2.8	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	109		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	111		70-130
Dibromofluoromethane	101		70-130

Project Name: 450 JOHNSON AVE**Lab Number:** L1932118**Project Number:** 170588001**Report Date:** 08/06/19**SAMPLE RESULTS**

Lab ID: L1932118-04 D

Date Collected: 07/19/19 12:15

Client ID: SB16_3.0-3.5

Date Received: 07/19/19

Sample Location: BROOKLYN

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Analytical Method: 1,8260C

Analytical Date: 07/21/19 19:57

Analyst: MV

Percent Solids: 80%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Methylene chloride	ND		ug/kg	3400	1600	10
1,1-Dichloroethane	ND		ug/kg	680	99.	10
Chloroform	ND		ug/kg	1000	96.	10
Carbon tetrachloride	ND		ug/kg	680	160	10
1,2-Dichloropropane	ND		ug/kg	680	86.	10
Dibromochloromethane	ND		ug/kg	680	96.	10
1,1,2-Trichloroethane	ND		ug/kg	680	180	10
Tetrachloroethene	ND		ug/kg	340	130	10
Chlorobenzene	ND		ug/kg	340	87.	10
Trichlorofluoromethane	ND		ug/kg	2700	480	10
1,2-Dichloroethane	ND		ug/kg	680	180	10
1,1,1-Trichloroethane	ND		ug/kg	340	110	10
Bromodichloromethane	ND		ug/kg	340	75.	10
trans-1,3-Dichloropropene	ND		ug/kg	680	190	10
cis-1,3-Dichloropropene	ND		ug/kg	340	110	10
1,3-Dichloropropene, Total	ND		ug/kg	340	110	10
1,1-Dichloropropene	ND		ug/kg	340	110	10
Bromoform	ND		ug/kg	2700	170	10
1,1,2,2-Tetrachloroethane	ND		ug/kg	340	110	10
Benzene	ND		ug/kg	340	110	10
Toluene	ND		ug/kg	680	370	10
Ethylbenzene	780		ug/kg	680	97.	10
Chloromethane	ND		ug/kg	2700	640	10
Bromomethane	ND		ug/kg	1400	400	10
Vinyl chloride	ND		ug/kg	680	230	10
Chloroethane	ND		ug/kg	1400	310	10
1,1-Dichloroethene	ND		ug/kg	680	160	10
trans-1,2-Dichloroethene	ND		ug/kg	1000	94.	10

Project Name: 450 JOHNSON AVE

Lab Number: L1932118

Project Number: 170588001

Report Date: 08/06/19

SAMPLE RESULTS

Lab ID: L1932118-04 D

Date Collected: 07/19/19 12:15

Client ID: SB16_3.0-3.5

Date Received: 07/19/19

Sample Location: BROOKLYN

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Trichloroethene	ND		ug/kg	340	94.	10
1,2-Dichlorobenzene	ND		ug/kg	1400	99.	10
1,3-Dichlorobenzene	ND		ug/kg	1400	100	10
1,4-Dichlorobenzene	ND		ug/kg	1400	120	10
Methyl tert butyl ether	ND		ug/kg	1400	140	10
p/m-Xylene	ND		ug/kg	1400	380	10
o-Xylene	ND		ug/kg	680	200	10
Xylenes, Total	ND		ug/kg	680	200	10
cis-1,2-Dichloroethene	ND		ug/kg	680	120	10
1,2-Dichloroethene, Total	ND		ug/kg	680	94.	10
Dibromomethane	ND		ug/kg	1400	160	10
Styrene	ND		ug/kg	680	130	10
Dichlorodifluoromethane	ND		ug/kg	6800	630	10
Acetone	ND		ug/kg	6800	3300	10
Carbon disulfide	ND		ug/kg	6800	3100	10
2-Butanone	ND		ug/kg	6800	1500	10
Vinyl acetate	ND		ug/kg	6800	1500	10
4-Methyl-2-pentanone	ND		ug/kg	6800	880	10
1,2,3-Trichloropropane	ND		ug/kg	1400	87.	10
2-Hexanone	ND		ug/kg	6800	810	10
Bromochloromethane	ND		ug/kg	1400	140	10
2,2-Dichloropropane	ND		ug/kg	1400	140	10
1,2-Dibromoethane	ND		ug/kg	680	190	10
1,3-Dichloropropane	ND		ug/kg	1400	110	10
1,1,1,2-Tetrachloroethane	ND		ug/kg	340	90.	10
Bromobenzene	ND		ug/kg	1400	99.	10
n-Butylbenzene	6500		ug/kg	680	110	10
sec-Butylbenzene	4000		ug/kg	680	100	10
tert-Butylbenzene	250	J	ug/kg	1400	81.	10
o-Chlorotoluene	ND		ug/kg	1400	130	10
p-Chlorotoluene	ND		ug/kg	1400	74.	10
1,2-Dibromo-3-chloropropane	ND		ug/kg	2000	680	10
Hexachlorobutadiene	ND		ug/kg	2700	120	10
Isopropylbenzene	280	J	ug/kg	680	75.	10
p-Isopropyltoluene	140	J	ug/kg	680	75.	10
Naphthalene	2100	J	ug/kg	2700	440	10
Acrylonitrile	ND		ug/kg	2700	790	10

Project Name: 450 JOHNSON AVE

Lab Number: L1932118

Project Number: 170588001

Report Date: 08/06/19

SAMPLE RESULTS

Lab ID: L1932118-04 D

Date Collected: 07/19/19 12:15

Client ID: SB16_3.0-3.5

Date Received: 07/19/19

Sample Location: BROOKLYN

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
n-Propylbenzene	1400		ug/kg	680	120	10
1,2,3-Trichlorobenzene	ND		ug/kg	1400	220	10
1,2,4-Trichlorobenzene	ND		ug/kg	1400	190	10
1,3,5-Trimethylbenzene	200	J	ug/kg	1400	130	10
1,2,4-Trimethylbenzene	910	J	ug/kg	1400	230	10
1,4-Dioxane	ND		ug/kg	55000	24000	10
p-Diethylbenzene	4600		ug/kg	1400	120	10
p-Ethyltoluene	850	J	ug/kg	1400	260	10
1,2,4,5-Tetramethylbenzene	7800		ug/kg	1400	130	10
Ethyl ether	ND		ug/kg	1400	230	10
trans-1,4-Dichloro-2-butene	ND		ug/kg	3400	970	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	89		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	124		70-130
Dibromofluoromethane	96		70-130

Project Name: 450 JOHNSON AVE**Lab Number:** L1932118**Project Number:** 170588001**Report Date:** 08/06/19**SAMPLE RESULTS**

Lab ID: L1932118-05
 Client ID: SB17_13.0-13.5
 Sample Location: BROOKLYN

Date Collected: 07/19/19 13:20
 Date Received: 07/19/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 07/21/19 16:57
 Analyst: JC
 Percent Solids: 91%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	6.2	2.8	1
1,1-Dichloroethane	ND		ug/kg	1.2	0.18	1
Chloroform	ND		ug/kg	1.9	0.17	1
Carbon tetrachloride	ND		ug/kg	1.2	0.29	1
1,2-Dichloropropane	ND		ug/kg	1.2	0.16	1
Dibromochloromethane	ND		ug/kg	1.2	0.17	1
1,1,2-Trichloroethane	ND		ug/kg	1.2	0.33	1
Tetrachloroethene	ND		ug/kg	0.62	0.24	1
Chlorobenzene	ND		ug/kg	0.62	0.16	1
Trichlorofluoromethane	ND		ug/kg	5.0	0.86	1
1,2-Dichloroethane	ND		ug/kg	1.2	0.32	1
1,1,1-Trichloroethane	ND		ug/kg	0.62	0.21	1
Bromodichloromethane	ND		ug/kg	0.62	0.14	1
trans-1,3-Dichloropropene	ND		ug/kg	1.2	0.34	1
cis-1,3-Dichloropropene	ND		ug/kg	0.62	0.20	1
1,3-Dichloropropene, Total	ND		ug/kg	0.62	0.20	1
1,1-Dichloropropene	ND		ug/kg	0.62	0.20	1
Bromoform	ND		ug/kg	5.0	0.31	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.62	0.21	1
Benzene	0.33	J	ug/kg	0.62	0.21	1
Toluene	ND		ug/kg	1.2	0.68	1
Ethylbenzene	ND		ug/kg	1.2	0.18	1
Chloromethane	2.4	J	ug/kg	5.0	1.2	1
Bromomethane	ND		ug/kg	2.5	0.72	1
Vinyl chloride	ND		ug/kg	1.2	0.42	1
Chloroethane	ND		ug/kg	2.5	0.56	1
1,1-Dichloroethene	ND		ug/kg	1.2	0.30	1
trans-1,2-Dichloroethene	ND		ug/kg	1.9	0.17	1

Project Name: 450 JOHNSON AVE

Lab Number: L1932118

Project Number: 170588001

Report Date: 08/06/19

SAMPLE RESULTS

Lab ID: L1932118-05
 Client ID: SB17_13.0-13.5
 Sample Location: BROOKLYN

Date Collected: 07/19/19 13:20
 Date Received: 07/19/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.62	0.17	1
1,2-Dichlorobenzene	ND		ug/kg	2.5	0.18	1
1,3-Dichlorobenzene	ND		ug/kg	2.5	0.18	1
1,4-Dichlorobenzene	ND		ug/kg	2.5	0.21	1
Methyl tert butyl ether	ND		ug/kg	2.5	0.25	1
p/m-Xylene	ND		ug/kg	2.5	0.70	1
o-Xylene	ND		ug/kg	1.2	0.36	1
Xylenes, Total	ND		ug/kg	1.2	0.36	1
cis-1,2-Dichloroethene	ND		ug/kg	1.2	0.22	1
1,2-Dichloroethene, Total	ND		ug/kg	1.2	0.17	1
Dibromomethane	ND		ug/kg	2.5	0.30	1
Styrene	ND		ug/kg	1.2	0.24	1
Dichlorodifluoromethane	ND		ug/kg	12	1.1	1
Acetone	7.4	J	ug/kg	12	6.0	1
Carbon disulfide	ND		ug/kg	12	5.7	1
2-Butanone	ND		ug/kg	12	2.8	1
Vinyl acetate	ND		ug/kg	12	2.7	1
4-Methyl-2-pentanone	ND		ug/kg	12	1.6	1
1,2,3-Trichloropropane	ND		ug/kg	2.5	0.16	1
2-Hexanone	ND		ug/kg	12	1.5	1
Bromochloromethane	ND		ug/kg	2.5	0.26	1
2,2-Dichloropropane	ND		ug/kg	2.5	0.25	1
1,2-Dibromoethane	ND		ug/kg	1.2	0.35	1
1,3-Dichloropropane	ND		ug/kg	2.5	0.21	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.62	0.16	1
Bromobenzene	ND		ug/kg	2.5	0.18	1
n-Butylbenzene	ND		ug/kg	1.2	0.21	1
sec-Butylbenzene	ND		ug/kg	1.2	0.18	1
tert-Butylbenzene	ND		ug/kg	2.5	0.15	1
o-Chlorotoluene	ND		ug/kg	2.5	0.24	1
p-Chlorotoluene	ND		ug/kg	2.5	0.13	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.7	1.2	1
Hexachlorobutadiene	ND		ug/kg	5.0	0.21	1
Isopropylbenzene	ND		ug/kg	1.2	0.14	1
p-Isopropyltoluene	ND		ug/kg	1.2	0.14	1
Naphthalene	ND		ug/kg	5.0	0.81	1
Acrylonitrile	ND		ug/kg	5.0	1.4	1

Project Name: 450 JOHNSON AVE
Project Number: 170588001

Lab Number: L1932118
Report Date: 08/06/19

SAMPLE RESULTS

Lab ID: L1932118-05
Client ID: SB17_13.0-13.5
Sample Location: BROOKLYN

Date Collected: 07/19/19 13:20
Date Received: 07/19/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.2	0.21	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.5	0.40	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.5	0.34	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.5	0.24	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.5	0.42	1
1,4-Dioxane	ND		ug/kg	100	44.	1
p-Diethylbenzene	ND		ug/kg	2.5	0.22	1
p-Ethyltoluene	ND		ug/kg	2.5	0.48	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.5	0.24	1
Ethyl ether	ND		ug/kg	2.5	0.42	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	6.2	1.8	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	113		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	119		70-130
Dibromofluoromethane	99		70-130

Project Name: 450 JOHNSON AVE**Lab Number:** L1932118**Project Number:** 170588001**Report Date:** 08/06/19**SAMPLE RESULTS**

Lab ID: L1932118-06

Date Collected: 07/19/19 14:00

Client ID: SB18_4.0-4.5

Date Received: 07/19/19

Sample Location: BROOKLYN

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Analytical Method: 1,8260C

Analytical Date: 07/21/19 17:23

Analyst: JC

Percent Solids: 86%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	6.2	2.9	1
1,1-Dichloroethane	ND		ug/kg	1.2	0.18	1
Chloroform	0.89	J	ug/kg	1.9	0.18	1
Carbon tetrachloride	ND		ug/kg	1.2	0.29	1
1,2-Dichloropropane	ND		ug/kg	1.2	0.16	1
Dibromochloromethane	ND		ug/kg	1.2	0.18	1
1,1,2-Trichloroethane	ND		ug/kg	1.2	0.33	1
Tetrachloroethene	2.2		ug/kg	0.62	0.24	1
Chlorobenzene	ND		ug/kg	0.62	0.16	1
Trichlorofluoromethane	ND		ug/kg	5.0	0.87	1
1,2-Dichloroethane	ND		ug/kg	1.2	0.32	1
1,1,1-Trichloroethane	ND		ug/kg	0.62	0.21	1
Bromodichloromethane	ND		ug/kg	0.62	0.14	1
trans-1,3-Dichloropropene	ND		ug/kg	1.2	0.34	1
cis-1,3-Dichloropropene	ND		ug/kg	0.62	0.20	1
1,3-Dichloropropene, Total	ND		ug/kg	0.62	0.20	1
1,1-Dichloropropene	ND		ug/kg	0.62	0.20	1
Bromoform	ND		ug/kg	5.0	0.31	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.62	0.21	1
Benzene	ND		ug/kg	0.62	0.21	1
Toluene	ND		ug/kg	1.2	0.68	1
Ethylbenzene	ND		ug/kg	1.2	0.18	1
Chloromethane	ND		ug/kg	5.0	1.2	1
Bromomethane	ND		ug/kg	2.5	0.73	1
Vinyl chloride	ND		ug/kg	1.2	0.42	1
Chloroethane	ND		ug/kg	2.5	0.56	1
1,1-Dichloroethene	ND		ug/kg	1.2	0.30	1
trans-1,2-Dichloroethene	ND		ug/kg	1.9	0.17	1

Project Name: 450 JOHNSON AVE**Lab Number:** L1932118**Project Number:** 170588001**Report Date:** 08/06/19**SAMPLE RESULTS****Lab ID:** L1932118-06**Date Collected:** 07/19/19 14:00**Client ID:** SB18_4.0-4.5**Date Received:** 07/19/19**Sample Location:** BROOKLYN**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.62	0.17	1
1,2-Dichlorobenzene	ND		ug/kg	2.5	0.18	1
1,3-Dichlorobenzene	ND		ug/kg	2.5	0.18	1
1,4-Dichlorobenzene	ND		ug/kg	2.5	0.21	1
Methyl tert butyl ether	ND		ug/kg	2.5	0.25	1
p/m-Xylene	ND		ug/kg	2.5	0.70	1
o-Xylene	ND		ug/kg	1.2	0.36	1
Xylenes, Total	ND		ug/kg	1.2	0.36	1
cis-1,2-Dichloroethene	ND		ug/kg	1.2	0.22	1
1,2-Dichloroethene, Total	ND		ug/kg	1.2	0.17	1
Dibromomethane	ND		ug/kg	2.5	0.30	1
Styrene	ND		ug/kg	1.2	0.24	1
Dichlorodifluoromethane	ND		ug/kg	12	1.1	1
Acetone	ND		ug/kg	12	6.0	1
Carbon disulfide	ND		ug/kg	12	5.7	1
2-Butanone	ND		ug/kg	12	2.8	1
Vinyl acetate	ND		ug/kg	12	2.7	1
4-Methyl-2-pentanone	ND		ug/kg	12	1.6	1
1,2,3-Trichloropropane	ND		ug/kg	2.5	0.16	1
2-Hexanone	ND		ug/kg	12	1.5	1
Bromochloromethane	ND		ug/kg	2.5	0.26	1
2,2-Dichloropropane	ND		ug/kg	2.5	0.25	1
1,2-Dibromoethane	ND		ug/kg	1.2	0.35	1
1,3-Dichloropropane	ND		ug/kg	2.5	0.21	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.62	0.16	1
Bromobenzene	ND		ug/kg	2.5	0.18	1
n-Butylbenzene	ND		ug/kg	1.2	0.21	1
sec-Butylbenzene	ND		ug/kg	1.2	0.18	1
tert-Butylbenzene	ND		ug/kg	2.5	0.15	1
o-Chlorotoluene	ND		ug/kg	2.5	0.24	1
p-Chlorotoluene	ND		ug/kg	2.5	0.14	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.8	1.2	1
Hexachlorobutadiene	ND		ug/kg	5.0	0.21	1
Isopropylbenzene	ND		ug/kg	1.2	0.14	1
p-Isopropyltoluene	ND		ug/kg	1.2	0.14	1
Naphthalene	ND		ug/kg	5.0	0.81	1
Acrylonitrile	ND		ug/kg	5.0	1.4	1

Project Name: 450 JOHNSON AVE**Lab Number:** L1932118**Project Number:** 170588001**Report Date:** 08/06/19**SAMPLE RESULTS****Lab ID:** L1932118-06**Date Collected:** 07/19/19 14:00**Client ID:** SB18_4.0-4.5**Date Received:** 07/19/19**Sample Location:** BROOKLYN**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.2	0.21	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.5	0.40	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.5	0.34	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.5	0.24	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.5	0.42	1
1,4-Dioxane	ND		ug/kg	100	44.	1
p-Diethylbenzene	ND		ug/kg	2.5	0.22	1
p-Ethyltoluene	ND		ug/kg	2.5	0.48	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.5	0.24	1
Ethyl ether	ND		ug/kg	2.5	0.43	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	6.2	1.8	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	115		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	112		70-130
Dibromofluoromethane	101		70-130

Project Name: 450 JOHNSON AVE
Project Number: 170588001

Lab Number: L1932118
Report Date: 08/06/19

SAMPLE RESULTS

Lab ID: L1932118-07
Client ID: TMW07_071919
Sample Location: BROOKLYN

Date Collected: 07/19/19 09:00
Date Received: 07/19/19
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 07/21/19 17:48
Analyst: MAB

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	5.3		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	150		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	0.24	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
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	3.2		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	1.1		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	1.8	J	ug/l	2.5	0.70	1

Project Name: 450 JOHNSON AVE

Lab Number: L1932118

Project Number: 170588001

Report Date: 08/06/19

SAMPLE RESULTS

Lab ID: L1932118-07
 Client ID: TMW07_071919
 Sample Location: BROOKLYN

Date Collected: 07/19/19 09:00
 Date Received: 07/19/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	70		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	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
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	270	E	ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	5.8		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	2.0	J	ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	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
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	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	2.9		ug/l	2.5	0.70	1
n-Propylbenzene	ND		ug/l	2.5	0.70	1

Project Name: 450 JOHNSON AVE

Lab Number: L1932118

Project Number: 170588001

Report Date: 08/06/19

SAMPLE RESULTS

Lab ID: L1932118-07
 Client ID: TMW07_071919
 Sample Location: BROOKLYN

Date Collected: 07/19/19 09:00
 Date Received: 07/19/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	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
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	85		70-130
Toluene-d8	86		70-130
4-Bromofluorobenzene	88		70-130
Dibromofluoromethane	98		70-130

Project Name: 450 JOHNSON AVE**Project Number:** 170588001**Lab Number:** L1932118**Report Date:** 08/06/19**SAMPLE RESULTS**

Lab ID: L1932118-07 D

Client ID: TMW07_071919

Sample Location: BROOKLYN

Date Collected: 07/19/19 09:00

Date Received: 07/19/19

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Analytical Method: 1,8260C

Analytical Date: 07/23/19 01:49

Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Volatile Organics by GC/MS - Westborough Lab

cis-1,2-Dichloroethene	250		ug/l	6.2	1.8	2.5

1,2-Dichloroethene, Total	250	J	ug/l	2.5	0.70	2.5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	96		70-130
Toluene-d8	84		70-130
4-Bromofluorobenzene	87		70-130
Dibromofluoromethane	105		70-130

Project Name: 450 JOHNSON AVE
Project Number: 170588001

Lab Number: L1932118
Report Date: 08/06/19

SAMPLE RESULTS

Lab ID: L1932118-09
Client ID: TB_071919
Sample Location: BROOKLYN

Date Collected: 07/16/19 00:00
Date Received: 07/19/19
Field Prep: None

Sample Depth:

Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 07/22/19 20:21
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
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
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: 450 JOHNSON AVE

Lab Number: L1932118

Project Number: 170588001

Report Date: 08/06/19

SAMPLE RESULTS

Lab ID: L1932118-09

Date Collected: 07/16/19 00:00

Client ID: TB_071919

Date Received: 07/19/19

Sample Location: BROOKLYN

Field Prep: None

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	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
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	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
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	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

Project Name: 450 JOHNSON AVE

Lab Number: L1932118

Project Number: 170588001

Report Date: 08/06/19

SAMPLE RESULTS

Lab ID: L1932118-09

Date Collected: 07/16/19 00:00

Client ID: TB_071919

Date Received: 07/19/19

Sample Location: BROOKLYN

Field Prep: None

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	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
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	90		70-130
Toluene-d8	85		70-130
4-Bromofluorobenzene	87		70-130
Dibromofluoromethane	102		70-130

Project Name: 450 JOHNSON AVE
Project Number: 170588001

Lab Number: L1932118
Report Date: 08/06/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 07/21/19 13:12
 Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 High - Westborough Lab for sample(s): 04 Batch: WG1262731-5					
Methylene chloride	ND		ug/kg	250	110
1,1-Dichloroethane	ND		ug/kg	50	7.2
Chloroform	ND		ug/kg	75	7.0
Carbon tetrachloride	ND		ug/kg	50	12.
1,2-Dichloropropane	ND		ug/kg	50	6.2
Dibromochloromethane	ND		ug/kg	50	7.0
1,1,2-Trichloroethane	ND		ug/kg	50	13.
Tetrachloroethene	ND		ug/kg	25	9.8
Chlorobenzene	ND		ug/kg	25	6.4
Trichlorofluoromethane	ND		ug/kg	200	35.
1,2-Dichloroethane	ND		ug/kg	50	13.
1,1,1-Trichloroethane	ND		ug/kg	25	8.4
Bromodichloromethane	ND		ug/kg	25	5.4
trans-1,3-Dichloropropene	ND		ug/kg	50	14.
cis-1,3-Dichloropropene	ND		ug/kg	25	7.9
1,3-Dichloropropene, Total	ND		ug/kg	25	7.9
1,1-Dichloropropene	ND		ug/kg	25	8.0
Bromoform	ND		ug/kg	200	12.
1,1,2,2-Tetrachloroethane	ND		ug/kg	25	8.3
Benzene	ND		ug/kg	25	8.3
Toluene	ND		ug/kg	50	27.
Ethylbenzene	ND		ug/kg	50	7.0
Chloromethane	ND		ug/kg	200	47.
Bromomethane	ND		ug/kg	100	29.
Vinyl chloride	ND		ug/kg	50	17.
Chloroethane	ND		ug/kg	100	23.
1,1-Dichloroethene	ND		ug/kg	50	12.
trans-1,2-Dichloroethene	ND		ug/kg	75	6.8
Trichloroethene	ND		ug/kg	25	6.8

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Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 07/21/19 13:12
 Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 High - Westborough Lab for sample(s): 04 Batch: WG1262731-5					
1,2-Dichlorobenzene	ND		ug/kg	100	7.2
1,3-Dichlorobenzene	ND		ug/kg	100	7.4
1,4-Dichlorobenzene	ND		ug/kg	100	8.6
Methyl tert butyl ether	ND		ug/kg	100	10.
p/m-Xylene	ND		ug/kg	100	28.
o-Xylene	ND		ug/kg	50	14.
Xylenes, Total	ND		ug/kg	50	14.
cis-1,2-Dichloroethene	ND		ug/kg	50	8.8
1,2-Dichloroethene, Total	ND		ug/kg	50	6.8
Dibromomethane	ND		ug/kg	100	12.
Styrene	ND		ug/kg	50	9.8
Dichlorodifluoromethane	ND		ug/kg	500	46.
Acetone	ND		ug/kg	500	240
Carbon disulfide	ND		ug/kg	500	230
2-Butanone	ND		ug/kg	500	110
Vinyl acetate	ND		ug/kg	500	110
4-Methyl-2-pentanone	ND		ug/kg	500	64.
1,2,3-Trichloropropane	ND		ug/kg	100	6.4
2-Hexanone	ND		ug/kg	500	59.
Bromochloromethane	ND		ug/kg	100	10.
2,2-Dichloropropane	ND		ug/kg	100	10.
1,2-Dibromoethane	ND		ug/kg	50	14.
1,3-Dichloropropane	ND		ug/kg	100	8.4
1,1,1,2-Tetrachloroethane	ND		ug/kg	25	6.6
Bromobenzene	ND		ug/kg	100	7.2
n-Butylbenzene	ND		ug/kg	50	8.4
sec-Butylbenzene	ND		ug/kg	50	7.3
tert-Butylbenzene	ND		ug/kg	100	5.9
o-Chlorotoluene	ND		ug/kg	100	9.6

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Analytical Method: 1,8260C
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 Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 High - Westborough Lab for sample(s): 04 Batch: WG1262731-5					
p-Chlorotoluene	ND		ug/kg	100	5.4
1,2-Dibromo-3-chloropropane	ND		ug/kg	150	50.
Hexachlorobutadiene	ND		ug/kg	200	8.4
Isopropylbenzene	ND		ug/kg	50	5.4
p-Isopropyltoluene	ND		ug/kg	50	5.4
Naphthalene	100	J	ug/kg	200	32.
Acrylonitrile	ND		ug/kg	200	58.
n-Propylbenzene	ND		ug/kg	50	8.6
1,2,3-Trichlorobenzene	ND		ug/kg	100	16.
1,2,4-Trichlorobenzene	ND		ug/kg	100	14.
1,3,5-Trimethylbenzene	ND		ug/kg	100	9.6
1,2,4-Trimethylbenzene	ND		ug/kg	100	17.
1,4-Dioxane	ND		ug/kg	4000	1800
p-Diethylbenzene	ND		ug/kg	100	8.8
p-Ethyltoluene	ND		ug/kg	100	19.
1,2,4,5-Tetramethylbenzene	ND		ug/kg	100	9.6
Ethyl ether	ND		ug/kg	100	17.
trans-1,4-Dichloro-2-butene	ND		ug/kg	250	71.

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	81		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	91		70-130

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Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 07/22/19 19:39
 Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 07,09 Batch: WG1262844-15					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14
1,1-Dichloropropene	ND		ug/l	2.5	0.70
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18

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Method Blank Analysis
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Analytical Method: 1,8260C
Analytical Date: 07/22/19 19:39
Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 07,09 Batch: WG1262844-15					
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70
1,4-Dichlorobenzene	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
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70
Dibromomethane	ND		ug/l	5.0	1.0
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70
Acrylonitrile	ND		ug/l	5.0	1.5
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
Vinyl acetate	ND		ug/l	5.0	1.0
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
2,2-Dichloropropane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,3-Dichloropropane	ND		ug/l	2.5	0.70
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70
Bromobenzene	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

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Analytical Method: 1,8260C
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Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 07,09 Batch: WG1262844-15					
o-Chlorotoluene	ND		ug/l	2.5	0.70
p-Chlorotoluene	ND		ug/l	2.5	0.70
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Hexachlorobutadiene	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
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	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
1,4-Dioxane	ND		ug/l	250	61.
p-Diethylbenzene	ND		ug/l	2.0	0.70
p-Ethyltoluene	ND		ug/l	2.0	0.70
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54
Ethyl ether	ND		ug/l	2.5	0.70
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	94		70-130
Toluene-d8	84		70-130
4-Bromofluorobenzene	85		70-130
Dibromofluoromethane	102		70-130

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Method Blank Analysis
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Analytical Method: 1,8260C
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 Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 07 Batch: WG1262844-5					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14
1,1-Dichloropropene	ND		ug/l	2.5	0.70
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18

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Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 07 Batch: WG1262844-5					
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70
1,4-Dichlorobenzene	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
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70
Dibromomethane	ND		ug/l	5.0	1.0
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70
Acrylonitrile	ND		ug/l	5.0	1.5
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
Vinyl acetate	ND		ug/l	5.0	1.0
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
2,2-Dichloropropane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,3-Dichloropropane	ND		ug/l	2.5	0.70
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70
Bromobenzene	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

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 Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 07 Batch: WG1262844-5					
o-Chlorotoluene	ND		ug/l	2.5	0.70
p-Chlorotoluene	ND		ug/l	2.5	0.70
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Hexachlorobutadiene	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
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	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
1,4-Dioxane	ND		ug/l	250	61.
p-Diethylbenzene	ND		ug/l	2.0	0.70
p-Ethyltoluene	ND		ug/l	2.0	0.70
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54
Ethyl ether	ND		ug/l	2.5	0.70
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	86		70-130
Toluene-d8	87		70-130
4-Bromofluorobenzene	88		70-130
Dibromofluoromethane	98		70-130

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Method Blank Analysis
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Analytical Method: 1,8260C
 Analytical Date: 07/21/19 15:55
 Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 03,05-06 Batch: WG1262879-5					
Methylene chloride	ND		ug/kg	5.0	2.3
1,1-Dichloroethane	ND		ug/kg	1.0	0.14
Chloroform	ND		ug/kg	1.5	0.14
Carbon tetrachloride	ND		ug/kg	1.0	0.23
1,2-Dichloropropane	ND		ug/kg	1.0	0.12
Dibromochloromethane	ND		ug/kg	1.0	0.14
1,1,2-Trichloroethane	ND		ug/kg	1.0	0.27
Tetrachloroethene	ND		ug/kg	0.50	0.20
Chlorobenzene	ND		ug/kg	0.50	0.13
Trichlorofluoromethane	ND		ug/kg	4.0	0.70
1,2-Dichloroethane	ND		ug/kg	1.0	0.26
1,1,1-Trichloroethane	ND		ug/kg	0.50	0.17
Bromodichloromethane	ND		ug/kg	0.50	0.11
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.27
cis-1,3-Dichloropropene	ND		ug/kg	0.50	0.16
1,3-Dichloropropene, Total	ND		ug/kg	0.50	0.16
1,1-Dichloropropene	ND		ug/kg	0.50	0.16
Bromoform	ND		ug/kg	4.0	0.25
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.50	0.17
Benzene	ND		ug/kg	0.50	0.17
Toluene	ND		ug/kg	1.0	0.54
Ethylbenzene	ND		ug/kg	1.0	0.14
Chloromethane	ND		ug/kg	4.0	0.93
Bromomethane	ND		ug/kg	2.0	0.58
Vinyl chloride	ND		ug/kg	1.0	0.34
Chloroethane	ND		ug/kg	2.0	0.45
1,1-Dichloroethene	ND		ug/kg	1.0	0.24
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.14
Trichloroethene	ND		ug/kg	0.50	0.14

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Analytical Method: 1,8260C
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Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 03,05-06 Batch: WG1262879-5					
1,2-Dichlorobenzene	ND		ug/kg	2.0	0.14
1,3-Dichlorobenzene	ND		ug/kg	2.0	0.15
1,4-Dichlorobenzene	ND		ug/kg	2.0	0.17
Methyl tert butyl ether	ND		ug/kg	2.0	0.20
p/m-Xylene	ND		ug/kg	2.0	0.56
o-Xylene	ND		ug/kg	1.0	0.29
Xylenes, Total	ND		ug/kg	1.0	0.29
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.18
1,2-Dichloroethene, Total	ND		ug/kg	1.0	0.14
Dibromomethane	ND		ug/kg	2.0	0.24
Styrene	ND		ug/kg	1.0	0.20
Dichlorodifluoromethane	ND		ug/kg	10	0.92
Acetone	ND		ug/kg	10	4.8
Carbon disulfide	ND		ug/kg	10	4.6
2-Butanone	ND		ug/kg	10	2.2
Vinyl acetate	ND		ug/kg	10	2.2
4-Methyl-2-pentanone	ND		ug/kg	10	1.3
1,2,3-Trichloropropane	ND		ug/kg	2.0	0.13
2-Hexanone	ND		ug/kg	10	1.2
Bromochloromethane	ND		ug/kg	2.0	0.20
2,2-Dichloropropane	ND		ug/kg	2.0	0.20
1,2-Dibromoethane	ND		ug/kg	1.0	0.28
1,3-Dichloropropane	ND		ug/kg	2.0	0.17
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.50	0.13
Bromobenzene	ND		ug/kg	2.0	0.14
n-Butylbenzene	ND		ug/kg	1.0	0.17
sec-Butylbenzene	ND		ug/kg	1.0	0.15
tert-Butylbenzene	ND		ug/kg	2.0	0.12
o-Chlorotoluene	ND		ug/kg	2.0	0.19

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Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 03,05-06 Batch: WG1262879-5					
p-Chlorotoluene	ND		ug/kg	2.0	0.11
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.0	1.0
Hexachlorobutadiene	ND		ug/kg	4.0	0.17
Isopropylbenzene	ND		ug/kg	1.0	0.11
p-Isopropyltoluene	ND		ug/kg	1.0	0.11
Naphthalene	ND		ug/kg	4.0	0.65
Acrylonitrile	ND		ug/kg	4.0	1.2
n-Propylbenzene	ND		ug/kg	1.0	0.17
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	0.32
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	0.27
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	0.19
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	0.33
1,4-Dioxane	ND		ug/kg	80	35.
p-Diethylbenzene	ND		ug/kg	2.0	0.18
p-Ethyltoluene	ND		ug/kg	2.0	0.38
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.0	0.19
Ethyl ether	ND		ug/kg	2.0	0.34
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.0	1.4

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	112		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	109		70-130
Dibromofluoromethane	100		70-130

Project Name: 450 JOHNSON AVE
Project Number: 170588001

Lab Number: L1932118
Report Date: 08/06/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 07/22/19 07:36
 Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1263000-5					
Methylene chloride	ND		ug/kg	5.0	2.3
1,1-Dichloroethane	ND		ug/kg	1.0	0.14
Chloroform	ND		ug/kg	1.5	0.14
Carbon tetrachloride	ND		ug/kg	1.0	0.23
1,2-Dichloropropane	ND		ug/kg	1.0	0.12
Dibromochloromethane	ND		ug/kg	1.0	0.14
1,1,2-Trichloroethane	ND		ug/kg	1.0	0.27
Tetrachloroethene	ND		ug/kg	0.50	0.20
Chlorobenzene	ND		ug/kg	0.50	0.13
Trichlorofluoromethane	ND		ug/kg	4.0	0.70
1,2-Dichloroethane	ND		ug/kg	1.0	0.26
1,1,1-Trichloroethane	ND		ug/kg	0.50	0.17
Bromodichloromethane	ND		ug/kg	0.50	0.11
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.27
cis-1,3-Dichloropropene	ND		ug/kg	0.50	0.16
1,3-Dichloropropene, Total	ND		ug/kg	0.50	0.16
1,1-Dichloropropene	ND		ug/kg	0.50	0.16
Bromoform	ND		ug/kg	4.0	0.25
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.50	0.17
Benzene	ND		ug/kg	0.50	0.17
Toluene	ND		ug/kg	1.0	0.54
Ethylbenzene	ND		ug/kg	1.0	0.14
Chloromethane	ND		ug/kg	4.0	0.93
Bromomethane	ND		ug/kg	2.0	0.58
Vinyl chloride	ND		ug/kg	1.0	0.34
Chloroethane	ND		ug/kg	2.0	0.45
1,1-Dichloroethene	ND		ug/kg	1.0	0.24
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.14
Trichloroethene	ND		ug/kg	0.50	0.14

Project Name: 450 JOHNSON AVE
Project Number: 170588001

Lab Number: L1932118
Report Date: 08/06/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 07/22/19 07:36
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1263000-5					
1,2-Dichlorobenzene	ND		ug/kg	2.0	0.14
1,3-Dichlorobenzene	ND		ug/kg	2.0	0.15
1,4-Dichlorobenzene	ND		ug/kg	2.0	0.17
Methyl tert butyl ether	ND		ug/kg	2.0	0.20
p/m-Xylene	ND		ug/kg	2.0	0.56
o-Xylene	ND		ug/kg	1.0	0.29
Xylenes, Total	ND		ug/kg	1.0	0.29
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.18
1,2-Dichloroethene, Total	ND		ug/kg	1.0	0.14
Dibromomethane	ND		ug/kg	2.0	0.24
Styrene	ND		ug/kg	1.0	0.20
Dichlorodifluoromethane	ND		ug/kg	10	0.92
Acetone	ND		ug/kg	10	4.8
Carbon disulfide	ND		ug/kg	10	4.6
2-Butanone	ND		ug/kg	10	2.2
Vinyl acetate	ND		ug/kg	10	2.2
4-Methyl-2-pentanone	ND		ug/kg	10	1.3
1,2,3-Trichloropropane	ND		ug/kg	2.0	0.13
2-Hexanone	ND		ug/kg	10	1.2
Bromochloromethane	ND		ug/kg	2.0	0.20
2,2-Dichloropropane	ND		ug/kg	2.0	0.20
1,2-Dibromoethane	ND		ug/kg	1.0	0.28
1,3-Dichloropropane	ND		ug/kg	2.0	0.17
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.50	0.13
Bromobenzene	ND		ug/kg	2.0	0.14
n-Butylbenzene	ND		ug/kg	1.0	0.17
sec-Butylbenzene	ND		ug/kg	1.0	0.15
tert-Butylbenzene	ND		ug/kg	2.0	0.12
o-Chlorotoluene	ND		ug/kg	2.0	0.19

Project Name: 450 JOHNSON AVE
Project Number: 170588001

Lab Number: L1932118
Report Date: 08/06/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 07/22/19 07:36
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1263000-5					
p-Chlorotoluene	ND		ug/kg	2.0	0.11
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.0	1.0
Hexachlorobutadiene	ND		ug/kg	4.0	0.17
Isopropylbenzene	ND		ug/kg	1.0	0.11
p-Isopropyltoluene	ND		ug/kg	1.0	0.11
Naphthalene	ND		ug/kg	4.0	0.65
Acrylonitrile	ND		ug/kg	4.0	1.2
n-Propylbenzene	ND		ug/kg	1.0	0.17
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	0.32
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	0.27
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	0.19
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	0.33
1,4-Dioxane	ND		ug/kg	80	35.
p-Diethylbenzene	ND		ug/kg	2.0	0.18
p-Ethyltoluene	ND		ug/kg	2.0	0.38
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.0	0.19
Ethyl ether	ND		ug/kg	2.0	0.34
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.0	1.4

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	117		70-130
Toluene-d8	109		70-130
4-Bromofluorobenzene	114		70-130
Dibromofluoromethane	95		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: 450 JOHNSON AVE

Project Number: 170588001

Lab Number: L1932118

Report Date: 08/06/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 04 Batch: WG1262731-3 WG1262731-4								
Methylene chloride	98		97		70-130	1		30
1,1-Dichloroethane	105		104		70-130	1		30
Chloroform	104		103		70-130	1		30
Carbon tetrachloride	98		97		70-130	1		30
1,2-Dichloropropane	107		108		70-130	1		30
Dibromochloromethane	96		94		70-130	2		30
1,1,2-Trichloroethane	111		107		70-130	4		30
Tetrachloroethene	106		103		70-130	3		30
Chlorobenzene	99		98		70-130	1		30
Trichlorofluoromethane	98		95		70-139	3		30
1,2-Dichloroethane	86		85		70-130	1		30
1,1,1-Trichloroethane	104		103		70-130	1		30
Bromodichloromethane	103		102		70-130	1		30
trans-1,3-Dichloropropene	104		102		70-130	2		30
cis-1,3-Dichloropropene	110		110		70-130	0		30
1,1-Dichloropropene	114		114		70-130	0		30
Bromoform	101		97		70-130	4		30
1,1,2,2-Tetrachloroethane	101		98		70-130	3		30
Benzene	110		108		70-130	2		30
Toluene	107		106		70-130	1		30
Ethylbenzene	109		107		70-130	2		30
Chloromethane	95		90		52-130	5		30
Bromomethane	113		108		57-147	5		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: 450 JOHNSON AVE

Project Number: 170588001

Lab Number: L1932118

Report Date: 08/06/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 04 Batch: WG1262731-3 WG1262731-4								
Vinyl chloride	113		110		67-130	3		30
Chloroethane	125		123		50-151	2		30
1,1-Dichloroethene	116		113		65-135	3		30
trans-1,2-Dichloroethene	114		110		70-130	4		30
Trichloroethene	110		110		70-130	0		30
1,2-Dichlorobenzene	90		91		70-130	1		30
1,3-Dichlorobenzene	94		93		70-130	1		30
1,4-Dichlorobenzene	92		91		70-130	1		30
Methyl tert butyl ether	95		94		66-130	1		30
p/m-Xylene	104		104		70-130	0		30
o-Xylene	104		101		70-130	3		30
cis-1,2-Dichloroethene	112		111		70-130	1		30
Dibromomethane	105		103		70-130	2		30
Styrene	104		101		70-130	3		30
Dichlorodifluoromethane	80		77		30-146	4		30
Acetone	86		75		54-140	14		30
Carbon disulfide	111		107		59-130	4		30
2-Butanone	69	Q	71		70-130	3		30
Vinyl acetate	88		88		70-130	0		30
4-Methyl-2-pentanone	102		98		70-130	4		30
1,2,3-Trichloropropane	93		93		68-130	0		30
2-Hexanone	80		78		70-130	3		30
Bromochloromethane	105		105		70-130	0		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: 450 JOHNSON AVE

Lab Number: L1932118

Project Number: 170588001

Report Date: 08/06/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 04 Batch: WG1262731-3 WG1262731-4								
2,2-Dichloropropane	107		103		70-130	4		30
1,2-Dibromoethane	102		98		70-130	4		30
1,3-Dichloropropane	104		100		69-130	4		30
1,1,1,2-Tetrachloroethane	97		96		70-130	1		30
Bromobenzene	98		96		70-130	2		30
n-Butylbenzene	106		105		70-130	1		30
sec-Butylbenzene	100		99		70-130	1		30
tert-Butylbenzene	97		97		70-130	0		30
o-Chlorotoluene	85		86		70-130	1		30
p-Chlorotoluene	101		100		70-130	1		30
1,2-Dibromo-3-chloropropane	87		84		68-130	4		30
Hexachlorobutadiene	113		113		67-130	0		30
Isopropylbenzene	101		99		70-130	2		30
p-Isopropyltoluene	98		98		70-130	0		30
Naphthalene	110		101		70-130	9		30
Acrylonitrile	91		85		70-130	7		30
n-Propylbenzene	107		104		70-130	3		30
1,2,3-Trichlorobenzene	91		92		70-130	1		30
1,2,4-Trichlorobenzene	98		96		70-130	2		30
1,3,5-Trimethylbenzene	98		98		70-130	0		30
1,2,4-Trimethylbenzene	96		95		70-130	1		30
1,4-Dioxane	118		112		65-136	5		30
p-Diethylbenzene	99		99		70-130	0		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: 450 JOHNSON AVE

Project Number: 170588001

Lab Number: L1932118

Report Date: 08/06/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 04 Batch: WG1262731-3 WG1262731-4								
p-Ethyltoluene	100		98		70-130	2		30
1,2,4,5-Tetramethylbenzene	95		95		70-130	0		30
Ethyl ether	107		106		67-130	1		30
trans-1,4-Dichloro-2-butene	89		80		70-130	11		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	83		83		70-130
Toluene-d8	99		99		70-130
4-Bromofluorobenzene	97		98		70-130
Dibromofluoromethane	93		95		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: 450 JOHNSON AVE

Project Number: 170588001

Lab Number: L1932118

Report Date: 08/06/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 07,09 Batch: WG1262844-13 WG1262844-14								
Methylene chloride	96		94		70-130	2		20
1,1-Dichloroethane	100		95		70-130	5		20
Chloroform	100		94		70-130	6		20
Carbon tetrachloride	120		110		63-132	9		20
1,2-Dichloropropane	99		96		70-130	3		20
Dibromochloromethane	96		94		63-130	2		20
1,1,2-Trichloroethane	84		83		70-130	1		20
Tetrachloroethene	110		100		70-130	10		20
Chlorobenzene	96		93		75-130	3		20
Trichlorofluoromethane	110		100		62-150	10		20
1,2-Dichloroethane	100		100		70-130	0		20
1,1,1-Trichloroethane	110		100		67-130	10		20
Bromodichloromethane	98		93		67-130	5		20
trans-1,3-Dichloropropene	73		72		70-130	1		20
cis-1,3-Dichloropropene	88		85		70-130	3		20
1,1-Dichloropropene	110		98		70-130	12		20
Bromoform	78		78		54-136	0		20
1,1,2,2-Tetrachloroethane	77		76		67-130	1		20
Benzene	100		96		70-130	4		20
Toluene	91		86		70-130	6		20
Ethylbenzene	92		87		70-130	6		20
Chloromethane	120		110		64-130	9		20
Bromomethane	75		72		39-139	4		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: 450 JOHNSON AVE

Project Number: 170588001

Lab Number: L1932118

Report Date: 08/06/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 07,09 Batch: WG1262844-13 WG1262844-14								
Vinyl chloride	110		100		55-140	10		20
Chloroethane	92		84		55-138	9		20
1,1-Dichloroethene	110		100		61-145	10		20
trans-1,2-Dichloroethene	110		100		70-130	10		20
Trichloroethene	100		96		70-130	4		20
1,2-Dichlorobenzene	96		95		70-130	1		20
1,3-Dichlorobenzene	96		95		70-130	1		20
1,4-Dichlorobenzene	95		94		70-130	1		20
Methyl tert butyl ether	97		95		63-130	2		20
p/m-Xylene	100		95		70-130	5		20
o-Xylene	100		95		70-130	5		20
cis-1,2-Dichloroethene	110		100		70-130	10		20
Dibromomethane	100		100		70-130	0		20
1,2,3-Trichloropropane	68		67		64-130	1		20
Acrylonitrile	110		110		70-130	0		20
Styrene	100		95		70-130	5		20
Dichlorodifluoromethane	130		120		36-147	8		20
Acetone	97		96		58-148	1		20
Carbon disulfide	99		91		51-130	8		20
2-Butanone	92		89		63-138	3		20
Vinyl acetate	100		100		70-130	0		20
4-Methyl-2-pentanone	83		82		59-130	1		20
2-Hexanone	76		77		57-130	1		20

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 450 JOHNSON AVE

Project Number: 170588001

Lab Number: L1932118

Report Date: 08/06/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 07,09 Batch: WG1262844-13 WG1262844-14								
Bromochloromethane	120		120		70-130	0		20
2,2-Dichloropropane	110		100		63-133	10		20
1,2-Dibromoethane	93		92		70-130	1		20
1,3-Dichloropropane	82		83		70-130	1		20
1,1,1,2-Tetrachloroethane	98		96		64-130	2		20
Bromobenzene	92		92		70-130	0		20
n-Butylbenzene	90		87		53-136	3		20
sec-Butylbenzene	97		92		70-130	5		20
tert-Butylbenzene	100		96		70-130	4		20
o-Chlorotoluene	85		84		70-130	1		20
p-Chlorotoluene	87		85		70-130	2		20
1,2-Dibromo-3-chloropropane	75		74		41-144	1		20
Hexachlorobutadiene	94		91		63-130	3		20
Isopropylbenzene	97		93		70-130	4		20
p-Isopropyltoluene	100		99		70-130	1		20
Naphthalene	81		80		70-130	1		20
n-Propylbenzene	92		88		69-130	4		20
1,2,3-Trichlorobenzene	90		89		70-130	1		20
1,2,4-Trichlorobenzene	91		90		70-130	1		20
1,3,5-Trimethylbenzene	94		90		64-130	4		20
1,2,4-Trimethylbenzene	94		91		70-130	3		20
1,4-Dioxane	112		106		56-162	6		20
p-Diethylbenzene	100		97		70-130	3		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: 450 JOHNSON AVE

Project Number: 170588001

Lab Number: L1932118

Report Date: 08/06/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 07,09 Batch: WG1262844-13 WG1262844-14								
p-Ethyltoluene	96		93		70-130	3		20
1,2,4,5-Tetramethylbenzene	90		88		70-130	2		20
Ethyl ether	85		84		59-134	1		20
trans-1,4-Dichloro-2-butene	71		88		70-130	21	Q	20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	96		95		70-130
Toluene-d8	86		86		70-130
4-Bromofluorobenzene	85		86		70-130
Dibromofluoromethane	105		104		70-130

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 450 JOHNSON AVE

Project Number: 170588001

Lab Number: L1932118

Report Date: 08/06/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 07 Batch: WG1262844-3 WG1262844-4								
Methylene chloride	97		96		70-130	1		20
1,1-Dichloroethane	98		94		70-130	4		20
Chloroform	93		90		70-130	3		20
Carbon tetrachloride	110		100		63-132	10		20
1,2-Dichloropropane	100		99		70-130	1		20
Dibromochloromethane	100		96		63-130	4		20
1,1,2-Trichloroethane	90		88		70-130	2		20
Tetrachloroethene	110		100		70-130	10		20
Chlorobenzene	96		94		75-130	2		20
Trichlorofluoromethane	92		84		62-150	9		20
1,2-Dichloroethane	94		93		70-130	1		20
1,1,1-Trichloroethane	100		94		67-130	6		20
Bromodichloromethane	93		90		67-130	3		20
trans-1,3-Dichloropropene	78		76		70-130	3		20
cis-1,3-Dichloropropene	91		89		70-130	2		20
1,1-Dichloropropene	100		96		70-130	4		20
Bromoform	87		86		54-136	1		20
1,1,2,2-Tetrachloroethane	86		86		67-130	0		20
Benzene	100		96		70-130	4		20
Toluene	92		89		70-130	3		20
Ethylbenzene	92		88		70-130	4		20
Chloromethane	120		110		64-130	9		20
Bromomethane	78		74		39-139	5		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: 450 JOHNSON AVE

Project Number: 170588001

Lab Number: L1932118

Report Date: 08/06/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 07 Batch: WG1262844-3 WG1262844-4								
Vinyl chloride	110		97		55-140	13		20
Chloroethane	85		81		55-138	5		20
1,1-Dichloroethene	110		98		61-145	12		20
trans-1,2-Dichloroethene	100		100		70-130	0		20
Trichloroethene	97		92		70-130	5		20
1,2-Dichlorobenzene	100		100		70-130	0		20
1,3-Dichlorobenzene	100		98		70-130	2		20
1,4-Dichlorobenzene	99		97		70-130	2		20
Methyl tert butyl ether	100		100		63-130	0		20
p/m-Xylene	100		95		70-130	5		20
o-Xylene	100		95		70-130	5		20
cis-1,2-Dichloroethene	100		100		70-130	0		20
Dibromomethane	100		100		70-130	0		20
1,2,3-Trichloropropane	82		82		64-130	0		20
Acrylonitrile	120		120		70-130	0		20
Styrene	100		100		70-130	0		20
Dichlorodifluoromethane	120		110		36-147	9		20
Acetone	100		95		58-148	5		20
Carbon disulfide	98		92		51-130	6		20
2-Butanone	95		93		63-138	2		20
Vinyl acetate	110		110		70-130	0		20
4-Methyl-2-pentanone	97		96		59-130	1		20
2-Hexanone	92		90		57-130	2		20

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 450 JOHNSON AVE

Project Number: 170588001

Lab Number: L1932118

Report Date: 08/06/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 07 Batch: WG1262844-3 WG1262844-4								
Bromochloromethane	120		120		70-130	0		20
2,2-Dichloropropane	100		97		63-133	3		20
1,2-Dibromoethane	100		98		70-130	2		20
1,3-Dichloropropane	88		88		70-130	0		20
1,1,1,2-Tetrachloroethane	98		96		64-130	2		20
Bromobenzene	98		96		70-130	2		20
n-Butylbenzene	93		89		53-136	4		20
sec-Butylbenzene	100		96		70-130	4		20
tert-Butylbenzene	100		99		70-130	1		20
o-Chlorotoluene	89		86		70-130	3		20
p-Chlorotoluene	91		87		70-130	4		20
1,2-Dibromo-3-chloropropane	84		82		41-144	2		20
Hexachlorobutadiene	95		92		63-130	3		20
Isopropylbenzene	100		97		70-130	3		20
p-Isopropyltoluene	100		100		70-130	0		20
Naphthalene	96		97		70-130	1		20
n-Propylbenzene	95		90		69-130	5		20
1,2,3-Trichlorobenzene	100		100		70-130	0		20
1,2,4-Trichlorobenzene	98		98		70-130	0		20
1,3,5-Trimethylbenzene	95		93		64-130	2		20
1,2,4-Trimethylbenzene	96		93		70-130	3		20
1,4-Dioxane	112		104		56-162	7		20
p-Diethylbenzene	100		100		70-130	0		20

Lab Control Sample Analysis Batch Quality Control

Project Name: 450 JOHNSON AVE

Project Number: 170588001

Lab Number: L1932118

Report Date: 08/06/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 07 Batch: WG1262844-3 WG1262844-4								
p-Ethyltoluene	99		95		70-130	4		20
1,2,4,5-Tetramethylbenzene	95		93		70-130	2		20
Ethyl ether	86		84		59-134	2		20
trans-1,4-Dichloro-2-butene	94		79		70-130	17		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	89		88		70-130
Toluene-d8	89		89		70-130
4-Bromofluorobenzene	88		88		70-130
Dibromofluoromethane	100		102		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: 450 JOHNSON AVE

Project Number: 170588001

Lab Number: L1932118

Report Date: 08/06/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 03,05-06 Batch: WG1262879-3 WG1262879-4								
Methylene chloride	112		112		70-130	0		30
1,1-Dichloroethane	130		132	Q	70-130	2		30
Chloroform	114		118		70-130	3		30
Carbon tetrachloride	98		100		70-130	2		30
1,2-Dichloropropane	130		132	Q	70-130	2		30
Dibromochloromethane	92		93		70-130	1		30
1,1,2-Trichloroethane	107		108		70-130	1		30
Tetrachloroethene	90		92		70-130	2		30
Chlorobenzene	101		103		70-130	2		30
Trichlorofluoromethane	88		89		70-139	1		30
1,2-Dichloroethane	121		124		70-130	2		30
1,1,1-Trichloroethane	106		109		70-130	3		30
Bromodichloromethane	107		108		70-130	1		30
trans-1,3-Dichloropropene	108		107		70-130	1		30
cis-1,3-Dichloropropene	114		116		70-130	2		30
1,1-Dichloropropene	118		118		70-130	0		30
Bromoform	82		81		70-130	1		30
1,1,2,2-Tetrachloroethane	111		112		70-130	1		30
Benzene	116		119		70-130	3		30
Toluene	108		109		70-130	1		30
Ethylbenzene	110		112		70-130	2		30
Chloromethane	156	Q	159	Q	52-130	2		30
Bromomethane	147		150	Q	57-147	2		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: 450 JOHNSON AVE

Project Number: 170588001

Lab Number: L1932118

Report Date: 08/06/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 03,05-06 Batch: WG1262879-3 WG1262879-4								
Vinyl chloride	127		129		67-130	2		30
Chloroethane	95		96		50-151	1		30
1,1-Dichloroethene	109		110		65-135	1		30
trans-1,2-Dichloroethene	109		111		70-130	2		30
Trichloroethene	105		105		70-130	0		30
1,2-Dichlorobenzene	100		99		70-130	1		30
1,3-Dichlorobenzene	99		100		70-130	1		30
1,4-Dichlorobenzene	98		99		70-130	1		30
Methyl tert butyl ether	112		114		66-130	2		30
p/m-Xylene	100		104		70-130	4		30
o-Xylene	100		101		70-130	1		30
cis-1,2-Dichloroethene	111		114		70-130	3		30
Dibromomethane	108		110		70-130	2		30
Styrene	99		100		70-130	1		30
Dichlorodifluoromethane	110		111		30-146	1		30
Acetone	182	Q	172	Q	54-140	6		30
Carbon disulfide	116		117		59-130	1		30
2-Butanone	133	Q	124		70-130	7		30
Vinyl acetate	135	Q	135	Q	70-130	0		30
4-Methyl-2-pentanone	116		115		70-130	1		30
1,2,3-Trichloropropane	113		111		68-130	2		30
2-Hexanone	125		124		70-130	1		30
Bromochloromethane	103		103		70-130	0		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: 450 JOHNSON AVE

Lab Number: L1932118

Project Number: 170588001

Report Date: 08/06/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 03,05-06 Batch: WG1262879-3 WG1262879-4								
2,2-Dichloropropane	110		110		70-130	0		30
1,2-Dibromoethane	102		103		70-130	1		30
1,3-Dichloropropane	112		115		69-130	3		30
1,1,1,2-Tetrachloroethane	91		92		70-130	1		30
Bromobenzene	96		98		70-130	2		30
n-Butylbenzene	115		116		70-130	1		30
sec-Butylbenzene	109		110		70-130	1		30
tert-Butylbenzene	105		106		70-130	1		30
o-Chlorotoluene	117		116		70-130	1		30
p-Chlorotoluene	113		113		70-130	0		30
1,2-Dibromo-3-chloropropane	83		82		68-130	1		30
Hexachlorobutadiene	87		87		67-130	0		30
Isopropylbenzene	110		111		70-130	1		30
p-Isopropyltoluene	104		106		70-130	2		30
Naphthalene	97		96		70-130	1		30
Acrylonitrile	132	Q	126		70-130	5		30
n-Propylbenzene	114		115		70-130	1		30
1,2,3-Trichlorobenzene	90		91		70-130	1		30
1,2,4-Trichlorobenzene	90		90		70-130	0		30
1,3,5-Trimethylbenzene	109		110		70-130	1		30
1,2,4-Trimethylbenzene	109		109		70-130	0		30
1,4-Dioxane	88		83		65-136	6		30
p-Diethylbenzene	104		104		70-130	0		30

Lab Control Sample Analysis Batch Quality Control

Project Name: 450 JOHNSON AVE

Project Number: 170588001

Lab Number: L1932118

Report Date: 08/06/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 03,05-06 Batch: WG1262879-3 WG1262879-4								
p-Ethyltoluene	111		112		70-130	1		30
1,2,4,5-Tetramethylbenzene	100		102		70-130	2		30
Ethyl ether	120		121		67-130	1		30
trans-1,4-Dichloro-2-butene	114		119		70-130	4		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	109		107		70-130
Toluene-d8	100		100		70-130
4-Bromofluorobenzene	113		113		70-130
Dibromofluoromethane	98		98		70-130

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 450 JOHNSON AVE

Project Number: 170588001

Lab Number: L1932118

Report Date: 08/06/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1263000-3 WG1263000-4								
Methylene chloride	91		89		70-130	2		30
1,1-Dichloroethane	108		104		70-130	4		30
Chloroform	97		94		70-130	3		30
Carbon tetrachloride	79		78		70-130	1		30
1,2-Dichloropropane	109		107		70-130	2		30
Dibromochloromethane	92		90		70-130	2		30
1,1,2-Trichloroethane	111		108		70-130	3		30
Tetrachloroethene	85		81		70-130	5		30
Chlorobenzene	97		94		70-130	3		30
Trichlorofluoromethane	77		71		70-139	8		30
1,2-Dichloroethane	109		106		70-130	3		30
1,1,1-Trichloroethane	88		85		70-130	3		30
Bromodichloromethane	92		91		70-130	1		30
trans-1,3-Dichloropropene	104		105		70-130	1		30
cis-1,3-Dichloropropene	95		94		70-130	1		30
1,1-Dichloropropene	97		93		70-130	4		30
Bromoform	86		85		70-130	1		30
1,1,2,2-Tetrachloroethane	119		118		70-130	1		30
Benzene	98		94		70-130	4		30
Toluene	103		99		70-130	4		30
Ethylbenzene	104		101		70-130	3		30
Chloromethane	146	Q	129		52-130	12		30
Bromomethane	124		120		57-147	3		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: 450 JOHNSON AVE

Project Number: 170588001

Lab Number: L1932118

Report Date: 08/06/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1263000-3 WG1263000-4								
Vinyl chloride	110		102		67-130	8		30
Chloroethane	84		78		50-151	7		30
1,1-Dichloroethene	88		82		65-135	7		30
trans-1,2-Dichloroethene	89		84		70-130	6		30
Trichloroethene	86		83		70-130	4		30
1,2-Dichlorobenzene	100		99		70-130	1		30
1,3-Dichlorobenzene	100		98		70-130	2		30
1,4-Dichlorobenzene	98		97		70-130	1		30
Methyl tert butyl ether	96		95		66-130	1		30
p/m-Xylene	96		94		70-130	2		30
o-Xylene	96		93		70-130	3		30
cis-1,2-Dichloroethene	92		89		70-130	3		30
Dibromomethane	95		95		70-130	0		30
Styrene	96		94		70-130	2		30
Dichlorodifluoromethane	93		87		30-146	7		30
Acetone	138		131		54-140	5		30
Carbon disulfide	94		89		59-130	5		30
2-Butanone	115		116		70-130	1		30
Vinyl acetate	118		119		70-130	1		30
4-Methyl-2-pentanone	120		116		70-130	3		30
1,2,3-Trichloropropane	122		121		68-130	1		30
2-Hexanone	134	Q	127		70-130	5		30
Bromochloromethane	87		85		70-130	2		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: 450 JOHNSON AVE

Project Number: 170588001

Lab Number: L1932118

Report Date: 08/06/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1263000-3 WG1263000-4								
2,2-Dichloropropane	89		86		70-130	3		30
1,2-Dibromoethane	102		100		70-130	2		30
1,3-Dichloropropane	115		112		69-130	3		30
1,1,1,2-Tetrachloroethane	88		87		70-130	1		30
Bromobenzene	96		94		70-130	2		30
n-Butylbenzene	112		110		70-130	2		30
sec-Butylbenzene	106		103		70-130	3		30
tert-Butylbenzene	101		99		70-130	2		30
o-Chlorotoluene	116		115		70-130	1		30
p-Chlorotoluene	113		112		70-130	1		30
1,2-Dibromo-3-chloropropane	88		88		68-130	0		30
Hexachlorobutadiene	78		78		67-130	0		30
Isopropylbenzene	106		103		70-130	3		30
p-Isopropyltoluene	101		99		70-130	2		30
Naphthalene	100		101		70-130	1		30
Acrylonitrile	117		117		70-130	0		30
n-Propylbenzene	112		109		70-130	3		30
1,2,3-Trichlorobenzene	90		91		70-130	1		30
1,2,4-Trichlorobenzene	89		89		70-130	0		30
1,3,5-Trimethylbenzene	106		104		70-130	2		30
1,2,4-Trimethylbenzene	107		105		70-130	2		30
1,4-Dioxane	80		77		65-136	4		30
p-Diethylbenzene	100		98		70-130	2		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: 450 JOHNSON AVE

Project Number: 170588001

Lab Number: L1932118

Report Date: 08/06/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1263000-3 WG1263000-4								
p-Ethyltoluene	108		105		70-130	3		30
1,2,4,5-Tetramethylbenzene	100		98		70-130	2		30
Ethyl ether	100		99		67-130	1		30
trans-1,4-Dichloro-2-butene	123		121		70-130	2		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	116		117		70-130
Toluene-d8	110		110		70-130
4-Bromofluorobenzene	113		114		70-130
Dibromofluoromethane	96		96		70-130

SEMIVOLATILES

Project Name: 450 JOHNSON AVE**Lab Number:** L1932118**Project Number:** 170588001**Report Date:** 08/06/19**SAMPLE RESULTS**

Lab ID: L1932118-01

Date Collected: 07/19/19 11:20

Client ID: SB15_8.0-8.5

Date Received: 07/19/19

Sample Location: BROOKLYN

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Extraction Method: EPA 3546

Analytical Method: 1,8270D

Extraction Date: 07/20/19 14:06

Analytical Date: 07/23/19 07:27

Analyst: JG

Percent Solids: 81%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	160		ug/kg	160	21.	1
1,2,4-Trichlorobenzene	ND		ug/kg	200	23.	1
Hexachlorobenzene	ND		ug/kg	120	23.	1
Bis(2-chloroethyl)ether	ND		ug/kg	180	28.	1
2-Chloronaphthalene	ND		ug/kg	200	20.	1
1,2-Dichlorobenzene	ND		ug/kg	200	37.	1
1,3-Dichlorobenzene	ND		ug/kg	200	35.	1
1,4-Dichlorobenzene	ND		ug/kg	200	36.	1
3,3'-Dichlorobenzidine	ND		ug/kg	200	54.	1
2,4-Dinitrotoluene	ND		ug/kg	200	41.	1
2,6-Dinitrotoluene	ND		ug/kg	200	35.	1
Fluoranthene	5000		ug/kg	120	23.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	200	22.	1
4-Bromophenyl phenyl ether	ND		ug/kg	200	31.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	240	35.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	220	20.	1
Hexachlorobutadiene	ND		ug/kg	200	30.	1
Hexachlorocyclopentadiene	ND		ug/kg	580	180	1
Hexachloroethane	ND		ug/kg	160	33.	1
Isophorone	ND		ug/kg	180	26.	1
Naphthalene	690		ug/kg	200	25.	1
Nitrobenzene	ND		ug/kg	180	30.	1
NDPA/DPA	ND		ug/kg	160	23.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	200	31.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	200	70.	1
Butyl benzyl phthalate	ND		ug/kg	200	51.	1
Di-n-butylphthalate	ND		ug/kg	200	39.	1
Di-n-octylphthalate	ND		ug/kg	200	69.	1

Project Name: 450 JOHNSON AVE

Lab Number: L1932118

Project Number: 170588001

Report Date: 08/06/19

SAMPLE RESULTS

Lab ID: L1932118-01

Date Collected: 07/19/19 11:20

Client ID: SB15_8.0-8.5

Date Received: 07/19/19

Sample Location: BROOKLYN

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	200	19.	1
Dimethyl phthalate	ND		ug/kg	200	43.	1
Benzo(a)anthracene	3500		ug/kg	120	23.	1
Benzo(a)pyrene	4300		ug/kg	160	50.	1
Benzo(b)fluoranthene	5200		ug/kg	120	34.	1
Benzo(k)fluoranthene	1000		ug/kg	120	33.	1
Chrysene	2900		ug/kg	120	21.	1
Acenaphthylene	1200		ug/kg	160	31.	1
Anthracene	890		ug/kg	120	40.	1
Benzo(ghi)perylene	3200		ug/kg	160	24.	1
Fluorene	220		ug/kg	200	20.	1
Phenanthrene	2400		ug/kg	120	25.	1
Dibenzo(a,h)anthracene	790		ug/kg	120	24.	1
Indeno(1,2,3-cd)pyrene	3100		ug/kg	160	28.	1
Pyrene	4900		ug/kg	120	20.	1
Biphenyl	ND		ug/kg	460	47.	1
4-Chloroaniline	ND		ug/kg	200	37.	1
2-Nitroaniline	ND		ug/kg	200	39.	1
3-Nitroaniline	ND		ug/kg	200	38.	1
4-Nitroaniline	ND		ug/kg	200	84.	1
Dibenzofuran	150	J	ug/kg	200	19.	1
2-Methylnaphthalene	130	J	ug/kg	240	25.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	200	21.	1
Acetophenone	ND		ug/kg	200	25.	1
2,4,6-Trichlorophenol	ND		ug/kg	120	39.	1
p-Chloro-m-cresol	ND		ug/kg	200	30.	1
2-Chlorophenol	ND		ug/kg	200	24.	1
2,4-Dichlorophenol	ND		ug/kg	180	33.	1
2,4-Dimethylphenol	ND		ug/kg	200	67.	1
2-Nitrophenol	ND		ug/kg	440	77.	1
4-Nitrophenol	ND		ug/kg	280	83.	1
2,4-Dinitrophenol	ND		ug/kg	980	95.	1
4,6-Dinitro-o-cresol	ND		ug/kg	530	98.	1
Pentachlorophenol	ND		ug/kg	160	45.	1
Phenol	190	J	ug/kg	200	31.	1
2-Methylphenol	69	J	ug/kg	200	32.	1
3-Methylphenol/4-Methylphenol	290		ug/kg	290	32.	1

Project Name: 450 JOHNSON AVE**Lab Number:** L1932118**Project Number:** 170588001**Report Date:** 08/06/19**SAMPLE RESULTS****Lab ID:** L1932118-01**Date Collected:** 07/19/19 11:20**Client ID:** SB15_8.0-8.5**Date Received:** 07/19/19**Sample Location:** BROOKLYN**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	200	39.	1
Benzoic Acid	ND		ug/kg	660	210	1
Benzyl Alcohol	ND		ug/kg	200	62.	1
Carbazole	420		ug/kg	200	20.	1
1,4-Dioxane	ND		ug/kg	30	9.4	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	64		25-120
Phenol-d6	74		10-120
Nitrobenzene-d5	74		23-120
2-Fluorobiphenyl	64		30-120
2,4,6-Tribromophenol	76		10-136
4-Terphenyl-d14	59		18-120

Project Name: 450 JOHNSON AVE**Lab Number:** L1932118**Project Number:** 170588001**Report Date:** 08/06/19**SAMPLE RESULTS**

Lab ID: L1932118-03

Date Collected: 07/19/19 09:40

Client ID: SB10_5.0-5.5

Date Received: 07/19/19

Sample Location: BROOKLYN

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Extraction Method: EPA 3546

Analytical Method: 1,8270D

Extraction Date: 07/20/19 14:06

Analytical Date: 07/23/19 06:36

Analyst: JG

Percent Solids: 82%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	330	J	ug/kg	470	61.	1
1,2,4-Trichlorobenzene	ND		ug/kg	590	67.	1
Hexachlorobenzene	ND		ug/kg	350	66.	1
Bis(2-chloroethyl)ether	ND		ug/kg	530	79.	1
2-Chloronaphthalene	ND		ug/kg	590	58.	1
1,2-Dichlorobenzene	ND		ug/kg	590	100	1
1,3-Dichlorobenzene	ND		ug/kg	590	100	1
1,4-Dichlorobenzene	ND		ug/kg	590	100	1
3,3'-Dichlorobenzidine	ND		ug/kg	590	160	1
2,4-Dinitrotoluene	ND		ug/kg	590	120	1
2,6-Dinitrotoluene	ND		ug/kg	590	100	1
Fluoranthene	4300		ug/kg	350	67.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	590	63.	1
4-Bromophenyl phenyl ether	ND		ug/kg	590	89.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	700	100	1
Bis(2-chloroethoxy)methane	ND		ug/kg	630	59.	1
Hexachlorobutadiene	ND		ug/kg	590	86.	1
Hexachlorocyclopentadiene	ND		ug/kg	1700	530	1
Hexachloroethane	ND		ug/kg	470	95.	1
Isophorone	ND		ug/kg	530	76.	1
Naphthalene	ND		ug/kg	590	71.	1
Nitrobenzene	ND		ug/kg	530	87.	1
NDPA/DPA	ND		ug/kg	470	67.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	590	90.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	590	200	1
Butyl benzyl phthalate	ND		ug/kg	590	150	1
Di-n-butylphthalate	ND		ug/kg	590	110	1
Di-n-octylphthalate	ND		ug/kg	590	200	1

Project Name: 450 JOHNSON AVE

Lab Number: L1932118

Project Number: 170588001

Report Date: 08/06/19

SAMPLE RESULTS

Lab ID: L1932118-03

Date Collected: 07/19/19 09:40

Client ID: SB10_5.0-5.5

Date Received: 07/19/19

Sample Location: BROOKLYN

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	590	54.	1
Dimethyl phthalate	ND		ug/kg	590	120	1
Benzo(a)anthracene	2900		ug/kg	350	66.	1
Benzo(a)pyrene	2000		ug/kg	470	140	1
Benzo(b)fluoranthene	2200		ug/kg	350	99.	1
Benzo(k)fluoranthene	760		ug/kg	350	94.	1
Chrysene	2700		ug/kg	350	61.	1
Acenaphthylene	100	J	ug/kg	470	90.	1
Anthracene	700		ug/kg	350	110	1
Benzo(ghi)perylene	1200		ug/kg	470	69.	1
Fluorene	250	J	ug/kg	590	57.	1
Phenanthrene	4000		ug/kg	350	71.	1
Dibenzo(a,h)anthracene	280	J	ug/kg	350	68.	1
Indeno(1,2,3-cd)pyrene	1200		ug/kg	470	82.	1
Pyrene	5500		ug/kg	350	58.	1
Biphenyl	ND		ug/kg	1300	140	1
4-Chloroaniline	ND		ug/kg	590	110	1
2-Nitroaniline	ND		ug/kg	590	110	1
3-Nitroaniline	ND		ug/kg	590	110	1
4-Nitroaniline	ND		ug/kg	590	240	1
Dibenzofuran	82	J	ug/kg	590	55.	1
2-Methylnaphthalene	ND		ug/kg	700	71.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	590	61.	1
Acetophenone	ND		ug/kg	590	72.	1
2,4,6-Trichlorophenol	ND		ug/kg	350	110	1
p-Chloro-m-cresol	ND		ug/kg	590	87.	1
2-Chlorophenol	ND		ug/kg	590	69.	1
2,4-Dichlorophenol	ND		ug/kg	530	94.	1
2,4-Dimethylphenol	ND		ug/kg	590	190	1
2-Nitrophenol	ND		ug/kg	1300	220	1
4-Nitrophenol	ND		ug/kg	820	240	1
2,4-Dinitrophenol	ND		ug/kg	2800	270	1
4,6-Dinitro-o-cresol	ND		ug/kg	1500	280	1
Pentachlorophenol	ND		ug/kg	470	130	1
Phenol	ND		ug/kg	590	88.	1
2-Methylphenol	ND		ug/kg	590	91.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	840	92.	1

Project Name: 450 JOHNSON AVE**Lab Number:** L1932118**Project Number:** 170588001**Report Date:** 08/06/19**SAMPLE RESULTS**

Lab ID: L1932118-03

Date Collected: 07/19/19 09:40

Client ID: SB10_5.0-5.5

Date Received: 07/19/19

Sample Location: BROOKLYN

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	590	110	1
Benzoic Acid	ND		ug/kg	1900	590	1
Benzyl Alcohol	ND		ug/kg	590	180	1
Carbazole	160	J	ug/kg	590	57.	1
1,4-Dioxane	ND		ug/kg	88	27.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	67		25-120
Phenol-d6	71		10-120
Nitrobenzene-d5	75		23-120
2-Fluorobiphenyl	71		30-120
2,4,6-Tribromophenol	84		10-136
4-Terphenyl-d14	72		18-120

Project Name: 450 JOHNSON AVE**Project Number:** 170588001**Lab Number:** L1932118**Report Date:** 08/06/19**SAMPLE RESULTS**

Lab ID: L1932118-04

Client ID: SB16_3.0-3.5

Sample Location: BROOKLYN

Date Collected: 07/19/19 12:15

Date Received: 07/19/19

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Analytical Method: 1,8270D

Analytical Date: 07/23/19 07:53

Analyst: JG

Percent Solids: 80%

Extraction Method: EPA 3546

Extraction Date: 07/20/19 14:06

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	86	J	ug/kg	170	22.	1
1,2,4-Trichlorobenzene	ND		ug/kg	210	24.	1
Hexachlorobenzene	ND		ug/kg	120	23.	1
Bis(2-chloroethyl)ether	ND		ug/kg	190	28.	1
2-Chloronaphthalene	ND		ug/kg	210	21.	1
1,2-Dichlorobenzene	ND		ug/kg	210	37.	1
1,3-Dichlorobenzene	ND		ug/kg	210	36.	1
1,4-Dichlorobenzene	ND		ug/kg	210	36.	1
3,3'-Dichlorobenzidine	ND		ug/kg	210	55.	1
2,4-Dinitrotoluene	ND		ug/kg	210	42.	1
2,6-Dinitrotoluene	ND		ug/kg	210	36.	1
Fluoranthene	1300		ug/kg	120	24.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	210	22.	1
4-Bromophenyl phenyl ether	ND		ug/kg	210	32.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	250	35.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	220	21.	1
Hexachlorobutadiene	ND		ug/kg	210	30.	1
Hexachlorocyclopentadiene	ND		ug/kg	590	190	1
Hexachloroethane	ND		ug/kg	170	34.	1
Isophorone	ND		ug/kg	190	27.	1
Naphthalene	820		ug/kg	210	25.	1
Nitrobenzene	ND		ug/kg	190	31.	1
NDPA/DPA	ND		ug/kg	170	24.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	210	32.	1
Bis(2-ethylhexyl)phthalate	74	J	ug/kg	210	72.	1
Butyl benzyl phthalate	ND		ug/kg	210	52.	1
Di-n-butylphthalate	ND		ug/kg	210	39.	1
Di-n-octylphthalate	ND		ug/kg	210	71.	1

Project Name: 450 JOHNSON AVE

Lab Number: L1932118

Project Number: 170588001

Report Date: 08/06/19

SAMPLE RESULTS

Lab ID: L1932118-04

Date Collected: 07/19/19 12:15

Client ID: SB16_3.0-3.5

Date Received: 07/19/19

Sample Location: BROOKLYN

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	210	19.	1
Dimethyl phthalate	ND		ug/kg	210	44.	1
Benzo(a)anthracene	760		ug/kg	120	23.	1
Benzo(a)pyrene	650		ug/kg	170	51.	1
Benzo(b)fluoranthene	850		ug/kg	120	35.	1
Benzo(k)fluoranthene	270		ug/kg	120	33.	1
Chrysene	680		ug/kg	120	22.	1
Acenaphthylene	140	J	ug/kg	170	32.	1
Anthracene	220		ug/kg	120	40.	1
Benzo(ghi)perylene	520		ug/kg	170	24.	1
Fluorene	120	J	ug/kg	210	20.	1
Phenanthrene	870		ug/kg	120	25.	1
Dibenzo(a,h)anthracene	120		ug/kg	120	24.	1
Indeno(1,2,3-cd)pyrene	530		ug/kg	170	29.	1
Pyrene	1300		ug/kg	120	21.	1
Biphenyl	ND		ug/kg	470	48.	1
4-Chloroaniline	ND		ug/kg	210	38.	1
2-Nitroaniline	ND		ug/kg	210	40.	1
3-Nitroaniline	ND		ug/kg	210	39.	1
4-Nitroaniline	ND		ug/kg	210	86.	1
Dibenzofuran	51	J	ug/kg	210	20.	1
2-Methylnaphthalene	140	J	ug/kg	250	25.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	210	22.	1
Acetophenone	ND		ug/kg	210	26.	1
2,4,6-Trichlorophenol	ND		ug/kg	120	39.	1
p-Chloro-m-cresol	ND		ug/kg	210	31.	1
2-Chlorophenol	ND		ug/kg	210	24.	1
2,4-Dichlorophenol	ND		ug/kg	190	33.	1
2,4-Dimethylphenol	ND		ug/kg	210	68.	1
2-Nitrophenol	ND		ug/kg	450	78.	1
4-Nitrophenol	ND		ug/kg	290	85.	1
2,4-Dinitrophenol	ND		ug/kg	1000	97.	1
4,6-Dinitro-o-cresol	ND		ug/kg	540	100	1
Pentachlorophenol	ND		ug/kg	170	46.	1
Phenol	ND		ug/kg	210	31.	1
2-Methylphenol	ND		ug/kg	210	32.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	300	32.	1

Project Name: 450 JOHNSON AVE**Lab Number:** L1932118**Project Number:** 170588001**Report Date:** 08/06/19**SAMPLE RESULTS****Lab ID:** L1932118-04**Date Collected:** 07/19/19 12:15**Client ID:** SB16_3.0-3.5**Date Received:** 07/19/19**Sample Location:** BROOKLYN**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	210	40.	1
Benzoic Acid	ND		ug/kg	670	210	1
Benzyl Alcohol	ND		ug/kg	210	64.	1
Carbazole	88	J	ug/kg	210	20.	1
1,4-Dioxane	ND		ug/kg	31	9.6	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	64		25-120
Phenol-d6	70		10-120
Nitrobenzene-d5	60		23-120
2-Fluorobiphenyl	61		30-120
2,4,6-Tribromophenol	72		10-136
4-Terphenyl-d14	61		18-120

Project Name: 450 JOHNSON AVE**Lab Number:** L1932118**Project Number:** 170588001**Report Date:** 08/06/19**SAMPLE RESULTS**

Lab ID: L1932118-05
 Client ID: SB17_13.0-13.5
 Sample Location: BROOKLYN

Date Collected: 07/19/19 13:20
 Date Received: 07/19/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 07/23/19 08:18
 Analyst: JG
 Percent Solids: 91%

Extraction Method: EPA 3546
 Extraction Date: 07/20/19 14:06

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	38	J	ug/kg	140	18.	1
1,2,4-Trichlorobenzene	ND		ug/kg	180	20.	1
Hexachlorobenzene	ND		ug/kg	110	20.	1
Bis(2-chloroethyl)ether	ND		ug/kg	160	24.	1
2-Chloronaphthalene	ND		ug/kg	180	18.	1
1,2-Dichlorobenzene	ND		ug/kg	180	32.	1
1,3-Dichlorobenzene	ND		ug/kg	180	30.	1
1,4-Dichlorobenzene	ND		ug/kg	180	31.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	47.	1
2,4-Dinitrotoluene	ND		ug/kg	180	36.	1
2,6-Dinitrotoluene	ND		ug/kg	180	30.	1
Fluoranthene	480		ug/kg	110	20.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	19.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	27.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	210	30.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	190	18.	1
Hexachlorobutadiene	ND		ug/kg	180	26.	1
Hexachlorocyclopentadiene	ND		ug/kg	510	160	1
Hexachloroethane	ND		ug/kg	140	29.	1
Isophorone	ND		ug/kg	160	23.	1
Naphthalene	67	J	ug/kg	180	22.	1
Nitrobenzene	ND		ug/kg	160	26.	1
NDPA/DPA	ND		ug/kg	140	20.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	27.	1
Bis(2-ethylhexyl)phthalate	76	J	ug/kg	180	62.	1
Butyl benzyl phthalate	ND		ug/kg	180	45.	1
Di-n-butylphthalate	ND		ug/kg	180	34.	1
Di-n-octylphthalate	ND		ug/kg	180	60.	1

Project Name: 450 JOHNSON AVE

Lab Number: L1932118

Project Number: 170588001

Report Date: 08/06/19

SAMPLE RESULTS

Lab ID: L1932118-05
 Client ID: SB17_13.0-13.5
 Sample Location: BROOKLYN

Date Collected: 07/19/19 13:20
 Date Received: 07/19/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	180	16.	1
Dimethyl phthalate	ND		ug/kg	180	37.	1
Benzo(a)anthracene	290		ug/kg	110	20.	1
Benzo(a)pyrene	250		ug/kg	140	43.	1
Benzo(b)fluoranthene	300		ug/kg	110	30.	1
Benzo(k)fluoranthene	88	J	ug/kg	110	28.	1
Chrysene	380		ug/kg	110	18.	1
Acenaphthylene	30	J	ug/kg	140	27.	1
Anthracene	90	J	ug/kg	110	35.	1
Benzo(ghi)perylene	260		ug/kg	140	21.	1
Fluorene	52	J	ug/kg	180	17.	1
Phenanthrene	480		ug/kg	110	22.	1
Dibenzo(a,h)anthracene	56	J	ug/kg	110	20.	1
Indeno(1,2,3-cd)pyrene	180		ug/kg	140	25.	1
Pyrene	500		ug/kg	110	18.	1
Biphenyl	ND		ug/kg	400	41.	1
4-Chloroaniline	ND		ug/kg	180	32.	1
2-Nitroaniline	ND		ug/kg	180	34.	1
3-Nitroaniline	ND		ug/kg	180	34.	1
4-Nitroaniline	ND		ug/kg	180	74.	1
Dibenzofuran	32	J	ug/kg	180	17.	1
2-Methylnaphthalene	50	J	ug/kg	210	21.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	18.	1
Acetophenone	ND		ug/kg	180	22.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	34.	1
p-Chloro-m-cresol	ND		ug/kg	180	26.	1
2-Chlorophenol	ND		ug/kg	180	21.	1
2,4-Dichlorophenol	ND		ug/kg	160	28.	1
2,4-Dimethylphenol	ND		ug/kg	180	59.	1
2-Nitrophenol	ND		ug/kg	380	67.	1
4-Nitrophenol	ND		ug/kg	250	72.	1
2,4-Dinitrophenol	ND		ug/kg	850	83.	1
4,6-Dinitro-o-cresol	ND		ug/kg	460	85.	1
Pentachlorophenol	ND		ug/kg	140	39.	1
Phenol	ND		ug/kg	180	27.	1
2-Methylphenol	ND		ug/kg	180	28.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	260	28.	1

Project Name: 450 JOHNSON AVE**Lab Number:** L1932118**Project Number:** 170588001**Report Date:** 08/06/19**SAMPLE RESULTS**

Lab ID: L1932118-05
 Client ID: SB17_13.0-13.5
 Sample Location: BROOKLYN

Date Collected: 07/19/19 13:20
 Date Received: 07/19/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	180	34.	1
Benzoic Acid	ND		ug/kg	580	180	1
Benzyl Alcohol	ND		ug/kg	180	54.	1
Carbazole	42	J	ug/kg	180	17.	1
1,4-Dioxane	ND		ug/kg	27	8.2	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	77		25-120
Phenol-d6	81		10-120
Nitrobenzene-d5	84		23-120
2-Fluorobiphenyl	70		30-120
2,4,6-Tribromophenol	75		10-136
4-Terphenyl-d14	70		18-120

Project Name: 450 JOHNSON AVE**Lab Number:** L1932118**Project Number:** 170588001**Report Date:** 08/06/19**SAMPLE RESULTS**

Lab ID: L1932118-06

Date Collected: 07/19/19 14:00

Client ID: SB18_4.0-4.5

Date Received: 07/19/19

Sample Location: BROOKLYN

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Extraction Method: EPA 3546

Analytical Method: 1,8270D

Extraction Date: 07/20/19 14:06

Analytical Date: 07/23/19 06:11

Analyst: JG

Percent Solids: 86%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	280		ug/kg	150	20.	1
1,2,4-Trichlorobenzene	ND		ug/kg	190	22.	1
Hexachlorobenzene	ND		ug/kg	110	21.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	26.	1
2-Chloronaphthalene	ND		ug/kg	190	19.	1
1,2-Dichlorobenzene	ND		ug/kg	190	34.	1
1,3-Dichlorobenzene	ND		ug/kg	190	32.	1
1,4-Dichlorobenzene	ND		ug/kg	190	33.	1
3,3'-Dichlorobenzidine	ND		ug/kg	190	50.	1
2,4-Dinitrotoluene	ND		ug/kg	190	38.	1
2,6-Dinitrotoluene	ND		ug/kg	190	32.	1
Fluoranthene	2300		ug/kg	110	22.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	190	20.	1
4-Bromophenyl phenyl ether	ND		ug/kg	190	29.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	230	32.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	19.	1
Hexachlorobutadiene	ND		ug/kg	190	28.	1
Hexachlorocyclopentadiene	ND		ug/kg	540	170	1
Hexachloroethane	ND		ug/kg	150	30.	1
Isophorone	ND		ug/kg	170	24.	1
Naphthalene	43	J	ug/kg	190	23.	1
Nitrobenzene	ND		ug/kg	170	28.	1
NDPA/DPA	ND		ug/kg	150	21.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	190	29.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	190	65.	1
Butyl benzyl phthalate	ND		ug/kg	190	47.	1
Di-n-butylphthalate	ND		ug/kg	190	36.	1
Di-n-octylphthalate	ND		ug/kg	190	64.	1

Project Name: 450 JOHNSON AVE

Lab Number: L1932118

Project Number: 170588001

Report Date: 08/06/19

SAMPLE RESULTS

Lab ID: L1932118-06

Date Collected: 07/19/19 14:00

Client ID: SB18_4.0-4.5

Date Received: 07/19/19

Sample Location: BROOKLYN

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	190	17.	1
Dimethyl phthalate	ND		ug/kg	190	40.	1
Benzo(a)anthracene	1200		ug/kg	110	21.	1
Benzo(a)pyrene	920		ug/kg	150	46.	1
Benzo(b)fluoranthene	1100		ug/kg	110	32.	1
Benzo(k)fluoranthene	430		ug/kg	110	30.	1
Chrysene	970		ug/kg	110	20.	1
Acenaphthylene	29	J	ug/kg	150	29.	1
Anthracene	540		ug/kg	110	37.	1
Benzo(ghi)perylene	520		ug/kg	150	22.	1
Fluorene	210		ug/kg	190	18.	1
Phenanthrene	2200		ug/kg	110	23.	1
Dibenzo(a,h)anthracene	140		ug/kg	110	22.	1
Indeno(1,2,3-cd)pyrene	600		ug/kg	150	26.	1
Pyrene	2000		ug/kg	110	19.	1
Biphenyl	ND		ug/kg	430	44.	1
4-Chloroaniline	ND		ug/kg	190	34.	1
2-Nitroaniline	ND		ug/kg	190	36.	1
3-Nitroaniline	ND		ug/kg	190	36.	1
4-Nitroaniline	ND		ug/kg	190	78.	1
Dibenzofuran	120	J	ug/kg	190	18.	1
2-Methylnaphthalene	32	J	ug/kg	230	23.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	190	20.	1
Acetophenone	ND		ug/kg	190	23.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	36.	1
p-Chloro-m-cresol	ND		ug/kg	190	28.	1
2-Chlorophenol	ND		ug/kg	190	22.	1
2,4-Dichlorophenol	ND		ug/kg	170	30.	1
2,4-Dimethylphenol	ND		ug/kg	190	62.	1
2-Nitrophenol	ND		ug/kg	410	71.	1
4-Nitrophenol	ND		ug/kg	260	77.	1
2,4-Dinitrophenol	ND		ug/kg	900	88.	1
4,6-Dinitro-o-cresol	ND		ug/kg	490	90.	1
Pentachlorophenol	ND		ug/kg	150	41.	1
Phenol	ND		ug/kg	190	28.	1
2-Methylphenol	ND		ug/kg	190	29.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	270	29.	1

Project Name: 450 JOHNSON AVE**Lab Number:** L1932118**Project Number:** 170588001**Report Date:** 08/06/19**SAMPLE RESULTS**

Lab ID: L1932118-06

Date Collected: 07/19/19 14:00

Client ID: SB18_4.0-4.5

Date Received: 07/19/19

Sample Location: BROOKLYN

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	190	36.	1
Benzoic Acid	ND		ug/kg	610	190	1
Benzyl Alcohol	ND		ug/kg	190	58.	1
Carbazole	180	J	ug/kg	190	18.	1
1,4-Dioxane	ND		ug/kg	28	8.7	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	71		25-120
Phenol-d6	74		10-120
Nitrobenzene-d5	80		23-120
2-Fluorobiphenyl	70		30-120
2,4,6-Tribromophenol	75		10-136
4-Terphenyl-d14	72		18-120

Project Name: 450 JOHNSON AVE
Project Number: 170588001

Lab Number: L1932118
Report Date: 08/06/19

SAMPLE RESULTS

Lab ID: L1932118-07
Client ID: TMW07_071919
Sample Location: BROOKLYN

Date Collected: 07/19/19 09:00
Date Received: 07/19/19
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8270D
Analytical Date: 07/23/19 16:38
Analyst: JG

Extraction Method: EPA 3510C
Extraction Date: 07/20/19 09:06

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1

Project Name: 450 JOHNSON AVE**Lab Number:** L1932118**Project Number:** 170588001**Report Date:** 08/06/19**SAMPLE RESULTS**

Lab ID: L1932118-07
 Client ID: TMW07_071919
 Sample Location: BROOKLYN

Date Collected: 07/19/19 09:00
 Date Received: 07/19/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Benzoic Acid	9.4	J	ug/l	50	2.6	1
Benzyl Alcohol	ND		ug/l	2.0	0.59	1
Carbazole	ND		ug/l	2.0	0.49	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	54		21-120
Phenol-d6	47		10-120
Nitrobenzene-d5	71		23-120
2-Fluorobiphenyl	74		15-120
2,4,6-Tribromophenol	62		10-120
4-Terphenyl-d14	80		41-149

Project Name: 450 JOHNSON AVE
Project Number: 170588001

Lab Number: L1932118
Report Date: 08/06/19

SAMPLE RESULTS

Lab ID: L1932118-07
Client ID: TMW07_071919
Sample Location: BROOKLYN

Date Collected: 07/19/19 09:00
Date Received: 07/19/19
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 07/24/19 17:03
Analyst: DV

Extraction Method: EPA 3510C
Extraction Date: 07/20/19 09:07

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	0.03	J	ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	0.46		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	0.87		ug/l	0.10	0.05	1
Benzo(a)anthracene	0.25		ug/l	0.10	0.02	1
Benzo(a)pyrene	0.22		ug/l	0.10	0.02	1
Benzo(b)fluoranthene	0.31		ug/l	0.10	0.01	1
Benzo(k)fluoranthene	0.11		ug/l	0.10	0.01	1
Chrysene	0.26		ug/l	0.10	0.01	1
Acenaphthylene	ND		ug/l	0.10	0.01	1
Anthracene	0.06	J	ug/l	0.10	0.01	1
Benzo(ghi)perylene	0.20		ug/l	0.10	0.01	1
Fluorene	0.03	J	ug/l	0.10	0.01	1
Phenanthrene	0.25		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	0.04	J	ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	0.21		ug/l	0.10	0.01	1
Pyrene	0.45		ug/l	0.10	0.02	1
2-Methylnaphthalene	0.03	J	ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: 450 JOHNSON AVE**Lab Number:** L1932118**Project Number:** 170588001**Report Date:** 08/06/19**SAMPLE RESULTS**

Lab ID: L1932118-07

Date Collected: 07/19/19 09:00

Client ID: TMW07_071919

Date Received: 07/19/19

Sample Location: BROOKLYN

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	35		21-120
Phenol-d6	37		10-120
Nitrobenzene-d5	67		23-120
2-Fluorobiphenyl	66		15-120
2,4,6-Tribromophenol	26		10-120
4-Terphenyl-d14	64		41-149

Project Name: 450 JOHNSON AVE
Project Number: 170588001

Lab Number: L1932118
Report Date: 08/06/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 07/20/19 22:38
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 07/19/19 15:43

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 07 Batch: WG1262165-1					
Acenaphthene	ND		ug/l	2.0	0.44
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50
Hexachlorobenzene	ND		ug/l	2.0	0.46
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50
2-Chloronaphthalene	ND		ug/l	2.0	0.44
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93
Fluoranthene	ND		ug/l	2.0	0.26
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50
Hexachlorobutadiene	ND		ug/l	2.0	0.66
Hexachlorocyclopentadiene	ND		ug/l	20	0.69
Hexachloroethane	ND		ug/l	2.0	0.58
Isophorone	ND		ug/l	5.0	1.2
Naphthalene	ND		ug/l	2.0	0.46
Nitrobenzene	ND		ug/l	2.0	0.77
NDPA/DPA	ND		ug/l	2.0	0.42
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5
Butyl benzyl phthalate	ND		ug/l	5.0	1.2
Di-n-butylphthalate	ND		ug/l	5.0	0.39
Di-n-octylphthalate	ND		ug/l	5.0	1.3
Diethyl phthalate	ND		ug/l	5.0	0.38

Project Name: 450 JOHNSON AVE
Project Number: 170588001

Lab Number: L1932118
Report Date: 08/06/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 07/20/19 22:38
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 07/19/19 15:43

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 07 Batch: WG1262165-1					
Dimethyl phthalate	ND		ug/l	5.0	1.8
Benzo(a)anthracene	ND		ug/l	2.0	0.32
Benzo(a)pyrene	ND		ug/l	2.0	0.41
Benzo(b)fluoranthene	ND		ug/l	2.0	0.35
Benzo(k)fluoranthene	ND		ug/l	2.0	0.37
Chrysene	ND		ug/l	2.0	0.34
Acenaphthylene	ND		ug/l	2.0	0.46
Anthracene	ND		ug/l	2.0	0.33
Benzo(ghi)perylene	ND		ug/l	2.0	0.30
Fluorene	ND		ug/l	2.0	0.41
Phenanthrene	ND		ug/l	2.0	0.33
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.32
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.40
Pyrene	ND		ug/l	2.0	0.28
Biphenyl	ND		ug/l	2.0	0.46
4-Chloroaniline	ND		ug/l	5.0	1.1
2-Nitroaniline	ND		ug/l	5.0	0.50
3-Nitroaniline	ND		ug/l	5.0	0.81
4-Nitroaniline	ND		ug/l	5.0	0.80
Dibenzofuran	ND		ug/l	2.0	0.50
2-Methylnaphthalene	ND		ug/l	2.0	0.45
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44
Acetophenone	ND		ug/l	5.0	0.53
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61
p-Chloro-m-cresol	ND		ug/l	2.0	0.35
2-Chlorophenol	ND		ug/l	2.0	0.48
2,4-Dichlorophenol	ND		ug/l	5.0	0.41
2,4-Dimethylphenol	ND		ug/l	5.0	1.8
2-Nitrophenol	ND		ug/l	10	0.85

Project Name: 450 JOHNSON AVE
Project Number: 170588001

Lab Number: L1932118
Report Date: 08/06/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 07/20/19 22:38
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 07/19/19 15:43

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 07 Batch: WG1262165-1					
4-Nitrophenol	ND		ug/l	10	0.67
2,4-Dinitrophenol	ND		ug/l	20	6.6
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8
Pentachlorophenol	ND		ug/l	10	1.8
Phenol	ND		ug/l	5.0	0.57
2-Methylphenol	ND		ug/l	5.0	0.49
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77
Benzoic Acid	ND		ug/l	50	2.6
Benzyl Alcohol	ND		ug/l	2.0	0.59
Carbazole	ND		ug/l	2.0	0.49

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	48		21-120
Phenol-d6	37		10-120
Nitrobenzene-d5	59		23-120
2-Fluorobiphenyl	70		15-120
2,4,6-Tribromophenol	57		10-120
4-Terphenyl-d14	92		41-149

Project Name: 450 JOHNSON AVE
Project Number: 170588001

Lab Number: L1932118
Report Date: 08/06/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 07/21/19 11:48
Analyst: DV

Extraction Method: EPA 3510C
Extraction Date: 07/19/19 15:43

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 07 Batch: WG1262166-1					
Acenaphthene	ND		ug/l	0.10	0.01
2-Chloronaphthalene	ND		ug/l	0.20	0.02
Fluoranthene	ND		ug/l	0.10	0.02
Hexachlorobutadiene	ND		ug/l	0.50	0.05
Naphthalene	ND		ug/l	0.10	0.05
Benzo(a)anthracene	ND		ug/l	0.10	0.02
Benzo(a)pyrene	ND		ug/l	0.10	0.02
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01
Chrysene	ND		ug/l	0.10	0.01
Acenaphthylene	ND		ug/l	0.10	0.01
Anthracene	ND		ug/l	0.10	0.01
Benzo(ghi)perylene	ND		ug/l	0.10	0.01
Fluorene	ND		ug/l	0.10	0.01
Phenanthrene	ND		ug/l	0.10	0.02
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01
Pyrene	ND		ug/l	0.10	0.02
2-Methylnaphthalene	ND		ug/l	0.10	0.02
Pentachlorophenol	ND		ug/l	0.80	0.01
Hexachlorobenzene	ND		ug/l	0.80	0.01
Hexachloroethane	ND		ug/l	0.80	0.06

Project Name: 450 JOHNSON AVE
Project Number: 170588001

Lab Number: L1932118
Report Date: 08/06/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 07/21/19 11:48
Analyst: DV

Extraction Method: EPA 3510C
Extraction Date: 07/19/19 15:43

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 07 Batch: WG1262166-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	48		21-120
Phenol-d6	38		10-120
Nitrobenzene-d5	64		23-120
2-Fluorobiphenyl	68		15-120
2,4,6-Tribromophenol	61		10-120
4-Terphenyl-d14	98		41-149

Project Name: 450 JOHNSON AVE
Project Number: 170588001

Lab Number: L1932118
Report Date: 08/06/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 07/21/19 13:28
Analyst: RC

Extraction Method: EPA 3546
Extraction Date: 07/20/19 14:06

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01,03-06 Batch: WG1262491-1					
Acenaphthene	ND		ug/kg	130	17.
1,2,4-Trichlorobenzene	ND		ug/kg	160	19.
Hexachlorobenzene	ND		ug/kg	99	18.
Bis(2-chloroethyl)ether	ND		ug/kg	150	22.
2-Chloronaphthalene	ND		ug/kg	160	16.
1,2-Dichlorobenzene	ND		ug/kg	160	30.
1,3-Dichlorobenzene	ND		ug/kg	160	28.
1,4-Dichlorobenzene	ND		ug/kg	160	29.
3,3'-Dichlorobenzidine	ND		ug/kg	160	44.
2,4-Dinitrotoluene	ND		ug/kg	160	33.
2,6-Dinitrotoluene	ND		ug/kg	160	28.
Fluoranthene	ND		ug/kg	99	19.
4-Chlorophenyl phenyl ether	ND		ug/kg	160	18.
4-Bromophenyl phenyl ether	ND		ug/kg	160	25.
Bis(2-chloroisopropyl)ether	ND		ug/kg	200	28.
Bis(2-chloroethoxy)methane	ND		ug/kg	180	16.
Hexachlorobutadiene	ND		ug/kg	160	24.
Hexachlorocyclopentadiene	ND		ug/kg	470	150
Hexachloroethane	ND		ug/kg	130	27.
Isophorone	ND		ug/kg	150	21.
Naphthalene	ND		ug/kg	160	20.
Nitrobenzene	ND		ug/kg	150	24.
NDPA/DPA	ND		ug/kg	130	19.
n-Nitrosodi-n-propylamine	ND		ug/kg	160	25.
Bis(2-ethylhexyl)phthalate	ND		ug/kg	160	57.
Butyl benzyl phthalate	ND		ug/kg	160	42.
Di-n-butylphthalate	ND		ug/kg	160	31.
Di-n-octylphthalate	ND		ug/kg	160	56.
Diethyl phthalate	ND		ug/kg	160	15.

Project Name: 450 JOHNSON AVE
Project Number: 170588001

Lab Number: L1932118
Report Date: 08/06/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 07/21/19 13:28
Analyst: RC

Extraction Method: EPA 3546
Extraction Date: 07/20/19 14:06

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01,03-06 Batch: WG1262491-1					
Dimethyl phthalate	ND		ug/kg	160	35.
Benzo(a)anthracene	ND		ug/kg	99	18.
Benzo(a)pyrene	ND		ug/kg	130	40.
Benzo(b)fluoranthene	ND		ug/kg	99	28.
Benzo(k)fluoranthene	ND		ug/kg	99	26.
Chrysene	ND		ug/kg	99	17.
Acenaphthylene	ND		ug/kg	130	25.
Anthracene	ND		ug/kg	99	32.
Benzo(ghi)perylene	ND		ug/kg	130	19.
Fluorene	ND		ug/kg	160	16.
Phenanthrene	ND		ug/kg	99	20.
Dibenzo(a,h)anthracene	ND		ug/kg	99	19.
Indeno(1,2,3-cd)pyrene	ND		ug/kg	130	23.
Pyrene	ND		ug/kg	99	16.
Biphenyl	ND		ug/kg	380	38.
4-Chloroaniline	ND		ug/kg	160	30.
2-Nitroaniline	ND		ug/kg	160	32.
3-Nitroaniline	ND		ug/kg	160	31.
4-Nitroaniline	ND		ug/kg	160	68.
Dibenzofuran	ND		ug/kg	160	16.
2-Methylnaphthalene	ND		ug/kg	200	20.
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	160	17.
Acetophenone	ND		ug/kg	160	20.
2,4,6-Trichlorophenol	ND		ug/kg	99	31.
p-Chloro-m-cresol	ND		ug/kg	160	24.
2-Chlorophenol	ND		ug/kg	160	20.
2,4-Dichlorophenol	ND		ug/kg	150	26.
2,4-Dimethylphenol	ND		ug/kg	160	54.
2-Nitrophenol	ND		ug/kg	360	62.

Project Name: 450 JOHNSON AVE
Project Number: 170588001

Lab Number: L1932118
Report Date: 08/06/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 07/21/19 13:28
Analyst: RC

Extraction Method: EPA 3546
Extraction Date: 07/20/19 14:06

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01,03-06 Batch: WG1262491-1					
4-Nitrophenol	ND		ug/kg	230	67.
2,4-Dinitrophenol	ND		ug/kg	790	77.
4,6-Dinitro-o-cresol	ND		ug/kg	430	79.
Pentachlorophenol	ND		ug/kg	130	36.
Phenol	ND		ug/kg	160	25.
2-Methylphenol	ND		ug/kg	160	26.
3-Methylphenol/4-Methylphenol	ND		ug/kg	240	26.
2,4,5-Trichlorophenol	ND		ug/kg	160	32.
Benzoic Acid	ND		ug/kg	530	170
Benzyl Alcohol	ND		ug/kg	160	50.
Carbazole	ND		ug/kg	160	16.
1,4-Dioxane	ND		ug/kg	25	7.6

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	71		25-120
Phenol-d6	74		10-120
Nitrobenzene-d5	76		23-120
2-Fluorobiphenyl	76		30-120
2,4,6-Tribromophenol	80		10-136
4-Terphenyl-d14	73		18-120

Lab Control Sample Analysis

Batch Quality Control

Project Name: 450 JOHNSON AVE

Project Number: 170588001

Lab Number: L1932118

Report Date: 08/06/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 07 Batch: WG1262165-2 WG1262165-3								
Acenaphthene	66		65		37-111	2		30
1,2,4-Trichlorobenzene	72		67		39-98	7		30
Hexachlorobenzene	80		83		40-140	4		30
Bis(2-chloroethyl)ether	67		61		40-140	9		30
2-Chloronaphthalene	75		72		40-140	4		30
1,2-Dichlorobenzene	67		62		40-140	8		30
1,3-Dichlorobenzene	66		62		40-140	6		30
1,4-Dichlorobenzene	67		61		36-97	9		30
3,3'-Dichlorobenzidine	67		63		40-140	6		30
2,4-Dinitrotoluene	68		73		48-143	7		30
2,6-Dinitrotoluene	77		84		40-140	9		30
Fluoranthene	84		89		40-140	6		30
4-Chlorophenyl phenyl ether	73		73		40-140	0		30
4-Bromophenyl phenyl ether	82		82		40-140	0		30
Bis(2-chloroisopropyl)ether	82		76		40-140	8		30
Bis(2-chloroethoxy)methane	75		71		40-140	5		30
Hexachlorobutadiene	77		72		40-140	7		30
Hexachlorocyclopentadiene	78		72		40-140	8		30
Hexachloroethane	71		63		40-140	12		30
Isophorone	75		74		40-140	1		30
Naphthalene	67		64		40-140	5		30
Nitrobenzene	74		72		40-140	3		30
NDPA/DPA	75		74		40-140	1		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: 450 JOHNSON AVE

Project Number: 170588001

Lab Number: L1932118

Report Date: 08/06/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 07 Batch: WG1262165-2 WG1262165-3								
n-Nitrosodi-n-propylamine	79		76		29-132	4		30
Bis(2-ethylhexyl)phthalate	80		81		40-140	1		30
Butyl benzyl phthalate	86		92		40-140	7		30
Di-n-butylphthalate	81		86		40-140	6		30
Di-n-octylphthalate	86		89		40-140	3		30
Diethyl phthalate	80		86		40-140	7		30
Dimethyl phthalate	84		88		40-140	5		30
Benzo(a)anthracene	79		85		40-140	7		30
Benzo(a)pyrene	80		90		40-140	12		30
Benzo(b)fluoranthene	80		90		40-140	12		30
Benzo(k)fluoranthene	84		91		40-140	8		30
Chrysene	78		82		40-140	5		30
Acenaphthylene	77		75		45-123	3		30
Anthracene	79		81		40-140	3		30
Benzo(ghi)perylene	76		84		40-140	10		30
Fluorene	70		71		40-140	1		30
Phenanthrene	76		78		40-140	3		30
Dibenzo(a,h)anthracene	77		82		40-140	6		30
Indeno(1,2,3-cd)pyrene	73		80		40-140	9		30
Pyrene	80		88		26-127	10		30
Biphenyl	68		66		40-140	3		30
4-Chloroaniline	77		68		40-140	12		30
2-Nitroaniline	74		80		52-143	8		30

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 450 JOHNSON AVE

Project Number: 170588001

Lab Number: L1932118

Report Date: 08/06/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 07 Batch: WG1262165-2 WG1262165-3								
3-Nitroaniline	57		67		25-145	16		30
4-Nitroaniline	63		72		51-143	13		30
Dibenzofuran	68		66		40-140	3		30
2-Methylnaphthalene	69		66		40-140	4		30
1,2,4,5-Tetrachlorobenzene	70		69		2-134	1		30
Acetophenone	63		62		39-129	2		30
2,4,6-Trichlorophenol	80		80		30-130	0		30
p-Chloro-m-cresol	80		81		23-97	1		30
2-Chlorophenol	70		67		27-123	4		30
2,4-Dichlorophenol	74		73		30-130	1		30
2,4-Dimethylphenol	63		54		30-130	15		30
2-Nitrophenol	78		74		30-130	5		30
4-Nitrophenol	62		78		10-80	23		30
2,4-Dinitrophenol	70		84		20-130	18		30
4,6-Dinitro-o-cresol	86		94		20-164	9		30
Pentachlorophenol	76		89		9-103	16		30
Phenol	50		52		12-110	4		30
2-Methylphenol	65		64		30-130	2		30
3-Methylphenol/4-Methylphenol	64		64		30-130	0		30
2,4,5-Trichlorophenol	80		82		30-130	2		30
Benzoic Acid	35		48		10-164	31	Q	30
Benzyl Alcohol	65		68		26-116	5		30
Carbazole	79		85		55-144	7		30

Lab Control Sample Analysis Batch Quality Control

Project Name: 450 JOHNSON AVE

Project Number: 170588001

Lab Number: L1932118

Report Date: 08/06/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits

Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 07 Batch: WG1262165-2 WG1262165-3

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	56		57		21-120
Phenol-d6	50		52		10-120
Nitrobenzene-d5	76		75		23-120
2-Fluorobiphenyl	79		76		15-120
2,4,6-Tribromophenol	77		77		10-120
4-Terphenyl-d14	88		96		41-149

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 450 JOHNSON AVE

Project Number: 170588001

Lab Number: L1932118

Report Date: 08/06/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 07 Batch: WG1262166-2 WG1262166-3								
Acenaphthene	78		81		40-140	4		40
2-Chloronaphthalene	78		88		40-140	12		40
Fluoranthene	87		91		40-140	4		40
Hexachlorobutadiene	72		84		40-140	15		40
Naphthalene	69		78		40-140	12		40
Benzo(a)anthracene	83		86		40-140	4		40
Benzo(a)pyrene	85		92		40-140	8		40
Benzo(b)fluoranthene	86		90		40-140	5		40
Benzo(k)fluoranthene	88		94		40-140	7		40
Chrysene	83		88		40-140	6		40
Acenaphthylene	79		88		40-140	11		40
Anthracene	89		95		40-140	7		40
Benzo(ghi)perylene	81		89		40-140	9		40
Fluorene	79		85		40-140	7		40
Phenanthrene	85		91		40-140	7		40
Dibenzo(a,h)anthracene	91		96		40-140	5		40
Indeno(1,2,3-cd)pyrene	88		96		40-140	9		40
Pyrene	86		90		40-140	5		40
2-Methylnaphthalene	75		85		40-140	13		40
Pentachlorophenol	71		81		40-140	13		40
Hexachlorobenzene	79		88		40-140	11		40
Hexachloroethane	68		79		40-140	15		40

Lab Control Sample Analysis Batch Quality Control

Project Name: 450 JOHNSON AVE

Project Number: 170588001

Lab Number: L1932118

Report Date: 08/06/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 07 Batch: WG1262166-2 WG1262166-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	50		58		21-120
Phenol-d6	40		46		10-120
Nitrobenzene-d5	70		80		23-120
2-Fluorobiphenyl	74		83		15-120
2,4,6-Tribromophenol	62		67		10-120
4-Terphenyl-d14	87		91		41-149

Lab Control Sample Analysis

Batch Quality Control

Project Name: 450 JOHNSON AVE

Project Number: 170588001

Lab Number: L1932118

Report Date: 08/06/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01,03-06 Batch: WG1262491-2 WG1262491-3								
Acenaphthene	68		69		31-137	1		50
1,2,4-Trichlorobenzene	75		71		38-107	5		50
Hexachlorobenzene	76		76		40-140	0		50
Bis(2-chloroethyl)ether	73		67		40-140	9		50
2-Chloronaphthalene	75		73		40-140	3		50
1,2-Dichlorobenzene	71		66		40-140	7		50
1,3-Dichlorobenzene	70		65		40-140	7		50
1,4-Dichlorobenzene	71		66		28-104	7		50
3,3'-Dichlorobenzidine	57		57		40-140	0		50
2,4-Dinitrotoluene	76		76		40-132	0		50
2,6-Dinitrotoluene	81		80		40-140	1		50
Fluoranthene	74		75		40-140	1		50
4-Chlorophenyl phenyl ether	72		72		40-140	0		50
4-Bromophenyl phenyl ether	75		76		40-140	1		50
Bis(2-chloroisopropyl)ether	66		61		40-140	8		50
Bis(2-chloroethoxy)methane	76		72		40-117	5		50
Hexachlorobutadiene	73		71		40-140	3		50
Hexachlorocyclopentadiene	77		76		40-140	1		50
Hexachloroethane	70		64		40-140	9		50
Isophorone	80		74		40-140	8		50
Naphthalene	69		68		40-140	1		50
Nitrobenzene	77		72		40-140	7		50
NDPA/DPA	74		74		36-157	0		50

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 450 JOHNSON AVE

Project Number: 170588001

Lab Number: L1932118

Report Date: 08/06/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01,03-06 Batch: WG1262491-2 WG1262491-3								
n-Nitrosodi-n-propylamine	78		73		32-121	7		50
Bis(2-ethylhexyl)phthalate	68		68		40-140	0		50
Butyl benzyl phthalate	72		73		40-140	1		50
Di-n-butylphthalate	76		76		40-140	0		50
Di-n-octylphthalate	75		75		40-140	0		50
Diethyl phthalate	73		72		40-140	1		50
Dimethyl phthalate	81		78		40-140	4		50
Benzo(a)anthracene	71		72		40-140	1		50
Benzo(a)pyrene	81		82		40-140	1		50
Benzo(b)fluoranthene	74		74		40-140	0		50
Benzo(k)fluoranthene	72		73		40-140	1		50
Chrysene	65		67		40-140	3		50
Acenaphthylene	79		77		40-140	3		50
Anthracene	73		74		40-140	1		50
Benzo(ghi)perylene	71		71		40-140	0		50
Fluorene	71		71		40-140	0		50
Phenanthrene	68		69		40-140	1		50
Dibenzo(a,h)anthracene	73		73		40-140	0		50
Indeno(1,2,3-cd)pyrene	74		75		40-140	1		50
Pyrene	72		73		35-142	1		50
Biphenyl	83		80		54-104	4		50
4-Chloroaniline	55		61		40-140	10		50
2-Nitroaniline	84		81		47-134	4		50

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 450 JOHNSON AVE

Project Number: 170588001

Lab Number: L1932118

Report Date: 08/06/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01,03-06 Batch: WG1262491-2 WG1262491-3								
3-Nitroaniline	64		62		26-129	3		50
4-Nitroaniline	73		74		41-125	1		50
Dibenzofuran	68		70		40-140	3		50
2-Methylnaphthalene	74		73		40-140	1		50
1,2,4,5-Tetrachlorobenzene	79		77		40-117	3		50
Acetophenone	86		81		14-144	6		50
2,4,6-Trichlorophenol	86		84		30-130	2		50
p-Chloro-m-cresol	80		78		26-103	3		50
2-Chlorophenol	79		74		25-102	7		50
2,4-Dichlorophenol	86		81		30-130	6		50
2,4-Dimethylphenol	83		78		30-130	6		50
2-Nitrophenol	90		85		30-130	6		50
4-Nitrophenol	72		74		11-114	3		50
2,4-Dinitrophenol	52		85		4-130	48		50
4,6-Dinitro-o-cresol	81		85		10-130	5		50
Pentachlorophenol	80		80		17-109	0		50
Phenol	71		67		26-90	6		50
2-Methylphenol	80		75		30-130.	6		50
3-Methylphenol/4-Methylphenol	80		74		30-130	8		50
2,4,5-Trichlorophenol	86		83		30-130	4		50
Benzoic Acid	0	Q	54		10-110	NC		50
Benzyl Alcohol	77		74		40-140	4		50
Carbazole	70		71		54-128	1		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: 450 JOHNSON AVE

Project Number: 170588001

Lab Number: L1932118

Report Date: 08/06/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01,03-06 Batch: WG1262491-2 WG1262491-3								
1,4-Dioxane	62		56		40-140	10		50

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	75		70		25-120
Phenol-d6	77		72		10-120
Nitrobenzene-d5	79		74		23-120
2-Fluorobiphenyl	75		73		30-120
2,4,6-Tribromophenol	80		81		10-136
4-Terphenyl-d14	70		72		18-120

PCBS

Project Name: 450 JOHNSON AVE
Project Number: 170588001

Lab Number: L1932118
Report Date: 08/06/19

SAMPLE RESULTS

Lab ID: L1932118-04
Client ID: SB16_3.0-3.5
Sample Location: BROOKLYN

Date Collected: 07/19/19 12:15
Date Received: 07/19/19
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 07/23/19 11:00
Analyst: WR
Percent Solids: 80%

Extraction Method: EPA 3546
Extraction Date: 07/22/19 13:27
Cleanup Method: EPA 3665A
Cleanup Date: 07/22/19
Cleanup Method: EPA 3660B
Cleanup Date: 07/23/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	41.0	3.64	1	A
Aroclor 1221	ND		ug/kg	41.0	4.11	1	A
Aroclor 1232	ND		ug/kg	41.0	8.69	1	A
Aroclor 1242	ND		ug/kg	41.0	5.53	1	A
Aroclor 1248	ND		ug/kg	41.0	6.15	1	A
Aroclor 1254	ND		ug/kg	41.0	4.49	1	A
Aroclor 1260	39.2	J	ug/kg	41.0	7.58	1	A
Aroclor 1262	ND		ug/kg	41.0	5.21	1	A
Aroclor 1268	42.5		ug/kg	41.0	4.25	1	A
PCBs, Total	81.7	J	ug/kg	41.0	3.64	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	40		30-150	A
Decachlorobiphenyl	39		30-150	A
2,4,5,6-Tetrachloro-m-xylene	33		30-150	B
Decachlorobiphenyl	34		30-150	B

Project Name: 450 JOHNSON AVE
Project Number: 170588001

Lab Number: L1932118
Report Date: 08/06/19

SAMPLE RESULTS

Lab ID: L1932118-05
Client ID: SB17_13.0-13.5
Sample Location: BROOKLYN

Date Collected: 07/19/19 13:20
Date Received: 07/19/19
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 07/23/19 11:13
Analyst: WR
Percent Solids: 91%

Extraction Method: EPA 3546
Extraction Date: 07/22/19 13:27
Cleanup Method: EPA 3665A
Cleanup Date: 07/22/19
Cleanup Method: EPA 3660B
Cleanup Date: 07/23/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	36.0	3.20	1	A
Aroclor 1221	ND		ug/kg	36.0	3.61	1	A
Aroclor 1232	ND		ug/kg	36.0	7.64	1	A
Aroclor 1242	ND		ug/kg	36.0	4.86	1	A
Aroclor 1248	ND		ug/kg	36.0	5.40	1	A
Aroclor 1254	ND		ug/kg	36.0	3.94	1	A
Aroclor 1260	ND		ug/kg	36.0	6.66	1	A
Aroclor 1262	ND		ug/kg	36.0	4.58	1	A
Aroclor 1268	ND		ug/kg	36.0	3.73	1	A
PCBs, Total	ND		ug/kg	36.0	3.20	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	41		30-150	A
Decachlorobiphenyl	33		30-150	A
2,4,5,6-Tetrachloro-m-xylene	35		30-150	B
Decachlorobiphenyl	28	Q	30-150	B

Project Name: 450 JOHNSON AVE
Project Number: 170588001

Lab Number: L1932118
Report Date: 08/06/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8082A
Analytical Date: 07/23/19 10:23
Analyst: WR

Extraction Method: EPA 3546
Extraction Date: 07/22/19 08:29
Cleanup Method: EPA 3665A
Cleanup Date: 07/22/19

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 04-05 Batch: WG1262733-1						
Aroclor 1016	ND		ug/kg	33.3	2.95	A
Aroclor 1221	ND		ug/kg	33.3	3.33	A
Aroclor 1232	ND		ug/kg	33.3	7.05	A
Aroclor 1242	ND		ug/kg	33.3	4.48	A
Aroclor 1248	ND		ug/kg	33.3	4.99	A
Aroclor 1254	ND		ug/kg	33.3	3.64	A
Aroclor 1260	ND		ug/kg	33.3	6.15	A
Aroclor 1262	ND		ug/kg	33.3	4.22	A
Aroclor 1268	ND		ug/kg	33.3	3.45	A
PCBs, Total	ND		ug/kg	33.3	2.95	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	74		30-150	A
Decachlorobiphenyl	63		30-150	A
2,4,5,6-Tetrachloro-m-xylene	65		30-150	B
Decachlorobiphenyl	52		30-150	B

Lab Control Sample Analysis Batch Quality Control

Project Name: 450 JOHNSON AVE

Project Number: 170588001

Lab Number: L1932118

Report Date: 08/06/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 04-05 Batch: WG1262733-2 WG1262733-3									
Aroclor 1016	97		95		40-140	2		50	A
Aroclor 1260	94		95		40-140	1		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	75		73		30-150	A
Decachlorobiphenyl	66		65		30-150	A
2,4,5,6-Tetrachloro-m-xylene	66		64		30-150	B
Decachlorobiphenyl	52		53		30-150	B

METALS

Project Name: 450 JOHNSON AVE**Lab Number:** L1932118**Project Number:** 170588001**Report Date:** 08/06/19**SAMPLE RESULTS**

Lab ID: L1932118-01

Date Collected: 07/19/19 11:20

Client ID: SB15_8.0-8.5

Date Received: 07/19/19

Sample Location: BROOKLYN

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 81%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	4590		mg/kg	9.33	2.52	2	07/20/19 09:40	07/22/19 10:49	EPA 3050B	1,6010D	LC
Antimony, Total	1.62	J	mg/kg	4.67	0.355	2	07/20/19 09:40	07/22/19 10:49	EPA 3050B	1,6010D	LC
Arsenic, Total	11.5		mg/kg	0.933	0.194	2	07/20/19 09:40	07/22/19 10:49	EPA 3050B	1,6010D	LC
Barium, Total	59.2		mg/kg	0.933	0.162	2	07/20/19 09:40	07/22/19 10:49	EPA 3050B	1,6010D	LC
Beryllium, Total	0.121	J	mg/kg	0.467	0.031	2	07/20/19 09:40	07/22/19 10:49	EPA 3050B	1,6010D	LC
Cadmium, Total	0.821	J	mg/kg	0.933	0.091	2	07/20/19 09:40	07/22/19 10:49	EPA 3050B	1,6010D	LC
Calcium, Total	2450		mg/kg	9.33	3.27	2	07/20/19 09:40	07/22/19 10:49	EPA 3050B	1,6010D	LC
Chromium, Total	11.7		mg/kg	0.933	0.090	2	07/20/19 09:40	07/22/19 10:49	EPA 3050B	1,6010D	LC
Cobalt, Total	5.36		mg/kg	1.87	0.155	2	07/20/19 09:40	07/22/19 10:49	EPA 3050B	1,6010D	LC
Copper, Total	41.8		mg/kg	0.933	0.241	2	07/20/19 09:40	07/22/19 10:49	EPA 3050B	1,6010D	LC
Iron, Total	17200		mg/kg	4.67	0.843	2	07/20/19 09:40	07/22/19 10:49	EPA 3050B	1,6010D	LC
Lead, Total	544		mg/kg	4.67	0.250	2	07/20/19 09:40	07/22/19 10:49	EPA 3050B	1,6010D	LC
Magnesium, Total	698		mg/kg	9.33	1.44	2	07/20/19 09:40	07/22/19 10:49	EPA 3050B	1,6010D	LC
Manganese, Total	342		mg/kg	0.933	0.148	2	07/20/19 09:40	07/22/19 10:49	EPA 3050B	1,6010D	LC
Mercury, Total	1.18		mg/kg	0.077	0.050	1	07/20/19 10:30	07/20/19 18:50	EPA 7471B	1,7471B	MG
Nickel, Total	10.3		mg/kg	2.33	0.226	2	07/20/19 09:40	07/22/19 10:49	EPA 3050B	1,6010D	LC
Potassium, Total	454		mg/kg	233	13.4	2	07/20/19 09:40	07/22/19 10:49	EPA 3050B	1,6010D	LC
Selenium, Total	0.765	J	mg/kg	1.87	0.241	2	07/20/19 09:40	07/22/19 10:49	EPA 3050B	1,6010D	LC
Silver, Total	ND		mg/kg	0.933	0.264	2	07/20/19 09:40	07/22/19 10:49	EPA 3050B	1,6010D	LC
Sodium, Total	106	J	mg/kg	187	2.94	2	07/20/19 09:40	07/22/19 10:49	EPA 3050B	1,6010D	LC
Thallium, Total	0.364	J	mg/kg	1.87	0.294	2	07/20/19 09:40	07/22/19 10:49	EPA 3050B	1,6010D	LC
Vanadium, Total	19.3		mg/kg	0.933	0.189	2	07/20/19 09:40	07/22/19 10:49	EPA 3050B	1,6010D	LC
Zinc, Total	336		mg/kg	4.67	0.273	2	07/20/19 09:40	07/22/19 10:49	EPA 3050B	1,6010D	LC



Project Name: 450 JOHNSON AVE**Lab Number:** L1932118**Project Number:** 170588001**Report Date:** 08/06/19**SAMPLE RESULTS**

Lab ID: L1932118-03

Date Collected: 07/19/19 09:40

Client ID: SB10_5.0-5.5

Date Received: 07/19/19

Sample Location: BROOKLYN

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 82%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	3190		mg/kg	9.28	2.50	2	07/20/19 09:40	07/22/19 10:53	EPA 3050B	1,6010D	LC
Antimony, Total	0.779	J	mg/kg	4.64	0.353	2	07/20/19 09:40	07/22/19 10:53	EPA 3050B	1,6010D	LC
Arsenic, Total	6.01		mg/kg	0.928	0.193	2	07/20/19 09:40	07/22/19 10:53	EPA 3050B	1,6010D	LC
Barium, Total	177		mg/kg	0.928	0.161	2	07/20/19 09:40	07/22/19 10:53	EPA 3050B	1,6010D	LC
Beryllium, Total	0.241	J	mg/kg	0.464	0.031	2	07/20/19 09:40	07/22/19 10:53	EPA 3050B	1,6010D	LC
Cadmium, Total	1.11		mg/kg	0.928	0.091	2	07/20/19 09:40	07/22/19 10:53	EPA 3050B	1,6010D	LC
Calcium, Total	2540		mg/kg	9.28	3.25	2	07/20/19 09:40	07/22/19 10:53	EPA 3050B	1,6010D	LC
Chromium, Total	7.75		mg/kg	0.928	0.089	2	07/20/19 09:40	07/22/19 10:53	EPA 3050B	1,6010D	LC
Cobalt, Total	4.87		mg/kg	1.86	0.154	2	07/20/19 09:40	07/22/19 10:53	EPA 3050B	1,6010D	LC
Copper, Total	67.0		mg/kg	0.928	0.239	2	07/20/19 09:40	07/22/19 10:53	EPA 3050B	1,6010D	LC
Iron, Total	7380		mg/kg	4.64	0.838	2	07/20/19 09:40	07/22/19 10:53	EPA 3050B	1,6010D	LC
Lead, Total	442		mg/kg	4.64	0.249	2	07/20/19 09:40	07/22/19 10:53	EPA 3050B	1,6010D	LC
Magnesium, Total	431		mg/kg	9.28	1.43	2	07/20/19 09:40	07/22/19 10:53	EPA 3050B	1,6010D	LC
Manganese, Total	140		mg/kg	0.928	0.148	2	07/20/19 09:40	07/22/19 10:53	EPA 3050B	1,6010D	LC
Mercury, Total	0.489		mg/kg	0.078	0.051	1	07/20/19 10:30	07/20/19 18:52	EPA 7471B	1,7471B	MG
Nickel, Total	12.8		mg/kg	2.32	0.224	2	07/20/19 09:40	07/22/19 10:53	EPA 3050B	1,6010D	LC
Potassium, Total	500		mg/kg	232	13.4	2	07/20/19 09:40	07/22/19 10:53	EPA 3050B	1,6010D	LC
Selenium, Total	1.77	J	mg/kg	1.86	0.239	2	07/20/19 09:40	07/22/19 10:53	EPA 3050B	1,6010D	LC
Silver, Total	ND		mg/kg	0.928	0.263	2	07/20/19 09:40	07/22/19 10:53	EPA 3050B	1,6010D	LC
Sodium, Total	141	J	mg/kg	186	2.92	2	07/20/19 09:40	07/22/19 10:53	EPA 3050B	1,6010D	LC
Thallium, Total	ND		mg/kg	1.86	0.292	2	07/20/19 09:40	07/22/19 10:53	EPA 3050B	1,6010D	LC
Vanadium, Total	15.2		mg/kg	0.928	0.188	2	07/20/19 09:40	07/22/19 10:53	EPA 3050B	1,6010D	LC
Zinc, Total	291		mg/kg	4.64	0.272	2	07/20/19 09:40	07/22/19 10:53	EPA 3050B	1,6010D	LC



Project Name: 450 JOHNSON AVE**Lab Number:** L1932118**Project Number:** 170588001**Report Date:** 08/06/19**SAMPLE RESULTS**

Lab ID: L1932118-04

Date Collected: 07/19/19 12:15

Client ID: SB16_3.0-3.5

Date Received: 07/19/19

Sample Location: BROOKLYN

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 80%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	7800		mg/kg	9.72	2.62	2	07/20/19 09:40	07/22/19 11:19	EPA 3050B	1,6010D	LC
Antimony, Total	5.74		mg/kg	4.86	0.369	2	07/20/19 09:40	07/22/19 11:19	EPA 3050B	1,6010D	LC
Arsenic, Total	10.4		mg/kg	0.972	0.202	2	07/20/19 09:40	07/22/19 11:19	EPA 3050B	1,6010D	LC
Barium, Total	632		mg/kg	0.972	0.169	2	07/20/19 09:40	07/22/19 11:19	EPA 3050B	1,6010D	LC
Beryllium, Total	0.330	J	mg/kg	0.486	0.032	2	07/20/19 09:40	07/22/19 11:19	EPA 3050B	1,6010D	LC
Cadmium, Total	2.98		mg/kg	0.972	0.095	2	07/20/19 09:40	07/22/19 11:19	EPA 3050B	1,6010D	LC
Calcium, Total	24200		mg/kg	9.72	3.40	2	07/20/19 09:40	07/22/19 11:19	EPA 3050B	1,6010D	LC
Chromium, Total	70.7		mg/kg	0.972	0.093	2	07/20/19 09:40	07/22/19 11:19	EPA 3050B	1,6010D	LC
Cobalt, Total	7.06		mg/kg	1.94	0.161	2	07/20/19 09:40	07/22/19 11:19	EPA 3050B	1,6010D	LC
Copper, Total	258		mg/kg	0.972	0.251	2	07/20/19 09:40	07/22/19 11:19	EPA 3050B	1,6010D	LC
Iron, Total	24500		mg/kg	4.86	0.878	2	07/20/19 09:40	07/22/19 11:19	EPA 3050B	1,6010D	LC
Lead, Total	545		mg/kg	4.86	0.260	2	07/20/19 09:40	07/22/19 11:19	EPA 3050B	1,6010D	LC
Magnesium, Total	3180		mg/kg	9.72	1.50	2	07/20/19 09:40	07/22/19 11:19	EPA 3050B	1,6010D	LC
Manganese, Total	276		mg/kg	0.972	0.154	2	07/20/19 09:40	07/22/19 11:19	EPA 3050B	1,6010D	LC
Mercury, Total	0.832		mg/kg	0.078	0.051	1	07/20/19 10:30	07/20/19 18:54	EPA 7471B	1,7471B	MG
Nickel, Total	55.0		mg/kg	2.43	0.235	2	07/20/19 09:40	07/22/19 11:19	EPA 3050B	1,6010D	LC
Potassium, Total	1540		mg/kg	243	14.0	2	07/20/19 09:40	07/22/19 11:19	EPA 3050B	1,6010D	LC
Selenium, Total	0.943	J	mg/kg	1.94	0.251	2	07/20/19 09:40	07/22/19 11:19	EPA 3050B	1,6010D	LC
Silver, Total	0.583	J	mg/kg	0.972	0.275	2	07/20/19 09:40	07/22/19 11:19	EPA 3050B	1,6010D	LC
Sodium, Total	400		mg/kg	194	3.06	2	07/20/19 09:40	07/22/19 11:19	EPA 3050B	1,6010D	LC
Thallium, Total	0.330	J	mg/kg	1.94	0.306	2	07/20/19 09:40	07/22/19 11:19	EPA 3050B	1,6010D	LC
Vanadium, Total	34.4		mg/kg	0.972	0.197	2	07/20/19 09:40	07/22/19 11:19	EPA 3050B	1,6010D	LC
Zinc, Total	843		mg/kg	4.86	0.285	2	07/20/19 09:40	07/22/19 11:19	EPA 3050B	1,6010D	LC



Project Name: 450 JOHNSON AVE**Lab Number:** L1932118**Project Number:** 170588001**Report Date:** 08/06/19**SAMPLE RESULTS**

Lab ID: L1932118-05

Date Collected: 07/19/19 13:20

Client ID: SB17_13.0-13.5

Date Received: 07/19/19

Sample Location: BROOKLYN

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 91%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	2920		mg/kg	8.55	2.31	2	07/20/19 09:40	07/22/19 11:24	EPA 3050B	1,6010D	LC
Antimony, Total	0.829	J	mg/kg	4.28	0.325	2	07/20/19 09:40	07/22/19 11:24	EPA 3050B	1,6010D	LC
Arsenic, Total	12.4		mg/kg	0.855	0.178	2	07/20/19 09:40	07/22/19 11:24	EPA 3050B	1,6010D	LC
Barium, Total	47.5		mg/kg	0.855	0.149	2	07/20/19 09:40	07/22/19 11:24	EPA 3050B	1,6010D	LC
Beryllium, Total	0.205	J	mg/kg	0.428	0.028	2	07/20/19 09:40	07/22/19 11:24	EPA 3050B	1,6010D	LC
Cadmium, Total	0.282	J	mg/kg	0.855	0.084	2	07/20/19 09:40	07/22/19 11:24	EPA 3050B	1,6010D	LC
Calcium, Total	8180		mg/kg	8.55	2.99	2	07/20/19 09:40	07/22/19 11:24	EPA 3050B	1,6010D	LC
Chromium, Total	8.94		mg/kg	0.855	0.082	2	07/20/19 09:40	07/22/19 11:24	EPA 3050B	1,6010D	LC
Cobalt, Total	4.92		mg/kg	1.71	0.142	2	07/20/19 09:40	07/22/19 11:24	EPA 3050B	1,6010D	LC
Copper, Total	31.5		mg/kg	0.855	0.220	2	07/20/19 09:40	07/22/19 11:24	EPA 3050B	1,6010D	LC
Iron, Total	15600		mg/kg	4.28	0.772	2	07/20/19 09:40	07/22/19 11:24	EPA 3050B	1,6010D	LC
Lead, Total	255		mg/kg	4.28	0.229	2	07/20/19 09:40	07/22/19 11:24	EPA 3050B	1,6010D	LC
Magnesium, Total	2030		mg/kg	8.55	1.32	2	07/20/19 09:40	07/22/19 11:24	EPA 3050B	1,6010D	LC
Manganese, Total	232		mg/kg	0.855	0.136	2	07/20/19 09:40	07/22/19 11:24	EPA 3050B	1,6010D	LC
Mercury, Total	1.15		mg/kg	0.069	0.045	1	07/20/19 10:30	07/20/19 19:00	EPA 7471B	1,7471B	MG
Nickel, Total	11.1		mg/kg	2.14	0.207	2	07/20/19 09:40	07/22/19 11:24	EPA 3050B	1,6010D	LC
Potassium, Total	373		mg/kg	214	12.3	2	07/20/19 09:40	07/22/19 11:24	EPA 3050B	1,6010D	LC
Selenium, Total	0.462	J	mg/kg	1.71	0.220	2	07/20/19 09:40	07/22/19 11:24	EPA 3050B	1,6010D	LC
Silver, Total	ND		mg/kg	0.855	0.242	2	07/20/19 09:40	07/22/19 11:24	EPA 3050B	1,6010D	LC
Sodium, Total	116	J	mg/kg	171	2.69	2	07/20/19 09:40	07/22/19 11:24	EPA 3050B	1,6010D	LC
Thallium, Total	ND		mg/kg	1.71	0.269	2	07/20/19 09:40	07/22/19 11:24	EPA 3050B	1,6010D	LC
Vanadium, Total	14.2		mg/kg	0.855	0.174	2	07/20/19 09:40	07/22/19 11:24	EPA 3050B	1,6010D	LC
Zinc, Total	60.2		mg/kg	4.28	0.250	2	07/20/19 09:40	07/22/19 11:24	EPA 3050B	1,6010D	LC



Project Name: 450 JOHNSON AVE**Lab Number:** L1932118**Project Number:** 170588001**Report Date:** 08/06/19**SAMPLE RESULTS**

Lab ID: L1932118-06

Date Collected: 07/19/19 14:00

Client ID: SB18_4.0-4.5

Date Received: 07/19/19

Sample Location: BROOKLYN

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 86%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	6310		mg/kg	8.76	2.36	2	07/20/19 09:40	07/22/19 11:28	EPA 3050B	1,6010D	LC
Antimony, Total	0.648	J	mg/kg	4.38	0.333	2	07/20/19 09:40	07/22/19 11:28	EPA 3050B	1,6010D	LC
Arsenic, Total	5.90		mg/kg	0.876	0.182	2	07/20/19 09:40	07/22/19 11:28	EPA 3050B	1,6010D	LC
Barium, Total	260		mg/kg	0.876	0.152	2	07/20/19 09:40	07/22/19 11:28	EPA 3050B	1,6010D	LC
Beryllium, Total	0.228	J	mg/kg	0.438	0.029	2	07/20/19 09:40	07/22/19 11:28	EPA 3050B	1,6010D	LC
Cadmium, Total	0.394	J	mg/kg	0.876	0.086	2	07/20/19 09:40	07/22/19 11:28	EPA 3050B	1,6010D	LC
Calcium, Total	55700		mg/kg	8.76	3.06	2	07/20/19 09:40	07/22/19 11:28	EPA 3050B	1,6010D	LC
Chromium, Total	12.2		mg/kg	0.876	0.084	2	07/20/19 09:40	07/22/19 11:28	EPA 3050B	1,6010D	LC
Cobalt, Total	5.28		mg/kg	1.75	0.145	2	07/20/19 09:40	07/22/19 11:28	EPA 3050B	1,6010D	LC
Copper, Total	23.8		mg/kg	0.876	0.226	2	07/20/19 09:40	07/22/19 11:28	EPA 3050B	1,6010D	LC
Iron, Total	13200		mg/kg	4.38	0.791	2	07/20/19 09:40	07/22/19 11:28	EPA 3050B	1,6010D	LC
Lead, Total	167		mg/kg	4.38	0.235	2	07/20/19 09:40	07/22/19 11:28	EPA 3050B	1,6010D	LC
Magnesium, Total	1880		mg/kg	8.76	1.35	2	07/20/19 09:40	07/22/19 11:28	EPA 3050B	1,6010D	LC
Manganese, Total	415		mg/kg	0.876	0.139	2	07/20/19 09:40	07/22/19 11:28	EPA 3050B	1,6010D	LC
Mercury, Total	0.742		mg/kg	0.074	0.049	1	07/20/19 10:30	07/20/19 19:02	EPA 7471B	1,7471B	MG
Nickel, Total	10.6		mg/kg	2.19	0.212	2	07/20/19 09:40	07/22/19 11:28	EPA 3050B	1,6010D	LC
Potassium, Total	555		mg/kg	219	12.6	2	07/20/19 09:40	07/22/19 11:28	EPA 3050B	1,6010D	LC
Selenium, Total	ND		mg/kg	1.75	0.226	2	07/20/19 09:40	07/22/19 11:28	EPA 3050B	1,6010D	LC
Silver, Total	ND		mg/kg	0.876	0.248	2	07/20/19 09:40	07/22/19 11:28	EPA 3050B	1,6010D	LC
Sodium, Total	154	J	mg/kg	175	2.76	2	07/20/19 09:40	07/22/19 11:28	EPA 3050B	1,6010D	LC
Thallium, Total	ND		mg/kg	1.75	0.276	2	07/20/19 09:40	07/22/19 11:28	EPA 3050B	1,6010D	LC
Vanadium, Total	17.6		mg/kg	0.876	0.178	2	07/20/19 09:40	07/22/19 11:28	EPA 3050B	1,6010D	LC
Zinc, Total	97.5		mg/kg	4.38	0.256	2	07/20/19 09:40	07/22/19 11:28	EPA 3050B	1,6010D	LC



Project Name: 450 JOHNSON AVE**Lab Number:** L1932118**Project Number:** 170588001**Report Date:** 08/06/19**SAMPLE RESULTS**

Lab ID: L1932118-08

Date Collected: 07/19/19 09:00

Client ID: TMW07_071919 (FIELD FILTERED)

Date Received: 07/19/19

Sample Location: BROOKLYN

Field Prep: Refer to COC

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab											
Aluminum, Dissolved	0.0138		mg/l	0.0100	0.00327	1	07/20/19 10:03	07/22/19 15:13	EPA 3005A	1,6020B	AM
Antimony, Dissolved	0.00147	J	mg/l	0.00400	0.00042	1	07/20/19 10:03	07/22/19 15:13	EPA 3005A	1,6020B	AM
Arsenic, Dissolved	0.00159		mg/l	0.00050	0.00016	1	07/20/19 10:03	07/22/19 15:13	EPA 3005A	1,6020B	AM
Barium, Dissolved	0.09796		mg/l	0.00050	0.00017	1	07/20/19 10:03	07/22/19 15:13	EPA 3005A	1,6020B	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	07/20/19 10:03	07/22/19 15:13	EPA 3005A	1,6020B	AM
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	07/20/19 10:03	07/22/19 15:13	EPA 3005A	1,6020B	AM
Calcium, Dissolved	74.8		mg/l	0.100	0.0394	1	07/20/19 10:03	07/22/19 15:13	EPA 3005A	1,6020B	AM
Chromium, Dissolved	0.00022	J	mg/l	0.00100	0.00017	1	07/20/19 10:03	07/22/19 15:13	EPA 3005A	1,6020B	AM
Cobalt, Dissolved	0.00871		mg/l	0.00050	0.00016	1	07/20/19 10:03	07/22/19 15:13	EPA 3005A	1,6020B	AM
Copper, Dissolved	0.00673		mg/l	0.00100	0.00038	1	07/20/19 10:03	07/22/19 15:13	EPA 3005A	1,6020B	AM
Iron, Dissolved	2.78		mg/l	0.0500	0.0191	1	07/20/19 10:03	07/22/19 15:13	EPA 3005A	1,6020B	AM
Lead, Dissolved	0.00209		mg/l	0.00100	0.00034	1	07/20/19 10:03	07/22/19 15:13	EPA 3005A	1,6020B	AM
Magnesium, Dissolved	10.9		mg/l	0.0700	0.0242	1	07/20/19 10:03	07/22/19 15:13	EPA 3005A	1,6020B	AM
Manganese, Dissolved	4.586		mg/l	0.00100	0.00044	1	07/20/19 10:03	07/22/19 15:13	EPA 3005A	1,6020B	AM
Mercury, Dissolved	ND		mg/l	0.00100	0.00045	1	07/23/19 10:35	07/23/19 13:23	EPA 7470A	1,7470A	GD
Nickel, Dissolved	0.00650		mg/l	0.00200	0.00055	1	07/20/19 10:03	07/22/19 15:13	EPA 3005A	1,6020B	AM
Potassium, Dissolved	13.5		mg/l	0.100	0.0309	1	07/20/19 10:03	07/22/19 15:13	EPA 3005A	1,6020B	AM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	07/20/19 10:03	07/22/19 15:13	EPA 3005A	1,6020B	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	07/20/19 10:03	07/22/19 15:13	EPA 3005A	1,6020B	AM
Sodium, Dissolved	64.8		mg/l	0.100	0.0293	1	07/20/19 10:03	07/22/19 15:13	EPA 3005A	1,6020B	AM
Thallium, Dissolved	ND		mg/l	0.00050	0.00014	1	07/20/19 10:03	07/22/19 15:13	EPA 3005A	1,6020B	AM
Vanadium, Dissolved	ND		mg/l	0.00500	0.00157	1	07/20/19 10:03	07/22/19 15:13	EPA 3005A	1,6020B	AM
Zinc, Dissolved	0.02134		mg/l	0.01000	0.00341	1	07/20/19 10:03	07/22/19 15:13	EPA 3005A	1,6020B	AM



Project Name: 450 JOHNSON AVE
Project Number: 170588001

Lab Number: L1932118
Report Date: 08/06/19

Method Blank Analysis Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01,03-06 Batch: WG1262372-1										
Aluminum, Total	ND		mg/kg	4.00	1.08	1	07/20/19 09:40	07/22/19 10:18	1,6010D	LC
Antimony, Total	ND		mg/kg	2.00	0.152	1	07/20/19 09:40	07/22/19 10:18	1,6010D	LC
Arsenic, Total	ND		mg/kg	0.400	0.083	1	07/20/19 09:40	07/22/19 10:18	1,6010D	LC
Barium, Total	ND		mg/kg	0.400	0.070	1	07/20/19 09:40	07/22/19 10:18	1,6010D	LC
Beryllium, Total	ND		mg/kg	0.200	0.013	1	07/20/19 09:40	07/22/19 10:18	1,6010D	LC
Cadmium, Total	ND		mg/kg	0.400	0.039	1	07/20/19 09:40	07/22/19 10:18	1,6010D	LC
Calcium, Total	ND		mg/kg	4.00	1.40	1	07/20/19 09:40	07/22/19 10:18	1,6010D	LC
Chromium, Total	ND		mg/kg	0.400	0.038	1	07/20/19 09:40	07/22/19 10:18	1,6010D	LC
Cobalt, Total	ND		mg/kg	0.800	0.066	1	07/20/19 09:40	07/22/19 10:18	1,6010D	LC
Copper, Total	ND		mg/kg	0.400	0.103	1	07/20/19 09:40	07/22/19 10:18	1,6010D	LC
Iron, Total	ND		mg/kg	2.00	0.361	1	07/20/19 09:40	07/22/19 10:18	1,6010D	LC
Lead, Total	ND		mg/kg	2.00	0.107	1	07/20/19 09:40	07/22/19 10:18	1,6010D	LC
Magnesium, Total	ND		mg/kg	4.00	0.616	1	07/20/19 09:40	07/22/19 10:18	1,6010D	LC
Manganese, Total	0.400		mg/kg	0.400	0.064	1	07/20/19 09:40	07/22/19 10:18	1,6010D	LC
Nickel, Total	ND		mg/kg	1.00	0.097	1	07/20/19 09:40	07/22/19 10:18	1,6010D	LC
Potassium, Total	ND		mg/kg	100	5.76	1	07/20/19 09:40	07/22/19 10:18	1,6010D	LC
Selenium, Total	ND		mg/kg	0.800	0.103	1	07/20/19 09:40	07/22/19 10:18	1,6010D	LC
Silver, Total	ND		mg/kg	0.400	0.113	1	07/20/19 09:40	07/22/19 10:18	1,6010D	LC
Sodium, Total	ND		mg/kg	80.0	1.26	1	07/20/19 09:40	07/22/19 10:18	1,6010D	LC
Thallium, Total	ND		mg/kg	0.800	0.126	1	07/20/19 09:40	07/22/19 10:18	1,6010D	LC
Vanadium, Total	ND		mg/kg	0.400	0.081	1	07/20/19 09:40	07/22/19 10:18	1,6010D	LC
Zinc, Total	ND		mg/kg	2.00	0.117	1	07/20/19 09:40	07/22/19 10:18	1,6010D	LC

Prep Information

Digestion Method: EPA 3050B

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01,03-06 Batch: WG1262400-1										
Mercury, Total	ND		mg/kg	0.083	0.054	1	07/20/19 10:30	07/20/19 18:11	1,7471B	MG



Project Name: 450 JOHNSON AVE

Lab Number: L1932118

Project Number: 170588001

Report Date: 08/06/19

Method Blank Analysis Batch Quality Control

Prep Information

Digestion Method: EPA 7471B

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab for sample(s): 08 Batch: WG1262423-1										
Aluminum, Dissolved	ND		mg/l	0.0100	0.00327	1	07/20/19 10:03	07/22/19 14:45	1,6020B	AM
Antimony, Dissolved	0.00087	J	mg/l	0.00400	0.00042	1	07/20/19 10:03	07/22/19 14:45	1,6020B	AM
Arsenic, Dissolved	ND		mg/l	0.00050	0.00016	1	07/20/19 10:03	07/22/19 14:45	1,6020B	AM
Barium, Dissolved	ND		mg/l	0.00050	0.00017	1	07/20/19 10:03	07/22/19 14:45	1,6020B	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	07/20/19 10:03	07/22/19 14:45	1,6020B	AM
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	07/20/19 10:03	07/22/19 14:45	1,6020B	AM
Calcium, Dissolved	ND		mg/l	0.100	0.0394	1	07/20/19 10:03	07/22/19 14:45	1,6020B	AM
Chromium, Dissolved	ND		mg/l	0.00100	0.00017	1	07/20/19 10:03	07/22/19 14:45	1,6020B	AM
Cobalt, Dissolved	ND		mg/l	0.00050	0.00016	1	07/20/19 10:03	07/22/19 14:45	1,6020B	AM
Copper, Dissolved	ND		mg/l	0.00100	0.00038	1	07/20/19 10:03	07/22/19 14:45	1,6020B	AM
Iron, Dissolved	ND		mg/l	0.0500	0.0191	1	07/20/19 10:03	07/22/19 14:45	1,6020B	AM
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	07/20/19 10:03	07/22/19 14:45	1,6020B	AM
Magnesium, Dissolved	ND		mg/l	0.0700	0.0242	1	07/20/19 10:03	07/22/19 14:45	1,6020B	AM
Manganese, Dissolved	ND		mg/l	0.00100	0.00044	1	07/20/19 10:03	07/22/19 14:45	1,6020B	AM
Nickel, Dissolved	ND		mg/l	0.00200	0.00055	1	07/20/19 10:03	07/22/19 14:45	1,6020B	AM
Potassium, Dissolved	ND		mg/l	0.100	0.0309	1	07/20/19 10:03	07/22/19 14:45	1,6020B	AM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	07/20/19 10:03	07/22/19 14:45	1,6020B	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	07/20/19 10:03	07/22/19 14:45	1,6020B	AM
Sodium, Dissolved	ND		mg/l	0.100	0.0293	1	07/20/19 10:03	07/22/19 14:45	1,6020B	AM
Thallium, Dissolved	0.00031	J	mg/l	0.00050	0.00014	1	07/20/19 10:03	07/22/19 14:45	1,6020B	AM
Vanadium, Dissolved	ND		mg/l	0.00500	0.00157	1	07/20/19 10:03	07/22/19 14:45	1,6020B	AM
Zinc, Dissolved	ND		mg/l	0.01000	0.00341	1	07/20/19 10:03	07/22/19 14:45	1,6020B	AM

Prep Information

Digestion Method: EPA 3005A



Project Name: 450 JOHNSON AVE

Lab Number: L1932118

Project Number: 170588001

Report Date: 08/06/19

Method Blank Analysis Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab for sample(s): 08 Batch: WG1263255-1										
Mercury, Dissolved	ND		mg/l	0.00020	0.00009	1	07/23/19 10:35	07/23/19 13:20	1,7470A	GD

Prep Information

Digestion Method: EPA 7470A

Lab Control Sample Analysis

Batch Quality Control

Project Name: 450 JOHNSON AVE

Project Number: 170588001

Lab Number: L1932118

Report Date: 08/06/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01,03-06 Batch: WG1262372-2 SRM Lot Number: D105-540								
Aluminum, Total	68		-		51-149	-		
Antimony, Total	146		-		19-249	-		
Arsenic, Total	116		-		70-130	-		
Barium, Total	102		-		75-125	-		
Beryllium, Total	100		-		75-125	-		
Cadmium, Total	98		-		75-125	-		
Calcium, Total	93		-		73-127	-		
Chromium, Total	100		-		70-130	-		
Cobalt, Total	106		-		75-125	-		
Copper, Total	107		-		75-125	-		
Iron, Total	88		-		38-162	-		
Lead, Total	106		-		71-128	-		
Magnesium, Total	89		-		63-137	-		
Manganese, Total	103		-		76-124	-		
Nickel, Total	109		-		70-131	-		
Potassium, Total	84		-		60-140	-		
Selenium, Total	112		-		63-137	-		
Silver, Total	105		-		69-131	-		
Sodium, Total	95		-		37-162	-		
Thallium, Total	98		-		68-132	-		
Vanadium, Total	98		-		65-135	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: 450 JOHNSON AVE

Project Number: 170588001

Lab Number: L1932118

Report Date: 08/06/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01,03-06 Batch: WG1262372-2 SRM Lot Number: D105-540					
Zinc, Total	105	-	70-130	-	
Total Metals - Mansfield Lab Associated sample(s): 01,03-06 Batch: WG1262400-2 SRM Lot Number: D105-540					
Mercury, Total	101	-	60-141	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: 450 JOHNSON AVE

Project Number: 170588001

Lab Number: L1932118

Report Date: 08/06/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 08 Batch: WG1262423-2					
Aluminum, Dissolved	112	-	80-120	-	
Antimony, Dissolved	86	-	80-120	-	
Arsenic, Dissolved	109	-	80-120	-	
Barium, Dissolved	108	-	80-120	-	
Beryllium, Dissolved	104	-	80-120	-	
Cadmium, Dissolved	108	-	80-120	-	
Calcium, Dissolved	115	-	80-120	-	
Chromium, Dissolved	104	-	80-120	-	
Cobalt, Dissolved	105	-	80-120	-	
Copper, Dissolved	101	-	80-120	-	
Iron, Dissolved	113	-	80-120	-	
Lead, Dissolved	112	-	80-120	-	
Magnesium, Dissolved	110	-	80-120	-	
Manganese, Dissolved	104	-	80-120	-	
Nickel, Dissolved	107	-	80-120	-	
Potassium, Dissolved	111	-	80-120	-	
Selenium, Dissolved	111	-	80-120	-	
Silver, Dissolved	104	-	80-120	-	
Sodium, Dissolved	104	-	80-120	-	
Thallium, Dissolved	108	-	80-120	-	
Vanadium, Dissolved	106	-	80-120	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: 450 JOHNSON AVE

Project Number: 170588001

Lab Number: L1932118

Report Date: 08/06/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 08 Batch: WG1262423-2					
Zinc, Dissolved	109	-	80-120	-	
Dissolved Metals - Mansfield Lab Associated sample(s): 08 Batch: WG1263255-2					
Mercury, Dissolved	97	-	80-120	-	

Matrix Spike Analysis

Batch Quality Control

Project Name: 450 JOHNSON AVE

Project Number: 170588001

Lab Number: L1932118

Report Date: 08/06/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01,03-06 QC Batch ID: WG1262372-3 QC Sample: L1929938-01 Client ID: MS Sample												
Aluminum, Total	22500	671	24000	224	Q	-	-		75-125	-		20
Antimony, Total	2.08J	168	178	106		-	-		75-125	-		20
Arsenic, Total	7.93	40.2	54.9	117		-	-		75-125	-		20
Barium, Total	418	671	1120	105		-	-		75-125	-		20
Beryllium, Total	0.314J	16.8	16.3	97		-	-		75-125	-		20
Cadmium, Total	1.88	17.1	18.0	94		-	-		75-125	-		20
Calcium, Total	29700	3350	33900	125		-	-		75-125	-		20
Chromium, Total	39.3	67.1	101	92		-	-		75-125	-		20
Cobalt, Total	4.27	168	154	89		-	-		75-125	-		20
Copper, Total	389	83.8	486	116		-	-		75-125	-		20
Iron, Total	14000	335	14600	179	Q	-	-		75-125	-		20
Lead, Total	70.1	171	225	90		-	-		75-125	-		20
Magnesium, Total	11000	3350	13900	86		-	-		75-125	-		20
Manganese, Total	229	168	392	97		-	-		75-125	-		20
Nickel, Total	31.3	168	181	89		-	-		75-125	-		20
Potassium, Total	6170	3350	10000	114		-	-		75-125	-		20
Selenium, Total	6.84	40.2	55.2	120		-	-		75-125	-		20
Silver, Total	1.78	101	109	106		-	-		75-125	-		20
Sodium, Total	1270	3350	5010	112		-	-		75-125	-		20
Thallium, Total	ND	40.2	33.3	83		-	-		75-125	-		20
Vanadium, Total	17.0	168	176	95		-	-		75-125	-		20

Matrix Spike Analysis

Batch Quality Control

Project Name: 450 JOHNSON AVE

Project Number: 170588001

Lab Number: L1932118

Report Date: 08/06/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01,03-06 QC Batch ID: WG1262372-3 QC Sample: L1929938-01 Client ID: MS Sample									
Zinc, Total	644	168	817	103	-	-	75-125	-	20
Total Metals - Mansfield Lab Associated sample(s): 01,03-06 QC Batch ID: WG1262400-3 QC Sample: L1929938-01 Client ID: MS Sample									
Mercury, Total	0.586	0.569	0.955	65	Q	-	80-120	-	20

Matrix Spike Analysis **Batch Quality Control**

Project Name: 450 JOHNSON AVE

Project Number: 170588001

Lab Number: L1932118

Report Date: 08/06/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 08 QC Batch ID: WG1262423-3 QC Sample: L1932118-08 Client ID: TMW07_071919 (FIELD FILTERED)									
Aluminum, Dissolved	0.0138	4	4.24	106	-	-	75-125	-	20
Antimony, Dissolved	0.00147J	1	1.323	132	Q	-	75-125	-	20
Arsenic, Dissolved	0.00159	0.24	0.2588	107	-	-	75-125	-	20
Barium, Dissolved	0.09796	4	4.342	106	-	-	75-125	-	20
Beryllium, Dissolved	ND	0.1	0.1044	104	-	-	75-125	-	20
Cadmium, Dissolved	ND	0.102	0.1106	108	-	-	75-125	-	20
Calcium, Dissolved	74.8	20	99.4	123	-	-	75-125	-	20
Chromium, Dissolved	0.00022J	0.4	0.4013	100	-	-	75-125	-	20
Cobalt, Dissolved	0.00871	1	1.020	101	-	-	75-125	-	20
Copper, Dissolved	0.00673	0.5	0.5061	100	-	-	75-125	-	20
Iron, Dissolved	2.78	2	5.08	115	-	-	75-125	-	20
Lead, Dissolved	0.00209	1.02	1.066	104	-	-	75-125	-	20
Magnesium, Dissolved	10.9	20	32.8	110	-	-	75-125	-	20
Manganese, Dissolved	4.586	1	5.547	96	-	-	75-125	-	20
Nickel, Dissolved	0.00650	1	1.023	102	-	-	75-125	-	20
Potassium, Dissolved	13.5	20	36.0	112	-	-	75-125	-	20
Selenium, Dissolved	ND	0.24	0.273	114	-	-	75-125	-	20
Silver, Dissolved	ND	0.1	0.1018	102	-	-	75-125	-	20
Sodium, Dissolved	64.8	20	81.8	85	-	-	75-125	-	20
Thallium, Dissolved	ND	0.24	0.2458	102	-	-	75-125	-	20
Vanadium, Dissolved	ND	1	1.038	104	-	-	75-125	-	20

Matrix Spike Analysis

Batch Quality Control

Project Name: 450 JOHNSON AVE
Project Number: 170588001

Lab Number: L1932118
Report Date: 08/06/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 08 QC Batch ID: WG1262423-3 QC Sample: L1932118-08 Client ID: TMW07_071919 (FIELD FILTERED)									
Zinc, Dissolved	0.02134	1	1.067	104	-	-	75-125	-	20
Dissolved Metals - Mansfield Lab Associated sample(s): 08 QC Batch ID: WG1263255-3 QC Sample: L1932118-08 Client ID: TMW07_071919 (FIELD FILTERED)									
Mercury, Dissolved	ND	0.025	0.02445	98	-	-	75-125	-	20

Lab Duplicate Analysis *Batch Quality Control*

Project Name: 450 JOHNSON AVE

Project Number: 170588001

Lab Number: L1932118

Report Date: 08/06/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01,03-06 QC Batch ID: WG1262372-4 QC Sample: L1929938-01 Client ID: DUP Sample						
Arsenic, Total	7.93	8.12	mg/kg	2		20
Cadmium, Total	1.88	1.99	mg/kg	6		20
Chromium, Total	39.3	37.8	mg/kg	4		20
Copper, Total	389	371	mg/kg	5		20
Lead, Total	70.1	70.2	mg/kg	0		20
Nickel, Total	31.3	30.3	mg/kg	3		20
Potassium, Total	6170	6020	mg/kg	2		20
Selenium, Total	6.84	7.15	mg/kg	4		20
Zinc, Total	644	642	mg/kg	0		20
Total Metals - Mansfield Lab Associated sample(s): 01,03-06 QC Batch ID: WG1262400-4 QC Sample: L1929938-01 Client ID: DUP Sample						
Mercury, Total	0.586	0.457	mg/kg	25	Q	20

Lab Duplicate Analysis *Batch Quality Control*

Project Name: 450 JOHNSON AVE

Project Number: 170588001

Lab Number: L1932118

Report Date: 08/06/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 08 QC Batch ID: WG1262423-4 QC Sample: L1932118-08 Client ID: TMW07_071919 (FIELD FILTERED)					
Aluminum, Dissolved	0.0138	0.00976J	mg/l	NC	20
Antimony, Dissolved	0.00147J	0.00462	mg/l	NC	20
Arsenic, Dissolved	0.00159	0.00165	mg/l	3	20
Barium, Dissolved	0.09796	0.1021	mg/l	4	20
Beryllium, Dissolved	ND	ND	mg/l	NC	20
Cadmium, Dissolved	ND	ND	mg/l	NC	20
Calcium, Dissolved	74.8	77.4	mg/l	3	20
Chromium, Dissolved	0.00022J	0.00018J	mg/l	NC	20
Cobalt, Dissolved	0.00871	0.00864	mg/l	1	20
Copper, Dissolved	0.00673	0.00491	mg/l	31	Q 20
Iron, Dissolved	2.78	2.90	mg/l	4	20
Lead, Dissolved	0.00209	0.00127	mg/l	49	Q 20
Magnesium, Dissolved	10.9	11.0	mg/l	1	20
Manganese, Dissolved	4.586	4.745	mg/l	3	20
Nickel, Dissolved	0.00650	0.00477	mg/l	31	Q 20
Potassium, Dissolved	13.5	14.0	mg/l	4	20
Selenium, Dissolved	ND	0.00173J	mg/l	NC	20
Silver, Dissolved	ND	ND	mg/l	NC	20
Sodium, Dissolved	64.8	66.0	mg/l	2	20

Project Name: 450 JOHNSON AVE
Project Number: 170588001

Lab Duplicate Analysis

Batch Quality Control

Lab Number: L1932118
Report Date: 08/06/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 08 QC Batch ID: WG1262423-4 QC Sample: L1932118-08 Client ID: TMW07_071919 (FIELD FILTERED)					
Thallium, Dissolved	ND	0.00029J	mg/l	NC	20
Vanadium, Dissolved	ND	ND	mg/l	NC	20
Zinc, Dissolved	0.02134	0.00720J	mg/l	NC	20
Dissolved Metals - Mansfield Lab Associated sample(s): 08 QC Batch ID: WG1263255-4 QC Sample: L1932118-08 Client ID: TMW07_071919 (FIELD FILTERED)					
Mercury, Dissolved	ND	ND	mg/l	NC	20

INORGANICS & MISCELLANEOUS

Project Name: 450 JOHNSON AVE
Project Number: 170588001

Lab Number: L1932118
Report Date: 08/06/19

SAMPLE RESULTS

Lab ID: L1932118-01
Client ID: SB15_8.0-8.5
Sample Location: BROOKLYN

Date Collected: 07/19/19 11:20
Date Received: 07/19/19
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	81.3		%	0.100	NA	1	-	07/20/19 13:26	121,2540G	RI



Project Name: 450 JOHNSON AVE

Project Number: 170588001

Lab Number: L1932118

Report Date: 08/06/19

SAMPLE RESULTS

Lab ID: L1932118-03

Client ID: SB10_5.0-5.5

Sample Location: BROOKLYN

Date Collected: 07/19/19 09:40

Date Received: 07/19/19

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	82.2		%	0.100	NA	1	-	07/20/19 13:26	121,2540G	RI



Project Name: 450 JOHNSON AVE**Project Number:** 170588001**Lab Number:** L1932118**Report Date:** 08/06/19**SAMPLE RESULTS****Lab ID:** L1932118-04**Client ID:** SB16_3.0-3.5**Sample Location:** BROOKLYN**Date Collected:** 07/19/19 12:15**Date Received:** 07/19/19**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	80.1		%	0.100	NA	1	-	07/20/19 13:26	121,2540G	RI



Project Name: 450 JOHNSON AVE**Project Number:** 170588001**Lab Number:** L1932118**Report Date:** 08/06/19**SAMPLE RESULTS****Lab ID:** L1932118-05**Client ID:** SB17_13.0-13.5**Sample Location:** BROOKLYN**Date Collected:** 07/19/19 13:20**Date Received:** 07/19/19**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	91.3		%	0.100	NA	1	-	07/20/19 13:26	121,2540G	RI



Project Name: 450 JOHNSON AVE**Project Number:** 170588001**Lab Number:** L1932118**Report Date:** 08/06/19**SAMPLE RESULTS****Lab ID:** L1932118-06**Client ID:** SB18_4.0-4.5**Sample Location:** BROOKLYN**Date Collected:** 07/19/19 14:00**Date Received:** 07/19/19**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	85.8		%	0.100	NA	1	-	07/20/19 13:26	121,2540G	RI



Lab Duplicate Analysis
*Batch Quality Control***Project Name:** 450 JOHNSON AVE**Project Number:** 170588001**Lab Number:** L1932118**Report Date:** 08/06/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01,03-06 QC Batch ID: WG1262373-1 QC Sample: L1932023-03 Client ID: DUP Sample						
Solids, Total	89.2	86.2	%	3		20

Project Name: 450 JOHNSON AVE**Lab Number:** L1932118**Project Number:** 170588001**Report Date:** 08/06/19**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(*)
L1932118-01A	Vial MeOH preserved	A	NA		3.2	Y	Absent		NYTCL-8260HLW(14)
L1932118-01B	Vial water preserved	A	NA		3.2	Y	Absent	20-JUL-19 03:20	NYTCL-8260HLW(14)
L1932118-01C	Vial water preserved	A	NA		3.2	Y	Absent	20-JUL-19 03:20	NYTCL-8260HLW(14)
L1932118-01D	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.2	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1932118-01E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.2	Y	Absent		NYTCL-8270(14),HOLD-8082(14)
L1932118-01F	Plastic 2oz unpreserved for TS	A	NA		3.2	Y	Absent		TS(7)
L1932118-01G	Glass 120ml/4oz unpreserved	A	NA		3.2	Y	Absent		NYTCL-8270(14),HOLD-8082(14)
L1932118-02A	Vial MeOH preserved	A	NA		3.2	Y	Absent		HOLD-8260HLW(14)
L1932118-02B	Vial water preserved	A	NA		3.2	Y	Absent	20-JUL-19 03:20	HOLD-8260HLW(14)
L1932118-02C	Vial water preserved	A	NA		3.2	Y	Absent	20-JUL-19 03:20	HOLD-8260HLW(14)
L1932118-02D	Glass 60mL/2oz unpreserved	A	NA		3.2	Y	Absent		HOLD-METAL(180)
L1932118-02E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.2	Y	Absent		HOLD-8270(14),HOLD-8082(14)
L1932118-02F	Plastic 2oz unpreserved for TS	A	NA		3.2	Y	Absent		HOLD-WETCHEM()
L1932118-02G	Glass 120ml/4oz unpreserved	A	NA		3.2	Y	Absent		HOLD-8270(14),HOLD-8082(14)
L1932118-03A	Vial MeOH preserved	A	NA		3.2	Y	Absent		NYTCL-8260HLW(14)
L1932118-03B	Vial water preserved	A	NA		3.2	Y	Absent	20-JUL-19 03:20	NYTCL-8260HLW(14)
L1932118-03C	Vial water preserved	A	NA		3.2	Y	Absent	20-JUL-19 03:20	NYTCL-8260HLW(14)

Project Name: 450 JOHNSON AVE
Project Number: 170588001

Serial_No:08061906:34
Lab Number: L1932118
Report Date: 08/06/19

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1932118-03D	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.2	Y	Absent		BE-Ti(180),AS-Ti(180),BA-Ti(180),AG-Ti(180),AL-Ti(180),CR-Ti(180),NI-Ti(180),TL-Ti(180),CU-Ti(180),PB-Ti(180),SB-Ti(180),SE-Ti(180),ZN-Ti(180),CO-Ti(180),V-Ti(180),FE-Ti(180),HG-T(28),MG-Ti(180),MN-Ti(180),CA-Ti(180),CD-Ti(180),K-Ti(180),NA-Ti(180)
L1932118-03E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.2	Y	Absent		NYTCL-8270(14),HOLD-8082(14)
L1932118-03F	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.2	Y	Absent		NYTCL-8270(14),HOLD-8082(14)
L1932118-03G	Plastic 2oz unpreserved for TS	A	NA		3.2	Y	Absent		TS(7)
L1932118-03H	Glass 120ml/4oz unpreserved	A	NA		3.2	Y	Absent		NYTCL-8270(14),HOLD-8082(14)
L1932118-04A	Vial MeOH preserved	B	NA		4.5	Y	Absent		NYTCL-8260HLW(14)
L1932118-04B	Vial water preserved	B	NA		4.5	Y	Absent	20-JUL-19 03:20	NYTCL-8260HLW(14)
L1932118-04C	Vial water preserved	B	NA		4.5	Y	Absent	20-JUL-19 03:20	NYTCL-8260HLW(14)
L1932118-04D	Metals Only-Glass 60mL/2oz unpreserved	B	NA		4.5	Y	Absent		BE-Ti(180),AS-Ti(180),BA-Ti(180),AG-Ti(180),AL-Ti(180),CR-Ti(180),NI-Ti(180),TL-Ti(180),CU-Ti(180),PB-Ti(180),SB-Ti(180),SE-Ti(180),ZN-Ti(180),CO-Ti(180),V-Ti(180),FE-Ti(180),HG-T(28),MG-Ti(180),MN-Ti(180),CA-Ti(180),CD-Ti(180),K-Ti(180),NA-Ti(180)
L1932118-04E	Metals Only-Glass 60mL/2oz unpreserved	B	NA		4.5	Y	Absent		NYTCL-8270(14)
L1932118-04F	Plastic 2oz unpreserved for TS	B	NA		4.5	Y	Absent		TS(7)
L1932118-04G	Glass 120ml/4oz unpreserved	B	NA		4.5	Y	Absent		NYTCL-8270(14)
L1932118-05A	Vial MeOH preserved	B	NA		4.5	Y	Absent		NYTCL-8260HLW(14)
L1932118-05B	Vial water preserved	B	NA		4.5	Y	Absent	20-JUL-19 03:20	NYTCL-8260HLW(14)
L1932118-05C	Vial water preserved	B	NA		4.5	Y	Absent	20-JUL-19 03:20	NYTCL-8260HLW(14)
L1932118-05D	Metals Only-Glass 60mL/2oz unpreserved	B	NA		4.5	Y	Absent		BE-Ti(180),AS-Ti(180),BA-Ti(180),AG-Ti(180),AL-Ti(180),CR-Ti(180),NI-Ti(180),TL-Ti(180),CU-Ti(180),PB-Ti(180),SB-Ti(180),SE-Ti(180),ZN-Ti(180),CO-Ti(180),V-Ti(180),FE-Ti(180),HG-T(28),MG-Ti(180),MN-Ti(180),CA-Ti(180),CD-Ti(180),K-Ti(180),NA-Ti(180)
L1932118-05E	Metals Only-Glass 60mL/2oz unpreserved	B	NA		4.5	Y	Absent		NYTCL-8270(14)
L1932118-05F	Plastic 2oz unpreserved for TS	B	NA		4.5	Y	Absent		TS(7)
L1932118-05G	Glass 120ml/4oz unpreserved	B	NA		4.5	Y	Absent		NYTCL-8270(14)
L1932118-06A	Vial MeOH preserved	B	NA		4.5	Y	Absent		NYTCL-8260HLW(14)
L1932118-06B	Vial water preserved	B	NA		4.5	Y	Absent	20-JUL-19 03:20	NYTCL-8260HLW(14)

Project Name: 450 JOHNSON AVE
Project Number: 170588001

Serial_No: 08061906:34
Lab Number: L1932118
Report Date: 08/06/19

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1932118-06C	Vial water preserved	B	NA		4.5	Y	Absent	20-JUL-19 03:20	NYTCL-8260HLW(14)
L1932118-06D	Metals Only-Glass 60mL/2oz unpreserved	B	NA		4.5	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1932118-06E	Plastic 2oz unpreserved for TS	B	NA		4.5	Y	Absent		TS(7)
L1932118-06F	Glass 120ml/4oz unpreserved	B	NA		4.5	Y	Absent		NYTCL-8270(14),HOLD-8082(14)
L1932118-07A	Vial HCl preserved	B	NA		4.5	Y	Absent		NYTCL-8260(14)
L1932118-07B	Vial HCl preserved	B	NA		4.5	Y	Absent		NYTCL-8260(14)
L1932118-07C	Vial HCl preserved	B	NA		4.5	Y	Absent		NYTCL-8260(14)
L1932118-07D	Amber 250ml unpreserved	B	7	7	4.5	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1932118-07E	Amber 250ml unpreserved	B	7	7	4.5	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1932118-08A	Amber 250ml HNO3 preserved	B	7	<2	4.5	N	Absent		CU-6020S(180),K-6020S(180),SE-6020S(180),V-6020S(180),MN-6020S(180),BE-6020S(180),CO-6020S(180),MG-6020S(180),ZN-6020S(180),CA-6020S(180),CR-6020S(180),FE-6020S(180),BA-6020S(180),NA-6020S(180),NI-6020S(180),PB-6020S(180),TL-6020S(180),AG-6020S(180),AS-6020S(180),SB-6020S(180),AL-6020S(180),CD-6020S(180),HG-S(28)
L1932118-08B	Amber 120ml unpreserved	B	7	7	4.5	Y	Absent		HOLD-8270(7)
L1932118-08C	Amber 120ml unpreserved	B	7	7	4.5	Y	Absent		HOLD-8270(7)
L1932118-08D	Amber 120ml unpreserved	B	7	7	4.5	Y	Absent		HOLD-8270(7)
L1932118-08E	Amber 250ml unpreserved	B	7	7	4.5	Y	Absent		HOLD-8270(7)
L1932118-09A	Vial HCl preserved	B	NA		4.5	Y	Absent		NYTCL-8260(14)
L1932118-09B	Vial HCl preserved	B	NA		4.5	Y	Absent		NYTCL-8260(14)
L1932118-10A	Vial HCl preserved	B	NA		4.5	Y	Absent		ARCHIVE()
L1932118-10B	Vial HCl preserved	B	NA		4.5	Y	Absent		ARCHIVE()
L1932118-10C	Vial HCl preserved	B	NA		4.5	Y	Absent		ARCHIVE()

Project Name: 450 JOHNSON AVE
Project Number: 170588001

Lab Number: L1932118
Report Date: 08/06/19

GLOSSARY

Acronyms

DL	- 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 limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
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).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
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.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
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. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
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.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
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

Report Format: DU Report with 'J' Qualifiers



Project Name: 450 JOHNSON AVE
Project Number: 170588001

Lab Number: L1932118
Report Date: 08/06/19

- 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.

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

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.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. If a 'Total' result is requested, the results of its individual components will also be reported.

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 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.
- 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).
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.
- 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.

Report Format: DU Report with 'J' Qualifiers



Project Name: 450 JOHNSON AVE
Project Number: 170588001

Lab Number: L1932118
Report Date: 08/06/19

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.



Alpha Analytical, Inc.Facility: **Company-wide**Department: **Quality Assurance**Title: **Certificate/Approval Program Summary**ID No.: **17873**

Revision 13

Published Date: 7/30/2019 3:17:52 PM

Page 1 of 1

Certification Information

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

Westborough Facility**EPA 624/624.1:** m/p-xylene, o-xylene**EPA 8260C:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.**EPA 8270D:** NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.**SM4500:** NPW: Amenable Cyanide; 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, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-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, **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 300:** Chloride, Sulfate, Nitrate.**EPA 624.1:** Volatile Halocarbons & Aromatics,**EPA 608.3:** 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 625.1:** SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.**Microbiology:** **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.****Mansfield Facility:****Drinking Water****EPA 200.7:** Al, Ba, Cd, Cr, Cu, Fe, 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, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.**EPA 245.1** Hg.**SM2340B**

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



ANALYTICAL REPORT

Lab Number:	L1932180
Client:	Langan Engineering & Environmental 21 Penn Plaza 360 W. 31st Street, 8th Floor New York, NY 10001-2727
ATTN:	Julia Leung
Phone:	(212) 479-5400
Project Name:	450 JOHNSON AVE.
Project Number:	170588001
Report Date:	07/23/19

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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).

320 Forbes Boulevard, Mansfield, MA 02048-1806
508-822-9300 (Fax) 508-822-3288 800-624-9220 - www.alphalab.com



Project Name: 450 JOHNSON AVE.
Project Number: 170588001

Lab Number: L1932180
Report Date: 07/23/19

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1932180-01	SSV02_071919	SOIL_VAPOR	BROOKLYN, NY	07/19/19 15:08	07/19/19
L1932180-02	SSV03_071919	SOIL_VAPOR	BROOKLYN, NY	07/19/19 13:05	07/19/19
L1932180-03	IA02_071919	AIR	BROOKLYN, NY	07/19/19 15:04	07/19/19
L1932180-04	IA03_071919	AIR	BROOKLYN, NY	07/19/19 14:50	07/19/19

Project Name: 450 JOHNSON AVE.
Project Number: 170588001

Lab Number: L1932180
Report Date: 07/23/19

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. 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 Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data 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.

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 Alpha Project Manager 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 Project Management at 800-624-9220 with any questions.

Project Name: 450 JOHNSON AVE.
Project Number: 170588001

Lab Number: L1932180
Report Date: 07/23/19

Case Narrative (continued)

Volatile Organics in Air

Canisters were released from the laboratory on July 17, 2019. The canister certification results are provided as an addendum.

L1932180-01 and -02: The samples have elevated detection limits due to the dilution required by the elevated concentrations of target compounds in the samples.

TO15

The WG1262915-3 LCS recovery for methylene chloride (131%) is above the upper 130% acceptance limit. All samples associated with this LCS do not have reportable amounts of this analyte.

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:  Christopher J. Anderson

Title: Technical Director/Representative

Date: 07/23/19

AIR

Project Name: 450 JOHNSON AVE.**Project Number:** 170588001**Lab Number:** L1932180**Report Date:** 07/23/19**SAMPLE RESULTS**

Lab ID: L1932180-01 D

Client ID: SSV02_071919

Sample Location: BROOKLYN, NY

Date Collected: 07/19/19 15:08

Date Received: 07/19/19

Field Prep: Not Specified

Sample Depth:

Matrix: Soil_Vapor

Analytical Method: 48,TO-15

Analytical Date: 07/23/19 01:57

Analyst: RY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.792	0.769	--	3.92	3.80	--		3.846
Chloromethane	ND	0.769	--	ND	1.59	--		3.846
Freon-114	ND	0.769	--	ND	5.38	--		3.846
Vinyl chloride	ND	0.769	--	ND	1.97	--		3.846
1,3-Butadiene	ND	0.769	--	ND	1.70	--		3.846
Bromomethane	ND	0.769	--	ND	2.99	--		3.846
Chloroethane	ND	0.769	--	ND	2.03	--		3.846
Ethanol	ND	19.2	--	ND	36.2	--		3.846
Vinyl bromide	ND	0.769	--	ND	3.36	--		3.846
Acetone	40.0	3.85	--	95.0	9.15	--		3.846
Trichlorofluoromethane	ND	0.769	--	ND	4.32	--		3.846
Isopropanol	ND	1.92	--	ND	4.72	--		3.846
1,1-Dichloroethene	ND	0.769	--	ND	3.05	--		3.846
Tertiary butyl Alcohol	7.51	1.92	--	22.8	5.82	--		3.846
Methylene chloride	ND	1.92	--	ND	6.67	--		3.846
3-Chloropropene	ND	0.769	--	ND	2.41	--		3.846
Carbon disulfide	4.64	0.769	--	14.4	2.39	--		3.846
Freon-113	ND	0.769	--	ND	5.89	--		3.846
trans-1,2-Dichloroethene	ND	0.769	--	ND	3.05	--		3.846
1,1-Dichloroethane	ND	0.769	--	ND	3.11	--		3.846
Methyl tert butyl ether	ND	0.769	--	ND	2.77	--		3.846
2-Butanone	17.6	1.92	--	51.9	5.66	--		3.846
cis-1,2-Dichloroethene	ND	0.769	--	ND	3.05	--		3.846



Project Name: 450 JOHNSON AVE.**Lab Number:** L1932180**Project Number:** 170588001**Report Date:** 07/23/19**SAMPLE RESULTS**

Lab ID: L1932180-01 D

Client ID: SSV02_071919

Sample Location: BROOKLYN, NY

Date Collected: 07/19/19 15:08

Date Received: 07/19/19

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	1.92	--	ND	6.92	--		3.846
Chloroform	ND	0.769	--	ND	3.76	--		3.846
Tetrahydrofuran	ND	1.92	--	ND	5.66	--		3.846
1,2-Dichloroethane	ND	0.769	--	ND	3.11	--		3.846
n-Hexane	69.2	0.769	--	244	2.71	--		3.846
1,1,1-Trichloroethane	ND	0.769	--	ND	4.20	--		3.846
Benzene	30.8	0.769	--	98.4	2.46	--		3.846
Carbon tetrachloride	ND	0.769	--	ND	4.84	--		3.846
Cyclohexane	37.1	0.769	--	128	2.65	--		3.846
1,2-Dichloropropane	ND	0.769	--	ND	3.55	--		3.846
Bromodichloromethane	ND	0.769	--	ND	5.15	--		3.846
1,4-Dioxane	ND	0.769	--	ND	2.77	--		3.846
Trichloroethene	1.43	0.769	--	7.69	4.13	--		3.846
2,2,4-Trimethylpentane	42.9	0.769	--	200	3.59	--		3.846
Heptane	99.7	0.769	--	409	3.15	--		3.846
cis-1,3-Dichloropropene	ND	0.769	--	ND	3.49	--		3.846
4-Methyl-2-pentanone	ND	1.92	--	ND	7.87	--		3.846
trans-1,3-Dichloropropene	ND	0.769	--	ND	3.49	--		3.846
1,1,2-Trichloroethane	ND	0.769	--	ND	4.20	--		3.846
Toluene	270	0.769	--	1020	2.90	--		3.846
2-Hexanone	ND	0.769	--	ND	3.15	--		3.846
Dibromochloromethane	ND	0.769	--	ND	6.55	--		3.846
1,2-Dibromoethane	ND	0.769	--	ND	5.91	--		3.846
Tetrachloroethene	0.981	0.769	--	6.65	5.21	--		3.846
Chlorobenzene	ND	0.769	--	ND	3.54	--		3.846
Ethylbenzene	57.3	0.769	--	249	3.34	--		3.846



Project Name: 450 JOHNSON AVE.**Lab Number:** L1932180**Project Number:** 170588001**Report Date:** 07/23/19**SAMPLE RESULTS**

Lab ID: L1932180-01 D

Client ID: SSV02_071919

Sample Location: BROOKLYN, NY

Date Collected: 07/19/19 15:08

Date Received: 07/19/19

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
p/m-Xylene	146	1.54	--	634	6.69	--		3.846
Bromoform	ND	0.769	--	ND	7.95	--		3.846
Styrene	ND	0.769	--	ND	3.27	--		3.846
1,1,2,2-Tetrachloroethane	ND	0.769	--	ND	5.28	--		3.846
o-Xylene	66.3	0.769	--	288	3.34	--		3.846
4-Ethyltoluene	6.83	0.769	--	33.6	3.78	--		3.846
1,3,5-Trimethylbenzene	10.8	0.769	--	53.1	3.78	--		3.846
1,2,4-Trimethylbenzene	30.9	0.769	--	152	3.78	--		3.846
Benzyl chloride	ND	0.769	--	ND	3.98	--		3.846
1,3-Dichlorobenzene	ND	0.769	--	ND	4.62	--		3.846
1,4-Dichlorobenzene	ND	0.769	--	ND	4.62	--		3.846
1,2-Dichlorobenzene	ND	0.769	--	ND	4.62	--		3.846
1,2,4-Trichlorobenzene	ND	0.769	--	ND	5.71	--		3.846
Hexachlorobutadiene	ND	0.769	--	ND	8.20	--		3.846

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	106		60-140
Bromochloromethane	96		60-140
chlorobenzene-d5	104		60-140



Project Name: 450 JOHNSON AVE.**Project Number:** 170588001**Lab Number:** L1932180**Report Date:** 07/23/19**SAMPLE RESULTS**

Lab ID: L1932180-02 D

Client ID: SSV03_071919

Sample Location: BROOKLYN, NY

Date Collected: 07/19/19 13:05

Date Received: 07/19/19

Field Prep: Not Specified

Sample Depth:

Matrix: Soil_Vapor

Analytical Method: 48,TO-15

Analytical Date: 07/23/19 02:34

Analyst: RY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.683	0.667	--	3.38	3.30	--		3.333
Chloromethane	ND	0.667	--	ND	1.38	--		3.333
Freon-114	ND	0.667	--	ND	4.66	--		3.333
Vinyl chloride	ND	0.667	--	ND	1.71	--		3.333
1,3-Butadiene	ND	0.667	--	ND	1.48	--		3.333
Bromomethane	ND	0.667	--	ND	2.59	--		3.333
Chloroethane	ND	0.667	--	ND	1.76	--		3.333
Ethanol	ND	16.7	--	ND	31.5	--		3.333
Vinyl bromide	ND	0.667	--	ND	2.92	--		3.333
Acetone	27.4	3.33	--	65.1	7.91	--		3.333
Trichlorofluoromethane	ND	0.667	--	ND	3.75	--		3.333
Isopropanol	ND	1.67	--	ND	4.10	--		3.333
1,1-Dichloroethene	ND	0.667	--	ND	2.64	--		3.333
Tertiary butyl Alcohol	5.54	1.67	--	16.8	5.06	--		3.333
Methylene chloride	ND	1.67	--	ND	5.80	--		3.333
3-Chloropropene	ND	0.667	--	ND	2.09	--		3.333
Carbon disulfide	3.45	0.667	--	10.7	2.08	--		3.333
Freon-113	ND	0.667	--	ND	5.11	--		3.333
trans-1,2-Dichloroethene	ND	0.667	--	ND	2.64	--		3.333
1,1-Dichloroethane	ND	0.667	--	ND	2.70	--		3.333
Methyl tert butyl ether	ND	0.667	--	ND	2.40	--		3.333
2-Butanone	11.0	1.67	--	32.4	4.93	--		3.333
cis-1,2-Dichloroethene	ND	0.667	--	ND	2.64	--		3.333



Project Name: 450 JOHNSON AVE.**Lab Number:** L1932180**Project Number:** 170588001**Report Date:** 07/23/19**SAMPLE RESULTS**

Lab ID: L1932180-02 D

Client ID: SSV03_071919

Sample Location: BROOKLYN, NY

Date Collected: 07/19/19 13:05

Date Received: 07/19/19

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	1.67	--	ND	6.02	--		3.333
Chloroform	ND	0.667	--	ND	3.26	--		3.333
Tetrahydrofuran	ND	1.67	--	ND	4.93	--		3.333
1,2-Dichloroethane	ND	0.667	--	ND	2.70	--		3.333
n-Hexane	35.5	0.667	--	125	2.35	--		3.333
1,1,1-Trichloroethane	ND	0.667	--	ND	3.64	--		3.333
Benzene	17.8	0.667	--	56.9	2.13	--		3.333
Carbon tetrachloride	ND	0.667	--	ND	4.20	--		3.333
Cyclohexane	24.8	0.667	--	85.4	2.30	--		3.333
1,2-Dichloropropane	ND	0.667	--	ND	3.08	--		3.333
Bromodichloromethane	ND	0.667	--	ND	4.47	--		3.333
1,4-Dioxane	ND	0.667	--	ND	2.40	--		3.333
Trichloroethene	ND	0.667	--	ND	3.58	--		3.333
2,2,4-Trimethylpentane	30.7	0.667	--	143	3.12	--		3.333
Heptane	65.3	0.667	--	268	2.73	--		3.333
cis-1,3-Dichloropropene	ND	0.667	--	ND	3.03	--		3.333
4-Methyl-2-pentanone	ND	1.67	--	ND	6.84	--		3.333
trans-1,3-Dichloropropene	ND	0.667	--	ND	3.03	--		3.333
1,1,2-Trichloroethane	ND	0.667	--	ND	3.64	--		3.333
Toluene	190	0.667	--	716	2.51	--		3.333
2-Hexanone	ND	0.667	--	ND	2.73	--		3.333
Dibromochloromethane	ND	0.667	--	ND	5.68	--		3.333
1,2-Dibromoethane	ND	0.667	--	ND	5.13	--		3.333
Tetrachloroethene	5.88	0.667	--	39.9	4.52	--		3.333
Chlorobenzene	ND	0.667	--	ND	3.07	--		3.333
Ethylbenzene	44.9	0.667	--	195	2.90	--		3.333



Project Name: 450 JOHNSON AVE.**Lab Number:** L1932180**Project Number:** 170588001**Report Date:** 07/23/19**SAMPLE RESULTS**

Lab ID: L1932180-02 D

Client ID: SSV03_071919

Sample Location: BROOKLYN, NY

Date Collected: 07/19/19 13:05

Date Received: 07/19/19

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
p/m-Xylene	119	1.33	--	517	5.78	--		3.333
Bromoform	ND	0.667	--	ND	6.90	--		3.333
Styrene	ND	0.667	--	ND	2.84	--		3.333
1,1,2,2-Tetrachloroethane	ND	0.667	--	ND	4.58	--		3.333
o-Xylene	54.8	0.667	--	238	2.90	--		3.333
4-Ethyltoluene	5.57	0.667	--	27.4	3.28	--		3.333
1,3,5-Trimethylbenzene	9.38	0.667	--	46.1	3.28	--		3.333
1,2,4-Trimethylbenzene	26.1	0.667	--	128	3.28	--		3.333
Benzyl chloride	ND	0.667	--	ND	3.45	--		3.333
1,3-Dichlorobenzene	ND	0.667	--	ND	4.01	--		3.333
1,4-Dichlorobenzene	ND	0.667	--	ND	4.01	--		3.333
1,2-Dichlorobenzene	ND	0.667	--	ND	4.01	--		3.333
1,2,4-Trichlorobenzene	ND	0.667	--	ND	4.95	--		3.333
Hexachlorobutadiene	ND	0.667	--	ND	7.11	--		3.333

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	108		60-140
Bromochloromethane	98		60-140
chlorobenzene-d5	107		60-140



Project Name: 450 JOHNSON AVE.**Project Number:** 170588001**Lab Number:** L1932180**Report Date:** 07/23/19**SAMPLE RESULTS**

Lab ID: L1932180-03
 Client ID: IA02_071919
 Sample Location: BROOKLYN, NY

Date Collected: 07/19/19 15:04
 Date Received: 07/19/19
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 48,TO-15
 Analytical Date: 07/22/19 18:39
 Analyst: RY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.556	0.200	--	2.75	0.989	--		1
Chloromethane	0.727	0.200	--	1.50	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	5.56	0.200	--	12.3	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	184	5.00	--	347	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	6.47	1.00	--	15.4	2.38	--		1
Trichlorofluoromethane	0.270	0.200	--	1.52	1.12	--		1
Isopropanol	2.94	0.500	--	7.23	1.23	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	1.24	0.500	--	3.66	1.47	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	0.225	0.200	--	1.10	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1



Project Name: 450 JOHNSON AVE.**Lab Number:** L1932180**Project Number:** 170588001**Report Date:** 07/23/19**SAMPLE RESULTS**

Lab ID: L1932180-03
 Client ID: IA02_071919
 Sample Location: BROOKLYN, NY

Date Collected: 07/19/19 15:04
 Date Received: 07/19/19
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
n-Hexane	18.4	0.200	--	64.8	0.705	--		1
Benzene	16.7	0.200	--	53.4	0.639	--		1
Cyclohexane	6.69	0.200	--	23.0	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	5.90	0.200	--	27.6	0.934	--		1
Heptane	10.7	0.200	--	43.9	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	39.6	0.200	--	149	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	6.16	0.200	--	26.8	0.869	--		1
p/m-Xylene	18.9	0.400	--	82.1	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	0.989	0.200	--	4.21	0.852	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	7.17	0.200	--	31.1	0.869	--		1
4-Ethyltoluene	1.38	0.200	--	6.78	0.983	--		1
1,3,5-Trimethylbenzene	1.79	0.200	--	8.80	0.983	--		1
1,2,4-Trimethylbenzene	6.51	0.200	--	32.0	0.983	--		1



Project Name: 450 JOHNSON AVE.**Lab Number:** L1932180**Project Number:** 170588001**Report Date:** 07/23/19**SAMPLE RESULTS**

Lab ID: L1932180-03
 Client ID: IA02_071919
 Sample Location: BROOKLYN, NY

Date Collected: 07/19/19 15:04
 Date Received: 07/19/19
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	80		60-140
Bromochloromethane	86		60-140
chlorobenzene-d5	86		60-140



Project Name: 450 JOHNSON AVE.**Lab Number:** L1932180**Project Number:** 170588001**Report Date:** 07/23/19**SAMPLE RESULTS**

Lab ID: L1932180-03
 Client ID: IA02_071919
 Sample Location: BROOKLYN, NY

Date Collected: 07/19/19 15:04
 Date Received: 07/19/19
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 48,TO-15-SIM
 Analytical Date: 07/22/19 18:39
 Analyst: RY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	0.756	0.500	--	2.63	1.74	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	0.046	0.020	--	0.251	0.109	--		1
Carbon tetrachloride	0.093	0.020	--	0.585	0.126	--		1
Trichloroethene	0.049	0.020	--	0.263	0.107	--		1
Tetrachloroethene	0.082	0.020	--	0.556	0.136	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	78		60-140
bromochloromethane	82		60-140
chlorobenzene-d5	86		60-140



Project Name: 450 JOHNSON AVE.**Project Number:** 170588001**Lab Number:** L1932180**Report Date:** 07/23/19**SAMPLE RESULTS**

Lab ID: L1932180-04
 Client ID: IA03_071919
 Sample Location: BROOKLYN, NY

Date Collected: 07/19/19 14:50
 Date Received: 07/19/19
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 48,TO-15
 Analytical Date: 07/22/19 19:20
 Analyst: RY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.543	0.200	--	2.69	0.989	--		1
Chloromethane	0.752	0.200	--	1.55	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	1.57	0.200	--	3.47	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	70.5	5.00	--	133	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	9.07	1.00	--	21.5	2.38	--		1
Trichlorofluoromethane	0.275	0.200	--	1.55	1.12	--		1
Isopropanol	3.61	0.500	--	8.87	1.23	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	1.50	0.500	--	4.42	1.47	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	1.26	0.500	--	3.72	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1



Project Name: 450 JOHNSON AVE.**Lab Number:** L1932180**Project Number:** 170588001**Report Date:** 07/23/19**SAMPLE RESULTS**

Lab ID: L1932180-04
 Client ID: IA03_071919
 Sample Location: BROOKLYN, NY

Date Collected: 07/19/19 14:50
 Date Received: 07/19/19
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
n-Hexane	3.83	0.200	--	13.5	0.705	--		1
Benzene	5.21	0.200	--	16.6	0.639	--		1
Cyclohexane	1.39	0.200	--	4.78	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	1.52	0.200	--	7.10	0.934	--		1
Heptane	2.49	0.200	--	10.2	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	10.9	0.200	--	41.1	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	1.57	0.200	--	6.82	0.869	--		1
p/m-Xylene	4.85	0.400	--	21.1	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	0.526	0.200	--	2.24	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	1.83	0.200	--	7.95	0.869	--		1
4-Ethyltoluene	0.279	0.200	--	1.37	0.983	--		1
1,3,5-Trimethylbenzene	0.429	0.200	--	2.11	0.983	--		1
1,2,4-Trimethylbenzene	1.81	0.200	--	8.90	0.983	--		1



Project Name: 450 JOHNSON AVE.**Lab Number:** L1932180**Project Number:** 170588001**Report Date:** 07/23/19**SAMPLE RESULTS**

Lab ID: L1932180-04
 Client ID: IA03_071919
 Sample Location: BROOKLYN, NY

Date Collected: 07/19/19 14:50
 Date Received: 07/19/19
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	81		60-140
Bromochloromethane	87		60-140
chlorobenzene-d5	87		60-140



Project Name: 450 JOHNSON AVE.**Lab Number:** L1932180**Project Number:** 170588001**Report Date:** 07/23/19**SAMPLE RESULTS**

Lab ID: L1932180-04
 Client ID: IA03_071919
 Sample Location: BROOKLYN, NY

Date Collected: 07/19/19 14:50
 Date Received: 07/19/19
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 48,TO-15-SIM
 Analytical Date: 07/22/19 19:20
 Analyst: RY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	7.05	0.500	--	24.5	1.74	--		1
cis-1,2-Dichloroethene	0.036	0.020	--	0.143	0.079	--		1
1,1,1-Trichloroethane	1.55	0.020	--	8.46	0.109	--		1
Carbon tetrachloride	0.089	0.020	--	0.560	0.126	--		1
Trichloroethene	0.172	0.020	--	0.924	0.107	--		1
Tetrachloroethene	0.208	0.020	--	1.41	0.136	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	79		60-140
bromochloromethane	84		60-140
chlorobenzene-d5	85		60-140



Project Name: 450 JOHNSON AVE.

Lab Number: L1932180

Project Number: 170588001

Report Date: 07/23/19

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15

Analytical Date: 07/22/19 14:43

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab for sample(s): 01-04 Batch: WG1262915-4								
Propylene	ND	0.500	--	ND	0.861	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1



Project Name: 450 JOHNSON AVE.

Lab Number: L1932180

Project Number: 170588001

Report Date: 07/23/19

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15

Analytical Date: 07/22/19 14:43

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab for sample(s): 01-04 Batch: WG1262915-4								
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1



Project Name: 450 JOHNSON AVE.

Lab Number: L1932180

Project Number: 170588001

Report Date: 07/23/19

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15

Analytical Date: 07/22/19 14:43

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab for sample(s): 01-04 Batch: WG1262915-4								
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1



Project Name: 450 JOHNSON AVE.

Lab Number: L1932180

Project Number: 170588001

Report Date: 07/23/19

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15-SIM

Analytical Date: 07/22/19 15:24

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab for sample(s): 03-04 Batch: WG1262918-4								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1



Lab Control Sample Analysis

Batch Quality Control

Project Name: 450 JOHNSON AVE.

Project Number: 170588001

Lab Number: L1932180

Report Date: 07/23/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-04 Batch: WG1262915-3								
Propylene	116		-		70-130	-		
Dichlorodifluoromethane	107		-		70-130	-		
Chloromethane	113		-		70-130	-		
Freon-114	107		-		70-130	-		
Vinyl chloride	106		-		70-130	-		
1,3-Butadiene	125		-		70-130	-		
Bromomethane	101		-		70-130	-		
Chloroethane	100		-		70-130	-		
Ethanol	126		-		40-160	-		
Vinyl bromide	99		-		70-130	-		
Acetone	87		-		40-160	-		
Trichlorofluoromethane	106		-		70-130	-		
Isopropanol	90		-		40-160	-		
1,1-Dichloroethene	110		-		70-130	-		
Tertiary butyl Alcohol	110		-		70-130	-		
Methylene chloride	131	Q	-		70-130	-		
3-Chloropropene	110		-		70-130	-		
Carbon disulfide	105		-		70-130	-		
Freon-113	106		-		70-130	-		
trans-1,2-Dichloroethene	100		-		70-130	-		
1,1-Dichloroethane	95		-		70-130	-		
Methyl tert butyl ether	93		-		70-130	-		
Vinyl acetate	97		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: 450 JOHNSON AVE.

Project Number: 170588001

Lab Number: L1932180

Report Date: 07/23/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-04 Batch: WG1262915-3								
2-Butanone	89		-		70-130	-		
cis-1,2-Dichloroethene	91		-		70-130	-		
Ethyl Acetate	98		-		70-130	-		
Chloroform	95		-		70-130	-		
Tetrahydrofuran	104		-		70-130	-		
1,2-Dichloroethane	106		-		70-130	-		
n-Hexane	86		-		70-130	-		
1,1,1-Trichloroethane	102		-		70-130	-		
Benzene	97		-		70-130	-		
Carbon tetrachloride	110		-		70-130	-		
Cyclohexane	101		-		70-130	-		
1,2-Dichloropropane	103		-		70-130	-		
Bromodichloromethane	103		-		70-130	-		
1,4-Dioxane	99		-		70-130	-		
Trichloroethene	98		-		70-130	-		
2,2,4-Trimethylpentane	103		-		70-130	-		
Heptane	106		-		70-130	-		
cis-1,3-Dichloropropene	109		-		70-130	-		
4-Methyl-2-pentanone	109		-		70-130	-		
trans-1,3-Dichloropropene	98		-		70-130	-		
1,1,2-Trichloroethane	107		-		70-130	-		
Toluene	86		-		70-130	-		
2-Hexanone	98		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: 450 JOHNSON AVE.

Project Number: 170588001

Lab Number: L1932180

Report Date: 07/23/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-04 Batch: WG1262915-3								
Dibromochloromethane	96		-		70-130	-		
1,2-Dibromoethane	87		-		70-130	-		
Tetrachloroethene	86		-		70-130	-		
Chlorobenzene	91		-		70-130	-		
Ethylbenzene	94		-		70-130	-		
p/m-Xylene	94		-		70-130	-		
Bromoform	108		-		70-130	-		
Styrene	92		-		70-130	-		
1,1,2,2-Tetrachloroethane	97		-		70-130	-		
o-Xylene	96		-		70-130	-		
4-Ethyltoluene	92		-		70-130	-		
1,3,5-Trimethylbenzene	96		-		70-130	-		
1,2,4-Trimethylbenzene	95		-		70-130	-		
Benzyl chloride	95		-		70-130	-		
1,3-Dichlorobenzene	86		-		70-130	-		
1,4-Dichlorobenzene	105		-		70-130	-		
1,2-Dichlorobenzene	93		-		70-130	-		
1,2,4-Trichlorobenzene	98		-		70-130	-		
Hexachlorobutadiene	89		-		70-130	-		

Lab Control Sample Analysis Batch Quality Control

Project Name: 450 JOHNSON AVE.

Project Number: 170588001

Lab Number: L1932180

Report Date: 07/23/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 03-04 Batch: WG1262918-3								
Vinyl chloride	96		-		70-130	-		25
1,1-Dichloroethene	101		-		70-130	-		25
Methylene chloride	127		-		70-130	-		25
cis-1,2-Dichloroethene	79		-		70-130	-		25
1,1,1-Trichloroethane	96		-		70-130	-		25
Carbon tetrachloride	99		-		70-130	-		25
Trichloroethene	89		-		70-130	-		25
Tetrachloroethene	83		-		70-130	-		25

Project Name: 450 JOHNSON AVE.

Serial_No: 07231913:15
Lab Number: L1932180

Project Number: 170588001

Report Date: 07/23/19

Canister and Flow Controller Information

Samplenum	Client ID	Media ID	Media Type	Date Prepared	Bottle Order	Cleaning Batch ID	Can Leak Check	Initial Pressure (in. Hg)	Pressure on Receipt (in. Hg)	Flow Controller Leak Chk	Flow Out mL/min	Flow In mL/min	% RPD
L1932180-01	SSV02_071919	0492	Flow 5	07/17/19	297202		-	-	-	Pass	4.5	4.7	4
L1932180-01	SSV02_071919	2824	2.7L Can	07/17/19	297202	L1930221-06	Pass	-29.5	-9.6	-	-	-	-
L1932180-02	SSV03_071919	01248	FLOW 5	07/17/19	297202		-	-	-	Pass	4.5	4.5	0
L1932180-02	SSV03_071919	230	2.7L Can	07/17/19	297202	L1930221-06	Pass	-29.7	-4.5	-	-	-	-
L1932180-03	IA02_071919	0813	Flow 5	07/17/19	297202		-	-	-	Pass	4.5	4.6	2
L1932180-03	IA02_071919	2872	2.7L Can	07/17/19	297202	L1930221-06	Pass	-29.5	-7.8	-	-	-	-
L1932180-04	IA03_071919	0435	Flow 5	07/17/19	297202		-	-	-	Pass	4.5	7.3	47
L1932180-04	IA03_071919	2825	2.7L Can	07/17/19	297202	L1930221-06	Pass	-29.6	-8.8	-	-	-	-

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1930221
Report Date: 07/23/19

Air Canister Certification Results

Lab ID: L1930221-06
Client ID: CAN 453 SHELF 10
Sample Location:

Date Collected: 06/11/19 09:00
Date Received: 07/11/19
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15
Analytical Date: 07/11/19 21:44
Analyst: TS

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1930221
Report Date: 07/23/19

Air Canister Certification Results

Lab ID: L1930221-06
Client ID: CAN 453 SHELF 10
Sample Location:

Date Collected: 06/11/19 09:00
Date Received: 07/11/19
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Xylenes, total	ND	0.600	--	ND	0.869	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,2-Dichloroethene (total)	ND	1.00	--	ND	1.00	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1930221
Report Date: 07/23/19

Air Canister Certification Results

Lab ID: L1930221-06
Client ID: CAN 453 SHELF 10
Sample Location:

Date Collected: 06/11/19 09:00
Date Received: 07/11/19
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1930221
Report Date: 07/23/19

Air Canister Certification Results

Lab ID: L1930221-06
Client ID: CAN 453 SHELF 10
Sample Location:

Date Collected: 06/11/19 09:00
Date Received: 07/11/19
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	1.05	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1



Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L1930221**Project Number:** CANISTER QC BAT**Report Date:** 07/23/19**Air Canister Certification Results**

Lab ID: L1930221-06

Date Collected: 06/11/19 09:00

Client ID: CAN 453 SHELF 10

Date Received: 07/11/19

Sample Location:

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								

Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds				
No Tentatively Identified Compounds				

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	99		60-140
Bromochloromethane	99		60-140
chlorobenzene-d5	101		60-140



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1930221
Report Date: 07/23/19

Air Canister Certification Results

Lab ID: L1930221-06
Client ID: CAN 453 SHELF 10
Sample Location:

Date Collected: 06/11/19 09:00
Date Received: 07/11/19
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15-SIM
Analytical Date: 07/11/19 21:44
Analyst: TS

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.100	--	ND	0.264	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
Freon-113	ND	0.050	--	ND	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1930221
Report Date: 07/23/19

Air Canister Certification Results

Lab ID: L1930221-06
Client ID: CAN 453 SHELF 10
Sample Location:

Date Collected: 06/11/19 09:00
Date Received: 07/11/19
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.050	--	ND	0.188	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethybenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1930221
Report Date: 07/23/19

Air Canister Certification Results

Lab ID: L1930221-06
Client ID: CAN 453 SHELF 10
Sample Location:

Date Collected: 06/11/19 09:00
Date Received: 07/11/19
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	98		60-140
bromochloromethane	99		60-140
chlorobenzene-d5	102		60-140



Project Name: 450 JOHNSON AVE.**Lab Number:** L1932180**Project Number:** 170588001**Report Date:** 07/23/19**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

Cooler Information**Cooler** **Custody Seal**

NA Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1932180-01A	Canister - 6 Liter	NA	NA			Y	Absent		TO15-LL(30)
L1932180-02A	Canister - 6 Liter	NA	NA			Y	Absent		TO15-LL(30)
L1932180-03A	Canister - 2.7 Liter	NA	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)
L1932180-04A	Canister - 2.7 Liter	NA	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)

Project Name: 450 JOHNSON AVE.**Lab Number:** L1932180**Project Number:** 170588001**Report Date:** 07/23/19

GLOSSARY

Acronyms

DL	- 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 limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
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).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
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.
LCS D	- 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.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
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. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
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.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
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

Report Format: Data Usability Report

Project Name: 450 JOHNSON AVE.
Project Number: 170588001

Lab Number: L1932180
Report Date: 07/23/19

- 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.

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

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.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. If a 'Total' result is requested, the results of its individual components will also be reported.

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 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.
- J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- ND** - Not detected at the reporting limit (RL) for the sample.
- 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.

Report Format: Data Usability Report



Project Name: 450 JOHNSON AVE.
Project Number: 170588001

Lab Number: L1932180
Report Date: 07/23/19

REFERENCES

- 48 Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air. Second Edition. EPA/625/R-96/010b, January 1999.

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.



Alpha Analytical, Inc.Facility: **Company-wide**Department: **Quality Assurance**Title: **Certificate/Approval Program Summary**ID No.: **17873**

Revision 12

Published Date: 10/9/2018 4:58:19 PM

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Certification Information

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

Westborough Facility**EPA 624/624.1:** 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 6860:** SCM: Perchlorate**SM4500:** NPW: Amenable Cyanide; 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, **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 300:** Chloride, Sulfate, Nitrate.**EPA 624.1:** Volatile Halocarbons & Aromatics,**EPA 608.3:** 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 625.1:** SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.**Microbiology:** **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.****Mansfield Facility:****Drinking Water****EPA 200.7:** Al, Ba, Cd, Cr, Cu, Fe, 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, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.**EPA 245.1 Hg.****SM2340B**

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



AIR ANALYSIS

PAGE 3 OF 3

CHAIN OF CUSTODY

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

Client Information

Client: Langan
Address: 360 W 31st Street
New York, New York
Phone: 212 479 5400
Fax: 212 479 2727
Email: jkleung@langan.com

☐ These samples have been previously analyzed by Alpha

Other Project Specific Requirements/Comments:

Project-Specific Target Compound List: ☐

Project Information

Project Name: 450 Johnson Ave
Project Location: Brooklyn NY
Project #: 170588001
Project Manager: Julia Leung
ALPHA Quote #:

Turn-Around Time

☐ Standard ☒ RUSH (only confirmed if pre-approved!)

Date Due: 24-48 hrs Time:

Date Rec'd in Lab: 7-20-19

Report Information - Data Deliverables

☐ FAX
☐ ADE_x

Criteria Checker: _____
(Default based on Regulatory Criteria Indicated)

Other Formats:

☒ EMAIL (standard pdf report)

☐ Additional Deliverables

Report to: (if different than Project Manager)

ALPHA Job #: L1932180

Billing Information

☐ Same as Client info PO #:

CONCUR

Regulatory Requirements/Report Limits

State/Fed	Program	Res / Comm

ANALYSIS

TO-15
TO-15 SIM
APH Quadrant Non-petroleum HCs
Fixed Gases
Sulfides & Mercaptans by TO-15 ☐

Sample Comments (i.e. PID)

All Columns Below Must Be Filled Out

ALPHA Lab ID (Lab Use Only)		Sample ID	COLLECTION						Sample Matrix*	Sampler's Initials	Can Size	I D Can	I D - Flow Controller	TO-15	TO-15 SIM	APH	Fixed Gas	Sulfides & Mercaptans	Sample Comments (i.e. PID)
			End Date	Start Time	End Time	Initial Vacuum	Final Vacuum												
32180-01	SSV02-071919	7/19/19	0756	1508	-29.93	-9.49	SSSV	DL	2.7	230	0492	X							
02	SSV03-071919	7/19/19	0743	1305	-29.91	-3.85	SSSV	PL	27	2824	0448	X							
03	IA02-071919	7/19/19	0757	1504	-30.03	-7.68	IA	DL	27	2872	0813	X							
04	IA03-071919	7/19/19	0744	1450	-30.46	-8.75	IA	DL	27	2825	0432	X							

*SAMPLE MATRIX CODES

AA = Ambient Air (Indoor/Outdoor)
SV = Soil Vapor/Landfill Gas/SVE
Other = Please Specify

Container Type

Relinquished By:

Date/Time

Received By:

Date/Time:

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.