

SUPPLEMENTAL SITE INVESTIGATION REPORT

- FOR -

CARMAN PLACE SITE

**157 Main Street
Village of Hempstead, Nassau County, New York**

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EXECUTIVE SUMMARY

On behalf of Conifer Realty (Conifer), Paulus, Sokolowski and Sartor Engineering, PC (PS&S) conducted a Supplemental Site Investigation (SSI) at Carman Place Site (the Site) located in the Village of Hempstead, Nassau County, New York. The Site comprises 11 lots, identified in the Nassau County Land and Tax Map as Section 34, Block 195, Lots 8, 9, 10, 111, 116, 131, 132, 129, 130, 135, & 138, with a combined total area of approximately 2.5 acres.

The purpose of this SSI was to collect additional soil, groundwater and vapor intrusion samples to further characterize Lots 8, 9, 10, 111, 116, 131 and 138. The Site is been assessed by the developer's team for acceptance into the New York State Department of Environmental Conservation (NYSDEC) Brownfield Cleanup Program (BCP).

The SSI was carried out in two separate mobilizations. On April 18, 2019, PS&S collected a total of five (5) soil samples from lots 8, 9, 10, 116 and 138 and one co-located vapor intrusion sample (sub slab, indoor air and outdoor air quality samples) from Lot 131. On July 10, 2019, PS&S collected an additional five (5) soil samples from lots 8, 9, 10, 111 and 116, one co-located vapor intrusion sample (sub slab, indoor air and outdoor air quality samples) from Lot 111, and two (2) groundwater samples from temporary wells installed in Lots 111 and 116.

The SSI soil results showed, volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), metals compounds and emerging contaminants (PFAS and 1-4, Dioxame) detected above the laboratory reporting limits (RL). Soil results were compared to 6 NYCRR Part 375-6.8(b) Unrestricted Use and Restricted Residential Use Soil Cleanup Objectives (UUSCOS and RRSCOs). In addition, emerging contaminants results for soil samples were compared to NYSDEC soil acceptance criteria as noted in NYSDEC Fact Sheet, dated June 2019. VOCs, metals and emerging contaminants were detected at concentration above their respective recommended values.

The SSI groundwater results showed VOCs, SVOCs, metals compounds, and emerging contaminants (PFAS and 1-4, Dioxame) detected above the laboratory reporting limits. Results were compared to New York State Ambient Water Quality Standards, Groundwater Effluent Limitations Class GA (AWQS GAs) and the NYS Recommended Maximum Contaminant Levels in Drinking Water for emerging contaminants accepted by the New York State Department of Health as announced by the office of Governor Cuomo in July 8, 2019. Several SVOCs, metals were found in exceedance of AWQS GAs. Emerging contaminants were detected at concentration above their respective recommended values.

The vapor intrusion sampling results were assessed based on the New York State Department of Health (NYSDOH) Guidance for Evaluating Soil Vapor Intrusion in the State of New York, dated October 2006 (as periodically amended). In addition, vapor intrusion sampling results were compared to United States Environmental Protection Agency (EPA) Vapor Intrusion Screening Level (VISL) Default Concentration Criteria for Sub-Slab and Exterior Soil Gas Concentration (EPA VISL SS/EA) and Indoor Air Concentration (EPA-VISL IA), VISL Calculator, Version 3.5, Updated October 2017 (June 2017 RSLs). Laboratory results showed VOCs detected at concentrations above their respective guidance values.

1.0 INTRODUCTION

On behalf of Conifer, PS&S prepared this SSI report (SSIR) to document the results of the soil, groundwater, and vapor intrusion SSI activities implemented in selected lots (8, 9, 10, 111, 116, 131 and 138) of the Carman Place Site. The Carman Place Site comprises eleven (11) lots in the town of Hempstead, identified in Nassau County Land and Tax Map as Section 34, Block 195, Lots 8, 9, 10, 111, 116, 131, 132, 129, 130, 135, and 138.

The SSI activities were performed in accordance with PS&S proposals dated November 16, 2018 and June 19, 2019, the New York State Department of Environmental Conservation (NYSDEC) DER-10, issued May 2010 and the NYSDOH Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York, issued October 2006 (as periodically amended).

This SSIR summarizes the SSI activities, conducted by PS&S on April 18, 2019 and July 10, 2019, and includes analytical results summary tables, soil boring logs, and figures presenting SSI soil exceedances to applicable standards and recommended values.

1.1 Site Description

The Site location is shown on the attached **Figure 1, Site Location Plan**. As detailed on **Figure 2**, the Site comprises 11 lots, identified as Section 34, Block 195, Lots 8, 9, 10, 111, 116, 129, 130, 131, 132, 135, & 138, with a total area of approximately 2.5 acres. The Site is bounded to the north by Bedell Street, to the east by Main Street, to the south by West Columbia Street and to the west by private properties followed by North Franklyn Street.

Acreage owned by lot is summarized in Table 1.

Table 1. Tax Parcel Info				
<u>Section</u>	<u>Block</u>	<u>Lot #</u>	<u>Address</u>	<u>Acres</u>
34	195	Lot 8	173-175 Main St	0.2261
34	195	Lot 9	171 Main St	0.1131
34	195	Lot 10	169 Main St	0.1131
34	195	Lot 111	163-169 Main St	0.2261
34	195	Lot 116	177-179 Main St	0.14
34	195	Lot 129	126 Bedell Street	0.0402
34	195	Lot 130	122 Bedell Street	0.0459
34	195	Lot 131 (includes Lot 132)	155-161 Main St	0.4378
34	195	Lot 135	Bedell Street	0.1148
34	195	Lot 138	Columbia Street	1.0859
Total Acreage:				2.543

2.0 PREVIOUS INVESTIGATIONS

The following is the list of environmental reports made available to PS&S for the Site. Copies of the reports are attached reports are provided in **Appendix A**.

A summary of the findings in provided in the Sub-sections below.

Table 2. Previous Environmental Site Investigations			
Report Date	Site Investigation	Subject Properties	Sample Collection ID
November 5, 2015	Limited Phase II Environmental Site Investigation	Lots 111, 131, 132	LP-1 (Lot 132), LP-2 (Lot 131), LP-3 (Lot 111), FD-1 (Lot 131) & FD-2 (Lot 131)
December 3, 2015	Limited Phase II Environmental Site Investigation	Lot 129 and 130	FD-1 (Lot 130) & FD-2 (Lot 129)
September 15, 2016	Limited Phase II Environmental Site Investigation	Lot 135 and 138	SS-1 (Lot 135); SS-2 (Lot 135); SD-1 (Lot 138); SD-2 (Lot 138) & SD-3 (Lot 138)

2.1 Limited Phase II ESI – November 5, 2015

A Limited Phase II Environmental Site Investigation (LESI) was performed by Nelson, Pope & Voorhis, LLC (NP&V) on November 5, 2015. The purpose of the LESI was to address the potential impacts associated to two recognized environmental conditions (RECs) identified in the Phase I Environmental Site Assessment (ESA), conducted by NP&V. The two RECs involved two (2) on-site floor drains, located in Lot 131, and three (3) stormwater leaching pools, located in Lots 111, 131 and 132.

According to the November 5, 2015 LESI Report, the subject property (identified in the report as Lots 8, 9, 111, 116) is used for commercial purposes. The on-Site buildings are heated by natural gas fired boilers and air conditioning units. A ceiling mounted gas fired Reznor heater was observed in the unit occupied by the laundromat. No evidence of any storage tanks was observed during NP&V's reconnaissance of the subject property. According to Mr. Lau (property owner), a 1,000-gallon underground storage tank (UST), formerly located in the northwestern portion of the property, was removed in 2015 along with several tons of contaminated soil. No drums were observed during the reconnaissance of the subject property.

As part of the November 5, 2015 LESI, a total of three (3) soil samples were collected from leaching pools located in Lot 131 and 132 (LP-1 and LP-2) and at the leaching pool located in Lot

111 (LP-3). In addition, one (1) soil sample was collected from each of the two (2) floor drains (FD-1 and FD-2) located in Lot 131.

Soil samples were analyzed for VOCs, SVOCs and metals compounds. The laboratory analysis results did not exhibit any elevated concentrations of VOCs. Several of the analyzed SVOCs and metals exhibited elevated concentrations. Since these concentrations exceed the NYSDEC 6 NYCRR Part 375 Protection of Groundwater (PGW SCO), NP&V recommended that impacts associated to the floor drains and leaching pools be remediated.

2.2 Limited Phase II ESI – December 3, 2015

A LESI was performed by NP&V on December 3, 2015. The purpose of this LESI was to address the potential impacts associated to two (2) floor drains, located in the basement of Lot 129 and Lot 130. Floor drains were identified as a REC in the Phase I ESA conducted by NP&V, dated November 13, 2015.

According to the December 3, 2015 LESI Report, the subject property (identified in the report as Lot 129 and Lot 130) was occupied by one two-story single-family home located in each lot. The buildings consist of wood framed structures with vinyl siding and asphalt shingle roofs with concrete block foundations. The interior of the buildings consists of painted sheetrock and/or plaster walls and ceilings with vinyl tiled and wood covered floors. Both buildings are heated by a natural gas fired boiler and window mounted air conditioning units. A 275- gal above ground storage tank (AST) was observed in the basement of both buildings. Floor drains were observed in the basements of each residence and were situated adjacent to the boilers that service each home.

As part of the LESI, a total of two (2) floor drains samples were collected using a stainless-steel hand auger. Sample (FD-1) was collected from the bottom sediment soil of the floor drains in Lot 122 and FD-2 was collected from the bottom sediment soil of the floor drains in Lot 126. These samples were collected from the top zero to twelve (0-12) inches of the soil and were analyzed based on the NYSDEC parameters for the presence of VOCs, SVOCs and metals compounds.

The laboratory results did not exhibit any elevated concentrations of VOCs and SVOCs in FD-2. Several of the analyzed VOCs and SVOCs in FD-1 exhibited elevated concentrations of VOCs and SVOCs, including exceedances of the PGW SCOs. Both samples, FD-1 and FD-2 exhibited elevated concentrations of several of the metals analyzed. Since several of these concentrations exceeded the PGW SCO, NP&V recommended that contamination associated to floor drains be remediated.

2.3 Limited Phase II ESI – September 15, 2016

A LESI was performed by NP&V on September 15, 2016 to address the potential impacts associated to three (3) stormwater leaching pools and stained soils in Lot 138. In addition, a Ground

Penetrating Radar (GPR) survey and soil sampling was completed in Lot 135 to determine if any subsurface structures associated with the former buildings or contamination was present.

According to the September 15, 2016 LESI Report, the subject property (identified in the report as Lots 135 and 138), consists of a paved municipal parking lot (Lot 138) and an automobile storage area (Lot 135).

As part of the LESI, the three (3) soil samples (SD-1, SD-2 and SD-3) were collected from a stormwater leaching pool located in Lot 138 and two (2) soil samples (SS-1 and SS-2) were collected from Lot 135. All samples were collected from the top zero to twelve (0-12) inches of the soil and were analyzed for VOCs, SVOCs and metals compounds.

The laboratory results for all samples exhibited elevated concentrations of several VOCs, SVOCs and metals. Since these concentrations exceeded the PGW SCO, NP&V recommended that all three (3) of the leaching pools and the area surrounding one (1) of the surface soil samples (SS-1) be remediated. Separately, the GPR survey did not reveal any anomalies which would indicate that subsurface anomalies were present on the subject property.

3.0 SUPPLEMENTAL SITE INVESTIGATIONS

SSIs were completed on April 18, 2019 and July 10, 2019 by PS&S. The SSIs were conducted to collect additional soil, groundwater, and vapor intrusion data to further characterize Lots 8, 9, 10, 111, 116, 131 and 138. This effort was completed to support the NYSDEC Brownfield Cleanup Program (BCP) application process.

The SSI scope, as proposed in PS&S proposals, included the installation of a total of ten (10) soil borings and collection of ten (10) soil samples, two (2) co-located vapor intrusion sampling samples (sub-slab, indoor air and outdoor air quality samples) and two (2) groundwater samples.

A map depicting the locations of the completed soil borings and soil exceedances is included as **Figure 2 - Boring Location Plan**. The locations of the vapor intrusion sample points are depicted in **Figure 3**. Groundwater sampling locations are depicted in **Figure 4**. Aquifer Drilling and Testing Inc. (ADT) was the selected driller for the investigation. Alpha Analytical (Alpha) was the New York State Department of Health (NYSDOH) Environmental Laboratory Accreditation Program (ELAP) certified laboratory selected to analyze all soil, groundwater and vapor intrusion samples collected during the SSI.

3.1 Soil Boring Installation

Prior to the start of the SSI, ADT, a private utility-locating service contractor and driller, identified underground utilities in the proposed boring locations. Each of the ten (10) boreholes was precleared via hand-auger down to 5-6 feet (ft.) below grade surface (BGS), and advanced to the desired depth, approximately 10-20 feet BGS, using a Geoprobe 7822DT Direct Push Drill Rig unit. The soil boring installation date, depth and location is presented below:

Table 2. SSI Sampling Location Summary

Sampling Location	Sample ID	Soil Boring Depth (ft. BGS)	Sampling Date	Sampling Media
Lot 8	SB-2	20 ft BGS	4/26/2019	Soil
	SB-102	10 ft BGS	7/10/2019	Soil
Lot 9	SB-3	20 ft BGS	4/26/2019	Soil
	SB-103	10 ft BGS	7/10/2019	Soil
Lot 10	SB-4	20 ft BGS	4/26/2019	Soil
	SB-104	10 ft BGS	7/10/2019	Soil
Lot 111	SB-105	30 ft BGS	7/10/2019	Soil & GW
	SS-111	16 in BGS	7/10/2019	Air
	IA-111	3 ft AGS	7/10/2019	Air
	OA-111	2 ft AGS	7/10/2019	Air
Lot 116	SB-1	20 ft BGS	4/26/2019	Soil
	SB-101	30 ft BGS	7/10/2019	Soil & GW
Lot 131	SS-1	16 in BGS	4/26/2019	Air
	IA-1	3 ft AGS	4/26/2019	Air
	OA1	2 ft AGS	4/26/2019	Air
Lot 138	SB-5	20 ft BGS	4/26/2019	Soil

On April 18, 2019, soil boring SB-1, SB-2, SB-3, SB-4 and SB-5 were advanced and sampled continuously to the completion depth, approximately 20 ft. BGS. On July 10, 2019, soil borings SB-102, SB-103 and SB-104 were advanced and sampled continuously to the completion depth, approximately 10 ft. BGS. SB-101 and SB-105 were advanced to below the water table, to a total depth of 30 ft BGS.

3.2 Soil Sample Collection

Soil samples were collected using 5-foot Macrocore® sample barrels with dedicated acetate liners. Recovered soil was characterized per the Unified Soil Classification System (USCS) and visually screened for the presence of groundwater and/or signs of contamination (i.e. staining, debris and odor). A photoionization detector (PID meter) was used to screen soils for presence of total organic vapors (TOVs). Field collected information was logged as presented in the Soil Boring Logs included as **Appendix B**.

One soil sample was collected from each borehole (SB-1, SB-2, SB-3, SB-4, SB-5, SB-101, SB-102, SB-103, SB-104, and SB-105) from the soil interval exhibiting the highest PID reading. Retained samples were transported under standard chain of custody documentation to Alpha, a NYS ELAP-certified laboratory, and analyzed for TCL VOCs (by USEPA Method 8260), TCL SVOCs (by USEPA Method 8270), TAL Metals (by USEPA Method 8081) including hexavalent chromium and emerging contaminants (full list of PFAS compounds (currently 21) using USEPA Method 537.1 and 1,4- Dioxane using USEPA 8260 and 8270).

3.3 Temporary Well Installation

Two (2) temporary wells MW-101 and MW-105 were installed in soil boring SB-101 (located in Lot 116) and SB-105 (located in Lot 111), respectively. In order to install the temporary groundwater wells, soil boring SB-101 and SB-105 were advanced using a Geoprobe 7822DT Direct Push Drill Rig unit to approximately 30 feet BGS. Temporary wells were then constructed using 1" diameter Schedule 40 PVC piping risers, with slotted screens from approximately 20 to 30 ft. BGS. Following installation, the temporary wells were developed by ADT until groundwater was free of turbidity and sediments. Purged water was treated on-site with activated carbon, before being discharged back into the vicinity of the temporary wells.

3.4 Groundwater Sample Collection

One groundwater sample was collected from each temporary well (MW-101 and MW-105) using a peristaltic pump. A PID meter was used to screen the temporary well for presence of TOVs.

Retained groundwater samples were transported under standard chain of custody documentation to Alpha, a NYS ELAP-certified laboratory, and analyzed for TCL VOCs (by USEPA Method 8260), TCL SVOCs (by USEPA Method 8270), TAL Metals (by USEPA Method 8081) including hexavalent chromium, 1-4 Dioxane (by USEPA Method 8270), and Per- and polyfluoroalkyl substances (PFAS) compounds (by EPA Method 537.1 [modified]).

3.5 Soil Vapor Intrusion Sampling

On April 18, 2019 and July 10, 2019, SVI sampling was performed at the Site in accordance with the NYSDOH Guidance for Evaluating Soil Vapor Intrusion in the State of New York, dated October 2006.

The co-located vapor intrusion sampling points included the installation and sampling of one (1) sub-slab sample (SS-1), one (1) indoor air sample (IA-1) and one ambient air sample (OA-1) in Lot 131 and one sub-slab sample (SS-111), one (1) indoor air sample (IA-111) and one ambient air sample (OA-111) in Lot 111.

The sub-slab samples were installed by ADT using a handheld rotary hammer drill to the area immediately below the slab (1-2 inches below the slab). The indoor air quality samples (IA-1 and IA-111) were collected from the ground floor of each building, at approximately 4 feet from the ground. The ambient air samples were collected outdoor the buildings.

All samples were collected concurrently using laboratory-provided Summa canisters equipped with a flow regulator. Summa canisters were pre-calibrated to collect samples for over a period, not to exceed 8 hours of sampling. Flow controller and sampling time info was recorded in the field and logged in the chain of custody.

The SVI samples were analyzed by Alpha Analytical, a NYSDEC-ELAP certified laboratory, for the VOCs via EPA Method TO-15.

4.0 2019 SUPPLEMENTAL SITE INVESTIGATION RESULTS

4.1 Application of Standards, Criteria, and Guidance Values

The NYSDEC remedial standards, criteria, and guidance values were applied to the SSI analytical results as presented below.

- 6 NYCRR Part 375-6.8(b) Unrestricted Use Soil Cleanup Objectives (UUSCOS)
- 6 NYCRR Part 375-6.8(b) Restricted Residential Use Soil Cleanup Objectives (RRSCOs)
- NYSDOH Guidance for Evaluating Soil Vapor Intrusion in the State of New York, Revised Table 3.1 Air Guidance Values (NYSDOH Air Guidance Values)
- EPA VISL Default Residential Target Sub-Slab and Exterior Soil Gas Concentration (EPA VISL SS/EA)
- EPA VISL Default Residential Target Indoor Concentrations (EPA-VISL IA).
- New York TOGS 111 Groundwater Effluent Limitations criteria reflects all addendum to criteria through June 2004 (NY-TOGS-GA).
- NYSDEC Recommended Values for Acceptance of Imported Soil/Reuse Soil. NYSDEC June 2019 Fact Sheet Emerging Contaminants (RV IS/RS), (**Appendix D**)
- NYSDOH Maximum Contaminant Levels (MCL) for PFOA, PFOS and 1,4-Dioxane as announced by the office of New York State Governor Cuomo, July 8, 2019 (NYS Recommended Values) (**Appendix D**)
- EPA Fact Sheet PFOA & PFOS Drinking Water Health Advisories, November 2016 (EPA Recommended Values) (**Appendix D**)

Laboratory analytical reports for the soil, groundwater and soil vapor media collected during the 2019 SSI can be found in **Appendix C**.

4.2 Soil Investigation Results

As discussed in Sub-section 3.1 and 3.2, PS&S performed SSI activities on April 18, 2019 and July 10, 2019 to further assess soil conditions in Lots 8, 9, 10, 111, 116 and 138. Laboratory results are discussed below.

4.2.1 Soil Sample Results

Two Soil borings (SB-1 [Lot 116] and SB-105 [Lot 111]) were advanced to 30 ft BGS). Five soil borings (SB-1 [Lot 116], SB-2 [Lot 8], SB-3 [Lot 9], SB-4 [Lot 10], and SB-5 [Lot 138]) were advanced to 20 ft BGS. Three soil borings (SB-102 [Lot 8], SB-103 [Lot 9], and SB-104 [Lot 10]) were advanced to 10 ft BGS. Soil boring locations are shown in **Figure 2**.

Gross contamination or free product was not observed in any of the soil boring locations.

Ten soil samples (one per advanced soil boring) were collected at intervals exhibiting the greatest indications of contamination based on field screening. For the most part, PID

readings ranged from 0.0ppm to 8.8ppm. The highest PID reading was observed in soil boring SB-102 (Lot 8) from the 5-10 ft. BGS interval.

Retained soil samples were analyzed for TCL VOCs, TCL SVOC, and TAL Metals, including hexavalent chromium. July 10th soil samples were also analyzed for 1,4-Dioxane and PFOAs. Criteria used for comparison is listed in Section 4.1.

UUSCO, RRSCO and emerging contaminant exceedances are detailed on Figure 2 and discussed in further detail below. In addition, soil sample result summary tables are provided as Tables 4 through 7.

SVOCs: SVOCs were detected at concentrations above their respective laboratory reporting limit (RL) in all soil samples except SB-1 and SB-5. None of the SVOCs detected concentrations were found at levels exceeding UUSCOs.

VOCs: All samples showed VOCs detected at concentrations above their respective RL.

Only 2 VOCs (Acetone and total Xylenes) was detected at concentrations exceeding the UUSCOs.

- Acetone was detected above the UUSCOs in soil samples SB-1 and SB-4. Acetone is a known laboratory contaminant and is often produced from the combination of humid materials in soil and the methanol in the surrogates used in the laboratory. The detection of this compound is attributed to laboratory contaminants and does not appear to be indicative of contamination in the soil.
- Total Xylenes were detected above the UUSCOs in soil sample SB-102. Xylenes were detected at a total concentration of 1.9 mg/kg, exceeding the UUSCO for total Xylenes of 0.26 mg/kg.
- RL achieved for few VOCs (e.g. 1,2-Dichloroethane, 1,4-Dioxane, 2-Butanone, Acetone, Methylene chloride and Vinyl chloride) were in exceedance to their respective UUSCOs in soil samples SB-101, SB-102 and SB-4.

Metals: All samples showed several metals detected above their respective RL. Two metals (Lead and Zinc) were detected at concentrations exceeding the UUSCOs for Lead (63 mg/kg) and Zinc (109 mg/kg).

- Lead: Lead in exceedance of the UUSCOs was identified in four locations (SB-4 [142 mg/kg], SB-101 [89.9 mg/kg], SB-102 [150 mg/kg], and SB-103 [78.4 mg/kg]).
- Zinc: Zinc in exceedance of the UUSCOs was identified in SB-102 (134 mg/kg).

PFAS and 1,4-Dioxane: No soil cleanup objectives (SCOs) have been established for PFAs and 1,4-Dioxane. In order to give some perspective to the analytical results, soil results were compared to the NYSDEC acceptance criteria for Import and Reused of Soil for Perfluorooctanoic Acid (PFOA), Perfluorooctanesulfonic Acid (PFOS) and 1,4-Dioxane, as noted in the NYSDEC Fact Sheet dated June 2019 (included in Appendix D).

- PFAs were detected above their respective RL in samples SB-101, SB-102, SB-103, SB-104 and SB-105.
- The recommended RL for PFAS of 1 ug/kg (ppb) was not achieved in soil samples SB-103 and SB-105 for most of the 21-compound PFAS list.
- The RL for PFOS in sample SB-105 was 1.04 µg/kg, which is above the RV IS/RS criteria of 1 µg/kg (ppb).
- PFOS was detected at concentrations exceeding the RV IS/RS of 1 µg/kg (ppb) in SB-102 (4.63 µg/kg).
- The recommended RL for 1,4- Dioxane of 100 µg/kg (ppb, equivalent to 0.1ppm) was not achieved in soil samples SB-101 (RL of 4400 ppb), SB-102 (RL of 4700 ppb).

4.3 Groundwater Investigation Results

Groundwater was observed at 19.5 ft BGS in both locations SB-1/MW-1 and SB-105/MW-105 (Lot 111). Groundwater sample MW-101 was collected in Lot 116, located in the northeast portion of the Site. Groundwater sample MW-105 was collected in Lot 111, located approximately 135 ft. south from MW-101. Based on previous assessments, the anticipated groundwater flow is to the south- southwest.

4.3.1 Groundwater Sample Results

Two temporary wells (MW-101 and MW-105) were installed to depths of 30 feet bgs. Temporary wells were collocated with soil borings on their respective lots (Lot 111 [MW-105] and Lot 116 [MW-101]) and locations are shown in **Figure 2**.

Gross contamination or free product was not observed in either of the temporary well locations.

Retained groundwater samples were analyzed for TCL VOCs, TCL SVOC, TAL Metals, including hexavalent chromium, 1,4-Dioxane, and PFOAs. Criteria used for comparison is listed in Section 4.1.

NY-TOGS-GA and EPA/ NYS Recommended Values exceedances are detailed on Figure 4 and discussed in further detail below. In addition, groundwater sample result summary tables are provided as Tables 9 through 12.

SVOCs: SVOCs were detected at concentrations above their respective laboratory reporting limit (RL) in both groundwater samples (MW-101 and MW-105). Several RL were in exceedance to their respective NY-TOGS-GA.

Seven (7) compounds (Bis(2-ethylhexyl) phthalate, Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Chrysene, and Indeno(1,2,3-cd) pyrene) were detected at concentrations exceeding the AWQS GAs in both samples.

- Benzo(a)anthracene was found in MW-101 at 2.4 µg/L and in MW-105 at 0.42 µg/L, above the AWQS GA of 0.002 µg/L.
- Benzo(a)pyrene was found in MW-101 at 1.3 µg/L and in MW-105 at 0.21 µg/L, above the AWQS GA of 0 µg/L (detectable).
- Benzo(b)fluoranthene was found in MW-101 at 1.6 µg/L and in MW-105 at 0.31 µg/L, above the AWQS GA of 0.002 µg/L.
- Benzo(k)fluoranthene was found in MW-101 at 0.6 µg/L and in MW-105 at 0.09 µg/L, above the AWQS GA of 0.002 µg/L.
- Chrysene was found in MW-101 at 1.4 µg/L and in MW-105 at 0.29 µg/L, above the AWQS GA of 0.002 µg/L.
- Indeno(1,2,3-cd) pyrene was found in MW-101 at 0.8 µg/L and in MW-105 at 0.16 µg/L, above the AWQS GA of 0.002 µg/L.
- Bis(2-ethylhexyl) phthalate, was found at a concentration of 27 µg/L in sample MW-101. The AWQS GA for Bis(2-ethylhexyl) phthalate is 5 µg/L.
- RL achieved for several SVOCs (17 compounds) were in exceedance to their respective AWQS GAs.

VOCs: Neither of the samples showed VOCs detected at concentrations above their respective RL.

- RL achieved for several VOCs (11 compounds) were in exceedance to their respective AWQS GAs.

Metals: Metals were detected at concentrations above their respective laboratory reporting limit (RL) in both samples. Aluminum, Iron and Manganese were detected at concentrations exceeding the AWQS GA.

- Aluminum was found in MW-101 at 3,960 µg/L, above the AWQS GA of 2000 µg/L
- Iron was found in MW-101 at 21,200 µg/L and in MW-105 at 5,880 µg/L, above the AWQS GA of 600 µg/L
- Manganese was found in MW-101 at 2,818 µg/L and in MW-105 at 1,432 µg/L, above the AWQS GA of 600 µg/L
- Thallium, the RL achieved for Thallium was in exceedance to its respective AWQS GAs.
- **PFAS and 1,4-Dioxane:** : No AWQS GAs have been established for PFAs and 1,4-Dioxane. In order to give some perspective to the analytical results, groundwater results were compared to the Maximum Contaminant Levels (MCL) for PFOA, PFOS and 1,4-Dioxane accepted by the New York State Department of Health, (NYSDOH) as announced by the office of Governor Cuomo on July 8, 2019 (included in Appendix D) and the EPA Fact Sheet PFOA & PFOS Drinking Water Health Advisories, dated November 2016 (included in Appendix D) Both samples MW-1 and MW-105 showed PFAs and 1,4-Dioxane detected above their respective RLs.

- PFOS was detected at concentrations exceeding the NYS MCL of 0.01 µg/L in both MW-101 (0.0516 µg/L) and MW-105 (0.0438 µg/L).
- PFOA was detected at concentrations exceeding the NYS MCL of 0.01 µg/L in both MW-101 (0.0414 µg/L) and MW-105 (0.0388 µg/L)
- The Sum of PFOS and PFOA exceeded the EPA drinking water advisory limit of 0.07 µg/L in both MW-101 (0.093 µg/L) and MW-105 (0.0826 µg/L).

4.4 SVI Assessment

As discussed in Sub-section 3.5, the SVI included the installation and collection of one (1) co-located vapor intrusion sample (sub-slab sample [SS-1], indoor air sample (IA-1) and a ambient air sample [OA-1]) in Lot 131 and one (1) co-located vapor intrusion sample (sub-slab sample [SS-111]), indoor air sample [IA-111] and an ambient air sample [OA-111]) in Lot 111. All samples were collected and submitted to Alpha Analytical, a NYSDEC-ELAP certified laboratory, for the VOCs via EPA Method TO-15. As noted in the NYSDOH Guidance for Evaluating Soil Vapor Intrusion in the State of New York, no standards, criteria or guidance values for concentrations of volatile chemicals in subsurface vapors (either soil vapor or sub-slab vapor) have been developed. Indoor air sample results were compared to NYSDOH Air Guidance Values (AGVs) and EPA VISL Default Residential Target Indoor Air Concentrations Criteria per VISL Calculator, Version 3.5, Updated October 2017 (June 2017 RSLs). In absence to DOH standards, criteria or guidance values for sub-slab samples, sub-slab samples collected during the SSI were compared to NYSDOH Air Guidance Values (AGVs) and EPA VISL Default Residential Target Sub-Slab, Exterior Soil Gas Concentrations Criteria per VISL Calculator, Version 3.5, Updated October 2017 (June 2017 RSLs).

The 2019 SSI SVI assessment identified the following exceedances:

- Benzene was detected in indoor air samples (IA-1 [0.748 µg/m³] and IA-111 [0.783 µg/m³]) at concentrations above their respective EPA VISL concentration (0.36 µg/m³) in indoor air and ambient air samples. There is no DOH AGV for Benzene.
- 1,3-Butadiene was detected in sub-slab sample SS-111 (3.23 µg/m³) at a concentration above the respective EPA VISL concentration (3.1 µg/m³). There is no DOH AGV for 1,3-Butadiene.
- Carbon tetrachloride was detected at a concentration (0.51 µg/m³) above the respective EPA VISL Indoor Air concentration (0.47 µg/m³) in indoor air sample IA-1. There is no DOH AGVs for Carbon tetrachloride.
- Tetrachloroethene (PCE) was detected at a concentration (382 µg/m³) above the DOH AVG (360 µg/m³) in sub-slab vapor sample SS-1.
- Trichloroethene (TCE) was detected at a concentration (50.9 µg/m³) above the DOG AVG (2 µg/m³) in sub-slab vapor sample SS-1.

- TCE was also detected at a concentration ($0.613 \mu\text{g}/\text{m}^3$) above their respective EPA VISL concentration ($0.48 \mu\text{g}/\text{m}^3$) in indoor air sample IA-111, located at Lot 111.

5.0 RECOMMENDATIONS

5.1 Soil and Groundwater Recommendations

Based on the comparison of the analytical results to the NYSDEC criteria for volatile, semi-volatile and metal compounds and publicly available recommended criteria for emerging contaminants, there are impacts that may require further delineation through the implementation of a Remedial Investigation (RI) to support future remedial action decisions. Additional soil and groundwater investigations is recommended as part of a future RI to support delineation and remedial design. Additional investigation would be designed based upon proposed site redevelopment plans and would include further site-wide sampling targeted towards the impacts identified in this report.

5.2 Soil Vapor Recommendations

The State of New York has no standards, criteria or guidance values for concentrations of volatile chemicals in subsurface vapors (either soil vapor or sub-slab vapor). Results of the vapor intrusion assessment, specially the elevated PCE and TCE concentrations in the sub-slab sample collected in Lot 131, suggest that consideration for further study and/or potential vapor intrusion mitigation would be warranted at the Site. A soil vapor assessment should be performed after Site demolition/remediation and prior to occupancy in accordance with the NYSDOH Vapor Intrusion Guidance.



**Carman Place Site
157 Main Street, Village of Hempstead, NY
Supplemental Site Investigation Report**

Figures

- Figure 1 Site Location Map
- Figure 2 2019 Supplemental Site Investigation, Soil Boring Sample Exceedances
- Figure 3 2019 Supplemental Site Investigation, Vapor Intrusion Results
- Figure 4 2019 Supplemental Site Investigation, Groundwater Sample Exceedances



Path: P:\04736\0005\DWG\GIS\Map\Fig01A_SiteLocationMap_20190606_00.mxd

Legend

Site Location

Note:
1. The Carman Place Site comprises 11 lots in the town of Hempstead, identified as Section 34, Block 195, Lots 8, 9, 10, 111, 116, 131, 132, 129, 130, 135, and 138

Sources:
1. Esri, StreetMap USA, 2012
2. Esri, World Imagery, Nassau County 2016



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2ND FLOOR
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PROJECT TITLE

Carman Place
Town of Hempstead
Nassau County, New York

SHEET TITLE

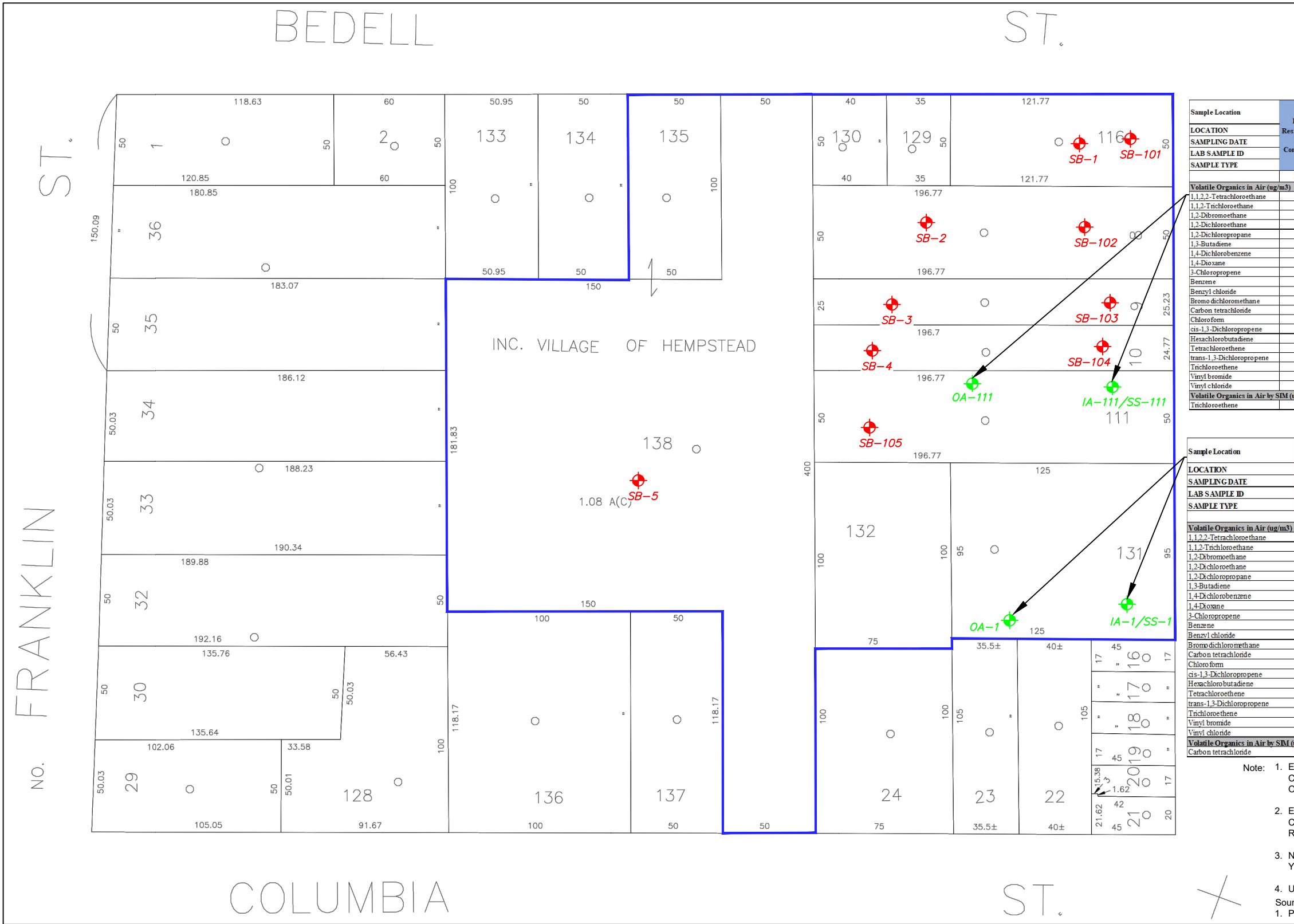
SITE LOCATION MAP

PROJ. NO. 04736.0005

DATE 6/6/2019
DRN. BY PDT
CHK. BY CI
SCALE 1" = 100'

FIGURE NO. 1

FILE NAME: P:\04736\050\DWG\N-Envr\Photos\Figures\Fig03_CarmanSoilVaporIntrusionResults_20190726.dwg; Figure 3 LAST EDIT: 08/06/2019 - 02:20:01 PM LOGIN: reposito@



Sample Location	EPA VISL - Residential Target Indoor Air Concentration (2)	EPA VISLs - Residential Target Sub-Slab & Exterior Soil Vapor Concentration (1)	NYSDOH Air Guidance Values (3)	Lot 111					
LOCATION	Residential Target Indoor Air Concentration (2)	Sub-Slab /Exterior Concentration (1)	Air Guidance Values (3)	IA-111		OA-111		SS-111	
SAMPLING DATE				7/10/2019	7/10/2019	7/10/2019			
LAB SAMPLE ID				L1930287-02	L1930287-03	L1930287-01			
SAMPLE TYPE				Indoor Air	Outdoor Air	Sub-Slab Vapor			
	Indoor Air	Sub-Slab /Exterior		Results	Qual	Results	Qual	Results	Qual
Volatile Organics in Air (ug/m3)									
1,1,2,2-Tetrachloroethane	0.048	1.6		1.37	U	1.37	U	1.37	U
1,1,2-Trichloroethane	0.18	5.8		1.09	U	1.09	U	1.09	U
1,2-Dibromoethane	0.0047	0.16		1.54	U	1.54	U	1.54	U
1,2-Dichloroethane	0.11	3.6		0.809	U	0.809	U	0.809	U
1,2-Dichloropropane	0.76	25		0.924	U	0.924	U	0.924	U
1,3-Butadiene	0.094	3.1		0.442	U	0.442	U	3.23	
1,4-Dichlorobenzene	0.26	8.5		1.2	U	1.2	U	1.2	U
1,4-Dioxane	0.56	19		0.721	U	0.721	U	0.721	U
3-Chloropropene	0.47	16		0.626	U	0.626	U	0.626	U
Benzene	0.36	12		0.783		0.649		1.83	
Benzyl chloride	0.057	1.9		1.04	U	1.04	U	1.04	U
Bromo dichloromethane	0.076	2.5		1.34	U	1.34	U	1.34	U
Carbon tetrachloride	0.47	16		-	-	-	-	1.26	U
Chloroform	0.12	4.1		0.977	U	0.977	U	2.89	
cis-1,3-Dichloropropene	0.7	23		0.908	U	0.908	U	0.908	U
Hexachlorobutadiene	0.13	4.3		2.13	U	2.13	U	2.13	U
Tetrachloroethene	11	360	30	-	-	-	-	1.36	U
trans-1,3-Dichloropropene	0.7	23		0.908	U	0.908	U	0.908	U
Trichloroethene	0.48	16	2	-	-	-	-	1.07	U
Vinyl bromide	0.088	2.9		0.874	U	0.874	U	0.874	U
Vinyl chloride	0.17	5.6		-	-	-	-	0.511	U
Volatile Organics in Air by SIM (ug/m3)									
Trichloroethene	0.48	16	2	0.613		0.554		-	-

Sample Location	EPA VISL - Residential Target Indoor Air Concentration (2)	EPA VISLs - Residential Target Sub-Slab & Exterior Soil Vapor Concentration (1)	NYSDOH Air Guidance Values (3)	Lot 131							
LOCATION				IA-1		OA-1		SS-1			
SAMPLING DATE				4/26/2019		4/26/2019		4/26/2019			
LAB SAMPLE ID				L1917489-02		L1917489-03		L1917489-01			
SAMPLE TYPE				Indoor Air		Outdoor Air		Sub-Slab Vapor			
	Indoor Air	Sub-Slab /Exterior		Results	Qual	Results	Qual	Results	Qual		
Volatile Organics in Air (ug/m3)											
1,1,2,2-Tetrachloroethane	0.048	1.6		1.37	U	1.37	U	1.37	U		
1,1,2-Trichloroethane	0.18	5.8		1.09	U	1.09	U	1.09	U		
1,2-Dibromoethane	0.0047	0.16		1.54	U	1.54	U	1.54	U		
1,2-Dichloroethane	0.11	3.6		0.809	U	0.809	U	0.809	U		
1,2-Dichloropropane	0.76	25		0.924	U	0.924	U	0.924	U		
1,3-Butadiene	0.094	3.1		0.442	U	0.442	U	0.442	U		
1,4-Dichlorobenzene	0.26	8.5		1.2	U	1.2	U	1.2	U		
1,4-Dioxane	0.56	19		0.721	U	0.721	U	0.721	U		
3-Chloropropene	0.47	16		0.626	U	0.626	U	0.626	U		
Benzene	0.36	12		0.748		0.645		1.82			
Benzyl chloride	0.057	1.9		1.04	U	1.04	U	1.04	U		
Bromo dichloromethane	0.076	2.5		1.34	U	1.34	U	1.34	U		
Carbon tetrachloride	0.47	16		-	-	-	-	1.26	U		
Chloroform	0.12	4.1		0.977	U	0.977	U	1.75			
cis-1,3-Dichloropropene	0.7	23		0.908	U	0.908	U	0.908	U		
Hexachlorobutadiene	0.13	4.3		2.13	U	2.13	U	2.13	U		
Tetrachloroethene	11	360	30	-	-	-	-	382			
trans-1,3-Dichloropropene	0.7	23		0.908	U	0.908	U	0.908	U		
Trichloroethene	0.48	16	2	-	-	-	-	50.9			
Vinyl bromide	0.088	2.9		0.874	U	0.874	U	0.874	U		
Vinyl chloride	0.17	5.6		-	-	-	-	0.511	U		
Volatile Organics in Air by SIM (ug/m3)											
Carbon tetrachloride	0.47	16		0.51		0.51		-			

- Note: 1. EPA-VISL: EPA VISL DEFAULT RESIDENTIAL TARGET SUB-SLAB & EXTERIOR SOIL GAS CONCENTRATIONS CRITERIA PER VISL CALCULATOR, VERSION 3.5, UPDATED OCTOBER 2017 (JUNE 2017 RSLs).
2. EPA-VISL: EPA VISL DEFAULT RESIDENTIAL TARGET INDOOR AIR CONCENTRATIONS CRITERIA PER VISL CALCULATOR, VERSION 3.5, UPDATED OCTOBER 2017 (JUNE 2017 RSLs).
3. NYSDOH GUIDANCE FOR EVALUATING SOIL VAPOR INTRUSION IN THE STATE OF NEW YORK
4. U - NOT DETECTED AT THE REPORTED DETECTION LIMIT FOR THE SAMPLE.
- Source: 1. Parcels taken from Land and Tax Map Plan by Nassau County Department of Assessment, dated October 2002.

LEGEND:

- 2019 BORING LOCATION
- 2019 AIR MONITORING LOCATION
- SITE BOUNDARY

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CERTIFICATE OF AUTHORIZATION NO. 24GA28032700

PROJECT TITLE

CARMAN PLACE
SITE INVESTIGATION

HEMPSTEAD, NASSAU COUNTY, NEW YORK

SHEET TITLE

FIGURE 3
2019 SOIL VAPOR
INTRUSION RESULTS

PROJ. NO.: 04736.0005

DATE: 08/09/2019

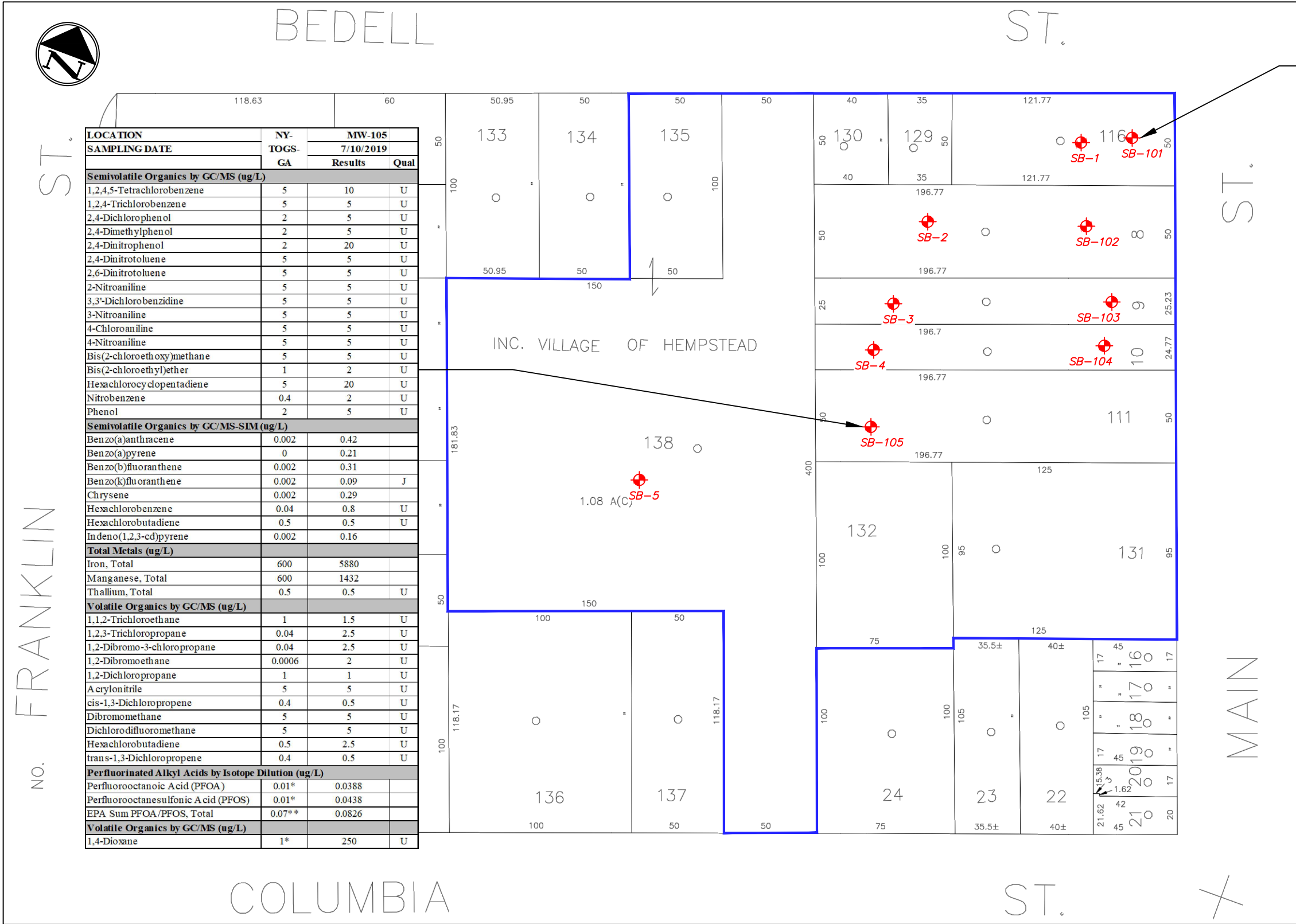
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SCALE: 1"=50'

SHT. NO.: 1 OF 1

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LOCATION		NY- TOGS- GA	MW-101	
SAMPLING DATE			7/10/2019	
			Results	Qu
Semivolatile Organics by GC/MS (ug/L)				
1,2,4,5-Tetrachlorobenzene		5	10	U
1,2,4-Trichlorobenzene		5	5	U
2,4-Dichlorophenol		2	5	U
2,4-Dimethylphenol		2	5	U
2,4-Dinitrophenol		2	20	U
2,4-Dinitrotoluene		5	5	U
2,6-Dinitrotoluene		5	5	U
2-Nitroaniline		5	5	U
3,3'-Dichlorobenzidine		5	5	U
3-Nitroaniline		5	5	U
4-Chloroaniline		5	5	U
4-Nitroaniline		5	5	U
Bis(2-chloroethoxy)methane		5	5	U
Bis(2-chloroethyl)ether		1	2	U
Bis(2-ethylhexyl)phthalate		5	27	
Hexachlorocyclopentadiene		5	20	U
Nitrobenzene		0.4	2	U
Phenol		2	5	U
Semivolatile Organics by GC/MS-SIM (ug/L)				
Benzo(a)anthracene		0.002	2.4	
Benzo(a)pyrene		0	1.3	
Benzo(b)fluoranthene		0.002	1.6	
Benzo(k)fluoranthene		0.002	0.6	
Chrysene		0.002	1.4	
Hexachlorobenzene		0.04	0.8	U
Hexachlorobutadiene		0.5	0.5	U
Indeno(1,2,3-cd)pyrene		0.002	0.8	
Total Metals (ug/L)				
Aluminum, Total		2000	3960	
Iron, Total		600	21200	
Manganese, Total		600	2818	
Volatile Organics by GC/MS (ug/L)				
1,1,2-Trichloroethane		1	1.5	U
1,2,3-Trichloropropane		0.04	2.5	U
1,2-Dibromo-3-chloropropane		0.04	2.5	U
1,2-Dibromoethane		0.0006	2	U
1,2-Dichloropropane		1	1	U
Acrylonitrile		5	5	U
cis-1,3-Dichloropropene		0.4	0.5	U
Dibromomethane		5	5	U
Dichlorodifluoromethane		5	5	U
Hexachlorobutadiene		0.5	2.5	U
trans-1,3-Dichloropropene		0.4	0.5	U
Perfluorinated Alkyl Acids by Isotope Dilution (ug/L)				
Perfluorooctanoic Acid (PFOA)		0.01*	0.0414	
Perfluorooctanesulfonic Acid (PFOS)		0.01*	0.0516	
EPA Sum PFOA/PFOS, Total		0.07**	0.093	
Volatile Organics by GC/MS (ug/L)				
1,4-Dioxane		1*	250	U

Note:
NY-TOGS-GA: NEW YORK TOGS 111 GROUNDWATER EFFLUENT LIMITATIONS CRITERIA REFLECTS ALL ADDENDUM TO CRITERIA THROUGH JUNE 2004.

U - NOT DETECTED AT THE REPORTED DETECTION LIMIT FOR THE SAMPLE.

* NEW YORK STATE, GOVERNOR COUOMO AND NY DOH ADOPTING MAXIMUM CONTAMINANT LEVELS (MCL) FOR PFOA, PFOS AND 1,4-DIOXANE, JULY 8, 2019 (10 PPT [0.01 PPB] FOR PFOA AND PFOS).

** FACT SHEET PFOA & PFOS DRINKING WATER HEALTH ADVISORIES, NOVEMBER 2016

Source:

1. Parcels taken from Land and Tax Map Plan by Nassau County Department of Assessment, dated October 2002.

LEGEND:

2019 BORING LOCATION

SITE BOUNDARY

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PROJECT TITLE

CARMAN PLACE
SITE INVESTIGATION

HEMPSTEAD, NASSAU COUNTY, NEW YORK

SHEET TITLE

FIGURE 4
2019 GROUNDWATER
SAMPLE EXCEEDANCES

PROJ. NO.: 04736.0005

DATE: 08/09/2019

DRN. BY: EDS

CK'D BY: PM

SCALE: 1"=50'

SHT. NO.: 1 OF 1



Carman Place Site
157 Main Street, Village of Hempstead, NY
Supplemental Site Investigation

Tables

Table 1	Tax Parcel Info (embedded in text)
Table 2	Previous Environmental Site Investigations (embedded in text)
Table 3	Sampling Event Summary (embedded in text)
Table 4	2019 Soil Analytical Results Summary Table for Semi-Volatile Organic Compounds
Table 5	2019 Soil Analytical Results Summary Table for Volatile Organic Compounds
Table 6	2019 Soil Analytical Results Summary Table for Metals Compounds
Table 7	2019 Soil Analytical Results Summary Table for Emerging Contaminants
Table 8	2019 Vapor Intrusion Analytical Results Summary Table for Volatile Organic Compounds
Table 9	2019 Groundwater Analytical Results Summary Table for Semi-Volatile Organic Compounds
Table 10	2019 Groundwater Analytical Results Summary Table for Volatile Organic Compounds
Table 11	2019 Groundwater Analytical Results Summary Table for Metals Compounds
Table 12	2019 Groundwater Analytical Results Summary Table for Emerging Contaminants

Table 9
Groundwater Analytical Results Summary Table for Semi-Volatile Organic Compounds
2019 Limited Site Investigation

SAMPLE LOCATION	CasNum	NY-TOGS-GA	Units	Lot 116		Lot 111	
				MW-101		MW-105	
				7/10/2019		7/10/2019	
				L1930261-06		L1930261-07	
				WATER		WATER	
				Results	Qual	Results	Qual
Semivolatile Organics by GC/MS							
1,2,4,5-Tetrachlorobenzene	95-94-3	5	ug/l	10	U	10	U
1,2,4-Trichlorobenzene	120-82-1	5	ug/l	5	U	5	U
1,2-Dichlorobenzene	95-50-1	3	ug/l	2	U	2	U
1,3-Dichlorobenzene	541-73-1	3	ug/l	2	U	2	U
1,4-Dichlorobenzene	106-46-7	3	ug/l	2	U	2	U
2,4,5-Trichlorophenol	95-95-4		ug/l	5	U	5	U
2,4,6-Trichlorophenol	88-06-2		ug/l	5	U	5	U
2,4-Dichlorophenol	120-83-2	2	ug/l	5	U	5	U
2,4-Dimethylphenol	105-67-9	2	ug/l	5	U	5	U
2,4-Dinitrophenol	51-28-5	2	ug/l	20	U	20	U
2,4-Dinitrotoluene	121-14-2	5	ug/l	5	U	5	U
2,6-Dinitrotoluene	606-20-2	5	ug/l	5	U	5	U
2-Chlorophenol	95-57-8		ug/l	2	U	2	U
2-Methylphenol	95-48-7		ug/l	5	U	5	U
2-Nitroaniline	88-74-4	5	ug/l	5	U	5	U
2-Nitrophenol	88-75-5		ug/l	10	U	10	U
3,3'-Dichlorobenzidine	91-94-1	5	ug/l	5	U	5	U
3-Methylphenol/4-Methylphenol	108-39-4/106-44-5		ug/l	5	U	5	U
3-Nitroaniline	99-09-2	5	ug/l	5	U	5	U
4,6-Dinitro-o-cresol	534-52-1		ug/l	10	U	10	U
4-Bromophenyl phenyl ether	101-55-3		ug/l	2	U	2	U
4-Chloroaniline	106-47-8	5	ug/l	5	U	5	U
4-Chlorophenyl phenyl ether	7005-72-3		ug/l	2	U	2	U
4-Nitroaniline	100-01-6	5	ug/l	5	U	5	U
4-Nitrophenol	100-02-7		ug/l	10	U	10	U
Acetophenone	98-86-2		ug/l	5	U	5	U
Benzoic Acid	65-85-0		ug/l	50	U	50	U
Benzyl Alcohol	100-51-6		ug/l	2	U	2	U
Biphenyl	92-52-4		ug/l	2	U	2	U
Bis(2-chloroethoxy)methane	111-91-1	5	ug/l	5	U	5	U
Bis(2-chloroethyl)ether	111-44-4	1	ug/l	2	U	2	U
Bis(2-chloroisopropyl)ether	108-60-1	5	ug/l	2	U	2	U
Bis(2-ethylhexyl)phthalate	117-81-7	5	ug/l	27		1.8	J
Butyl benzyl phthalate	85-68-7	50	ug/l	5	U	5	U
Carbazole	86-74-8		ug/l	1.2	J	0.8	J
Di-n-butylphthalate	84-74-2	50	ug/l	5	U	5	U
Di-n-octylphthalate	117-84-0	50	ug/l	5	U	5	U
Dibenzofuran	132-64-9		ug/l	2	U	2	U
Diethyl phthalate	84-66-2	50	ug/l	5	U	5	U
Dimethyl phthalate	131-11-3	50	ug/l	5	U	5	U
Hexachlorocyclopentadiene	77-47-4	5	ug/l	20	U	20	U
Isophorone	78-59-1	50	ug/l	5	U	5	U
n-Nitrosodi-n-propylamine	621-64-7		ug/l	5	U	5	U
NDPA/DPA	86-30-6	50	ug/l	2	U	2	U
Nitrobenzene	98-95-3	0.4	ug/l	2	U	2	U
p-Chloro-m-cresol	59-50-7		ug/l	2	U	2	U
Phenol	108-95-2	2	ug/l	5	U	5	U
Semivolatile Organics by GC/MS-SIM							
2-Chloronaphthalene	91-58-7	10	ug/l	0.2	U	0.2	U
2-Methylnaphthalene	91-57-6		ug/l	0.11		0.05	J
Acenaphthene	83-32-9	20	ug/l	0.1	J	0.1	U
Acenaphthylene	208-96-8		ug/l	0.72		0.16	
Anthracene	120-12-7	50	ug/l	1.1		0.32	
Benzo(a)anthracene	56-55-3	0.002	ug/l	2.4		0.42	
Benzo(a)pyrene	50-32-8	0	ug/l	1.3		0.21	
Benzo(b)fluoranthene	205-99-2	0.002	ug/l	1.6		0.31	
Benzo(ghi)perylene	191-24-2		ug/l	0.73		0.16	
Benzo(k)fluoranthene	207-08-9	0.002	ug/l	0.6		0.09	J
Chrysene	218-01-9	0.002	ug/l	1.4		0.29	
Dibenzo(a,h)anthracene	53-70-3		ug/l	0.21		0.04	J
Fluoranthene	206-44-0	50	ug/l	4.8		0.92	
Fluorene	86-73-7	50	ug/l	0.49		0.19	
Hexachlorobenzene	118-74-1	0.04	ug/l	0.8	U	0.8	U
Hexachlorobutadiene	87-68-3	0.5	ug/l	0.5	U	0.5	U
Hexachloroethane	67-72-1	5	ug/l	0.8	U	0.8	U
Indeno(1,2,3-cd)pyrene	193-39-5	0.002	ug/l	0.8		0.16	
Naphthalene	91-20-3	10	ug/l	0.41		0.22	
Pentachlorophenol	87-86-5	2	ug/l	0.8	U	0.8	U
Phenanthrene	85-01-8	50	ug/l	5.1		1.6	
Pyrene	129-00-0	50	ug/l	4.4		0.8	

* Comparison is not performed on parameters with non-numeric criteria.

Denotes exceedance to TOGS-GA

Denotes RL in exceedance to TOGS-GA

NY-TOGS-GA: New York TOGS 111 Groundwater Effluent Limitations criteria reflects all addendum to criteria through June 2004.

Qualifier Notes:

U - Not detected at the reported detection limit for the sample.

J -- Estimated Concentration

Table 10
Groundwater Analytical Results Summary Table for Volatile Organic Compounds
2019 Limited Site Investigation

SAMPLE LOCATION LOCATION SAMPLING DATE LAB SAMPLE ID SAMPLE TYPE	CasNum	NY-TOGS-GA	Units	Lot 116		Lot 111	
				MW-101		MW-105	
				7/10/2019		7/10/2019	
				L1930261-06		L1930261-07	
				WATER		WATER	
				Results	Qual	Results	Qual
Volatile Organics by GC/MS							
1,1,1,2-Tetrachloroethane	630-20-6	5	ug/l	2.5	U	2.5	U
1,1,1-Trichloroethane	71-55-6	5	ug/l	2.5	U	2.5	U
1,1,2,2-Tetrachloroethane	79-34-5	5	ug/l	0.5	U	0.5	U
1,1,2-Trichloroethane	79-00-5	1	ug/l	1.5	U	1.5	U
1,1-Dichloroethane	75-34-3	5	ug/l	2.5	U	2.5	U
1,1-Dichloroethene	75-35-4	5	ug/l	0.5	U	0.5	U
1,1-Dichloropropene	563-58-6	5	ug/l	2.5	U	2.5	U
1,2,3-Trichlorobenzene	87-61-6	5	ug/l	2.5	U	2.5	U
1,2,3-Trichloropropane	96-18-4	0.04	ug/l	2.5	U	2.5	U
1,2,4,5-Tetramethylbenzene	95-93-2	5	ug/l	2	U	2	U
1,2,4-Trichlorobenzene	120-82-1	5	ug/l	2.5	U	2.5	U
1,2,4-Trimethylbenzene	95-63-6	5	ug/l	2.5	U	2.5	U
1,2-Dibromo-3-chloropropane	96-12-8	0.04	ug/l	2.5	U	2.5	U
1,2-Dibromoethane	106-93-4	0.0006	ug/l	2	U	2	U
1,2-Dichlorobenzene	95-50-1	3	ug/l	2.5	U	2.5	U
1,2-Dichloroethane	107-06-2	0.6	ug/l	0.5	U	0.5	U
1,2-Dichloroethene, Total	540-59-0		ug/l	2.5	U	2.5	U
1,2-Dichloropropane	78-87-5	1	ug/l	1	U	1	U
1,3,5-Trimethylbenzene	108-67-8	5	ug/l	2.5	U	2.5	U
1,3-Dichlorobenzene	541-73-1	3	ug/l	2.5	U	2.5	U
1,3-Dichloropropane	142-28-9	5	ug/l	2.5	U	2.5	U
1,3-Dichloropropene, Total	542-75-6		ug/l	0.5	U	0.5	U
1,4-Dichlorobenzene	106-46-7	3	ug/l	2.5	U	2.5	U
1,4-Dioxane	123-91-1		ug/l	250	U	250	U
2,2-Dichloropropane	594-20-7	5	ug/l	2.5	U	2.5	U
2-Butanone	78-93-3	50	ug/l	5	U	5	U
2-Hexanone	591-78-6	50	ug/l	5	U	5	U
4-Methyl-2-pentanone	108-10-1		ug/l	5	U	5	U
Acetone	67-64-1	50	ug/l	2.3	J	2.8	J
Acrylonitrile	107-13-1	5	ug/l	5	U	5	U
Benzene	71-43-2	1	ug/l	0.5	U	0.5	U
Bromobenzene	108-86-1	5	ug/l	2.5	U	2.5	U
Bromochloromethane	74-97-5	5	ug/l	2.5	U	2.5	U
Bromodichloromethane	75-27-4	50	ug/l	0.5	U	0.5	U
Bromoform	75-25-2	50	ug/l	2	U	2	U
Bromomethane	74-83-9	5	ug/l	2.5	U	2.5	U
Carbon disulfide	75-15-0	60	ug/l	5	U	5	U
Carbon tetrachloride	56-23-5	5	ug/l	0.5	U	0.5	U
Chlorobenzene	108-90-7	5	ug/l	2.5	U	2.5	U
Chloroethane	75-00-3	5	ug/l	2.5	U	2.5	U
Chloroform	67-66-3	7	ug/l	2.5	U	2.5	U
Chloromethane	74-87-3		ug/l	2.5	U	2.5	U
cis-1,2-Dichloroethene	156-59-2	5	ug/l	2.5	U	2.5	U
cis-1,3-Dichloropropene	10061-01-5	0.4	ug/l	0.5	U	0.5	U
Dibromochloromethane	124-48-1	50	ug/l	0.5	U	0.5	U
Dibromomethane	74-95-3	5	ug/l	5	U	5	U
Dichlorodifluoromethane	75-71-8	5	ug/l	5	U	5	U
Ethyl ether	60-29-7		ug/l	2.5	U	2.5	U
Ethylbenzene	100-41-4	5	ug/l	2.5	U	2.5	U
Hexachlorobutadiene	87-68-3	0.5	ug/l	2.5	U	2.5	U
Isopropylbenzene	98-82-8	5	ug/l	2.5	U	2.5	U
Methyl tert butyl ether	1634-04-4	10	ug/l	2.5	U	2.5	U
Methylene chloride	75-09-2	5	ug/l	2.5	U	2.5	U
n-Butylbenzene	104-51-8	5	ug/l	2.5	U	2.5	U
n-Propylbenzene	103-65-1	5	ug/l	2.5	U	2.5	U
Naphthalene	91-20-3	10	ug/l	2.5	U	2.5	U
o-Chlorotoluene	95-49-8	5	ug/l	2.5	U	2.5	U
o-Xylene	95-47-6	5	ug/l	2.5	U	2.5	U
p-Chlorotoluene	106-43-4	5	ug/l	2.5	U	2.5	U
p-Diethylbenzene	105-05-5		ug/l	2	U	2	U
p-Ethyltoluene	622-96-8		ug/l	2	U	2	U
p-Isopropyltoluene	99-87-6	5	ug/l	2.5	U	2.5	U
p/m-Xylene	179601-23-1	5	ug/l	2.5	U	2.5	U
sec-Butylbenzene	135-98-8	5	ug/l	2.5	U	2.5	U
Styrene	100-42-5	930	ug/l	2.5	U	2.5	U
tert-Butylbenzene	98-06-6	5	ug/l	2.5	U	2.5	U
Tetrachloroethene	127-18-4	5	ug/l	0.5	U	0.5	U
Toluene	108-88-3	5	ug/l	2.5	U	2.5	U
trans-1,2-Dichloroethene	156-60-5	5	ug/l	2.5	U	2.5	U
trans-1,3-Dichloropropene	10061-02-6	0.4	ug/l	0.5	U	0.5	U
trans-1,4-Dichloro-2-butene	110-57-6	5	ug/l	2.5	U	2.5	U
Trichloroethene	79-01-6	5	ug/l	0.5	U	0.5	U
Trichlorofluoromethane	75-69-4	5	ug/l	2.5	U	2.5	U
Vinyl acetate	108-05-4		ug/l	5	U	5	U
Vinyl chloride	75-01-4	2	ug/l	1	U	1	U
Xylenes, Total	1330-20-7		ug/l	2.5	U	2.5	U

* Comparison is not performed on parameters with non-numeric criteria.

Denotes exceedance to TOGS-GA

Denotes RL in exceedance to TOGS-GA

NY-TOGS-GA: New York TOGS 111 Groundwater Effluent Limitations criteria reflects all addendum to criteria through June 2004.

Qualifier Notes:

U - Not detected at the reported detection limit for the sample.

J -- Estimated Concentration

Table 11
Groundwater Analytical Results Summary Table for Metals Compounds
2019 Limited Site Investigation

SAMPLE LOCATION	CasNum	NY-TOGS-GA	Units	Lot 116		Lot 111	
LOCATION				MW-101		MW-105	
SAMPLING DATE				7/10/2019		7/10/2019	
LAB SAMPLE ID				L1930261-06		L1930261-07	
SAMPLE TYPE				WATER		WATER	
				Results	Qual	Results	Qual
Total Metals							
Aluminum, Total	7429-90-5	2000	ug/l	3960		1320	
Antimony, Total	7440-36-0	6	ug/l	1.08	J	1.24	J
Arsenic, Total	7440-38-2	50	ug/l	3.15		2	
Barium, Total	7440-39-3	2000	ug/l	130.5		46.73	
Beryllium, Total	7440-41-7	3	ug/l	0.35	J	0.5	U
Cadmium, Total	7440-43-9	10	ug/l	0.33		0.24	
Calcium, Total	7440-70-2		ug/l	49000		41500	
Chromium, Total	7440-47-3	100	ug/l	83.36		35.58	
Cobalt, Total	7440-48-4		ug/l	28.77		12.01	
Copper, Total	7440-50-8	1000	ug/l	34.72		12.18	
Iron, Total	7439-89-6	600	ug/l	21200		5880	
Lead, Total	7439-92-1	50	ug/l	24.63		7.23	
Magnesium, Total	7439-95-4	35000	ug/l	8490		5330	
Manganese, Total	7439-96-5	600	ug/l	2818		1432	
Mercury, Total	7439-97-6	1.4	ug/l	0.2	U	0.2	U
Nickel, Total	7440-02-0	200	ug/l	22.65		12.77	
Potassium, Total	7440-09-7		ug/l	4170		3660	
Selenium, Total	7782-49-2	20	ug/l	3.65	J	5	U
Silver, Total	7440-22-4	100	ug/l	0.4	U	0.4	U
Sodium, Total	7440-23-5		ug/l	69500		54700	
Thallium, Total	7440-28-0	0.5	ug/l	0.36	J	0.5	U
Vanadium, Total	7440-62-2		ug/l	9.98		3.15	J
Zinc, Total	7440-66-6	5000	ug/l	114		77.71	
1,4 Dioxane by 8270D-SIM							
1,4-Dioxane	123-91-1		ug/l	0.304		0.318	
General Chemistry							
Chromium, Hexavalent	18540-29-9	100	ug/l	10	U	10	U
Cyanide, Total	57-12-5	400	ug/l	5	U	5	U

* Comparison is not performed on parameters with non-numeric criteria.

Denotes exceedance to TOGS-GA

Denotes RL in exceedance to TOGS-GA

NY-TOGS-GA: New York TOGS 111 Groundwater Effluent Limitations criteria reflects all addendum to criteria through June 2004.

Qualifier Notes:

U - Not detected at the reported detection limit for the sample.

J -- Estimated Concentration

Table 12
Groundwater Analytical Results Summary Table for Emerging Contaminants
2019 Limited Site Investigation

SAMPLE ID:	CAS	Guidance Value (ppb)	Units	Lot 116 MW-101 7/10/2019 L1930261-06 WATER				Lot 111 MW-105 7/10/2019 L1930261-07 WATER				FIELD BLANK FIELD BLANK 7/10/2019 L1930261-08 WATER				
SAMPLE ID:																
COLLECTION DATE:																
LAB ID:																
SAMPLE MATRIX:																
ANALYTE					Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL
Volatile Organics by GC/MS (ug/L)																
1,4-Dioxane	123-91-1	1*	(ug/l)	ND		250	61	ND		250	61	-	-	-	-	
1,4 Dioxane by 8270D-SIM																
1,4-Dioxane	123-91-1	1*	(ug/l)	0.304		0.144	0.0326	0.318		0.144	0.0326	-	-	-	-	
Perfluorinated Alkyl Acids by Isotope Dilution (ug/L)																
Perfluorobutanoic Acid (PFBA)	375-22-4		(ug/l)	0.0156		0.00217	0.000443	0.0115		0.00184	0.000375	ND		0.00178	0.000363	
Perfluoropentanoic Acid (PFPeA)	2706-90-3		(ug/l)	0.0299		0.00217	0.00043	0.0232		0.00184	0.000364	ND		0.00178	0.000352	
Perfluorobutanesulfonic Acid (PFBS)	375-73-5		(ug/l)	0.03		0.00217	0.000259	0.00743		0.00184	0.000219	ND		0.00178	0.000212	
Perfluorohexanoic Acid (PFHxA)	307-24-4		(ug/l)	0.0227		0.00217	0.000356	0.0183		0.00184	0.000301	ND		0.00178	0.000292	
Perfluoroheptanoic Acid (PFHpA)	375-85-9		(ug/l)	0.0132		0.00217	0.000245	0.0127		0.00184	0.000207	ND		0.00178	0.0002	
Perfluorohexanesulfonic Acid (PFHxS)	355-46-4		(ug/l)	0.00525		0.00217	0.000409	0.00245		0.00184	0.000346	ND		0.00178	0.000334	
Perfluorooctanoic Acid (PFOA)	335-67-1	0.01*	(ug/l)	0.0414		0.00217	0.000256	0.0388		0.00184	0.000217	ND		0.00178	0.00021	
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	27619-97-2		(ug/l)	ND		0.00217	0.00145	0.00196		0.00184	0.00122	ND		0.00178	0.00118	
Perfluoroheptanesulfonic Acid (PFHpS)	375-92-8		(ug/l)	0.00107	J	0.00217	0.000748	ND		0.00184	0.000632	ND		0.00178	0.000612	
Perfluorononanoic Acid (PFNA)	375-95-1		(ug/l)	0.00649		0.00217	0.000339	0.00721		0.00184	0.000287	ND		0.00178	0.000278	
Perfluorooctanesulfonic Acid (PFOS)	1763-23-1	0.01*	(ug/l)	0.0516		0.00217	0.000548	0.0438		0.00184	0.000463	ND		0.00178	0.000448	
Perfluorodecanoic Acid (PFDA)	335-76-2		(ug/l)	0.00163	J	0.00217	0.00033	0.0153		0.00184	0.000279	ND		0.00178	0.00027	
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	39108-34-4		(ug/l)	ND		0.00217	0.00132	ND		0.00184	0.00111	ND		0.00178	0.00108	
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	2355-31-9		(ug/l)	ND		0.00217	0.000704	ND		0.00184	0.000596	ND		0.00178	0.000576	
Perfluoroundecanoic Acid (PFUnA)	2058-94-8		(ug/l)	ND		0.00217	0.000283	0.00418		0.00184	0.000239	ND		0.00178	0.000231	
Perfluorodecanesulfonic Acid (PFDS)	335-77-3		(ug/l)	ND		0.00217	0.00106	0.00383		0.00184	0.000901	ND		0.00178	0.000872	
Perfluorooctanesulfonamide (FOSA)	754-91-6		(ug/l)	ND		0.00217	0.00063	ND		0.00184	0.000533	ND		0.00178	0.000516	
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	2991-50-6		(ug/l)	ND		0.00217	0.000874	ND		0.00184	0.000739	ND		0.00178	0.000715	
Perfluorododecanoic Acid (PFDoA)	307-55-1		(ug/l)	ND		0.00217	0.000404	0.000518	J	0.00184	0.000342	ND		0.00178	0.000331	
Perfluorotridecanoic Acid (PFTrDA)	72629-94-8		(ug/l)	ND		0.00217	0.000356	ND		0.00184	0.000301	ND		0.00178	0.000291	
Perfluorotetradecanoic Acid (PFTA)	376-06-7		(ug/l)	ND		0.00217	0.00027	ND		0.00184	0.000228	ND		0.00178	0.000221	
PFOA/PFOS, Total		0.07**	(ug/l)	0.093		0.00217	0.000256	0.0826		0.00184	0.000217	ND		0.00178	0.00021	

Denotes exceedance to NYSDEC / EPA Guidance Values
Denotes RL in exceedance to TOGS-GA

*New York State,Governor Cuomo and NY DOH Adopting Maximum Contaminant Levels (MCL) for PFOA, PFOS and 1,4-Dioxane, July 8, 2018 (PFOA and PFOS : 10 ppt [0.01 ppb] and 1,4 Dioxane: 1 ppb)
**EPA Fact Sheet PFOA & PFOS Drinking Water Health Advisories, November 2016

Qualifier Notes:
U - Not detected at the reported detection limit for the sample.
J -- Estimated Concentration

Table 8
Vapor Intrusion Analytical Results Summary Table for Volatile Organic Compounds
2019 Limited Site Investigation

Sample Location		EPA VISL - Residential Target Indoor Air Concentration (2)	EPA VISLs - Residential Target Sub-Slab & Exterior Soil Vapor Concentration (1)	NYSDOH Air Guidance Values (3)	Lot 131						Lot 111					
LOCATION					IA-1		OA-1		SS-1		IA-111		OA-111		SS-111	
SAMPLING DATE					4/26/2019		4/26/2019		4/26/2019		7/10/2019		7/10/2019		7/10/2019	
LAB SAMPLE ID					L1917489-02		L1917489-03		L1917489-01		L1930287-02		L1930287-03		L1930287-01	
SAMPLE TYPE					Indoor Air		Outdoor Air		Sub-Slab Vapor		Indoor Air		Outdoor Air		Sub-Slab Vapor	
	CasNum	Indoor Air	Sub-Slab /Exterior		Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
Volatile Organics in Air (ug/m3)																
1,1,1-Trichloroethane	71-55-6	5200	170000		-	-	-	-	5.21		-	-	-	-	1.09	U
1,1,2,2-Tetrachloroethane	79-34-5	0.048	1.6		1.37	U	1.37	U	1.37	U	1.37	U	1.37	U	1.37	U
1,1,2-Trichloroethane	79-00-5	0.18	5.8		1.09	U	1.09	U	1.09	U	1.09	U	1.09	U	1.09	U
1,1-Dichloroethane	75-34-3	1.8	58		0.809	U	0.809	U	0.809	U	0.809	U	0.809	U	0.809	U
1,1-Dichloroethene	75-35-4	210	7000		-	-	-	-	0.793	U	-	-	-	-	0.793	U
1,2,4-Trichlorobenzene	120-82-1	2.1	70		1.48	U	1.48	U	1.48	U	1.48	U	1.48	U	1.48	U
1,2,4-Trimethylbenzene	95-63-6	63	2100		0.983	U	0.983	U	3.23		17.2		2.34		1.76	
1,2-Dibromoethane	106-93-4	0.0047	0.16		1.54	U	1.54	U	1.54	U	1.54	U	1.54	U	1.54	U
1,2-Dichlorobenzene	95-50-1	210	7000		1.2	U	1.2	U	1.2	U	1.2	U	1.39		1.2	U
1,2-Dichloroethane	107-06-2	0.11	3.6		0.809	U	0.809	U	0.809	U	0.809	U	0.809	U	0.809	U
1,2-Dichloropropane	78-87-5	0.76	25		0.924	U	0.924	U	0.924	U	0.924	U	0.924	U	0.924	U
1,3,5-Trimethylbenzene	108-67-8	63	2100		0.983	U	0.983	U	0.983	U	6.39		0.983	U	0.983	U
1,3-Butadiene	106-99-0	0.094	3.1		0.442	U	0.442	U	0.442	U	0.442	U	0.442	U	3.23	
1,3-Dichlorobenzene	541-73-1				1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	3.05	
1,4-Dichlorobenzene	106-46-7	0.26	8.5		1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U
1,4-Dioxane	123-91-1	0.56	19		0.721	U	0.721	U	0.721	U	0.721	U	0.721	U	0.721	U
2,2,4-Trimethylpentane	540-84-1				0.934	U	0.934	U	0.934	U	0.934	U	0.934	U	0.953	
2-Butanone	78-93-3	5200	170000		2.72		1.47	U	9.08		1.92		5.99		5.84	
2-Hexanone	591-78-6	31	1000		0.82	U	0.82	U	5.7		0.82	U	0.82	U	0.82	U
3-Chloropropene	107-05-1	0.47	16		0.626	U	0.626	U	0.626	U	0.626	U	0.626	U	0.626	U
4-Ethyltoluene	622-96-8				0.983	U	0.983	U	0.983	U	2.54		0.983	U	0.983	U
4-Methyl-2-pentanone	108-10-1	3100	100000		2.05	U	2.05	U	2.05	U	2.05	U	3.01		27.3	
Acetone	67-64-1	32000	1100000		14.4		4.89		138		14.2		30.2		75.3	
Benzene	71-43-2	0.36	12		0.748		0.645		1.82		0.783		0.649		1.83	
Benzyl chloride	100-44-7	0.057	1.9		1.04	U	1.04	U	1.04	U	1.04	U	1.04	U	1.04	U
Bromodichloromethane	75-27-4	0.076	2.5		1.34	U	1.34	U	1.34	U	1.34	U	1.34	U	1.34	U
Bromoform	75-25-2	2.6	85		2.07	U	2.07	U	2.07	U	2.07	U	2.07	U	2.07	U
Bromomethane	74-83-9	5.2	170		0.777	U	0.777	U	0.777	U	0.777	U	0.777	U	0.777	U
Carbon disulfide	75-15-0	730	24000		0.623	U	0.623	U	5.39		0.623	U	0.623	U	0.81	
Carbon tetrachloride	56-23-5	0.47	16		-	-	-	-	1.26	U	-	-	-	-	1.26	U
Chlorobenzene	108-90-7	52	1700		0.921	U	0.921	U	0.921	U	0.921	U	0.921	U	0.921	U
Chloroethane	75-00-3	10000	350000		0.528	U	0.528	U	0.528	U	0.528	U	0.528	U	0.528	U
Chloroform	67-66-3	0.12	4.1		0.977	U	0.977	U	1.75		0.977	U	0.977	U	2.89	
Chloromethane	74-87-3	94	3100		2.01		1.33		0.413	U	1.18		1.29		0.605	
cis-1,2-Dichloroethene	156-59-2				-	-	-	-	0.793	U	-	-	-	-	0.793	U
cis-1,3-Dichloropropene	10061-01-5	0.7	23		0.908	U	0.908	U	0.908	U	0.908	U	0.908	U	0.908	U
Cyclohexane	110-82-7	6300	210000		0.688	U	0.688	U	0.688	U	0.688	U	0.688	U	0.688	U
Dibromochloromethane	124-48-1				1.7	U	1.7	U	1.7	U	1.7	U	1.7	U	1.7	U
Dichlorodifluoromethane	75-71-8	100	3500		2.43		2.45		2.49		2.2		2.29		2.49	
Ethanol	64-17-5				64.4		12.7		11.4		27.7		18.6		74.6	
Ethyl Acetate	141-78-6	73	2400		1.8	U	1.8	U	1.8	U	1.8	U	1.8	U	1.8	U
Ethylbenzene	100-41-4	1.1	37		0.869	U	0.869	U	1.09		0.912		0.869	U	3.05	
Freon-113	76-13-1	5200	170000		1.53	U	1.53	U	1.53	U	1.53	U	1.53	U	1.53	U
Freon-114	76-14-2				1.4	U	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U
Heptane	142-82-5				0.82	U	0.82	U	3.2		4.14		0.82	U	3.19	
Hexachlorobutadiene	87-68-3	0.13	4.3		2.13	U	2.13	U	2.13	U	2.13	U	2.13	U	2.13	U
Isopropanol	67-63-0	210	7000		19.4		1.23	U	3.56		4.42		9.78		128	
Methyl tert butyl ether	1634-04-4	11	360		0.721	U	0.721	U	0.721	U	0.721	U	0.721	U	0.721	U
Methylene chloride	75-09-2	100	3400	60	3.21		1.74	U	1.74	U	1.74	U	2.61		6.57	
n-Hexane	110-54-3	730	24000		0.715		0.705	U	0.973		0.779		0.705	U	5	
o-Xylene	95-47-6	100	3500		0.869	U	0.869	U	1.79		1.46		0.869	U	4.6	
p/m-Xylene	179601-23-1	100	3500		1.74	U	1.74	U	4.43		3.69		2.14		15.6	
Styrene	100-42-5	1000	35000		0.852	U	0.852	U	0.852	U	0.852	U	0.852	U	0.852	U
Tertiary butyl Alcohol	75-65-0				1.52	U	1.52	U	5.34		1.52	U	1.52	U	7.49	
Tetrachloroethene	127-18-4	11	360	30	-	-	-	-	382		-	-	-	-	1.36	U
Tetrahydrofuran	109-99-9	2100	70000		4.98		1.47	U	1.47	U	1.65		1.47	U	1.47	U
Toluene	108-88-3	5200	170000		1.8		1.22		4.9		2.91		2.26		2.82	
trans-1,2-Dichloroethene	156-60-5				0.793	U	0.793	U	0.793	U	0.793	U	0.793	U	0.793	U
trans-1,3-Dichloropropene	10061-02-6	0.7	23		0.908	U	0.908	U	0.908	U	0.908	U	0.908	U	0.908	U
Trichloroethene	79-01-6	0.48	16	2	-	-	-	-	50.9		-	-	-	-	1.07	U
Trichlorofluoromethane	75-69-4				1.25		1.12		11.4		1.12	U	1.21		1.52	
Vinyl bromide	593-60-2	0.088	2.9		0.874	U	0.874	U	0.874	U	0.874	U	0.874	U	0.874	U
Vinyl chloride	75-01-4	0.17	5.6		-	-	-	-	0.511	U	-	-	-	-	0.511	U
Volatile Organics in Air by SIM (ug/m3)																
1,1,1-Trichloroethane	71-55-6	5200	170000		0.109	U	0.109	U	-	-	0.109	U	0.109	U	-	-
1,1-Dichloroethene	75-35-4	210	7000		0.079	U	0.079	U	-	-	0.079	U	0.079	U	-	-
Carbon tetrachloride	56-23-5	0.47	16		0.51		0.51		-	-	0.447		0.579		-	-
cis-1,2-Dichloroethene	156-59-2				0.079	U	0.079	U	-	-	0.301		0.472		-	-
Tetrachloroethene	127-18-4	11	360	30	0.271		0.509		-	-	0.583		1		-	-
Trichloroethene	79-01-6	0.48	16	2	0.107	U	0.107	U	-	-	0.613		0.554		-	-
Vinyl chloride	75-01-4	0.17	5.6		0.051	U	0.051	U	-	-	0.051	U	0.051	U	-	-

(1) EPA-VISL: EPA VISL Default Residential Target Sub-Slab & Exterior Soil Gas Concentrations Criteria per VISL Calculator, Version 3.5, Updated October 2017 (June 2017 RSLs).
(2) EPA-VISL: EPA VISL Default Residential Target Indoor Air Concentrations Criteria per VISL Calculator, Version 3.5,
(3) NYSDOH Guidance for Evaluating Soil Vapor Intrusion in the State of New York

RL concentration is above the comparison criteria
Sample exceeds EPA VISLs -Residential Target Sub-Slab & Exterior Soil Vapor Concentration
Sample exceeds EPA VISLs - Residential Target Indoor Air Concentration

Qualifier Notes:
U - Not detected at the reported detection limit (RL) for the sample.
RL: Reporting Limits

Table 4
Soil Analytical Results Summary Table for Semi-Volatile Organic Compounds
2019 Limited Site Investigation

SAMPLE LOCATION	CasNum	RRSCO	UUSCO	Units	Lot 116				Lot 8				Lot 9				Lot 10				Lot 138		Lot 111	
SAMPLE ID					SB-1		SB-101		SB-2		SB-102		SB-3		SB-103		SB-4		SB-104		SB-5		SB-105	
SAMPLING DATE					4/26/2019		7/10/2019		4/26/2019		7/10/2019		4/26/2019		7/10/2019		4/26/2019		7/10/2019		4/26/2019		7/10/2019	
LAB SAMPLE ID					L1917453-01		L1930261-01		L1917453-02		L1930261-02		L1917453-03		L1930261-03		L1917453-04		L1930261-04		L1917453-05		L1930261-05	
SAMPLE TYPE					SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
					Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual		
General Chemistry																								
Chromium, Hexavalent	18540-29-9	110	1	mg/kg	0.894	U	0.863	U	0.873	U	0.838	U	0.845	U	0.977	U	0.889	U	0.827	U	0.898	U	0.859	U
Chromium, Trivalent	16065-83-1				18		NS		12		NS		25		NS		13		NS		2.2		NS	
Cyanide, Total	57-12-5	27	27	mg/kg	1.1	U	1	U	1	U	0.97	U	1	U	1.2	U	1.1	U	0.95	U	1.1	U	0.99	U
Solids, Total	NONE			%	89.5		92.7		91.6		95.5		94.7		81.9		90		96.7		89.1		93.1	
Semivolatile Organics by GC/MS																								
1,2,4,5-Tetrachlorobenzene	95-94-3			mg/kg	0.18	U	0.18	U	0.18	U	0.17	U	0.17	U	0.2	U	0.18	U	0.17	U	0.18	U	0.18	U
1,2,4-Trichlorobenzene	120-82-1			mg/kg	0.18	U	0.18	U	0.18	U	0.17	U	0.17	U	0.2	U	0.18	U	0.17	U	0.18	U	0.18	U
1,2-Dichlorobenzene	95-50-1	100	1.1	mg/kg	0.18	U	0.18	U	0.18	U	0.17	U	0.17	U	0.2	U	0.18	U	0.17	U	0.18	U	0.18	U
1,3-Dichlorobenzene	541-73-1	49	2.4	mg/kg	0.18	U	0.18	U	0.18	U	0.17	U	0.17	U	0.2	U	0.18	U	0.17	U	0.18	U	0.18	U
1,4-Dichlorobenzene	106-46-7	13	1.8	mg/kg	0.18	U	0.18	U	0.18	U	0.17	U	0.17	U	0.2	U	0.18	U	0.17	U	0.18	U	0.18	U
1,4-Dioxane	123-91-1	13	0.1	mg/kg	NS		0.027	U	NS		0.026	U	NS		0.03	U	NS		0.026	U	NS		0.026	U
2,4,5-Trichlorophenol	95-95-4			mg/kg	0.18	U	0.18	U	0.18	U	0.17	U	0.17	U	0.2	U	0.18	U	0.17	U	0.18	U	0.18	U
2,4,6-Trichlorophenol	88-06-2			mg/kg	0.11	U	0.11	U	0.11	U	0.1	U	0.1	U	0.12	U	0.11	U	0.1	U	0.11	U	0.1	U
2,4-Dichlorophenol	120-83-2			mg/kg	0.17	U	0.16	U	0.16	U	0.15	U	0.16	U	0.18	U	0.16	U	0.15	U	0.17	U	0.16	U
2,4-Dimethylphenol	105-67-9			mg/kg	0.18	U	0.18	U	0.18	U	0.17	U	0.17	U	0.2	U	0.18	U	0.17	U	0.18	U	0.18	U
2,4-Dinitrophenol	51-28-5			mg/kg	0.89	U	0.85	U	0.86	U	0.82	U	0.83	U	0.97	U	0.87	U	0.82	U	0.89	U	0.84	U
2,4-Dinitrotoluene	121-14-2			mg/kg	0.18	U	0.18	U	0.18	U	0.17	U	0.17	U	0.2	U	0.18	U	0.17	U	0.18	U	0.18	U
2,6-Dinitrotoluene	606-20-2			mg/kg	0.18	U	0.18	U	0.18	U	0.17	U	0.17	U	0.2	U	0.18	U	0.17	U	0.18	U	0.18	U
2-Chloronaphthalene	91-58-7			mg/kg	0.18	U	0.18	U	0.18	U	0.17	U	0.17	U	0.2	U	0.18	U	0.17	U	0.18	U	0.18	U
2-Chlorophenol	95-57-8			mg/kg	0.18	U	0.18	U	0.18	U	0.17	U	0.17	U	0.2	U	0.18	U	0.17	U	0.18	U	0.18	U
2-Methylnaphthalene	91-57-6			mg/kg	0.22	U	0.21	U	0.22	U	0.2	U	0.21	U	0.24	U	0.22	U	0.2	U	0.22	U	0.21	U
2-Methylphenol	95-48-7	100	0.33	mg/kg	0.18	U	0.18	U	0.18	U	0.17	U	0.17	U	0.2	U	0.18	U	0.17	U	0.18	U	0.18	U
2-Nitroaniline	88-74-4			mg/kg	0.18	U	0.18	U	0.18	U	0.17	U	0.17	U	0.2	U	0.18	U	0.17	U	0.18	U	0.18	U
2-Nitrophenol	88-75-5			mg/kg	0.4	U	0.38	U	0.39	U	0.37	U	0.37	U	0.44	U	0.39	U	0.37	U	0.4	U	0.38	U
3,3'-Dichlorobenzidine	91-94-1			mg/kg	0.18	U	0.18	U	0.18	U	0.17	U	0.17	U	0.2	U	0.18	U	0.17	U	0.18	U	0.18	U
3-Methylphenol/4-Methylphenol	08-39-4/106-44	100	0.33	mg/kg	0.27	U	0.26	U	0.26	U	0.25	U	0.25	U	0.29	U	0.26	U	0.24	U	0.27	U	0.25	U
3-Nitroaniline	99-09-2			mg/kg	0.18	U	0.18	U	0.18	U	0.17	U	0.17	U	0.2	U	0.18	U	0.17	U	0.18	U	0.18	U
4,6-Dinitro-o-cresol	534-52-1			mg/kg	0.48	U	0.46	U	0.47	U	0.44	U	0.45	U	0.53	U	0.47	U	0.44	U	0.48	U	0.46	U
4-Bromophenyl phenyl ether	101-55-3			mg/kg	0.18	U	0.18	U	0.18	U	0.17	U	0.17	U	0.2	U	0.18	U	0.17	U	0.18	U	0.18	U
4-Chloroaniline	106-47-8			mg/kg	0.18	U	0.18	U	0.18	U	0.17	U	0.17	U	0.2	U	0.18	U	0.17	U	0.18	U	0.18	U
4-Chlorophenyl phenyl ether	7005-72-3			mg/kg	0.18	U	0.18	U	0.18	U	0.17	U	0.17	U	0.2	U	0.18	U	0.17	U	0.18	U	0.18	U
4-Nitroaniline	100-01-6			mg/kg	0.18	U	0.18	U	0.18	U	0.17	U	0.17	U	0.2	U	0.18	U	0.17	U	0.18	U	0.18	U
4-Nitrophenol	100-02-7			mg/kg	0.26	U	0.25	U	0.25	U	0.24	U	0.24	U	0.28	U	0.26	U	0.24	U	0.26	U	0.24	U
Acenaphthene	83-32-9	100	20	mg/kg	0.15	U	0.14	U	0.14	U	0.14	U	0.14	U	0.16	U	0.14	U	0.14	U	0.15	U	0.14	U
Acenaphthylene	208-96-8	100	100	mg/kg	0.15	U	0.14	U	0.14	U	0.14	U	0.14	U	0.16	U	0.034	J	0.14	U	0.15	U	0.14	U
Acetophenone	98-86-2			mg/kg	0.18	U	0.18	U	0.18	U	0.17	U	0.17	U	0.2	U	0.18	U	0.17	U	0.18	U	0.18	U
Anthracene	120-12-7	100	100	mg/kg	0.11	U	0.11	U	0.11	U	0.1	U	0.1	U	0.12	U	0.04	J	0.04	J	0.11	U	0.1	U
Benzo(a)anthracene	56-55-3	1	1	mg/kg	0.11	U	0.03	J	0.02	J	0.11		0.1	U	0.029	J	0.18		0.12		0.11	U	0.045	J
Benzo(a)pyrene	50-32-8	1	1	mg/kg	0.15	U	0.14	U	0.14	U	0.16		0.14	U	0.16	U	0.18		0.13	J	0.15	U	0.056	J
Benzo(b)fluoranthene	205-99-2	1	1	mg/kg	0.11	U	0.046	J	0.11	U	0.18		0.1	U	0.036	J	0.25		0.15		0.11	U	0.073	J
Benzo(ghi)perylene	191-24-2	100	100	mg/kg	0.15	U	0.022	J	0.14	U	0.12	J	0.14	U	0.16	U	0.13	J	0.07/					

Table 4
Soil Analytical Results Summary Table for Semi-Volatile Organic Compounds
2019 Limited Site Investigation

SAMPLE LOCATION	CasNum	RRSCO	UUSCO	Units	Lot 116				Lot 8				Lot 9				Lot 10				Lot 138		Lot 111	
SAMPLE ID					SB-1		SB-101		SB-2		SB-102		SB-3		SB-103		SB-4		SB-104		SB-5		SB-105	
SAMPLING DATE					4/26/2019		7/10/2019		4/26/2019		7/10/2019		4/26/2019		7/10/2019		4/26/2019		7/10/2019		4/26/2019		7/10/2019	
LAB SAMPLE ID					L1917453-01		L1930261-01		L1917453-02		L1930261-02		L1917453-03		L1930261-03		L1917453-04		L1930261-04		L1917453-05		L1930261-05	
SAMPLE TYPE					SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
					Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
Dimethyl phthalate	131-11-3			mg/kg	0.18	U	0.18	U	0.18	U	0.17	U	0.17	U	0.2	U	0.18	U	0.17	U	0.18	U	0.18	U
Fluoranthene	206-44-0	100	100	mg/kg	0.11	U	0.043	J	0.025	J	0.17		0.1	U	0.036	J	0.25		0.23		0.11	U	0.091	J
Fluorene	86-73-7	100	30	mg/kg	0.18	U	0.18	U	0.18	U	0.17	U	0.17	U	0.2	U	0.18	U	0.018	J	0.18	U	0.18	U
Hexachlorobenzene	118-74-1	1.2	0.33	mg/kg	0.11	U	0.11	U	0.11	U	0.1	U	0.1	U	0.12	U	0.11	U	0.1	U	0.11	U	0.1	U
Hexachlorobutadiene	87-68-3			mg/kg	0.18	U	0.18	U	0.18	U	0.17	U	0.17	U	0.2	U	0.18	U	0.17	U	0.18	U	0.18	U
Hexachlorocyclopentadiene	77-47-4			mg/kg	0.53	U	0.51	U	0.51	U	0.49	U	0.5	U	0.58	U	0.52	U	0.49	U	0.53	U	0.5	U
Hexachloroethane	67-72-1			mg/kg	0.15	U	0.14	U	0.14	U	0.14	U	0.14	U	0.16	U	0.14	U	0.14	U	0.15	U	0.14	U
Indeno(1,2,3-cd)pyrene	193-39-5	0.5	0.5	mg/kg	0.15	U	0.14	U	0.14	U	0.11	J	0.14	U	0.16	U	0.13	J	0.08	J	0.15	U	0.046	J
Isophorone	78-59-1			mg/kg	0.17	U	0.16	U	0.16	U	0.15	U	0.16	U	0.18	U	0.16	U	0.15	U	0.17	U	0.16	U
n-Nitrosodi-n-propylamine	621-64-7			mg/kg	0.18	U	0.18	U	0.18	U	0.17	U	0.17	U	0.2	U	0.18	U	0.17	U	0.18	U	0.18	U
Naphthalene	91-20-3	100	12	mg/kg	0.18	U	0.18	U	0.18	U	0.17	U	0.17	U	0.2	U	0.18	U	0.17	U	0.18	U	0.021	J
NDPA/DPA	86-30-6			mg/kg	0.15	U	0.14	U	0.14	U	0.14	U	0.14	U	0.16	U	0.14	U	0.14	U	0.15	U	0.14	U
Nitrobenzene	98-95-3			mg/kg	0.17	U	0.16	U	0.16	U	0.15	U	0.16	U	0.18	U	0.16	U	0.15	U	0.17	U	0.16	U
p-Chloro-m-cresol	59-50-7			mg/kg	0.18	U	0.18	U	0.18	U	0.17	U	0.17	U	0.2	U	0.18	U	0.17	U	0.18	U	0.18	U
Pentachlorophenol	87-86-5	6.7	0.8	mg/kg	0.15	U	0.14	U	0.14	U	0.14	U	0.14	U	0.16	U	0.14	U	0.14	U	0.15	U	0.14	U
Phenanthrene	85-01-8	100	100	mg/kg	0.11	U	0.11	U	0.11	U	0.062	J	0.1	U	0.12	U	0.088	J	0.14		0.11	U	0.06	J
Phenol	108-95-2	100	0.33	mg/kg	0.18	U	0.18	U	0.18	U	0.17	U	0.17	U	0.2	U	0.18	U	0.17	U	0.18	U	0.18	U
Pyrene	129-00-0	100	100	mg/kg	0.11	U	0.041	J	0.023	J	0.16		0.021	J	0.033	J	0.24		0.18		0.11	U	0.073	J

UUSCO: New York NYCRR Part 375 New York Unrestricted use, effective
RRSCO: New York NYCRR Part 375 Restricted Residential Criteria,
Denotes Exceedances to UUSCO
Denotes Exceedances to UUSCO and RRSCO
Denotes RL in exceedance to UUSCO

Qualifier Notes:
U - Not detected at the reported detection limit for the sample.
J -- Estimated Concentration
ND --Not detected

Table 5
Soil Analytical Results Summary Table for Volatile Organic Compounds
2019 Limited Site Investigation

SAMPLE LOCATION	CasNum	RRSCO	UUSCO	Units	Lot 116				Lot 8				Lot 9				Lot 10				Lot 138		Lot 111	
SAMPLE ID					SB-1		SB-101		SB-2		SB-102		SB-3		SB-103		SB-4		SB-104		SB-5		SB-105	
SAMPLING DATE					4/26/2019		7/10/2019		4/26/2019		7/10/2019		4/26/2019		7/10/2019		4/26/2019		7/10/2019		4/26/2019		7/10/2019	
LAB SAMPLE ID					L1917453-01		L1930261-01		L1917453-02		L1930261-02		L1917453-03		L1930261-03		L1917453-04		L1930261-04		L1917453-05		L1930261-05	
SAMPLE TYPE					SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
					Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual		
Volatile Organics by EPA 5035																								
1,1,1,2-Tetrachloroethane	630-20-6			mg/kg	0.00043	U	0.027	U	0.00049	U	0.029	U	0.00051	U	0.00057	U	0.00063	U	0.00055	U	0.00048	U		
1,1,1-Trichloroethane	71-55-6	100	0.68	mg/kg	0.00043	U	0.027	U	0.00049	U	0.029	U	0.00051	U	0.00057	U	0.00063	U	0.00055	U	0.00048	U		
1,1,2,2-Tetrachloroethane	79-34-5			mg/kg	0.00043	U	0.027	U	0.00049	U	0.029	U	0.00051	U	0.00057	U	0.00063	U	0.00055	U	0.00048	U		
1,1,2-Trichloroethane	79-00-5			mg/kg	0.00086	U	0.055	U	0.00099	U	0.059	U	0.001	U	0.0011	U	0.0012	U	0.0011	U	0.00097	U		
1,1-Dichloroethane	75-34-3	26	0.27	mg/kg	0.00086	U	0.055	U	0.00099	U	0.059	U	0.001	U	0.0011	U	0.0012	U	0.0011	U	0.00097	U		
1,1-Dichloroethene	75-35-4	100	0.33	mg/kg	0.00086	U	0.055	U	0.00099	U	0.059	U	0.001	U	0.0011	U	0.0012	U	0.0011	U	0.00097	U		
1,1-Dichloropropene	563-58-6			mg/kg	0.00043	U	0.027	U	0.00049	U	0.029	U	0.00051	U	0.00057	U	0.00063	U	0.00055	U	0.00048	U		
1,2,3-Trichlorobenzene	87-61-6			mg/kg	0.0017	U	0.11	U	0.002	U	0.12	U	0.002	U	0.0023	U	0.0025	U	0.0022	U	0.0019	U		
1,2,3-Trichloropropane	96-18-4			mg/kg	0.0017	U	0.11	U	0.002	U	0.12	U	0.002	U	0.0023	U	0.0025	U	0.0022	U	0.0019	U		
1,2,4,5-Tetramethylbenzene	95-93-2			mg/kg	0.0017	U	0.11	U	0.002	U	0.12	U	0.002	U	0.0023	U	0.0025	U	0.0022	U	0.0019	U		
1,2,4-Trichlorobenzene	120-82-1			mg/kg	0.0017	U	0.11	U	0.002	U	0.12	U	0.002	U	0.0023	U	0.0025	U	0.0022	U	0.0019	U		
1,2,4-Trimethylbenzene	95-63-6	52	3.6	mg/kg	0.0017	U	0.11	U	0.002	U	0.026	J	0.002	U	0.0023	U	0.0019	J	0.0022	U	0.0019	U		
1,2-Dibromo-3-chloropropane	96-12-8			mg/kg	0.0026	U	0.16	U	0.003	U	0.18	U	0.003	U	0.0034	U	0.0038	U	0.0033	U	0.0029	U		
1,2-Dibromoethane	106-93-4			mg/kg	0.00086	U	0.055	U	0.00099	U	0.059	U	0.001	U	0.0011	U	0.0012	U	0.0011	U	0.00097	U		
1,2-Dichlorobenzene	95-50-1	100	1.1	mg/kg	0.0017	U	0.11	U	0.002	U	0.12	U	0.002	U	0.0023	U	0.0025	U	0.0022	U	0.0019	U		
1,2-Dichloroethane	107-06-2	3.1	0.02	mg/kg	0.00086	U	0.055	U	0.00099	U	0.059	U	0.001	U	0.0011	U	0.0012	U	0.0011	U	0.00097	U		
1,2-Dichloroethene, Total	540-59-0			mg/kg	0.00086	U	0.055	U	0.00099	U	0.059	U	0.001	U	0.0011	U	0.0012	U	0.0011	U	0.00097	U		
1,2-Dichloropropane	78-87-5			mg/kg	0.00086	U	0.055	U	0.00099	U	0.059	U	0.001	U	0.0011	U	0.0012	U	0.0011	U	0.00097	U		
1,3,5-Trimethylbenzene	108-67-8	52	8.4	mg/kg	0.0017	U	0.11	U	0.002	U	0.12	U	0.002	U	0.0023	U	0.00051	J	0.0022	U	0.0019	U		
1,3-Dichlorobenzene	541-73-1	49	2.4	mg/kg	0.0017	U	0.11	U	0.002	U	0.12	U	0.002	U	0.0023	U	0.0025	U	0.0022	U	0.0019	U		
1,3-Dichloropropane	142-28-9			mg/kg	0.0017	U	0.11	U	0.002	U	0.12	U	0.002	U	0.0023	U	0.0025	U	0.0022	U	0.0019	U		
1,3-Dichloropropene, Total	542-75-6			mg/kg	0.00043	U	0.027	U	0.00049	U	0.029	U	0.00051	U	0.00057	U	0.00063	U	0.00055	U	0.00048	U		
1,4-Dichlorobenzene	106-46-7	13	1.8	mg/kg	0.0017	U	0.11	U	0.002	U	0.12	U	0.002	U	0.0023	U	0.0025	U	0.0022	U	0.0019	U		
1,4-Dioxane	123-91-1	13	0.1	mg/kg	0.068	U	4.4	U	0.079	U	4.7	U	0.081	U	0.092	U	0.1	U	0.088	U	0.077	U		
2,2-Dichloropropane	594-20-7			mg/kg	0.0017	U	0.11	U	0.002	U	0.12	U	0.002	U	0.0023	U	0.0025	U	0.0022	U	0.0019	U		
2-Butanone	78-93-3	100	0.12	mg/kg	0.0071	J	0.55	U	0.0031	J	0.59	U	0.01	U	0.011	U	0.012	U	0.011	U	0.0097	U		
2-Hexanone	591-78-6			mg/kg	0.0086	U	0.55	U	0.0099	U	0.59	U	0.01	U	0.011	U	0.012	U	0.011	U	0.0097	U		
4-Methyl-2-pentanone	108-10-1			mg/kg	0.0086	U	0.55	U	0.0099	U	0.59	U	0.01	U	0.011	U	0.012	U	0.011	U	0.0097	U		
Acetone	67-64-1	100	0.05	mg/kg	0.077		0.55	U	0.046		0.59	U	0.042		0.012		0.23		0.018		0.014			
Acrylonitrile	107-13-1			mg/kg	0.0034	U	0.22	U	0.0039	U	0.24	U	0.0041	U	0.0046	U	0.005	U	0.0044	U	0.0039	U		
Benzene	71-43-2	4.8	0.06	mg/kg	0.00047		0.02	J	0.00049	U	0.029	U	0.00017	J	0.00057	U	0.00063	U	0.00055	U	0.00048	U		
Bromobenzene	108-86-1			mg/kg	0.0017	U	0.11	U	0.002	U	0.12	U	0.002	U	0.0023	U	0.0025	U	0.0022	U	0.0019	U		
Bromochloromethane	74-97-5			mg/kg	0.0017	U	0.11	U	0.002	U	0.12	U	0.002	U	0.0023	U	0.0025	U	0.0022	U	0.0019	U		
Bromodichloromethane	75-27-4			mg/kg	0.00043	U	0.027	U	0.00049	U	0.029	U	0.00051	U	0.00057	U	0.00063	U	0.00055	U	0.00048	U		
Bromoform	75-25-2			mg/kg	0.0034	U	0.22	U	0.0039	U	0.24	U	0.0041	U	0.0046	U	0.005	U	0.0044	U	0.0039	U		
Bromomethane	74-83-9			mg/kg	0.0017	U	0.11	U	0.002	U	0.12	U	0.002	U	0.0023	U	0.0025	U	0.0022	U	0.0019	U		
Carbon disulfide	75-15-0			mg/kg	0.0086	U	0.55	U	0.0099	U	0.59	U	0.01	U	0.011	U	0.012	U	0.011	U	0.0097	U		
Carbon tetrachloride	56-23-5	2.4	0.76	mg/kg	0.00086	U	0.055	U	0.00099	U	0.059	U	0.001	U	0.0011	U	0.0012	U	0.0011					

Table 5
Soil Analytical Results Summary Table for Volatile Organic Compounds
2019 Limited Site Investigation

SAMPLE LOCATION	CasNum	RRSCO	UUSCO	Units	Lot 116				Lot 8				Lot 9				Lot 10				Lot 138		Lot 111	
SAMPLE ID					SB-1		SB-101		SB-2		SB-102		SB-3		SB-103		SB-4		SB-104		SB-5		SB-105	
SAMPLING DATE					4/26/2019		7/10/2019		4/26/2019		7/10/2019		4/26/2019		7/10/2019		4/26/2019		7/10/2019		4/26/2019		7/10/2019	
LAB SAMPLE ID					L1917453-01		L1930261-01		L1917453-02		L1930261-02		L1917453-03		L1930261-03		L1917453-04		L1930261-04		L1917453-05		L1930261-05	
SAMPLE TYPE					SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
					Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
Volatile Organics by EPA 5035																								
o-Xylene	95-47-6			mg/kg	0.00086	U	0.055	U	0.00099	U	0.49		0.001	U	0.0011	U	0.0012	U	0.0029		0.00097	U	0.00097	U
p-Chlorotoluene	106-43-4			mg/kg	0.0017	U	0.11	U	0.002	U	0.12	U	0.002	U	0.0023	U	0.0025	U	0.0022	U	0.0019	U	0.0019	U
p-Diethylbenzene	105-05-5			mg/kg	0.0017	U	0.11	U	0.002	U	0.12	U	0.002	U	0.0023	U	0.0025	U	0.0022	U	0.0019	U	0.0019	U
p-Ethyltoluene	622-96-8			mg/kg	0.0017	U	0.11	U	0.002	U	0.023	J	0.002	U	0.0023	U	0.0012	J	0.0022	U	0.0019	U	0.0019	U
p-Isopropyltoluene	99-87-6			mg/kg	0.00086	U	0.028	J	0.00099	U	0.059	U	0.001	U	0.0011	U	0.0012	U	0.0011	U	0.00097	U	0.00097	U
p/m-Xylene	179601-23-1			mg/kg	0.0017	U	0.11	U	0.002	U	1.4		0.002	U	0.0023	U	0.0025	U	0.0073		0.0019	U	0.0019	U
sec-Butylbenzene	135-98-8	100	11	mg/kg	0.00086	U	0.055	U	0.00099	U	0.059	U	0.001	U	0.0011	U	0.0012	U	0.0011	U	0.00097	U	0.00097	U
Styrene	100-42-5			mg/kg	0.00086	U	0.055	U	0.00099	U	0.059	U	0.001	U	0.0011	U	0.0012	U	0.0011	U	0.00097	U	0.00097	U
tert-Butylbenzene	98-06-6	100	5.9	mg/kg	0.0017	U	0.11	U	0.002	U	0.12	U	0.002	U	0.0023	U	0.0025	U	0.0022	U	0.0019	U	0.0019	U
Tetrachloroethene	127-18-4	19	1.3	mg/kg	0.00043	U	0.027	U	0.00049	U	0.029	U	0.00051	U	0.00057	U	0.00063	U	0.00055	U	0.00048	U	0.00048	U
Toluene	108-88-3	100	0.7	mg/kg	0.00076	J	0.081		0.00061	J	0.059	U	0.0014		0.0011	U	0.00081	J	0.0011	U	0.00052	J	0.00097	U
trans-1,2-Dichloroethene	156-60-5	100	0.19	mg/kg	0.0013	U	0.082	U	0.0015	U	0.088	U	0.0015	U	0.0017	U	0.0019	U	0.0016	U	0.0014	U	0.0014	U
trans-1,3-Dichloropropene	10061-02-6			mg/kg	0.00086	U	0.055	U	0.00099	U	0.059	U	0.001	U	0.0011	U	0.0012	U	0.0011	U	0.00097	U	0.00097	U
trans-1,4-Dichloro-2-butene	110-57-6			mg/kg	0.0043	U	0.27	U	0.0049	U	0.29	U	0.0051	U	0.0057	U	0.0063	U	0.0055	U	0.0048	U	0.0048	U
Trichloroethene	79-01-6	21	0.47	mg/kg	0.00043	U	0.027	U	0.00049	U	0.029	U	0.00051	U	0.00057	U	0.00063	U	0.00055	U	0.00048	U	0.00048	U
Trichlorofluoromethane	75-69-4			mg/kg	0.0034	U	0.22	U	0.0039	U	0.24	U	0.0041	U	0.0046	U	0.005	U	0.0044	U	0.0039	U	0.0039	U
Vinyl acetate	108-05-4			mg/kg	0.0086	U	0.55	U	0.0099	U	0.59	U	0.01	U	0.011	U	0.012	U	0.011	U	0.0097	U	0.0097	U
Vinyl chloride	75-01-4	0.9	0.02	mg/kg	0.00086	U	0.055	U	0.00099	U	0.059	U	0.001	U	0.0011	U	0.0012	U	0.0011	U	0.00097	U	0.00097	U
Xylenes, Total	1330-20-7	100	0.26	mg/kg	0.00086	U	0.055	U	0.00099	U	1.9		0.001	U	0.0011	U	0.0012	U	0.01		0.00097	U	0.00097	U

UUSCO: New York NYCRR Part 375 New York Unrestricted use, effective
RRSCO: New York NYCRR Part 375 Restricted Residential Criteria,

Denotes Exceedances to UUSCO
Denotes Exceedances to UUSCO and RRSCO
Denotes RL in exceedance to UUSCO

Qualifier Notes:
U - Not detected at the reported detection limit for the sample.
J -- Estimated Concentration
ND --Not detected

Table 6
Soil Analytical Results Summary Table for Metals Compounds
2019 Limited Site Investigation

SAMPLE LOCATION	CasNum	RRSCO	UUSCO	Units	Lot 116				Lot 8				Lot 9				Lot 10				Lot 138		Lot 111	
SAMPLE ID					SB-1		SB-101		SB-2		SB-102		SB-3		SB-103		SB-4		SB-104		SB-5		SB-105	
SAMPLING DATE					4/26/2019		7/10/2019		4/26/2019		7/10/2019		4/26/2019		7/10/2019		4/26/2019		7/10/2019		4/26/2019		7/10/2019	
LAB SAMPLE ID					L1917453-01		L1930261-01		L1917453-02		L1930261-02		L1917453-03		L1930261-03		L1917453-04		L1930261-04		L1917453-05		L1930261-05	
SAMPLE TYPE					SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
					Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual		
Total Metals																								
Aluminum, Total	7429-90-5			mg/kg	1600		2200		2960		3700		2420		7850		6750		2680		1250		1890	
Antimony, Total	7440-36-0			mg/kg	4.38	U	0.448	J	0.42	J	1.36	J	0.446	J	0.51	J	0.932	J	0.376	J	4.36	U	4.27	U
Arsenic, Total	7440-38-2	16	13	mg/kg	1.01		1.52		1.66		3.46		1.78		3.42		3.9		1.84		0.523	J	1.27	
Barium, Total	7440-39-3	400	350	mg/kg	11.7		24.7		17.7		88.6		14.8		38.4		62		22		5.99		14.9	
Beryllium, Total	7440-41-7	72	7.2	mg/kg	0.088	J	0.091	J	0.126	J	0.167	J	0.135	J	0.308	J	0.237	J	0.155	J	0.079	J	0.102	J
Cadmium, Total	7440-43-9	4.3	2.5	mg/kg	0.123	J	0.357	J	0.168	J	1.05		0.177	J	0.664	J	0.475	J	0.482	J	0.872	U	0.273	J
Calcium, Total	7440-70-2			mg/kg	246		526		1050		9700		529		1780		12700		3740		41.8		13100	
Chromium, Total	7440-47-3			mg/kg	17.6		3.53		12.3		7.43		24.8		7.86		13		6.4		2.19		31.9	
Cobalt, Total	7440-48-4			mg/kg	3.27		1.81		2.78		3.05		2.55		7.64		3.83		2.8		0.759	J	1.86	
Copper, Total	7440-50-8	270	50	mg/kg	4.5		6.22		5.93		41.2		6.01		10.4		23		6.78		1.62		5.81	
Iron, Total	7439-89-6			mg/kg	5730		3850		8310		7430		8930		11500		10600		7900		2610		4320	
Lead, Total	7439-92-1	400	63	mg/kg	6.99		89.9		9.55		150		5.21		78.4		142		37.3		0.846	J	9.22	
Magnesium, Total	7439-95-4			mg/kg	445		441		1050		2130		891		1460		4790		1240		187		1140	
Manganese, Total	7439-96-5	2000	1600	mg/kg	135		70.7		152		119		116		156		172		181		49.2		81.9	
Mercury, Total	7439-97-6	0.81	0.18	mg/kg	0.07	U	0.069	U	0.069	U	0.09		0.066	U	0.077	U	0.177		0.066	U	0.071	U	0.068	U
Molybdenum, Total	7439-98-7			mg/kg	3.1	J	NS		1.93	J	NS		5.31		NS		0.542	J	NS		0.235	J	NS	
Nickel, Total	7440-02-0	310	30	mg/kg	4.07		3.79		6.14		8.47		7.32		10.5		8.42		5.39		2.03	J	21.5	
Potassium, Total	7440-09-7			mg/kg	303		142	J	690		279		539		318		474		238		129	J	312	
Selenium, Total	7782-49-2	180	3.9	mg/kg	1.75	U	0.249	J	1.68	U	0.343	J	1.68	U	0.443	J	0.424	J	0.368	J	1.74	U	1.71	U
Silver, Total	7440-22-4	180	2	mg/kg	0.877	U	0.83	U	0.841	U	0.622	J	0.841	U	0.962	U	0.848	U	0.817	U	0.872	U	0.854	U
Sodium, Total	7440-23-5			mg/kg	23.3	J	15.8	J	32.8	J	61.8	J	41.1	J	47.5	J	90	J	21.9	J	62.4	J	93	J
Thallium, Total	7440-28-0			mg/kg	1.75	U	1.66	U	1.68	U	1.6	U	1.68	U	1.92	U	1.7	U	1.63	U	1.74	U	1.71	U
Titanium, Total	7440-32-6				95.2		NS		182		NS		161		NS		157		NS		53.3		NS	
Vanadium, Total	7440-62-2			mg/kg	4.78		5.25		7.76		13.8		8.79		14		27.4		9.34		2.76		5.54	
Zinc, Total	7440-66-6	10000	109	mg/kg	11.8		48.7		15.1		134		12.2		66.6		84		26		4.99		15.5	

UUSCO: New York NYCRR Part 375 New York Unrestricted use, effective

RRSCO: New York NYCRR Part 375 Restricted Residential Criteria,

Denotes Exceedances to UUSCO

Denotes Exceedances to UUSCO and RRSCO

Denotes RL in exceedance to UUSCO

Qualifier Notes:

U - Not detected at the reported detection limit for the sample.

J -- Estimated Concentration

ND --Not detected

Table 7
Soil Analytical Results Summary Table for Emerging Contaminants
2019 Limited Site Investigation

SAMPLE LOCATION		CAS	* RV IS/RS	Units	Lot 116				Lot 8				Lot 9				Lot 10				Lot 138				Lot 111																				
SAMPLE ID:	SB-1 17-19 FT BGS				SB-101				SB-2 16-18 FT BGS				SB-102				SB-3 11-13 FT BGS				SB-103				SB-4 0-5 FT BGS				SB-104				SB-5 19-20 FT BGS				SB-105								
COLLECTION DATE:	4/26/2019				7/10/2019				4/26/2019				7/10/2019				4/26/2019				7/10/2019				4/26/2019				7/10/2019				4/26/2019				7/10/2019								
SAMPLE ID:	L1917453-01				L1930261-01				L1917453-02				L1930261-02				L1917453-03				L1930261-03				L1917453-04				L1930261-04				L1917453-05				L1930261-05								
SAMPLE MATRIX:	SOIL				SOIL				SOIL				SOIL				SOIL				SOIL				SOIL				SOIL				SOIL				SOIL				SOIL				
ANALYTE	CAS				Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	
Volatile Organics by EPA 5035																																													
1,4-Dioxane	123-91-1			(ug/kg)	ND		68	30	ND		4400	1900	ND		79	35	ND		4700	2100	ND		81	36	ND		92	40	ND		100	44	ND		88	38	ND		77	34	ND		78	34	
Semi-Volatile Organics byGC/MS																																													
1,4-Dioxane	123-91-1			(ug/kg)					ND		27	8.2					ND		26	7.9					ND		30	9.3					ND		26	7.8			ND		26	8.1			
Perfluorinated Alkyl Acids by Isotope Dilution																																													
Perfluorobutanoic Acid (PFBA)	375-22-4			(ug/kg)					ND		0.967	0.022			ND		0.952	0.022			ND		1.17	0.027			ND		0.897	0.02			ND		0.897	0.02			ND		1.04	0.024			
Perfluoropentanoic Acid (PFPeA)	2706-90-3			(ug/kg)					ND		0.967	0.045			0.118	J	0.952	0.044			ND		1.17	0.054			ND		0.897	0.041			ND		0.897	0.041			ND		1.04	0.048			
Perfluorobutanesulfonic Acid (PFBS)	375-73-5			(ug/kg)					ND		0.967	0.038			ND		0.952	0.037			ND		1.17	0.046			ND		0.897	0.035			ND		0.897	0.035			ND		1.04	0.041			
Perfluorohexanoic Acid (PFHxA)	307-24-4			(ug/kg)					ND		0.967	0.051			0.07	J	0.952	0.05			ND		1.17	0.061			ND		0.897	0.047			ND		0.897	0.047			ND		1.04	0.055			
Perfluoroheptanoic Acid (PFHpA)	375-85-9			(ug/kg)					ND		0.967	0.044			0.063	J	0.952	0.043			ND		1.17	0.053			ND		0.897	0.041			ND		0.897	0.041			ND		1.04	0.047			
Perfluorohexanesulfonic Acid (PFHxS)	355-46-4			(ug/kg)					ND		0.967	0.059			ND		0.952	0.058			ND		1.17	0.071			ND		0.897	0.054			ND		0.897	0.054			ND		1.04	0.063			
Perfluorooctanoic Acid (PFOA)	335-67-1	1*		(ug/kg)					ND		0.967	0.041			0.223	J	0.952	0.04			0.121	J	1.17	0.049			0.088	J	0.897	0.038			0.066	J	1.04	0.044			0.066	J	1.04	0.044			
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	27619-97-2			(ug/kg)					ND		0.967	0.174			ND		0.952	0.171			ND		1.17	0.21			ND		0.897	0.161			ND		0.897	0.161			ND		1.04	0.186			
Perfluoroheptanesulfonic Acid (PFHpS)	375-92-8			(ug/kg)					ND		0.967	0.132			ND		0.952	0.13			ND		1.17	0.159			ND		0.897	0.122			ND		0.897	0.122			ND		1.04	0.142			
Perfluorononanoic Acid (PFNA)	375-95-1			(ug/kg)					ND		0.967	0.073			0.15	J	0.952	0.071			ND		1.17	0.088			ND		0.897	0.067			ND		0.897	0.067			ND		1.04	0.078			
Perfluorooctanesulfonic Acid (PFOS)	1763-23-1	1*		(ug/kg)					0.318	J	0.967	0.126			4.63		0.952	0.124			0.238	J	1.17	0.152			0.173	J	0.897	0.117			ND		0.897	0.117			ND		1.04	0.135			
Perfluorodecanoic Acid (PFDA)	335-76-2			(ug/kg)					ND		0.967	0.065			0.474	J	0.952	0.064			ND		1.17	0.078			ND		0.897	0.06			ND		0.897	0.06			ND		1.04	0.07			
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	39108-34-4			(ug/kg)					ND		0.967	0.278			ND		0.952	0.273			ND		1.17	0.335			ND		0.897	0.258			ND		0.897	0.258			ND		1.04	0.298			
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	2355-31-9			(ug/kg)					ND		0.967	0.195			ND		0.952	0.192			ND		1.17	0.235			ND		0.897	0.181			ND		0.897	0.181			ND		1.04	0.209			
Perfluoroundecanoic Acid (PFUnA)	2058-94-8			(ug/kg)					ND		0.967	0.045			0.153	J	0.952	0.045			ND		1.17	0.055			ND		0.897	0.042			ND		0.897	0.042			ND		1.04	0.049			
Perfluorodecanesulfonic Acid (PFDS)	335-77-3			(ug/kg)					ND		0.967	0.148			3.57		0.952	0.146			ND		1.17	0.179			ND		0.897	0.137			ND		0.897	0.137			ND		1.04	0.159			
Perfluorooctanesulfonamide (FOSA)	754-91-6			(ug/kg)					ND		0.967	0.095			ND		0.952	0.093			ND		1.17	0.114			ND		0.897	0.088			ND		0.897	0.088			ND		1.04	0.102			
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	2991-50-6			(ug/kg)					0.118	J	0.967	0.082			0.393	J	0.952	0.08			0.117	J	1.17	0.099			ND		0.897	0.076			ND		0.897	0.076			ND		1.04	0.088			
Perfluorododecanoic Acid (PFDoA)	307-55-1			(ug/kg)					ND		0.967	0.068			0.296	J	0.952	0.067			ND		1.17	0.082			ND		0.897	0.063			ND		0.897	0.063			ND		1.04	0.073			
Perfluorotridecanoic Acid (PFTriDA)	72629-94-8			(ug/kg)					ND		0.967	0.198			ND		0.952	0.195			ND		1.17	0.239			ND		0.897	0.183			ND		0.897	0.183			ND		1.04	0.212			
Perfluorotetradecanoic Acid (PFTA)	376-06-7			(ug/kg)					ND		0.967	0.052			0.128	J	0.952	0.051			ND		1.17	0.063			ND		0.897	0.048			ND		0.897	0.048			ND		1.04	0.056			
PFOA/PFOS, Total				(ug/kg)					0.318	J	0.967	0.041			4.85	J	0.952	0.04			0.359	J	1.17	0.049			0.261	J	0.897	0.038			0.066	J	1.04	0.044			0.066	J	1.04	0.044			

*RV IS/RS: NYSDEC Recommended Values for Acceptance of Imported Soil/Reuse Soil. NYSDEC June 2019 Fact Sheet Emerging Contaminants

Denotes Sample result in exceedance of RV IS/RS

Denotes RL in exceedance of RV IS/RS

Qualifier Notes:

U - Not detected at the reported detection limit for the sample.

J -- Estimated Concentration

ND --Not detected

NS -- Not sampled



**Carman Place Site
157 Main Street, Village of Hempstead, NY
Supplemental Site Investigation**

Appendices

Appendix A	Previous Environmental Site Investigations
Appendix B	Soil Boring Logs
Appendix C	Laboratory Analytical Reports
Appendix D	Emerging Contaminants Comparison Criteria Fact Sheets



Carman Place Site
157 Main Street, Village of Hempstead, NY
Supplemental Site Investigation

Appendix A

Previous Environmental Site Investigations

Limited Phase II ESI – November 5, 2015
Limited Phase II ESI – December 3, 2015
Limited Phase II ESI – September 15, 2016

Limited Phase II
Environmental Site Assessment

Lau Property

Hempstead, New York

NP&V Job# 15202

November 5, 2015

**Limited Phase II
Environmental Site Assessment**

Lau Property

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**Limited Phase II
Environmental Site Assessment**

Lau Property

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Limited Phase II
Environmental Site Assessment
Lau Property

1.0 INTRODUCTION AND PURPOSE

Nelson, Pope & Voorhis, LLC (NP&V) has been contracted to prepare a Limited Phase II Environmental Site Assessment for the subject property. This report is intended to address recognized environmental conditions that were identified in a Phase I Environmental Site Assessment report prepared by Nelson, Pope & Voorhis, LLC dated October 16, 2015. The Phase I ESA was performed in accordance with the standards detailed by the American Society of Testing and Materials (ASTM) for the Performance of a Phase I Environmental Site Assessment (E 1527). This Limited Phase II ESA was designed to determine what, if any, impact on-site activities have had upon the environmental quality of the subject property.

The subject property is located in the Village of Hempstead, County of Nassau, New York. The property is identified more specifically as Nassau County Tax Number: Section 34, Block 195, Lots 8 through 9, 111, 116 and 131. The ±1.25 acre parcel is located on the southwest corner of Main Street and Bedell Street. The subject property is located within an area developed with residential and commercial uses as well as municipal parking lots.

The subject property is currently utilized for commercial, retail and services purposes. The northern half of the property is used as a parking area for overstock vehicles for a nearby automobile dealership, and the southeastern portion of the property is occupied by a commercial retail strip center. The strip center is occupied by several restaurants, a laundromat, a billiard parlor, a wireless store, a hair salon, a check cashing service center and a vacant store front. The southwestern portion of the property is occupied by an asphalt parking lot associated with the commercial strip center.

The building consists of a one story masonry structure situated on a concrete block foundation that forms a full basement and has a rolled rubber roof. The building exterior is covered with decorative stone, aluminum siding and painted concrete block. The interior of the building consists of painted sheetrock walls and ceilings with stone, vinyl tiled and wood covered floors.

The building is heated by natural gas fired boilers and air conditioning units. A ceiling mounted gas fired Reznor heater was observed in the unit occupied by the laundromat.

No evidence of any storage tanks was observed during the reconnaissance of the subject property. A 1,000 gallon underground storage tank was formerly located in the northwestern portion of the property. According to Mr. Lau (property owner), this tank was removed in 2015 along with several tons of contaminated soil. No drums were observed during the reconnaissance of the subject property.

Several floor drains were observed in the basement of the building; these floor drains discharge directly to the subsurface. In addition, several open grate stormwater drainage features were observed in the paved parking area during the reconnaissance of the subject property.

Based on these findings the Phase I Environmental Site Assessment identified recognized environmental conditions that prompted the performance of this Limited Phase II Environmental Site Assessment. These conditions included:

1. There are two (2) floor drains that discharge directly to the subsurface. Based on observations during the site reconnaissance former discharges may have adversely impacted subsurface soils.
2. The open grate stormwater leaching pools located in the parking areas of the subject property should be sampled to ensure that none of the structures are contaminated

This assessment has been designed and performed by NP&V to address the potential impacts to two (2) on-site floor drains and three (3) stormwater leaching pools. The laboratory analysis was provided by Long Island Analytical Laboratories, Inc.

The protocol used to direct this investigation is based upon the following documents: 1) the Suffolk County Department of Health Services (SCDHS) SOP 9-95 Pumpout and Soil Cleanup Criteria. The following sections detail the subject property and surrounding area characteristics, sampling program, quality assurance protocol, laboratory analysis methodology and laboratory results.

2.0 SAMPLING AND ANALYSIS PROGRAM (SAP)

2.1 HAND AUGER SOIL SAMPLING

The three (3) stormwater leaching pools located in the paved parking area on the west side of the building and the two (2) floor drains located in the basement on the east and west side of the building were sampled using a stainless steel hand auger. The soil samples (LP-1 thru LP-3, FD-1 and FD-2) were collected from the bottom sediment soil of the leaching pools and floor drains. These samples were collected from the top zero to twelve (0-12) inches of the soil and were analyzed based on the New York State Department of Environmental Conservation (NYSDEC) parameters for the presence of volatile and semi-volatile organic compounds and metals as set forth in Part 375. **Figure 1** located at the end of this document provides a location map of the samples collected.

2.2 LABORATORY SAMPLE LOCATION AND FREQUENCY

The soil samples collected from the site were containerized and labeled for identification purposes. The labels were coded to correspond to the location from which the samples were secured. **Table 1** provides an index of how the samples were coded during labeling.

TABLE 1
SAMPLE IDENTIFICATION

SAMPLE LOCATION	SAMPLE ID CODE
Soil sample collected from stormwater leaching pool located in the western portion of the parking area on the west side of the building	LP-1
Soil sample collected from stormwater leaching pool located in the southern portion of the parking area on the west side of the building.	LP-2
Soil sample collected from stormwater leaching pool located in the northern portion of the parking area on the west side of the building.	LP-3
Soil sample collected from the floor drain at the bottom of the stairs on the west side of the building.	FD-1
Soil sample collected from the floor drain at the bottom of the stairs on the east side of the building.	FD-2

3.0 LABORATORY ANALYSIS

3.1 ANALYTICAL TEST METHODS

The soil samples were transported to a New York State Certified Commercial Laboratory for analysis. Selection of the analytical test methods for the presence of volatile and semi-volatile organic compounds and metals based on SCDHS parameters.

3.2 ANALYTICAL RESULTS

The laboratory analysis performed on the three (3) leaching pool and two (2) floor drain samples did not exhibit any elevated concentrations of volatile organic compounds. Several of the analyzed semi-volatile organic compounds and metals exhibited elevated concentrations. **Table 2** provides a comparison of those constituents with elevated concentrations and the regulatory guidance values. The laboratory analysis sheets (NYS ASPA) as prepared by Long Island Analytical Laboratories are presented in **Appendix A** of this document. As depicted in **Table 2**, some of the analyzed constituents exceeded the regulatory guidance values set forth in the NYSDEC Part 375. Since these concentrations exceed the NYSDEC guidance values, it is recommended that LP-1, LP-2, FD-1 and FD-2 be remediated under the auspices of United States Environmental Protection Agency (USEPA) personnel.

TABLE 2
COMPARISON ANALYSIS

Constituents	LP-1	LP-2	LP-3	FD-1	FD-2	6 NYCRR Part 375 Protection of Groundwater
Semi-Volatiles	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Phenol	ND	ND	ND	ND	954	NS
Fluorene	3,000	ND	ND	ND	ND	386,000
Phenanthrene	37,900	ND	ND	1,000	ND	1,000,000
Anthracene	5,730	ND	ND	ND	ND	1,000,000
Fluoranthene	92,300	1,010	ND	2,860	782	1,000,000
Pyrene	67,000	ND	ND	2,160	ND	1,000,000
Benzo(a)anthracene	39,200	ND	ND	1,360	ND	1,000
Chrysene	57,900	ND	ND	3,180	ND	1,000
Benzo(b)fluoranthene	39,600	1,090	ND	4,520	1,050	1,700
Benzo(k)fluoranthene	20,600	ND	ND	2,350	ND	800
Benzo(a)pyrene	28,600	1,010	ND	3,420	788	22,000
Indeno(1,2,3-cd)pyrene	32,400	867	ND	2,840	ND	8,200
Dibenzo(a,h)anthracene	11,600	ND	ND	1,120	ND	1,000,000
Benzo(g,h,i)perylene	35,900	908	ND	3,050	ND	1,000,000
Volatiles	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Methylene Chloride	ND	ND	ND	8.10	ND	50
Chloroform	ND	ND	ND	ND	73.5	370
Toluene	30.8	ND	ND	ND	ND	700
Metals	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Arsenic	2.27	2.88	8.99	4.02	17.2	16
Barium	25.4	27.0	21.8	123	262	820
Cadmium	ND	ND	ND	2.54	36.8	7.5
Chromium	27.4	19.6	15.6	150	67.9	19
Copper	72.9	43.5	68.0	245	1,260	1,720
Lead	79.2	87.4	40.4	163	1,340	450
Manganese	74.0	59.9	130	189	344	2,000
Nickel	12.6	11.6	13.0	19.6	55.9	130
Zinc	289	294	631	704	3,720	2,480
Mercury	0.03	0.10	0.03	0.26	11.7	0.73

ND - Not Detected

NS - No Standard

Bold and highlighted indicates the constituent exceeds the regulatory guidance values

4.0 QUALITY ASSURANCE/QUALITY CONTROL PROCEDURES (QA/QC)

This sampling protocol was conducted in accordance with USEPA accepted sampling procedures for hazardous waste streams (Municipal Research Laboratory, 1980, Sampling and Sampling Procedures for Hazardous Material Waste Streams, USEPA, Cincinnati, Ohio EPA- 600/280-018) and ASTM Material Sampling Procedures. All samples were collected by or under the auspices of USEPA trained personnel having completed the course Sampling of Hazardous Materials, offered by the Office of Emergency and Remedial Response.

Separate QA/QC measures were implemented for each of the instruments used in the Sampling and Analysis Program. Sampling instruments included a stainless steel hand auger and sample vessels.

Prior to arrival on the site and between sample locations, the probes sections were decontaminated by washing with a detergent (alconox/liquinix) and potable water solution with distilled water rinse. The organic vapor analyzer was calibrated prior to sampling using a span gas of known concentration. All sample vessels were "level A" certified decontaminated containers. Samples were placed into vessels consistent with the analytical parameters. After acquisition, samples were preserved in the field. All containerized samples were refrigerated to 4° C during transport.

A sample represents physical evidence; therefore, an essential part of liability reduction is the proper control of gathered evidence. To establish proper control, the following sample identification and chain-of-custody procedures were followed.

Sample Identification

Sample identification was executed by use of a sample tag, logbook and manifest. Documentation provides the following:

1. Project Code
2. Sample Laboratory Number
3. Sample Preservation
4. Instrument Used for Source Soil Grabs
5. Composite Medium Used for Source Soil Grabs
6. Date Sample was Secured from Source Soil
7. Time Sample was Secured from Source Soil
8. Person Who Secured Sample from Source Soil

Chain-of-Custody Procedures

Due to the evidential nature of samples, possession was traceable from the time the samples were collected until they were received by the testing laboratory. A sample was considered under custody if:

It was in a person's possession, or
It was in a person's view, after being in possession, or
It was in a person's possession and they were to lock it up, or
It is in a designated secure area.

When transferring custody, the individuals relinquishing and receiving signed, dated and noted the time on the Chain-of- Custody Form.

Laboratory Custody Procedures

A designated sample custodian accepted custody of the shipped samples and verified that the information on the sample tags matched that on the Chain-of-Custody records. Pertinent information as to shipment, pick-up, courier, etc. was entered in the "remarks" section. The custodian then entered the sample tag data into a bound logbook which was arranged by project code and station number.

The laboratory custodian used the sample tag number or assigned an unique laboratory number to each sample tag and assured that all samples were transferred to the proper analyst or stored in the appropriate source area.

The custodian distributed samples to the appropriate analysts. Laboratory personnel were responsible for the care and custody of samples from the time they were received until the sample was exhausted or returned to the custodian.

All identifying data sheets and laboratory records were retained as part of the permanent site record. Samples received by the laboratory were retained until after analysis and quality assurance checks were completed.

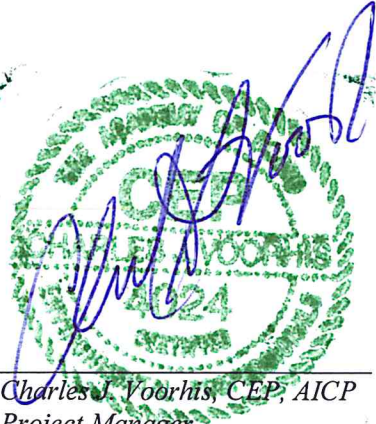
5.0 SUMMARY AND CONCLUSION

This investigation was completed to address issues raised in a prior Phase I ESA prepared by Nelson, Pope & Voorhis, LLC. A sampling and analysis program was designed to determine if the on-site stormwater leaching pools and basement floor drains had been impacted by the prior and existing uses of the subject property. The sampling and analysis plan consisted of soil/sediment quality testing using analytical test methods consistent with expected parameters and agency soil cleanup objectives. The following presents an evaluation of the results of this investigation.

1. Three (3) stormwater leaching pools located in the paved parking area on the west side of the building and two (2) floor drains located in the basement on the east and west sides of the building were sampled and analyzed for the presence of volatile and semi-volatile organic compounds and metals. The analytical results revealed that several of the analyzed semi-volatile and metal constituents exhibited elevated concentrations. Several of the analyzed constituents exceeded the regulatory guidance values set forth in the NYSDEC. Since these concentrations exceed the NYSDEC guidance values, it is recommended that LP-1, LP-2, FD-1 and FD-2 be remediated under the auspices of USEPA personnel.

The subject property has been evaluated consistent with the findings of a Phase I ESA, and in accordance with standard practice for the industry. This Limited Phase II ESA addresses only the specific areas of the site warranting further analysis and can only provide conclusions regarding the subsurface soil quality in those specific areas tested. The Limited Phase II ESA report is limited to the evaluation of on-site conditions at the time of completion of the field sampling program.

11/5/15
Date of Completion


Charles J. Voorhis, CEP, AICP
Project Manager

6.0 REFERENCES

New York State Department of Environmental Conservation (NYSDEC), 1992, Sampling Guidelines and Protocols, Technology Background and Quality Control/Quality Assurance for NYSDEC Spill Response Program, NYSDEC, Albany, New York.

American Society for Testing and Materials (ASTM), June 2011, E1903-11 Standard Practice for Environmental Site Assessments: Phase II Environmental Site Assessment Process, West Conshohocken, Pennsylvania.

New York State Department of Environmental Conservation (NYSDEC), December 2006, 6NYCRR Part 375 Environmental Remediation Programs Subparts 375-1 to 375-4 & 375-6, Division of Environmental Remediation, Albany, New York.

FIGURES



FIGURE 1 LOCATION MAP

Source: NYS Orthophotography, 2013
Scale: 1 inch = 50 feet



**Lau Property
Village of
Hempstead**

Limited Phase II ESA

APPENDICES

APPENDIX A

LABORATORY DATA SHEETS

**LONG
ISLAND
ANALYTICAL
LABORATORIES INC.****"TOMORROWS ANALYTICAL SOLUTIONS TODAY"**Laboratory ReportNYSDOH ELAP# 11693
USEPA# NY01273
CTDOH# PH-0284
AIHA# 164456
NJDEP# NY012
PADEP# 68-2943

LIAL# 5102702

November 03, 2015

Nelson, Pope & Voorhis
Steve McGinn
572 Walt Whitman Road
Melville, NY 11747

Re: Lau Property

Dear Steve McGinn,

Enclosed please find the laboratory Analysis Report(s) for sample(s) received on October 26, 2015. Long Island Analytical laboratories analyzed the samples on November 03, 2015 for the following:

SAMPLE ID	ANALYSIS
LP-1	NYC Part 375 Package
LP-2	NYC Part 375 Package
LP-3	NYC Part 375 Package
FD-1	NYC Part 375 Package
FD-2	NYC Part 375 Package

Samples received at 2.5 ° C

5.L Results may be biased low due to the sample not being collected according to 5035A-L/5035A-H low level specifications.

If you have any questions or require further information, please call at your convenience. Long Island Analytical Laboratories Inc. is a NELAP accredited laboratory. All reported results meet the requirements of the NELAP standards unless noted. Report shall not be reproduced except in full without the written approval of the laboratory. Results related only to items tested. Long Island Analytical Laboratories would like to thank you for the opportunity to be of service to you.

Best Regards,

Long Island Analytical Laboratories, Inc.**Michael Veraldi - Laboratory Director**

Client: Nelson, Pope & Voorhis	Client ID: Lau Property
Date (Time) Collected: 10/26/2015 13:20	Sample ID: LP-1
Date (Time) Received: 10/26/2015 17:53	Laboratory ID: 5102702-01 % Solid:70.80
Matrix: Soil	ELAP: #11693

Volatiles Low Level Analysis

Parameter	CAS No.	LOQ	Result	Units	Flag
1,1,1-Trichloroethane	71-55-6	14.1	<14.1	ug/kg dry	3.A, 5.L
1,1-Dichloroethane	75-34-3	14.1	<14.1	ug/kg dry	3.A, 5.L
1,1-Dichloroethylene	75-35-4	14.1	<14.1	ug/kg dry	3.A, 5.L
1,2,4-Trimethylbenzene	95-63-6	14.1	<14.1	ug/kg dry	3.A, 5.L
1,2-Dichlorobenzene	95-50-1	35.3	<35.3	ug/kg dry	3.A, 5.L
1,2-Dichloroethane	107-06-2	14.1	<14.1	ug/kg dry	3.A, 5.L
1,3,5-Trimethylbenzene	108-67-8	14.1	<14.1	ug/kg dry	3.A, 5.L
1,3-Dichlorobenzene	541-73-1	35.3	<35.3	ug/kg dry	3.A, 5.L
1,4-Dichlorobenzene	106-46-7	35.3	<35.3	ug/kg dry	3.A, 5.L
1,4-Dioxane	123-91-1	141	<141	ug/kg dry	3.A, 5.L
Acetone	67-64-1	141	<141	ug/kg dry	3.A, 5.L
Benzene	71-43-2	14.1	<14.1	ug/kg dry	3.A, 5.L
Carbon Tetrachloride	56-23-5	14.1	<14.1	ug/kg dry	3.A, 5.L
Chlorobenzene	108-90-7	14.1	<14.1	ug/kg dry	3.A, 5.L
Chloroform	67-66-3	14.1	<14.1	ug/kg dry	3.A, 5.L
cis-1,2-Dichloroethylene	156-59-2	14.1	<14.1	ug/kg dry	3.A, 5.L
Ethylbenzene	100-41-4	14.1	<14.1	ug/kg dry	5.L, 3.A
m,p-Xylenes	108-38-3/106-42-3	28.2	<28.2	ug/kg dry	3.A, 5.L
Methyl Ethyl Ketone (2-Butanone)	78-93-3	28.2	<28.2	ug/kg dry	3.A, 5.L
Methylene Chloride	75-09-2	14.1	<14.1	ug/kg dry	3.A, 5.L
Methyl-tert-Butyl Ether	1634-04-4	14.1	<14.1	ug/kg dry	3.A, 5.L
n-Butylbenzene	104-51-8	35.3	<35.3	ug/kg dry	3.A, 5.L
n-Propylbenzene	103-65-1	14.1	<14.1	ug/kg dry	3.A, 5.L
o-Xylene	95-47-6	14.1	<14.1	ug/kg dry	3.A, 5.L
sec-Butylbenzene	135-98-8	14.1	<14.1	ug/kg dry	5.L, 3.A
tert-Butylbenzene	98-06-6	14.1	<14.1	ug/kg dry	3.A, 5.L
Tetrachloroethylene	127-18-4	14.1	<14.1	ug/kg dry	3.A, 5.L
Toluene	108-88-3	14.1	30.8	ug/kg dry	3.E, 5.L
trans-1,2-Dichloroethylene	156-60-5	14.1	<14.1	ug/kg dry	3.A, 5.L
Trichloroethylene	79-01-6	14.1	<14.1	ug/kg dry	3.A, 5.L

Client: Nelson, Pope & Voorhis	Client ID: Lau Property
Date (Time) Collected: 10/26/2015 13:20	Sample ID: LP-1
Date (Time) Received: 10/26/2015 17:53	Laboratory ID: 5102702-01 % Solid:70.80
Matrix: Soil	ELAP: #11693

Volatiles Low Level Analysis

Parameter	CAS No.	LOQ	Result	Units	Flag
Vinyl chloride	75-01-4	14.1	<14.1	ug/kg dry	3.A, 4.J, 5.L

Surrogate	CAS No.	% Recovery	Rec. Limits	Flag
1,2-Dichloroethane-d4	10706-07-0	74	74.4-131	4.L
4-Bromofluorobenzene	460-00-4	121	82.3-134	
Dibromofluoromethane	1868-53-7	90	79.4-122	
Toluene-d8	2037-26-5	115	85-123	

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
1,4-Dichlorobenzene-d4	3855-82-1	70	50-200	
1,4-Difluorobenzene	540-36-3	117	50-200	
Chlorobenzene-d5	3114-55-4	86	50-200	
Pentafluorobenzene	363-72-4	121	50-200	

Date Prepared: 10/29/2015

Preparation Method: EPA 5035A-L

Date Analyzed: 10/29/2015

Analytical Method: EPA 8260 C

Client: Nelson, Pope & Voorhis	Client ID: Lau Property
Date (Time) Collected: 10/26/2015 13:20	Sample ID: LP-1
Date (Time) Received: 10/26/2015 17:53	Laboratory ID: 5102702-01 % Solid:70.80
Matrix: Soil	ELAP: #11693

Semivolatile Analysis

Parameter	CAS No.	LOQ	Result	Units	Flag
2-Methylphenol	95-48-7	2120	<2120	ug/kg dry	3.A
3/4-Methylphenol	108-39-4/106-44-5	2120	<2120	ug/kg dry	3.A
Acenaphthene	83-32-9	2120	<2120	ug/kg dry	3.E
Acenaphthylene	208-96-8	2120	<2120	ug/kg dry	3.A
Anthracene	120-12-7	2120	5730	ug/kg dry	3.E
Benzo(a)anthracene	56-55-3	2120	39200	ug/kg dry	3.E
Benzo(a)pyrene	50-32-8	2120	28600	ug/kg dry	3.E
Benzo(b)fluoranthene	205-99-2	2120	39600	ug/kg dry	3.E
Benzo(g,h,i)perylene	191-24-2	2120	35900	ug/kg dry	3.E
Benzo(k)fluoranthene	207-08-9	2120	20600	ug/kg dry	3.E
Chrysene	218-01-9	2120	57900	ug/kg dry	3.E
Dibenzo(a,h)anthracene	53-70-3	2120	11600	ug/kg dry	3.E
Dibenzofuran	132-64-9	2120	<2120	ug/kg dry	3.A
Fluoranthene	206-44-0	21200	92300	ug/kg dry	3.E
Fluorene	86-73-7	2120	3000	ug/kg dry	3.E
Hexachlorobenzene	118-74-1	2120	<2120	ug/kg dry	3.A
Indeno(1,2,3-cd)pyrene	193-39-5	2120	32400	ug/kg dry	3.E
Naphthalene	91-20-3	2120	<2120	ug/kg dry	3.A
Pentachlorophenol	87-86-5	2120	<2120	ug/kg dry	3.A
Phenanthrene	85-01-8	2120	37900	ug/kg dry	3.E
Phenol	108-95-2	2120	<2120	ug/kg dry	3.A
Pyrene	129-00-0	21200	67000	ug/kg dry	3.E

Surrogate	CAS No.	% Recovery	Rec. Limits	Flag
2,4,6-Tribromophenol	118-79-6	111	18.04-120.2	3.E
2-Fluorobiphenyl	321-60-8	74	34.39-110.73	3.E
2-Fluorophenol	367-12-4	94	22.98-107.57	3.E
Nitrobenzene-d5	4165-60-0	90	31-118.25	3.E
Phenol-d6	13127-88-3	92	35.55-111.39	3.E
Terphenyl-d14	1718-51-0	110	41.02-106	3.E

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
1,4-Dichlorobenzene-d4	3855-82-1	97	50-200	



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Client: Nelson, Pope & Voorhis	Client ID: Lau Property
Date (Time) Collected: 10/26/2015 13:20	Sample ID: LP-1
Date (Time) Received: 10/26/2015 17:53	Laboratory ID: 5102702-01 % Solid:70.80
Matrix: Soil	ELAP: #11693

Semivolatile Analysis

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
Acenaphthene-d10	15067-26-2	70	50-200	
Chrysene-d12	1719-03-5	100	50-200	
Naphthalene-d8	1146-65-2	91	50-200	
Perylene-d12	1520-96-3	71	50-200	
Phenanthrene-d10	1517-22-2	86	50-200	

Date Prepared: 10/29/2015

Preparation Method: EPA 3545 A

Date Analyzed: 10/30/2015

Analytical Method: EPA 8270 D



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Client: Nelson, Pope & Voorhis	Client ID: Lau Property
Date (Time) Collected: 10/26/2015 13:20	Sample ID: LP-1
Date (Time) Received: 10/26/2015 17:53	Laboratory ID: 5102702-01 % Solid:70.80
Matrix: Soil	ELAP: #11693

Pesticides Analysis

Parameter	CAS No.	LOQ	Result	Units	Flag
4,4'-DDD	72-54-8	4.24	<4.24	ug/kg dry	
4,4'-DDE	72-55-9	4.24	<4.24	ug/kg dry	
4,4'-DDT	50-29-3	4.24	<4.24	ug/kg dry	
Aldrin	309-00-2	7.06	<7.06	ug/kg dry	
alpha-BHC	319-84-6	7.06	<7.06	ug/kg dry	
beta-BHC	319-85-7	7.06	<7.06	ug/kg dry	
cis-Chlordane	5103-71-9	7.06	<7.06	ug/kg dry	
delta-BHC	319-86-8	7.06	<7.06	ug/kg dry	
Dieldrin	60-57-1	7.06	<7.06	ug/kg dry	
Endosulfan I	959-98-8	7.06	<7.06	ug/kg dry	
Endosulfan II	33213-65-9	7.06	<7.06	ug/kg dry	
Endosulfan Sulfate	1031-07-8	7.06	<7.06	ug/kg dry	
Endrin	72-20-8	7.06	<7.06	ug/kg dry	
gamma-BHC	58-89-9	7.06	<7.06	ug/kg dry	
Heptachlor	76-44-8	7.06	<7.06	ug/kg dry	

Surrogate	CAS No.	% Recovery	Rec. Limits	Flag
Decachlorobiphenyl	2051-24-3	246	62.3-146	4.E
Tetrachloro-m-xylene	877-09-8	81	83.1-126	4.D

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
1-Bromo-2-Nitrobenzene	108-31-6	84	50-200	

Date Prepared: 10/27/2015

Preparation Method: EPA 3545 A

Date Analyzed: 10/29/2015

Analytical Method: EPA 8081 B

Client: Nelson, Pope & Voorhis	Client ID: Lau Property
Date (Time) Collected: 10/26/2015 13:20	Sample ID: LP-1
Date (Time) Received: 10/26/2015 17:53	Laboratory ID: 5102702-01 % Solid:70.80
Matrix: Soil	ELAP: #11693

PCB/Aroclor Analysis

Parameter	CAS No.	LOQ	Result	Units	Flag
Aroclor-1016	12674-11-2	14.1	<14.1	ug/kg dry	
Aroclor-1221	11104-28-2	14.1	<14.1	ug/kg dry	
Aroclor-1232	11141-16-5	14.1	<14.1	ug/kg dry	
Aroclor-1242	53469-21-9	14.1	<14.1	ug/kg dry	
Aroclor-1248	12672-29-6	14.1	<14.1	ug/kg dry	
Aroclor-1254	11097-69-1	14.1	<14.1	ug/kg dry	
Aroclor-1260	11096-82-5	14.1	<14.1	ug/kg dry	
Aroclor-1262	37324-23-5	14.1	<14.1	ug/kg dry	
Aroclor-1268	11100-14-4	14.1	<14.1	ug/kg dry	

Surrogate	CAS No.	% Recovery	Rec. Limits	Flag
Decachlorobiphenyl	2051-24-3	67	43.5-123	
Tetrachloro-m-xylene	877-09-8	72	72.3-118	4.D

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
1-Bromo-2-Nitrobenzene	108-31-6	112	50-200	

Date Prepared: 10/27/2015

Preparation Method: EPA 3545 A

Date Analyzed: 10/29/2015

Analytical Method: EPA 8082 A

Client: Nelson, Pope & Voorhis	Client ID: Lau Property
Date (Time) Collected: 10/26/2015 13:20	Sample ID: LP-1
Date (Time) Received: 10/26/2015 17:53	Laboratory ID: 5102702-01 % Solid:70.80
Matrix: Soil	ELAP: #11693

Herbicide Analysis

Parameter	CAS No.	LOQ	Result	Units	Flag
2,4,5-TP (Silvex)	93-72-1	35	<35	ug/kg dry	

Surrogate	CAS No.	% Recovery	Rec. Limits	Flag
2,4-Dichlorophenylacetic Acid	19719-28-9	46	21.5-137	

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
4,4'-Dibromooctafluorobiphenyl	10386-84-2	92	50-200	

Date Prepared: 10/27/2015

Preparation Method: EPA 3545 A

Date Analyzed: 11/03/2015

Analytical Method: EPA 8151 A



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Date (Time) Collected: 10/26/2015 13:20	Sample ID: LP-1
Date (Time) Received: 10/26/2015 17:53	Laboratory ID: 5102702-01 % Solid:70.80
Matrix: Soil	ELAP: #11693

Total Metals Analysis

Parameter	Date Analyzed	Method	LOQ	Result	Units	Flag
Arsenic	10/27/2015	EPA 6010 C	1.83	2.27	mg/kg dry	
Barium	10/27/2015	EPA 6010 C	1.83	25.4	mg/kg dry	
Beryllium	10/27/2015	EPA 6010 C	1.83	<1.83	mg/kg dry	
Cadmium	10/27/2015	EPA 6010 C	1.83	<1.83	mg/kg dry	
Chromium	10/27/2015	EPA 6010 C	1.83	27.4	mg/kg dry	
Copper	10/27/2015	EPA 6010 C	1.83	72.9	mg/kg dry	
Lead	10/27/2015	EPA 6010 C	1.83	79.2	mg/kg dry	
Manganese	10/27/2015	EPA 6010 C	1.83	74.0	mg/kg dry	
Nickel	10/27/2015	EPA 6010 C	1.83	12.6	mg/kg dry	
Selenium	10/27/2015	EPA 6010 C	1.83	<1.83	mg/kg dry	
Silver	10/27/2015	EPA 6010 C	1.83	<1.83	mg/kg dry	
Zinc	10/27/2015	EPA 6010 C	1.83	289	mg/kg dry	

Date Prepared: 10/27/2015

Preparation Method: EPA 3050B

Parameter	Date Analyzed	Method	LOQ	Result	Units	Flag
Mercury	10/28/2015	EPA 7471 B	0.02	0.03	mg/kg dry	

Date Prepared: 10/27/2015

Preparation Method: EPA 7471 B



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Client: Nelson, Pope & Voorhis	Client ID: Lau Property
Date (Time) Collected: 10/26/2015 13:36	Sample ID: LP-2
Date (Time) Received: 10/26/2015 17:53	Laboratory ID: 5102702-02 % Solid:70.32
Matrix: Soil	ELAP: #11693

Volatiles Low Level Analysis

Parameter	CAS No.	LOQ	Result	Units	Flag
1,1,1-Trichloroethane	71-55-6	14.2	<14.2	ug/kg dry	3.A, 5.L
1,1-Dichloroethane	75-34-3	14.2	<14.2	ug/kg dry	3.A, 5.L
1,1-Dichloroethylene	75-35-4	14.2	<14.2	ug/kg dry	3.A, 5.L
1,2,4-Trimethylbenzene	95-63-6	14.2	<14.2	ug/kg dry	5.L, 3.A
1,2-Dichlorobenzene	95-50-1	14.2	<14.2	ug/kg dry	3.A, 5.L
1,2-Dichloroethane	107-06-2	14.2	<14.2	ug/kg dry	3.A, 5.L
1,3,5-Trimethylbenzene	108-67-8	14.2	<14.2	ug/kg dry	3.A, 4.G, 5.L
1,3-Dichlorobenzene	541-73-1	14.2	<14.2	ug/kg dry	3.A, 5.L
1,4-Dichlorobenzene	106-46-7	14.2	<14.2	ug/kg dry	3.A, 5.L
1,4-Dioxane	123-91-1	142	<142	ug/kg dry	3.A, 5.L
Acetone	67-64-1	142	<142	ug/kg dry	5.L, 3.A
Benzene	71-43-2	14.2	<14.2	ug/kg dry	3.A, 5.L
Carbon Tetrachloride	56-23-5	14.2	<14.2	ug/kg dry	3.A, 5.L
Chlorobenzene	108-90-7	14.2	<14.2	ug/kg dry	3.A, 5.L
Chloroform	67-66-3	14.2	<14.2	ug/kg dry	3.A, 5.L
cis-1,2-Dichloroethylene	156-59-2	14.2	<14.2	ug/kg dry	3.A, 5.L
Ethylbenzene	100-41-4	14.2	<14.2	ug/kg dry	3.A, 5.L
m,p-Xylenes	108-38-3/106-42-3	28.4	<28.4	ug/kg dry	3.A, 5.L
Methyl Ethyl Ketone (2-Butanone)	78-93-3	28.4	<28.4	ug/kg dry	3.A, 5.L
Methylene Chloride	75-09-2	14.2	<14.2	ug/kg dry	4.G, 4.T, 5.L, 3.A
Methyl-tert-Butyl Ether	1634-04-4	14.2	<14.2	ug/kg dry	3.A, 5.L
n-Butylbenzene	104-51-8	14.2	<14.2	ug/kg dry	3.A, 5.L
n-Propylbenzene	103-65-1	14.2	<14.2	ug/kg dry	3.A, 5.L
o-Xylene	95-47-6	14.2	<14.2	ug/kg dry	3.A, 5.L
sec-Butylbenzene	135-98-8	14.2	<14.2	ug/kg dry	3.A, 4.G, 5.L
tert-Butylbenzene	98-06-6	14.2	<14.2	ug/kg dry	3.A, 4.G, 5.L
Tetrachloroethylene	127-18-4	14.2	<14.2	ug/kg dry	3.A, 5.L
Toluene	108-88-3	14.2	<14.2	ug/kg dry	3.A, 5.L
trans-1,2-Dichloroethylene	156-60-5	14.2	<14.2	ug/kg dry	3.A, 5.L
Trichloroethylene	79-01-6	14.2	<14.2	ug/kg dry	3.A, 5.L

Client: Nelson, Pope & Voorhis	Client ID: Lau Property
Date (Time) Collected: 10/26/2015 13:36	Sample ID: LP-2
Date (Time) Received: 10/26/2015 17:53	Laboratory ID: 5102702-02 % Solid:70.32
Matrix: Soil	ELAP: #11693

Volatiles Low Level Analysis

Parameter	CAS No.	LOQ	Result	Units	Flag
Vinyl chloride	75-01-4	14.2	<14.2	ug/kg dry	3.A, 4.G, 4.J, 5.L

Surrogate	CAS No.	% Recovery	Rec. Limits	Flag
1,2-Dichloroethane-d4	10706-07-0	72	74.4-131	4.L
4-Bromofluorobenzene	460-00-4	127	82.3-134	
Dibromofluoromethane	1868-53-7	88	79.4-122	
Toluene-d8	2037-26-5	107	85-123	

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
1,4-Dichlorobenzene-d4	3855-82-1	70	50-200	
1,4-Difluorobenzene	540-36-3	123	50-200	
Chlorobenzene-d5	3114-55-4	107	50-200	
Pentafluorobenzene	363-72-4	128	50-200	

Date Prepared: 10/29/2015

Preparation Method: EPA 5035A-L

Date Analyzed: 10/29/2015

Analytical Method: EPA 8260 C

Client: Nelson, Pope & Voorhis	Client ID: Lau Property
Date (Time) Collected: 10/26/2015 13:36	Sample ID: LP-2
Date (Time) Received: 10/26/2015 17:53	Laboratory ID: 5102702-02 % Solid:70.32
Matrix: Soil	ELAP: #11693

Semivolatile Analysis

Parameter	CAS No.	LOQ	Result	Units	Flag
2-Methylphenol	95-48-7	853	<853	ug/kg dry	3.A
3/4-Methylphenol	108-39-4/106-44-5	853	<853	ug/kg dry	3.A
Acenaphthene	83-32-9	853	<853	ug/kg dry	3.A
Acenaphthylene	208-96-8	853	<853	ug/kg dry	3.A
Anthracene	120-12-7	853	<853	ug/kg dry	3.A
Benzo(a)anthracene	56-55-3	853	<853	ug/kg dry	3.A
Benzo(a)pyrene	50-32-8	853	1010	ug/kg dry	3.E
Benzo(b)fluoranthene	205-99-2	853	1090	ug/kg dry	3.E
Benzo(g,h,i)perylene	191-24-2	853	908	ug/kg dry	3.E
Benzo(k)fluoranthene	207-08-9	853	<853	ug/kg dry	3.A
Chrysene	218-01-9	853	<853	ug/kg dry	3.A
Dibenzo(a,h)anthracene	53-70-3	853	<853	ug/kg dry	3.A
Dibenzofuran	132-64-9	853	<853	ug/kg dry	3.A
Fluoranthene	206-44-0	853	1010	ug/kg dry	3.E
Fluorene	86-73-7	853	<853	ug/kg dry	3.A
Hexachlorobenzene	118-74-1	853	<853	ug/kg dry	3.A
Indeno(1,2,3-cd)pyrene	193-39-5	853	867	ug/kg dry	3.E
Naphthalene	91-20-3	853	<853	ug/kg dry	3.A
Pentachlorophenol	87-86-5	853	<853	ug/kg dry	3.A
Phenanthrene	85-01-8	853	<853	ug/kg dry	3.A
Phenol	108-95-2	853	<853	ug/kg dry	3.A
Pyrene	129-00-0	853	<853	ug/kg dry	3.E

Surrogate	CAS No.	% Recovery	Rec. Limits	Flag
2,4,6-Tribromophenol	118-79-6	99	18.04-120.2	3.E
2-Fluorobiphenyl	321-60-8	73	34.39-110.73	3.E
2-Fluorophenol	367-12-4	79	22.98-107.57	3.E
Nitrobenzene-d5	4165-60-0	78	31-118.25	3.E
Phenol-d6	13127-88-3	83	35.55-111.39	3.E
Terphenyl-d14	1718-51-0	92	41.02-106	3.E

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
1,4-Dichlorobenzene-d4	3855-82-1	109	50-200	



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Client: Nelson, Pope & Voorhis	Client ID: Lau Property
Date (Time) Collected: 10/26/2015 13:36	Sample ID: LP-2
Date (Time) Received: 10/26/2015 17:53	Laboratory ID: 5102702-02 % Solid:70.32
Matrix: Soil	ELAP: #11693

Semivolatile Analysis

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
Acenaphthene-d10	15067-26-2	81	50-200	
Chrysene-d12	1719-03-5	77	50-200	
Naphthalene-d8	1146-65-2	116	50-200	
Perylene-d12	1520-96-3	104	50-200	
Phenanthrene-d10	1517-22-2	76	50-200	

Date Prepared: 10/29/2015

Preparation Method: EPA 3545 A

Date Analyzed: 10/30/2015

Analytical Method: EPA 8270 D



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Date (Time) Collected: 10/26/2015 13:36	Sample ID: LP-2
Date (Time) Received: 10/26/2015 17:53	Laboratory ID: 5102702-02 % Solid:70.32
Matrix: Soil	ELAP: #11693

Pesticides Analysis

Parameter	CAS No.	LOQ	Result	Units	Flag
4,4'-DDD	72-54-8	4.27	55.6	ug/kg dry	
4,4'-DDE	72-55-9	4.27	<4.27	ug/kg dry	
4,4'-DDT	50-29-3	4.27	<4.27	ug/kg dry	
Aldrin	309-00-2	7.11	<7.11	ug/kg dry	
alpha-BHC	319-84-6	7.11	<7.11	ug/kg dry	
beta-BHC	319-85-7	7.11	<7.11	ug/kg dry	
cis-Chlordane	5103-71-9	7.11	477	ug/kg dry	
delta-BHC	319-86-8	7.11	<7.11	ug/kg dry	
Dieldrin	60-57-1	7.11	<7.11	ug/kg dry	
Endosulfan I	959-98-8	7.11	<7.11	ug/kg dry	
Endosulfan II	33213-65-9	7.11	<7.11	ug/kg dry	
Endosulfan Sulfate	1031-07-8	7.11	<7.11	ug/kg dry	
Endrin	72-20-8	7.11	<7.11	ug/kg dry	
gamma-BHC	58-89-9	7.11	<7.11	ug/kg dry	
Heptachlor	76-44-8	7.11	94.9	ug/kg dry	

Surrogate	CAS No.	% Recovery	Rec. Limits	Flag
Decachlorobiphenyl	2051-24-3	94	62.3-146	
Tetrachloro-m-xylene	877-09-8	96	83.1-126	

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
1-Bromo-2-Nitrobenzene	108-31-6	109	50-200	

Date Prepared: 10/27/2015

Preparation Method: EPA 3545 A

Date Analyzed: 10/28/2015

Analytical Method: EPA 8081 B

Client: Nelson, Pope & Voorhis	Client ID: Lau Property
Date (Time) Collected: 10/26/2015 13:36	Sample ID: LP-2
Date (Time) Received: 10/26/2015 17:53	Laboratory ID: 5102702-02 % Solid:70.32
Matrix: Soil	ELAP: #11693

PCB/Aroclor Analysis

Parameter	CAS No.	LOQ	Result	Units	Flag
Aroclor-1016	12674-11-2	14.2	<14.2	ug/kg dry	
Aroclor-1221	11104-28-2	14.2	<14.2	ug/kg dry	
Aroclor-1232	11141-16-5	14.2	<14.2	ug/kg dry	
Aroclor-1242	53469-21-9	14.2	<14.2	ug/kg dry	
Aroclor-1248	12672-29-6	14.2	<14.2	ug/kg dry	
Aroclor-1254	11097-69-1	14.2	<14.2	ug/kg dry	
Aroclor-1260	11096-82-5	14.2	<14.2	ug/kg dry	
Aroclor-1262	37324-23-5	14.2	<14.2	ug/kg dry	
Aroclor-1268	11100-14-4	14.2	<14.2	ug/kg dry	

Surrogate	CAS No.	% Recovery	Rec. Limits	Flag
Decachlorobiphenyl	2051-24-3	73	43.5-123	
Tetrachloro-m-xylene	877-09-8	87	72.3-118	

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
1-Bromo-2-Nitrobenzene	108-31-6	115	50-200	

Date Prepared: 10/27/2015

Preparation Method: EPA 3545 A

Date Analyzed: 10/29/2015

Analytical Method: EPA 8082 A



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Date (Time) Collected: 10/26/2015 13:36	Sample ID: LP-2
Date (Time) Received: 10/26/2015 17:53	Laboratory ID: 5102702-02 % Solid:70.32
Matrix: Soil	ELAP: #11693

Herbicide Analysis

Parameter	CAS No.	LOQ	Result	Units	Flag
2,4,5-TP (Silvex)	93-72-1	36	<36	ug/kg dry	

Surrogate	CAS No.	% Recovery	Rec. Limits	Flag
2,4-Dichlorophenylacetic Acid	19719-28-9	47	21.5-137	

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
4,4'-Dibromoocafuorobiphenyl	10386-84-2	97	50-200	

Date Prepared: 10/27/2015

Preparation Method: EPA 3545 A

Date Analyzed: 11/03/2015

Analytical Method: EPA 8151 A



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Date (Time) Received: 10/26/2015 17:53	Laboratory ID: 5102702-02 % Solid:70.32
Matrix: Soil	ELAP: #11693

Total Metals Analysis

Parameter	Date Analyzed	Method	LOQ	Result	Units	Flag
Arsenic	10/27/2015	EPA 6010 C	1.77	2.88	mg/kg dry	
Barium	10/27/2015	EPA 6010 C	1.77	27.0	mg/kg dry	
Beryllium	10/27/2015	EPA 6010 C	1.77	<1.77	mg/kg dry	
Cadmium	10/27/2015	EPA 6010 C	1.77	<1.77	mg/kg dry	
Chromium	10/27/2015	EPA 6010 C	1.77	19.6	mg/kg dry	
Copper	10/27/2015	EPA 6010 C	1.77	43.5	mg/kg dry	
Lead	10/27/2015	EPA 6010 C	1.77	87.4	mg/kg dry	
Manganese	10/27/2015	EPA 6010 C	1.77	59.9	mg/kg dry	
Nickel	10/27/2015	EPA 6010 C	1.77	11.6	mg/kg dry	
Selenium	10/27/2015	EPA 6010 C	1.77	<1.77	mg/kg dry	
Silver	10/27/2015	EPA 6010 C	1.77	<1.77	mg/kg dry	
Zinc	10/27/2015	EPA 6010 C	1.77	294	mg/kg dry	

Date Prepared: 10/27/2015

Preparation Method: EPA 3050B

Parameter	Date Analyzed	Method	LOQ	Result	Units	Flag
Mercury	10/28/2015	EPA 7471 B	0.02	0.10	mg/kg dry	

Date Prepared: 10/27/2015

Preparation Method: EPA 7471 B

Client: Nelson, Pope & Voorhis	Client ID: Lau Property
Date (Time) Collected: 10/26/2015 14:00	Sample ID: LP-3
Date (Time) Received: 10/26/2015 17:53	Laboratory ID: 5102702-03 % Solid:77.17
Matrix: Soil	ELAP: #11693

Volatiles Low Level Analysis

Parameter	CAS No.	LOQ	Result	Units	Flag
1,1,1-Trichloroethane	71-55-6	32.4	<32.4	ug/kg dry	3.A, 5.L
1,1-Dichloroethane	75-34-3	32.4	<32.4	ug/kg dry	3.A, 5.L
1,1-Dichloroethylene	75-35-4	32.4	<32.4	ug/kg dry	3.A, 5.L
1,2,4-Trimethylbenzene	95-63-6	32.4	<32.4	ug/kg dry	3.A, 5.L
1,2-Dichlorobenzene	95-50-1	32.4	<32.4	ug/kg dry	3.A, 5.L
1,2-Dichloroethane	107-06-2	32.4	<32.4	ug/kg dry	5.L, 3.A
1,3,5-Trimethylbenzene	108-67-8	32.4	<32.4	ug/kg dry	3.A, 5.L
1,3-Dichlorobenzene	541-73-1	32.4	<32.4	ug/kg dry	3.A, 5.L
1,4-Dichlorobenzene	106-46-7	32.4	<32.4	ug/kg dry	3.A, 5.L
1,4-Dioxane	123-91-1	324	<324	ug/kg dry	3.A, 5.L
Acetone	67-64-1	324	<324	ug/kg dry	3.A, 5.L
Benzene	71-43-2	32.4	<32.4	ug/kg dry	3.A, 5.L
Carbon Tetrachloride	56-23-5	32.4	<32.4	ug/kg dry	3.A, 5.L
Chlorobenzene	108-90-7	32.4	<32.4	ug/kg dry	5.L, 3.A
Chloroform	67-66-3	32.4	<32.4	ug/kg dry	3.A, 5.L
cis-1,2-Dichloroethylene	156-59-2	32.4	<32.4	ug/kg dry	3.A, 5.L
Ethylbenzene	100-41-4	32.4	<32.4	ug/kg dry	3.A, 5.L
m,p-Xylenes	108-38-3/106-42-3	64.8	<64.8	ug/kg dry	3.A, 5.L
Methyl Ethyl Ketone (2-Butanone)	78-93-3	64.8	<64.8	ug/kg dry	3.A, 5.L
Methylene Chloride	75-09-2	32.4	<32.4	ug/kg dry	3.A, 5.L
Methyl-tert-Butyl Ether	1634-04-4	32.4	<32.4	ug/kg dry	3.A, 5.L
n-Butylbenzene	104-51-8	32.4	<32.4	ug/kg dry	3.A, 5.L
n-Propylbenzene	103-65-1	32.4	<32.4	ug/kg dry	3.A, 5.L
o-Xylene	95-47-6	32.4	<32.4	ug/kg dry	3.A, 5.L
sec-Butylbenzene	135-98-8	32.4	<32.4	ug/kg dry	3.A, 5.L
tert-Butylbenzene	98-06-6	32.4	<32.4	ug/kg dry	3.A, 5.L
Tetrachloroethylene	127-18-4	32.4	<32.4	ug/kg dry	3.A, 5.L
Toluene	108-88-3	32.4	<32.4	ug/kg dry	3.A, 5.L
trans-1,2-Dichloroethylene	156-60-5	32.4	<32.4	ug/kg dry	3.A, 5.L
Trichloroethylene	79-01-6	32.4	<32.4	ug/kg dry	3.A, 5.L

Client: Nelson, Pope & Voorhis	Client ID: Lau Property
Date (Time) Collected: 10/26/2015 14:00	Sample ID: LP-3
Date (Time) Received: 10/26/2015 17:53	Laboratory ID: 5102702-03 % Solid:77.17
Matrix: Soil	ELAP: #11693

Volatiles Low Level Analysis

Parameter	CAS No.	LOQ	Result	Units	Flag
Vinyl chloride	75-01-4	32.4	<32.4	ug/kg dry	3.A, 4.J, 5.L

Surrogate	CAS No.	% Recovery	Rec. Limits	Flag
1,2-Dichloroethane-d4	10706-07-0	71	74.4-131	4.L
4-Bromofluorobenzene	460-00-4	114	82.3-134	
Dibromofluoromethane	1868-53-7	86	79.4-122	
Toluene-d8	2037-26-5	102	85-123	

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
1,4-Dichlorobenzene-d4	3855-82-1	93	50-200	
1,4-Difluorobenzene	540-36-3	125	50-200	
Chlorobenzene-d5	3114-55-4	117	50-200	
Pentafluorobenzene	363-72-4	132	50-200	

Date Prepared: 10/29/2015

Preparation Method: EPA 5035A-L

Date Analyzed: 10/29/2015

Analytical Method: EPA 8260 C

Client: Nelson, Pope & Voorhis	Client ID: Lau Property
Date (Time) Collected: 10/26/2015 14:00	Sample ID: LP-3
Date (Time) Received: 10/26/2015 17:53	Laboratory ID: 5102702-03 % Solid:77.17
Matrix: Soil	ELAP: #11693

Semivolatile Analysis

Parameter	CAS No.	LOQ	Result	Units	Flag
2-Methylphenol	95-48-7	1940	<1940	ug/kg dry	3.A
3/4-Methylphenol	108-39-4/106-44-5	1940	<1940	ug/kg dry	3.A
Acenaphthene	83-32-9	1940	<1940	ug/kg dry	3.A
Acenaphthylene	208-96-8	1940	<1940	ug/kg dry	3.A
Anthracene	120-12-7	1940	<1940	ug/kg dry	3.A
Benzo(a)anthracene	56-55-3	1940	<1940	ug/kg dry	3.A
Benzo(a)pyrene	50-32-8	1940	<1940	ug/kg dry	3.A
Benzo(b)fluoranthene	205-99-2	1940	<1940	ug/kg dry	3.A
Benzo(g,h,i)perylene	191-24-2	1940	<1940	ug/kg dry	3.A
Benzo(k)fluoranthene	207-08-9	1940	<1940	ug/kg dry	3.A
Chrysene	218-01-9	1940	<1940	ug/kg dry	3.A
Dibenzo(a,h)anthracene	53-70-3	1940	<1940	ug/kg dry	3.A
Dibenzofuran	132-64-9	1940	<1940	ug/kg dry	3.A
Fluoranthene	206-44-0	1940	<1940	ug/kg dry	3.A
Fluorene	86-73-7	1940	<1940	ug/kg dry	3.A
Hexachlorobenzene	118-74-1	1940	<1940	ug/kg dry	3.A
Indeno(1,2,3-cd)pyrene	193-39-5	1940	<1940	ug/kg dry	3.A
Naphthalene	91-20-3	1940	<1940	ug/kg dry	3.A
Pentachlorophenol	87-86-5	1940	<1940	ug/kg dry	3.A
Phenanthrene	85-01-8	1940	<1940	ug/kg dry	3.A
Phenol	108-95-2	1940	<1940	ug/kg dry	3.A
Pyrene	129-00-0	1940	<1940	ug/kg dry	3.A

Surrogate	CAS No.	% Recovery	Rec. Limits	Flag
2,4,6-Tribromophenol	118-79-6	73	18.04-120.2	3.E
2-Fluorobiphenyl	321-60-8	47	34.39-110.73	3.E
2-Fluorophenol	367-12-4	55	22.98-107.57	3.E
Nitrobenzene-d5	4165-60-0	56	31-118.25	3.E
Phenol-d6	13127-88-3	63	35.55-111.39	3.E
Terphenyl-d14	1718-51-0	88	41.02-106	3.E

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
1,4-Dichlorobenzene-d4	3855-82-1	120	50-200	

Client: Nelson, Pope & Voorhis	Client ID: Lau Property
Date (Time) Collected: 10/26/2015 14:00	Sample ID: LP-3
Date (Time) Received: 10/26/2015 17:53	Laboratory ID: 5102702-03 % Solid:77.17
Matrix: Soil	ELAP: #11693

Semivolatile Analysis

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
Acenaphthene-d10	15067-26-2	86	50-200	
Chrysene-d12	1719-03-5	111	50-200	
Naphthalene-d8	1146-65-2	112	50-200	
Perylene-d12	1520-96-3	125	50-200	
Phenanthrene-d10	1517-22-2	82	50-200	

Date Prepared: 10/29/2015

Preparation Method: EPA 3545 A

Date Analyzed: 10/30/2015

Analytical Method: EPA 8270 D



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Date (Time) Collected: 10/26/2015 14:00	Sample ID: LP-3
Date (Time) Received: 10/26/2015 17:53	Laboratory ID: 5102702-03 % Solid:77.17
Matrix: Soil	ELAP: #11693

Pesticides Analysis

Parameter	CAS No.	LOQ	Result	Units	Flag
4,4'-DDD	72-54-8	3.89	<3.89	ug/kg dry	
4,4'-DDE	72-55-9	3.89	<3.89	ug/kg dry	
4,4'-DDT	50-29-3	3.89	<3.89	ug/kg dry	
Aldrin	309-00-2	6.48	<6.48	ug/kg dry	
alpha-BHC	319-84-6	6.48	<6.48	ug/kg dry	
beta-BHC	319-85-7	6.48	<6.48	ug/kg dry	
cis-Chlordane	5103-71-9	6.48	<6.48	ug/kg dry	
delta-BHC	319-86-8	6.48	<6.48	ug/kg dry	
Dieldrin	60-57-1	6.48	<6.48	ug/kg dry	
Endosulfan I	959-98-8	6.48	<6.48	ug/kg dry	
Endosulfan II	33213-65-9	6.48	<6.48	ug/kg dry	
Endosulfan Sulfate	1031-07-8	6.48	<6.48	ug/kg dry	
Endrin	72-20-8	6.48	<6.48	ug/kg dry	
gamma-BHC	58-89-9	6.48	<6.48	ug/kg dry	
Heptachlor	76-44-8	6.48	<6.48	ug/kg dry	

Surrogate	CAS No.	% Recovery	Rec. Limits	Flag
Decachlorobiphenyl	2051-24-3	282	62.3-146	4.E
Tetrachloro-m-xylene	877-09-8	87	83.1-126	

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
1-Bromo-2-Nitrobenzene	108-31-6	80	50-200	

Date Prepared: 10/27/2015

Preparation Method: EPA 3545 A

Date Analyzed: 10/29/2015

Analytical Method: EPA 8081 B

Client: Nelson, Pope & Voorhis	Client ID: Lau Property
Date (Time) Collected: 10/26/2015 14:00	Sample ID: LP-3
Date (Time) Received: 10/26/2015 17:53	Laboratory ID: 5102702-03 % Solid:77.17
Matrix: Soil	ELAP: #11693

PCB/Aroclor Analysis

Parameter	CAS No.	LOQ	Result	Units	Flag
Aroclor-1016	12674-11-2	13.0	<13.0	ug/kg dry	
Aroclor-1221	11104-28-2	13.0	<13.0	ug/kg dry	
Aroclor-1232	11141-16-5	13.0	<13.0	ug/kg dry	
Aroclor-1242	53469-21-9	13.0	<13.0	ug/kg dry	
Aroclor-1248	12672-29-6	13.0	<13.0	ug/kg dry	
Aroclor-1254	11097-69-1	13.0	<13.0	ug/kg dry	
Aroclor-1260	11096-82-5	13.0	<13.0	ug/kg dry	
Aroclor-1262	37324-23-5	13.0	<13.0	ug/kg dry	
Aroclor-1268	11100-14-4	13.0	<13.0	ug/kg dry	

Surrogate	CAS No.	% Recovery	Rec. Limits	Flag
Decachlorobiphenyl	2051-24-3	98	43.5-123	
Tetrachloro-m-xylene	877-09-8	88	72.3-118	

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
1-Bromo-2-Nitrobenzene	108-31-6	102	50-200	

Date Prepared: 10/27/2015

Preparation Method: EPA 3545 A

Date Analyzed: 10/29/2015

Analytical Method: EPA 8082 A

Client: Nelson, Pope & Voorhis	Client ID: Lau Property
Date (Time) Collected: 10/26/2015 14:00	Sample ID: LP-3
Date (Time) Received: 10/26/2015 17:53	Laboratory ID: 5102702-03 % Solid:77.17
Matrix: Soil	ELAP: #11693

Herbicide Analysis

Parameter	CAS No.	LOQ	Result	Units	Flag
2,4,5-TP (Silvex)	93-72-1	32	<32	ug/kg dry	

Surrogate	CAS No.	% Recovery	Rec. Limits	Flag
2,4-Dichlorophenylacetic Acid	19719-28-9	68	21.5-137	

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
4,4'-Dibromoocafuorobiphenyl	10386-84-2	109	50-200	

Date Prepared: 10/27/2015

Preparation Method: EPA 3545 A

Date Analyzed: 11/03/2015

Analytical Method: EPA 8151 A



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Date (Time) Collected: 10/26/2015 14:00	Sample ID: LP-3
Date (Time) Received: 10/26/2015 17:53	Laboratory ID: 5102702-03 % Solid:77.17
Matrix: Soil	ELAP: #11693

Total Metals Analysis

Parameter	Date Analyzed	Method	LOQ	Result	Units	Flag
Arsenic	10/27/2015	EPA 6010 C	1.67	8.99	mg/kg dry	
Barium	10/27/2015	EPA 6010 C	1.64	21.8	mg/kg dry	
Beryllium	10/27/2015	EPA 6010 C	1.67	<1.67	mg/kg dry	
Cadmium	10/27/2015	EPA 6010 C	1.65	<1.65	mg/kg dry	
Chromium	10/27/2015	EPA 6010 C	1.67	15.6	mg/kg dry	
Copper	10/27/2015	EPA 6010 C	1.67	68.0	mg/kg dry	
Lead	10/27/2015	EPA 6010 C	1.67	40.4	mg/kg dry	
Manganese	10/27/2015	EPA 6010 C	1.67	130	mg/kg dry	
Nickel	10/27/2015	EPA 6010 C	1.67	13.0	mg/kg dry	
Selenium	10/27/2015	EPA 6010 C	1.67	<1.67	mg/kg dry	
Silver	10/27/2015	EPA 6010 C	1.67	<1.67	mg/kg dry	
Zinc	10/28/2015	EPA 6010 C	16.4	631	mg/kg dry	3.E

Date Prepared: 10/27/2015

Preparation Method: EPA 3050B

Parameter	Date Analyzed	Method	LOQ	Result	Units	Flag
Mercury	10/28/2015	EPA 7471 B	0.02	0.03	mg/kg dry	

Date Prepared: 10/27/2015

Preparation Method: EPA 7471 B



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Client: Nelson, Pope & Voorhis	Client ID: Lau Property
Date (Time) Collected: 10/26/2015 14:10	Sample ID: FD-1
Date (Time) Received: 10/26/2015 17:53	Laboratory ID: 5102702-04 % Solid:67.94
Matrix: Soil	ELAP: #11693

Volatiles Low Level Analysis

Parameter	CAS No.	LOQ	Result	Units	Flag
1,1,1-Trichloroethane	71-55-6	7.36	<7.36	ug/kg dry	5.L
1,1-Dichloroethane	75-34-3	7.36	<7.36	ug/kg dry	5.L
1,1-Dichloroethylene	75-35-4	7.36	<7.36	ug/kg dry	5.L
1,2,4-Trimethylbenzene	95-63-6	7.36	<7.36	ug/kg dry	5.L
1,2-Dichlorobenzene	95-50-1	36.8	<36.8	ug/kg dry	3.A, 5.L
1,2-Dichloroethane	107-06-2	7.36	<7.36	ug/kg dry	5.L
1,3,5-Trimethylbenzene	108-67-8	7.36	<7.36	ug/kg dry	5.L
1,3-Dichlorobenzene	541-73-1	36.8	<36.8	ug/kg dry	3.A, 5.L
1,4-Dichlorobenzene	106-46-7	36.8	<36.8	ug/kg dry	3.A, 5.L
1,4-Dioxane	123-91-1	73.6	<73.6	ug/kg dry	5.L
Acetone	67-64-1	73.6	<73.6	ug/kg dry	5.L
Benzene	71-43-2	7.36	<7.36	ug/kg dry	5.L
Carbon Tetrachloride	56-23-5	7.36	<7.36	ug/kg dry	5.L
Chlorobenzene	108-90-7	7.36	<7.36	ug/kg dry	5.L
Chloroform	67-66-3	7.36	<7.36	ug/kg dry	5.L
cis-1,2-Dichloroethylene	156-59-2	7.36	<7.36	ug/kg dry	5.L
Ethylbenzene	100-41-4	7.36	<7.36	ug/kg dry	5.L
m,p-Xylenes	108-38-3/106-42-3	14.7	<14.7	ug/kg dry	5.L
Methyl Ethyl Ketone (2-Butanone)	78-93-3	14.7	<14.7	ug/kg dry	5.L
Methylene Chloride	75-09-2	7.36	8.10	ug/kg dry	5.L
Methyl-tert-Butyl Ether	1634-04-4	7.36	<7.36	ug/kg dry	5.L
n-Butylbenzene	104-51-8	36.8	<36.8	ug/kg dry	3.A, 5.L
n-Propylbenzene	103-65-1	7.36	<7.36	ug/kg dry	5.L
o-Xylene	95-47-6	7.36	<7.36	ug/kg dry	5.L
sec-Butylbenzene	135-98-8	7.36	<7.36	ug/kg dry	5.L
tert-Butylbenzene	98-06-6	7.36	<7.36	ug/kg dry	5.L
Tetrachloroethylene	127-18-4	7.36	<7.36	ug/kg dry	5.L
Toluene	108-88-3	7.36	<7.36	ug/kg dry	5.L
trans-1,2-Dichloroethylene	156-60-5	7.36	<7.36	ug/kg dry	5.L
Trichloroethylene	79-01-6	7.36	<7.36	ug/kg dry	5.L



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Client: Nelson, Pope & Voorhis	Client ID: Lau Property
Date (Time) Collected: 10/26/2015 14:10	Sample ID: FD-1
Date (Time) Received: 10/26/2015 17:53	Laboratory ID: 5102702-04 % Solid:67.94
Matrix: Soil	ELAP: #11693

Volatiles Low Level Analysis

Parameter	CAS No.	LOQ	Result	Units	Flag
Vinyl chloride	75-01-4	7.36	<7.36	ug/kg dry	4.J, 5.L

Surrogate	CAS No.	% Recovery	Rec. Limits	Flag
1,2-Dichloroethane-d4	10706-07-0	74	74.4-131	4.L
4-Bromofluorobenzene	460-00-4	116	82.3-134	
Dibromofluoromethane	1868-53-7	84	79.4-122	
Toluene-d8	2037-26-5	116	85-123	

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
1,4-Dichlorobenzene-d4	3855-82-1	61	50-200	
1,4-Difluorobenzene	540-36-3	106	50-200	
Chlorobenzene-d5	3114-55-4	80	50-200	
Pentafluorobenzene	363-72-4	116	50-200	

Date Prepared: 10/29/2015

Preparation Method: EPA 5035A-L

Date Analyzed: 10/29/2015

Analytical Method: EPA 8260 C

Client: Nelson, Pope & Voorhis	Client ID: Lau Property
Date (Time) Collected: 10/26/2015 14:10	Sample ID: FD-1
Date (Time) Received: 10/26/2015 17:53	Laboratory ID: 5102702-04 % Solid:67.94
Matrix: Soil	ELAP: #11693

Semivolatile Analysis

Parameter	CAS No.	LOQ	Result	Units	Flag
2-Methylphenol	95-48-7	662	<662	ug/kg dry	3.A
3/4-Methylphenol	108-39-4/106-44-5	662	<662	ug/kg dry	3.A
Acenaphthene	83-32-9	662	<662	ug/kg dry	3.A
Acenaphthylene	208-96-8	662	<662	ug/kg dry	3.A
Anthracene	120-12-7	662	<662	ug/kg dry	3.A
Benzo(a)anthracene	56-55-3	662	1360	ug/kg dry	3.E
Benzo(a)pyrene	50-32-8	662	3420	ug/kg dry	3.E
Benzo(b)fluoranthene	205-99-2	662	4520	ug/kg dry	3.E
Benzo(g,h,i)perylene	191-24-2	662	3050	ug/kg dry	3.E
Benzo(k)fluoranthene	207-08-9	662	2350	ug/kg dry	3.E
Chrysene	218-01-9	662	3180	ug/kg dry	3.E
Dibenzo(a,h)anthracene	53-70-3	662	1120	ug/kg dry	3.E
Dibenzofuran	132-64-9	662	<662	ug/kg dry	3.A
Fluoranthene	206-44-0	662	2860	ug/kg dry	3.E
Fluorene	86-73-7	662	<662	ug/kg dry	3.A
Hexachlorobenzene	118-74-1	662	<662	ug/kg dry	3.A
Indeno(1,2,3-cd)pyrene	193-39-5	662	2840	ug/kg dry	3.E
Naphthalene	91-20-3	662	<662	ug/kg dry	3.A
Pentachlorophenol	87-86-5	662	<662	ug/kg dry	3.A
Phenanthrene	85-01-8	662	1000	ug/kg dry	3.E
Phenol	108-95-2	662	<662	ug/kg dry	3.A
Pyrene	129-00-0	662	2160	ug/kg dry	3.E

Surrogate	CAS No.	% Recovery	Rec. Limits	Flag
2,4,6-Tribromophenol	118-79-6	47	18.04-120.2	3.E
2-Fluorobiphenyl	321-60-8	41	34.39-110.73	3.E
2-Fluorophenol	367-12-4	35	22.98-107.57	3.E
Nitrobenzene-d5	4165-60-0	39	31-118.25	3.E
Phenol-d6	13127-88-3	41	35.55-111.39	3.E
Terphenyl-d14	1718-51-0	32	41.02-106	3.E

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
1,4-Dichlorobenzene-d4	3855-82-1	117	50-200	

Client: Nelson, Pope & Voorhis	Client ID: Lau Property
Date (Time) Collected: 10/26/2015 14:10	Sample ID: FD-1
Date (Time) Received: 10/26/2015 17:53	Laboratory ID: 5102702-04 % Solid:67.94
Matrix: Soil	ELAP: #11693

Semivolatile Analysis

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
Acenaphthene-d10	15067-26-2	116	50-200	
Chrysene-d12	1719-03-5	75	50-200	
Naphthalene-d8	1146-65-2	122	50-200	
Perylene-d12	1520-96-3	76	50-200	
Phenanthrene-d10	1517-22-2	110	50-200	

Date Prepared: 10/29/2015

Preparation Method: EPA 3545 A

Date Analyzed: 10/30/2015

Analytical Method: EPA 8270 D



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Client: Nelson, Pope & Voorhis	Client ID: Lau Property
Date (Time) Collected: 10/26/2015 14:10	Sample ID: FD-1
Date (Time) Received: 10/26/2015 17:53	Laboratory ID: 5102702-04 % Solid:67.94
Matrix: Soil	ELAP: #11693

Pesticides Analysis

Parameter	CAS No.	LOQ	Result	Units	Flag
4,4'-DDD	72-54-8	4.42	<4.42	ug/kg dry	
4,4'-DDE	72-55-9	4.42	20.3	ug/kg dry	
4,4'-DDT	50-29-3	4.42	32.3	ug/kg dry	
Aldrin	309-00-2	7.36	<7.36	ug/kg dry	
alpha-BHC	319-84-6	7.36	<7.36	ug/kg dry	
beta-BHC	319-85-7	7.36	<7.36	ug/kg dry	
cis-Chlordane	5103-71-9	7.36	34.4	ug/kg dry	
delta-BHC	319-86-8	7.36	<7.36	ug/kg dry	
Dieldrin	60-57-1	7.36	<7.36	ug/kg dry	
Endosulfan I	959-98-8	7.36	<7.36	ug/kg dry	
Endosulfan II	33213-65-9	7.36	<7.36	ug/kg dry	
Endosulfan Sulfate	1031-07-8	7.36	<7.36	ug/kg dry	
Endrin	72-20-8	7.36	<7.36	ug/kg dry	
gamma-BHC	58-89-9	7.36	<7.36	ug/kg dry	
Heptachlor	76-44-8	7.36	<7.36	ug/kg dry	

Surrogate	CAS No.	% Recovery	Rec. Limits	Flag
Decachlorobiphenyl	2051-24-3	399	62.3-146	4.E
Tetrachloro-m-xylene	877-09-8	88	83.1-126	

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
1-Bromo-2-Nitrobenzene	108-31-6	116	50-200	

Date Prepared: 10/27/2015

Preparation Method: EPA 3545 A

Date Analyzed: 10/28/2015

Analytical Method: EPA 8081 B

Client: Nelson, Pope & Voorhis	Client ID: Lau Property
Date (Time) Collected: 10/26/2015 14:10	Sample ID: FD-1
Date (Time) Received: 10/26/2015 17:53	Laboratory ID: 5102702-04 % Solid:67.94
Matrix: Soil	ELAP: #11693

PCB/Aroclor Analysis

Parameter	CAS No.	LOQ	Result	Units	Flag
Aroclor-1016	12674-11-2	14.7	<14.7	ug/kg dry	
Aroclor-1221	11104-28-2	14.7	<14.7	ug/kg dry	
Aroclor-1232	11141-16-5	14.7	<14.7	ug/kg dry	
Aroclor-1242	53469-21-9	14.7	<14.7	ug/kg dry	
Aroclor-1248	12672-29-6	14.7	<14.7	ug/kg dry	
Aroclor-1254	11097-69-1	14.7	<14.7	ug/kg dry	
Aroclor-1260	11096-82-5	14.7	<14.7	ug/kg dry	
Aroclor-1262	37324-23-5	14.7	<14.7	ug/kg dry	
Aroclor-1268	11100-14-4	14.7	<14.7	ug/kg dry	

Surrogate	CAS No.	% Recovery	Rec. Limits	Flag
Decachlorobiphenyl	2051-24-3	72	43.5-123	
Tetrachloro-m-xylene	877-09-8	89	72.3-118	

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
1-Bromo-2-Nitrobenzene	108-31-6	107	50-200	

Date Prepared: 10/27/2015

Preparation Method: EPA 3545 A

Date Analyzed: 10/29/2015

Analytical Method: EPA 8082 A

Client: Nelson, Pope & Voorhis	Client ID: Lau Property
Date (Time) Collected: 10/26/2015 14:10	Sample ID: FD-1
Date (Time) Received: 10/26/2015 17:53	Laboratory ID: 5102702-04 % Solid:67.94
Matrix: Soil	ELAP: #11693

Herbicide Analysis

Parameter	CAS No.	LOQ	Result	Units	Flag
2,4,5-TP (Silvex)	93-72-1	37	<37	ug/kg dry	

Surrogate	CAS No.	% Recovery	Rec. Limits	Flag
2,4-Dichlorophenylacetic Acid	19719-28-9	70	21.5-137	

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
4,4'-Dibromoocafuorobiphenyl	10386-84-2	113	50-200	

Date Prepared: 10/27/2015

Preparation Method: EPA 3545 A

Date Analyzed: 11/03/2015

Analytical Method: EPA 8151 A



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Client: Nelson, Pope & Voorhis	Client ID: Lau Property
Date (Time) Collected: 10/26/2015 14:10	Sample ID: FD-1
Date (Time) Received: 10/26/2015 17:53	Laboratory ID: 5102702-04 % Solid:67.94
Matrix: Soil	ELAP: #11693

Total Metals Analysis

Parameter	Date Analyzed	Method	LOQ	Result	Units	Flag
Arsenic	10/27/2015	EPA 6010 C	2.04	4.02	mg/kg dry	
Barium	10/27/2015	EPA 6010 C	2.04	123	mg/kg dry	
Beryllium	10/27/2015	EPA 6010 C	2.04	<2.04	mg/kg dry	
Cadmium	10/27/2015	EPA 6010 C	2.04	2.54	mg/kg dry	
Chromium	10/27/2015	EPA 6010 C	2.04	150	mg/kg dry	
Copper	10/27/2015	EPA 6010 C	2.04	245	mg/kg dry	
Lead	10/27/2015	EPA 6010 C	2.04	163	mg/kg dry	
Manganese	10/27/2015	EPA 6010 C	2.04	189	mg/kg dry	
Nickel	10/27/2015	EPA 6010 C	2.04	19.6	mg/kg dry	
Selenium	10/27/2015	EPA 6010 C	2.04	<2.04	mg/kg dry	
Silver	10/27/2015	EPA 6010 C	2.04	<2.04	mg/kg dry	
Zinc	10/28/2015	EPA 6010 C	20.4	704	mg/kg dry	3.E

Date Prepared: 10/27/2015

Preparation Method: EPA 3050B

Parameter	Date Analyzed	Method	LOQ	Result	Units	Flag
Mercury	10/28/2015	EPA 7471 B	0.02	0.26	mg/kg dry	

Date Prepared: 10/27/2015

Preparation Method: EPA 7471 B



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Client: Nelson, Pope & Voorhis	Client ID: Lau Property
Date (Time) Collected: 10/26/2015 14:20	Sample ID: FD-2
Date (Time) Received: 10/26/2015 17:53	Laboratory ID: 5102702-05 % Solid:59.46
Matrix: Soil	ELAP: #11693

Volatiles Low Level Analysis

Parameter	CAS No.	LOQ	Result	Units	Flag
1,1,1-Trichloroethane	71-55-6	42.0	<42.0	ug/kg dry	3.A, 5.L
1,1-Dichloroethane	75-34-3	42.0	<42.0	ug/kg dry	3.A, 5.L
1,1-Dichloroethylene	75-35-4	42.0	<42.0	ug/kg dry	3.A, 5.L
1,2,4-Trimethylbenzene	95-63-6	42.0	<42.0	ug/kg dry	3.A, 5.L
1,2-Dichlorobenzene	95-50-1	42.0	<42.0	ug/kg dry	3.A, 5.L
1,2-Dichloroethane	107-06-2	42.0	<42.0	ug/kg dry	3.A, 5.L
1,3,5-Trimethylbenzene	108-67-8	42.0	<42.0	ug/kg dry	3.A, 5.L
1,3-Dichlorobenzene	541-73-1	42.0	<42.0	ug/kg dry	3.A, 5.L
1,4-Dichlorobenzene	106-46-7	42.0	<42.0	ug/kg dry	3.A, 5.L
1,4-Dioxane	123-91-1	420	<420	ug/kg dry	3.A, 5.L
Acetone	67-64-1	420	<420	ug/kg dry	3.A, 5.L
Benzene	71-43-2	42.0	<42.0	ug/kg dry	3.A, 5.L
Carbon Tetrachloride	56-23-5	42.0	<42.0	ug/kg dry	5.L, 3.A
Chlorobenzene	108-90-7	42.0	<42.0	ug/kg dry	3.A, 5.L
Chloroform	67-66-3	42.0	73.5	ug/kg dry	3.E, 5.L
cis-1,2-Dichloroethylene	156-59-2	42.0	<42.0	ug/kg dry	3.A, 5.L
Ethylbenzene	100-41-4	42.0	<42.0	ug/kg dry	3.A, 5.L
m,p-Xylenes	108-38-3/106-42-3	84.1	<84.1	ug/kg dry	3.A, 5.L
Methyl Ethyl Ketone (2-Butanone)	78-93-3	84.1	<84.1	ug/kg dry	3.A, 5.L
Methylene Chloride	75-09-2	42.0	<42.0	ug/kg dry	3.A, 5.L
Methyl-tert-Butyl Ether	1634-04-4	42.0	<42.0	ug/kg dry	5.L, 3.A
n-Butylbenzene	104-51-8	42.0	<42.0	ug/kg dry	3.A, 5.L
n-Propylbenzene	103-65-1	42.0	<42.0	ug/kg dry	3.A, 5.L
o-Xylene	95-47-6	42.0	<42.0	ug/kg dry	3.A, 5.L
sec-Butylbenzene	135-98-8	42.0	<42.0	ug/kg dry	3.A, 5.L
tert-Butylbenzene	98-06-6	42.0	<42.0	ug/kg dry	3.A, 5.L
Tetrachloroethylene	127-18-4	42.0	<42.0	ug/kg dry	3.A, 5.L
Toluene	108-88-3	42.0	<42.0	ug/kg dry	3.A, 5.L
trans-1,2-Dichloroethylene	156-60-5	42.0	<42.0	ug/kg dry	3.A, 5.L
Trichloroethylene	79-01-6	42.0	<42.0	ug/kg dry	3.A, 5.L



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Client: Nelson, Pope & Voorhis	Client ID: Lau Property
Date (Time) Collected: 10/26/2015 14:20	Sample ID: FD-2
Date (Time) Received: 10/26/2015 17:53	Laboratory ID: 5102702-05 % Solid:59.46
Matrix: Soil	ELAP: #11693

Volatiles Low Level Analysis

Parameter	CAS No.	LOQ	Result	Units	Flag
Vinyl chloride	75-01-4	42.0	<42.0	ug/kg dry	3.A, 4.J, 5.L

Surrogate	CAS No.	% Recovery	Rec. Limits	Flag
1,2-Dichloroethane-d4	10706-07-0	77	74.4-131	
4-Bromofluorobenzene	460-00-4	126	82.3-134	
Dibromofluoromethane	1868-53-7	92	79.4-122	
Toluene-d8	2037-26-5	107	85-123	

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
1,4-Dichlorobenzene-d4	3855-82-1	60	50-200	
1,4-Difluorobenzene	540-36-3	110	50-200	
Chlorobenzene-d5	3114-55-4	92	50-200	
Pentafluorobenzene	363-72-4	115	50-200	

Date Prepared: 10/29/2015

Preparation Method: EPA 5035A-L

Date Analyzed: 10/29/2015

Analytical Method: EPA 8260 C

Client: Nelson, Pope & Voorhis	Client ID: Lau Property
Date (Time) Collected: 10/26/2015 14:20	Sample ID: FD-2
Date (Time) Received: 10/26/2015 17:53	Laboratory ID: 5102702-05 % Solid:59.46
Matrix: Soil	ELAP: #11693

Semivolatile Analysis

Parameter	CAS No.	LOQ	Result	Units	Flag
2-Methylphenol	95-48-7	757	<757	ug/kg dry	3.A
3/4-Methylphenol	108-39-4/106-44-5	757	<757	ug/kg dry	3.A
Acenaphthene	83-32-9	757	<757	ug/kg dry	3.A
Acenaphthylene	208-96-8	757	<757	ug/kg dry	3.A
Anthracene	120-12-7	757	<757	ug/kg dry	3.A
Benzo(a)anthracene	56-55-3	757	<757	ug/kg dry	3.A
Benzo(a)pyrene	50-32-8	757	788	ug/kg dry	3.E
Benzo(b)fluoranthene	205-99-2	757	1050	ug/kg dry	3.E
Benzo(g,h,i)perylene	191-24-2	757	<757	ug/kg dry	3.A
Benzo(k)fluoranthene	207-08-9	757	<757	ug/kg dry	3.A
Chrysene	218-01-9	757	<757	ug/kg dry	3.A
Dibenzo(a,h)anthracene	53-70-3	757	<757	ug/kg dry	3.A
Dibenzofuran	132-64-9	757	<757	ug/kg dry	3.A
Fluoranthene	206-44-0	757	782	ug/kg dry	3.E
Fluorene	86-73-7	757	<757	ug/kg dry	3.A
Hexachlorobenzene	118-74-1	757	<757	ug/kg dry	3.A
Indeno(1,2,3-cd)pyrene	193-39-5	757	<757	ug/kg dry	3.A
Naphthalene	91-20-3	757	<757	ug/kg dry	3.A
Pentachlorophenol	87-86-5	757	<757	ug/kg dry	3.A
Phenanthrene	85-01-8	757	<757	ug/kg dry	3.A
Phenol	108-95-2	757	954	ug/kg dry	3.E
Pyrene	129-00-0	757	<757	ug/kg dry	3.E

Surrogate	CAS No.	% Recovery	Rec. Limits	Flag
2,4,6-Tribromophenol	118-79-6	103	18.04-120.2	3.E
2-Fluorobiphenyl	321-60-8	61	34.39-110.73	3.E
2-Fluorophenol	367-12-4	72	22.98-107.57	3.E
Nitrobenzene-d5	4165-60-0	82	31-118.25	3.E
Phenol-d6	13127-88-3	81	35.55-111.39	3.E
Terphenyl-d14	1718-51-0	92	41.02-106	3.E

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
1,4-Dichlorobenzene-d4	3855-82-1	116	50-200	

Client: Nelson, Pope & Voorhis	Client ID: Lau Property
Date (Time) Collected: 10/26/2015 14:20	Sample ID: FD-2
Date (Time) Received: 10/26/2015 17:53	Laboratory ID: 5102702-05 % Solid:59.46
Matrix: Soil	ELAP: #11693

Semivolatile Analysis

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
Acenaphthene-d10	15067-26-2	79	50-200	
Chrysene-d12	1719-03-5	103	50-200	
Naphthalene-d8	1146-65-2	114	50-200	
Perylene-d12	1520-96-3	116	50-200	
Phenanthrene-d10	1517-22-2	76	50-200	

Date Prepared: 10/29/2015

Preparation Method: EPA 3545 A

Date Analyzed: 10/30/2015

Analytical Method: EPA 8270 D



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Client: Nelson, Pope & Voorhis	Client ID: Lau Property
Date (Time) Collected: 10/26/2015 14:20	Sample ID: FD-2
Date (Time) Received: 10/26/2015 17:53	Laboratory ID: 5102702-05 % Solid:59.46
Matrix: Soil	ELAP: #11693

Pesticides Analysis

Parameter	CAS No.	LOQ	Result	Units	Flag
4,4'-DDD	72-54-8	5.05	606	ug/kg dry	
4,4'-DDE	72-55-9	5.05	230	ug/kg dry	
4,4'-DDT	50-29-3	5.05	56.6	ug/kg dry	
Aldrin	309-00-2	8.41	<8.41	ug/kg dry	
alpha-BHC	319-84-6	8.41	<8.41	ug/kg dry	
beta-BHC	319-85-7	8.41	<8.41	ug/kg dry	
cis-Chlordane	5103-71-9	8.41	552	ug/kg dry	4.G
delta-BHC	319-86-8	8.41	<8.41	ug/kg dry	
Dieldrin	60-57-1	8.41	<8.41	ug/kg dry	
Endosulfan I	959-98-8	8.41	<8.41	ug/kg dry	
Endosulfan II	33213-65-9	8.41	<8.41	ug/kg dry	
Endosulfan Sulfate	1031-07-8	8.41	<8.41	ug/kg dry	4.G
Endrin	72-20-8	8.41	<8.41	ug/kg dry	
gamma-BHC	58-89-9	8.41	14.9	ug/kg dry	
Heptachlor	76-44-8	8.41	<8.41	ug/kg dry	

Surrogate	CAS No.	% Recovery	Rec. Limits	Flag
Decachlorobiphenyl	2051-24-3	1890	62.3-146	4.E
Tetrachloro-m-xylene	877-09-8	88	83.1-126	

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
1-Bromo-2-Nitrobenzene	108-31-6	109	50-200	

Date Prepared: 10/27/2015

Preparation Method: EPA 3545 A

Date Analyzed: 10/28/2015

Analytical Method: EPA 8081 B

Client: Nelson, Pope & Voorhis	Client ID: Lau Property
Date (Time) Collected: 10/26/2015 14:20	Sample ID: FD-2
Date (Time) Received: 10/26/2015 17:53	Laboratory ID: 5102702-05 % Solid:59.46
Matrix: Soil	ELAP: #11693

PCB/Aroclor Analysis

Parameter	CAS No.	LOQ	Result	Units	Flag
Aroclor-1016	12674-11-2	16.8	<16.8	ug/kg dry	
Aroclor-1221	11104-28-2	16.8	<16.8	ug/kg dry	
Aroclor-1232	11141-16-5	16.8	<16.8	ug/kg dry	
Aroclor-1242	53469-21-9	16.8	<16.8	ug/kg dry	
Aroclor-1248	12672-29-6	16.8	<16.8	ug/kg dry	
Aroclor-1254	11097-69-1	16.8	<16.8	ug/kg dry	
Aroclor-1260	11096-82-5	16.8	<16.8	ug/kg dry	4.G
Aroclor-1262	37324-23-5	16.8	<16.8	ug/kg dry	
Aroclor-1268	11100-14-4	16.8	<16.8	ug/kg dry	

Surrogate	CAS No.	% Recovery	Rec. Limits	Flag
Decachlorobiphenyl	2051-24-3	81	43.5-123	
Tetrachloro-m-xylene	877-09-8	100	72.3-118	

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
1-Bromo-2-Nitrobenzene	108-31-6	92	50-200	

Date Prepared: 10/27/2015

Preparation Method: EPA 3545 A

Date Analyzed: 10/29/2015

Analytical Method: EPA 8082 A

Client: Nelson, Pope & Voorhis	Client ID: Lau Property
Date (Time) Collected: 10/26/2015 14:20	Sample ID: FD-2
Date (Time) Received: 10/26/2015 17:53	Laboratory ID: 5102702-05 % Solid:59.46
Matrix: Soil	ELAP: #11693

Herbicide Analysis

Parameter	CAS No.	LOQ	Result	Units	Flag
2,4,5-TP (Silvex)	93-72-1	42	<42	ug/kg dry	

Surrogate	CAS No.	% Recovery	Rec. Limits	Flag
2,4-Dichlorophenylacetic Acid	19719-28-9	73	21.5-137	

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
4,4'-Dibromoocafuorobiphenyl	10386-84-2	120	50-200	

Date Prepared: 10/27/2015

Preparation Method: EPA 3545 A

Date Analyzed: 11/03/2015

Analytical Method: EPA 8151 A



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Client: Nelson, Pope & Voorhis	Client ID: Lau Property
Date (Time) Collected: 10/26/2015 14:20	Sample ID: FD-2
Date (Time) Received: 10/26/2015 17:53	Laboratory ID: 5102702-05 % Solid:59.46
Matrix: Soil	ELAP: #11693

Total Metals Analysis

Parameter	Date Analyzed	Method	LOQ	Result	Units	Flag
Arsenic	10/27/2015	EPA 6010 C	2.29	17.2	mg/kg dry	
Barium	10/27/2015	EPA 6010 C	2.29	262	mg/kg dry	
Beryllium	10/27/2015	EPA 6010 C	2.29	<2.29	mg/kg dry	
Cadmium	10/27/2015	EPA 6010 C	2.29	36.8	mg/kg dry	
Chromium	10/27/2015	EPA 6010 C	2.29	67.9	mg/kg dry	
Copper	10/28/2015	EPA 6010 C	22.9	1260	mg/kg dry	3.E
Lead	10/28/2015	EPA 6010 C	22.9	1340	mg/kg dry	3.E
Manganese	10/27/2015	EPA 6010 C	2.29	344	mg/kg dry	
Nickel	10/27/2015	EPA 6010 C	2.29	55.9	mg/kg dry	
Selenium	10/27/2015	EPA 6010 C	2.29	<2.29	mg/kg dry	
Silver	10/27/2015	EPA 6010 C	2.29	<2.29	mg/kg dry	
Zinc	10/28/2015	EPA 6010 C	22.9	3720	mg/kg dry	3.E

Date Prepared: 10/27/2015

Preparation Method: EPA 3050B

Parameter	Date Analyzed	Method	LOQ	Result	Units	Flag
Mercury	10/28/2015	EPA 7471 B	2.25	11.7	mg/kg dry	3.E

Date Prepared: 10/27/2015

Preparation Method: EPA 7471 B

Data Qualifiers Key Reference:

- 3.A Reporting limit raised due to matrix interference.
- 3.E Compound reported at a dilution factor.
- 4.D Surrogate recovery has failed low.
- 4.E Surrogate recovery has failed high.
- 4.G Spike recovery out of range due to matrix interference.
- 4.J Continuing Calibration Verification (CCV) quality control levels failed low, values are considered to be estimated.
- 4.L Surrogate recovery is outside the acceptance criteria.
- 4.T Sample Matrix Spike/Spike Dup RPD is above acceptable range.
- 5.L Results may be biased low due to the sample not being collected according to 5035A-L/5035A-H low level specifications.
- MDL Minimum Detection Limit
- LOQ Limit of Quantitation

Limited Phase II
Environmental Site Assessment
122 & 126 Bedell Street

Hempstead, New York

NP&V Job# 15247

December 3, 2015

**Limited Phase II
Environmental Site Assessment**

122 & 126 Bedell Street

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**Limited Phase II
Environmental Site Assessment**

122 & 126 Bedell Street

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Limited Phase II
Environmental Site Assessment
122 & 126 Bedell Street

1.0 INTRODUCTION AND PURPOSE

Nelson, Pope & Voorhis, LLC (NP&V) has been contracted to prepare a Limited Phase II Environmental Site Assessment for the subject property. This report is intended to address recognized environmental conditions that were identified in a Phase I Environmental Site Assessment report prepared by Nelson, Pope & Voorhis, LLC dated November 13, 2015. The Phase I ESA was performed in accordance with the standards detailed by the American Society of Testing and Materials (ASTM) for the Performance of a Phase I Environmental Site Assessment (E 1527). This Limited Phase II ESA was designed to determine what, if any, impact on-site activities have had upon the environmental quality of the subject property.

The subject property is located in the Village of Hempstead, County of Nassau, New York. The property is identified more specifically as Nassau County Tax Number: Section 34, Block 195, Lot 130. The ±0.10 acre parcel is located on the south side of Bedell Street, approximately 150 feet west of Main Street. The subject property is located within an area developed with residential and commercial uses as well as municipal parking lots. The subject property is currently occupied by two (2), two (2) story single family homes.



Both buildings consist of wood framed structures with vinyl siding and asphalt shingle roofs with concrete block foundations. The interior of the buildings consist of painted sheetrock and/or plaster walls and ceilings with vinyl tiled and wood covered floors.

The eastern residence (126 Bedell Street) is heated by a natural gas fired boiler and window mounted air conditioning units. The western residence (122 Bedell Street) is heated by a fuel oil fired boiler and cooled by window mounted air conditioning units. A 275 gallon fuel oil above ground storage tank was observed in the basement of both buildings. The tank in the basement of 126 Bedell Street was found to be empty at the time of the inspection. Floor drains were observed in the basements of each residence and were situated adjacent to the boilers that service each home.

Based on these findings the Phase I Environmental Site Assessment identified recognized environmental conditions that prompted the performance of this Limited Phase II Environmental Site Assessment. These conditions included:

1. There are floor drains in both basements located adjacent to the boilers that service each which discharge directly to the subsurface.

This assessment has been designed and performed by NP&V to address the potential impacts to the subsurface soils in the vicinity of the floor drains. The laboratory analysis was provided by Long Island Analytical Laboratories, Inc.

The protocol used to direct this investigation is based upon the following documents: 1) the New York State Department of Environmental Conservation (NYSDEC) 6NYCRR Part 375 Environmental Remediation Programs Subparts 375-1 to 375-4 & 375-6. The following sections detail the subject property and surrounding area characteristics, sampling program, quality assurance protocol, laboratory analysis methodology and laboratory results.

2.0 SAMPLING AND ANALYSIS PROGRAM (SAP)

2.1 HAND AUGER SOIL SAMPLING

The two (2) floor drains located in the basements of the two (2) residences were sampled using a stainless steel hand auger. The soil samples (FD-1 and FD-2) were collected from the bottom sediment soil of the floor drains. These samples were collected from the top zero to twelve (0-12) inches of the soil and were analyzed based on the NYSDEC parameters for the presence of volatile and semi-volatile organic compounds and metals. **Figure 1** located in the rear of this document provides a location of the samples collected.

2.2 LABORATORY SAMPLE LOCATION AND FREQUENCY

The soil samples collected from the site were containerized and labeled for identification purposes. The labels were coded to correspond to the location from which the samples were secured. **Table 1** provides an index of how the samples were coded during labeling.

TABLE 1
SAMPLE IDENTIFICATION

SAMPLE LOCATION	SAMPLE ID CODE
Soil sample collected from floor drain in the basement of the residence on the west side of the property (122).	FD-1
Soil sample collected from floor drain in the basement of the residence on the east side of the property (126).	FD-2

3.0 LABORATORY ANALYSIS

3.1 ANALYTICAL TEST METHODS

The soil samples were transported to a New York State Certified Commercial Laboratory for analysis. Selection of the analytical test methods for the presence of volatile and semi-volatile organic compounds and metals based on NYSDEC parameters.

3.2 ANALYTICAL RESULTS

The laboratory analysis performed on the two (2) floor drains samples did not exhibit any elevated concentrations of volatile or semi volatile organic compounds in FD-2. Several of the analyzed volatile and semi-volatile organic compounds in FD-1 exhibited elevated concentrations and both samples exhibited elevated concentrations of several of the metals analyzed. **Table 2** provides a comparison of those constituents with elevated concentrations and the regulatory guidance values. The laboratory analysis sheets (NYS ASPA) as prepared by Long Island Analytical Laboratories are presented in **Appendix A** of this document. As depicted in **Table 2**, several of the analyzed constituents exceeded the regulatory guidance values set forth in the NYSDEC Part 375. Since these concentrations exceed the NYSDEC guidance values, it is recommended that FD-1 and FD-2 remediated under the auspices of USEPA personnel.

TABLE 2
COMPARISON ANALYSIS

Constituents	FD-1	FD-2	6 NYCRR Part 375 Protection of GW
Semi-Volatiles	ug/kg	ug/kg	ug/kg
Naphthalene	16,800	ND	12,000
Pentachlorophenol	2,390	ND	NS
Phenanthrene	11,800	ND	1,000,000
Fluoranthene	746	ND	1,000,000
Pyrene	8,620	ND	1,000,000
Volatiles	ug/kg	ug/kg	ug/kg
1,3,5-Trimethylbenzene	2,580	ND	8,400
1,2,4-Trimethylbenzene	7,970	ND	3,600
sec-Butylbenzene	934	ND	11,000
Metals	mg/kg	mg/kg	mg/kg
Arsenic	12.0	3.39	16
Barium	131	339	820
Cadmium	7.97	2.64	7.5
Chromium	72.7	14.1	NS
Copper	8,480	923	1,720
Lead	10,700	858	450
Manganese	555	221	2,000
Nickel	76.5	15.4	130
Silver	4.48	2.69	8.3
Zinc	2,290	10,700	2,480
Mercury	0.19	1.85	0.73

ND - Not Detected NS - No Standard

Bold and highlighted indicates the constituent exceeds the regulatory guidance values

4.0 QUALITY ASSURANCE/QUALITY CONTROL PROCEDURES (QA/QC)

This sampling protocol was conducted in accordance with USEPA accepted sampling procedures for hazardous waste streams (Municipal Research Laboratory, 1980, Sampling and Sampling Procedures for Hazardous Material Waste Streams, USEPA, Cincinnati, Ohio EPA- 600/280-018) and ASTM Material Sampling Procedures. All samples were collected by or under the auspices of USEPA trained personnel having completed the course Sampling of Hazardous Materials, offered by the Office of Emergency and Remedial Response.

Separate QA/QC measures were implemented for each of the instruments used in the Sampling and Analysis Program. Sampling instruments included a stainless steel hand auger and sample vessels.

Prior to arrival on the site and between sample locations, the probes sections were decontaminated by washing with a detergent (alconox/liquinnox) and potable water solution with distilled water rinse. The organic vapor analyzer was calibrated prior to sampling using a span gas of known concentration. All sample vessels were "level A" certified decontaminated containers. Samples were placed into vessels consistent with the analytical parameters. After acquisition, samples were preserved in the field. All containerized samples were refrigerated to 4° C during transport.

A sample represents physical evidence; therefore, an essential part of liability reduction is the proper control of gathered evidence. To establish proper control, the following sample identification and chain-of-custody procedures were followed.

Sample Identification

Sample identification was executed by use of a sample tag, logbook and manifest. Documentation provides the following:

1. Project Code
2. Sample Laboratory Number
3. Sample Preservation
4. Instrument Used for Source Soil Grabs
5. Composite Medium Used for Source Soil Grabs
6. Date Sample was Secured from Source Soil
7. Time Sample was Secured from Source Soil
8. Person Who Secured Sample from Source Soil

Chain-of-Custody Procedures

Due to the evidential nature of samples, possession was traceable from the time the samples were collected until they were received by the testing laboratory. A sample was considered under custody if:

It was in a person's possession, or
It was in a person's view, after being in possession, or
It was in a person's possession and they were to lock it up, or
It is in a designated secure area.

When transferring custody, the individuals relinquishing and receiving signed, dated and noted the time on the Chain-of- Custody Form.

Laboratory Custody Procedures

A designated sample custodian accepted custody of the shipped samples and verified that the information on the sample tags matched that on the Chain-of-Custody records. Pertinent information as to shipment, pick-up, courier, etc. was entered in the "remarks" section. The custodian then entered the sample tag data into a bound logbook which was arranged by project code and station number.

The laboratory custodian used the sample tag number or assigned an unique laboratory number to each sample tag and assured that all samples were transferred to the proper analyst or stored in the appropriate source area.

The custodian distributed samples to the appropriate analysts. Laboratory personnel were responsible for the care and custody of samples from the time they were received until the sample was exhausted or returned to the custodian.

All identifying data sheets and laboratory records were retained as part of the permanent site record. Samples received by the laboratory were retained until after analysis and quality assurance checks were completed.

5.0 SUMMARY AND CONCLUSION

This investigation was completed to address issues raised in a prior Phase I ESA prepared by Nelson, Pope & Voorhis, LLC. A sampling and analysis program was designed to determine if the basement floor drains had been impacted by the prior and existing uses of the subject property. The sampling and analysis plan consisted of soil/sediment quality testing using analytical test methods consistent with expected parameters and agency soil cleanup objectives. The following presents an evaluation of the results of this investigation.

1. The two (2) floor drains located in the basements of the two (2) residences were sampled and analyzed for the presence of volatile and semi-volatile organic compounds and metals. The analytical results revealed that several of the analyzed volatile and semi-volatile organic compounds and metal constituents exhibited elevated concentrations. Several of the elevated concentrations exceeded the NYSDEC guidance values set forth in Part 375. As a result, it is recommended that FD-1 and FD-2 be remediated under the auspices of USEPA personnel.

The subject property has been evaluated consistent with the findings of a Phase I ESA, and in accordance with standard practice for the industry. This Limited Phase II ESA addresses only the specific areas of the site warranting further analysis and can only provide conclusions regarding the subsurface soil quality in those specific areas tested. The Limited Phase II ESA report is limited to the evaluation of on-site conditions at the time of completion of the field sampling program.

Date of Completion

*Charles J. Voorhis, CEP, AICP
Project Manager*

6.0 REFERENCES

New York State Department of Environmental Conservation (NYSDEC), 1992, Sampling Guidelines and Protocols, Technology Background and Quality Control/Quality Assurance for NYSDEC Spill Response Program, NYSDEC, Albany, New York.

American Society for Testing and Materials (ASTM), June 2011, E1903-11 Standard Practice for Environmental Site Assessments: Phase II Environmental Site Assessment Process, West Conshohocken, Pennsylvania.

New York State Department of Environmental Conservation (NYSDEC), December 2006, 6NYCRR Part 375 Environmental Remediation Programs Subparts 375-1 to 375-4 & 375-6, Division of Environmental Remediation, Albany, New York.

FIGURES



Legend



Site



Floor Drain



**FIGURE 1
SAMPLE LOCATION MAP**

Source: NYS Orthophotography Program, 2013
Scale: 1 inch = 25 feet



122 & 126 Bedell Street

Limited Phase II ESA

APPENDICES

APPENDIX A

LABORATORY DATA SHEETS

**LONG
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USEPA# NY01273
CTDOH# PH-0284
AIHA# 164456
NJDEP# NY012
PADEP# 68-2943

LIAL# 5112310

December 01, 2015

Nelson, Pope & Voorhis
Steve McGinn
572 Walt Whitman Road
Melville, NY 11747**Re: 122 & 126 Bedell Street Hempstead**

Dear Steve McGinn,

Enclosed please find the laboratory Analysis Report(s) for sample(s) received on November 23, 2015. Long Island Analytical laboratories analyzed the samples on December 01, 2015 for the following:

SAMPLE ID	ANALYSIS
FD-1	NYC Part 375 (Semi-Volatile), NYC Part 375 (Volatile), NYC Part 375 Metals
FD-2	NYC Part 375 (Semi-Volatile), NYC Part 375 (Volatile), NYC Part 375 Metals

Samples received at 2.7 ° C

5.L Results may be biased low due to the sample not being collected according to 5035A-L/5035A-H low level specifications.

If you have any questions or require further information, please call at your convenience. Long Island Analytical Laboratories Inc. is a NELAP accredited laboratory. All reported results meet the requirements of the NELAP standards unless noted. Report shall not be reproduced except in full without the written approval of the laboratory. Results related only to items tested. Long Island Analytical Laboratories would like to thank you for the opportunity to be of service to you.

Best Regards,

Long Island Analytical Laboratories, Inc.**Michael Veraldi - Laboratory Director**

Client: Nelson, Pope & Voorhis	Client ID: 122 & 126 Bedell Street Hempstead
Date (Time) Collected: 11/23/2015 10:25	Sample ID: FD-1
Date (Time) Received: 11/23/2015 17:20	Laboratory ID: 5112310-01 % Solid:87.68
Matrix: Soil	ELAP: #11693

Volatiles Low Level Analysis

Parameter	CAS No.	LOQ	Result	Units	Flag
1,1,1-Trichloroethane	71-55-6	285	<285	ug/kg dry	3.A, 5.L
1,1-Dichloroethane	75-34-3	285	<285	ug/kg dry	3.A, 5.L
1,1-Dichloroethylene	75-35-4	285	<285	ug/kg dry	3.A, 5.L
1,2,4-Trimethylbenzene	95-63-6	285	7970	ug/kg dry	3.E, 5.L
1,2-Dichlorobenzene	95-50-1	285	<285	ug/kg dry	3.A, 5.L
1,2-Dichloroethane	107-06-2	285	<285	ug/kg dry	3.A, 5.L
1,3,5-Trimethylbenzene	108-67-8	285	2580	ug/kg dry	3.E, 5.L
1,3-Dichlorobenzene	541-73-1	285	<285	ug/kg dry	3.A, 5.L
1,4-Dichlorobenzene	106-46-7	285	<285	ug/kg dry	3.A, 5.L
1,4-Dioxane	123-91-1	2850	<2850	ug/kg dry	3.A, 5.L
Acetone	67-64-1	2850	<2850	ug/kg dry	5.L, 3.A
Benzene	71-43-2	285	<285	ug/kg dry	3.A, 5.L
Carbon Tetrachloride	56-23-5	285	<285	ug/kg dry	3.A, 5.L
Chlorobenzene	108-90-7	285	<285	ug/kg dry	3.A, 5.L
Chloroform	67-66-3	285	<285	ug/kg dry	3.A, 5.L
cis-1,2-Dichloroethylene	156-59-2	285	<285	ug/kg dry	3.A, 5.L
Ethylbenzene	100-41-4	285	<285	ug/kg dry	3.A, 5.L
m,p-Xylenes	108-38-3/106-42-3	570	<570	ug/kg dry	3.A, 5.L
Methyl Ethyl Ketone (2-Butanone)	78-93-3	570	<570	ug/kg dry	3.A, 5.L
Methylene Chloride	75-09-2	285	<285	ug/kg dry	4.J, 5.L, 3.A
Methyl-tert-Butyl Ether	1634-04-4	285	<285	ug/kg dry	3.A, 4.M, 5.L
n-Butylbenzene	104-51-8	285	<285	ug/kg dry	3.A, 5.L
n-Propylbenzene	103-65-1	285	<285	ug/kg dry	3.A, 5.L
o-Xylene	95-47-6	285	<285	ug/kg dry	3.A, 5.L
sec-Butylbenzene	135-98-8	285	934	ug/kg dry	3.E, 5.L
tert-Butylbenzene	98-06-6	285	<285	ug/kg dry	5.L, 3.A
Tetrachloroethylene	127-18-4	285	<285	ug/kg dry	3.A, 5.L
Toluene	108-88-3	285	<285	ug/kg dry	3.A, 5.L
trans-1,2-Dichloroethylene	156-60-5	285	<285	ug/kg dry	3.A, 5.L
Trichloroethylene	79-01-6	285	<285	ug/kg dry	3.A, 5.L

Client: Nelson, Pope & Voorhis	Client ID: 122 & 126 Bedell Street Hempstead
Date (Time) Collected: 11/23/2015 10:25	Sample ID: FD-1
Date (Time) Received: 11/23/2015 17:20	Laboratory ID: 5112310-01 % Solid:87.68
Matrix: Soil	ELAP: #11693

Parameter	CAS No.	LOQ	Result	Units	Flag
Vinyl chloride	75-01-4	285	<285	ug/kg dry	3.A, 5.L

Surrogate	CAS No.	% Recovery	Rec. Limits	Flag
1,2-Dichloroethane-d4	10706-07-0	86	74.4-131	
4-Bromofluorobenzene	460-00-4	126	82.3-134	
Dibromofluoromethane	1868-53-7	95	79.4-122	
Toluene-d8	2037-26-5	104	85-123	

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
1,4-Dichlorobenzene-d4	3855-82-1	56	50-200	
1,4-Difluorobenzene	540-36-3	91	50-200	
Chlorobenzene-d5	3114-55-4	81	50-200	
Pentafluorobenzene	363-72-4	92	50-200	

Date Prepared: 11/24/2015

Preparation Method: EPA 5035A-L

Date Analyzed: 11/25/2015

Analytical Method: EPA 8260 C



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Date (Time) Received: 11/23/2015 17:20	Laboratory ID: 5112310-01 % Solid:87.68
Matrix: Soil	ELAP: #11693

Semivolatile Analysis

Parameter	CAS No.	LOQ	Result	Units	Flag
2-Methylphenol	95-48-7	684	<684	ug/kg dry	3.A
3/4-Methylphenol	108-39-4/106-44-5	684	<684	ug/kg dry	3.A
Acenaphthene	83-32-9	684	<684	ug/kg dry	3.A
Acenaphthylene	208-96-8	684	<684	ug/kg dry	3.A
Anthracene	120-12-7	684	<684	ug/kg dry	3.E
Benzo(a)anthracene	56-55-3	684	<684	ug/kg dry	3.A
Benzo(a)pyrene	50-32-8	684	<684	ug/kg dry	3.A
Benzo(b)fluoranthene	205-99-2	684	<684	ug/kg dry	3.A
Benzo(g,h,i)perylene	191-24-2	684	<684	ug/kg dry	3.A
Benzo(k)fluoranthene	207-08-9	684	<684	ug/kg dry	3.A
Chrysene	218-01-9	684	<684	ug/kg dry	3.A
Dibenzo(a,h)anthracene	53-70-3	684	<684	ug/kg dry	3.A
Dibenzofuran	132-64-9	684	<684	ug/kg dry	3.A
Fluoranthene	206-44-0	684	746	ug/kg dry	3.E
Fluorene	86-73-7	684	<684	ug/kg dry	3.A
Hexachlorobenzene	118-74-1	684	<684	ug/kg dry	3.A
Indeno(1,2,3-cd)pyrene	193-39-5	684	<684	ug/kg dry	3.A
Naphthalene	91-20-3	6840	16800	ug/kg dry	3.E
Pentachlorophenol	87-86-5	684	2390	ug/kg dry	3.E
Phenanthrene	85-01-8	684	11800	ug/kg dry	3.E
Phenol	108-95-2	684	<684	ug/kg dry	3.A
Pyrene	129-00-0	684	8620	ug/kg dry	3.E

Surrogate	CAS No.	% Recovery	Rec. Limits	Flag
2,4,6-Tribromophenol	118-79-6	69	18.04-120.2	3.E
2-Fluorobiphenyl	321-60-8	108	34.39-110.73	3.E
2-Fluorophenol	367-12-4	73	22.98-107.57	3.E
Nitrobenzene-d5	4165-60-0	88	31-118.25	3.E
Phenol-d6	13127-88-3	78	35.55-111.39	3.E
Terphenyl-d14	1718-51-0	95	41.02-106	3.E

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
1,4-Dichlorobenzene-d4	3855-82-1	91	50-200	

Client: Nelson, Pope & Voorhis	Client ID: 122 & 126 Bedell Street Hempstead
Date (Time) Collected: 11/23/2015 10:25	Sample ID: FD-1
Date (Time) Received: 11/23/2015 17:20	Laboratory ID: 5112310-01 % Solid:87.68
Matrix: Soil	ELAP: #11693

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
Acenaphthene-d10	15067-26-2	85	50-200	
Chrysene-d12	1719-03-5	72	50-200	
Naphthalene-d8	1146-65-2	79	50-200	
Perylene-d12	1520-96-3	84	50-200	
Phenanthrene-d10	1517-22-2	63	50-200	

Date Prepared: 11/23/2015

Preparation Method: EPA 3545 A

Date Analyzed: 11/30/2015

Analytical Method: EPA 8270 D



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Date (Time) Received: 11/23/2015 17:20	Laboratory ID: 5112310-01 % Solid:87.68
Matrix: Soil	ELAP: #11693

Total Metals Analysis

Parameter	Date Analyzed	Method	LOQ	Result	Units	Flag
Arsenic	11/24/2015	EPA 6010 C	1.77	12.0	mg/kg dry	
Barium	11/24/2015	EPA 6010 C	1.77	131	mg/kg dry	
Beryllium	11/24/2015	EPA 6010 C	1.77	<1.77	mg/kg dry	
Cadmium	11/24/2015	EPA 6010 C	1.77	7.97	mg/kg dry	
Chromium	11/24/2015	EPA 6010 C	1.77	72.7	mg/kg dry	
Copper	11/24/2015	EPA 6010 C	177	8480	mg/kg dry	3.E
Lead	11/24/2015	EPA 6010 C	177	10700	mg/kg dry	3.E
Manganese	11/24/2015	EPA 6010 C	177	555	mg/kg dry	3.E
Nickel	11/24/2015	EPA 6010 C	1.77	76.5	mg/kg dry	
Selenium	11/24/2015	EPA 6010 C	1.77	<1.77	mg/kg dry	
Silver	11/24/2015	EPA 6010 C	1.77	4.48	mg/kg dry	
Zinc	11/24/2015	EPA 6010 C	177	2290	mg/kg dry	3.E

Date Prepared: 11/24/2015

Preparation Method: EPA 3050B

Parameter	Date Analyzed	Method	LOQ	Result	Units	Flag
Mercury	11/25/2015	EPA 7471 B	0.02	0.19	mg/kg dry	

Date Prepared: 11/24/2015

Preparation Method: EPA 7471 B

Client: Nelson, Pope & Voorhis	Client ID: 122 & 126 Bedell Street Hempstead		
Date (Time) Collected: 11/23/2015 10:35	Sample ID: FD-2		
Date (Time) Received: 11/23/2015 17:20	Laboratory ID: 5112310-02	% Solid:91.84	
Matrix: Soil	ELAP: #11693		

Volatiles Low Level Analysis

Parameter	CAS No.	LOQ	Result	Units	Flag
1,1,1-Trichloroethane	71-55-6	5.44	<5.44	ug/kg dry	5.L
1,1-Dichloroethane	75-34-3	5.44	<5.44	ug/kg dry	5.L
1,1-Dichloroethylene	75-35-4	5.44	<5.44	ug/kg dry	5.L
1,2,4-Trimethylbenzene	95-63-6	5.44	<5.44	ug/kg dry	5.L
1,2-Dichlorobenzene	95-50-1	27.2	<27.2	ug/kg dry	3.A, 5.L
1,2-Dichloroethane	107-06-2	5.44	<5.44	ug/kg dry	5.L
1,3,5-Trimethylbenzene	108-67-8	5.44	<5.44	ug/kg dry	5.L
1,3-Dichlorobenzene	541-73-1	27.2	<27.2	ug/kg dry	3.A, 5.L
1,4-Dichlorobenzene	106-46-7	27.2	<27.2	ug/kg dry	3.A, 5.L
1,4-Dioxane	123-91-1	54.4	<54.4	ug/kg dry	5.L
Acetone	67-64-1	54.4	<54.4	ug/kg dry	5.L
Benzene	71-43-2	5.44	<5.44	ug/kg dry	5.L
Carbon Tetrachloride	56-23-5	5.44	<5.44	ug/kg dry	5.L
Chlorobenzene	108-90-7	5.44	<5.44	ug/kg dry	5.L
Chloroform	67-66-3	5.44	<5.44	ug/kg dry	5.L
cis-1,2-Dichloroethylene	156-59-2	5.44	<5.44	ug/kg dry	5.L
Ethylbenzene	100-41-4	5.44	<5.44	ug/kg dry	5.L
m,p-Xylenes	108-38-3/106-42-3	10.9	<10.9	ug/kg dry	5.L
Methyl Ethyl Ketone (2-Butanone)	78-93-3	10.9	<10.9	ug/kg dry	5.L
Methylene Chloride	75-09-2	5.44	<5.44	ug/kg dry	5.L
Methyl-tert-Butyl Ether	1634-04-4	5.44	<5.44	ug/kg dry	4.M, 5.L
n-Butylbenzene	104-51-8	27.2	<27.2	ug/kg dry	3.A, 5.L
n-Propylbenzene	103-65-1	5.44	<5.44	ug/kg dry	5.L
o-Xylene	95-47-6	5.44	<5.44	ug/kg dry	5.L
sec-Butylbenzene	135-98-8	5.44	<5.44	ug/kg dry	5.L
tert-Butylbenzene	98-06-6	5.44	<5.44	ug/kg dry	5.L
Tetrachloroethylene	127-18-4	5.44	<5.44	ug/kg dry	5.L
Toluene	108-88-3	5.44	<5.44	ug/kg dry	5.L
trans-1,2-Dichloroethylene	156-60-5	5.44	<5.44	ug/kg dry	5.L
Trichloroethylene	79-01-6	5.44	<5.44	ug/kg dry	5.L

Client: Nelson, Pope & Voorhis	Client ID: 122 & 126 Bedell Street Hempstead
Date (Time) Collected: 11/23/2015 10:35	Sample ID: FD-2
Date (Time) Received: 11/23/2015 17:20	Laboratory ID: 5112310-02 % Solid:91.84
Matrix: Soil	ELAP: #11693

Parameter	CAS No.	LOQ	Result	Units	Flag
Vinyl chloride	75-01-4	5.44	<5.44	ug/kg dry	4.J, 5.L

Surrogate	CAS No.	% Recovery	Rec. Limits	Flag
1,2-Dichloroethane-d4	10706-07-0	83	74.4-131	
4-Bromofluorobenzene	460-00-4	117	82.3-134	
Dibromofluoromethane	1868-53-7	93	79.4-122	
Toluene-d8	2037-26-5	118	85-123	

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
1,4-Dichlorobenzene-d4	3855-82-1	54	50-200	
1,4-Difluorobenzene	540-36-3	68	50-200	
Chlorobenzene-d5	3114-55-4	53	50-200	
Pentafluorobenzene	363-72-4	69	50-200	

Date Prepared: 11/24/2015

Preparation Method: EPA 5035A-L

Date Analyzed: 11/24/2015

Analytical Method: EPA 8260 C

Client: Nelson, Pope & Voorhis	Client ID: 122 & 126 Bedell Street Hempstead
Date (Time) Collected: 11/23/2015 10:35	Sample ID: FD-2
Date (Time) Received: 11/23/2015 17:20	Laboratory ID: 5112310-02 % Solid:91.84
Matrix: Soil	ELAP: #11693

Semivolatile Analysis

Parameter	CAS No.	LOQ	Result	Units	Flag
2-Methylphenol	95-48-7	163	<163	ug/kg dry	
3/4-Methylphenol	108-39-4/106-44-5	163	<163	ug/kg dry	
Acenaphthene	83-32-9	163	<163	ug/kg dry	
Acenaphthylene	208-96-8	163	<163	ug/kg dry	
Anthracene	120-12-7	163	<163	ug/kg dry	
Benzo(a)anthracene	56-55-3	163	<163	ug/kg dry	
Benzo(a)pyrene	50-32-8	163	<163	ug/kg dry	
Benzo(b)fluoranthene	205-99-2	163	<163	ug/kg dry	
Benzo(g,h,i)perylene	191-24-2	163	<163	ug/kg dry	
Benzo(k)fluoranthene	207-08-9	163	<163	ug/kg dry	
Chrysene	218-01-9	163	<163	ug/kg dry	
Dibenzo(a,h)anthracene	53-70-3	163	<163	ug/kg dry	
Dibenzofuran	132-64-9	163	<163	ug/kg dry	
Fluoranthene	206-44-0	163	<163	ug/kg dry	
Fluorene	86-73-7	163	<163	ug/kg dry	
Hexachlorobenzene	118-74-1	163	<163	ug/kg dry	
Indeno(1,2,3-cd)pyrene	193-39-5	163	<163	ug/kg dry	
Naphthalene	91-20-3	163	<163	ug/kg dry	
Pentachlorophenol	87-86-5	163	<163	ug/kg dry	
Phenanthrene	85-01-8	163	<163	ug/kg dry	
Phenol	108-95-2	163	<163	ug/kg dry	
Pyrene	129-00-0	163	<163	ug/kg dry	

Surrogate	CAS No.	% Recovery	Rec. Limits	Flag
2,4,6-Tribromophenol	118-79-6	71	18.04-120.2	
2-Fluorobiphenyl	321-60-8	71	34.39-110.73	
2-Fluorophenol	367-12-4	72	22.98-107.57	
Nitrobenzene-d5	4165-60-0	70	31-118.25	
Phenol-d6	13127-88-3	75	35.55-111.39	
Terphenyl-d14	1718-51-0	76	41.02-106	

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
1,4-Dichlorobenzene-d4	3855-82-1	83	50-200	



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Date (Time) Received: 11/23/2015 17:20	Laboratory ID: 5112310-02 % Solid:91.84
Matrix: Soil	ELAP: #11693

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
Acenaphthene-d10	15067-26-2	77	50-200	
Chrysene-d12	1719-03-5	73	50-200	
Naphthalene-d8	1146-65-2	81	50-200	
Perylene-d12	1520-96-3	83	50-200	
Phenanthrene-d10	1517-22-2	75	50-200	

Date Prepared: 11/23/2015

Preparation Method: EPA 3545 A

Date Analyzed: 11/30/2015

Analytical Method: EPA 8270 D



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Matrix: Soil	ELAP: #11693

Total Metals Analysis

Parameter	Date Analyzed	Method	LOQ	Result	Units	Flag
Arsenic	11/24/2015	EPA 6010 C	1.67	3.39	mg/kg dry	
Barium	11/24/2015	EPA 6010 C	1.67	339	mg/kg dry	
Beryllium	11/24/2015	EPA 6010 C	1.67	<1.67	mg/kg dry	
Cadmium	11/24/2015	EPA 6010 C	1.67	2.64	mg/kg dry	
Chromium	11/24/2015	EPA 6010 C	1.67	14.1	mg/kg dry	
Copper	11/24/2015	EPA 6010 C	167	923	mg/kg dry	3.E
Lead	11/24/2015	EPA 6010 C	167	858	mg/kg dry	3.E
Manganese	11/24/2015	EPA 6010 C	1.67	221	mg/kg dry	
Nickel	11/24/2015	EPA 6010 C	1.67	15.4	mg/kg dry	
Selenium	11/24/2015	EPA 6010 C	1.67	<1.67	mg/kg dry	
Silver	11/24/2015	EPA 6010 C	1.67	2.69	mg/kg dry	
Zinc	11/24/2015	EPA 6010 C	167	10700	mg/kg dry	3.E

Date Prepared: 11/24/2015

Preparation Method: EPA 3050B

Parameter	Date Analyzed	Method	LOQ	Result	Units	Flag
Mercury	11/25/2015	EPA 7471 B	0.82	1.85	mg/kg dry	3.E

Date Prepared: 11/24/2015

Preparation Method: EPA 7471 B

Data Qualifiers Key Reference:

- 3.A Reporting limit raised due to matrix interference.
- 3.E Compound reported at a dilution factor.
- 4.J Continuing Calibration Verification (CCV) quality control levels failed low, values are considered to be estimated.
- 4.M LCS recovery was above QC acceptance limit.
- 5.L Results may be biased low due to the sample not being collected according to 5035A-L/5035A-H low level specifications.
- MDL Minimum Detection Limit
- LOQ Limit of Quantitation



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CHAIN OF CUSTODY / REQUEST FOR ANALYSIS DOCUMENT

CLIENT NAME/ADDRESS 671 Walt Whitman Rd Melville, NY 11747		CONTACT: Steve McGinn PHONE: 427-5665 FAX: EMAIL:		SAMPLER (SIGNATURE) Jonathan McGinn		SAMPLE(S) SEALED YES / NO		CORRECT CONTAINER(S) YES / NO		5112310		N					
PROJECT LOCATION: 126 Bedell Street, Hempstead				SAMPLES RECEIVED AT 2.7 °C		ANALYSIS REQUIRED Rpt 375 SVCS Rpt 375 VOCs Rpt 375 MTL											
TERMS & CONDITIONS: Accounts are payable in full within thirty days, outstanding balances accrue service charges of 1.5% per month. Tendering of samples to LIAL for analytical testing constitutes agreement by buyer/sampler to LIAL's Standard terms																	
LABORATORY ID # For Laboratory Use Only		MATRIX		TYPE		PH		RES CHLORINE		PRES.		DATE		TIME		SAMPLE # LOCATION	
15112310-01		S G						1		11/23/15		10:15		FD-1			
2. OL		S G						1		11/23/15		10:35		FD-2			
3.																	
4.																	
5.																	
6.																	
7.																	
8.																	
9.																	
10.																	
11.																	
12.																	
13.																	
14.																	
MATRIX: S=SOIL; SL=SLUDGE; DW=DRINKING WATER; A=AIR; W=WASTE; PC=PAINT CHIPS; BM=BULK MATERIAL; O=OIL; WW=WASTE WATER		TURNAROUND REQUIRED: ☒ NORMAL ☐ STAT		COMMENTS / INSTRUCTIONS No Hexachlor and Cyande													
TYPE: G=GRAB; C=COMPOSITE; SS=SPLIT SPOON		PRES: (1) ICE; (2) HCL; (3) H ₂ SO ₄ ; (4) NAOH; (5) NA ₂ S ₂ O ₃ ; (6) HNO ₃ ; (7) OTHER		BY													
RELINQUISHED BY (SIGNATURE) [Signature]		DATE 11/23/15		PRINTED NAME Jonathan McGinn		RECEIVED BY (SIGNATURE) [Signature]		DATE 11/23/15		TIME 12:21		PRINTED NAME Steve J. McGinn					
RELINQUISHED BY (SIGNATURE) [Signature]		DATE 11/23/15		PRINTED NAME Jonathan McGinn		RECEIVED BY (SIGNATURE) [Signature]		DATE 11/23/15		TIME 12:21		PRINTED NAME Jonathan McGinn					

Limited Phase II
Environmental Site Assessment

Block 38

Hempstead, New York

NP&V Job # 15203

September 15, 2016

**Limited Phase II
Environmental Site Assessment**

Block 38

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**Limited Phase II
Environmental Site Assessment**

Block 38

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**Limited Phase II
Environmental Site Assessment**

Block 38

1.0 INTRODUCTION AND PURPOSE

Nelson, Pope & Voorhis, LLC (NP&V) has been contracted to prepare a Limited Phase II Environmental Site Assessment for the subject property. This report is intended to address recognized environmental conditions that were identified in a Phase I Environmental Site Assessment report prepared by Nelson, Pope & Voorhis, LLC dated October 16, 2015. The Phase I ESA was performed in accordance with the standards detailed by the American Society of Testing and Materials (ASTM) for the Performance of a Phase I Environmental Site Assessment (E 1527). This Limited Phase II ESA was designed to determine what, if any, impact on-site activities have had upon the environmental quality of the subject property.

The subject property is located in the Village of Hempstead, County of Nassau, New York. The property is identified more specifically as Nassau County Tax Number: Section 34, Block 195, Lots 135 and 138. The ±1.20 acre parcel is centrally located between Bedell Street to the north, West Columbia Street to the south Main Street to the east and North Franklin Street to the west. The subject property is located within an area developed with residential and commercial uses as well as municipal parking lots.

The majority of the subject property consists of a paved municipal parking lot within which two (2) open grate curbside storm drains were found to be present as well as a solid manhole cover which overlies an unknown utility. An automobile storage area located in the northern end of the property is approximately 5,000 square feet in size and consists of a bare soil area enclosed with a chain link fence.



Based on these findings the Phase I Environmental Site Assessment identified recognized environmental conditions that prompted the performance of this Limited Phase II Environmental Site Assessment. These conditions included:

1. There are two (2) open grate curbside catch basins located on the subject property and one (1) manhole cover overlying an unidentified utility.
2. Due to the historical use and former development of the subject property, the possibility exists that underground utilities (i.e. tanks, cesspools, etc.) may still be present at the subject property.

This assessment has been designed and performed by NP&V to address the potential impacts to three (3) stormwater leaching pools and the staining identified on the soil of the 5,000 square foot storage yard. In addition, a Ground Penetrating Radar (GPR) survey was completed in order to determine if any subsurface structures associated with the former buildings were present. The laboratory analysis was provided by Long Island Analytical Laboratories, Inc.

The protocol used to direct this investigation is based upon the following documents: 1) the New York State Department of Environmental Conservation (NYSDEC) Part 375 parameters. The following sections detail the subject property and surrounding area characteristics, sampling program, quality assurance protocol, laboratory analysis methodology and laboratory results.

2.0 GROUND PENETRATING RADAR (GPR) SURVEY

2.1 GPR SURVEY

A remote sensing ground penetrating radar field survey was performed over portions of the planimetric surface of the property. The ground penetrating radar (GPR) used in this process was a GSSI model UtilityScan DF with a 300 and 800 MHz antenna.

The GPR system consisted of a control unit, control cable and a transducer. The GPR control unit transmits a trigger pulse at a normal repetition rate of 50 KHz. The pulse is then sent to the transmitter electronics in the transducer (antenna) via the control cable where the trigger pulses are transformed into bipolar pulses with higher amplitudes. The transformed pulse will vary in shape and frequency according to the transducer used. The GSSI system is capable of transmitting electromagnetic energy into the subsurface of the earth in the frequency range of 16 MHz to 2000 MHz. In the subsurface, reflections of the pulse occur at boundaries where there is a dielectric contrast (void, steel, soil type). The reflected portion of the signal travels back to the antenna and the control unit and is subsequently shown on the display of the computers color video monitor for interpolation.

A qualified technician specified a coordinate system on the planimetric surface to locate any subsurface dielectric anomalies on the premises. The operator used known knowledge of the subsurface soil composition to calibrate the UtilityScan DF system to site specific conditions. Factor settings such as range, gain, number of gain points, and scans per unit, are modified to yield the most accurate data to describe the subsurface conditions.

Upon finding a dielectric anomaly a more specific coordinate system was designed over the area to determine its size, shape and orientation. The data collected during the survey was reviewed by the operator and compared against past experience, technical judgment and prior site knowledge to classify the anomalies.

The GPR survey was completed over the entire property with specific review in the areas of former structures. The GPR survey was based on the presence of former buildings which occupied the subject property. A review of Sanborn maps depicted the locations of any former buildings. The GPR was traversed in a north-south and east-west direction in order to determine if any tanks or other subsurface structures were present on the subject property. This survey did not reveal any anomalies which would indicate that subsurface anomalies were present on the subject property.

3.0 SAMPLING AND ANALYSIS PROGRAM (SAP)

3.1 HAND AUGER SOIL SAMPLING

The three (3) stormwater leaching pools located in the paved parking area and two (2) locations in the 5,000 square foot storage yard were sampled using a stainless steel hand auger. The soil samples (SD-1 thru SD-3, SS-1 and SS-2) were collected from the bottom sediment soil of the leaching pools and from two (2) surface locations in the storage yard. These samples were collected from the top zero to twelve (0-12) inches of the soil and were analyzed based on the New York State Department of Environmental Conservation (NYSDEC) parameters for the presence of volatile and semi-volatile organic compounds and metals as set forth in Part 375. **Figure 1** located at the end of this document provides a location map of the samples collected.

3.2 LABORATORY SAMPLE LOCATION AND FREQUENCY

The soil samples collected from the site were containerized and labeled for identification purposes. The labels were coded to correspond to the location from which the samples were secured. **Table 1** provides an index of how the samples were coded during labeling.

TABLE 1
SAMPLE IDENTIFICATION

SAMPLE LOCATION	SAMPLE ID CODE
Soil sample collected from stormwater leaching pool located in the northeast portion of the parking area.	SD-1
Soil sample collected from stormwater leaching pool located in the northwest corner of the parking area.	SD-2
Soil sample collected from stormwater leaching pool located in the southeast portion of the parking area.	SD-3
Soil sample collected from the north central portion of the property.	SS-1
Soil sample collected from the south central portion of the property.	SS-2

4.0 LABORATORY ANALYSIS

4.1 ANALYTICAL TEST METHODS

The soil samples were transported to a New York State Certified Commercial Laboratory for analysis. Selection of the analytical test methods for the presence of volatile and semi-volatile organic compounds and metals based on NYSDEC Part 375 parameters.

4.2 ANALYTICAL RESULTS

The laboratory analysis performed on the three (3) leaching pools and two (2) surface soil samples exhibited elevated concentrations of several volatile and semi-volatile organic compounds and metals. **Table 2** provides a comparison of those constituents with elevated concentrations and the regulatory guidance values. The laboratory analysis sheets (NYS ASPA) as prepared by Long Island Analytical Laboratories are presented in **Appendix A** of this document. As depicted in **Table 2**, some of the analyzed constituents exceeded the regulatory guidance values set forth in the NYSDEC Part 375. Since these concentrations exceeded the NYSDEC guidance values, it is recommended that all three (3) of the leaching pools and the area surrounding one (1) of the surface soil samples (SS-1) be remediated under the auspices of United States Environmental Protection Agency (USEPA) personnel.

TABLE 2
COMPARISON ANALYSIS

Constituents	SD-1	SD-2	SD-3	SS-1	SS-2	6 NYCRR Part 375 Protection of Groundwater
Semi-Volatiles	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
2-Methylphenol	ND	ND	1,250	ND	ND	NS
3/4-Methylphenol	ND	ND	1,420	ND	ND	NS
Acenaphthene	ND	265	ND	ND	ND	98,000
Anthracene	776	673	667	ND	ND	1,000,000
Benzo-a-Anthracene	8,500	6,120	2,550	441	342	1,000
Benzo-a-Pyrene	2,620	1,910	ND	ND	213	22,000
Benzo-b-Flouranthene	12,300	9,430	ND	ND	231	1,700
Benzo-g,h,i-Perylene	8,840	6,320	ND	ND	227	1,000,000
Benzo-k-Flouranthene	6,970	4,770	ND	ND	ND	800
Chrysene	10,500	6,660	3,850	571	198	1,000
Flouranthene	20,600	13,600	6,800	ND	293	1,000,000
Flourene	ND	322	434	ND	ND	386,000
Indeno(1,2,3-c,d)Pyrene	10,700	7,100	ND	ND	261	8,200
Naphthalene	ND	ND	498	ND	ND	12,000
Phenanthrene	5,030	5,950	2,940	ND	ND	1,000,000
Pyrene	ND	10,200	5,870	ND	281	1,000,000
Volatiles	ug/kg	ug/kg	ug/kg		ug/kg	ug/kg
Acetone	645	622	ND	ND	ND	50
Methyl Ethyl Ketone	55.4	62.8	ND	ND	ND	120
Methylene Chloride	6.81	11.2	ND	13.1	8.73	50
Metals	mg/kg	mg/kg	mg/kg		mg/kg	mg/kg
Arsenic	3.48	1.92	12.3	2.97	3.03	16
Barium	48.6	30.6	147	124	46.3	820
Cadmium	ND	ND	4.79	ND	ND	7.5
Hexavalent Chromium	ND	ND	ND	ND	ND	19
Trivalent Chromium	23.1	14.4	38.4	10.9	8.94	NS
Copper	70.7	134	151	25.2	21.4	1,720
Lead	254	104	1,790	837	183	450
Manganese	111	113	160	267	168	2,000
Nickel	18.5	36.5	40.3	40.5	7.88	130
Zinc	485	288	1,220	221	103	2,480
Mercury	1.04	0.18	1.05	0.15	0.14	0.73

ND - Not Detected

NS - No Standard

Bold and highlighted indicates the constituent exceeds the regulatory guidance values

5.0 QUALITY ASSURANCE/QUALITY CONTROL PROCEDURES (QA/QC)

This sampling protocol was conducted in accordance with USEPA accepted sampling procedures for hazardous waste streams (Municipal Research Laboratory, 1980, Sampling and Sampling Procedures for Hazardous Material Waste Streams, USEPA, Cincinnati, Ohio EPA- 600/280-018) and ASTM Material Sampling Procedures. All samples were collected by or under the auspices of USEPA trained personnel having completed the course Sampling of Hazardous Materials, offered by the Office of Emergency and Remedial Response.

Separate QA/QC measures were implemented for each of the instruments used in the Sampling and Analysis Program. Sampling instruments included a stainless steel hand auger and sample vessels.

Prior to arrival on the site and between sample locations, the probes sections were decontaminated by washing with a detergent (alconox/liquinnox) and potable water solution with distilled water rinse. The organic vapor analyzer was calibrated prior to sampling using a span gas of known concentration. All sample vessels were "level A" certified decontaminated containers. Samples were placed into vessels consistent with the analytical parameters. After acquisition, samples were preserved in the field. All containerized samples were refrigerated to 4° C during transport.

A sample represents physical evidence; therefore, an essential part of liability reduction is the proper control of gathered evidence. To establish proper control, the following sample identification and chain-of-custody procedures were followed.

Sample Identification

Sample identification was executed by use of a sample tag, logbook and manifest. Documentation provides the following:

1. Project Code
2. Sample Laboratory Number
3. Sample Preservation
4. Instrument Used for Source Soil Grabs
5. Composite Medium Used for Source Soil Grabs
6. Date Sample was Secured from Source Soil
7. Time Sample was Secured from Source Soil
8. Person Who Secured Sample from Source Soil

Chain-of-Custody Procedures

Due to the evidential nature of samples, possession was traceable from the time the samples were collected until they were received by the testing laboratory. A sample was considered under custody if:

It was in a person's possession, or
It was in a person's view, after being in possession, or
It was in a person's possession and they were to lock it up, or
It is in a designated secure area.

When transferring custody, the individuals relinquishing and receiving signed, dated and noted the time on the Chain-of- Custody Form.

Laboratory Custody Procedures

A designated sample custodian accepted custody of the shipped samples and verified that the information on the sample tags matched that on the Chain-of-Custody records. Pertinent information as to shipment, pick-up, courier, etc. was entered in the "remarks" section. The custodian then entered the sample tag data into a bound logbook which was arranged by project code and station number.

The laboratory custodian used the sample tag number or assigned an unique laboratory number to each sample tag and assured that all samples were transferred to the proper analyst or stored in the appropriate source area.

The custodian distributed samples to the appropriate analysts. Laboratory personnel were responsible for the care and custody of samples from the time they were received until the sample was exhausted or returned to the custodian.

All identifying data sheets and laboratory records were retained as part of the permanent site record. Samples received by the laboratory were retained until after analysis and quality assurance checks were completed.

6.0 SUMMARY AND CONCLUSION

This investigation was completed to address issues raised in a prior Phase I ESA prepared by Nelson, Pope & Voorhis, LLC. A sampling and analysis program was designed to determine if the on-site stormwater leaching pools and surface soils of the storage yard had been impacted by the prior and existing uses of the subject property. The sampling and analysis plan consisted of soil/sediment quality testing using analytical test methods consistent with expected parameters and agency soil cleanup objectives. The following presents an evaluation of the results of this investigation.

1. Three (3) stormwater leaching pools located in the paved parking area and two (2) surface soil samples were collected and analyzed for the presence of volatile and semi-volatile organic compounds and metals. The analytical results revealed that several of the analyzed volatile and semi-volatile organic compounds and metal constituents exhibited elevated concentrations. Several of the analyzed constituents exceeded the regulatory guidance values set forth in the NYSDEC Part 375. Since these concentrations exceed the NYSDEC guidance values, it is recommended that all three (3) of the leaching pools and the area surrounding one (1) of the surface soil samples (SS-1) be remediated under the auspices of United States Environmental Protection Agency (USEPA) personnel.

The subject property has been evaluated consistent with the findings of a Phase I ESA, and in accordance with standard practice for the industry. This Limited Phase II ESA addresses only the specific areas of the site warranting further analysis and can only provide conclusions regarding the subsurface soil quality in those specific areas tested. The Limited Phase II ESA report is limited to the evaluation of on-site conditions at the time of completion of the field sampling program.

Date of Completion

*Charles J. Voorhis, CEP, AICP
Project Manager*

7.0 REFERENCES

New York State Department of Environmental Conservation (NYSDEC), 1992, Sampling Guidelines and Protocols, Technology Background and Quality Control/Quality Assurance for NYSDEC Spill Response Program, NYSDEC, Albany, New York.

American Society for Testing and Materials (ASTM), June 2011, E1903-11 Standard Practice for Environmental Site Assessments: Phase II Environmental Site Assessment Process, West Conshohocken, Pennsylvania.

New York State Department of Environmental Conservation (NYSDEC), December 2006, 6NYCRR Part 375 Environmental Remediation Programs Subparts 375-1 to 375-4 & 375-6, Division of Environmental Remediation, Albany, New York.

FIGURES

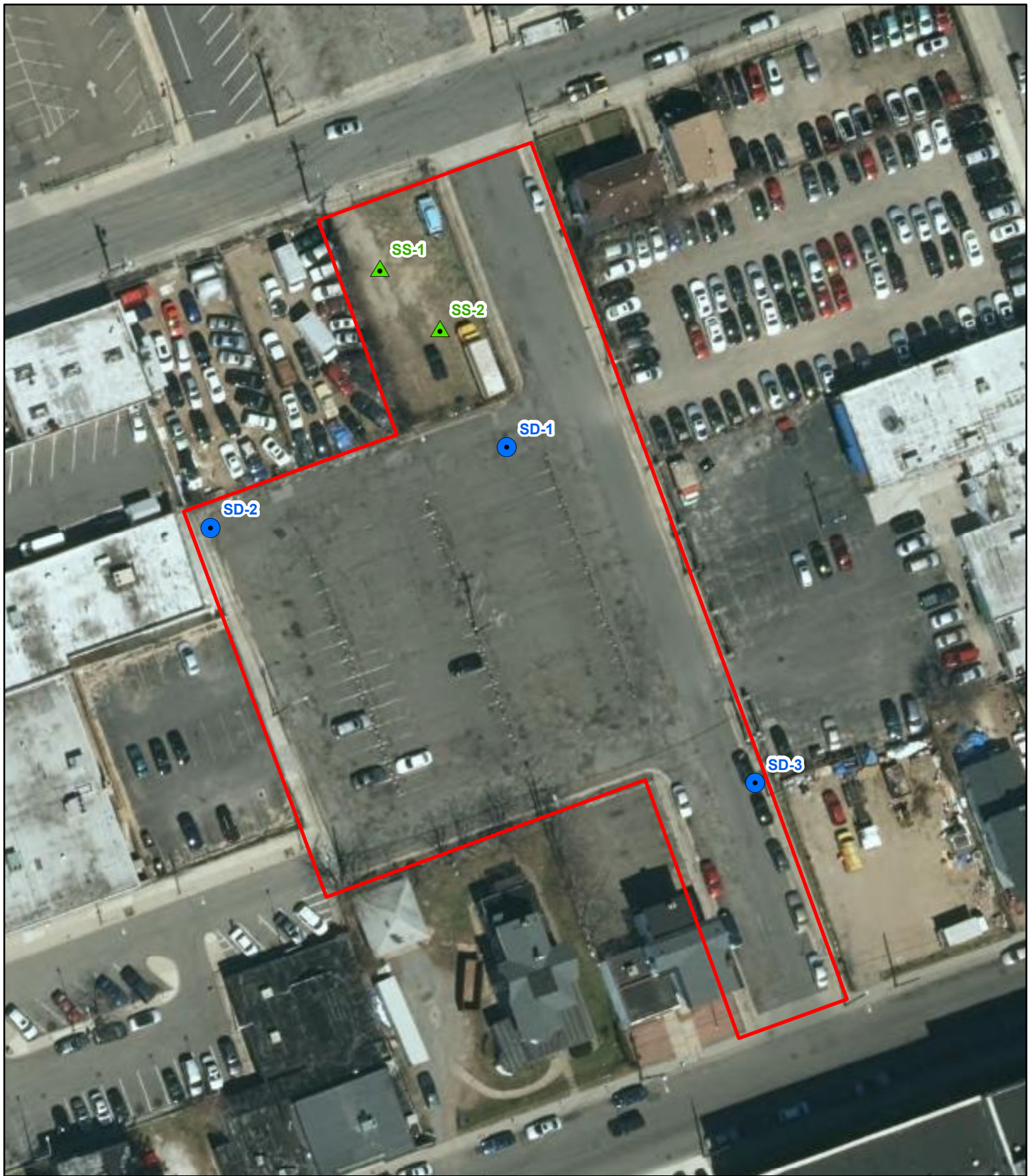


FIGURE 1
SAMPLE LOCATION MAP

Source: ESRI Web Mapping Service
Scale: 1 inch = 60 feet



Block 38
Village of
Hempstead

Limited Phase II ESA

APPENDICES

APPENDIX A

LABORATORY DATA SHEETS

**LONG
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LABORATORIES INC.****"TOMORROWS ANALYTICAL SOLUTIONS TODAY"**Laboratory ReportNYSDOH ELAP# 11693
USEPA# NY01273
CTDOH# PH-0284
AIHA# 164456
NJDEP# NY012
PADEP# 68-2943

LIAL# 6083019

September 15, 2016

Nelson, Pope & Voorhis
Steve McGinn
572 Walt Whitman Road
Melville, NY 11747**Re: Block 38 Hempstead**

Dear Steve McGinn,

Enclosed please find the laboratory Analysis Report(s) for sample(s) received on August 30, 2016. Long Island Analytical laboratories analyzed the samples on September 15, 2016 for the following:

SAMPLE ID	ANALYSIS
SD-1	NYC Part 375 (Semi-Volatile), NYC Part 375 (Volatile), NYC Part 375 Metals
SD-2	NYC Part 375 (Semi-Volatile), NYC Part 375 (Volatile), NYC Part 375 Metals
SD-3	NYC Part 375 (Semi-Volatile), NYC Part 375 (Volatile), NYC Part 375 Metals

Samples received at 1.1 ° C

5.L Results may be biased low due to the sample not being collected according to 5035A-L/5035A-H low level specifications.

If you have any questions or require further information, please call at your convenience. Long Island Analytical Laboratories Inc. is a NELAP accredited laboratory. All reported results meet the requirements of the NELAP standards unless noted. Report shall not be reproduced except in full without the written approval of the laboratory. Results related only to items tested. Long Island Analytical Laboratories would like to thank you for the opportunity to be of service to you.

Best Regards,

Long Island Analytical Laboratories, Inc.**Michael Veraldi - Laboratory Director**

Client: Nelson, Pope & Voorhis	Client ID: Block 38 Hempstead
Date (Time) Collected: 08/30/2016 09:42	Sample ID: SD-1
Date (Time) Received: 08/30/2016 16:25	Laboratory ID: 6083019-01 % Solid:73.54
Matrix: Soil	ELAP: #11693

Volatiles Low Level Analysis

Parameter	CAS No.	LOQ	Result	Units	Flag
1,1,1-Trichloroethane	71-55-6	6.80	<6.80	ug/kg dry	5.L
1,1-Dichloroethane	75-34-3	6.80	<6.80	ug/kg dry	5.L
1,1-Dichloroethylene	75-35-4	6.80	<6.80	ug/kg dry	5.L
1,2,4-Trimethylbenzene	95-63-6	6.80	<6.80	ug/kg dry	5.L
1,2-Dichlorobenzene	95-50-1	170	<170	ug/kg dry	3.A, 5.L
1,2-Dichloroethane	107-06-2	6.80	<6.80	ug/kg dry	4.J, 5.L
1,3,5-Trimethylbenzene	108-67-8	6.80	<6.80	ug/kg dry	5.L
1,3-Dichlorobenzene	541-73-1	170	<170	ug/kg dry	3.A, 5.L
1,4-Dichlorobenzene	106-46-7	170	<170	ug/kg dry	3.A, 5.L
1,4-Dioxane	123-91-1	68.0	<68.0	ug/kg dry	4.J, 5.L
Acetone	67-64-1	68.0	645	ug/kg dry	4.A, 4.J, 4.N, 5.L
Benzene	71-43-2	6.80	<6.80	ug/kg dry	5.L
Carbon Tetrachloride	56-23-5	6.80	<6.80	ug/kg dry	5.L
Chlorobenzene	108-90-7	6.80	<6.80	ug/kg dry	5.L
Chloroform	67-66-3	6.80	<6.80	ug/kg dry	5.L
cis-1,2-Dichloroethylene	156-59-2	6.80	<6.80	ug/kg dry	5.L
Ethylbenzene	100-41-4	6.80	<6.80	ug/kg dry	5.L
m,p-Xylenes	108-38-3/106-42-3	13.6	<13.6	ug/kg dry	5.L
Methyl Ethyl Ketone (2-Butanone)	78-93-3	13.6	55.4	ug/kg dry	4.J, 5.L
Methylene Chloride	75-09-2	6.80	6.81	ug/kg dry	5.L
Methyl-tert-Butyl Ether	1634-04-4	6.80	<6.80	ug/kg dry	5.L
n-Butylbenzene	104-51-8	170	<170	ug/kg dry	3.A, 5.L
n-Propylbenzene	103-65-1	6.80	<6.80	ug/kg dry	5.L
o-Xylene	95-47-6	6.80	<6.80	ug/kg dry	5.L
sec-Butylbenzene	135-98-8	6.80	<6.80	ug/kg dry	5.L
tert-Butylbenzene	98-06-6	6.80	<6.80	ug/kg dry	5.L
Tetrachloroethylene	127-18-4	6.80	<6.80	ug/kg dry	5.L
Toluene	108-88-3	6.80	<6.80	ug/kg dry	5.L
trans-1,2-Dichloroethylene	156-60-5	6.80	<6.80	ug/kg dry	5.L
Trichloroethylene	79-01-6	6.80	<6.80	ug/kg dry	5.L



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Client: Nelson, Pope & Voorhis	Client ID: Block 38 Hempstead
Date (Time) Collected: 08/30/2016 09:42	Sample ID: SD-1
Date (Time) Received: 08/30/2016 16:25	Laboratory ID: 6083019-01 % Solid:73.54
Matrix: Soil	ELAP: #11693

Parameter	CAS No.	LOQ	Result	Units	Flag
Vinyl chloride	75-01-4	6.80	<6.80	ug/kg dry	4.J, 5.L

Surrogate	CAS No.	% Recovery	Rec. Limits	Flag
1,2-Dichloroethane-d4	10706-07-0	93	74.4-131	
4-Bromofluorobenzene	460-00-4	111	82.3-134	
Dibromofluoromethane	1868-53-7	135	79.4-122	4.E
Toluene-d8	2037-26-5	99	85-123	

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
1,4-Dichlorobenzene-d4	3855-82-1	54	50-200	
1,4-Difluorobenzene	540-36-3	64	50-200	
Chlorobenzene-d5	3114-55-4	58	50-200	
Pentafluorobenzene	363-72-4	65	50-200	

Date Prepared: 09/06/2016

Preparation Method: EPA 5035A-L

Date Analyzed: 09/06/2016

Analytical Method: EPA 8260 C

Client: Nelson, Pope & Voorhis	Client ID: Block 38 Hempstead
Date (Time) Collected: 08/30/2016 09:42	Sample ID: SD-1
Date (Time) Received: 08/30/2016 16:25	Laboratory ID: 6083019-01 % Solid:73.54
Matrix: Soil	ELAP: #11693

Semivolatile Analysis

Parameter	CAS No.	LOQ	Result	Units	Flag
2-Methylphenol	95-48-7	204	<204	ug/kg dry	
3/4-Methylphenol	108-39-4/106-44-5	204	<204	ug/kg dry	
Acenaphthene	83-32-9	204	<204	ug/kg dry	
Acenaphthylene	208-96-8	204	<204	ug/kg dry	
Anthracene	120-12-7	204	776	ug/kg dry	
Benzo(a)anthracene	56-55-3	2040	8500	ug/kg dry	3.E
Benzo(a)pyrene	50-32-8	2040	2620	ug/kg dry	
Benzo(b)fluoranthene	205-99-2	2040	12300	ug/kg dry	3.E
Benzo(g,h,i)perylene	191-24-2	2040	8840	ug/kg dry	3.E
Benzo(k)fluoranthene	207-08-9	2040	6970	ug/kg dry	3.E
Chrysene	218-01-9	2040	10500	ug/kg dry	3.E
Dibenzo(a,h)anthracene	53-70-3	204	<204	ug/kg dry	
Dibenzofuran	132-64-9	204	<204	ug/kg dry	
Fluoranthene	206-44-0	2040	20600	ug/kg dry	
Fluorene	86-73-7	204	<204	ug/kg dry	
Hexachlorobenzene	118-74-1	204	<204	ug/kg dry	
Indeno(1,2,3-cd)pyrene	193-39-5	2040	10700	ug/kg dry	3.E
Naphthalene	91-20-3	204	<204	ug/kg dry	
Pentachlorophenol	87-86-5	204	<204	ug/kg dry	
Phenanthrene	85-01-8	204	5030	ug/kg dry	
Phenol	108-95-2	204	<204	ug/kg dry	
Pyrene	129-00-0	204	<204	ug/kg dry	

Surrogate	CAS No.	% Recovery	Rec. Limits	Flag
2,4,6-Tribromophenol	118-79-6	95	18.04-120.2	
2-Fluorobiphenyl	321-60-8	77	34.39-110.73	
2-Fluorophenol	367-12-4	84	22.98-107.57	
Nitrobenzene-d5	4165-60-0	80	31-118.25	
Phenol-d6	13127-88-3	82	35.55-111.39	
Terphenyl-d14	1718-51-0	85	41.02-106	

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
1,4-Dichlorobenzene-d4	3855-82-1	104	50-200	

Client: Nelson, Pope & Voorhis	Client ID: Block 38 Hempstead
Date (Time) Collected: 08/30/2016 09:42	Sample ID: SD-1
Date (Time) Received: 08/30/2016 16:25	Laboratory ID: 6083019-01 % Solid:73.54
Matrix: Soil	ELAP: #11693

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
Acenaphthene-d10	15067-26-2	96	50-200	
Chrysene-d12	1719-03-5	90	50-200	
Naphthalene-d8	1146-65-2	102	50-200	
Perylene-d12	1520-96-3	84	50-200	
Phenanthrene-d10	1517-22-2	93	50-200	

Date Prepared: 08/31/2016

Preparation Method: EPA 3545 A

Date Analyzed: 09/01/2016

Analytical Method: EPA 8270 D



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Client: Nelson, Pope & Voorhis	Client ID: Block 38 Hempstead
Date (Time) Collected: 08/30/2016 09:42	Sample ID: SD-1
Date (Time) Received: 08/30/2016 16:25	Laboratory ID: 6083019-01 % Solid:73.54
Matrix: Soil	ELAP: #11693

Total Metals Analysis

Parameter	Date Analyzed	Method	LOQ	Result	Units	Flag
Arsenic	09/07/2016	EPA 6010 C	2.43	3.48	mg/kg dry	
Barium	09/07/2016	EPA 6010 C	2.43	48.6	mg/kg dry	
Beryllium	09/07/2016	EPA 6010 C	2.43	<2.43	mg/kg dry	
Cadmium	09/07/2016	EPA 6010 C	2.43	<2.43	mg/kg dry	
Chromium	09/07/2016	EPA 6010 C	2.43	23.1	mg/kg dry	
Copper	09/07/2016	EPA 6010 C	2.43	70.7	mg/kg dry	
Lead	09/07/2016	EPA 6010 C	2.43	254	mg/kg dry	
Manganese	09/07/2016	EPA 6010 C	2.43	111	mg/kg dry	
Nickel	09/07/2016	EPA 6010 C	2.43	18.5	mg/kg dry	
Selenium	09/07/2016	EPA 6010 C	2.43	<2.43	mg/kg dry	
Silver	09/07/2016	EPA 6010 C	2.43	<2.43	mg/kg dry	
Zinc	09/07/2016	EPA 6010 C	2.43	485	mg/kg dry	

Date Prepared: 09/07/2016

Preparation Method: EPA 3050B

Parameter	Date Analyzed	Method	LOQ	Result	Units	Flag
Hexavalent Chromium	09/01/2016	EPA 7196 A	3.23	<3.23	mg/kg dry	3.A

Date Prepared: 08/31/2016

Preparation Method: EPA 3060A

Parameter	Date Analyzed	Method	LOQ	Result	Units	Flag
Mercury	09/02/2016	EPA 7471 B	0.06	1.04	mg/kg dry	

Date Prepared: 09/02/2016

Preparation Method: EPA 7471 B

Parameter	Date Analyzed	Method	LOQ	Result	Units	Flag
Cyanide	09/15/2016	EPA 9014	0.27	<0.27	mg/kg dry	

Date Prepared: 09/09/2016

Preparation Method: Distillation Prep

Client: Nelson, Pope & Voorhis	Client ID: Block 38 Hempstead
Date (Time) Collected: 08/30/2016 10:08	Sample ID: SD-2
Date (Time) Received: 08/30/2016 16:25	Laboratory ID: 6083019-02 % Solid:85.13
Matrix: Soil	ELAP: #11693

Volatiles Low Level Analysis

Parameter	CAS No.	LOQ	Result	Units	Flag
1,1,1-Trichloroethane	71-55-6	5.87	<5.87	ug/kg dry	5.L
1,1-Dichloroethane	75-34-3	5.87	<5.87	ug/kg dry	5.L
1,1-Dichloroethylene	75-35-4	5.87	<5.87	ug/kg dry	5.L
1,2,4-Trimethylbenzene	95-63-6	58.7	<58.7	ug/kg dry	3.A, 5.L
1,2-Dichlorobenzene	95-50-1	147	<147	ug/kg dry	3.A, 5.L
1,2-Dichloroethane	107-06-2	5.87	<5.87	ug/kg dry	4.J, 5.L
1,3,5-Trimethylbenzene	108-67-8	58.7	<58.7	ug/kg dry	3.A, 5.L
1,3-Dichlorobenzene	541-73-1	147	<147	ug/kg dry	3.A, 5.L
1,4-Dichlorobenzene	106-46-7	147	<147	ug/kg dry	3.A, 5.L
1,4-Dioxane	123-91-1	58.7	<58.7	ug/kg dry	4.J, 5.L
Acetone	67-64-1	58.7	622	ug/kg dry	4.A, 4.J, 4.N, 5.L
Benzene	71-43-2	5.87	<5.87	ug/kg dry	5.L
Carbon Tetrachloride	56-23-5	5.87	<5.87	ug/kg dry	5.L
Chlorobenzene	108-90-7	58.7	<58.7	ug/kg dry	3.A, 5.L
Chloroform	67-66-3	5.87	<5.87	ug/kg dry	5.L
cis-1,2-Dichloroethylene	156-59-2	5.87	<5.87	ug/kg dry	5.L
Ethylbenzene	100-41-4	58.7	<58.7	ug/kg dry	3.A, 5.L
m,p-Xylenes	108-38-3/106-42-3	117	<117	ug/kg dry	3.A, 5.L
Methyl Ethyl Ketone (2-Butanone)	78-93-3	11.7	62.8	ug/kg dry	4.J, 5.L
Methylene Chloride	75-09-2	5.87	11.2	ug/kg dry	5.L
Methyl-tert-Butyl Ether	1634-04-4	5.87	<5.87	ug/kg dry	5.L
n-Butylbenzene	104-51-8	147	<147	ug/kg dry	5.L, 3.A
n-Propylbenzene	103-65-1	58.7	<58.7	ug/kg dry	3.A, 5.L
o-Xylene	95-47-6	58.7	<58.7	ug/kg dry	3.A, 5.L
sec-Butylbenzene	135-98-8	58.7	<58.7	ug/kg dry	3.A, 5.L
tert-Butylbenzene	98-06-6	58.7	<58.7	ug/kg dry	3.A, 5.L
Tetrachloroethylene	127-18-4	5.87	<5.87	ug/kg dry	5.L
Toluene	108-88-3	5.87	<5.87	ug/kg dry	5.L
trans-1,2-Dichloroethylene	156-60-5	5.87	<5.87	ug/kg dry	5.L
Trichloroethylene	79-01-6	5.87	<5.87	ug/kg dry	5.L



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Client: Nelson, Pope & Voorhis	Client ID: Block 38 Hempstead
Date (Time) Collected: 08/30/2016 10:08	Sample ID: SD-2
Date (Time) Received: 08/30/2016 16:25	Laboratory ID: 6083019-02 % Solid:85.13
Matrix: Soil	ELAP: #11693

Parameter	CAS No.	LOQ	Result	Units	Flag
Vinyl chloride	75-01-4	5.87	<5.87	ug/kg dry	4.J, 5.L

Surrogate	CAS No.	% Recovery	Rec. Limits	Flag
1,2-Dichloroethane-d4	10706-07-0	92	74.4-131	
4-Bromofluorobenzene	460-00-4	106	82.3-134	
Dibromofluoromethane	1868-53-7	142	79.4-122	4.E
Toluene-d8	2037-26-5	97	85-123	

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
1,4-Dichlorobenzene-d4	3855-82-1	54	50-200	
1,4-Difluorobenzene	540-36-3	64	50-200	
Chlorobenzene-d5	3114-55-4	61	50-200	
Pentafluorobenzene	363-72-4	62	50-200	

Date Prepared: 09/06/2016

Preparation Method: EPA 5035A-L

Date Analyzed: 09/06/2016

Analytical Method: EPA 8260 C



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Date (Time) Received: 08/30/2016 16:25	Laboratory ID: 6083019-02 % Solid:85.13
Matrix: Soil	ELAP: #11693

Semivolatile Analysis

Parameter	CAS No.	LOQ	Result	Units	Flag
2-Methylphenol	95-48-7	176	<176	ug/kg dry	
3/4-Methylphenol	108-39-4/106-44-5	176	<176	ug/kg dry	
Acenaphthene	83-32-9	176	265	ug/kg dry	
Acenaphthylene	208-96-8	176	<176	ug/kg dry	
Anthracene	120-12-7	176	673	ug/kg dry	
Benzo(a)anthracene	56-55-3	176	6120	ug/kg dry	
Benzo(a)pyrene	50-32-8	1760	1910	ug/kg dry	
Benzo(b)fluoranthene	205-99-2	1760	9430	ug/kg dry	3.E
Benzo(g,h,i)perylene	191-24-2	176	6320	ug/kg dry	
Benzo(k)fluoranthene	207-08-9	1760	4770	ug/kg dry	3.E
Chrysene	218-01-9	1760	6660	ug/kg dry	3.E
Dibenzo(a,h)anthracene	53-70-3	176	<176	ug/kg dry	
Dibenzofuran	132-64-9	176	<176	ug/kg dry	
Fluoranthene	206-44-0	1760	13600	ug/kg dry	3.E
Fluorene	86-73-7	176	322	ug/kg dry	
Hexachlorobenzene	118-74-1	176	<176	ug/kg dry	
Indeno(1,2,3-cd)pyrene	193-39-5	1760	7100	ug/kg dry	3.E
Naphthalene	91-20-3	176	<176	ug/kg dry	
Pentachlorophenol	87-86-5	176	<176	ug/kg dry	
Phenanthrene	85-01-8	176	5950	ug/kg dry	
Phenol	108-95-2	176	<176	ug/kg dry	
Pyrene	129-00-0	1760	10200	ug/kg dry	3.E

Surrogate	CAS No.	% Recovery	Rec. Limits	Flag
2,4,6-Tribromophenol	118-79-6	83	18.04-120.2	
2-Fluorobiphenyl	321-60-8	69	34.39-110.73	
2-Fluorophenol	367-12-4	74	22.98-107.57	
Nitrobenzene-d5	4165-60-0	69	31-118.25	
Phenol-d6	13127-88-3	71	35.55-111.39	
Terphenyl-d14	1718-51-0	69	41.02-106	

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
1,4-Dichlorobenzene-d4	3855-82-1	92	50-200	

Client: Nelson, Pope & Voorhis	Client ID: Block 38 Hempstead
Date (Time) Collected: 08/30/2016 10:08	Sample ID: SD-2
Date (Time) Received: 08/30/2016 16:25	Laboratory ID: 6083019-02 % Solid:85.13
Matrix: Soil	ELAP: #11693

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
Acenaphthene-d10	15067-26-2	88	50-200	
Chrysene-d12	1719-03-5	81	50-200	
Naphthalene-d8	1146-65-2	87	50-200	
Perylene-d12	1520-96-3	75	50-200	
Phenanthrene-d10	1517-22-2	84	50-200	

Date Prepared: 08/31/2016

Preparation Method: EPA 3545 A

Date Analyzed: 09/01/2016

Analytical Method: EPA 8270 D



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Client: Nelson, Pope & Voorhis	Client ID: Block 38 Hempstead
Date (Time) Collected: 08/30/2016 10:08	Sample ID: SD-2
Date (Time) Received: 08/30/2016 16:25	Laboratory ID: 6083019-02 % Solid:85.13
Matrix: Soil	ELAP: #11693

Total Metals Analysis

Parameter	Date Analyzed	Method	LOQ	Result	Units	Flag
Arsenic	09/07/2016	EPA 6010 C	1.92	1.92	mg/kg dry	
Barium	09/07/2016	EPA 6010 C	1.92	30.6	mg/kg dry	
Beryllium	09/07/2016	EPA 6010 C	1.92	<1.92	mg/kg dry	
Cadmium	09/07/2016	EPA 6010 C	1.92	<1.92	mg/kg dry	
Chromium	09/07/2016	EPA 6010 C	1.92	14.4	mg/kg dry	
Copper	09/07/2016	EPA 6010 C	1.92	134	mg/kg dry	
Lead	09/07/2016	EPA 6010 C	1.92	104	mg/kg dry	
Manganese	09/07/2016	EPA 6010 C	1.92	113	mg/kg dry	
Nickel	09/07/2016	EPA 6010 C	1.92	36.5	mg/kg dry	
Selenium	09/07/2016	EPA 6010 C	1.92	<1.92	mg/kg dry	
Silver	09/07/2016	EPA 6010 C	1.92	<1.92	mg/kg dry	
Zinc	09/07/2016	EPA 6010 C	1.92	288	mg/kg dry	

Date Prepared: 09/07/2016

Preparation Method: EPA 3050B

Parameter	Date Analyzed	Method	LOQ	Result	Units	Flag
Hexavalent Chromium	09/01/2016	EPA 7196 A	2.80	<2.80	mg/kg dry	3.A

Date Prepared: 08/31/2016

Preparation Method: EPA 3060A

Parameter	Date Analyzed	Method	LOQ	Result	Units	Flag
Mercury	09/02/2016	EPA 7471 B	0.02	0.18	mg/kg dry	

Date Prepared: 09/02/2016

Preparation Method: EPA 7471 B

Parameter	Date Analyzed	Method	LOQ	Result	Units	Flag
Cyanide	09/15/2016	EPA 9014	0.23	<0.23	mg/kg dry	

Date Prepared: 09/09/2016

Preparation Method: Distillation Prep

Client: Nelson, Pope & Voorhis	Client ID: Block 38 Hempstead
Date (Time) Collected: 08/30/2016 10:27	Sample ID: SD-3
Date (Time) Received: 08/30/2016 16:25	Laboratory ID: 6083019-03 % Solid:48.58
Matrix: Soil	ELAP: #11693

Volatiles Low Level Analysis

Parameter	CAS No.	LOQ	Result	Units	Flag
1,1,1-Trichloroethane	71-55-6	515	<515	ug/kg dry	3.A, 5.L
1,1-Dichloroethane	75-34-3	515	<515	ug/kg dry	3.A, 5.L
1,1-Dichloroethylene	75-35-4	515	<515	ug/kg dry	3.A, 5.L
1,2,4-Trimethylbenzene	95-63-6	515	<515	ug/kg dry	3.A, 5.L
1,2-Dichlorobenzene	95-50-1	515	<515	ug/kg dry	3.A, 5.L
1,2-Dichloroethane	107-06-2	515	<515	ug/kg dry	3.A, 5.L
1,3,5-Trimethylbenzene	108-67-8	515	<515	ug/kg dry	3.A, 5.L
1,3-Dichlorobenzene	541-73-1	515	<515	ug/kg dry	3.A, 5.L
1,4-Dichlorobenzene	106-46-7	515	<515	ug/kg dry	3.A, 5.L
1,4-Dioxane	123-91-1	5150	<5150	ug/kg dry	3.A, 4.J, 5.L
Acetone	67-64-1	5150	<5150	ug/kg dry	3.A, 4.J, 4.N, 5.L
Benzene	71-43-2	515	<515	ug/kg dry	3.A, 5.L
Carbon Tetrachloride	56-23-5	515	<515	ug/kg dry	3.A, 5.L
Chlorobenzene	108-90-7	515	<515	ug/kg dry	3.A, 5.L
Chloroform	67-66-3	515	<515	ug/kg dry	3.A, 5.L
cis-1,2-Dichloroethylene	156-59-2	515	<515	ug/kg dry	3.A, 5.L
Ethylbenzene	100-41-4	515	<515	ug/kg dry	3.A, 5.L
m,p-Xylenes	108-38-3/106-42-3	1030	<1030	ug/kg dry	3.A, 5.L
Methyl Ethyl Ketone (2-Butanone)	78-93-3	1030	<1030	ug/kg dry	3.A, 5.L
Methylene Chloride	75-09-2	515	<515	ug/kg dry	5.L, 3.A
Methyl-tert-Butyl Ether	1634-04-4	515	<515	ug/kg dry	3.A, 5.L
n-Butylbenzene	104-51-8	515	<515	ug/kg dry	3.A, 5.L
n-Propylbenzene	103-65-1	515	<515	ug/kg dry	3.A, 5.L
o-Xylene	95-47-6	515	<515	ug/kg dry	3.A, 5.L
sec-Butylbenzene	135-98-8	515	<515	ug/kg dry	3.A, 5.L
tert-Butylbenzene	98-06-6	515	<515	ug/kg dry	3.A, 5.L
Tetrachloroethylene	127-18-4	515	<515	ug/kg dry	3.A, 5.L
Toluene	108-88-3	515	<515	ug/kg dry	3.A, 5.L
trans-1,2-Dichloroethylene	156-60-5	515	<515	ug/kg dry	3.A, 5.L
Trichloroethylene	79-01-6	515	<515	ug/kg dry	3.A, 5.L

Client: Nelson, Pope & Voorhis	Client ID: Block 38 Hempstead
Date (Time) Collected: 08/30/2016 10:27	Sample ID: SD-3
Date (Time) Received: 08/30/2016 16:25	Laboratory ID: 6083019-03 % Solid:48.58
Matrix: Soil	ELAP: #11693

Parameter	CAS No.	LOQ	Result	Units	Flag
Vinyl chloride	75-01-4	515	<515	ug/kg dry	3.A, 5.L

Surrogate	CAS No.	% Recovery	Rec. Limits	Flag
1,2-Dichloroethane-d4	10706-07-0	86	74.4-131	
4-Bromofluorobenzene	460-00-4	113	82.3-134	
Dibromofluoromethane	1868-53-7	145	79.4-122	4.E, 5.L
Toluene-d8	2037-26-5	92	85-123	

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
1,4-Dichlorobenzene-d4	3855-82-1	52	50-200	
1,4-Difluorobenzene	540-36-3	73	50-200	
Chlorobenzene-d5	3114-55-4	71	50-200	
Pentafluorobenzene	363-72-4	70	50-200	

Date Prepared: 09/06/2016

Preparation Method: EPA 5035A-L

Date Analyzed: 09/08/2016

Analytical Method: EPA 8260 C



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Date (Time) Collected: 08/30/2016 10:27	Sample ID: SD-3
Date (Time) Received: 08/30/2016 16:25	Laboratory ID: 6083019-03 % Solid:48.58
Matrix: Soil	ELAP: #11693

Semivolatile Analysis

Parameter	CAS No.	LOQ	Result	Units	Flag
2-Methylphenol	95-48-7	309	1250	ug/kg dry	
3/4-Methylphenol	108-39-4/106-44-5	309	1420	ug/kg dry	
Acenaphthene	83-32-9	309	<309	ug/kg dry	
Acenaphthylene	208-96-8	309	<309	ug/kg dry	
Anthracene	120-12-7	309	667	ug/kg dry	
Benzo(a)anthracene	56-55-3	309	2550	ug/kg dry	
Benzo(a)pyrene	50-32-8	309	<309	ug/kg dry	
Benzo(b)fluoranthene	205-99-2	309	<309	ug/kg dry	
Benzo(g,h,i)perylene	191-24-2	309	<309	ug/kg dry	
Benzo(k)fluoranthene	207-08-9	309	<309	ug/kg dry	
Chrysene	218-01-9	309	3850	ug/kg dry	
Dibenzo(a,h)anthracene	53-70-3	309	<309	ug/kg dry	
Dibenzofuran	132-64-9	309	<309	ug/kg dry	
Fluoranthene	206-44-0	309	6800	ug/kg dry	
Fluorene	86-73-7	309	434	ug/kg dry	
Hexachlorobenzene	118-74-1	309	<309	ug/kg dry	
Indeno(1,2,3-cd)pyrene	193-39-5	309	<309	ug/kg dry	
Naphthalene	91-20-3	309	498	ug/kg dry	
Pentachlorophenol	87-86-5	309	<309	ug/kg dry	
Phenanthrene	85-01-8	309	2940	ug/kg dry	
Phenol	108-95-2	309	<309	ug/kg dry	
Pyrene	129-00-0	309	5870	ug/kg dry	

Surrogate	CAS No.	% Recovery	Rec. Limits	Flag
2,4,6-Tribromophenol	118-79-6	90	18.04-120.2	
2-Fluorobiphenyl	321-60-8	69	34.39-110.73	
2-Fluorophenol	367-12-4	110	22.98-107.57	4.E
Nitrobenzene-d5	4165-60-0	62	31-118.25	
Phenol-d6	13127-88-3	122	35.55-111.39	4.E
Terphenyl-d14	1718-51-0	69	41.02-106	

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
1,4-Dichlorobenzene-d4	3855-82-1	32	50-200	



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Date (Time) Received: 08/30/2016 16:25	Laboratory ID: 6083019-03 % Solid:48.58
Matrix: Soil	ELAP: #11693

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
Acenaphthene-d10	15067-26-2	33	50-200	
Chrysene-d12	1719-03-5	26	50-200	
Naphthalene-d8	1146-65-2	32	50-200	
Perylene-d12	1520-96-3	25	50-200	
Phenanthrene-d10	1517-22-2	30	50-200	

Date Prepared: 08/31/2016

Preparation Method: EPA 3545 A

Date Analyzed: 09/01/2016

Analytical Method: EPA 8270 D



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Date (Time) Received: 08/30/2016 16:25	Laboratory ID: 6083019-03 % Solid:48.58
Matrix: Soil	ELAP: #11693

Total Metals Analysis

Parameter	Date Analyzed	Method	LOQ	Result	Units	Flag
Arsenic	09/07/2016	EPA 6010 C	3.61	12.3	mg/kg dry	
Barium	09/07/2016	EPA 6010 C	3.61	147	mg/kg dry	
Beryllium	09/07/2016	EPA 6010 C	3.61	<3.61	mg/kg dry	
Cadmium	09/07/2016	EPA 6010 C	3.61	4.79	mg/kg dry	
Chromium	09/07/2016	EPA 6010 C	3.61	38.4	mg/kg dry	
Copper	09/07/2016	EPA 6010 C	3.61	151	mg/kg dry	
Lead	09/07/2016	EPA 6010 C	36.1	1790	mg/kg dry	3.E
Manganese	09/07/2016	EPA 6010 C	3.61	160	mg/kg dry	
Nickel	09/07/2016	EPA 6010 C	3.61	40.3	mg/kg dry	
Selenium	09/07/2016	EPA 6010 C	3.61	<3.61	mg/kg dry	
Silver	09/07/2016	EPA 6010 C	3.61	<3.61	mg/kg dry	
Zinc	09/07/2016	EPA 6010 C	36.1	1220	mg/kg dry	3.E

Date Prepared: 09/07/2016

Preparation Method: EPA 3050B

Parameter	Date Analyzed	Method	LOQ	Result	Units	Flag
Hexavalent Chromium	09/01/2016	EPA 7196 A	4.66	<4.66	mg/kg dry	3.A, 3.H

Date Prepared: 08/31/2016

Preparation Method: EPA 3060A

Parameter	Date Analyzed	Method	LOQ	Result	Units	Flag
Mercury	09/02/2016	EPA 7471 B	0.06	1.05	mg/kg dry	3.E

Date Prepared: 09/02/2016

Preparation Method: EPA 7471 B

Parameter	Date Analyzed	Method	LOQ	Result	Units	Flag
Cyanide	09/15/2016	EPA 9014	0.41	<0.41	mg/kg dry	

Date Prepared: 09/09/2016

Preparation Method: Distillation Prep

Data Qualifiers Key Reference:

- 3.A Reporting limit raised due to matrix interference.
- 3.E Compound reported at a dilution factor.
- 3.H Sample has turbidity, but no color change.
- 4.A Estimated concentration, exceeds calibration range.
- 4.E Surrogate recovery has failed high.
- 4.J Continuing Calibration Verification (CCV) quality control levels failed low, values are considered to be estimated.
- 4.N LCS recovery was below QC acceptance limit.
- 5.L Results may be biased low due to the sample not being collected according to 5035A-L/5035A-H low level specifications.
- MDL Minimum Detection Limit
- LOQ Limit of Quantitation



TOMORROW'S ANALYTICAL SOLUTIONS TODAY™

CHAIN OF CUSTODY / REQUEST FOR ANALYSIS DOCUMENT

CLIENT NAME/ADDRESS NPV 572 West Whitman Rd P.O. Box 11747 Brooklyn, NY 11217		CONTACT: Steve McGin PHONE: 477-5665 EMAIL:		SAMPLE(S) SEALED YES / NO YES		CORRECT CONTAINER(S) YES / NO YES		6083019			
PROJECT LOCATION: Block 38, Hempstead				SAMPLES RECEIVED AT 1.1 °C		ANALYSIS REQUIRED Pd 375 (VOC) Pd 375 (SVOC) Pd 375 (MHL)					
TERMS & CONDITIONS: Accounts are payable in full within thirty days. Outstanding balances accrue service charges of 1.5% per month. Tending of samples to LIAL for analytical testing constitutes agreement by buyer/sampler to LIAL's Standard terms		SAMPLE # LOCATION		DATE		TIME		# OF CONTAINERS			
LABORATORY ID # For Laboratory Use Only		MATRIX		TYPE		PH		RES CHLORINE			
1608219-01		S G		9:42		8/30/16		1			
02		S G		10:08		8/30/16		1			
03		S G		10:27		8/30/16		1			
4.											
5.											
6.											
7.											
8.											
9.											
10.											
11.											
12.											
13.											
14.											
MATRIX: S=SOIL; SL=SLUDGE; DW=DRINKING WATER; A=AIR; W=WASTE; PC=PAINT CHIPS; BM=BULK MATERIAL; O=OIL; WW=WASTE WATER TYPE: G=GRAB; C=COMPOSITE; SS=SPLIT SPOON PRES: (1) ICE; (2) HCL; (3) H ₂ SO ₄ ; (4) NaOH; (5) Na ₂ S ₂ O ₃ ; (6) HNO ₃ ; (7) OTHER BY				TURNAROUND REQUIRED: ☒ NORMAL ☐ STAT				COMMENTS / INSTRUCTIONS w/ Heptachlor and Cydane			
RELINQUISHED BY (SIGNATURE)		DATE 8/30/16		PRINTED NAME Jonathan McGin		RECEIVED BY (SIGNATURE)		DATE 8-30-16			
TIME 3:35		TIME 3:35		TIME 3:35		TIME 3:35		TIME 3:35			
RELINQUISHED BY (SIGNATURE)		DATE		PRINTED NAME		RECEIVED BY (SIGNATURE)		DATE 8-30-16			
TIME		TIME		TIME		TIME		TIME			

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USEPA# NY01273
CTDOH# PH-0284
AIHA# 164456
NJDEP# NY012
PADEP# 68-2943

LIAL# 6083101

September 15, 2016

Nelson, Pope & Voorhis
Steve McGinn
572 Walt Whitman Road
Melville, NY 11747**Re: Blockm 38 Mek Mek Property**

Dear Steve McGinn,

Enclosed please find the laboratory Analysis Report(s) for sample(s) received on August 30, 2016. Long Island Analytical laboratories analyzed the samples on September 15, 2016 for the following:

SAMPLE ID	ANALYSIS
SS-1	NYC Part 375 (Semi-Volatile), NYC Part 375 (Volatile), NYC Part 375 Metals
SS-2	NYC Part 375 (Semi-Volatile), NYC Part 375 (Volatile), NYC Part 375 Metals

Samples received at 1.9 ° C

If you have any questions or require further information, please call at your convenience. Long Island Analytical Laboratories Inc. is a NELAP accredited laboratory. All reported results meet the requirements of the NELAP standards unless noted. Report shall not be reproduced except in full without the written approval of the laboratory. Results related only to items tested. Long Island Analytical Laboratories would like to thank you for the opportunity to be of service to you.

Best Regards,

Long Island Analytical Laboratories, Inc.**Michael Veraldi - Laboratory Director**

Client: Nelson, Pope & Voorhis	Client ID: Blockm 38 Mek Mek Property
Date (Time) Collected: 08/30/2016 15:29	Sample ID: SS-1
Date (Time) Received: 08/30/2016 18:05	Laboratory ID: 6083101-01 % Solid:79.03
Matrix: Soil	ELAP: #11693

Volatiles Low Level Analysis

Parameter	CAS No.	LOQ	Result	Units	Flag
1,1,1-Trichloroethane	71-55-6	6.33	<6.33	ug/kg dry	
1,1-Dichloroethane	75-34-3	6.33	<6.33	ug/kg dry	
1,1-Dichloroethylene	75-35-4	6.33	<6.33	ug/kg dry	
1,2,4-Trimethylbenzene	95-63-6	6.33	<6.33	ug/kg dry	
1,2-Dichlorobenzene	95-50-1	63.3	<63.3	ug/kg dry	3.A
1,2-Dichloroethane	107-06-2	6.33	<6.33	ug/kg dry	
1,3,5-Trimethylbenzene	108-67-8	6.33	<6.33	ug/kg dry	
1,3-Dichlorobenzene	541-73-1	63.3	<63.3	ug/kg dry	3.A
1,4-Dichlorobenzene	106-46-7	63.3	<63.3	ug/kg dry	3.A
1,4-Dioxane	123-91-1	63.3	<63.3	ug/kg dry	
Acetone	67-64-1	63.3	<63.3	ug/kg dry	
Benzene	71-43-2	6.33	<6.33	ug/kg dry	
Carbon Tetrachloride	56-23-5	6.33	<6.33	ug/kg dry	
Chlorobenzene	108-90-7	6.33	<6.33	ug/kg dry	
Chloroform	67-66-3	6.33	<6.33	ug/kg dry	
cis-1,2-Dichloroethylene	156-59-2	6.33	<6.33	ug/kg dry	
Ethylbenzene	100-41-4	6.33	<6.33	ug/kg dry	
m,p-Xylenes	108-38-3/106-42-3	12.7	<12.7	ug/kg dry	
Methyl Ethyl Ketone (2-Butanone)	78-93-3	12.7	<12.7	ug/kg dry	
Methylene Chloride	75-09-2	6.33	13.1	ug/kg dry	
Methyl-tert-Butyl Ether	1634-04-4	6.33	<6.33	ug/kg dry	
n-Butylbenzene	104-51-8	63.3	<63.3	ug/kg dry	3.A
n-Propylbenzene	103-65-1	6.33	<6.33	ug/kg dry	
o-Xylene	95-47-6	6.33	<6.33	ug/kg dry	
sec-Butylbenzene	135-98-8	6.33	<6.33	ug/kg dry	
tert-Butylbenzene	98-06-6	6.33	<6.33	ug/kg dry	
Tetrachloroethylene	127-18-4	6.33	<6.33	ug/kg dry	
Toluene	108-88-3	6.33	<6.33	ug/kg dry	
trans-1,2-Dichloroethylene	156-60-5	6.33	<6.33	ug/kg dry	
Trichloroethylene	79-01-6	6.33	<6.33	ug/kg dry	



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Client: Nelson, Pope & Voorhis	Client ID: Blockm 38 Mek Mek Property
Date (Time) Collected: 08/30/2016 15:29	Sample ID: SS-1
Date (Time) Received: 08/30/2016 18:05	Laboratory ID: 6083101-01 % Solid:79.03
Matrix: Soil	ELAP: #11693

Parameter	CAS No.	LOQ	Result	Units	Flag
Vinyl chloride	75-01-4	6.33	<6.33	ug/kg dry	4.J, 4.N

Surrogate	CAS No.	% Recovery	Rec. Limits	Flag
1,2-Dichloroethane-d4	10706-07-0	105	74.4-131	
4-Bromofluorobenzene	460-00-4	116	82.3-134	
Dibromofluoromethane	1868-53-7	127	79.4-122	4.E
Toluene-d8	2037-26-5	106	85-123	

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
1,4-Dichlorobenzene-d4	3855-82-1	56	50-200	
1,4-Difluorobenzene	540-36-3	78	50-200	
Chlorobenzene-d5	3114-55-4	65	50-200	
Pentafluorobenzene	363-72-4	80	50-200	

Date Prepared: 08/31/2016

Preparation Method: EPA 5035A-L

Date Analyzed: 08/31/2016

Analytical Method: EPA 8260 C

Client: Nelson, Pope & Voorhis	Client ID: Blockm 38 Mek Mek Property
Date (Time) Collected: 08/30/2016 15:29	Sample ID: SS-1
Date (Time) Received: 08/30/2016 18:05	Laboratory ID: 6083101-01 % Solid:79.03
Matrix: Soil	ELAP: #11693

Semivolatile Analysis

Parameter	CAS No.	LOQ	Result	Units	Flag
2-Methylphenol	95-48-7	190	<190	ug/kg dry	
3/4-Methylphenol	108-39-4/106-44-5	190	<190	ug/kg dry	
Acenaphthene	83-32-9	190	<190	ug/kg dry	
Acenaphthylene	208-96-8	190	<190	ug/kg dry	
Anthracene	120-12-7	190	<190	ug/kg dry	
Benzo(a)anthracene	56-55-3	190	441	ug/kg dry	
Benzo(a)pyrene	50-32-8	190	<190	ug/kg dry	
Benzo(b)fluoranthene	205-99-2	190	<190	ug/kg dry	
Benzo(g,h,i)perylene	191-24-2	190	<190	ug/kg dry	
Benzo(k)fluoranthene	207-08-9	190	<190	ug/kg dry	
Chrysene	218-01-9	190	571	ug/kg dry	
Dibenzo(a,h)anthracene	53-70-3	190	<190	ug/kg dry	
Dibenzofuran	132-64-9	190	<190	ug/kg dry	
Fluoranthene	206-44-0	190	<190	ug/kg dry	
Fluorene	86-73-7	190	<190	ug/kg dry	
Hexachlorobenzene	118-74-1	190	<190	ug/kg dry	
Indeno(1,2,3-cd)pyrene	193-39-5	190	<190	ug/kg dry	
Naphthalene	91-20-3	190	<190	ug/kg dry	
Pentachlorophenol	87-86-5	190	<190	ug/kg dry	
Phenanthrene	85-01-8	190	<190	ug/kg dry	
Phenol	108-95-2	190	<190	ug/kg dry	
Pyrene	129-00-0	190	<190	ug/kg dry	

Surrogate	CAS No.	% Recovery	Rec. Limits	Flag
2,4,6-Tribromophenol	118-79-6	94	18.04-120.2	
2-Fluorobiphenyl	321-60-8	81	34.39-110.73	
2-Fluorophenol	367-12-4	109	22.98-107.57	4.E
Nitrobenzene-d5	4165-60-0	100	31-118.25	
Phenol-d6	13127-88-3	118	35.55-111.39	4.E
Terphenyl-d14	1718-51-0	76	41.02-106	

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
1,4-Dichlorobenzene-d4	3855-82-1	45	50-200	



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Client: Nelson, Pope & Voorhis	Client ID: Blockm 38 Mek Mek Property
Date (Time) Collected: 08/30/2016 15:29	Sample ID: SS-1
Date (Time) Received: 08/30/2016 18:05	Laboratory ID: 6083101-01 % Solid:79.03
Matrix: Soil	ELAP: #11693

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
Acenaphthene-d10	15067-26-2	48	50-200	
Chrysene-d12	1719-03-5	32	50-200	
Naphthalene-d8	1146-65-2	46	50-200	
Perylene-d12	1520-96-3	15	50-200	
Phenanthrene-d10	1517-22-2	42	50-200	

Date Prepared: 08/31/2016

Preparation Method: EPA 3545 A

Date Analyzed: 09/01/2016

Analytical Method: EPA 8270 D



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Client: Nelson, Pope & Voorhis	Client ID: Blockm 38 Mek Mek Property
Date (Time) Collected: 08/30/2016 15:29	Sample ID: SS-1
Date (Time) Received: 08/30/2016 18:05	Laboratory ID: 6083101-01 % Solid:79.03
Matrix: Soil	ELAP: #11693

Total Metals Analysis

Parameter	Date Analyzed	Method	LOQ	Result	Units	Flag
Arsenic	09/07/2016	EPA 6010 C	1.67	2.97	mg/kg dry	
Barium	09/07/2016	EPA 6010 C	1.53	124	mg/kg dry	
Beryllium	09/07/2016	EPA 6010 C	1.67	<1.67	mg/kg dry	
Cadmium	09/07/2016	EPA 6010 C	1.65	<1.65	mg/kg dry	
Chromium	09/07/2016	EPA 6010 C	1.67	10.9	mg/kg dry	
Copper	09/07/2016	EPA 6010 C	1.67	25.2	mg/kg dry	
Lead	09/07/2016	EPA 6010 C	15.3	837	mg/kg dry	3.E
Manganese	09/07/2016	EPA 6010 C	1.67	267	mg/kg dry	
Nickel	09/07/2016	EPA 6010 C	1.67	40.5	mg/kg dry	
Selenium	09/07/2016	EPA 6010 C	1.67	<1.67	mg/kg dry	
Silver	09/07/2016	EPA 6010 C	1.67	<1.67	mg/kg dry	
Zinc	09/07/2016	EPA 6010 C	1.67	221	mg/kg dry	

Date Prepared: 09/07/2016

Preparation Method: EPA 3050B

Parameter	Date Analyzed	Method	LOQ	Result	Units	Flag
Hexavalent Chromium	09/01/2016	EPA 7196 A	2.98	<2.98	mg/kg dry	3.A

Date Prepared: 08/31/2016

Preparation Method: EPA 3060A

Parameter	Date Analyzed	Method	LOQ	Result	Units	Flag
Mercury	09/07/2016	EPA 7471 B	0.01	0.15	mg/kg dry	

Date Prepared: 09/06/2016

Preparation Method: EPA 7471 B

Parameter	Date Analyzed	Method	LOQ	Result	Units	Flag
Cyanide	09/15/2016	EPA 9014	0.25	<0.25	mg/kg dry	

Date Prepared: 09/09/2016

Preparation Method: Distillation Prep

Client: Nelson, Pope & Voorhis	Client ID: Blockm 38 Mek Mek Property
Date (Time) Collected: 08/30/2016 15:42	Sample ID: SS-2
Date (Time) Received: 08/30/2016 18:05	Laboratory ID: 6083101-02 % Solid:95.26
Matrix: Soil	ELAP: #11693

Volatiles Low Level Analysis

Parameter	CAS No.	LOQ	Result	Units	Flag
1,1,1-Trichloroethane	71-55-6	5.25	<5.25	ug/kg dry	
1,1-Dichloroethane	75-34-3	5.25	<5.25	ug/kg dry	
1,1-Dichloroethylene	75-35-4	5.25	<5.25	ug/kg dry	
1,2,4-Trimethylbenzene	95-63-6	5.25	<5.25	ug/kg dry	
1,2-Dichlorobenzene	95-50-1	26.2	<26.2	ug/kg dry	3.A
1,2-Dichloroethane	107-06-2	5.25	<5.25	ug/kg dry	
1,3,5-Trimethylbenzene	108-67-8	5.25	<5.25	ug/kg dry	
1,3-Dichlorobenzene	541-73-1	26.2	<26.2	ug/kg dry	3.A
1,4-Dichlorobenzene	106-46-7	26.2	<26.2	ug/kg dry	3.A
1,4-Dioxane	123-91-1	52.5	<52.5	ug/kg dry	
Acetone	67-64-1	52.5	<52.5	ug/kg dry	
Benzene	71-43-2	5.25	<5.25	ug/kg dry	
Carbon Tetrachloride	56-23-5	5.25	<5.25	ug/kg dry	
Chlorobenzene	108-90-7	5.25	<5.25	ug/kg dry	
Chloroform	67-66-3	5.25	<5.25	ug/kg dry	
cis-1,2-Dichloroethylene	156-59-2	5.25	<5.25	ug/kg dry	
Ethylbenzene	100-41-4	5.25	<5.25	ug/kg dry	
m,p-Xylenes	108-38-3/106-42-3	10.5	<10.5	ug/kg dry	
Methyl Ethyl Ketone (2-Butanone)	78-93-3	10.5	<10.5	ug/kg dry	
Methylene Chloride	75-09-2	5.25	8.73	ug/kg dry	
Methyl-tert-Butyl Ether	1634-04-4	5.25	<5.25	ug/kg dry	
n-Butylbenzene	104-51-8	26.2	<26.2	ug/kg dry	3.A
n-Propylbenzene	103-65-1	5.25	<5.25	ug/kg dry	
o-Xylene	95-47-6	5.25	<5.25	ug/kg dry	
sec-Butylbenzene	135-98-8	5.25	<5.25	ug/kg dry	
tert-Butylbenzene	98-06-6	5.25	<5.25	ug/kg dry	
Tetrachloroethylene	127-18-4	5.25	<5.25	ug/kg dry	
Toluene	108-88-3	5.25	<5.25	ug/kg dry	
trans-1,2-Dichloroethylene	156-60-5	5.25	<5.25	ug/kg dry	
Trichloroethylene	79-01-6	5.25	<5.25	ug/kg dry	

Client: Nelson, Pope & Voorhis	Client ID: Blockm 38 Mek Mek Property
Date (Time) Collected: 08/30/2016 15:42	Sample ID: SS-2
Date (Time) Received: 08/30/2016 18:05	Laboratory ID: 6083101-02 % Solid:95.26
Matrix: Soil	ELAP: #11693

Parameter	CAS No.	LOQ	Result	Units	Flag
Vinyl chloride	75-01-4	5.25	<5.25	ug/kg dry	4.J, 4.N

Surrogate	CAS No.	% Recovery	Rec. Limits	Flag
1,2-Dichloroethane-d4	10706-07-0	103	74.4-131	
4-Bromofluorobenzene	460-00-4	110	82.3-134	4.E
Dibromofluoromethane	1868-53-7	125	79.4-122	4.E
Toluene-d8	2037-26-5	109	85-123	

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
1,4-Dichlorobenzene-d4	3855-82-1	67	50-200	
1,4-Difluorobenzene	540-36-3	89	50-200	
Chlorobenzene-d5	3114-55-4	74	50-200	
Pentafluorobenzene	363-72-4	91	50-200	

Date Prepared: 08/31/2016

Preparation Method: EPA 5035A-L

Date Analyzed: 08/31/2016

Analytical Method: EPA 8260 C

Client: Nelson, Pope & Voorhis	Client ID: Blockm 38 Mek Mek Property
Date (Time) Collected: 08/30/2016 15:42	Sample ID: SS-2
Date (Time) Received: 08/30/2016 18:05	Laboratory ID: 6083101-02 % Solid:95.26
Matrix: Soil	ELAP: #11693

Semivolatile Analysis

Parameter	CAS No.	LOQ	Result	Units	Flag
2-Methylphenol	95-48-7	157	<157	ug/kg dry	
3/4-Methylphenol	108-39-4/106-44-5	157	<157	ug/kg dry	
Acenaphthene	83-32-9	157	<157	ug/kg dry	
Acenaphthylene	208-96-8	157	<157	ug/kg dry	
Anthracene	120-12-7	157	<157	ug/kg dry	
Benzo(a)anthracene	56-55-3	157	342	ug/kg dry	
Benzo(a)pyrene	50-32-8	157	213	ug/kg dry	
Benzo(b)fluoranthene	205-99-2	157	231	ug/kg dry	
Benzo(g,h,i)perylene	191-24-2	157	227	ug/kg dry	
Benzo(k)fluoranthene	207-08-9	157	<157	ug/kg dry	
Chrysene	218-01-9	157	198	ug/kg dry	
Dibenzo(a,h)anthracene	53-70-3	157	<157	ug/kg dry	
Dibenzofuran	132-64-9	157	<157	ug/kg dry	
Fluoranthene	206-44-0	157	293	ug/kg dry	
Fluorene	86-73-7	157	<157	ug/kg dry	
Hexachlorobenzene	118-74-1	157	<157	ug/kg dry	
Indeno(1,2,3-cd)pyrene	193-39-5	157	261	ug/kg dry	
Naphthalene	91-20-3	157	<157	ug/kg dry	
Pentachlorophenol	87-86-5	157	<157	ug/kg dry	
Phenanthrene	85-01-8	157	<157	ug/kg dry	
Phenol	108-95-2	157	<157	ug/kg dry	
Pyrene	129-00-0	157	281	ug/kg dry	

Surrogate	CAS No.	% Recovery	Rec. Limits	Flag
2,4,6-Tribromophenol	118-79-6	60	18.04-120.2	
2-Fluorobiphenyl	321-60-8	79	34.39-110.73	
2-Fluorophenol	367-12-4	75	22.98-107.57	
Nitrobenzene-d5	4165-60-0	82	31-118.25	
Phenol-d6	13127-88-3	72	35.55-111.39	
Terphenyl-d14	1718-51-0	87	41.02-106	

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
1,4-Dichlorobenzene-d4	3855-82-1	110	50-200	

Client: Nelson, Pope & Voorhis	Client ID: Blockm 38 Mek Mek Property
Date (Time) Collected: 08/30/2016 15:42	Sample ID: SS-2
Date (Time) Received: 08/30/2016 18:05	Laboratory ID: 6083101-02 % Solid:95.26
Matrix: Soil	ELAP: #11693

Internal Standard	CAS No.	% Recovery	Rec. Limits	Flag
Acenaphthene-d10	15067-26-2	106	50-200	
Chrysene-d12	1719-03-5	91	50-200	
Naphthalene-d8	1146-65-2	108	50-200	
Perylene-d12	1520-96-3	67	50-200	
Phenanthrene-d10	1517-22-2	103	50-200	

Date Prepared: 08/31/2016

Preparation Method: EPA 3545 A

Date Analyzed: 09/13/2016

Analytical Method: EPA 8270 D



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Client: Nelson, Pope & Voorhis	Client ID: Blockm 38 Mek Mek Property
Date (Time) Collected: 08/30/2016 15:42	Sample ID: SS-2
Date (Time) Received: 08/30/2016 18:05	Laboratory ID: 6083101-02 % Solid:95.26
Matrix: Soil	ELAP: #11693

Total Metals Analysis

Parameter	Date Analyzed	Method	LOQ	Result	Units	Flag
Arsenic	09/07/2016	EPA 6010 C	1.84	3.03	mg/kg dry	
Barium	09/07/2016	EPA 6010 C	1.84	46.3	mg/kg dry	
Beryllium	09/07/2016	EPA 6010 C	1.84	<1.84	mg/kg dry	
Cadmium	09/07/2016	EPA 6010 C	1.84	<1.84	mg/kg dry	
Chromium	09/07/2016	EPA 6010 C	1.84	8.94	mg/kg dry	
Copper	09/07/2016	EPA 6010 C	1.84	21.4	mg/kg dry	
Lead	09/07/2016	EPA 6010 C	1.84	183	mg/kg dry	
Manganese	09/07/2016	EPA 6010 C	1.84	168	mg/kg dry	
Nickel	09/07/2016	EPA 6010 C	1.84	7.88	mg/kg dry	
Selenium	09/07/2016	EPA 6010 C	1.84	<1.84	mg/kg dry	
Silver	09/07/2016	EPA 6010 C	1.84	<1.84	mg/kg dry	
Zinc	09/07/2016	EPA 6010 C	1.84	103	mg/kg dry	

Date Prepared: 09/07/2016

Preparation Method: EPA 3050B

Parameter	Date Analyzed	Method	LOQ	Result	Units	Flag
Hexavalent Chromium	09/01/2016	EPA 7196 A	0.521	<0.521	mg/kg dry	3.H, 4.G

Date Prepared: 08/31/2016

Preparation Method: EPA 3060A

Parameter	Date Analyzed	Method	LOQ	Result	Units	Flag
Mercury	09/07/2016	EPA 7471 B	0.02	0.14	mg/kg dry	4.H

Date Prepared: 09/06/2016

Preparation Method: EPA 7471 B

Parameter	Date Analyzed	Method	LOQ	Result	Units	Flag
Cyanide	09/15/2016	EPA 9014	0.21	<0.21	mg/kg dry	

Date Prepared: 09/09/2016

Preparation Method: Distillation Prep

Data Qualifiers Key Reference:

- 3.A Reporting limit raised due to matrix interference.
- 3.E Compound reported at a dilution factor.
- 3.H Sample has turbidity, but no color change.
- 4.E Surrogate recovery has failed high.
- 4.G Spike recovery out of range due to matrix interference.
- 4.H Batch spike recovery out of range due to matrix inconsistency.
- 4.J Continuing Calibration Verification (CCV) quality control levels failed low, values are considered to be estimated.
- 4.N LCS recovery was below QC acceptance limit.
- MDL Minimum Detection Limit
- LOQ Limit of Quantitation



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CHAIN OF CUSTODY / REQUEST FOR ANALYSIS DOCUMENT

CLIENT NAME/ADDRESS <i>NEW WALK WHOLESALE PA 572 WALK WHOLESALE PA MELVILLE, NY 11747</i>		CONTACT: <i>S. M'Ginn</i>		SAMPLE(S) SEALED YES / NO <i>YES</i>		CHAIN NLY	
PROJECT LOCATION: <i>Block 38 Mek Mek Property</i>		PHONE: <i>631 427-5665</i>		CORRECT CONTAINER? YES / NO <i>YES</i>		6083101	
FAX: <i>631 427-5620</i>		EMAIL:		SAMPLE NAME (PRINT) <i>Steven J. M'Ginn</i>			
TERMS & CONDITIONS: Accounts are payable in full within thirty days, outstanding balances accrue service charges of 1.5% per month. Tendering of samples to LIAL for analytical testing constitutes agreement by buyer/sampler to LIAL's Standard terms		SAMPLES RECEIVED AT <i>1.9 °C</i>		ANALYSIS REQUIRED <i>1-375 vol 1-375 vol 1-375 vol</i>			
LABORATORY ID # <i>6083101-01</i>	MATRIX <i>SO</i>	DATE <i>8/30/16</i>	TIME <i>329</i>	SAMPLE #	LOCATION		
2. <i>LOUS</i>		<i>8/30/16</i>	<i>542</i>	<i>SS-1</i>	<i>SS-2</i>		
3.							
4.							
5.							
6.							
7.							
8.							
9.							
10.							
11.							
12.							
13.							
14.							
MATRIX: S=SOIL; SL=SLUDGE; DW=DRINKING WATER; A=AIR; W=WASTE; PC=PAINT CHIPS; BM=BULK MATERIAL; O=OIL; WW=WASTE WATER		TURN AROUND REQUIRED: ☒ NORMAL ☐ STAT		COMMENTS / INSTRUCTIONS <i>1-Hex + CYANIDE ALSO</i>			
TYPE: G=GRAB; C=COMPOSITE; SS=SPLIT SPOON		DATE <i>8/30/16</i>		RECEIVED BY (SIGNATURE) <i>Steven J. M'Ginn</i>		DATE <i>8-30-16</i>	
PRES: (1) ICE; (2) HCL; (3) H ₂ SO ₄ ; (4) NaOH; (5) Na ₂ S ₂ O ₃ ; (6) HNO ₃ ; (7) OTHER		PRINTED NAME <i>Steven J. M'Ginn</i>		RECEIVED BY (SIGNATURE) <i>Geoffrey D. ...</i>		TIME <i>18:05</i>	
RELINQUISHED BY (SIGNATURE) <i>[Signature]</i>		DATE <i>8/30/16</i>		RECEIVED BY (SIGNATURE) <i>[Signature]</i>		DATE <i>8-30-16</i>	
RELINQUISHED BY (SIGNATURE) <i>[Signature]</i>		DATE <i>8/30/16</i>		RECEIVED BY (SIGNATURE) <i>[Signature]</i>		DATE <i>8-30-16</i>	
PRINTED NAME <i>Steven J. M'Ginn</i>		PRINTED NAME <i>Steven J. M'Ginn</i>		PRINTED NAME <i>Steven J. M'Ginn</i>		PRINTED NAME <i>Steven J. M'Ginn</i>	



Carman Place Site
157 Main Street, Village of Hempstead, NY
Supplemental Site Investigation

Appendix B

Soil Boring Logs

SOIL BORING LOG

Paulus, Sokolowski and Sartor Engineering, PC



Project Number: 04736.0005				SB/MW ID: SB-1		
Project: Carman Place Site				Elevation: NA. Lot 116		
Project Location: Nassau County, NY				Date Started: 04-18-2019		
Observer: Camila Israel				Date Completed: 04-18-2019		
Contractor: Aquifer Drilling & Testing, Inc. (ADT)						
Driller: Rajiv J. Singh				Helper:		
Type of Rig: Geoprobe 7822DT						
Casing Dia.: NA				Auger Dia.: 2"		
Drilling Mud Utilized: NA Type: NA				Rotary Bit Diameter: 2.625"		
SAMPLING EQUIPMENT (type and size)			Macro-Core Sampler: O.D. = 2", Length = 5'			
			U-Tube Sampler: N/A			
			Core Barrel: N/A			
Sampler Hammer Weight: NA				Average Drop: NA		
WATER LEVEL OBSERVATIONS						
Date	Time	Depth of Hole	Depth of	Depth to Water	Remarks	
4/18/2019				NA	No GW observed	
Depth (Feet)	Blow Counts	PID (ppm)	LITHOLOGY		Recovery (%)	COMMENTS
0-5	N/A	0.0	Yellowish/ orange; fine - medium sand		80	Pre-clearing using hand auger. Rain conditions
5-10	N/A	0.0	Yellowish/ orange; fine - medium sand		25	Rain & thunder conditions
10-15	N/A	0.0	Yellowish/ orange; fine - medium sand		100	Rain conditions
15-17	N/A	0.1	Yellowish/ orange; fine - medium sand		100	
17-20	N/A	0.3	Brown/gray sand; ; fine - medium sand		100	Soil sample collected SB-1 (17-19 ft BGS)

SOIL BORING LOG

Paulus, Sokolowski and Sartor Engineering, PC

SOIL BORING LOG

Paulus, Sokolowski and Sartor Engineering, PC

[illegible]

Paulus, Sokolowski and Sartor Engineering, PC

[illegible]

Paulus, Sokolowski and Sartor Engineering, PC

[illegible]

SOIL BORING LOG

Paulus, Sokolowski and Sartor Engineering, PC

SOIL BORING LOG

Paulus, Sokolowski and Sartor Engineering, PC



Project Number: 04736.0005		SB/MW ID: SB-5	
Project: Carman Place Site		Elevation: NA. Lot 138	
Project Location: Nassau County, NY		Date Started: 04-18-2019	
Observer: Camila Israel		Date Completed: 04-18-2019	
Contractor: Aquifer Drilling & Testing, Inc. (ADT)			
Driller: Rajiv J. Singh		Helper:	
Type of Rig: Geoprobe 7822DT			
Casing Dia.: NA		Auger Dia.: 2"	
Drilling Mud Utilized: NA Type: NA		Rotary Bit Diameter: 2.625"	
SAMPLING EQUIPMENT (type and size)	Macro-Core Sampler: O.D. = 2", Length = 5'		
	U-Tube Sampler: N/A		
	Core Barrel: N/A		
Sampler Hammer Weight: NA		Average Drop: NA	

WATER LEVEL OBSERVATIONS	

Date	Time	Depth of Hole	Depth of	Depth to Water	Remarks
4/18/2019				NA	No GW observed

[illegible]

Paulus, Sokolowski and Sartor Engineering, PC



Project Number: 04736.0005		SB/MW ID: SB-101	
Project: Carman Place Site		Elevation: NA. Lot 116	
Project Location: Nassau County, NY		Date Started: 07-10-2019	
Observer: Eric Stucker		Date Completed: 07-10-2019	
Contractor: Aquifer Drilling & Testing, Inc. (ADT)			
Driller: Rajiv J. Singh		Helper:	
Type of Rig: Geoprobe 7822DT			
Casing Dia.: NA		Auger Dia.: 2"	
Drilling Mud Utilized: NA		Rotary Bit Diameter: 2.625"	
SAMPLING EQUIPMENT (type and size)		Macro-Core Sampler: O.D. = 2", Length = 5'	
		U-Tube Sampler: N/A	
		Core Barrel: N/A	
Sampler Hammer Weight: NA		Average Drop: NA	

Date	Time	Depth of Hole	Depth of Casing	Depth to Water	Remarks
7/10/2019		30.05		19.5	Well MW-101 installed at this location

[illegible]

Paulus, Sokolowski and Sartor Engineering, PC

[illegible]

SOIL BORING LOG

Paulus, Sokolowski and Sartor Engineering, PC



Project Number: 04736.0005				SB/MW ID: SB-103		
Project: Carman Place Site				Elevation: NA. Lot 9		
Project Location: Nassau County, NY				Date Started: 07-10-2019		
Observer: Eric Stucker				Date Completed: 07-10-2019		
Contractor: Aquifer Drilling & Testing, Inc. (ADT)						
Driller: Rajiv J. Singh				Helper:		
Type of Rig: Geoprobe 7822DT						
Casing Dia.: NA				Auger Dia.: 2"		
Drilling Mud Utilized: NA Type: NA				Rotary Bit Diameter: 2.625"		
SAMPLING EQUIPMENT (type and size)			Macro-Core Sampler: O.D. = 2", Length = 5'			
			U-Tube Sampler: N/A			
			Core Barrel: N/A			
Sampler Hammer Weight: NA				Average Drop: NA		
WATER LEVEL OBSERVATIONS						
Date		Time	Depth of Hole	Depth of Casing	Depth to Water	Remarks
7/10/2019					NA	No GW observed
Depth (Feet)	Blow Counts	PID (ppm)	LITHOLOGY		Recovery (%)	COMMENTS
0-1.5	N/A	0.0	Moist, Brown, c-f SAND, some gravel		90	
1.5-3	N/A	0.0	Moist, Brown-Lt. brown, SANDY CLAY, trace fine gravel		90	VOC grab sample SB-103 collected at ~3 ft BGS at 1455
3-5	N/A	0.0	Moist, Lt. brown, c-f SAND, some gravel		90	
5-10	N/A	0.0	Moist, Lt. brown, c-f SAND, some gravel		90	

Paulus, Sokolowski and Sartor Engineering, PC

[illegible]

SOIL BORING LOG

Paulus, Sokolowski and Sartor Engineering, PC



Project Number: 04736.0005				SB/MW ID: SB-105			
Project: Carman Place Site				Elevation: NA. Lot 111			
Project Location: Nassau County, NY				Date Started: 07-10-2019			
Observer: Eric Stucker				Date Completed: 07-10-2019			
Contractor: Aquifer Drilling & Testing, Inc. (ADT)							
Driller: Rajiv J. Singh				Helper:			
Type of Rig: Geoprobe 7822DT							
Casing Dia.: NA				Auger Dia.: 2"			
Drilling Mud Utilized: NA Type: NA				Rotary Bit Diameter: 2.625"			
SAMPLING EQUIPMENT (type and size)			Macro-Core Sampler: O.D. = 2", Length = 5'				
			U-Tube Sampler: N/A				
			Core Barrel: N/A				
Sampler Hammer Weight: NA				Average Drop: NA			
WATER LEVEL OBSERVATIONS							
Date		Time		Depth of Hole	Depth of Casing	Depth to Water	Remarks
7/10/2019				28.64		19.56	Well MW-105 installed at this location
Depth (Feet)	Blow Counts	PID (ppm)	LITHOLOGY			Recovery (%)	COMMENTS
0-5	N/A	1.1	Dry, Gray, c-f SAND, little c-f gravel, trace asphalt				
5-6.5	N/A	0.2	SAA			70	
6.5-8.25	N/A	0.0	Dry, Brown, c-f SAND, some c-f gravel, trace brick			70	
8.25-10	N/A	0.0	Moist, Lt. brown, c-f SAND, little fine gravel			70	
10-11.7	N/A	2.2	Moist, Lt. brown, c-f SAND, little c-f gravel				
11.7-13.4	N/A	7.8	SAA				VOC grab sample SB-105 collected at ~12.5 ft BGS at 1200
13.4-15	N/A	6.8	Wet, Lt. brown, m-f SAND, trace fine gravel and silt				
15-20	N/A	0.6	Moist, Brown, c-f SAND, little c-f gravel, trace silt				
20-21.5	N/A	0.1	Moist, Lt. brown, c-f SAND, little c-f gravel				
21.5-25	N/A	0.1	Wet, Lt. brown, c-f SAND and GRAVEL				



Carman Place Site
157 Main Street, Village of Hempstead, NY
Supplemental Site Investigation

Appendix C

Laboratory Analytical Reports



ANALYTICAL REPORT

Lab Number:	L1917489
Client:	PS&S Engineering, Inc. 1 Larkin Plaza 2nd Floor Yonkers, NY 10701
ATTN:	Camila Israel
Phone:	(914) 509-8616
Project Name:	CARMAN PLACE
Project Number:	4736.005
Report Date:	05/02/19

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-MA030), NH NELAP (2062), CT (PH-0141), DoD (L2474), FL (E87814), IL (200081), LA (85084), ME (MA00030), MD (350), NJ (MA015), NY (11627), NC (685), OH (CL106), PA (68-02089), RI (LAO00299), TX (T104704419), VT (VT-0015), VA (460194), WA (C954), US Army Corps of Engineers, USDA (Permit #P330-17-00150), USFWS (Permit #206964).

320 Forbes Boulevard, Mansfield, MA 02048-1806
508-822-9300 (Fax) 508-822-3288 800-624-9220 - www.alphalab.com



Project Name: CARMAN PLACE
Project Number: 4736.005

Lab Number: L1917489
Report Date: 05/02/19

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1917489-01	SS-1	SOIL_VAPOR	157 MAIN STREET HEMPSTEAD	04/26/19 12:00	04/26/19
L1917489-02	IA-1	AIR	157 MAIN STREET HEMPSTEAD	04/26/19 15:50	04/26/19
L1917489-03	OA-1	AIR	157 MAIN STREET HEMPSTEAD	04/26/19 15:40	04/26/19

Project Name: CARMAN PLACE
Project Number: 4736.005

Lab Number: L1917489
Report Date: 05/02/19

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: CARMAN PLACE
Project Number: 4736.005

Lab Number: L1917489
Report Date: 05/02/19

Case Narrative (continued)

Volatile Organics in Air

Canisters were released from the laboratory on April 15, 2019. The canister certification results are provided as an addendum.

L1917489-02 and -03: results for Acetone should be considered estimated due to co-elution with a non-target peak.

The WG1232045-3 LCS recovery for 3-chloropropene (135%) and bromoform (135%) is above the upper 130% acceptance limit. All samples associated with this LCS do not have reportable amounts of this analyte.

WG1232045-5 results for Acetone should be considered estimated due to co-elution with a non-target peak.

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: 05/02/19

AIR

Project Name: CARMAN PLACE**Project Number:** 4736.005**Lab Number:** L1917489**Report Date:** 05/02/19**SAMPLE RESULTS**

Lab ID: L1917489-01
 Client ID: SS-1
 Sample Location: 157 MAIN STREET HEMPSTEAD

Date Collected: 04/26/19 12:00
 Date Received: 04/26/19
 Field Prep: Not Specified

Sample Depth:
 Matrix: Soil_Vapor
 Analytical Method: 48,TO-15
 Analytical Date: 04/30/19 20:05
 Analyst: EW

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.504	0.200	--	2.49	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	6.07	5.00	--	11.4	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	57.9	1.00	--	138	2.38	--		1
Trichlorofluoromethane	2.02	0.200	--	11.4	1.12	--		1
Isopropanol	1.45	0.500	--	3.56	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	1.76	0.500	--	5.34	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	1.73	0.200	--	5.39	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	3.08	0.500	--	9.08	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1



Project Name: CARMAN PLACE**Lab Number:** L1917489**Project Number:** 4736.005**Report Date:** 05/02/19**SAMPLE RESULTS**

Lab ID: L1917489-01

Date Collected: 04/26/19 12:00

Client ID: SS-1

Date Received: 04/26/19

Sample Location: 157 MAIN STREET HEMPSTEAD

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	0.500	--	ND	1.80	--		1
Chloroform	0.359	0.200	--	1.75	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	0.276	0.200	--	0.973	0.705	--		1
1,1,1-Trichloroethane	0.955	0.200	--	5.21	1.09	--		1
Benzene	0.569	0.200	--	1.82	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	9.47	0.200	--	50.9	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	0.782	0.200	--	3.20	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	1.30	0.200	--	4.90	0.754	--		1
2-Hexanone	1.39	0.200	--	5.70	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	56.4	0.200	--	382	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	0.251	0.200	--	1.09	0.869	--		1



Project Name: CARMAN PLACE**Lab Number:** L1917489**Project Number:** 4736.005**Report Date:** 05/02/19**SAMPLE RESULTS****Lab ID:** L1917489-01**Date Collected:** 04/26/19 12:00**Client ID:** SS-1**Date Received:** 04/26/19**Sample Location:** 157 MAIN STREET HEMPSTEAD**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	1.02	0.400	--	4.43	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	0.412	0.200	--	1.79	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	0.658	0.200	--	3.23	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

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	95		60-140
Bromochloromethane	95		60-140
chlorobenzene-d5	92		60-140



Project Name: CARMAN PLACE**Project Number:** 4736.005**Lab Number:** L1917489**Report Date:** 05/02/19**SAMPLE RESULTS**

Lab ID: L1917489-02
 Client ID: IA-1
 Sample Location: 157 MAIN STREET HEMPSTEAD

Date Collected: 04/26/19 15:50
 Date Received: 04/26/19
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 48,TO-15
 Analytical Date: 04/30/19 18:48
 Analyst: EW

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.492	0.200	--	2.43	0.989	--		1
Chloromethane	0.972	0.200	--	2.01	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		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	34.2	5.00	--	64.4	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	6.05	1.00	--	14.4	2.38	--		1
Trichlorofluoromethane	0.222	0.200	--	1.25	1.12	--		1
Isopropanol	7.91	0.500	--	19.4	1.23	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	0.924	0.500	--	3.21	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
2-Butanone	0.921	0.500	--	2.72	1.47	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	1.69	0.500	--	4.98	1.47	--		1



Project Name: CARMAN PLACE**Project Number:** 4736.005**Lab Number:** L1917489**Report Date:** 05/02/19**SAMPLE RESULTS****Lab ID:** L1917489-02**Client ID:** IA-1**Sample Location:** 157 MAIN STREET HEMPSTEAD**Date Collected:** 04/26/19 15:50**Date Received:** 04/26/19**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	0.203	0.200	--	0.715	0.705	--		1
Benzene	0.234	0.200	--	0.748	0.639	--		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
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	0.477	0.200	--	1.80	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	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
1,1,1,2,2-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



Project Name: CARMAN PLACE**Lab Number:** L1917489**Project Number:** 4736.005**Report Date:** 05/02/19**SAMPLE RESULTS****Lab ID:** L1917489-02**Date Collected:** 04/26/19 15:50**Client ID:** IA-1**Date Received:** 04/26/19**Sample Location:** 157 MAIN STREET HEMPSTEAD**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	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

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	91		60-140
Bromochloromethane	92		60-140
chlorobenzene-d5	89		60-140



Project Name: CARMAN PLACE**Lab Number:** L1917489**Project Number:** 4736.005**Report Date:** 05/02/19**SAMPLE RESULTS**

Lab ID: L1917489-02

Client ID: IA-1

Sample Location: 157 MAIN STREET HEMPSTEAD

Date Collected: 04/26/19 15:50

Date Received: 04/26/19

Field Prep: Not Specified

Sample Depth:

Matrix: Air

Analytical Method: 48,TO-15-SIM

Analytical Date: 04/30/19 18:48

Analyst: TS

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	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.081	0.020	--	0.510	0.126	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
Tetrachloroethene	0.040	0.020	--	0.271	0.136	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	91		60-140
bromochloromethane	93		60-140
chlorobenzene-d5	92		60-140



Project Name: CARMAN PLACE**Project Number:** 4736.005**Lab Number:** L1917489**Report Date:** 05/02/19**SAMPLE RESULTS**

Lab ID: L1917489-03
 Client ID: OA-1
 Sample Location: 157 MAIN STREET HEMPSTEAD

Date Collected: 04/26/19 15:40
 Date Received: 04/26/19
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 48,TO-15
 Analytical Date: 04/30/19 18:09
 Analyst: EW

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.496	0.200	--	2.45	0.989	--		1
Chloromethane	0.646	0.200	--	1.33	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		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	6.75	5.00	--	12.7	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	2.06	1.00	--	4.89	2.38	--		1
Trichlorofluoromethane	0.200	0.200	--	1.12	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		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
2-Butanone	ND	0.500	--	ND	1.47	--		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



Project Name: CARMAN PLACE**Project Number:** 4736.005**Lab Number:** L1917489**Report Date:** 05/02/19**SAMPLE RESULTS****Lab ID:** L1917489-03**Client ID:** OA-1**Sample Location:** 157 MAIN STREET HEMPSTEAD**Date Collected:** 04/26/19 15:40**Date Received:** 04/26/19**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	ND	0.200	--	ND	0.705	--		1
Benzene	0.202	0.200	--	0.645	0.639	--		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
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	0.324	0.200	--	1.22	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	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
1,1,1,2,2-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



Project Name: CARMAN PLACE**Lab Number:** L1917489**Project Number:** 4736.005**Report Date:** 05/02/19**SAMPLE RESULTS**

Lab ID: L1917489-03

Date Collected: 04/26/19 15:40

Client ID: OA-1

Date Received: 04/26/19

Sample Location: 157 MAIN STREET HEMPSTEAD

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	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

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	91		60-140
Bromochloromethane	94		60-140
chlorobenzene-d5	90		60-140



Project Name: CARMAN PLACE**Lab Number:** L1917489**Project Number:** 4736.005**Report Date:** 05/02/19**SAMPLE RESULTS**

Lab ID: L1917489-03
 Client ID: OA-1
 Sample Location: 157 MAIN STREET HEMPSTEAD

Date Collected: 04/26/19 15:40
 Date Received: 04/26/19
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 48,TO-15-SIM
 Analytical Date: 04/30/19 18:09
 Analyst: TS

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	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.081	0.020	--	0.510	0.126	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
Tetrachloroethene	0.075	0.020	--	0.509	0.136	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	92		60-140
bromochloromethane	94		60-140
chlorobenzene-d5	92		60-140



Project Name: CARMAN PLACE

Lab Number: L1917489

Project Number: 4736.005

Report Date: 05/02/19

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15

Analytical Date: 04/30/19 15:02

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab for sample(s): 01-03 Batch: WG1232045-4								
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: CARMAN PLACE

Lab Number: L1917489

Project Number: 4736.005

Report Date: 05/02/19

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15

Analytical Date: 04/30/19 15:02

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab for sample(s): 01-03 Batch: WG1232045-4								
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: CARMAN PLACE

Lab Number: L1917489

Project Number: 4736.005

Report Date: 05/02/19

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15

Analytical Date: 04/30/19 15:02

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab for sample(s): 01-03 Batch: WG1232045-4								
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: CARMAN PLACE

Lab Number: L1917489

Project Number: 4736.005

Report Date: 05/02/19

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15-SIM

Analytical Date: 04/30/19 15:41

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab for sample(s): 02-03 Batch: WG1232046-4								
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: CARMAN PLACE

Project Number: 4736.005

Lab Number: L1917489

Report Date: 05/02/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-03 Batch: WG1232045-3								
Propylene	138	Q	-		70-130	-		
Dichlorodifluoromethane	105		-		70-130	-		
Chloromethane	117		-		70-130	-		
Freon-114	113		-		70-130	-		
Vinyl chloride	114		-		70-130	-		
1,3-Butadiene	105		-		70-130	-		
Bromomethane	108		-		70-130	-		
Chloroethane	113		-		70-130	-		
Ethanol	77		-		40-160	-		
Vinyl bromide	103		-		70-130	-		
Acetone	99		-		40-160	-		
Trichlorofluoromethane	96		-		70-130	-		
Isopropanol	108		-		40-160	-		
1,1-Dichloroethene	106		-		70-130	-		
Tertiary butyl Alcohol	79		-		70-130	-		
Methylene chloride	116		-		70-130	-		
3-Chloropropene	135	Q	-		70-130	-		
Carbon disulfide	104		-		70-130	-		
Freon-113	111		-		70-130	-		
trans-1,2-Dichloroethene	102		-		70-130	-		
1,1-Dichloroethane	108		-		70-130	-		
Methyl tert butyl ether	96		-		70-130	-		
Vinyl acetate	138	Q	-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: CARMAN PLACE

Project Number: 4736.005

Lab Number: L1917489

Report Date: 05/02/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-03 Batch: WG1232045-3								
2-Butanone	128		-		70-130	-		
cis-1,2-Dichloroethene	106		-		70-130	-		
Ethyl Acetate	124		-		70-130	-		
Chloroform	102		-		70-130	-		
Tetrahydrofuran	112		-		70-130	-		
1,2-Dichloroethane	100		-		70-130	-		
n-Hexane	103		-		70-130	-		
1,1,1-Trichloroethane	104		-		70-130	-		
Benzene	99		-		70-130	-		
Carbon tetrachloride	119		-		70-130	-		
Cyclohexane	106		-		70-130	-		
1,2-Dichloropropane	118		-		70-130	-		
Bromodichloromethane	107		-		70-130	-		
1,4-Dioxane	103		-		70-130	-		
Trichloroethene	102		-		70-130	-		
2,2,4-Trimethylpentane	110		-		70-130	-		
Heptane	122		-		70-130	-		
cis-1,3-Dichloropropene	113		-		70-130	-		
4-Methyl-2-pentanone	123		-		70-130	-		
trans-1,3-Dichloropropene	97		-		70-130	-		
1,1,2-Trichloroethane	112		-		70-130	-		
Toluene	106		-		70-130	-		
2-Hexanone	120		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: CARMAN PLACE

Project Number: 4736.005

Lab Number: L1917489

Report Date: 05/02/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-03 Batch: WG1232045-3								
Dibromochloromethane	127		-		70-130	-		
1,2-Dibromoethane	112		-		70-130	-		
Tetrachloroethene	99		-		70-130	-		
Chlorobenzene	106		-		70-130	-		
Ethylbenzene	110		-		70-130	-		
p/m-Xylene	110		-		70-130	-		
Bromoform	135	Q	-		70-130	-		
Styrene	106		-		70-130	-		
1,1,2,2-Tetrachloroethane	115		-		70-130	-		
o-Xylene	113		-		70-130	-		
4-Ethyltoluene	108		-		70-130	-		
1,3,5-Trimethylbenzene	109		-		70-130	-		
1,2,4-Trimethylbenzene	113		-		70-130	-		
Benzyl chloride	122		-		70-130	-		
1,3-Dichlorobenzene	107		-		70-130	-		
1,4-Dichlorobenzene	107		-		70-130	-		
1,2-Dichlorobenzene	109		-		70-130	-		
1,2,4-Trichlorobenzene	105		-		70-130	-		
Hexachlorobutadiene	106		-		70-130	-		

Lab Control Sample Analysis Batch Quality Control

Project Name: CARMAN PLACE

Project Number: 4736.005

Lab Number: L1917489

Report Date: 05/02/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 02-03 Batch: WG1232046-3								
Vinyl chloride	110		-		70-130	-		25
1,1-Dichloroethene	102		-		70-130	-		25
cis-1,2-Dichloroethene	110		-		70-130	-		25
1,1,1-Trichloroethane	104		-		70-130	-		25
Carbon tetrachloride	119		-		70-130	-		25
Trichloroethene	101		-		70-130	-		25
Tetrachloroethene	101		-		70-130	-		25

Lab Duplicate Analysis Batch Quality Control

Project Name: CARMAN PLACE

Project Number: 4736.005

Lab Number: L1917489

Report Date: 05/02/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-03 QC Batch ID: WG1232045-5 QC Sample: L1917489-02 Client ID: IA-1						
Dichlorodifluoromethane	0.492	0.491	ppbV	0		25
Chloromethane	0.972	1.00	ppbV	3		25
Freon-114	ND	ND	ppbV	NC		25
1,3-Butadiene	ND	ND	ppbV	NC		25
Bromomethane	ND	ND	ppbV	NC		25
Chloroethane	ND	ND	ppbV	NC		25
Ethanol	34.2	35.1	ppbV	3		25
Vinyl bromide	ND	ND	ppbV	NC		25
Acetone	6.05	6.00	ppbV	1		25
Trichlorofluoromethane	0.222	0.216	ppbV	3		25
Isopropanol	7.91	8.13	ppbV	3		25
Tertiary butyl Alcohol	ND	ND	ppbV	NC		25
Methylene chloride	0.924	0.938	ppbV	2		25
3-Chloropropene	ND	ND	ppbV	NC		25
Carbon disulfide	ND	ND	ppbV	NC		25
Freon-113	ND	ND	ppbV	NC		25
trans-1,2-Dichloroethene	ND	ND	ppbV	NC		25
1,1-Dichloroethane	ND	ND	ppbV	NC		25
Methyl tert butyl ether	ND	ND	ppbV	NC		25
2-Butanone	0.921	0.939	ppbV	2		25
Ethyl Acetate	ND	ND	ppbV	NC		25

Project Name: CARMAN PLACE

Project Number: 4736.005

Lab Duplicate Analysis

Batch Quality Control

Lab Number: L1917489

Report Date: 05/02/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-03 QC Batch ID: WG1232045-5 QC Sample: L1917489-02 Client ID: IA-1						
Chloroform	ND	ND	ppbV	NC		25
Tetrahydrofuran	1.69	1.66	ppbV	2		25
1,2-Dichloroethane	ND	ND	ppbV	NC		25
n-Hexane	0.203	0.204	ppbV	0		25
Benzene	0.234	0.246	ppbV	5		25
Cyclohexane	ND	ND	ppbV	NC		25
1,2-Dichloropropane	ND	ND	ppbV	NC		25
Bromodichloromethane	ND	ND	ppbV	NC		25
1,4-Dioxane	ND	ND	ppbV	NC		25
2,2,4-Trimethylpentane	ND	ND	ppbV	NC		25
Heptane	ND	ND	ppbV	NC		25
cis-1,3-Dichloropropene	ND	ND	ppbV	NC		25
4-Methyl-2-pentanone	ND	ND	ppbV	NC		25
trans-1,3-Dichloropropene	ND	ND	ppbV	NC		25
1,1,2-Trichloroethane	ND	ND	ppbV	NC		25
Toluene	0.477	0.484	ppbV	1		25
2-Hexanone	ND	ND	ppbV	NC		25
Dibromochloromethane	ND	ND	ppbV	NC		25
1,2-Dibromoethane	ND	ND	ppbV	NC		25
Chlorobenzene	ND	ND	ppbV	NC		25
Ethylbenzene	ND	ND	ppbV	NC		25

Lab Duplicate Analysis Batch Quality Control

Project Name: CARMAN PLACE

Project Number: 4736.005

Lab Number: L1917489

Report Date: 05/02/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-03 QC Batch ID: WG1232045-5 QC Sample: L1917489-02 Client ID: IA-1						
p/m-Xylene	ND	ND	ppbV	NC		25
Bromoform	ND	ND	ppbV	NC		25
Styrene	ND	ND	ppbV	NC		25
1,1,2,2-Tetrachloroethane	ND	ND	ppbV	NC		25
o-Xylene	ND	ND	ppbV	NC		25
4-Ethyltoluene	ND	ND	ppbV	NC		25
1,3,5-Trimethylbenzene	ND	ND	ppbV	NC		25
1,2,4-Trimethylbenzene	ND	ND	ppbV	NC		25
Benzyl chloride	ND	ND	ppbV	NC		25
1,3-Dichlorobenzene	ND	ND	ppbV	NC		25
1,4-Dichlorobenzene	ND	ND	ppbV	NC		25
1,2-Dichlorobenzene	ND	ND	ppbV	NC		25
1,2,4-Trichlorobenzene	ND	ND	ppbV	NC		25
Hexachlorobutadiene	ND	ND	ppbV	NC		25
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 02-03 QC Batch ID: WG1232046-5 QC Sample: L1917489-02 Client ID: IA-1						
Vinyl chloride	ND	ND	ppbV	NC		25
1,1-Dichloroethene	ND	ND	ppbV	NC		25
cis-1,2-Dichloroethene	ND	ND	ppbV	NC		25
1,1,1-Trichloroethane	ND	ND	ppbV	NC		25
Carbon tetrachloride	0.081	0.089	ppbV	9		25
Trichloroethene	ND	ND	ppbV	NC		25
Tetrachloroethene	0.040	0.040	ppbV	0		25

Project Name: CARMAN PLACE

Project Number: 4736.005

Serial_No:05021914:30
Lab Number: L1917489

Report Date: 05/02/19

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
L1917489-01	SS-1	0851	SV20	04/15/19	289568		-	-	-	Pass	18.8	16.4	14
L1917489-01	SS-1	463	2.7L Can	04/15/19	289568	L1914298-01	Pass	-29.3	-1.7	-	-	-	-
L1917489-02	IA-1	0790	Flow 4	04/15/19	289568		-	-	-	Pass	4.1	2.2	60
L1917489-02	IA-1	545	2.7L Can	04/15/19	289568	L1914298-01	Pass	-29.9	-9.0	-	-	-	-
L1917489-03	OA-1	0788	Flow 5	04/15/19	289568		-	-	-	Pass	4.5	5.1	13
L1917489-03	OA-1	341	2.7L Can	04/15/19	289568	L1914298-01	Pass	-30.0	-8.1	-	-	-	-

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1914298
Report Date: 05/02/19

Air Canister Certification Results

Lab ID: L1914298-01
Client ID: CAN 191 SHELF 3
Sample Location:

Date Collected: 04/09/19 09:00
Date Received: 04/09/19
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15
Analytical Date: 04/10/19 17:43
Analyst: TS

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
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
Butane	ND	0.200	--	ND	0.475	--		1
Acetaldehyde	ND	2.50	--	ND	4.50	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	2.50	--	ND	4.71	--		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
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
tert-Butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	1.00	--	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



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1914298
Report Date: 05/02/19

Air Canister Certification Results

Lab ID: L1914298-01
Client ID: CAN 191 SHELF 3
Sample Location:

Date Collected: 04/09/19 09:00
Date Received: 04/09/19
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								
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	0.200	--	ND	0.793	--		1
Chloroform	ND	0.200	--	ND	0.977	--		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
Thiophene	ND	0.200	--	ND	0.688	--		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-Methylthiophene	ND	0.200	--	ND	0.803	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
3-Methylthiophene	ND	0.200	--	ND	0.803	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1914298
Report Date: 05/02/19

Air Canister Certification Results

Lab ID: L1914298-01
Client ID: CAN 191 SHELF 3
Sample Location:

Date Collected: 04/09/19 09:00
Date Received: 04/09/19
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								
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
2-Ethylthiophene	ND	0.200	--	ND	0.918	--		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
Nonane	ND	0.200	--	ND	1.05	--		1
2-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
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,3-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
Indane	ND	0.200	--	ND	0.967	--		1
Indene	ND	0.200	--	ND	0.951	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
1,2,4,5-Tetramethylbenzene	ND	0.200	--	ND	1.10	--		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



Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L1914298**Project Number:** CANISTER QC BAT**Report Date:** 05/02/19**Air Canister Certification Results**

Lab ID: L1914298-01

Date Collected: 04/09/19 09:00

Client ID: CAN 191 SHELF 3

Date Received: 04/09/19

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								
Benzothiophene	ND	0.500	--	ND	2.74	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1
2-Methylnaphthalene	ND	1.00	--	ND	5.82	--		1
1-Methylnaphthalene	ND	1.00	--	ND	5.82	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	94		60-140
Bromochloromethane	92		60-140
chlorobenzene-d5	90		60-140



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1914298
Report Date: 05/02/19

Air Canister Certification Results

Lab ID: L1914298-01
Client ID: CAN 191 SHELF 3
Sample Location:

Date Collected: 04/09/19 09:00
Date Received: 04/09/19
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15
Analytical Date: 04/10/19 17:43
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: L1914298
Report Date: 05/02/19

Air Canister Certification Results

Lab ID: L1914298-01
Client ID: CAN 191 SHELF 3
Sample Location:

Date Collected: 04/09/19 09:00
Date Received: 04/09/19
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
Xylenes, total	ND	0.600	--	ND	0.869	--		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
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-Dichloroethene (total)	ND	1.00	--	ND	1.00	--		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
1,1,1-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: L1914298
Report Date: 05/02/19

Air Canister Certification Results

Lab ID: L1914298-01
Client ID: CAN 191 SHELF 3
Sample Location:

Date Collected: 04/09/19 09:00
Date Received: 04/09/19
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: L1914298
Report Date: 05/02/19

Air Canister Certification Results

Lab ID: L1914298-01
Client ID: CAN 191 SHELF 3
Sample Location:

Date Collected: 04/09/19 09:00
Date Received: 04/09/19
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
1,2,3-Trimethylbenzene	ND	0.200	--	ND	0.983	--		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



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1914298
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Air Canister Certification Results

Lab ID: L1914298-01
 Client ID: CAN 191 SHELF 3
 Sample Location:

Date Collected: 04/09/19 09:00
 Date Received: 04/09/19
 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								
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds				

No Tentatively Identified Compounds

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	94		60-140
Bromochloromethane	92		60-140
chlorobenzene-d5	90		60-140

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1914298
Report Date: 05/02/19

Air Canister Certification Results

Lab ID: L1914298-01
Client ID: CAN 191 SHELF 3
Sample Location:

Date Collected: 04/09/19 09:00
Date Received: 04/09/19
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15-SIM
Analytical Date: 04/10/19 17:43
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
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Air Canister Certification Results

Lab ID: L1914298-01
Client ID: CAN 191 SHELF 3
Sample Location:

Date Collected: 04/09/19 09:00
Date Received: 04/09/19
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: L1914298
Report Date: 05/02/19

Air Canister Certification Results

Lab ID: L1914298-01
Client ID: CAN 191 SHELF 3
Sample Location:

Date Collected: 04/09/19 09:00
Date Received: 04/09/19
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	95		60-140
bromochloromethane	95		60-140
chlorobenzene-d5	93		60-140



Project Name: CARMAN PLACE**Lab Number:** L1917489**Project Number:** 4736.005**Report Date:** 05/02/19**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(*)
L1917489-01A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-LL(30)
L1917489-02A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)
L1917489-03A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)

Project Name: CARMAN PLACE
Project Number: 4736.005

Lab Number: L1917489
Report Date: 05/02/19

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: Data Usability Report



Project Name: CARMAN PLACE
Project Number: 4736.005

Lab Number: L1917489
Report Date: 05/02/19

- 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.

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: CARMAN PLACE
Project Number: 4736.005

Lab Number: L1917489
Report Date: 05/02/19

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.

CHAIN OF CUSTODY

Client Information

Client: PS&S

Address: 1 Larkin Pl 2nd Floor
Yonkers, NY 10701

Phone: 914.509.8616

Fax:

Email: cisrael@psands.com

☐ These samples have been previously analyzed by Alpha

Other Project Specific Requirements/Comments:

Project-Specific Target Compound List: ☐

PAGE 1 OF 1

Date Rec'd in Lab:

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 #: 61917489

Billing Information

☐ Same as Client info

PO #: 04736.005

Regulatory Requirements/Report Limits

State/Fed

Program

Res / Comm

ANALYSIS

All Columns Below Must Be Filled Out[illegible]

*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:

Camila Israel

4/26/19 17Z

Received by: AAC

4/24/1972

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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.



ANALYTICAL REPORT

Lab Number:	L1930287
Client:	PS&S Engineering, Inc. 1 Larkin Plaza 2nd Floor Yonkers, NY 10701
ATTN:	Camila Israel
Phone:	(914) 509-8616
Project Name:	CARMAN PLACE
Project Number:	04736.005
Report Date:	07/22/19

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Project Name: CARMAN PLACE
Project Number: 04736.005

Lab Number: L1930287
Report Date: 07/22/19

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1930287-01	SS-111	SOIL_VAPOR	HEMPSTEAD	07/10/19 12:10	07/11/19
L1930287-02	IA-111	AIR	HEMPSTEAD	07/10/19 15:55	07/11/19
L1930287-03	OA-111	AIR	HEMPSTEAD	07/10/19 18:20	07/11/19

Project Name: CARMAN PLACE
Project Number: 04736.005

Lab Number: L1930287
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: CARMAN PLACE
Project Number: 04736.005

Lab Number: L1930287
Report Date: 07/22/19

Case Narrative (continued)

Volatile Organics in Air

Canisters were released from the laboratory on July 3, 2019. The canister certification results are provided as an addendum.

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: CARMAN PLACE**Project Number:** 04736.005**Lab Number:** L1930287**Report Date:** 07/22/19**SAMPLE RESULTS**

Lab ID: L1930287-01

Client ID: SS-111

Sample Location: HEMPSTEAD

Date Collected: 07/10/19 12:10

Date Received: 07/11/19

Field Prep: Not Specified

Sample Depth:

Matrix: Soil_Vapor

Analytical Method: 48,TO-15

Analytical Date: 07/20/19 21:35

Analyst: RY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.503	0.200	--	2.49	0.989	--		1
Chloromethane	0.293	0.200	--	0.605	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	1.46	0.200	--	3.23	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	39.6	5.00	--	74.6	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	31.7	1.00	--	75.3	2.38	--		1
Trichlorofluoromethane	0.271	0.200	--	1.52	1.12	--		1
Isopropanol	52.0	0.500	--	128	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	2.47	0.500	--	7.49	1.52	--		1
Methylene chloride	1.89	0.500	--	6.57	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	0.260	0.200	--	0.810	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	1.98	0.500	--	5.84	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1



Project Name: CARMAN PLACE**Project Number:** 04736.005**Lab Number:** L1930287**Report Date:** 07/22/19**SAMPLE RESULTS**

Lab ID: L1930287-01

Client ID: SS-111

Sample Location: HEMPSTEAD

Date Collected: 07/10/19 12:10

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								
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	0.592	0.200	--	2.89	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	1.42	0.200	--	5.00	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	0.574	0.200	--	1.83	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	0.204	0.200	--	0.953	0.934	--		1
Heptane	0.778	0.200	--	3.19	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	6.67	0.500	--	27.3	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	0.748	0.200	--	2.82	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
Ethylbenzene	0.703	0.200	--	3.05	0.869	--		1



Project Name: CARMAN PLACE**Lab Number:** L1930287**Project Number:** 04736.005**Report Date:** 07/22/19**SAMPLE RESULTS**

Lab ID: L1930287-01

Date Collected: 07/10/19 12:10

Client ID: SS-111

Date Received: 07/11/19

Sample Location: HEMPSTEAD

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	3.60	0.400	--	15.6	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	1.06	0.200	--	4.60	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	0.359	0.200	--	1.76	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	0.508	0.200	--	3.05	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	98		60-140
Bromochloromethane	98		60-140
chlorobenzene-d5	95		60-140



Project Name: CARMAN PLACE**Project Number:** 04736.005**Lab Number:** L1930287**Report Date:** 07/22/19**SAMPLE RESULTS**

Lab ID: L1930287-02

Client ID: IA-111

Sample Location: HEMPSTEAD

Date Collected: 07/10/19 15:55

Date Received: 07/11/19

Field Prep: Not Specified

Sample Depth:

Matrix: Air

Analytical Method: 48,TO-15

Analytical Date: 07/20/19 19:37

Analyst: RY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.445	0.200	--	2.20	0.989	--		1
Chloromethane	0.570	0.200	--	1.18	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		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	14.7	5.00	--	27.7	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	5.96	1.00	--	14.2	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	1.80	0.500	--	4.42	1.23	--		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
2-Butanone	0.652	0.500	--	1.92	1.47	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	0.559	0.500	--	1.65	1.47	--		1



Project Name: CARMAN PLACE**Project Number:** 04736.005**Lab Number:** L1930287**Report Date:** 07/22/19**SAMPLE RESULTS**

Lab ID: L1930287-02

Client ID: IA-111

Sample Location: HEMPSTEAD

Date Collected: 07/10/19 15:55

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								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	0.221	0.200	--	0.779	0.705	--		1
Benzene	0.245	0.200	--	0.783	0.639	--		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
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	1.01	0.200	--	4.14	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	0.773	0.200	--	2.91	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	0.210	0.200	--	0.912	0.869	--		1
p/m-Xylene	0.850	0.400	--	3.69	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	0.336	0.200	--	1.46	0.869	--		1
4-Ethyltoluene	0.517	0.200	--	2.54	0.983	--		1
1,3,5-Trimethylbenzene	1.30	0.200	--	6.39	0.983	--		1



Project Name: CARMAN PLACE**Lab Number:** L1930287**Project Number:** 04736.005**Report Date:** 07/22/19**SAMPLE RESULTS**

Lab ID: L1930287-02

Date Collected: 07/10/19 15:55

Client ID: IA-111

Date Received: 07/11/19

Sample Location: HEMPSTEAD

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	3.50	0.200	--	17.2	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

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	96		60-140
Bromochloromethane	96		60-140
chlorobenzene-d5	89		60-140



Project Name: CARMAN PLACE**Project Number:** 04736.005**Lab Number:** L1930287**Report Date:** 07/22/19**SAMPLE RESULTS**

Lab ID: L1930287-02

Client ID: IA-111

Sample Location: HEMPSTEAD

Date Collected: 07/10/19 15:55

Date Received: 07/11/19

Field Prep: Not Specified

Sample Depth:

Matrix: Air

Analytical Method: 48,TO-15-SIM

Analytical Date: 07/20/19 19:37

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	0.076	0.020	--	0.301	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.071	0.020	--	0.447	0.126	--		1
Trichloroethene	0.114	0.020	--	0.613	0.107	--		1
Tetrachloroethene	0.086	0.020	--	0.583	0.136	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	98		60-140
bromochloromethane	97		60-140
chlorobenzene-d5	95		60-140



Project Name: CARMAN PLACE**Project Number:** 04736.005**Lab Number:** L1930287**Report Date:** 07/22/19**SAMPLE RESULTS**

Lab ID: L1930287-03

Client ID: OA-111

Sample Location: HEMPSTEAD

Date Collected: 07/10/19 18:20

Date Received: 07/11/19

Field Prep: Not Specified

Sample Depth:

Matrix: Air

Analytical Method: 48,TO-15

Analytical Date: 07/20/19 18:58

Analyst: RY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.463	0.200	--	2.29	0.989	--		1
Chloromethane	0.625	0.200	--	1.29	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		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	9.89	5.00	--	18.6	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	12.7	1.00	--	30.2	2.38	--		1
Trichlorofluoromethane	0.215	0.200	--	1.21	1.12	--		1
Isopropanol	3.98	0.500	--	9.78	1.23	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	0.750	0.500	--	2.61	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
2-Butanone	2.03	0.500	--	5.99	1.47	--		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



Project Name: CARMAN PLACE**Project Number:** 04736.005**Lab Number:** L1930287**Report Date:** 07/22/19**SAMPLE RESULTS**

Lab ID: L1930287-03

Client ID: OA-111

Sample Location: HEMPSTEAD

Date Collected: 07/10/19 18:20

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								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Benzene	0.203	0.200	--	0.649	0.639	--		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
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	0.735	0.500	--	3.01	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	0.600	0.200	--	2.26	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	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	0.493	0.400	--	2.14	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
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



Project Name: CARMAN PLACE**Lab Number:** L1930287**Project Number:** 04736.005**Report Date:** 07/22/19**SAMPLE RESULTS**

Lab ID: L1930287-03

Date Collected: 07/10/19 18:20

Client ID: OA-111

Date Received: 07/11/19

Sample Location: HEMPSTEAD

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	0.475	0.200	--	2.34	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	0.232	0.200	--	1.39	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	93		60-140
Bromochloromethane	95		60-140
chlorobenzene-d5	85		60-140



Project Name: CARMAN PLACE**Project Number:** 04736.005**Lab Number:** L1930287**Report Date:** 07/22/19**SAMPLE RESULTS**

Lab ID: L1930287-03

Client ID: OA-111

Sample Location: HEMPSTEAD

Date Collected: 07/10/19 18:20

Date Received: 07/11/19

Field Prep: Not Specified

Sample Depth:

Matrix: Air

Analytical Method: 48,TO-15-SIM

Analytical Date: 07/20/19 18:58

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	0.119	0.020	--	0.472	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.092	0.020	--	0.579	0.126	--		1
Trichloroethene	0.103	0.020	--	0.554	0.107	--		1
Tetrachloroethene	0.148	0.020	--	1.00	0.136	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	95		60-140
bromochloromethane	95		60-140
chlorobenzene-d5	89		60-140

Project Name: CARMAN PLACE

Lab Number: L1930287

Project Number: 04736.005

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): 01-03 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: CARMAN PLACE

Lab Number: L1930287

Project Number: 04736.005

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): 01-03 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: CARMAN PLACE

Lab Number: L1930287

Project Number: 04736.005

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): 01-03 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: CARMAN PLACE

Lab Number: L1930287

Project Number: 04736.005

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): 02-03 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: CARMAN PLACE

Project Number: 04736.005

Lab Number: L1930287

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): 01-03 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: CARMAN PLACE

Project Number: 04736.005

Lab Number: L1930287

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): 01-03 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: CARMAN PLACE

Project Number: 04736.005

Lab Number: L1930287

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): 01-03 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: CARMAN PLACE

Project Number: 04736.005

Lab Number: L1930287

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): 02-03 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

Lab Duplicate Analysis

Batch Quality Control

Project Name: CARMAN PLACE

Project Number: 04736.005

Lab Number: L1930287

Report Date: 07/22/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-03 QC Batch ID: WG1262520-5 QC Sample: L1930287-02 Client ID: IA-111						
Dichlorodifluoromethane	0.445	0.474	ppbV	6		25
Chloromethane	0.570	0.585	ppbV	3		25
Freon-114	ND	ND	ppbV	NC		25
1,3-Butadiene	ND	ND	ppbV	NC		25
Bromomethane	ND	ND	ppbV	NC		25
Chloroethane	ND	ND	ppbV	NC		25
Ethanol	14.7	15.2	ppbV	3		25
Vinyl bromide	ND	ND	ppbV	NC		25
Acetone	5.96	6.16	ppbV	3		25
Trichlorofluoromethane	ND	ND	ppbV	NC		25
Isopropanol	1.80	1.86	ppbV	3		25
Tertiary butyl Alcohol	ND	ND	ppbV	NC		25
Methylene chloride	ND	ND	ppbV	NC		25
3-Chloropropene	ND	ND	ppbV	NC		25
Carbon disulfide	ND	ND	ppbV	NC		25
Freon-113	ND	ND	ppbV	NC		25
trans-1,2-Dichloroethene	ND	ND	ppbV	NC		25
1,1-Dichloroethane	ND	ND	ppbV	NC		25
Methyl tert butyl ether	ND	ND	ppbV	NC		25
2-Butanone	0.652	0.661	ppbV	1		25
Ethyl Acetate	ND	ND	ppbV	NC		25

Lab Duplicate Analysis Batch Quality Control

Project Name: CARMAN PLACE

Project Number: 04736.005

Lab Number: L1930287

Report Date: 07/22/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-03 QC Batch ID: WG1262520-5 QC Sample: L1930287-02 Client ID: IA-111						
Chloroform	ND	ND	ppbV	NC		25
Tetrahydrofuran	0.559	0.578	ppbV	3		25
1,2-Dichloroethane	ND	ND	ppbV	NC		25
n-Hexane	0.221	0.230	ppbV	4		25
Benzene	0.245	0.252	ppbV	3		25
Cyclohexane	ND	ND	ppbV	NC		25
1,2-Dichloropropane	ND	ND	ppbV	NC		25
Bromodichloromethane	ND	ND	ppbV	NC		25
1,4-Dioxane	ND	ND	ppbV	NC		25
2,2,4-Trimethylpentane	ND	ND	ppbV	NC		25
Heptane	1.01	1.03	ppbV	2		25
cis-1,3-Dichloropropene	ND	ND	ppbV	NC		25
4-Methyl-2-pentanone	ND	ND	ppbV	NC		25
trans-1,3-Dichloropropene	ND	ND	ppbV	NC		25
1,1,2-Trichloroethane	ND	ND	ppbV	NC		25
Toluene	0.773	0.787	ppbV	2		25
2-Hexanone	ND	ND	ppbV	NC		25
Dibromochloromethane	ND	ND	ppbV	NC		25
1,2-Dibromoethane	ND	ND	ppbV	NC		25
Chlorobenzene	ND	ND	ppbV	NC		25
Ethylbenzene	0.210	0.217	ppbV	3		25

Project Name: CARMAN PLACE
Project Number: 04736.005

Lab Duplicate Analysis
Batch Quality Control

Lab Number: L1930287
Report Date: 07/22/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-03 QC Batch ID: WG1262520-5 QC Sample: L1930287-02 Client ID: IA-111						
p/m-Xylene	0.850	0.878	ppbV	3		25
Bromoform	ND	ND	ppbV	NC		25
Styrene	ND	ND	ppbV	NC		25
1,1,2,2-Tetrachloroethane	ND	ND	ppbV	NC		25
o-Xylene	0.336	0.348	ppbV	4		25
4-Ethyltoluene	0.517	0.529	ppbV	2		25
1,3,5-Trimethylbenzene	1.30	1.33	ppbV	2		25
1,2,4-Trimethylbenzene	3.50	3.62	ppbV	3		25
Benzyl chloride	ND	ND	ppbV	NC		25
1,3-Dichlorobenzene	ND	ND	ppbV	NC		25
1,4-Dichlorobenzene	ND	ND	ppbV	NC		25
1,2-Dichlorobenzene	ND	ND	ppbV	NC		25
1,2,4-Trichlorobenzene	ND	ND	ppbV	NC		25
Hexachlorobutadiene	ND	ND	ppbV	NC		25
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 02-03 QC Batch ID: WG1262521-5 QC Sample: L1930287-02 Client ID: IA-111						
Vinyl chloride	ND	ND	ppbV	NC		25
1,1-Dichloroethene	ND	ND	ppbV	NC		25
cis-1,2-Dichloroethene	0.076	0.078	ppbV	3		25
1,1,1-Trichloroethane	ND	ND	ppbV	NC		25
Carbon tetrachloride	0.071	0.069	ppbV	3		25
Trichloroethene	0.114	0.105	ppbV	8		25
Tetrachloroethene	0.086	0.086	ppbV	0		25

Project Name: CARMAN PLACE

Project Number: 04736.005

Serial_No:07221916:42
Lab Number: L1930287

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
L1930287-01	SS-111	01092	SV20	07/03/19	296097		-	-	-	Pass	20.8	17.6	17
L1930287-01	SS-111	556	2.7L Can	07/03/19	296097	L1927560-01	Pass	-29.3	-4.8	-	-	-	-
L1930287-02	IA-111	0492	Flow 5	07/03/19	296097		-	-	-	Pass	4.5	5.8	25
L1930287-02	IA-111	2180	2.7L Can	07/03/19	296097	L1927560-05	Pass	-29.4	-2.8	-	-	-	-
L1930287-03	OA-111	0047	Flow 4	07/03/19	296097		-	-	-	Pass	4.5	5.5	20
L1930287-03	OA-111	1804	2.7L Can	07/03/19	296097	L1927560-01	Pass	-29.4	-14.0	-	-	-	-

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1927560
Report Date: 07/22/19

Air Canister Certification Results

Lab ID: L1927560-01
Client ID: CAN 393 SHELF 8
Sample Location:

Date Collected: 06/24/19 16:00
Date Received: 06/25/19
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 06/25/19 07:38
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: L1927560
Report Date: 07/22/19

Air Canister Certification Results

Lab ID: L1927560-01
Client ID: CAN 393 SHELF 8
Sample Location:

Date Collected: 06/24/19 16:00
Date Received: 06/25/19
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
Xylenes, total	ND	0.600	--	ND	0.869	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		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
Dibromomethane	ND	0.200	--	ND	1.42	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1927560
Report Date: 07/22/19

Air Canister Certification Results

Lab ID: L1927560-01
Client ID: CAN 393 SHELF 8
Sample Location:

Date Collected: 06/24/19 16:00
Date Received: 06/25/19
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-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
o-Xylene	ND	0.200	--	ND	0.869	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1927560
Report Date: 07/22/19

Air Canister Certification Results

Lab ID: L1927560-01
Client ID: CAN 393 SHELF 8
Sample Location:

Date Collected: 06/24/19 16:00
Date Received: 06/25/19
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								
1,2,3-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:** L1927560**Project Number:** CANISTER QC BAT**Report Date:** 07/22/19**Air Canister Certification Results**

Lab ID: L1927560-01

Date Collected: 06/24/19 16:00

Client ID: CAN 393 SHELF 8

Date Received: 06/25/19

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	100		60-140
Bromochloromethane	100		60-140
chlorobenzene-d5	94		60-140

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1927560
Report Date: 07/22/19

Air Canister Certification Results

Lab ID: L1927560-01
Client ID: CAN 393 SHELF 8
Sample Location:

Date Collected: 06/24/19 16:00
Date Received: 06/25/19
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15-SIM
Analytical Date: 06/25/19 07:38
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: L1927560
Report Date: 07/22/19

Air Canister Certification Results

Lab ID: L1927560-01
Client ID: CAN 393 SHELF 8
Sample Location:

Date Collected: 06/24/19 16:00
Date Received: 06/25/19
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: L1927560
Report Date: 07/22/19

Air Canister Certification Results

Lab ID: L1927560-01
Client ID: CAN 393 SHELF 8
Sample Location:

Date Collected: 06/24/19 16:00
Date Received: 06/25/19
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	96		60-140
chlorobenzene-d5	96		60-140



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1927560
Report Date: 07/22/19

Air Canister Certification Results

Lab ID: L1927560-05
Client ID: CAN 189 SHELF 14
Sample Location:

Date Collected: 06/25/19 09:00
Date Received: 06/25/19
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15
Analytical Date: 06/25/19 17:20
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
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1927560
Report Date: 07/22/19

Air Canister Certification Results

Lab ID: L1927560-05
Client ID: CAN 189 SHELF 14
Sample Location:

Date Collected: 06/25/19 09:00
Date Received: 06/25/19
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								
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
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1927560
Report Date: 07/22/19

Air Canister Certification Results

Lab ID: L1927560-05
Client ID: CAN 189 SHELF 14
Sample Location:

Date Collected: 06/25/19 09:00
Date Received: 06/25/19
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								
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
1,1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1927560
Report Date: 07/22/19

Air Canister Certification Results

Lab ID: L1927560-05
Client ID: CAN 189 SHELF 14
Sample Location:

Date Collected: 06/25/19 09:00
Date Received: 06/25/19
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								
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:** L1927560**Project Number:** CANISTER QC BAT**Report Date:** 07/22/19**Air Canister Certification Results**

Lab ID: L1927560-05

Date Collected: 06/25/19 09:00

Client ID: CAN 189 SHELF 14

Date Received: 06/25/19

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	98		60-140
Bromochloromethane	97		60-140
chlorobenzene-d5	94		60-140

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1927560
Report Date: 07/22/19

Air Canister Certification Results

Lab ID: L1927560-05
Client ID: CAN 189 SHELF 14
Sample Location:

Date Collected: 06/25/19 09:00
Date Received: 06/25/19
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15-SIM
Analytical Date: 06/25/19 17:20
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
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Date Collected: 06/25/19 09:00
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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: L1927560
Report Date: 07/22/19

Air Canister Certification Results

Lab ID: L1927560-05
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Sample Location:

Date Collected: 06/25/19 09:00
Date Received: 06/25/19
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	97		60-140
bromochloromethane	98		60-140
chlorobenzene-d5	96		60-140



Project Name: CARMAN PLACE**Lab Number:** L1930287**Project Number:** 04736.005**Report Date:** 07/22/19**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(*)
L1930287-01A	Canister - 2.7 Liter	NA	NA			Y	Absent		TO15-LL(30)
L1930287-02A	Canister - 2.7 Liter	NA	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)
L1930287-03A	Canister - 2.7 Liter	NA	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)

Project Name: CARMAN PLACE
Project Number: 04736.005

Lab Number: L1930287
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: CARMAN PLACE
Project Number: 04736.005

Lab Number: L1930287
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: CARMAN PLACE
Project Number: 04736.005

Lab Number: L1930287
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.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

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.

CHAIN OF CUSTODY

PAGE 1 OF 1

Client Information

Fax:

☐ These samples have been previously analyzed by Alpha

Other Project Specific Requirements/Comments:

Project-Specific Target Compound List: ☐

ALPHA Quote #:

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved!)

Date Due:

Time:

Report Information - Data Deliverables

☐ Additional Deliverables:

Report to: (if different than Project Manager)

estuckee@psands.com
C) rael@psands.com

Billing Information

☐ Same as Client info	PO #: 04736.0005

Regulatory Requirements/Report Limits

State/Fed	Program	Res / Comm

NY	DOH SV
	Guidance

ANALYSIS

TO-15
TO-15 SIM
APH
Fixed Gases
Solid & Mercaptans by TO-15

Sample Comments (i.e. PID)

$PID_{start} = 6.3 \text{ ppm}$
 $PID_{end} = 2.4 \text{ ppm}$
 $PID_{start} = 0.2 \text{ ppm}$
 $PID_{end} = 0.2 \text{ ppm}$
 $PID_{start} = 0.0 \text{ ppm}$
 $PID_{end} = 0.0 \text{ ppm}$

All Columns Below Must Be Filled Out

[illegible]

*SAMPLE MATRIX CODES

AA = Ambient Air (Indoor/Outdoor)
SV = Soil Vapor/Landfill Gas/SVE
Other = Please Specify

Container Type

Sv 6 4
A 13

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.



ANALYTICAL REPORT

Lab Number:	L1917453
Client:	PS&S Engineering, Inc. 1 Larkin Plaza 2nd Floor Yonkers, NY 10701
ATTN:	Camila Israel
Phone:	(914) 509-8616
Project Name:	CARMAN PL
Project Number:	04736.005
Report Date:	05/09/19

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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: CARMAN PL
Project Number: 04736.005

Lab Number: L1917453
Report Date: 05/09/19

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1917453-01	SB-1 17-19 FT BGS	SOIL	HEMPSTEAD, NY	04/26/19 13:10	04/26/19
L1917453-02	SB-2 16-18 FT BGS	SOIL	HEMPSTEAD, NY	04/26/19 17:20	04/26/19
L1917453-03	SB-3 11-13 FT BGS	SOIL	HEMPSTEAD, NY	04/26/19 16:20	04/26/19
L1917453-04	SB-4 0-5 FT BGS	SOIL	HEMPSTEAD, NY	04/26/19 16:55	04/26/19
L1917453-05	SB-5 19-20 FT BGS	SOIL	HEMPSTEAD, NY	04/26/19 10:50	04/26/19

Project Name: CARMAN PL
Project Number: 04736.005

Lab Number: L1917453
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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: CARMAN PL
Project Number: 04736.005

Lab Number: L1917453
Report Date: 05/09/19

Case Narrative (continued)

Report Submission

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

Sample Receipt

The analyses performed were specified by the client.

Total Metals

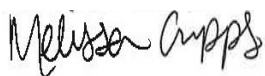
L1917453-01 through -04: The sample has elevated detection limits for all elements, with the exception of mercury, due to the dilution required by matrix interferences encountered during analysis.

Cyanide, Total

The WG1231563-2 LCS recovery (62%), associated with L1917453-01 through -05, is outside our in-house acceptance criteria, but within the vendor-certified acceptance limits. The results of the original analyses are reported.

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

Authorized Signature:

 Melissa Cripps

Title: Technical Director/Representative

Date: 05/09/19

ORGANICS

VOLATILES

Project Name: CARMAN PL

Lab Number: L1917453

Project Number: 04736.005

Report Date: 05/09/19

SAMPLE RESULTS

Lab ID: L1917453-01
 Client ID: SB-1 17-19 FT BGS
 Sample Location: HEMPSTEAD, NY

Date Collected: 04/26/19 13:10
 Date Received: 04/26/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 05/04/19 13:17
 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	4.3	2.0	1
1,1-Dichloroethane	ND		ug/kg	0.86	0.12	1
Chloroform	ND		ug/kg	1.3	0.12	1
Carbon tetrachloride	ND		ug/kg	0.86	0.20	1
1,2-Dichloropropane	ND		ug/kg	0.86	0.11	1
Dibromochloromethane	ND		ug/kg	0.86	0.12	1
1,1,2-Trichloroethane	ND		ug/kg	0.86	0.23	1
Tetrachloroethene	ND		ug/kg	0.43	0.17	1
Chlorobenzene	ND		ug/kg	0.43	0.11	1
Trichlorofluoromethane	ND		ug/kg	3.4	0.59	1
1,2-Dichloroethane	ND		ug/kg	0.86	0.22	1
1,1,1-Trichloroethane	ND		ug/kg	0.43	0.14	1
Bromodichloromethane	ND		ug/kg	0.43	0.09	1
trans-1,3-Dichloropropene	ND		ug/kg	0.86	0.23	1
cis-1,3-Dichloropropene	ND		ug/kg	0.43	0.14	1
1,3-Dichloropropene, Total	ND		ug/kg	0.43	0.14	1
1,1-Dichloropropene	ND		ug/kg	0.43	0.14	1
Bromoform	ND		ug/kg	3.4	0.21	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.43	0.14	1
Benzene	0.47		ug/kg	0.43	0.14	1
Toluene	0.76	J	ug/kg	0.86	0.46	1
Ethylbenzene	ND		ug/kg	0.86	0.12	1
Chloromethane	ND		ug/kg	3.4	0.80	1
Bromomethane	ND		ug/kg	1.7	0.50	1
Vinyl chloride	ND		ug/kg	0.86	0.29	1
Chloroethane	ND		ug/kg	1.7	0.39	1
1,1-Dichloroethene	ND		ug/kg	0.86	0.20	1
trans-1,2-Dichloroethene	ND		ug/kg	1.3	0.12	1

Project Name: CARMAN PL

Lab Number: L1917453

Project Number: 04736.005

Report Date: 05/09/19

SAMPLE RESULTS

Lab ID: L1917453-01
 Client ID: SB-1 17-19 FT BGS
 Sample Location: HEMPSTEAD, NY

Date Collected: 04/26/19 13:10
 Date Received: 04/26/19
 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	0.43	0.12	1
1,2-Dichlorobenzene	ND		ug/kg	1.7	0.12	1
1,3-Dichlorobenzene	ND		ug/kg	1.7	0.13	1
1,4-Dichlorobenzene	ND		ug/kg	1.7	0.15	1
Methyl tert butyl ether	ND		ug/kg	1.7	0.17	1
p/m-Xylene	ND		ug/kg	1.7	0.48	1
o-Xylene	ND		ug/kg	0.86	0.25	1
Xylenes, Total	ND		ug/kg	0.86	0.25	1
cis-1,2-Dichloroethene	ND		ug/kg	0.86	0.15	1
1,2-Dichloroethene, Total	ND		ug/kg	0.86	0.12	1
Dibromomethane	ND		ug/kg	1.7	0.20	1
Styrene	ND		ug/kg	0.86	0.17	1
Dichlorodifluoromethane	ND		ug/kg	8.6	0.78	1
Acetone	77		ug/kg	8.6	4.1	1
Carbon disulfide	ND		ug/kg	8.6	3.9	1
2-Butanone	7.1	J	ug/kg	8.6	1.9	1
Vinyl acetate	ND		ug/kg	8.6	1.8	1
4-Methyl-2-pentanone	ND		ug/kg	8.6	1.1	1
1,2,3-Trichloropropane	ND		ug/kg	1.7	0.11	1
2-Hexanone	ND		ug/kg	8.6	1.0	1
Bromochloromethane	ND		ug/kg	1.7	0.18	1
2,2-Dichloropropane	ND		ug/kg	1.7	0.17	1
1,2-Dibromoethane	ND		ug/kg	0.86	0.24	1
1,3-Dichloropropane	ND		ug/kg	1.7	0.14	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.43	0.11	1
Bromobenzene	ND		ug/kg	1.7	0.12	1
n-Butylbenzene	ND		ug/kg	0.86	0.14	1
sec-Butylbenzene	ND		ug/kg	0.86	0.12	1
tert-Butylbenzene	ND		ug/kg	1.7	0.10	1
o-Chlorotoluene	ND		ug/kg	1.7	0.16	1
p-Chlorotoluene	ND		ug/kg	1.7	0.09	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	2.6	0.85	1
Hexachlorobutadiene	ND		ug/kg	3.4	0.14	1
Isopropylbenzene	ND		ug/kg	0.86	0.09	1
p-Isopropyltoluene	ND		ug/kg	0.86	0.09	1
Naphthalene	ND		ug/kg	3.4	0.56	1
Acrylonitrile	ND		ug/kg	3.4	0.98	1

Project Name: CARMAN PL

Lab Number: L1917453

Project Number: 04736.005

Report Date: 05/09/19

SAMPLE RESULTS

Lab ID: L1917453-01
 Client ID: SB-1 17-19 FT BGS
 Sample Location: HEMPSTEAD, NY

Date Collected: 04/26/19 13:10
 Date Received: 04/26/19
 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	0.86	0.15	1
1,2,3-Trichlorobenzene	ND		ug/kg	1.7	0.28	1
1,2,4-Trichlorobenzene	ND		ug/kg	1.7	0.23	1
1,3,5-Trimethylbenzene	ND		ug/kg	1.7	0.16	1
1,2,4-Trimethylbenzene	ND		ug/kg	1.7	0.28	1
1,4-Dioxane	ND		ug/kg	68	30.	1
p-Diethylbenzene	ND		ug/kg	1.7	0.15	1
p-Ethyltoluene	ND		ug/kg	1.7	0.33	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	1.7	0.16	1
Ethyl ether	ND		ug/kg	1.7	0.29	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	4.3	1.2	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	102		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	106		70-130
Dibromofluoromethane	100		70-130

Project Name: CARMAN PL

Lab Number: L1917453

Project Number: 04736.005

Report Date: 05/09/19

SAMPLE RESULTS

Lab ID: L1917453-02
 Client ID: SB-2 16-18 FT BGS
 Sample Location: HEMPSTEAD, NY

Date Collected: 04/26/19 17:20
 Date Received: 04/26/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 05/04/19 13:44
 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	4.9	2.3	1
1,1-Dichloroethane	ND		ug/kg	0.99	0.14	1
Chloroform	0.20	J	ug/kg	1.5	0.14	1
Carbon tetrachloride	ND		ug/kg	0.99	0.23	1
1,2-Dichloropropane	ND		ug/kg	0.99	0.12	1
Dibromochloromethane	ND		ug/kg	0.99	0.14	1
1,1,2-Trichloroethane	ND		ug/kg	0.99	0.26	1
Tetrachloroethene	ND		ug/kg	0.49	0.19	1
Chlorobenzene	ND		ug/kg	0.49	0.12	1
Trichlorofluoromethane	ND		ug/kg	3.9	0.69	1
1,2-Dichloroethane	ND		ug/kg	0.99	0.25	1
1,1,1-Trichloroethane	ND		ug/kg	0.49	0.16	1
Bromodichloromethane	ND		ug/kg	0.49	0.11	1
trans-1,3-Dichloropropene	ND		ug/kg	0.99	0.27	1
cis-1,3-Dichloropropene	ND		ug/kg	0.49	0.16	1
1,3-Dichloropropene, Total	ND		ug/kg	0.49	0.16	1
1,1-Dichloropropene	ND		ug/kg	0.49	0.16	1
Bromoform	ND		ug/kg	3.9	0.24	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.49	0.16	1
Benzene	ND		ug/kg	0.49	0.16	1
Toluene	0.61	J	ug/kg	0.99	0.54	1
Ethylbenzene	ND		ug/kg	0.99	0.14	1
Chloromethane	ND		ug/kg	3.9	0.92	1
Bromomethane	ND		ug/kg	2.0	0.57	1
Vinyl chloride	ND		ug/kg	0.99	0.33	1
Chloroethane	ND		ug/kg	2.0	0.45	1
1,1-Dichloroethene	ND		ug/kg	0.99	0.23	1
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.14	1

Project Name: CARMAN PL

Lab Number: L1917453

Project Number: 04736.005

Report Date: 05/09/19

SAMPLE RESULTS

Lab ID: L1917453-02
 Client ID: SB-2 16-18 FT BGS
 Sample Location: HEMPSTEAD, NY

Date Collected: 04/26/19 17:20
 Date Received: 04/26/19
 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	0.49	0.14	1
1,2-Dichlorobenzene	ND		ug/kg	2.0	0.14	1
1,3-Dichlorobenzene	ND		ug/kg	2.0	0.15	1
1,4-Dichlorobenzene	ND		ug/kg	2.0	0.17	1
Methyl tert butyl ether	ND		ug/kg	2.0	0.20	1
p/m-Xylene	ND		ug/kg	2.0	0.55	1
o-Xylene	ND		ug/kg	0.99	0.29	1
Xylenes, Total	ND		ug/kg	0.99	0.29	1
cis-1,2-Dichloroethene	ND		ug/kg	0.99	0.17	1
1,2-Dichloroethene, Total	ND		ug/kg	0.99	0.14	1
Dibromomethane	ND		ug/kg	2.0	0.23	1
Styrene	ND		ug/kg	0.99	0.19	1
Dichlorodifluoromethane	ND		ug/kg	9.9	0.90	1
Acetone	46		ug/kg	9.9	4.7	1
Carbon disulfide	ND		ug/kg	9.9	4.5	1
2-Butanone	3.1	J	ug/kg	9.9	2.2	1
Vinyl acetate	ND		ug/kg	9.9	2.1	1
4-Methyl-2-pentanone	ND		ug/kg	9.9	1.3	1
1,2,3-Trichloropropane	ND		ug/kg	2.0	0.12	1
2-Hexanone	ND		ug/kg	9.9	1.2	1
Bromochloromethane	ND		ug/kg	2.0	0.20	1
2,2-Dichloropropane	ND		ug/kg	2.0	0.20	1
1,2-Dibromoethane	ND		ug/kg	0.99	0.28	1
1,3-Dichloropropane	ND		ug/kg	2.0	0.16	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.49	0.13	1
Bromobenzene	ND		ug/kg	2.0	0.14	1
n-Butylbenzene	ND		ug/kg	0.99	0.16	1
sec-Butylbenzene	ND		ug/kg	0.99	0.14	1
tert-Butylbenzene	ND		ug/kg	2.0	0.12	1
o-Chlorotoluene	ND		ug/kg	2.0	0.19	1
p-Chlorotoluene	ND		ug/kg	2.0	0.11	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.0	0.98	1
Hexachlorobutadiene	ND		ug/kg	3.9	0.17	1
Isopropylbenzene	ND		ug/kg	0.99	0.11	1
p-Isopropyltoluene	ND		ug/kg	0.99	0.11	1
Naphthalene	ND		ug/kg	3.9	0.64	1
Acrylonitrile	ND		ug/kg	3.9	1.1	1

Project Name: CARMAN PL**Lab Number:** L1917453**Project Number:** 04736.005**Report Date:** 05/09/19**SAMPLE RESULTS**

Lab ID: L1917453-02
 Client ID: SB-2 16-18 FT BGS
 Sample Location: HEMPSTEAD, NY

Date Collected: 04/26/19 17:20
 Date Received: 04/26/19
 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	0.99	0.17	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	0.32	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	0.27	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	0.19	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	0.33	1
1,4-Dioxane	ND		ug/kg	79	35.	1
p-Diethylbenzene	ND		ug/kg	2.0	0.17	1
p-Ethyltoluene	ND		ug/kg	2.0	0.38	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.0	0.19	1
Ethyl ether	ND		ug/kg	2.0	0.34	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	4.9	1.4	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	93		70-130

Project Name: CARMAN PL

Lab Number: L1917453

Project Number: 04736.005

Report Date: 05/09/19

SAMPLE RESULTS

Lab ID: L1917453-03
 Client ID: SB-3 11-13 FT BGS
 Sample Location: HEMPSTEAD, NY

Date Collected: 04/26/19 16:20
 Date Received: 04/26/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 05/05/19 14:49
 Analyst: JC
 Percent Solids: 95%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	5.1	2.3	1
1,1-Dichloroethane	ND		ug/kg	1.0	0.15	1
Chloroform	ND		ug/kg	1.5	0.14	1
Carbon tetrachloride	ND		ug/kg	1.0	0.23	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	0.27	1
Tetrachloroethene	ND		ug/kg	0.51	0.20	1
Chlorobenzene	ND		ug/kg	0.51	0.13	1
Trichlorofluoromethane	ND		ug/kg	4.1	0.71	1
1,2-Dichloroethane	ND		ug/kg	1.0	0.26	1
1,1,1-Trichloroethane	ND		ug/kg	0.51	0.17	1
Bromodichloromethane	ND		ug/kg	0.51	0.11	1
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.28	1
cis-1,3-Dichloropropene	ND		ug/kg	0.51	0.16	1
1,3-Dichloropropene, Total	ND		ug/kg	0.51	0.16	1
1,1-Dichloropropene	ND		ug/kg	0.51	0.16	1
Bromoform	ND		ug/kg	4.1	0.25	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.51	0.17	1
Benzene	0.17	J	ug/kg	0.51	0.17	1
Toluene	1.4		ug/kg	1.0	0.55	1
Ethylbenzene	ND		ug/kg	1.0	0.14	1
Chloromethane	ND		ug/kg	4.1	0.95	1
Bromomethane	ND		ug/kg	2.0	0.59	1
Vinyl chloride	ND		ug/kg	1.0	0.34	1
Chloroethane	ND		ug/kg	2.0	0.46	1
1,1-Dichloroethene	ND		ug/kg	1.0	0.24	1
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.14	1

Project Name: CARMAN PL

Lab Number: L1917453

Project Number: 04736.005

Report Date: 05/09/19

SAMPLE RESULTS

Lab ID: L1917453-03
 Client ID: SB-3 11-13 FT BGS
 Sample Location: HEMPSTEAD, NY

Date Collected: 04/26/19 16:20
 Date Received: 04/26/19
 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	0.51	0.14	1
1,2-Dichlorobenzene	ND		ug/kg	2.0	0.15	1
1,3-Dichlorobenzene	ND		ug/kg	2.0	0.15	1
1,4-Dichlorobenzene	ND		ug/kg	2.0	0.17	1
Methyl tert butyl ether	ND		ug/kg	2.0	0.20	1
p/m-Xylene	ND		ug/kg	2.0	0.57	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	2.0	0.24	1
Styrene	ND		ug/kg	1.0	0.20	1
Dichlorodifluoromethane	ND		ug/kg	10	0.93	1
Acetone	42		ug/kg	10	4.9	1
Carbon disulfide	ND		ug/kg	10	4.6	1
2-Butanone	ND		ug/kg	10	2.2	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	2.0	0.13	1
2-Hexanone	ND		ug/kg	10	1.2	1
Bromochloromethane	ND		ug/kg	2.0	0.21	1
2,2-Dichloropropane	ND		ug/kg	2.0	0.20	1
1,2-Dibromoethane	ND		ug/kg	1.0	0.28	1
1,3-Dichloropropane	ND		ug/kg	2.0	0.17	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.51	0.13	1
Bromobenzene	ND		ug/kg	2.0	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	2.0	0.12	1
o-Chlorotoluene	ND		ug/kg	2.0	0.19	1
p-Chlorotoluene	ND		ug/kg	2.0	0.11	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.0	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	0.66	1
Acrylonitrile	ND		ug/kg	4.1	1.2	1

Project Name: CARMAN PL**Lab Number:** L1917453**Project Number:** 04736.005**Report Date:** 05/09/19**SAMPLE RESULTS**

Lab ID: L1917453-03
 Client ID: SB-3 11-13 FT BGS
 Sample Location: HEMPSTEAD, NY

Date Collected: 04/26/19 16:20
 Date Received: 04/26/19
 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	1.0	0.17	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	0.33	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	0.28	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	0.20	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	0.34	1
1,4-Dioxane	ND		ug/kg	81	36.	1
p-Diethylbenzene	ND		ug/kg	2.0	0.18	1
p-Ethyltoluene	ND		ug/kg	2.0	0.39	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.0	0.19	1
Ethyl ether	ND		ug/kg	2.0	0.35	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.1	1.4	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	106		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	102		70-130

Project Name: CARMAN PL

Lab Number: L1917453

Project Number: 04736.005

Report Date: 05/09/19

SAMPLE RESULTS

Lab ID: L1917453-04
 Client ID: SB-4 0-5 FT BGS
 Sample Location: HEMPSTEAD, NY

Date Collected: 04/26/19 16:55
 Date Received: 04/26/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 05/04/19 14:38
 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	6.3	2.9	1
1,1-Dichloroethane	ND		ug/kg	1.2	0.18	1
Chloroform	ND		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	0.34	1
Tetrachloroethene	ND		ug/kg	0.63	0.25	1
Chlorobenzene	ND		ug/kg	0.63	0.16	1
Trichlorofluoromethane	ND		ug/kg	5.0	0.88	1
1,2-Dichloroethane	ND		ug/kg	1.2	0.32	1
1,1,1-Trichloroethane	ND		ug/kg	0.63	0.21	1
Bromodichloromethane	ND		ug/kg	0.63	0.14	1
trans-1,3-Dichloropropene	ND		ug/kg	1.2	0.34	1
cis-1,3-Dichloropropene	ND		ug/kg	0.63	0.20	1
1,3-Dichloropropene, Total	ND		ug/kg	0.63	0.20	1
1,1-Dichloropropene	ND		ug/kg	0.63	0.20	1
Bromoform	ND		ug/kg	5.0	0.31	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.63	0.21	1
Benzene	ND		ug/kg	0.63	0.21	1
Toluene	0.81	J	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	0.57	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: CARMAN PL

Lab Number: L1917453

Project Number: 04736.005

Report Date: 05/09/19

SAMPLE RESULTS

Lab ID: L1917453-04
 Client ID: SB-4 0-5 FT BGS
 Sample Location: HEMPSTEAD, NY

Date Collected: 04/26/19 16:55
 Date Received: 04/26/19
 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	0.63	0.17	1
1,2-Dichlorobenzene	ND		ug/kg	2.5	0.18	1
1,3-Dichlorobenzene	ND		ug/kg	2.5	0.19	1
1,4-Dichlorobenzene	ND		ug/kg	2.5	0.22	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	0.37	1
Xylenes, Total	ND		ug/kg	1.2	0.37	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	0.25	1
Dichlorodifluoromethane	ND		ug/kg	12	1.2	1
Acetone	230		ug/kg	12	6.1	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	0.63	0.17	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	0.82	1
Acrylonitrile	ND		ug/kg	5.0	1.4	1

Project Name: CARMAN PL

Lab Number: L1917453

Project Number: 04736.005

Report Date: 05/09/19

SAMPLE RESULTS

Lab ID: L1917453-04
 Client ID: SB-4 0-5 FT BGS
 Sample Location: HEMPSTEAD, NY

Date Collected: 04/26/19 16:55
 Date Received: 04/26/19
 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	0.22	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	0.51	J	ug/kg	2.5	0.24	1
1,2,4-Trimethylbenzene	1.9	J	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	1.2	J	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	6.3	1.8	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	109		70-130
Dibromofluoromethane	96		70-130

Project Name: CARMAN PL

Lab Number: L1917453

Project Number: 04736.005

Report Date: 05/09/19

SAMPLE RESULTS

Lab ID: L1917453-05
 Client ID: SB-5 19-20 FT BGS
 Sample Location: HEMPSTEAD, NY

Date Collected: 04/26/19 10:50
 Date Received: 04/26/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 05/04/19 15:05
 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	4.8	2.2	1
1,1-Dichloroethane	ND		ug/kg	0.97	0.14	1
Chloroform	ND		ug/kg	1.4	0.14	1
Carbon tetrachloride	ND		ug/kg	0.97	0.22	1
1,2-Dichloropropane	ND		ug/kg	0.97	0.12	1
Dibromochloromethane	ND		ug/kg	0.97	0.14	1
1,1,2-Trichloroethane	ND		ug/kg	0.97	0.26	1
Tetrachloroethene	ND		ug/kg	0.48	0.19	1
Chlorobenzene	ND		ug/kg	0.48	0.12	1
Trichlorofluoromethane	ND		ug/kg	3.9	0.67	1
1,2-Dichloroethane	ND		ug/kg	0.97	0.25	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	0.97	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	3.9	0.24	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.48	0.16	1
Benzene	ND		ug/kg	0.48	0.16	1
Toluene	0.52	J	ug/kg	0.97	0.52	1
Ethylbenzene	ND		ug/kg	0.97	0.14	1
Chloromethane	ND		ug/kg	3.9	0.90	1
Bromomethane	ND		ug/kg	1.9	0.56	1
Vinyl chloride	ND		ug/kg	0.97	0.32	1
Chloroethane	ND		ug/kg	1.9	0.44	1
1,1-Dichloroethene	ND		ug/kg	0.97	0.23	1
trans-1,2-Dichloroethene	ND		ug/kg	1.4	0.13	1

Project Name: CARMAN PL

Lab Number: L1917453

Project Number: 04736.005

Report Date: 05/09/19

SAMPLE RESULTS

Lab ID: L1917453-05
 Client ID: SB-5 19-20 FT BGS
 Sample Location: HEMPSTEAD, NY

Date Collected: 04/26/19 10:50
 Date Received: 04/26/19
 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	ND		ug/kg	1.9	0.19	1
p/m-Xylene	ND		ug/kg	1.9	0.54	1
o-Xylene	ND		ug/kg	0.97	0.28	1
Xylenes, Total	ND		ug/kg	0.97	0.28	1
cis-1,2-Dichloroethene	ND		ug/kg	0.97	0.17	1
1,2-Dichloroethene, Total	ND		ug/kg	0.97	0.13	1
Dibromomethane	ND		ug/kg	1.9	0.23	1
Styrene	ND		ug/kg	0.97	0.19	1
Dichlorodifluoromethane	ND		ug/kg	9.7	0.88	1
Acetone	14		ug/kg	9.7	4.6	1
Carbon disulfide	ND		ug/kg	9.7	4.4	1
2-Butanone	ND		ug/kg	9.7	2.1	1
Vinyl acetate	ND		ug/kg	9.7	2.1	1
4-Methyl-2-pentanone	ND		ug/kg	9.7	1.2	1
1,2,3-Trichloropropane	ND		ug/kg	1.9	0.12	1
2-Hexanone	ND		ug/kg	9.7	1.1	1
Bromochloromethane	ND		ug/kg	1.9	0.20	1
2,2-Dichloropropane	ND		ug/kg	1.9	0.20	1
1,2-Dibromoethane	ND		ug/kg	0.97	0.27	1
1,3-Dichloropropane	ND		ug/kg	1.9	0.16	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.48	0.13	1
Bromobenzene	ND		ug/kg	1.9	0.14	1
n-Butylbenzene	ND		ug/kg	0.97	0.16	1
sec-Butylbenzene	ND		ug/kg	0.97	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	2.9	0.96	1
Hexachlorobutadiene	ND		ug/kg	3.9	0.16	1
Isopropylbenzene	ND		ug/kg	0.97	0.10	1
p-Isopropyltoluene	ND		ug/kg	0.97	0.10	1
Naphthalene	ND		ug/kg	3.9	0.63	1
Acrylonitrile	ND		ug/kg	3.9	1.1	1

Project Name: CARMAN PL

Lab Number: L1917453

Project Number: 04736.005

Report Date: 05/09/19

SAMPLE RESULTS

Lab ID: L1917453-05
 Client ID: SB-5 19-20 FT BGS
 Sample Location: HEMPSTEAD, NY

Date Collected: 04/26/19 10:50
 Date Received: 04/26/19
 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	0.97	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	0.19	1
1,2,4-Trimethylbenzene	ND		ug/kg	1.9	0.32	1
1,4-Dioxane	ND		ug/kg	77	34.	1
p-Diethylbenzene	ND		ug/kg	1.9	0.17	1
p-Ethyltoluene	ND		ug/kg	1.9	0.37	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	1.9	0.18	1
Ethyl ether	ND		ug/kg	1.9	0.33	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	4.8	1.4	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	95		70-130

Project Name: CARMAN PL

Lab Number: L1917453

Project Number: 04736.005

Report Date: 05/09/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 05/05/19 12:34
 Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 03 Batch: WG1233816-5					
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: CARMAN PL

Lab Number: L1917453

Project Number: 04736.005

Report Date: 05/09/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 05/05/19 12:34
 Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 03 Batch: WG1233816-5					
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: CARMAN PL

Lab Number: L1917453

Project Number: 04736.005

Report Date: 05/09/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 05/05/19 12:34
 Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 03 Batch: WG1233816-5					
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	107		70-130
Toluene-d8	94		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	101		70-130

Project Name: CARMAN PL
Project Number: 04736.005

Lab Number: L1917453
Report Date: 05/09/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 05/04/19 08:20
 Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 01-02,04-05 Batch: WG1233935-5					
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: CARMAN PL

Project Number: 04736.005

Lab Number: L1917453

Report Date: 05/09/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 05/04/19 08:20
 Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 01-02,04-05 Batch: WG1233935-5					
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: CARMAN PL
Project Number: 04736.005

Lab Number: L1917453
Report Date: 05/09/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 05/04/19 08:20
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 01-02,04-05 Batch: WG1233935-5					
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	102		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	96		70-130

Lab Control Sample Analysis **Batch Quality Control**

Project Name: CARMAN PL

Project Number: 04736.005

Lab Number: L1917453

Report Date: 05/09/19

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 Batch: WG1233816-3 WG1233816-4								
Methylene chloride	103		105		70-130	2		30
1,1-Dichloroethane	114		116		70-130	2		30
Chloroform	101		102		70-130	1		30
Carbon tetrachloride	98		98		70-130	0		30
1,2-Dichloropropane	112		113		70-130	1		30
Dibromochloromethane	94		94		70-130	0		30
1,1,2-Trichloroethane	97		97		70-130	0		30
Tetrachloroethene	95		96		70-130	1		30
Chlorobenzene	92		92		70-130	0		30
Trichlorofluoromethane	77		79		70-139	3		30
1,2-Dichloroethane	104		106		70-130	2		30
1,1,1-Trichloroethane	100		102		70-130	2		30
Bromodichloromethane	102		104		70-130	2		30
trans-1,3-Dichloropropene	100		101		70-130	1		30
cis-1,3-Dichloropropene	106		108		70-130	2		30
1,1-Dichloropropene	105		106		70-130	1		30
Bromoform	88		88		70-130	0		30
1,1,2,2-Tetrachloroethane	91		90		70-130	1		30
Benzene	106		107		70-130	1		30
Toluene	95		95		70-130	0		30
Ethylbenzene	93		94		70-130	1		30
Chloromethane	117		118		52-130	1		30
Bromomethane	74		78		57-147	5		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: CARMAN PL

Project Number: 04736.005

Lab Number: L1917453

Report Date: 05/09/19

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 Batch: WG1233816-3 WG1233816-4								
Vinyl chloride	100		100		67-130	0		30
Chloroethane	89		89		50-151	0		30
1,1-Dichloroethene	107		106		65-135	1		30
trans-1,2-Dichloroethene	105		106		70-130	1		30
Trichloroethene	104		105		70-130	1		30
1,2-Dichlorobenzene	89		89		70-130	0		30
1,3-Dichlorobenzene	90		89		70-130	1		30
1,4-Dichlorobenzene	89		89		70-130	0		30
Methyl tert butyl ether	102		104		66-130	2		30
p/m-Xylene	94		94		70-130	0		30
o-Xylene	92		92		70-130	0		30
cis-1,2-Dichloroethene	102		101		70-130	1		30
Dibromomethane	100		100		70-130	0		30
Styrene	92		91		70-130	1		30
Dichlorodifluoromethane	78		78		30-146	0		30
Acetone	119		122		54-140	2		30
Carbon disulfide	106		106		59-130	0		30
2-Butanone	115		102		70-130	12		30
Vinyl acetate	115		116		70-130	1		30
4-Methyl-2-pentanone	102		101		70-130	1		30
1,2,3-Trichloropropane	91		91		68-130	0		30
2-Hexanone	94		95		70-130	1		30
Bromochloromethane	104		107		70-130	3		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: CARMAN PL

Project Number: 04736.005

Lab Number: L1917453

Report Date: 05/09/19

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 Batch: WG1233816-3 WG1233816-4								
2,2-Dichloropropane	105		105		70-130	0		30
1,2-Dibromoethane	94		96		70-130	2		30
1,3-Dichloropropane	98		96		69-130	2		30
1,1,1,2-Tetrachloroethane	93		94		70-130	1		30
Bromobenzene	87		86		70-130	1		30
n-Butylbenzene	92		89		70-130	3		30
sec-Butylbenzene	90		89		70-130	1		30
tert-Butylbenzene	89		87		70-130	2		30
o-Chlorotoluene	91		93		70-130	2		30
p-Chlorotoluene	91		92		70-130	1		30
1,2-Dibromo-3-chloropropane	86		86		68-130	0		30
Hexachlorobutadiene	84		83		67-130	1		30
Isopropylbenzene	90		88		70-130	2		30
p-Isopropyltoluene	90		89		70-130	1		30
Naphthalene	82		80		70-130	2		30
Acrylonitrile	121		122		70-130	1		30
n-Propylbenzene	91		90		70-130	1		30
1,2,3-Trichlorobenzene	87		86		70-130	1		30
1,2,4-Trichlorobenzene	86		86		70-130	0		30
1,3,5-Trimethylbenzene	91		90		70-130	1		30
1,2,4-Trimethylbenzene	92		90		70-130	2		30
1,4-Dioxane	113		115		65-136	2		30
p-Diethylbenzene	92		90		70-130	2		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: CARMAN PL
Project Number: 04736.005

Lab Number: L1917453
Report Date: 05/09/19

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 Batch: WG1233816-3 WG1233816-4								
p-Ethyltoluene	92		92		70-130	0		30
1,2,4,5-Tetramethylbenzene	86		84		70-130	2		30
Ethyl ether	111		112		67-130	1		30
trans-1,4-Dichloro-2-butene	97		98		70-130	1		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	103		102		70-130
Toluene-d8	97		96		70-130
4-Bromofluorobenzene	101		100		70-130
Dibromofluoromethane	100		102		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: CARMAN PL

Project Number: 04736.005

Lab Number: L1917453

Report Date: 05/09/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01-02,04-05 Batch: WG1233935-3 WG1233935-4								
Methylene chloride	99		105		70-130	6		30
1,1-Dichloroethane	107		114		70-130	6		30
Chloroform	98		104		70-130	6		30
Carbon tetrachloride	96		105		70-130	9		30
1,2-Dichloropropane	102		114		70-130	11		30
Dibromochloromethane	81		86		70-130	6		30
1,1,2-Trichloroethane	100		102		70-130	2		30
Tetrachloroethene	95		101		70-130	6		30
Chlorobenzene	103		104		70-130	1		30
Trichlorofluoromethane	96		98		70-139	2		30
1,2-Dichloroethane	102		106		70-130	4		30
1,1,1-Trichloroethane	103		106		70-130	3		30
Bromodichloromethane	90		98		70-130	9		30
trans-1,3-Dichloropropene	98		100		70-130	2		30
cis-1,3-Dichloropropene	100		102		70-130	2		30
1,1-Dichloropropene	110		116		70-130	5		30
Bromoform	77		79		70-130	3		30
1,1,2,2-Tetrachloroethane	98		95		70-130	3		30
Benzene	112		114		70-130	2		30
Toluene	113		112		70-130	1		30
Ethylbenzene	106		105		70-130	1		30
Chloromethane	106		111		52-130	5		30
Bromomethane	93		95		57-147	2		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: CARMAN PL

Project Number: 04736.005

Lab Number: L1917453

Report Date: 05/09/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01-02,04-05 Batch: WG1233935-3 WG1233935-4								
Vinyl chloride	99		100		67-130	1		30
Chloroethane	94		92		50-151	2		30
1,1-Dichloroethene	92		94		65-135	2		30
trans-1,2-Dichloroethene	102		111		70-130	8		30
Trichloroethene	104		108		70-130	4		30
1,2-Dichlorobenzene	102		98		70-130	4		30
1,3-Dichlorobenzene	104		104		70-130	0		30
1,4-Dichlorobenzene	105		101		70-130	4		30
Methyl tert butyl ether	99		104		66-130	5		30
p/m-Xylene	116		115		70-130	1		30
o-Xylene	113		112		70-130	1		30
cis-1,2-Dichloroethene	104		108		70-130	4		30
Dibromomethane	87		96		70-130	10		30
Styrene	116		112		70-130	4		30
Dichlorodifluoromethane	98		94		30-146	4		30
Acetone	105		101		54-140	4		30
Carbon disulfide	85		88		59-130	3		30
2-Butanone	93		94		70-130	1		30
Vinyl acetate	87		91		70-130	4		30
4-Methyl-2-pentanone	90		92		70-130	2		30
1,2,3-Trichloropropane	103		98		68-130	5		30
2-Hexanone	80		79		70-130	1		30
Bromochloromethane	92		98		70-130	6		30

Lab Control Sample Analysis Batch Quality Control

Project Name: CARMAN PL

Project Number: 04736.005

Lab Number: L1917453

Report Date: 05/09/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01-02,04-05 Batch: WG1233935-3 WG1233935-4								
2,2-Dichloropropane	100		106		70-130	6		30
1,2-Dibromoethane	91		98		70-130	7		30
1,3-Dichloropropane	103		100		69-130	3		30
1,1,1,2-Tetrachloroethane	88		91		70-130	3		30
Bromobenzene	97		100		70-130	3		30
n-Butylbenzene	118		117		70-130	1		30
sec-Butylbenzene	116		109		70-130	6		30
tert-Butylbenzene	114		110		70-130	4		30
o-Chlorotoluene	112		112		70-130	0		30
p-Chlorotoluene	109		107		70-130	2		30
1,2-Dibromo-3-chloropropane	73		76		68-130	4		30
Hexachlorobutadiene	103		101		67-130	2		30
Isopropylbenzene	111		109		70-130	2		30
p-Isopropyltoluene	114		109		70-130	4		30
Naphthalene	95		95		70-130	0		30
Acrylonitrile	126		131	Q	70-130	4		30
n-Propylbenzene	116		113		70-130	3		30
1,2,3-Trichlorobenzene	91		96		70-130	5		30
1,2,4-Trichlorobenzene	99		102		70-130	3		30
1,3,5-Trimethylbenzene	114		110		70-130	4		30
1,2,4-Trimethylbenzene	114		108		70-130	5		30
1,4-Dioxane	103		103		65-136	0		30
p-Diethylbenzene	114		113		70-130	1		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: CARMAN PL

Project Number: 04736.005

Lab Number: L1917453

Report Date: 05/09/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01-02,04-05 Batch: WG1233935-3 WG1233935-4								
p-Ethyltoluene	112		109		70-130	3		30
1,2,4,5-Tetramethylbenzene	108		105		70-130	3		30
Ethyl ether	84		84		67-130	0		30
trans-1,4-Dichloro-2-butene	103		95		70-130	8		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	99		101		70-130
Toluene-d8	99		95		70-130
4-Bromofluorobenzene	103		97		70-130
Dibromofluoromethane	92		95		70-130

SEMIVOLATILES

Project Name: CARMAN PL

Lab Number: L1917453

Project Number: 04736.005

Report Date: 05/09/19

SAMPLE RESULTS

Lab ID: L1917453-01
 Client ID: SB-1 17-19 FT BGS
 Sample Location: HEMPSTEAD, NY

Date Collected: 04/26/19 13:10
 Date Received: 04/26/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 05/08/19 20:32
 Analyst: RC
 Percent Solids: 90%

Extraction Method: EPA 3546
 Extraction Date: 05/04/19 12:39

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	180	21.	1
Hexachlorobenzene	ND		ug/kg	110	21.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	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	32.	1
1,4-Dichlorobenzene	ND		ug/kg	180	32.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	49.	1
2,4-Dinitrotoluene	ND		ug/kg	180	37.	1
2,6-Dinitrotoluene	ND		ug/kg	180	32.	1
Fluoranthene	ND		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	32.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	18.	1
Hexachlorobutadiene	ND		ug/kg	180	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	180	23.	1
Nitrobenzene	ND		ug/kg	170	27.	1
NDPA/DPA	ND		ug/kg	150	21.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	29.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	180	64.	1
Butyl benzyl phthalate	ND		ug/kg	180	47.	1
Di-n-butylphthalate	ND		ug/kg	180	35.	1
Di-n-octylphthalate	ND		ug/kg	180	63.	1

Project Name: CARMAN PL

Lab Number: L1917453

Project Number: 04736.005

Report Date: 05/09/19

SAMPLE RESULTS

Lab ID: L1917453-01
 Client ID: SB-1 17-19 FT BGS
 Sample Location: HEMPSTEAD, NY

Date Collected: 04/26/19 13:10
 Date Received: 04/26/19
 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	17.	1
Dimethyl phthalate	ND		ug/kg	180	39.	1
Benzo(a)anthracene	ND		ug/kg	110	21.	1
Benzo(a)pyrene	ND		ug/kg	150	45.	1
Benzo(b)fluoranthene	ND		ug/kg	110	31.	1
Benzo(k)fluoranthene	ND		ug/kg	110	30.	1
Chrysene	ND		ug/kg	110	19.	1
Acenaphthylene	ND		ug/kg	150	29.	1
Anthracene	ND		ug/kg	110	36.	1
Benzo(ghi)perylene	ND		ug/kg	150	22.	1
Fluorene	ND		ug/kg	180	18.	1
Phenanthrene	ND		ug/kg	110	22.	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	21.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	150	26.	1
Pyrene	ND		ug/kg	110	18.	1
Biphenyl	ND		ug/kg	420	43.	1
4-Chloroaniline	ND		ug/kg	180	34.	1
2-Nitroaniline	ND		ug/kg	180	36.	1
3-Nitroaniline	ND		ug/kg	180	35.	1
4-Nitroaniline	ND		ug/kg	180	77.	1
Dibenzofuran	ND		ug/kg	180	18.	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	23.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	35.	1
p-Chloro-m-cresol	ND		ug/kg	180	28.	1
2-Chlorophenol	ND		ug/kg	180	22.	1
2,4-Dichlorophenol	ND		ug/kg	170	30.	1
2,4-Dimethylphenol	ND		ug/kg	180	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	86.	1
4,6-Dinitro-o-cresol	ND		ug/kg	480	89.	1
Pentachlorophenol	ND		ug/kg	150	41.	1
Phenol	ND		ug/kg	180	28.	1
2-Methylphenol	ND		ug/kg	180	29.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	270	29.	1

Project Name: CARMAN PL**Lab Number:** L1917453**Project Number:** 04736.005**Report Date:** 05/09/19**SAMPLE RESULTS**

Lab ID: L1917453-01
 Client ID: SB-1 17-19 FT BGS
 Sample Location: HEMPSTEAD, NY

Date Collected: 04/26/19 13:10
 Date Received: 04/26/19
 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	36.	1
Benzoic Acid	ND		ug/kg	600	190	1
Benzyl Alcohol	ND		ug/kg	180	57.	1
Carbazole	ND		ug/kg	180	18.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	76		25-120
Phenol-d6	75		10-120
Nitrobenzene-d5	78		23-120
2-Fluorobiphenyl	70		30-120
2,4,6-Tribromophenol	74		10-136
4-Terphenyl-d14	56		18-120

Project Name: CARMAN PL**Lab Number:** L1917453**Project Number:** 04736.005**Report Date:** 05/09/19**SAMPLE RESULTS**

Lab ID: L1917453-02
 Client ID: SB-2 16-18 FT BGS
 Sample Location: HEMPSTEAD, NY

Date Collected: 04/26/19 17:20
 Date Received: 04/26/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 05/08/19 20:06
 Analyst: RC
 Percent Solids: 92%

Extraction Method: EPA 3546
 Extraction Date: 05/04/19 12:39

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	140	19.	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	31.	1
1,4-Dichlorobenzene	ND		ug/kg	180	31.	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	25	J	ug/kg	110	21.	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	220	31.	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	ND		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: CARMAN PL

Lab Number: L1917453

Project Number: 04736.005

Report Date: 05/09/19

SAMPLE RESULTS

Lab ID: L1917453-02
 Client ID: SB-2 16-18 FT BGS
 Sample Location: HEMPSTEAD, NY

Date Collected: 04/26/19 17:20
 Date Received: 04/26/19
 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	17.	1
Dimethyl phthalate	ND		ug/kg	180	38.	1
Benzo(a)anthracene	20	J	ug/kg	110	20.	1
Benzo(a)pyrene	ND		ug/kg	140	44.	1
Benzo(b)fluoranthene	ND		ug/kg	110	30.	1
Benzo(k)fluoranthene	ND		ug/kg	110	29.	1
Chrysene	ND		ug/kg	110	19.	1
Acenaphthylene	ND		ug/kg	140	28.	1
Anthracene	ND		ug/kg	110	35.	1
Benzo(ghi)perylene	ND		ug/kg	140	21.	1
Fluorene	ND		ug/kg	180	17.	1
Phenanthrene	ND		ug/kg	110	22.	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	21.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	140	25.	1
Pyrene	23	J	ug/kg	110	18.	1
Biphenyl	ND		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	74.	1
Dibenzofuran	ND		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	21.	1
2,4-Dichlorophenol	ND		ug/kg	160	29.	1
2,4-Dimethylphenol	ND		ug/kg	180	59.	1
2-Nitrophenol	ND		ug/kg	390	68.	1
4-Nitrophenol	ND		ug/kg	250	73.	1
2,4-Dinitrophenol	ND		ug/kg	860	84.	1
4,6-Dinitro-o-cresol	ND		ug/kg	470	86.	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: CARMAN PL**Lab Number:** L1917453**Project Number:** 04736.005**Report Date:** 05/09/19**SAMPLE RESULTS**

Lab ID: L1917453-02
 Client ID: SB-2 16-18 FT BGS
 Sample Location: HEMPSTEAD, NY

Date Collected: 04/26/19 17:20
 Date Received: 04/26/19
 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	55.	1
Carbazole	ND		ug/kg	180	17.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	60		25-120
Phenol-d6	63		10-120
Nitrobenzene-d5	62		23-120
2-Fluorobiphenyl	64		30-120
2,4,6-Tribromophenol	69		10-136
4-Terphenyl-d14	56		18-120

Project Name: CARMAN PL**Lab Number:** L1917453**Project Number:** 04736.005**Report Date:** 05/09/19**SAMPLE RESULTS**

Lab ID: L1917453-03
 Client ID: SB-3 11-13 FT BGS
 Sample Location: HEMPSTEAD, NY

Date Collected: 04/26/19 16:20
 Date Received: 04/26/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 05/08/19 19:41
 Analyst: RC
 Percent Solids: 95%

Extraction Method: EPA 3546
 Extraction Date: 05/04/19 12:39

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	140	18.	1
1,2,4-Trichlorobenzene	ND		ug/kg	170	20.	1
Hexachlorobenzene	ND		ug/kg	100	19.	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	ND		ug/kg	170	35.	1
2,6-Dinitrotoluene	ND		ug/kg	170	30.	1
Fluoranthene	ND		ug/kg	100	20.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	170	18.	1
4-Bromophenyl phenyl ether	ND		ug/kg	170	26.	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	25.	1
Hexachlorocyclopentadiene	ND		ug/kg	500	160	1
Hexachloroethane	ND		ug/kg	140	28.	1
Isophorone	ND		ug/kg	160	22.	1
Naphthalene	ND		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: CARMAN PL

Lab Number: L1917453

Project Number: 04736.005

Report Date: 05/09/19

SAMPLE RESULTS

Lab ID: L1917453-03
 Client ID: SB-3 11-13 FT BGS
 Sample Location: HEMPSTEAD, NY

Date Collected: 04/26/19 16:20
 Date Received: 04/26/19
 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	36.	1
Benzo(a)anthracene	ND		ug/kg	100	20.	1
Benzo(a)pyrene	ND		ug/kg	140	42.	1
Benzo(b)fluoranthene	ND		ug/kg	100	29.	1
Benzo(k)fluoranthene	ND		ug/kg	100	28.	1
Chrysene	ND		ug/kg	100	18.	1
Acenaphthylene	ND		ug/kg	140	27.	1
Anthracene	ND		ug/kg	100	34.	1
Benzo(ghi)perylene	ND		ug/kg	140	20.	1
Fluorene	ND		ug/kg	170	17.	1
Phenanthrene	ND		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	21	J	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	33.	1
3-Nitroaniline	ND		ug/kg	170	33.	1
4-Nitroaniline	ND		ug/kg	170	72.	1
Dibenzofuran	ND		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	21.	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	20.	1
2,4-Dichlorophenol	ND		ug/kg	160	28.	1
2,4-Dimethylphenol	ND		ug/kg	170	57.	1
2-Nitrophenol	ND		ug/kg	370	65.	1
4-Nitrophenol	ND		ug/kg	240	71.	1
2,4-Dinitrophenol	ND		ug/kg	830	81.	1
4,6-Dinitro-o-cresol	ND		ug/kg	450	83.	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: CARMAN PL**Lab Number:** L1917453**Project Number:** 04736.005**Report Date:** 05/09/19**SAMPLE RESULTS**

Lab ID: L1917453-03
 Client ID: SB-3 11-13 FT BGS
 Sample Location: HEMPSTEAD, NY

Date Collected: 04/26/19 16:20
 Date Received: 04/26/19
 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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	66		25-120
Phenol-d6	68		10-120
Nitrobenzene-d5	68		23-120
2-Fluorobiphenyl	68		30-120
2,4,6-Tribromophenol	68		10-136
4-Terphenyl-d14	56		18-120

Project Name: CARMAN PL

Lab Number: L1917453

Project Number: 04736.005

Report Date: 05/09/19

SAMPLE RESULTS

Lab ID: L1917453-04
 Client ID: SB-4 0-5 FT BGS
 Sample Location: HEMPSTEAD, NY

Date Collected: 04/26/19 16:55
 Date Received: 04/26/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 05/08/19 18:45
 Analyst: JG
 Percent Solids: 90%

Extraction Method: EPA 3546
 Extraction Date: 05/04/19 12:39

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		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	250		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	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	ND		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	99	J	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: CARMAN PL

Lab Number: L1917453

Project Number: 04736.005

Report Date: 05/09/19

SAMPLE RESULTS

Lab ID: L1917453-04
 Client ID: SB-4 0-5 FT BGS
 Sample Location: HEMPSTEAD, NY

Date Collected: 04/26/19 16:55
 Date Received: 04/26/19
 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	17.	1
Dimethyl phthalate	ND		ug/kg	180	38.	1
Benzo(a)anthracene	180		ug/kg	110	20.	1
Benzo(a)pyrene	180		ug/kg	140	44.	1
Benzo(b)fluoranthene	250		ug/kg	110	31.	1
Benzo(k)fluoranthene	84	J	ug/kg	110	29.	1
Chrysene	190		ug/kg	110	19.	1
Acenaphthylene	34	J	ug/kg	140	28.	1
Anthracene	40	J	ug/kg	110	36.	1
Benzo(ghi)perylene	130	J	ug/kg	140	21.	1
Fluorene	ND		ug/kg	180	18.	1
Phenanthrene	88	J	ug/kg	110	22.	1
Dibenzo(a,h)anthracene	36	J	ug/kg	110	21.	1
Indeno(1,2,3-cd)pyrene	130	J	ug/kg	140	25.	1
Pyrene	240		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	ND		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: CARMAN PL**Lab Number:** L1917453**Project Number:** 04736.005**Report Date:** 05/09/19**SAMPLE RESULTS**

Lab ID: L1917453-04
 Client ID: SB-4 0-5 FT BGS
 Sample Location: HEMPSTEAD, NY

Date Collected: 04/26/19 16:55
 Date Received: 04/26/19
 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	ND		ug/kg	180	18.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	55		25-120
Phenol-d6	58		10-120
Nitrobenzene-d5	62		23-120
2-Fluorobiphenyl	56		30-120
2,4,6-Tribromophenol	57		10-136
4-Terphenyl-d14	43		18-120

Project Name: CARMAN PL**Lab Number:** L1917453**Project Number:** 04736.005**Report Date:** 05/09/19**SAMPLE RESULTS**

Lab ID: L1917453-05
 Client ID: SB-5 19-20 FT BGS
 Sample Location: HEMPSTEAD, NY

Date Collected: 04/26/19 10:50
 Date Received: 04/26/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 05/08/19 18:20
 Analyst: JG
 Percent Solids: 89%

Extraction Method: EPA 3546
 Extraction Date: 05/04/19 12:39

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	180	21.	1
Hexachlorobenzene	ND		ug/kg	110	21.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	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	32.	1
1,4-Dichlorobenzene	ND		ug/kg	180	32.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	49.	1
2,4-Dinitrotoluene	ND		ug/kg	180	37.	1
2,6-Dinitrotoluene	ND		ug/kg	180	32.	1
Fluoranthene	ND		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	32.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	19.	1
Hexachlorobutadiene	ND		ug/kg	180	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	180	23.	1
Nitrobenzene	ND		ug/kg	170	28.	1
NDPA/DPA	ND		ug/kg	150	21.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	29.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	180	64.	1
Butyl benzyl phthalate	ND		ug/kg	180	47.	1
Di-n-butylphthalate	ND		ug/kg	180	35.	1
Di-n-octylphthalate	ND		ug/kg	180	63.	1

Project Name: CARMAN PL

Lab Number: L1917453

Project Number: 04736.005

Report Date: 05/09/19

SAMPLE RESULTS

Lab ID: L1917453-05
 Client ID: SB-5 19-20 FT BGS
 Sample Location: HEMPSTEAD, NY

Date Collected: 04/26/19 10:50
 Date Received: 04/26/19
 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	17.	1
Dimethyl phthalate	ND		ug/kg	180	39.	1
Benzo(a)anthracene	ND		ug/kg	110	21.	1
Benzo(a)pyrene	ND		ug/kg	150	45.	1
Benzo(b)fluoranthene	ND		ug/kg	110	31.	1
Benzo(k)fluoranthene	ND		ug/kg	110	30.	1
Chrysene	ND		ug/kg	110	19.	1
Acenaphthylene	ND		ug/kg	150	29.	1
Anthracene	ND		ug/kg	110	36.	1
Benzo(ghi)perylene	ND		ug/kg	150	22.	1
Fluorene	ND		ug/kg	180	18.	1
Phenanthrene	ND		ug/kg	110	23.	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	21.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	150	26.	1
Pyrene	ND		ug/kg	110	18.	1
Biphenyl	ND		ug/kg	420	43.	1
4-Chloroaniline	ND		ug/kg	180	34.	1
2-Nitroaniline	ND		ug/kg	180	36.	1
3-Nitroaniline	ND		ug/kg	180	35.	1
4-Nitroaniline	ND		ug/kg	180	77.	1
Dibenzofuran	ND		ug/kg	180	18.	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	23.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	35.	1
p-Chloro-m-cresol	ND		ug/kg	180	28.	1
2-Chlorophenol	ND		ug/kg	180	22.	1
2,4-Dichlorophenol	ND		ug/kg	170	30.	1
2,4-Dimethylphenol	ND		ug/kg	180	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	180	28.	1
2-Methylphenol	ND		ug/kg	180	29.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	270	29.	1

Project Name: CARMAN PL**Lab Number:** L1917453**Project Number:** 04736.005**Report Date:** 05/09/19**SAMPLE RESULTS**

Lab ID: L1917453-05
 Client ID: SB-5 19-20 FT BGS
 Sample Location: HEMPSTEAD, NY

Date Collected: 04/26/19 10:50
 Date Received: 04/26/19
 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	36.	1
Benzoic Acid	ND		ug/kg	600	190	1
Benzyl Alcohol	ND		ug/kg	180	57.	1
Carbazole	ND		ug/kg	180	18.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	48		25-120
Phenol-d6	52		10-120
Nitrobenzene-d5	53		23-120
2-Fluorobiphenyl	58		30-120
2,4,6-Tribromophenol	55		10-136
4-Terphenyl-d14	63		18-120

Project Name: CARMAN PL
Project Number: 04736.005

Lab Number: L1917453
Report Date: 05/09/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 05/06/19 19:59
Analyst: SZ

Extraction Method: EPA 3546
Extraction Date: 05/04/19 12:39

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-05 Batch: WG1233656-1					
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: CARMAN PL
Project Number: 04736.005

Lab Number: L1917453
Report Date: 05/09/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 05/06/19 19:59
Analyst: SZ

Extraction Method: EPA 3546
Extraction Date: 05/04/19 12:39

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-05 Batch: WG1233656-1					
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: CARMAN PL
Project Number: 04736.005

Lab Number: L1917453
Report Date: 05/09/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 05/06/19 19:59
Analyst: SZ

Extraction Method: EPA 3546
Extraction Date: 05/04/19 12:39

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-05 Batch: WG1233656-1					
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.

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	57		25-120
Phenol-d6	60		10-120
Nitrobenzene-d5	62		23-120
2-Fluorobiphenyl	66		30-120
2,4,6-Tribromophenol	65		10-136
4-Terphenyl-d14	78		18-120

Lab Control Sample Analysis **Batch Quality Control**

Project Name: CARMAN PL

Project Number: 04736.005

Lab Number: L1917453

Report Date: 05/09/19

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: WG1233656-2 WG1233656-3								
Acenaphthene	66		69		31-137	4		50
1,2,4-Trichlorobenzene	72		73		38-107	1		50
Hexachlorobenzene	66		68		40-140	3		50
Bis(2-chloroethyl)ether	70		69		40-140	1		50
2-Chloronaphthalene	74		74		40-140	0		50
1,2-Dichlorobenzene	72		70		40-140	3		50
1,3-Dichlorobenzene	69		68		40-140	1		50
1,4-Dichlorobenzene	69		69		28-104	0		50
3,3'-Dichlorobenzidine	47		50		40-140	6		50
2,4-Dinitrotoluene	73		75		40-132	3		50
2,6-Dinitrotoluene	79		80		40-140	1		50
Fluoranthene	77		79		40-140	3		50
4-Chlorophenyl phenyl ether	66		68		40-140	3		50
4-Bromophenyl phenyl ether	68		70		40-140	3		50
Bis(2-chloroisopropyl)ether	75		74		40-140	1		50
Bis(2-chloroethoxy)methane	76		74		40-117	3		50
Hexachlorobutadiene	66		68		40-140	3		50
Hexachlorocyclopentadiene	64		66		40-140	3		50
Hexachloroethane	70		69		40-140	1		50
Isophorone	78		77		40-140	1		50
Naphthalene	71		73		40-140	3		50
Nitrobenzene	76		76		40-140	0		50
NDPA/DPA	69		70		36-157	1		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: CARMAN PL

Project Number: 04736.005

Lab Number: L1917453

Report Date: 05/09/19

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: WG1233656-2 WG1233656-3								
n-Nitrosodi-n-propylamine	77		78		32-121	1		50
Bis(2-ethylhexyl)phthalate	73		76		40-140	4		50
Butyl benzyl phthalate	77		79		40-140	3		50
Di-n-butylphthalate	76		78		40-140	3		50
Di-n-octylphthalate	77		78		40-140	1		50
Diethyl phthalate	69		70		40-140	1		50
Dimethyl phthalate	76		76		40-140	0		50
Benzo(a)anthracene	76		77		40-140	1		50
Benzo(a)pyrene	72		74		40-140	3		50
Benzo(b)fluoranthene	76		77		40-140	1		50
Benzo(k)fluoranthene	74		78		40-140	5		50
Chrysene	74		76		40-140	3		50
Acenaphthylene	76		77		40-140	1		50
Anthracene	76		79		40-140	4		50
Benzo(ghi)perylene	74		76		40-140	3		50
Fluorene	67		69		40-140	3		50
Phenanthrene	74		76		40-140	3		50
Dibenzo(a,h)anthracene	73		75		40-140	3		50
Indeno(1,2,3-cd)pyrene	74		76		40-140	3		50
Pyrene	76		78		35-142	3		50
Biphenyl	77		78		54-104	1		50
4-Chloroaniline	46		50		40-140	8		50
2-Nitroaniline	82		83		47-134	1		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: CARMAN PL

Project Number: 04736.005

Lab Number: L1917453

Report Date: 05/09/19

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: WG1233656-2 WG1233656-3								
3-Nitroaniline	49		53		26-129	8		50
4-Nitroaniline	67		70		41-125	4		50
Dibenzofuran	67		70		40-140	4		50
2-Methylnaphthalene	72		74		40-140	3		50
1,2,4,5-Tetrachlorobenzene	76		78		40-117	3		50
Acetophenone	77		76		14-144	1		50
2,4,6-Trichlorophenol	80		81		30-130	1		50
p-Chloro-m-cresol	77		79		26-103	3		50
2-Chlorophenol	76		76		25-102	0		50
2,4-Dichlorophenol	79		79		30-130	0		50
2,4-Dimethylphenol	76		74		30-130	3		50
2-Nitrophenol	80		80		30-130	0		50
4-Nitrophenol	78		80		11-114	3		50
2,4-Dinitrophenol	62		60		4-130	3		50
4,6-Dinitro-o-cresol	76		80		10-130	5		50
Pentachlorophenol	63		63		17-109	0		50
Phenol	71		69		26-90	3		50
2-Methylphenol	76		76		30-130.	0		50
3-Methylphenol/4-Methylphenol	77		76		30-130	1		50
2,4,5-Trichlorophenol	79		80		30-130	1		50
Benzoic Acid	80		59		10-110	30		50
Benzyl Alcohol	76		76		40-140	0		50
Carbazole	77		79		54-128	3		50

Lab Control Sample Analysis Batch Quality Control

Project Name: CARMAN PL

Project Number: 04736.005

Lab Number: L1917453

Report Date: 05/09/19

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: WG1233656-2 WG1233656-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	67		65		25-120
Phenol-d6	68		68		10-120
Nitrobenzene-d5	71		71		23-120
2-Fluorobiphenyl	67		67		30-120
2,4,6-Tribromophenol	62		63		10-136
4-Terphenyl-d14	68		71		18-120

METALS

Project Name: CARMAN PL

Lab Number: L1917453

Project Number: 04736.005

Report Date: 05/09/19

SAMPLE RESULTS

Lab ID: L1917453-01

Date Collected: 04/26/19 13:10

Client ID: SB-1 17-19 FT BGS

Date Received: 04/26/19

Sample Location: HEMPSTEAD, 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	1600		mg/kg	8.77	2.37	2	05/01/19 18:30	05/03/19 19:39	EPA 3050B	1,6010D	AB
Antimony, Total	ND		mg/kg	4.38	0.333	2	05/01/19 18:30	05/03/19 19:39	EPA 3050B	1,6010D	AB
Arsenic, Total	1.01		mg/kg	0.877	0.182	2	05/01/19 18:30	05/03/19 19:39	EPA 3050B	1,6010D	AB
Barium, Total	11.7		mg/kg	0.877	0.153	2	05/01/19 18:30	05/03/19 19:39	EPA 3050B	1,6010D	AB
Beryllium, Total	0.088	J	mg/kg	0.438	0.029	2	05/01/19 18:30	05/03/19 19:39	EPA 3050B	1,6010D	AB
Cadmium, Total	0.123	J	mg/kg	0.877	0.086	2	05/01/19 18:30	05/03/19 19:39	EPA 3050B	1,6010D	AB
Calcium, Total	246		mg/kg	8.77	3.07	2	05/01/19 18:30	05/03/19 19:39	EPA 3050B	1,6010D	AB
Chromium, Total	17.6		mg/kg	0.877	0.084	2	05/01/19 18:30	05/03/19 19:39	EPA 3050B	1,6010D	AB
Cobalt, Total	3.27		mg/kg	1.75	0.146	2	05/01/19 18:30	05/03/19 19:39	EPA 3050B	1,6010D	AB
Copper, Total	4.50		mg/kg	0.877	0.226	2	05/01/19 18:30	05/03/19 19:39	EPA 3050B	1,6010D	AB
Iron, Total	5730		mg/kg	4.38	0.792	2	05/01/19 18:30	05/03/19 19:39	EPA 3050B	1,6010D	AB
Lead, Total	6.99		mg/kg	4.38	0.235	2	05/01/19 18:30	05/03/19 19:39	EPA 3050B	1,6010D	AB
Magnesium, Total	445		mg/kg	8.77	1.35	2	05/01/19 18:30	05/03/19 19:39	EPA 3050B	1,6010D	AB
Manganese, Total	135		mg/kg	0.877	0.139	2	05/01/19 18:30	05/03/19 19:39	EPA 3050B	1,6010D	AB
Mercury, Total	ND		mg/kg	0.070	0.015	1	04/30/19 05:20	04/30/19 21:16	EPA 7471B	1,7471B	EA
Molybdenum, Total	3.10	J	mg/kg	4.38	0.119	2	05/01/19 18:30	05/03/19 19:39	EPA 3050B	1,6010D	AB
Nickel, Total	4.07		mg/kg	2.19	0.212	2	05/01/19 18:30	05/03/19 19:39	EPA 3050B	1,6010D	AB
Potassium, Total	303		mg/kg	219	12.6	2	05/01/19 18:30	05/03/19 19:39	EPA 3050B	1,6010D	AB
Selenium, Total	ND		mg/kg	1.75	0.226	2	05/01/19 18:30	05/03/19 19:39	EPA 3050B	1,6010D	AB
Silver, Total	ND		mg/kg	0.877	0.248	2	05/01/19 18:30	05/03/19 19:39	EPA 3050B	1,6010D	AB
Sodium, Total	23.3	J	mg/kg	175	2.76	2	05/01/19 18:30	05/03/19 19:39	EPA 3050B	1,6010D	AB
Thallium, Total	ND		mg/kg	1.75	0.276	2	05/01/19 18:30	05/03/19 19:39	EPA 3050B	1,6010D	AB
Titanium, Total	95.2		mg/kg	0.877	0.161	2	05/01/19 18:30	05/03/19 19:39	EPA 3050B	1,6010D	AB
Vanadium, Total	4.78		mg/kg	0.877	0.178	2	05/01/19 18:30	05/03/19 19:39	EPA 3050B	1,6010D	AB
Zinc, Total	11.8		mg/kg	4.38	0.257	2	05/01/19 18:30	05/03/19 19:39	EPA 3050B	1,6010D	AB
General Chemistry - Mansfield Lab											
Chromium, Trivalent	18		mg/kg	0.89	0.89	1		05/03/19 19:39	NA	107,-	



Project Name: CARMAN PL

Lab Number: L1917453

Project Number: 04736.005

Report Date: 05/09/19

SAMPLE RESULTS

Lab ID: L1917453-02

Date Collected: 04/26/19 17:20

Client ID: SB-2 16-18 FT BGS

Date Received: 04/26/19

Sample Location: HEMPSTEAD, 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	2960		mg/kg	8.41	2.27	2	05/01/19 18:30	05/03/19 19:44	EPA 3050B	1,6010D	AB
Antimony, Total	0.420	J	mg/kg	4.20	0.320	2	05/01/19 18:30	05/03/19 19:44	EPA 3050B	1,6010D	AB
Arsenic, Total	1.66		mg/kg	0.841	0.175	2	05/01/19 18:30	05/03/19 19:44	EPA 3050B	1,6010D	AB
Barium, Total	17.7		mg/kg	0.841	0.146	2	05/01/19 18:30	05/03/19 19:44	EPA 3050B	1,6010D	AB
Beryllium, Total	0.126	J	mg/kg	0.420	0.028	2	05/01/19 18:30	05/03/19 19:44	EPA 3050B	1,6010D	AB
Cadmium, Total	0.168	J	mg/kg	0.841	0.082	2	05/01/19 18:30	05/03/19 19:44	EPA 3050B	1,6010D	AB
Calcium, Total	1050		mg/kg	8.41	2.94	2	05/01/19 18:30	05/03/19 19:44	EPA 3050B	1,6010D	AB
Chromium, Total	12.3		mg/kg	0.841	0.081	2	05/01/19 18:30	05/03/19 19:44	EPA 3050B	1,6010D	AB
Cobalt, Total	2.78		mg/kg	1.68	0.140	2	05/01/19 18:30	05/03/19 19:44	EPA 3050B	1,6010D	AB
Copper, Total	5.93		mg/kg	0.841	0.217	2	05/01/19 18:30	05/03/19 19:44	EPA 3050B	1,6010D	AB
Iron, Total	8310		mg/kg	4.20	0.759	2	05/01/19 18:30	05/03/19 19:44	EPA 3050B	1,6010D	AB
Lead, Total	9.55		mg/kg	4.20	0.225	2	05/01/19 18:30	05/03/19 19:44	EPA 3050B	1,6010D	AB
Magnesium, Total	1050		mg/kg	8.41	1.30	2	05/01/19 18:30	05/03/19 19:44	EPA 3050B	1,6010D	AB
Manganese, Total	152		mg/kg	0.841	0.134	2	05/01/19 18:30	05/03/19 19:44	EPA 3050B	1,6010D	AB
Mercury, Total	ND		mg/kg	0.069	0.015	1	04/30/19 05:20	04/30/19 21:18	EPA 7471B	1,7471B	EA
Molybdenum, Total	1.93	J	mg/kg	4.20	0.114	2	05/01/19 18:30	05/03/19 19:44	EPA 3050B	1,6010D	AB
Nickel, Total	6.14		mg/kg	2.10	0.204	2	05/01/19 18:30	05/03/19 19:44	EPA 3050B	1,6010D	AB
Potassium, Total	690		mg/kg	210	12.1	2	05/01/19 18:30	05/03/19 19:44	EPA 3050B	1,6010D	AB
Selenium, Total	ND		mg/kg	1.68	0.217	2	05/01/19 18:30	05/03/19 19:44	EPA 3050B	1,6010D	AB
Silver, Total	ND		mg/kg	0.841	0.238	2	05/01/19 18:30	05/03/19 19:44	EPA 3050B	1,6010D	AB
Sodium, Total	32.8	J	mg/kg	168	2.65	2	05/01/19 18:30	05/03/19 19:44	EPA 3050B	1,6010D	AB
Thallium, Total	ND		mg/kg	1.68	0.265	2	05/01/19 18:30	05/03/19 19:44	EPA 3050B	1,6010D	AB
Titanium, Total	182		mg/kg	0.841	0.155	2	05/01/19 18:30	05/03/19 19:44	EPA 3050B	1,6010D	AB
Vanadium, Total	7.76		mg/kg	0.841	0.171	2	05/01/19 18:30	05/03/19 19:44	EPA 3050B	1,6010D	AB
Zinc, Total	15.1		mg/kg	4.20	0.246	2	05/01/19 18:30	05/03/19 19:44	EPA 3050B	1,6010D	AB

General Chemistry - Mansfield Lab

Chromium, Trivalent	12		mg/kg	0.87	0.87	1		05/03/19 19:44	NA	107,-	



Project Name: CARMAN PL

Lab Number: L1917453

Project Number: 04736.005

Report Date: 05/09/19

SAMPLE RESULTS

Lab ID: L1917453-03

Date Collected: 04/26/19 16:20

Client ID: SB-3 11-13 FT BGS

Date Received: 04/26/19

Sample Location: HEMPSTEAD, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 95%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	2420		mg/kg	8.41	2.27	2	05/01/19 18:30	05/03/19 19:48	EPA 3050B	1,6010D	AB
Antimony, Total	0.446	J	mg/kg	4.21	0.320	2	05/01/19 18:30	05/03/19 19:48	EPA 3050B	1,6010D	AB
Arsenic, Total	1.78		mg/kg	0.841	0.175	2	05/01/19 18:30	05/03/19 19:48	EPA 3050B	1,6010D	AB
Barium, Total	14.8		mg/kg	0.841	0.146	2	05/01/19 18:30	05/03/19 19:48	EPA 3050B	1,6010D	AB
Beryllium, Total	0.135	J	mg/kg	0.421	0.028	2	05/01/19 18:30	05/03/19 19:48	EPA 3050B	1,6010D	AB
Cadmium, Total	0.177	J	mg/kg	0.841	0.082	2	05/01/19 18:30	05/03/19 19:48	EPA 3050B	1,6010D	AB
Calcium, Total	529		mg/kg	8.41	2.94	2	05/01/19 18:30	05/03/19 19:48	EPA 3050B	1,6010D	AB
Chromium, Total	24.8		mg/kg	0.841	0.081	2	05/01/19 18:30	05/03/19 19:48	EPA 3050B	1,6010D	AB
Cobalt, Total	2.55		mg/kg	1.68	0.140	2	05/01/19 18:30	05/03/19 19:48	EPA 3050B	1,6010D	AB
Copper, Total	6.01		mg/kg	0.841	0.217	2	05/01/19 18:30	05/03/19 19:48	EPA 3050B	1,6010D	AB
Iron, Total	8930		mg/kg	4.21	0.760	2	05/01/19 18:30	05/03/19 19:48	EPA 3050B	1,6010D	AB
Lead, Total	5.21		mg/kg	4.21	0.225	2	05/01/19 18:30	05/03/19 19:48	EPA 3050B	1,6010D	AB
Magnesium, Total	891		mg/kg	8.41	1.30	2	05/01/19 18:30	05/03/19 19:48	EPA 3050B	1,6010D	AB
Manganese, Total	116		mg/kg	0.841	0.134	2	05/01/19 18:30	05/03/19 19:48	EPA 3050B	1,6010D	AB
Mercury, Total	ND		mg/kg	0.066	0.014	1	04/30/19 05:20	04/30/19 21:19	EPA 7471B	1,7471B	EA
Molybdenum, Total	5.31		mg/kg	4.21	0.114	2	05/01/19 18:30	05/03/19 19:48	EPA 3050B	1,6010D	AB
Nickel, Total	7.32		mg/kg	2.10	0.204	2	05/01/19 18:30	05/03/19 19:48	EPA 3050B	1,6010D	AB
Potassium, Total	539		mg/kg	210	12.1	2	05/01/19 18:30	05/03/19 19:48	EPA 3050B	1,6010D	AB
Selenium, Total	ND		mg/kg	1.68	0.217	2	05/01/19 18:30	05/03/19 19:48	EPA 3050B	1,6010D	AB
Silver, Total	ND		mg/kg	0.841	0.238	2	05/01/19 18:30	05/03/19 19:48	EPA 3050B	1,6010D	AB
Sodium, Total	41.1	J	mg/kg	168	2.65	2	05/01/19 18:30	05/03/19 19:48	EPA 3050B	1,6010D	AB
Thallium, Total	ND		mg/kg	1.68	0.265	2	05/01/19 18:30	05/03/19 19:48	EPA 3050B	1,6010D	AB
Titanium, Total	161		mg/kg	0.841	0.155	2	05/01/19 18:30	05/03/19 19:48	EPA 3050B	1,6010D	AB
Vanadium, Total	8.79		mg/kg	0.841	0.171	2	05/01/19 18:30	05/03/19 19:48	EPA 3050B	1,6010D	AB
Zinc, Total	12.2		mg/kg	4.21	0.246	2	05/01/19 18:30	05/03/19 19:48	EPA 3050B	1,6010D	AB

General Chemistry - Mansfield Lab

Chromium, Trivalent	25		mg/kg	0.84	0.85	1		05/03/19 19:48	NA	107,-	



Project Name: CARMAN PL

Lab Number: L1917453

Project Number: 04736.005

Report Date: 05/09/19

SAMPLE RESULTS

Lab ID: L1917453-04

Date Collected: 04/26/19 16:55

Client ID: SB-4 0-5 FT BGS

Date Received: 04/26/19

Sample Location: HEMPSTEAD, 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	6750		mg/kg	8.48	2.29	2	05/01/19 18:30	05/03/19 19:53	EPA 3050B	1,6010D	AB
Antimony, Total	0.932	J	mg/kg	4.24	0.322	2	05/01/19 18:30	05/03/19 19:53	EPA 3050B	1,6010D	AB
Arsenic, Total	3.90		mg/kg	0.848	0.176	2	05/01/19 18:30	05/03/19 19:53	EPA 3050B	1,6010D	AB
Barium, Total	62.0		mg/kg	0.848	0.147	2	05/01/19 18:30	05/03/19 19:53	EPA 3050B	1,6010D	AB
Beryllium, Total	0.237	J	mg/kg	0.424	0.028	2	05/01/19 18:30	05/03/19 19:53	EPA 3050B	1,6010D	AB
Cadmium, Total	0.475	J	mg/kg	0.848	0.083	2	05/01/19 18:30	05/03/19 19:53	EPA 3050B	1,6010D	AB
Calcium, Total	12700		mg/kg	8.48	2.97	2	05/01/19 18:30	05/03/19 19:53	EPA 3050B	1,6010D	AB
Chromium, Total	13.0		mg/kg	0.848	0.081	2	05/01/19 18:30	05/03/19 19:53	EPA 3050B	1,6010D	AB
Cobalt, Total	3.83		mg/kg	1.70	0.141	2	05/01/19 18:30	05/03/19 19:53	EPA 3050B	1,6010D	AB
Copper, Total	23.0		mg/kg	0.848	0.219	2	05/01/19 18:30	05/03/19 19:53	EPA 3050B	1,6010D	AB
Iron, Total	10600		mg/kg	4.24	0.765	2	05/01/19 18:30	05/03/19 19:53	EPA 3050B	1,6010D	AB
Lead, Total	142		mg/kg	4.24	0.227	2	05/01/19 18:30	05/03/19 19:53	EPA 3050B	1,6010D	AB
Magnesium, Total	4790		mg/kg	8.48	1.30	2	05/01/19 18:30	05/03/19 19:53	EPA 3050B	1,6010D	AB
Manganese, Total	172		mg/kg	0.848	0.135	2	05/01/19 18:30	05/03/19 19:53	EPA 3050B	1,6010D	AB
Mercury, Total	0.177		mg/kg	0.070	0.015	1	04/30/19 05:20	04/30/19 21:21	EPA 7471B	1,7471B	EA
Molybdenum, Total	0.542	J	mg/kg	4.24	0.115	2	05/01/19 18:30	05/03/19 19:53	EPA 3050B	1,6010D	AB
Nickel, Total	8.42		mg/kg	2.12	0.205	2	05/01/19 18:30	05/03/19 19:53	EPA 3050B	1,6010D	AB
Potassium, Total	474		mg/kg	212	12.2	2	05/01/19 18:30	05/03/19 19:53	EPA 3050B	1,6010D	AB
Selenium, Total	0.424	J	mg/kg	1.70	0.219	2	05/01/19 18:30	05/03/19 19:53	EPA 3050B	1,6010D	AB
Silver, Total	ND		mg/kg	0.848	0.240	2	05/01/19 18:30	05/03/19 19:53	EPA 3050B	1,6010D	AB
Sodium, Total	90.0	J	mg/kg	170	2.67	2	05/01/19 18:30	05/03/19 19:53	EPA 3050B	1,6010D	AB
Thallium, Total	ND		mg/kg	1.70	0.267	2	05/01/19 18:30	05/03/19 19:53	EPA 3050B	1,6010D	AB
Titanium, Total	157		mg/kg	0.848	0.156	2	05/01/19 18:30	05/03/19 19:53	EPA 3050B	1,6010D	AB
Vanadium, Total	27.4		mg/kg	0.848	0.172	2	05/01/19 18:30	05/03/19 19:53	EPA 3050B	1,6010D	AB
Zinc, Total	84.0		mg/kg	4.24	0.248	2	05/01/19 18:30	05/03/19 19:53	EPA 3050B	1,6010D	AB
General Chemistry - Mansfield Lab											
Chromium, Trivalent	13		mg/kg	0.89	0.89	1		05/03/19 19:53	NA	107,-	



Project Name: CARMAN PL

Lab Number: L1917453

Project Number: 04736.005

Report Date: 05/09/19

SAMPLE RESULTS

Lab ID: L1917453-05

Date Collected: 04/26/19 10:50

Client ID: SB-5 19-20 FT BGS

Date Received: 04/26/19

Sample Location: HEMPSTEAD, 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	1250		mg/kg	8.72	2.35	2	05/01/19 18:30	05/03/19 20:12	EPA 3050B	1,6010D	AB
Antimony, Total	ND		mg/kg	4.36	0.331	2	05/01/19 18:30	05/03/19 20:12	EPA 3050B	1,6010D	AB
Arsenic, Total	0.523	J	mg/kg	0.872	0.181	2	05/01/19 18:30	05/03/19 20:12	EPA 3050B	1,6010D	AB
Barium, Total	5.99		mg/kg	0.872	0.152	2	05/01/19 18:30	05/03/19 20:12	EPA 3050B	1,6010D	AB
Beryllium, Total	0.079	J	mg/kg	0.436	0.029	2	05/01/19 18:30	05/03/19 20:12	EPA 3050B	1,6010D	AB
Cadmium, Total	ND		mg/kg	0.872	0.086	2	05/01/19 18:30	05/03/19 20:12	EPA 3050B	1,6010D	AB
Calcium, Total	41.8		mg/kg	8.72	3.05	2	05/01/19 18:30	05/03/19 20:12	EPA 3050B	1,6010D	AB
Chromium, Total	2.19		mg/kg	0.872	0.084	2	05/01/19 18:30	05/03/19 20:12	EPA 3050B	1,6010D	AB
Cobalt, Total	0.759	J	mg/kg	1.74	0.145	2	05/01/19 18:30	05/03/19 20:12	EPA 3050B	1,6010D	AB
Copper, Total	1.62		mg/kg	0.872	0.225	2	05/01/19 18:30	05/03/19 20:12	EPA 3050B	1,6010D	AB
Iron, Total	2610		mg/kg	4.36	0.787	2	05/01/19 18:30	05/03/19 20:12	EPA 3050B	1,6010D	AB
Lead, Total	0.846	J	mg/kg	4.36	0.234	2	05/01/19 18:30	05/03/19 20:12	EPA 3050B	1,6010D	AB
Magnesium, Total	187		mg/kg	8.72	1.34	2	05/01/19 18:30	05/03/19 20:12	EPA 3050B	1,6010D	AB
Manganese, Total	49.2		mg/kg	0.872	0.139	2	05/01/19 18:30	05/03/19 20:12	EPA 3050B	1,6010D	AB
Mercury, Total	ND		mg/kg	0.071	0.015	1	04/30/19 05:20	04/30/19 21:23	EPA 7471B	1,7471B	EA
Molybdenum, Total	0.235	J	mg/kg	4.36	0.118	2	05/01/19 18:30	05/03/19 20:12	EPA 3050B	1,6010D	AB
Nickel, Total	2.03	J	mg/kg	2.18	0.211	2	05/01/19 18:30	05/03/19 20:12	EPA 3050B	1,6010D	AB
Potassium, Total	129	J	mg/kg	218	12.6	2	05/01/19 18:30	05/03/19 20:12	EPA 3050B	1,6010D	AB
Selenium, Total	ND		mg/kg	1.74	0.225	2	05/01/19 18:30	05/03/19 20:12	EPA 3050B	1,6010D	AB
Silver, Total	ND		mg/kg	0.872	0.247	2	05/01/19 18:30	05/03/19 20:12	EPA 3050B	1,6010D	AB
Sodium, Total	62.4	J	mg/kg	174	2.75	2	05/01/19 18:30	05/03/19 20:12	EPA 3050B	1,6010D	AB
Thallium, Total	ND		mg/kg	1.74	0.275	2	05/01/19 18:30	05/03/19 20:12	EPA 3050B	1,6010D	AB
Titanium, Total	53.3		mg/kg	0.872	0.160	2	05/01/19 18:30	05/03/19 20:12	EPA 3050B	1,6010D	AB
Vanadium, Total	2.76		mg/kg	0.872	0.177	2	05/01/19 18:30	05/03/19 20:12	EPA 3050B	1,6010D	AB
Zinc, Total	4.99		mg/kg	4.36	0.256	2	05/01/19 18:30	05/03/19 20:12	EPA 3050B	1,6010D	AB
General Chemistry - Mansfield Lab											
Chromium, Trivalent	2.2		mg/kg	0.90	0.90	1		05/03/19 20:12	NA	107,-	



Project Name: CARMAN PL

Lab Number: L1917453

Project Number: 04736.005

Report Date: 05/09/19

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: WG1231763-1										
Mercury, Total	ND		mg/kg	0.083	0.018	1	04/30/19 05:20	04/30/19 15:09	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: WG1232465-1										
Aluminum, Total	ND		mg/kg	4.00	1.08	1	05/01/19 18:30	05/03/19 18:18	1,6010D	AB
Antimony, Total	ND		mg/kg	2.00	0.152	1	05/01/19 18:30	05/03/19 18:18	1,6010D	AB
Arsenic, Total	0.084	J	mg/kg	0.400	0.083	1	05/01/19 18:30	05/03/19 18:18	1,6010D	AB
Barium, Total	ND		mg/kg	0.400	0.070	1	05/01/19 18:30	05/03/19 18:18	1,6010D	AB
Beryllium, Total	ND		mg/kg	0.200	0.013	1	05/01/19 18:30	05/03/19 18:18	1,6010D	AB
Cadmium, Total	ND		mg/kg	0.400	0.039	1	05/01/19 18:30	05/03/19 18:18	1,6010D	AB
Calcium, Total	ND		mg/kg	4.00	1.40	1	05/01/19 18:30	05/03/19 18:18	1,6010D	AB
Chromium, Total	ND		mg/kg	0.400	0.038	1	05/01/19 18:30	05/03/19 18:18	1,6010D	AB
Cobalt, Total	ND		mg/kg	0.800	0.066	1	05/01/19 18:30	05/03/19 18:18	1,6010D	AB
Copper, Total	ND		mg/kg	0.400	0.103	1	05/01/19 18:30	05/03/19 18:18	1,6010D	AB
Iron, Total	0.400	J	mg/kg	2.00	0.361	1	05/01/19 18:30	05/03/19 18:18	1,6010D	AB
Lead, Total	ND		mg/kg	2.00	0.107	1	05/01/19 18:30	05/03/19 18:18	1,6010D	AB
Magnesium, Total	ND		mg/kg	4.00	0.616	1	05/01/19 18:30	05/03/19 18:18	1,6010D	AB
Manganese, Total	ND		mg/kg	0.400	0.064	1	05/01/19 18:30	05/03/19 18:18	1,6010D	AB
Molybdenum, Total	ND		mg/kg	2.00	0.054	1	05/01/19 18:30	05/03/19 18:18	1,6010D	AB
Nickel, Total	ND		mg/kg	1.00	0.097	1	05/01/19 18:30	05/03/19 18:18	1,6010D	AB
Potassium, Total	ND		mg/kg	100	5.76	1	05/01/19 18:30	05/03/19 18:18	1,6010D	AB
Selenium, Total	ND		mg/kg	0.800	0.103	1	05/01/19 18:30	05/03/19 18:18	1,6010D	AB
Silver, Total	ND		mg/kg	0.400	0.113	1	05/01/19 18:30	05/03/19 18:18	1,6010D	AB
Sodium, Total	2.17	J	mg/kg	80.0	1.26	1	05/01/19 18:30	05/03/19 18:18	1,6010D	AB
Thallium, Total	ND		mg/kg	0.800	0.126	1	05/01/19 18:30	05/03/19 18:18	1,6010D	AB
Titanium, Total	ND		mg/kg	0.400	0.074	1	05/01/19 18:30	05/03/19 18:18	1,6010D	AB
Vanadium, Total	ND		mg/kg	0.400	0.081	1	05/01/19 18:30	05/03/19 18:18	1,6010D	AB
Zinc, Total	ND		mg/kg	2.00	0.117	1	05/01/19 18:30	05/03/19 18:18	1,6010D	AB



Project Name: CARMAN PL

Lab Number: L1917453

Project Number: 04736.005

Report Date: 05/09/19

Method Blank Analysis Batch Quality Control

Prep Information

Digestion Method: EPA 3050B

Lab Control Sample Analysis Batch Quality Control

Project Name: CARMAN PL

Project Number: 04736.005

Lab Number: L1917453

Report Date: 05/09/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-05 Batch: WG1231763-2 SRM Lot Number: D101-540								
Mercury, Total	115		-		65-135	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: CARMAN PL

Project Number: 04736.005

Lab Number: L1917453

Report Date: 05/09/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-05 Batch: WG1232465-2 SRM Lot Number: D101-540					
Aluminum, Total	92	-	50-151	-	
Antimony, Total	167	-	3-196	-	
Arsenic, Total	113	-	83-117	-	
Barium, Total	107	-	83-118	-	
Beryllium, Total	110	-	83-117	-	
Cadmium, Total	105	-	83-117	-	
Calcium, Total	106	-	81-119	-	
Chromium, Total	113	-	81-118	-	
Cobalt, Total	107	-	84-116	-	
Copper, Total	110	-	83-116	-	
Iron, Total	124	-	62-138	-	
Lead, Total	107	-	83-117	-	
Magnesium, Total	98	-	76-124	-	
Manganese, Total	105	-	82-118	-	
Molybdenum, Total	109	-	80-120	-	
Nickel, Total	108	-	82-117	-	
Potassium, Total	102	-	71-130	-	
Selenium, Total	111	-	79-121	-	
Silver, Total	108	-	80-120	-	
Sodium, Total	106	-	72-127	-	
Thallium, Total	108	-	81-119	-	

Lab Control Sample Analysis Batch Quality Control

Project Name: CARMAN PL

Project Number: 04736.005

Lab Number: L1917453

Report Date: 05/09/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-05 Batch: WG1232465-2 SRM Lot Number: D101-540					
Titanium, Total	105	-	21-179	-	
Vanadium, Total	120	-	79-121	-	
Zinc, Total	106	-	81-119	-	

Matrix Spike Analysis

Batch Quality Control

Project Name: CARMAN PL

Lab Number: L1917453

Project Number: 04736.005

Report Date: 05/09/19

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: WG1231763-3 QC Sample: L1917644-01 Client ID: MS Sample												
Mercury, Total	0.046J	0.16	0.211	132	Q	-	-		80-120	-		20

Matrix Spike Analysis

Batch Quality Control

Project Name: CARMAN PL
Project Number: 04736.005

Lab Number: L1917453
Report Date: 05/09/19

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: WG1232465-3		QC Sample: L1917629-05		Client ID: MS Sample		
Aluminum, Total	6230	171	6720	287	Q	-	75-125	-	20
Antimony, Total	0.824J	42.7	35.1	82		-	75-125	-	20
Arsenic, Total	5.76	10.2	15.6	96		-	75-125	-	20
Barium, Total	33.4	171	186	89		-	75-125	-	20
Beryllium, Total	0.255J	4.27	4.13	97		-	75-125	-	20
Cadmium, Total	0.450J	4.35	4.06	93		-	75-125	-	20
Calcium, Total	38500	853	49100	1240	Q	-	75-125	-	20
Chromium, Total	9.05	17.1	23.8	86		-	75-125	-	20
Cobalt, Total	5.88	42.7	41.6	84		-	75-125	-	20
Copper, Total	21.4	21.3	40.9	91		-	75-125	-	20
Iron, Total	15500	85.3	15600	117		-	75-125	-	20
Lead, Total	7.39	43.5	44.5	85		-	75-125	-	20
Magnesium, Total	8320	853	9640	155	Q	-	75-125	-	20
Manganese, Total	415	42.7	431	37	Q	-	75-125	-	20
Molybdenum, Total	0.646J	85.3	72.6	85		-	75-125	-	20
Nickel, Total	15.6	42.7	50.1	81		-	75-125	-	20
Potassium, Total	356	853	1170	95		-	75-125	-	20
Selenium, Total	0.476J	10.2	10.1	99		-	75-125	-	20
Silver, Total	ND	25.6	23.9	93		-	75-125	-	20
Sodium, Total	60.9J	853	950	111		-	75-125	-	20
Thallium, Total	ND	10.2	7.78	76		-	75-125	-	20

Matrix Spike Analysis

Batch Quality Control

Project Name: CARMAN PL

Project Number: 04736.005

Lab Number: L1917453

Report Date: 05/09/19

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: WG1232465-3 QC Sample: L1917629-05 Client ID: MS Sample									
Titanium, Total	27.0	85.3	96.0	81	-	-	75-125	-	20
Vanadium, Total	11.8	42.7	49.2	88	-	-	75-125	-	20
Zinc, Total	70.1	42.7	102	75	-	-	75-125	-	20

Lab Duplicate Analysis
*Batch Quality Control***Project Name:** CARMAN PL**Project Number:** 04736.005**Lab Number:** L1917453**Report Date:** 05/09/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-05 QC Batch ID: WG1231763-4 QC Sample: L1917644-01 Client ID: DUP Sample						
Mercury, Total	0.046J	0.037J	mg/kg	NC		20

Project Name: CARMAN PL
Project Number: 04736.005

Lab Duplicate Analysis
Batch Quality Control

Lab Number: L1917453
Report Date: 05/09/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-05 QC Batch ID: WG1232465-4 QC Sample: L1917629-05 Client ID: DUP Sample					
Aluminum, Total	6230	5580	mg/kg	11	20
Antimony, Total	0.824J	0.772J	mg/kg	NC	20
Arsenic, Total	5.76	5.76	mg/kg	0	20
Barium, Total	33.4	29.8	mg/kg	11	20
Beryllium, Total	0.255J	0.233J	mg/kg	NC	20
Cadmium, Total	0.450J	0.394J	mg/kg	NC	20
Calcium, Total	38500	59000	mg/kg	42	Q 20
Chromium, Total	9.05	8.13	mg/kg	11	20
Cobalt, Total	5.88	5.23	mg/kg	12	20
Copper, Total	21.4	25.4	mg/kg	17	20
Iron, Total	15500	14200	mg/kg	9	20
Lead, Total	7.39	6.71	mg/kg	10	20
Magnesium, Total	8320	12000	mg/kg	36	Q 20
Manganese, Total	415	400	mg/kg	4	20
Nickel, Total	15.6	14.1	mg/kg	10	20
Potassium, Total	356	343	mg/kg	4	20
Selenium, Total	0.476J	0.434J	mg/kg	NC	20
Silver, Total	ND	ND	mg/kg	NC	20
Sodium, Total	60.9J	77.1J	mg/kg	NC	20

Lab Duplicate Analysis

Batch Quality Control

Project Name: CARMAN PL

Project Number: 04736.005

Lab Number: L1917453

Report Date: 05/09/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-05 QC Batch ID: WG1232465-4 QC Sample: L1917629-05 Client ID: DUP Sample					
Thallium, Total	ND	ND	mg/kg	NC	20
Vanadium, Total	11.8	10.4	mg/kg	13	20
Zinc, Total	70.1	61.1	mg/kg	14	20

INORGANICS & MISCELLANEOUS

Project Name: CARMAN PL

Project Number: 04736.005

Lab Number: L1917453

Report Date: 05/09/19

SAMPLE RESULTS

Lab ID: L1917453-01

Client ID: SB-1 17-19 FT BGS

Sample Location: HEMPSTEAD, NY

Date Collected: 04/26/19 13:10

Date Received: 04/26/19

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	-	04/27/19 11:27	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.1	0.24	1	04/30/19 15:45	05/01/19 11:33	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.894	0.179	1	04/29/19 00:55	04/29/19 10:32	1,7196A	NH



Project Name: CARMAN PL

Project Number: 04736.005

Lab Number: L1917453

Report Date: 05/09/19

SAMPLE RESULTS

Lab ID: L1917453-02

Client ID: SB-2 16-18 FT BGS

Sample Location: HEMPSTEAD, NY

Date Collected: 04/26/19 17:20

Date Received: 04/26/19

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	91.6		%	0.100	NA	1	-	04/27/19 11:27	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.0	0.22	1	04/30/19 15:45	05/01/19 11:39	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.873	0.175	1	04/29/19 00:55	04/29/19 10:32	1,7196A	NH



Project Name: CARMAN PL

Project Number: 04736.005

Lab Number: L1917453

Report Date: 05/09/19

SAMPLE RESULTS

Lab ID: L1917453-03

Client ID: SB-3 11-13 FT BGS

Sample Location: HEMPSTEAD, NY

Date Collected: 04/26/19 16:20

Date Received: 04/26/19

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	94.7		%	0.100	NA	1	-	04/27/19 11:27	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.0	0.21	1	04/30/19 15:45	05/01/19 11:40	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.845	0.169	1	04/29/19 00:55	04/29/19 10:32	1,7196A	NH



Project Name: CARMAN PL

Project Number: 04736.005

Lab Number: L1917453

Report Date: 05/09/19

SAMPLE RESULTS

Lab ID: L1917453-04

Client ID: SB-4 0-5 FT BGS

Sample Location: HEMPSTEAD, NY

Date Collected: 04/26/19 16:55

Date Received: 04/26/19

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	90.0		%	0.100	NA	1	-	04/27/19 11:27	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.1	0.23	1	04/30/19 15:45	05/01/19 11:41	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.889	0.178	1	04/29/19 00:55	04/29/19 10:32	1,7196A	NH



Project Name: CARMAN PL

Project Number: 04736.005

Lab Number: L1917453

Report Date: 05/09/19

SAMPLE RESULTS

Lab ID: L1917453-05

Client ID: SB-5 19-20 FT BGS

Sample Location: HEMPSTEAD, NY

Date Collected: 04/26/19 10:50

Date Received: 04/26/19

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	89.1		%	0.100	NA	1	-	04/27/19 11:27	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.1	0.23	1	04/30/19 15:45	05/01/19 11:42	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.898	0.180	1	04/29/19 00:55	04/29/19 10:32	1,7196A	NH



Project Name: CARMAN PL

Lab Number: L1917453

Project Number: 04736.005

Report Date: 05/09/19

Method Blank Analysis Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01-05 Batch: WG1231318-1										
Chromium, Hexavalent	ND		mg/kg	0.800	0.160	1	04/29/19 00:55	04/29/19 10:32	1,7196A	NH
General Chemistry - Westborough Lab for sample(s): 01-05 Batch: WG1231563-1										
Cyanide, Total	ND		mg/kg	0.89	0.19	1	04/30/19 15:45	05/01/19 11:09	1,9010C/9012B	LH

Lab Control Sample Analysis

Batch Quality Control

Project Name: CARMAN PL
Project Number: 04736.005

Lab Number: L1917453
Report Date: 05/09/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-05 Batch: WG1231318-2								
Chromium, Hexavalent	86		-		80-120	-		20
General Chemistry - Westborough Lab Associated sample(s): 01-05 Batch: WG1231563-2 WG1231563-3								
Cyanide, Total	62	Q	80		80-120	30		35

Matrix Spike Analysis Batch Quality Control

Project Name: CARMAN PL

Lab Number: L1917453

Project Number: 04736.005

Report Date: 05/09/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-05 QC Batch ID: WG1231318-4 QC Sample: L1917453-05 Client ID: SB-5 19-20 FT BGS												
Chromium, Hexavalent	ND	1040	1100	105		-	-		75-125	-		20
General Chemistry - Westborough Lab Associated sample(s): 01-05 QC Batch ID: WG1231563-4 WG1231563-5 QC Sample: L1917453-01 Client ID: SB-1 17-19 FT BGS												
Cyanide, Total	ND	11	10	91		10	91		75-125	0		35

Lab Duplicate Analysis

Batch Quality Control

Project Name: CARMAN PL

Project Number: 04736.005

Lab Number: L1917453

Report Date: 05/09/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-05 QC Batch ID: WG1231044-1 QC Sample: L1917453-01 Client ID: SB-1 17-19 FT BGS						
Solids, Total	89.5	90.9	%	2		20
General Chemistry - Westborough Lab Associated sample(s): 01-05 QC Batch ID: WG1231318-6 QC Sample: L1917453-05 Client ID: SB-5 19-20 FT BGS						
Chromium, Hexavalent	ND	ND	mg/kg	NC		20

Project Name: CARMAN PL
Project Number: 04736.005

Serial_No:05091909:29
Lab Number: L1917453
Report Date: 05/09/19

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(*)
L1917453-01A	Vial MeOH preserved	A	NA		2.4	Y	Absent		NYTCL-8260HLW(14)
L1917453-01B	Vial water preserved	A	NA		2.4	Y	Absent	27-APR-19 06:04	NYTCL-8260HLW(14)
L1917453-01C	Vial water preserved	A	NA		2.4	Y	Absent	27-APR-19 06:04	NYTCL-8260HLW(14)
L1917453-01D	Plastic 2oz unpreserved for TS	A	NA		2.4	Y	Absent		TS(7)
L1917453-01E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		2.4	Y	Absent		BE-Ti(180),AS-Ti(180),BA-Ti(180),AG-Ti(180),CR-Ti(180),NI-Ti(180),CU-Ti(180),PB-Ti(180),SE-Ti(180),ZN-Ti(180),HG-T(28),MN-Ti(180),CD-Ti(180)
L1917453-01F	Glass 120ml/4oz unpreserved	A	NA		2.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),HEXCR-7196(30)
L1917453-01G	Glass 120ml/4oz unpreserved	A	NA		2.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),HEXCR-7196(30)
L1917453-02A	Vial MeOH preserved	A	NA		2.4	Y	Absent		NYTCL-8260HLW(14)
L1917453-02B	Vial water preserved	A	NA		2.4	Y	Absent	27-APR-19 06:04	NYTCL-8260HLW(14)
L1917453-02C	Vial water preserved	A	NA		2.4	Y	Absent	27-APR-19 06:04	NYTCL-8260HLW(14)
L1917453-02D	Plastic 2oz unpreserved for TS	A	NA		2.4	Y	Absent		TS(7)
L1917453-02E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		2.4	Y	Absent		BE-Ti(180),AS-Ti(180),BA-Ti(180),AG-Ti(180),CR-Ti(180),NI-Ti(180),CU-Ti(180),PB-Ti(180),SE-Ti(180),ZN-Ti(180),HG-T(28),MN-Ti(180),CD-Ti(180)
L1917453-02F	Glass 120ml/4oz unpreserved	A	NA		2.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),HEXCR-7196(30)
L1917453-02G	Glass 120ml/4oz unpreserved	A	NA		2.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),HEXCR-7196(30)
L1917453-03A	Vial MeOH preserved	A	NA		2.4	Y	Absent		NYTCL-8260HLW(14)
L1917453-03B	Vial water preserved	A	NA		2.4	Y	Absent	27-APR-19 06:04	NYTCL-8260HLW(14)
L1917453-03C	Vial water preserved	A	NA		2.4	Y	Absent	27-APR-19 06:04	NYTCL-8260HLW(14)
L1917453-03D	Plastic 2oz unpreserved for TS	A	NA		2.4	Y	Absent		TS(7)

Project Name: CARMAN PL
Project Number: 04736.005

Serial_No: 05091909:29
Lab Number: L1917453
Report Date: 05/09/19

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1917453-03E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		2.4	Y	Absent		BE-Ti(180),AS-Ti(180),BA-Ti(180),AG-Ti(180),CR-Ti(180),NI-Ti(180),CU-Ti(180),PB-Ti(180),SE-Ti(180),ZN-Ti(180),HG-T(28),MN-Ti(180),CD-Ti(180)
L1917453-03F	Glass 120ml/4oz unpreserved	A	NA		2.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),HEXCR-7196(30)
L1917453-03G	Glass 120ml/4oz unpreserved	A	NA		2.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),HEXCR-7196(30)
L1917453-04A	Vial MeOH preserved	A	NA		2.4	Y	Absent		NYTCL-8260HLW(14)
L1917453-04B	Vial water preserved	A	NA		2.4	Y	Absent	27-APR-19 06:04	NYTCL-8260HLW(14)
L1917453-04C	Vial water preserved	A	NA		2.4	Y	Absent	27-APR-19 06:04	NYTCL-8260HLW(14)
L1917453-04D	Plastic 2oz unpreserved for TS	A	NA		2.4	Y	Absent		TS(7)
L1917453-04E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		2.4	Y	Absent		BE-Ti(180),AS-Ti(180),BA-Ti(180),AG-Ti(180),CR-Ti(180),NI-Ti(180),CU-Ti(180),PB-Ti(180),SE-Ti(180),ZN-Ti(180),HG-T(28),MN-Ti(180),CD-Ti(180)
L1917453-04F	Glass 120ml/4oz unpreserved	A	NA		2.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),HEXCR-7196(30)
L1917453-04G	Glass 120ml/4oz unpreserved	A	NA		2.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),HEXCR-7196(30)
L1917453-05A	Vial MeOH preserved	A	NA		2.4	Y	Absent		NYTCL-8260HLW(14)
L1917453-05B	Vial water preserved	A	NA		2.4	Y	Absent	27-APR-19 06:04	NYTCL-8260HLW(14)
L1917453-05C	Vial water preserved	A	NA		2.4	Y	Absent	27-APR-19 06:04	NYTCL-8260HLW(14)
L1917453-05D	Plastic 2oz unpreserved for TS	A	NA		2.4	Y	Absent		TS(7)
L1917453-05E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		2.4	Y	Absent		BE-Ti(180),AS-Ti(180),BA-Ti(180),AG-Ti(180),CR-Ti(180),NI-Ti(180),CU-Ti(180),PB-Ti(180),SE-Ti(180),ZN-Ti(180),HG-T(28),MN-Ti(180),CD-Ti(180)
L1917453-05F	Glass 120ml/4oz unpreserved	A	NA		2.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),HEXCR-7196(30)
L1917453-05G	Glass 120ml/4oz unpreserved	A	NA		2.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),HEXCR-7196(30)

Project Name: CARMAN PL
Project Number: 04736.005

Lab Number: L1917453
Report Date: 05/09/19

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: CARMAN PL
Project Number: 04736.005

Lab Number: L1917453
Report Date: 05/09/19

- 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.

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: CARMAN PL
Project Number: 04736.005

Lab Number: L1917453
Report Date: 05/09/19

REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.
- 107 Alpha Analytical - In-house calculation method.
- 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**

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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.

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of 1

4/27/10

61917453

PO# 04736.005

☐ NJ ☐ NY
☐ Other: _____

X	X	X	X	TCL SVOCs
X	X	X	X	TCL VOCs
X	X	X	X	TAL Metals
X	X	X	X	Hex. Chromium
X	X	X	X	Total C-Met

17453-01	SB-1	17-19 RT bgs	4/26/19	1:10 pm	S	CI
02	SB-2	16-18 FT bgs	"	5:20 pm	S	CI
03	SB-3	11-13 RT bgs	"	4:20 pm	S	CI
04	SB-4	0-5 FT bgs	"	4:55 pm	S	CI
05	SB-5	19-20 RT bgs	"	10:50 am	S	CI

A	✓	A	A	F

A		A	A	A

4/26/91 1730

1/26/92 33
11/27/92 035

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ANALYTICAL REPORT

Lab Number:	L1930261
Client:	PS&S Engineering, Inc. 1 Larkin Plaza 2nd Floor Yonkers, NY 10701
ATTN:	Camila Israel
Phone:	(914) 509-8616
Project Name:	CARMAN PLACE
Project Number:	04736-0005-11
Report Date:	07/29/19

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: CARMAN PLACE
Project Number: 04736-0005-11

Lab Number: L1930261
Report Date: 07/29/19

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1930261-01	SB-101	SOIL	123-169 MAIN ST., HEMPSTEAD, NY	07/10/19 16:35	07/11/19
L1930261-02	SB-102	SOIL	123-169 MAIN ST., HEMPSTEAD, NY	07/10/19 15:20	07/11/19
L1930261-03	SB-103	SOIL	123-169 MAIN ST., HEMPSTEAD, NY	07/10/19 14:55	07/11/19
L1930261-04	SB-104	SOIL	123-169 MAIN ST., HEMPSTEAD, NY	07/10/19 14:25	07/11/19
L1930261-05	SB-105	SOIL	123-169 MAIN ST., HEMPSTEAD, NY	07/10/19 12:00	07/11/19
L1930261-06	MW-101	WATER	123-169 MAIN ST., HEMPSTEAD, NY	07/10/19 17:20	07/11/19
L1930261-07	MW-105	WATER	123-169 MAIN ST., HEMPSTEAD, NY	07/10/19 13:35	07/11/19
L1930261-08	FIELD BLANK	WATER	123-169 MAIN ST., HEMPSTEAD, NY	07/10/19 00:00	07/11/19

Project Name: CARMAN PLACE
Project Number: 04736-0005-11

Lab Number: L1930261
Report Date: 07/29/19

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: CARMAN PLACE
Project Number: 04736-0005-11

Lab Number: L1930261
Report Date: 07/29/19

Case Narrative (continued)

Report Submission

July 29, 2019: This final report includes the results of all requested analyses.

July 29, 2019: This is a preliminary report.

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

The analysis of Total Cyanide was performed at the client's request.

L1930261-06 and -07: The sample was received without the container for the Total Cyanide analysis. An aliquot was taken from an unpreserved container and preserved appropriately.

Volatile Organics

L1930261-01: The analysis of Volatile Organics by EPA Method 5035/8260 Low Level could not be performed due to the elevated concentrations of non-target compounds in the sample.

Perfluorinated Alkyl Acids by Isotope Dilution

WG1264962-3: The continuing calibration standard had the response for 8:2FTS and NMeFOSAA outside the acceptance criteria for the method. This value represents less than 10% of all compounds; therefore, the calibration was accepted.

WG1262377-3: The continuing calibration standard had the response for Perfluorooctanesulfonic Acid-Branched (br-PFOS) outside of acceptance criteria. The response for Perfluorooctanesulfonic Acid (PFOS) was within acceptance criteria; therefore, no further action was taken.

WG1262377-4: The continuing calibration standard had the response for NMeFOSAA above the acceptance criteria for the method. The associated samples were non-detect; therefore, no further action was taken.

Project Name: CARMAN PLACE
Project Number: 04736-0005-11

Lab Number: L1930261
Report Date: 07/29/19

Case Narrative (continued)

Total Metals

L1930261-01 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.

Cyanide, Total

The WG1259928-2 LCS recovery (73%), associated with L1930261-01 through -04, is outside our in-house acceptance criteria, but within the vendor-certified acceptance limits. The results of the original analyses are reported.

The WG1260396-2 LCS recovery (67%), associated with L1930261-05, is outside our in-house acceptance criteria, but within the vendor-certified acceptance limits. The results of the original analyses are reported.

WG1261047: A Matrix Spike and Matrix Spike Duplicate were prepared with the sample batch, however, the native sample was not available for reporting; therefore, the Matrix Spike and Matrix Spike Duplicate results could not be reported.

Hexavalent Chromium

L1930261-06 and -07 were analyzed with the method required holding time exceeded.

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: 07/29/19

ORGANICS

VOLATILES

Project Name: CARMAN PLACE**Lab Number:** L1930261**Project Number:** 04736-0005-11**Report Date:** 07/29/19**SAMPLE RESULTS**

Lab ID: L1930261-01
 Client ID: SB-101
 Sample Location: 123-169 MAIN ST., HEMPSTEAD, NY

Date Collected: 07/10/19 16:35
 Date Received: 07/11/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 07/22/19 08:11
 Analyst: MV
 Percent Solids: 93%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Methylene chloride	ND		ug/kg	270	120	1
1,1-Dichloroethane	ND		ug/kg	55	7.9	1
Chloroform	ND		ug/kg	82	7.6	1
Carbon tetrachloride	ND		ug/kg	55	12.	1
1,2-Dichloropropane	ND		ug/kg	55	6.8	1
Dibromochloromethane	ND		ug/kg	55	7.6	1
1,1,2-Trichloroethane	ND		ug/kg	55	14.	1
Tetrachloroethene	ND		ug/kg	27	11.	1
Chlorobenzene	ND		ug/kg	27	6.9	1
Trichlorofluoromethane	ND		ug/kg	220	38.	1
1,2-Dichloroethane	ND		ug/kg	55	14.	1
1,1,1-Trichloroethane	ND		ug/kg	27	9.1	1
Bromodichloromethane	ND		ug/kg	27	6.0	1
trans-1,3-Dichloropropene	ND		ug/kg	55	15.	1
cis-1,3-Dichloropropene	ND		ug/kg	27	8.6	1
1,3-Dichloropropene, Total	ND		ug/kg	27	8.6	1
1,1-Dichloropropene	ND		ug/kg	27	8.7	1
Bromoform	ND		ug/kg	220	13.	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	27	9.1	1
Benzene	20	J	ug/kg	27	9.1	1
Toluene	81		ug/kg	55	30.	1
Ethylbenzene	ND		ug/kg	55	7.7	1
Chloromethane	ND		ug/kg	220	51.	1
Bromomethane	ND		ug/kg	110	32.	1
Vinyl chloride	ND		ug/kg	55	18.	1
Chloroethane	ND		ug/kg	110	25.	1
1,1-Dichloroethene	ND		ug/kg	55	13.	1
trans-1,2-Dichloroethene	ND		ug/kg	82	7.5	1

Project Name: CARMAN PLACE

Lab Number: L1930261

Project Number: 04736-0005-11

Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930261-01

Date Collected: 07/10/19 16:35

Client ID: SB-101

Date Received: 07/11/19

Sample Location: 123-169 MAIN ST., HEMPSTEAD, 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	27	7.5	1
1,2-Dichlorobenzene	ND		ug/kg	110	7.9	1
1,3-Dichlorobenzene	ND		ug/kg	110	8.1	1
1,4-Dichlorobenzene	ND		ug/kg	110	9.3	1
Methyl tert butyl ether	ND		ug/kg	110	11.	1
p/m-Xylene	ND		ug/kg	110	30.	1
o-Xylene	ND		ug/kg	55	16.	1
Xylenes, Total	ND		ug/kg	55	16.	1
cis-1,2-Dichloroethene	ND		ug/kg	55	9.6	1
1,2-Dichloroethene, Total	ND		ug/kg	55	7.5	1
Dibromomethane	ND		ug/kg	110	13.	1
Styrene	ND		ug/kg	55	11.	1
Dichlorodifluoromethane	ND		ug/kg	550	50.	1
Acetone	ND		ug/kg	550	260	1
Carbon disulfide	ND		ug/kg	550	250	1
2-Butanone	ND		ug/kg	550	120	1
Vinyl acetate	ND		ug/kg	550	120	1
4-Methyl-2-pentanone	ND		ug/kg	550	70.	1
1,2,3-Trichloropropane	ND		ug/kg	110	6.9	1
2-Hexanone	ND		ug/kg	550	64.	1
Bromochloromethane	ND		ug/kg	110	11.	1
2,2-Dichloropropane	ND		ug/kg	110	11.	1
1,2-Dibromoethane	ND		ug/kg	55	15.	1
1,3-Dichloropropane	ND		ug/kg	110	9.1	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	27	7.2	1
Bromobenzene	ND		ug/kg	110	7.9	1
n-Butylbenzene	ND		ug/kg	55	9.1	1
sec-Butylbenzene	ND		ug/kg	55	8.0	1
tert-Butylbenzene	ND		ug/kg	110	6.4	1
o-Chlorotoluene	ND		ug/kg	110	10.	1
p-Chlorotoluene	ND		ug/kg	110	5.9	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	160	54.	1
Hexachlorobutadiene	ND		ug/kg	220	9.2	1
Isopropylbenzene	ND		ug/kg	55	6.0	1
p-Isopropyltoluene	28	J	ug/kg	55	6.0	1
Naphthalene	77	J	ug/kg	220	36.	1
Acrylonitrile	ND		ug/kg	220	63.	1

Project Name: CARMAN PLACE**Lab Number:** L1930261**Project Number:** 04736-0005-11**Report Date:** 07/29/19**SAMPLE RESULTS****Lab ID:** L1930261-01**Date Collected:** 07/10/19 16:35**Client ID:** SB-101**Date Received:** 07/11/19**Sample Location:** 123-169 MAIN ST., HEMPSTEAD, NY**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	55	9.3	1
1,2,3-Trichlorobenzene	ND		ug/kg	110	18.	1
1,2,4-Trichlorobenzene	ND		ug/kg	110	15.	1
1,3,5-Trimethylbenzene	ND		ug/kg	110	10.	1
1,2,4-Trimethylbenzene	ND		ug/kg	110	18.	1
1,4-Dioxane	ND		ug/kg	4400	1900	1
p-Diethylbenzene	ND		ug/kg	110	9.7	1
p-Ethyltoluene	ND		ug/kg	110	21.	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	110	10.	1
Ethyl ether	ND		ug/kg	110	19.	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	270	78.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	83		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	92		70-130

Project Name: CARMAN PLACE**Lab Number:** L1930261**Project Number:** 04736-0005-11**Report Date:** 07/29/19**SAMPLE RESULTS**

Lab ID: L1930261-02
 Client ID: SB-102
 Sample Location: 123-169 MAIN ST., HEMPSTEAD, NY

Date Collected: 07/10/19 15:20
 Date Received: 07/11/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 07/22/19 08:37
 Analyst: MV
 Percent Solids: 96%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Methylene chloride	ND		ug/kg	290	130	1
1,1-Dichloroethane	ND		ug/kg	59	8.5	1
Chloroform	ND		ug/kg	88	8.2	1
Carbon tetrachloride	ND		ug/kg	59	14.	1
1,2-Dichloropropane	ND		ug/kg	59	7.3	1
Dibromochloromethane	ND		ug/kg	59	8.2	1
1,1,2-Trichloroethane	ND		ug/kg	59	16.	1
Tetrachloroethene	ND		ug/kg	29	12.	1
Chlorobenzene	ND		ug/kg	29	7.5	1
Trichlorofluoromethane	ND		ug/kg	240	41.	1
1,2-Dichloroethane	ND		ug/kg	59	15.	1
1,1,1-Trichloroethane	ND		ug/kg	29	9.8	1
Bromodichloromethane	ND		ug/kg	29	6.4	1
trans-1,3-Dichloropropene	ND		ug/kg	59	16.	1
cis-1,3-Dichloropropene	ND		ug/kg	29	9.3	1
1,3-Dichloropropene, Total	ND		ug/kg	29	9.3	1
1,1-Dichloropropene	ND		ug/kg	29	9.3	1
Bromoform	ND		ug/kg	240	14.	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	29	9.8	1
Benzene	ND		ug/kg	29	9.8	1
Toluene	ND		ug/kg	59	32.	1
Ethylbenzene	210		ug/kg	59	8.3	1
Chloromethane	ND		ug/kg	240	55.	1
Bromomethane	ND		ug/kg	120	34.	1
Vinyl chloride	ND		ug/kg	59	20.	1
Chloroethane	ND		ug/kg	120	26.	1
1,1-Dichloroethene	ND		ug/kg	59	14.	1
trans-1,2-Dichloroethene	ND		ug/kg	88	8.0	1

Project Name: CARMAN PLACE

Lab Number: L1930261

Project Number: 04736-0005-11

Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930261-02

Date Collected: 07/10/19 15:20

Client ID: SB-102

Date Received: 07/11/19

Sample Location: 123-169 MAIN ST., HEMPSTEAD, 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	29	8.0	1
1,2-Dichlorobenzene	ND		ug/kg	120	8.5	1
1,3-Dichlorobenzene	ND		ug/kg	120	8.7	1
1,4-Dichlorobenzene	ND		ug/kg	120	10.	1
Methyl tert butyl ether	ND		ug/kg	120	12.	1
p/m-Xylene	1400		ug/kg	120	33.	1
o-Xylene	490		ug/kg	59	17.	1
Xylenes, Total	1900		ug/kg	59	17.	1
cis-1,2-Dichloroethene	ND		ug/kg	59	10.	1
1,2-Dichloroethene, Total	ND		ug/kg	59	8.0	1
Dibromomethane	ND		ug/kg	120	14.	1
Styrene	ND		ug/kg	59	12.	1
Dichlorodifluoromethane	ND		ug/kg	590	54.	1
Acetone	ND		ug/kg	590	280	1
Carbon disulfide	ND		ug/kg	590	270	1
2-Butanone	ND		ug/kg	590	130	1
Vinyl acetate	ND		ug/kg	590	130	1
4-Methyl-2-pentanone	ND		ug/kg	590	75.	1
1,2,3-Trichloropropane	ND		ug/kg	120	7.5	1
2-Hexanone	ND		ug/kg	590	69.	1
Bromochloromethane	ND		ug/kg	120	12.	1
2,2-Dichloropropane	ND		ug/kg	120	12.	1
1,2-Dibromoethane	ND		ug/kg	59	16.	1
1,3-Dichloropropane	ND		ug/kg	120	9.8	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	29	7.8	1
Bromobenzene	ND		ug/kg	120	8.5	1
n-Butylbenzene	ND		ug/kg	59	9.8	1
sec-Butylbenzene	ND		ug/kg	59	8.6	1
tert-Butylbenzene	ND		ug/kg	120	6.9	1
o-Chlorotoluene	ND		ug/kg	120	11.	1
p-Chlorotoluene	ND		ug/kg	120	6.3	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	180	59.	1
Hexachlorobutadiene	ND		ug/kg	240	9.9	1
Isopropylbenzene	ND		ug/kg	59	6.4	1
p-Isopropyltoluene	ND		ug/kg	59	6.4	1
Naphthalene	45	J	ug/kg	240	38.	1
Acrylonitrile	ND		ug/kg	240	68.	1

Project Name: CARMAN PLACE**Lab Number:** L1930261**Project Number:** 04736-0005-11**Report Date:** 07/29/19**SAMPLE RESULTS****Lab ID:** L1930261-02**Date Collected:** 07/10/19 15:20**Client ID:** SB-102**Date Received:** 07/11/19**Sample Location:** 123-169 MAIN ST., HEMPSTEAD, NY**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	59	10.	1
1,2,3-Trichlorobenzene	ND		ug/kg	120	19.	1
1,2,4-Trichlorobenzene	ND		ug/kg	120	16.	1
1,3,5-Trimethylbenzene	ND		ug/kg	120	11.	1
1,2,4-Trimethylbenzene	26	J	ug/kg	120	20.	1
1,4-Dioxane	ND		ug/kg	4700	2100	1
p-Diethylbenzene	ND		ug/kg	120	10.	1
p-Ethyltoluene	23	J	ug/kg	120	22.	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	120	11.	1
Ethyl ether	ND		ug/kg	120	20.	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	290	83.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	84		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	93		70-130

Project Name: CARMAN PLACE**Lab Number:** L1930261**Project Number:** 04736-0005-11**Report Date:** 07/29/19**SAMPLE RESULTS**

Lab ID: L1930261-03
 Client ID: SB-103
 Sample Location: 123-169 MAIN ST., HEMPSTEAD, NY

Date Collected: 07/10/19 14:55
 Date Received: 07/11/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 07/21/19 19:06
 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	5.7	2.6	1
1,1-Dichloroethane	ND		ug/kg	1.1	0.17	1
Chloroform	ND		ug/kg	1.7	0.16	1
Carbon tetrachloride	ND		ug/kg	1.1	0.26	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	0.31	1
Tetrachloroethene	ND		ug/kg	0.57	0.22	1
Chlorobenzene	ND		ug/kg	0.57	0.14	1
Trichlorofluoromethane	ND		ug/kg	4.6	0.80	1
1,2-Dichloroethane	ND		ug/kg	1.1	0.29	1
1,1,1-Trichloroethane	ND		ug/kg	0.57	0.19	1
Bromodichloromethane	ND		ug/kg	0.57	0.12	1
trans-1,3-Dichloropropene	ND		ug/kg	1.1	0.31	1
cis-1,3-Dichloropropene	ND		ug/kg	0.57	0.18	1
1,3-Dichloropropene, Total	ND		ug/kg	0.57	0.18	1
1,1-Dichloropropene	ND		ug/kg	0.57	0.18	1
Bromoform	ND		ug/kg	4.6	0.28	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.57	0.19	1
Benzene	ND		ug/kg	0.57	0.19	1
Toluene	ND		ug/kg	1.1	0.62	1
Ethylbenzene	ND		ug/kg	1.1	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	1.1	0.38	1
Chloroethane	ND		ug/kg	2.3	0.52	1
1,1-Dichloroethene	ND		ug/kg	1.1	0.27	1
trans-1,2-Dichloroethene	ND		ug/kg	1.7	0.16	1

Project Name: CARMAN PLACE

Lab Number: L1930261

Project Number: 04736-0005-11

Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930261-03

Date Collected: 07/10/19 14:55

Client ID: SB-103

Date Received: 07/11/19

Sample Location: 123-169 MAIN ST., HEMPSTEAD, 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	0.57	0.16	1
1,2-Dichlorobenzene	ND		ug/kg	2.3	0.16	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	0.64	1
o-Xylene	ND		ug/kg	1.1	0.33	1
Xylenes, Total	ND		ug/kg	1.1	0.33	1
cis-1,2-Dichloroethene	ND		ug/kg	1.1	0.20	1
1,2-Dichloroethene, Total	ND		ug/kg	1.1	0.16	1
Dibromomethane	ND		ug/kg	2.3	0.27	1
Styrene	ND		ug/kg	1.1	0.22	1
Dichlorodifluoromethane	ND		ug/kg	11	1.0	1
Acetone	12		ug/kg	11	5.5	1
Carbon disulfide	ND		ug/kg	11	5.2	1
2-Butanone	ND		ug/kg	11	2.5	1
Vinyl acetate	ND		ug/kg	11	2.5	1
4-Methyl-2-pentanone	ND		ug/kg	11	1.5	1
1,2,3-Trichloropropane	ND		ug/kg	2.3	0.14	1
2-Hexanone	ND		ug/kg	11	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	1.1	0.32	1
1,3-Dichloropropane	ND		ug/kg	2.3	0.19	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.57	0.15	1
Bromobenzene	ND		ug/kg	2.3	0.17	1
n-Butylbenzene	ND		ug/kg	1.1	0.19	1
sec-Butylbenzene	ND		ug/kg	1.1	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	3.4	1.1	1
Hexachlorobutadiene	ND		ug/kg	4.6	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	4.6	0.74	1
Acrylonitrile	ND		ug/kg	4.6	1.3	1

Project Name: CARMAN PLACE**Lab Number:** L1930261**Project Number:** 04736-0005-11**Report Date:** 07/29/19**SAMPLE RESULTS****Lab ID:** L1930261-03**Date Collected:** 07/10/19 14:55**Client ID:** SB-103**Date Received:** 07/11/19**Sample Location:** 123-169 MAIN ST., HEMPSTEAD, 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	0.20	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.3	0.37	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.3	0.31	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.3	0.22	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.3	0.38	1
1,4-Dioxane	ND		ug/kg	92	40.	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	0.39	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.7	1.6	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	119		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	106		70-130
Dibromofluoromethane	102		70-130

Project Name: CARMAN PLACE**Lab Number:** L1930261**Project Number:** 04736-0005-11**Report Date:** 07/29/19**SAMPLE RESULTS**

Lab ID: L1930261-04
 Client ID: SB-104
 Sample Location: 123-169 MAIN ST., HEMPSTEAD, NY

Date Collected: 07/10/19 14:25
 Date Received: 07/11/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 07/21/19 19:31
 Analyst: JC
 Percent Solids: 97%

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	1.6	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	0.55	0.22	1
Chlorobenzene	ND		ug/kg	0.55	0.14	1
Trichlorofluoromethane	ND		ug/kg	4.4	0.76	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	0.17	1
1,3-Dichloropropene, Total	ND		ug/kg	0.55	0.17	1
1,1-Dichloropropene	ND		ug/kg	0.55	0.17	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	1.2		ug/kg	1.1	0.15	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	1.6	0.15	1

Project Name: CARMAN PLACE

Lab Number: L1930261

Project Number: 04736-0005-11

Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930261-04

Date Collected: 07/10/19 14:25

Client ID: SB-104

Date Received: 07/11/19

Sample Location: 123-169 MAIN ST., HEMPSTEAD, 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	7.3		ug/kg	2.2	0.61	1
o-Xylene	2.9		ug/kg	1.1	0.32	1
Xylenes, Total	10		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	18		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	0.22	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	0.14	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	3.3	1.1	1
Hexachlorobutadiene	ND		ug/kg	4.4	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	4.4	0.71	1
Acrylonitrile	ND		ug/kg	4.4	1.3	1

Project Name: CARMAN PLACE**Lab Number:** L1930261**Project Number:** 04736-0005-11**Report Date:** 07/29/19**SAMPLE RESULTS****Lab ID:** L1930261-04**Date Collected:** 07/10/19 14:25**Client ID:** SB-104**Date Received:** 07/11/19**Sample Location:** 123-169 MAIN ST., HEMPSTEAD, 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	0.19	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	0.37	1
1,4-Dioxane	ND		ug/kg	88	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	5.5	1.6	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	116		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	113		70-130
Dibromofluoromethane	102		70-130

Project Name: CARMAN PLACE**Lab Number:** L1930261**Project Number:** 04736-0005-11**Report Date:** 07/29/19**SAMPLE RESULTS**

Lab ID: L1930261-05
 Client ID: SB-105
 Sample Location: 123-169 MAIN ST., HEMPSTEAD, NY

Date Collected: 07/10/19 12:00
 Date Received: 07/11/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 07/21/19 19:57
 Analyst: JC
 Percent Solids: 93%

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	0.97	0.14	1
Chloroform	ND		ug/kg	1.4	0.14	1
Carbon tetrachloride	ND		ug/kg	0.97	0.22	1
1,2-Dichloropropane	ND		ug/kg	0.97	0.12	1
Dibromochloromethane	ND		ug/kg	0.97	0.14	1
1,1,2-Trichloroethane	ND		ug/kg	0.97	0.26	1
Tetrachloroethene	ND		ug/kg	0.48	0.19	1
Chlorobenzene	ND		ug/kg	0.48	0.12	1
Trichlorofluoromethane	ND		ug/kg	3.9	0.67	1
1,2-Dichloroethane	ND		ug/kg	0.97	0.25	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	0.97	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	3.9	0.24	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	0.97	0.53	1
Ethylbenzene	ND		ug/kg	0.97	0.14	1
Chloromethane	ND		ug/kg	3.9	0.90	1
Bromomethane	ND		ug/kg	1.9	0.56	1
Vinyl chloride	ND		ug/kg	0.97	0.32	1
Chloroethane	ND		ug/kg	1.9	0.44	1
1,1-Dichloroethene	ND		ug/kg	0.97	0.23	1
trans-1,2-Dichloroethene	ND		ug/kg	1.4	0.13	1

Project Name: CARMAN PLACE

Lab Number: L1930261

Project Number: 04736-0005-11

Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930261-05

Date Collected: 07/10/19 12:00

Client ID: SB-105

Date Received: 07/11/19

Sample Location: 123-169 MAIN ST., HEMPSTEAD, 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	0.48	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	0.17	1
Methyl tert butyl ether	0.21	J	ug/kg	1.9	0.20	1
p/m-Xylene	ND		ug/kg	1.9	0.54	1
o-Xylene	ND		ug/kg	0.97	0.28	1
Xylenes, Total	ND		ug/kg	0.97	0.28	1
cis-1,2-Dichloroethene	ND		ug/kg	0.97	0.17	1
1,2-Dichloroethene, Total	ND		ug/kg	0.97	0.13	1
Dibromomethane	ND		ug/kg	1.9	0.23	1
Styrene	ND		ug/kg	0.97	0.19	1
Dichlorodifluoromethane	ND		ug/kg	9.7	0.89	1
Acetone	25		ug/kg	9.7	4.7	1
Carbon disulfide	ND		ug/kg	9.7	4.4	1
2-Butanone	ND		ug/kg	9.7	2.2	1
Vinyl acetate	ND		ug/kg	9.7	2.1	1
4-Methyl-2-pentanone	ND		ug/kg	9.7	1.2	1
1,2,3-Trichloropropane	ND		ug/kg	1.9	0.12	1
2-Hexanone	ND		ug/kg	9.7	1.1	1
Bromochloromethane	ND		ug/kg	1.9	0.20	1
2,2-Dichloropropane	ND		ug/kg	1.9	0.20	1
1,2-Dibromoethane	ND		ug/kg	0.97	0.27	1
1,3-Dichloropropane	ND		ug/kg	1.9	0.16	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.48	0.13	1
Bromobenzene	ND		ug/kg	1.9	0.14	1
n-Butylbenzene	ND		ug/kg	0.97	0.16	1
sec-Butylbenzene	ND		ug/kg	0.97	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	2.9	0.97	1
Hexachlorobutadiene	ND		ug/kg	3.9	0.16	1
Isopropylbenzene	ND		ug/kg	0.97	0.10	1
p-Isopropyltoluene	ND		ug/kg	0.97	0.10	1
Naphthalene	2.7	J	ug/kg	3.9	0.63	1
Acrylonitrile	ND		ug/kg	3.9	1.1	1

Project Name: CARMAN PLACE**Lab Number:** L1930261**Project Number:** 04736-0005-11**Report Date:** 07/29/19**SAMPLE RESULTS****Lab ID:** L1930261-05**Date Collected:** 07/10/19 12:00**Client ID:** SB-105**Date Received:** 07/11/19**Sample Location:** 123-169 MAIN ST., HEMPSTEAD, 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	0.97	0.17	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	0.19	1
1,2,4-Trimethylbenzene	ND		ug/kg	1.9	0.32	1
1,4-Dioxane	ND		ug/kg	78	34.	1
p-Diethylbenzene	ND		ug/kg	1.9	0.17	1
p-Ethyltoluene	ND		ug/kg	1.9	0.37	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	1.9	0.18	1
Ethyl ether	ND		ug/kg	1.9	0.33	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	4.8	1.4	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	117		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	113		70-130
Dibromofluoromethane	101		70-130

Project Name: CARMAN PLACE

Lab Number: L1930261

Project Number: 04736-0005-11

Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930261-06
 Client ID: MW-101
 Sample Location: 123-169 MAIN ST., HEMPSTEAD, NY

Date Collected: 07/10/19 17:20
 Date Received: 07/11/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 07/17/19 10:44
 Analyst: NLK

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: CARMAN PLACE**Lab Number:** L1930261**Project Number:** 04736-0005-11**Report Date:** 07/29/19**SAMPLE RESULTS****Lab ID:** L1930261-06**Date Collected:** 07/10/19 17:20**Client ID:** MW-101**Date Received:** 07/11/19**Sample Location:** 123-169 MAIN ST., HEMPSTEAD, NY**Field Prep:** Not Specified**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	2.3	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	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: CARMAN PLACE**Lab Number:** L1930261**Project Number:** 04736-0005-11**Report Date:** 07/29/19**SAMPLE RESULTS****Lab ID:** L1930261-06**Date Collected:** 07/10/19 17:20**Client ID:** MW-101**Date Received:** 07/11/19**Sample Location:** 123-169 MAIN ST., HEMPSTEAD, NY**Field Prep:** Not Specified**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	101		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	92		70-130

Project Name: CARMAN PLACE**Lab Number:** L1930261**Project Number:** 04736-0005-11**Report Date:** 07/29/19**SAMPLE RESULTS**

Lab ID: L1930261-07

Date Collected: 07/10/19 13:35

Client ID: MW-105

Date Received: 07/11/19

Sample Location: 123-169 MAIN ST., HEMPSTEAD, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Analytical Method: 1,8260C

Analytical Date: 07/17/19 11:13

Analyst: NLK

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: CARMAN PLACE**Lab Number:** L1930261**Project Number:** 04736-0005-11**Report Date:** 07/29/19**SAMPLE RESULTS****Lab ID:** L1930261-07**Date Collected:** 07/10/19 13:35**Client ID:** MW-105**Date Received:** 07/11/19**Sample Location:** 123-169 MAIN ST., HEMPSTEAD, NY**Field Prep:** Not Specified**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	2.8	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	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: CARMAN PLACE**Lab Number:** L1930261**Project Number:** 04736-0005-11**Report Date:** 07/29/19**SAMPLE RESULTS****Lab ID:** L1930261-07**Date Collected:** 07/10/19 13:35**Client ID:** MW-105**Date Received:** 07/11/19**Sample Location:** 123-169 MAIN ST., HEMPSTEAD, NY**Field Prep:** Not Specified**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	104		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	95		70-130

Project Name: CARMAN PLACE
Project Number: 04736-0005-11

Lab Number: L1930261
Report Date: 07/29/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 07/17/19 10:16
 Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 06-07 Batch: WG1261582-5					
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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Analytical Method: 1,8260C
 Analytical Date: 07/17/19 10:16
 Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 06-07 Batch: WG1261582-5					
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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Analytical Method: 1,8260C
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Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 06-07 Batch: WG1261582-5					
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	102		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	93		70-130

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Batch Quality Control

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 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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 Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 03-05 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 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

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Method Blank Analysis
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Analytical Method: 1,8260C
 Analytical Date: 07/22/19 07:45
 Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 High - Westborough Lab for sample(s): 01-02 Batch: WG1262968-5					
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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Analytical Method: 1,8260C
 Analytical Date: 07/22/19 07:45
 Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 High - Westborough Lab for sample(s): 01-02 Batch: WG1262968-5					
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
Analytical Date: 07/22/19 07:45
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 High - Westborough Lab for sample(s):				01-02	Batch: WG1262968-5
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	84		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	92		70-130

Lab Control Sample Analysis Batch Quality Control

Project Name: CARMAN PLACE

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Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 06-07 Batch: WG1261582-3 WG1261582-4								
Methylene chloride	92		93		70-130	1		20
1,1-Dichloroethane	93		96		70-130	3		20
Chloroform	93		96		70-130	3		20
Carbon tetrachloride	94		96		63-132	2		20
1,2-Dichloropropane	89		88		70-130	1		20
Dibromochloromethane	88		86		63-130	2		20
1,1,2-Trichloroethane	93		90		70-130	3		20
Tetrachloroethene	92		92		70-130	0		20
Chlorobenzene	89		87		75-130	2		20
Trichlorofluoromethane	100		100		62-150	0		20
1,2-Dichloroethane	94		90		70-130	4		20
1,1,1-Trichloroethane	95		96		67-130	1		20
Bromodichloromethane	89		89		67-130	0		20
trans-1,3-Dichloropropene	92		92		70-130	0		20
cis-1,3-Dichloropropene	89		91		70-130	2		20
1,1-Dichloropropene	94		94		70-130	0		20
Bromoform	90		87		54-136	3		20
1,1,2,2-Tetrachloroethane	90		84		67-130	7		20
Benzene	90		89		70-130	1		20
Toluene	89		86		70-130	3		20
Ethylbenzene	90		88		70-130	2		20
Chloromethane	120		120		64-130	0		20
Bromomethane	140	Q	140	Q	39-139	0		20

Lab Control Sample Analysis **Batch Quality Control**

Project Name: CARMAN PLACE

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Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 06-07 Batch: WG1261582-3 WG1261582-4								
Vinyl chloride	110		110		55-140	0		20
Chloroethane	110		110		55-138	0		20
1,1-Dichloroethene	98		100		61-145	2		20
trans-1,2-Dichloroethene	95		96		70-130	1		20
Trichloroethene	96		94		70-130	2		20
1,2-Dichlorobenzene	84		81		70-130	4		20
1,3-Dichlorobenzene	86		84		70-130	2		20
1,4-Dichlorobenzene	85		83		70-130	2		20
Methyl tert butyl ether	95		95		63-130	0		20
p/m-Xylene	95		90		70-130	5		20
o-Xylene	90		90		70-130	0		20
cis-1,2-Dichloroethene	94		95		70-130	1		20
Dibromomethane	85		85		70-130	0		20
1,2,3-Trichloropropane	89		92		64-130	3		20
Acrylonitrile	92		96		70-130	4		20
Styrene	90		90		70-130	0		20
Dichlorodifluoromethane	120		120		36-147	0		20
Acetone	100		110		58-148	10		20
Carbon disulfide	96		97		51-130	1		20
2-Butanone	100		100		63-138	0		20
Vinyl acetate	98		100		70-130	2		20
4-Methyl-2-pentanone	88		88		59-130	0		20
2-Hexanone	95		94		57-130	1		20

Lab Control Sample Analysis Batch Quality Control

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Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 06-07 Batch: WG1261582-3 WG1261582-4								
Bromochloromethane	92		94		70-130	2		20
2,2-Dichloropropane	97		98		63-133	1		20
1,2-Dibromoethane	94		92		70-130	2		20
1,3-Dichloropropane	92		88		70-130	4		20
1,1,1,2-Tetrachloroethane	86		87		64-130	1		20
Bromobenzene	87		85		70-130	2		20
n-Butylbenzene	88		84		53-136	5		20
sec-Butylbenzene	88		85		70-130	3		20
tert-Butylbenzene	92		89		70-130	3		20
o-Chlorotoluene	86		81		70-130	6		20
p-Chlorotoluene	86		83		70-130	4		20
1,2-Dibromo-3-chloropropane	83		79		41-144	5		20
Hexachlorobutadiene	100		95		63-130	5		20
Isopropylbenzene	86		86		70-130	0		20
p-Isopropyltoluene	93		88		70-130	6		20
Naphthalene	83		80		70-130	4		20
n-Propylbenzene	87		83		69-130	5		20
1,2,3-Trichlorobenzene	89		84		70-130	6		20
1,2,4-Trichlorobenzene	88		84		70-130	5		20
1,3,5-Trimethylbenzene	88		83		64-130	6		20
1,2,4-Trimethylbenzene	87		85		70-130	2		20
1,4-Dioxane	106		102		56-162	4		20
p-Diethylbenzene	92		89		70-130	3		20

Lab Control Sample Analysis Batch Quality Control

Project Name: CARMAN PLACE

Project Number: 04736-0005-11

Lab Number: L1930261

Report Date: 07/29/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 06-07 Batch: WG1261582-3 WG1261582-4								
p-Ethyltoluene	88		83		70-130	6		20
1,2,4,5-Tetramethylbenzene	90		87		70-130	3		20
Ethyl ether	95		94		59-134	1		20
trans-1,4-Dichloro-2-butene	86		83		70-130	4		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	100		98		70-130
Toluene-d8	102		100		70-130
4-Bromofluorobenzene	99		97		70-130
Dibromofluoromethane	95		98		70-130

Lab Control Sample Analysis **Batch Quality Control**

Project Name: CARMAN PLACE

Project Number: 04736-0005-11

Lab Number: L1930261

Report Date: 07/29/19

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 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: CARMAN PLACE

Project Number: 04736-0005-11

Lab Number: L1930261

Report Date: 07/29/19

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 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: CARMAN PLACE

Project Number: 04736-0005-11

Lab Number: L1930261

Report Date: 07/29/19

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 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: CARMAN PLACE

Project Number: 04736-0005-11

Lab Number: L1930261

Report Date: 07/29/19

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 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: CARMAN PLACE

Project Number: 04736-0005-11

Lab Number: L1930261

Report Date: 07/29/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 01-02 Batch: WG1262968-3 WG1262968-4								
Methylene chloride	88		82		70-130	7		30
1,1-Dichloroethane	96		90		70-130	6		30
Chloroform	95		91		70-130	4		30
Carbon tetrachloride	91		86		70-130	6		30
1,2-Dichloropropane	99		93		70-130	6		30
Dibromochloromethane	86		84		70-130	2		30
1,1,2-Trichloroethane	93		93		70-130	0		30
Tetrachloroethene	94		88		70-130	7		30
Chlorobenzene	87		85		70-130	2		30
Trichlorofluoromethane	93		86		70-139	8		30
1,2-Dichloroethane	82		79		70-130	4		30
1,1,1-Trichloroethane	97		91		70-130	6		30
Bromodichloromethane	96		92		70-130	4		30
trans-1,3-Dichloropropene	92		88		70-130	4		30
cis-1,3-Dichloropropene	102		96		70-130	6		30
1,1-Dichloropropene	103		98		70-130	5		30
Bromoform	88		84		70-130	5		30
1,1,2,2-Tetrachloroethane	90		86		70-130	5		30
Benzene	100		94		70-130	6		30
Toluene	94		89		70-130	5		30
Ethylbenzene	95		91		70-130	4		30
Chloromethane	86		77		52-130	11		30
Bromomethane	101		94		57-147	7		30

Lab Control Sample Analysis **Batch Quality Control**

Project Name: CARMAN PLACE

Project Number: 04736-0005-11

Lab Number: L1930261

Report Date: 07/29/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 01-02 Batch: WG1262968-3 WG1262968-4								
Vinyl chloride	104		97		67-130	7		30
Chloroethane	113		106		50-151	6		30
1,1-Dichloroethene	104		99		65-135	5		30
trans-1,2-Dichloroethene	100		96		70-130	4		30
Trichloroethene	101		94		70-130	7		30
1,2-Dichlorobenzene	82		78		70-130	5		30
1,3-Dichlorobenzene	83		80		70-130	4		30
1,4-Dichlorobenzene	83		78		70-130	6		30
Methyl tert butyl ether	88		85		66-130	3		30
p/m-Xylene	93		89		70-130	4		30
o-Xylene	92		89		70-130	3		30
cis-1,2-Dichloroethene	100		95		70-130	5		30
Dibromomethane	98		92		70-130	6		30
Styrene	91		88		70-130	3		30
Dichlorodifluoromethane	77		70		30-146	10		30
Acetone	74		63		54-140	16		30
Carbon disulfide	98		91		59-130	7		30
2-Butanone	66	Q	70		70-130	6		30
Vinyl acetate	80		77		70-130	4		30
4-Methyl-2-pentanone	89		87		70-130	2		30
1,2,3-Trichloropropane	84		81		68-130	4		30
2-Hexanone	70		69	Q	70-130	1		30
Bromochloromethane	96		90		70-130	6		30

Lab Control Sample Analysis **Batch Quality Control**

Project Name: CARMAN PLACE

Project Number: 04736-0005-11

Lab Number: L1930261

Report Date: 07/29/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 01-02 Batch: WG1262968-3 WG1262968-4								
2,2-Dichloropropane	97		89		70-130	9		30
1,2-Dibromoethane	90		88		70-130	2		30
1,3-Dichloropropane	91		88		69-130	3		30
1,1,1,2-Tetrachloroethane	86		84		70-130	2		30
Bromobenzene	86		82		70-130	5		30
n-Butylbenzene	96		90		70-130	6		30
sec-Butylbenzene	90		84		70-130	7		30
tert-Butylbenzene	87		82		70-130	6		30
o-Chlorotoluene	76		70		70-130	8		30
p-Chlorotoluene	90		88		70-130	2		30
1,2-Dibromo-3-chloropropane	78		75		68-130	4		30
Hexachlorobutadiene	104		98		67-130	6		30
Isopropylbenzene	89		84		70-130	6		30
p-Isopropyltoluene	88		83		70-130	6		30
Naphthalene	82		79		70-130	4		30
Acrylonitrile	75		77		70-130	3		30
n-Propylbenzene	93		88		70-130	6		30
1,2,3-Trichlorobenzene	82		80		70-130	2		30
1,2,4-Trichlorobenzene	86		82		70-130	5		30
1,3,5-Trimethylbenzene	86		82		70-130	5		30
1,2,4-Trimethylbenzene	86		81		70-130	6		30
1,4-Dioxane	90		80		65-136	12		30
p-Diethylbenzene	90		84		70-130	7		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: CARMAN PLACE

Project Number: 04736-0005-11

Lab Number: L1930261

Report Date: 07/29/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 01-02 Batch: WG1262968-3 WG1262968-4								
p-Ethyltoluene	88		83		70-130	6		30
1,2,4,5-Tetramethylbenzene	85		80		70-130	6		30
Ethyl ether	98		94		67-130	4		30
trans-1,4-Dichloro-2-butene	78		72		70-130	8		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	85		86		70-130
Toluene-d8	97		98		70-130
4-Bromofluorobenzene	99		97		70-130
Dibromofluoromethane	95		95		70-130

SEMIVOLATILES

Project Name: CARMAN PLACE**Lab Number:** L1930261**Project Number:** 04736-0005-11**Report Date:** 07/29/19**SAMPLE RESULTS**

Lab ID: L1930261-01
 Client ID: SB-101
 Sample Location: 123-169 MAIN ST., HEMPSTEAD, NY

Date Collected: 07/10/19 16:35
 Date Received: 07/11/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 07/22/19 17:07
 Analyst: IM
 Percent Solids: 93%

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	ND		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	35.	1
2,6-Dinitrotoluene	ND		ug/kg	180	30.	1
Fluoranthene	43	J	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	ND		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	ND		ug/kg	180	61.	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: CARMAN PLACE

Lab Number: L1930261

Project Number: 04736-0005-11

Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930261-01

Date Collected: 07/10/19 16:35

Client ID: SB-101

Date Received: 07/11/19

Sample Location: 123-169 MAIN ST., HEMPSTEAD, 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	16.	1
Dimethyl phthalate	ND		ug/kg	180	37.	1
Benzo(a)anthracene	30	J	ug/kg	110	20.	1
Benzo(a)pyrene	ND		ug/kg	140	43.	1
Benzo(b)fluoranthene	46	J	ug/kg	110	30.	1
Benzo(k)fluoranthene	ND		ug/kg	110	28.	1
Chrysene	32	J	ug/kg	110	18.	1
Acenaphthylene	ND		ug/kg	140	27.	1
Anthracene	ND		ug/kg	110	34.	1
Benzo(ghi)perylene	22	J	ug/kg	140	21.	1
Fluorene	ND		ug/kg	180	17.	1
Phenanthrene	ND		ug/kg	110	22.	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	20.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	140	25.	1
Pyrene	41	J	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	33.	1
4-Nitroaniline	ND		ug/kg	180	73.	1
Dibenzofuran	ND		ug/kg	180	17.	1
2-Methylnaphthalene	ND		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	58.	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: CARMAN PLACE**Lab Number:** L1930261**Project Number:** 04736-0005-11**Report Date:** 07/29/19**SAMPLE RESULTS****Lab ID:** L1930261-01**Date Collected:** 07/10/19 16:35**Client ID:** SB-101**Date Received:** 07/11/19**Sample Location:** 123-169 MAIN ST., HEMPSTEAD, 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	ND		ug/kg	180	17.	1
1,4-Dioxane	ND		ug/kg	27	8.2	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	70		25-120
Phenol-d6	73		10-120
Nitrobenzene-d5	75		23-120
2-Fluorobiphenyl	73		30-120
2,4,6-Tribromophenol	94		10-136
4-Terphenyl-d14	68		18-120

Project Name: CARMAN PLACE

Lab Number: L1930261

Project Number: 04736-0005-11

Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930261-01
 Client ID: SB-101
 Sample Location: 123-169 MAIN ST., HEMPSTEAD, NY

Date Collected: 07/10/19 16:35
 Date Received: 07/11/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 122,537(M)
 Analytical Date: 07/26/19 23:28
 Analyst: JW
 Percent Solids: 93%

Extraction Method: EPA 537(M)
 Extraction Date: 07/25/19 10:12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	ND		ug/kg	0.967	0.022	1
Perfluoropentanoic Acid (PFPeA)	ND		ug/kg	0.967	0.045	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ug/kg	0.967	0.038	1
Perfluorohexanoic Acid (PFHxA)	ND		ug/kg	0.967	0.051	1
Perfluoroheptanoic Acid (PFHpA)	ND		ug/kg	0.967	0.044	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ug/kg	0.967	0.059	1
Perfluorooctanoic Acid (PFOA)	ND		ug/kg	0.967	0.041	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ug/kg	0.967	0.174	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ug/kg	0.967	0.132	1
Perfluorononanoic Acid (PFNA)	ND		ug/kg	0.967	0.073	1
Perfluorooctanesulfonic Acid (PFOS)	0.318	J	ug/kg	0.967	0.126	1
Perfluorodecanoic Acid (PFDA)	ND		ug/kg	0.967	0.065	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ug/kg	0.967	0.278	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ug/kg	0.967	0.195	1
Perfluoroundecanoic Acid (PFUnA)	ND		ug/kg	0.967	0.045	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ug/kg	0.967	0.148	1
Perfluorooctanesulfonamide (FOSA)	ND		ug/kg	0.967	0.095	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	0.118	J	ug/kg	0.967	0.082	1
Perfluorododecanoic Acid (PFDoA)	ND		ug/kg	0.967	0.068	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ug/kg	0.967	0.198	1
Perfluorotetradecanoic Acid (PFTA)	ND		ug/kg	0.967	0.052	1
PFOA/PFOS, Total	0.318	J	ug/kg	0.967	0.041	1

Project Name: CARMAN PLACE**Lab Number:** L1930261**Project Number:** 04736-0005-11**Report Date:** 07/29/19**SAMPLE RESULTS**

Lab ID: L1930261-01

Date Collected: 07/10/19 16:35

Client ID: SB-101

Date Received: 07/11/19

Sample Location: 123-169 MAIN ST., HEMPSTEAD, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						

Surrogate (Extracted Internal Standard)	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	88		60-153
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	88		65-182
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	94		70-151
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	87		61-147
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	87		62-149
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	98		63-166
Perfluoro[13C8]Octanoic Acid (M8PFOA)	89		62-152
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	93		32-182
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	95		61-154
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	97		65-151
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	86		65-150
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	107		25-186
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	55		45-137
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	93		64-158
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	6		1-125
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	55		42-136
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	87		56-148
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	84		26-160

Project Name: CARMAN PLACE**Lab Number:** L1930261**Project Number:** 04736-0005-11**Report Date:** 07/29/19**SAMPLE RESULTS**

Lab ID: L1930261-02
 Client ID: SB-102
 Sample Location: 123-169 MAIN ST., HEMPSTEAD, NY

Date Collected: 07/10/19 15:20
 Date Received: 07/11/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 07/22/19 17:32
 Analyst: IM
 Percent Solids: 96%

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	ND		ug/kg	140	18.	1
1,2,4-Trichlorobenzene	ND		ug/kg	170	20.	1
Hexachlorobenzene	ND		ug/kg	100	19.	1
Bis(2-chloroethyl)ether	ND		ug/kg	150	23.	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	29.	1
1,4-Dichlorobenzene	ND		ug/kg	170	30.	1
3,3'-Dichlorobenzidine	ND		ug/kg	170	45.	1
2,4-Dinitrotoluene	ND		ug/kg	170	34.	1
2,6-Dinitrotoluene	ND		ug/kg	170	29.	1
Fluoranthene	170		ug/kg	100	20.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	170	18.	1
4-Bromophenyl phenyl ether	ND		ug/kg	170	26.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	200	29.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	180	17.	1
Hexachlorobutadiene	ND		ug/kg	170	25.	1
Hexachlorocyclopentadiene	ND		ug/kg	490	150	1
Hexachloroethane	ND		ug/kg	140	28.	1
Isophorone	ND		ug/kg	150	22.	1
Naphthalene	ND		ug/kg	170	21.	1
Nitrobenzene	ND		ug/kg	150	25.	1
NDPA/DPA	ND		ug/kg	140	19.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	170	26.	1
Bis(2-ethylhexyl)phthalate	5300		ug/kg	170	59.	1
Butyl benzyl phthalate	110	J	ug/kg	170	43.	1
Di-n-butylphthalate	ND		ug/kg	170	32.	1
Di-n-octylphthalate	ND		ug/kg	170	58.	1

Project Name: CARMAN PLACE

Lab Number: L1930261

Project Number: 04736-0005-11

Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930261-02

Date Collected: 07/10/19 15:20

Client ID: SB-102

Date Received: 07/11/19

Sample Location: 123-169 MAIN ST., HEMPSTEAD, 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	170	16.	1
Dimethyl phthalate	ND		ug/kg	170	36.	1
Benzo(a)anthracene	110		ug/kg	100	19.	1
Benzo(a)pyrene	160		ug/kg	140	42.	1
Benzo(b)fluoranthene	180		ug/kg	100	29.	1
Benzo(k)fluoranthene	54	J	ug/kg	100	27.	1
Chrysene	100		ug/kg	100	18.	1
Acenaphthylene	ND		ug/kg	140	26.	1
Anthracene	ND		ug/kg	100	33.	1
Benzo(ghi)perylene	120	J	ug/kg	140	20.	1
Fluorene	ND		ug/kg	170	17.	1
Phenanthrene	62	J	ug/kg	100	21.	1
Dibenzo(a,h)anthracene	25	J	ug/kg	100	20.	1
Indeno(1,2,3-cd)pyrene	110	J	ug/kg	140	24.	1
Pyrene	160		ug/kg	100	17.	1
Biphenyl	ND		ug/kg	390	40.	1
4-Chloroaniline	ND		ug/kg	170	31.	1
2-Nitroaniline	ND		ug/kg	170	33.	1
3-Nitroaniline	ND		ug/kg	170	32.	1
4-Nitroaniline	ND		ug/kg	170	71.	1
Dibenzofuran	ND		ug/kg	170	16.	1
2-Methylnaphthalene	ND		ug/kg	200	21.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	170	18.	1
Acetophenone	ND		ug/kg	170	21.	1
2,4,6-Trichlorophenol	ND		ug/kg	100	32.	1
p-Chloro-m-cresol	ND		ug/kg	170	25.	1
2-Chlorophenol	ND		ug/kg	170	20.	1
2,4-Dichlorophenol	ND		ug/kg	150	27.	1
2,4-Dimethylphenol	ND		ug/kg	170	56.	1
2-Nitrophenol	ND		ug/kg	370	64.	1
4-Nitrophenol	ND		ug/kg	240	70.	1
2,4-Dinitrophenol	ND		ug/kg	820	80.	1
4,6-Dinitro-o-cresol	ND		ug/kg	440	82.	1
Pentachlorophenol	ND		ug/kg	140	38.	1
Phenol	ND		ug/kg	170	26.	1
2-Methylphenol	ND		ug/kg	170	26.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	250	27.	1

Project Name: CARMAN PLACE**Lab Number:** L1930261**Project Number:** 04736-0005-11**Report Date:** 07/29/19**SAMPLE RESULTS****Lab ID:** L1930261-02**Date Collected:** 07/10/19 15:20**Client ID:** SB-102**Date Received:** 07/11/19**Sample Location:** 123-169 MAIN ST., HEMPSTEAD, 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	170	33.	1
Benzoic Acid	ND		ug/kg	550	170	1
Benzyl Alcohol	ND		ug/kg	170	52.	1
Carbazole	ND		ug/kg	170	17.	1
1,4-Dioxane	ND		ug/kg	26	7.9	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	72		25-120
Phenol-d6	74		10-120
Nitrobenzene-d5	79		23-120
2-Fluorobiphenyl	72		30-120
2,4,6-Tribromophenol	95		10-136
4-Terphenyl-d14	59		18-120

Project Name: CARMAN PLACE**Lab Number:** L1930261**Project Number:** 04736-0005-11**Report Date:** 07/29/19**SAMPLE RESULTS**

Lab ID: L1930261-02
 Client ID: SB-102
 Sample Location: 123-169 MAIN ST., HEMPSTEAD, NY

Date Collected: 07/10/19 15:20
 Date Received: 07/11/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 122,537(M)
 Analytical Date: 07/26/19 23:45
 Analyst: JW
 Percent Solids: 96%

Extraction Method: EPA 537(M)
 Extraction Date: 07/25/19 10:12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	ND		ug/kg	0.952	0.022	1
Perfluoropentanoic Acid (PFPeA)	0.118	J	ug/kg	0.952	0.044	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ug/kg	0.952	0.037	1
Perfluorohexanoic Acid (PFHxA)	0.070	J	ug/kg	0.952	0.050	1
Perfluoroheptanoic Acid (PFHpA)	0.063	J	ug/kg	0.952	0.043	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ug/kg	0.952	0.058	1
Perfluorooctanoic Acid (PFOA)	0.223	J	ug/kg	0.952	0.040	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ug/kg	0.952	0.171	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ug/kg	0.952	0.130	1
Perfluorononanoic Acid (PFNA)	0.150	J	ug/kg	0.952	0.071	1
Perfluorooctanesulfonic Acid (PFOS)	4.63		ug/kg	0.952	0.124	1
Perfluorodecanoic Acid (PFDA)	0.474	J	ug/kg	0.952	0.064	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ug/kg	0.952	0.273	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ug/kg	0.952	0.192	1
Perfluoroundecanoic Acid (PFUnA)	0.153	J	ug/kg	0.952	0.045	1
Perfluorodecanesulfonic Acid (PFDS)	3.57		ug/kg	0.952	0.146	1
Perfluorooctanesulfonamide (FOSA)	ND		ug/kg	0.952	0.093	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	0.393	J	ug/kg	0.952	0.080	1
Perfluorododecanoic Acid (PFDoA)	0.296	J	ug/kg	0.952	0.067	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ug/kg	0.952	0.195	1
Perfluorotetradecanoic Acid (PFTA)	0.128	J	ug/kg	0.952	0.051	1
PFOA/PFOS, Total	4.85	J	ug/kg	0.952	0.040	1

Project Name: CARMAN PLACE

Lab Number: L1930261

Project Number: 04736-0005-11

Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930261-02

Date Collected: 07/10/19 15:20

Client ID: SB-102

Date Received: 07/11/19

Sample Location: 123-169 MAIN ST., HEMPSTEAD, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						

Surrogate (Extracted Internal Standard)	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	87		60-153
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	87		65-182
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	92		70-151
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	86		61-147
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	88		62-149
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	94		63-166
Perfluoro[13C8]Octanoic Acid (M8PFOA)	88		62-152
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	89		32-182
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	93		61-154
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	93		65-151
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	86		65-150
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	99		25-186
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	58		45-137
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	94		64-158
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	2		1-125
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	63		42-136
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	85		56-148
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	76		26-160

Project Name: CARMAN PLACE

Lab Number: L1930261

Project Number: 04736-0005-11

Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930261-03
 Client ID: SB-103
 Sample Location: 123-169 MAIN ST., HEMPSTEAD, NY

Date Collected: 07/10/19 14:55
 Date Received: 07/11/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 07/22/19 17:57
 Analyst: IM
 Percent Solids: 82%

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	ND		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	36.	1
1,3-Dichlorobenzene	ND		ug/kg	200	35.	1
1,4-Dichlorobenzene	ND		ug/kg	200	35.	1
3,3'-Dichlorobenzidine	ND		ug/kg	200	54.	1
2,4-Dinitrotoluene	ND		ug/kg	200	40.	1
2,6-Dinitrotoluene	ND		ug/kg	200	35.	1
Fluoranthene	36	J	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	ND		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	38.	1
Di-n-octylphthalate	ND		ug/kg	200	69.	1

Project Name: CARMAN PLACE

Lab Number: L1930261

Project Number: 04736-0005-11

Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930261-03

Date Collected: 07/10/19 14:55

Client ID: SB-103

Date Received: 07/11/19

Sample Location: 123-169 MAIN ST., HEMPSTEAD, 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	200	19.	1
Dimethyl phthalate	ND		ug/kg	200	42.	1
Benzo(a)anthracene	29	J	ug/kg	120	23.	1
Benzo(a)pyrene	ND		ug/kg	160	49.	1
Benzo(b)fluoranthene	36	J	ug/kg	120	34.	1
Benzo(k)fluoranthene	ND		ug/kg	120	32.	1
Chrysene	22	J	ug/kg	120	21.	1
Acenaphthylene	ND		ug/kg	160	31.	1
Anthracene	ND		ug/kg	120	40.	1
Benzo(ghi)perylene	ND		ug/kg	160	24.	1
Fluorene	ND		ug/kg	200	20.	1
Phenanthrene	ND		ug/kg	120	25.	1
Dibenzo(a,h)anthracene	ND		ug/kg	120	23.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	160	28.	1
Pyrene	33	J	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	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	33.	1
2,4-Dimethylphenol	ND		ug/kg	200	67.	1
2-Nitrophenol	ND		ug/kg	440	76.	1
4-Nitrophenol	ND		ug/kg	280	83.	1
2,4-Dinitrophenol	ND		ug/kg	970	94.	1
4,6-Dinitro-o-cresol	ND		ug/kg	530	97.	1
Pentachlorophenol	ND		ug/kg	160	45.	1
Phenol	ND		ug/kg	200	31.	1
2-Methylphenol	ND		ug/kg	200	31.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	290	32.	1

Project Name: CARMAN PLACE**Lab Number:** L1930261**Project Number:** 04736-0005-11**Report Date:** 07/29/19**SAMPLE RESULTS****Lab ID:** L1930261-03**Date Collected:** 07/10/19 14:55**Client ID:** SB-103**Date Received:** 07/11/19**Sample Location:** 123-169 MAIN ST., HEMPSTEAD, 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	39.	1
Benzoic Acid	ND		ug/kg	660	200	1
Benzyl Alcohol	ND		ug/kg	200	62.	1
Carbazole	ND		ug/kg	200	20.	1
1,4-Dioxane	ND		ug/kg	30	9.3	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	73		25-120
Phenol-d6	74		10-120
Nitrobenzene-d5	74		23-120
2-Fluorobiphenyl	75		30-120
2,4,6-Tribromophenol	96		10-136
4-Terphenyl-d14	48		18-120

Project Name: CARMAN PLACE**Lab Number:** L1930261**Project Number:** 04736-0005-11**Report Date:** 07/29/19**SAMPLE RESULTS**

Lab ID: L1930261-03
 Client ID: SB-103
 Sample Location: 123-169 MAIN ST., HEMPSTEAD, NY

Date Collected: 07/10/19 14:55
 Date Received: 07/11/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 122,537(M)
 Analytical Date: 07/27/19 00:18
 Analyst: JW
 Percent Solids: 82%

Extraction Method: EPA 537(M)
 Extraction Date: 07/25/19 10:12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	ND		ug/kg	1.17	0.027	1
Perfluoropentanoic Acid (PFPeA)	ND		ug/kg	1.17	0.054	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ug/kg	1.17	0.046	1
Perfluorohexanoic Acid (PFHxA)	ND		ug/kg	1.17	0.061	1
Perfluoroheptanoic Acid (PFHpA)	ND		ug/kg	1.17	0.053	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ug/kg	1.17	0.071	1
Perfluorooctanoic Acid (PFOA)	0.121	J	ug/kg	1.17	0.049	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ug/kg	1.17	0.210	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ug/kg	1.17	0.159	1
Perfluorononanoic Acid (PFNA)	ND		ug/kg	1.17	0.088	1
Perfluorooctanesulfonic Acid (PFOS)	0.238	J	ug/kg	1.17	0.152	1
Perfluorodecanoic Acid (PFDA)	ND		ug/kg	1.17	0.078	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ug/kg	1.17	0.335	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ug/kg	1.17	0.235	1
Perfluoroundecanoic Acid (PFUnA)	ND		ug/kg	1.17	0.055	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ug/kg	1.17	0.179	1
Perfluorooctanesulfonamide (FOSA)	ND		ug/kg	1.17	0.114	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	0.117	J	ug/kg	1.17	0.099	1
Perfluorododecanoic Acid (PFDoA)	ND		ug/kg	1.17	0.082	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ug/kg	1.17	0.239	1
Perfluorotetradecanoic Acid (PFTA)	ND		ug/kg	1.17	0.063	1
PFOA/PFOS, Total	0.359	J	ug/kg	1.17	0.049	1

Project Name: CARMAN PLACE

Lab Number: L1930261

Project Number: 04736-0005-11

Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930261-03

Date Collected: 07/10/19 14:55

Client ID: SB-103

Date Received: 07/11/19

Sample Location: 123-169 MAIN ST., HEMPSTEAD, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						

Surrogate (Extracted Internal Standard)	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	87		60-153
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	88		65-182
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	93		70-151
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	87		61-147
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	89		62-149
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	95		63-166
Perfluoro[13C8]Octanoic Acid (M8PFOA)	88		62-152
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	90		32-182
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	95		61-154
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	95		65-151
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	86		65-150
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	103		25-186
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	53		45-137
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	91		64-158
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	4		1-125
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	57		42-136
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	84		56-148
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	76		26-160

Project Name: CARMAN PLACE**Lab Number:** L1930261**Project Number:** 04736-0005-11**Report Date:** 07/29/19**SAMPLE RESULTS**

Lab ID: L1930261-04
 Client ID: SB-104
 Sample Location: 123-169 MAIN ST., HEMPSTEAD, NY

Date Collected: 07/10/19 14:25
 Date Received: 07/11/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 07/22/19 16:16
 Analyst: IM
 Percent Solids: 97%

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	ND		ug/kg	140	18.	1
1,2,4-Trichlorobenzene	ND		ug/kg	170	19.	1
Hexachlorobenzene	ND		ug/kg	100	19.	1
Bis(2-chloroethyl)ether	ND		ug/kg	150	23.	1
2-Chloronaphthalene	ND		ug/kg	170	17.	1
1,2-Dichlorobenzene	ND		ug/kg	170	30.	1
1,3-Dichlorobenzene	ND		ug/kg	170	29.	1
1,4-Dichlorobenzene	ND		ug/kg	170	30.	1
3,3'-Dichlorobenzidine	ND		ug/kg	170	45.	1
2,4-Dinitrotoluene	ND		ug/kg	170	34.	1
2,6-Dinitrotoluene	ND		ug/kg	170	29.	1
Fluoranthene	230		ug/kg	100	20.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	170	18.	1
4-Bromophenyl phenyl ether	ND		ug/kg	170	26.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	200	29.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	180	17.	1
Hexachlorobutadiene	ND		ug/kg	170	25.	1
Hexachlorocyclopentadiene	ND		ug/kg	490	150	1
Hexachloroethane	ND		ug/kg	140	28.	1
Isophorone	ND		ug/kg	150	22.	1
Naphthalene	ND		ug/kg	170	21.	1
Nitrobenzene	ND		ug/kg	150	25.	1
NDPA/DPA	ND		ug/kg	140	19.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	170	26.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	170	59.	1
Butyl benzyl phthalate	ND		ug/kg	170	43.	1
Di-n-butylphthalate	ND		ug/kg	170	32.	1
Di-n-octylphthalate	ND		ug/kg	170	58.	1

Project Name: CARMAN PLACE**Lab Number:** L1930261**Project Number:** 04736-0005-11**Report Date:** 07/29/19**SAMPLE RESULTS**

Lab ID: L1930261-04

Date Collected: 07/10/19 14:25

Client ID: SB-104

Date Received: 07/11/19

Sample Location: 123-169 MAIN ST., HEMPSTEAD, 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	170	16.	1
Dimethyl phthalate	ND		ug/kg	170	36.	1
Benzo(a)anthracene	120		ug/kg	100	19.	1
Benzo(a)pyrene	130	J	ug/kg	140	42.	1
Benzo(b)fluoranthene	150		ug/kg	100	29.	1
Benzo(k)fluoranthene	53	J	ug/kg	100	27.	1
Chrysene	100		ug/kg	100	18.	1
Acenaphthylene	ND		ug/kg	140	26.	1
Anthracene	40	J	ug/kg	100	33.	1
Benzo(ghi)perylene	72	J	ug/kg	140	20.	1
Fluorene	18	J	ug/kg	170	16.	1
Phenanthrene	140		ug/kg	100	21.	1
Dibenzo(a,h)anthracene	20	J	ug/kg	100	20.	1
Indeno(1,2,3-cd)pyrene	80	J	ug/kg	140	24.	1
Pyrene	180		ug/kg	100	17.	1
Biphenyl	ND		ug/kg	390	40.	1
4-Chloroaniline	ND		ug/kg	170	31.	1
2-Nitroaniline	ND		ug/kg	170	33.	1
3-Nitroaniline	ND		ug/kg	170	32.	1
4-Nitroaniline	ND		ug/kg	170	70.	1
Dibenzofuran	ND		ug/kg	170	16.	1
2-Methylnaphthalene	ND		ug/kg	200	20.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	170	18.	1
Acetophenone	ND		ug/kg	170	21.	1
2,4,6-Trichlorophenol	ND		ug/kg	100	32.	1
p-Chloro-m-cresol	ND		ug/kg	170	25.	1
2-Chlorophenol	ND		ug/kg	170	20.	1
2,4-Dichlorophenol	ND		ug/kg	150	27.	1
2,4-Dimethylphenol	ND		ug/kg	170	56.	1
2-Nitrophenol	ND		ug/kg	370	64.	1
4-Nitrophenol	ND		ug/kg	240	69.	1
2,4-Dinitrophenol	ND		ug/kg	820	79.	1
4,6-Dinitro-o-cresol	ND		ug/kg	440	82.	1
Pentachlorophenol	ND		ug/kg	140	37.	1
Phenol	ND		ug/kg	170	26.	1
2-Methylphenol	ND		ug/kg	170	26.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	240	27.	1

Project Name: CARMAN PLACE**Lab Number:** L1930261**Project Number:** 04736-0005-11**Report Date:** 07/29/19**SAMPLE RESULTS****Lab ID:** L1930261-04**Date Collected:** 07/10/19 14:25**Client ID:** SB-104**Date Received:** 07/11/19**Sample Location:** 123-169 MAIN ST., HEMPSTEAD, 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	170	33.	1
Benzoic Acid	ND		ug/kg	550	170	1
Benzyl Alcohol	ND		ug/kg	170	52.	1
Carbazole	23	J	ug/kg	170	16.	1
1,4-Dioxane	ND		ug/kg	26	7.8	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	80		25-120
Phenol-d6	82		10-120
Nitrobenzene-d5	84		23-120
2-Fluorobiphenyl	76		30-120
2,4,6-Tribromophenol	102		10-136
4-Terphenyl-d14	55		18-120

Project Name: CARMAN PLACE

Lab Number: L1930261

Project Number: 04736-0005-11

Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930261-04
 Client ID: SB-104
 Sample Location: 123-169 MAIN ST., HEMPSTEAD, NY

Date Collected: 07/10/19 14:25
 Date Received: 07/11/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 122,537(M)
 Analytical Date: 07/27/19 00:35
 Analyst: JW
 Percent Solids: 97%

Extraction Method: EPA 537(M)
 Extraction Date: 07/25/19 10:12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	ND		ug/kg	0.897	0.020	1
Perfluoropentanoic Acid (PFPeA)	ND		ug/kg	0.897	0.041	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ug/kg	0.897	0.035	1
Perfluorohexanoic Acid (PFHxA)	ND		ug/kg	0.897	0.047	1
Perfluoroheptanoic Acid (PFHpA)	ND		ug/kg	0.897	0.041	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ug/kg	0.897	0.054	1
Perfluorooctanoic Acid (PFOA)	0.088	J	ug/kg	0.897	0.038	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ug/kg	0.897	0.161	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ug/kg	0.897	0.122	1
Perfluorononanoic Acid (PFNA)	ND		ug/kg	0.897	0.067	1
Perfluorooctanesulfonic Acid (PFOS)	0.173	J	ug/kg	0.897	0.117	1
Perfluorodecanoic Acid (PFDA)	ND		ug/kg	0.897	0.060	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ug/kg	0.897	0.258	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ug/kg	0.897	0.181	1
Perfluoroundecanoic Acid (PFUnA)	ND		ug/kg	0.897	0.042	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ug/kg	0.897	0.137	1
Perfluorooctanesulfonamide (FOSA)	ND		ug/kg	0.897	0.088	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ug/kg	0.897	0.076	1
Perfluorododecanoic Acid (PFDoA)	ND		ug/kg	0.897	0.063	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ug/kg	0.897	0.183	1
Perfluorotetradecanoic Acid (PFTA)	ND		ug/kg	0.897	0.048	1
PFOA/PFOS, Total	0.261	J	ug/kg	0.897	0.038	1

Project Name: CARMAN PLACE

Lab Number: L1930261

Project Number: 04736-0005-11

Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930261-04

Date Collected: 07/10/19 14:25

Client ID: SB-104

Date Received: 07/11/19

Sample Location: 123-169 MAIN ST., HEMPSTEAD, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						

Surrogate (Extracted Internal Standard)	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	88		60-153
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	89		65-182
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	97		70-151
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	86		61-147
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	87		62-149
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	101		63-166
Perfluoro[13C8]Octanoic Acid (M8PFOA)	90		62-152
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	93		32-182
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	97		61-154
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	99		65-151
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	88		65-150
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	110		25-186
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	60		45-137
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	95		64-158
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	72		1-125
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	66		42-136
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	86		56-148
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	85		26-160

Project Name: CARMAN PLACE

Lab Number: L1930261

Project Number: 04736-0005-11

Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930261-05
 Client ID: SB-105
 Sample Location: 123-169 MAIN ST., HEMPSTEAD, NY

Date Collected: 07/10/19 12:00
 Date Received: 07/11/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 07/22/19 18:22
 Analyst: IM
 Percent Solids: 93%

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	ND		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	91	J	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	21	J	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	ND		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: CARMAN PLACE

Lab Number: L1930261

Project Number: 04736-0005-11

Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930261-05

Date Collected: 07/10/19 12:00

Client ID: SB-105

Date Received: 07/11/19

Sample Location: 123-169 MAIN ST., HEMPSTEAD, 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	16.	1
Dimethyl phthalate	ND		ug/kg	180	37.	1
Benzo(a)anthracene	45	J	ug/kg	100	20.	1
Benzo(a)pyrene	56	J	ug/kg	140	43.	1
Benzo(b)fluoranthene	73	J	ug/kg	100	30.	1
Benzo(k)fluoranthene	ND		ug/kg	100	28.	1
Chrysene	47	J	ug/kg	100	18.	1
Acenaphthylene	ND		ug/kg	140	27.	1
Anthracene	ND		ug/kg	100	34.	1
Benzo(ghi)perylene	46	J	ug/kg	140	21.	1
Fluorene	ND		ug/kg	180	17.	1
Phenanthrene	60	J	ug/kg	100	21.	1
Dibenzo(a,h)anthracene	ND		ug/kg	100	20.	1
Indeno(1,2,3-cd)pyrene	46	J	ug/kg	140	24.	1
Pyrene	73	J	ug/kg	100	17.	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	ND		ug/kg	180	17.	1
2-Methylnaphthalene	ND		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	240	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	ND		ug/kg	180	26.	1
2-Methylphenol	ND		ug/kg	180	27.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	250	27.	1

Project Name: CARMAN PLACE**Lab Number:** L1930261**Project Number:** 04736-0005-11**Report Date:** 07/29/19**SAMPLE RESULTS****Lab ID:** L1930261-05**Date Collected:** 07/10/19 12:00**Client ID:** SB-105**Date Received:** 07/11/19**Sample Location:** 123-169 MAIN ST., HEMPSTEAD, 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	ND		ug/kg	180	17.	1
1,4-Dioxane	ND		ug/kg	26	8.1	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	44		25-120
Phenol-d6	73		10-120
Nitrobenzene-d5	79		23-120
2-Fluorobiphenyl	70		30-120
2,4,6-Tribromophenol	50		10-136
4-Terphenyl-d14	55		18-120

Project Name: CARMAN PLACE

Lab Number: L1930261

Project Number: 04736-0005-11

Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930261-05
 Client ID: SB-105
 Sample Location: 123-169 MAIN ST., HEMPSTEAD, NY

Date Collected: 07/10/19 12:00
 Date Received: 07/11/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 122,537(M)
 Analytical Date: 07/27/19 00:51
 Analyst: JW
 Percent Solids: 93%

Extraction Method: EPA 537(M)
 Extraction Date: 07/25/19 10:12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	ND		ug/kg	1.04	0.024	1
Perfluoropentanoic Acid (PFPeA)	ND		ug/kg	1.04	0.048	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ug/kg	1.04	0.041	1
Perfluorohexanoic Acid (PFHxA)	ND		ug/kg	1.04	0.055	1
Perfluoroheptanoic Acid (PFHpA)	ND		ug/kg	1.04	0.047	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ug/kg	1.04	0.063	1
Perfluorooctanoic Acid (PFOA)	0.066	J	ug/kg	1.04	0.044	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ug/kg	1.04	0.186	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ug/kg	1.04	0.142	1
Perfluorononanoic Acid (PFNA)	ND		ug/kg	1.04	0.078	1
Perfluorooctanesulfonic Acid (PFOS)	ND		ug/kg	1.04	0.135	1
Perfluorodecanoic Acid (PFDA)	ND		ug/kg	1.04	0.070	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ug/kg	1.04	0.298	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ug/kg	1.04	0.209	1
Perfluoroundecanoic Acid (PFUnA)	ND		ug/kg	1.04	0.049	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ug/kg	1.04	0.159	1
Perfluorooctanesulfonamide (FOSA)	ND		ug/kg	1.04	0.102	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ug/kg	1.04	0.088	1
Perfluorododecanoic Acid (PFDoA)	ND		ug/kg	1.04	0.073	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ug/kg	1.04	0.212	1
Perfluorotetradecanoic Acid (PFTA)	ND		ug/kg	1.04	0.056	1
PFOA/PFOS, Total	0.066	J	ug/kg	1.04	0.044	1

Project Name: CARMAN PLACE**Lab Number:** L1930261**Project Number:** 04736-0005-11**Report Date:** 07/29/19**SAMPLE RESULTS****Lab ID:** L1930261-05**Date Collected:** 07/10/19 12:00**Client ID:** SB-105**Date Received:** 07/11/19**Sample Location:** 123-169 MAIN ST., HEMPSTEAD, NY**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						

Surrogate (Extracted Internal Standard)	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	83		60-153
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	81		65-182
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	92		70-151
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	74		61-147
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	76		62-149
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	86		63-166
Perfluoro[13C8]Octanoic Acid (M8PFOA)	77		62-152
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	85		32-182
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	85		61-154
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	85		65-151
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	74		65-150
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	103		25-186
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	54		45-137
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	83		64-158
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	57		1-125
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	62		42-136
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	73		56-148
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	67		26-160

Project Name: CARMAN PLACE**Lab Number:** L1930261**Project Number:** 04736-0005-11**Report Date:** 07/29/19**SAMPLE RESULTS**

Lab ID: L1930261-06
 Client ID: MW-101
 Sample Location: 123-169 MAIN ST., HEMPSTEAD, NY

Date Collected: 07/10/19 17:20
 Date Received: 07/11/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D
 Analytical Date: 07/25/19 09:55
 Analyst: CB

Extraction Method: EPA 3510C
 Extraction Date: 07/14/19 16:41

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	27.		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: CARMAN PLACE**Lab Number:** L1930261**Project Number:** 04736-0005-11**Report Date:** 07/29/19**SAMPLE RESULTS****Lab ID:** L1930261-06**Date Collected:** 07/10/19 17:20**Client ID:** MW-101**Date Received:** 07/11/19**Sample Location:** 123-169 MAIN ST., HEMPSTEAD, 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	1.2	J	ug/l	2.0	0.49	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	45		21-120
Phenol-d6	46		10-120
Nitrobenzene-d5	81		23-120
2-Fluorobiphenyl	75		15-120
2,4,6-Tribromophenol	35		10-120
4-Terphenyl-d14	81		41-149

Project Name: CARMAN PLACE**Lab Number:** L1930261**Project Number:** 04736-0005-11**Report Date:** 07/29/19**SAMPLE RESULTS**

Lab ID: L1930261-06
 Client ID: MW-101
 Sample Location: 123-169 MAIN ST., HEMPSTEAD, NY

Date Collected: 07/10/19 17:20
 Date Received: 07/11/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D-SIM
 Analytical Date: 07/16/19 20:11
 Analyst: DV

Extraction Method: EPA 3510C
 Extraction Date: 07/14/19 16:43

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	0.10	J	ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	4.8		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	0.41		ug/l	0.10	0.05	1
Benzo(a)anthracene	2.4		ug/l	0.10	0.02	1
Benzo(a)pyrene	1.3		ug/l	0.10	0.02	1
Benzo(b)fluoranthene	1.6		ug/l	0.10	0.01	1
Benzo(k)fluoranthene	0.60		ug/l	0.10	0.01	1
Chrysene	1.4		ug/l	0.10	0.01	1
Acenaphthylene	0.72		ug/l	0.10	0.01	1
Anthracene	1.1		ug/l	0.10	0.01	1
Benzo(ghi)perylene	0.73		ug/l	0.10	0.01	1
Fluorene	0.49		ug/l	0.10	0.01	1
Phenanthrene	5.1		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	0.21		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	0.80		ug/l	0.10	0.01	1
Pyrene	4.4		ug/l	0.10	0.02	1
2-Methylnaphthalene	0.11		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: CARMAN PLACE**Lab Number:** L1930261**Project Number:** 04736-0005-11**Report Date:** 07/29/19**SAMPLE RESULTS**

Lab ID: L1930261-06

Date Collected: 07/10/19 17:20

Client ID: MW-101

Date Received: 07/11/19

Sample Location: 123-169 MAIN ST., HEMPSTEAD, 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	47		21-120
Phenol-d6	46		10-120
Nitrobenzene-d5	73		23-120
2-Fluorobiphenyl	74		15-120
2,4,6-Tribromophenol	35		10-120
4-Terphenyl-d14	97		41-149

Project Name: CARMAN PLACE**Project Number:** 04736-0005-11**Lab Number:** L1930261**Report Date:** 07/29/19**SAMPLE RESULTS**

Lab ID: L1930261-06

Client ID: MW-101

Sample Location: 123-169 MAIN ST., HEMPSTEAD, NY

Date Collected: 07/10/19 17:20

Date Received: 07/11/19

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Analytical Method: 1,8270D-SIM

Analytical Date: 07/18/19 09:43

Analyst: MA

Extraction Method: EPA 3510C

Extraction Date: 07/16/19 14:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	304.		ng/l	144	32.6	1
Surrogate	% Recovery		Qualifier	Acceptance Criteria		
1,4-Dioxane-d8	34			15-110		

Project Name: CARMAN PLACE**Lab Number:** L1930261**Project Number:** 04736-0005-11**Report Date:** 07/29/19**SAMPLE RESULTS**

Lab ID: L1930261-06
 Client ID: MW-101
 Sample Location: 123-169 MAIN ST., HEMPSTEAD, NY

Date Collected: 07/10/19 17:20
 Date Received: 07/11/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 122,537(M)
 Analytical Date: 07/21/19 04:12
 Analyst: AJ

Extraction Method: EPA 537
 Extraction Date: 07/19/19 07:04

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	15.6		ng/l	2.17	0.443	1
Perfluoropentanoic Acid (PFPeA)	29.9		ng/l	2.17	0.430	1
Perfluorobutanesulfonic Acid (PFBS)	30.0		ng/l	2.17	0.259	1
Perfluorohexanoic Acid (PFHxA)	22.7		ng/l	2.17	0.356	1
Perfluoroheptanoic Acid (PFHpA)	13.2		ng/l	2.17	0.245	1
Perfluorohexanesulfonic Acid (PFHxS)	5.25		ng/l	2.17	0.409	1
Perfluorooctanoic Acid (PFOA)	41.4		ng/l	2.17	0.256	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	2.17	1.45	1
Perfluoroheptanesulfonic Acid (PFHpS)	1.07	J	ng/l	2.17	0.748	1
Perfluorononanoic Acid (PFNA)	6.49		ng/l	2.17	0.339	1
Perfluorooctanesulfonic Acid (PFOS)	51.6		ng/l	2.17	0.548	1
Perfluorodecanoic Acid (PFDA)	1.63	J	ng/l	2.17	0.330	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	2.17	1.32	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	2.17	0.704	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	2.17	0.283	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	2.17	1.06	1
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	2.17	0.630	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	2.17	0.874	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	2.17	0.404	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	2.17	0.356	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	2.17	0.270	1
PFOA/PFOS, Total	93.0		ng/l	2.17	0.256	1

Project Name: CARMAN PLACE

Lab Number: L1930261

Project Number: 04736-0005-11

Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930261-06

Date Collected: 07/10/19 17:20

Client ID: MW-101

Date Received: 07/11/19

Sample Location: 123-169 MAIN ST., HEMPSTEAD, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						

Surrogate (Extracted Internal Standard)	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	82		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	72		16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	96		31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	79		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	88		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	98		47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	84		36-149
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	132		1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	76		34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	86		42-146
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	66		38-144
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	88		7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	28		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	51		40-144
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	9		1-87
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	39		23-146
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	46		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	58		33-143

Project Name: CARMAN PLACE**Lab Number:** L1930261**Project Number:** 04736-0005-11**Report Date:** 07/29/19**SAMPLE RESULTS**

Lab ID: L1930261-07
 Client ID: MW-105
 Sample Location: 123-169 MAIN ST., HEMPSTEAD, NY

Date Collected: 07/10/19 13:35
 Date Received: 07/11/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D
 Analytical Date: 07/25/19 06:19
 Analyst: CB

Extraction Method: EPA 3510C
 Extraction Date: 07/14/19 16:41

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: CARMAN PLACE

Lab Number: L1930261

Project Number: 04736-0005-11

Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930261-07

Date Collected: 07/10/19 13:35

Client ID: MW-105

Date Received: 07/11/19

Sample Location: 123-169 MAIN ST., HEMPSTEAD, 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	0.80	J	ug/l	2.0	0.49	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	36		21-120
Phenol-d6	28		10-120
Nitrobenzene-d5	51		23-120
2-Fluorobiphenyl	50		15-120
2,4,6-Tribromophenol	41		10-120
4-Terphenyl-d14	59		41-149

Project Name: CARMAN PLACE**Lab Number:** L1930261**Project Number:** 04736-0005-11**Report Date:** 07/29/19**SAMPLE RESULTS**

Lab ID: L1930261-07
 Client ID: MW-105
 Sample Location: 123-169 MAIN ST., HEMPSTEAD, NY

Date Collected: 07/10/19 13:35
 Date Received: 07/11/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D-SIM
 Analytical Date: 07/16/19 20:27
 Analyst: DV

Extraction Method: EPA 3510C
 Extraction Date: 07/14/19 16:43

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	0.92		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	0.22		ug/l	0.10	0.05	1
Benzo(a)anthracene	0.42		ug/l	0.10	0.02	1
Benzo(a)pyrene	0.21		ug/l	0.10	0.02	1
Benzo(b)fluoranthene	0.31		ug/l	0.10	0.01	1
Benzo(k)fluoranthene	0.09	J	ug/l	0.10	0.01	1
Chrysene	0.29		ug/l	0.10	0.01	1
Acenaphthylene	0.16		ug/l	0.10	0.01	1
Anthracene	0.32		ug/l	0.10	0.01	1
Benzo(ghi)perylene	0.16		ug/l	0.10	0.01	1
Fluorene	0.19		ug/l	0.10	0.01	1
Phenanthrene	1.6		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	0.16		ug/l	0.10	0.01	1
Pyrene	0.80		ug/l	0.10	0.02	1
2-Methylnaphthalene	0.05	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: CARMAN PLACE**Lab Number:** L1930261**Project Number:** 04736-0005-11**Report Date:** 07/29/19**SAMPLE RESULTS**

Lab ID: L1930261-07

Date Collected: 07/10/19 13:35

Client ID: MW-105

Date Received: 07/11/19

Sample Location: 123-169 MAIN ST., HEMPSTEAD, 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	43		21-120
Phenol-d6	34		10-120
Nitrobenzene-d5	56		23-120
2-Fluorobiphenyl	59		15-120
2,4,6-Tribromophenol	43		10-120
4-Terphenyl-d14	64		41-149

Project Name: CARMAN PLACE**Project Number:** 04736-0005-11**Lab Number:** L1930261**Report Date:** 07/29/19**SAMPLE RESULTS**

Lab ID: L1930261-07
 Client ID: MW-105
 Sample Location: 123-169 MAIN ST., HEMPSTEAD, NY

Date Collected: 07/10/19 13:35
 Date Received: 07/11/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D-SIM
 Analytical Date: 07/18/19 21:55
 Analyst: MA

Extraction Method: EPA 3510C
 Extraction Date: 07/16/19 14:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	318.		ng/l	144	32.6	1
Surrogate	% Recovery		Qualifier	Acceptance Criteria		
1,4-Dioxane-d8	33			15-110		

Project Name: CARMAN PLACE**Lab Number:** L1930261**Project Number:** 04736-0005-11**Report Date:** 07/29/19**SAMPLE RESULTS**

Lab ID: L1930261-07
 Client ID: MW-105
 Sample Location: 123-169 MAIN ST., HEMPSTEAD, NY

Date Collected: 07/10/19 13:35
 Date Received: 07/11/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 122,537(M)
 Analytical Date: 07/21/19 04:46
 Analyst: AJ

Extraction Method: EPA 537
 Extraction Date: 07/19/19 07:04

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	11.5		ng/l	1.84	0.375	1
Perfluoropentanoic Acid (PFPeA)	23.2		ng/l	1.84	0.364	1
Perfluorobutanesulfonic Acid (PFBS)	7.43		ng/l	1.84	0.219	1
Perfluorohexanoic Acid (PFHxA)	18.3		ng/l	1.84	0.301	1
Perfluoroheptanoic Acid (PFHpA)	12.7		ng/l	1.84	0.207	1
Perfluorohexanesulfonic Acid (PFHxS)	2.45		ng/l	1.84	0.346	1
Perfluorooctanoic Acid (PFOA)	38.8		ng/l	1.84	0.217	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	1.96		ng/l	1.84	1.22	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.84	0.632	1
Perfluorononanoic Acid (PFNA)	7.21		ng/l	1.84	0.287	1
Perfluorooctanesulfonic Acid (PFOS)	43.8		ng/l	1.84	0.463	1
Perfluorodecanoic Acid (PFDA)	15.3		ng/l	1.84	0.279	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.84	1.11	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	1.84	0.596	1
Perfluoroundecanoic Acid (PFUnA)	4.18		ng/l	1.84	0.239	1
Perfluorodecanesulfonic Acid (PFDS)	3.83		ng/l	1.84	0.901	1
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	1.84	0.533	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	1.84	0.739	1
Perfluorododecanoic Acid (PFDoA)	0.518	J	ng/l	1.84	0.342	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	1.84	0.301	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	1.84	0.228	1
PFOA/PFOS, Total	82.6		ng/l	1.84	0.217	1

Project Name: CARMAN PLACE

Lab Number: L1930261

Project Number: 04736-0005-11

Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930261-07

Date Collected: 07/10/19 13:35

Client ID: MW-105

Date Received: 07/11/19

Sample Location: 123-169 MAIN ST., HEMPSTEAD, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						

Surrogate (Extracted Internal Standard)	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	92		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	85		16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	126		31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	92		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	103		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	133		47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	96		36-149
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	145		1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	92		34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	122		42-146
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	88		38-144
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	125		7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	59		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	87		40-144
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	14		1-87
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	54		23-146
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	76		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	79		33-143

Project Name: CARMAN PLACE**Lab Number:** L1930261**Project Number:** 04736-0005-11**Report Date:** 07/29/19**SAMPLE RESULTS**

Lab ID: L1930261-08
 Client ID: FIELD BLANK
 Sample Location: 123-169 MAIN ST., HEMPSTEAD, NY

Date Collected: 07/10/19 00:00
 Date Received: 07/11/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 122,537(M)
 Analytical Date: 07/21/19 03:56
 Analyst: AJ

Extraction Method: EPA 537
 Extraction Date: 07/19/19 07:04

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	ND		ng/l	1.78	0.363	1
Perfluoropentanoic Acid (PFPeA)	ND		ng/l	1.78	0.352	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/l	1.78	0.212	1
Perfluorohexanoic Acid (PFHxA)	ND		ng/l	1.78	0.292	1
Perfluoroheptanoic Acid (PFHpA)	ND		ng/l	1.78	0.200	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	1.78	0.334	1
Perfluorooctanoic Acid (PFOA)	ND		ng/l	1.78	0.210	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	1.78	1.18	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.78	0.612	1
Perfluorononanoic Acid (PFNA)	ND		ng/l	1.78	0.278	1
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/l	1.78	0.448	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.78	0.270	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.78	1.08	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	1.78	0.576	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.78	0.231	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	1.78	0.872	1
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	1.78	0.516	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	1.78	0.715	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.78	0.331	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	1.78	0.291	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	1.78	0.221	1
PFOA/PFOS, Total	ND		ng/l	1.78	0.210	1

Project Name: CARMAN PLACE

Lab Number: L1930261

Project Number: 04736-0005-11

Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930261-08

Date Collected: 07/10/19 00:00

Client ID: FIELD BLANK

Date Received: 07/11/19

Sample Location: 123-169 MAIN ST., HEMPSTEAD, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						

Surrogate (Extracted Internal Standard)	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	111		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	111		16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	140		31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	121		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	121		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	144		47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	103		36-149
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	145		1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	98		34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	116		42-146
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	100		38-144
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	124		7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	84		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	86		40-144
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	23		1-87
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	74		23-146
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	87		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	87		33-143

Project Name: CARMAN PLACE
Project Number: 04736-0005-11

Lab Number: L1930261
Report Date: 07/29/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 07/15/19 04:50
Analyst: ALS

Extraction Method: EPA 3510C
Extraction Date: 07/14/19 11:43

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 06-07 Batch: WG1259700-1					
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: CARMAN PLACE
Project Number: 04736-0005-11

Lab Number: L1930261
Report Date: 07/29/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 07/15/19 04:50
Analyst: ALS

Extraction Method: EPA 3510C
Extraction Date: 07/14/19 11:43

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 06-07 Batch: WG1259700-1					
Dimethyl phthalate	2.9	J	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: CARMAN PLACE
Project Number: 04736-0005-11

Lab Number: L1930261
Report Date: 07/29/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 07/15/19 04:50
Analyst: ALS

Extraction Method: EPA 3510C
Extraction Date: 07/14/19 11:43

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 06-07 Batch: WG1259700-1					
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	67		21-120
Phenol-d6	49		10-120
Nitrobenzene-d5	86		23-120
2-Fluorobiphenyl	92		15-120
2,4,6-Tribromophenol	73		10-120
4-Terphenyl-d14	98		41-149

Project Name: CARMAN PLACE
Project Number: 04736-0005-11

Lab Number: L1930261
Report Date: 07/29/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 07/15/19 13:11
Analyst: DV

Extraction Method: EPA 3510C
Extraction Date: 07/14/19 11:50

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 06-07 Batch: WG1259701-1					
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: CARMAN PLACE
Project Number: 04736-0005-11

Lab Number: L1930261
Report Date: 07/29/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
 Analytical Date: 07/15/19 13:11
 Analyst: DV

Extraction Method: EPA 3510C
 Extraction Date: 07/14/19 11:50

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 06-07 Batch: WG1259701-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	63		21-120
Phenol-d6	48		10-120
Nitrobenzene-d5	92		23-120
2-Fluorobiphenyl	92		15-120
2,4,6-Tribromophenol	107		10-120
4-Terphenyl-d14	109		41-149

Project Name: CARMAN PLACE
Project Number: 04736-0005-11

Lab Number: L1930261
Report Date: 07/29/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 07/17/19 07:59
Analyst: MA

Extraction Method: EPA 3510C
Extraction Date: 07/16/19 14:30

Parameter	Result	Qualifier	Units	RL	MDL
1,4 Dioxane by 8270D-SIM - Mansfield Lab for sample(s): 06-07 Batch: WG1260506-1					
1,4-Dioxane	ND		ng/l	150	33.9

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	24		15-110

Project Name: CARMAN PLACE
Project Number: 04736-0005-11

Lab Number: L1930261
Report Date: 07/29/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 122,537(M)
Analytical Date: 07/21/19 01:10
Analyst: AJ

Extraction Method: EPA 537
Extraction Date: 07/19/19 07:04

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab for sample(s): 06-08 Batch: WG1261911-1					
Perfluorobutanoic Acid (PFBA)	ND		ng/l	2.00	0.408
Perfluoropentanoic Acid (PFPeA)	ND		ng/l	2.00	0.396
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/l	2.00	0.238
Perfluorohexanoic Acid (PFHxA)	ND		ng/l	2.00	0.328
Perfluoroheptanoic Acid (PFHpA)	ND		ng/l	2.00	0.225
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	2.00	0.376
Perfluorooctanoic Acid (PFOA)	ND		ng/l	2.00	0.236
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	2.00	1.33
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	2.00	0.688
Perfluorononanoic Acid (PFNA)	ND		ng/l	2.00	0.312
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/l	2.00	0.504
Perfluorodecanoic Acid (PFDA)	ND		ng/l	2.00	0.304
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	2.00	1.21
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	2.00	0.648
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	2.00	0.260
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	2.00	0.980
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	2.00	0.580
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	2.00	0.804
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	2.00	0.372
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	2.00	0.327
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	2.00	0.248
PFOA/PFOS, Total	ND		ng/l	2.00	0.236

Project Name: CARMAN PLACE
Project Number: 04736-0005-11

Lab Number: L1930261
Report Date: 07/29/19

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 122,537(M)
Analytical Date: 07/21/19 01:10
Analyst: AJ

Extraction Method: EPA 537
Extraction Date: 07/19/19 07:04

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab for sample(s): 06-08 Batch: WG1261911-1					

Surrogate (Extracted Internal Standard)	%Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	124		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	125		16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	129		31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	128		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	134		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	135		47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	115		36-149
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	124		1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	106		34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	106		42-146
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	102		38-144
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	114		7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	87		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	101		40-144
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	30		1-87
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	101		23-146
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	97		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	99		33-143

Project Name: CARMAN PLACE
Project Number: 04736-0005-11

Lab Number: L1930261
Report Date: 07/29/19

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): 01-05 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: CARMAN PLACE
Project Number: 04736-0005-11

Lab Number: L1930261
Report Date: 07/29/19

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): 01-05 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: CARMAN PLACE
Project Number: 04736-0005-11

Lab Number: L1930261
Report Date: 07/29/19

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): 01-05 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

Project Name: CARMAN PLACE
Project Number: 04736-0005-11

Lab Number: L1930261
Report Date: 07/29/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 122,537(M)
Analytical Date: 07/26/19 21:33
Analyst: JW

Extraction Method: EPA 537(M)
Extraction Date: 07/25/19 10:12

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab for sample(s): 01-05 Batch: WG1264347-1					
Perfluorobutanoic Acid (PFBA)	0.104	J	ug/kg	1.00	0.023
Perfluoropentanoic Acid (PFPeA)	ND		ug/kg	1.00	0.046
Perfluorobutanesulfonic Acid (PFBS)	ND		ug/kg	1.00	0.039
Perfluorohexanoic Acid (PFHxA)	ND		ug/kg	1.00	0.053
Perfluoroheptanoic Acid (PFHpA)	ND		ug/kg	1.00	0.045
Perfluorohexanesulfonic Acid (PFHxS)	ND		ug/kg	1.00	0.061
Perfluorooctanoic Acid (PFOA)	ND		ug/kg	1.00	0.042
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ug/kg	1.00	0.180
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ug/kg	1.00	0.136
Perfluorononanoic Acid (PFNA)	ND		ug/kg	1.00	0.075
Perfluorooctanesulfonic Acid (PFOS)	ND		ug/kg	1.00	0.130
Perfluorodecanoic Acid (PFDA)	ND		ug/kg	1.00	0.067
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ug/kg	1.00	0.287
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ug/kg	1.00	0.202
Perfluoroundecanoic Acid (PFUnA)	ND		ug/kg	1.00	0.047
Perfluorodecanesulfonic Acid (PFDS)	ND		ug/kg	1.00	0.153
Perfluorooctanesulfonamide (FOSA)	ND		ug/kg	1.00	0.098
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ug/kg	1.00	0.085
Perfluorododecanoic Acid (PFDoA)	ND		ug/kg	1.00	0.070
Perfluorotridecanoic Acid (PFTrDA)	ND		ug/kg	1.00	0.204
Perfluorotetradecanoic Acid (PFTA)	ND		ug/kg	1.00	0.054
PFOA/PFOS, Total	ND		ug/kg	1.00	0.042

Project Name: CARMAN PLACE
Project Number: 04736-0005-11

Lab Number: L1930261
Report Date: 07/29/19

Method Blank Analysis Batch Quality Control

Analytical Method: 122,537(M)
Analytical Date: 07/26/19 21:33
Analyst: JW

Extraction Method: EPA 537(M)
Extraction Date: 07/25/19 10:12

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab for sample(s): 01-05 Batch: WG1264347-1					

Surrogate (Extracted Internal Standard)	%Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	74		60-153
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	79		65-182
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	93		70-151
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	77		61-147
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	80		62-149
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	96		63-166
Perfluoro[13C8]Octanoic Acid (M8PFOA)	84		62-152
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	85		32-182
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	91		61-154
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	95		65-151
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	86		65-150
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	93		25-186
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	73		45-137
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	93		64-158
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	1		1-125
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	62		42-136
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	83		56-148
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	78		26-160

Lab Control Sample Analysis **Batch Quality Control**

Project Name: CARMAN PLACE

Project Number: 04736-0005-11

Lab Number: L1930261

Report Date: 07/29/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 06-07 Batch: WG1259700-2 WG1259700-3								
Acenaphthene	63		74		37-111	16		30
1,2,4-Trichlorobenzene	65		79		39-98	19		30
Hexachlorobenzene	71		83		40-140	16		30
Bis(2-chloroethyl)ether	62		76		40-140	20		30
2-Chloronaphthalene	69		82		40-140	17		30
1,2-Dichlorobenzene	63		76		40-140	19		30
1,3-Dichlorobenzene	62		73		40-140	16		30
1,4-Dichlorobenzene	63		77		36-97	20		30
3,3'-Dichlorobenzidine	57		68		40-140	18		30
2,4-Dinitrotoluene	61		74		48-143	19		30
2,6-Dinitrotoluene	70		84		40-140	18		30
Fluoranthene	77		89		40-140	14		30
4-Chlorophenyl phenyl ether	66		78		40-140	17		30
4-Bromophenyl phenyl ether	73		85		40-140	15		30
Bis(2-chloroisopropyl)ether	76		91		40-140	18		30
Bis(2-chloroethoxy)methane	67		81		40-140	19		30
Hexachlorobutadiene	74		86		40-140	15		30
Hexachlorocyclopentadiene	71		85		40-140	18		30
Hexachloroethane	65		79		40-140	19		30
Isophorone	70		85		40-140	19		30
Naphthalene	64		78		40-140	20		30
Nitrobenzene	70		85		40-140	19		30
NDPA/DPA	66		78		40-140	17		30

Lab Control Sample Analysis **Batch Quality Control**

Project Name: CARMAN PLACE

Project Number: 04736-0005-11

Lab Number: L1930261

Report Date: 07/29/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 06-07 Batch: WG1259700-2 WG1259700-3								
n-Nitrosodi-n-propylamine	74		91		29-132	21		30
Bis(2-ethylhexyl)phthalate	73		77		40-140	5		30
Butyl benzyl phthalate	78		86		40-140	10		30
Di-n-butylphthalate	73		81		40-140	10		30
Di-n-octylphthalate	82		86		40-140	5		30
Diethyl phthalate	70		81		40-140	15		30
Dimethyl phthalate	85		96		40-140	12		30
Benzo(a)anthracene	75		86		40-140	14		30
Benzo(a)pyrene	78		87		40-140	11		30
Benzo(b)fluoranthene	73		96		40-140	27		30
Benzo(k)fluoranthene	74		84		40-140	13		30
Chrysene	73		81		40-140	10		30
Acenaphthylene	71		85		45-123	18		30
Anthracene	76		87		40-140	13		30
Benzo(ghi)perylene	76		95		40-140	22		30
Fluorene	66		78		40-140	17		30
Phenanthrene	72		84		40-140	15		30
Dibenzo(a,h)anthracene	77		85		40-140	10		30
Indeno(1,2,3-cd)pyrene	72		81		40-140	12		30
Pyrene	75		88		26-127	16		30
Biphenyl	62		73		40-140	16		30
4-Chloroaniline	72		88		40-140	20		30
2-Nitroaniline	70		85		52-143	19		30

Lab Control Sample Analysis Batch Quality Control

Project Name: CARMAN PLACE

Project Number: 04736-0005-11

Lab Number: L1930261

Report Date: 07/29/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 06-07 Batch: WG1259700-2 WG1259700-3								
3-Nitroaniline	54		66		25-145	20		30
4-Nitroaniline	58		72		51-143	22		30
Dibenzofuran	63		75		40-140	17		30
2-Methylnaphthalene	64		75		40-140	16		30
1,2,4,5-Tetrachlorobenzene	68		80		2-134	16		30
Acetophenone	60		74		39-129	21		30
2,4,6-Trichlorophenol	72		87		30-130	19		30
p-Chloro-m-cresol	73		88		23-97	19		30
2-Chlorophenol	66		81		27-123	20		30
2,4-Dichlorophenol	68		85		30-130	22		30
2,4-Dimethylphenol	67		82		30-130	20		30
2-Nitrophenol	70		88		30-130	23		30
4-Nitrophenol	58		76		10-80	27		30
2,4-Dinitrophenol	73		87		20-130	18		30
4,6-Dinitro-o-cresol	77		93		20-164	19		30
Pentachlorophenol	72		85		9-103	17		30
Phenol	50		65		12-110	26		30
2-Methylphenol	62		79		30-130	24		30
3-Methylphenol/4-Methylphenol	67		84		30-130	23		30
2,4,5-Trichlorophenol	73		93		30-130	24		30
Benzoic Acid	46		61		10-164	28		30
Benzyl Alcohol	65		79		26-116	19		30
Carbazole	74		87		55-144	16		30

Lab Control Sample Analysis Batch Quality Control

Project Name: CARMAN PLACE

Lab Number: L1930261

Project Number: 04736-0005-11

Report Date: 07/29/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits

Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 06-07 Batch: WG1259700-2 WG1259700-3

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	59		76		21-120
Phenol-d6	51		62		10-120
Nitrobenzene-d5	71		90		23-120
2-Fluorobiphenyl	73		86		15-120
2,4,6-Tribromophenol	69		82		10-120
4-Terphenyl-d14	78		92		41-149

Lab Control Sample Analysis Batch Quality Control

Project Name: CARMAN PLACE

Project Number: 04736-0005-11

Lab Number: L1930261

Report Date: 07/29/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 06-07 Batch: WG1259701-2 WG1259701-3								
Acenaphthene	86		79		40-140	8		40
2-Chloronaphthalene	87		80		40-140	8		40
Fluoranthene	88		82		40-140	7		40
Hexachlorobutadiene	76		70		40-140	8		40
Naphthalene	82		75		40-140	9		40
Benzo(a)anthracene	89		82		40-140	8		40
Benzo(a)pyrene	92		85		40-140	8		40
Benzo(b)fluoranthene	93		86		40-140	8		40
Benzo(k)fluoranthene	96		90		40-140	6		40
Chrysene	87		81		40-140	7		40
Acenaphthylene	94		83		40-140	12		40
Anthracene	90		84		40-140	7		40
Benzo(ghi)perylene	85		81		40-140	5		40
Fluorene	89		82		40-140	8		40
Phenanthrene	86		80		40-140	7		40
Dibenzo(a,h)anthracene	93		90		40-140	3		40
Indeno(1,2,3-cd)pyrene	90		86		40-140	5		40
Pyrene	87		81		40-140	7		40
2-Methylnaphthalene	86		79		40-140	8		40
Pentachlorophenol	99		95		40-140	4		40
Hexachlorobenzene	89		82		40-140	8		40
Hexachloroethane	84		76		40-140	10		40

Lab Control Sample Analysis**Batch Quality Control****Project Name:** CARMAN PLACE**Project Number:** 04736-0005-11**Lab Number:** L1930261**Report Date:** 07/29/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 06-07 Batch: WG1259701-2 WG1259701-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	68		62		21-120
Phenol-d6	56		52		10-120
Nitrobenzene-d5	92		84		23-120
2-Fluorobiphenyl	87		80		15-120
2,4,6-Tribromophenol	104		92		10-120
4-Terphenyl-d14	102		94		41-149

Lab Control Sample Analysis Batch Quality Control

Project Name: CARMAN PLACE

Project Number: 04736-0005-11

Lab Number: L1930261

Report Date: 07/29/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
1,4 Dioxane by 8270D-SIM - Mansfield Lab Associated sample(s): 06-07 Batch: WG1260506-2 WG1260506-3								
1,4-Dioxane	119		118		40-140	1		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,4-Dioxane-d8	25		23		15-110

Lab Control Sample Analysis

Batch Quality Control

Project Name: CARMAN PLACE

Project Number: 04736-0005-11

Lab Number: L1930261

Report Date: 07/29/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 06-08 Batch: WG1261911-2 WG1261911-3								
Perfluorobutanoic Acid (PFBA)	106		107		67-148	1		30
Perfluoropentanoic Acid (PFPeA)	110		111		63-161	1		30
Perfluorobutanesulfonic Acid (PFBS)	103		107		65-157	4		30
Perfluorohexanoic Acid (PFHxA)	118		118		69-168	0		30
Perfluoroheptanoic Acid (PFHpA)	110		107		58-159	3		30
Perfluorohexanesulfonic Acid (PFHxS)	109		97		69-177	12		30
Perfluorooctanoic Acid (PFOA)	117		109		63-159	7		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	107		113		49-187	5		30
Perfluoroheptanesulfonic Acid (PFHpS)	123		131		61-179	6		30
Perfluorononanoic Acid (PFNA)	121		120		68-171	1		30
Perfluorooctanesulfonic Acid (PFOS)	104		107		52-151	3		30
Perfluorodecanoic Acid (PFDA)	112		123		63-171	9		30
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	99		96		56-173	3		30
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	99		102		60-166	3		30
Perfluoroundecanoic Acid (PFUnA)	100		115		60-153	14		30
Perfluorodecanesulfonic Acid (PFDS)	110		108		38-156	2		30
Perfluorooctanesulfonamide (FOSA)	90		121		46-170	29		30
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	98		84		45-170	15		30
Perfluorododecanoic Acid (PFDoA)	89		89		67-153	0		30
Perfluorotridecanoic Acid (PFTrDA)	95		102		48-158	7		30
Perfluorotetradecanoic Acid (PFTA)	105		99		59-182	6		30

Lab Control Sample Analysis **Batch Quality Control**

Project Name: CARMAN PLACE

Project Number: 04736-0005-11

Lab Number: L1930261

Report Date: 07/29/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 06-08 Batch: WG1261911-2 WG1261911-3								

Surrogate (Extracted Internal Standard)	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	112		112		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	113		110		16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	124		107		31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	122		121		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	121		124		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	127		121		47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	108		109		36-149
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	133		108		1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	107		95		34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	109		85		42-146
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	110		93		38-144
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	113		90		7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	100		83		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	101		85		40-144
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	23		23		1-87
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	83		84		23-146
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	97		86		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	95		88		33-143

Lab Control Sample Analysis Batch Quality Control

Project Name: CARMAN PLACE

Project Number: 04736-0005-11

Lab Number: L1930261

Report Date: 07/29/19

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: 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: CARMAN PLACE

Project Number: 04736-0005-11

Lab Number: L1930261

Report Date: 07/29/19

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: 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: CARMAN PLACE

Project Number: 04736-0005-11

Lab Number: L1930261

Report Date: 07/29/19

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: 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: CARMAN PLACE

Project Number: 04736-0005-11

Lab Number: L1930261

Report Date: 07/29/19

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: 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

Lab Control Sample Analysis

Batch Quality Control

Project Name: CARMAN PLACE

Project Number: 04736-0005-11

Lab Number: L1930261

Report Date: 07/29/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 01-05 Batch: WG1264347-2 WG1264347-3								
Perfluorobutanoic Acid (PFBA)	113		110		71-135	3		30
Perfluoropentanoic Acid (PFPeA)	119		118		69-132	1		30
Perfluorobutanesulfonic Acid (PFBS)	114		110		72-128	4		30
Perfluorohexanoic Acid (PFHxA)	124		122		70-132	2		30
Perfluoroheptanoic Acid (PFHpA)	110		108		71-131	2		30
Perfluorohexanesulfonic Acid (PFHxS)	116		109		67-130	6		30
Perfluorooctanoic Acid (PFOA)	116		115		69-133	1		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	115		112		64-140	3		30
Perfluoroheptanesulfonic Acid (PFHpS)	122		112		70-132	9		30
Perfluorononanoic Acid (PFNA)	120		117		72-129	3		30
Perfluorooctanesulfonic Acid (PFOS)	106		103		68-136	3		30
Perfluorodecanoic Acid (PFDA)	120		117		69-133	3		30
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	124		115		65-137	8		30
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	108		117		63-144	8		30
Perfluoroundecanoic Acid (PFUnA)	103		103		64-136	0		30
Perfluorodecanesulfonic Acid (PFDS)	122		121		59-134	1		30
Perfluorooctanesulfonamide (FOSA)	134		113		67-137	17		30
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	92		105		61-139	13		30
Perfluorododecanoic Acid (PFDoA)	112		106		69-135	6		30
Perfluorotridecanoic Acid (PFTrDA)	112		108		66-139	4		30
Perfluorotetradecanoic Acid (PFTA)	124		122		69-133	2		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: CARMAN PLACE

Project Number: 04736-0005-11

Lab Number: L1930261

Report Date: 07/29/19

Parameter	LCS %Recovery	Qual	LCS %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 01-05 Batch: WG1264347-2 WG1264347-3								

Surrogate (Extracted Internal Standard)	LCS %Recovery	Qual	LCS %Recovery	Qual	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	79		74		60-153
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	83		79		65-182
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	90		89		70-151
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	78		77		61-147
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	80		80		62-149
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	90		93		63-166
Perfluoro[13C8]Octanoic Acid (M8PFOA)	82		82		62-152
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	92		93		32-182
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	87		89		61-154
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	88		85		65-151
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	82		83		65-150
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	94		94		25-186
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	74		72		45-137
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	86		88		64-158
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	2		2		1-125
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	74		71		42-136
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	81		85		56-148
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	74		79		26-160

Matrix Spike Analysis

Batch Quality Control

Project Name: CARMAN PLACE

Project Number: 04736-0005-11

Lab Number: L1930261

Report Date: 07/29/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 06-08 QC Batch ID: WG1261911-4 QC Sample: L1930261-06 Client ID: MW-101												
Perfluorobutanoic Acid (PFBA)	15.6	41.7	60.4	108	-	-	-	-	67-148	-	-	30
Perfluoropentanoic Acid (PFPeA)	29.9	41.7	75.5	109	-	-	-	-	63-161	-	-	30
Perfluorobutanesulfonic Acid (PFBS)	30.0	41.7	73.3	104	-	-	-	-	65-157	-	-	30
Perfluorohexanoic Acid (PFHxA)	22.7	41.7	70.7	115	-	-	-	-	69-168	-	-	30
Perfluoroheptanoic Acid (PFHpA)	13.2	41.7	60.1	113	-	-	-	-	58-159	-	-	30
Perfluorohexanesulfonic Acid (PFHxS)	5.25	41.7	49.6	106	-	-	-	-	69-177	-	-	30
Perfluorooctanoic Acid (PFOA)	41.4	41.7	94.4	127	-	-	-	-	63-159	-	-	30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND	41.7	43.3	104	-	-	-	-	49-187	-	-	30
Perfluoroheptanesulfonic Acid (PFHpS)	1.07J	41.7	61.0	146	-	-	-	-	61-179	-	-	30
Perfluorononanoic Acid (PFNA)	6.49	41.7	53.9	114	-	-	-	-	68-171	-	-	30
Perfluorooctanesulfonic Acid (PFOS)	51.6	41.7	101	119	-	-	-	-	52-151	-	-	30
Perfluorodecanoic Acid (PFDA)	1.63J	41.7	49.3	118	-	-	-	-	63-171	-	-	30
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND	41.7	42.0	101	-	-	-	-	56-173	-	-	30
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND	41.7	33.3	80	-	-	-	-	60-166	-	-	30
Perfluoroundecanoic Acid (PFUnA)	ND	41.7	38.6	93	-	-	-	-	60-153	-	-	30
Perfluorodecanesulfonic Acid (PFDS)	ND	41.7	30.6	73	-	-	-	-	38-156	-	-	30
Perfluorooctanesulfonamide (FOSA)	ND	41.7	37.1	89	-	-	-	-	46-170	-	-	30
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND	41.7	51.6	124	-	-	-	-	45-170	-	-	30
Perfluorododecanoic Acid (PFDoA)	ND	41.7	28.8	69	-	-	-	-	67-153	-	-	30
Perfluorotridecanoic Acid (PFTrDA)	ND	41.7	37.8	91	-	-	-	-	48-158	-	-	30
Perfluorotetradecanoic Acid (PFTA)	ND	41.7	36.2	87	-	-	-	-	59-182	-	-	30

Matrix Spike Analysis**Batch Quality Control****Project Name:** CARMAN PLACE**Project Number:** 04736-0005-11**Lab Number:** L1930261**Report Date:** 07/29/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 06-08 QC Batch ID: WG1261911-4 QC Sample: L1930261-06 Client ID: MW-101												

Surrogate (Extracted Internal Standard)	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	114				7-170
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	186				1-244
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	29				23-146
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	49				1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	72				40-144
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	83				38-144
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	91				21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	101				30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	138				47-153
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	59				24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	67				33-143
Perfluoro[13C4]Butanoic Acid (MPFBA)	96				2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	87				16-173
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	15				1-87
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	102				42-146
Perfluoro[13C8]Octanoic Acid (M8PFOA)	89				36-149
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	94				34-146
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	126				31-159

Matrix Spike Analysis

Batch Quality Control

Project Name: CARMAN PLACE

Project Number: 04736-0005-11

Lab Number: L1930261

Report Date: 07/29/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 01-05 QC Batch ID: WG1264347-4 QC Sample: L1930261-01 Client ID: SB-101												
Perfluorobutanoic Acid (PFBA)	ND	5.02	5.41	108	-	-	-	-	71-135	-	-	30
Perfluoropentanoic Acid (PFPeA)	ND	5.02	5.89	117	-	-	-	-	69-132	-	-	30
Perfluorobutanesulfonic Acid (PFBS)	ND	5.02	5.81	116	-	-	-	-	72-128	-	-	30
Perfluorohexanoic Acid (PFHxA)	ND	5.02	6.13	122	-	-	-	-	70-132	-	-	30
Perfluoroheptanoic Acid (PFHpA)	ND	5.02	5.44	108	-	-	-	-	71-131	-	-	30
Perfluorohexanesulfonic Acid (PFHxS)	ND	5.02	5.54	110	-	-	-	-	67-130	-	-	30
Perfluorooctanoic Acid (PFOA)	ND	5.02	5.64	112	-	-	-	-	69-133	-	-	30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND	5.02	5.93	118	-	-	-	-	64-140	-	-	30
Perfluoroheptanesulfonic Acid (PFHpS)	ND	5.02	5.62	112	-	-	-	-	70-132	-	-	30
Perfluorononanoic Acid (PFNA)	ND	5.02	5.87	117	-	-	-	-	72-129	-	-	30
Perfluorooctanesulfonic Acid (PFOS)	0.318J	5.02	5.52	110	-	-	-	-	68-136	-	-	30
Perfluorodecanoic Acid (PFDA)	ND	5.02	6.13	122	-	-	-	-	69-133	-	-	30
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND	5.02	5.42	108	-	-	-	-	65-137	-	-	30
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND	5.02	4.90	98	-	-	-	-	63-144	-	-	30
Perfluoroundecanoic Acid (PFUnA)	ND	5.02	5.12	102	-	-	-	-	64-136	-	-	30
Perfluorodecanesulfonic Acid (PFDS)	ND	5.02	5.82	116	-	-	-	-	59-134	-	-	30
Perfluorooctanesulfonamide (FOSA)	ND	5.02	5.53	110	-	-	-	-	67-137	-	-	30
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	0.118J	5.02	5.34	106	-	-	-	-	61-139	-	-	30
Perfluorododecanoic Acid (PFDoA)	ND	5.02	5.42	108	-	-	-	-	69-135	-	-	30
Perfluorotridecanoic Acid (PFTrDA)	ND	5.02	5.53	110	-	-	-	-	66-139	-	-	30
Perfluorotetradecanoic Acid (PFTA)	ND	5.02	6.21	124	-	-	-	-	69-133	-	-	30

Matrix Spike Analysis

Batch Quality Control

Project Name: CARMAN PLACE

Project Number: 04736-0005-11

Lab Number: L1930261

Report Date: 07/29/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 01-05 QC Batch ID: WG1264347-4 QC Sample: L1930261-01 Client ID: SB-101												

Surrogate (Extracted Internal Standard)	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	101				25-186
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	88				32-182
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	61				42-136
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	64				45-137
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	95				64-158
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	86				65-150
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	87				61-147
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	89				62-149
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	95				63-166
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	91				56-148
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	87				26-160
Perfluoro[13C4]Butanoic Acid (MPFBA)	90				60-153
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	92				65-182
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	4				1-125
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	89				65-151
Perfluoro[13C8]Octanoic Acid (M8PFOA)	91				62-152
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	96				61-154
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	90				70-151

Lab Duplicate Analysis Batch Quality Control

Project Name: CARMAN PLACE

Project Number: 04736-0005-11

Lab Number: L1930261

Report Date: 07/29/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 06-08 QC Batch ID: WG1261911-5 QC Sample: L1930261-07 Client ID: MW-105						
Perfluorobutanoic Acid (PFBA)	11.5	12.1	ng/l	5		30
Perfluoropentanoic Acid (PFPeA)	23.2	22.8	ng/l	2		30
Perfluorobutanesulfonic Acid (PFBS)	7.43	7.70	ng/l	4		30
Perfluorohexanoic Acid (PFHxA)	18.3	17.9	ng/l	2		30
Perfluoroheptanoic Acid (PFHpA)	12.7	12.8	ng/l	1		30
Perfluorohexanesulfonic Acid (PFHxS)	2.45	2.65	ng/l	8		30
Perfluorooctanoic Acid (PFOA)	38.8	40.0	ng/l	3		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	1.96	ND	ng/l	NC		30
Perfluoroheptanesulfonic Acid (PFHpS)	ND	ND	ng/l	NC		30
Perfluorononanoic Acid (PFNA)	7.21	7.06	ng/l	2		30
Perfluorooctanesulfonic Acid (PFOS)	43.8	47.5	ng/l	8		30
Perfluorodecanoic Acid (PFDA)	15.3	15.4	ng/l	1		30
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND	ND	ng/l	NC		30
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND	ND	ng/l	NC		30
Perfluoroundecanoic Acid (PFUnA)	4.18	4.08	ng/l	2		30
Perfluorodecanesulfonic Acid (PFDS)	3.83	4.35	ng/l	13		30
Perfluorooctanesulfonamide (FOSA)	ND	ND	ng/l	NC		30
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND	ND	ng/l	NC		30
Perfluorododecanoic Acid (PFDoA)	0.518J	1.10J	ng/l	NC		30
Perfluorotridecanoic Acid (PFTrDA)	ND	ND	ng/l	NC		30

Lab Duplicate Analysis

Batch Quality Control

Project Name: CARMAN PLACE

Project Number: 04736-0005-11

Lab Number: L1930261

Report Date: 07/29/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 06-08 QC Batch ID: WG1261911-5 QC Sample: L1930261-07 Client ID: MW-105						
Perfluorotetradecanoic Acid (PFTA)	ND	ND	ng/l	NC		30
PFOA/PFOS, Total	82.6	87.5	ng/l	0		30

Surrogate (Extracted Internal Standard)	%Recovery	Qualifier	%Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	92		95		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	85		90		16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	126		119		31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	92		97		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	103		103		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	133		106		47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	96		99		36-149
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	145		143		1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	92		98		34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	122		109		42-146
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	88		95		38-144
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	125		120		7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	59		72		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	87		87		40-144
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	14		22		1-87
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	54		61		23-146
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	76		77		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	79		83		33-143

Lab Duplicate Analysis Batch Quality Control

Project Name: CARMAN PLACE

Project Number: 04736-0005-11

Lab Number: L1930261

Report Date: 07/29/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 01-05 QC Batch ID: WG1264347-5 QC Sample: L1930261-02 Client ID: SB-102						
Perfluorobutanoic Acid (PFBA)	ND	ND	ug/kg	NC		30
Perfluoropentanoic Acid (PFPeA)	0.118J	0.098J	ug/kg	NC		30
Perfluorobutanesulfonic Acid (PFBS)	ND	ND	ug/kg	NC		30
Perfluorohexanoic Acid (PFHxA)	0.070J	ND	ug/kg	NC		30
Perfluoroheptanoic Acid (PFHpA)	0.063J	0.059J	ug/kg	NC		30
Perfluorohexanesulfonic Acid (PFHxS)	ND	ND	ug/kg	NC		30
Perfluorooctanoic Acid (PFOA)	0.223J	0.208J	ug/kg	NC		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND	ND	ug/kg	NC		30
Perfluoroheptanesulfonic Acid (PFHpS)	ND	ND	ug/kg	NC		30
Perfluorononanoic Acid (PFNA)	0.150J	0.145J	ug/kg	NC		30
Perfluorooctanesulfonic Acid (PFOS)	4.63	5.25	ug/kg	13		30
Perfluorodecanoic Acid (PFDA)	0.474J	0.488J	ug/kg	NC		30
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND	ND	ug/kg	NC		30
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND	ND	ug/kg	NC		30
Perfluoroundecanoic Acid (PFUnA)	0.153J	0.151J	ug/kg	NC		30
Perfluorodecanesulfonic Acid (PFDS)	3.57	3.91	ug/kg	9		30
Perfluorooctanesulfonamide (FOSA)	ND	ND	ug/kg	NC		30
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	0.393J	0.532J	ug/kg	NC		30
Perfluorododecanoic Acid (PFDoA)	0.296J	0.329J	ug/kg	NC		30
Perfluorotridecanoic Acid (PFTrDA)	ND	ND	ug/kg	NC		30

Lab Duplicate Analysis

Batch Quality Control

Project Name: CARMAN PLACE

Project Number: 04736-0005-11

Lab Number: L1930261

Report Date: 07/29/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 01-05 QC Batch ID: WG1264347-5 QC Sample: L1930261-02 Client ID: SB-102						
Perfluorotetradecanoic Acid (PFTA)	0.128J	0.127J	ug/kg	NC		30
PFOA/PFOS, Total	4.85J	5.46J	ug/kg	NC		30

Surrogate (Extracted Internal Standard)	%Recovery	Qualifier	%Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	87		87		60-153
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	87		88		65-182
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	92		91		70-151
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	86		88		61-147
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	88		88		62-149
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	94		96		63-166
Perfluoro[13C8]Octanoic Acid (M8PFOA)	88		89		62-152
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	89		89		32-182
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	93		93		61-154
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	93		89		65-151
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	86		87		65-150
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	99		98		25-186
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	58		59		45-137
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	94		96		64-158
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	2		2		1-125
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	63		66		42-136
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	85		84		56-148
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	76		82		26-160

METALS

Project Name: CARMAN PLACE

Lab Number: L1930261

Project Number: 04736-0005-11

Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930261-01

Date Collected: 07/10/19 16:35

Client ID: SB-101

Date Received: 07/11/19

Sample Location: 123-169 MAIN ST., HEMPSTEAD, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 93%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	2200		mg/kg	8.30	2.24	2	07/19/19 18:37	07/23/19 11:18	EPA 3050B	1,6010D	LC
Antimony, Total	0.448	J	mg/kg	4.15	0.316	2	07/19/19 18:37	07/23/19 11:18	EPA 3050B	1,6010D	LC
Arsenic, Total	1.52		mg/kg	0.830	0.173	2	07/19/19 18:37	07/23/19 11:18	EPA 3050B	1,6010D	LC
Barium, Total	24.7		mg/kg	0.830	0.144	2	07/19/19 18:37	07/23/19 11:18	EPA 3050B	1,6010D	LC
Beryllium, Total	0.091	J	mg/kg	0.415	0.027	2	07/19/19 18:37	07/23/19 11:18	EPA 3050B	1,6010D	LC
Cadmium, Total	0.357	J	mg/kg	0.830	0.081	2	07/19/19 18:37	07/23/19 11:18	EPA 3050B	1,6010D	LC
Calcium, Total	526		mg/kg	8.30	2.91	2	07/19/19 18:37	07/23/19 11:18	EPA 3050B	1,6010D	LC
Chromium, Total	3.53		mg/kg	0.830	0.080	2	07/19/19 18:37	07/23/19 11:18	EPA 3050B	1,6010D	LC
Cobalt, Total	1.81		mg/kg	1.66	0.138	2	07/19/19 18:37	07/23/19 11:18	EPA 3050B	1,6010D	LC
Copper, Total	6.22		mg/kg	0.830	0.214	2	07/19/19 18:37	07/23/19 11:18	EPA 3050B	1,6010D	LC
Iron, Total	3850		mg/kg	4.15	0.750	2	07/19/19 18:37	07/23/19 11:18	EPA 3050B	1,6010D	LC
Lead, Total	89.9		mg/kg	4.15	0.222	2	07/19/19 18:37	07/23/19 11:18	EPA 3050B	1,6010D	LC
Magnesium, Total	441		mg/kg	8.30	1.28	2	07/19/19 18:37	07/23/19 11:18	EPA 3050B	1,6010D	LC
Manganese, Total	70.7		mg/kg	0.830	0.132	2	07/19/19 18:37	07/23/19 11:18	EPA 3050B	1,6010D	LC
Mercury, Total	ND		mg/kg	0.069	0.045	1	07/19/19 08:50	07/22/19 16:58	EPA 7471B	1,7471B	GD
Nickel, Total	3.79		mg/kg	2.08	0.201	2	07/19/19 18:37	07/23/19 11:18	EPA 3050B	1,6010D	LC
Potassium, Total	142	J	mg/kg	208	12.0	2	07/19/19 18:37	07/23/19 11:18	EPA 3050B	1,6010D	LC
Selenium, Total	0.249	J	mg/kg	1.66	0.214	2	07/19/19 18:37	07/23/19 11:18	EPA 3050B	1,6010D	LC
Silver, Total	ND		mg/kg	0.830	0.235	2	07/19/19 18:37	07/23/19 11:18	EPA 3050B	1,6010D	LC
Sodium, Total	15.8	J	mg/kg	166	2.62	2	07/19/19 18:37	07/23/19 11:18	EPA 3050B	1,6010D	LC
Thallium, Total	ND		mg/kg	1.66	0.262	2	07/19/19 18:37	07/23/19 11:18	EPA 3050B	1,6010D	LC
Vanadium, Total	5.25		mg/kg	0.830	0.168	2	07/19/19 18:37	07/23/19 11:18	EPA 3050B	1,6010D	LC
Zinc, Total	48.7		mg/kg	4.15	0.243	2	07/19/19 18:37	07/23/19 11:18	EPA 3050B	1,6010D	LC



Project Name: CARMAN PLACE**Lab Number:** L1930261**Project Number:** 04736-0005-11**Report Date:** 07/29/19**SAMPLE RESULTS**

Lab ID: L1930261-02

Date Collected: 07/10/19 15:20

Client ID: SB-102

Date Received: 07/11/19

Sample Location: 123-169 MAIN ST., HEMPSTEAD, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 96%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	3700		mg/kg	7.98	2.15	2	07/19/19 18:37	07/23/19 11:22	EPA 3050B	1,6010D	LC
Antimony, Total	1.36	J	mg/kg	3.99	0.303	2	07/19/19 18:37	07/23/19 11:22	EPA 3050B	1,6010D	LC
Arsenic, Total	3.46		mg/kg	0.798	0.166	2	07/19/19 18:37	07/23/19 11:22	EPA 3050B	1,6010D	LC
Barium, Total	88.6		mg/kg	0.798	0.139	2	07/19/19 18:37	07/23/19 11:22	EPA 3050B	1,6010D	LC
Beryllium, Total	0.167	J	mg/kg	0.399	0.026	2	07/19/19 18:37	07/23/19 11:22	EPA 3050B	1,6010D	LC
Cadmium, Total	1.05		mg/kg	0.798	0.078	2	07/19/19 18:37	07/23/19 11:22	EPA 3050B	1,6010D	LC
Calcium, Total	9700		mg/kg	7.98	2.79	2	07/19/19 18:37	07/23/19 11:22	EPA 3050B	1,6010D	LC
Chromium, Total	7.43		mg/kg	0.798	0.077	2	07/19/19 18:37	07/23/19 11:22	EPA 3050B	1,6010D	LC
Cobalt, Total	3.05		mg/kg	1.60	0.132	2	07/19/19 18:37	07/23/19 11:22	EPA 3050B	1,6010D	LC
Copper, Total	41.2		mg/kg	0.798	0.206	2	07/19/19 18:37	07/23/19 11:22	EPA 3050B	1,6010D	LC
Iron, Total	7430		mg/kg	3.99	0.720	2	07/19/19 18:37	07/23/19 11:22	EPA 3050B	1,6010D	LC
Lead, Total	150		mg/kg	3.99	0.214	2	07/19/19 18:37	07/23/19 11:22	EPA 3050B	1,6010D	LC
Magnesium, Total	2130		mg/kg	7.98	1.23	2	07/19/19 18:37	07/23/19 11:22	EPA 3050B	1,6010D	LC
Manganese, Total	119		mg/kg	0.798	0.127	2	07/19/19 18:37	07/23/19 11:22	EPA 3050B	1,6010D	LC
Mercury, Total	0.090		mg/kg	0.066	0.043	1	07/19/19 08:50	07/22/19 17:00	EPA 7471B	1,7471B	GD
Nickel, Total	8.47		mg/kg	1.99	0.193	2	07/19/19 18:37	07/23/19 11:22	EPA 3050B	1,6010D	LC
Potassium, Total	279		mg/kg	199	11.5	2	07/19/19 18:37	07/23/19 11:22	EPA 3050B	1,6010D	LC
Selenium, Total	0.343	J	mg/kg	1.60	0.206	2	07/19/19 18:37	07/23/19 11:22	EPA 3050B	1,6010D	LC
Silver, Total	0.622	J	mg/kg	0.798	0.226	2	07/19/19 18:37	07/23/19 11:22	EPA 3050B	1,6010D	LC
Sodium, Total	61.8	J	mg/kg	160	2.51	2	07/19/19 18:37	07/23/19 11:22	EPA 3050B	1,6010D	LC
Thallium, Total	ND		mg/kg	1.60	0.251	2	07/19/19 18:37	07/23/19 11:22	EPA 3050B	1,6010D	LC
Vanadium, Total	13.8		mg/kg	0.798	0.162	2	07/19/19 18:37	07/23/19 11:22	EPA 3050B	1,6010D	LC
Zinc, Total	134		mg/kg	3.99	0.234	2	07/19/19 18:37	07/23/19 11:22	EPA 3050B	1,6010D	LC



Project Name: CARMAN PLACE**Lab Number:** L1930261**Project Number:** 04736-0005-11**Report Date:** 07/29/19**SAMPLE RESULTS**

Lab ID: L1930261-03

Date Collected: 07/10/19 14:55

Client ID: SB-103

Date Received: 07/11/19

Sample Location: 123-169 MAIN ST., HEMPSTEAD, 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	7850		mg/kg	9.62	2.60	2	07/19/19 18:37	07/23/19 11:27	EPA 3050B	1,6010D	LC
Antimony, Total	0.510	J	mg/kg	4.81	0.366	2	07/19/19 18:37	07/23/19 11:27	EPA 3050B	1,6010D	LC
Arsenic, Total	3.42		mg/kg	0.962	0.200	2	07/19/19 18:37	07/23/19 11:27	EPA 3050B	1,6010D	LC
Barium, Total	38.4		mg/kg	0.962	0.167	2	07/19/19 18:37	07/23/19 11:27	EPA 3050B	1,6010D	LC
Beryllium, Total	0.308	J	mg/kg	0.481	0.032	2	07/19/19 18:37	07/23/19 11:27	EPA 3050B	1,6010D	LC
Cadmium, Total	0.664	J	mg/kg	0.962	0.094	2	07/19/19 18:37	07/23/19 11:27	EPA 3050B	1,6010D	LC
Calcium, Total	1780		mg/kg	9.62	3.37	2	07/19/19 18:37	07/23/19 11:27	EPA 3050B	1,6010D	LC
Chromium, Total	7.86		mg/kg	0.962	0.092	2	07/19/19 18:37	07/23/19 11:27	EPA 3050B	1,6010D	LC
Cobalt, Total	7.64		mg/kg	1.92	0.160	2	07/19/19 18:37	07/23/19 11:27	EPA 3050B	1,6010D	LC
Copper, Total	10.4		mg/kg	0.962	0.248	2	07/19/19 18:37	07/23/19 11:27	EPA 3050B	1,6010D	LC
Iron, Total	11500		mg/kg	4.81	0.869	2	07/19/19 18:37	07/23/19 11:27	EPA 3050B	1,6010D	LC
Lead, Total	78.4		mg/kg	4.81	0.258	2	07/19/19 18:37	07/23/19 11:27	EPA 3050B	1,6010D	LC
Magnesium, Total	1460		mg/kg	9.62	1.48	2	07/19/19 18:37	07/23/19 11:27	EPA 3050B	1,6010D	LC
Manganese, Total	156		mg/kg	0.962	0.153	2	07/19/19 18:37	07/23/19 11:27	EPA 3050B	1,6010D	LC
Mercury, Total	ND		mg/kg	0.077	0.050	1	07/19/19 08:50	07/22/19 17:01	EPA 7471B	1,7471B	GD
Nickel, Total	10.5		mg/kg	2.40	0.233	2	07/19/19 18:37	07/23/19 11:27	EPA 3050B	1,6010D	LC
Potassium, Total	318		mg/kg	240	13.8	2	07/19/19 18:37	07/23/19 11:27	EPA 3050B	1,6010D	LC
Selenium, Total	0.443	J	mg/kg	1.92	0.248	2	07/19/19 18:37	07/23/19 11:27	EPA 3050B	1,6010D	LC
Silver, Total	ND		mg/kg	0.962	0.272	2	07/19/19 18:37	07/23/19 11:27	EPA 3050B	1,6010D	LC
Sodium, Total	47.5	J	mg/kg	192	3.03	2	07/19/19 18:37	07/23/19 11:27	EPA 3050B	1,6010D	LC
Thallium, Total	ND		mg/kg	1.92	0.303	2	07/19/19 18:37	07/23/19 11:27	EPA 3050B	1,6010D	LC
Vanadium, Total	14.0		mg/kg	0.962	0.195	2	07/19/19 18:37	07/23/19 11:27	EPA 3050B	1,6010D	LC
Zinc, Total	66.6		mg/kg	4.81	0.282	2	07/19/19 18:37	07/23/19 11:27	EPA 3050B	1,6010D	LC



Project Name: CARMAN PLACE**Lab Number:** L1930261**Project Number:** 04736-0005-11**Report Date:** 07/29/19**SAMPLE RESULTS**

Lab ID: L1930261-04

Date Collected: 07/10/19 14:25

Client ID: SB-104

Date Received: 07/11/19

Sample Location: 123-169 MAIN ST., HEMPSTEAD, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 97%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	2680		mg/kg	8.17	2.20	2	07/19/19 18:37	07/23/19 11:31	EPA 3050B	1,6010D	LC
Antimony, Total	0.376	J	mg/kg	4.08	0.310	2	07/19/19 18:37	07/23/19 11:31	EPA 3050B	1,6010D	LC
Arsenic, Total	1.84		mg/kg	0.817	0.170	2	07/19/19 18:37	07/23/19 11:31	EPA 3050B	1,6010D	LC
Barium, Total	22.0		mg/kg	0.817	0.142	2	07/19/19 18:37	07/23/19 11:31	EPA 3050B	1,6010D	LC
Beryllium, Total	0.155	J	mg/kg	0.408	0.027	2	07/19/19 18:37	07/23/19 11:31	EPA 3050B	1,6010D	LC
Cadmium, Total	0.482	J	mg/kg	0.817	0.080	2	07/19/19 18:37	07/23/19 11:31	EPA 3050B	1,6010D	LC
Calcium, Total	3740		mg/kg	8.17	2.86	2	07/19/19 18:37	07/23/19 11:31	EPA 3050B	1,6010D	LC
Chromium, Total	6.40		mg/kg	0.817	0.078	2	07/19/19 18:37	07/23/19 11:31	EPA 3050B	1,6010D	LC
Cobalt, Total	2.80		mg/kg	1.63	0.136	2	07/19/19 18:37	07/23/19 11:31	EPA 3050B	1,6010D	LC
Copper, Total	6.78		mg/kg	0.817	0.211	2	07/19/19 18:37	07/23/19 11:31	EPA 3050B	1,6010D	LC
Iron, Total	7900		mg/kg	4.08	0.738	2	07/19/19 18:37	07/23/19 11:31	EPA 3050B	1,6010D	LC
Lead, Total	37.3		mg/kg	4.08	0.219	2	07/19/19 18:37	07/23/19 11:31	EPA 3050B	1,6010D	LC
Magnesium, Total	1240		mg/kg	8.17	1.26	2	07/19/19 18:37	07/23/19 11:31	EPA 3050B	1,6010D	LC
Manganese, Total	181		mg/kg	0.817	0.130	2	07/19/19 18:37	07/23/19 11:31	EPA 3050B	1,6010D	LC
Mercury, Total	ND		mg/kg	0.066	0.043	1	07/19/19 08:50	07/22/19 17:03	EPA 7471B	1,7471B	GD
Nickel, Total	5.39		mg/kg	2.04	0.198	2	07/19/19 18:37	07/23/19 11:31	EPA 3050B	1,6010D	LC
Potassium, Total	238		mg/kg	204	11.8	2	07/19/19 18:37	07/23/19 11:31	EPA 3050B	1,6010D	LC
Selenium, Total	0.368	J	mg/kg	1.63	0.211	2	07/19/19 18:37	07/23/19 11:31	EPA 3050B	1,6010D	LC
Silver, Total	ND		mg/kg	0.817	0.231	2	07/19/19 18:37	07/23/19 11:31	EPA 3050B	1,6010D	LC
Sodium, Total	21.9	J	mg/kg	163	2.57	2	07/19/19 18:37	07/23/19 11:31	EPA 3050B	1,6010D	LC
Thallium, Total	ND		mg/kg	1.63	0.257	2	07/19/19 18:37	07/23/19 11:31	EPA 3050B	1,6010D	LC
Vanadium, Total	9.34		mg/kg	0.817	0.166	2	07/19/19 18:37	07/23/19 11:31	EPA 3050B	1,6010D	LC
Zinc, Total	26.0		mg/kg	4.08	0.239	2	07/19/19 18:37	07/23/19 11:31	EPA 3050B	1,6010D	LC



Project Name: CARMAN PLACE**Lab Number:** L1930261**Project Number:** 04736-0005-11**Report Date:** 07/29/19**SAMPLE RESULTS**

Lab ID: L1930261-05

Date Collected: 07/10/19 12:00

Client ID: SB-105

Date Received: 07/11/19

Sample Location: 123-169 MAIN ST., HEMPSTEAD, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 93%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	1890		mg/kg	8.54	2.31	2	07/19/19 18:37	07/23/19 11:36	EPA 3050B	1,6010D	LC
Antimony, Total	ND		mg/kg	4.27	0.325	2	07/19/19 18:37	07/23/19 11:36	EPA 3050B	1,6010D	LC
Arsenic, Total	1.27		mg/kg	0.854	0.178	2	07/19/19 18:37	07/23/19 11:36	EPA 3050B	1,6010D	LC
Barium, Total	14.9		mg/kg	0.854	0.149	2	07/19/19 18:37	07/23/19 11:36	EPA 3050B	1,6010D	LC
Beryllium, Total	0.102	J	mg/kg	0.427	0.028	2	07/19/19 18:37	07/23/19 11:36	EPA 3050B	1,6010D	LC
Cadmium, Total	0.273	J	mg/kg	0.854	0.084	2	07/19/19 18:37	07/23/19 11:36	EPA 3050B	1,6010D	LC
Calcium, Total	13100		mg/kg	8.54	2.99	2	07/19/19 18:37	07/23/19 11:36	EPA 3050B	1,6010D	LC
Chromium, Total	31.9		mg/kg	0.854	0.082	2	07/19/19 18:37	07/23/19 11:36	EPA 3050B	1,6010D	LC
Cobalt, Total	1.86		mg/kg	1.71	0.142	2	07/19/19 18:37	07/23/19 11:36	EPA 3050B	1,6010D	LC
Copper, Total	5.81		mg/kg	0.854	0.220	2	07/19/19 18:37	07/23/19 11:36	EPA 3050B	1,6010D	LC
Iron, Total	4320		mg/kg	4.27	0.772	2	07/19/19 18:37	07/23/19 11:36	EPA 3050B	1,6010D	LC
Lead, Total	9.22		mg/kg	4.27	0.229	2	07/19/19 18:37	07/23/19 11:36	EPA 3050B	1,6010D	LC
Magnesium, Total	1140		mg/kg	8.54	1.32	2	07/19/19 18:37	07/23/19 11:36	EPA 3050B	1,6010D	LC
Manganese, Total	81.9		mg/kg	0.854	0.136	2	07/19/19 18:37	07/23/19 11:36	EPA 3050B	1,6010D	LC
Mercury, Total	ND		mg/kg	0.068	0.044	1	07/19/19 08:50	07/22/19 17:05	EPA 7471B	1,7471B	GD
Nickel, Total	21.5		mg/kg	2.14	0.207	2	07/19/19 18:37	07/23/19 11:36	EPA 3050B	1,6010D	LC
Potassium, Total	312		mg/kg	214	12.3	2	07/19/19 18:37	07/23/19 11:36	EPA 3050B	1,6010D	LC
Selenium, Total	ND		mg/kg	1.71	0.220	2	07/19/19 18:37	07/23/19 11:36	EPA 3050B	1,6010D	LC
Silver, Total	ND		mg/kg	0.854	0.242	2	07/19/19 18:37	07/23/19 11:36	EPA 3050B	1,6010D	LC
Sodium, Total	93.0	J	mg/kg	171	2.69	2	07/19/19 18:37	07/23/19 11:36	EPA 3050B	1,6010D	LC
Thallium, Total	ND		mg/kg	1.71	0.269	2	07/19/19 18:37	07/23/19 11:36	EPA 3050B	1,6010D	LC
Vanadium, Total	5.54		mg/kg	0.854	0.173	2	07/19/19 18:37	07/23/19 11:36	EPA 3050B	1,6010D	LC
Zinc, Total	15.5		mg/kg	4.27	0.250	2	07/19/19 18:37	07/23/19 11:36	EPA 3050B	1,6010D	LC



Project Name: CARMAN PLACE

Lab Number: L1930261

Project Number: 04736-0005-11

Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930261-06

Date Collected: 07/10/19 17:20

Client ID: MW-101

Date Received: 07/11/19

Sample Location: 123-169 MAIN ST., HEMPSTEAD, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	3.96		mg/l	0.0100	0.00327	1	07/20/19 11:10	07/22/19 19:05	EPA 3005A	1,6020B	AM
Antimony, Total	0.00108	J	mg/l	0.00400	0.00042	1	07/20/19 11:10	07/22/19 19:05	EPA 3005A	1,6020B	AM
Arsenic, Total	0.00315		mg/l	0.00050	0.00016	1	07/20/19 11:10	07/22/19 19:05	EPA 3005A	1,6020B	AM
Barium, Total	0.1305		mg/l	0.00050	0.00017	1	07/20/19 11:10	07/22/19 19:05	EPA 3005A	1,6020B	AM
Beryllium, Total	0.00035	J	mg/l	0.00050	0.00010	1	07/20/19 11:10	07/22/19 19:05	EPA 3005A	1,6020B	AM
Cadmium, Total	0.00033		mg/l	0.00020	0.00005	1	07/20/19 11:10	07/22/19 19:05	EPA 3005A	1,6020B	AM
Calcium, Total	49.0		mg/l	0.100	0.0394	1	07/20/19 11:10	07/22/19 19:05	EPA 3005A	1,6020B	AM
Chromium, Total	0.08336		mg/l	0.00100	0.00017	1	07/20/19 11:10	07/22/19 19:05	EPA 3005A	1,6020B	AM
Cobalt, Total	0.02877		mg/l	0.00050	0.00016	1	07/20/19 11:10	07/22/19 19:05	EPA 3005A	1,6020B	AM
Copper, Total	0.03472		mg/l	0.00100	0.00038	1	07/20/19 11:10	07/22/19 19:05	EPA 3005A	1,6020B	AM
Iron, Total	21.2		mg/l	0.0700	0.0191	1	07/20/19 11:10	07/22/19 19:05	EPA 3005A	1,6020B	AM
Lead, Total	0.02463		mg/l	0.00100	0.00034	1	07/20/19 11:10	07/22/19 19:05	EPA 3005A	1,6020B	AM
Magnesium, Total	8.49		mg/l	0.0700	0.0242	1	07/20/19 11:10	07/22/19 19:05	EPA 3005A	1,6020B	AM
Manganese, Total	2.818		mg/l	0.00100	0.00044	1	07/20/19 11:10	07/22/19 19:05	EPA 3005A	1,6020B	AM
Mercury, Total	ND		mg/l	0.00020	0.00009	1	07/22/19 11:22	07/23/19 01:44	EPA 7470A	1,7470A	GD
Nickel, Total	0.02265		mg/l	0.00200	0.00055	1	07/20/19 11:10	07/22/19 19:05	EPA 3005A	1,6020B	AM
Potassium, Total	4.17		mg/l	0.100	0.0309	1	07/20/19 11:10	07/22/19 19:05	EPA 3005A	1,6020B	AM
Selenium, Total	0.00365	J	mg/l	0.00500	0.00173	1	07/20/19 11:10	07/22/19 19:05	EPA 3005A	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	07/20/19 11:10	07/22/19 19:05	EPA 3005A	1,6020B	AM
Sodium, Total	69.5		mg/l	0.100	0.0293	1	07/20/19 11:10	07/22/19 19:05	EPA 3005A	1,6020B	AM
Thallium, Total	0.00036	J	mg/l	0.00050	0.00014	1	07/20/19 11:10	07/22/19 19:05	EPA 3005A	1,6020B	AM
Vanadium, Total	0.00998		mg/l	0.00500	0.00157	1	07/20/19 11:10	07/22/19 19:05	EPA 3005A	1,6020B	AM
Zinc, Total	0.1140		mg/l	0.01000	0.00341	1	07/20/19 11:10	07/22/19 19:05	EPA 3005A	1,6020B	AM



Project Name: CARMAN PLACE

Lab Number: L1930261

Project Number: 04736-0005-11

Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930261-07

Date Collected: 07/10/19 13:35

Client ID: MW-105

Date Received: 07/11/19

Sample Location: 123-169 MAIN ST., HEMPSTEAD, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	1.32		mg/l	0.0100	0.00327	1	07/20/19 11:10	07/22/19 19:09	EPA 3005A	1,6020B	AM
Antimony, Total	0.00124	J	mg/l	0.00400	0.00042	1	07/20/19 11:10	07/22/19 19:09	EPA 3005A	1,6020B	AM
Arsenic, Total	0.00200		mg/l	0.00050	0.00016	1	07/20/19 11:10	07/22/19 19:09	EPA 3005A	1,6020B	AM
Barium, Total	0.04673		mg/l	0.00050	0.00017	1	07/20/19 11:10	07/22/19 19:09	EPA 3005A	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	07/20/19 11:10	07/22/19 19:09	EPA 3005A	1,6020B	AM
Cadmium, Total	0.00024		mg/l	0.00020	0.00005	1	07/20/19 11:10	07/22/19 19:09	EPA 3005A	1,6020B	AM
Calcium, Total	41.5		mg/l	0.100	0.0394	1	07/20/19 11:10	07/22/19 19:09	EPA 3005A	1,6020B	AM
Chromium, Total	0.03558		mg/l	0.00100	0.00017	1	07/20/19 11:10	07/22/19 19:09	EPA 3005A	1,6020B	AM
Cobalt, Total	0.01201		mg/l	0.00050	0.00016	1	07/20/19 11:10	07/22/19 19:09	EPA 3005A	1,6020B	AM
Copper, Total	0.01218		mg/l	0.00100	0.00038	1	07/20/19 11:10	07/22/19 19:09	EPA 3005A	1,6020B	AM
Iron, Total	5.88		mg/l	0.0700	0.0191	1	07/20/19 11:10	07/22/19 19:09	EPA 3005A	1,6020B	AM
Lead, Total	0.00723		mg/l	0.00100	0.00034	1	07/20/19 11:10	07/22/19 19:09	EPA 3005A	1,6020B	AM
Magnesium, Total	5.33		mg/l	0.0700	0.0242	1	07/20/19 11:10	07/22/19 19:09	EPA 3005A	1,6020B	AM
Manganese, Total	1.432		mg/l	0.00100	0.00044	1	07/20/19 11:10	07/22/19 19:09	EPA 3005A	1,6020B	AM
Mercury, Total	ND		mg/l	0.00020	0.00009	1	07/22/19 11:22	07/23/19 01:45	EPA 7470A	1,7470A	GD
Nickel, Total	0.01277		mg/l	0.00200	0.00055	1	07/20/19 11:10	07/22/19 19:09	EPA 3005A	1,6020B	AM
Potassium, Total	3.66		mg/l	0.100	0.0309	1	07/20/19 11:10	07/22/19 19:09	EPA 3005A	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	07/20/19 11:10	07/22/19 19:09	EPA 3005A	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	07/20/19 11:10	07/22/19 19:09	EPA 3005A	1,6020B	AM
Sodium, Total	54.7		mg/l	0.100	0.0293	1	07/20/19 11:10	07/22/19 19:09	EPA 3005A	1,6020B	AM
Thallium, Total	ND		mg/l	0.00050	0.00014	1	07/20/19 11:10	07/22/19 19:09	EPA 3005A	1,6020B	AM
Vanadium, Total	0.00315	J	mg/l	0.00500	0.00157	1	07/20/19 11:10	07/22/19 19:09	EPA 3005A	1,6020B	AM
Zinc, Total	0.07771		mg/l	0.01000	0.00341	1	07/20/19 11:10	07/22/19 19:09	EPA 3005A	1,6020B	AM



Project Name: CARMAN PLACE

Lab Number: L1930261

Project Number: 04736-0005-11

Report Date: 07/29/19

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: 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
Total Metals - Mansfield Lab for sample(s): 01-05 Batch: WG1262219-1										
Aluminum, Total	ND		mg/kg	4.00	1.08	1	07/19/19 18:37	07/22/19 13:31	1,6010D	LC
Antimony, Total	ND		mg/kg	2.00	0.152	1	07/19/19 18:37	07/22/19 13:31	1,6010D	LC
Arsenic, Total	ND		mg/kg	0.400	0.083	1	07/19/19 18:37	07/22/19 13:31	1,6010D	LC
Barium, Total	ND		mg/kg	0.400	0.070	1	07/19/19 18:37	07/22/19 13:31	1,6010D	LC
Beryllium, Total	ND		mg/kg	0.200	0.013	1	07/19/19 18:37	07/22/19 13:31	1,6010D	LC
Cadmium, Total	ND		mg/kg	0.400	0.039	1	07/19/19 18:37	07/22/19 13:31	1,6010D	LC
Calcium, Total	ND		mg/kg	4.00	1.40	1	07/19/19 18:37	07/22/19 13:31	1,6010D	LC
Chromium, Total	ND		mg/kg	0.400	0.038	1	07/19/19 18:37	07/22/19 13:31	1,6010D	LC
Cobalt, Total	ND		mg/kg	0.800	0.066	1	07/19/19 18:37	07/22/19 13:31	1,6010D	LC
Copper, Total	ND		mg/kg	0.400	0.103	1	07/19/19 18:37	07/22/19 13:31	1,6010D	LC
Iron, Total	ND		mg/kg	2.00	0.361	1	07/19/19 18:37	07/22/19 13:31	1,6010D	LC
Lead, Total	ND		mg/kg	2.00	0.107	1	07/19/19 18:37	07/22/19 13:31	1,6010D	LC
Magnesium, Total	ND		mg/kg	4.00	0.616	1	07/19/19 18:37	07/22/19 13:31	1,6010D	LC
Manganese, Total	ND		mg/kg	0.400	0.064	1	07/19/19 18:37	07/22/19 13:31	1,6010D	LC
Nickel, Total	ND		mg/kg	1.00	0.097	1	07/19/19 18:37	07/22/19 13:31	1,6010D	LC
Potassium, Total	ND		mg/kg	100	5.76	1	07/19/19 18:37	07/22/19 13:31	1,6010D	LC
Selenium, Total	ND		mg/kg	0.800	0.103	1	07/19/19 18:37	07/22/19 13:31	1,6010D	LC
Silver, Total	ND		mg/kg	0.400	0.113	1	07/19/19 18:37	07/22/19 13:31	1,6010D	LC
Sodium, Total	ND		mg/kg	80.0	1.26	1	07/19/19 18:37	07/22/19 13:31	1,6010D	LC
Thallium, Total	ND		mg/kg	0.800	0.126	1	07/19/19 18:37	07/22/19 13:31	1,6010D	LC
Vanadium, Total	ND		mg/kg	0.400	0.081	1	07/19/19 18:37	07/22/19 13:31	1,6010D	LC
Zinc, Total	ND		mg/kg	2.00	0.117	1	07/19/19 18:37	07/22/19 13:31	1,6010D	LC



Project Name: CARMAN PLACE

Lab Number: L1930261

Project Number: 04736-0005-11

Report Date: 07/29/19

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
Total Metals - Mansfield Lab for sample(s): 06-07 Batch: WG1262436-1										
Aluminum, Total	ND		mg/l	0.0100	0.00327	1	07/20/19 11:10	07/22/19 17:35	1,6020B	AM
Antimony, Total	0.00090	J	mg/l	0.00400	0.00042	1	07/20/19 11:10	07/22/19 17:35	1,6020B	AM
Arsenic, Total	ND		mg/l	0.00050	0.00016	1	07/20/19 11:10	07/22/19 17:35	1,6020B	AM
Barium, Total	ND		mg/l	0.00050	0.00017	1	07/20/19 11:10	07/22/19 17:35	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	07/20/19 11:10	07/22/19 17:35	1,6020B	AM
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	07/20/19 11:10	07/22/19 17:35	1,6020B	AM
Calcium, Total	ND		mg/l	0.100	0.0394	1	07/20/19 11:10	07/22/19 17:35	1,6020B	AM
Chromium, Total	ND		mg/l	0.00100	0.00017	1	07/20/19 11:10	07/22/19 17:35	1,6020B	AM
Cobalt, Total	ND		mg/l	0.00050	0.00016	1	07/20/19 11:10	07/22/19 17:35	1,6020B	AM
Copper, Total	ND		mg/l	0.00100	0.00038	1	07/20/19 11:10	07/22/19 17:35	1,6020B	AM
Iron, Total	0.0215	J	mg/l	0.0700	0.0191	1	07/20/19 11:10	07/22/19 17:35	1,6020B	AM
Lead, Total	ND		mg/l	0.00100	0.00034	1	07/20/19 11:10	07/22/19 17:35	1,6020B	AM
Magnesium, Total	ND		mg/l	0.0700	0.0242	1	07/20/19 11:10	07/22/19 17:35	1,6020B	AM
Manganese, Total	ND		mg/l	0.00100	0.00044	1	07/20/19 11:10	07/22/19 17:35	1,6020B	AM
Nickel, Total	ND		mg/l	0.00200	0.00055	1	07/20/19 11:10	07/22/19 17:35	1,6020B	AM
Potassium, Total	ND		mg/l	0.100	0.0309	1	07/20/19 11:10	07/22/19 17:35	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	07/20/19 11:10	07/22/19 17:35	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	07/20/19 11:10	07/22/19 17:35	1,6020B	AM
Sodium, Total	ND		mg/l	0.100	0.0293	1	07/20/19 11:10	07/22/19 17:35	1,6020B	AM
Thallium, Total	0.00028	J	mg/l	0.00050	0.00014	1	07/20/19 11:10	07/22/19 17:35	1,6020B	AM
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	07/20/19 11:10	07/22/19 17:35	1,6020B	AM
Zinc, Total	ND		mg/l	0.01000	0.00341	1	07/20/19 11:10	07/22/19 17:35	1,6020B	AM

Prep Information

Digestion Method: EPA 3005A



Project Name: CARMAN PLACE

Lab Number: L1930261

Project Number: 04736-0005-11

Report Date: 07/29/19

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): 06-07 Batch: WG1262816-1										
Mercury, Total	ND		mg/l	0.00020	0.00009	1	07/22/19 11:22	07/23/19 01:25	1,7470A	GD

Prep Information

Digestion Method: EPA 7470A

Lab Control Sample Analysis
Batch Quality Control**Project Name:** CARMAN PLACE**Project Number:** 04736-0005-11**Lab Number:** L1930261**Report Date:** 07/29/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-05 Batch: WG1261950-2 SRM Lot Number: D105-540								
Mercury, Total	94		-		60-141	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: CARMAN PLACE

Project Number: 04736-0005-11

Lab Number: L1930261

Report Date: 07/29/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-05 Batch: WG1262219-2 SRM Lot Number: D105-540					
Aluminum, Total	62	-	51-149	-	
Antimony, Total	185	-	19-249	-	
Arsenic, Total	112	-	70-130	-	
Barium, Total	90	-	75-125	-	
Beryllium, Total	91	-	75-125	-	
Cadmium, Total	96	-	75-125	-	
Calcium, Total	81	-	73-127	-	
Chromium, Total	90	-	70-130	-	
Cobalt, Total	99	-	75-125	-	
Copper, Total	97	-	75-125	-	
Iron, Total	83	-	38-162	-	
Lead, Total	101	-	71-128	-	
Magnesium, Total	82	-	63-137	-	
Manganese, Total	88	-	76-124	-	
Nickel, Total	101	-	70-131	-	
Potassium, Total	76	-	60-140	-	
Selenium, Total	107	-	63-137	-	
Silver, Total	95	-	69-131	-	
Sodium, Total	92	-	37-162	-	
Thallium, Total	96	-	68-132	-	
Vanadium, Total	91	-	65-135	-	

Lab Control Sample Analysis
Batch Quality Control**Project Name:** CARMAN PLACE**Project Number:** 04736-0005-11**Lab Number:** L1930261**Report Date:** 07/29/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-05 Batch: WG1262219-2 SRM Lot Number: D105-540					
Zinc, Total	100	-	70-130	-	

Lab Control Sample Analysis Batch Quality Control

Project Name: CARMAN PLACE

Project Number: 04736-0005-11

Lab Number: L1930261

Report Date: 07/29/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 06-07 Batch: WG1262436-2					
Aluminum, Total	106	-	80-120	-	
Antimony, Total	82	-	80-120	-	
Arsenic, Total	114	-	80-120	-	
Barium, Total	107	-	80-120	-	
Beryllium, Total	103	-	80-120	-	
Cadmium, Total	110	-	80-120	-	
Calcium, Total	113	-	80-120	-	
Chromium, Total	102	-	80-120	-	
Cobalt, Total	102	-	80-120	-	
Copper, Total	100	-	80-120	-	
Iron, Total	107	-	80-120	-	
Lead, Total	115	-	80-120	-	
Magnesium, Total	114	-	80-120	-	
Manganese, Total	102	-	80-120	-	
Nickel, Total	101	-	80-120	-	
Potassium, Total	113	-	80-120	-	
Selenium, Total	105	-	80-120	-	
Silver, Total	102	-	80-120	-	
Sodium, Total	104	-	80-120	-	
Thallium, Total	111	-	80-120	-	
Vanadium, Total	104	-	80-120	-	

Lab Control Sample Analysis Batch Quality Control

Project Name: CARMAN PLACE

Project Number: 04736-0005-11

Lab Number: L1930261

Report Date: 07/29/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 06-07 Batch: WG1262436-2					
Zinc, Total	105	-	80-120	-	
Total Metals - Mansfield Lab Associated sample(s): 06-07 Batch: WG1262816-2					
Mercury, Total	100	-	80-120	-	

Matrix Spike Analysis

Batch Quality Control

Project Name: CARMAN PLACE

Project Number: 04736-0005-11

Lab Number: L1930261

Report Date: 07/29/19

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: WG1261950-3 QC Sample: L1931536-01 Client ID: MS Sample												
Mercury, Total	ND	0.182	0.223	123	Q	-	-		80-120	-		20

Matrix Spike Analysis

Batch Quality Control

Project Name: CARMAN PLACE

Project Number: 04736-0005-11

Lab Number: L1930261

Report Date: 07/29/19

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: WG1262219-3		QC Sample: L1931885-01		Client ID: MS Sample			
Aluminum, Total	5800	182	5470	0	Q	-	-	75-125	-	20
Antimony, Total	43.2	45.4	80.8	83		-	-	75-125	-	20
Arsenic, Total	51.0	10.9	51.5	5	Q	-	-	75-125	-	20
Barium, Total	160	182	333	95		-	-	75-125	-	20
Beryllium, Total	0.577	4.54	4.62	89		-	-	75-125	-	20
Cadmium, Total	10.6	4.63	13.5	63	Q	-	-	75-125	-	20
Calcium, Total	2290	908	4780	274	Q	-	-	75-125	-	20
Chromium, Total	68.8	18.2	91.3	124		-	-	75-125	-	20
Cobalt, Total	9.41	45.4	52.4	95		-	-	75-125	-	20
Copper, Total	992	22.7	687	0	Q	-	-	75-125	-	20
Iron, Total	72700	90.8	72600	0	Q	-	-	75-125	-	20
Lead, Total	2530	46.3	1190	0	Q	-	-	75-125	-	20
Magnesium, Total	700	908	2380	185	Q	-	-	75-125	-	20
Manganese, Total	1840	45.4	889	0	Q	-	-	75-125	-	20
Nickel, Total	36.5	45.4	79.3	94		-	-	75-125	-	20
Potassium, Total	226J	908	1240	137	Q	-	-	75-125	-	20
Selenium, Total	2.67	10.9	13.8	102		-	-	75-125	-	20
Silver, Total	1.01	27.2	29.9	106		-	-	75-125	-	20
Sodium, Total	197	908	1220	113		-	-	75-125	-	20
Thallium, Total	0.624J	10.9	8.82	81		-	-	75-125	-	20
Vanadium, Total	16.0	45.4	60.9	99		-	-	75-125	-	20

Matrix Spike Analysis

Batch Quality Control

Project Name: CARMAN PLACE

Project Number: 04736-0005-11

Lab Number: L1930261

Report Date: 07/29/19

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: WG1262219-3 QC Sample: L1931885-01 Client ID: MS Sample									
Zinc, Total	915	45.4	674	0	Q	-	-	75-125	- 20

Matrix Spike Analysis

Batch Quality Control

Project Name: CARMAN PLACE

Project Number: 04736-0005-11

Lab Number: L1930261

Report Date: 07/29/19

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): 06-07			QC Batch ID: WG1262436-3		WG1262436-4	QC Sample: L1931311-02		Client ID: MS Sample		
Aluminum, Total	0.220	2	2.32	105		2.44	111	75-125	5	20
Antimony, Total	0.00098J	0.5	0.6594	132	Q	0.6382	128	Q 75-125	3	20
Arsenic, Total	0.00168	0.12	0.1306	107		0.1286	106	75-125	2	20
Barium, Total	0.06271	2	2.182	106		2.173	106	75-125	0	20
Beryllium, Total	ND	0.05	0.05055	101		0.05250	105	75-125	4	20
Cadmium, Total	ND	0.051	0.05754	113		0.05617	110	75-125	2	20
Calcium, Total	149.	10	154	50	Q	160	110	75-125	4	20
Chromium, Total	0.00065J	0.2	0.2011	100		0.2029	101	75-125	1	20
Cobalt, Total	0.01258	0.5	0.5162	101		0.5182	101	75-125	0	20
Copper, Total	0.00214	0.25	0.2467	98		0.2623	104	75-125	6	20
Iron, Total	1.73	1	2.87	114		2.96	123	75-125	3	20
Lead, Total	0.00090J	0.51	0.6560	129	Q	0.5707	112	75-125	14	20
Magnesium, Total	71.0	10	77.0	60	Q	80.1	91	75-125	4	20
Manganese, Total	2.978	0.5	3.239	52	Q	3.289	62	Q 75-125	2	20
Nickel, Total	0.04437	0.5	0.5478	101		0.5475	101	75-125	0	20
Potassium, Total	3.05	10	13.6	106		14.0	110	75-125	3	20
Selenium, Total	ND	0.12	0.126	105		0.141	118	75-125	11	20
Silver, Total	ND	0.05	0.05230	105		0.05168	103	75-125	1	20
Sodium, Total	10.1	10	20.0	99		20.4	103	75-125	2	20
Thallium, Total	ND	0.12	0.1486	124		0.1308	109	75-125	13	20
Vanadium, Total	ND	0.5	0.5205	104		0.5172	103	75-125	1	20

Matrix Spike Analysis

Batch Quality Control

Project Name: CARMAN PLACE

Project Number: 04736-0005-11

Lab Number: L1930261

Report Date: 07/29/19

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): 06-07			QC Batch ID: WG1262436-3		WG1262436-4	QC Sample: L1931311-02		Client ID: MS Sample		
Zinc, Total	0.01409	0.5	0.5370	104	0.6631	130	Q 75-125	21	Q 20	
Total Metals - Mansfield Lab Associated sample(s): 06-07			QC Batch ID: WG1262816-3		WG1262816-4	QC Sample: L1931311-02		Client ID: MS Sample		
Mercury, Total	ND	0.005	0.00252	50	Q 0.00249	50	Q 75-125	1	20	

Lab Duplicate Analysis
*Batch Quality Control***Project Name:** CARMAN PLACE**Project Number:** 04736-0005-11**Lab Number:** L1930261**Report Date:** 07/29/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-05 QC Batch ID: WG1261950-4 QC Sample: L1931536-01 Client ID: DUP Sample						
Mercury, Total	ND	ND	mg/kg	NC		20

Project Name: CARMAN PLACE
Project Number: 04736-0005-11

Lab Duplicate Analysis
Batch Quality Control

Lab Number: L1930261
Report Date: 07/29/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-05 QC Batch ID: WG1262219-4 QC Sample: L1931885-01 Client ID: DUP Sample					
Aluminum, Total	5800	5150	mg/kg	12	20
Antimony, Total	43.2	32.5	mg/kg	28	Q 20
Arsenic, Total	51.0	75.8	mg/kg	39	Q 20
Barium, Total	160	209	mg/kg	27	Q 20
Beryllium, Total	0.577	1.34	mg/kg	80	Q 20
Cadmium, Total	10.6	8.16	mg/kg	26	Q 20
Calcium, Total	2290	6160	mg/kg	92	Q 20
Chromium, Total	68.8	64.0	mg/kg	7	20
Cobalt, Total	9.41	7.88	mg/kg	18	20
Copper, Total	992	974	mg/kg	2	20
Iron, Total	72700	63900	mg/kg	13	20
Lead, Total	2530	1060	mg/kg	82	Q 20
Magnesium, Total	700	997	mg/kg	35	Q 20
Manganese, Total	1840	10200	mg/kg	139	Q 20
Nickel, Total	36.5	37.2	mg/kg	2	20
Potassium, Total	226J	446	mg/kg	NC	20
Selenium, Total	2.67	4.22	mg/kg	45	Q 20
Silver, Total	1.01	3.76	mg/kg	115	Q 20
Sodium, Total	197	214	mg/kg	8	20

Lab Duplicate Analysis

Batch Quality Control

Project Name: CARMAN PLACE

Project Number: 04736-0005-11

Lab Number: L1930261

Report Date: 07/29/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-05 QC Batch ID: WG1262219-4 QC Sample: L1931885-01 Client ID: DUP Sample					
Thallium, Total	0.624J	1.42J	mg/kg	NC	20
Vanadium, Total	16.0	12.4	mg/kg	25	Q 20
Zinc, Total	915	6010	mg/kg	147	Q 20

INORGANICS & MISCELLANEOUS

Project Name: CARMAN PLACE

Project Number: 04736-0005-11

Lab Number: L1930261

Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930261-01

Client ID: SB-101

Sample Location: 123-169 MAIN ST., HEMPSTEAD, NY

Date Collected: 07/10/19 16:35

Date Received: 07/11/19

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	92.7		%	0.100	NA	1	-	07/12/19 03:52	121,2540G	YA
Cyanide, Total	ND		mg/kg	1.0	0.21	1	07/15/19 17:00	07/16/19 12:43	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.863	0.172	1	07/18/19 17:00	07/19/19 10:14	1,7196A	NH



Project Name: CARMAN PLACE

Project Number: 04736-0005-11

Lab Number: L1930261

Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930261-02

Client ID: SB-102

Sample Location: 123-169 MAIN ST., HEMPSTEAD, NY

Date Collected: 07/10/19 15:20

Date Received: 07/11/19

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	95.5		%	0.100	NA	1	-	07/12/19 03:52	121,2540G	YA
Cyanide, Total	ND		mg/kg	0.97	0.20	1	07/15/19 17:00	07/16/19 12:47	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.838	0.168	1	07/18/19 17:00	07/19/19 10:14	1,7196A	NH



Project Name: CARMAN PLACE

Project Number: 04736-0005-11

Lab Number: L1930261

Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930261-03

Client ID: SB-103

Sample Location: 123-169 MAIN ST., HEMPSTEAD, NY

Date Collected: 07/10/19 14:55

Date Received: 07/11/19

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	81.9		%	0.100	NA	1	-	07/12/19 03:52	121,2540G	YA
Cyanide, Total	ND		mg/kg	1.2	0.25	1	07/15/19 17:00	07/16/19 12:48	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.977	0.195	1	07/18/19 17:00	07/19/19 10:14	1,7196A	NH



Project Name: CARMAN PLACE

Project Number: 04736-0005-11

Lab Number: L1930261

Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930261-04

Client ID: SB-104

Sample Location: 123-169 MAIN ST., HEMPSTEAD, NY

Date Collected: 07/10/19 14:25

Date Received: 07/11/19

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	96.7		%	0.100	NA	1	-	07/12/19 03:52	121,2540G	YA
Cyanide, Total	ND		mg/kg	0.95	0.20	1	07/15/19 17:00	07/16/19 12:49	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.827	0.165	1	07/18/19 17:00	07/19/19 10:14	1,7196A	NH



Project Name: CARMAN PLACE

Project Number: 04736-0005-11

Lab Number: L1930261

Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930261-05

Client ID: SB-105

Sample Location: 123-169 MAIN ST., HEMPSTEAD, NY

Date Collected: 07/10/19 12:00

Date Received: 07/11/19

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	93.1		%	0.100	NA	1	-	07/12/19 03:52	121,2540G	YA
Cyanide, Total	ND		mg/kg	0.99	0.21	1	07/16/19 17:20	07/17/19 11:24	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.859	0.172	1	07/18/19 17:00	07/19/19 10:14	1,7196A	NH



Project Name: CARMAN PLACE

Project Number: 04736-0005-11

Lab Number: L1930261

Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930261-06

Client ID: MW-101

Sample Location: 123-169 MAIN ST., HEMPSTEAD, NY

Date Collected: 07/10/19 17:20

Date Received: 07/11/19

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	ND		mg/l	0.005	0.001	1	07/17/19 14:50	07/18/19 12:12	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	07/12/19 04:00	07/12/19 05:56	1,7196A	EJ



Project Name: CARMAN PLACE

Project Number: 04736-0005-11

Lab Number: L1930261

Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930261-07

Client ID: MW-105

Sample Location: 123-169 MAIN ST., HEMPSTEAD, NY

Date Collected: 07/10/19 13:35

Date Received: 07/11/19

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	ND		mg/l	0.005	0.001	1	07/17/19 14:50	07/18/19 12:13	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	07/12/19 04:00	07/12/19 05:58	1,7196A	EJ



Project Name: CARMAN PLACE

Lab Number: L1930261

Project Number: 04736-0005-11

Report Date: 07/29/19

Method Blank Analysis Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 06-07 Batch: WG1258993-1										
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	07/12/19 04:00	07/12/19 05:41	1,7196A	EJ
General Chemistry - Westborough Lab for sample(s): 01-04 Batch: WG1259928-1										
Cyanide, Total	ND		mg/kg	0.93	0.20	1	07/15/19 17:00	07/16/19 12:23	1,9010C/9012B	LH
General Chemistry - Westborough Lab for sample(s): 05 Batch: WG1260396-1										
Cyanide, Total	ND		mg/kg	0.94	0.20	1	07/16/19 17:20	07/17/19 11:16	1,9010C/9012B	LH
General Chemistry - Westborough Lab for sample(s): 06-07 Batch: WG1261047-1										
Cyanide, Total	ND		mg/l	0.005	0.001	1	07/17/19 14:50	07/18/19 12:06	1,9010C/9012B	LH
General Chemistry - Westborough Lab for sample(s): 01-05 Batch: WG1261666-1										
Chromium, Hexavalent	ND		mg/kg	0.800	0.160	1	07/18/19 17:00	07/19/19 10:14	1,7196A	NH

Lab Control Sample Analysis

Batch Quality Control

Project Name: CARMAN PLACE

Project Number: 04736-0005-11

Lab Number: L1930261

Report Date: 07/29/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 06-07 Batch: WG1258993-2								
Chromium, Hexavalent	98		-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 01-04 Batch: WG1259928-2 WG1259928-3								
Cyanide, Total	73	Q	83		80-120	24		35
General Chemistry - Westborough Lab Associated sample(s): 05 Batch: WG1260396-2 WG1260396-3								
Cyanide, Total	67	Q	87		80-120	28		35
General Chemistry - Westborough Lab Associated sample(s): 06-07 Batch: WG1261047-2 WG1261047-3								
Cyanide, Total	92		92		85-115	0		20
General Chemistry - Westborough Lab Associated sample(s): 01-05 Batch: WG1261666-2								
Chromium, Hexavalent	81		-		80-120	-		20

Matrix Spike Analysis

Batch Quality Control

Project Name: CARMAN PLACE

Project Number: 04736-0005-11

Lab Number: L1930261

Report Date: 07/29/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 06-07 QC Batch ID: WG1258993-4 QC Sample: L1930261-07 Client ID: MW-105												
Chromium, Hexavalent	ND	0.1	0.101	101		-	-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 01-04 QC Batch ID: WG1259928-4 WG1259928-5 QC Sample: L1930856-04 Client ID: MS Sample												
Cyanide, Total	1.3	10	10	87		10	91		75-125	0		35
General Chemistry - Westborough Lab Associated sample(s): 05 QC Batch ID: WG1260396-4 WG1260396-5 QC Sample: L1931033-11 Client ID: MS Sample												
Cyanide, Total	ND	11	10	88		11	93		75-125	10		35
General Chemistry - Westborough Lab Associated sample(s): 01-05 QC Batch ID: WG1261666-4 QC Sample: L1930261-01 Client ID: SB-101												
Chromium, Hexavalent	ND	946	933	99		-	-		75-125	-		20

Lab Duplicate Analysis *Batch Quality Control*

Project Name: CARMAN PLACE

Project Number: 04736-0005-11

Lab Number: L1930261

Report Date: 07/29/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-05 QC Batch ID: WG1258937-1 QC Sample: L1930261-03 Client ID: SB-103						
Solids, Total	81.9	83.3	%	2		20
General Chemistry - Westborough Lab Associated sample(s): 06-07 QC Batch ID: WG1258993-3 QC Sample: L1930261-06 Client ID: MW-101						
Chromium, Hexavalent	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 01-05 QC Batch ID: WG1261666-6 QC Sample: L1930261-01 Client ID: SB-101						
Chromium, Hexavalent	ND	ND	mg/kg	NC		20

Project Name: CARMAN PLACE**Lab Number:** L1930261**Project Number:** 04736-0005-11**Report Date:** 07/29/19**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(*)
L1930261-01A	Vial MeOH preserved	B	NA		2.2	Y	Absent		NYTCL-8260HLW(14)
L1930261-01B	Vial water preserved	B	NA		2.2	Y	Absent	12-JUL-19 01:17	NYTCL-8260HLW(14)
L1930261-01C	Vial water preserved	B	NA		2.2	Y	Absent	12-JUL-19 01:17	NYTCL-8260HLW(14)
L1930261-01D	Plastic 2oz unpreserved for TS	B	NA		2.2	Y	Absent		TS(7)
L1930261-01E	Plastic 2oz unpreserved for TS	B	NA		2.2	Y	Absent		TS(7)
L1930261-01F	Plastic 8oz unpreserved	A	NA		5.3	Y	Absent		A2-NY-537-ISOTOPE(28)
L1930261-01G	Glass 60mL/2oz unpreserved	B	NA		2.2	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)
L1930261-01H	Glass 120ml/4oz unpreserved	B	NA		2.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),HEXCR-7196(30)
L1930261-01I	Glass 120ml/4oz unpreserved	B	NA		2.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),HEXCR-7196(30)
L1930261-02A	Vial MeOH preserved	B	NA		2.2	Y	Absent		NYTCL-8260HLW(14)
L1930261-02B	Vial water preserved	B	NA		2.2	Y	Absent	12-JUL-19 01:17	NYTCL-8260HLW(14)
L1930261-02C	Vial water preserved	B	NA		2.2	Y	Absent	12-JUL-19 01:17	NYTCL-8260HLW(14)
L1930261-02D	Plastic 2oz unpreserved for TS	B	NA		2.2	Y	Absent		TS(7)
L1930261-02E	Plastic 2oz unpreserved for TS	B	NA		2.2	Y	Absent		TS(7)
L1930261-02F	Plastic 8oz unpreserved	A	NA		5.3	Y	Absent		A2-NY-537-ISOTOPE(28)
L1930261-02G	Glass 60mL/2oz unpreserved	B	NA		2.2	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)

Project Name: CARMAN PLACE
Project Number: 04736-0005-11

Serial_No: 07291917:18
Lab Number: L1930261
Report Date: 07/29/19

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1930261-02H	Glass 120ml/4oz unpreserved	B	NA		2.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),HEXCR-7196(30)
L1930261-02I	Glass 120ml/4oz unpreserved	B	NA		2.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),HEXCR-7196(30)
L1930261-03A	Vial MeOH preserved	B	NA		2.2	Y	Absent		NYTCL-8260HLW(14)
L1930261-03B	Vial water preserved	B	NA		2.2	Y	Absent	12-JUL-19 01:17	NYTCL-8260HLW(14)
L1930261-03C	Vial water preserved	B	NA		2.2	Y	Absent	12-JUL-19 01:17	NYTCL-8260HLW(14)
L1930261-03D	Plastic 2oz unpreserved for TS	B	NA		2.2	Y	Absent		TS(7)
L1930261-03E	Plastic 2oz unpreserved for TS	B	NA		2.2	Y	Absent		TS(7)
L1930261-03F	Plastic 8oz unpreserved	A	NA		5.3	Y	Absent		A2-NY-537-ISOTOPE(28)
L1930261-03G	Glass 60mL/2oz unpreserved	B	NA		2.2	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)
L1930261-03H	Glass 120ml/4oz unpreserved	B	NA		2.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),HEXCR-7196(30)
L1930261-03I	Glass 120ml/4oz unpreserved	B	NA		2.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),HEXCR-7196(30)
L1930261-04A	Vial MeOH preserved	B	NA		2.2	Y	Absent		NYTCL-8260HLW(14)
L1930261-04B	Vial water preserved	B	NA		2.2	Y	Absent	12-JUL-19 01:17	NYTCL-8260HLW(14)
L1930261-04C	Vial water preserved	B	NA		2.2	Y	Absent	12-JUL-19 01:17	NYTCL-8260HLW(14)
L1930261-04D	Plastic 2oz unpreserved for TS	B	NA		2.2	Y	Absent		TS(7)
L1930261-04E	Plastic 2oz unpreserved for TS	B	NA		2.2	Y	Absent		TS(7)
L1930261-04F	Plastic 8oz unpreserved	A	NA		5.3	Y	Absent		A2-NY-537-ISOTOPE(28)
L1930261-04G	Glass 60mL/2oz unpreserved	B	NA		2.2	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)
L1930261-04H	Glass 120ml/4oz unpreserved	B	NA		2.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),HEXCR-7196(30)
L1930261-04I	Glass 120ml/4oz unpreserved	B	NA		2.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),HEXCR-7196(30)
L1930261-05A	Vial MeOH preserved	B	NA		2.2	Y	Absent		NYTCL-8260HLW(14)

Project Name: CARMAN PLACE
Project Number: 04736-0005-11

Serial_No:07291917:18
Lab Number: L1930261
Report Date: 07/29/19

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1930261-05B	Vial water preserved	B	NA		2.2	Y	Absent	12-JUL-19 01:17	NYTCL-8260HLW(14)
L1930261-05C	Vial water preserved	B	NA		2.2	Y	Absent	12-JUL-19 01:17	NYTCL-8260HLW(14)
L1930261-05D	Plastic 2oz unpreserved for TS	B	NA		2.2	Y	Absent		TS(7)
L1930261-05E	Plastic 2oz unpreserved for TS	B	NA		2.2	Y	Absent		TS(7)
L1930261-05F	Plastic 8oz unpreserved	A	NA		5.3	Y	Absent		A2-NY-537-ISOTOPE(28)
L1930261-05G	Glass 60mL/2oz unpreserved	B	NA		2.2	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)
L1930261-05H	Glass 120ml/4oz unpreserved	B	NA		2.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),HEXCR-7196(30)
L1930261-05I	Glass 120ml/4oz unpreserved	B	NA		2.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),HEXCR-7196(30)
L1930261-06A	Vial HCl preserved	B	NA		2.2	Y	Absent		NYTCL-8260(14)
L1930261-06B	Vial HCl preserved	B	NA		2.2	Y	Absent		NYTCL-8260(14)
L1930261-06C	Vial HCl preserved	B	NA		2.2	Y	Absent		NYTCL-8260(14)
L1930261-06D	Plastic 250ml unpreserved	A	NA		5.3	Y	Absent		A2-NY-537-ISOTOPE(14)
L1930261-06E	Plastic 250ml unpreserved	A	NA		5.3	Y	Absent		A2-NY-537-ISOTOPE(14)
L1930261-06F	Amber 250ml unpreserved	B	7	7	2.2	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1930261-06G	Amber 250ml unpreserved	B	7	7	2.2	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1930261-06H	Amber 250ml unpreserved	B	7	7	2.2	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L1930261-06I	Amber 250ml unpreserved	B	7	7	2.2	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L1930261-06J	Plastic 250ml HNO3 preserved	B	<2	<2	2.2	Y	Absent		BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CA-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),AS-6020T(180),SB-6020T(180),V-6020T(180),AG-6020T(180),AL-6020T(180),CD-6020T(180),HG-T(28),MG-6020T(180),CO-6020T(180)
L1930261-06K	Plastic 500ml unpreserved	B	7	7	2.2	Y	Absent		HEXCR-7196(1)
L1930261-06W	Plastic 250ml NaOH preserved split	B	7	>12	2.2	N	Absent		TCN-9010(14)
L1930261-07A	Vial HCl preserved	B	NA		2.2	Y	Absent		NYTCL-8260(14)

Project Name: CARMAN PLACE
Project Number: 04736-0005-11

Serial_No: 07291917:18
Lab Number: L1930261
Report Date: 07/29/19

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1930261-07B	Vial HCl preserved	B	NA		2.2	Y	Absent		NYTCL-8260(14)
L1930261-07C	Vial HCl preserved	B	NA		2.2	Y	Absent		NYTCL-8260(14)
L1930261-07D	Plastic 250ml unpreserved	A	NA		5.3	Y	Absent		A2-NY-537-ISOTOPE(14)
L1930261-07E	Plastic 250ml unpreserved	A	NA		5.3	Y	Absent		A2-NY-537-ISOTOPE(14)
L1930261-07F	Amber 250ml unpreserved	B	7	7	2.2	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1930261-07G	Amber 250ml unpreserved	B	7	7	2.2	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1930261-07H	Amber 250ml unpreserved	B	7	7	2.2	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L1930261-07I	Amber 250ml unpreserved	B	7	7	2.2	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L1930261-07J	Plastic 250ml HNO3 preserved	B	<2	<2	2.2	Y	Absent		BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CA-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),AS-6020T(180),SB-6020T(180),V-6020T(180),AG-6020T(180),AL-6020T(180),CD-6020T(180),HG-T(28),MG-6020T(180),CO-6020T(180)
L1930261-07K	Plastic 500ml unpreserved	B	7	7	2.2	Y	Absent		HEXCR-7196(1)
L1930261-07W	Plastic 250ml NaOH preserved split	B	7	>12	2.2	N	Absent		TCN-9010(14)
L1930261-08A	Plastic 250ml unpreserved	A	NA		5.3	Y	Absent		A2-NY-537-ISOTOPE(14)

Project Name: CARMAN PLACE
Project Number: 04736-0005-11

Lab Number: L1930261
Report Date: 07/29/19

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: CARMAN PLACE
Project Number: 04736-0005-11

Lab Number: L1930261
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- 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: CARMAN PLACE
Project Number: 04736-0005-11

Lab Number: L1930261
Report Date: 07/29/19

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.
- 122 Determination of Selected Perfluorinated Alkyl Acids in Drinking Water by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry (LC/MS/MS). EPA Method 537, EPA/600/R-08/092. Version 1.1, September 2009.

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 its 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.

 NEW YORK CHAIN OF CUSTODY Westborough, MA 01581 8 Walkup Dr. TEL: 508-898-9220 FAX: 508-898-9193 Mansfield, MA 02048 320 Forbes Blvd TEL: 508-822-9300 FAX: 508-822-3288		Service Centers Mahwah, NJ 07430: 35 Whitney Rd, Suite 5 Albany, NY 12205: 14 Walker Way Tonawanda, NY 14150: 275 Cooper Ave, Suite 105		Page 1 of 2		Date Rec'd in Lab 7/11/19		ALPHA Job # L1930261																																																																																																																																																																																																		
		Project Information Project Name: <u>Carmen Place</u> Project Location: <u>103-104 Main St Hempstead, NY</u> Project # <u>0435** 04730-0005-11</u> (Use Project name as Project #) ☐ Project Manager: <u>Carmen Iscari</u> ALPHAQuote #: Turn-Around Time Standard ☒ Due Date: Rush (only if pre approved) ☐ # of Days:		Deliverables ☐ ASP-A ☐ ASP-B ☐ EQUIS (1 File) ☐ EQUIS (4 File) ☐ Other		Billing Information ☐ Same as Client Info PO #																																																																																																																																																																																																				
Client Information Client: <u>PS&S</u> Address: <u>1 Carmen Place 2nd Floor</u> <u>Hempstead, NY 10701</u> Phone: <u>914-509-8600</u> Fax: Email: <u>Ciscari@PSandS.com</u>		Regulatory Requirement ☐ NY TOGS ☐ NY Part 375 ☐ AWQ Standards ☐ NY CP-51 ☐ NY Restricted Use ☐ Other ☐ NY Unrestricted Use ☐ NYC Sewer Discharge		Disposal Site Information Please identify below location of applicable disposal facilities. Disposal Facility: ☐ NJ ☐ NY ☐ Other:																																																																																																																																																																																																						
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**Carman Place Site
157 Main Street, Village of Hempstead, NY
Supplemental Site Investigation**

Appendix D

Emerging Contaminants Comparison Criteria Fact Sheets

NYSDEC June 2019 Fact Sheet Emerging Contaminants

New York State Office of Governor Cuomo Announcement, July 8, 2019

EPA Fact Sheet PFOA & PFOS Drinking Water Health Advisories, November 2016

Sampling for 1,4-Dioxane and Per- and Polyfluoroalkyl Substances (PFAS) Under DEC's Part 375 Remedial Programs

Objective

The Department of Environmental Conservation (DEC) is requiring sampling of all environmental media and subsequent analysis for the emerging contaminants 1,4-Dioxane and PFAS as part of all remedial programs implemented under 6 NYCRR Part 375, as further described in the guidance below.

Sample Planning

The number of samples required for emerging contaminant analyses is to be the same number of samples where "full TAL/TCL sampling" would typically be required in an investigation or remedial action compliance program.

Sampling of all media for ECs is required at all sites coming into or already in an investigative phase of any DER program. In other words, if the sampling outlined in the guidance hasn't already been done or isn't part of an existing work plan to be sampled for in the future, it will be necessary to go back out and perform the sampling prior to approving a SC report or issuing a decision document.

PFAS and 1,4-dioxane shall be incorporated into the investigation of potentially affected media, including soil, groundwater, surface water, and sediment as an addition to the standard "full TAL/TCL sampling." Biota sampling may be necessary based upon the potential for biota to be affected as determined pursuant to a Fish and Wildlife Impact analysis. Soil vapor sampling for PFAS and 1,4-dioxane is not required.

Upon an emerging contaminant being identified as a contaminant of concern (COC) for a site, those compounds must be assessed as part of the remedy selection process in accordance with Part 375 and DER-10 and included as part of the monitoring program upon entering the site management phase.

Special Testing Requirements for Import or Reuse of Soil: Soil imported to a site for use in a soil cap, soil cover, or as backfill must be tested for 1,4-dioxane and PFAS contamination in general conformance with DER-10, Section 5.4(e). Soil samples must be analyzed for 1,4-dioxane using EPA Method 8270, as well as the full list of PFAS compounds (currently 21) using EPA Method 537.1 (modified).

For 1,4-dioxane, soil exceeding 0.1 ppm must be rejected per DER 10: Appendix 5 - Allowable Constituent Levels for Imported Fill or Soil, Subdivision 5.4(e).

If PFOA or PFOS is detected in any sample at or above 1 ppb, then a soil sample must be tested by the Synthetic Precipitation Leaching Procedure (SPLP) and the leachate analyzed. If the SPLP results exceed 70 ppt combined PFOA/S, then the source of backfill must be rejected. Remedial parties have the option of analyzing samples concurrently for both PFAS in soil and in the SPLP leachate to minimize project delays.

The work plan should explicitly describe analysis and reporting requirements, including laboratory analytical procedures for modified methods discussed below.

Analysis and Reporting

Labs should provide a full category B deliverable, and a DUSR should be prepared by an independent 3rd party data validator. QA/QC samples should be collected as required in DER-10, Section 2.3(c). The electronic data submission should meet the requirements provided at:

<https://www.dec.ny.gov/chemical/62440.html>.

PFAS analysis and reporting: DEC has developed a *PFAS Analyte List* (below) for remedial programs. It is expected that reported results for PFAS will include, at a minimum, all the compounds listed. If lab and/or matrix specific issues are encountered for any compounds, the DEC project manager, in consultation with the DEC remedial program chemist, will make case-by-case decisions as to whether certain analytes may be temporarily or permanently discontinued from analysis at each site.

Currently, ELAP does not offer certification for PFAS compounds in matrices other than finished drinking water. However, laboratories analyzing environmental samples (e.g., soil, sediments, and groundwater) are required by DER to hold ELAP certification for PFOA and PFOS in drinking water by EPA Method 537 or ISO 25101. Labs must also adhere to the requirements and criteria set forth in the [Laboratory Guidance for Analysis of PFAS in Non-Potable Water and Solids](#).

Modified EPA Method 537 is the preferred method to use for environmental samples due to its ability to achieve very low detection limits. Reporting limits for PFAS in groundwater and soil are to be 2 ng/L (ppt) and 1 ug/kg (ppb), respectively. If contract labs or work plans submitted by responsible parties indicate that they are not able to achieve these reporting limits for the entire list of 21 PFAS, site-specific decisions will need to be made by the DEC project manager in consultation with the DEC remedial program chemist. Note: Reporting limits for PFOA and PFOS in groundwater should not exceed 2 ng/L.

Additional laboratory methods for analysis of PFAS may be warranted at a site. These methods include Synthetic Precipitation Leaching Procedure (SPLP) by EPA Method 1312 and Total Oxidizable Precursor Assay (TOP Assay).

SPLP is a technique for determining the potential for chemicals in soil to leach to groundwater and may be helpful in determining the need for addressing PFAS-containing soils or other solid material as part of the remedy. SPLP sampling need not be considered if there are no elevated PFAS levels in groundwater. If elevated levels of PFAS are detected in water, and PFAS are also seen in soil, then an SPLP test should be considered to better understand the relationship between the PFAS in the two media.

The TOP Assay can assist in determining the potential PFAS risk at a site. For example, some polyfluoroalkyl substances may transform to form perfluoroalkyl substances, resulting in an increase in perfluoroalkyl substance concentrations as contaminated groundwater moves away from the site. To conceptualize the amount and type of oxidizable perfluoroalkyl substances which could be liberated in the environment, a "TOP Assay" analysis can be performed, which approximates the maximum concentration of perfluoroalkyl substances that could be generated if all polyfluoroalkyl substances were oxidized.

PFAS-containing materials can be made up of per- and polyfluoroalkyl substances that are not analyzable by routine analytical methodology (LC-MS/MS). The TOP assay converts, through oxidation, polyfluoroalkyl substances (precursors) into perfluoroalkyl substances that can be detected by current

analytical methodology. Please note that analysis of highly contaminated samples, such as those from an AFFF site, can result in incomplete oxidation of the samples and an underestimation of the total perfluoroalkyl substances. Please consult with a DEC remedial program chemist for assistance interpreting the results.

1,4-Dioxane analysis and reporting: The reporting limit for 1,4-dioxane in groundwater should be no higher than 0.35 µg/L (ppb) and no higher than 0.1 mg/kg (ppm) in soil. Although ELAP offers certification for both EPA Method 8260 and EPA Method 8270 for 1,4-dioxane, DER is advising the use of Method 8270 SIM for water samples and EPA Method 8270 for soil samples. EPA Method 8270 SIM is not necessary for soils if the lab can achieve the required reporting limits without the use of SIM. Note: 1,4-dioxane is currently listed as a VOC in the Part 375 SCO tables but will be moved to the SVOC table with the next update to Part 375.

Refinement of sample analyses: As with other contaminants that are analyzed for at a site, the emerging contaminant analyte list may be refined for future sampling events based on investigative findings. Initially, however, sampling using this PFAS Analyte List and 1,4-dioxane is needed to understand the nature of contamination.

PFAS Analyte List

Group	Chemical Name	Abbreviation	CAS Number
Perfluoroalkyl sulfonates	Perfluorobutanesulfonic acid	PFBS	375-73-5
	Perfluorohexanesulfonic acid	PFHxS	355-46-4
	Perfluoroheptanesulfonic acid	PFHpS	375-92-8
	Perfluorooctanesulfonic acid	PFOS	1763-23-1
	Perfluorodecanesulfonic acid	PFDS	335-77-3
Perfluoroalkyl carboxylates	Perfluorobutanoic acid	PFBA	375-22-4
	Perfluoropentanoic acid	PFPeA	2706-90-3
	Perfluorohexanoic acid	PFHxA	307-24-4
	Perfluoroheptanoic acid	PFHpA	375-85-9
	Perfluorooctanoic acid	PFOA	335-67-1
	Perfluorononanoic acid	PFNA	375-95-1
	Perfluorodecanoic acid	PFDA	335-76-2
	Perfluoroundecanoic acid	PFUA/PFUdA	2058-94-8
	Perfluorododecanoic acid	PFDoA	307-55-1
	Perfluorotridecanoic acid	PFTriA/PFTTrDA	72629-94-8
	Perfluorotetradecanoic acid	PFTA/PFTeDA	376-06-7
Fluorinated Telomer Sulfonates	6:2 Fluorotelomer sulfonate	6:2 FTS	27619-97-2
	8:2 Fluorotelomer sulfonate	8:2 FTS	39108-34-4
Perfluorooctane-sulfonamides	Perfluorooctanesulfonamide	FOSA	754-91-6
Perfluorooctane-sulfonamidoacetic acids	N-methyl perfluorooctanesulfonamidoacetic acid	N-MeFOSAA	2355-31-9
	N-ethyl perfluorooctanesulfonamidoacetic acid	N-EtFOSAA	2991-50-6

Overview

EPA has established health advisories for PFOA and PFOS based on the agency's assessment of the latest peer-reviewed science to provide drinking water system operators, and state, tribal and local officials who have the primary responsibility for overseeing these systems, with information on the health risks of these chemicals, so they can take the appropriate actions to protect their residents. EPA is committed to supporting states and public water systems as they determine the appropriate steps to reduce exposure to PFOA and PFOS in drinking water. As science on health effects of these chemicals evolves, EPA will continue to evaluate new evidence.

Background on PFOA and PFOS

PFOA and PFOS are fluorinated organic chemicals that are part of a larger group of chemicals referred to as perfluoroalkyl substances (PFASs). PFOA and PFOS have been the most extensively produced and studied of these chemicals. They have been used to make carpets, clothing, fabrics for furniture, paper packaging for food and other materials (e.g., cookware) that are resistant to water, grease or stains. They are also used for firefighting at airfields and in a number of industrial processes.

Because these chemicals have been used in an array of consumer products, most people have been exposed to them. Between 2000 and 2002, PFOS was voluntarily phased out of production in the U.S. by its primary manufacturer. In 2006, eight major companies voluntarily agreed to phase out their global production of PFOA and PFOA-related chemicals, although there are a limited number of ongoing uses. Scientists have found PFOA and PFOS in the blood of nearly all the people they tested, but these studies show that the levels of PFOA and PFOS in blood have been decreasing. While consumer products and food are a large source of exposure to these chemicals for most people, drinking water can be an additional source in the small percentage of communities where these chemicals have contaminated water supplies. Such contamination is typically localized and associated with a specific facility, for example, an industrial facility where these chemicals were produced or used to manufacture other products or an airfield at which they were used for firefighting.

EPA's 2016 Lifetime Health Advisories

EPA develops health advisories to provide information on contaminants that can cause human health effects and are known or anticipated to occur in drinking water. EPA's health advisories are non-enforceable and non-regulatory and provide technical information to states agencies and other public health officials on health effects, analytical methodologies, and treatment technologies associated with drinking water contamination. In 2009, EPA published provisional health advisories for PFOA and PFOS based on the evidence available at that time. The science has evolved since then and EPA is now replacing the 2009 provisional advisories with new, lifetime health advisories.

FACT SHEET

PFOA & PFOS Drinking Water Health Advisories

EPA's 2016 Lifetime Health Advisories, continued

To provide Americans, including the most sensitive populations, with a margin of protection from a lifetime of exposure to PFOA and PFOS from drinking water, EPA established the health advisory levels at 70 parts per trillion. When both PFOA and PFOS are found in drinking water, the combined concentrations of PFOA and PFOS should be compared with the 70 parts per trillion health advisory level. This health advisory level offers a margin of protection for all Americans throughout their life from adverse health effects resulting from exposure to PFOA and PFOS in drinking water.

How the Health Advisories were developed

EPA's health advisories are based on the best available peer-reviewed studies of the effects of PFOA and PFOS on laboratory animals (rats and mice) and were also informed by epidemiological studies of human populations that have been exposed to PFASs. These studies indicate that exposure to PFOA and PFOS over certain levels may result in adverse health effects, including developmental effects to fetuses during pregnancy or to breastfed infants (e.g., low birth weight, accelerated puberty, skeletal variations), cancer (e.g., testicular, kidney), liver effects (e.g., tissue damage), immune effects (e.g., antibody production and immunity), thyroid effects and other effects (e.g., cholesterol changes).

EPA's health advisory levels were calculated to offer a margin of protection against adverse health effects to the most sensitive populations: fetuses during pregnancy and breastfed infants. The health advisory levels are calculated based on the drinking water intake of lactating women, who drink more water than other people and can pass these chemicals along to nursing infants through breastmilk.

Recommended Actions for Drinking Water Systems

Steps to Assess Contamination

If water sampling results confirm that drinking water contains PFOA and PFOS at individual or combined concentrations greater than 70 parts per trillion, water systems should quickly undertake additional sampling to assess the level, scope and localized source of contamination to inform next steps

Steps to Inform

If water sampling results confirm that drinking water contains PFOA and PFOS at individual or combined concentrations greater than 70 parts per trillion, water systems should promptly notify their State drinking water safety agency (or with EPA in jurisdictions for which EPA is the primary drinking water safety agency) and consult with the relevant agency on the best approach to conduct additional sampling.

Drinking water systems and public health officials should also promptly provide consumers with information about the levels of PFOA and PFOS in their drinking water. This notice should include specific information on the risks to fetuses during pregnancy and breastfed and formula-fed infants from exposure to drinking water with an individual or combined concentration of PFOA and PFOS above EPA's health advisory level of 70 parts per trillion. In addition, the notification should include actions they are taking and identify options that consumers may consider to reduce risk such as seeking an alternative drinking water source, or in the case of parents of formula-fed infants, using formula that does not require adding water.

FACT SHEET

PFOA & PFOS Drinking Water Health Advisories

Recommended Actions for Drinking Water Systems, continued

Steps to Limit Exposure

A number of options are available to drinking water systems to lower concentrations of PFOA and PFOS in their drinking water supply. In some cases, drinking water systems can reduce concentrations of perfluoroalkyl substances, including PFOA and PFOS, by closing contaminated wells or changing rates of blending of water sources. Alternatively, public water systems can treat source water with activated carbon or high pressure membrane systems (e.g., reverse osmosis) to remove PFOA and PFOS from drinking water. These treatment systems are used by some public water systems today, but should be carefully designed and maintained to ensure that they are effective for treating PFOA and PFOS. In some communities, entities have provided bottled water to consumers while steps to reduce or remove PFOA or PFOS from drinking water or to establish a new water supply are completed.

Many home drinking water treatment units are certified by independent accredited third party organizations against American National Standards Institute (ANSI) standards to verify their contaminant removal claims. NSF International (NSF®) has developed a protocol for NSF/ANSI Standards 53 and 58 that establishes minimum requirements for materials, design and construction, and performance of point-of-use (POU) activated carbon drinking water treatment systems and reverse osmosis systems that are designed to reduce PFOA and PFOS in public water supplies. The protocol has been established to certify systems (e.g., home treatment systems) that meet the minimum requirements. The systems are evaluated for contaminant reduction by challenging them with an influent of $1.5 \pm 30\%$ µg/L (total of both PFOA and PFOS) and must reduce this concentration by more than 95% to 0.07 µg/L or less (total of both PFOA and PFOS) throughout the manufacturer's stated life of the treatment system. Product certification to this protocol for testing home treatment systems verifies that devices effectively reduces PFOA and PFOS to acceptable levels.

Other Actions Relating to PFOA and PFOS

Between 2000 and 2002, PFOS was voluntarily phased out of production in the U.S. by its primary manufacturer, 3M. EPA also issued regulations to limit future manufacturing, including importation, of PFOS and its precursors, without first having EPA review the new use. A limited set of existing uses for PFOS (fire resistant aviation hydraulic fluids, photography and film products, photomicro lithography process to produce semiconductors, metal finishing and plating baths, component of an etchant) was excluded from these regulations because these uses were ongoing and alternatives were not available.

In 2006, EPA asked eight major companies to commit to working toward the elimination of their production and use of PFOA, and chemicals that degrade to PFOA, from emissions and products by the end of 2015. All eight companies have indicated that they have phased out PFOA, and chemicals that degrade to PFOA, from emissions and products by the end of 2015. Additionally, PFOA is included in EPA's proposed Toxic Substance Control Act's Significant New Use Rule (SNUR) issued in January 2015 which will ensure that EPA has an opportunity to review any efforts to reintroduce the chemical into the marketplace and take action, as necessary, to address potential concerns.

FACT SHEET

PFOA & PFOS Drinking Water Health Advisories

Other Actions Relating to PFOA and PFOS, continued

EPA has not established national primary drinking water regulations for PFOA and PFOS. EPA is evaluating PFOA and PFOS as drinking water contaminants in accordance with the process required by the Safe Drinking Water Act (SDWA). To regulate a contaminant under SDWA, EPA must find that it: (1) may have adverse health effects; (2) occurs frequently (or there is a substantial likelihood that it occurs frequently) at levels of public health concern; and (3) there is a meaningful opportunity for health risk reduction for people served by public water systems.

EPA included PFOA and PFOS among the list of contaminants that water systems are required to monitor under the third Unregulated Contaminant Monitoring Rule (UCMR 3) in 2012. Results of this monitoring effort are updated regularly and can be found on the publicly-available National Contaminant Occurrence Database (NCOD) (<https://www.epa.gov/dwucmr/occurrence-data-unregulated-contaminant-monitoring-rule#3>). In accordance with SDWA, EPA will consider the occurrence data from UCMR 3, along with the peer reviewed health effects assessments supporting the PFOA and PFOS Health Advisories, to make a regulatory determination on whether to initiate the process to develop a national primary drinking water regulation.

In addition, EPA plans to begin a separate effort to determine the range of PFAS for which an Integrated Risk Information System (IRIS) assessment is needed. The IRIS Program identifies and characterizes the health hazards of chemicals found in the environment. IRIS assessments inform the first two steps of the risk assessment process: hazard identification, and dose-response. As indicated in the 2015 IRIS Multi-Year Agenda, the IRIS Program will be working with other EPA offices to determine the range of PFAS compounds and the scope of assessment required to best meet Agency needs. More about this effort can be found at <https://www.epa.gov/iris/iris-agenda>.

Non-Drinking Water Exposure to PFOA and PFOS

These health advisories only apply to exposure scenarios involving drinking water. They are not appropriate for use, in identifying risk levels for ingestion of food sources, including: fish, meat produced from livestock that consumes contaminated water, or crops irrigated with contaminated water.

The health advisories are based on exposure from drinking water ingestion, not from skin contact or breathing. The advisory values are calculated based on drinking water consumption and household use of drinking water during food preparation (e.g., cooking or to prepare coffee, tea or soup). To develop the advisories, EPA considered non-drinking water sources of exposure to PFOA and PFOS, including: air, food, dust, and consumer products. In January 2016 the Food and Drug Administration amended its regulations to no longer allow PFOA and PFOS to be added in food packaging, which will likely decrease one source of non-drinking water exposure.

Where Can I Learn More?

- EPA's Drinking Water Health Advisories for PFOA and PFOS can be found at: <https://www.epa.gov/ground-water-and-drinking-water/drinking-water-health-advisories-pfoa-and-pfos>
- PFOA and PFOS data collected under EPA's Unregulated Contaminant Monitoring Rule are available: <https://www.epa.gov/dwucmr/occurrence-data-unregulated-contaminant-monitoring-rule>
- EPA's stewardship program for PFAS related to TSCA: <https://www.epa.gov/assessing-and-managing-chemicals-under-tsca/and-polyfluoroalkyl-substances-pfass-under-tsca>
- EPA's research activities on PFASs can be found at: <http://www.epa.gov/chemical-research/perfluorinated-chemical-pfc-research>
- The Agency for Toxic Substances and Disease Registry's Perfluorinated Chemicals and Your Health webpage at: <http://www.atsdr.cdc.gov/PFC/>





JULY 8, 2019 Albany, NY

Governor Cuomo Announces Availability of \$350 Million for Water System Upgrades Statewide and Directs Health Department to Begin Adopting Maximum Contaminant Levels for PFOA, PFOS and 1,4-Dioxane

\$27 Million in Grants Awarded to Address 1,4-Dioxane in Nine Long Island Communities

Additional \$370,000 to Help Fund Planning and Development of New Local Infrastructure Projects That Will Combat Emerging Contaminants in 14 Public Water Systems

Levels Recommended by New York's Drinking Water Quality Council are the Nation's Most Protective for PFOA and PFOS, and First-Ever Level for 1,4-dioxane

DOH, DEC, and EFC Will Work Together to Assist Municipalities in Meeting Standards and Funding Upgrades to Water Systems

Governor Andrew M. Cuomo today announced that \$350 million is now available through the Water Infrastructure Improvement Act and the Intermunicipal Water Infrastructure Grant Program for municipalities with infrastructure projects that protect public health or improve water quality. The Governor also announced that New York's Health Commissioner, Dr. Howard Zucker, has accepted the New York State Drinking Water Quality Council's recommendations for maximum contaminant levels in drinking water for PFOA, PFOS and 1,4-

dioxane, and has directed the Department to begin the regulatory process for adopting these enforceable standards. The levels of 10 parts per trillion for PFOA and 10 parts per trillion for PFOS are the most protective in the nation. The standard of 1 part per billion for 1,4-dioxane is the nation's first-ever level set for that contaminant. Once adopted, the Environmental Facilities Corporation and the Department of Environmental Conservation will closely coordinate with the Department of Health to help fund and remediate water systems that test above the new maximum contaminant levels.

"We're proposing the most protective levels in the nation for three emerging contaminants to ensure we are regularly testing and fixing water systems before they ever rise to a public health risk in any part of the state," **Governor Cuomo said**. "New York State will continue to lead in the absence of federal action by ensuring all residents have access to clean drinking water and by investing in critical projects to assist municipalities in treating these emerging contaminants."

The state's recommended levels for PFOA and PFOS are significantly lower than the federal EPA's current guidance levels of 70 parts per trillion. Any potential health effects of concern for these contaminants primarily results after a lifetime of exposure to 70 ppt, not exposure over short periods of time. While the EPA does not have guidance on 1,4-dioxane, in accepting the Drinking Water Quality Council's recommendations, DOH used the best available science to determine a similarly protective level of 1 part per billion. Establishing such highly protective maximum contaminant levels (MCLs) and requiring every public water system to regularly test and monitor, regardless of their size, will ensure that contaminant levels never rise to the point of causing a public health risk.

Grant eligible projects for the \$350 million in water quality improvement projects include those that combat emerging contaminants, such as PFOA, PFOS, and 1,4-dioxane, with system upgrades and innovative technologies, and those that address combined or sanitary sewer overflows impacts from flooding. The Governor also announced \$27 million in grants to support nine Long Island projects that will remove emerging contaminants from drinking water. Under the leadership of Governor Cuomo, New York State's 2017 Clean Water Infrastructure Act and the FY 2020 Enacted Budget make \$3 billion available to address critical water infrastructure needs.

"It's critical that we ensure our drinking water is safe for all New Yorkers," **said Lieutenant Governor Kathy Hochul**. "This process to tackle the serious issue of contaminants will address health needs to enhance and protect water quality. We want to make sure that communities have the resources they need to make upgrades to their water treatment systems and ensure the health and safety of residents."

Regulatory Process, Public Comment and MCL Adoption

To amend the state's drinking water regulations, a Notice of Proposed Rulemaking in the New York State Register has been submitted [here](#) and is expected to be published on Wednesday, July 24 when a 60-day public comment will begin. Public comments can be sent to regsqa@health.ny.gov. Following assessment of public comments, the proposed regulation will either be revised or submitted for adoption by the Public Health and Health Planning Council, subject to the approval of the Commissioner of Health. The regulation will go into effect upon publication of a Notice of Adoption in the New York State Register. Once adopted, public water systems of all sizes would need to test their water within the specified timeframes, as outlined in the regulations, and comply with the adopted MCLs. Most water supplies will need to submit their first round of test results within three months of rule adoption.

The Nation's Most Protective MCLs for PFOA/PFOS Accepted

Dr. Zucker has accepted the Drinking Water Quality Council's recommendation to adopt MCLs of 10 parts per trillion (ppt) for PFOA and 10 ppt for PFOS. These levels are the lowest in the nation and take into consideration the national adult population's "body burden," or the fact that all adults already have some level of exposure to these and other related chemicals. PFOA is a chemical that has been used to make non-stick, stain resistant and water repellant products, and PFOS is a chemical that has been used in fire-fighting foam. The State has invested millions through the State Superfund program to install granular activated carbon filtration (GACs) systems that are successfully removing PFOA and PFOS from impacted water supplies in several communities. Ultimately, as with any environmental remediation, the State is holding those responsible accountable for any expenses incurred at state and local levels.

First in the Nation MCL for 1,4-dioxane Accepted

For 1,4-dioxane, the Commissioner has accepted the Drinking Water Quality Council's recommendation to adopt a first in the nation MCL of 1.0 part per billion (ppb). 1,4-dioxane is a chemical that has been used as a stabilizer in solvents, paint strippers, greases and wax. The State approved an effective new treatment technology for 1,4-dioxane called Advanced Oxidative Process (AOP), which is already being utilized by the Suffolk County Water Authority on Long Island.

Funding for Water Quality Infrastructure Projects

To further bolster actions to protect communities' drinking water supplies and support infrastructure improvements statewide, the Governor announced the availability of \$350 million. Municipalities are eligible to apply for funding for:

- **Water Infrastructure Improvement Act Wastewater Infrastructure Projects:** depending on the size of the project applicants may receive funding for up to 25 percent of net eligible project costs, or a maximum of \$25 million, whichever is less.
- **Water Infrastructure Improvement Act Drinking Water Infrastructure Projects:** applicants may receive funding for up to 60 percent of net eligible project costs, or \$3 million, whichever is less.
- **Intermunicipal Water Infrastructure Grants Clean Water and Drinking Water Projects:** applicants may receive funding for up to 40 percent of net eligible project costs, or \$10 million, whichever is less.

Applicants can go to the link below to apply for Water Infrastructure Improvement Act grant funding today: <https://www.efc.ny.gov/WIIAApply>.

Funding for Emerging Contaminants

The State Environmental Facilities Corporation, in collaboration with the Department of Health, has awarded \$27 million to help Long Island communities upgrade drinking water treatment systems and address the emerging contaminants PFOA, PFOS and 1,4-dioxane. The grants will fund up to 60 percent of each project's cost, up to the grant maximum of \$3 million. In addition, the projects are expected to support local jobs in construction, supplier, and service sectors.

The following communities each received \$3 million to upgrade treatment systems:

- Franklin Square Water District (Nassau County): Volatile Organic Compound (VOC) and 1,4-dioxane treatment;
- Greenlawn Water District (Nassau County): 1,4-dioxane treatment;
- Town of Hempstead (Nassau County): East Meadow Water District 1,4-dioxane treatment;
- Town of Huntington (Suffolk County): 1,4-dioxane treatment;
- Manhasset-Lakeville Water District (Nassau County): 1,4-dioxane treatment;
- Oyster Bay Water District (Suffolk County): 1,4-dioxane treatment;
- Port Washington Water District (Nassau County): 1,4-dioxane and PFOA treatment;
- South Farmingdale Water District (Nassau County): 1,4-dioxane treatment; and
- West Hempstead Water District (Nassau County): 1,4-dioxane treatment.

In addition to the \$27 million in grants, \$370,000 is being awarded to help fund the planning and development of new local infrastructure projects that will combat emerging contaminants. Planning grants of up to \$50,000 each were awarded to 14 public water systems:

- Town of Berlin (Rensselaer County): \$20,625 for Non-PFOA source water investigation planning;
- Town of Petersburg (Rensselaer County): \$20,625 for water system upgrade planning;
- Village of Endicott (Broome County): \$30,000 for an emerging contaminants water system study;
- Town of Pleasant Valley (Dutchess County): \$30,000 for hamlet water district creation planning;
- Bethpage Water District (Nassau County): \$19,600 for 1,4-dioxane, Nitrate and VOC removal planning;
- Village of Farmingdale (Nassau County): \$19,920 for VOC and emerging contaminants removal planning;
- Garden City Park Water District (Nassau County): \$19,600 for 1,4-dioxane treatment planning;
- Hicksville Water District (Nassau County): \$30,000 for an emerging contaminants planning report;
- Jericho Water District (Nassau County): \$50,000 for 1,4-dioxane treatment planning;
- Village of Mineola (Nassau County): \$30,000 for 1,4-dioxane removal planning;
- Plainview Water District (Nassau County): \$19,600 for 1,4-dioxane treatment planning;
- Roslyn Water District (Nassau County): \$30,000 for 1,4-dioxane treatment planning;
- Westbury Water District (Nassau County): \$30,000 for 1,4-dioxane treatment planning; and
- Westchester County: \$30,000 for New King Street water extension planning.

To date, over \$775 million in the Water Infrastructure Improvement Act and the Intermunicipal Water Infrastructure Grant Program funding administered by EFC is supporting over \$2.7 billion in total project costs for vital drinking and wastewater infrastructure projects statewide.

Department of Health (DOH) Commissioner Dr. Howard Zucker said, "The continued lack of federal leadership on emerging contaminants has made it evident that New York must chart its own course to continue to protect water quality statewide. With the state now moving forward in setting enforceable maximum contaminant levels, Governor Cuomo is ensuring these communities have the financial support and assistance to effectively address these contaminants."

Department of Environmental Conservation (DEC) Commissioner Basil Seggos said, "We applaud our colleagues at the Department of Health for advancing this comprehensive proposal to improve the regulation of emerging contaminants in drinking water. Safeguarding clean water is essential to the health of our communities, environment and economy, and the leadership and funding provided by Governor Cuomo today is leading the nation forward on critical water infrastructure upgrades. DEC will continue to work across the state to ensure all New Yorkers have access to clean drinking water, and hold accountable those responsible for any contamination."

Environmental Facilities Corporation (EFC) President and CEO Sabrina M. Ty said, "Governor Cuomo has established a record of environmental leadership regarding emerging contaminants, and the grants announced today will help communities across Long Island safeguard their drinking water supplies. Clean drinking water is central to the prosperity of our communities, and EFC stands ready to do its part as we seek to create a healthier New York for everyone."

Senator Gustavo Rivera, Chair of Senate Health Committee said, "It is encouraging that the NYSDOH is accepting the MCL recommendations of the New York State Drinking Water Quality Council to adequately regulate three emerging contaminants in our State's drinking water. Implementing these recommendations will help protect our drinking water supply and safeguard the health of New Yorkers across the state from dangerous exposure to PFOS, PFOA and 1,4-dioxane."

Senator Todd Kaminsky, Chair of Senate Environmental Conservation Committee said, "Long Islanders are rightly concerned that emerging contaminants are impacting the quality of their water supply. Setting strict limits is the first important step toward tackling this challenge, and allocating the necessary dollars -- including the round of funding announced here -- must be a

consistent priority of our State government going forward. I would like to thank Governor Cuomo for focusing intensely on this critical issue for all of Long Island."

Assembly Member Richard Gottfried, Chair of Assembly Health Committee said, "New York has a responsibility to be a national environmental leader, with the most protective contaminant levels in the country. We must have the strongest commitment to water quality for implementing the testing and remediation necessary to meet these standards in communities across the state, including monitoring emerging science about these dangerous chemicals."

Assembly Member Steve Englebright, Chair of Assembly Environmental Conservation Committee said, "Although dangerous substances should not be polluting our drinking water, the new limits on contamination for these three chemicals are an important first step in protecting human health. I thank the Drinking Water Quality Council for their diligence in suggesting these new limits and applaud Governor Cuomo for directing the Health Department to formally adopt the Council's recommendation."

Technical Assistance

Governor Cuomo has directed the New York State Water Quality Rapid Response Team to provide immediate technical assistance to communities interested in assessing system needs and applying for grant funding. Additionally, DOH will offer technical assistance based upon its successful oversight of carbon filtration and AOP treatment systems in other parts of the state. This will include engineering consultation, establishing monitoring and operational protocols, and guidance for potential grant and loan financing options. Established by Governor Cuomo in 2016, the New York State Water Quality Rapid Response Team continues to implement an aggressive protocol to reduce exposure to emerging contaminants in drinking water.

For more information about New York's Drinking Water Quality Council, please see:
<https://www.health.ny.gov/environmental/water/drinking/dwqc/>.

For more information about New York's Drinking Water Protection Program, please see:
<https://www.health.ny.gov/environmental/water/drinking/>.

For information about grant funding opportunities for water systems, please see:

<https://www.health.ny.gov/environmental/water/drinking/financing.htm>.

Contact the Governor's Press Office



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