
**FORMER ANDOR MEDICAL SYSTEMS
26-22 4th STREET
ASTORIA, NY
Block 910 Lots 9 & 35**

**REMEDIAL INVESTIGATION
REPORT**

May 2020

Prepared for:

4th Street Developments LLC
143 Division Avenue
Brooklyn, NY 11211



ENVIRONMENTAL BUSINESS CONSULTANTS

1808 Middle Country Road
Ridge, NY 11961

TABLE OF CONTENTS
REMEDIAL INVESTIGATION REPORT
Former Andor Medical Systems
26-22 4th Street, Astoria, NY

1.0	INTRODUCTION.....	1
1.1	Site Location and Description	1
1.2	Redevelopment Plans	2
1.3	Site History	2
1.4	Summary of Previous Investigations.....	2
	1.4.1 Limited Phase II Environmental Site Investigation - EBS (Jul. 2016).....	2
	1.4.2 Supplemental Subsurface Investigation - EBC (Feb. 2018).....	3
2.0	REMEDIAL INVESTIGATION	4
2.1	Field Investigation.....	4
2.2	Deviations from the Remedial Investigation Work Plan.....	4
2.3	Soil Sampling	4
	2.3.1 Soil Borings	4
	2.3.2 Soil Samples	5
2.4	Monitoring Well Installation.....	5
	2.4.1 Groundwater Sampling	5
2.5	Soil Vapor Sampling	6
	2.5.1 Installation of Subslab Vapor Sampling Points	6
	2.5.2 Surface Seal Test Procedure	7
	2.5.3 Soil Vapor Sampling Procedures	7
2.6	Laboratory Analysis	7
	2.6.1 Analytical Results – Soil Samples	7
	2.6.2 Analytical Results – Groundwater Samples	9
	2.6.3 Analytical Results – Soil Vapor Samples	10
	2.6.4 Data Usability Summary Report	11
3.0	HYDROGEOLOGIC ASSESSMENT AND PHYSICAL SETTING	12
3.1	Site Topography	12
3.2	Surrounding Land Use.....	12
3.3	Regional Geology / Hydrogeology.....	12
3.4	Site Geology / Hydrogeology.....	13
4.0	NATURE AND EXTENT OF CONTAMINATION	14
4.1	Identification of Source Areas.....	14
4.2	Groundwater Impacts	14
4.3	Soil-Vapor Impacts.....	14
4.4	Site Conceptual Model	14
5.0	QUALITATIVE EXPOSURE ASSESSMENT	16
5.1	Contaminant Source	16
5.2	Contaminant Release and Transport Mechanism.....	16
5.3	Point of Exposure, Route of Exposure and Potentially Exposed Populations	16
6.0	CONCLUSIONS AND RECOMENDATIONS.....	18
7.0	REFERENCES.....	19

TABLE OF CONTENTS
REMEDIAL INVESTIGATION REPORT
Former Andor Medical Systems
26-22 4th Street, Astoria, NY

TABLES

Table 1	Summary of Sampling Program Rationale and Analysis
Table 2	Monitoring Well Specifications and Elevation
Table 3	Laboratory Results – Soil Samples, Volatile Organic Compounds
Table 4	Laboratory Results – Soil Samples, Semi-Volatile Organic Compounds
Table 5	Laboratory Results – Soil Samples, Pesticides/PCBs
Table 6	Laboratory Results – Soil Samples, Metals
Table 7	Laboratory Results – Soil Samples, PFAS
Table 8	Laboratory Results – Groundwater Samples, Volatile Organic Compounds
Table 9	Laboratory Results – Groundwater Samples, Semi-Volatile Organic Compounds
Table 10	Laboratory Results – Groundwater Samples, Pesticides/PCBs
Table 11	Laboratory Results – Groundwater Samples, Total Metals
Table 12	Laboratory Results – Groundwater Samples, Dissolved Metals
Table 13	Laboratory Results – Groundwater Samples, PFAS
Table 14	Laboratory Results – Soil Vapor Samples, Volatile Organic Compounds
Table 15	Parameters Detected Above Track 1 Soil Cleanup Objectives
Table 16	Parameters Detected Above Ambient Groundwater Standards

FIGURES

Figure 1	Site Location Map
Figure 2	Site Plan
Figure 3	Soil Sampling Locations
Figure 4	Soil Gas and Groundwater Sampling Locations
Figure 5	Groundwater Elevation Map
Figure 6	Posted Soil Results Above Unrestricted / Restricted Residential SCOs.
Figure 7	Groundwater Results above AWQS
Figure 8	Soil Gas Detections

APPENDICES

Appendix A	Soil Boring Logs
Appendix B	Monitoring Well Completion Reports
Appendix C	Groundwater Sampling Logs
Appendix D	Soil Vapor Sampling Log
Appendix E	Laboratory Reports - Phoenix
Appendix F	Laboratory Reports - Alpha
Appendix G	Data Usability Summary Reports

LIST OF ACRONYMS

Acronym	Definition
AOC	Area of Concern
AST	Aboveground Storage Tank
BCP	Brownfields Cleanup Program
BCA	Brownfield Site Cleanup Agreement
CVOC	Chlorinated VOC
ESA	Environmental Site Assessment
EBC	Environmental Business Consultants
IRM	Interim Remedial Measure Work Plan
NYCDEP	New York City Department of Environmental Protection
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
PID	Photo-Ionization Detector
PCB	Polychlorinated Biphenyls
REC	Recognized Environmental Condition
RI	Remedial Investigation
RIWR	Remedial Investigation Work Plan
SVOC	Semi-Volatile Organic Compound
UST	Underground Storage Tank
VOC	Volatile Organic Compound

REPORT CERTIFICAION

I, Charles Sosik, certify that I am currently a Qualified Environmental Professional as defined in 6 NYCRR Part 375 and that this Remedial Investigation Report was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10) and that all activities were performed in full accordance with the DER-approved work plan and any DER-approved modifications.



Charles Sosik, PG
Principal

Date: 5/22/2020

1.0 INTRODUCTION

This Remedial Investigation Report (RIR) was prepared on behalf of 4th Street Developments LLC for the property located at 26-22 4th Street and 26-30 4th Street, Queens, New York (the Site). An application for acceptance into the New York State Brownfield Cleanup Program (BCP) was previously submitted to the New York State by the former property owner 4th Street Developments LLC. On July 30, 2019, the New York State Department of Environmental Conservation (DEC) informed 4th Street Developments LLC that the property was accepted into the BCP. The Brownfield Cleanup Agreement (BCA) was executed by the DEC on August 29, 2019 (Site No. C-241234) with the Applicant classified as a “Volunteer.”

The purpose of this Remedial Investigation Report is to collect data of sufficient quality and quantity to characterize the nature and extent of contamination associated with the historic operations at the Site and to complete a qualitative exposure assessment for future occupants of the proposed building and the surrounding community and to evaluate alternatives to remediate the contamination.

The overall objectives of the project are to prepare the Site for residential use and to remediate known and unknown environmental conditions at the Site to the satisfaction of the NYSDEC and the New York State Department of Health (NYSDOH).

The field work portion of the RI was conducted by EBC from December 10, 2019, through December 30, 2019.

1.1 Site Location and Description

The Site is located in the Astoria neighborhood of Queens County (Figure 1) and is comprised of a two tax lots (Block 910, Lots 9 & 35) totaling 25,473 square feet (0.584 acres). The Site is located in the City of New York and Borough of Queens. The Site is rectangular shaped with 100 feet of frontage along 3rd Street and 147.75 feet of frontage along 4th Street (Figure 2).

The Site is improved with one-story 20,000 sf industrial building constructed in 1961 (estimate) on Lot 9. The building is currently vacant. Lot 35 is a paved parking area which was previously used by the former Lot 9 tenant. The entire site is covered by either the concrete building slab or the asphalt parking lot with no exposed soil.

The north side of the property is bordered by multi-family residential buildings. The south side is bordered by a single-family residential home and a contractor’s yard. Properties to the west include a single-family residence and stone countertop businesses. Properties to the east across 4th Street include industrial properties and a Goodwill recycling center.

Surrounding land use includes industrial / manufacturing facilities north of 26th Avenue and a large multi-family multi-building apartment complex south of 27th area. Adjacent properties to the east and west include a mix of commercial (contractor yards, warehouses, manufacturing) with single and multi-family residential properties interspersed among the commercial lots. The area surrounding the property is highly urbanized and predominantly consists of industrial / commercial buildings to the north and residential apartment complexes to the south.

Only one school was identified within 1,000 feet of the Site; AHRC – Astoria Blue Feather – Special Education School located at 27-07 8th Street approximately 750 feet to the southeast. The Hallet Cove Child Development Center was identified within the Astoria Houses complex located south of the Site. There were no nursing homes or hospitals identified within 1,000 feet of the Site.

1.2 Redevelopment Plans

The Requestors intend to redevelop the property with two new multi-family residential buildings (Tower A and Tower B) totaling 99 units. Tower A will be a 7-story building that fronts 4th Street, and Tower B will be a 5-story building that fronts 3rd Street. The project will set aside 30% of the units for affordable housing (no more than 130% AMI).

1.3 Site History

The environmental history of the Site was previously investigated through the review of Federal and State Environmental databases, Environmental Sanborn Fire Insurance maps, NYC Department of Building records and the NYC Department of Finance databases.

According to the review of these sources the Site has been developed since at least 1898 with a residential home located on each lot through at least 1950. The present 1-story building was constructed in 1961 and used for unidentified manufacturing (1961 CO, 1967 Sanborn Map). From 1977 to 2007, the building is labeled with a W which refers in general to warehouse. City Directory Listings include SOS Distributors in 1983 and Andor Medical Systems in 1991. There were no other City Directory Listings for the property. The building has been vacant since at least August 2018. The Requestor purchased the property in January 2019.

1.4 Summary of Previous Investigations

Investigations performed at the Site include the following:

- Phase I Environmental Site Assessment (AES, August, 2018)
- Focused Phase II Subsurface Site Investigation (AES, October, 2018)

1.4.1 August 2018 – Phase I Environmental Site Assessment (AES)

In August 2018, Associated Environmental Services (AES) performed a due diligence Phase I Environmental Site Assessment at the 26-22 4th Street property. AES reported the following Recognized Environmental Conditions (RECs) in connection with the Property:

- The Property was occupied by Andor Medical Systems around 1991 which may have used chemicals related to medical imaging.
- According to NYCDOB, Department of Finance Building Classification for Lot 35 is GARAGE/GAS STATION.
- A data gap exists for the tenants of the Property from 1961 to 1983.
- A 2,000-gallon fuel oil underground storage tank (UST) is present at the Property. According to the records provided, the UST had recently passed a tightness test. However, the UST is

registered as being installed in 1961. Due to the age and known useful life of single wall steel USTs (approximately 30 years) and the fact the top has been excavated, subsurface testing is recommended.

1.4.2 October 2018 – Focused Subsurface Site Investigation (AES)

The subsurface investigation performed by AES was performed as part of a due diligence environmental assessment to further investigate the property and recognized environmental conditions that were identified in the Phase I ESA report. The subsurface investigation included a geophysical survey, the advancement of 9 soil borings, and the collection of 3 groundwater samples.

The results of soil analysis reported elevated levels of volatile and semi-volatile organic compounds (VOCs/SVOCs), pesticides, PCBs and metals. The chlorinated solvents cis-1,2-dichloroethene, (cis-DCE), tetrachloroethene (PCE) and trichloroethene (TCE) were reported above Protection of Groundwater Soil Cleanup Objectives (SCOs) in one or more samples. Multiple SVOCs were reported in 4 of 6 soil samples above Restricted Residential and/or Restricted Commercial SCOs. The metals barium and lead were also reported above Restricted Commercial SCOs. The pesticide 4,4'-DDE, the PCB PCB-1254, and the metal mercury were all reported above Unrestricted Use SCOs.

The chlorinated VOCs, PCE, TCE, and cis-DCE were all reported above Groundwater Quality Standards in all three groundwater samples collected by AES.

Due to the absence of petroleum related VOCs/SVOCs within the soil and groundwater samples collected as part of the subsurface investigation, a significant leak from the 2,000-gallon underground storage tank is unlikely.

2.0 REMEDIAL INVESTIGATION

2.1 Field Investigation

A supplemental subsurface investigation was performed by EBC in accordance with the April 2019 Remedial Investigation Work Plan approved by the NYSDEC. The field work portion of the RI was conducted by EBC from December 10, 2019, through December 30, 2019. The field investigation consisted of environmental sampling, field observations and measurements to determine:

- Local geologic/hydro geological conditions;
- Definition of source areas;
- Potential migration of contaminants from the Site to surrounding areas; and,
- Overall characterization of site-related contamination in all media.

The field effort included the collection and analysis of soil, groundwater and soil vapor samples. Laboratory services for soil, groundwater and soil vapor analysis were provided by Phoenix Environmental Laboratories, Inc. of Manchester, Connecticut (NY Cert No. 11301). Analysis for emerging contaminants (PFAS, 1,4-dioxane) in soil and groundwater samples was provided by Alpha Analytical Laboratories (NY Cert No. 11148) of Westborough, Massachusetts. A sample matrix showing the number, type and analysis of samples collected during the Remedial Investigation is provided as Table 1.

2.2 Deviations from the Remedial Investigation Work Plan

- The sampling locations for SS1, SS2, SS4, and SS7 were moved as needed during the implementation of the Remedial Investigation from the locations proposed within the Remedial Investigation Work Plan. SS1 was moved approximately 15 ft to the southwest because the proposed location was within an active driveway. The location needed to be moved so the driveway could be accessed, and to avoid the soil vapor probe from being damaged by vehicular traffic. SS2 was moved approximately 28ft to the northeast because the proposed location was blocked with parked trucks. EBC moved the SS2 sampling location to a place where it would not be damaged by the trucks. SS4 and SS7 were moved to avoid puddles within the building.
- Monitoring well MW2 was moved to a location the driller felt was level enough to properly install the monitoring well.

2.3 Soil Sampling

A total of 10 soil borings were advanced December 10, 2019, to identify source areas and to obtain general soil quality information present at the Site (Figure 3).

2.3.1 Soil Borings

On December 10, 2019, ten soil borings (19B1 - 19B10) were advanced at the Site. Soil samples were collected continuously in 5-foot intervals to a depth of 10 feet below grade using a track-mounted Geoprobe™ model 6712DT sampling system. The Geoprobe™ uses a direct push

hydraulic percussion system to drive and retrieve core samplers. Soil samples were retrieved using a 1.25-inch diameter, 5-foot long dual tube with disposable acetate liners. Each soil sample recovered from the soil borings was characterized by an experienced geologist and field screened for the presence of VOCs using a PID. The geologist's field observations and PID readings were recorded for each boring in a soil boring log (Appendix A).

In accordance with the RI Work Plan, two samples were retained for laboratory analysis from the 0-2 ft and 8-10 ft interval from each of the ten soil borings. An odor was noted within soil recovered from 5-10 ft below grade within soil boring 19B9. Therefore, a third soil sample was retained from soil boring 19B9 at a depth of 12 ft below grade [19B9(12)].

2.3.2 Soil Sample Analysis

A total of 21 soil samples were retained for laboratory analysis from the 10 soil borings. The soil samples were collected in pre-cleaned, laboratory supplied glassware, stored in a cooler with ice and submitted for analysis to Phoenix Environmental Laboratories, Inc. (Phoenix) and Alpha Analytical Laboratories (Alpha). The soil samples were analyzed for the following: VOCs (EPA Method 8260), SVOCs and 1,4-dioxane (EPA Method 8270), TAL metals (EPA Method 6010), pesticides/PCBs (EPA Method 8081/8082) and PFAS compounds (EPA Method 537).

2.4 Monitoring Well Installation

Six monitoring wells (MW1-MW6) were installed at the Site on December 16, 2019, and December 17, 2019, with a track mounted Geoprobe drilling machine using hollow stem augers to create a 6 inch diameter borehole. Each of the six new monitoring wells was constructed of 2-inch diameter PVC casing and 10 feet of 0.010 inch slotted PVC well screen set 7 to 8 feet below the water table.

A No.00 morie filter-pack sand filled the annulus surrounding the screen within two feet above the top of the screen. A one-foot hydrated bentonite seal was then placed on top of the filter sand and the remainder of the borehole was backfilled to grade. Following installation, each of the wells was surveyed to determine relative casing elevation to the nearest 0.01 ft and horizontal position to the nearest 0.1 ft. Groundwater elevations and generic monitoring well specifications for each well is provided in Table 2. Monitoring well locations are identified in Figure 4. Well completion reports detailing monitoring well construction are provided in Appendix B. A groundwater elevation map is provided as Figure 5.

2.4.1 Groundwater Sampling

A groundwater sample was collected from each of the six monitoring wells on December 17, 2019, for laboratory analysis of VOCs EPA method 8260 SVOCs by EPA method 8270, 1,4-dioxane by EPA Method 8270 SIM, target analyte list (TAL) total metals by EPA method 6010, Pesticides/PCBs by method 8081/8082, and PFAS compounds by EPA method 537. Each of the monitoring wells was sampled using low-flow sampling techniques and were monitored continuously until parameters stabilized. A peristaltic pump was used to develop and purge each well and collect the sample. Samples were collected directly into pre-cleaned laboratory supplied glassware, stored in a cooler with ice and submitted to Phoenix and Alpha. Groundwater sampling

logs are provided in Appendix C.

EBC inadvertently did not include analysis of TAL dissolved metals for the groundwater samples collected on December 7, 2019. Therefore, each of the six monitoring wells was re-sampled on January 28, 2020, for laboratory analysis of TAL dissolved metals by EPA method 6010. The groundwater sample collected from monitoring well MW3 was also re-sampled for laboratory analysis of VOCs EPA method 8260 SVOCs by EPA method 8270, 1,4-dioxane by EPA Method 8270 SIM, target analyte list (TAL) total metals by EPA method 6010, Pesticides/PCBs by method 8081/8082. Each of the monitoring wells was sampled using low-flow sampling techniques and were monitored continuously until parameters stabilized. A peristaltic pump was used to develop and purge each well and collect the sample. Samples were collected directly into pre-cleaned laboratory supplied glassware, stored in a cooler with ice and submitted to Phoenix. Groundwater sampling logs are provided in Appendix C.

2.4.2 Groundwater Sample Analysis

All groundwater samples from the monitoring wells were analyzed for VOCs EPA method 8260 SVOCs by EPA method 8270, 1,4-dioxane by EPA Method 8270 SIM, target analyte list (TAL) total metals and dissolved metals by EPA method 6010, Pesticides/PCBs by method 8081/8082, and PFAS compounds by EPA method 537.

2.5 Soil Vapor Sampling

Eight vapor samples were collected during the RI on December 11, 2019. Six sub-slab soil gas samples were collected from six sub-slab soil gas implants installed within the existing building (Lot 9) and two soil gas implants installed at a depth of approximately 2 feet below grade within the parking area (Lot 35). Soil vapor sampling locations are shown on Figure 4. All soil vapor samples were collected over a 2-hr sampling period. Soil vapor samples were collected in accordance with the procedures as described in the *Guidance for Evaluating Soil Vapor Intrusion in the State of New York (NYSDOH 10/06)*.

2.5.1 Installation of Sub-Slab Soil Vapor Points

The sub-slab and soil vapor implants (SS1 through SS8) were installed on December 11, 2019. The six sub-slab soil gas implants consisted of 1/4" polyethylene tubing inserted 2 inches into a 1/2-inch hole drilled through the concrete slab with a handheld drill. The soil vapor probes consisted of Geoprobe™ Model AT86 series, which are constructed of a 6-inch length of double woven stainless steel wire were installed to a depth of 2 feet below grade. The 1/4" tubing protruding from the concrete/asphalt was then sealed to the surface with hydrated bentonite and a 6"x6" (approximate) plastic sheet.

2.5.2 Surface Seal Test Procedure

In accordance with NYSDOH guidance, a tracer gas (helium) was used as a quality assurance/quality control device to verify the integrity of the sampling point seal prior to collecting the samples. This was accomplished by enriching the air space above the seal with a tracer gas (helium) while continuously monitoring air drawn from the implant with a helium detector (Ionscience Gas Check G).

The tracer gas test procedure was employed at all soil vapor sampling locations. All seals tested tight with no infiltration of helium through the surface.

2.5.3 Soil Vapor Sample Collection

Following verification that the surface seal was tight, one to three volumes (i.e., the volume of the sample probe and tube) were purged with a handheld vacuum pump prior to collecting the samples to ensure samples collected were representative. After purging, a 6-liter summa canister, fitted with a 2-hour flow regulator was attached to the surface tube of each of the sampling points and the valve opened to initiate sampling. Sample identification, date, start time, start vacuum, end time and end vacuum were recorded on tags attached to each canister and on a sample log sheet (Appendix D). When the remaining vacuum in the canisters was between 2- and 5-inches Hg, (after approximately 2 hours of run-time) the valve was closed, and the canisters were detached from the sampling tube. Each of the 6-liter summa canisters were picked up the following day by a Phoenix laboratory courier and delivered to Phoenix for laboratory analysis of VOCs by USEPA Method TO-15.

2.6 Laboratory Analysis

Data tables summarizing the laboratory results are provided in Tables 3 through 14, and copies of the laboratory reports (with chains-of-custody) are included in digital format in Appendix E (Phoenix) and Appendix F (Alpha). Soil sample results for SVOCs, pesticides, PCBs, and metals were compared to Unrestricted Use Soil Cleanup Objectives (SCOs), Restricted Residential SCOs, and Commercial SCOs as promulgated in 6 NYCRR Subpart 375-6. Soil sample results for VOCs were also compared to Protection of Groundwater SCOs. Groundwater results were compared to NYSDEC Division of Water, Technical & Operational Guidance Series 1.1.1, Ambient Water Quality Standards and Guidance Values (AWQS), June 1998. Table 15 contains a list of parameters detected above Track 1 Unrestricted Use SCOs and the range in detections. Table 16 contains a list of parameters detected above Ambient Water Quality Standards and Guidance Values (AWQS) and the range in detections.

Table 7 summarizes the concentrations of 1,4-dioxane and PFAS in soil, and Table 13 summarizes the concentrations of 1,4-dioxane and PFAS in groundwater.

2.6.1 Analytical Results – Soil Samples

A total of 21 soil samples were collected from 10 soil borings for laboratory analysis of VOCs (EPA Method 8260), SVOCs and 1,4-dioxane (EPA Method 8270), TAL metals, pesticides/PCBs (EPA Method 8081/8082), and PFAS compounds (EPA Method 537).

Soil sampling results are summarized in 3 through 7. All soil results above Unrestricted Use SCOs are presented in Table 15 and posted on Figure 6. Soil samples collected from the borings had elevated levels of VOCs, SVOCs, metals and pesticides that exceeded Unrestricted Use SCOs and/or Restricted Residential SCOs as follows:

VOCs in Soil Above Unrestricted Use SCOs:

19B3 (0-2') - Tetrachloroethene (5.6 mg/Kg)

19B4 (0-2') - Acetone (0.091 mg/Kg)

19B6 (0-2') - Acetone (0.073 mg/Kg)

19B8 (0-2') - Tetrachloroethene (1.4 mg/Kg)

SVOCs in Soil Above Restricted Residential SCOs:

19B10 (0-2') - Indeno(1,2,3-cd)pyrene (0.56 mg/Kg)

Pesticides in Soil Above Unrestricted Use SCOs:

19B2 (0-2') - 4,4'-DDT (0.0036 mg/Kg)

19B4 (0-2') - 4,4'-DDD (0.0058 mg/Kg)

19B4 (8-10') - 4,4'-DDD (0.0081 mg/Kg)

19B7 (0-2') - 4,4'-DDD (0.017 mg/Kg)

19B7 (0-2') - 4,4'-DDT (0.0064 mg/Kg)

19B8 (0-2') - 4,4'-DDD (0.0065 mg/Kg)

19B8 (0-2') - 4,4'-DDT (0.0059 mg/Kg)

Metals in Soil Above Unrestricted Use SCOs:

19B1 (0-2') - Mercury (0.43 mg/Kg)

19B2 (0-2') - Lead (93 mg/Kg), Mercury (0.24 mg/Kg), Zinc (128 mg/Kg)

19B2 (8-10') - Chromium (40.7 mg/Kg), Mercury (0.24 mg/Kg)

19B3 (0-2') - Barium (370 mg/Kg), Copper (79.1 mg/Kg)

19B4 (0-2') - Lead (169 mg/Kg), Mercury (0.35 mg/Kg), Zinc (175 mg/Kg)

19B5 (0-2') - Lead (77.3 mg/Kg)

19B6 (0-2') - Copper (85 mg/Kg), Lead (343 mg/Kg), Mercury (0.36 mg/Kg), Zinc (284 mg/Kg)

19B7(0-2') - Copper (83.1 mg/Kg), Mercury (0.31 mg/Kg), Zinc (261 mg/Kg)

19B8(0-2') - Arsenic (14.2 mg/Kg), Copper (73.6 mg/Kg), Mercury (0.4 mg/Kg), Zinc (262 mg/Kg)

19B8 (8-10') - Chromium (38.5 mg/Kg), Nickel (31.7 mg/Kg)

19B9 (0-2') - Lead (384 mg/Kg), Zinc (426 mg/Kg)

19B10 (0-2') - Copper (97.5 mg/Kg), Mercury (0.22 mg/Kg), Zinc (555 mg/Kg)

Metals in Soil Above Restricted Residential SCOs:

19B3 (0-2') - Lead (783 mg/Kg), Mercury (0.83 mg/Kg)

19B5 (0-2') - Mercury (2.26 mg/Kg)

19B7 (0-2') - Lead (885 mg/Kg)

19B8 (0-2') - Lead (412 mg/Kg)

19B10 (0-2') - Lead (655 mg/Kg)

Metals in Soil Above Commercial SCOs:

19B6 (8-10') - Barium (407 mg/Kg)

19B10 (0-2') - Barium (401 mg/Kg)

No PCBs s were detected above NYSDEC Unrestricted Use SCOs.

2.6.2 Analytical Results – Groundwater Samples

A total of six groundwater samples were collected from six (6) groundwater monitoring wells for laboratory analysis of VOCs (EPA Method 8260), SVOCs (EPA Method 8270), TAL metals, pesticides/PCBs (EPA Method 8081/8082), PFAS Compounds (EPA Method 537), and 1,4-dioxane (EPA Method 8270).

The results of groundwater samples collected during the RI are summarized in Tables 8 through 13. Several VOCs, pesticides, and metal detections were in excess of the NYSDEC Division of Water, Technical & Operational Guidance Series 1.1.1, Ambient Water Quality Standards and Guidance Values (AWQS), June 1998.

VOCs in Groundwater Above NYSDEC AWQS:

MW1 – Tetrachloroethene (9.9 µg/L)

MW2 – Tetrachloroethene (43 µg/L)

MW3 – Tetrachloroethene (9.1 µg/L)

MW4 – Tetrachloroethene (13 µg/L), cis-1,2-Dichloroethene (9.9 µg/L)

Pesticides in Groundwater Above NYSDEC AWQS:

MW4 – 4,4-DDT (0.26 µg/L)

MW5 – 4,4-DDT (0.28 µg/L)

Dissolved Metals in Groundwater Above NYSDEC AWQS:

MW1 – Manganese (0.447 mg/L), Sodium (179 mg/L)

MW2 – Manganese (0.446 mg/L), Sodium (197 mg/L)

MW3 – Manganese (0.447 mg/L), Sodium (199 mg/L)

MW4 – Manganese (0.455 mg/L), Sodium (188 mg/L)

MW5 – Manganese (0.444 mg/L), Sodium (196 mg/L)

MW6 – Manganese (0.43 mg/L), Sodium (188 mg/L)

Total Metals in Groundwater Above NYSDEC AWQS:

Multiple metals were reported above standards in the unfiltered samples from all of the wells including aluminum, arsenic, barium, cadmium, chromium, copper, iron, lead, magnesium, manganese, nickel, sodium and thallium. As demonstrated by the filtered samples, these detections are a function of suspended solids in the sample and are not representative of metals concentrations dissolved in the groundwater.

Groundwater parameters reported above Groundwater Quality Standards are presented in Table 16 and posted on Figure 7.

2.6.3 Analytical Results – Soil Vapor Samples

To determine the vapor quality in the soil beneath the Site, soil vapor samples were collected from eight locations (SS1 – SS8).

Total BTEX was low in all the vapor samples ranging from 5.6 µg/m³ (SS1) to 18.58 µg/m³ (SS5). Chlorinated VOCs (CVOCs) were reported in all of the soil vapor samples with tetrachloroethene (PCE) reported in all 8 samples, trichloroethene (TCE) reported in 5 of the samples and cis-1,2-dichloroethene (cis-DCE) was reported in 4 of the samples. PCE concentrations ranged from 6.07

$\mu\text{g}/\text{m}^3$ to $1,130 \mu\text{g}/\text{m}^3$. TCE ranged from $9.18 \mu\text{g}/\text{m}^3$ to $57.5 \mu\text{g}/\text{m}^3$. Cis-DCE ranged from $5.67 \mu\text{g}/\text{m}^3$ to $201 \mu\text{g}/\text{m}^3$. Soil vapor results are summarized on Table 14 and posted on Figure 8.

2.6.4 Data Usability Summary Report

Data validation services were provided by Alpha Geoscience of Clifton Park, New York. Alpha Geoscience reported that, the data is acceptable with some minor issues that are identified in the accompanying data validation reviews. Therefore, the data may be used for decision making purposes. In addition, the electronic data deliverables (EDDs) package was submitted and successfully uploaded to the DEC. The Data Usability Summary Reports prepared by Alpha Geoscience and an e-mail verifying submission of the EDDs are provided in Appendix F.

3.0 HYDROGEOLOGIC ASSESSMENT AND PHYSICAL SETTING

3.1 Site Topography

The area topography slopes fairly steeply to the east. Sidewalk elevation on the west side of the property (3rd Street) is approximately 13ft above mean sea level, and the sidewalk elevation on the east side of the property (4th Street) is approximately 20ft above mean sea level.

3.2 Surrounding Land Use

The area surrounding the property is highly urbanized. Properties in the immediate area around the Site are generally industrial/commercial interspersed with residential homes. Large industrial properties are located along the waterfront/26th Avenue, and a large New York City Housing complex is located south of the Site along 27th Avenue. Adjacent land use includes residential homes to the north, 1-story commercial buildings to the south, auto repair shops, a rehabilitation center and commercial building to the east on the opposite side of 4th Street, and residential homes and industrial buildings to the west on the opposite side of 3rd Street.

3.3 Regional Geology / Hydrogeology

Long Island's present configuration is primarily the result of glaciation which occurred during the Pleistocene Era, predominately that of the last ice age, the Wisconsin, which ended about ten thousand years ago. Two advances of the Wisconsin ice sheet during the Upper Pleistocene of the Quaternary Period caused the island to be blanketed with till, ice contact stratified drift, outwash deposits and deposits composed of clay, silt, sand, gravel and boulders. The terminal moraines and the north shore are composed primarily of stratified drift with some till. The area between the moraines and south of them are mostly the outwash deposits. Central and South Long Island are of the glaciofluvial origin. The Pleistocene deposits lie atop the gently dipping Cretaceous rocks.

The bedrock was eroded to a peneplain before the overlying Cretaceous sediments were deposited; its surface shows signs of later erosion by Pleistocene glaciation in the north. Bedrock crops out in northwestern Queens County near the East River and slopes southward at about eighty (80) feet per mile. Consequently, the overlying formations form a southward-dipping wedge that attains a maximum thickness of one-thousand fifty (1,050) feet in the southeast corner of Queens County. The maximum thickness of unconsolidated deposits in Kings County is about eight hundred (800) feet in the southeast area of the County.

Overlying bedrock is the Raritan Formation of Late Cretaceous age, consisting of the Lloyd Sand Member and an upper, unnamed clay member. Overlying the Raritan Formation is the Magothy Formation and Matawan Group, undifferentiated, also of Late Cretaceous age, the Jameco Gravel of Pleistocene age, the Gardiners Clay of Pleistocene age, upper Pleistocene deposits of Wisconsin age, and a generally thin soil mantle of Holocene age. Holocene beach deposits make up most of the Rockaway Peninsula and Coney Island in the south, and Holocene salt-marsh deposits underlie and fringe the south-shore bay areas. Artificial filling has been done in low and swampy shoreline areas. Because Holocene deposits occur in relatively small areas of Kings and Queens and are not significant water bearers, they are not included in the geologic descriptions that follow. The four

distinct formations on Long Island: The Upper Glacial, the Jameco, the Magothy and the Lloyd aquifers. They all occur in the unconsolidated materials overlying the bedrock.

3.4 Site Geology / Hydrogeology

Subsurface soil at the Site consists of historic fill material from 0 to 4 ft below the existing building slab and parking area and up to depths as great as 10 ft (Lot 9 and Lot 35) followed by native fine to medium sand. Groundwater occurs beneath the Site at a depth of 4.5 to 6.14 feet below grade under water table conditions (Table 2). Based upon on-site measurements, groundwater flow is to the north (Figure 5). However, the groundwater flow direction would be expected to be influenced by building foundations and subsurface utility lines.

4.0 NATURE AND EXTENT OF CONTAMINATION

4.1 Identification of Source Areas

Chlorinated VOCs

The CVOC PCE was detected above Unrestricted Use and Protection of Groundwater SCOs within numerous shallow soil samples collected from the intervals 0-2ft and 2-4ft below the existing building slab (Lot 9), and 0-2ft and 2-4ft below the asphalt parking lot (Lot 35).

The CVOC TCE was detected above Unrestricted Use SCOs and Protection of Groundwater SCOs within one 2-4ft soil sample in the approximate center of the existing building (Lot 9).

Fill Material

Historic fill material has been identified across the Site to depths of 0 to 4 ft below the existing building slab and parking area and up to depths as great as 10 ft (Lot 9 and Lot 35). Depending on location, the historic fill material contains SVOCs, pesticides/PCBs, and/or metals above Unrestricted Use SCOs, Restricted Residential SCOs, and/or Restricted Commercial SCOs.

4.2 Groundwater Impacts

PCE was detected within the groundwater samples collected in the central area of the building, the northeast corner of the building, and in the parking lot. Concentrations were low ($<10 \mu\text{g/L}$) in all samples with the exception of the MW2 groundwater sample ($43 \mu\text{g/L}$) located in the south – central area of the parking lot near the property line. The chlorinated VOC cis-1,2-dichloroethene was detected in the GW-2 groundwater sample ($15 \mu\text{g/L}$) collected by Associated in September 2018, and the MW4 groundwater sample ($9.9 \mu\text{g/L}$) collected by EBC in December 2019. The concentration of VOCs detected within groundwater sample MW3 in December 2019 were similar to the VOC concentrations detected within the MW3 groundwater sample collected in January 2020.

The pesticide 4,4'-DDT was detected in the parts per trillion range in two of the samples and is likely related to suspended solids in the sample. Two dissolved metals were detected in all of the wells. Manganese and sodium were detected above NYSDEC Ambient Water Quality Standards (AWQS) in all six wells and are attributable to residual salt water intrusion. Low levels of PFAS compounds were detected in groundwater throughout the Site. Total PFAS detections ranged from 34 ng/L to 185 ng/L .

4.3 Soil-Vapor Impacts

Petroleum-related VOCs were generally low in the soil gas samples and were consistent with typical background levels. Chlorinated VOCs in soil vapor included PCE (ranged from $6.07 \mu\text{g/m}^3$ to $1,130 \mu\text{g/m}^3$), TCE (ranged from $9.18 \mu\text{g/m}^3$ to $57.5 \mu\text{g/m}^3$), and cis-DCE (ranged from $5.67 \mu\text{g/m}^3$ to $201 \mu\text{g/m}^3$). PCE was reported in all eight soil gas samples, and TCE and cis-DCE were detected within 5 and 4 of the eight soil gas samples respectively. The highest CVOC concentrations were in the northeast corner of the building and did not correlate with the highest concentrations in soil or in groundwater.

4.4 Site Conceptual Model

There is very little detail about what type of manufacturing took place at the Site historically and if those activities involved the use of chlorinated VOCs. However, elevated levels of CVOCs were reported in shallow soil and also in shallow groundwater. The wide distribution across the site and the uniformity in concentration in both soil and groundwater suggest a surface release at multiple locations across the site. However it is also possible that the release occurred in one location of the site and was then spread around during a flooding condition (storm surge, hurricane Sandy, etc.). According to NYC open data resources, the western half of the site was within the hurricane Sandy inundation zone. It is likely that the latter scenario is the case as the highest concentrations in soil did not correlate with that in groundwater.

Elevated levels of CVOCs are present in soil vapor indicating that CVOCs in shallow soil are transferring to the vapor phase. However, the highest concentrations reported in soil vapor did not correlate with the highest concentrations in either soil or groundwater.

5.0 QUALITATIVE EXPOSURE ASSESSMENT

The objective of the qualitative exposure assessment under the Brownfields Cleanup Program (BCP) is to identify potential receptors to the contaminants of concern (COC) that are present at, or migrating from, the Site. The identification of exposure pathways describes the route that the COC takes to travel from the source to the receptor. An identified pathway indicates that the potential for exposure exists; it does not imply that exposures actually occur. An exposure pathway has five elements; a contaminant source, release and transport mechanisms, point of exposure, route of exposure and a receptor population.

The potential exposure pathways identified below, represent both current and future exposure scenarios.

5.1 Contaminant Source

CVOC Source

The CVOC PCE was detected above Unrestricted Use and Protection of Groundwater SCOs within numerous shallow soil samples collected from the intervals 0-2ft and 2-4ft below the existing building slab (Lot 9), and 0-2ft and 2-4ft below the asphalt parking lot (Lot 35).

The CVOC TCE was detected above Unrestricted Use SCOs and Protection of Groundwater SCOs within one 2-4ft soil sample in the approximate center of the existing building (Lot 9).

No other sources were identified during this RI.

Fill Material

Historic fill material has been identified across the Site to depths of 0 to 4 ft below the existing building slab and parking area and up to depths as great as 10 ft (Lot 9 and Lot 35). Depending on location, the historic fill material contains SVOCs, pesticides/PCBs, and/or metals above Unrestricted Use SCOs, Restricted Residential SCOs, and/or Restricted Commercial SCOs.

5.2 Contaminant Release and Transport Mechanism

PCE present in shallow soil has likely come in contact with the shallow groundwater through seasonal or episodic (storm event, flooding) rise in water levels. Some of the PCE dissolved into the water upon contact and was spread to different areas of the Site.

At least some of the CVOCs in shallow soil are off-gassing though there is no apparent correlation with impacted soil or groundwater.

5.3 Point of Exposure, Route of Exposure and Potentially Exposed Populations

Potential On-Site Exposures: Remediation workers and construction workers engaged in the excavation of impacted and non-impacted soil at the Site may be exposed to chlorinated VOCs, pesticides, PCBs, and heavy metals through several routes. Workers removing the AST may be exposed to fuel oil, VOCs, SVOCs and metals through inhalation, ingestion and dermal contact. A

site-specific Health and Safety Plan has been developed to identify and minimize the potential hazards to on-site workers. Site trespassers could also be exposed to impacted soil during tank removal and excavation, however, security measures including an 8 ft high construction fence and 24 hr security will minimize potential exposure through this route. There is a potential for soil vapor intrusion related to CVOCs to impact indoor air quality in the new building if source removal is not performed.

Following construction of the new building, a soil vapor intrusion study should be performed to determine if further monitoring or mitigation is needed.

Potential Off-Site Exposures: Off-Site residents could be exposed to dust or vapors during the excavation of impacted soil. A site-specific Community Air Monitoring Plan has been developed to identify and minimize the potential for off-site exposure to residents through continuous air monitoring during excavation activity.

The entire area is serviced by the New York City Water System which distributes water from the Croton Reservoir system. Since there are no public or private potable supply wells in the area, exposure from contact with tap water is not a concern. Off-site exposure is therefore limited to vapor intrusion from CVOCs. There appears to be a potential inhalation exposure to site contaminants via the soil vapor intrusion (SVI) pathway in both on and off-site structures.

Potential Off-Site Environmental Impacts: As previously discussed, there are no public or private potable supply wells in the area, and therefore no potential impacts to groundwater supplies. Based on the concentrations of dissolved CVOCs, there are no significant potential surface water impacts.

6.0 CONCLUSIONS AND RECOMENDATIONS

Subsurface soils at the Site consist of historic fill material from 0 to 4 ft below the existing building slab and parking area and up to depths as great as 10 ft (Lot 9 and Lot 35) followed by native fine to medium sand. The depth to groundwater beneath the Site is approximately 4.5 to 6.14 feet below the building slab which meets 3rd Street. Based upon on-site measurements, groundwater flow is to the north. However, the groundwater flow direction would be expected to be influenced by building foundations and subsurface utility lines.

PCE was detected within the groundwater samples collected in the central area of the building, the northeast corner of the building, and in the parking lot. Concentrations were low ($<10\text{ }\mu\text{g/L}$) in all samples with the exception of the MW2 groundwater sample ($43\text{ }\mu\text{g/L}$) located in the south – central area of the parking lot near the property line, and MW4 ($13\text{ }\mu\text{g/L}$). The chlorinated VOC cis-1,2-dichloroethene was detected in the GW-2 groundwater sample ($15\text{ }\mu\text{g/L}$) collected by Associated in September 2018, and the MW4 groundwater sample ($9.9\text{ }\mu\text{g/L}$) collected by EBC in December 2019.

Elevated levels of CVOCs are present in soil vapor indicating that CVOCs in shallow soil are transferring to the vapor phase. However, the highest concentrations reported in soil vapor did not correlate with the highest concentrations in either soil or groundwater.

The qualitative exposure assessment identified potential completed routes of exposure to construction workers and remediation workers through inhalation, ingestion and dermal contact of CVOCs, pesticides, PCBs, and heavy metals during excavation activities. The Health and Safety Plan prepared for the site identifies such exposures and provides instructions for on-site workers to minimize potential exposure. Occupants in the proposed on-Site building may be exposed to CVOCs through the vapor intrusion pathway if the identified source areas are not removed or otherwise remediated.

Potential environmental impacts through the groundwater to surface water discharge were considered unlikely based on the concentrations of VOCs.

Recommendations include the excavation and disposal of CVOC soil and design elements to address the elevated CVOCs detected in on-Site soil vapor. This work would be performed under an approved Remedial Action Work Plan which includes a Soil Management Plan, a Construction Health and Safety Plan, and a Community Air Monitoring Plan.

7.0 REFERENCES

6 NYCRR Part 375 Environmental Remediation Programs Subparts 375-1, 375-3 and 375-6.

Environmental Business Consultants, *Remedial Investigation Work Plan* – May 2019.

NYSDEC, Division of Environmental Remediation, May 2004, *Draft Brownfield Program Cleanup Guide*.

NYSDEC, Division of Environmental Remediation, December 2002, *DER-10, Technical Guidance for Site Investigation and Remediation*.

NYSDEC, Division of Environmental Remediation, December 14, 2006, 6 NYCRR Part 375, *Environmental Remediation Programs, subparts 375-1 to 375-4 & 375-6*.

NYSDEC, Division of Water, June 1998, Addendum April 2000, *Technical and Administrative Guidance Series 1:1:1, Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations*.

NYSDOH, Center for Environmental Health, October 2006, *Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York*.

TABLES

**TABLE 1
SUMMARY OF
SAMPLING PROGRAM RATIONALE AND ANALYSIS**

Matrix	Location	Number of Samples	Rationale for Sampling	Laboratory Analysis
Subsurface soil (0 to 2 feet bgs)	From soil borings SB1 through SB10 performed across the Site.	10	To evaluate historic fill material with respect to SCOs	VOCs EPA Method 8260B, PFAS Compounds EPA Method 537, SVOCs EPA Method 8270 plus 1,4-dioxane, pesticide / PCBs EPA Method 8081/8082, TAL metals EPA 6010.
Subsurface soil (8 to 10 feet bgs)	From soil borings SB1 through SB10 performed across the Site.	10	To evaluate native soil with respect to SCOs	VOCs EPA Method 8260B, PFAS Compounds EPA Method 537, SVOCs EPA Method 8270 plus 1,4-dioxane, pesticide / PCBs EPA Method 8081/8082, TAL metals EPA 6010.
Subsurface soil (12 feet bgs)	From soil borings SB9.	1	To evaluate native soil with respect to SCOs	VOCs EPA Method 8260B, PFAS Compounds EPA Method 537, SVOCs EPA Method 8270 plus 1,4-dioxane, pesticide / PCBs EPA Method 8081/8082, TAL metals EPA 6010.
Total (Soils)		21		
Groundwater (water table)	From 6 monitoring well installed across the Site.	7	To assess groundwater quality at the Site.	VOCs EPA Method 8260B, PFAS Compounds EPA Method 537, SVOCs EPA Method 8270 plus 1,4-dioxane, pesticide / PCBs EPA Method 8081/8082, TAL (total and dissolved) metals EPA 6010.
Total (Groundwater)		7		
Soil Vapor (Sub-Slab)	8 subslab sampling points installed below the existing building's slab and within the parking area.	8	Evaluate soil gas across the Site.	VOCs EPA Method TO15
Total (Soil Gas)		8		
MS/MSD	Matrix spike and Matrix spike duplicates at the rate 5%	2	To meet requirements of QA / QC program	1 soil and 1 groundwater MS/MSD for VOCs EPA Method 8260B, PFAS Compounds EPA Method 537, SVOCs EPA Method 8270 plus 1,4-dioxane, pesticide / PCBs EPA Method 8081/8082, TAL (total and dissolved) metals EPA 6010.
Field Equipment Blanks	Groundwater pump rinsate samples at a rate of 1 per eight samples.	1	To meet requirements of QA / QC program	VOCs EPA Method 8260B, PFAS Compounds EPA Method 537
Trip Blanks	One laboratory prepared trip blank to accompany samples each time they are delivered to the laboratory.	4	To meet requirements of QA / QC program	VOCs EPA Method 8260B, PFAS Compounds EPA Method 537
Total (QA / QC Samples)		7		

Table 2
26-22 4th Street
Queens, New York
Generic Soil Boring / Well Information

SAMPLE ID	Date	Total Depth (ft)	Diameter (in)	Construction Materials
19B1	12/10/2019	10	2	Geoprobe
19B2	12/10/2019	10	2	Geoprobe
19B3	12/10/2019	15	2	Geoprobe
19B4	12/10/2019	10	2	Geoprobe
19B5	12/10/2019	10	2	Geoprobe
19B6	12/10/2019	10	2	Geoprobe
19B7	12/10/2019	10	2	Geoprobe
19B8	12/10/2019	10	2	Geoprobe
19B9	12/10/2019	15	2	Geoprobe
19B10	12/10/2019	10	2	Geoprobe

Well ID	Installation Date	Total Well Depth (ft)	Well Diameter (in)	Construction Materials	Screen Length (ft)	DTW Reading (ft)	DTP	Relative Survey Reading	Casing Elevation	GW ELV
MW1	12/17/2019	15	2	2" PVC	10.00	5.67	-	-	3.73	90.60
MW2	12/17/2019	15	2	2" PVC	10.00	5.37	-	-	3.26	91.37
MW3	12/16/2019	12.5	2	2" PVC	10.00	5.23	-	-	3.59	91.18
MW4	12/16/2019	15	2	2" PVC	10.00	4.50	-	-	4.45	91.05
MW5	12/16/2019	15	2	2" PVC	10.00	6.14		-	3.21	90.65
MW6	12/16/2019	15	2	2" PVC	10.00	5.95	-	-	3.83	90.22

Table 3
26-22 4th Street
Queens, New York
2018 Phase II and 2019/2020 Remedial Investigation
Soil Analytical Results
Volatile Organic Compounds

COMPOUND	NYSDEC Part 375.6 Groundwater Protection Soil Cleanup Objectives*	NYSDEC Part 375.6 Unrestricted Use Soil Cleanup Objectives	NYSDEC Part 375.6 Restricted Residential Soil Cleanup Objectives*	NYSDEC Part 375.6 Restricted Commercial Soil Cleanup Objectives	B-1		B-3		B-4		B-6		B-7		B-9	
					(6-5)		(2-4)		(2-4)		(2-4)		(2-4)		(2-4)	
					9/20/2018		9/20/2018		9/20/2018		9/20/2018		9/20/2018		9/20/2018	
					mg/Kg	RL	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL
1,1,1,2-tetrachloroethane					<0.0047	0.0047	<0.0044	0.0044	<0.0074	0.0074	<0.0052	0.0052	<0.0059	0.0059	<0.0057	0.0057
1,1,1-Trichloroethane	0.68	0.68	0.1	0.5	<0.0047	0.0047	<0.0044	0.0044	<0.0074	0.0074	<0.0052	0.0052	<0.0059	0.0059	<0.0057	0.0057
1,1,2,2-Tetrachloroethane					<0.0047	0.0047	<0.0044	0.0044	<0.0074	0.0074	<0.0052	0.0052	<0.0059	0.0059	<0.0057	0.0057
1,1,2-Trichloroethane					<0.0047	0.0047	<0.0044	0.0044	<0.0074	0.0074	<0.0052	0.0052	<0.0059	0.0059	<0.0057	0.0057
1,1-Dichloroethane	0.27	0.27	26	240	<0.0047	0.0047	<0.0044	0.0044	<0.0074	0.0074	<0.0052	0.0052	<0.0059	0.0059	<0.0057	0.0057
1,2-Dichloroethane	0.33	0.33	100	500	<0.0047	0.0047	<0.0044	0.0044	<0.0074	0.0074	<0.0052	0.0052	<0.0059	0.0059	<0.0057	0.0057
1,1-Dichloropropene					<0.0047	0.0047	<0.0044	0.0044	<0.0074	0.0074	<0.0052	0.0052	<0.0059	0.0059	<0.0057	0.0057
1,2,3-Trichlorobenzene					<0.0047	0.0047	<0.0044	0.0044	<0.0074	0.0074	<0.0052	0.0052	<0.0059	0.0059	<0.0057	0.0057
1,2,3-Trichloropropane					<0.0047	0.0047	<0.0044	0.0044	<0.0074	0.0074	<0.0052	0.0052	<0.0059	0.0059	<0.0057	0.0057
1,2,4-Trichlorobenzene					<0.0047	0.0047	<0.0044	0.0044	<0.0074	0.0074	<0.0052	0.0052	<0.0059	0.0059	<0.0057	0.0057
1,2,4-Trimethylbenzene	3.6	3.6	52	190	<0.0047	0.0047	<0.0044	0.0044	<0.0074	0.0074	<0.0052	0.0052	<0.0059	0.0059	<0.0057	0.0057
1,2-Dibromo-3-chloropropane					<0.0047	0.0047	<0.0044	0.0044	<0.0074	0.0074	<0.0052	0.0052	<0.0059	0.0059	<0.0057	0.0057
1,2-Dibromoethane					<0.0047	0.0047	<0.0044	0.0044	<0.0074	0.0074	<0.0052	0.0052	<0.0059	0.0059	<0.0057	0.0057
1,2-Dichlorobenzene	1.1	1.1	100	500	<0.0047	0.0047	<0.0044	0.0044	<0.0074	0.0074	<0.0052	0.0052	<0.0059	0.0059	<0.0057	0.0057
1,2-Dichloroethane	0.2	0.2	3.1	30	<0.0047	0.0047	<0.0044	0.0044	<0.0074	0.0074	<0.0052	0.0052	<0.0059	0.0059	<0.0057	0.0057
1,2-Dichloropropane					<0.0047	0.0047	<0.0044	0.0044	<0.0074	0.0074	<0.0052	0.0052	<0.0059	0.0059	<0.0057	0.0057
1,3,5-Trimethylbenzene	8.4	8.4	52	190	<0.0047	0.0047	<0.0044	0.0044	<0.0074	0.0074	<0.0052	0.0052	<0.0059	0.0059	<0.0057	0.0057
1,3-Dichlorobenzene	2.4	2.4	4.9	280	<0.0047	0.0047	<0.0044	0.0044	<0.0074	0.0074	<0.0052	0.0052	<0.0059	0.0059	<0.0057	0.0057
1,3-Dichloropropane					<0.0047	0.0047	<0.0044	0.0044	<0.0074	0.0074	<0.0052	0.0052	<0.0059	0.0059	<0.0057	0.0057
1,4-Dichlorobenzene	1.8	1.8	13	130	<0.0047	0.0047	<0.0044	0.0044	<0.0074	0.0074	<0.0052	0.0052	<0.0059	0.0059	<0.0057	0.0057
1,4-Dioxane		0.1	13	130	<0.0047	0.0047	<0.0044	0.0044	<0.0074	0.0074	<0.0052	0.0052	<0.0059	0.0059	<0.0057	0.0057
2,2-Dichloropropane					<0.0047	0.0047	<0.0044	0.0044	<0.0074	0.0074	<0.0052	0.0052	<0.0059	0.0059	<0.0057	0.0057
2-Chlorotoluene					<0.0047	0.0047	<0.0044	0.0044	<0.0074	0.0074	<0.0052	0.0052	<0.0059	0.0059	<0.0057	0.0057
2-Hexanone (Methyl Butyl Ketone)					<0.023	0.023	<0.022	0.022	<0.037	0.037	<0.026	0.026	<0.043	0.043	<0.029	0.029
2-Isopropyltoluene					<0.0047	0.0047	<0.0044	0.0044	<0.0074	0.0074	<0.0052	0.0052	<0.0059	0.0059	<0.0057	0.0057
4-Chlorotoluene					<0.0047	0.0047	<0.0044	0.0044	<0.0074	0.0074	<0.0052	0.0052	<0.0059	0.0059	<0.0057	0.0057
4-Methyl-2-Pentanone					<0.023	0.023	<0.022	0.022	<0.037	0.037	<0.026	0.026	<0.043	0.043	<0.029	0.029
Acetone	0.05	0.05	100	500	<0.023	0.023	0.79	0.53	<0.037	0.037	<0.026	0.026	<0.043	0.043	<0.029	0.029
Acrolein					<0.0093	0.0093	<0.0089	0.0089	<0.019	0.019	<0.010	0.010	<0.020	0.020	<0.011	0.011
Acrylonitrile					<0.0047	0.0047	<0.0044	0.0044	<0.0074	0.0074	<0.0052	0.0052	<0.0059	0.0059	<0.0057	0.0057
Benzene	0.06	0.06	4.8	44	<0.0047	0.0047	<0.0044	0.0044	<0.0074	0.0074	<0.0052	0.0052	<0.0059	0.0059	<0.0057	0.0057
Bromobenzene					<0.0047	0.0047	<0.0044	0.0044	<0.0074	0.0074	<0.0052	0.0052	<0.0059	0.0059	<0.0057	0.0057
Bromochloromethane					<0.0047	0.0047	<0.0044	0.0044	<0.0074	0.0074	<0.0052	0.0052	<0.0059	0.0059	<0.0057	0.0057
Bromodichloromethane					<0.0047	0.0047	<0.0044	0.0044	<0.0074	0.0074	<0.0052	0.0052	<0.0059	0.0059	<0.0057	0.0057
Bromofluoromethane					<0.0047	0.0047	<0.0044	0.0044	<0.0074	0.0074	<0.0052	0.0052	<0.0059	0.0059	<0.0057	0.0057
Bromomethane					<0.0047	0.0047	<0.0044	0.0044	<0.0074	0.0074	<0.0052	0.0052	<0.0059	0.0059	<0.0057	0.0057
Carbon Disulfide					<0.0047	0.0047	<0.0044	0.0044	<0.0074	0.0074	<0.0052	0.0052	<0.0059	0.0059	<0.0057	0.0057
Carbon tetrachloride	0.76	0.76	2.4	22	<0.0047	0.0047	<0.0044	0.0044	<0.0074	0.0074	<0.0052	0.0052	<0.0059	0.0059	<0.0057	0.0057
Chlorobenzene	1.1	1.10	100	500	<0.0047	0.0047	<0.0044	0.0044	<0.0074	0.0074	<0.0052	0.0052	<0.0059	0.0059	<0.0057	0.0057
Chloroethane					<0.0047	0.0047	<0.0044	0.0044	<0.0074	0.0074	<0.0052	0.0052	<0.0059	0.0059	<0.0057	0.0057
Chloroform	0.37	0.37	49	350	<0.0047	0.0047	<0.0044	0.0044	<0.0074	0.0074	<0.0052	0.0052	<0.0059	0.0059	<0.0057	0.0057
Chloromethane					<0.0047	0.0047	<0.0044	0.0044	<0.0074	0.0074	<0.0052	0.0052	<0.0059	0.0059	<0.0057	0.0057
cis-1,2-Dichloroethene	0.25	0.25	100	500	<0.0047	0.0047	<0.0044	0.0044	0.018	0.0074	<0.0052	0.0052	0.32	0.25	<0.0057	0.0057
cis-1,3-Dichloropropene					<0.0047	0.0047	<0.0044	0.0044	<0.0074	0.0074	<0.0052	0.0052	<0.0059	0.0059	<0.0057	0.0057
Dibromochloromethane					<0.0047	0.0047	<0.0044	0.0044	<0.0074	0.0074	<0.0052	0.0052	<0.0059	0.0059	<0.0057	0.0057
Dibromomethane					<0.0047	0.0047	<0.0044	0.0044	<0.0074	0.0074	<0.0052	0.0052	<0.0059	0.0059	<0.0057	0.0057
Dichlorodifluoromethane					<0.0047	0.0047	<0.0044	0.0044	<0.0074	0.0074	<0.0052	0.0052	<0.0059	0.0059	<0.0057	0.0057
Ethylbenzene	1	1	41	390	<0.0047	0.0047	<0.0044	0.0044	<0.0074	0.0074	<0.0052	0.0052	<0.0059	0.0059	<0.0057	0.0057
Hexachlorobutadiene					<0.0047	0.0047	<0.0044	0.0044	<0.0074	0.0074	<0.0052	0.0052	<0.0059	0.0059	<0.0057	0.0057
Isopropylbenzene					<0.0047	0.0047	<0.0044	0.0044	<0.0074	0.0074	<0.0052	0.0052	<0.0059	0.0059	<0.0057	0.0057
m,p-Xylenes	1.6	0.26	100	500	<0.0047	0.0047	<0.0044	0.0044	<0.0074	0.0074	<0.0052	0.0052	<0.0059	0.0059	<0.0057	0.0057
Methyl Ethyl Ketone (2-Butanone)	0.12	0.12	100	500	<0.023	0.023	<0.022	0.022	<0.037	0.037	<0.026	0.026	<0.043	0.043	<0.029	0.029
Methyl t-butyl ether (MTBE)	0.93	0.93	100	500	<0.0203	0.0203	<0.0089	0.0089	<0.019	0.019	<0.010	0.010	<0.020	0.020	<0.011	0.011
Methylene chloride	0.05	0.05	100	500	<0.0203	0.0203	<0.0089	0.0089	<0.019	0.019	<0.010	0.010	<0.020	0.020	<0.011	0.011
Naphthalene	12	12	100	500	<0.0047	0.0047	<0.0044	0.0044	<0.0074	0.0074	<0.0052	0.0052	<0.0059	0.0059	<0.0057	0.0057
n-Butylbenzene	12	12	100	500	<0.0047	0.0047	<0.0044	0.0044	<0.0074	0.0074	<0.0052	0.0052	<0.0059	0.0059	<0.0057	0.0057
n-Propylbenzene	3.9	3.9	100	500	<0.0047	0.0047	<0.0044	0.0044	<0.0074	0.0074	<0.0052	0.0052	<0.0059	0.0059	<0.0057	0.0057
o-Xylene	0.16	0.26	100	500	<0.0047	0.0047	<0.0044	0.0044	<0.0074	0.0074	<0.0052	0.0052	<0.0059	0.0059	<0.0057	0.0057
p-Isopropyltoluene	11	11	100	500	<0.0047	0.0047	<0.0044	0.0044	<0.0074	0.0074	<0.0052	0.0052	<0.0059	0.0059	<0.0057	0.0057
sec-Butylbenzene	11	11	100	500	<											

Table 3
26-22 4th Street
Queens, New York
2018 Phase II and 2019/2020 Remedial Investigation
Soil Analytical Results
Volatile Organic Compounds

COMPOUND	NYSDEC Part 375.6 Groundwater Protection Soil Cleanup Objectives*	NYSDEC Part 375.6 Unrestricted Use Soil Cleanup Objectives	NYDEC Part 375.6 Restricted Residential Soil Cleanup Objectives*	NYDEC Part 375.6 Restricted Commercial Soil Cleanup Objectives	19B1				19B2				19B3				19B4			
					(0-2')		(6-10')		(0-2')		(6-10')		(0-2')		(6-10')		(0-2')		(6-10')	
					12/10/2019		12/10/2019		12/10/2019		12/10/2019		12/10/2019		12/10/2019		12/10/2019		12/10/2019	
					mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
			mg/Kg	mg/Kg	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
1,1,1,2-Tetrachloroethane					< 0.0035	0.0035	< 0.0067	0.0067	< 0.0064	0.0064	< 0.012	0.012	< 0.0034	0.0034	< 0.0067	0.0067	< 0.0052	0.0052	< 0.0056	0.0056
1,1,1-Trichloroethane	0.68	0.68	0.1	0.5	< 0.014	0.014	< 0.027	0.027	< 0.0064	0.0064	< 0.048	0.048	< 0.014	0.0140	< 0.032	0.032	< 0.021	0.021	< 0.022	0.022
1,1,2,2-Tetrachloroethane					< 0.0035	0.0035	< 0.0067	0.0067	< 0.0064	0.0064	< 0.012	0.012	< 0.0034	0.0034	< 0.0067	0.0067	< 0.0052	0.0052	< 0.0056	0.0056
1,1,2-Trichloroethane					< 0.0035	0.0035	< 0.0067	0.0067	< 0.0064	0.0064	< 0.012	0.012	< 0.0034	0.0034	< 0.0067	0.0067	< 0.0052	0.0052	< 0.0056	0.0056
1,1-Dichloroethane	0.27	0.27	26	240	< 0.0035	0.0035	< 0.0067	0.0067	< 0.0064	0.0064	< 0.012	0.012	< 0.0034	0.0034	< 0.0067	0.0067	< 0.0052	0.0052	< 0.0056	0.0056
1-Dichloroethane	0.33	0.33	100	500	< 0.0035	0.0035	< 0.0067	0.0067	< 0.0064	0.0064	< 0.012	0.012	< 0.0034	0.0034	< 0.0067	0.0067	< 0.0052	0.0052	< 0.0056	0.0056
1-Dichloropropene					< 0.0035	0.0035	< 0.0067	0.0067	< 0.0064	0.0064	< 0.012	0.012	< 0.0034	0.0034	< 0.0067	0.0067	< 0.0052	0.0052	< 0.0056	0.0056
1,2,3-Trichlorobenzene					< 0.0035	0.0035	< 0.0067	0.0067	< 0.0064	0.0064	< 0.012	0.012	< 0.0034	0.0034	< 0.0067	0.0067	< 0.0052	0.0052	< 0.0056	0.0056
1,2,3-Trichloropropane					< 0.0035	0.0035	< 0.0067	0.0067	< 0.0064	0.0064	< 0.012	0.012	< 0.0034	0.0034	< 0.0067	0.0067	< 0.0052	0.0052	< 0.0056	0.0056
1,2,4-Trichlorobenzene					< 0.0035	0.0035	< 0.0067	0.0067	< 0.0064	0.0064	< 0.012	0.012	< 0.0034	0.0034	< 0.0067	0.0067	< 0.0052	0.0052	< 0.0056	0.0056
1,2,4-Trimethylbenzene	3.6	3.6	52	190	< 0.0035	0.0035	< 0.0067	0.0067	< 0.0064	0.0064	< 0.012	0.012	< 0.0034	0.0034	< 0.0067	0.0067	< 0.0052	0.0052	< 0.0056	0.0056
1,2-Dibromo-3-chloropropane					< 0.0035	0.0035	< 0.0067	0.0067	< 0.0064	0.0064	< 0.012	0.012	< 0.0034	0.0034	< 0.0067	0.0067	< 0.0052	0.0052	< 0.0056	0.0056
1,2-Dibromomethane					< 0.0035	0.0035	< 0.0067	0.0067	< 0.0064	0.0064	< 0.012	0.012	< 0.0034	0.0034	< 0.0067	0.0067	< 0.0052	0.0052	< 0.0056	0.0056
1,2-Dichlorobenzene	1.1	1.1	100	500	< 0.0035	0.0035	< 0.0067	0.0067	< 0.0064	0.0064	< 0.012	0.012	< 0.0034	0.0034	< 0.0067	0.0067	< 0.0052	0.0052	< 0.0056	0.0056
1,2-Dichloroethane	0.2	0.2	3.1	30	< 0.0035	0.0035	< 0.0067	0.0067	< 0.0064	0.0064	< 0.012	0.012	< 0.0034	0.0034	< 0.0067	0.0067	< 0.0052	0.0052	< 0.0056	0.0056
1,2-Dichloropropane					< 0.0035	0.0035	< 0.0067	0.0067	< 0.0064	0.0064	< 0.012	0.012	< 0.0034	0.0034	< 0.0067	0.0067	< 0.0052	0.0052	< 0.0056	0.0056
1,3,5-Trimethylbenzene	8.4	8.4	52	190	< 0.0035	0.0035	< 0.0067	0.0067	< 0.0064	0.0064	< 0.012	0.012	< 0.0034	0.0034	< 0.0067	0.0067	< 0.0052	0.0052	< 0.0056	0.0056
1,3-Dichlorobenzene	2.4	2.4	4.9	280	< 0.0035	0.0035	< 0.0067	0.0067	< 0.0064	0.0064	< 0.012	0.012	< 0.0034	0.0034	< 0.0067	0.0067	< 0.0052	0.0052	< 0.0056	0.0056
1,3-Dichloropropane					< 0.0035	0.0035	< 0.0067	0.0067	< 0.0064	0.0064	< 0.012	0.012	< 0.0034	0.0034	< 0.0067	0.0067	< 0.0052	0.0052	< 0.0056	0.0056
1,4-Dichlorobenzene	1.8	1.8	13	130	< 0.0035	0.0035	< 0.0067	0.0067	< 0.0064	0.0064	< 0.012	0.012	< 0.0034	0.0034	< 0.0067	0.0067	< 0.0052	0.0052	< 0.0056	0.0056
1,4-Dioxane		0.1	13	130	< 0.071	0.071	< 0.091	0.091	< 0.073	0.073	< 0.075	0.075	< 0.075	0.075	< 0.075	0.075	< 0.075	0.075	< 0.095	0.095
2,2-Dichloropropane					< 0.0035	0.0035	< 0.0067	0.0067	< 0.0064	0.0064	< 0.012	0.012	< 0.0034	0.0034	< 0.0067	0.0067	< 0.0052	0.0052	< 0.0056	0.0056
2-Chloroluene					< 0.0035	0.0035	< 0.0067	0.0067	< 0.0064	0.0064	< 0.012	0.012	< 0.0034	0.0034	< 0.0067	0.0067	< 0.0052	0.0052	< 0.0056	0.0056
2-Hexanone (Methyl Butyl Ketone)					< 0.018	0.018	< 0.034	0.034	< 0.032	0.032	< 0.061	0.061	< 0.017	0.017	< 0.040	0.040	< 0.026	0.026	< 0.028	0.028
2-Isopropyltoluene					< 0.0035	0.0035	< 0.0067	0.0067	< 0.0064	0.0064	< 0.012	0.012	< 0.0034	0.0034	< 0.0067	0.0067	< 0.0052	0.0052	< 0.0056	0.0056
4-Chloroluene					< 0.0035	0.0035	< 0.0067	0.0067	< 0.0064	0.0064	< 0.012	0.012	< 0.0034	0.0034	< 0.0067	0.0067	< 0.0052	0.0052	< 0.0056	0.0056
4-Methyl-2-Pentanone					< 0.018	0.018	< 0.034	0.034	< 0.032	0.032	< 0.061	0.061	< 0.017	0.017	< 0.040	0.040	< 0.026	0.026	< 0.028	0.028
Acetone	0.05	0.05	100	500	0.0037	0.018	0.0091	0.034	0.0066	0.032	< 0.050	0.050	0.0052	0.017	0.043	0.040	0.0091	0.026	< 0.026	0.026
Acrolein					< 0.0035	0.0035	< 0.0067	0.0067	< 0.0064	0.0064	< 0.012	0.012	< 0.0034	0.0034	< 0.0067	0.0067	< 0.0052	0.0052	< 0.0056	0.0056
Acrylonitrile					< 0.014	0.014	< 0.027	0.027	< 0.013	0.013	< 0.048	0.048	< 0.014	0.0140	< 0.032	0.032	< 0.021	0.021	< 0.022	0.022
Benzene	0.06	0.06	4.8	44	< 0.0035	0.0035	< 0.0067	0.0067	< 0.0064	0.0064	< 0.012	0.012	< 0.0034	0.0034	< 0.0067	0.0067	< 0.0052	0.0052	< 0.0056	0.0056
Bromobenzene					< 0.0035	0.0035	< 0.0067	0.0067	< 0.0064	0.0064	< 0.012	0.012	< 0.0034	0.0034	< 0.0067	0.0067	< 0.0052	0.0052	< 0.0056	0.0056
Bromochloromethane					< 0.0035	0.0035	< 0.0067	0.0067	< 0.0064	0.0064	< 0.012	0.012	< 0.0034	0.0034	< 0.0067	0.0067	< 0.0052	0.0052	< 0.0056	0.0056
Bromodichloromethane					< 0.0035	0.0035	< 0.0067	0.0067	< 0.0064	0.0064	< 0.012	0.012	< 0.0034	0.0034	< 0.0067	0.0067	< 0.0052	0.0052	< 0.0056	0.0056
Bromoform					< 0.0035	0.0035	< 0.0067	0.0067	< 0.0064	0.0064	< 0.012	0.012	< 0.0034	0.0034	< 0.0067	0.0067	< 0.0052	0.0052	< 0.0056	0.0056
Bromomethane					< 0.0035	0.0035	< 0.0067	0.0067	< 0.0064	0.0064	< 0.012	0.012	< 0.0034	0.0034	< 0.0067	0.0067	< 0.0052	0.0052	< 0.0056	0.0056
Carbon Disulfide					< 0.0035	0.0035	< 0.0067	0.0067	< 0.0064	0.0064	< 0.012	0.012	< 0.0034	0.0034	0.21	0.008	< 0.0052	0.0052	< 0.0056	0.0056
Carbon tetrachloride	0.76	0.76	2.4	22	< 0.0035	0.0035	< 0.0067	0.0067	< 0.0064	0.0064	< 0.012	0.012	< 0.0034	0.0034	< 0.0067	0.0067	< 0.0052	0.0052	< 0.0056	0.0056
Chlorobenzene	1.1	1.10	100	500	< 0.0035	0.0035	< 0.0067	0.0067	< 0.0064	0.0064	< 0.012	0.012	< 0.0034	0.0034	< 0.0067	0.0067	< 0.0052	0.0052	< 0.0056	0.0056
Chloroethane					< 0.0035	0.0035	< 0.0067	0.0067	< 0.0064	0.0064	< 0.012	0.012	< 0.0034	0.0034	< 0.0067	0.0067	< 0.0052	0.0052	< 0.0056	0.0056
Chloroform	0.37	0.37	49	350	< 0.0035	0.0035	< 0.0067	0.0067	< 0.0064	0.0064	< 0.012	0.012	< 0.0034	0.0034	< 0.0067	0.0067	< 0.0052	0.0052	< 0.0056	0.0056
Chloromethane					< 0.0035	0.0035	< 0.0067	0.0067	< 0.0064	0.0064	< 0.012	0.012	< 0.0034	0.0034	< 0.0067	0.0067	< 0.0052	0.0052	< 0.0056	0.0056
cis-1,2-Dichloroethene	0.25	0.25	100	500	< 0.0035	0.0035	< 0.0067	0.0067	< 0.0064	0.0064	< 0.012	0.012	0.061	0.25	0.0092	0.0091	0.0006	0.0053	< 0.0056	0.0056
cis-1,3-Dichloropropene					< 0.0035	0.0035	< 0.0067	0.0067	< 0.0064	0.0064	< 0.012	0.012	< 0.0034	0.0034	< 0.0067	0.0067	< 0.0052	0.0052	< 0.0056	0.0056
Dibromochloromethane					< 0.0035	0.0035	< 0.0067	0.0067	< 0.0064	0.0064	< 0.012	0.012	< 0.0034	0.0034	< 0.0067	0.0067	< 0.0052	0.0052	< 0.0056	0.0056
Dibromomethane					< 0.0035	0.0035	< 0.0067	0.0067	<											

Table 3
26-22 4th Street
Queens, New York
2018 Phase II and 2019/2020 Remedial Investigation
Soil Analytical Results
Volatile Organic Compounds

COMPOUND	NYSDEC Part 375.6 Groundwater Protection Soil Cleanup Objectives*	NYSDEC Part 375.6 Unrestricted Use Soil Cleanup Objectives	NYDEC Part 375.6 Restricted Residential Soil Cleanup Objectives*	NYDEC Part 375.6 Restricted Commercial Soil Cleanup Objectives	1985				1986				1987				1988			
					(0-2")		(6-10")		(0-2")		(6-10")		(0-2")		(6-10")		(0-2")		(6-10")	
					12/10/2019		12/10/2019		12/10/2019		12/10/2019		12/10/2019		12/10/2019		12/10/2019		12/10/2019	
					mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
		mg/Kg	mg/Kg	mg/Kg	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
1,1,1,2-Tetrachloroethane					< 0.0058	0.0058	< 0.0071	0.0071	< 0.0052	0.0052	< 0.0048	0.0048	< 0.004	0.004	< 0.0042	0.0042	< 0.0082	0.0082	< 0.0048	0.0048
1,1,1-Trichloroethane	0.68	0.68	0.1	0.5	< 0.021	0.021	< 0.0071	0.0071	< 0.021	0.021	< 0.018	0.018	< 0.016	0.016	< 0.0042	0.0042	< 0.003	0.003	< 0.018	0.018
1,1,2,2-Tetrachloroethane					< 0.0058	0.0058	< 0.0071	0.0071	< 0.0052	0.0052	< 0.0048	0.0048	< 0.004	0.004	< 0.0042	0.0042	< 0.020	0.020	< 0.0048	0.0048
1,1,2-Trichloroethane					< 0.0058	0.0058	< 0.0071	0.0071	< 0.0052	0.0052	< 0.0048	0.0048	< 0.004	0.004	< 0.0042	0.0042	< 0.0082	0.0082	< 0.0048	0.0048
1,1-Dichloroethane	0.27	0.27	26	240	< 0.0058	0.0058	< 0.0071	0.0071	< 0.0052	0.0052	< 0.0048	0.0048	< 0.004	0.004	< 0.0042	0.0042	< 0.0082	0.0082	< 0.0048	0.0048
1,1-Dichloroethene	0.33	0.33	100	500	< 0.0058	0.0058	< 0.0071	0.0071	< 0.0052	0.0052	< 0.0048	0.0048	< 0.004	0.004	< 0.0042	0.0042	< 0.0082	0.0082	< 0.0048	0.0048
1,1-Dichloropropene					< 0.0058	0.0058	< 0.0071	0.0071	< 0.0052	0.0052	< 0.0048	0.0048	< 0.004	0.004	< 0.0042	0.0042	< 0.0082	0.0082	< 0.0048	0.0048
1,2,3-Trichlorobenzene					< 0.0058	0.0058	< 0.0071	0.0071	< 0.0052	0.0052	< 0.0048	0.0048	< 0.004	0.004	< 0.0042	0.0042	< 0.020	0.020	< 0.0048	0.0048
1,2,3-Trichloropropane					< 0.0058	0.0058	< 0.0071	0.0071	< 0.0052	0.0052	< 0.0048	0.0048	< 0.004	0.004	< 0.0042	0.0042	< 0.020	0.020	< 0.0048	0.0048
1,2,4-Trichlorobenzene					< 0.0058	0.0058	< 0.0071	0.0071	< 0.0052	0.0052	< 0.0048	0.0048	< 0.004	0.004	< 0.0042	0.0042	< 0.020	0.020	< 0.0048	0.0048
1,2,4-Trimethylbenzene	3.6	3.6	52	190	< 0.0058	0.0058	< 0.0071	0.0071	< 0.0052	0.0052	< 0.0048	0.0048	< 0.004	0.004	< 0.0042	0.0042	< 0.020	0.020	< 0.0048	0.0048
1,2-Dibromo-3-chloropropane					< 0.0058	0.0058	< 0.0071	0.0071	< 0.0052	0.0052	< 0.0048	0.0048	< 0.004	0.004	< 0.0042	0.0042	< 0.0082	0.0082	< 0.0048	0.0048
1,2-Dibromomethane					< 0.0058	0.0058	< 0.0071	0.0071	< 0.0052	0.0052	< 0.0048	0.0048	< 0.004	0.004	< 0.0042	0.0042	< 0.020	0.020	< 0.0048	0.0048
1,2-Dichlorobenzene	1.1	1.1	100	500	< 0.0058	0.0058	< 0.0071	0.0071	< 0.0052	0.0052	< 0.0048	0.0048	< 0.004	0.004	< 0.0042	0.0042	< 0.020	0.020	< 0.0048	0.0048
1,2-Dichloroethane	0.2	0.2	31	30	< 0.0058	0.0058	< 0.0071	0.0071	< 0.0052	0.0052	< 0.0048	0.0048	< 0.004	0.004	< 0.0042	0.0042	< 0.0082	0.0082	< 0.0048	0.0048
1,2-Dichloropropane					< 0.0058	0.0058	< 0.0071	0.0071	< 0.0052	0.0052	< 0.0048	0.0048	< 0.004	0.004	< 0.0042	0.0042	< 0.0082	0.0082	< 0.0048	0.0048
1,3,5-Trimethylbenzene	8.4	8.4	52	190	< 0.0058	0.0058	< 0.0071	0.0071	< 0.0052	0.0052	< 0.0048	0.0048	< 0.004	0.004	< 0.0042	0.0042	< 0.020	0.020	< 0.0048	0.0048
1,3-Dichlorobenzene	2.4	2.4	4.9	280	< 0.0058	0.0058	< 0.0071	0.0071	< 0.0052	0.0052	< 0.0048	0.0048	< 0.004	0.004	< 0.0042	0.0042	< 0.020	0.020	< 0.0048	0.0048
1,3-Dichloropropene					< 0.0058	0.0058	< 0.0071	0.0071	< 0.0052	0.0052	< 0.0048	0.0048	< 0.004	0.004	< 0.0042	0.0042	< 0.0082	0.0082	< 0.0048	0.0048
1,4-Dichlorobenzene	1.8	1.8	13	130	< 0.0058	0.0058	< 0.0071	0.0071	< 0.0052	0.0052	< 0.0048	0.0048	< 0.004	0.004	< 0.0042	0.0042	< 0.020	0.020	< 0.0048	0.0048
1,4-Dioxane		0.1	13	130	< 0.074	0.074	< 0.027	0.027	< 0.073	0.073	< 0.073	0.073	< 0.078	0.078	< 0.075	0.075	< 0.077	0.077	< 0.075	0.075
2,2-Dichloropropane					< 0.0058	0.0058	< 0.0071	0.0071	< 0.0052	0.0052	< 0.0048	0.0048	< 0.004	0.004	< 0.0042	0.0042	< 0.0082	0.0082	< 0.0048	0.0048
2-Chloroluene					< 0.0058	0.0058	< 0.0071	0.0071	< 0.0052	0.0052	< 0.0048	0.0048	< 0.004	0.004	< 0.0042	0.0042	< 0.020	0.020	< 0.0048	0.0048
2-Hexanone (Methyl Butyl Ketone)					< 0.020	0.020	< 0.036	0.036	< 0.026	0.026	< 0.023	0.023	< 0.020	0.020	< 0.021	0.021	< 0.041	0.041	< 0.023	0.023
2-Isopropyltoluene					< 0.0058	0.0058	< 0.0071	0.0071	< 0.0052	0.0052	< 0.0048	0.0048	< 0.004	0.004	< 0.0042	0.0042	< 0.020	0.020	< 0.0048	0.0048
4-Chloroluene					< 0.0058	0.0058	< 0.0071	0.0071	< 0.0052	0.0052	< 0.0048	0.0048	< 0.004	0.004	< 0.0042	0.0042	< 0.020	0.020	< 0.0048	0.0048
4-Methyl-2-Pentanone					< 0.020	0.020	< 0.036	0.036	< 0.026	0.026	< 0.023	0.023	< 0.020	0.020	< 0.021	0.021	< 0.041	0.041	< 0.023	0.023
Acetone	0.05	0.05	100	500	0.012	0.020	< 0.036	0.036	0.073	0.026	< 0.023	0.023	0.034	0.020	0.005	0.021	0.015	0.041	0.0097	0.023
Acrolein					< 0.0058	0.0058	< 0.0071	0.0071	< 0.0052	0.0052	< 0.0048	0.0048	< 0.004	0.004	< 0.0042	0.0042	< 0.0082	0.0082	< 0.0048	0.0048
Acrylonitrile					< 0.023	0.023	< 0.014	0.014	< 0.010	0.010	< 0.010	0.010	< 0.016	0.016	< 0.017	0.017	< 0.033	0.033	< 0.018	0.018
Benzene	0.06	0.06	4.8	44	< 0.0058	0.0058	< 0.0071	0.0071	< 0.0052	0.0052	< 0.0048	0.0048	< 0.004	0.004	< 0.0042	0.0042	< 0.0082	0.0082	< 0.0048	0.0048
Bromobenzene					< 0.0058	0.0058	< 0.0071	0.0071	< 0.0052	0.0052	< 0.0048	0.0048	< 0.004	0.004	< 0.0042	0.0042	< 0.020	0.020	< 0.0048	0.0048
Bromochloromethane					< 0.0058	0.0058	< 0.0071	0.0071	< 0.0052	0.0052	< 0.0048	0.0048	< 0.004	0.004	< 0.0042	0.0042	< 0.0082	0.0082	< 0.0048	0.0048
Bromodichloromethane					< 0.0058	0.0058	< 0.0071	0.0071	< 0.0052	0.0052	< 0.0048	0.0048	< 0.004	0.004	< 0.0042	0.0042	< 0.0082	0.0082	< 0.0048	0.0048
Bromoform					< 0.0058	0.0058	< 0.0071	0.0071	< 0.0052	0.0052	< 0.0048	0.0048	< 0.004	0.004	< 0.0042	0.0042	< 0.0082	0.0082	< 0.0048	0.0048
Bromomethane					< 0.0058	0.0058	< 0.0071	0.0071	< 0.0052	0.0052	< 0.0048	0.0048	< 0.004	0.004	< 0.0042	0.0042	< 0.0082	0.0082	< 0.0048	0.0048
Carbon Disulfide					< 0.0058	0.0058	< 0.0071	0.0071	< 0.0052	0.0052	< 0.0048	0.0048	< 0.004	0.004	< 0.0042	0.0042	< 0.0082	0.0082	< 0.0048	0.0048
Carbon tetrachloride	0.76	0.76	2.4	22	< 0.0058	0.0058	< 0.0071	0.0071	< 0.0052	0.0052	< 0.0048	0.0048	< 0.004	0.004	< 0.0042	0.0042	< 0.0082	0.0082	< 0.0048	0.0048
Chlorobenzene	1.1	1.10	100	500	< 0.0058	0.0058	< 0.0071	0.0071	< 0.0052	0.0052	< 0.0048	0.0048	< 0.004	0.004	< 0.0042	0.0042	< 0.0082	0.0082	< 0.0048	0.0048
Chloroethane					< 0.0058	0.0058	< 0.0071	0.0071	< 0.0052	0.0052	< 0.0048	0.0048	< 0.004	0.004	< 0.0042	0.0042	< 0.0082	0.0082	< 0.0048	0.0048
Chloroform	0.37	0.37	49	350	< 0.0058	0.0058	< 0.0071	0.0071	< 0.0052	0.0052	< 0.0048	0.0048	< 0.004	0.004	< 0.0042	0.0042	< 0.0082	0.0082	< 0.0048	0.0048
Chloromethane					< 0.0058	0.0058	< 0.0071	0.0071	< 0.0052	0.0052	< 0.0048	0.0048	< 0.004	0.004	< 0.0042	0.0042	< 0.0082	0.0082	< 0.0048	0.0048
cis-1,2-Dichloroethene	0.25	0.25	100	500	< 0.0058	0.0058	< 0.0071	0.0071	< 0.0052	0.0052	< 0.0048	0.0048	< 0.004	0.004	< 0.0042	0.0042	< 0.0082	0.0082	< 0.0048	0.0048
cis-1,3-Dichloropropene					< 0.0058	0.0058	< 0.0071	0.0071	< 0.0052	0.0052	< 0.0048	0.0048	< 0.004	0.004	< 0.0042	0.0042	< 0.0082	0.0082	< 0.0048	0.0048
Dibromochloromethane					< 0.0058	0.0058	< 0.0071	0.0071	< 0.0052	0.0052	< 0.0048	0.0048	< 0.004	0.004	< 0.0042	0.0042	< 0.0082	0.0082	< 0.0048	0.0048
Dibromomethane					< 0.0058	0.0058	< 0.0071	0.0071	< 0.0052	0										

Table 3
26-22 4th Street
Queens, New York
2018 Phase II and 2019/2020 Remedial Investigation
Soil Analytical Results
Volatile Organic Compounds

COMPOUND	NYSDEC Part 375.6 Groundwater Protection Soil Cleanup Objectives*	NYSDEC Part 375.6 Unrestricted Use Soil Cleanup Objectives	NYSDEC Part 375.6 Restricted Residential Soil Cleanup Objectives*	NYSDEC Part 375.6 Restricted Commercial Soil Cleanup Objectives	19B9						19B10					
					(0-2')		(8-10')		(12')		(0-2')		(8-10')			
					12/10/2019		12/10/2019		12/10/2019		12/10/2019		12/10/2019			
					mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg			
					Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
1,1,1,2-tetrachloroethane					< 0.0073	0.0073	< 0.0063	0.0063	< 0.0043	0.0043	< 0.0043	0.0043	< 0.0043	0.0043	< 0.0043	0.0043
1,1,1-Trichloroethane	0.68	0.68	0.1	0.5	< 0.0073	0.0073	< 0.0025	0.0025	< 0.017	0.017	< 0.020	0.020	< 0.037	0.037		
1,1,2,2-Tetrachloroethane					< 0.380	0.380	< 0.0063	0.0063	< 0.0043	0.0043	< 0.0043	0.0043	< 0.0043	0.0043	< 0.0043	0.0043
1,1,2-Trichloroethane					< 0.0073	0.0073	< 0.0063	0.0063	< 0.0043	0.0043	< 0.0043	0.0043	< 0.0043	0.0043	< 0.0043	0.0043
1,1-Dichloroethane	0.27	0.27	26	240	< 0.0073	0.0073	< 0.0063	0.0063	< 0.0043	0.0043	< 0.0043	0.0043	< 0.0043	0.0043	< 0.0043	0.0043
1,1-Dichloroethene	0.33	0.33	100	500	< 0.0073	0.0073	< 0.0063	0.0063	< 0.0043	0.0043	< 0.0043	0.0043	< 0.0043	0.0043	< 0.0043	0.0043
1,1-Dichloropropene					< 0.0073	0.0073	< 0.0063	0.0063	< 0.0043	0.0043	< 0.0043	0.0043	< 0.0043	0.0043	< 0.0043	0.0043
1,2,3-Trichlorobenzene					< 0.380	0.380	< 0.0063	0.0063	< 0.0043	0.0043	< 0.0043	0.0043	< 0.0043	0.0043	< 0.0043	0.0043
1,2,3-Trichloropropene					< 0.380	0.380	< 0.0063	0.0063	< 0.0043	0.0043	< 0.0043	0.0043	< 0.0043	0.0043	< 0.0043	0.0043
1,2,4-Trichlorobenzene					< 0.380	0.380	< 0.0063	0.0063	< 0.0043	0.0043	< 0.0043	0.0043	< 0.0043	0.0043	< 0.0043	0.0043
1,2,4-Trimethylbenzene	3.6	3.6	52	190	< 0.380	0.380	< 0.0063	0.0063	< 0.0043	0.0043	< 0.0043	0.0043	< 0.0043	0.0043	< 0.0043	0.0043
1,2-Dibromo-3-chloropropane					< 0.380	0.380	< 0.0063	0.0063	< 0.0043	0.0043	< 0.0043	0.0043	< 0.0043	0.0043	< 0.0043	0.0043
1,2-Dibromoethane					< 0.0073	0.0073	< 0.0063	0.0063	< 0.0043	0.0043	< 0.0043	0.0043	< 0.0043	0.0043	< 0.0043	0.0043
1,2-Dichlorobenzene	1.1	1.1	100	500	< 0.380	0.380	< 0.0063	0.0063	< 0.0043	0.0043	< 0.0043	0.0043	< 0.0043	0.0043	< 0.0043	0.0043
1,2-Dichloroethane	0.2	0.2	3.1	30	< 0.0073	0.0073	< 0.0063	0.0063	< 0.0043	0.0043	< 0.0043	0.0043	< 0.0043	0.0043	< 0.0043	0.0043
1,2-Dichloropropene					< 0.0073	0.0073	< 0.0063	0.0063	< 0.0043	0.0043	< 0.0043	0.0043	< 0.0043	0.0043	< 0.0043	0.0043
1,3,5-Trimethylbenzene	8.4	8.4	52	190	< 0.380	0.380	< 0.0063	0.0063	< 0.0043	0.0043	< 0.0043	0.0043	< 0.0043	0.0043	< 0.0043	0.0043
1,3-Dichlorobenzene	2.4	2.4	4.9	280	< 0.380	0.380	< 0.0063	0.0063	< 0.0043	0.0043	< 0.0043	0.0043	< 0.0043	0.0043	< 0.0043	0.0043
1,3-Dichloropropene					< 0.0073	0.0073	< 0.0063	0.0063	< 0.0043	0.0043	< 0.0043	0.0043	< 0.0043	0.0043	< 0.0043	0.0043
1,4-Dichlorobenzene	1.8	1.8	13	130	< 0.380	0.380	< 0.0063	0.0063	< 0.0043	0.0043	< 0.0043	0.0043	< 0.0043	0.0043	< 0.0043	0.0043
1,4-Dioxane		0.1	13	130	< 0.015	0.015	< 0.075	0.075	< 0.075	0.075	< 0.081	0.081	< 0.082	0.082		
2,2-Dichloropropene					< 0.0073	0.0073	< 0.0063	0.0063	< 0.0043	0.0043	< 0.0043	0.0043	< 0.0043	0.0043	< 0.0043	0.0043
2-Chlorotoluene					< 0.380	0.380	< 0.0063	0.0063	< 0.0043	0.0043	< 0.0043	0.0043	< 0.0043	0.0043	< 0.0043	0.0043
2-Hexanone (Methyl Butyl Ketone)					< 0.036	0.036	< 0.032	0.032	< 0.022	0.022	< 0.024	0.024	< 0.045	0.045		
2-Isopropyltoluene					< 0.380	0.380	< 0.0063	0.0063	< 0.0043	0.0043	< 0.0043	0.0043	< 0.0043	0.0043	< 0.0043	0.0043
4-Chlorotoluene					< 0.380	0.380	< 0.0063	0.0063	< 0.0043	0.0043	< 0.0043	0.0043	< 0.0043	0.0043	< 0.0043	0.0043
4-Methyl-2-Pentanone					< 0.036	0.036	< 0.032	0.032	< 0.022	0.022	< 0.024	0.024	< 0.045	0.045		
Acetone	0.05	0.05	100	500	0.015	0.036	0.047	0.032	< 0.022	0.022	0.039	0.024	0.023	0.048		
Acrolein					< 0.0073	0.0073	< 0.0063	0.0063	< 0.0043	0.0043	< 0.0043	0.0043	< 0.0043	0.0043	< 0.0043	0.0043
Acrylonitrile					< 0.015	0.015	< 0.025	0.025	< 0.017	0.017	< 0.020	0.020	< 0.037	0.037		
Benzene	0.06	0.06	4.8	44	< 0.0073	0.0073	< 0.0063	0.0063	< 0.0043	0.0043	< 0.0043	0.0043	< 0.0043	0.0043	< 0.0043	0.0043
Bromobenzene					< 0.380	0.380	< 0.0063	0.0063	< 0.0043	0.0043	< 0.0043	0.0043	< 0.0043	0.0043	< 0.0043	0.0043
Bromochloromethane					< 0.0073	0.0073	< 0.0063	0.0063	< 0.0043	0.0043	< 0.0043	0.0043	< 0.0043	0.0043	< 0.0043	0.0043
Bromodichloromethane					< 0.0073	0.0073	< 0.0063	0.0063	< 0.0043	0.0043	< 0.0043	0.0043	< 0.0043	0.0043	< 0.0043	0.0043
Bromofluoromethane					< 0.0073	0.0073	< 0.0063	0.0063	< 0.0043	0.0043	< 0.0043	0.0043	< 0.0043	0.0043	< 0.0043	0.0043
Bromomethane					< 0.0073	0.0073	< 0.0063	0.0063	< 0.0043	0.0043	< 0.0043	0.0043	< 0.0043	0.0043	< 0.0043	0.0043
Carbon Disulfide					< 0.0073	0.0073	0.0013	0.0063	< 0.0043	0.0043	< 0.0043	0.0043	< 0.0043	0.0043	< 0.0043	0.0043
Carbon tetrachloride	0.76	0.76	2.4	22	< 0.0073	0.0073	< 0.0063	0.0063	< 0.0043	0.0043	< 0.0043	0.0043	< 0.0043	0.0043	< 0.0043	0.0043
Chlorobenzene	1.1	1.10	100	500	< 0.0073	0.0073	< 0.0063	0.0063	< 0.0043	0.0043	< 0.0043	0.0043	< 0.0043	0.0043	< 0.0043	0.0043
Chloroethane					< 0.0073	0.0073	< 0.0063	0.0063	< 0.0043	0.0043	< 0.0043	0.0043	< 0.0043	0.0043	< 0.0043	0.0043
Chloroform	0.37	0.37	49	350	< 0.0073	0.0073	< 0.0063	0.0063	< 0.0043	0.0043	< 0.0043	0.0043	< 0.0043	0.0043	< 0.0043	0.0043
Chloromethane					< 0.0073	0.0073	< 0.0063	0.0063	< 0.0043	0.0043	< 0.0043	0.0043	< 0.0043	0.0043	< 0.0043	0.0043
cis-1,2-Dichloroethene	0.25	0.25	100	500	< 0.0073	0.0073	< 0.0063	0.0063	< 0.0043	0.0043	0.0018	0.0043	0.0071	0.0043	< 0.0043	0.0043
cis-1,3-Dichloropropene					< 0.0073	0.0073	< 0.0063	0.0063	< 0.0043	0.0043	< 0.0043	0.0043	< 0.0043	0.0043	< 0.0043	0.0043
Dibromochloromethane					< 0.0073	0.0073	< 0.0063	0.0063	< 0.0043	0.0043	< 0.0043	0.0043	< 0.0043	0.0043	< 0.0043	0.0043
Dibromomethane					< 0.0073	0.0073	< 0.0063	0.0063	< 0.0043	0.0043	< 0.0043	0.0043	< 0.0043	0.0043	< 0.0043	0.0043
Dichlorodifluoromethane					< 0.0073	0.0073	< 0.0063	0.0063	< 0.0043	0.0043	< 0.0043	0.0043	< 0.0043	0.0043	< 0.0043	0.0043
Ethylbenzene	1	1	41	380	< 0.0073	0.0073	< 0.0063	0.0063	< 0.0043	0.0043	< 0.0043	0.0043	< 0.0043	0.0043	< 0.0043	0.0043
Hexachlorobutadiene					< 0.380	0.380	< 0.0063	0.0063	< 0.0043	0.0043	< 0.0043	0.0043	< 0.0043	0.0043	< 0.0043	0.0043
Isopropylbenzene					< 0.380	0.380	< 0.0063	0.0063	< 0.0043	0.0043	< 0.0043	0.0043	< 0.0043	0.0043	< 0.0043	0.0043
m,p-Xylenes	1.8	0.26	100	500	< 0.0073	0.0073	< 0.0063	0.0063	< 0.0043	0.0043	< 0.0043	0.0043	< 0.0043	0.0043	< 0.0043	0.0043
Methyl Ethyl Ketone (2-Butanone)	0.12	0.12	100	500	< 0.044	0.044	0.0079	0.038	< 0.028	0.028	0.0068	0.038	< 0.058	0.058		
Methyl t-Butyl ether (MTBE)	0.93	0.93	100	500	< 0.015	0.015	< 0.013	0.013	< 0.0087	0.0087	< 0.0087	0.0087	< 0.018	0.018		
Methylene chloride	0.05	0.05	100	500	< 0.0073	0.0073	< 0.0063	0.0063	< 0.0043	0.0043	< 0.0043	0.0043	< 0.0043	0.0043	< 0.0043	0.0043
Naphthalene	12	12	100	500	< 0.380	0.380	0.0029	0.0063	< 0.0043	0.0043	< 0.0043	0.0043	< 0.0043	0.0043	< 0.0043	0.0043
n-Butylbenzene	12	12	100	500	< 0.380	0.380	< 0.0063	0.0063	< 0.0043	0.0043	< 0.0043	0.0043	< 0.0043	0.0043	< 0.0043	0.0043
n-Propylbenzene	3.9	3.9	100	500	< 0.380	0.380	< 0.0063	0.0063	< 0.0043	0.0043	< 0.0043	0.0043	< 0.0043	0.0043	< 0.0043	0.0043
o-Xylene	0.16	0.26	100	500	< 0.0073	0.0073	< 0.0063	0.0063	< 0.0043	0.0043	< 0.0043	0.0043	< 0.0043	0.0043	< 0.0043	0.0043
p-Isopropyltoluene					< 0.380	0.380	< 0.0063	0.0063	< 0.0043	0.0043	< 0.0043	0.0043	< 0.0043	0.0043	< 0.0043	0.0043
sec-Butylbenzene	11	11	100	500	< 0.380	0.380	< 0.0063	0.0063								

Table 4
26-22 4th Street
Queens, New York
2018 Phase II and 2019/2020 Remedial Investigation
Soil Analytical Results
Semi-Volatile Organic Compounds

COMPOUND	NYSDEC Part 375.6 Unrestricted Use Soil Cleanup Objectives	NYDEC Part 375.6 Restricted Residential Soil Cleanup Objectives*	NYDEC Part 375.6 Restricted Commercial Soil Cleanup Objectives	B-1		B-3		B-4		B-6		B-7		B-9	
				(6-8)		(2-4)		(2-4)		(2-4)		(2-4)		(2-4)	
				9/20/2018		9/20/2018		9/20/2018		9/20/2018		9/20/2018		9/20/2018	
				mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
1,2,4,5-Tetrachlorobenzene				Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
1,2,4-Trichlorobenzene				< 0.230	0.230	< 0.260	0.260	< 0.260	0.260	< 0.270	0.270	< 0.260	0.260	< 0.270	0.270
1,2-Dichlorobenzene				< 0.230	0.230	< 0.260	0.260	< 0.260	0.260	< 0.270	0.270	< 0.260	0.260	< 0.270	0.270
1,2-Diphenylhydrazine				< 0.330	0.330	< 0.370	0.370	< 0.370	0.370	< 0.390	0.390	< 0.370	0.370	< 0.390	0.390
1,3-Dichlorobenzene				< 0.230	0.230	< 0.260	0.260	< 0.260	0.260	< 0.270	0.270	< 0.260	0.260	< 0.270	0.270
1,4-Dichlorobenzene				< 0.230	0.230	< 0.260	0.260	< 0.260	0.260	< 0.270	0.270	< 0.260	0.260	< 0.270	0.270
2,4,5-Trichlorophenol				< 0.230	0.230	< 0.260	0.260	< 0.260	0.260	< 0.270	0.270	< 0.260	0.260	< 0.270	0.270
2,4,6-Trichlorophenol				< 0.230	0.230	< 0.260	0.260	< 0.260	0.260	< 0.270	0.270	< 0.260	0.260	< 0.270	0.270
2,4-Dichlorophenol				< 0.230	0.230	< 0.260	0.260	< 0.260	0.260	< 0.270	0.270	< 0.260	0.260	< 0.270	0.270
2,4-Dimethylphenol				< 0.230	0.230	< 0.260	0.260	< 0.260	0.260	< 0.270	0.270	< 0.260	0.260	< 0.270	0.270
2,4-Dinitrophenol				< 0.330	0.330	< 0.370	0.370	< 0.370	0.370	< 0.390	0.390	< 0.370	0.370	< 0.390	0.390
2,4-Dinitrotoluene				< 0.230	0.230	< 0.260	0.260	< 0.260	0.260	< 0.270	0.270	< 0.260	0.260	< 0.270	0.270
2,6-Dinitrotoluene				< 0.230	0.230	< 0.260	0.260	< 0.260	0.260	< 0.270	0.270	< 0.260	0.260	< 0.270	0.270
2-Chloronaphthalene				< 0.230	0.230	< 0.260	0.260	< 0.260	0.260	< 0.270	0.270	< 0.260	0.260	< 0.270	0.270
2-Chlorophenol				< 0.230	0.230	< 0.260	0.260	< 0.260	0.260	< 0.270	0.270	< 0.260	0.260	< 0.270	0.270
2-Methylnaphthalene				< 0.230	0.230	< 0.260	0.260	0.260	0.260	< 0.270	0.270	< 0.260	0.260	0.64	0.270
2-Methylphenol (o-cresol)	0.33	100	500	< 0.230	0.230	< 0.260	0.260	< 0.260	0.260	< 0.270	0.270	< 0.260	0.260	< 0.270	0.270
2-Nitroaniline				< 0.330	0.330	< 0.370	0.370	< 0.370	0.370	< 0.390	0.390	< 0.370	0.370	< 0.390	0.390
2-Nitrophenol				< 0.230	0.230	< 0.260	0.260	< 0.260	0.260	< 0.270	0.270	< 0.260	0.260	< 0.270	0.270
3,4-Methylphenol (m&p-cresol)	0.33	100	500	< 0.330	0.330	< 0.370	0.370	< 0.370	0.370	< 0.390	0.390	< 0.370	0.370	< 0.390	0.390
3,3'-Dichlorobenzidine				< 0.230	0.230	< 0.260	0.260	< 0.260	0.260	< 0.270	0.270	< 0.260	0.260	< 0.270	0.270
3-Nitroaniline				< 0.330	0.330	< 0.370	0.370	< 0.370	0.370	< 0.390	0.390	< 0.370	0.370	< 0.390	0.390
4,6-Dinitro-2-methylphenol				< 0.330	0.330	< 0.370	0.370	< 0.370	0.370	< 0.390	0.390	< 0.370	0.370	< 0.390	0.390
4-Bromophenyl phenyl ether				< 0.330	0.330	< 0.370	0.370	< 0.370	0.370	< 0.390	0.390	< 0.370	0.370	< 0.390	0.390
4-Chloro-3-methylphenol				< 0.230	0.230	< 0.260	0.260	< 0.260	0.260	< 0.270	0.270	< 0.260	0.260	< 0.270	0.270
4-Chloroaniline				< 0.230	0.230	< 0.260	0.260	< 0.260	0.260	< 0.270	0.270	< 0.260	0.260	< 0.270	0.270
4-Chlorophenyl phenyl ether				< 0.230	0.230	< 0.260	0.260	< 0.260	0.260	< 0.270	0.270	< 0.260	0.260	< 0.270	0.270
4-Nitroaniline				< 0.520	0.520	< 0.590	0.590	< 0.590	0.590	< 0.630	0.630	< 0.600	0.600	< 0.630	0.630
4-Nitrophenol				< 0.230	0.230	< 0.260	0.260	< 0.260	0.260	< 0.270	0.270	< 0.260	0.260	< 0.270	0.270
Acenaphthene	20	100	500,000	< 0.230	0.230	< 0.260	0.260	0.490	0.260	0.43	0.270	0.40	0.260	0.92	0.270
Acenaphthylene	100	100	500,000	< 0.230	0.230	< 0.260	0.260	0.430	0.260	< 0.270	0.270	< 0.260	0.260	1.9	0.270
Acetophenone				< 0.230	0.230	< 0.260	0.260	< 0.260	0.260	< 0.270	0.270	< 0.260	0.260	< 0.270	0.270
Aniline				< 0.330	0.330	< 0.370	0.370	< 0.370	0.370	< 0.390	0.390	< 0.370	0.370	< 0.390	0.390
Anthracene	100	100	500,000	< 0.230	0.230	< 0.260	0.260	1.8	0.260	1.10	0.270	0.93	0.260	2.9	0.270
Benz(a)anthracene	1	1	5,600	< 0.230	0.230	0.450	0.260	3.7	0.260	3.2	0.270	2.2	0.260	9.4	1.0
Benidine				< 0.230	0.230	< 0.260	0.260	< 0.260	0.260	< 0.270	0.270	< 0.260	0.260	< 0.270	0.270
Benzo(a)pyrene	1	1	1,000	< 0.230	0.230	0.410	0.260	3.3	0.260	2.8	0.270	2.0	0.260	8.9	1.0
Benzo(b)fluoranthene	1	1	5,600	< 0.230	0.230	0.430	0.260	2.9	0.260	2.3	0.270	1.8	0.260	7.5	1.0
Benzo(ghi)perylene	100	100	500,000	< 0.230	0.230	0.320	0.260	1.9	0.260	1.7	0.270	1.3	0.260	4.7	0.270
Benzo(k)fluoranthene	0.8	3.9	56,000	< 0.230	0.230	0.430	0.260	2.7	0.260	2.3	0.270	1.7	0.260	4.3	0.270
Benzoic acid				< 0.650	0.650	< 0.740	0.740	< 0.730	0.730	< 0.780	0.780	< 0.740	0.740	< 0.780	0.780
Benzyl butyl phthalate				< 0.230	0.230	< 0.260	0.260	< 0.260	0.260	< 0.270	0.270	< 0.260	0.260	< 0.270	0.270
Bis(2-chloroethoxy)methane				< 0.230	0.230	< 0.260	0.260	< 0.260	0.260	< 0.270	0.270	< 0.260	0.260	< 0.270	0.270
Bis(2-chloroethyl)ether				< 0.330	0.330	< 0.370	0.370	< 0.370	0.370	< 0.390	0.390	< 0.370	0.370	< 0.390	0.390
Bis(2-chloroisopropyl)ether				< 0.230	0.230	< 0.260	0.260	< 0.260	0.260	< 0.270	0.270	< 0.260	0.260	< 0.270	0.270
Bis(2-ethylhexyl)phthalate				< 0.230	0.230	< 0.260	0.260	< 0.260	0.260	< 0.270	0.270	< 0.260	0.260	< 0.270	0.270
Carbazole				< 0.330	0.330	< 0.370	0.370	0.83	0.370	0.49	0.390	0.38	0.390	1.3	0.390
Chrysene	1	3.9	56	< 0.230	0.230	0.55	0.260	3.9	0.260	3.7	0.270	2.2	0.260	9.6	1.0
Dibenz(a,h)anthracene	0.33	0.33	0.56	< 0.230	0.230	< 0.260	0.260	0.49	0.260	0.44	0.270	0.34	0.260	2.1	0.270
Dibenzofuran	7	59	59	< 0.230	0.230	< 0.260	0.260	0.58	0.260	< 0.270	0.270	< 0.260	0.260	0.84	0.270
Diethyl phthalate				< 0.230	0.230	< 0.260	0.260	< 0.260	0.260	< 0.270	0.270	< 0.260	0.260	< 0.270	0.270
Dimethylphthalate				< 0.230	0.230	< 0.260	0.260	< 0.260	0.260	< 0.270	0.270	< 0.260	0.260	< 0.270	0.270
Di-n-butylphthalate				< 0.330	0.330	< 0.370	0.370	< 0.370	0.370	< 0.390	0.390	< 0.370	0.370	< 0.390	0.390
Di-n-octylphthalate				< 0.230	0.230	< 0.260	0.260	< 0.260	0.260	< 0.270	0.270	< 0.260	0.260	< 0.270	0.270
Fluoranthene	100	100	500	0.320	0.230	0.1	0.260	7.6	1.3	6.9	0.270	4.0	0.260	16.0	1.4
Fluorene	30	100	500	< 0.230	0.230	< 0.260	0.260	1.1	0.260	0.55	0.270	0.43	0.260	1.9	0.270
Hexachlorobenzene				< 0.230	0.230	< 0.260	0.260	< 0.260	0.260	< 0.270	0.270	< 0.260	0.260	< 0.270	0.270
Hexachlorobutadiene				< 0.230	0.230	< 0.260	0.260	< 0.260	0.260	< 0.270	0.270	< 0.260	0.260	< 0.270	0.270
Hexachlorocyclopentadiene				< 0.230	0.230	< 0.260	0.260	< 0.260	0.260	< 0.270	0.270	< 0.260	0.260	< 0.270	0.270
Hexachloroethane				< 0.230	0.230	< 0.260	0.260	< 0.260	0.260	< 0.270	0.270	< 0.260	0.260	< 0.270	0.270
Indeno(1,2,3-cd)pyrene	0.5	0.5	5.6	< 0.230	0.230	380	0.260	2.4	0.260	2.0	0.270	1.4	0.260	6.0	0.270
Isophorone				< 0.230	0.230	< 0.260	0.260	< 0.260	0.260	< 0.270	0.270	< 0.260	0.260	< 0.270	0.270
Naphthalene	12	100	500	< 0.230	0.230	< 0.260	0.260	0.46	0.260	0.44	0.270	< 0.260	0.260	0.86	0.270
Nitrobenzene				< 0.230	0.230	< 0.260	0.260	< 0.260	0.260	< 0.270	0.270	< 0.260	0.260	< 0.270	0.270
N-Nitrosodimethylamine				< 0.230	0.230	< 0.370	0.370	< 0.370	0.370	< 0.390</					

Table 4
26-22 4th Street
Queens, New York
2018 Phase II and 2019/2020 Remedial Investigation
Soil Analytical Results
Semi-Volatile Organic Compounds

COMPOUND	NYSDEC Part 375.6 Unrestricted Use Soil Cleanup Objectives	NYDEC Part 375.6 Restricted Residential Soil Cleanup Objectives*	NYDEC Part 375.6 Restricted Commercial Soil Cleanup Objectives	19B1				19B2				19B3				19B4			
				(0-2')		(8-10')		(0-2')		(8-10')		(0-2')		(8-10')		(0-2')		(8-10')	
				12/10/2019		12/10/2019		12/10/2019		12/10/2019		12/10/2019		12/10/2019		12/10/2019		12/10/2019	
				mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
				Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
1,2,4,5-Tetrachlorobenzene				< 0.260	0.260	< 0.260	0.260	< 0.250	0.250	< 0.250	0.250	< 0.260	0.260	< 0.270	0.270	< 0.260	0.260	< 0.260	0.260
1,2,4-Trichlorobenzene				< 0.260	0.260	< 0.260	0.260	< 0.250	0.250	< 0.250	0.250	< 0.260	0.260	< 0.270	0.270	< 0.260	0.260	< 0.260	0.260
1,2-Dichlorobenzene				< 0.260	0.260	< 0.260	0.260	< 0.250	0.250	< 0.250	0.250	< 0.260	0.260	< 0.270	0.270	< 0.260	0.260	< 0.260	0.260
1,2-Diphenylhydrazine				< 0.260	0.260	< 0.260	0.260	< 0.250	0.250	< 0.250	0.250	< 0.260	0.260	< 0.270	0.270	< 0.260	0.260	< 0.260	0.260
1,3-Dichlorobenzene				< 0.260	0.260	< 0.260	0.260	< 0.250	0.250	< 0.250	0.250	< 0.260	0.260	< 0.270	0.270	< 0.260	0.260	< 0.260	0.260
1,4-Dichlorobenzene				< 0.260	0.260	< 0.260	0.260	< 0.250	0.250	< 0.250	0.250	< 0.260	0.260	< 0.270	0.270	< 0.260	0.260	< 0.260	0.260
2,4,5-Trichlorophenol				< 0.073	0.073	< 0.081	0.081	< 0.073	0.073	< 0.073	0.073	< 0.075	0.075	< 0.079	0.079	< 0.073	0.073	< 0.080	0.080
2,4,6-Trichlorophenol				< 0.190	0.190	< 0.200	0.200	< 0.180	0.180	< 0.180	0.180	< 0.190	0.190	< 0.190	0.190	< 0.180	0.180	< 0.200	0.200
2,4-Dichlorophenol				< 0.190	0.190	< 0.200	0.200	< 0.180	0.180	< 0.180	0.180	< 0.190	0.190	< 0.190	0.190	< 0.180	0.180	< 0.200	0.200
2,4-Dimethylphenol				< 0.260	0.260	< 0.260	0.260	< 0.250	0.250	< 0.250	0.250	< 0.260	0.260	< 0.270	0.270	< 0.260	0.260	< 0.260	0.260
2,4-Dinitrophenol				< 0.260	0.260	< 0.260	0.260	< 0.250	0.250	< 0.250	0.250	< 0.260	0.260	< 0.270	0.270	< 0.260	0.260	< 0.260	0.260
2,4-Dinitrotoluene				< 0.190	0.190	< 0.200	0.200	< 0.180	0.180	< 0.180	0.180	< 0.190	0.190	< 0.190	0.190	< 0.180	0.180	< 0.200	0.200
2,6-Dinitrotoluene				< 0.190	0.190	< 0.200	0.200	< 0.180	0.180	< 0.180	0.180	< 0.190	0.190	< 0.190	0.190	< 0.180	0.180	< 0.200	0.200
2-Chloronaphthalene				< 0.260	0.260	< 0.260	0.260	< 0.250	0.250	< 0.250	0.250	< 0.260	0.260	< 0.270	0.270	< 0.260	0.260	< 0.260	0.260
2-Chlorophenol				< 0.260	0.260	< 0.260	0.260	< 0.250	0.250	< 0.250	0.250	< 0.260	0.260	< 0.270	0.270	< 0.260	0.260	< 0.260	0.260
2-Methylnaphthalene				< 0.260	0.260	< 0.260	0.260	< 0.250	0.250	< 0.250	0.250	< 0.260	0.260	< 0.270	0.270	< 0.260	0.260	< 0.260	0.260
2-Methylphenol (o-cresol)	0.33	100	500	< 0.260	0.260	< 0.260	0.260	< 0.250	0.250	< 0.250	0.250	< 0.260	0.260	< 0.270	0.270	< 0.260	0.260	< 0.260	0.260
2-Nitroaniline				< 0.260	0.260	< 0.260	0.260	< 0.250	0.250	< 0.250	0.250	< 0.260	0.260	< 0.270	0.270	< 0.260	0.260	< 0.260	0.260
2-Nitrophenol				< 0.260	0.260	< 0.260	0.260	< 0.250	0.250	< 0.250	0.250	< 0.260	0.260	< 0.270	0.270	< 0.260	0.260	< 0.260	0.260
3&4-Methylphenol (m&p-cresol)	0.33	100	500	< 0.260	0.260	< 0.260	0.260	< 0.250	0.250	< 0.250	0.250	< 0.260	0.260	< 0.270	0.270	< 0.260	0.260	< 0.260	0.260
3,3'-Dichlorobenzidine				< 0.190	0.190	< 0.200	0.200	< 0.180	0.180	< 0.180	0.180	< 0.190	0.190	< 0.190	0.190	< 0.180	0.180	< 0.200	0.200
3-Nitroaniline				< 0.370	0.370	< 0.410	0.410	< 0.360	0.360	< 0.350	0.350	< 0.370	0.370	< 0.380	0.380	< 0.370	0.370	< 0.400	0.400
4,6-Dinitro-2-methylphenol				< 0.220	0.220	< 0.250	0.250	< 0.220	0.220	< 0.210	0.210	< 0.220	0.220	< 0.230	0.230	< 0.220	0.220	< 0.240	0.240
4-Bromophenyl phenyl ether				< 0.260	0.260	< 0.260	0.260	< 0.250	0.250	< 0.250	0.250	< 0.260	0.260	< 0.270	0.270	< 0.260	0.260	< 0.260	0.260
4-Chloro-3-methylphenol				< 0.260	0.260	< 0.260	0.260	< 0.250	0.250	< 0.250	0.250	< 0.260	0.260	< 0.270	0.270	< 0.260	0.260	< 0.260	0.260
4-Chloroaniline				< 0.300	0.300	< 0.330	0.330	< 0.290	0.290	< 0.280	0.280	< 0.300	0.300	< 0.310	0.310	< 0.290	0.290	< 0.320	0.320
4-Chlorophenyl phenyl ether				< 0.260	0.260	< 0.260	0.260	< 0.250	0.250	< 0.250	0.250	< 0.260	0.260	< 0.270	0.270	< 0.260	0.260	< 0.260	0.260
4-Nitroaniline				< 0.370	0.370	< 0.410	0.410	< 0.360	0.360	< 0.350	0.350	< 0.370	0.370	< 0.380	0.380	< 0.370	0.370	< 0.400	0.400
4-Nitrophenol				< 0.370	0.370	< 0.410	0.410	< 0.360	0.360	< 0.350	0.350	< 0.370	0.370	< 0.380	0.380	< 0.370	0.370	< 0.400	0.400
Acenaphthene	20	100	500,000	< 0.260	0.260	< 0.260	0.260	< 0.250	0.250	< 0.250	0.250	< 0.260	0.260	< 0.270	0.270	< 0.260	0.260	< 0.260	0.260
Acenaphthylene	100	100	500,000	< 0.260	0.260	< 0.260	0.260	< 0.250	0.250	< 0.250	0.250	< 0.260	0.260	< 0.270	0.270	< 0.260	0.260	< 0.260	0.260
Acetophenone				< 0.260	0.260	< 0.260	0.260	< 0.250	0.250	< 0.250	0.250	< 0.260	0.260	< 0.270	0.270	< 0.260	0.260	< 0.260	0.260
Aniline				< 0.300	0.300	< 0.330	0.330	< 0.290	0.290	< 0.250	0.250	< 0.300	0.300	< 0.310	0.310	< 0.290	0.290	< 0.320	0.320
Anthracene	100	100	500,000	< 0.260	0.260	< 0.260	0.260	< 0.250	0.250	< 0.250	0.250	0.13	0.260	< 0.270	0.270	< 0.260	0.260	< 0.260	0.260
Benz(a)anthracene	1	1	5,600	0.51	0.260	< 0.260	0.260	0.22	0.250	< 0.250	0.250	0.63	0.260	< 0.270	0.270	< 0.260	0.260	< 0.260	0.260
Benzenzide				< 0.370	0.370	< 0.410	0.410	< 0.360	0.360	< 0.350	0.350	< 0.370	0.370	< 0.380	0.380	< 0.370	0.370	< 0.400	0.400
Benzo(a)pyrene	1	1	1,000	0.47	0.190	< 0.200	0.200	0.23	0.180	< 0.180	0.180	0.65	0.190	< 0.190	0.190	< 0.180	0.180	< 0.200	0.200
Benzo(b)fluoranthene	1	1	5,600	0.46	0.260	< 0.260	0.260	0.24	0.250	< 0.250	0.250	0.61	0.260	< 0.270	0.270	< 0.260	0.260	< 0.260	0.260
Benzo(g,h,i)perylene	100	100	500,000	0.38	0.260	< 0.260	0.260	0.2	0.250	< 0.250	0.250	0.42	0.260	< 0.270	0.270	< 0.260	0.260	< 0.260	0.260
Benzo(k)fluoranthene	0.8	3.9	56,000	0.42	0.260	< 0.260	0.260	0.22	0.250	< 0.250	0.250	0.53	0.260	< 0.270	0.270	< 0.260	0.260	< 0.260	0.260
Benzoic acid				< 1.9	1.9	< 2.0	2.0	< 1.8	1.8	< 1.8	1.8	< 1.9	1.9	< 1.9	1.9	< 1.8	1.8	< 2.0	2.0
Benzyl butyl phthalate				< 0.260	0.260	< 0.260	0.260	< 0.250	0.250	< 0.250	0.250	< 0.260	0.260	< 0.270	0.270	< 0.260	0.260	< 0.260	0.260
Bis(2-chloroethoxy)methane				< 0.260	0.260	< 0.260	0.260	< 0.250	0.250	< 0.250	0.250	< 0.260	0.260	< 0.270	0.270	< 0.260	0.260	< 0.260	0.260
Bis(2-chloroethyl)ether				< 0.190	0.190	< 0.200	0.200	< 0.180	0.180	< 0.180	0.180	< 0.190	0.190	< 0.190	0.190	< 0.180	0.180	< 0.200	0.200
Bis(2-chloroisopropyl)ether				< 0.260	0.260	< 0.260	0.260	< 0.250	0.250	< 0.250	0.250	< 0.260	0.260	< 0.270	0.270	< 0.260	0.260	< 0.260	0.260
Bis(2-ethylhexyl)phthalate				< 0.260	0.260	< 0.260	0.260	< 0.250	0.250	< 0.250	0.250	< 0.260	0.260	< 0.270	0.270	< 0.260	0.260	< 0.260	0.260
Carbazole				< 0.190	0.190	< 0.200	0.200	< 0.180	0.180	< 0.180	0.180	< 0.190	0.190	< 0.190	0.190	< 0.180	0.180	< 0.200	0.200
Chrysene	1	3.9	56	0.74	0.260	< 0.260	0.260	0.31	0.250	< 0.250	0.250	0.71	0.260	< 0.270	0.270	< 0.260	0.260	< 0.260	0.260
Dibenz(a,h)anthracene	0.33																		

Table 4
26-22 4th Street
Queens, New York
2018 Phase II and 2019/2020 Remedial Investigation
Soil Analytical Results
Semi-Volatile Organic Compounds

COMPOUND	NYSDEC Part 375.6 Unrestricted Use Soil Cleanup Objectives	NYDEC Part 375.6 Restricted Residential Soil Cleanup Objectives*	NYDEC Part 375.6 Restricted Commercial Soil Cleanup Objectives	1985				1986				1987				1988			
				(0-2')		(8-10')		(0-2')		(8-10')		(0-2')		(8-10')		(0-2')		(8-10')	
				12/10/2019		12/10/2019		12/10/2019		12/10/2019		12/10/2019		12/10/2019		12/10/2019		12/10/2019	
				mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
				Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
1,2,4,5-Tetrachlorobenzene				< 0.260	0.260	< 0.270	0.270	< 0.260	0.260	< 0.260	0.260	< 0.270	0.270	< 0.270	0.270	< 0.270	0.270		
1,2,4-Trichlorobenzene				< 0.260	0.260	< 0.270	0.270	< 0.260	0.260	< 0.260	0.260	< 0.270	0.270	< 0.270	0.270	< 0.270	0.270		
1,2-Dichlorobenzene				< 0.260	0.260	< 0.270	0.270	< 0.260	0.260	< 0.260	0.260	< 0.270	0.270	< 0.270	0.270	< 0.270	0.270		
1,2-Diphenylhydrazine				< 0.260	0.260	< 0.270	0.270	< 0.260	0.260	< 0.260	0.260	< 0.270	0.270	< 0.270	0.270	< 0.270	0.270		
1,3-Dichlorobenzene				< 0.260	0.260	< 0.270	0.270	< 0.260	0.260	< 0.260	0.260	< 0.270	0.270	< 0.270	0.270	< 0.270	0.270		
1,4-Dichlorobenzene				< 0.260	0.260	< 0.270	0.270	< 0.260	0.260	< 0.260	0.260	< 0.270	0.270	< 0.270	0.270	< 0.270	0.270		
2,4,5-Trichlorophenol				< 0.074	0.074	< 0.077	0.077	< 0.073	0.073	< 0.073	0.073	< 0.078	0.078	< 0.075	0.075	< 0.077	0.077		
2,4,6-Trichlorophenol				< 0.260	0.260	< 0.270	0.270	< 0.260	0.260	< 0.260	0.260	< 0.270	0.270	< 0.270	0.270	< 0.270	0.270		
2,4-Dichlorophenol				< 0.190	0.190	< 0.190	0.190	< 0.190	0.190	< 0.190	0.190	< 0.200	0.200	< 0.190	0.190	< 0.190	0.190		
2,4-Dimethylphenol				< 0.190	0.190	< 0.190	0.190	< 0.190	0.190	< 0.190	0.190	< 0.200	0.200	< 0.190	0.190	< 0.190	0.190		
2,4-Dinitrophenol				< 0.260	0.260	< 0.270	0.270	< 0.260	0.260	< 0.260	0.260	< 0.270	0.270	< 0.270	0.270	< 0.270	0.270		
2,4-Dinitrotoluene				< 0.190	0.190	< 0.190	0.190	< 0.190	0.190	< 0.190	0.190	< 0.200	0.200	< 0.190	0.190	< 0.190	0.190		
2,6-Dinitrotoluene				< 0.190	0.190	< 0.190	0.190	< 0.190	0.190	< 0.190	0.190	< 0.200	0.200	< 0.190	0.190	< 0.190	0.190		
2-Chloronaphthalene				< 0.260	0.260	< 0.270	0.270	< 0.260	0.260	< 0.260	0.260	< 0.270	0.270	< 0.270	0.270	< 0.270	0.270		
2-Chlorophenol				< 0.260	0.260	< 0.270	0.270	< 0.260	0.260	< 0.260	0.260	< 0.270	0.270	< 0.270	0.270	< 0.270	0.270		
2-Methylnaphthalene				< 0.260	0.260	< 0.270	0.270	< 0.260	0.260	< 0.260	0.260	< 0.270	0.270	< 0.270	0.270	< 0.270	0.270		
2-Methylphenol (o-cresol)	0.33	100	500	< 0.260	0.260	< 0.270	0.270	< 0.260	0.260	< 0.260	0.260	< 0.270	0.270	< 0.270	0.270	< 0.270	0.270		
2-Nitroaniline				< 0.260	0.260	< 0.270	0.270	< 0.260	0.260	< 0.260	0.260	< 0.270	0.270	< 0.270	0.270	< 0.270	0.270		
2-Nitrophenol				< 0.260	0.260	< 0.270	0.270	< 0.260	0.260	< 0.260	0.260	< 0.270	0.270	< 0.270	0.270	< 0.270	0.270		
3&4-Methylphenol (m&p-cresol)	0.33	100	500	< 0.260	0.260	< 0.270	0.270	< 0.260	0.260	< 0.260	0.260	< 0.270	0.270	< 0.270	0.270	< 0.270	0.270		
3,3'-Dichlorobenzidine				< 0.190	0.190	< 0.190	0.190	< 0.190	0.190	< 0.190	0.190	< 0.200	0.200	< 0.190	0.190	< 0.190	0.190		
3-Nitroaniline				< 0.370	0.370	< 0.380	0.380	< 0.370	0.370	< 0.370	0.370	< 0.390	0.390	< 0.380	0.380	< 0.390	0.390		
4,6-Dinitro-2-methylphenol				< 0.220	0.220	< 0.230	0.230	< 0.220	0.220	< 0.220	0.220	< 0.230	0.230	< 0.230	0.230	< 0.230	0.230		
4-Bromophenyl phenyl ether				< 0.260	0.260	< 0.270	0.270	< 0.260	0.260	< 0.260	0.260	< 0.270	0.270	< 0.270	0.270	< 0.270	0.270		
4-Chloro-3-methylphenol				< 0.260	0.260	< 0.270	0.270	< 0.260	0.260	< 0.260	0.260	< 0.270	0.270	< 0.270	0.270	< 0.270	0.270		
4-Chloroaniline				< 0.290	0.290	< 0.310	0.310	< 0.300	0.300	< 0.290	0.290	< 0.310	0.310	< 0.300	0.300	< 0.310	0.310		
4-Chlorophenyl phenyl ether				< 0.260	0.260	< 0.270	0.270	< 0.260	0.260	< 0.260	0.260	< 0.270	0.270	< 0.270	0.270	< 0.270	0.270		
4-Nitroaniline				< 0.370	0.370	< 0.380	0.380	< 0.370	0.370	< 0.370	0.370	< 0.390	0.390	< 0.380	0.380	< 0.390	0.390		
4-Nitrophenol				< 0.370	0.370	< 0.380	0.380	< 0.370	0.370	< 0.370	0.370	< 0.390	0.390	< 0.380	0.380	< 0.390	0.390		
Acenaphthene	20	100	500,000	< 0.260	0.260	< 0.270	0.270	< 0.260	0.260	< 0.260	0.260	< 0.270	0.270	< 0.270	0.270	< 0.270	0.270		
Acenaphthylene	100	100	500,000	< 0.260	0.260	< 0.270	0.270	< 0.260	0.260	< 0.260	0.260	< 0.270	0.270	< 0.270	0.270	< 0.270	0.270		
Acetophenone				< 0.260	0.260	< 0.270	0.270	< 0.260	0.260	< 0.260	0.260	< 0.270	0.270	< 0.270	0.270	< 0.270	0.270		
Aniline				< 0.290	0.290	< 0.310	0.310	< 0.300	0.300	< 0.290	0.290	< 0.310	0.310	< 0.300	0.300	< 0.310	0.310		
Anthracene	100	100	500,000	< 0.260	0.260	< 0.270	0.270	< 0.260	0.260	< 0.260	0.260	0.17	0.270	< 0.270	0.270	< 0.270	0.270		
Benzo(a)anthracene	1	1	5,600	< 0.260	0.260	< 0.270	0.270	0.42	0.260	< 0.260	0.260	0.85	0.270	< 0.270	0.270	0.46	0.270		
Benzenzine				< 0.370	0.370	< 0.380	0.380	< 0.370	0.370	< 0.370	0.370	< 0.390	0.390	< 0.380	0.380	< 0.390	0.390		
Benzo(a)pyrene	1	1	1,000	< 0.190	0.190	< 0.190	0.190	0.42	0.190	< 0.190	0.190	0.81	0.200	< 0.190	0.190	0.44	0.190		
Benzo(b)fluoranthene	1	1	5,600	< 0.260	0.260	< 0.270	0.270	0.36	0.260	< 0.260	0.260	0.61	0.270	< 0.270	0.270	0.44	0.270		
Benzo(ghi)perylene	100	100	500,000	< 0.260	0.260	< 0.270	0.270	0.27	0.260	< 0.260	0.260	0.60	0.270	< 0.270	0.270	0.30	0.270		
Benzo(k)fluoranthene	0.8	3.9	56,000	< 0.260	0.260	< 0.270	0.270	0.35	0.260	< 0.260	0.260	0.47	0.270	< 0.270	0.270	0.42	0.270		
Benzoic acid				< 1.8	1.8	< 1.9	1.9	< 1.9	1.9	< 1.8	1.8	< 2.0	2.0	< 1.9	1.9	< 1.9	1.9		
Benzyl butyl phthalate				< 0.260	0.260	< 0.270	0.270	< 0.260	0.260	< 0.260	0.260	< 0.270	0.270	< 0.270	0.270	< 0.270	0.270		
Bis(2-chloroethoxy)methane				< 0.260	0.260	< 0.270	0.270	< 0.260	0.260	< 0.260	0.260	< 0.270	0.270	< 0.270	0.270	< 0.270	0.270		
Bis(2-chloroethyl)ether				< 0.190	0.190	< 0.190	0.190	< 0.190	0.190	< 0.190	0.190	< 0.200	0.200	< 0.190	0.190	< 0.190	0.190		
Bis(2-chloroisopropyl)ether				< 0.260	0.260	< 0.270	0.270	< 0.260	0.260	< 0.260	0.260	< 0.270	0.270	< 0.270	0.270	< 0.270	0.270		
Bis(2-ethylhexyl)phthalate				< 0.260	0.260	< 0.270	0.270	< 0.260	0.260	< 0.260	0.260	< 0.270	0.270	< 0.270	0.270	< 0.270	0.270		
Carbazole				< 0.190	0.190	< 0.190	0.190	< 0.190	0.190	< 0.190	0.190	< 0.200	0.200	< 0.190	0.190	< 0.190	0.190		
Chrysene	1	3.9	56	< 0.260	0.260	< 0.270	0.270	0.46	0.260	< 0.260	0.260	1.0	0.270	< 0.270	0.270	0.52	0.270		
Dibenz(a,h)anthracene	0.33	0.33	0.56	< 0.190	0.190	< 0.190	0.190	< 0.190	0.190	< 0.190	0.190	< 0.200	0.200	< 0.190	0.190	< 0.190	0.190		
Dibenzofuran	7	59	59	< 0.260	0.260	< 0.270	0.270	< 0.260	0.260	< 0.260	0.260	< 0.270	0.270	< 0.270	0.270	< 0.270	0.270		
Diethyl phthalate				< 0.260	0.260	< 0.270	0.270	< 0.260	0.260	< 0.260	0.260	< 0.270	0.270	< 0.270	0.270	< 0.270	0.270		
Dimethylphthalate				< 0.260	0.260	< 0.270	0.270	< 0.260	0.260	< 0.260	0.260	< 0.270	0.270	< 0.270	0.270	< 0.270	0.270		
Di-n-butylphthalate				< 0.260	0.260	< 0.270	0.270	< 0.260	0.260	< 0.260	0.260	< 0.270	0.270	< 0.270	0.270	< 0.270	0.270		
Di-n-octylphthalate				< 0.260	0.260	< 0.270	0.270	< 0.260	0.260	< 0.260	0.260	< 0.270	0.270	< 0.270	0.270	< 0.270	0.270		
Fluoranthene	100	1																	

Table 4
26-22 4th Street
Queens, New York
2018 Phase II and 2019/2020 Remedial Investigation
Soil Analytical Results
Semi-Volatile Organic Compounds

COMPOUND	NYSDEC Part 375.6 Unrestricted Use Soil Cleanup Objectives	NYDEC Part 375.6 Restricted Residential Soil Cleanup Objectives*	NYDEC Part 375.6 Restricted Commercial Soil Cleanup Objectives	19B9						19B10			
				(0-2')		(8-10')		(12')		(0-2')		(8-10')	
				12/10/2019		12/10/2019		12/10/2019		12/10/2019		12/10/2019	
				mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
	mg/Kg	mg/Kg	mg/Kg	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
1,2,4,5-Tetrachlorobenzene				< 0.250	0.250	< 0.250	0.250	< 0.250	0.250	< 0.250	0.250	< 0.250	0.250
1,2,4-Trichlorobenzene				< 0.250	0.250	< 0.250	0.250	< 0.250	0.250	< 0.250	0.250	< 0.250	0.250
1,2-Dichlorobenzene				< 0.250	0.250	< 0.250	0.250	< 0.250	0.250	< 0.250	0.250	< 0.250	0.250
1,2-Diphenylhydrazine				< 0.250	0.250	< 0.250	0.250	< 0.250	0.250	< 0.250	0.250	< 0.250	0.250
1,3-Dichlorobenzene				< 0.250	0.250	< 0.250	0.250	< 0.250	0.250	< 0.250	0.250	< 0.250	0.250
1,4-Dichlorobenzene				< 0.250	0.250	< 0.250	0.250	< 0.250	0.250	< 0.250	0.250	< 0.250	0.250
				< 0.075	0.075	< 0.075	0.075	< 0.073	0.073	< 0.081	0.081	< 0.082	0.082
2,4,5-Trichlorophenol				< 0.250	0.250	< 0.250	0.250	< 0.250	0.250	< 0.250	0.250	< 0.250	0.250
2,4,6-Trichlorophenol				< 0.190	0.190	< 0.180	0.180	< 0.180	0.180	< 0.200	0.200	< 0.200	0.200
2,4-Dichlorophenol				< 0.190	0.190	< 0.180	0.180	< 0.180	0.180	< 0.200	0.200	< 0.200	0.200
2,4-Dimethylphenol				< 0.250	0.250	< 0.250	0.250	< 0.250	0.250	< 0.250	0.250	< 0.250	0.250
2,4-Dinitrophenol				< 0.250	0.250	< 0.250	0.250	< 0.250	0.250	< 0.250	0.250	< 0.250	0.250
2,4-Dinitrotoluene				< 0.190	0.190	< 0.180	0.180	< 0.180	0.180	< 0.200	0.200	< 0.200	0.200
2,6-Dinitrotoluene				< 0.190	0.190	< 0.180	0.180	< 0.180	0.180	< 0.200	0.200	< 0.200	0.200
2-Chloronaphthalene				< 0.250	0.250	< 0.250	0.250	< 0.250	0.250	< 0.250	0.250	< 0.250	0.250
2-Chlorophenol				< 0.250	0.250	< 0.250	0.250	< 0.250	0.250	< 0.250	0.250	< 0.250	0.250
2-Methylnaphthalene				< 0.250	0.250	< 0.250	0.250	< 0.250	0.250	< 0.250	0.250	< 0.250	0.250
2-Methylphenol (o-cresol)	0.33	100	500	< 0.250	0.250	< 0.250	0.250	< 0.250	0.250	< 0.250	0.250	< 0.250	0.250
2-Nitroaniline				< 0.250	0.250	< 0.250	0.250	< 0.250	0.250	< 0.250	0.250	< 0.250	0.250
2-Nitrophenol				< 0.250	0.250	< 0.250	0.250	< 0.250	0.250	< 0.250	0.250	< 0.250	0.250
3,4'-Dichlorobenzidine	0.33	100	500	< 0.250	0.250	< 0.250	0.250	< 0.250	0.250	< 0.250	0.250	< 0.250	0.250
3,4-Methylphenol (m&p-cresol)	0.33	100	500	< 0.250	0.250	< 0.250	0.250	< 0.250	0.250	< 0.250	0.250	< 0.250	0.250
3,3'-Dichlorobenzidine				< 0.190	0.190	< 0.180	0.180	< 0.180	0.180	< 0.200	0.200	< 0.200	0.200
3-Nitroaniline				< 0.380	0.380	< 0.370	0.370	< 0.360	0.360	< 0.410	0.410	< 0.400	0.400
4,6-Dinitro-2-methylphenol				< 0.230	0.230	< 0.220	0.220	< 0.220	0.220	< 0.240	0.240	< 0.240	0.240
4-Bromophenyl phenyl ether				< 0.250	0.250	< 0.250	0.250	< 0.250	0.250	< 0.250	0.250	< 0.250	0.250
4-Chloro-3-methylphenol				< 0.250	0.250	< 0.250	0.250	< 0.250	0.250	< 0.250	0.250	< 0.250	0.250
4-Chloroaniline				< 0.300	0.300	< 0.290	0.290	< 0.290	0.290	< 0.320	0.320	< 0.320	0.320
4-Chlorophenyl phenyl ether				< 0.250	0.250	< 0.250	0.250	< 0.250	0.250	< 0.250	0.250	< 0.250	0.250
4-Nitroaniline				< 0.380	0.380	< 0.370	0.370	< 0.360	0.360	< 0.410	0.410	< 0.400	0.400
4-Nitrophenol				< 0.380	0.380	< 0.370	0.370	< 0.360	0.360	< 0.410	0.410	< 0.400	0.400
Acenaphthene	20	100	500,000	< 0.250	0.250	< 0.250	0.250	< 0.250	0.250	< 0.250	0.250	< 0.250	0.250
Acenaphthylene	100	100	500,000	< 0.250	0.250	< 0.250	0.250	< 0.250	0.250	< 0.250	0.250	< 0.250	0.250
Acetophenone				< 0.250	0.250	< 0.250	0.250	< 0.250	0.250	< 0.250	0.250	< 0.250	0.250
Aniline				< 0.300	0.300	< 0.290	0.290	< 0.290	0.290	< 0.320	0.320	< 0.320	0.320
Anthracene	100	100	500,000	< 0.250	0.250	< 0.250	0.250	< 0.250	0.250	0.2	0.250	< 0.250	0.250
Benz(a)anthracene	1	1	5,600	0.15	0.250	< 0.250	0.250	< 0.250	0.250	0.83	0.250	< 0.250	0.250
Benzo(a)pyrene	1	1	1,000	0.13	0.190	< 0.180	0.180	< 0.180	0.180	0.76	0.250	< 0.250	0.250
Benzo(b)fluoranthene	1	1	5,600	< 0.250	0.250	< 0.250	0.250	< 0.250	0.250	0.70	0.250	< 0.250	0.250
Benzo(ghi)perylene	100	100	500,000	< 0.250	0.250	< 0.250	0.250	< 0.250	0.250	0.49	0.250	< 0.250	0.250
Benzo(k)fluoranthene	0.8	3.9	56,000	< 0.250	0.250	< 0.250	0.250	< 0.250	0.250	0.62	0.250	< 0.250	0.250
Benzoic acid				< 1.9	1.9	< 1.8	1.8	< 1.8	1.8	< 2.0	2.0	< 2.0	2.0
Benzyl butyl phthalate				< 0.250	0.250	< 0.250	0.250	< 0.250	0.250	< 0.250	0.250	< 0.250	0.250
Bis(2-chloroethoxy)methane				< 0.250	0.250	< 0.250	0.250	< 0.250	0.250	< 0.250	0.250	< 0.250	0.250
Bis(2-chloroethyl)ether				< 0.190	0.190	< 0.180	0.180	< 0.180	0.180	< 0.200	0.200	< 0.200	0.200
Bis(2-chloroisopropyl)ether				< 0.250	0.250	< 0.250	0.250	< 0.250	0.250	< 0.250	0.250	< 0.250	0.250
Bis(2-ethylhexyl)phthalate				< 0.250	0.250	< 0.250	0.250	< 0.250	0.250	< 0.250	0.250	< 0.250	0.250
Carbazole				< 0.190	0.190	< 0.180	0.180	< 0.180	0.180	< 0.200	0.200	< 0.200	0.200
Chrysene	1	3.9	56	0.16	0.250	< 0.250	0.250	< 0.250	0.250	0.86	0.250	< 0.250	0.250
Dibenz(a,h)anthracene	0.33	0.33	0.56	< 0.190	0.190	< 0.180	0.180	< 0.180	0.180	< 0.200	0.200	< 0.200	0.200
Dibenzofuran	7	59	59	< 0.250	0.250	< 0.250	0.250	< 0.250	0.250	< 0.250	0.250	< 0.250	0.250
Diethyl phthalate				< 0.250	0.250	< 0.250	0.250	< 0.250	0.250	< 0.250	0.250	< 0.250	0.250
Dimethylphthalate				< 0.250	0.250	< 0.250	0.250	< 0.250	0.250	< 0.250	0.250	< 0.250	0.250
Di-n-butylphthalate				< 0.250	0.250	< 0.250	0.250	< 0.250	0.250	< 0.250	0.250	< 0.250	0.250
Di-n-octylphthalate				< 0.250	0.250	< 0.250	0.250	< 0.250	0.250	< 0.250	0.250	< 0.250	0.250
Fluoranthene	100	100	500	0.27	0.250	< 0.250	0.250	< 0.250	0.250	1.8	0.250	< 0.250	0.250
Fluorene	30	100	500	< 0.250	0.250	< 0.250	0.250	< 0.250	0.250	< 0.250	0.250	< 0.250	0.250
Hexachlorobenzene				< 0.190	0.190	< 0.180	0.180	< 0.180	0.180	< 0.200	0.200	< 0.200	0.200
Hexachlorobutadiene				< 0.250	0.250	< 0.250	0.250	< 0.250	0.250	< 0.250	0.250	< 0.250	0.250
Hexachlorocyclopentadiene				< 0.250	0.250	< 0.250	0.250	< 0.250	0.250	< 0.250	0.250	< 0.250	0.250
Hexachloroethane				< 0.190	0.190	< 0.180	0.180	< 0.180	0.180	< 0.200	0.200	< 0.200	0.200
Indeno(1,2,3-cd)pyrene	0.5	0.5	5.6	< 0.250	0.250	< 0.250	0.250	< 0.250	0.250	0.56	0.250	< 0.250	0.250
Isophorone				< 0.190	0.190	< 0.180	0.180	< 0.180	0.180	< 0.200	0.200	< 0.200	0.200
Naphthalene	12	100	500	< 0.250	0.250	< 0.250	0.250	< 0.250	0.250	< 0.250	0.250	< 0.250	0.250
Nitrobenzene				< 0.190	0.190	< 0.180	0.180	< 0.180	0.180	< 0.200	0.200	< 0.200	0.200
N-Nitrosodimethylamine				< 0.250	0.250	< 0.250	0.250	< 0.250	0.250	< 0.250	0.250	< 0.250	0.250
N-Nitrosodi-n-propylamine				< 0.190	0.190	< 0.180	0.180	< 0.180	0.180	< 0.200	0.200	< 0.200	0.200
N-Nitrosodiphenylamine				< 0.250	0.250	< 0.250	0.250	< 0.250	0.250	< 0.250	0.250	< 0.250	0.250
Pentachloronitrobenzene				< 0.250	0.250	< 0.250	0.250	< 0.250	0.250	< 0.250	0.250	< 0.250	0.250
Pentachlorophenol	0.8	6.8	6.7	< 0.230	0.230	< 0.220	0.220	< 0.220	0.220	< 0.240	0.240	< 0.240	0.240
Phenanthrene	100	100	500	0.19	0.250	< 0.250	0.250	< 0.250	0.250	1.2	0.250	< 0.250	0.250
Phenol	0.33	100	500	< 0.250	0.250	< 0.250	0.250	< 0.250	0.250	< 0.250	0.250	< 0.250	0.250
Pyrene	100	100	500	0.27	0.250	< 0.250	0.250	< 0.250	0.250	1.5	0.250	< 0.250	0.250
Pyridine				< 0.250	0.250	< 0.250	0.250	< 0.250	0.250	< 0.250	0.250	< 0.250	0.250

Notes:

* - 6 NYCRR Part 375-6 Remedial Program Soil Cleanup Objectives

RL - Reporting Limit

Bold/highlighted- Indicated exceedance of the NYSDEC UUSCO Guidance Value

Bold/highlighted- Indicated exceedance of the NYSDEC RRSCO Guidance Value

Bold/highlighted- Indicated exceedance of the NYSDEC RCSCO Guidance Value

Table 5
26-22 4th Street
Queens, New York
2018 Phase II and 2019/2020 Remedial Investigation
Soil Analytical Results
Pesticides PCBs

	COMPOUND	NYSDEC Part 375.6 Unrestricted Use Soil Cleanup Objectives	NYDEC Part 375.6 Restricted Residential Soil Cleanup Objectives*	NYDEC Part 375.6 Restricted Commercial Soil Cleanup Objectives	B-1		B-1		B-3		B-4		B-6		B-7		B-9	
					(0-2')		(6-8')		(2-4')		(2-4')		(2-4')		(2-4')		(2-4')	
					9/20/2018		9/20/2018		9/20/2018		9/20/2018		9/20/2018		9/20/2018		9/20/2018	
					mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
		mg/Kg	mg/Kg	mg/Kg	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
Pesticides	4,4'-DDD	0.0033	13	92	<0.0021	0.0021	<0.002	0.002	<0.0023	0.0023	<0.002	0.0022	<0.0024	0.0024	<0.0023	0.0023	<0.0023	0.0023
	4,4'-DDE	0.0033	8.9	62	<0.0021	0.0021	<0.002	0.002	<0.0023	0.0023	<0.003	0.003	<0.0024	0.0024	0.0058	0.0023	<0.003	0.003
	4,4'-DDT	0.0033	7.9	47	<0.0021	0.0021	<0.002	0.002	<0.0023	0.0023	<0.0022	0.0022	<0.0024	0.0024	<0.003	0.003	<0.0023	0.0023
	a-BHC	0.02	0.48	3.4	<0.0071	0.0071	<0.0066	0.0066	<0.0075	0.0075	<0.0074	0.0074	<0.0079	0.0079	<0.0076	0.0076	<0.0077	0.0077
	a-Chlordane	0.09	4.2	24	<0.0036	0.0036	<0.0033	0.0033	<0.0038	0.0038	<0.0037	0.0037	<0.0039	0.0039	<0.0038	0.0038	<0.0039	0.0039
	Aldrin	0.005	0.097	0.68	<0.0036	0.0036	<0.0033	0.0033	<0.0038	0.0038	<0.0037	0.0037	<0.0039	0.0039	<0.0038	0.0038	<0.0039	0.0039
	b-BHC	0.036	0.36	3	<0.0071	0.0071	<0.0066	0.0066	<0.0075	0.0075	<0.0074	0.0074	<0.0079	0.0079	<0.0076	0.0076	<0.0077	0.0077
	Chlordane				<0.036	0.036	<0.033	0.033	<0.038	0.038	<0.037	0.037	<0.039	0.039	<0.038	0.038	<0.039	0.039
	d-BHC	0.04	100	500	<0.0071	0.0071	<0.0066	0.0066	<0.0075	0.0075	<0.0074	0.0074	<0.0079	0.0079	<0.0076	0.0076	<0.0077	0.0077
	Dieldrin	0.005	0.2	1.4	<0.0036	0.0036	<0.0033	0.0033	<0.0038	0.0038	<0.0037	0.0037	<0.0039	0.0039	<0.0038	0.0038	<0.0039	0.0039
	Endosulfan I	2.4	24	200	<0.0071	0.0071	<0.0066	0.0066	<0.0075	0.0075	<0.0074	0.0074	<0.0079	0.0079	<0.0076	0.0076	<0.0077	0.0077
	Endosulfan II	2.4	24	200	<0.0071	0.0071	<0.0066	0.0066	<0.0075	0.0075	<0.0074	0.0074	<0.0079	0.0079	<0.0076	0.0076	<0.0077	0.0077
	Endosulfan sulfate	2.4	24	200	<0.0071	0.0071	<0.0066	0.0066	<0.0075	0.0075	<0.0074	0.0074	<0.0079	0.0079	<0.0076	0.0076	<0.0077	0.0077
	Endrin	0.14	11	89	<0.0071	0.0071	<0.0066	0.0066	<0.0075	0.0075	<0.0074	0.0074	<0.0079	0.0079	<0.0076	0.0076	<0.0077	0.0077
	Endrin aldehyde				<0.0071	0.0071	<0.0066	0.0066	<0.0075	0.0075	<0.0074	0.0074	<0.0079	0.0079	<0.0076	0.0076	<0.0077	0.0077
	Endrin ketone				<0.0071	0.0071	<0.0066	0.0066	<0.0075	0.0075	<0.0074	0.0074	<0.0079	0.0079	<0.0076	0.0076	<0.0077	0.0077
	g-BHC				<0.0014	0.0014	<0.0013	0.0013	<0.0015	0.0015	<0.0015	0.0015	<0.0016	0.0016	<0.0015	0.0015	<0.0015	0.0015
	g-Chlordane				<0.0036	0.0036	<0.0033	0.0033	<0.0038	0.0038	<0.0037	0.0037	<0.0039	0.0039	<0.0038	0.0038	<0.0039	0.0039
	Heptachlor	0.04	2.1	15	<0.0071	0.0071	<0.0066	0.0066	<0.0075	0.0075	<0.0074	0.0074	<0.0079	0.0079	<0.0076	0.0076	<0.0077	0.0077
	Heptachlor epoxide				<0.0071	0.0071	<0.0066	0.0066	<0.0075	0.0075	<0.0074	0.0074	<0.0079	0.0079	<0.0076	0.0076	<0.0077	0.0077
	Methoxychlor				<0.036	0.036	<0.033	0.033	<0.038	0.038	<0.0037	0.0037	<0.039	0.039	<0.038	0.038	<0.039	0.039
	Toxaphene				<0.140	0.140	<0.130	0.130	<0.150	0.150	<0.150	0.150	<160	160	<0.150	0.150	<0.150	0.150
PCBs	PCB-1016	0.1	1	1	<0.071	0.071	<0.066	0.066	<0.075	0.075	<0.074	0.074	<0.079	0.079	<0.076	0.076	<0.077	0.077
	PCB-1221	0.1	1	1	<0.071	0.071	<0.066	0.066	<0.075	0.075	<0.074	0.074	<0.079	0.079	<0.076	0.076	<0.077	0.077
	PCB-1232	0.1	1	1	<0.071	0.071	<0.066	0.066	<0.075	0.075	<0.074	0.074	<0.079	0.079	<0.076	0.076	<0.077	0.077
	PCB-1242	0.1	1	1	<0.071	0.071	<0.066	0.066	<0.075	0.075	<0.074	0.074	<0.079	0.079	<0.076	0.076	<0.077	0.077
	PCB-1248	0.1	1	1	<0.071	0.071	<0.066	0.066	<0.075	0.075	<0.074	0.074	<0.079	0.079	<0.076	0.076	<0.077	0.077
	PCB-1254	0.1	1	1	<0.071	0.071	<0.066	0.066	<0.075	0.075	<0.074	0.074	<0.079	0.079	<0.076	0.076	0.19	0.077
	PCB-1260	0.1	1	1	<0.071	0.071	<0.066	0.066	<0.075	0.075	<0.074	0.074	<0.079	0.079	<0.076	0.076	<0.077	0.077
	PCB-1262	0.1	1	1	<0.071	0.071	<0.066	0.066	<0.075	0.075	<0.074	0.074	<0.079	0.079	<0.076	0.076	<0.077	0.077
	PCB-1268	0.1	1	1	<0.071	0.071	<0.066	0.066	<0.075	0.075	<0.074	0.074	<0.079	0.079	<0.076	0.076	<0.077	0.077

Notes:

* - 6 NYCRR Part 375-6 Remedial Program Soil Cleanup Objectives

RL - Reporting Limit

Bold/highlighted- Indicated exceedance of the NYSDEC UUSCO Guidance Value

Bold/highlighted- Indicated exceedance of the NYSDEC RRSCO Guidance Value

Bold/highlighted- Indicated exceedance of the NYSDEC RCSCO Guidance Value

Table 5
26-22 4th Street
Queens, New York
2018 Phase II and 2019/2020 Remedial Investigation
Soil Analytical Results
Pesticides PCBs

COMPOUND	NYSDEC Part 375.6 Unrestricted Use Soil Cleanup Objectives	NYDEC Part 375.6 Restricted Residential Soil Cleanup Objectives*	NYDEC Part 375.6 Restricted Commercial Soil Cleanup Objectives	19B1				19B2				19B3				19B4				
				(0-2')		(8-10')		(0-2')		(8-10')		(0-2')		(8-10')		(0-2')		(8-10')		
				12/10/2019		12/10/2019		12/10/2019		12/10/2019		12/10/2019		12/10/2019		12/10/2019		12/10/2019		
				mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		
	mg/Kg	mg/Kg	mg/Kg	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL			
Pesticides	4,4'-DDD	0.0033	13	92	< 0.0022	0.0022	< 0.0024	0.0024	0.0032	0.0022	< 0.0022	0.0022	< 0.0023	0.0023	< 0.0023	0.0023	0.0058	0.0022	0.0081	0.0024
	4,4'-DDE	0.0033	8.9	62	< 0.0022	0.0022	< 0.0024	0.0024	< 0.0022	0.0022	< 0.0022	0.0022	< 0.0023	0.0023	< 0.0023	0.0023	< 0.0022	0.0022	< 0.0024	0.0024
	4,4'-DDT	0.0033	7.9	47	< 0.0022	0.0022	< 0.0024	0.0024	0.0036	0.0022	< 0.0022	0.0022	< 0.0023	0.0023	< 0.0023	0.0023	0.0025	0.0022	< 0.0033	0.0033
	a-BHC	0.02	0.48	3.4	< 0.0075	0.0075	< 0.0081	0.0081	< 0.0073	0.0073	< 0.0072	0.0072	< 0.0075	0.0075	< 0.0077	0.0077	< 0.0073	0.0073	< 0.0079	0.0079
	a-Chlordane	0.09	4.2	24	< 0.0037	0.0037	< 0.0041	0.0041	< 0.0036	0.0036	< 0.0036	0.0036	< 0.0038	0.0038	< 0.0039	0.0039	< 0.0037	0.0037	< 0.0039	0.0039
	Aldrin	0.005	0.097	0.68	< 0.0037	0.0037	< 0.0041	0.0041	< 0.0036	0.0036	< 0.0036	0.0036	< 0.0038	0.0038	< 0.0039	0.0039	< 0.0037	0.0037	< 0.0039	0.0039
	b-BHC	0.036	0.36	3	< 0.0075	0.0075	< 0.0081	0.0081	< 0.0073	0.0073	< 0.0072	0.0072	< 0.0075	0.0075	< 0.0077	0.0077	< 0.0073	0.0073	< 0.0079	0.0079
	Chlordane				< 0.037	0.037	< 0.041	0.041	< 0.036	0.036	< 0.036	0.036	< 0.038	0.038	< 0.039	0.039	< 0.037	0.037	< 0.039	0.039
	d-BHC	0.04	100	500	< 0.0075	0.0075	< 0.0081	0.0081	< 0.0073	0.0073	< 0.0072	0.0072	< 0.0075	0.0075	< 0.0077	0.0077	< 0.0073	0.0073	< 0.0079	0.0079
	Dieldrin	0.005	0.2	1.4	< 0.0037	0.0037	< 0.0041	0.0041	< 0.0036	0.0036	< 0.0036	0.0036	< 0.0038	0.0038	< 0.0039	0.0039	< 0.0037	0.0037	< 0.0039	0.0039
	Endosulfan I	2.4	24	200	< 0.0075	0.0075	< 0.0081	0.0081	< 0.0073	0.0073	< 0.0072	0.0072	< 0.0075	0.0075	< 0.0077	0.0077	< 0.0073	0.0073	< 0.0079	0.0079
	Endosulfan II	2.4	24	200	< 0.0075	0.0075	< 0.0081	0.0081	< 0.0073	0.0073	< 0.0072	0.0072	< 0.0075	0.0075	< 0.0077	0.0077	< 0.0073	0.0073	< 0.0079	0.0079
	Endosulfan sulfate	2.4	24	200	< 0.0075	0.0075	< 0.0081	0.0081	< 0.0073	0.0073	< 0.0072	0.0072	< 0.0075	0.0075	< 0.0077	0.0077	< 0.0073	0.0073	< 0.0079	0.0079
	Endrin	0.14	11	89	< 0.0075	0.0075	< 0.0081	0.0081	< 0.0073	0.0073	< 0.0072	0.0072	< 0.0075	0.0075	< 0.0077	0.0077	< 0.0073	0.0073	< 0.0079	0.0079
	Endrin aldehyde				< 0.0075	0.0075	< 0.0081	0.0081	< 0.0073	0.0073	< 0.0072	0.0072	< 0.0075	0.0075	< 0.0077	0.0077	< 0.0073	0.0073	< 0.0079	0.0079
	Endrin ketone				< 0.0075	0.0075	< 0.0081	0.0081	< 0.0073	0.0073	< 0.0072	0.0072	< 0.0075	0.0075	< 0.0077	0.0077	< 0.0073	0.0073	< 0.0079	0.0079
	g-BHC				< 0.0015	0.0015	< 0.0016	0.0016	< 0.0015	0.0015	< 0.0014	0.0014	< 0.0015	0.0015	< 0.0015	0.0015	< 0.0015	0.0015	< 0.0016	0.0016
	g-Chlordane				< 0.0037	0.0037	< 0.0041	0.0041	< 0.0036	0.0036	< 0.0036	0.0036	< 0.0038	0.0038	< 0.0039	0.0039	< 0.0037	0.0037	< 0.0039	0.0039
	Heptachlor	0.04	2.1	15	< 0.0075	0.0075	< 0.0081	0.0081	< 0.0073	0.0073	< 0.0072	0.0072	< 0.0075	0.0075	< 0.0077	0.0077	< 0.0073	0.0073	< 0.0079	0.0079
	Heptachlor epoxide				< 0.0075	0.0075	< 0.0081	0.0081	< 0.0073	0.0073	< 0.0072	0.0072	< 0.0075	0.0075	< 0.0077	0.0077	< 0.0073	0.0073	< 0.0079	0.0079
	Methoxychlor				< 0.037	0.037	< 0.041	0.041	< 0.036	0.036	< 0.036	0.036	< 0.038	0.038	< 0.039	0.039	< 0.037	0.037	< 0.039	0.039
	Toxaphene				< 0.150	0.150	< 0.160	0.160	< 0.150	0.150	< 0.140	0.140	< 0.150	0.150	< 0.150	0.150	< 0.150	0.150	< 0.160	0.160
PCBs	PCB-1016	0.1	1	1	< 0.075	0.075	< 0.081	0.081	< 0.073	0.073	< 0.072	0.072	< 0.075	0.075	< 0.073	0.073	< 0.073	0.073	< 0.079	0.079
	PCB-1221	0.1	1	1	< 0.075	0.075	< 0.081	0.081	< 0.073	0.073	< 0.072	0.072	< 0.075	0.075	< 0.073	0.073	< 0.073	0.073	< 0.079	0.079
	PCB-1232	0.1	1	1	< 0.075	0.075	< 0.081	0.081	< 0.073	0.073	< 0.072	0.072	< 0.075	0.075	< 0.073	0.073	< 0.073	0.073	< 0.079	0.079
	PCB-1242	0.1	1	1	< 0.075	0.075	< 0.081	0.081	< 0.073	0.073	< 0.072	0.072	< 0.075	0.075	< 0.073	0.073	< 0.073	0.073	< 0.079	0.079
	PCB-1248	0.1	1	1	< 0.075	0.075	< 0.081	0.081	< 0.073	0.073	< 0.072	0.072	< 0.075	0.075	< 0.073	0.073	< 0.073	0.073	< 0.079	0.079
	PCB-1254	0.1	1	1	< 0.075	0.075	< 0.081	0.081	< 0.073	0.073	< 0.072	0.072	< 0.075	0.075	< 0.073	0.073	< 0.073	0.073	< 0.079	0.079
	PCB-1260	0.1	1	1	< 0.075	0.075	< 0.081	0.081	< 0.073	0.073	< 0.072	0.072	< 0.075	0.075	< 0.073	0.073	< 0.073	0.073	< 0.079	0.079
	PCB-1262	0.1	1	1	< 0.075	0.075	< 0.081	0.081	< 0.073	0.073	< 0.072	0.072	< 0.075	0.075	< 0.073	0.073	< 0.073	0.073	< 0.079	0.079
	PCB-1268	0.1	1	1	< 0.075	0.075	< 0.081	0.081	< 0.073	0.073	< 0.072	0.072	< 0.075	0.075	< 0.073	0.073	< 0.073	0.073	< 0.079	0.079

Notes:

* - 6 NYCRR Part 375-6 Remedial Program Soil Cleanup Objectives

RL - Reporting Limit

Bold/highlighted- Indicated exceedance of the NYSDEC UUSCO Guidance Value

Bold/highlighted- Indicated exceedance of the NYSDEC RRSO Guidance Value

Bold/highlighted- Indicated exceedance of the NYSDEC RCSCO Guidance Value

Table 5
26-22 4th Street
Queens, New York
2018 Phase II and 2019/2020 Remedial Investigation
Soil Analytical Results
Pesticides PCBs

	COMPOUND	NYSDEC Part 375.6 Unrestricted Use Soil Cleanup Objectives	NYDEC Part 375.6 Restricted Residential Soil Cleanup Objectives*	NYDEC Part 375.6 Restricted Commercial Soil Cleanup Objectives	19B5				19B6				19B7				19B8			
					(0-2')		(8-10')		(0-2')		(8-10')		(0-2')		(8-10')		(0-2')		(8-10')	
					12/10/2019		12/10/2019		12/10/2019		12/10/2019		12/10/2019		12/10/2019		12/10/2019		12/10/2019	
					mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
					Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
Pesticides	4,4'-DDD	0.0033	13	92	< 0.0022	0.0022	< 0.0023	0.0023	< 0.0022	0.0022	< 0.0022	0.0022	0.017	0.0023	< 0.0023	0.0023	0.0065	0.0024	< 0.0022	0.0022
	4,4'-DDE	0.0033	8.9	62	< 0.0022	0.0022	< 0.0023	0.0023	< 0.0022	0.0022	< 0.0022	0.0022	< 0.003	0.003	< 0.0023	0.0023	< 0.0024	0.0024	< 0.0022	0.0022
	4,4'-DDT	0.0033	7.9	47	< 0.0022	0.0022	< 0.0023	0.0023	< 0.0022	0.0022	< 0.0022	0.0022	0.0064	0.0023	< 0.0023	0.0023	0.0059	0.0024	< 0.0022	0.0022
	a-BHC	0.02	0.48	3.4	< 0.0073	0.0073	< 0.0077	0.0077	< 0.0073	0.0073	< 0.0072	0.0072	< 0.0077	0.0077	< 0.0077	0.0077	< 0.0079	0.0079	< 0.0075	0.0075
	a-Chlordane	0.09	4.2	24	< 0.0037	0.0037	< 0.0039	0.0039	< 0.0037	0.0037	< 0.0036	0.0036	< 0.0038	0.0038	< 0.0038	0.0038	< 0.0039	0.0039	< 0.0037	0.0037
	Aldrin	0.005	0.097	0.68	< 0.0037	0.0037	< 0.0039	0.0039	< 0.0037	0.0037	< 0.0036	0.0036	< 0.0038	0.0038	< 0.0038	0.0038	< 0.0039	0.0039	< 0.0037	0.0037
	b-BHC	0.036	0.36	3	< 0.0073	0.0073	< 0.0077	0.0077	< 0.0073	0.0073	< 0.0072	0.0072	< 0.0077	0.0077	< 0.0077	0.0077	< 0.0079	0.0079	< 0.0075	0.0075
	Chlordane				< 0.037	0.037	< 0.039	0.039	< 0.037	0.037	< 0.036	0.036	< 0.038	0.038	< 0.038	0.038	< 0.039	0.039	< 0.037	0.037
	d-BHC	0.04	100	500	< 0.0073	0.0073	< 0.0077	0.0077	< 0.0073	0.0073	< 0.0072	0.0072	< 0.0077	0.0077	< 0.0077	0.0077	< 0.0079	0.0079	< 0.0075	0.0075
	Dieldrin	0.005	0.2	1.4	< 0.0037	0.0037	< 0.0039	0.0039	< 0.0037	0.0037	< 0.0036	0.0036	< 0.0038	0.0038	< 0.0038	0.0038	< 0.0039	0.0039	< 0.0037	0.0037
	Endosulfan I	2.4	24	200	< 0.0073	0.0073	< 0.0077	0.0077	< 0.0073	0.0073	< 0.0072	0.0072	< 0.0077	0.0077	< 0.0077	0.0077	< 0.0079	0.0079	< 0.0075	0.0075
	Endosulfan II	2.4	24	200	< 0.0073	0.0073	< 0.0077	0.0077	< 0.0073	0.0073	< 0.0072	0.0072	< 0.0077	0.0077	< 0.0077	0.0077	< 0.0079	0.0079	< 0.0075	0.0075
	Endosulfan sulfate	2.4	24	200	< 0.0073	0.0073	< 0.0077	0.0077	< 0.0073	0.0073	< 0.0072	0.0072	< 0.0077	0.0077	< 0.0077	0.0077	< 0.0079	0.0079	< 0.0075	0.0075
	Endrin	0.14	11	89	< 0.0073	0.0073	< 0.0077	0.0077	< 0.0073	0.0073	< 0.0072	0.0072	< 0.0077	0.0077	< 0.0077	0.0077	< 0.0079	0.0079	< 0.0075	0.0075
	Endrin aldehyde				< 0.0073	0.0073	< 0.0077	0.0077	< 0.0073	0.0073	< 0.0072	0.0072	< 0.0077	0.0077	< 0.0077	0.0077	< 0.0079	0.0079	< 0.0075	0.0075
	Endrin ketone				< 0.0073	0.0073	< 0.0077	0.0077	< 0.0073	0.0073	< 0.0072	0.0072	< 0.0077	0.0077	< 0.0077	0.0077	< 0.0079	0.0079	< 0.0075	0.0075
	g-BHC				< 0.0015	0.0015	< 0.0015	0.0015	< 0.0015	0.0015	< 0.0014	0.0014	< 0.0015	0.0015	< 0.0015	0.0015	< 0.0016	0.0016	< 0.0015	0.0015
	g-Chlordane				< 0.0037	0.0037	< 0.0039	0.0039	< 0.0037	0.0037	< 0.0036	0.0036	< 0.0038	0.0038	< 0.0038	0.0038	< 0.0039	0.0039	< 0.0037	0.0037
	Heptachlor	0.04	2.1	15	< 0.0073	0.0073	< 0.0077	0.0077	< 0.0073	0.0073	< 0.0072	0.0072	< 0.0077	0.0077	< 0.0077	0.0077	< 0.0079	0.0079	< 0.0075	0.0075
	Heptachlor epoxide				< 0.0073	0.0073	< 0.0077	0.0077	< 0.0073	0.0073	< 0.0072	0.0072	< 0.0077	0.0077	< 0.0077	0.0077	< 0.0079	0.0079	< 0.0075	0.0075
	Methoxychlor				< 0.037	0.037	< 0.039	0.039	< 0.037	0.037	< 0.036	0.036	< 0.038	0.038	< 0.038	0.038	< 0.039	0.039	< 0.037	0.037
	Toxaphene				< 0.150	0.150	< 0.150	0.150	< 0.150	0.150	< 0.140	0.140	< 0.150	0.150	< 0.150	0.150	< 0.160	0.160	< 0.150	0.150
PCBs	PCB-1016	0.1	1	1	< 0.073	0.073	< 0.077	0.077	< 0.073	0.073	< 0.072	0.072	< 0.077	0.077	< 0.077	0.077	< 0.078	0.078	< 0.075	0.075
	PCB-1221	0.1	1	1	< 0.073	0.073	< 0.077	0.077	< 0.073	0.073	< 0.072	0.072	< 0.077	0.077	< 0.077	0.077	< 0.078	0.078	< 0.075	0.075
	PCB-1232	0.1	1	1	< 0.073	0.073	< 0.077	0.077	< 0.073	0.073	< 0.072	0.072	< 0.077	0.077	< 0.077	0.077	< 0.078	0.078	< 0.075	0.075
	PCB-1242	0.1	1	1	< 0.073	0.073	< 0.077	0.077	< 0.073	0.073	< 0.072	0.072	< 0.077	0.077	< 0.077	0.077	< 0.078	0.078	< 0.075	0.075
	PCB-1248	0.1	1	1	< 0.073	0.073	< 0.077	0.077	< 0.073	0.073	< 0.072	0.072	< 0.077	0.077	< 0.077	0.077	< 0.078	0.078	< 0.075	0.075
	PCB-1254	0.1	1	1	< 0.073	0.073	< 0.077	0.077	< 0.073	0.073	< 0.072	0.072	< 0.077	0.077	< 0.077	0.077	< 0.078	0.078	< 0.075	0.075
	PCB-1260	0.1	1	1	< 0.073	0.073	< 0.077	0.077	< 0.073	0.073	< 0.072	0.072	0.11	0.077	< 0.077	0.077	0.13	0.078	< 0.075	0.075
	PCB-1262	0.1	1	1	< 0.073	0.073	< 0.077	0.077	< 0.073	0.073	< 0.072	0.072	< 0.077	0.077	< 0.077	0.077	< 0.078	0.078	< 0.075	0.075
	PCB-1268	0.1	1	1	< 0.073	0.073	< 0.077	0.077	< 0.073	0.073	< 0.072	0.072	< 0.077	0.077	< 0.077	0.077	< 0.078	0.078	< 0.075	0.075

Notes:

* - 6 NYCRR Part 375-6 Remedial Program Soil Cleanup Objectives

RL - Reporting Limit

Bold/highlighted- Indicated exceedance of the NYSDEC UUSCO Guidance Value

Bold/highlighted- Indicated exceedance of the NYSDEC RRSO Guidance Value

Bold/highlighted- Indicated exceedance of the NYSDEC RCSCO Guidance Value

Table 5
26-22 4th Street
Queens, New York
2018 Phase II and 2019/2020 Remedial Investigation
Soil Analytical Results
Pesticides PCBs

	COMPOUND	NYSDEC Part 375.6 Unrestricted Use Soil Cleanup Objectives	NYDEC Part 375.6 Restricted Residential Soil Cleanup Objectives*	NYDEC Part 375.6 Restricted Commercial Soil Cleanup Objectives	19B9						19B10			
					(0-2')		(8-10')		(12')		(0-2')		(8-10')	
					12/10/2019		12/10/2019		12/10/2019		12/10/2019		12/10/2019	
					mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
					Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
Pesticides	4,4'-DDD	0.0033	13	92	< 0.0024	0.0024	< 0.0022	0.0022	< 0.0022	0.0022	< 0.0024	0.0024	< 0.0025	0.0025
	4,4'-DDE	0.0033	8.9	62	< 0.0024	0.0024	< 0.0022	0.0022	< 0.0022	0.0022	< 0.0024	0.0024	< 0.0025	0.0025
	4,4'-DDT	0.0033	7.9	47	< 0.0024	0.0024	< 0.0022	0.0022	< 0.0022	0.0022	< 0.0024	0.0024	< 0.0025	0.0025
	a-BHC	0.02	0.48	3.4	< 0.0078	0.0078	< 0.0075	0.0075	< 0.0073	0.0073	< 0.0081	0.0081	< 0.0082	0.0082
	a-Chlordane	0.09	4.2	24	< 0.0039	0.0039	< 0.0037	0.0037	< 0.0036	0.0036	< 0.004	0.004	< 0.0041	0.0041
	Aldrin	0.005	0.097	0.68	< 0.0039	0.0039	< 0.0037	0.0037	< 0.0036	0.0036	< 0.004	0.004	< 0.0041	0.0041
	b-BHC	0.036	0.36	3	< 0.0078	0.0078	< 0.0075	0.0075	< 0.0073	0.0073	< 0.0081	0.0081	< 0.0082	0.0082
	Chlordane				< 0.039	0.039	< 0.037	0.037	< 0.036	0.036	< 0.040	0.040	< 0.0041	0.0041
	d-BHC	0.04	100	500	< 0.0078	0.0078	< 0.0075	0.0075	< 0.0073	0.0073	< 0.0081	0.0081	< 0.0082	0.0082
	Dieldrin	0.005	0.2	1.4	< 0.0039	0.0039	< 0.0037	0.0037	< 0.0036	0.0036	< 0.004	0.004	< 0.0041	0.0041
	Endosulfan I	2.4	24	200	< 0.0078	0.0078	< 0.0075	0.0075	< 0.0073	0.0073	< 0.0081	0.0081	< 0.0082	0.0082
	Endosulfan II	2.4	24	200	< 0.0078	0.0078	< 0.0075	0.0075	< 0.0073	0.0073	< 0.0081	0.0081	< 0.0082	0.0082
	Endosulfan sulfate	2.4	24	200	< 0.0078	0.0078	< 0.0075	0.0075	< 0.0073	0.0073	< 0.0081	0.0081	< 0.0082	0.0082
	Endrin	0.14	11	89	< 0.0078	0.0078	< 0.0075	0.0075	< 0.0073	0.0073	< 0.0081	0.0081	< 0.0082	0.0082
	Endrin aldehyde				< 0.0078	0.0078	< 0.0075	0.0075	< 0.0073	0.0073	< 0.0081	0.0081	< 0.0082	0.0082
	Endrin ketone				< 0.0078	0.0078	< 0.0075	0.0075	< 0.0073	0.0073	< 0.0081	0.0081	< 0.0082	0.0082
	g-BHC				< 0.0016	0.0016	< 0.0015	0.0015	< 0.0015	0.0015	< 0.0016	0.0016	< 0.0016	0.0016
	g-Chlordane				< 0.0039	0.0039	< 0.0037	0.0037	< 0.0036	0.0036	< 0.004	0.004	< 0.0041	0.0041
	Heptachlor	0.04	2.1	15	< 0.0078	0.0078	< 0.0075	0.0075	< 0.0073	0.0073	< 0.0081	0.0081	< 0.0082	0.0082
	Heptachlor epoxide				< 0.0078	0.0078	< 0.0075	0.0075	< 0.0073	0.0073	< 0.0081	0.0081	< 0.0082	0.0082
PCBs	Methoxychlor				< 0.039	0.039	< 0.037	0.037	< 0.036	0.036	< 0.040	0.040	< 0.0041	0.0041
	Toxaphene				< 0.160	0.160	< 0.150	0.150	< 0.150	0.150	< 0.160	0.160	< 0.160	0.160
	PCB-1016	0.1	1	1	< 0.078	0.078	< 0.075	0.075	< 0.073	0.073	< 0.081	0.081	< 0.082	0.082
	PCB-1221	0.1	1	1	< 0.078	0.078	< 0.075	0.075	< 0.073	0.073	< 0.081	0.081	< 0.082	0.082
	PCB-1232	0.1	1	1	< 0.078	0.078	< 0.075	0.075	< 0.073	0.073	< 0.081	0.081	< 0.082	0.082
	PCB-1242	0.1	1	1	< 0.078	0.078	< 0.075	0.075	< 0.073	0.073	< 0.081	0.081	< 0.082	0.082
	PCB-1248	0.1	1	1	< 0.078	0.078	< 0.075	0.075	< 0.073	0.073	< 0.081	0.081	< 0.082	0.082
	PCB-1254	0.1	1	1	< 0.078	0.078	< 0.075	0.075	< 0.073	0.073	< 0.081	0.081	< 0.082	0.082
	PCB-1260	0.1	1	1	< 0.078	0.078	< 0.075	0.075	< 0.073	0.073	< 0.081	0.081	< 0.082	0.082
	PCB-1262	0.1	1	1	< 0.078	0.078	< 0.075	0.075	< 0.073	0.073	< 0.081	0.081	< 0.082	0.082
	PCB-1268	0.1	1	1	< 0.078	0.078	< 0.075	0.075	< 0.073	0.073	< 0.081	0.081	< 0.082	0.082

Notes:

* - 6 NYCRR Part 375-6 Remedial Program Soil Cleanup Objectives

RL - Reporting Limit

Bold/highlighted- Indicated exceedance of the NYSDEC UUSCO Guidance Value

Bold/highlighted- Indicated exceedance of the NYSDEC RRSCO Guidance Value

Bold/highlighted- Indicated exceedance of the NYSDEC RSCSO Guidance Value

Table 6
26-22 4th Street
Queens, New York
2018 Phase II and 2019/2020 Remedial Investigation
Soil Analytical Results
Metals

COMPOUND	NYSDEC Part 375.6 Unrestricted Use Soil Cleanup Objectives	NYDEC Part 375.6 Restricted Residential Soil Cleanup Objectives*	NYDEC Part 375.6 Restricted Commercial Soil Cleanup Objectives	B-1		B-1		B-3		B-4		B-6		B-7		B-9	
				(0-2')		(6-8')		(2-4')		(2-4')		(2-4')		(2-4')		(2-4')	
				9/20/2018		9/20/2018		9/20/2018		9/20/2018		9/20/2018		9/20/2018		9/20/2018	
				mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
				Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
Aluminum				-	-	-	-	-	-	-	-	-	-	-	-	-	-
Antimony				-	-	-	-	-	-	-	-	-	-	-	-	-	-
Arsenic	13	16	16	1.76	0.65	2.55	0.65	12.5	0.70	5.73	0.73	6.35	0.73	9.68	0.71	4.63	0.78
Barium	350	400	400	121	0.33	60	0.32	78	0.35	252	0.36	199	0.36	934	0.35	143	0.39
Beryllium	7.2	72	590	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cadmium	2.5	4.3	9.3	<0.33	0.33	<0.32	0.32	1.5	0.35	0.92	0.36	0.96	0.36	0.93	0.35	0.76	0.39
Calcium				-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chromium	30	180	1500	4.48	0.33	14.6	0.32	29.4	0.35	22.2	0.36	24.6	0.36	29.8	0.35	19.4	0.39
Cobalt				-	-	-	-	-	-	-	-	-	-	-	-	-	-
Copper	50	270	270	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron				-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lead	63	400	1000	22.9	0.33	27.3	0.32	257	3.5	327	3.6	300	3.6	8,430	35	173	3.9
Magnesium				-	-	-	-	-	-	-	-	-	-	-	-	-	-
Manganese	1,600	2,000	10,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mercury	0.18	0.81	2.8	<0.14	0.14	0.15	0.13	0.17	0.12	0.28	0.14	0.51	0.14	0.45	0.14	0.45	0.14
Nickel	30	310	310	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Potassium				-	-	-	-	-	-	-	-	-	-	-	-	-	-
Selenium	3.9	180	1500	<1.3	1.3	<1.3	1.3	<1.4	1.4	<1.5	1.5	<1.5	1.5	<1.4	1.4	<1.6	1.6
Silver	2	180	1500	<0.33	0.33	<0.32	0.32	<0.35	0.35	<0.36	0.36	<0.36	0.36	<0.35	0.35	<0.35	0.35
Sodium				-	-	-	-	-	-	-	-	-	-	-	-	-	-
Thallium				-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vanadium				-	-	-	-	-	-	-	-	-	-	-	-	-	-
Zinc	109	10,000	10,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:

* - 6 NYCRR Part 375-6 Remedial Program Soil Cleanup Objectives

RL - Reporting Limit

Bold/highlighted- Indicated exceedance of the NYSDEC UUSCO Guidance Value

Bold/highlighted- Indicated exceedance of the NYSDEC RRSCO Guidance Value

Bold/highlighted- Indicated exceedance of the NYSDEC RCSCO Guidance Value

Table 6
26-22 4th Street
Queens, New York
2018 Phase II and 2019/2020 Remedial Investigation
Soil Analytical Results
Metals

COMPOUND	NYSDEC Part 375.6 Unrestricted Use Soil Cleanup Objectives	NYDEC Part 375.6 Restricted Residential Soil Cleanup Objectives*	NYDEC Part 375.6 Restricted Commercial Soil Cleanup Objectives	19B1				19B2				19B3				19B4			
				(0-2')		(8-10')		(0-2')		(8-10')		(0-2')		(8-10')		(0-2')		(8-10')	
				12/10/2019		12/10/2019		12/10/2019		12/10/2019		12/10/2019		12/10/2019		12/10/2019		12/10/2019	
				mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
				Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
Aluminum				12,500	33	14,900	37	11,100	36	17,300	34	9,830	35	7,460	38	10,400	35	8,480	38
Antimony				< 3.3	3.3	< 3.7	3.7	< 3.6	3.6	< 3.4	3.4	< 3.5	3.5	< 3.8	3.8	< 3.5	3.5	< 3.8	3.8
Arsenic	13	16	16	3.91	0.67	2.37	0.74	3.89	0.71	1.44	0.68	9.64	0.69	< 0.76	0.76	4.18	0.70	< 0.76	0.76
Barium	350	400	400	106	0.7	54.4	0.7	86.3	0.7	195	0.7	370	0.7	39.4	0.8	103	0.7	55.9	0.8
Beryllium	7.2	72	590	0.6	0.27	0.42	0.30	0.49	0.28	0.54	0.27	0.47	0.28	0.2	0.31	0.46	0.28	0.27	0.31
Cadmium	2.5	4.3	9.3	0.4	0.33	0.41	0.37	0.54	0.36	< 0.34	0.34	1.06	0.35	< 0.38	0.38	0.71	0.35	0.41	0.38
Calcium				4,400	33	996	37	14,300	36	2,180	34	6,340	3.5	1,490	38	7,310	3.5	1,180	38
Chromium	30	180	1500	17.6	0.33	25.3	0.37	18.4	0.36	40.7	0.34	18.8	0.35	16.7	0.38	19.8	0.35	19.3	0.38
Cobalt				6.06	0.33	6.88	0.37	5.84	0.36	2.05	0.34	5.42	0.35	3.4	0.38	5.2	0.35	4.68	0.38
Copper	50	270	270	20.2	0.7	11.9	0.7	35.7	0.7	7.1	0.7	79.1	0.7	14.9	0.8	34.2	0.7	26.7	0.8
Iron				17,900	33	20,500	37	17,400	36	22,000	34	18,800	35	10,200	38	17,200	35	16,200	38
Lead	63	400	1000	56	0.7	8.9	0.7	93	0.7	5.8	0.7	783	6.9	8.1	0.8	169	0.7	4.1	0.8
Magnesium				3,810	33	2,930	37	8,540	36	6,310	34	3,630	3.5	2,550	38	4,250	3.5	3,870	3.8
Manganese	1,600	2,000	10,000	449	3.3	384	3.7	314	3.6	821	3.4	323	3.5	78.1	3.8	285	3.5	416	3.8
Mercury	0.18	0.81	2.8	0.43	0.07	< 0.03	0.03	0.24	0.07	< 0.07	0.07	0.83	0.07	0.17	0.03	0.35	0.07	< 0.03	0.03
Nickel	30	310	310	12.7	0.33	13.8	0.37	15.6	0.36	25	0.34	16.2	0.35	12.2	0.38	14.2	0.35	13.9	0.38
Potassium				1,370	7	918	7	1,030	7	8,070	68	1,020	7	675	8	1,290	7	1,520	8
Selenium	3.9	180	1500	< 1.3	1.3	< 1.5	1.5	< 1.4	1.4	< 1.4	1.4	< 1.4	1.4	< 1.5	1.5	< 1.4	1.4	< 1.5	1.5
Silver	2	180	1500	< 0.33	0.33	< 0.37	0.37	< 0.36	0.36	< 0.34	0.34	< 0.35	0.35	< 0.38	0.38	< 0.35	0.35	< 0.38	0.38
Sodium				449	7	251	7	528	7	290	7	214	7	139	8	159	7	250	8
Thallium				< 1.3	1.3	< 1.5	1.5	< 1.4	1.4	< 1.4	1.4	< 1.4	1.4	< 1.5	1.5	< 1.4	1.4	< 1.5	1.5
Vanadium				29.9	0.33	34	0.37	31.7	0.36	45.6	0.34	31.3	0.35	20.2	0.38	26.6	0.35	31.1	0.38
Zinc	109	10,000	10,000	64.4	0.7	47.7	0.7	128	0.7	69.6	0.7	316	0.7	31.8	0.8	175	0.7	32.9	0.8

Notes:

* - 6 NYCRR Part 375-6 Remedial Program Soil Cleanup Objectives

RL - Reporting Limit

Bold/highlighted- Indicated exceedance of the NYSDEC UUSCO Guidance Value

Bold/highlighted- Indicated exceedance of the NYSDEC RRSO Guidance Value

Bold/highlighted- Indicated exceedance of the NYSDEC RSCO Guidance Value

Table 6
26-22 4th Street
Queens, New York
2018 Phase II and 2019/2020 Remedial Investigation
Soil Analytical Results
Metals

COMPOUND	NYSDEC Part 375.6 Unrestricted Use Soil Cleanup Objectives	NYDEC Part 375.6 Restricted Residential Soil Cleanup Objectives*	NYDEC Part 375.6 Restricted Commercial Soil Cleanup Objectives	19B5				19B6				19B7				19B8			
				(0-2')		(8-10')		(0-2')		(8-10')		(0-2')		(8-10')		(0-2')		(8-10')	
				12/10/2019		12/10/2019		12/10/2019		12/10/2019		12/10/2019		12/10/2019		12/10/2019		12/10/2019	
				mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
				Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
Aluminum				9,630	33	6,600	39	9,470	36	17,000	33	8,640	37	11,400	35	5,140	36	15,500	35
Antimony				< 3.3	3.3	< 3.9	3.9	< 3.6	3.6	< 3.3	3.3	4.3	3.7	< 3.5	3.5	4.3	3.6	< 3.5	3.5
Arsenic	13	16	16	2.37	0.66	< 0.77	0.77	11.6	0.71	< 0.66	0.66	12.4	0.74	1.61	0.70	14.2	0.73	1.06	0.71
Barium	350	400	400	59.7	0.7	40.4	0.8	180	0.7	407	0.7	233	0.7	51.1	0.7	179	0.7	104	0.7
Beryllium	7.2	72	590	0.39	0.26	0.2	0.31	0.47	0.28	0.31	0.26	0.4	0.30	0.44	0.28	0.41	0.29	0.36	0.28
Cadmium	2.5	4.3	9.3	0.37	0.33	< 0.39	0.39	1.33	0.36	0.59	0.33	1.36	0.37	0.41	0.35	1.82	0.36	0.5	0.35
Calcium				12,400	33	1,290	39	7,350	36	2,820	33	14,500	37	975	35	3,000	36	1,430	35
Chromium	30	180	1500	21.7	0.33	12.3	0.39	23.9	0.36	23.5	0.33	22	0.37	23.9	0.35	17	0.36	38.5	0.35
Cobalt				4.73	0.33	2.97	0.39	5.13	0.36	4.33	0.33	7.74	0.37	6.48	0.35	5.27	0.36	5.67	0.35
Copper	50	270	270	25.8	0.7	16.4	0.8	85	0.7	41.7	0.7	83.1	0.7	19.1	0.7	73.6	0.7	34.9	0.7
Iron				15,900	33	9,300	39	20,500	36	33,000	33	29,300	37	18,600	35	32,600	36	24,700	35
Lead	63	400	1000	77.3	0.7	2.8	0.8	343	0.7	3.3	0.7	885	7.4	6.4	0.7	412	0.7	5.2	0.7
Magnesium				8,310	33	2,920	3.9	3,070	3.6	8,170	33	6,140	37	4,460	3.5	1,370	3.6	7,340	35
Manganese	1,600	2,000	10,000	224	3.3	128	0.39	300	3.6	358	3.3	370	3.7	509	3.5	126	0.36	248	3.5
Mercury	0.18	0.81	2.8	2.26	0.14	< 0.03	0.03	0.36	0.14	< 0.03	0.03	0.31	0.07	< 0.03	0.03	0.4	0.08	< 0.03	0.03
Nickel	30	310	310	14	0.33	9.63	0.39	19.2	0.36	20.2	0.33	22.2	0.37	21.4	0.35	18.4	0.36	31.7	0.35
Potassium				1,560	7	1,630	8	1,130	7	9,310	66	1,240	7	1,950	7	992	7	4,680	71
Selenium	3.9	180	1500	< 1.3	1.3	< 1.5	1.5	< 1.4	1.4	< 1.3	1.3	< 1.5	1.5	< 1.4	1.4	< 1.5	1.5	< 1.4	1.4
Silver	2	180	1500	< 0.33	0.33	< 0.39	0.39	< 0.36	0.36	< 0.33	0.33	< 0.37	0.37	< 0.35	0.35	< 0.36	0.36	< 0.35	0.35
Sodium				210	7	187	8	159	7	249	7	290	7	204	7	295	7	286	7
Thallium				< 1.3	1.3	< 1.5	1.5	< 1.4	1.4	< 1.3	1.3	< 1.5	1.5	< 1.4	1.4	< 1.5	1.5	< 1.4	1.4
Vanadium				31	0.33	15.7	0.39	32.8	0.36	65.6	0.33	34.2	0.37	30	0.35	21.2	0.36	47	0.35
Zinc	109	10,000	10,000	44.2	0.7	25.9	0.8	284	0.7	69.6	0.7	261	0.7	37.4	0.7	262	0.7	57.4	0.7

Notes:

* - 6 NYCRR Part 375-6 Remedial Program Soil Cleanup Objectives

RL - Reporting Limit

Bold/highlighted- Indicated exceedance of the NYSDEC UUSCO Guidance Value

Bold/highlighted- Indicated exceedance of the NYSDEC RRSCO Guidance Value

Bold/highlighted- Indicated exceedance of the NYSDEC RCSCO Guidance Value

Table 6
26-22 4th Street
Queens, New York
2018 Phase II and 2019/2020 Remedial Investigation
Soil Analytical Results
Metals

COMPOUND	NYSDEC Part 375.6 Unrestricted Use Soil Cleanup Objectives	NYSDEC Part 375.6 Restricted Residential Soil Cleanup Objectives*	NYSDEC Part 375.6 Restricted Commercial Soil Cleanup Objectives	19B9						19B10			
				(0-2')		(8-10')		(12')		(0-2')		(8-10')	
				12/10/2019		12/10/2019		12/10/2019		12/10/2019		12/10/2019	
				mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
				Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
Aluminum				7,490	36	11,300	36	12,800	33	8,530	39	6,770	37
Antimony				< 3.6	3.6	< 3.6	3.6	< 3.3	3.3	< 3.9	3.9	< 3.7	3.7
Arsenic	13	16	16	3.32	0.72	1.8	0.71	0.79	0.66	9.29	0.78	0.86	0.74
Barium	350	400	400	88.5	0.7	82.5	0.7	231	0.7	401	0.8	29.5	0.7
Beryllium	7.2	72	590	0.31	0.29	0.42	0.28	0.2	0.26	0.43	0.31	0.19	0.30
Cadmium	2.5	4.3	9.3	0.45	0.36	0.47	0.36	0.49	0.33	1.79	0.39	0.38	0.37
Calcium				41,000	36	1,820	3.6	2,610	33	6,480	3.9	1,650	3.7
Chromium	30	180	1500	14.6	0.36	28.6	0.36	21.3	0.33	25.8	0.39	18.6	0.37
Cobalt				3.45	0.36	6.31	0.36	4.87	0.33	5.2	0.39	4.64	0.37
Copper	50	270	270	22.3	0.7	38.8	0.7	48	0.7	97.5	0.8	29.1	0.7
Iron				12,400	36	19,700	36	25,100	33	16,700	39	13,100	37
Lead	63	400	1000	384	0.7	9.1	0.7	2.4	0.7	655	0.8	8.4	0.7
Magnesium				4,020	3.6	4,450	3.6	6,960	33	3,330	3.9	3,240	3.7
Manganese	1,600	2,000	10,000	206	3.6	269	3.6	368	3.3	230	3.9	158	3.7
Mercury	0.18	0.81	2.8	0.04	0.03	0.06	0.03	< 0.03	0.03	0.22	0.08	< 0.03	0.03
Nickel	30	310	310	12.8	0.36	21.3	0.36	20.6	0.33	16.5	0.39	15.2	0.37
Potassium				1,490	7	1,780	7	7,080	66	1,130	8	1,210	7
Selenium	3.9	180	1500	< 1.4	1.4	< 1.4	1.4	< 1.3	1.3	< 1.6	1.6	< 1.5	1.5
Silver	2	180	1500	< 0.36	0.36	< 0.36	0.36	< 0.33	0.33	< 0.39	0.39	< 0.37	0.37
Sodium				439	7	238	7	250	7	149	8	145	7
Thallium				< 1.4	1.4	< 1.4	1.4	< 1.3	1.3	< 1.6	1.6	< 1.5	1.5
Vanadium				26.3	0.36	33.5	0.36	49.7	0.33	28.8	0.39	27.7	0.37
Zinc	109	10,000	10,000	426	7.2	41.5	0.7	40.1	0.7	555	7.8	36.1	0.7

Notes:

* - 6 NYCRR Part 375-6 Remedial Program Soil Cleanup Objectives

RL - Reporting Limit

Bold/highlighted- Indicated exceedance of the NYSDEC UUSCO Guidance Value

Bold/highlighted- Indicated exceedance of the NYSDEC RRSCO Guidance Value

Bold/highlighted- Indicated exceedance of the NYSDEC RCSCO Guidance Value

Table 7
26-22 4th Street
Queens, New York
2018 Phase II and 2019/2020 Remedial Investigation
Soil Analytical Results
Emerging Contaminants

Compound	19B1				19B2				19B3				19B4			
	(0-2')		(8-10')		(0-2')		(8-10')		(0-2')		(8-10')		(0-2')		(8-10')	
	12/10/2019		12/10/2019		12/10/2019		12/10/2019		12/10/2019		12/10/2019		12/10/2019		12/10/2019	
	µg/Kg		µg/Kg		µg/Kg		µg/Kg		µg/Kg		µg/Kg		µg/Kg		µg/Kg	
	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
Perfluorobutanoic Acid (PFBA)	ND	0.979	ND	1.07	ND	1	ND	0.998	ND	1.06	ND	1.07	ND	1.19	ND	1.19
Perfluoropentanoic Acid (PFPeA)	ND	0.979	ND	1.07	ND	1	ND	0.998	ND	1.06	ND	1.07	ND	1.19	ND	1.19
Perfluorobutanesulfonic Acid (PFBS)	ND	0.979	ND	1.07	ND	1	ND	0.998	ND	1.06	ND	1.07	ND	1.19	ND	1.19
Perfluorohexanoic Acid (PFHxA)	0.083J	0.979	0.071J	1.07	ND	1	ND	0.998	ND	1.06	0.056J	1.07	ND	1.19	ND	1.19
Perfluoroheptanoic Acid (PFHpA)	ND	0.979	ND	1.07	ND	1	ND	0.998	ND	1.06	ND	1.07	ND	1.19	ND	1.19
Perfluorohexanesulfonic Acid (PFHxS)	ND	0.979	ND	1.07	ND	1	ND	0.998	ND	1.06	ND	1.07	ND	1.19	ND	1.19
Perfluorooctanoic Acid (PFOA)	0.078J	0.979	0.140J	1.07	0.376J	1	0.042J	0.998	0.060J	1.06	0.091J	1.07	ND	1.19	ND	1.19
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND	0.979	ND	1.07	ND	1	ND	0.998	ND	1.06	ND	1.07	ND	1.19	ND	1.19
Perfluoroheptanesulfonic Acid (PFHpS)	ND	0.979	ND	1.07	ND	1	ND	0.998	ND	1.06	ND	1.07	ND	1.19	ND	1.19
Perfluorononanoic Acid (PFNA)	ND	0.979	ND	1.07	ND	1	ND	0.998	ND	1.06	ND	1.07	ND	1.19	ND	1.19
Perfluorooctanesulfonic Acid (PFOS)	ND	0.979	ND	1.07	0.629J	1	ND	0.998	ND	1.06	0.214J	1.07	ND	1.19	ND	1.19
Perfluorodecanoic Acid (PFDA)	ND	0.979	ND	1.07	ND	1	ND	0.998	ND	1.06	ND	1.07	ND	1.19	ND	1.19
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND	0.979	ND	1.07	ND	1	ND	0.998	ND	1.06	ND	1.07	ND	1.19	ND	1.19
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND	0.979	ND	1.07	ND	1	ND	0.998	ND	1.06	ND	1.07	ND	1.19	ND	1.19
Perfluoroundecanoic Acid (PFUnA)	ND	0.979	ND	1.07	ND	1	ND	0.998	ND	1.06	ND	1.07	ND	1.19	ND	1.19
Perfluorodecanesulfonic Acid (PFDS)	ND	0.979	ND	1.07	ND	1	ND	0.998	ND	1.06	ND	1.07	ND	1.19	ND	1.19
Perfluorooctanesulfonamide (FOSA)	ND	0.979	ND	1.07	ND	1	ND	0.998	ND	1.06	ND	1.07	ND	1.19	ND	1.19
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	0.122J	0.979	ND	1.07	ND	1	ND	0.998	ND	1.06	ND	1.07	ND	1.19	ND	1.19
Perfluorododecanoic Acid (PFDoA)	ND	0.979	ND	1.07	ND	1	ND	0.998	ND	1.06	ND	1.07	ND	1.19	ND	1.19
Perfluorotridecanoic Acid (PFTTrDA)	ND	0.979	ND	1.07	ND	1	ND	0.998	ND	1.06	ND	1.07	ND	1.19	ND	1.19
Perfluorotetradecanoic Acid (PFTA)	ND	0.979	ND	1.07	ND	1	ND	0.998	ND	1.06	ND	1.07	ND	1.19	ND	1.19
Combined PFOA and PFOS	0.078J		0.140		1.005		0.042		0.060		0.305		ND		ND	
Combined Total Detections	0.283		0.211		1.005		0.042		0.060		0.361		ND		ND	

Notes:

DL- Detection Limit

J- The value is estimated.

ND- Not Detected

The USEPA Health Advisory Level for drinking water is 70 ng/L (ppt) for combined detections of PFOA and PFOs

Table 7
26-22 4th Street
Queens, New York
2018 Phase II and 2019/2020 Remedial Investigation
Soil Analytical Results
Emerging Contaminants

Compound	19B5				19B6				19B7			
	(0-2')		(8-10')		(0-2')		(8-10')		(0-2')		(8-10')	
	12/10/2019		12/10/2019		12/10/2019		12/10/2019		12/10/2019		12/10/2019	
	µg/Kg		µg/Kg		µg/Kg		µg/Kg		µg/Kg		µg/Kg	
	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
Perfluorobutanoic Acid (PFBA)	ND	1.37	ND	1.06	ND	1.02	ND	1.13	ND	1.09	ND	1.08
Perfluoropentanoic Acid (PFPeA)	ND	1.37	ND	1.06	ND	1.02	ND	1.13	ND	1.09	ND	1.08
Perfluorobutanesulfonic Acid (PFBS)	ND	1.37	ND	1.06	ND	1.02	ND	1.13	ND	1.09	ND	1.08
Perfluorohexanoic Acid (PFHxA)	ND	1.37	ND	1.06	ND	1.02	ND	1.13	ND	1.09	0.058J	1.08
Perfluoroheptanoic Acid (PFHpA)	ND	1.37	ND	1.06	ND	1.02	ND	1.13	ND	1.09	ND	1.08
Perfluorohexanesulfonic Acid (PFHxS)	ND	1.37	ND	1.06	ND	1.02	ND	1.13	ND	1.09	ND	1.08
Perfluorooctanoic Acid (PFOA)	ND	1.37	ND	1.06	ND	1.02	ND	1.13	ND	1.09	0.049J	1.08
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND	1.37	ND	1.06	ND	1.02	ND	1.13	ND	1.09	ND	1.08
Perfluoroheptanesulfonic Acid (PFHpS)	ND	1.37	ND	1.06	ND	1.02	ND	1.13	ND	1.09	ND	1.08
Perfluorononanoic Acid (PFNA)	ND	1.37	ND	1.06	ND	1.02	ND	1.13	ND	1.09	ND	1.08
Perfluorooctanesulfonic Acid (PFOS)	ND	1.37	ND	1.06	ND	1.02	ND	1.13	ND	1.09	ND	1.08
Perfluorodecanoic Acid (PFDA)	ND	1.37	ND	1.06	ND	1.02	ND	1.13	ND	1.09	ND	1.08
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND	1.37	ND	1.06	ND	1.02	ND	1.13	ND	1.09	ND	1.08
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND	1.37	ND	1.06	ND	1.02	ND	1.13	ND	1.09	ND	1.08
Perfluoroundecanoic Acid (PFUnA)	ND	1.37	ND	1.06	ND	1.02	ND	1.13	ND	1.09	ND	1.08
Perfluorodecanesulfonic Acid (PFDS)	ND	1.37	ND	1.06	ND	1.02	ND	1.13	ND	1.09	ND	1.08
Perfluorooctanesulfonamide (FOSA)	ND	1.37	ND	1.06	ND	1.02	ND	1.13	ND	1.09	ND	1.08
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND	1.37	0.188J	1.06	ND	1.02	ND	1.13	ND	1.09	ND	1.08
Perfluorododecanoic Acid (PFDoA)	ND	1.37	ND	1.06	ND	1.02	ND	1.13	ND	1.09	ND	1.08
Perfluorotridecanoic Acid (PFTrDA)	ND	1.37	ND	1.06	ND	1.02	ND	1.13	ND	1.09	ND	1.08
Perfluorotetradecanoic Acid (PFTA)	ND	1.37	ND	1.06	ND	1.02	ND	1.13	ND	1.09	ND	1.08
Combined PFOA and PFOS	ND		ND		ND		ND		ND		0.049	
Combined Total Detections	ND		0.188		ND		ND		ND		0.107	

Notes:

DL - Detection Limit

J- The value is estimated.

ND- Not Detected

The USEPA Health Advisory Level for drinking water is 70 ng/L (ppt) for combined detections of PFOA and PFOS

Table 7
26-22 4th Street
Queens, New York
2018 Phase II and 2019/2020 Remedial Investigation
Soil Analytical Results
Emerging Contaminants

Compound	19B8				19B9				19B10			
	(0-2')		(8-10')		(0-2')		(8-10')		(0-2')		(8-10')	
	12/10/2019		12/10/2019		12/10/2019		12/10/2019		12/10/2019		12/10/2019	
	µg/Kg		µg/Kg		µg/Kg		µg/Kg		µg/Kg		µg/Kg	
	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
Perfluorobutanoic Acid (PFBA)	ND	1.04	ND	1.11	ND	1	ND	1.09	ND	1.11	ND	1.15
Perfluoropentanoic Acid (PFPeA)	ND	1.04	ND	1.11	ND	1	ND	1.09	ND	1.11	ND	1.15
Perfluorobutanesulfonic Acid (PFBS)	ND	1.04	ND	1.11	ND	1	ND	1.09	ND	1.11	ND	1.15
Perfluorohexanoic Acid (PFHxA)	ND	1.04	ND	1.11	ND	1	ND	1.09	ND	1.11	ND	1.15
Perfluoroheptanoic Acid (PFHpA)	ND	1.04	ND	1.11	ND	1	ND	1.09	ND	1.11	ND	1.15
Perfluorohexanesulfonic Acid (PFHxS)	ND	1.04	ND	1.11	ND	1	ND	1.09	ND	1.11	ND	1.15
Perfluorooctanoic Acid (PFOA)	ND	1.04	ND	1.11	ND	1	ND	1.09	ND	1.11	ND	1.15
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND	1.04	ND	1.11	ND	1	ND	1.09	ND	1.11	ND	1.15
Perfluoroheptanesulfonic Acid (PFHpS)	ND	1.04	ND	1.11	ND	1	ND	1.09	ND	1.11	ND	1.15
Perfluorononanoic Acid (PFNA)	ND	1.04	ND	1.11	ND	1	ND	1.09	ND	1.11	ND	1.15
Perfluorooctanesulfonic Acid (PFOS)	ND	1.04	ND	1.11	ND	1	ND	1.09	ND	1.11	ND	1.15
Perfluorodecanoic Acid (PFDA)	ND	1.04	ND	1.11	ND	1	ND	1.09	ND	1.11	ND	1.15
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND	1.04	ND	1.11	ND	1	ND	1.09	ND	1.11	ND	1.15
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND	1.04	ND	1.11	ND	1	ND	1.09	ND	1.11	ND	1.15
Perfluoroundecanoic Acid (PFUnA)	ND	1.04	ND	1.11	ND	1	ND	1.09	ND	1.11	ND	1.15
Perfluorodecanesulfonic Acid (PFDS)	ND	1.04	ND	1.11	ND	1	ND	1.09	ND	1.11	ND	1.15
Perfluorooctanesulfonamide (FOSA)	ND	1.04	ND	1.11	ND	1	ND	1.09	ND	1.11	ND	11
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND	1.04	ND	1.11	ND	1	ND	1.09	ND	1.11	ND	1.15
Perfluorododecanoic Acid (PFDoA)	ND	1.04	ND	1.11	ND	1	ND	1.09	ND	1.11	ND	1.15
Perfluorotridecanoic Acid (PFTrDA)	ND	1.04	ND	1.11	ND	1	ND	1.09	ND	1.11	ND	1.15
Perfluorotetradecanoic Acid (PFTA)	ND	1.04	ND	1.11	ND	1	ND	1.09	ND	1.11	ND	1.15
Combined PFOA and PFOS	ND		ND		ND		ND		ND		ND	
Combined Total Detections	ND		ND		ND		ND		ND		ND	

Notes:

DL - Detection Limit

J- The value is estimated.

ND- Not Detected

The USEPA Health Advisory Level for drinking water is 70 ng/L (ppt) for combined detections of PFOA and PFOS

Table 8
26-22 4th Street
Queens, New York
2018 Phase II and 2019/2020 Remedial Investigation
Groundwater Analytical Results
Volatile Organic Compounds

Compound	NYSDEC Groundwater Quality Standards	Associated Phase II (2018)								EBC Remedial Investigation											
		GW-2		GW-5		GW-8		MW1		MW2		MW3				MW4		MW5		MW6	
		9/20/2018		9/20/2018		9/20/2018		12/17/2019		12/17/2019		12/17/2019		1/28/2020		12/17/2019		12/17/2019		12/17/2019	
		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L	
		Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
1,1,1,2-tetrachloroethane	5	<1.0	1	<1.0	1	<1.0	1	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
1,1,1-Trichloroethane	5	<1.0	1	<1.0	1	<1.0	1	<5.0	5.0	<5.0	5.0	<5.0	5.0	<5.0	5.0	<5.0	5.0	<5.0	5.0	<5.0	5.0
1,1,2,2-Tetrachloroethane	5	<0.50	0.5	<0.50	0.5	<0.50	0.5	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
1,1,2-Trichloroethane	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
1,1-Dichloroethane	5	<1.0	1	<1.0	1	<1.0	1	<5.0	5.0	<5.0	5.0	<5.0	5.0	<5.0	5.0	<5.0	5.0	<5.0	5.0	<5.0	5.0
1,1-Dichloroethene	5	<1.0	1	<1.0	1	<1.0	1	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
1,1-Dichloropropene	5	<1.0	1	<1.0	1	<1.0	1	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
1,2,3-Trichlorobenzene	5	<1.0	1	<1.0	1	<1.0	1	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
1,2,3-Trichloropropane	0.04	<1.0	1	<1.0	1	<1.0	1	<0.25	0.25	<0.25	0.25	<0.25	0.25	<0.25	0.25	<0.25	0.25	<0.25	0.25	<0.25	0.25
1,2,4-Trichlorobenzene	5	<1.0	1	<1.0	1	<1.0	1	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
1,2,4-Trimethylbenzene	5	<1.0	1	<1.0	1	<1.0	1	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
1,2-Dibromo-3-chloropropane	0.04	<1.0	1	<1.0	1	<1.0	1	<0.50	0.50	<0.50	0.50	<0.50	0.50	<0.50	0.50	<0.50	0.50	<0.50	0.50	<0.50	0.50
1,2-Dibromoethane	0.0006	<1.0	1	<1.0	1	<1.0	1	<0.25	0.25	<0.25	0.25	<0.25	0.25	<0.25	0.25	<0.25	0.25	<0.25	0.25	<0.25	0.25
1,2-Dichlorobenzene	5	<1.0	1	<1.0	1	<1.0	1	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
1,2-Dichloroethane	0.6	<0.60	0.6	<0.60	0.6	<0.60	0.6	<0.60	0.60	<0.60	0.60	<0.60	0.60	<0.60	0.60	<0.60	0.60	<0.60	0.60	<0.60	0.60
1,2-Dichloropropane	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
1,3,5-Trimethylbenzene	5	<1.0	1	<1.0	1	<1.0	1	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
1,3-Dichlorobenzene	3	<1.0	1	<1.0	1	<1.0	1	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
1,3-Dichloropropane	5	<1.0	1	<1.0	1	<1.0	1	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
1,4-Dichlorobenzene	5	<1.0	1	<1.0	1	<1.0	1	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
1,4-Dioxane	-	-	-	-	-	-	-	<0.20	0.20	<0.20	0.20	<0.20	0.20	-	-	<0.20	0.20	0.25	0.20	0.96	0.20
2,2-Dichloropropane	5	<1.0	1	<1.0	1	<1.0	1	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
2-Chlorotoluene	5	<1.0	1	<1.0	1	<1.0	1	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
2-Hexanone (Methyl Butyl Ketone)	50	<5.0	5	<5.0	5	<5.0	5	<2.5	2.5	<2.5	2.5	<2.5	2.5	<2.5	2.5	<2.5	2.5	<2.5	2.5	<2.5	2.5
2-Isopropyltoluene	5	<1.0	1	<1.0	1	<1.0	1	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
4-Chlorotoluene	5	<1.0	1	<1.0	1	<1.0	1	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
4-Methyl-2-Pentanone	5	<5.0	5	<5.0	5	<5.0	5	<2.5	2.5	<2.5	2.5	<2.5	2.5	<2.5	2.5	<2.5	2.5	<2.5	2.5	<2.5	2.5
Acetone	50	<25	25	<25	25	<25	25	<5.0	5.0	<5.0	5.0	<5.0	5.0	<5.0	5.0	4	5.0	<5.0	5.0	<5.0	5.0
Acrolein	5	-	-	-	-	-	-	<5.0	5.0	<5.0	5.0	<5.0	5.0	<5.0	5.0	<5.0	5.0	<5.0	5.0	<5.0	5.0
Acrylonitrile	5	<1.0	1	<1.0	1	<1.0	1	<5.0	5.0	<5.0	5.0	<5.0	5.0	<5.0	5.0	<5.0	5.0	<5.0	5.0	<5.0	5.0
Benzene	1	<0.70	0.7	<0.70	0.7	<0.70	0.7	<0.70	0.70	<0.70	0.70	<0.70	0.70	<0.70	0.70	<0.70	0.70	<0.70	0.70	<0.70	0.70
Bromobenzene	5	<1.0	1	<1.0	1	<1.0	1	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
Bromochloromethane	5	<1.0	1	<1.0	1	<1.0	1	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
Bromodichloromethane	50	<0.50	0.5	<0.50	0.5	<0.50	0.5	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
Bromoform	50	<1.0	1	<1.0	1	<1.0	1	<5.0	5.0	<5.0	5.0	<5.0	5.0	<5.0	5.0	<5.0	5.0	<5.0	5.0	<5.0	5.0
Bromomethane	5	<1.0	1	<1.0	1	<1.0	1	<5.0	5.0	<5.0	5.0	<5.0	5.0	<5.0	5.0	<5.0	5.0	<5.0	5.0	<5.0	5.0
Carbon Disulfide	5	<5.0	5	<5.0	5	<5.0	5	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
Carbon tetrachloride	5	<1.0	1	<1.0	1	<1.0	1	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
Chlorobenzene	5	<1.0	1	<1.0	1	<1.0	1	<5.0	5.0	<5.0	5.0	<5.0	5.0	<5.0	5.0	<5.0	5.0	<5.0	5.0	<5.0	5.0
Chloroethane	5	<1.0	1	<1.0	1	<1.0	1	<5.0	5.0	<5.0	5.0	<5.0	5.0	<5.0	5.0	<5.0	5.0	<5.0	5.0	<5.0	5.0
Chloroform	7	<1.0	1	<1.0	1	<1.0	1	<5.0	5.0	<5.0	5.0	<5.0	5.0	<5.0	5.0	<5.0	5.0	<5.0	5.0	<5.0	5.0
Chloromethane	5	<1.0	1	<1.0	1	<1.0	1	<5.0	5.0	<5.0	5.0	<5.0	5.0	<5.0	5.0	<5.0	5.0	<5.0	5.0	<5.0	5.0
cis-1,2-Dichloroethene	5	15	1	16	1	1.4	1	0.28	1.0	2.4	1.0	<1.0	1.0	<1.0	1.0	9.9	1.0	<1.0	1.0	0.39	1.0
cis-1,3-Dichloropropene	0.04	<0.40	0.4	<0.40	0.4	<0.40	0.4	<0.40	0.40	<0.40	0.40	<0.40	0.40	<0.40	0.40	<0.40	0.40	<0.40	0.40	<0.40	0.40
Dibromochloromethane	50	<0.50	0.5	<0.50	0.5	<0.50	0.5	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
Dibromomethane	5	<1.0	1	<1.0	1	<1.0	1	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
Dichlorodifluoromethane	5	<1.0	1	<1.0	1	<1.0	1	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
Ethylbenzene	5	<1.0	1	<1.0	1	<1.0	1	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
Hexachlorobutadiene	0.5	<0.40	0.4	<0.40	0.4	<0.40	0.4	<0.50	0.50	<0.50	0.50	<0.50	0.50	<0.50	0.50	<0.50	0.50	<0.50	0.50	<0.50	0.50
Isopropylbenzene	5	<1.0	1	<1.0	1	<1.0	1	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
m&p-Xylenes	5	<1.0	1	<1.0	1	<1.0	1	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
Methyl Ethyl Ketone (2-Butanone)	50	<5.0	5	<5.0	5	<5.0	5	<2.5	2.5	<2.5	2.5	<2.5	2.5	<2.5	2.5	<2.5	2.5	<2.5	2.5	<2.5	2.5
Methyl t-butyl ether (MTBE)																					

Table 9
26-22 4th Street
Queens, New York
2018 Phase II and 2019/2020 Remedial Investigation
Groundwater Analytical Results
Semi-Volatile Organic Compounds

Compound	NYSDEC Groundwater Quality Standards	Associated Phase II (2018)						EBC Remedial Investigation													
		GW-2		GW-5		GW-8		MW1		MW2		MW3				MW4		MW5		MW6	
		9/20/2018		9/20/2018		9/20/2018		12/17/2019		12/17/2019		12/17/2019		1/28/2020		12/17/2019		12/17/2019		12/17/2019	
		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L	
	µg/L	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
1,2,4,5-Tetrachlorobenzene		<0.47	0.47	<0.47	0.47	<0.47	0.47	<3.3	3.3	<3.3	3.3	<3.6	3.6	<3.5	3.5	<3.5	3.5	<3.6	3.6	<3.7	3.7
1,2,4-Trichlorobenzene		<4.7	4.7	<5.4	5.4	<4.8	4.8	<4.7	4.7	<4.7	4.7	<5.1	5.1	<5.0	5.0	<5.1	5.1	<5.2	5.2	<5.4	5.4
1,2-Dichlorobenzene		<2.4	2.4	<2.7	2.7	<2.4	2.4	<0.94	0.94	<0.94	0.94	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.1	1.1
1,2-Diphenylhydrazine		<4.7	4.7	<5.4	5.4	<4.8	4.8	<4.7	4.7	<4.7	4.7	<5.1	5.1	<5.0	5.0	<5.1	5.1	<5.2	5.2	<5.4	5.4
1,3-Dichlorobenzene	3	<2.4	2.4	<2.7	2.7	<2.4	2.4	<0.94	0.94	<0.94	0.94	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.1	1.1
1,4-Dichlorobenzene		<2.4	2.4	<2.7	2.7	<2.4	2.4	<0.94	0.94	<0.94	0.94	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.1	1.1
2,4-Dichlorophenol	5	<0.94	0.94	<1.1	1.1	<0.95	0.95	<0.94	0.94	<0.94	0.94	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.1	1.1
2,4-Dimethylphenol	1	<0.94	0.94	<1.1	1.1	<0.95	0.95	<0.94	0.94	<0.94	0.94	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.1	1.1
2,4-Dinitrophenol	5	<0.94	0.94	<1.1	1.1	<0.95	0.95	<0.94	0.94	<0.94	0.94	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.1	1.1
2,4-Dinitrotoluene	5	<4.7	4.7	<5.4	5.4	<4.8	4.8	<0.94	0.94	<0.94	0.94	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.1	1.1
2,4,5-Trichlorophenol	1	<0.94	0.94	<1.1	1.1	<0.95	0.95	<0.94	0.94	<0.94	0.94	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.1	1.1
2,4,6-Trichlorophenol	1	<0.94	0.94	<1.1	1.1	<0.95	0.95	<4.7	4.7	<4.7	4.7	<5.0	5.0	<5.0	5.0	<5.0	5.0	<5.0	5.0	<5.0	5.0
2,6-Dinitrotoluene	5	<4.7	4.7	<5.4	5.4	<4.8	4.8	<4.7	4.7	<4.7	4.7	<5.0	5.0	<5.0	5.0	<5.0	5.0	<5.0	5.0	<5.0	5.0
2-Chloronaphthalene	10	<4.7	4.7	<5.4	5.4	<4.8	4.8	<4.7	4.7	<4.7	4.7	<5.1	5.1	<5.0	5.0	<5.1	5.1	<5.2	5.2	<5.4	5.4
2-Chlorophenol	1	<0.94	0.94	<1.1	1.1	<0.95	0.95	<0.94	0.94	<0.94	0.94	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.1	1.1
2-Methylnaphthalene		<0.94	0.94	<0.94	0.94	<0.94	0.94	<4.7	4.7	<4.7	4.7	<5.1	5.1	<5.0	5.0	<5.1	5.1	<5.2	5.2	<5.4	5.4
2-Methylphenol (o-cresol)	1	<0.94	0.94	<1.1	1.1	<0.95	0.95	<0.94	0.94	<0.94	0.94	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.1	1.1
2-Nitroaniline	5	<4.7	4.7	<5.4	5.4	<4.8	4.8	<4.7	4.7	<4.7	4.7	<5.0	5.0	<5.0	5.0	<5.0	5.0	<5.0	5.0	<5.0	5.0
2-Nitrophenol	1	<0.94	0.94	<1.1	1.1	<0.95	0.95	<0.94	0.94	<0.94	0.94	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.1	1.1
3&4-Methylphenol (m&p-cresol)		<9.4	9.4	<11	11	<9.5	9.5	<0.94	0.94	<0.94	0.94	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.1	1.1
3,3'-Dichlorobenzidine	5	<4.7	4.7	<5.4	5.4	<4.8	4.8	<4.7	4.7	<4.7	4.7	<5.0	5.0	<5.0	5.0	<5.0	5.0	<5.0	5.0	<5.0	5.0
3-Nitroaniline	5	<4.7	4.7	<5.4	5.4	<4.8	4.8	<4.7	4.7	<4.7	4.7	<5.0	5.0	<5.0	5.0	<5.0	5.0	<5.0	5.0	<5.0	5.0
4,6-Dinitro-2-methylphenol	1	<0.94	0.94	<1.1	1.1	<0.95	0.95	<0.94	0.94	<0.94	0.94	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.1	1.1
4-Bromophenyl phenyl ether		<4.7	4.7	<5.4	5.4	<4.8	4.8	<4.7	4.7	<4.7	4.7	<5.1	5.1	<5.0	5.0	<5.1	5.1	<5.2	5.2	<5.4	5.4
4-Chloro-3-methylphenol	1	<0.94	0.94	<1.1	1.1	<0.95	0.95	<0.94	0.94	<0.94	0.94	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.1	1.1
4-Chloroaniline	5	<4.7	4.7	<5.4	5.4	<4.8	4.8	<3.3	3.3	<3.3	3.3	<3.6	3.6	<3.5	3.5	<3.5	3.5	<3.6	3.6	<3.7	3.7
4-Chlorophenyl phenyl ether		<0.94	0.94	<1.1	1.1	<0.95	0.95	<4.7	4.7	<4.7	4.7	<5.1	5.1	<5.0	5.0	<5.1	5.1	<5.2	5.2	<5.4	5.4
4-Nitroaniline	5	<4.7	4.7	<5.4	5.4	<4.8	4.8	<4.7	4.7	<4.7	4.7	<5.0	5.0	<5.0	5.0	<5.0	5.0	<5.0	5.0	<5.0	5.0
4-Nitrophenol	1	<0.94	0.94	<1.1	1.1	<0.95	0.95	<0.94	0.94	<0.94	0.94	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.1	1.1
Acenaphthene	20	<0.05	0.05	<0.05	0.05	<0.05	0.05	<4.7	4.7	<4.7	4.7	<5.1	5.1	<5.0	5.0	<5.1	5.1	<5.2	5.2	<5.4	5.4
Acenaphthylene		<0.05	0.05	<0.05	0.05	<0.05	0.05	<0.47	0.47	<0.47	0.47	<0.51	0.51	<0.50	0.50	<0.51	0.51	<0.52	0.52	<0.54	0.54
Acetophenone		<4.7	4.7	<5.4	5.4	<4.8	4.8	<4.7	4.7	<4.7	4.7	<5.1	5.1	<5.0	5.0	<5.1	5.1	<5.2	5.2	<5.4	5.4
Aniline	5	<4.7	4.7	<5.4	5.4	<4.8	4.8	<3.3	3.3	<3.3	3.3	<3.6	3.6	<3.5	3.5	<3.5	3.5	<3.6	3.6	<3.7	3.7
Anthracene	50	<0.02	0.02	<0.02	0.02	<0.02	0.02	<4.7	4.7	<4.7	4.7	<5.1	5.1	<5.0	5.0	<5.1	5.1	<5.2	5.2	<5.4	5.4
Benzo(a)anthracene	0.002	<0.02	0.02	<0.02	0.02	<0.02	0.02	<0.02	0.02	<0.02	0.02	<0.02	0.02	<0.02	0.02	<0.02	0.02	<0.02	0.02	<0.02	0.02
Benzidine	5	<4.7	4.7	<5.4	5.4	<4.8	4.8	<4.2	4.2	<4.2	4.2	<4.6	4.6	<4.5	4.5	<4.5	4.5	<4.6	4.6	<4.8	4.8
Benzo(a)pyrene		<0.02	0.02	<0.02	0.02	<0.02	0.02	<0.02	0.02	<0.02	0.02	<0.02	0.02	<0.02	0.02	<0.02	0.02	<0.02	0.02	<0.02	0.02
Benzo(b)fluoranthene	0.002	<0.02	0.02	<0.02	0.02	<0.02	0.02	<0.02	0.02	<0.02	0.02	<0.02	0.02	<0.02	0.02	<0.02	0.02	<0.02	0.02	<0.02	0.02
Benzo(g,h,i)perylene		<0.47	0.47	<0.47	0.47	<0.47	0.47	<0.47	0.47	<0.47	0.47	<0.51	0.51	<0.50	0.50	<0.51	0.51	<0.52	0.52	<0.54	0.54
Benzo(k)fluoranthene	0.002	<0.02	0.02	<0.02	0.02	<0.02	0.02	<0.02	0.02	<0.02	0.02	<0.02	0.02	<0.02	0.02	<0.02	0.02	<0.02	0.02	<0.02	0.02
Benzoic Acid		<4.7	4.7	<5.4	5.4	<4.8	4.8	<24	24	<24	24	<26	26	<25	25	<25	25	<26	26	<27	27
Butyl benzyl phthalate	50	<4.7	4.7	<5.4	5.4	<4.8	4.8	<4.7	4.7	<4.7	4.7	<5.1	5.1	<5.0	5.0	<5.1	5.1	<5.2	5.2	<5.4	5.4
Bis(2-chloroethoxy)methane	5	<4.7	4.7	<5.4	5.4	<4.8	4.8	<4.7	4.7	<4.7	4.7	<5.0	5.0	<5.0	5.0	<5.0	5.0	<5.0	5.0	<5.0	5.0
Bis(2-chloroethyl)ether	1	<0.94	0.94	<1.1	1.1	<0.95	0.95	<0.94	0.94	<0.94	0.94	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.1	1.1
Bis(2-chloroisopropyl)ether		<4.7	4.7	<5.4	5.4	<4.8	4.8	<4.7	4.7	<4.7	4.7	<5.1	5.1	<5.0	5.0	<5.1	5.1	<5.2	5.2	<5.4	5.4
Bis(2-ethylhexyl)phthalate	5	<1.5	1.5	<1.5	1.5	<1.5	1.5	<0.94	0.94	<0.94	0.94	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.1	1.1
Carbazole		<4.7	4.7	<5.4	5.4	<4.8	4.8	<4.7	4.7	<4.7	4.7	<5.1	5.1	<5.0	5.0	<5.1	5.1	<5.2	5.2	<5.4	5.4
Chrysene	0.002	<0.02	0.02	<0.02	0.02	<0.02	0.02	<0.02	0.02	<0.02	0.02	<0.02	0.02	<0.02	0.02	<0.02	0.02	<0.02	0.02	<0.02	0.02
Dibenzo(a,h)anthracene		<0.02	0.02	<0.02	0.02	<0.02	0.02	<0.47	0.47	<0.47	0.47	<0.51	0.51	<0.50	0.50	<0.51	0.51	<0.52	0.52	<0.54	0.54

Table 10
26-22 4th Street
Queens, New York
2018 Phase II and 2019/2020 Remedial Investigation
Groundwater Analytical Results
Pesticides/PCBs

	Compound	NYSDEC Groundwater Quality Standards µg/L	MW1		MW2		MW3				MW4		MW5		MW6	
			12/17/2019		12/17/2019		12/17/2019		1/28/2020		12/17/2019		12/17/2019		12/17/2019	
			µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L	
			Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
Pesticides	4,4-DDD	0.3	< 0.005	0.005	< 0.005	0.005	< 0.005	0.005	< 0.005	0.005	< 0.005	0.005	< 0.010	0.010	< 0.005	0.005
	4,4-DDE	0.2	< 0.005	0.005	< 0.005	0.005	< 0.005	0.005	< 0.005	0.005	< 0.005	0.005	< 0.005	0.005	< 0.005	0.005
	4,4-DDT	0.2	< 0.005	0.005	< 0.005	0.005	< 0.005	0.005	< 0.005	0.005	0.026	0.005	0.028	0.005	< 0.010	0.010
	a-BHC	0.01	< 0.005	0.005	< 0.005	0.005	< 0.005	0.005	< 0.005	0.005	< 0.005	0.005	< 0.005	0.005	< 0.005	0.005
	a-chlordane		< 0.010	0.010	< 0.010	0.010	< 0.010	0.010	< 0.010	0.010	< 0.010	0.010	< 0.010	0.010	< 0.010	0.010
	Alachlor	0.5	< 0.076	0.076	< 0.075	0.075	< 0.074	0.074	< 0.073	0.073	< 0.075	0.075	< 0.075	0.075	< 0.076	0.076
	Aldrin		< 0.002	0.002	< 0.002	0.002	< 0.002	0.002	< 0.002	0.002	< 0.002	0.002	< 0.002	0.002	< 0.002	0.002
	b-BHC	0.04	< 0.005	0.005	< 0.005	0.005	< 0.005	0.005	< 0.005	0.005	< 0.005	0.005	< 0.005	0.005	< 0.005	0.005
	Chlordane	0.05	< 0.020	0.020	< 0.050	0.050	< 0.050	0.050	< 0.049	0.049	< 0.050	0.050	< 0.050	0.050	< 0.020	0.020
	d-BHC	0.04	< 0.005	0.005	< 0.005	0.005	< 0.005	0.005	< 0.040	0.040	< 0.005	0.005	< 0.005	0.005	< 0.005	0.005
	Dieldrin	0.004	< 0.002	0.002	< 0.002	0.002	< 0.002	0.002	< 0.002	0.002	< 0.002	0.002	< 0.002	0.002	< 0.004	0.004
	Endosulfan I		< 0.010	0.010	< 0.010	0.010	< 0.010	0.010	< 0.010	0.010	< 0.010	0.010	< 0.010	0.010	< 0.010	0.010
	Endosulfan II		< 0.010	0.010	< 0.010	0.010	< 0.010	0.010	< 0.010	0.010	< 0.010	0.010	< 0.010	0.010	< 0.010	0.010
	Endosulfan Sulfate		< 0.010	0.010	< 0.010	0.010	< 0.010	0.010	< 0.010	0.010	< 0.010	0.010	< 0.010	0.010	< 0.010	0.010
	Endrin		< 0.005	0.005	< 0.010	0.010	< 0.010	0.010	< 0.010	0.010	< 0.010	0.010	< 0.010	0.010	< 0.005	0.005
	Endrin aldehyde	5	< 0.010	0.010	< 0.010	0.010	< 0.010	0.010	< 0.010	0.010	< 0.010	0.010	< 0.010	0.010	< 0.010	0.010
	Endrin ketone	5	< 0.010	0.010	< 0.010	0.010	< 0.010	0.010	< 0.010	0.010	< 0.010	0.010	< 0.010	0.010	< 0.010	0.010
	gamma-BHC	0.05	< 0.005	0.005	< 0.005	0.005	< 0.005	0.005	< 0.005	0.005	< 0.005	0.005	< 0.005	0.005	< 0.005	0.005
	g-chlordane		< 0.010	0.010	< 0.010	0.010	< 0.010	0.010	< 0.010	0.010	< 0.010	0.010	< 0.010	0.010	< 0.010	0.010
	Heptachlor	0.04	< 0.005	0.005	< 0.010	0.010	< 0.010	0.010	< 0.010	0.010	< 0.010	0.010	< 0.010	0.010	< 0.005	0.005
	Heptachlor epoxide	0.03	< 0.005	0.005	< 0.010	0.010	< 0.010	0.010	< 0.010	0.010	< 0.010	0.010	< 0.010	0.010	< 0.005	0.005
PCBs	Methoxychlor	35	< 0.10	0.10	< 0.10	0.10	< 0.099	0.099	< 0.097	0.097	< 0.10	0.10	< 0.10	0.10	< 0.10	0.10
	Toxaphene	0.06	< 0.20	0.20	< 0.20	0.20	< 0.20	0.20	< 0.19	0.19	< 0.20	0.20	< 0.20	0.20	< 0.20	0.20
	PCB-1016	0.09	< 0.051	0.051	< 0.050	0.050	< 0.050	0.050	< 0.049	0.049	< 0.050	0.050	< 0.050	0.050	< 0.051	0.051
	PCB-1221	0.09	< 0.051	0.051	< 0.050	0.050	< 0.050	0.050	< 0.049	0.049	< 0.050	0.050	< 0.050	0.050	< 0.051	0.051
	PCB-1232	0.09	< 0.051	0.051	< 0.050	0.050	< 0.050	0.050	< 0.049	0.049	< 0.050	0.050	< 0.050	0.050	< 0.051	0.051
	PCB-1242	0.09	< 0.051	0.051	< 0.050	0.050	< 0.050	0.050	< 0.049	0.049	< 0.050	0.050	< 0.050	0.050	< 0.051	0.051
	PCB-1248	0.09	< 0.051	0.051	< 0.050	0.050	< 0.050	0.050	< 0.049	0.049	< 0.050	0.050	< 0.050	0.050	< 0.051	0.051
	PCB-1254	0.09	< 0.051	0.051	< 0.050	0.050	< 0.050	0.050	< 0.049	0.049	< 0.050	0.050	< 0.050	0.050	< 0.051	0.051
	PCB-1260	0.09	< 0.051	0.051	< 0.050	0.050	< 0.050	0.050	< 0.049	0.049	< 0.050	0.050	< 0.050	0.050	< 0.051	0.051
	PCB-1262		< 0.051	0.051	< 0.050	0.050	< 0.050	0.050	< 0.049	0.049	< 0.050	0.050	< 0.050	0.050	< 0.051	0.051
	PCB-1268		< 0.051	0.051	< 0.050	0.050	< 0.050	0.050	< 0.049	0.049	< 0.050	0.050	< 0.050	0.050	< 0.051	0.051

Notes:

RL - Reporting Limit

Bold/highlighted- Indicated exceedance of the NYSDEC Groundwater Standard

Table 11
26-22 4th Street
Queens, New York
2018 Phase II and 2019/2020 Remedial Investigation
Groundwater Analytical Results
TAL Metals

Compound	NYSDEC Groundwater Quality Standards	MW1		MW2		MW3				MW4		MW5		MW6	
		12/17/2019		12/17/2019		12/17/2019		1/28/2020		12/17/2019		12/17/2019		12/17/2019	
		mg/L		mg/L		mg/L		mg/L		mg/L		mg/L		mg/L	
		Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
Aluminum	0.1	1.25	0.025	8.31	0.025	1.09	0.025	12.8	0.020	1.53	0.025	0.896	0.025	1.01	0.025
Antimony	0.003	< 0.0030	0.0030	< 0.0030	0.0030	< 0.0030	0.0030	< 0.0030	0.0030	< 0.0030	0.0030	< 0.0030	0.0030	< 0.0030	0.0030
Arsenic	0.025	< 0.004	0.004	0.003	0.004	< 0.004	0.004	< 0.004	0.004	< 0.004	0.004	< 0.004	0.004	< 0.004	0.004
Barium	1	0.022	0.010	0.157	0.010	0.151	0.010	0.224	0.010	0.193	0.010	0.221	0.010	0.127	0.010
Beryllium	0.003	< 0.001	0.001	< 0.001	0.001	< 0.001	0.001	< 0.001	0.001	< 0.001	0.001	< 0.001	0.001	< 0.001	0.001
Cadmium	0.005	< 0.004	0.004	< 0.004	0.004	< 0.004	0.004	< 0.004	0.004	< 0.004	0.004	< 0.004	0.004	< 0.004	0.004
Calcium		21.9	0.010	202	0.10	144	0.010	131	0.010	151	0.10	119	0.010	54.7	0.010
Chromium	0.05	< 0.003	0.003	0.015	0.003	< 0.003	0.003	0.016	0.001	0.004	0.003	< 0.003	0.003	< 0.003	0.003
Cobalt		< 0.005	0.005	0.006	0.005	< 0.005	0.005	0.007	0.005	0.003	0.005	0.005	0.005	0.005	0.005
Copper	0.2	0.006	0.005	0.048	0.005	0.005	0.005	0.026	0.005	0.007	0.005	0.005	0.005	0.007	0.005
Iron	0.3	1.19	0.01	15.8	0.01	1.24	0.01	12.4	0.01	2.24	0.01	1.29	0.01	1.5	0.01
Lead	0.025	0.003	0.002	0.084	0.002	< 0.002	0.002	0.025	0.002	< 0.002	0.002	< 0.002	0.002	0.002	0.002
Magnesium	35	3.55	0.010	29.9	0.010	25.6	0.010	33.3	0.010	31.2	0.010	20.5	0.010	10.9	0.010
Manganese	0.3	0.278	0.005	1.07	0.005	0.68	0.005	1.04	0.005	1.94	0.005	0.721	0.005	1.47	0.005
Mercury	0.0007	< 0.0002	0.0002	0.0003	0.0002	< 0.0002	0.0002	< 0.0002	0.0002	< 0.0002	0.0002	< 0.0002	0.0002	< 0.0002	0.0002
Nickel	0.1	0.002	0.004	0.013	0.004	0.002	0.004	0.014	0.004	0.005	0.004	0.008	0.004	0.005	0.004
Potassium		4.4	0.1	7.3	0.1	9.8	0.1	10.8	0.1	13.6	0.1	16.7	0.1	9.4	0.1
Selenium	0.01	< 0.010	0.010	0.014	0.010	< 0.010	0.010	< 0.010	0.010	< 0.010	0.010	0.016	0.010	< 0.010	0.010
Silver	0.05	< 0.005	0.005	< 0.005	0.005	< 0.005	0.005	< 0.005	0.005	< 0.005	0.005	< 0.005	0.005	< 0.005	0.005
Sodium	20	14.6	0.10	46.7	0.10	209	1.0	211	1.0	112	1.0	97.8	1.0	143	1.0
Thallium	0.0005	< 0.0005	0.0005	< 0.0005	0.0005	< 0.0005	0.0005	< 0.0005	0.0005	< 0.0005	0.0005	< 0.0005	0.0005	< 0.0005	0.0005
Vanadium		0.005	0.010	0.024	0.010	0.004	0.010	0.021	0.010	0.006	0.010	0.003	0.010	0.005	0.010
Zinc	5	0.008	0.010	0.127	0.010	0.006	0.010	0.042	0.010	0.008	0.010	0.009	0.010	0.008	0.010

Notes:

RL - Reporting Limit

Bold/highlighted- Indicated exceedance of the NYSDEC Groundwater Standard

Table 12
26-22 4th Street
Queens, New York
2018 Phase II and 2019/2020 Remedial Investigation
Groundwater Analytical Results
TAL Filtered Metals

Compound	NYSDEC Groundwater Quality Standards	Associated Phase II (2018)						EBC Remedial Investigation											
		GW-2		GW-5		GW-8		MW1		MW2		MW3		MW4		MW5		MW6	
		9/20/2018		9/20/2018		9/20/2018		1/28/2020		1/28/2020		1/28/2020		1/28/2020		1/28/2020		1/28/2020	
		mg/L		mg/L		mg/L		mg/L		mg/L		mg/L		mg/L		mg/L		mg/L	
		Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
Aluminum (Dissolved)	0.1	-	-	-	-	-	-	0.047	0.011	0.056	0.011	0.046	0.011	0.044	0.011	0.049	0.011	0.04	0.011
Antimony (Dissolved)-LDL	0.003	-	-	-	-	-	-	< 0.0010	0.0010	< 0.0010	0.0010	< 0.0010	0.0010	< 0.0010	0.0010	< 0.0010	0.0010	< 0.0010	0.0010
Arsenic, (Dissolved)	0.025	< 0.004	0.004	<0.004	0.004	<0.004	0.004	< 0.003	0.003	< 0.003	0.003	< 0.003	0.003	< 0.003	0.003	< 0.003	0.003	< 0.003	0.003
Barium (Dissolved)	1	0.125	0.002	0.519	0.002	0.071	0.002	0.139	0.011	0.137	0.011	0.136	0.011	0.135	0.011	0.136	0.011	0.134	0.011
Beryllium (Dissolved)	0.003	-	-	-	-	-	-	< 0.001	0.001	< 0.001	0.001	< 0.001	0.001	< 0.001	0.001	< 0.001	0.001	< 0.001	0.001
Cadmium (Dissolved)	0.005	<0.001	0.001	<0.001	0.001	<0.001	0.001	< 0.004	0.004	< 0.004	0.004	< 0.004	0.004	< 0.004	0.004	< 0.004	0.004	< 0.004	0.004
Calcium (Dissolved)		-	-	-	-	-	-	130	0.01	129	0.01	128	0.01	128	0.01	128	0.01	126	0.01
Chromium (Dissolved)	0.05	<0.001	0.001	<0.001	0.001	<0.001	0.001	< 0.001	0.001	< 0.001	0.001	< 0.001	0.001	< 0.001	0.001	< 0.001	0.001	< 0.001	0.001
Cobalt, (Dissolved)		-	-	-	-	-	-	< 0.005	0.005	< 0.005	0.005	< 0.005	0.005	< 0.005	0.005	< 0.005	0.005	< 0.005	0.005
Copper, (Dissolved)	0.2	-	-	-	-	-	-	< 0.005	0.005	< 0.005	0.005	< 0.005	0.005	< 0.005	0.005	< 0.005	0.005	< 0.005	0.005
Iron, (Dissolved)	0.3	-	-	-	-	-	-	< 0.01	0.01	< 0.01	0.01	< 0.01	0.01	< 0.01	0.01	< 0.01	0.01	< 0.01	0.01
Lead (Dissolved)	0.025	<0.002	0.002	<0.002	0.002	<0.002	0.002	< 0.002	0.002	< 0.002	0.002	< 0.002	0.002	< 0.002	0.002	< 0.002	0.002	< 0.002	0.002
Magnesium (Dissolved)	35	-	-	-	-	-	-	29.6	0.01	28.8	0.01	27.9	0.01	27.8	0.01	28.9	0.01	28.4	0.01
Manganese, (Dissolved)	0.3	-	-	-	-	-	-	0.447	0.005	0.446	0.005	0.447	0.005	0.455	0.005	0.444	0.005	0.43	0.005
Mercury (Dissolved)	0.0007	<0.0002	0.0002	<0.0002	0.0002	<0.0002	0.0002	< 0.0002	0.0002	< 0.0002	0.0002	< 0.0002	0.0002	< 0.0002	0.0002	< 0.0002	0.0002	< 0.0002	0.0002
Nickel, (Dissolved)	0.1	-	-	-	-	-	-	< 0.004	0.004	< 0.004	0.004	< 0.004	0.004	< 0.004	0.004	< 0.004	0.004	< 0.004	0.004
Potassium (Dissolved)		-	-	-	-	-	-	9.3	0.1	9.2	0.1	9.1	0.1	8.7	0.1	8.9	0.1	8.7	0.1
Selenium (Dissolved)-LDL	0.01	<0.02	0.02	<0.02	0.02	<0.02	0.02	< 0.010	0.010	< 0.010	0.010	< 0.010	0.010	< 0.010	0.010	< 0.010	0.010	< 0.010	0.010
Silver (Dissolved)	0.05	<0.005	0.005	<0.005	0.005	<0.005	0.005	< 0.005	0.005	< 0.005	0.005	< 0.005	0.005	< 0.005	0.005	< 0.005	0.005	< 0.005	0.005
Sodium (Dissolved)	20	-	-	-	-	-	-	179	1.1	197	1.1	199	1.1	188	1.1	196	1.1	188	1.1
Thallium (Dissolved)	0.0005	-	-	-	-	-	-	< 0.0003	0.0003	< 0.0003	0.0003	< 0.0003	0.0003	< 0.0003	0.0003	< 0.0003	0.0003	< 0.0003	0.0003
Vanadium, (Dissolved)		-	-	-	-	-	-	< 0.011	0.011	< 0.011	0.011	< 0.011	0.011	< 0.011	0.011	< 0.011	0.011	< 0.011	0.011
Zinc, (Dissolved)	5	-	-	-	-	-	-	< 0.011	0.011	< 0.011	0.011	< 0.011	0.011	< 0.011	0.011	< 0.011	0.011	< 0.011	0.011

Notes:

RL - Reporting Limit

Bold/highlighted- Indicated exceedance of the NYSDEC Groundwater Standard

Table 13
26-22 4th Street
Queens, New York
2018 Phase II and 2019/2020 Remedial Investigation
Groundwater Analytical Results
Emerging Contaminants

Compound	MW1		MW2		MW3		MW4		MW5		MW6	
	12/17/2019		12/17/2019		12/17/2019		12/17/2019		12/17/2019		12/17/2019	
	ng/L		ng/L		ng/L		ng/L		ng/L		ng/L	
	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
Perfluorobutanoic Acid (PFBA)	2.28	1.96	15.4	2.04	8.66	1.99	18.8	1.87	5.41	2	9.55	1.86
Perfluoropentanoic Acid (PFPeA)	3.36	1.96	16.7	2.04	17.4	1.99	24.4	1.87	8.68	2	8.03	1.86
Perfluorobutanesulfonic Acid (PFBS)	5.12	1.96	10.9	2.04	3.65	1.99	7.32	1.87	9.42	2	3.94	1.86
Perfluorohexanoic Acid (PFHxA)	2.91	1.96	15.3	2.04	14.8	1.99	19.3	1.87	9.98	2	11.5	1.86
Perfluoroheptanoic Acid (PFHpA)	1.24J	1.96	12.6	2.04	11.2	1.99	14.2	1.87	4.26	2	6.19	1.86
Perfluorohexanesulfonic Acid (PFHxS)	0.776J	1.96	9.2	2.04	6.23	1.99	5.72	1.87	0.912J	2	2.09	1.86
Perfluorooctanoic Acid (PFOA)	2.45	1.96	64.3	2.04	42.8	1.99	58.6	1.87	16.1	2	29.7	1.86
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND	1.96	ND	2.04	ND	1.99	ND	1.87	2.54	2	ND	1.86
Perfluoroheptanesulfonic Acid (PFHpS)	ND	1.96	ND	2.04	ND	1.99	ND	1.87	ND	2	ND	1.86
Perfluorononanoic Acid (PFNA)	1.07J	1.96	2.52	2.04	2.89	1.99	4.5	1.87	1.47J	2	6.33	1.86
Perfluorooctanesulfonic Acid (PFOS)	12.6	1.96	20.7	2.04	19.5	1.99	31.5	1.87	4.01	2	51.4	1.86
Perfluorodecanoic Acid (PFDA)	1.64J	1.96	0.584J	2.04	0.382J	1.99	0.464J	1.87	0.516J	2	3.43	1.86
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND	1.96	ND	2.04	ND	1.99	ND	1.87	ND	2	ND	1.86
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND	1.96	0.718J	2.04	ND	1.99	ND	1.87	ND	2	ND	1.86
Perfluoroundecanoic Acid (PFUnA)	0.412J	1.96	ND	2.04	ND	1.99	ND	1.87	ND	2	0.552J	1.86
Perfluorodecanesulfonic Acid (PFDS)	ND	1.96	ND	2.04	ND	1.99	ND	1.87	ND	2	ND	1.86
Perfluorooctanesulfonamide (FOSA)	ND	1.96	ND	2.04	ND	1.99	ND	1.87	ND	2	ND	1.86
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND	1.96	ND	2.04	0.932J	1.99	ND	1.87	ND	2	1.27J	1.86
Perfluorododecanoic Acid (PFDoA)	ND	1.96	ND	2.04	ND	1.99	ND	1.87	ND	2	ND	1.86
Perfluorotridecanoic Acid (PFTrDA)	ND	1.96	ND	2.04	ND	1.99	ND	1.87	ND	2	ND	1.86
Perfluorotetradecanoic Acid (PFTA)	ND	1.96	ND	2.04	ND	1.99	ND	1.87	ND	2	ND	1.86
Combined PFOA and PFOS	15.1		85		62.3		90.1		20.1		81.1	
Combined Total Detections	33.858		168.922		128.444		184.804		63.298		133.982	

Notes:

DL- Detection Limit

J- The value is estimated.

ND- Not Detected

The USEPA Health Advisory Level for drinking water is 70 ng/L (ppt) for combined detections of PFOA and PFOS

Table 14
26-22 4th Street
Queens, New York
2018 Phase II and 2019/2020 Remedial Investigation
Soil Gas - Volatile Organic Compounds

COMPOUNDS	NYSDOH Maximum Sub-Slab Value	NYSDOH Soil Outdoor Background Levels	SS1		SS2		SS3		SS4		SS5		SS6		SS7		SS8		
			12/11/2019		12/11/2019		12/11/2019		12/11/2019		12/11/2019		12/11/2019		12/11/2019		12/11/2019		
			µg/m³		µg/m³		µg/m³		µg/m³		µg/m³		µg/m³		µg/m³		µg/m³		
			Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	
1,1,1,2-Tetrachloroethane	100	<2.0 - 2.8	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	
1,1,1-Trichloroethane			<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	
1,1,2,2-Tetrachloroethane			<1.5	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00
1,1,2-Trichloroethane			<1.0	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00
1,1-Dichloroethane			<1.0	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00
1,1-Dichloroethene			<1.0	<0.20	0.20	0.37	0.20	<0.20	0.20	3.58	0.20	<0.20	0.20	<0.20	0.20	<0.20	0.20	<0.20	0.20
1,2,4-Trichlorobenzene			NA	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00
1,2,4-Trimethylbenzene			<1.0	1.07	1.00	1.11	1.00	2.33	1.00	1.91	1.00	2	1.00	1.68	1.00	1.65	1.00	1.37	1.00
1,2-Dibromoethane			<1.5	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00
1,2-Dichlorobenzene			<2.0	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00
1,2-Dichloroethane	<1.0	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00		
1,2-Dichloropropane		<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00		
1,2-Dichlorotetrafluoroethane		<1.00	1.00	2.61	1.00	5.09	1.00	<1.00	1.00	<1.00	1.00	17.8	1.00	2.12	1.00	<1.00	1.00		
1,3,5-Trimethylbenzene		<1.0	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	
1,3-Butadiene		NA	<1.00	1.00	1.19	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	
1,3-Dichlorobenzene		<2.0	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	
1,4-Dichlorobenzene		NA	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	
1,4-Dioxane			<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	
2-Hexanone			<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	
4-Ethyltoluene		NA	1.27	1.00	1.33	1.00	2.5	1.00	1.72	1.00	1.97	1.00	1.49	1.00	1.37	1.00	1.47	1.00	
4-Isopropyltoluene			<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	
4-Methyl-2-pentanone			1.2	1.00	1.24	1.00	1.61	1.00	2.75	1.00	2.8	1.00	4.3	1.00	2.04	1.00	1.76	1.00	
Acetone		NA	38.2	1.00	54.6	1.00	38.7	1.00	42.3	1.00	83.1	1.00	39.9	1.00	33.7	1.00	42.5	1.00	
Acrylonitrile			<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	
Benzene		<1.6 - 4.7	1.18	1.00	1.85	1.00	4.18	1.00	3	1.00	1.76	1.00	3.93	1.00	2.96	1.00	1.9	1.00	
Benzyl Chloride		NA	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	
Bromodichloromethane		<5.0	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	
Bromoform		<1.0	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	
Bromomethane		<1.0	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	
Carbon Disulfide		NA	1.43	1.00	12.4	1.00	10.1	1.00	36.4	1.00	2.23	1.00	4.89	1.00	31.4	1.00	11.6	1.00	
Carbon Tetrachloride	5	<3.1	0.37	0.20	0.4	0.20	0.46	0.20	0.22	0.20	0.25	0.20	0.25	0.20	0.29	0.20	0.21	0.20	
Chlorobenzene		<2.0	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	
Chloroethane		NA	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	
Chloroform		<2.4	<1.00	1.00	6.78	1.00	26.2	1.00	2.7	1.00	2.74	1.00	<1.00	1.00	7.27	1.00	<1.00	1.00	
Chloromethane		<1.0 - 1.4	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	
cis-1,2-Dichloroethene		<1.0	<0.20	0.20	18.7	0.20	5.67	0.20	201	1.00	<0.20	0.20	<0.20	0.20	0.66	0.20	<0.20	0.20	
cis-1,3-Dichloropropene		NA	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	
Cyclohexane		NA	<1.00	1.00	<1.00	1.00	1.09	1.00	8.19	1.00	1.51	1.00	<1.00	1.00	8.7	1.00	<1.00	1.00	
Dibromochloromethane		<5.0	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	
Dichlorodifluoromethane		NA		1.63	1.00	1.31	1.00	2.2	1.00	1.27	1.00	4.73	1.00	4.37	1.00	2.47	1.00	2.24	1.00
Ethanol			42.4	1.00	56.9	1.00	38.6	1.00	40.5	1.00	60.6	1.00	30.5	1.00	47.1	1.00	42.2	1.00	
Ethyl Acetate		NA	1.71	1.00	1.89	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	
Ethylbenzene		<4.3	<1.00	1.00	<1.00	1.00	1.97	1.00	1.23	1.00	1.54	1.00	1.39	1.00	1.43	1.00	1.22	1.00	
Heptane		NA	<1.00	1.00	1.31	1.00	11.8	1.00	6.64	1.00	1.08	1.00	5.2	1.00	3.25	1.00	43.8	1.00	
Hexachlorobutadiene		NA	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	
Hexane		<1.5	6.87	1.00	7.71	1.00	23	1.00	21.1	1.00	2.04	1.00	19.4	1.00	9.72	1.00	99.7	1.00	
Isopropylalcohol		NA	1.86	1.00	2.85	1.00	1.65	1.00	4.1	1.00	3.37	1.00	<1.00	1.00	2.75	1.00	1.37	1.00	
Isopropylbenzene			<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	
Xylene (m&p)		<4.3	3.05	1.00	2.84	1.00	8.59	1.00	4.04	1.00	5.34	1.00	4.6	1.00	4.73	1.00	4.18	1.00	
Methyl Ethyl Ketone			5.81	1.00	8.78	1.00	7.25	1.00	10.9	1.00	15.1	1.00	5.81	1.00	9.02	1.00	7.6	1.00	
MTBE		NA	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	
Methylene Chloride		<3.4	4.2	3.00	<3.00	3.00	5.24	3.00	<3.00	3.00	<3.00	3.00	<3.00	3.00	<3.00	3.00	<3.00	3.00	
n-Butylbenzene			<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	
Xylene (o)		<4.3	1.37	1.00	1.28	1.00	3.84	1.00	1.88	1.00	2.53	1.00	1.89	1.00	1.89	1.00	1.9	1.00	
Propylene		NA	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	
sec-Butylbenzene			<1.00	1.00	<1.00	1.00	<1.00	1.00	2.13	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	
Styrene		<1.0	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	<1.00	1.00	
Tetrachloroethene	30		9.9	0.25	247	0.25	344	1.25	1										

Table 15
26-22 4th Street
Queens, New York
Remaining Remedial Investigation Soil Sample Exceedences
Parameters Detected Above Track 1 Soil Cleanup Objectives

COMPOUND	Range in Exceedances	Frequency of Detection	B-1	B-3	B-4	B-6	B-7	B-9	19B1	19B2		19B3	19B4		19B5	19B6		19B7	19B8		19B9	19B10
			(6-8') 9/20/2018	(2-4') 9/20/2018	(2-4') 9/20/2018	(2-4') 9/20/2018	(2-4') 9/20/2018	(2-4') 9/20/2018	(0-2') 12/10/2019	(0-2') 12/10/2019	(8-10') 12/10/2019	(0-2') 12/10/2019	(0-2') 12/10/2019	(8-10') 12/10/2019	(0-2') 12/10/2019	(0-2') 12/10/2019	(8-10') 12/10/2019	(0-2') 12/10/2019	(0-2') 12/10/2019	(8-10') 12/10/2019	(0-2') 12/10/2019	(0-2') 12/10/2019
Sample Results in µg/kg																						
Acetone	0.73-0.079	3	-	0.79	-	-	-	-	-	-	-	-	0.091	-	-	-	0.073	-	-	-	-	-
Cis-1,2-dichloroethene	0.32	1	-	-	-	-	0.32	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Tetrachloroethene	1.4 - 5.6	6	-	2.7	2.9	2.3	5.0	-	-	-	-	5.6	-	-	-	-	-	-	1.4	-	-	
Trichloroethene	1.4	1	-	-	-	-	1.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Sample Results in µg/kg																						
Benz(a)anthracene	2.2-9.4	4	-	-	3.7	3.2	2.2	9.4	-	-	-	-	-	-	-	-	-	-	-	-	-	
Benzo(a)pyrene	2.0-8.9	4	-	-	3.3	2.8	2.0	8.9	-	-	-	-	-	-	-	-	-	-	-	-	-	
Benzo(b)fluoranthene	1.8-7.5	4	-	-	2.9	2.3	1.8	7.5	-	-	-	-	-	-	-	-	-	-	-	-	-	
Benzo(k)fluoranthene	1.7-4.3	4	-	-	2.7	2.3	1.7	4.3	-	-	-	-	-	-	-	-	-	-	-	-	-	
Chrysene	2.2-9.6	4	-	-	3.9	3.7	2.2	9.6	-	-	-	-	-	-	-	-	-	-	-	-	-	
Dibenz(a,h)anthracene	0.34-2.1	4	-	-	0.49	0.44	0.34	2.1	-	-	-	-	-	-	-	-	-	-	-	-	-	
Indeno(1,2,3-cd)pyrene	0.56-6.0	5	-	-	2.4	2.0	1.4	6.0	-	-	-	-	-	-	-	-	-	-	-	-	0.56	
Sample Results in µg/kg																						
4,4'-DDD	0.0058-0.017	4	-	-	-	-	-	-	-	-	-	0.0058	0.0081	-	-	-	-	0.017	0.0065	-	-	
4,4'-DDE	0.0058	1	-	-	-	-	0.0058	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
4,4'-DDT	0.0039 - 0.0064	3	-	-	-	-	-	-	-	-	0.0036	-	-	-	-	-	-	0.0064	0.0059	-	-	
Sample Results in µg/kg																						
PCB-1254	0.19	1	-	-	-	-	-	0.19	-	-	-	-	-	-	-	-	-	0.11	0.13	-	-	
PCB-1260	0.11 - 0.13	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.11	0.13	-	-	
Sample Results in mg/kg																						
Arsenic	14.2	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	14.2	-	-	
Barium	370 - 934	4	-	-	-	-	934	-	-	-	-	370	-	-	-	-	407	-	-	-	401	
Chromium	38.5 - 40.7	2	-	-	-	-	-	-	-	-	40.7	-	-	-	-	-	-	-	-	38.5	-	
Copper	73.6 - 97.5	5	-	-	-	-	-	-	-	-	-	79.1	-	-	-	85	-	-	83.1	73.6	-	
Lead	77 - 8,430	9	-	257	327	300	8,430	173	-	93	-	783	169	-	77	343	-	-	885	412	-	
Mercury	0.22 - 2.26	13	-	-	0.28	0.51	0.45	0.45	0.43	0.24	-	0.83	0.35	-	2.26	0.36	-	0.31	0.4	-	0.22	
Nickel	32	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	31.7	-	-	
Zinc	2.61 - 555	6	-	-	-	-	-	-	-	-	-	-	175	-	-	284	-	2.61	262	-	555	

Notes:
 * - 6 NYCRR Part 375-6 Remedial Program Soil Cleanup Objectives
 -- Not Analyzed
 Bold/highlighted- Indicated exceedance of the NYSDEC UUSCO Guidance Value
 Bold/highlighted- Indicated exceedance of the NYSDEC RRSCO Guidance Value
 Bold/highlighted- Indicated exceedance of the NYSDEC RCSCO Guidance Value

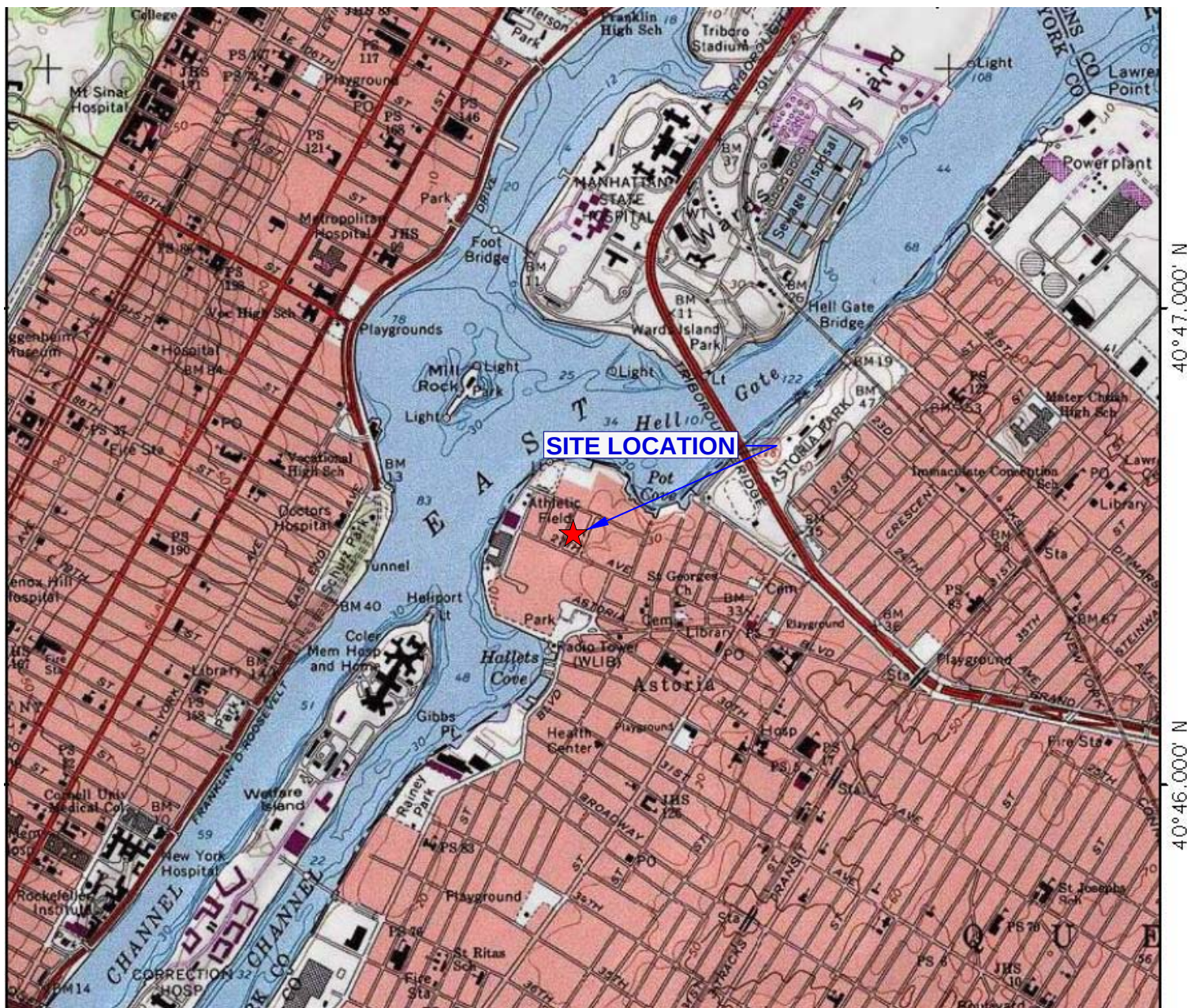
Table 16
26-22 4th Street
Queens, New York
2018 Phase II and 2019/2020 RI Parameters Detected Above Ambient Groundwater Standards

COMPOUND	Range in Exceedances	Frequency of Detection	GW-2	GW-5	GW-8	MW1	MW2	MW3		MW4	MW5	MW6
			9/20/2018	9/20/2018	9/20/2018	12/17/2019	12/17/2019	12/17/2019	1/28/2020	12/17/2019	12/17/2019	12/17/2019
Sample Results in µg/kg												
Tetrachloroethene	8.1 - 43	5	15	16	5.2	9.9	43	9.1	8.1	13	-	-
cis-1,2-Dichloroethene	9.9-15	2	15	-	-	-	-	-	-	9.9	-	-
Trichloroethene	10	1	10	-	-	-	-	-	-	-	-	-
Sample Results in µg/kg												
4,4-DDT	0.026 - 0.028	2				-	-	-	-	0.026	0.028	-
Sample Results in mg/kg												
Aluminum	0.90 - 12.8	7				1.25	8.31	1.09	12.8	1.53	0.90	1.01
Iron	1.19 - 15.8	7				1.19	15.8	1.24	12.4	2.24	1.29	1.50
Lead	0.025 - 0.084	2				-	0.084	-	0.025	-	-	-
Manganese	0.68 - 1.94	6				-	1.07	0.68	1.04	1.94	0.72	1.47
Selenium	0.014 - 0.016	2				-	0.014	-	-	-	0.016	-
Sodium	46.7 - 211	6				-	46.7	209	211	112	97.8	143
Sample Results in mg/kg												
Magnesium (Dissolved)	0.43 - 0.447	6				0.447	0.446	0.447	-	0.455	0.444	0.430
Sodium (Dissolved)	179 - 199	6				179	197	199	-	188	196	188

Notes:

Bold/highlighted- Indicated exceedance of the NYSDEC Groundwater Standard

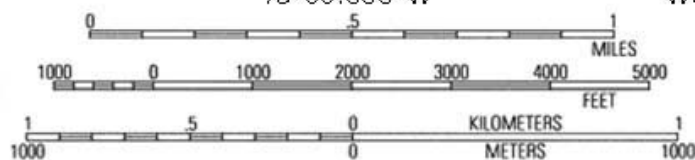
FIGURES



73°57.000' W

73°56.000' W

WGS84 73°55.000' W



MN 13° TN

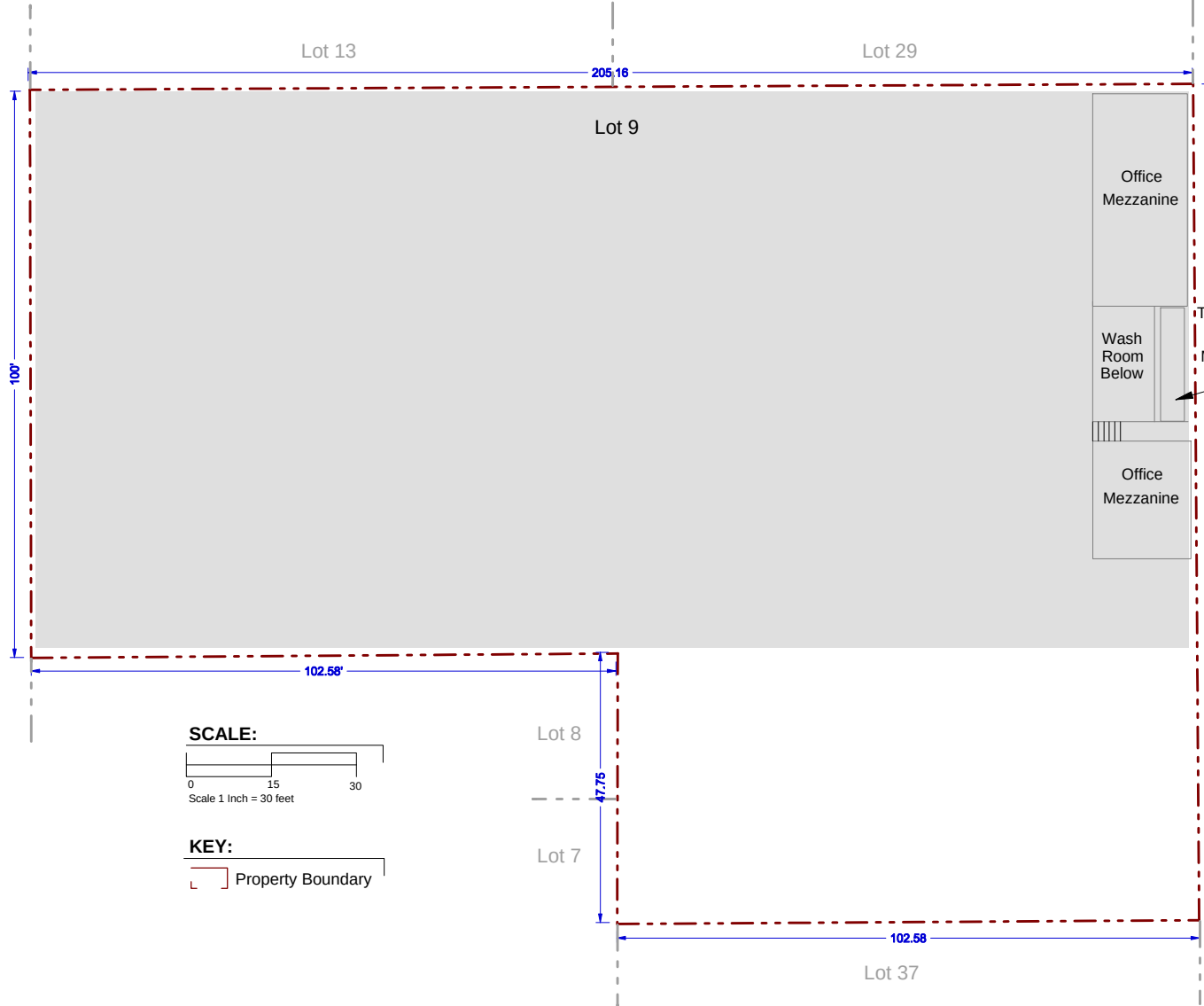
04/14/19

USGS Brooklyn, NY Quadrangle 1995, Contour Interval = 10 ft.



3RD STREET

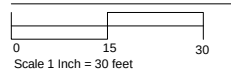
SIDEWALK



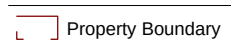
SIDEWALK

4TH STREET

SCALE:



KEY:



EBC

ENVIRONMENTAL BUSINESS CONSULTANTS

Phone 631.504.6000
Fax 631.924.2870

**Figure No.
2**

Site Name: **FORMER ANDOR MEDICAL SYSTEMS**

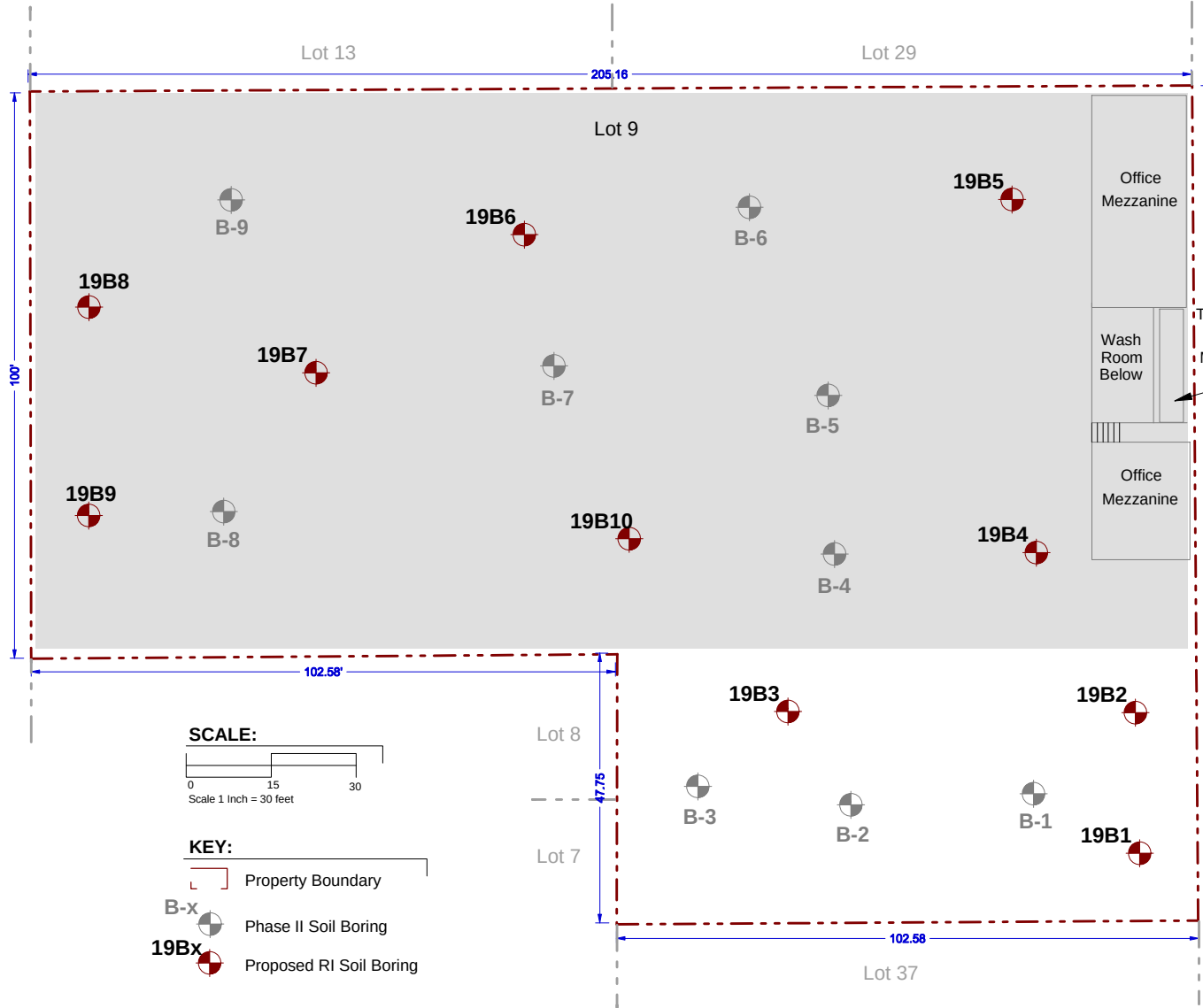
Site Address: **26-30 4TH STREET, QUEENS, NY**

Drawing Title: **SITE PLAN**

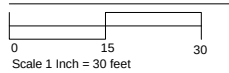


3RD STREET

SIDEWALK



SCALE:



KEY:

- Property Boundary
- Phase II Soil Boring
- Proposed RI Soil Boring

EB

ENVIRONMENTAL BUSINESS CONSULTANTS

Phone 631.504.6000
Fax 631.924.2870

Figure No.
3

Site Name: **FORMER ANDOR MEDICAL SYSTEMS**

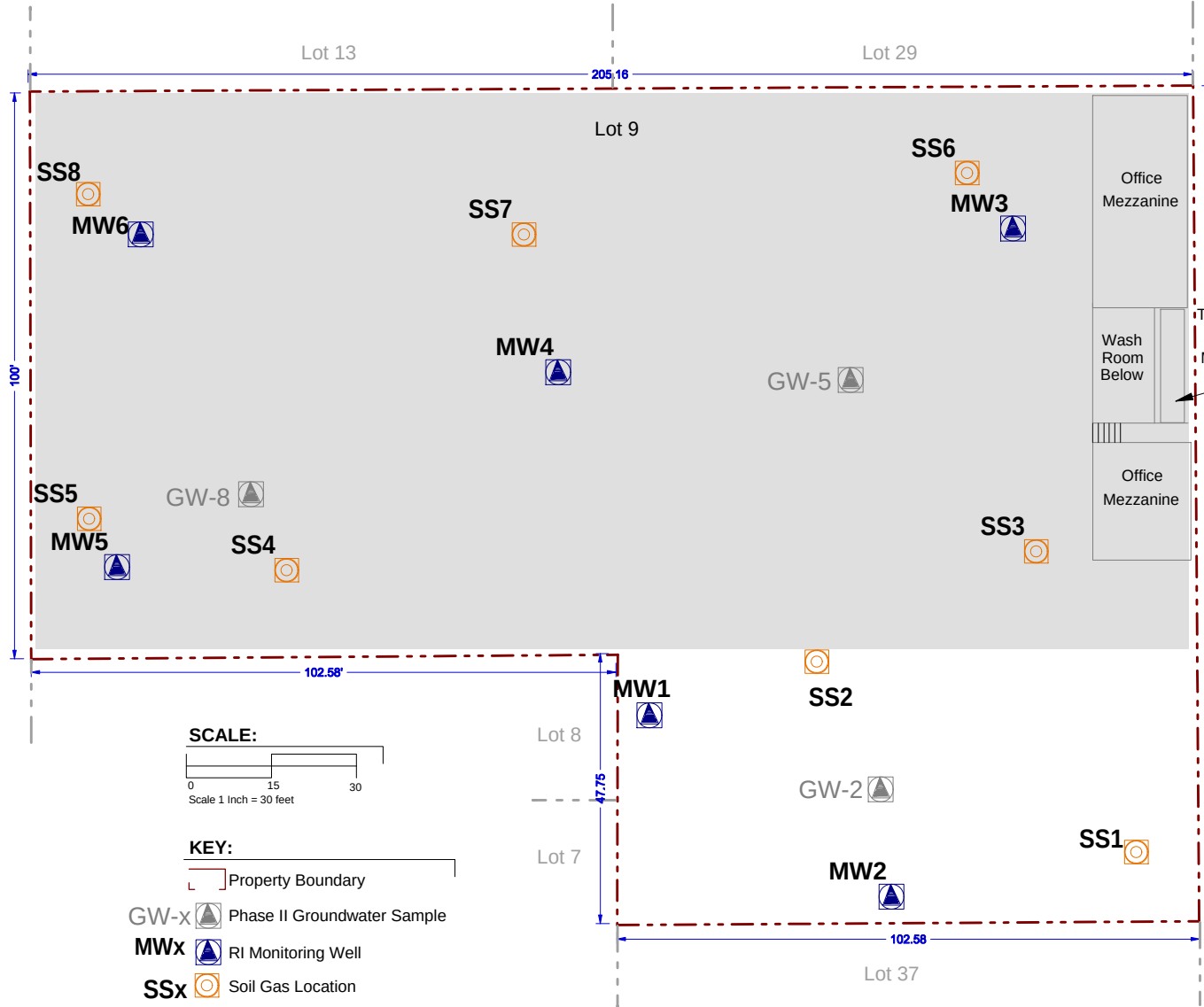
Site Address: **26-30 4TH STREET, QUEENS, NY**

Drawing Title: **SOIL BORING LOCATION MAP**



3RD STREET

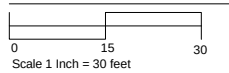
SIDEWALK



SIDEWALK

4TH STREET

SCALE:



KEY:

Property Boundary

GW-x Phase II Groundwater Sample

MWx RI Monitoring Well

SSx Soil Gas Location

EB

ENVIRONMENTAL BUSINESS CONSULTANTS

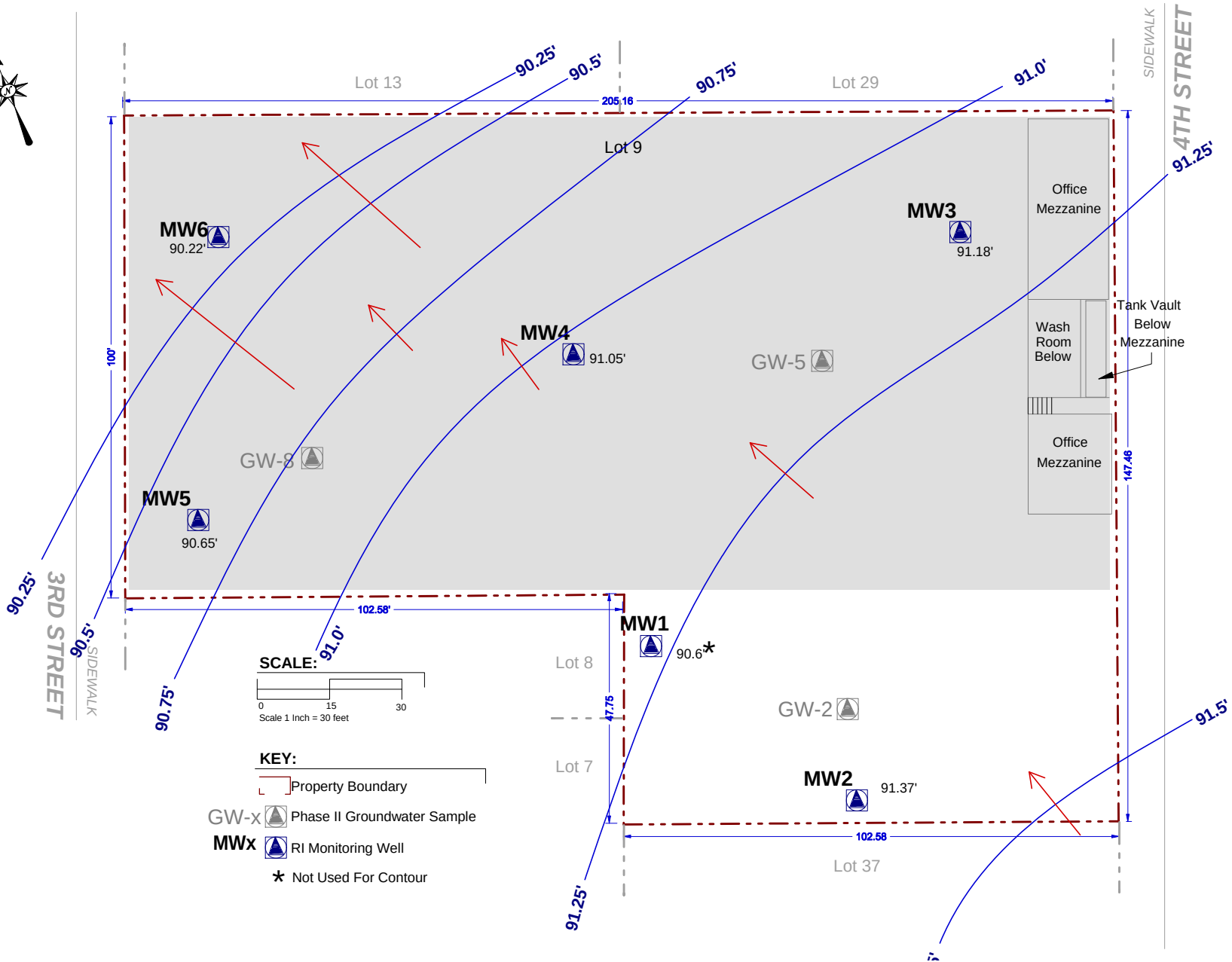
Phone 631.504.6000
Fax 631.924.2870

Figure No.
4

Site Name: **FORMER ANDOR MEDICAL SYSTEMS**

Site Address: **26-30 4TH STREET, QUEENS, NY**

Drawing Title: **MONITORING WELL & SOIL VAPOR LOCATION MAP**



ENVIRONMENTAL BUSINESS CONSULTANTS

Phone 631.504.6000
Fax 631.924.2870

Figure No.
5

Site Name:	FORMER ANDOR MEDICAL SYSTEMS
Site Address:	26-30 4TH STREET, QUEENS, NY
Drawing Title:	GROUNDWATER ELEVATION

19B7 (0-2') 12/10/2019	
SVOCs (mg/Kg)	
Chrysene	1
Pesticides (mg/Kg)	
4,4' -DDD	0.017
4,4' -DDT	0.0064
PCBs (mg/Kg)	
PCB-1260	0.110
Metals (mg/Kg)	
Copper	83.1
Lead	885
Mercury	0.31
Zinc	261

19B7 (8-10') 12/10/2019	
No Exceedance	

19B8 (0-2') 12/10/2018	
VOCs (mg/Kg)	
Tetrachloroethene	1.4
Pesticides (mg/Kg)	
4,4' -DDD	0.0065
4,4' -DDT	0.0059
PCBs (mg/Kg)	
PCB-1254	0.13
Metals (mg/Kg)	
Arsenic	14.2
Copper	73.6
Lead	412
Mercury	0.4
Zinc	262

19B8 (8-10') 12/10/2019	
Metals (mg/Kg)	
Chromium	38.5
Nickel	31.7

19B9 (0-2') 12/10/2019	
Metals (mg/Kg)	
Lead	384
Zinc	426

19B9 (8-10') 12/10/2019	
No Exceedance	

19B9 (12') 12/10/2019	
No Exceedance	

B-9 (2-4') 9/20/2018	
PCBs (mg/Kg)	
PCB-1254	0.190
Metals (mg/Kg)	
Lead	173
Mercury	0.45
SVOCs (mg/Kg)	
Benz(a)anthracene	0.4
Benzo(a)pyrene	0.5
Benzo(b)fluoranthene	0.36
Benzo(k)fluoranthene	0.3
Chrysene	0.5
Dibenz(a,h)anthracene	0.1
Indeno(1,2,3-cd)pyrene	0.5

19B6 (0-2') 12/10/2019	
VOCs (mg/Kg)	
Acetone	0.073
Metals (mg/Kg)	
Copper	85
Lead	343
Mercury	0.36
Zinc	284

19B6 (8-10') 12/10/2019	
Metals (mg/Kg)	
Barium	407

B-6 (2-4') 9/20/2018	
VOCs (mg/Kg)	
Tetrachloroethene	2.3
Metals (mg/Kg)	
Lead	300
Mercury	0.51
SVOCs (mg/Kg)	
Benz(a)anthracene	2.3
Benzo(a)pyrene	2.3
Benzo(b)fluoranthene	2.3
Benzo(k)fluoranthene	2.3
Chrysene	2.3
Dibenz(a,h)anthracene	2.3
Indeno(1,2,3-cd)pyrene	2.3

19B5 (0-2') 12/10/2019	
Metals (mg/Kg)	
Lead	77.3
Mercury	2.26

19B5 (8-10') 12/10/2019	
No Exceedance	

B-4 (2-4') 9/20/2018	
VOCs (mg/Kg)	
Tetrachloroethene	2.0
Metals (mg/Kg)	
Lead	327
Mercury	0.28
SVOCs (mg/Kg)	
Benz(a)anthracene	1.7
Benzo(a)pyrene	1.7
Benzo(b)fluoranthene	1.7
Benzo(k)fluoranthene	1.7
Chrysene	1.7
Dibenz(a,h)anthracene	1.7
Indeno(1,2,3-cd)pyrene	1.7
Pesticides (mg/Kg)	
4,4'-DDE	0.0058

B-7 (2-4') 9/20/2018	
VOCs (mg/Kg)	
Cis-1,2-dichloroethene	0.32
Tetrachloroethene	5.0
Trichloroethene	1.4
Metals (mg/Kg)	
Barium	943
Lead	8,430
Mercury	0.45
SVOCs (mg/Kg)	
Benz(a)anthracene	1.5
Benzo(a)pyrene	1.5
Benzo(b)fluoranthene	1.5
Benzo(k)fluoranthene	1.7
Chrysene	1.7
Dibenz(a,h)anthracene	1.7
Indeno(1,2,3-cd)pyrene	1.7
Pesticides (mg/Kg)	
4,4'-DDE	0.0058

19B4 (0-2') 12/10/2019	
VOCs (mg/Kg)	
Acetone	0.091
Pesticides (mg/Kg)	
4,4' -DDD	0.0058
Metals (mg/Kg)	
Lead	169
Mercury	0.35
Zinc	175

19B4 (8-10') 12/10/2019	
Pesticides (mg/Kg)	
4,4' -DDD	0.0081

19B2 (0-2') 12/10/2019	
Pesticides (mg/Kg)	
4,4' -DDT	0.0036
Metals (mg/Kg)	
Lead	93
Mercury	0.24
Zinc	128

19B2 (8-10') 12/10/2019	
Metals (mg/Kg)	
Chromium	40.7

19B10 (0-2') 12/10/2019	
SVOCs (mg/Kg)	
Indeno(1,2,3-cd)pyrene	0.56
Metals (mg/Kg)	
Barium	401
Copper	97.5
Lead	655
Mercury	0.22
Zinc	555

19B3 (0-2') 12/10/2019	
VOCs (mg/Kg)	
Tetrachloroethene	5.6
Metals (mg/Kg)	
Barium	370
Copper	79.1
Lead	783
Mercury	0.83
Zinc	316

19B10 (8-10') 12/10/2019	
No Exceedance	

19B3 (8-10') 12/10/2019	
No Exceedance	

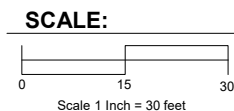
B-3 (2-4') 9/20/2018	
VOCs (mg/Kg)	
Acetone	0.79
Tetrachloroethene	2.7
Metals (mg/Kg)	
Lead	257

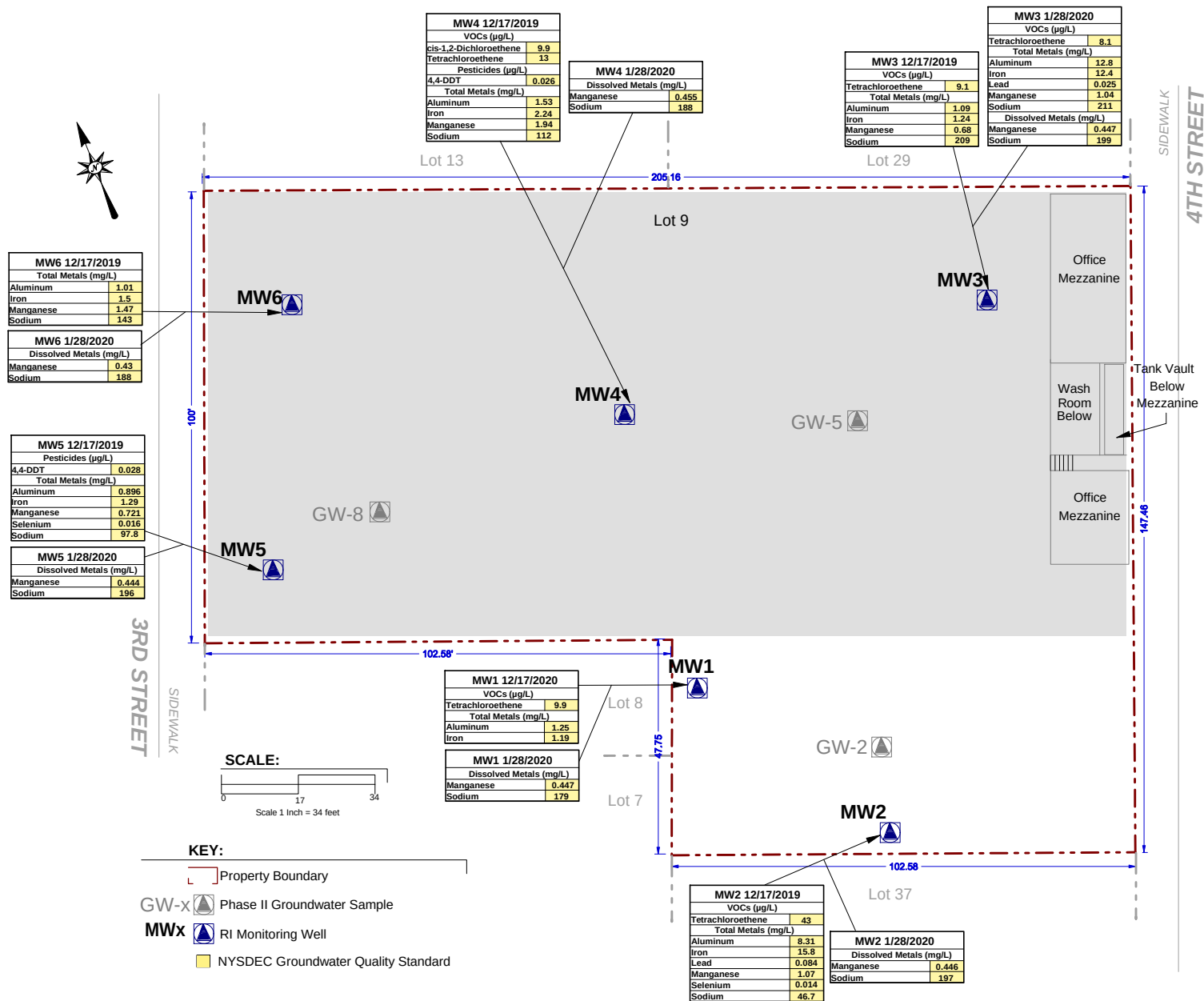
B1 (6-8') 9/20/2018	
No Exceedance	

19B1 (0-2') 12/10/2019	
Metals (mg/Kg)	
Mercury	0.43

19B1 (8-10') 12/10/2019	
No Exceedance	

KEY:	
	Property Boundary
	9/2018 Phase II Soil Boring
	EBC 12/2019 RI Soil Boring
	Exceedence of Protection of Groundwater SCO
	Exceedence of Unrestricted Use SCO
	Exceedence of Restricted Residential SCO
	Exceedence of Restricted Commercial SCO





SS5 12/11/2019	
VOCs (µg/m³)	
1,2,4-Trimethylbenzene	2
4-Ethyltoluene	1.97
4-Methyl-2-pentanone	2.8
Acetone	83.1
Benzene	1.76
Carbon Disulfide	2.23
Carbon Tetrachloride	0.25
Chloroform	2.74
Cyclohexane	1.51
Dichlorodifluoromethane	4.73
Ethanol	69.6
Ethylbenzene	1.54
Heptane	1.08
Hexane	2.04
Isopropylalcohol	3.37
Xylene (m&p)	5.34
Methyl Ethyl Ketone	15.1
Xylene (o)	2.53
Tetrachloroethene	12.1
Tetrahydrofuran	18.5
Toluene	6.89
Trichloroethene	8.32

SS8 12/11/2019	
VOCs (µg/m³)	
1,2,4-Trimethylbenzene	1.37
4-Ethyltoluene	1.47
4-Methyl-2-pentanone	1.76
Acetone	42.5
Benzene	1.9
Carbon Disulfide	11.6
Carbon Tetrachloride	0.21
Dichlorodifluoromethane	2.24
Ethanol	42.2
Ethylbenzene	1.22
Heptane	43.8
Hexane	99.7
Isopropylalcohol	1.37
Xylene (m&p)	4.18
Methyl Ethyl Ketone	7.6
Xylene (o)	1.9
Tetrachloroethene	55.9
Toluene	5.95

SS7 12/11/2019	
VOCs (µg/m³)	
1,2,4-Trimethylbenzene	1.65
1,2-Dichlorotetrafluoroethane	2.12
4-Ethyltoluene	1.37
4-Methyl-2-pentanone	2.04
Acetone	33.7
Benzene	2.96
Carbon Disulfide	31.4
Chloroform	0.29
Chloroform	7.27
cis-1,2-Dichloroethene	0.66
Cyclohexane	8.7
Dichlorodifluoromethane	2.47
Ethanol	47.1
Ethylbenzene	1.43
Heptane	3.25
Hexane	9.72
Isopropylalcohol	2.75
Xylene (m&p)	4.73
Methyl Ethyl Ketone	9.02
Xylene (o)	1.89
Tetrachloroethene	6.07
Tetrahydrofuran	7.56
Toluene	9.42
Vinyl Chloride	1.81

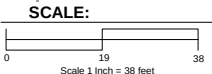
SS6 12/11/2019	
VOCs (µg/m³)	
1,2,4-Trimethylbenzene	1.68
1,2-Dichlorotetrafluoroethane	17.8
4-Ethyltoluene	1.49
4-Methyl-2-pentanone	4.3
Acetone	39.9
Benzene	3.93
Carbon Disulfide	4.89
Carbon Tetrachloride	0.25
Dichlorodifluoromethane	4.37
Ethanol	30.5
Ethylbenzene	1.39
Heptane	5.2
Hexane	19.4
Xylene (m&p)	4.6
Methyl Ethyl Ketone	5.81
Xylene (o)	1.99
Tetrachloroethene	1.130
Tetrahydrofuran	5.39
Toluene	8.32
Trichloroethene	13.1
Trichlorofluoromethane	3.5

SS3 12/11/2019	
VOCs (µg/m³)	
1,2,4-Trimethylbenzene	2.33
1,2-Dichlorotetrafluoroethane	5.09
4-Ethyltoluene	2.5
4-Methyl-2-pentanone	1.61
Acetone	38.7
Benzene	4.18
Carbon Disulfide	16.1
Carbon Tetrachloride	0.46
Chloroform	26.2
cis-1,2-Dichloroethene	5.67
Cyclohexane	1.09
Dichlorodifluoromethane	2.2
Ethanol	38.6
Ethylbenzene	1.97
Heptane	11.8
Hexane	23
Isopropylalcohol	1.65
Xylene (m&p)	8.59
Methyl Ethyl Ketone	7.25
Methylene Chloride	5.24
Xylene (o)	3.84
Tetrachloroethene	344
Toluene	11.8
Trichloroethene	57.5
Trichlorofluoromethane	1.66

SS1 12/11/2019	
VOCs (µg/m³)	
1,2,4-Trimethylbenzene	1.07
4-Ethyltoluene	1.27
4-Methyl-2-pentanone	1.2
Acetone	38.2
Benzene	1.18
Carbon Disulfide	1.43
Carbon Tetrachloride	0.37
Dichlorodifluoromethane	1.63
Ethanol	42.4
Ethylbenzene	1.97
Ethyl Acetate	1.71
Hexane	6.87
Isopropylalcohol	1.86
Xylene (m&p)	3.05
Methyl Ethyl Ketone	5.81
Methylene Chloride	4.2
Xylene (o)	1.37
Tetrachloroethene	9.9
Tetrahydrofuran	6.75
Toluene	3.73
Trichlorofluoromethane	1.82

SS4 12/11/2019	
VOCs (µg/m³)	
1,1-Dichloroethene	3.58
1,2,4-Trimethylbenzene	1.91
4-Ethyltoluene	1.72
4-Methyl-2-pentanone	2.75
Acetone	42.3
Benzene	3
Carbon Disulfide	36.4
Carbon Tetrachloride	0.22
Chloroform	2.7
cis-1,2-Dichloroethene	201
Cyclohexane	6.19
Dichlorodifluoromethane	1.27
Ethanol	40.5
Ethylbenzene	1.23
Heptane	5.64
Hexane	21.1
Isopropylalcohol	4.1
Xylene (m&p)	4.04
Methyl Ethyl Ketone	10.9
Xylene (o)	1.88
sec-Butylbenzene	2.13
Tetrachloroethene	13.8
Tetrahydrofuran	5.84
Toluene	5.95
trans-1,2-Dichloroethene	15.4
Trichloroethene	9.18
Vinyl Chloride	70

SS2 12/11/2019	
VOCs (µg/m³)	
1,1-Dichloroethene	0.37
1,2,4-Trimethylbenzene	1.11
1,2-Dichlorotetrafluoroethane	2.61
1,3-Butadiene	1.19
4-Ethyltoluene	1.33
4-Methyl-2-pentanone	1.24
Acetone	54.6
Benzene	1.85
Carbon Disulfide	12.4
Carbon Tetrachloride	0.4
Chloroform	6.78
cis-1,2-Dichloroethene	18.7
Dichlorodifluoromethane	1.31
Ethanol	56.9
Ethyl Acetate	1.88
Heptane	1.31
Hexane	7.71
Isopropylalcohol	2.85
Xylene (m&p)	2.84
Methyl Ethyl Ketone	8.78
Xylene (o)	1.28
Tetrachloroethene	247
Tetrahydrofuran	9.31
Toluene	3.95
trans-1,2-Dichloroethene	1.12
Trichloroethene	32.1
Trichlorofluoromethane	1.06



EB
ENVIRONMENTAL BUSINESS CONSULTANTS

Phone 631.504.6000
Fax 631.924.2870

Figure No.
8

Site Name:	FORMER ANDOR MEDICAL SYSTEMS
Site Address:	26-30 4TH STREET, QUEENS, NY
Drawing Title:	SOIL VAPOR DETECTIONS

APPENDIX – A
Soil Boring Logs

19B1 (WCE1)

Location: Located 10' from 4th St, 35' from northern wall/property boundary (Lot 35).		Depth to Water (ft. from grade.)		Site Elevation Datum
Site Name:	Address: 26-30 4th St, Queens, NY	Date	DTW	Ground Elevation
		Groundwater Depth		
Drilling Company: C2	Method: Geoprobe 6712	~5ft		Well Specifications
Date Started: 12/10/2019	Date Completed: 12/10/2019			
Completion Depth: 10'	Geologist: Tony Balado			

[illegible]

19B2 (WCE1)

Location: Located 10' from northern wall/property boundary (Lot 35), 10' from 4th St		Depth to Water (ft. from grade.)		Site Elevation Datum	
Site Name:		Address: 26-30 4th St, Queens, NY		Date	DTW
				Groundwater Depth	
Drilling Company: C2		Method: Geoprobe 6712		~6ft	
Date Started: 12/10/2019		Date Completed: 12/10/2019		Well Specifications	
Completion Depth: 10'		Geologist Tony Balado			

[illegible]

Geologic Boring Log Details



ENVIRONMENTAL BUSINESS CONSULTANTS

19B3 (WCE3)

Location: Located 10' from northern wall/property boundary (Lot 35), 30' from western wall/property boundary (Lot 35)		Depth to Water (ft. from grade.)		Site Elevation Datum
Site Name:	Address: 26-30 4th St, Queens, NY	Date	DTW	Ground Elevation
Drilling Company: C2		Method: Geoprobe 6712		Well Specifications
Date Started: 12/10/2019	Date Completed: 12/10/2019	Groundwater Depth ~5ft		
Completion Depth: 15'	Geologist Tony Balado			

19B3 (WCE3) (NTS)	DEPTH (ft below grade)	SAMPLES			SOIL DESCRIPTION
		Reco- very (in.)	Blow per 6 in.	PID (ppm)	
	0				
	to	17"		0.0	17" Wet silty fill with asphalt and brick
	5				*Retained soil sample 19B3 (0-2')
	to	15"		0.0	15" Saturated silty fill with asphalt and brick
	10				*Retained soil sample 19B3 (8-10')
	to	50"			50" Saturated sand
	15				

19B4 (WCD3)

Location: Located 28' from 4th St, 18' from southern building (Lot 9)		Depth to Water (ft. from grade.)		Site Elevation Datum
Site Name:	Address: 26-30 4th St, Queens, NY		Date	DTW
		Groundwater Depth		Ground Elevation
Drilling Company: C2	Method: Geoprobe 6712		~12ft	
Date Started: 12/10/2019	Date Completed: 12/10/2019		Well Specifications	
Completion Depth: 10'	Geologist Tony Balado			

[illegible]

19B5 (WCC3)

Location: Located 32' from 4th St, 20' from northern wall (Lot 9)			Depth to Water (ft. from grade.)		Site Elevation Datum	
Site Name:		Address: 26-30 4th St, Queens, NY		Date	DTW	Ground Elevation
Drilling Company: C2		Method: Geoprobe 6712		Groundwater Depth		Well Specifications
Date Started: 12/10/2019		Date Completed: 12/10/2019		~8ft		
Completion Depth: 10'		Geologist Tony Balado				

[illegible]

19B6 (WCA2)

Location: Located 87' from 3rd St, 25' from northern wall (Lot 9)			Depth to Water (ft. from grade.)		Site Elevation Datum	
Site Name:		Address: 26-30 4th St, Queens, NY		Date	DTW	Ground Elevation
Drilling Company: C2		Method: Geoprobe 6712		Groundwater Depth		Well Specifications
Date Started: 12/10/2019		Date Completed: 12/10/2019		~5ft		
Completion Depth: 10'		Geologist Tony Balado				

[illegible]

19B7 (WCA5)

Location: Located 50' from 3rd St, 50' from south building (Lot 9)		Depth to Water (ft. from grade.)		Site Elevation Datum
Site Name:	Address: 26-30 4th St, Queens, NY		Date	DTW
		Groundwater Depth		Ground Elevation
Drilling Company: C2		Method: Geoprobe 6712		Well Specifications
Date Started: 12/10/2019		Date Completed: 12/10/2019		
Completion Depth: 10'		Geologist Tony Balado		

[illegible]

19B8 (WCA1)

Location: Located 10' from 3rd St, 38' from northern wall (Lot 9)			Depth to Water (ft. from grade.)		Site Elevation Datum	
Site Name:		Address: 26-30 4th St, Queens, NY		Date	DTW	Ground Elevation
Drilling Company: C2		Method: Geoprobe 6712		Groundwater Depth		Well Specifications
Date Started: 12/10/2019		Date Completed: 12/10/2019		~5ft		
Completion Depth: 10'		Geologist Tony Balado				

[illegible]

Geologic Boring Log Details



ENVIRONMENTAL BUSINESS CONSULTANTS

19B9 (WCB1)

Location: Located 10' from 3rd St, 25' from southern wall (Lot 9)			Depth to Water (ft. from grade.)		Site Elevation Datum	
Site Name:		Address: 26-30 4th St, Queens, NY		Date	DTW	Ground Elevation
Drilling Company: C2		Method: Geoprobe 6712		Groundwater Depth		Well Specifications
Date Started: 12/10/2019		Date Completed: 12/10/2019		~5ft		
Completion Depth: 15'		Geologist Tony Balado				

19B9 (WCB1) (NTS)	DEPTH (ft below grade)	SAMPLES			SOIL DESCRIPTION
		Reco- very (in.)	Blow per 6 in.	PID (ppm)	
	0				
	to	13"		0.0	3" Concrete 10" Damp black silty fill with asphalt
	5				<i>*Retained soil sample 19B9 (0-2')</i>
	to	42"		26.3	42" Odorous wet brown silty sand with stone fragments and light staining
	10				<i>*Retained soil sample 19B9 (8-10')</i>
	to	36"		0.0	36" Moist sand with stone fragments
	15				<i>*Retained soil sample 19B9 (17')</i>

19B10 (WCB2)

Location: Located 100' from 4th St, 20' from southern wall (Lot 9)			Depth to Water (ft. from grade.)		Site Elevation Datum	
Site Name:		Address: 26-30 4th St, Queens, NY		Date	DTW	Ground Elevation
Drilling Company: C2		Method: Geoprobe 6712		Groundwater Depth		Well Specifications
Date Started: 12/10/2019		Date Completed: 12/10/2019		~7ft		
Completion Depth: 10'		Geologist Tony Balado				

[illegible]

WCD1

Location: Located 60' from northern wall (Lot 9), 90' from 4th St			Depth to Water (ft. from grade.)		Site Elevation Datum	
Site Name:		Address: 26-30 4th St, Queens, NY		Date	DTW	Ground Elevation
Drilling Company: C2		Method: Geoprobe 6712		Groundwater Depth		Well Specifications
Date Started: 12/10/2019		Date Completed: 12/10/2019		~7ft		
Completion Depth: 10'		Geologist Tony Balado				

[illegible]

WCD2

Location: Located 60' from 4th St, 15' from southern building (Lot 9)		Depth to Water (ft. from grade.)		Site Elevation Datum
Site Name:	Address: 26-30 4th St, Queens, NY	Date	DTW	Ground Elevation
		Groundwater Depth		
Drilling Company: C2	Method: Geoprobe 6712	~5ft		Well Specifications
Date Started: 12/10/2019	Date Completed: 12/10/2019			
Completion Depth: 10'	Geologist Tony Balado			

[illegible]

WCC1

Location: Located 90' from 4th St, 25' from northern wall (Lot 9)			Depth to Water (ft. from grade.)		Site Elevation Datum	
Site Name:		Address: 26-30 4th St, Queens, NY		Date	DTW	Ground Elevation
Drilling Company: C2		Method: Geoprobe 6712		Groundwater Depth		Well Specifications
Date Started: 12/10/2019		Date Completed: 12/10/2019		~5ft		
Completion Depth: 10'		Geologist Tony Balado				

[illegible]

ENVIRONMENTAL BUSINESS CONSULTANTS

Location: Located 60' from 4th St, 45' from northern wall (Lot 9)		Depth to Water (ft. from grade.)		Site Elevation Datum
Site Name:	Address: 26-30 4th St, Queens, NY	Date	DTW	Ground Elevation
		Groundwater Depth		
Drilling Company: C2	Method: Geoprobe 6712			
Date Started: 12/10/2019		~5ft		Well Specifications
Date Completed: 12/10/2019				
Completion Depth: 10'		Geologist Tony Balado		

[illegible]

ENVIRONMENTAL BUSINESS CONSULTANTS

Location: Located 45' from 3rd St, 15' from southern building (Lot 9)			Depth to Water (ft. from grade.)		Site Elevation Datum	
Site Name:		Address: 26-30 4th St, Queens, NY		Date	DTW	Ground Elevation
Drilling Company: C2		Method: Geoprobe 6712		Groundwater Depth		Well Specifications
Date Started: 12/10/2019		Date Completed: 12/10/2019		~5ft		
Completion Depth: 10'		Geologist Tony Balado				

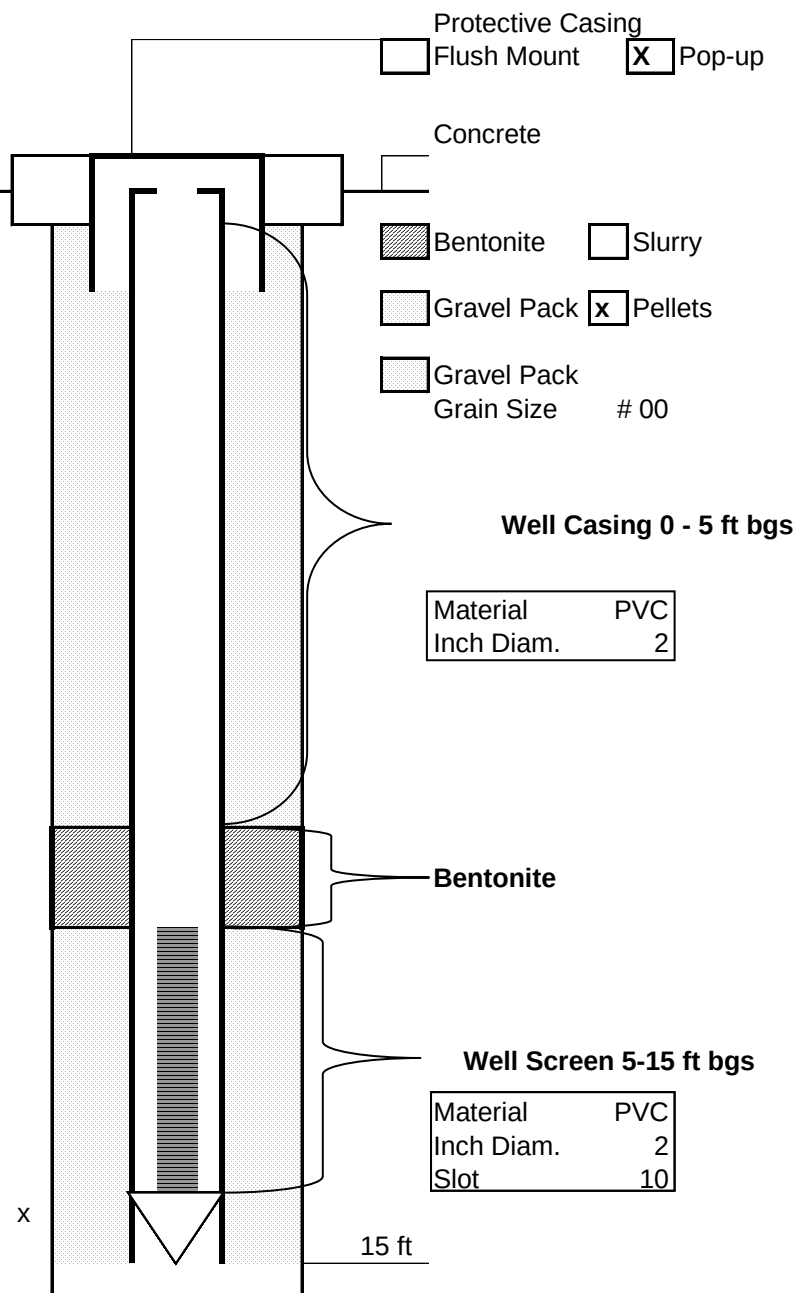
[illegible]

APPENDIX - B
Monitoring Well Completion Reports

GROUNDWATER MONITORING WELL

CONSTRUCTION LOG

MW1



Monitoring Well No.: MW1

Project: 26-22 4th Street, Queens, NY

Depth to Groundwater: 5.84 Date: 12/17/2019

Installation Depth: 15 ft bg

Survey Point Elevation:

Installation Date: 12/17/2019

Drilling Contractor: C2 Environmental

Installation Method: Geoprobe 6712DT

Water Removed During Development:

Hydrogeologist: Tony Balado

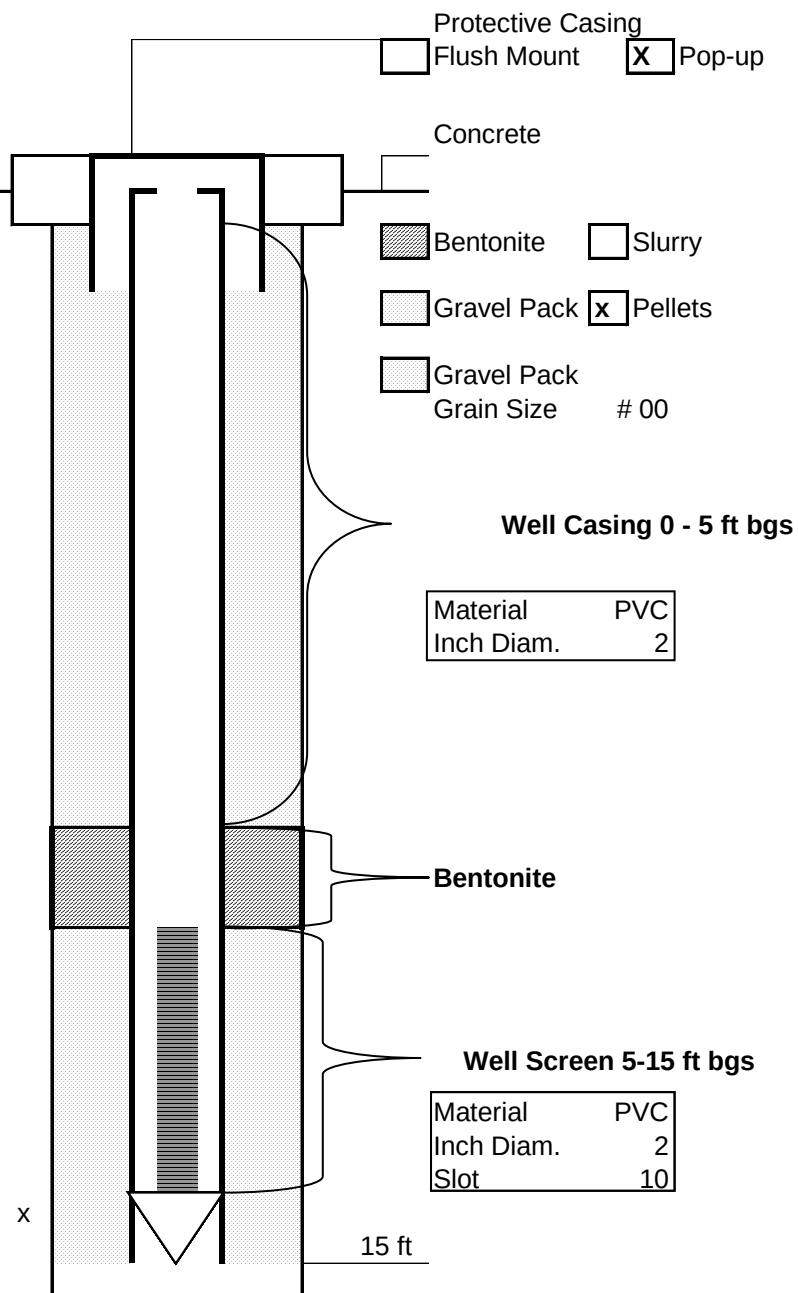
Company Name: EBC

Note: Drawing is not to scale.
 Depths are given in feet below land surface.

GROUNDWATER MONITORING WELL

CONSTRUCTION LOG

MW2



Monitoring Well No.: MW2

Project: 26-22 4th Street, Queens, NY

Depth to Groundwater: 5.37 Date: 12/17/2019

Installation Depth: 15 ft bg

Survey Point Elevation:

Installation Date: 12/17/2019

Drilling Contractor: C2 Environmental

Installation Method: Geoprobe 6712DT

Water Removed During Development:

Hydrogeologist: Tony Balado

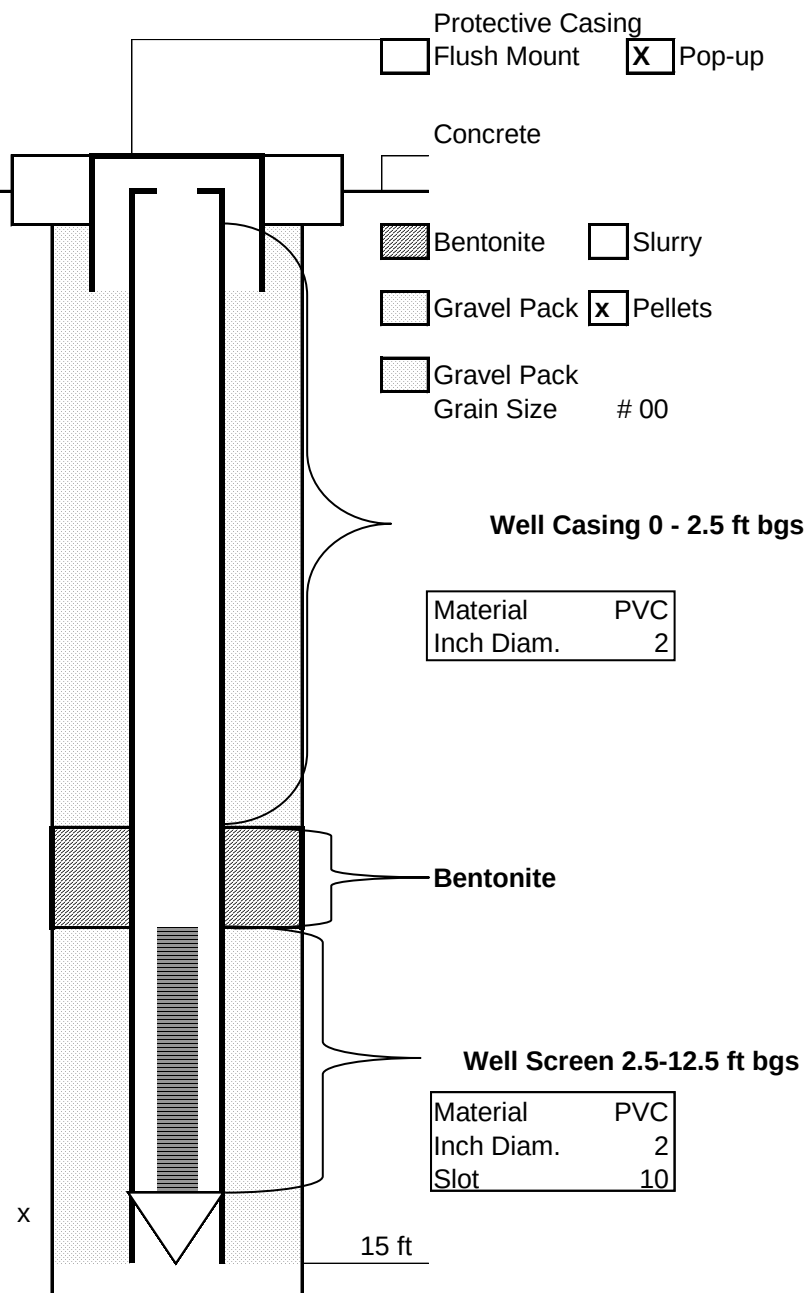
Company Name: EBC

Note: Drawing is not to scale.
 Depths are given in feet below land surface.

GROUNDWATER MONITORING WELL

CONSTRUCTION LOG

MW3



Monitoring Well No.: MW3

Project: 26-22 4th Street, Queens, NY

Depth to Groundwater: 5.23 Date: 12/16/2019

Installation Depth: 12.5 ft bg

Survey Point Elevation:

Installation Date: 12/17/2019

Drilling Contractor: C2 Environmental

Installation Method: Geoprobe 6712DT

Water Removed During Development:

Hydrogeologist: Tony Balado

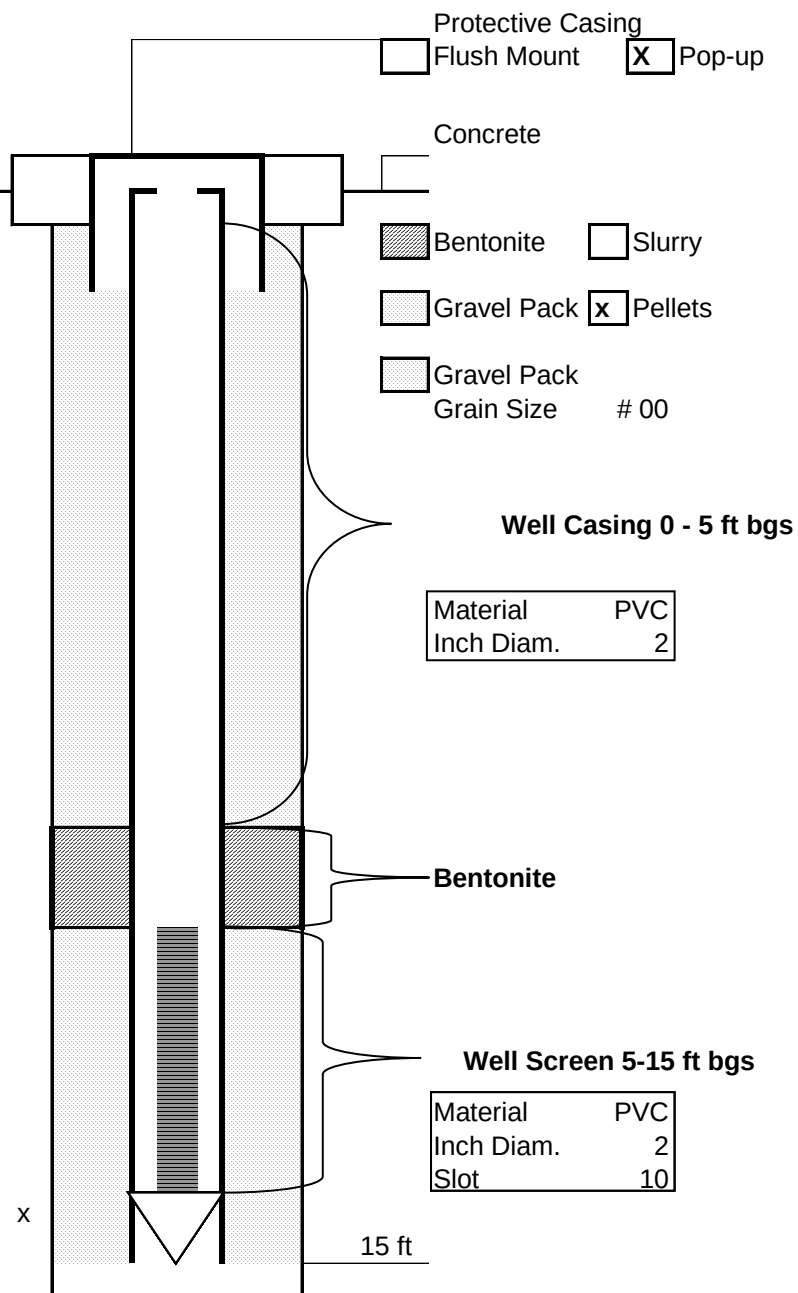
Company Name: EBC

Note: Drawing is not to scale.
 Depths are given in feet below land surface.

GROUNDWATER MONITORING WELL

CONSTRUCTION LOG

MW4



Monitoring Well No.: MW4

Project: 26-22 4th Street, Queens, NY

Depth to Groundwater: 4.50' Date: 12/16/2019

Installation Depth: 15 ft bg

Survey Point Elevation:

Installation Date: 12/16/2019

Drilling Contractor: C2 Environmental

Installation Method: Geoprobe 6712DT

Water Removed During Development:

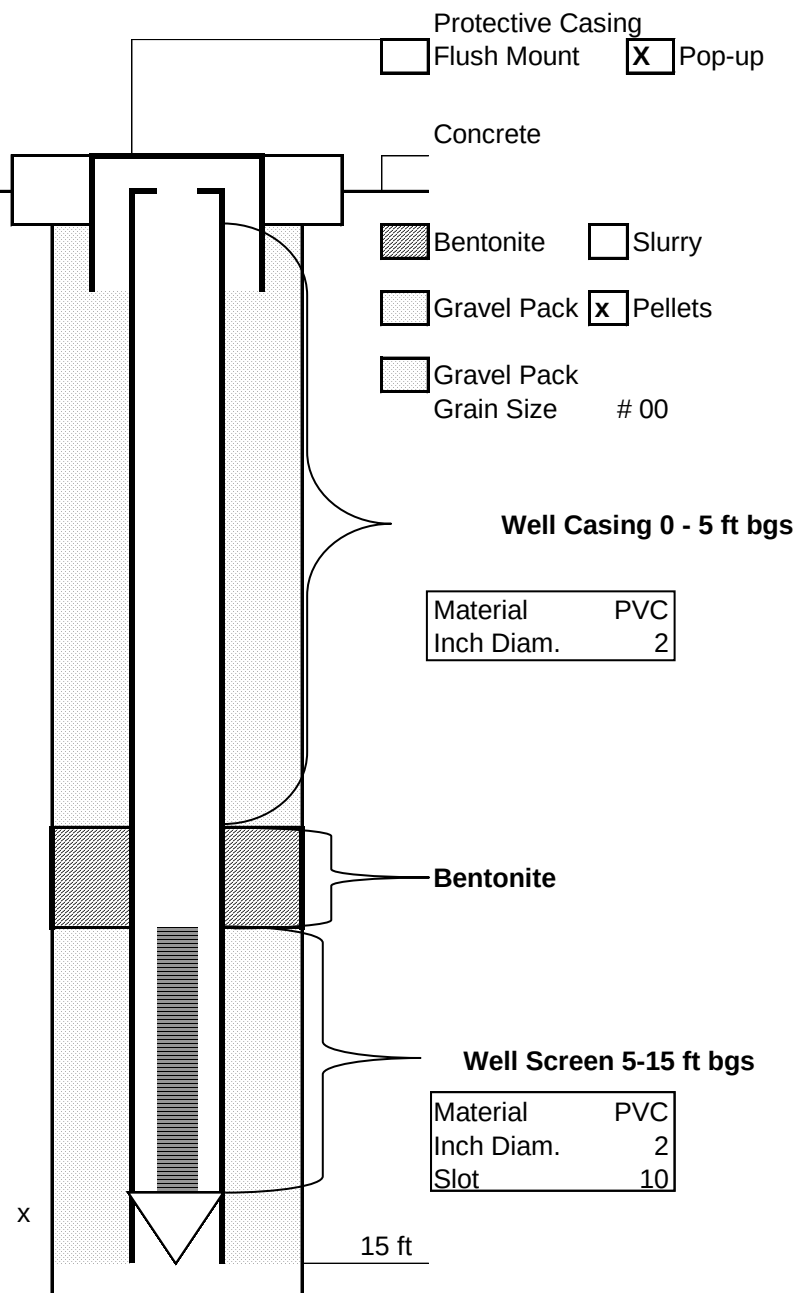
Hydrogeologist: Tony Balado

Company Name: EBC

GROUNDWATER MONITORING WELL

CONSTRUCTION LOG

MW5



Monitoring Well No.: MW5

Project: 26-22 4th Street, Queens, NY

Depth to Groundwater: 6.14' Date: 12/16/2019

Installation Depth: 15 ft bg

Survey Point Elevation:

Installation Date: 12/16/2019

Drilling Contractor: C2 Environmental

Installation Method: Geoprobe 6712DT

Water Removed During Development:

Hydrogeologist: Tony Balado

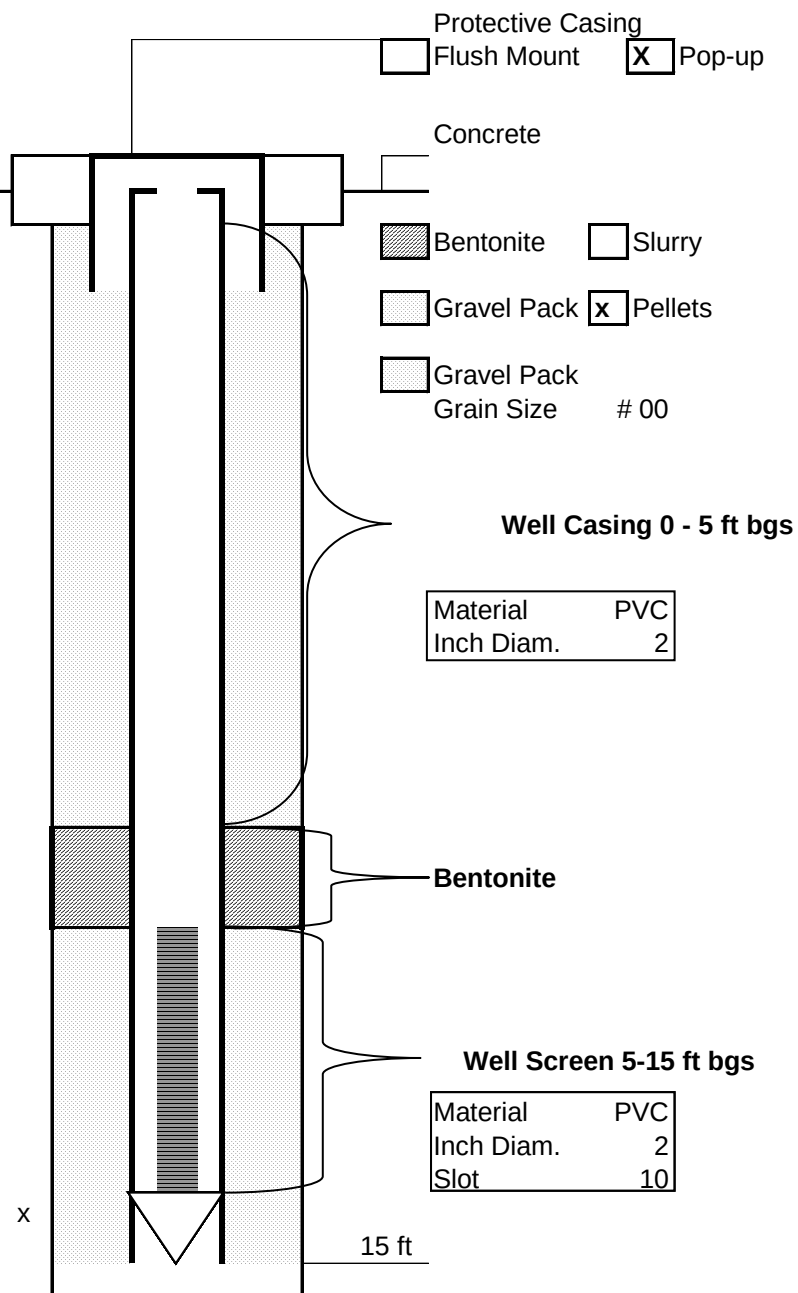
Company Name: EBC

Note: Drawing is not to scale.
 Depths are given in feet below land surface.

GROUNDWATER MONITORING WELL

CONSTRUCTION LOG

MW6



Monitoring Well No.: MW6

Project: 26-22 4th Street, Queens, NY

Depth to Groundwater: 5.95' Date: 12/16/2019

Installation Depth: 15 ft bg

Survey Point Elevation:

Installation Date: 12/16/2019

Drilling Contractor: C2 Environmental

Installation Method: Geoprobe 6712DT

Water Removed During Development:

Hydrogeologist: Tony Balado

Company Name: EBC

APPENDIX – C
Groundwater Sampling Logs



ENVIRONMENTAL BUSINESS CONSULTANTS

GROUNDWATER PURGE / SAMPLE LOGS

26-22 4th Street, Queens

Well I.D.: MWI

Well Depth (from TOC): 10.0'

Static Water Level (from TOC): 5.67'

Height of Water in Well: 4.33'

Gallons of Water per Well Volume: 0.71

Flow Rate: 380 ml/min.

Date: 12-18-19

Equipment: Peristaltic Pump, Horiba

Time	Pump Rate	Gal. Removed	pH	Cond. (uS/cm)	Temp. (deg. F)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	TDS	Comments
7:53		0.0	7.01	1.35	12.39	10.07	199	800+		Turbid, brown
7:58		0.5	6.83	1.32	12.51	8.62	190	800+		"
8:03		1.0	6.79	1.31	13.11	4.19	181	800+		"
8:08		1.5	6.73	1.29	13.35	4.18	176	223		"
8:13		2.0	6.71	1.27	13.44	1.72	154	119		clear
8:18		2.5	6.69	1.17	13.44	1.59	151	75		"
8:23		3.0	6.69	1.17	13.45	1.11	151	73		"

Note 400 ml = 0.11 gallons



ENVIRONMENTAL BUSINESS CONSULTANTS

GROUNDWATER PURGE / SAMPLE LOGS

26-22 4th Street, Queens

Well I.D.: 11.25"Date: 12-18-19Well Depth (from TOC): 12.00'Equipment: Peristaltic Pump, HoribaStatic Water Level (from TOC): 5.37'Height of Water in Well: Gallons of Water per Well Volume: 1.08

Flow Rate: 380 ml/min.

Time	Pump Rate	Gal. Removed	pH	Cond. (uS/cm)	Temp. (deg. F)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	TDS	Comments
9:42		0.0	7.12	2.21	13.45	12.12	166	8001		Turbid brown
9:47		0.5	6.87	2.21	13.56	10.90	167	779		"
9:52		1.0	6.88	2.22	13.99	7.65	159	689		"
9:57		1.5	6.21	2.22	14.77	6.33	155	201		"
10:02		2.0	6.25	2.22	14.89	5.91	140	197		"
10:07		2.5	6.24	2.22	15.31	5.50	122	100		clear
10:12		3.0	6.24	2.21	15.33	5.12	123	73		clear
10:17		3.5	6.24	2.22	15.32	4.87	115	41		clear

Note 400 ml = 0.11 gallons



ENVIRONMENTAL BUSINESS CONSULTANTS

GROUNDWATER PURGE / SAMPLE LOGS

26-22 4th Street, Queens

Well I.D.: mw3

Well Depth (from TOC): 12.00'

Static Water Level (from TOC): 5.30'

Height of Water in Well: 6.70

Gallons of Water per Well Volume: 1.12

Flow Rate: 380 ml/min.

Date: 12-17-19

Equipment: Peristaltic Pump, Horiba

Time	Pump Rate	Gal. Removed	pH	Cond. (uS/cm)	Temp. (deg. F)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	TDS	Comments
7:53		0.0	7.33	2.56	7.12	12.53	230	800+		Turbid, brown
7:58		0.5	6.85	2.34	12.30	8.99	223	216		light turbidity
8:03		1.0	6.87	2.35	12.55°C	8.29	208	1000+		Turbid, brown
8:08		1.5	6.88	2.35	12.45°C	7.89	195	412		Moderately turbid
8:13		2.0	6.88	2.29	13.37°C	7.14	179	227		Light turbidity
8:18		2.5	6.87	2.30	13.53°C	6.87	172	169		Clear
8:23		3.0	6.86	2.28	14.13°C	6.91	161	200		Clear
8:28		3.5	6.85	2.19	15.16°C	5.74	162	250		Clear

Note 400 ml = 0.11 gallons



ENVIRONMENTAL BUSINESS CONSULTANTS

GROUNDWATER PURGE / SAMPLE LOGS

26-22 4th Street, Queens

Well I.D.: MW4

Well Depth (from TOC):

Static Water Level (from TOC):

Height of Water in Well:

Gallons of Water per Well Volume:

Flow Rate: 380 ml/min.

Date:

Equipment:

12-17-19Peristaltic Pump, Horiba

Time	Pump Rate	Gal. Removed	pH	Cond. (uS/cm)	Temp. (deg. F)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	TDS	Comments
9:21		0.0	6.79	1.77	11.69°C	8.29	226	285		Clear
9:26		0.5	6.70	1.77	12.10°C	7.84	196	479		Slight turbidity
9:31		1.0	6.69	1.70	13.40°C	7.09	174	319		Clear
9:36		1.5	6.68	1.70	13.56°C	6.79	169	196		Clear
9:41		2.0	6.67	1.71	13.61°C	6.59	165	146		Clear
9:46		2.5	6.67	1.71	13.79°C	3.92	~~163~~ 98.2	98.2		Clear
9:51		3.0	6.66	1.73	13.60°C	3.02	159	91.2		Clear
9:56		3.5	6.65	1.75	13.51°C	2.71	158	69.4		Clear
10:01		4.0	6.64	1.76	13.59°C	4.58	156	57.0		Clear
10:06		4.5	6.65	1.72	14.39°C	1.99	155	62.2		Clear
10:11		5.0	6.63	1.73	14.65°C	1.61	155	50.2		Clear
10:16		5.5	6.63	1.73	14.70°C	1.46	154	35.0		Clear

Note 400 ml = 0.11 gallons



ENVIRONMENTAL BUSINESS CONSULTANTS

GROUNDWATER PURGE / SAMPLE LOGS

26-22 4th Street, Queens

Well I.D.: mw5

Date: 12.17.19

Well Depth (from TOC): 15.00'

Equipment: Peristaltic Pump, Horiba

Static Water Level (from TOC): 6.2'

Height of Water in Well: 8.8'

Gallons of Water per Well Volume: 1.44

Flow Rate: 380 ml/min.

Time	Pump Rate	Gal. Removed	pH	Cond. (uS/cm)	Temp. (deg. F)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	TDS	Comments
1:23		0.0	7.24	2.61	15.24	8.17	230	800+		Turbid, brown
1:28		0.5	6.99	2.16	15.14	8.10	203	678		"
1:33		1.0	6.91	2.16	14.90	7.77	197	400		"
1:38		1.5	9.90	2.16	14.82	7.45	174	312		"
1:43		2.0	6.90	2.16	14.82	6.91	168	227		clear
1:48		2.5	6.89	2.15	14.82	6.81	166	185		clear
1:53		3.0	6.87	2.15	14.80	5.98	165	99		clear
1:58		3.5	6.86	2.11	14.80	5.76	164	75		clear
2:03		4.0	6.86	2.04	14.81	5.35	164	48		clear

Note 400 ml = 0.11 gallons



ENVIRONMENTAL BUSINESS CONSULTANTS

GROUNDWATER PURGE / SAMPLE LOGS

26-22 4th Street, Queens

Well I.D.: MW6

Well Depth (from TOC): 15.00'

Static Water Level (from TOC): 6.01'

Height of Water in Well: 10.91'

Gallons of Water per Well Volume: 1.83

Flow Rate: 380 ml/min.

Date: 12-17-19

Equipment: Peristaltic Pump, Horiba

Time	Pump Rate	Gal. Removed	pH	Cond. (uS/cm)	Temp. (deg. F)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	TDS	Comments
10:57		0.0	6.62	1.27	12.39	0.84	148	306		
11:02		0.5	6.62	1.27	12.71	0.30	118	502		
11:07		1.0	6.58	1.20	14.15	1.31	115	472		
11:12		1.5	6.55	1.21	14.12	1.27	113	401		
11:17		2.0	6.63	1.21	14.45	0.46	88	186		
11:22		2.5	6.62	1.21	14.40	0.41	87	175		
11:27		3.0	6.61	1.21	14.42	0.50	80	160		
11:32		3.5	6.61	1.20	14.40	0.51	77	90		
11:37		4.0	6.61	1.20	14.41	0.48	75	67		
11:42		4.5	6.61	1.21	14.40	0.41	75	58		
11:47		5.0	6.61	1.20	14.40	0.40	74	29		
11:52		5.5	6.61	1.20	14.40	0.37	74	29		

Note 400 ml = 0.11 gallons



ENVIRONMENTAL BUSINESS CONSULTANTS

GROUNDWATER PURGE / SAMPLE LOGS

26-22 4th Street, Queens, NY

Well I.D.: MW1

Date: 1/28/2020

Well Depth (from TOC): 11.65

Equipment: Peristaltic pump, Horiba

Static Water Level (from TOC): 5.32

Height of Water in Well: 6.33

Gallons of Water per Well Volume: 1.11

Flow Rate:

Time	Pump Rate	Gal. Removed	pH	Cond. (uS/cm)	Temp. (deg. C)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	TDS	Comments
3:56		0	7.01	1.27	13.39	7.56	114	800+		Brown, turbid
4:03		0.5	6.89	1.20	14.12	7.30	112	500		Brown, turbid
4:10		1	6.77	1.20	14.40	5.03	88	310		Clear
4:17		1.5	6.74	1.21	14.41	4.11	76	265		Clear
4:24		2	6.70	1.21	14.40	3.65	75	189		Clear
4:31		2.5	6.69	1.20	14.40	1.87	75	100		Clear
4:38		3	6.68	1.21	14.40	1.15	78	75		Clear
4:45		3.5	6.68	1.20	14.40	1.13	75	54		Clear

Comments:

Note 400 ml = 0.11 gallons



ENVIRONMENTAL BUSINESS CONSULTANTS

GROUNDWATER PURGE / SAMPLE LOGS

26-22 4th Street, Queens, NY

Well I.D.: MW2

Date: 1/28/2020

Well Depth (from TOC): 13.47

Equipment: Peristaltic pump, Horiba

Static Water Level (from TOC): 5.15

Height of Water in Well: 8.32

Gallons of Water per Well Volume: 1.46

Flow Rate:

Time	Pump Rate	Gal. Removed	pH	Cond. (uS/cm)	Temp. (deg. C)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	TDS	Comments
2:50		0	7.25	2.34	14.12	10.96	158	800+		Brown, turbid
2:57		0.5	6.98	2.30	14.19	9.50	154	646		Brown, turbid
3:04		1	6.57	2.25	14.36	8.24	169	175		Clear
3:11		1.5	6.35	2.21	14.37	7.86	169	80		Clear
3:18		2	6.36	2.21	14.36	6.98	137	17		Clear
3:25		2.5	6.34	2.21	14.39	6.21	127	15		Clear
3:32		3	6.34	2.21	14.39	5.12	125	12		Clear
3:39		3.5	6.34	2.21	14.39	3.92	125	12		Clear

Comments:

Note 400 ml = 0.11 gallons



ENVIRONMENTAL BUSINESS CONSULTANTS

GROUNDWATER PURGE / SAMPLE LOGS

26-22 4th Street, Queens, NY

Well I.D.: MW3

Date: 1/28/2020

Well Depth (from TOC): 12

Equipment: Peristaltic pump, Horiba

Static Water Level (from TOC): 5.17

Height of Water in Well: 6.83

Gallons of Water per Well Volume: 1.20

Flow Rate:

Time	Pump Rate	Gal. Removed	pH	Cond. (uS/cm)	Temp. (deg. C)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	TDS	Comments
10:37		0	7.11	2.49	12.12	11.15	215	800+		Brown, turbid
10:44		0.5	6.81	2.43	13.30	10.16	200	770		Brown, turbid
10:51		1	6.80	2.37	14.15	8.88	187	480		Clear
10:58		1.5	6.80	2.34	14.14	7.43	176	311		Clear
11:05		2	6.80	2.22	14.15	6.98	163	225		Clear
11:12		2.5	6.80	2.22	14.15	6.32	162	215		Clear
11:19		3	6.80	2.21	14.15	5.51	160	154		Clear
11:26		3.5	6.80	2.20	14.15	4.89	160	111		Clear

Comments:

Note 400 ml = 0.11 gallons

GROUNDWATER PURGE / SAMPLE LOGS

26-22 4th Street, Queens, NY



ENVIRONMENTAL BUSINESS CONSULTANTS

Well I.D.: MW4

Date: 1/28/2020

Well Depth (from TOC): 15

Equipment: Peristaltic pump, Horiba

Static Water Level (from TOC): 5.1

Height of Water in Well: 9.9

Gallons of Water per Well Volume: 1.93

Flow Rate:

Time	Pump Rate	Gal. Removed	pH	Cond. (uS/cm)	Temp. (deg. C)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	TDS	Comments
11:39		0	7.11	1.75	12.12	6.87	186	800+		Brown, turbid
11:46		0.5	6.81	1.74	13.30	6.45	181	770		Brown, turbid
11:53		1	6.80	1.74	14.15	5.51	170	351		Clear
12:00		1.5	6.77	1.72	14.14	4.87	167	244		Clear
12:07		2	6.67	1.73	14.15	4.2	144	241		Clear
12:14		2.5	6.64	1.73	14.15	3.6	135	201		Clear
12:21		3	6.65	1.68	14.16	1.89	114	199		Clear
12:28		3.5	6.65	1.68	14.15	1.44	113	110		Clear
12:35		4	6.65	1.67	14.15	1.15	113	102		Clear

Comments:

Note 400 ml = 0.11 gallons

**ENVIRONMENTAL BUSINESS CONSULTANTS****GROUNDWATER PURGE / SAMPLE LOGS**

26-22 4th Street, Queens, NY

Well I.D.: MW5Date: 1/28/2020Well Depth (from TOC): 15Equipment: Peristaltic pump, HoribaStatic Water Level (from TOC): 6.37Height of Water in Well: 8.63Gallons of Water per Well Volume: 1.51

Flow Rate:

Time	Pump Rate	Gal. Removed	pH	Cond. (uS/cm)	Temp. (deg. C)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	TDS	Comments
1:45		0	7.11	2.45	12.12	6.36	223	800+		Brown, turbid
1:50		0.5	6.89	2.41	13.30	6.17	204	745		Brown, turbid
1:55		1	6.89	2.36	14.15	5.98	201	345		Clear
2:01		1.5	6.87	2.21	14.14	5.31	197	211		Clear
2:08		2	6.84	2.14	14.10	5.01	190	198		Clear
2:15		2.5	6.81	2.11	14.10	4.98	151	164		Clear
2:21		3	6.82	2.11	14.10	4.90	145	134		Clear
2:27		3.5	6.81	2.11	14.10	4.87	145	36		Clear

Comments:

Note 400 ml = 0.11 gallons

**ENVIRONMENTAL BUSINESS CONSULTANTS****GROUNDWATER PURGE / SAMPLE LOGS**

26-22 4th Street, Queens, NY

Well I.D.: MW6Date: 1/28/2020Well Depth (from TOC): 15Equipment: Peristaltic pump, HoribaStatic Water Level (from TOC): 6.19Height of Water in Well: 8.81Gallons of Water per Well Volume: 1.54

Flow Rate:

Time	Pump Rate	Gal. Removed	pH	Cond. (uS/cm)	Temp. (deg. C)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	TDS	Comments
12:52		0	7.11	1.35	12.12	0.89	102	800+		Brown, turbid
12:59		0.5	6.81	1.31	13.30	0.76	97	770		Brown, turbid
1:06		1	6.80	1.28	14.15	0.71	87	480		Clear
1:13		1.5	6.80	1.27	14.14	0.69	80	376		Clear
1:20		2	6.63	1.20	14.15	0.65	68	187		Clear
1:27		2.5	6.51	1.17	14.15	0.47	66	145		Clear
1:34		3	6.45	1.17	14.15	0.41	65	97		Clear
1:41		3.5	6.45	1.17	14.15	0.030	65	45		Clear

Comments:

Note 400 ml = 0.11 gallons

APPENDIX - D
Soil Vapor Sampling Logs



587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Telephone: 860.645.1102 • Fax: 860.645.0823

CHAIN OF CUSTODY RECORD

AIR ANALYSES

800-827-5426

email: greg@phoenixlabs.com

P.O. #

Page / of /

Data Delivery:

☐ Fax #:

☒ Email: D: 14

☐ Phone #:

Report to: <u>Tony Balado</u>	Project Name: <u>26-22 4th St. Queens</u>	Data Format: (Circle) <u>Equis</u> <u>Excel</u> Other:															
Customer: <u>EBC</u>	Invoice to:	Requested Deliverable: RCP <u>ASP CAT B</u>															
Address:		MCP N Deliverables															
	Sampled by: <u>Tony Balado</u>	Quote Number:															
Phoenix ID #	Client Sample ID	Canister ID #	Canister Size (L)	Outgoing Canister Pressure ("Hg)	Incoming Canister Pressure ("Hg)	Flow Regulator ID #	Flow Controller Setting (mL/min)	Sampling Start Time	Sampling End Time	Sample Start Date	Canister Pressure at Start ("Hg)	Canister Pressure at End ("Hg)	Ambient/Indoor Air	Soil Gas	Grab (C) Composite (C)	TO-15	APH
THIS SECTION FOR LAB USE ONLY																	
85314	SS5	23872	6.0	-30	-3	5622	43	7:20	9:17	12-11-19	-29	-3	X	X			
85315	SS8	23329			-4	0163		7:13	9:06	12-11-19	-30	-5	X	X			
85316	SS1	17160			-3	7007		7:50	9:48	12-11-19	-29	-5	X	X			
85317	SS6	455			-3	8593		7:00	8:54	12-11-19	-30	-5	X	X			
		23346				4967											
		21326				7004											
85318	SS3	496			-4	3408		7:35	9:31	12-11-19	-30	-5	X	X			
85319	SS2	368			-3	4960		9:11	11:14	12-11-19	-30	-5	X	X			
85320	SS7	11292			-5	2975		7:07	9:04	12-11-19	-29	-5	X	X			
85321	SS4	28596			-5	3190		7:27	9:18	12-11-19	-30	-5	X	X			
Relinquished by: <u>[Signature]</u>	Accepted by: <u>[Signature]</u>	Date: <u>12-11-19</u>	Time: <u>12:00</u>	I attest that all media released by Phoenix Environmental Laboratories, Inc. have been received in good working condition and agree to the terms and conditions as listed on the back of this document.													
State Where Samples Collected: <u>NY</u>	Turnaround Time: 1 Day ☐ 2 Day ☐ 3 Day ☐ 4 Day ☐ 5 Day ☒	Requested Criteria: (Please Circle) CT: TAC I/C TAC RES SVVC I/C SVVC RES GWV I/C GWV CES	MA: Indoor Air Residential Ind/Commercial Soil Gas Residential Ind/Commercial	NI: Indoor Air Residential Ind/Commercial Vapor Intrusion	NY: Vapor Intrusion	PA: Indoor Air Residential Non-residential	VT: Indoor Air Residential Industrial										
SPECIAL INSTRUCTIONS, OC REQUIREMENTS, REGULATORY INFORMATION: <u>(10)(6-c)</u> <u>(24H)</u>																	

APPENDIX - E
Laboratory Reports - Phoenix



Thursday, February 06, 2020

Attn: Mr. Charles B. Sosik, P.G.
Environmental Business Consultants
1808 Middle Country Rd
Ridge NY 11961-2406

Project ID: 26-22 4TH ST., QUEENS
SDG ID: GCF22921
Sample ID#s: CF22921 - CF22927

This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory. This report is incomplete unless all pages indicated in the pagination at the bottom of the page are included.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Phyllis Shiller".

Phyllis/Shiller

Laboratory Director

NELAC - #NY11301
CT Lab Registration #PH-0618
MA Lab Registration #M-CT007
ME Lab Registration #CT-007
NH Lab Registration #213693-A,B

NJ Lab Registration #CT-003
NY Lab Registration #11301
PA Lab Registration #68-03530
RI Lab Registration #63
UT Lab Registration #CT00007
VT Lab Registration #VT11301



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823



SDG Comments

February 06, 2020

SDG I.D.: GCF22921

8260 Volatile Organics:

1,2-Dibromoethane, 1,2,3 Trichloropropane, and 1,2-Dibromo-3-chloropropane do not meet NY TOGS GA criteria, these compounds are analyzed by GC/FID method 504 or 8011 to achieve this criteria.

SIM Analysis:

The lowest possible reporting limit under SIM conditions is 0.02 ug/L. The NY TOGS GA criteria for some PAHs is 0.002 ug/L. This level can not be achieved.

Toxaphene is reported to the lowest possible reporting level. The NY TOGS criteria for this compound can not be achieved.

Any compound that is not detected above the MDL/LOD is reported as ND on the report and is reported in the electronic deliverables (EDD) as <RL or U at the RL per state and EPA guidance.

Version 1: Analysis results minus raw data.

Version 2: Complete report with raw data.



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823



Sample Id Cross Reference

February 06, 2020

SDG I.D.: GCF22921

Project ID: 26-22 4TH ST., QUEENS

Client Id	Lab Id	Matrix
MW1	CF22921	GROUND WATER
MW2	CF22922	GROUND WATER
MW3	CF22923	GROUND WATER
MW4	CF22924	GROUND WATER
MW5	CF22925	GROUND WATER
MW6	CF22926	GROUND WATER
TB	CF22927	WATER



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823



Analysis Report

February 06, 2020

FOR: Attn: Mr. Charles B. Sosik, P.G.
Environmental Business Consultants
1808 Middle Country Rd
Ridge NY 11961-2406

Sample Information

Matrix: GROUND WATER
Location Code: EBC
Rush Request: 72 Hour
P.O.#:

Custody Information

Collected by: TB
Received by: LB
Analyzed by: see "By" below

Date

01/28/20
01/29/20

Time

16:45
14:22

Laboratory Data

SDG ID: GCF22921
Phoenix ID: CF22921

Project ID: 26-22 4TH ST., QUEENS
Client ID: MW1

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Silver (Dissolved)	ND	0.005	0.001	mg/L	1	01/30/20	CPP	SW6010D
Aluminum (Dissolved)	0.047	0.011	0.0026	mg/L	1	01/30/20	CPP	SW6010D
Arsenic, (Dissolved)	ND	0.003	0.001	mg/L	1	01/30/20	CPP	SW6010D
Barium (Dissolved)	0.139	0.011	0.001	mg/L	1	01/30/20	CPP	SW6010D
Beryllium (Dissolved)	ND	0.001	0.001	mg/L	1	01/30/20	CPP	SW6010D
Calcium (Dissolved)	130	0.01	0.003	mg/L	1	01/30/20	CPP	SW6010D
Cadmium (Dissolved)	ND	0.004	0.0005	mg/L	1	01/30/20	CPP	SW6010D
Cobalt, (Dissolved)	ND	0.005	0.001	mg/L	1	01/30/20	CPP	SW6010D
Chromium (Dissolved)	ND	0.001	0.001	mg/L	1	01/30/20	CPP	SW6010D
Copper, (Dissolved)	ND	0.005	0.001	mg/L	1	01/30/20	CPP	SW6010D
Iron, (Dissolved)	ND	0.01	0.01	mg/L	1	01/30/20	CPP	SW6010D
Mercury (Dissolved)	ND	0.0002	0.00015	mg/L	1	01/30/20	RS	SW7470A
Potassium (Dissolved)	9.3	0.1	0.1	mg/L	1	01/30/20	CPP	SW6010D
Magnesium (Dissolved)	29.6	0.01	0.01	mg/L	1	01/30/20	CPP	SW6010D
Manganese, (Dissolved)	0.447	0.005	0.001	mg/L	1	01/30/20	CPP	SW6010D
Sodium (Dissolved)	179	1.1	1.1	mg/L	10	01/30/20	TH	SW6010D
Nickel, (Dissolved)	ND	0.004	0.001	mg/L	1	01/30/20	CPP	SW6010D
Lead (Dissolved)	ND	0.002	0.001	mg/L	1	01/30/20	CPP	SW6010D
Antimony (Dissolved)-LDL	ND	0.0010	0.0010	mg/L	1	01/30/20	PS	SW6020B
Selenium (Dissolved)-LDL	ND	0.010	0.010	mg/L	1	01/30/20	CPP	SW6020B
Thallium (Dissolved)	ND	0.0003	0.0001	mg/L	1	01/30/20	CPP	SW6020B
Vanadium, (Dissolved)	ND	0.011	0.011	mg/L	1	01/30/20	CPP	SW6010D
Zinc, (Dissolved)	ND	0.011	0.002	mg/L	1	01/30/20	CPP	SW6010D
Filtration	Completed					01/29/20	AG	0.45um Filter
Dissolved Mercury Digestion	Completed					01/30/20	LS/LS	SW7470A
Dissolved Metals Preparation	Completed					01/29/20	AG	SW3005A
Dissolved Metals Preparation	Completed					01/29/20	AG	SW3005A

Client ID: MW1

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit1

Comments:

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

**Phyllis Shiller, Laboratory Director****February 06, 2020****Reviewed and Released by: Phyllis Shiller, Laboratory Director**



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823



Analysis Report

February 06, 2020

FOR: Attn: Mr. Charles B. Sosik, P.G.
Environmental Business Consultants
1808 Middle Country Rd
Ridge NY 11961-2406

Sample Information

Matrix: GROUND WATER
Location Code: EBC
Rush Request: 72 Hour
P.O.#:

Custody Information

Collected by: TB
Received by: LB
Analyzed by: see "By" below

Date

01/28/20
01/29/20

Time

15:39
14:22

Laboratory Data

SDG ID: GCF22921
Phoenix ID: CF22922

Project ID: 26-22 4TH ST., QUEENS
Client ID: MW2

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Silver (Dissolved)	ND	0.005	0.001	mg/L	1	01/30/20	CPP	SW6010D
Aluminum (Dissolved)	0.056	0.011	0.0026	mg/L	1	01/30/20	CPP	SW6010D
Arsenic, (Dissolved)	ND	0.003	0.001	mg/L	1	01/30/20	CPP	SW6010D
Barium (Dissolved)	0.137	0.011	0.001	mg/L	1	01/30/20	CPP	SW6010D
Beryllium (Dissolved)	ND	0.001	0.001	mg/L	1	01/30/20	CPP	SW6010D
Calcium (Dissolved)	129	0.01	0.003	mg/L	1	01/30/20	CPP	SW6010D
Cadmium (Dissolved)	ND	0.004	0.0005	mg/L	1	01/30/20	CPP	SW6010D
Cobalt, (Dissolved)	ND	0.005	0.001	mg/L	1	01/30/20	CPP	SW6010D
Chromium (Dissolved)	ND	0.001	0.001	mg/L	1	01/30/20	CPP	SW6010D
Copper, (Dissolved)	ND	0.005	0.001	mg/L	1	01/30/20	CPP	SW6010D
Iron, (Dissolved)	ND	0.01	0.01	mg/L	1	01/30/20	CPP	SW6010D
Mercury (Dissolved)	ND	0.0002	0.00015	mg/L	1	01/30/20	RS	SW7470A
Potassium (Dissolved)	9.2	0.1	0.1	mg/L	1	01/30/20	CPP	SW6010D
Magnesium (Dissolved)	28.8	0.01	0.01	mg/L	1	01/30/20	CPP	SW6010D
Manganese, (Dissolved)	0.446	0.005	0.001	mg/L	1	01/30/20	CPP	SW6010D
Sodium (Dissolved)	197	1.1	1.1	mg/L	10	01/30/20	TH	SW6010D
Nickel, (Dissolved)	ND	0.004	0.001	mg/L	1	01/30/20	CPP	SW6010D
Lead (Dissolved)	ND	0.002	0.001	mg/L	1	01/30/20	CPP	SW6010D
Antimony (Dissolved)-LDL	ND	0.0010	0.0010	mg/L	1	01/30/20	CPP	SW6020B
Selenium (Dissolved)-LDL	ND	0.010	0.010	mg/L	1	01/30/20	CPP	SW6020B
Thallium (Dissolved)	ND	0.0003	0.0001	mg/L	1	01/30/20	CPP	SW6020B
Vanadium, (Dissolved)	ND	0.011	0.011	mg/L	1	01/30/20	CPP	SW6010D
Zinc, (Dissolved)	ND	0.011	0.002	mg/L	1	01/30/20	CPP	SW6010D
Filtration	Completed					01/29/20	AG	0.45um Filter
Dissolved Mercury Digestion	Completed					01/30/20	LS/LS	SW7470A
Dissolved Metals Preparation	Completed					01/29/20	AG	SW3005A
Dissolved Metals Preparation	Completed					01/29/20	AG	SW3005A

Client ID: MW2

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit1

Comments:

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

**Phyllis Shiller, Laboratory Director****February 06, 2020****Reviewed and Released by: Phyllis Shiller, Laboratory Director**



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823



Analysis Report

February 06, 2020

FOR: Attn: Mr. Charles B. Sosik, P.G.
Environmental Business Consultants
1808 Middle Country Rd
Ridge NY 11961-2406

Sample Information

Matrix: GROUND WATER
Location Code: EBC
Rush Request: 72 Hour
P.O.#:

Custody Information

Collected by: TB
Received by: LB
Analyzed by: see "By" below

Date

01/28/20
01/29/20

Time

11:26
14:22

Laboratory Data

SDG ID: GCF22921
Phoenix ID: CF22923

Project ID: 26-22 4TH ST., QUEENS
Client ID: MW3

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Silver	ND	0.005	0.001	mg/L	1	01/30/20	TH	SW6010D
Aluminum	12.8	0.020	0.0024	mg/L	1	01/30/20	TH	SW6010D
Arsenic - LDL	ND	0.004	0.001	mg/L	1	01/30/20	TH	SW6010D
Barium	0.224	0.010	0.001	mg/L	1	01/30/20	TH	SW6010D
Beryllium	ND	0.001	0.001	mg/L	1	01/30/20	TH	SW6010D
Calcium	131	0.010	0.003	mg/L	1	01/30/20	TH	SW6010D
Cadmium	ND	0.004	0.0005	mg/L	1	01/30/20	TH	SW6010D
Cobalt	0.007	0.005	0.001	mg/L	1	01/30/20	TH	SW6010D
Chromium	0.016	0.001	0.001	mg/L	1	01/30/20	TH	SW6010D
Copper	0.026	0.005	0.001	mg/L	1	01/30/20	TH	SW6010D
Silver (Dissolved)	ND	0.005	0.001	mg/L	1	01/30/20	CPP	SW6010D
Aluminum (Dissolved)	0.046	0.011	0.0026	mg/L	1	01/30/20	CPP	SW6010D
Arsenic, (Dissolved)	ND	0.003	0.001	mg/L	1	01/30/20	CPP	SW6010D
Barium (Dissolved)	0.136	0.011	0.001	mg/L	1	01/30/20	CPP	SW6010D
Beryllium (Dissolved)	ND	0.001	0.001	mg/L	1	01/30/20	CPP	SW6010D
Calcium (Dissolved)	128	0.01	0.003	mg/L	1	01/30/20	CPP	SW6010D
Cadmium (Dissolved)	ND	0.004	0.0005	mg/L	1	01/30/20	CPP	SW6010D
Cobalt, (Dissolved)	ND	0.005	0.001	mg/L	1	01/30/20	CPP	SW6010D
Chromium (Dissolved)	ND	0.001	0.001	mg/L	1	01/30/20	CPP	SW6010D
Copper, (Dissolved)	ND	0.005	0.001	mg/L	1	01/30/20	CPP	SW6010D
Iron, (Dissolved)	ND	0.01	0.01	mg/L	1	01/30/20	CPP	SW6010D
Mercury (Dissolved)	ND	0.0002	0.00015	mg/L	1	01/30/20	RS	SW7470A
Potassium (Dissolved)	9.1	0.1	0.1	mg/L	1	01/30/20	CPP	SW6010D
Magnesium (Dissolved)	27.9	0.01	0.01	mg/L	1	01/30/20	CPP	SW6010D
Manganese, (Dissolved)	0.447	0.005	0.001	mg/L	1	01/30/20	CPP	SW6010D
Sodium (Dissolved)	199	1.1	1.1	mg/L	10	02/04/20	TH	SW6010D
Nickel, (Dissolved)	ND	0.004	0.001	mg/L	1	01/30/20	CPP	SW6010D
Lead (Dissolved)	ND	0.002	0.001	mg/L	1	01/30/20	CPP	SW6010D

Client ID: MW3

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Antimony (Dissolved)-LDL	ND	0.0010	0.0010	mg/L	1	01/30/20	CPP	SW6020B
Selenium (Dissolved)-LDL	ND	0.010	0.010	mg/L	1	01/30/20	CPP	SW6020B
Thallium (Dissolved)	ND	0.0003	0.0001	mg/L	1	01/30/20	CPP	SW6020B
Vanadium, (Dissolved)	ND	0.011	0.011	mg/L	1	01/30/20	CPP	SW6010D
Zinc, (Dissolved)	ND	0.011	0.002	mg/L	1	01/30/20	CPP	SW6010D
Iron	12.4	0.01	0.01	mg/L	1	01/30/20	TH	SW6010D
Mercury	ND	0.0002	0.00015	mg/L	1	01/30/20	RS	SW7470A
Potassium	10.8	0.1	0.1	mg/L	1	01/30/20	TH	SW6010D
Magnesium	33.3	0.010	0.01	mg/L	1	01/30/20	TH	SW6010D
Manganese	1.04	0.005	0.001	mg/L	1	01/30/20	TH	SW6010D
Sodium	211	1.0	1.0	mg/L	10	01/30/20	TH	SW6010D
Nickel	0.014	0.004	0.001	mg/L	1	01/30/20	TH	SW6010D
Lead	0.025	0.002	0.001	mg/L	1	01/30/20	TH	SW6010D
Antimony	ND	0.0030	0.0005	mg/L	5	01/30/20	CPP	SW6020B
Selenium	ND	0.010	0.010	mg/L	5	01/30/20	CPP	SW6020B
Thallium	ND	0.0005	0.0005	mg/L	5	01/30/20	CPP	SW6020B
Vanadium	0.021	0.010	0.001	mg/L	1	01/30/20	TH	SW6010D
Zinc	0.042	0.010	0.002	mg/L	1	01/30/20	TH	SW6010D
Filtration	Completed					01/29/20	AG	0.45um Filter
Dissolved Mercury Digestion	Completed					01/30/20	LS/LS	SW7470A
Mercury Digestion	Completed					01/30/20	LS/Q	SW7470A
PCB Extraction (LDL)	Completed					01/30/20	AT/AT	SW3510C
Extraction for Pest (LDL)	Completed					01/30/20	AT/AT	SW3510C
Semi-Volatile Extraction	Completed					01/29/20	P/AK	SW3520C
Dissolved Metals Preparation	Completed					01/29/20	AG	SW3005A
Dissolved Metals Preparation	Completed					01/29/20	AG	SW3005A
Total Metals Digestion	Completed					01/29/20	AG	
Total Metals Digestion MS	Completed					01/29/20	AG	

Pesticides

4,4' -DDD	ND	0.005	0.005	ug/L	1	01/31/20	CG	SW8081B
4,4' -DDE	ND	0.005	0.005	ug/L	1	01/31/20	CG	SW8081B
4,4' -DDT	ND	0.005	0.005	ug/L	1	01/31/20	CG	SW8081B
a-BHC	ND	0.005	0.005	ug/L	1	01/31/20	CG	SW8081B
a-chlordane	ND	0.010	0.010	ug/L	1	01/31/20	CG	SW8081B
Alachlor	ND	0.073	0.073	ug/L	1	01/31/20	CG	SW8081B
Aldrin	ND	0.002	0.002	ug/L	1	01/31/20	CG	SW8081B
b-BHC	ND	0.005	0.005	ug/L	1	01/31/20	CG	SW8081B
Chlordane	ND	0.049	0.049	ug/L	1	01/31/20	CG	SW8081B
d-BHC	ND	0.040	0.040	ug/L	1	01/31/20	CG	SW8081B
Dieldrin	ND	0.002	0.002	ug/L	1	01/31/20	CG	SW8081B
Endosulfan I	ND	0.010	0.010	ug/L	1	01/31/20	CG	SW8081B
Endosulfan II	ND	0.010	0.010	ug/L	1	01/31/20	CG	SW8081B
Endosulfan Sulfate	ND	0.010	0.010	ug/L	1	01/31/20	CG	SW8081B
Endrin	ND	0.010	0.010	ug/L	1	01/31/20	CG	SW8081B
Endrin Aldehyde	ND	0.010	0.010	ug/L	1	01/31/20	CG	SW8081B
Endrin ketone	ND	0.010	0.010	ug/L	1	01/31/20	CG	SW8081B
g-BHC (Lindane)	ND	0.005	0.005	ug/L	1	01/31/20	CG	SW8081B
g-chlordane	ND	0.010	0.010	ug/L	1	01/31/20	CG	SW8081B
Heptachlor	ND	0.010	0.010	ug/L	1	01/31/20	CG	SW8081B

Client ID: MW3

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Heptachlor epoxide	ND	0.010	0.010	ug/L	1	01/31/20	CG	SW8081B
Methoxychlor	ND	0.097	0.097	ug/L	1	01/31/20	CG	SW8081B
Toxaphene	ND	0.19	0.19	ug/L	1	01/31/20	CG	SW8081B
<u>QA/QC Surrogates</u>								
%DCBP (Surrogate Rec)	73			%	1	01/31/20	CG	30 - 150 %
%DCBP (Surrogate Rec) (Confirmation)	71			%	1	01/31/20	CG	30 - 150 %
%TCMX (Surrogate Rec)	88			%	1	01/31/20	CG	30 - 150 %
%TCMX (Surrogate Rec) (Confirmation)	81			%	1	01/31/20	CG	30 - 150 %
<u>Polychlorinated Biphenyls</u>								
PCB-1016	ND	0.049	0.049	ug/L	1	01/31/20	SC	SW8082A
PCB-1221	ND	0.049	0.049	ug/L	1	01/31/20	SC	SW8082A
PCB-1232	ND	0.049	0.049	ug/L	1	01/31/20	SC	SW8082A
PCB-1242	ND	0.049	0.049	ug/L	1	01/31/20	SC	SW8082A
PCB-1248	ND	0.049	0.049	ug/L	1	01/31/20	SC	SW8082A
PCB-1254	ND	0.049	0.049	ug/L	1	01/31/20	SC	SW8082A
PCB-1260	ND	0.049	0.049	ug/L	1	01/31/20	SC	SW8082A
PCB-1262	ND	0.049	0.049	ug/L	1	01/31/20	SC	SW8082A
PCB-1268	ND	0.049	0.049	ug/L	1	01/31/20	SC	SW8082A
<u>QA/QC Surrogates</u>								
% DCBP	89			%	1	01/31/20	SC	30 - 150 %
% DCBP (Confirmation)	94			%	1	01/31/20	SC	30 - 150 %
% TCMX	80			%	1	01/31/20	SC	30 - 150 %
% TCMX (Confirmation)	98			%	1	01/31/20	SC	30 - 150 %
<u>Volatiles</u>								
1,1,1,2-Tetrachloroethane	ND	1.0	0.25	ug/L	1	01/29/20	MH	SW8260C
1,1,1-Trichloroethane	ND	5.0	0.25	ug/L	1	01/29/20	MH	SW8260C
1,1,2,2-Tetrachloroethane	ND	1.0	0.25	ug/L	1	01/29/20	MH	SW8260C
1,1,2-Trichloroethane	ND	1.0	0.25	ug/L	1	01/29/20	MH	SW8260C
1,1-Dichloroethane	ND	5.0	0.25	ug/L	1	01/29/20	MH	SW8260C
1,1-Dichloroethene	ND	1.0	0.25	ug/L	1	01/29/20	MH	SW8260C
1,1-Dichloropropene	ND	1.0	0.25	ug/L	1	01/29/20	MH	SW8260C
1,2,3-Trichlorobenzene	ND	1.0	0.25	ug/L	1	01/29/20	MH	SW8260C
1,2,3-Trichloropropane	ND	0.25	0.25	ug/L	1	01/29/20	MH	SW8260C
1,2,4-Trichlorobenzene	ND	1.0	0.25	ug/L	1	01/29/20	MH	SW8260C
1,2,4-Trimethylbenzene	ND	1.0	0.25	ug/L	1	01/29/20	MH	SW8260C
1,2-Dibromo-3-chloropropane	ND	0.50	0.50	ug/L	1	01/29/20	MH	SW8260C
1,2-Dibromoethane	ND	0.25	0.25	ug/L	1	01/29/20	MH	SW8260C
1,2-Dichlorobenzene	ND	1.0	0.25	ug/L	1	01/29/20	MH	SW8260C
1,2-Dichloroethane	ND	0.60	0.50	ug/L	1	01/29/20	MH	SW8260C
1,2-Dichloropropane	ND	1.0	0.25	ug/L	1	01/29/20	MH	SW8260C
1,3,5-Trimethylbenzene	ND	1.0	0.25	ug/L	1	01/29/20	MH	SW8260C
1,3-Dichlorobenzene	ND	1.0	0.25	ug/L	1	01/29/20	MH	SW8260C
1,3-Dichloropropane	ND	1.0	0.25	ug/L	1	01/29/20	MH	SW8260C
1,4-Dichlorobenzene	ND	1.0	0.25	ug/L	1	01/29/20	MH	SW8260C
2,2-Dichloropropane	ND	1.0	0.25	ug/L	1	01/29/20	MH	SW8260C
2-Chlorotoluene	ND	1.0	0.25	ug/L	1	01/29/20	MH	SW8260C
2-Hexanone	ND	2.5	2.5	ug/L	1	01/29/20	MH	SW8260C
2-Isopropyltoluene	ND	1.0	0.25	ug/L	1	01/29/20	MH	SW8260C

Client ID: MW3

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
4-Chlorotoluene	ND	1.0	0.25	ug/L	1	01/29/20	MH	SW8260C
4-Methyl-2-pentanone	ND	2.5	2.5	ug/L	1	01/29/20	MH	SW8260C
Acetone	ND	5.0	2.5	ug/L	1	01/29/20	MH	SW8260C
Acrolein	ND	5.0	2.5	ug/L	1	01/29/20	MH	SW8260C
Acrylonitrile	ND	5.0	2.5	ug/L	1	01/29/20	MH	SW8260C
Benzene	ND	0.70	0.25	ug/L	1	01/29/20	MH	SW8260C
Bromobenzene	ND	1.0	0.25	ug/L	1	01/29/20	MH	SW8260C
Bromochloromethane	ND	1.0	0.25	ug/L	1	01/29/20	MH	SW8260C
Bromodichloromethane	ND	1.0	0.25	ug/L	1	01/29/20	MH	SW8260C
Bromoform	ND	5.0	0.25	ug/L	1	01/29/20	MH	SW8260C
Bromomethane	ND	5.0	0.25	ug/L	1	01/29/20	MH	SW8260C
Carbon Disulfide	ND	1.0	0.25	ug/L	1	01/29/20	MH	SW8260C
Carbon tetrachloride	ND	1.0	0.25	ug/L	1	01/29/20	MH	SW8260C
Chlorobenzene	ND	5.0	0.25	ug/L	1	01/29/20	MH	SW8260C
Chloroethane	ND	5.0	0.25	ug/L	1	01/29/20	MH	SW8260C
Chloroform	ND	5.0	0.25	ug/L	1	01/29/20	MH	SW8260C
Chloromethane	ND	5.0	0.25	ug/L	1	01/29/20	MH	SW8260C
cis-1,2-Dichloroethene	ND	1.0	0.25	ug/L	1	01/29/20	MH	SW8260C
cis-1,3-Dichloropropene	ND	0.40	0.25	ug/L	1	01/29/20	MH	SW8260C
Dibromochloromethane	ND	1.0	0.25	ug/L	1	01/29/20	MH	SW8260C
Dibromomethane	ND	1.0	0.25	ug/L	1	01/29/20	MH	SW8260C
Dichlorodifluoromethane	ND	1.0	0.25	ug/L	1	01/29/20	MH	SW8260C
Ethylbenzene	ND	1.0	0.25	ug/L	1	01/29/20	MH	SW8260C
Hexachlorobutadiene	ND	0.50	0.20	ug/L	1	01/29/20	MH	SW8260C
Isopropylbenzene	ND	1.0	0.25	ug/L	1	01/29/20	MH	SW8260C
m&p-Xylene	ND	1.0	0.25	ug/L	1	01/29/20	MH	SW8260C
Methyl ethyl ketone	ND	2.5	2.5	ug/L	1	01/29/20	MH	SW8260C
Methyl t-butyl ether (MTBE)	ND	1.0	0.25	ug/L	1	01/29/20	MH	SW8260C
Methylene chloride	ND	3.0	1.0	ug/L	1	01/29/20	MH	SW8260C
Naphthalene	ND	1.0	1.0	ug/L	1	01/29/20	MH	SW8260C
n-Butylbenzene	ND	1.0	0.25	ug/L	1	01/29/20	MH	SW8260C
n-Propylbenzene	ND	1.0	0.25	ug/L	1	01/29/20	MH	SW8260C
o-Xylene	ND	1.0	0.25	ug/L	1	01/29/20	MH	SW8260C
p-Isopropyltoluene	ND	1.0	0.25	ug/L	1	01/29/20	MH	SW8260C
sec-Butylbenzene	ND	1.0	0.25	ug/L	1	01/29/20	MH	SW8260C
Styrene	ND	1.0	0.25	ug/L	1	01/29/20	MH	SW8260C
tert-Butylbenzene	ND	1.0	0.25	ug/L	1	01/29/20	MH	SW8260C
Tetrachloroethene	8.1	1.0	0.25	ug/L	1	01/29/20	MH	SW8260C
Tetrahydrofuran (THF)	ND	5.0	2.5	ug/L	1	01/29/20	MH	SW8260C
Toluene	ND	1.0	0.25	ug/L	1	01/29/20	MH	SW8260C
trans-1,2-Dichloroethene	ND	5.0	0.25	ug/L	1	01/29/20	MH	SW8260C
trans-1,3-Dichloropropene	ND	0.40	0.25	ug/L	1	01/29/20	MH	SW8260C
trans-1,4-dichloro-2-butene	ND	2.5	2.5	ug/L	1	01/29/20	MH	SW8260C
Trichloroethene	0.76	1.0	0.25	ug/L	1	01/29/20	MH	SW8260C
Trichlorofluoromethane	ND	1.0	0.25	ug/L	1	01/29/20	MH	SW8260C
Trichlorotrifluoroethane	ND	1.0	0.25	ug/L	1	01/29/20	MH	SW8260C
Vinyl chloride	ND	1.0	0.25	ug/L	1	01/29/20	MH	SW8260C
<u>QA/QC Surrogates</u>								
% 1,2-dichlorobenzene-d4	104			%	1	01/29/20	MH	70 - 130 %

1

Client ID: MW3

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
% Bromofluorobenzene	94			%	1	01/29/20	MH	70 - 130 %
% Dibromofluoromethane	104			%	1	01/29/20	MH	70 - 130 %
% Toluene-d8	102			%	1	01/29/20	MH	70 - 130 %

Volatiles

1,1,1,2-Tetrachloroethane	ND	1.0	0.25	ug/L	1	01/29/20	MH	SW8260C
Acrolein	ND	5.0	2.5	ug/L	1	01/29/20	MH	SW8260C
Acrylonitrile	ND	5.0	0.25	ug/L	1	01/29/20	MH	SW8260C
Tert-butyl alcohol	ND	50	10	ug/L	1	01/29/20	MH	SW8260C
Client MS/MSD	Completed					01/31/20		

1,4-dioxane

1,4-dioxane	ND	0.20	0.20	ug/l	1	01/30/20	AW	SW8270DSIM

1

QA/QC Surrogates

% 1,4-dioxane-d8	74			%	1	01/30/20	AW	30 - 130 %

Semivolatiles

1,2,4,5-Tetrachlorobenzene	ND	3.5	3.5	ug/L	1	02/03/20	WB	SW8270D
1,2,4-Trichlorobenzene	ND	5.0	1.5	ug/L	1	02/03/20	WB	SW8270D
1,2-Dichlorobenzene	ND	1.0	1.0	ug/L	1	02/03/20	WB	SW8270D
1,2-Diphenylhydrazine	ND	5.0	1.6	ug/L	1	02/03/20	WB	SW8270D
1,3-Dichlorobenzene	ND	1.0	1.0	ug/L	1	02/03/20	WB	SW8270D
1,4-Dichlorobenzene	ND	1.0	1.0	ug/L	1	02/03/20	WB	SW8270D
2,4,5-Trichlorophenol	ND	1.0	1.0	ug/L	1	02/03/20	WB	SW8270D
2,4,6-Trichlorophenol	ND	1.0	1.0	ug/L	1	02/03/20	WB	SW8270D
2,4-Dichlorophenol	ND	1.0	1.0	ug/L	1	02/03/20	WB	SW8270D
2,4-Dimethylphenol	ND	1.0	1.0	ug/L	1	02/03/20	WB	SW8270D
2,4-Dinitrophenol	ND	1.0	1.0	ug/L	1	02/03/20	WB	SW8270D
2,4-Dinitrotoluene	ND	5.0	2.0	ug/L	1	02/03/20	WB	SW8270D
2,6-Dinitrotoluene	ND	5.0	1.6	ug/L	1	02/03/20	WB	SW8270D
2-Chloronaphthalene	ND	5.0	1.4	ug/L	1	02/03/20	WB	SW8270D
2-Chlorophenol	ND	1.0	1.0	ug/L	1	02/03/20	WB	SW8270D
2-Methylnaphthalene	ND	5.0	1.5	ug/L	1	02/03/20	WB	SW8270D
2-Methylphenol (o-cresol)	ND	1.0	1.0	ug/L	1	02/03/20	WB	SW8270D
2-Nitroaniline	ND	5.0	2.0	ug/L	1	02/03/20	WB	SW8270D
2-Nitrophenol	ND	1.0	1.0	ug/L	1	02/03/20	WB	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	1.0	1.0	ug/L	1	02/03/20	WB	SW8270D
3,3'-Dichlorobenzidine	ND	5.0	2.4	ug/L	1	02/03/20	WB	SW8270D
3-Nitroaniline	ND	5.0	2.0	ug/L	1	02/03/20	WB	SW8270D
4,6-Dinitro-2-methylphenol	ND	1.0	1.0	ug/L	1	02/03/20	WB	SW8270D
4-Bromophenyl phenyl ether	ND	5.0	1.5	ug/L	1	02/03/20	WB	SW8270D
4-Chloro-3-methylphenol	ND	1.0	1.0	ug/L	1	02/03/20	WB	SW8270D
4-Chloroaniline	ND	3.5	2.3	ug/L	1	02/03/20	WB	SW8270D
4-Chlorophenyl phenyl ether	ND	5.0	1.7	ug/L	1	02/03/20	WB	SW8270D
4-Nitroaniline	ND	5.0	1.7	ug/L	1	02/03/20	WB	SW8270D
4-Nitrophenol	ND	1.0	1.0	ug/L	1	02/03/20	WB	SW8270D
Acenaphthene	ND	5.0	1.5	ug/L	1	02/03/20	WB	SW8270D
Acetophenone	ND	5.0	1.6	ug/L	1	02/03/20	WB	SW8270D
Aniline	ND	3.5	3.5	ug/L	1	02/03/20	WB	SW8270D
Anthracene	ND	5.0	1.6	ug/L	1	02/03/20	WB	SW8270D

Client ID: MW3

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Benzidine	ND	4.5	2.9	ug/L	1	02/03/20	WB	SW8270D
Benzoic acid	ND	25	10	ug/L	1	02/03/20	WB	SW8270D
Benzyl butyl phthalate	ND	5.0	1.3	ug/L	1	02/03/20	WB	SW8270D
Bis(2-chloroethoxy)methane	ND	5.0	1.4	ug/L	1	02/03/20	WB	SW8270D
Bis(2-chloroethyl)ether	ND	1.0	1.0	ug/L	1	02/03/20	WB	SW8270D
Bis(2-chloroisopropyl)ether	ND	5.0	1.4	ug/L	1	02/03/20	WB	SW8270D
Bis(2-ethylhexyl)phthalate	ND	1.0	1.0	ug/L	1	02/03/20	WB	SW8270D
Carbazole	ND	5.0	3.8	ug/L	1	02/03/20	WB	SW8270D
Dibenzofuran	ND	5.0	1.5	ug/L	1	02/03/20	WB	SW8270D
Diethyl phthalate	ND	5.0	1.6	ug/L	1	02/03/20	WB	SW8270D
Dimethylphthalate	ND	5.0	1.6	ug/L	1	02/03/20	WB	SW8270D
Di-n-butylphthalate	ND	5.0	1.3	ug/L	1	02/03/20	WB	SW8270D
Di-n-octylphthalate	ND	5.0	1.3	ug/L	1	02/03/20	WB	SW8270D
Fluoranthene	ND	5.0	1.6	ug/L	1	02/03/20	WB	SW8270D
Fluorene	ND	5.0	1.7	ug/L	1	02/03/20	WB	SW8270D
Hexachlorocyclopentadiene	ND	5.0	1.5	ug/L	1	02/03/20	WB	SW8270D
Hexachloroethane	ND	1.0	1.0	ug/L	1	02/03/20	WB	SW8270D
Isophorone	ND	5.0	1.4	ug/L	1	02/03/20	WB	SW8270D
Naphthalene	ND	5.0	1.4	ug/L	1	02/03/20	WB	SW8270D
N-Nitrosodi-n-propylamine	ND	5.0	1.6	ug/L	1	02/03/20	WB	SW8270D
N-Nitrosodiphenylamine	ND	5.0	1.9	ug/L	1	02/03/20	WB	SW8270D
Pentachloronitrobenzene	ND	2.5	2.5	ug/L	1	02/03/20	WB	SW8270D
Phenol	ND	1.0	1.0	ug/L	1	02/03/20	WB	SW8270D
Pyrene	ND	5.0	1.7	ug/L	1	02/03/20	WB	SW8270D
Pyridine	ND	10	1.2	ug/L	1	02/03/20	WB	SW8270D

QA/QC Surrogates

% 2,4,6-Tribromophenol	61			%	1	02/03/20	WB	15 - 110 %
% 2-Fluorobiphenyl	68			%	1	02/03/20	WB	30 - 130 %
% 2-Fluorophenol	46			%	1	02/03/20	WB	15 - 110 %
% Nitrobenzene-d5	59			%	1	02/03/20	WB	30 - 130 %
% Phenol-d5	53			%	1	02/03/20	WB	15 - 110 %
% Terphenyl-d14	51			%	1	02/03/20	WB	30 - 130 %

Semivolatiles

Acenaphthylene	ND	0.50	0.50	ug/L	1	02/01/20	WB	SW8270D (SIM)
Benz(a)anthracene	ND	0.02	0.02	ug/L	1	02/01/20	WB	SW8270D (SIM)
Benzo(a)pyrene	ND	0.02	0.02	ug/L	1	02/01/20	WB	SW8270D (SIM)
Benzo(b)fluoranthene	ND	0.02	0.02	ug/L	1	02/01/20	WB	SW8270D (SIM)
Benzo(ghi)perylene	ND	0.50	0.50	ug/L	1	02/01/20	WB	SW8270D (SIM)
Benzo(k)fluoranthene	ND	0.02	0.02	ug/L	1	02/01/20	WB	SW8270D (SIM)
Chrysene	ND	0.02	0.02	ug/L	1	02/01/20	WB	SW8270D (SIM)
Dibenz(a,h)anthracene	ND	0.50	0.50	ug/L	1	02/01/20	WB	SW8270D (SIM)
Hexachlorobenzene	ND	0.04	0.04	ug/L	1	02/01/20	WB	SW8270D (SIM)
Hexachlorobutadiene	ND	0.50	0.50	ug/L	1	02/01/20	WB	SW8270D (SIM)
Indeno(1,2,3-cd)pyrene	ND	0.02	0.02	ug/L	1	02/01/20	WB	SW8270D (SIM)
Nitrobenzene	ND	0.40	0.40	ug/L	1	02/01/20	WB	SW8270D (SIM)
N-Nitrosodimethylamine	ND	0.10	0.10	ug/L	1	02/01/20	WB	SW8270D (SIM)
Pentachlorophenol	ND	0.50	0.50	ug/L	1	02/01/20	WB	SW8270D (SIM)
Phenanthrene	ND	0.50	0.50	ug/L	1	02/01/20	WB	SW8270D (SIM)

QA/QC Surrogates

Client ID: MW3

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
% 2,4,6-Tribromophenol	66			%	1	02/01/20	WB	15 - 110 %
% 2-Fluorobiphenyl	71			%	1	02/01/20	WB	30 - 130 %
% 2-Fluorophenol	53			%	1	02/01/20	WB	15 - 110 %
% Nitrobenzene-d5	67			%	1	02/01/20	WB	30 - 130 %
% Phenol-d5	66			%	1	02/01/20	WB	15 - 110 %
% Terphenyl-d14	59			%	1	02/01/20	WB	30 - 130 %
Extraction for 1,4-Dioxane	Completed					01/29/20	S/S	

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low J=Estimated Below RL LOD=Limit of Detection MDL=Method Detection Limit1

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

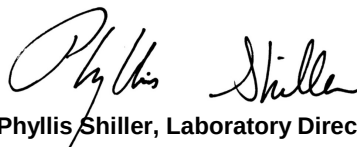
Volatile Comment:

To achieve client's objectives, where the lowest calibration standard or LOD justifies lowering the RL/PQL, the RL/PQL of some compounds have been lowered to meet criteria.

Semi-Volatile Comment:

To achieve client's objectives, where the lowest calibration standard or LOD justifies lowering the RL/PQL, the RL/PQL of some compounds have been lowered to meet criteria.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

February 06, 2020

Reviewed and Released by: Phyllis Shiller, Laboratory Director



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823



Analysis Report

February 06, 2020

FOR: Attn: Mr. Charles B. Sosik, P.G.
Environmental Business Consultants
1808 Middle Country Rd
Ridge NY 11961-2406

Sample Information

Matrix: GROUND WATER
Location Code: EBC
Rush Request: 72 Hour
P.O.#:

Custody Information

Collected by: TB
Received by: LB
Analyzed by: see "By" below

Date

01/28/20
01/29/20

Time

12:35
14:22

Laboratory Data

SDG ID: GCF22921
Phoenix ID: CF22924

Project ID: 26-22 4TH ST., QUEENS
Client ID: MW4

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Silver (Dissolved)	ND	0.005	0.001	mg/L	1	01/30/20	CPP	SW6010D
Aluminum (Dissolved)	0.044	0.011	0.0026	mg/L	1	01/30/20	CPP	SW6010D
Arsenic, (Dissolved)	ND	0.003	0.001	mg/L	1	01/30/20	CPP	SW6010D
Barium (Dissolved)	0.135	0.011	0.001	mg/L	1	01/30/20	CPP	SW6010D
Beryllium (Dissolved)	ND	0.001	0.001	mg/L	1	01/30/20	CPP	SW6010D
Calcium (Dissolved)	128	0.01	0.003	mg/L	1	01/30/20	CPP	SW6010D
Cadmium (Dissolved)	ND	0.004	0.0005	mg/L	1	01/30/20	CPP	SW6010D
Cobalt, (Dissolved)	ND	0.005	0.001	mg/L	1	01/30/20	CPP	SW6010D
Chromium (Dissolved)	ND	0.001	0.001	mg/L	1	01/30/20	CPP	SW6010D
Copper, (Dissolved)	ND	0.005	0.001	mg/L	1	01/30/20	CPP	SW6010D
Iron, (Dissolved)	ND	0.01	0.01	mg/L	1	01/30/20	CPP	SW6010D
Mercury (Dissolved)	ND	0.0002	0.00015	mg/L	1	01/30/20	RS	SW7470A
Potassium (Dissolved)	8.7	0.1	0.1	mg/L	1	01/30/20	CPP	SW6010D
Magnesium (Dissolved)	27.8	0.01	0.01	mg/L	1	01/30/20	CPP	SW6010D
Manganese, (Dissolved)	0.455	0.005	0.001	mg/L	1	01/30/20	CPP	SW6010D
Sodium (Dissolved)	188	1.1	1.1	mg/L	10	01/30/20	TH	SW6010D
Nickel, (Dissolved)	ND	0.004	0.001	mg/L	1	01/30/20	CPP	SW6010D
Lead (Dissolved)	ND	0.002	0.001	mg/L	1	01/30/20	CPP	SW6010D
Antimony (Dissolved)-LDL	ND	0.0010	0.0010	mg/L	1	01/30/20	CPP	SW6020B
Selenium (Dissolved)-LDL	ND	0.010	0.010	mg/L	1	01/30/20	CPP	SW6020B
Thallium (Dissolved)	ND	0.0003	0.0001	mg/L	1	01/30/20	CPP	SW6020B
Vanadium, (Dissolved)	ND	0.011	0.011	mg/L	1	01/30/20	CPP	SW6010D
Zinc, (Dissolved)	ND	0.011	0.002	mg/L	1	01/30/20	CPP	SW6010D
Filtration	Completed					01/29/20	AG	0.45um Filter
Dissolved Mercury Digestion	Completed					01/30/20	LS/LS	SW7470A
Dissolved Metals Preparation	Completed					01/29/20	AG	SW3005A
Dissolved Metals Preparation	Completed					01/29/20	AG	SW3005A

Client ID: MW4

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit1

Comments:

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

**Phyllis Shiller, Laboratory Director****February 06, 2020****Reviewed and Released by: Phyllis Shiller, Laboratory Director**



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823



Analysis Report

February 06, 2020

FOR: Attn: Mr. Charles B. Sosik, P.G.
Environmental Business Consultants
1808 Middle Country Rd
Ridge NY 11961-2406

Sample Information

Matrix: GROUND WATER
Location Code: EBC
Rush Request: 72 Hour
P.O.#:

Custody Information

Collected by: TB
Received by: LB
Analyzed by: see "By" below

Date

01/28/20
01/29/20

Time

14:27
14:22

Laboratory Data

SDG ID: GCF22921
Phoenix ID: CF22925

Project ID: 26-22 4TH ST., QUEENS
Client ID: MW5

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Silver (Dissolved)	ND	0.005	0.001	mg/L	1	01/30/20	CPP	SW6010D
Aluminum (Dissolved)	0.049	0.011	0.0026	mg/L	1	01/30/20	CPP	SW6010D
Arsenic, (Dissolved)	ND	0.003	0.001	mg/L	1	01/30/20	CPP	SW6010D
Barium (Dissolved)	0.136	0.011	0.001	mg/L	1	01/30/20	CPP	SW6010D
Beryllium (Dissolved)	ND	0.001	0.001	mg/L	1	01/30/20	CPP	SW6010D
Calcium (Dissolved)	128	0.01	0.003	mg/L	1	01/30/20	CPP	SW6010D
Cadmium (Dissolved)	ND	0.004	0.0005	mg/L	1	01/30/20	CPP	SW6010D
Cobalt, (Dissolved)	ND	0.005	0.001	mg/L	1	01/30/20	CPP	SW6010D
Chromium (Dissolved)	ND	0.001	0.001	mg/L	1	01/30/20	CPP	SW6010D
Copper, (Dissolved)	ND	0.005	0.001	mg/L	1	01/30/20	CPP	SW6010D
Iron, (Dissolved)	ND	0.01	0.01	mg/L	1	01/30/20	CPP	SW6010D
Mercury (Dissolved)	ND	0.0002	0.00015	mg/L	1	01/30/20	RS	SW7470A
Potassium (Dissolved)	8.9	0.1	0.1	mg/L	1	01/30/20	CPP	SW6010D
Magnesium (Dissolved)	28.9	0.01	0.01	mg/L	1	01/30/20	CPP	SW6010D
Manganese, (Dissolved)	0.444	0.005	0.001	mg/L	1	01/30/20	CPP	SW6010D
Sodium (Dissolved)	196	1.1	1.1	mg/L	10	01/30/20	TH	SW6010D
Nickel, (Dissolved)	ND	0.004	0.001	mg/L	1	01/30/20	CPP	SW6010D
Lead (Dissolved)	ND	0.002	0.001	mg/L	1	01/30/20	CPP	SW6010D
Antimony (Dissolved)-LDL	ND	0.0010	0.0010	mg/L	1	01/30/20	CPP	SW6020B
Selenium (Dissolved)-LDL	ND	0.010	0.010	mg/L	1	01/30/20	CPP	SW6020B
Thallium (Dissolved)	ND	0.0003	0.0001	mg/L	1	01/30/20	CPP	SW6020B
Vanadium, (Dissolved)	ND	0.011	0.011	mg/L	1	01/30/20	CPP	SW6010D
Zinc, (Dissolved)	ND	0.011	0.002	mg/L	1	01/30/20	CPP	SW6010D
Filtration	Completed					01/29/20	AG	0.45um Filter
Dissolved Mercury Digestion	Completed					01/30/20	LS/LS	SW7470A
Dissolved Metals Preparation	Completed					01/29/20	AG	SW3005A
Dissolved Metals Preparation	Completed					01/29/20	AG	SW3005A

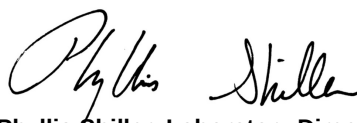
Client ID: MW5

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit1

Comments:

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

**Phyllis Shiller, Laboratory Director****February 06, 2020****Reviewed and Released by: Phyllis Shiller, Laboratory Director**



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823



Analysis Report

February 06, 2020

FOR: Attn: Mr. Charles B. Sosik, P.G.
Environmental Business Consultants
1808 Middle Country Rd
Ridge NY 11961-2406

Sample Information

Matrix: GROUND WATER
Location Code: EBC
Rush Request: 72 Hour
P.O.#:

Custody Information

Collected by: TB
Received by: LB
Analyzed by: see "By" below

Date

01/28/20
01/29/20

Time

13:14
14:22

Laboratory Data

SDG ID: GCF22921
Phoenix ID: CF22926

Project ID: 26-22 4TH ST., QUEENS
Client ID: MW6

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Silver (Dissolved)	ND	0.005	0.001	mg/L	1	01/30/20	CPP	SW6010D
Aluminum (Dissolved)	0.040	0.011	0.0026	mg/L	1	01/30/20	CPP	SW6010D
Arsenic, (Dissolved)	ND	0.003	0.001	mg/L	1	01/30/20	CPP	SW6010D
Barium (Dissolved)	0.134	0.011	0.001	mg/L	1	01/30/20	CPP	SW6010D
Beryllium (Dissolved)	ND	0.001	0.001	mg/L	1	01/30/20	CPP	SW6010D
Calcium (Dissolved)	126	0.01	0.003	mg/L	1	01/30/20	CPP	SW6010D
Cadmium (Dissolved)	ND	0.004	0.0005	mg/L	1	01/30/20	CPP	SW6010D
Cobalt, (Dissolved)	ND	0.005	0.001	mg/L	1	01/30/20	CPP	SW6010D
Chromium (Dissolved)	ND	0.001	0.001	mg/L	1	01/30/20	CPP	SW6010D
Copper, (Dissolved)	ND	0.005	0.001	mg/L	1	01/30/20	CPP	SW6010D
Iron, (Dissolved)	ND	0.01	0.01	mg/L	1	01/30/20	CPP	SW6010D
Mercury (Dissolved)	ND	0.0002	0.00015	mg/L	1	01/30/20	RS	SW7470A
Potassium (Dissolved)	8.7	0.1	0.1	mg/L	1	01/30/20	CPP	SW6010D
Magnesium (Dissolved)	28.4	0.01	0.01	mg/L	1	01/30/20	CPP	SW6010D
Manganese, (Dissolved)	0.430	0.005	0.001	mg/L	1	01/30/20	CPP	SW6010D
Sodium (Dissolved)	188	1.1	1.1	mg/L	10	01/30/20	TH	SW6010D
Nickel, (Dissolved)	ND	0.004	0.001	mg/L	1	01/30/20	CPP	SW6010D
Lead (Dissolved)	ND	0.002	0.001	mg/L	1	01/30/20	CPP	SW6010D
Antimony (Dissolved)-LDL	ND	0.0010	0.0010	mg/L	1	01/30/20	CPP	SW6020B
Selenium (Dissolved)-LDL	ND	0.010	0.010	mg/L	1	01/30/20	CPP	SW6020B
Thallium (Dissolved)	ND	0.0003	0.0001	mg/L	1	01/30/20	CPP	SW6020B
Vanadium, (Dissolved)	ND	0.011	0.011	mg/L	1	01/30/20	CPP	SW6010D
Zinc, (Dissolved)	ND	0.011	0.002	mg/L	1	01/30/20	CPP	SW6010D
Filtration	Completed					01/29/20	AG	0.45um Filter
Dissolved Mercury Digestion	Completed					01/30/20	LS/LS	SW7470A
Dissolved Metals Preparation	Completed					01/29/20	AG	SW3005A
Dissolved Metals Preparation	Completed					01/29/20	AG	SW3005A

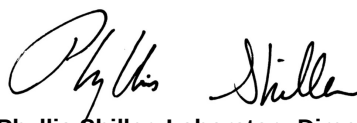
Client ID: MW6

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit1

Comments:

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

**Phyllis Shiller, Laboratory Director****February 06, 2020****Reviewed and Released by: Phyllis Shiller, Laboratory Director**



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823



Analysis Report

February 06, 2020

FOR: Attn: Mr. Charles B. Sosik, P.G.
Environmental Business Consultants
1808 Middle Country Rd
Ridge NY 11961-2406

Sample Information

Matrix: WATER
Location Code: EBC
Rush Request: 72 Hour
P.O.#:

Custody Information

Collected by: TB
Received by: LB
Analyzed by: see "By" below

Date

01/28/20

Time

14:22

Laboratory Data

SDG ID: GCF22921
Phoenix ID: CF22927

Project ID: 26-22 4TH ST., QUEENS
Client ID: TB

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
<u>Volatiles</u>								
1,1,1,2-Tetrachloroethane	ND	1.0	0.25	ug/L	1	01/29/20	MH	SW8260C
1,1,1-Trichloroethane	ND	5.0	0.25	ug/L	1	01/29/20	MH	SW8260C
1,1,2,2-Tetrachloroethane	ND	1.0	0.25	ug/L	1	01/29/20	MH	SW8260C
1,1,2-Trichloroethane	ND	1.0	0.25	ug/L	1	01/29/20	MH	SW8260C
1,1-Dichloroethane	ND	5.0	0.25	ug/L	1	01/29/20	MH	SW8260C
1,1-Dichloroethene	ND	1.0	0.25	ug/L	1	01/29/20	MH	SW8260C
1,1-Dichloropropene	ND	1.0	0.25	ug/L	1	01/29/20	MH	SW8260C
1,2,3-Trichlorobenzene	ND	1.0	0.25	ug/L	1	01/29/20	MH	SW8260C
1,2,3-Trichloropropane	ND	0.25	0.25	ug/L	1	01/29/20	MH	SW8260C
1,2,4-Trichlorobenzene	ND	1.0	0.25	ug/L	1	01/29/20	MH	SW8260C
1,2,4-Trimethylbenzene	ND	1.0	0.25	ug/L	1	01/29/20	MH	SW8260C
1,2-Dibromo-3-chloropropane	ND	0.50	0.50	ug/L	1	01/29/20	MH	SW8260C
1,2-Dibromoethane	ND	0.25	0.25	ug/L	1	01/29/20	MH	SW8260C
1,2-Dichlorobenzene	ND	1.0	0.25	ug/L	1	01/29/20	MH	SW8260C
1,2-Dichloroethane	ND	0.60	0.50	ug/L	1	01/29/20	MH	SW8260C
1,2-Dichloropropane	ND	1.0	0.25	ug/L	1	01/29/20	MH	SW8260C
1,3,5-Trimethylbenzene	ND	1.0	0.25	ug/L	1	01/29/20	MH	SW8260C
1,3-Dichlorobenzene	ND	1.0	0.25	ug/L	1	01/29/20	MH	SW8260C
1,3-Dichloropropane	ND	1.0	0.25	ug/L	1	01/29/20	MH	SW8260C
1,4-Dichlorobenzene	ND	1.0	0.25	ug/L	1	01/29/20	MH	SW8260C
2,2-Dichloropropane	ND	1.0	0.25	ug/L	1	01/29/20	MH	SW8260C
2-Chlorotoluene	ND	1.0	0.25	ug/L	1	01/29/20	MH	SW8260C
2-Hexanone	ND	2.5	2.5	ug/L	1	01/29/20	MH	SW8260C
2-Isopropyltoluene	ND	1.0	0.25	ug/L	1	01/29/20	MH	SW8260C
4-Chlorotoluene	ND	1.0	0.25	ug/L	1	01/29/20	MH	SW8260C
4-Methyl-2-pentanone	ND	2.5	2.5	ug/L	1	01/29/20	MH	SW8260C

Client ID: TB

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Acetone	ND	5.0	2.5	ug/L	1	01/29/20	MH	SW8260C
Acrolein	ND	5.0	2.5	ug/L	1	01/29/20	MH	SW8260C
Acrylonitrile	ND	5.0	2.5	ug/L	1	01/29/20	MH	SW8260C
Benzene	ND	0.70	0.25	ug/L	1	01/29/20	MH	SW8260C
Bromobenzene	ND	1.0	0.25	ug/L	1	01/29/20	MH	SW8260C
Bromochloromethane	ND	1.0	0.25	ug/L	1	01/29/20	MH	SW8260C
Bromodichloromethane	ND	1.0	0.25	ug/L	1	01/29/20	MH	SW8260C
Bromoform	ND	5.0	0.25	ug/L	1	01/29/20	MH	SW8260C
Bromomethane	ND	5.0	0.25	ug/L	1	01/29/20	MH	SW8260C
Carbon Disulfide	ND	1.0	0.25	ug/L	1	01/29/20	MH	SW8260C
Carbon tetrachloride	ND	1.0	0.25	ug/L	1	01/29/20	MH	SW8260C
Chlorobenzene	ND	5.0	0.25	ug/L	1	01/29/20	MH	SW8260C
Chloroethane	ND	5.0	0.25	ug/L	1	01/29/20	MH	SW8260C
Chloroform	ND	5.0	0.25	ug/L	1	01/29/20	MH	SW8260C
Chloromethane	ND	5.0	0.25	ug/L	1	01/29/20	MH	SW8260C
cis-1,2-Dichloroethene	ND	1.0	0.25	ug/L	1	01/29/20	MH	SW8260C
cis-1,3-Dichloropropene	ND	0.40	0.25	ug/L	1	01/29/20	MH	SW8260C
Dibromochloromethane	ND	1.0	0.25	ug/L	1	01/29/20	MH	SW8260C
Dibromomethane	ND	1.0	0.25	ug/L	1	01/29/20	MH	SW8260C
Dichlorodifluoromethane	ND	1.0	0.25	ug/L	1	01/29/20	MH	SW8260C
Ethylbenzene	ND	1.0	0.25	ug/L	1	01/29/20	MH	SW8260C
Hexachlorobutadiene	ND	0.50	0.20	ug/L	1	01/29/20	MH	SW8260C
Isopropylbenzene	ND	1.0	0.25	ug/L	1	01/29/20	MH	SW8260C
m&p-Xylene	ND	1.0	0.25	ug/L	1	01/29/20	MH	SW8260C
Methyl ethyl ketone	ND	2.5	2.5	ug/L	1	01/29/20	MH	SW8260C
Methyl t-butyl ether (MTBE)	ND	1.0	0.25	ug/L	1	01/29/20	MH	SW8260C
Methylene chloride	ND	3.0	1.0	ug/L	1	01/29/20	MH	SW8260C
Naphthalene	ND	1.0	1.0	ug/L	1	01/29/20	MH	SW8260C
n-Butylbenzene	ND	1.0	0.25	ug/L	1	01/29/20	MH	SW8260C
n-Propylbenzene	ND	1.0	0.25	ug/L	1	01/29/20	MH	SW8260C
o-Xylene	ND	1.0	0.25	ug/L	1	01/29/20	MH	SW8260C
p-Isopropyltoluene	ND	1.0	0.25	ug/L	1	01/29/20	MH	SW8260C
sec-Butylbenzene	ND	1.0	0.25	ug/L	1	01/29/20	MH	SW8260C
Styrene	ND	1.0	0.25	ug/L	1	01/29/20	MH	SW8260C
tert-Butylbenzene	ND	1.0	0.25	ug/L	1	01/29/20	MH	SW8260C
Tetrachloroethene	ND	1.0	0.25	ug/L	1	01/29/20	MH	SW8260C
Tetrahydrofuran (THF)	ND	5.0	2.5	ug/L	1	01/29/20	MH	SW8260C
Toluene	ND	1.0	0.25	ug/L	1	01/29/20	MH	SW8260C
trans-1,2-Dichloroethene	ND	5.0	0.25	ug/L	1	01/29/20	MH	SW8260C
trans-1,3-Dichloropropene	ND	0.40	0.25	ug/L	1	01/29/20	MH	SW8260C
trans-1,4-dichloro-2-butene	ND	2.5	2.5	ug/L	1	01/29/20	MH	SW8260C
Trichloroethene	ND	1.0	0.25	ug/L	1	01/29/20	MH	SW8260C
Trichlorofluoromethane	ND	1.0	0.25	ug/L	1	01/29/20	MH	SW8260C
Trichlorotrifluoroethane	ND	1.0	0.25	ug/L	1	01/29/20	MH	SW8260C
Vinyl chloride	ND	1.0	0.25	ug/L	1	01/29/20	MH	SW8260C
<u>QA/QC Surrogates</u>								
% 1,2-dichlorobenzene-d4	102			%	1	01/29/20	MH	70 - 130 %
% Bromofluorobenzene	94			%	1	01/29/20	MH	70 - 130 %
% Dibromofluoromethane	104			%	1	01/29/20	MH	70 - 130 %

1

Client ID: TB

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
% Toluene-d8	101			%	1	01/29/20	MH	70 - 130 %

Volatiles

1,1,1,2-Tetrachloroethane	ND	1.0	0.25	ug/L	1	01/29/20	MH	SW8260C
Acrolein	ND	5.0	2.5	ug/L	1	01/29/20	MH	SW8260C
Acrylonitrile	ND	5.0	0.25	ug/L	1	01/29/20	MH	SW8260C
Tert-butyl alcohol	ND	50	10	ug/L	1	01/29/20	MH	SW8260C

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit1

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

TRIP BLANK INCLUDED.

Volatile Comment:

To achieve client's objectives, where the lowest calibration standard or LOD justifies lowering the RL/PQL, the RL/PQL of some compounds have been lowered to meet criteria.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

February 06, 2020

Reviewed and Released by: Phyllis Shiller, Laboratory Director

Thursday, February 06, 2020

Criteria: NY: GW

State: NY

Sample Criteria Exceedances Report

GCF22921 - EBC

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units
CF22921	DMN-WMDP	Manganese, (Dissolved)	NY / TOGS - Water Quality / GA Criteria	0.447	0.005	0.3	0.3	mg/L
CF22921	D-NA	Sodium (Dissolved)	NY / TOGS - Water Quality / GA Criteria	179	1.1	20	20	mg/L
CF22922	DMN-WMDP	Manganese, (Dissolved)	NY / TOGS - Water Quality / GA Criteria	0.446	0.005	0.3	0.3	mg/L
CF22922	D-NA	Sodium (Dissolved)	NY / TOGS - Water Quality / GA Criteria	197	1.1	20	20	mg/L
CF22923	\$8260DP25R	Tetrachloroethene	NY / TAGM - Volatile Organics / Groundwater Standards	8.1	1.0	5	5	ug/L
CF22923	\$8260DP25R	1,2,3-Trichloropropane	NY / TOGS - Water Quality / GA Criteria	ND	0.25	0.04	0.04	ug/L
CF22923	\$8260DP25R	1,2-Dibromo-3-chloropropane	NY / TOGS - Water Quality / GA Criteria	ND	0.50	0.04	0.04	ug/L
CF22923	\$8260DP25R	1,2-Dibromoethane	NY / TOGS - Water Quality / GA Criteria	ND	0.25	0.0006	0.0006	ug/L
CF22923	\$8260DP25R	Tetrachloroethene	NY / TOGS - Water Quality / GA Criteria	8.1	1.0	5	5	ug/L
CF22923	\$DP8270-SIMR	Indeno(1,2,3-cd)pyrene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CF22923	\$DP8270-SIMR	Benz(a)anthracene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CF22923	\$DP8270-SIMR	Benzo(a)pyrene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CF22923	\$DP8270-SIMR	Benzo(b)fluoranthene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CF22923	\$DP8270-SIMR	Benzo(k)fluoranthene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CF22923	\$DP8270-SIMR	Chrysene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CF22923	\$DP8270-SIMR	Benz(a)anthracene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	ug/L
CF22923	\$DP8270-SIMR	Indeno(1,2,3-cd)pyrene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	ug/L
CF22923	\$DP8270-SIMR	Chrysene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	ug/L
CF22923	\$DP8270-SIMR	Benzo(k)fluoranthene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	ug/L
CF22923	\$DP8270-SIMR	Benzo(b)fluoranthene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	ug/L
CF22923	\$DPPEST_GA	Toxaphene	NY / TOGS - Water Quality / GA Criteria	ND	0.19	0.06	0.06	ug/L
CF22923	AL-WM	Aluminum	NY / TOGS - Water Quality / GA Criteria	12.8	0.020	0.1	0.1	mg/L
CF22923	DMN-WMDP	Manganese, (Dissolved)	NY / TOGS - Water Quality / GA Criteria	0.447	0.005	0.3	0.3	mg/L
CF22923	D-NA	Sodium (Dissolved)	NY / TOGS - Water Quality / GA Criteria	199	1.1	20	20	mg/L
CF22923	FE-WMDP	Iron	NY / TOGS - Water Quality / GA Criteria	12.4	0.01	0.3	0.3	mg/L
CF22923	MN-WMDP	Manganese	NY / TOGS - Water Quality / GA Criteria	1.04	0.005	0.3	0.3	mg/L
CF22923	NA-WM	Sodium	NY / TOGS - Water Quality / GA Criteria	211	1.0	20	20	mg/L
CF22924	DMN-WMDP	Manganese, (Dissolved)	NY / TOGS - Water Quality / GA Criteria	0.455	0.005	0.3	0.3	mg/L
CF22924	D-NA	Sodium (Dissolved)	NY / TOGS - Water Quality / GA Criteria	188	1.1	20	20	mg/L
CF22925	DMN-WMDP	Manganese, (Dissolved)	NY / TOGS - Water Quality / GA Criteria	0.444	0.005	0.3	0.3	mg/L
CF22925	D-NA	Sodium (Dissolved)	NY / TOGS - Water Quality / GA Criteria	196	1.1	20	20	mg/L
CF22926	DMN-WMDP	Manganese, (Dissolved)	NY / TOGS - Water Quality / GA Criteria	0.430	0.005	0.3	0.3	mg/L
CF22926	D-NA	Sodium (Dissolved)	NY / TOGS - Water Quality / GA Criteria	188	1.1	20	20	mg/L
CF22927	\$8260DP25R	1,2-Dibromoethane	NY / TOGS - Water Quality / GA Criteria	ND	0.25	0.0006	0.0006	ug/L
CF22927	\$8260DP25R	1,2,3-Trichloropropane	NY / TOGS - Water Quality / GA Criteria	ND	0.25	0.04	0.04	ug/L
CF22927	\$8260DP25R	1,2-Dibromo-3-chloropropane	NY / TOGS - Water Quality / GA Criteria	ND	0.50	0.04	0.04	ug/L

Sample Criteria Exceedances Report
GCF22921 - EBC

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units

Phoenix Laboratories does not assume responsibility for the data contained in this exceedance report. It is provided as an additional tool to identify requested criteria exceedences. All efforts are made to ensure the accuracy of the data (obtained from appropriate agencies). A lack of exceedence information does not necessarily suggest conformance to the criteria. It is ultimately the site professional's responsibility to determine appropriate compliance.



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823



NY Temperature Narration

February 06, 2020

SDG I.D.: GCF22921

The samples in this delivery group were received at 1.3°C.
(Note acceptance criteria for relevant matrices is above freezing up to 6°C)



NY/NJ CHAIN OF CUSTODY RECORD

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Email: info@phoenixlabs.com Fax (860) 645-0823
Client Services (860) 645-8726

Cooler: Yes ☒ No ☐
Coolant: IPK ☐ ICE ☐

Temp 15.5 C Pg 1 of 1

Contact Options:

Fax: 631-504-6000
Phone: 631-504-6000
Email: f.l.k

Customer: Environmental Business Consultants

Address: 1808 Middle Country Road

Ridge, NY 11961

Project: 26-22 4th St, Queens

Report to: Environmental Business Consultants

Invoice to: Environmental Business Consultants

Project P.O.:

This section **MUST** be
completed with
Bottle Quantities.

Client Sample - Information - Identification		Analysis Request		
Sampler's Signature	Date	Analysis Request		
<u>Tony BALABO</u>	<u>1-28-20</u>			
Matrix Code: DW=Drinking Water GW=Ground Water SW=Surface Water WW=Waste Water RW=Raw Water SE=Sediment SL=Sludge S=Soil SD=Solid W=Wipe OIL=Oil B=Bulk L=Liquid				
PHOENIX USE ONLY SAMPLE #	Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled
22921	MW1	GW	1-29-20	4:45
22922	MW2			3:39
22923	MW3			11:26
22924	MW4			12:35
22925	MW5			2:27
22926	MW6			1:41
22927	TB			-

Relinquished by:	Accepted by:	Date:	Time:
<u>[Signature]</u>	<u>[Signature]</u>	1-28-20	11:38
<u>[Signature]</u>	<u>[Signature]</u>	1/29/20	14:22

Comments, Special Requirements or Regulations:
Please run mspaso on MW3

Turnaround:	NJ	NY	Data Format
☐ 1 Day* ☐ 2 Days* ☒ 3 Days* ☐ 5 Days ☐ 10 Days ☐ Other	☐ Res. Criteria ☐ Non-Res. Criteria ☐ Impact to GW Soil Cleanup Criteria ☐ GW Criteria	☒ NY 375 GWP ☐ NY375 Unrestricted Use Soil ☐ NY375 Residential Soil ☐ Restricted/Residential Commercial Industrial	☐ Phoenix Std Report ☒ Excel ☒ PDF ☐ GIS/Key ☒ EQUIS ☐ NJ Hazsite EDD ☒ NY EZ EDD (ASP) ☐ Other

State where samples were collected: NY

Data Package:
☐ NJ Reduced Deliv. *
☒ NY Enhanced (ASP B) *
☐ Other



Monday, December 30, 2019

Attn: Mr. Charles B. Sosik, P.G.
Environmental Business Consultants
1808 Middle Country Rd
Ridge NY 11961-2406

Project ID: 26-22 4TH ST QUEENS
SDG ID: GCE90170
Sample ID#s: CE90170 - CE90176

This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory. This report is incomplete unless all pages indicated in the pagination at the bottom of the page are included.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Phyllis Shiller".

Phyllis/Shiller

Laboratory Director

NELAC - #NY11301
CT Lab Registration #PH-0618
MA Lab Registration #M-CT007
ME Lab Registration #CT-007
NH Lab Registration #213693-A,B

NJ Lab Registration #CT-003
NY Lab Registration #11301
PA Lab Registration #68-03530
RI Lab Registration #63
UT Lab Registration #CT00007
VT Lab Registration #VT11301



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823



SDG Comments

December 30, 2019

SDG I.D.: GCE90170

8260 Volatile Organics:

1,2-Dibromoethane, 1,2,3 Trichloropropane, and 1,2-Dibromo-3-chloropropane do not meet NY TOGS GA criteria, these compounds are analyzed by GC/FID method 504 or 8011 to achieve this criteria.

SIM Analysis:

The lowest possible reporting limit under SIM conditions is 0.02 ug/L. The NY TOGS GA criteria for some PAHs is 0.002 ug/L. This level can not be achieved.

Toxaphene is reported to the lowest possible reporting level. The NY TOGS criteria for this compound can not be achieved.

Any compound that is not detected above the MDL/LOD is reported as ND on the report and is reported in the electronic deliverables (EDD) as <RL or U at the RL per state and EPA guidance.

Version 1: Analysis results minus raw data.

Version 2: Complete report with raw data.



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823



Sample Id Cross Reference

December 30, 2019

SDG I.D.: GCE90170

Project ID: 26-22 4TH ST QUEENS

Client Id	Lab Id	Matrix
MW1	CE90170	GROUND WATER
MW2	CE90171	GROUND WATER
MW3	CE90172	GROUND WATER
MW4	CE90173	GROUND WATER
MW5	CE90174	GROUND WATER
MW6	CE90175	GROUND WATER
TRIP BLANK	CE90176	GROUND WATER



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823



Analysis Report

December 30, 2019

FOR: Attn: Mr. Charles B. Sosik, P.G.
Environmental Business Consultants
1808 Middle Country Rd
Ridge NY 11961-2406

Sample Information

Matrix: GROUND WATER
Location Code: EBC
Rush Request: 72 Hour
P.O.#:

Custody Information

Collected by: TB
Received by: CP
Analyzed by: see "By" below

Date

12/17/19
12/18/19

Time

8:23
17:12

Laboratory Data

SDG ID: GCE90170
Phoenix ID: CE90170

Project ID: 26-22 4TH ST QUEENS
Client ID: MW1

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Silver	ND	0.005	0.001	mg/L	1	12/20/19	TH	SW6010D
Aluminum	1.25	0.025	0.0024	mg/L	1	12/20/19	TH	SW6010D
Arsenic - LDL	ND	0.004	0.001	mg/L	1	12/20/19	TH	SW6010D
Barium	0.022	0.010	0.001	mg/L	1	12/20/19	TH	SW6010D
Beryllium	ND	0.001	0.001	mg/L	1	12/20/19	TH	SW6010D
Calcium	21.9	0.010	0.003	mg/L	1	12/20/19	TH	SW6010D
Cadmium	ND	0.004	0.0005	mg/L	1	12/20/19	TH	SW6010D
Cobalt	ND	0.005	0.001	mg/L	1	12/20/19	TH	SW6010D
Chromium	ND	0.003	0.003	mg/L	1	12/20/19	EK	SW6010D
Copper	0.006	0.005	0.001	mg/L	1	12/20/19	TH	SW6010D
Iron	1.19	0.01	0.01	mg/L	1	12/20/19	TH	SW6010D
Mercury	ND	0.0002	0.00015	mg/L	1	12/19/19	RS	SW7470A
Potassium	4.4	0.1	0.1	mg/L	1	12/20/19	TH	SW6010D
Magnesium	3.55	0.010	0.01	mg/L	1	12/20/19	TH	SW6010D
Manganese	0.278	0.005	0.001	mg/L	1	12/20/19	TH	SW6010D
Sodium	14.6	0.10	0.1	mg/L	1	12/20/19	TH	SW6010D
Nickel	0.002	J 0.004	0.001	mg/L	1	12/20/19	TH	SW6010D
Lead	0.003	0.002	0.001	mg/L	1	12/20/19	TH	SW6010D
Antimony	ND	0.0030	0.0030	mg/L	5	12/19/19	CPP	SW6020B
Selenium	ND	0.010	0.010	mg/L	5	12/23/19	CPP	SW6020B
Thallium	ND	0.0005	0.0005	mg/L	5	12/19/19	CPP	SW6020B
Vanadium	0.005	J 0.010	0.001	mg/L	1	12/20/19	TH	SW6010D
Zinc	0.008	J 0.010	0.002	mg/L	1	12/20/19	TH	SW6010D
Mercury Digestion	Completed					12/19/19	LS/LS	SW7470A
PCB Extraction (LDL)	Completed					12/19/19	AT/AT	SW3510C
Extraction for Pest (LDL)	Completed					12/19/19	AT/AT	SW3510C
Semi-Volatile Extraction	Completed					12/20/19	P/AK	SW3520C
Total Metals Digestion	Completed					12/19/19	AG	

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Total Metals Digestion MS	Completed					12/18/19	AG	
<u>Pesticides</u>								
4,4' -DDD	ND	0.005	0.005	ug/L	1	12/20/19	AW	SW8081B
4,4' -DDE	ND	0.005	0.005	ug/L	1	12/20/19	AW	SW8081B
4,4' -DDT	ND	0.005	0.005	ug/L	1	12/20/19	AW	SW8081B
a-BHC	ND	0.005	0.005	ug/L	1	12/20/19	AW	SW8081B
a-chlordane	ND	0.010	0.010	ug/L	1	12/20/19	AW	SW8081B
Alachlor	ND	0.076	0.076	ug/L	1	12/20/19	AW	SW8081B
Aldrin	ND	0.002	0.002	ug/L	1	12/20/19	AW	SW8081B
b-BHC	ND	0.005	0.005	ug/L	1	12/20/19	AW	SW8081B
Chlordane	ND	0.020	0.020	ug/L	1	12/20/19	AW	SW8081B
d-BHC	ND	0.005	0.005	ug/L	1	12/20/19	AW	SW8081B
Dieldrin	ND	0.002	0.002	ug/L	1	12/20/19	AW	SW8081B
Endosulfan I	ND	0.010	0.010	ug/L	1	12/20/19	AW	SW8081B
Endosulfan II	ND	0.010	0.010	ug/L	1	12/20/19	AW	SW8081B
Endosulfan Sulfate	ND	0.010	0.010	ug/L	1	12/20/19	AW	SW8081B
Endrin	ND	0.005	0.005	ug/L	1	12/20/19	AW	SW8081B
Endrin Aldehyde	ND	0.010	0.010	ug/L	1	12/20/19	AW	SW8081B
Endrin ketone	ND	0.010	0.010	ug/L	1	12/20/19	AW	SW8081B
g-BHC (Lindane)	ND	0.005	0.005	ug/L	1	12/20/19	AW	SW8081B
g-chlordane	ND	0.010	0.010	ug/L	1	12/20/19	AW	SW8081B
Heptachlor	ND	0.005	0.005	ug/L	1	12/20/19	AW	SW8081B
Heptachlor epoxide	ND	0.005	0.005	ug/L	1	12/20/19	AW	SW8081B
Methoxychlor	ND	0.10	0.10	ug/L	1	12/20/19	AW	SW8081B
Toxaphene	ND	0.20	0.20	ug/L	1	12/20/19	AW	SW8081B
<u>QA/QC Surrogates</u>								
%DCBP (Surrogate Rec)	102			%	1	12/20/19	AW	30 - 150 %
%DCBP (Surrogate Rec) (Confirmation)	69			%	1	12/20/19	AW	30 - 150 %
%TCMX (Surrogate Rec)	92			%	1	12/20/19	AW	30 - 150 %
%TCMX (Surrogate Rec) (Confirmation)	71			%	1	12/20/19	AW	30 - 150 %
<u>Polychlorinated Biphenyls</u>								
PCB-1016	ND	0.051	0.051	ug/L	1	12/21/19	SC	SW8082A
PCB-1221	ND	0.051	0.051	ug/L	1	12/21/19	SC	SW8082A
PCB-1232	ND	0.051	0.051	ug/L	1	12/21/19	SC	SW8082A
PCB-1242	ND	0.051	0.051	ug/L	1	12/21/19	SC	SW8082A
PCB-1248	ND	0.051	0.051	ug/L	1	12/21/19	SC	SW8082A
PCB-1254	ND	0.051	0.051	ug/L	1	12/21/19	SC	SW8082A
PCB-1260	ND	0.051	0.051	ug/L	1	12/21/19	SC	SW8082A
PCB-1262	ND	0.051	0.051	ug/L	1	12/21/19	SC	SW8082A
PCB-1268	ND	0.051	0.051	ug/L	1	12/21/19	SC	SW8082A
<u>QA/QC Surrogates</u>								
% DCBP	76			%	1	12/21/19	SC	30 - 150 %
% DCBP (Confirmation)	70			%	1	12/21/19	SC	30 - 150 %
% TCMX	70			%	1	12/21/19	SC	30 - 150 %
% TCMX (Confirmation)	70			%	1	12/21/19	SC	30 - 150 %
<u>Volatiles</u>								
1,1,1,2-Tetrachloroethane	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C

Client ID: MW1

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
1,1,1-Trichloroethane	ND	5.0	0.25	ug/L	1	12/19/19	HM	SW8260C
1,1,2,2-Tetrachloroethane	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
1,1,2-Trichloroethane	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
1,1-Dichloroethane	ND	5.0	0.25	ug/L	1	12/19/19	HM	SW8260C
1,1-Dichloroethene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
1,1-Dichloropropene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
1,2,3-Trichlorobenzene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
1,2,3-Trichloropropane	ND	0.25	0.25	ug/L	1	12/19/19	HM	SW8260C
1,2,4-Trichlorobenzene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
1,2,4-Trimethylbenzene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
1,2-Dibromo-3-chloropropane	ND	0.50	0.50	ug/L	1	12/19/19	HM	SW8260C
1,2-Dibromoethane	ND	0.25	0.25	ug/L	1	12/19/19	HM	SW8260C
1,2-Dichlorobenzene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
1,2-Dichloroethane	ND	0.60	0.50	ug/L	1	12/19/19	HM	SW8260C
1,2-Dichloropropane	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
1,3,5-Trimethylbenzene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
1,3-Dichlorobenzene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
1,3-Dichloropropane	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
1,4-Dichlorobenzene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
2,2-Dichloropropane	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
2-Chlorotoluene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
2-Hexanone	ND	2.5	2.5	ug/L	1	12/19/19	HM	SW8260C
2-Isopropyltoluene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
4-Chlorotoluene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
4-Methyl-2-pentanone	ND	2.5	2.5	ug/L	1	12/19/19	HM	SW8260C
Acetone	ND	5.0	2.5	ug/L	1	12/19/19	HM	SW8260C
Acrolein	ND	5.0	2.5	ug/L	1	12/19/19	HM	SW8260C
Acrylonitrile	ND	5.0	2.5	ug/L	1	12/19/19	HM	SW8260C
Benzene	ND	0.70	0.25	ug/L	1	12/19/19	HM	SW8260C
Bromobenzene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Bromochloromethane	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Bromodichloromethane	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Bromoform	ND	5.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Bromomethane	ND	5.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Carbon Disulfide	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Carbon tetrachloride	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Chlorobenzene	ND	5.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Chloroethane	ND	5.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Chloroform	ND	5.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Chloromethane	ND	5.0	0.25	ug/L	1	12/19/19	HM	SW8260C
cis-1,2-Dichloroethene	0.28	J 1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
cis-1,3-Dichloropropene	ND	0.40	0.25	ug/L	1	12/19/19	HM	SW8260C
Dibromochloromethane	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Dibromomethane	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Dichlorodifluoromethane	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Ethylbenzene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Hexachlorobutadiene	ND	0.50	0.20	ug/L	1	12/19/19	HM	SW8260C
Isopropylbenzene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
m&p-Xylene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C

1

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Methyl ethyl ketone	ND	2.5	2.5	ug/L	1	12/19/19	HM	SW8260C
Methyl t-butyl ether (MTBE)	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Methylene chloride	ND	3.0	1.0	ug/L	1	12/19/19	HM	SW8260C
Naphthalene	ND	1.0	1.0	ug/L	1	12/19/19	HM	SW8260C
n-Butylbenzene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
n-Propylbenzene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
o-Xylene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
p-Isopropyltoluene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
sec-Butylbenzene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Styrene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
tert-Butylbenzene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Tetrachloroethene	9.9	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Tetrahydrofuran (THF)	ND	5.0	2.5	ug/L	1	12/19/19	HM	SW8260C
Toluene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
trans-1,2-Dichloroethene	ND	5.0	0.25	ug/L	1	12/19/19	HM	SW8260C
trans-1,3-Dichloropropene	ND	0.40	0.25	ug/L	1	12/19/19	HM	SW8260C
trans-1,4-dichloro-2-butene	ND	2.5	2.5	ug/L	1	12/19/19	HM	SW8260C
Trichloroethene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Trichlorofluoromethane	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Trichlorotrifluoroethane	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Vinyl chloride	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
<u>QA/QC Surrogates</u>								
% 1,2-dichlorobenzene-d4	100			%	1	12/19/19	HM	70 - 130 %
% Bromofluorobenzene	100			%	1	12/19/19	HM	70 - 130 %
% Dibromofluoromethane	93			%	1	12/19/19	HM	70 - 130 %
% Toluene-d8	105			%	1	12/19/19	HM	70 - 130 %
<u>Volatiles</u>								
1,1,1,2-Tetrachloroethane	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Acrolein	ND	5.0	2.5	ug/L	1	12/19/19	HM	SW8260C
Acrylonitrile	ND	5.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Tert-butyl alcohol	ND	50	10	ug/L	1	12/19/19	HM	SW8260C
<u>1,4-dioxane</u>								
1,4-dioxane	ND	0.20	0.20	ug/l	1	12/20/19	AW	SW8270DSIM
<u>QA/QC Surrogates</u>								
% 1,4-dioxane-d8	66			%	1	12/20/19	AW	30 - 130 %
<u>Semivolatiles</u>								
1,2,4,5-Tetrachlorobenzene	ND	3.3	3.3	ug/L	1	12/24/19	WB	SW8270D
1,2,4-Trichlorobenzene	ND	4.7	1.4	ug/L	1	12/24/19	WB	SW8270D
1,2-Dichlorobenzene	ND	0.94	0.94	ug/L	1	12/24/19	WB	SW8270D
1,2-Diphenylhydrazine	ND	4.7	1.5	ug/L	1	12/24/19	WB	SW8270D
1,3-Dichlorobenzene	ND	0.94	0.94	ug/L	1	12/24/19	WB	SW8270D
1,4-Dichlorobenzene	ND	0.94	0.94	ug/L	1	12/24/19	WB	SW8270D
2,4,5-Trichlorophenol	ND	0.94	0.94	ug/L	1	12/24/19	WB	SW8270D
2,4,6-Trichlorophenol	ND	0.94	0.94	ug/L	1	12/24/19	WB	SW8270D
2,4-Dichlorophenol	ND	0.94	0.94	ug/L	1	12/24/19	WB	SW8270D
2,4-Dimethylphenol	ND	0.94	0.94	ug/L	1	12/24/19	WB	SW8270D
2,4-Dinitrophenol	ND	0.94	0.94	ug/L	1	12/24/19	WB	SW8270D

Client ID: MW1

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
2,4-Dinitrotoluene	ND	4.7	1.9	ug/L	1	12/24/19	WB	SW8270D
2,6-Dinitrotoluene	ND	4.7	1.5	ug/L	1	12/24/19	WB	SW8270D
2-Chloronaphthalene	ND	4.7	1.3	ug/L	1	12/24/19	WB	SW8270D
2-Chlorophenol	ND	0.94	0.94	ug/L	1	12/24/19	WB	SW8270D
2-Methylnaphthalene	ND	4.7	1.4	ug/L	1	12/24/19	WB	SW8270D
2-Methylphenol (o-cresol)	ND	0.94	0.94	ug/L	1	12/24/19	WB	SW8270D
2-Nitroaniline	ND	4.7	1.9	ug/L	1	12/24/19	WB	SW8270D
2-Nitrophenol	ND	0.94	0.94	ug/L	1	12/24/19	WB	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	0.94	0.94	ug/L	1	12/24/19	WB	SW8270D
3,3'-Dichlorobenzidine	ND	4.7	2.2	ug/L	1	12/24/19	WB	SW8270D
3-Nitroaniline	ND	4.7	1.9	ug/L	1	12/24/19	WB	SW8270D
4,6-Dinitro-2-methylphenol	ND	0.94	0.94	ug/L	1	12/24/19	WB	SW8270D
4-Bromophenyl phenyl ether	ND	4.7	1.4	ug/L	1	12/24/19	WB	SW8270D
4-Chloro-3-methylphenol	ND	0.94	0.94	ug/L	1	12/24/19	WB	SW8270D
4-Chloroaniline	ND	3.3	2.2	ug/L	1	12/24/19	WB	SW8270D
4-Chlorophenyl phenyl ether	ND	4.7	1.6	ug/L	1	12/24/19	WB	SW8270D
4-Nitroaniline	ND	4.7	1.6	ug/L	1	12/24/19	WB	SW8270D
4-Nitrophenol	ND	0.94	0.94	ug/L	1	12/24/19	WB	SW8270D
Acenaphthene	ND	4.7	1.4	ug/L	1	12/24/19	WB	SW8270D
Acetophenone	ND	4.7	1.5	ug/L	1	12/24/19	WB	SW8270D
Aniline	ND	3.3	3.3	ug/L	1	12/24/19	WB	SW8270D
Anthracene	ND	4.7	1.5	ug/L	1	12/24/19	WB	SW8270D
Benidine	ND	4.2	2.8	ug/L	1	12/24/19	WB	SW8270D
Benzoic acid	ND	24	9.4	ug/L	1	12/24/19	WB	SW8270D
Benzyl butyl phthalate	ND	4.7	1.2	ug/L	1	12/24/19	WB	SW8270D
Bis(2-chloroethoxy)methane	ND	4.7	1.3	ug/L	1	12/24/19	WB	SW8270D
Bis(2-chloroethyl)ether	ND	0.94	0.94	ug/L	1	12/24/19	WB	SW8270D
Bis(2-chloroisopropyl)ether	ND	4.7	1.3	ug/L	1	12/24/19	WB	SW8270D
Bis(2-ethylhexyl)phthalate	ND	0.94	0.94	ug/L	1	12/24/19	WB	SW8270D
Carbazole	ND	4.7	3.6	ug/L	1	12/24/19	WB	SW8270D
Dibenzofuran	ND	4.7	1.4	ug/L	1	12/24/19	WB	SW8270D
Diethyl phthalate	ND	4.7	1.5	ug/L	1	12/24/19	WB	SW8270D
Dimethylphthalate	ND	4.7	1.5	ug/L	1	12/24/19	WB	SW8270D
Di-n-butylphthalate	ND	4.7	1.3	ug/L	1	12/24/19	WB	SW8270D
Di-n-octylphthalate	ND	4.7	1.2	ug/L	1	12/24/19	WB	SW8270D
Fluoranthene	ND	4.7	1.5	ug/L	1	12/24/19	WB	SW8270D
Fluorene	ND	4.7	1.6	ug/L	1	12/24/19	WB	SW8270D
Hexachlorocyclopentadiene	ND	4.7	1.4	ug/L	1	12/24/19	WB	SW8270D
Hexachloroethane	ND	0.94	0.94	ug/L	1	12/24/19	WB	SW8270D
Isophorone	ND	4.7	1.3	ug/L	1	12/24/19	WB	SW8270D
Naphthalene	ND	4.7	1.4	ug/L	1	12/24/19	WB	SW8270D
N-Nitrosodi-n-propylamine	ND	4.7	1.5	ug/L	1	12/24/19	WB	SW8270D
N-Nitrosodiphenylamine	ND	4.7	1.8	ug/L	1	12/24/19	WB	SW8270D
Pentachloronitrobenzene	ND	2.4	2.4	ug/L	1	12/24/19	WB	SW8270D
Phenol	ND	0.94	0.94	ug/L	1	12/24/19	WB	SW8270D
Pyrene	ND	4.7	1.6	ug/L	1	12/24/19	WB	SW8270D
Pyridine	ND	9.4	1.2	ug/L	1	12/24/19	WB	SW8270D
<u>QA/QC Surrogates</u>								
% 2,4,6-Tribromophenol	62			%	1	12/24/19	WB	15 - 110 %

Client ID: MW1

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
% 2-Fluorobiphenyl	66			%	1	12/24/19	WB	30 - 130 %
% 2-Fluorophenol	43			%	1	12/24/19	WB	15 - 110 %
% Nitrobenzene-d5	40			%	1	12/24/19	WB	30 - 130 %
% Phenol-d5	<10			%	1	12/24/19	WB	15 - 110 % 3
% Terphenyl-d14	16			%	1	12/24/19	WB	30 - 130 % 3

Semivolatiles

Acenaphthylene	ND	0.47	0.47	ug/L	1	12/23/19	WB	SW8270D (SIM)
Benz(a)anthracene	ND	0.02	0.02	ug/L	1	12/23/19	WB	SW8270D (SIM)
Benzo(a)pyrene	ND	0.02	0.02	ug/L	1	12/23/19	WB	SW8270D (SIM)
Benzo(b)fluoranthene	ND	0.02	0.02	ug/L	1	12/23/19	WB	SW8270D (SIM)
Benzo(ghi)perylene	ND	0.47	0.47	ug/L	1	12/23/19	WB	SW8270D (SIM)
Benzo(k)fluoranthene	ND	0.02	0.02	ug/L	1	12/23/19	WB	SW8270D (SIM)
Chrysene	ND	0.02	0.02	ug/L	1	12/23/19	WB	SW8270D (SIM)
Dibenz(a,h)anthracene	ND	0.47	0.47	ug/L	1	12/23/19	WB	SW8270D (SIM)
Hexachlorobenzene	ND	0.04	0.04	ug/L	1	12/23/19	WB	SW8270D (SIM)
Hexachlorobutadiene	ND	0.47	0.47	ug/L	1	12/23/19	WB	SW8270D (SIM)
Indeno(1,2,3-cd)pyrene	ND	0.02	0.02	ug/L	1	12/23/19	WB	SW8270D (SIM)
Nitrobenzene	ND	0.38	0.38	ug/L	1	12/23/19	WB	SW8270D (SIM)
N-Nitrosodimethylamine	ND	0.09	0.09	ug/L	1	12/23/19	WB	SW8270D (SIM)
Pentachlorophenol	ND	0.47	0.47	ug/L	1	12/23/19	WB	SW8270D (SIM)
Phenanthrene	ND	0.47	0.47	ug/L	1	12/23/19	WB	SW8270D (SIM)

QA/QC Surrogates

% 2,4,6-Tribromophenol	67			%	1	12/23/19	WB	15 - 110 %
% 2-Fluorobiphenyl	59			%	1	12/23/19	WB	30 - 130 %
% 2-Fluorophenol	39			%	1	12/23/19	WB	15 - 110 %
% Nitrobenzene-d5	47			%	1	12/23/19	WB	30 - 130 %
% Phenol-d5	<10			%	1	12/23/19	WB	15 - 110 % 3
% Terphenyl-d14	17			%	1	12/23/19	WB	30 - 130 % 3
Extraction for 1,4-Dioxane	Completed					12/19/19	S/S	

Client ID: MW1

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

3 = This parameter exceeds laboratory specified limits.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low J=Estimated Below RL LOD=Limit of Detection MDL=Method Detection Limit1

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

Volatile Comment:

To achieve client's objectives, where the lowest calibration standard or LOD justifies lowering the RL/PQL, the RL/PQL of some compounds have been lowered to meet criteria.

Semi-Volatile Comment:

Poor surrogate recovery was observed for one acid and/or one base surrogate. The other surrogates associated with this sample were within QA/QC criteria. No significant bias suspected.

Semi-Volatile Comment:

To achieve client's objectives, where the lowest calibration standard or LOD justifies lowering the RL/PQL, the RL/PQL of some compounds have been lowered to meet criteria.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

December 30, 2019

Reviewed and Released by: Phyllis Shiller, Laboratory Director



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823



Analysis Report

December 30, 2019

FOR: Attn: Mr. Charles B. Sosik, P.G.
Environmental Business Consultants
1808 Middle Country Rd
Ridge NY 11961-2406

Sample Information

Matrix: GROUND WATER
Location Code: EBC
Rush Request: 72 Hour
P.O.#:

Custody Information

Collected by: TB
Received by: CP
Analyzed by: see "By" below

Date

12/17/19 10:17
12/18/19 17:12

Time

Laboratory Data

SDG ID: GCE90170
Phoenix ID: CE90171

Project ID: 26-22 4TH ST QUEENS
Client ID: MW2

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Silver	ND	0.005	0.001	mg/L	1	12/20/19	TH	SW6010D
Aluminum	8.31	0.025	0.0024	mg/L	1	12/20/19	TH	SW6010D
Arsenic - LDL	0.003	0.004	0.001	mg/L	1	12/20/19	TH	SW6010D
Barium	0.157	0.010	0.001	mg/L	1	12/20/19	TH	SW6010D
Beryllium	ND	0.001	0.001	mg/L	1	12/20/19	TH	SW6010D
Calcium	202	0.10	0.030	mg/L	10	12/20/19	TH	SW6010D
Cadmium	ND	0.004	0.0005	mg/L	1	12/20/19	TH	SW6010D
Cobalt	0.006	0.005	0.001	mg/L	1	12/20/19	TH	SW6010D
Chromium	0.015	0.003	0.003	mg/L	1	12/20/19	EK	SW6010D
Copper	0.048	0.005	0.001	mg/L	1	12/20/19	TH	SW6010D
Iron	15.8	0.01	0.01	mg/L	1	12/20/19	TH	SW6010D
Mercury	0.0003	0.0002	0.00015	mg/L	1	12/19/19	RS	SW7470A
Potassium	7.3	0.1	0.1	mg/L	1	12/20/19	TH	SW6010D
Magnesium	29.9	0.010	0.01	mg/L	1	12/20/19	TH	SW6010D
Manganese	1.07	0.005	0.001	mg/L	1	12/20/19	TH	SW6010D
Sodium	46.7	0.10	0.1	mg/L	1	12/20/19	TH	SW6010D
Nickel	0.013	0.004	0.001	mg/L	1	12/20/19	TH	SW6010D
Lead	0.084	0.002	0.001	mg/L	1	12/20/19	TH	SW6010D
Antimony	ND	0.0030	0.0030	mg/L	5	12/19/19	CPP	SW6020B
Selenium	0.014	0.010	0.010	mg/L	5	12/23/19	CPP	SW6020B
Thallium	ND	0.0005	0.0005	mg/L	5	12/19/19	CPP	SW6020B
Vanadium	0.024	0.010	0.001	mg/L	1	12/20/19	TH	SW6010D
Zinc	0.127	0.010	0.002	mg/L	1	12/20/19	TH	SW6010D
Mercury Digestion	Completed					12/19/19	LS/LS	SW7470A
PCB Extraction (LDL)	Completed					12/19/19	AT/AT	SW3510C
Extraction for Pest (LDL)	Completed					12/19/19	AT/AT	SW3510C
Semi-Volatile Extraction	Completed					12/20/19	P/AK	SW3520C
Total Metals Digestion	Completed					12/19/19	AG	

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Total Metals Digestion MS	Completed					12/18/19	AG	
<u>Pesticides</u>								
4,4' -DDD	ND	0.005	0.005	ug/L	1	12/20/19	AW	SW8081B
4,4' -DDE	ND	0.005	0.005	ug/L	1	12/20/19	AW	SW8081B
4,4' -DDT	ND	0.005	0.005	ug/L	1	12/20/19	AW	SW8081B
a-BHC	ND	0.005	0.005	ug/L	1	12/20/19	AW	SW8081B
a-chlordane	ND	0.010	0.010	ug/L	1	12/20/19	AW	SW8081B
Alachlor	ND	0.075	0.075	ug/L	1	12/20/19	AW	SW8081B
Aldrin	ND	0.002	0.002	ug/L	1	12/20/19	AW	SW8081B
b-BHC	ND	0.005	0.005	ug/L	1	12/20/19	AW	SW8081B
Chlordane	ND	0.050	0.050	ug/L	1	12/20/19	AW	SW8081B
d-BHC	ND	0.005	0.005	ug/L	1	12/20/19	AW	SW8081B
Dieldrin	ND	0.002	0.002	ug/L	1	12/20/19	AW	SW8081B
Endosulfan I	ND	0.010	0.010	ug/L	1	12/20/19	AW	SW8081B
Endosulfan II	ND	0.010	0.010	ug/L	1	12/20/19	AW	SW8081B
Endosulfan Sulfate	ND	0.010	0.010	ug/L	1	12/20/19	AW	SW8081B
Endrin	ND	0.010	0.010	ug/L	1	12/20/19	AW	SW8081B
Endrin Aldehyde	ND	0.010	0.010	ug/L	1	12/20/19	AW	SW8081B
Endrin ketone	ND	0.010	0.010	ug/L	1	12/20/19	AW	SW8081B
g-BHC (Lindane)	ND	0.005	0.005	ug/L	1	12/20/19	AW	SW8081B
g-chlordane	ND	0.010	0.010	ug/L	1	12/20/19	AW	SW8081B
Heptachlor	ND	0.010	0.010	ug/L	1	12/20/19	AW	SW8081B
Heptachlor epoxide	ND	0.010	0.010	ug/L	1	12/20/19	AW	SW8081B
Methoxychlor	ND	0.10	0.10	ug/L	1	12/20/19	AW	SW8081B
Toxaphene	ND	0.20	0.20	ug/L	1	12/20/19	AW	SW8081B
<u>QA/QC Surrogates</u>								
%DCBP (Surrogate Rec)	69			%	1	12/20/19	AW	30 - 150 %
%DCBP (Surrogate Rec) (Confirmation)	45			%	1	12/20/19	AW	30 - 150 %
%TCMX (Surrogate Rec)	97			%	1	12/20/19	AW	30 - 150 %
%TCMX (Surrogate Rec) (Confirmation)	66			%	1	12/20/19	AW	30 - 150 %
<u>Polychlorinated Biphenyls</u>								
PCB-1016	ND	0.050	0.050	ug/L	1	12/21/19	SC	SW8082A
PCB-1221	ND	0.050	0.050	ug/L	1	12/21/19	SC	SW8082A
PCB-1232	ND	0.050	0.050	ug/L	1	12/21/19	SC	SW8082A
PCB-1242	ND	0.050	0.050	ug/L	1	12/21/19	SC	SW8082A
PCB-1248	ND	0.050	0.050	ug/L	1	12/21/19	SC	SW8082A
PCB-1254	ND	0.050	0.050	ug/L	1	12/21/19	SC	SW8082A
PCB-1260	ND	0.050	0.050	ug/L	1	12/21/19	SC	SW8082A
PCB-1262	ND	0.050	0.050	ug/L	1	12/21/19	SC	SW8082A
PCB-1268	ND	0.050	0.050	ug/L	1	12/21/19	SC	SW8082A
<u>QA/QC Surrogates</u>								
% DCBP	54			%	1	12/21/19	SC	30 - 150 %
% DCBP (Confirmation)	45			%	1	12/21/19	SC	30 - 150 %
% TCMX	69			%	1	12/21/19	SC	30 - 150 %
% TCMX (Confirmation)	60			%	1	12/21/19	SC	30 - 150 %
<u>Volatiles</u>								
1,1,1,2-Tetrachloroethane	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C

Client ID: MW2

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
1,1,1-Trichloroethane	ND	5.0	0.25	ug/L	1	12/19/19	HM	SW8260C
1,1,2,2-Tetrachloroethane	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
1,1,2-Trichloroethane	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
1,1-Dichloroethane	ND	5.0	0.25	ug/L	1	12/19/19	HM	SW8260C
1,1-Dichloroethene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
1,1-Dichloropropene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
1,2,3-Trichlorobenzene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
1,2,3-Trichloropropane	ND	0.25	0.25	ug/L	1	12/19/19	HM	SW8260C
1,2,4-Trichlorobenzene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
1,2,4-Trimethylbenzene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
1,2-Dibromo-3-chloropropane	ND	0.50	0.50	ug/L	1	12/19/19	HM	SW8260C
1,2-Dibromoethane	ND	0.25	0.25	ug/L	1	12/19/19	HM	SW8260C
1,2-Dichlorobenzene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
1,2-Dichloroethane	ND	0.60	0.50	ug/L	1	12/19/19	HM	SW8260C
1,2-Dichloropropane	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
1,3,5-Trimethylbenzene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
1,3-Dichlorobenzene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
1,3-Dichloropropane	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
1,4-Dichlorobenzene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
2,2-Dichloropropane	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
2-Chlorotoluene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
2-Hexanone	ND	2.5	2.5	ug/L	1	12/19/19	HM	SW8260C
2-Isopropyltoluene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
4-Chlorotoluene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
4-Methyl-2-pentanone	ND	2.5	2.5	ug/L	1	12/19/19	HM	SW8260C
Acetone	ND	5.0	2.5	ug/L	1	12/19/19	HM	SW8260C
Acrolein	ND	5.0	2.5	ug/L	1	12/19/19	HM	SW8260C
Acrylonitrile	ND	5.0	2.5	ug/L	1	12/19/19	HM	SW8260C
Benzene	ND	0.70	0.25	ug/L	1	12/19/19	HM	SW8260C
Bromobenzene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Bromochloromethane	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Bromodichloromethane	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Bromoform	ND	5.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Bromomethane	ND	5.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Carbon Disulfide	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Carbon tetrachloride	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Chlorobenzene	ND	5.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Chloroethane	ND	5.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Chloroform	ND	5.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Chloromethane	ND	5.0	0.25	ug/L	1	12/19/19	HM	SW8260C
cis-1,2-Dichloroethene	2.4	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
cis-1,3-Dichloropropene	ND	0.40	0.25	ug/L	1	12/19/19	HM	SW8260C
Dibromochloromethane	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Dibromomethane	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Dichlorodifluoromethane	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Ethylbenzene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Hexachlorobutadiene	ND	0.50	0.20	ug/L	1	12/19/19	HM	SW8260C
Isopropylbenzene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
m&p-Xylene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C

1

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Methyl ethyl ketone	ND	2.5	2.5	ug/L	1	12/19/19	HM	SW8260C
Methyl t-butyl ether (MTBE)	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Methylene chloride	ND	3.0	1.0	ug/L	1	12/19/19	HM	SW8260C
Naphthalene	ND	1.0	1.0	ug/L	1	12/19/19	HM	SW8260C
n-Butylbenzene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
n-Propylbenzene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
o-Xylene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
p-Isopropyltoluene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
sec-Butylbenzene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Styrene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
tert-Butylbenzene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Tetrachloroethene	43	5.0	1.3	ug/L	5	12/21/19	HM	SW8260C
Tetrahydrofuran (THF)	ND	5.0	2.5	ug/L	1	12/19/19	HM	SW8260C
Toluene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
trans-1,2-Dichloroethene	ND	5.0	0.25	ug/L	1	12/19/19	HM	SW8260C
trans-1,3-Dichloropropene	ND	0.40	0.25	ug/L	1	12/19/19	HM	SW8260C
trans-1,4-dichloro-2-butene	ND	2.5	2.5	ug/L	1	12/19/19	HM	SW8260C
Trichloroethene	1.4	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Trichlorofluoromethane	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Trichlorotrifluoroethane	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Vinyl chloride	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
<u>QA/QC Surrogates</u>								
% 1,2-dichlorobenzene-d4	100			%	1	12/19/19	HM	70 - 130 %
% Bromofluorobenzene	105			%	1	12/19/19	HM	70 - 130 %
% Dibromofluoromethane	91			%	1	12/19/19	HM	70 - 130 %
% Toluene-d8	103			%	1	12/19/19	HM	70 - 130 %
% 1,2-dichlorobenzene-d4 (5x)	100			%	5	12/21/19	HM	70 - 130 %
% Bromofluorobenzene (5x)	104			%	5	12/21/19	HM	70 - 130 %
% Dibromofluoromethane (5x)	95			%	5	12/21/19	HM	70 - 130 %
% Toluene-d8 (5x)	105			%	5	12/21/19	HM	70 - 130 %
<u>Volatiles</u>								
1,1,1,2-Tetrachloroethane	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Acrolein	ND	5.0	2.5	ug/L	1	12/19/19	HM	SW8260C
Acrylonitrile	ND	5.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Tert-butyl alcohol	ND	50	10	ug/L	1	12/19/19	HM	SW8260C
<u>1,4-dioxane</u>								
1,4-dioxane	ND	0.20	0.20	ug/l	1	12/20/19	AW	SW8270DSIM
<u>QA/QC Surrogates</u>								
% 1,4-dioxane-d8	62			%	1	12/20/19	AW	30 - 130 %
<u>Semivolatiles</u>								
1,2,4,5-Tetrachlorobenzene	ND	3.3	3.3	ug/L	1	12/24/19	WB	SW8270D
1,2,4-Trichlorobenzene	ND	4.7	1.4	ug/L	1	12/24/19	WB	SW8270D
1,2-Dichlorobenzene	ND	0.94	0.94	ug/L	1	12/24/19	WB	SW8270D
1,2-Diphenylhydrazine	ND	4.7	1.5	ug/L	1	12/24/19	WB	SW8270D
1,3-Dichlorobenzene	ND	0.94	0.94	ug/L	1	12/24/19	WB	SW8270D
1,4-Dichlorobenzene	ND	0.94	0.94	ug/L	1	12/24/19	WB	SW8270D
2,4,5-Trichlorophenol	ND	0.94	0.94	ug/L	1	12/24/19	WB	SW8270D

Client ID: MW2

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
2,4,6-Trichlorophenol	ND	0.94	0.94	ug/L	1	12/24/19	WB	SW8270D
2,4-Dichlorophenol	ND	0.94	0.94	ug/L	1	12/24/19	WB	SW8270D
2,4-Dimethylphenol	ND	0.94	0.94	ug/L	1	12/24/19	WB	SW8270D
2,4-Dinitrophenol	ND	0.94	0.94	ug/L	1	12/24/19	WB	SW8270D
2,4-Dinitrotoluene	ND	4.7	1.9	ug/L	1	12/24/19	WB	SW8270D
2,6-Dinitrotoluene	ND	4.7	1.5	ug/L	1	12/24/19	WB	SW8270D
2-Chloronaphthalene	ND	4.7	1.3	ug/L	1	12/24/19	WB	SW8270D
2-Chlorophenol	ND	0.94	0.94	ug/L	1	12/24/19	WB	SW8270D
2-Methylnaphthalene	ND	4.7	1.4	ug/L	1	12/24/19	WB	SW8270D
2-Methylphenol (o-cresol)	ND	0.94	0.94	ug/L	1	12/24/19	WB	SW8270D
2-Nitroaniline	ND	4.7	1.9	ug/L	1	12/24/19	WB	SW8270D
2-Nitrophenol	ND	0.94	0.94	ug/L	1	12/24/19	WB	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	0.94	0.94	ug/L	1	12/24/19	WB	SW8270D
3,3'-Dichlorobenzidine	ND	4.7	2.2	ug/L	1	12/24/19	WB	SW8270D
3-Nitroaniline	ND	4.7	1.9	ug/L	1	12/24/19	WB	SW8270D
4,6-Dinitro-2-methylphenol	ND	0.94	0.94	ug/L	1	12/24/19	WB	SW8270D
4-Bromophenyl phenyl ether	ND	4.7	1.4	ug/L	1	12/24/19	WB	SW8270D
4-Chloro-3-methylphenol	ND	0.94	0.94	ug/L	1	12/24/19	WB	SW8270D
4-Chloroaniline	ND	3.3	2.2	ug/L	1	12/24/19	WB	SW8270D
4-Chlorophenyl phenyl ether	ND	4.7	1.6	ug/L	1	12/24/19	WB	SW8270D
4-Nitroaniline	ND	4.7	1.6	ug/L	1	12/24/19	WB	SW8270D
4-Nitrophenol	ND	0.94	0.94	ug/L	1	12/24/19	WB	SW8270D
Acenaphthene	ND	4.7	1.4	ug/L	1	12/24/19	WB	SW8270D
Acetophenone	ND	4.7	1.5	ug/L	1	12/24/19	WB	SW8270D
Aniline	ND	3.3	3.3	ug/L	1	12/24/19	WB	SW8270D
Anthracene	ND	4.7	1.5	ug/L	1	12/24/19	WB	SW8270D
Benzidine	ND	4.2	2.8	ug/L	1	12/24/19	WB	SW8270D
Benzoic acid	ND	24	9.4	ug/L	1	12/24/19	WB	SW8270D
Benzyl butyl phthalate	ND	4.7	1.2	ug/L	1	12/24/19	WB	SW8270D
Bis(2-chloroethoxy)methane	ND	4.7	1.3	ug/L	1	12/24/19	WB	SW8270D
Bis(2-chloroethyl)ether	ND	0.94	0.94	ug/L	1	12/24/19	WB	SW8270D
Bis(2-chloroisopropyl)ether	ND	4.7	1.3	ug/L	1	12/24/19	WB	SW8270D
Bis(2-ethylhexyl)phthalate	ND	0.94	0.94	ug/L	1	12/24/19	WB	SW8270D
Carbazole	ND	4.7	3.6	ug/L	1	12/24/19	WB	SW8270D
Dibenzofuran	ND	4.7	1.4	ug/L	1	12/24/19	WB	SW8270D
Diethyl phthalate	ND	4.7	1.5	ug/L	1	12/24/19	WB	SW8270D
Dimethylphthalate	ND	4.7	1.5	ug/L	1	12/24/19	WB	SW8270D
Di-n-butylphthalate	ND	4.7	1.3	ug/L	1	12/24/19	WB	SW8270D
Di-n-octylphthalate	ND	4.7	1.2	ug/L	1	12/24/19	WB	SW8270D
Fluoranthene	ND	4.7	1.5	ug/L	1	12/24/19	WB	SW8270D
Fluorene	ND	4.7	1.6	ug/L	1	12/24/19	WB	SW8270D
Hexachlorocyclopentadiene	ND	4.7	1.4	ug/L	1	12/24/19	WB	SW8270D
Hexachloroethane	ND	0.94	0.94	ug/L	1	12/24/19	WB	SW8270D
Isophorone	ND	4.7	1.3	ug/L	1	12/24/19	WB	SW8270D
Naphthalene	ND	4.7	1.4	ug/L	1	12/24/19	WB	SW8270D
N-Nitrosodi-n-propylamine	ND	4.7	1.5	ug/L	1	12/24/19	WB	SW8270D
N-Nitrosodiphenylamine	ND	4.7	1.8	ug/L	1	12/24/19	WB	SW8270D
Pentachloronitrobenzene	ND	2.4	2.4	ug/L	1	12/24/19	WB	SW8270D
Phenol	ND	0.94	0.94	ug/L	1	12/24/19	WB	SW8270D

Client ID: MW2

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Pyrene	ND	4.7	1.6	ug/L	1	12/24/19	WB	SW8270D
Pyridine	ND	9.4	1.2	ug/L	1	12/24/19	WB	SW8270D
<u>QA/QC Surrogates</u>								
% 2,4,6-Tribromophenol	72			%	1	12/24/19	WB	15 - 110 %
% 2-Fluorobiphenyl	70			%	1	12/24/19	WB	30 - 130 %
% 2-Fluorophenol	51			%	1	12/24/19	WB	15 - 110 %
% Nitrobenzene-d5	50			%	1	12/24/19	WB	30 - 130 %
% Phenol-d5	<10			%	1	12/24/19	WB	15 - 110 %
% Terphenyl-d14	50			%	1	12/24/19	WB	30 - 130 %
<u>Semivolatiles</u>								
Acenaphthylene	ND	0.47	0.47	ug/L	1	12/23/19	WB	SW8270D (SIM)
Benz(a)anthracene	ND	0.02	0.02	ug/L	1	12/23/19	WB	SW8270D (SIM)
Benzo(a)pyrene	ND	0.02	0.02	ug/L	1	12/23/19	WB	SW8270D (SIM)
Benzo(b)fluoranthene	ND	0.02	0.02	ug/L	1	12/23/19	WB	SW8270D (SIM)
Benzo(ghi)perylene	ND	0.47	0.47	ug/L	1	12/23/19	WB	SW8270D (SIM)
Benzo(k)fluoranthene	ND	0.02	0.02	ug/L	1	12/23/19	WB	SW8270D (SIM)
Chrysene	ND	0.02	0.02	ug/L	1	12/23/19	WB	SW8270D (SIM)
Dibenz(a,h)anthracene	ND	0.47	0.47	ug/L	1	12/23/19	WB	SW8270D (SIM)
Hexachlorobenzene	ND	0.04	0.04	ug/L	1	12/23/19	WB	SW8270D (SIM)
Hexachlorobutadiene	ND	0.47	0.47	ug/L	1	12/23/19	WB	SW8270D (SIM)
Indeno(1,2,3-cd)pyrene	ND	0.02	0.02	ug/L	1	12/23/19	WB	SW8270D (SIM)
Nitrobenzene	ND	0.38	0.38	ug/L	1	12/23/19	WB	SW8270D (SIM)
N-Nitrosodimethylamine	ND	0.09	0.09	ug/L	1	12/23/19	WB	SW8270D (SIM)
Pentachlorophenol	ND	0.47	0.47	ug/L	1	12/23/19	WB	SW8270D (SIM)
Phenanthrene	ND	0.47	0.47	ug/L	1	12/23/19	WB	SW8270D (SIM)
<u>QA/QC Surrogates</u>								
% 2,4,6-Tribromophenol	71			%	1	12/23/19	WB	15 - 110 %
% 2-Fluorobiphenyl	63			%	1	12/23/19	WB	30 - 130 %
% 2-Fluorophenol	49			%	1	12/23/19	WB	15 - 110 %
% Nitrobenzene-d5	51			%	1	12/23/19	WB	30 - 130 %
% Phenol-d5	<10			%	1	12/23/19	WB	15 - 110 %
% Terphenyl-d14	49			%	1	12/23/19	WB	30 - 130 %
Extraction for 1,4-Dioxane	Completed					12/19/19	S/S	

Client ID: MW2

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

3 = This parameter exceeds laboratory specified limits.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low J=Estimated Below RL LOD=Limit of Detection MDL=Method Detection Limit1

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

Volatile Comment:

To achieve client's objectives, where the lowest calibration standard or LOD justifies lowering the RL/PQL, the RL/PQL of some compounds have been lowered to meet criteria.

Semi-Volatile Comment:

Poor surrogate recovery was observed for one acid and/or one base surrogate. The other surrogates associated with this sample were within QA/QC criteria. No significant bias suspected.

Semi-Volatile Comment:

To achieve client's objectives, where the lowest calibration standard or LOD justifies lowering the RL/PQL, the RL/PQL of some compounds have been lowered to meet criteria.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

December 30, 2019

Reviewed and Released by: Phyllis Shiller, Laboratory Director



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823



Analysis Report

December 30, 2019

FOR: Attn: Mr. Charles B. Sosik, P.G.
Environmental Business Consultants
1808 Middle Country Rd
Ridge NY 11961-2406

Sample Information

Matrix: GROUND WATER
Location Code: EBC
Rush Request: 72 Hour
P.O.#:

Custody Information

Collected by: TB
Received by: CP
Analyzed by: see "By" below

Date

12/17/19
12/18/19

Time

8:28
17:12

Laboratory Data

SDG ID: GCE90170
Phoenix ID: CE90172

Project ID: 26-22 4TH ST QUEENS
Client ID: MW3

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Silver	ND	0.005	0.001	mg/L	1	12/20/19	TH	SW6010D
Aluminum	1.09	0.025	0.0024	mg/L	1	12/20/19	TH	SW6010D
Arsenic - LDL	ND	0.004	0.001	mg/L	1	12/20/19	TH	SW6010D
Barium	0.151	0.010	0.001	mg/L	1	12/20/19	TH	SW6010D
Beryllium	ND	0.001	0.001	mg/L	1	12/20/19	TH	SW6010D
Calcium	144	0.010	0.003	mg/L	1	12/20/19	TH	SW6010D
Cadmium	ND	0.004	0.0005	mg/L	1	12/20/19	TH	SW6010D
Cobalt	ND	0.005	0.001	mg/L	1	12/20/19	TH	SW6010D
Chromium	ND	0.003	0.003	mg/L	1	12/20/19	EK	SW6010D
Copper	0.005	J 0.005	0.001	mg/L	1	12/20/19	TH	SW6010D
Iron	1.24	0.01	0.01	mg/L	1	12/20/19	TH	SW6010D
Mercury	ND	0.0002	0.00015	mg/L	1	12/19/19	RS	SW7470A
Potassium	9.8	0.1	0.1	mg/L	1	12/20/19	TH	SW6010D
Magnesium	25.6	0.010	0.01	mg/L	1	12/20/19	TH	SW6010D
Manganese	0.680	0.005	0.001	mg/L	1	12/20/19	TH	SW6010D
Sodium	209	1.0	1.0	mg/L	10	12/20/19	TH	SW6010D
Nickel	0.002	J 0.004	0.001	mg/L	1	12/20/19	TH	SW6010D
Lead	ND	0.002	0.001	mg/L	1	12/20/19	TH	SW6010D
Antimony	ND	0.0030	0.0030	mg/L	5	12/19/19	CPP	SW6020B
Selenium	ND	0.010	0.010	mg/L	5	12/23/19	CPP	SW6020B
Thallium	ND	0.0005	0.0005	mg/L	5	12/19/19	CPP	SW6020B
Vanadium	0.004	J 0.010	0.001	mg/L	1	12/20/19	TH	SW6010D
Zinc	0.006	J 0.010	0.002	mg/L	1	12/20/19	TH	SW6010D
Mercury Digestion	Completed					12/19/19	LS/LS	SW7470A
PCB Extraction (LDL)	Completed					12/19/19	AT/AT	SW3510C
Extraction for Pest (LDL)	Completed					12/19/19	AT/AT	SW3510C
Semi-Volatile Extraction	Completed					12/20/19	P/AK	SW3520C
Total Metals Digestion	Completed					12/19/19	AG	

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Total Metals Digestion MS	Completed					12/18/19	AG	
<u>Pesticides</u>								
4,4' -DDD	ND	0.005	0.005	ug/L	1	12/20/19	AW	SW8081B
4,4' -DDE	ND	0.005	0.005	ug/L	1	12/20/19	AW	SW8081B
4,4' -DDT	ND	0.005	0.005	ug/L	1	12/20/19	AW	SW8081B
a-BHC	ND	0.005	0.005	ug/L	1	12/20/19	AW	SW8081B
a-chlordane	ND	0.010	0.010	ug/L	1	12/20/19	AW	SW8081B
Alachlor	ND	0.074	0.074	ug/L	1	12/20/19	AW	SW8081B
Aldrin	ND	0.002	0.002	ug/L	1	12/20/19	AW	SW8081B
b-BHC	ND	0.005	0.005	ug/L	1	12/20/19	AW	SW8081B
Chlordane	ND	0.050	0.050	ug/L	1	12/20/19	AW	SW8081B
d-BHC	ND	0.005	0.005	ug/L	1	12/20/19	AW	SW8081B
Dieldrin	ND	0.002	0.002	ug/L	1	12/20/19	AW	SW8081B
Endosulfan I	ND	0.010	0.010	ug/L	1	12/20/19	AW	SW8081B
Endosulfan II	ND	0.010	0.010	ug/L	1	12/20/19	AW	SW8081B
Endosulfan Sulfate	ND	0.010	0.010	ug/L	1	12/20/19	AW	SW8081B
Endrin	ND	0.010	0.010	ug/L	1	12/20/19	AW	SW8081B
Endrin Aldehyde	ND	0.010	0.010	ug/L	1	12/20/19	AW	SW8081B
Endrin ketone	ND	0.010	0.010	ug/L	1	12/20/19	AW	SW8081B
g-BHC (Lindane)	ND	0.005	0.005	ug/L	1	12/20/19	AW	SW8081B
g-chlordane	ND	0.010	0.010	ug/L	1	12/20/19	AW	SW8081B
Heptachlor	ND	0.010	0.010	ug/L	1	12/20/19	AW	SW8081B
Heptachlor epoxide	ND	0.010	0.010	ug/L	1	12/20/19	AW	SW8081B
Methoxychlor	ND	0.099	0.099	ug/L	1	12/20/19	AW	SW8081B
Toxaphene	ND	0.20	0.20	ug/L	1	12/20/19	AW	SW8081B
<u>QA/QC Surrogates</u>								
%DCBP (Surrogate Rec)	101			%	1	12/20/19	AW	30 - 150 %
%DCBP (Surrogate Rec) (Confirmation)	67			%	1	12/20/19	AW	30 - 150 %
%TCMX (Surrogate Rec)	102			%	1	12/20/19	AW	30 - 150 %
%TCMX (Surrogate Rec) (Confirmation)	71			%	1	12/20/19	AW	30 - 150 %
<u>Polychlorinated Biphenyls</u>								
PCB-1016	ND	0.050	0.050	ug/L	1	12/20/19	SC	SW8082A
PCB-1221	ND	0.050	0.050	ug/L	1	12/20/19	SC	SW8082A
PCB-1232	ND	0.050	0.050	ug/L	1	12/20/19	SC	SW8082A
PCB-1242	ND	0.050	0.050	ug/L	1	12/20/19	SC	SW8082A
PCB-1248	ND	0.050	0.050	ug/L	1	12/20/19	SC	SW8082A
PCB-1254	ND	0.050	0.050	ug/L	1	12/20/19	SC	SW8082A
PCB-1260	ND	0.050	0.050	ug/L	1	12/20/19	SC	SW8082A
PCB-1262	ND	0.050	0.050	ug/L	1	12/20/19	SC	SW8082A
PCB-1268	ND	0.050	0.050	ug/L	1	12/20/19	SC	SW8082A
<u>QA/QC Surrogates</u>								
% DCBP	92			%	1	12/20/19	SC	30 - 150 %
% DCBP (Confirmation)	79			%	1	12/20/19	SC	30 - 150 %
% TCMX	85			%	1	12/20/19	SC	30 - 150 %
% TCMX (Confirmation)	75			%	1	12/20/19	SC	30 - 150 %
<u>Volatiles</u>								
1,1,1,2-Tetrachloroethane	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
1,1,1-Trichloroethane	ND	5.0	0.25	ug/L	1	12/19/19	HM	SW8260C
1,1,2,2-Tetrachloroethane	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
1,1,2-Trichloroethane	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
1,1-Dichloroethane	ND	5.0	0.25	ug/L	1	12/19/19	HM	SW8260C
1,1-Dichloroethene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
1,1-Dichloropropene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
1,2,3-Trichlorobenzene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
1,2,3-Trichloropropane	ND	0.25	0.25	ug/L	1	12/19/19	HM	SW8260C
1,2,4-Trichlorobenzene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
1,2,4-Trimethylbenzene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
1,2-Dibromo-3-chloropropane	ND	0.50	0.50	ug/L	1	12/19/19	HM	SW8260C
1,2-Dibromoethane	ND	0.25	0.25	ug/L	1	12/19/19	HM	SW8260C
1,2-Dichlorobenzene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
1,2-Dichloroethane	ND	0.60	0.50	ug/L	1	12/19/19	HM	SW8260C
1,2-Dichloropropane	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
1,3,5-Trimethylbenzene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
1,3-Dichlorobenzene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
1,3-Dichloropropane	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
1,4-Dichlorobenzene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
2,2-Dichloropropane	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
2-Chlorotoluene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
2-Hexanone	ND	2.5	2.5	ug/L	1	12/19/19	HM	SW8260C
2-Isopropyltoluene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
4-Chlorotoluene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
4-Methyl-2-pentanone	ND	2.5	2.5	ug/L	1	12/19/19	HM	SW8260C
Acetone	ND	5.0	2.5	ug/L	1	12/19/19	HM	SW8260C
Acrolein	ND	5.0	2.5	ug/L	1	12/19/19	HM	SW8260C
Acrylonitrile	ND	5.0	2.5	ug/L	1	12/19/19	HM	SW8260C
Benzene	ND	0.70	0.25	ug/L	1	12/19/19	HM	SW8260C
Bromobenzene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Bromochloromethane	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Bromodichloromethane	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Bromoform	ND	5.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Bromomethane	ND	5.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Carbon Disulfide	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Carbon tetrachloride	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Chlorobenzene	ND	5.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Chloroethane	ND	5.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Chloroform	ND	5.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Chloromethane	ND	5.0	0.25	ug/L	1	12/19/19	HM	SW8260C
cis-1,2-Dichloroethene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
cis-1,3-Dichloropropene	ND	0.40	0.25	ug/L	1	12/19/19	HM	SW8260C
Dibromochloromethane	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Dibromomethane	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Dichlorodifluoromethane	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Ethylbenzene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Hexachlorobutadiene	ND	0.50	0.20	ug/L	1	12/19/19	HM	SW8260C
Isopropylbenzene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
m&p-Xylene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Methyl ethyl ketone	ND	2.5	2.5	ug/L	1	12/19/19	HM	SW8260C
Methyl t-butyl ether (MTBE)	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Methylene chloride	ND	3.0	1.0	ug/L	1	12/19/19	HM	SW8260C
Naphthalene	ND	1.0	1.0	ug/L	1	12/19/19	HM	SW8260C
n-Butylbenzene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
n-Propylbenzene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
o-Xylene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
p-Isopropyltoluene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
sec-Butylbenzene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Styrene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
tert-Butylbenzene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Tetrachloroethene	9.1	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Tetrahydrofuran (THF)	ND	5.0	2.5	ug/L	1	12/19/19	HM	SW8260C
Toluene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
trans-1,2-Dichloroethene	ND	5.0	0.25	ug/L	1	12/19/19	HM	SW8260C
trans-1,3-Dichloropropene	ND	0.40	0.25	ug/L	1	12/19/19	HM	SW8260C
trans-1,4-dichloro-2-butene	ND	2.5	2.5	ug/L	1	12/19/19	HM	SW8260C
Trichloroethene	0.65	J 1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Trichlorofluoromethane	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Trichlorotrifluoroethane	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Vinyl chloride	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
<u>QA/QC Surrogates</u>								
% 1,2-dichlorobenzene-d4	100			%	1	12/19/19	HM	70 - 130 %
% Bromofluorobenzene	103			%	1	12/19/19	HM	70 - 130 %
% Dibromofluoromethane	90			%	1	12/19/19	HM	70 - 130 %
% Toluene-d8	105			%	1	12/19/19	HM	70 - 130 %
<u>Volatiles</u>								
1,1,1,2-Tetrachloroethane	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Acrolein	ND	5.0	2.5	ug/L	1	12/19/19	HM	SW8260C
Acrylonitrile	ND	5.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Tert-butyl alcohol	ND	50	10	ug/L	1	12/19/19	HM	SW8260C
<u>1,4-dioxane</u>								
1,4-dioxane	ND	0.20	0.20	ug/l	1	12/20/19	AW	SW8270DSIM
<u>QA/QC Surrogates</u>								
% 1,4-dioxane-d8	66			%	1	12/20/19	AW	30 - 130 %
<u>Semivolatiles</u>								
1,2,4,5-Tetrachlorobenzene	ND	3.6	3.6	ug/L	1	12/24/19	WB	SW8270D
1,2,4-Trichlorobenzene	ND	5.1	1.5	ug/L	1	12/24/19	WB	SW8270D
1,2-Dichlorobenzene	ND	1.0	1.0	ug/L	1	12/24/19	WB	SW8270D
1,2-Diphenylhydrazine	ND	5.1	1.7	ug/L	1	12/24/19	WB	SW8270D
1,3-Dichlorobenzene	ND	1.0	1.0	ug/L	1	12/24/19	WB	SW8270D
1,4-Dichlorobenzene	ND	1.0	1.0	ug/L	1	12/24/19	WB	SW8270D
2,4,5-Trichlorophenol	ND	1.0	1.0	ug/L	1	12/24/19	WB	SW8270D
2,4,6-Trichlorophenol	ND	1.0	1.0	ug/L	1	12/24/19	WB	SW8270D
2,4-Dichlorophenol	ND	1.0	1.0	ug/L	1	12/24/19	WB	SW8270D
2,4-Dimethylphenol	ND	1.0	1.0	ug/L	1	12/24/19	WB	SW8270D
2,4-Dinitrophenol	ND	1.0	1.0	ug/L	1	12/24/19	WB	SW8270D

Client ID: MW3

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
2,4-Dinitrotoluene	ND	5.0	2.0	ug/L	1	12/24/19	WB	SW8270D
2,6-Dinitrotoluene	ND	5.0	1.6	ug/L	1	12/24/19	WB	SW8270D
2-Chloronaphthalene	ND	5.1	1.4	ug/L	1	12/24/19	WB	SW8270D
2-Chlorophenol	ND	1.0	1.0	ug/L	1	12/24/19	WB	SW8270D
2-Methylnaphthalene	ND	5.1	1.5	ug/L	1	12/24/19	WB	SW8270D
2-Methylphenol (o-cresol)	ND	1.0	1.0	ug/L	1	12/24/19	WB	SW8270D
2-Nitroaniline	ND	5.0	2.0	ug/L	1	12/24/19	WB	SW8270D
2-Nitrophenol	ND	1.0	1.0	ug/L	1	12/24/19	WB	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	1.0	1.0	ug/L	1	12/24/19	WB	SW8270D
3,3'-Dichlorobenzidine	ND	5.0	2.4	ug/L	1	12/24/19	WB	SW8270D
3-Nitroaniline	ND	5.0	2.0	ug/L	1	12/24/19	WB	SW8270D
4,6-Dinitro-2-methylphenol	ND	1.0	1.0	ug/L	1	12/24/19	WB	SW8270D
4-Bromophenyl phenyl ether	ND	5.1	1.5	ug/L	1	12/24/19	WB	SW8270D
4-Chloro-3-methylphenol	ND	1.0	1.0	ug/L	1	12/24/19	WB	SW8270D
4-Chloroaniline	ND	3.6	2.4	ug/L	1	12/24/19	WB	SW8270D
4-Chlorophenyl phenyl ether	ND	5.1	1.7	ug/L	1	12/24/19	WB	SW8270D
4-Nitroaniline	ND	5.0	1.7	ug/L	1	12/24/19	WB	SW8270D
4-Nitrophenol	ND	1.0	1.0	ug/L	1	12/24/19	WB	SW8270D
Acenaphthene	ND	5.1	1.6	ug/L	1	12/24/19	WB	SW8270D
Acetophenone	ND	5.1	1.6	ug/L	1	12/24/19	WB	SW8270D
Aniline	ND	3.6	3.6	ug/L	1	12/24/19	WB	SW8270D
Anthracene	ND	5.1	1.7	ug/L	1	12/24/19	WB	SW8270D
Benzidine	ND	4.6	3.0	ug/L	1	12/24/19	WB	SW8270D
Benzoic acid	ND	26	10	ug/L	1	12/24/19	WB	SW8270D
Benzyl butyl phthalate	ND	5.1	1.3	ug/L	1	12/24/19	WB	SW8270D
Bis(2-chloroethoxy)methane	ND	5.0	1.4	ug/L	1	12/24/19	WB	SW8270D
Bis(2-chloroethyl)ether	ND	1.0	1.0	ug/L	1	12/24/19	WB	SW8270D
Bis(2-chloroisopropyl)ether	ND	5.1	1.4	ug/L	1	12/24/19	WB	SW8270D
Bis(2-ethylhexyl)phthalate	ND	1.0	1.0	ug/L	1	12/24/19	WB	SW8270D
Carbazole	ND	5.1	3.9	ug/L	1	12/24/19	WB	SW8270D
Dibenzofuran	ND	5.0	1.5	ug/L	1	12/24/19	WB	SW8270D
Diethyl phthalate	ND	5.1	1.6	ug/L	1	12/24/19	WB	SW8270D
Dimethylphthalate	ND	5.1	1.6	ug/L	1	12/24/19	WB	SW8270D
Di-n-butylphthalate	ND	5.1	1.4	ug/L	1	12/24/19	WB	SW8270D
Di-n-octylphthalate	ND	5.1	1.3	ug/L	1	12/24/19	WB	SW8270D
Fluoranthene	ND	5.1	1.7	ug/L	1	12/24/19	WB	SW8270D
Fluorene	ND	5.1	1.7	ug/L	1	12/24/19	WB	SW8270D
Hexachlorocyclopentadiene	ND	5.0	1.6	ug/L	1	12/24/19	WB	SW8270D
Hexachloroethane	ND	1.0	1.0	ug/L	1	12/24/19	WB	SW8270D
Isophorone	ND	5.1	1.4	ug/L	1	12/24/19	WB	SW8270D
Naphthalene	ND	5.0	1.5	ug/L	1	12/24/19	WB	SW8270D
N-Nitrosodi-n-propylamine	ND	5.1	1.7	ug/L	1	12/24/19	WB	SW8270D
N-Nitrosodiphenylamine	ND	5.1	2.0	ug/L	1	12/24/19	WB	SW8270D
Pentachloronitrobenzene	ND	2.6	2.6	ug/L	1	12/24/19	WB	SW8270D
Phenol	ND	1.0	1.0	ug/L	1	12/24/19	WB	SW8270D
Pyrene	ND	5.1	1.8	ug/L	1	12/24/19	WB	SW8270D
Pyridine	ND	10	1.3	ug/L	1	12/24/19	WB	SW8270D
<u>QA/QC Surrogates</u>								
% 2,4,6-Tribromophenol	73			%	1	12/24/19	WB	15 - 110 %

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
% 2-Fluorobiphenyl	69			%	1	12/24/19	WB	30 - 130 %
% 2-Fluorophenol	52			%	1	12/24/19	WB	15 - 110 %
% Nitrobenzene-d5	49			%	1	12/24/19	WB	30 - 130 %
% Phenol-d5	55			%	1	12/24/19	WB	15 - 110 %
% Terphenyl-d14	65			%	1	12/24/19	WB	30 - 130 %

Semivolatiles

Acenaphthylene	ND	0.51	0.51	ug/L	1	12/23/19	WB	SW8270D (SIM)
Benz(a)anthracene	ND	0.02	0.02	ug/L	1	12/23/19	WB	SW8270D (SIM)
Benzo(a)pyrene	ND	0.02	0.02	ug/L	1	12/23/19	WB	SW8270D (SIM)
Benzo(b)fluoranthene	ND	0.02	0.02	ug/L	1	12/23/19	WB	SW8270D (SIM)
Benzo(ghi)perylene	ND	0.51	0.51	ug/L	1	12/23/19	WB	SW8270D (SIM)
Benzo(k)fluoranthene	ND	0.02	0.02	ug/L	1	12/23/19	WB	SW8270D (SIM)
Chrysene	ND	0.02	0.02	ug/L	1	12/23/19	WB	SW8270D (SIM)
Dibenz(a,h)anthracene	ND	0.51	0.51	ug/L	1	12/23/19	WB	SW8270D (SIM)
Hexachlorobenzene	ND	0.04	0.04	ug/L	1	12/23/19	WB	SW8270D (SIM)
Hexachlorobutadiene	ND	0.50	0.50	ug/L	1	12/23/19	WB	SW8270D (SIM)
Indeno(1,2,3-cd)pyrene	ND	0.02	0.02	ug/L	1	12/23/19	WB	SW8270D (SIM)
Nitrobenzene	ND	0.40	0.40	ug/L	1	12/23/19	WB	SW8270D (SIM)
N-Nitrosodimethylamine	ND	0.10	0.10	ug/L	1	12/23/19	WB	SW8270D (SIM)
Pentachlorophenol	ND	0.51	0.51	ug/L	1	12/23/19	WB	SW8270D (SIM)
Phenanthrene	ND	0.51	0.51	ug/L	1	12/23/19	WB	SW8270D (SIM)

QA/QC Surrogates

% 2,4,6-Tribromophenol	73			%	1	12/23/19	WB	15 - 110 %
% 2-Fluorobiphenyl	62			%	1	12/23/19	WB	30 - 130 %
% 2-Fluorophenol	49			%	1	12/23/19	WB	15 - 110 %
% Nitrobenzene-d5	51			%	1	12/23/19	WB	30 - 130 %
% Phenol-d5	58			%	1	12/23/19	WB	15 - 110 %
% Terphenyl-d14	70			%	1	12/23/19	WB	30 - 130 %
Extraction for 1,4-Dioxane	Completed					12/19/19	S/S	

Client ID: MW3

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low J=Estimated Below RL LOD=Limit of Detection MDL=Method Detection Limit1

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

Volatile Comment:

To achieve client's objectives, where the lowest calibration standard or LOD justifies lowering the RL/PQL, the RL/PQL of some compounds have been lowered to meet criteria.

Semi-Volatile Comment:

Poor surrogate recovery was observed for one acid and/or one base surrogate. The other surrogates associated with this sample were within QA/QC criteria. No significant bias suspected.

Semi-Volatile Comment:

To achieve client's objectives, where the lowest calibration standard or LOD justifies lowering the RL/PQL, the RL/PQL of some compounds have been lowered to meet criteria.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

December 30, 2019

Reviewed and Released by: Phyllis Shiller, Laboratory Director



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823



Analysis Report

December 30, 2019

FOR: Attn: Mr. Charles B. Sosik, P.G.
Environmental Business Consultants
1808 Middle Country Rd
Ridge NY 11961-2406

Sample Information

Matrix: GROUND WATER
Location Code: EBC
Rush Request: 72 Hour
P.O.#:

Custody Information

Collected by: TB
Received by: CP
Analyzed by: see "By" below

Date

12/17/19 10:16
12/18/19 17:12

Time

Laboratory Data

SDG ID: GCE90170
Phoenix ID: CE90173

Project ID: 26-22 4TH ST QUEENS
Client ID: MW4

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Silver	ND	0.005	0.001	mg/L	1	12/20/19	TH	SW6010D
Aluminum	1.53	0.025	0.0024	mg/L	1	12/20/19	TH	SW6010D
Arsenic - LDL	ND	0.004	0.001	mg/L	1	12/20/19	TH	SW6010D
Barium	0.193	0.010	0.001	mg/L	1	12/20/19	TH	SW6010D
Beryllium	ND	0.001	0.001	mg/L	1	12/20/19	TH	SW6010D
Calcium	151	0.10	0.030	mg/L	10	12/20/19	TH	SW6010D
Cadmium	ND	0.004	0.0005	mg/L	1	12/20/19	TH	SW6010D
Cobalt	0.003	J 0.005	0.001	mg/L	1	12/20/19	TH	SW6010D
Chromium	0.004	0.003	0.003	mg/L	1	12/20/19	EK	SW6010D
Copper	0.007	0.005	0.001	mg/L	1	12/20/19	TH	SW6010D
Iron	2.24	0.01	0.01	mg/L	1	12/20/19	TH	SW6010D
Mercury	ND	0.0002	0.00015	mg/L	1	12/19/19	RS	SW7470A
Potassium	13.6	0.1	0.1	mg/L	1	12/20/19	TH	SW6010D
Magnesium	31.2	0.010	0.01	mg/L	1	12/20/19	TH	SW6010D
Manganese	1.94	0.005	0.001	mg/L	1	12/20/19	TH	SW6010D
Sodium	112	1.0	1.0	mg/L	10	12/20/19	TH	SW6010D
Nickel	0.005	0.004	0.001	mg/L	1	12/20/19	TH	SW6010D
Lead	ND	0.002	0.001	mg/L	1	12/20/19	TH	SW6010D
Antimony	ND	0.0030	0.0030	mg/L	5	12/19/19	CPP	SW6020B
Selenium	ND	0.010	0.010	mg/L	5	12/23/19	CPP	SW6020B
Thallium	ND	0.0005	0.0005	mg/L	5	12/19/19	CPP	SW6020B
Vanadium	0.006	J 0.010	0.001	mg/L	1	12/20/19	TH	SW6010D
Zinc	0.008	J 0.010	0.002	mg/L	1	12/20/19	TH	SW6010D
Mercury Digestion	Completed					12/19/19	LS/LS	SW7470A
PCB Extraction (LDL)	Completed					12/19/19	AT/AT	SW3510C
Extraction for Pest (LDL)	Completed					12/19/19	AT/AT	SW3510C
Semi-Volatile Extraction	Completed					12/20/19	P/AK	SW3520C
Total Metals Digestion	Completed					12/19/19	AG	

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Total Metals Digestion MS	Completed					12/18/19	AG	
<u>Pesticides</u>								
4,4' -DDD	ND	0.005	0.005	ug/L	1	12/20/19	AW	SW8081B
4,4' -DDE	ND	0.005	0.005	ug/L	1	12/20/19	AW	SW8081B
4,4' -DDT	0.026	0.005	0.005	ug/L	1	12/20/19	AW	SW8081B
a-BHC	ND	0.005	0.005	ug/L	1	12/20/19	AW	SW8081B
a-chlordane	ND	0.010	0.010	ug/L	1	12/20/19	AW	SW8081B
Alachlor	ND	0.075	0.075	ug/L	1	12/20/19	AW	SW8081B
Aldrin	ND	0.002	0.002	ug/L	1	12/20/19	AW	SW8081B
b-BHC	ND	0.005	0.005	ug/L	1	12/20/19	AW	SW8081B
Chlordane	ND	0.050	0.050	ug/L	1	12/20/19	AW	SW8081B
d-BHC	ND	0.005	0.005	ug/L	1	12/20/19	AW	SW8081B
Dieldrin	ND	0.002	0.002	ug/L	1	12/20/19	AW	SW8081B
Endosulfan I	ND	0.010	0.010	ug/L	1	12/20/19	AW	SW8081B
Endosulfan II	ND	0.010	0.010	ug/L	1	12/20/19	AW	SW8081B
Endosulfan Sulfate	ND	0.010	0.010	ug/L	1	12/20/19	AW	SW8081B
Endrin	ND	0.010	0.010	ug/L	1	12/20/19	AW	SW8081B
Endrin Aldehyde	ND	0.010	0.010	ug/L	1	12/20/19	AW	SW8081B
Endrin ketone	ND	0.010	0.010	ug/L	1	12/20/19	AW	SW8081B
g-BHC (Lindane)	ND	0.005	0.005	ug/L	1	12/20/19	AW	SW8081B
g-chlordane	ND	0.010	0.010	ug/L	1	12/20/19	AW	SW8081B
Heptachlor	ND	0.010	0.010	ug/L	1	12/20/19	AW	SW8081B
Heptachlor epoxide	ND	0.010	0.010	ug/L	1	12/20/19	AW	SW8081B
Methoxychlor	ND	0.10	0.10	ug/L	1	12/20/19	AW	SW8081B
Toxaphene	ND	0.20	0.20	ug/L	1	12/20/19	AW	SW8081B
<u>QA/QC Surrogates</u>								
%DCBP (Surrogate Rec)	102			%	1	12/20/19	AW	30 - 150 %
%DCBP (Surrogate Rec) (Confirmation)	76			%	1	12/20/19	AW	30 - 150 %
%TCMX (Surrogate Rec)	122			%	1	12/20/19	AW	30 - 150 %
%TCMX (Surrogate Rec) (Confirmation)	64			%	1	12/20/19	AW	30 - 150 %
<u>Polychlorinated Biphenyls</u>								
PCB-1016	ND	0.050	0.050	ug/L	1	12/20/19	SC	SW8082A
PCB-1221	ND	0.050	0.050	ug/L	1	12/20/19	SC	SW8082A
PCB-1232	ND	0.050	0.050	ug/L	1	12/20/19	SC	SW8082A
PCB-1242	ND	0.050	0.050	ug/L	1	12/20/19	SC	SW8082A
PCB-1248	ND	0.050	0.050	ug/L	1	12/20/19	SC	SW8082A
PCB-1254	ND	0.050	0.050	ug/L	1	12/20/19	SC	SW8082A
PCB-1260	ND	0.050	0.050	ug/L	1	12/20/19	SC	SW8082A
PCB-1262	ND	0.050	0.050	ug/L	1	12/20/19	SC	SW8082A
PCB-1268	ND	0.050	0.050	ug/L	1	12/20/19	SC	SW8082A
<u>QA/QC Surrogates</u>								
% DCBP	100			%	1	12/20/19	SC	30 - 150 %
% DCBP (Confirmation)	89			%	1	12/20/19	SC	30 - 150 %
% TCMX	107			%	1	12/20/19	SC	30 - 150 %
% TCMX (Confirmation)	80			%	1	12/20/19	SC	30 - 150 %
<u>Volatiles</u>								
1,1,1,2-Tetrachloroethane	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C

Client ID: MW4

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
1,1,1-Trichloroethane	ND	5.0	0.25	ug/L	1	12/19/19	HM	SW8260C
1,1,2,2-Tetrachloroethane	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
1,1,2-Trichloroethane	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
1,1-Dichloroethane	ND	5.0	0.25	ug/L	1	12/19/19	HM	SW8260C
1,1-Dichloroethene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
1,1-Dichloropropene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
1,2,3-Trichlorobenzene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
1,2,3-Trichloropropane	ND	0.25	0.25	ug/L	1	12/19/19	HM	SW8260C
1,2,4-Trichlorobenzene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
1,2,4-Trimethylbenzene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
1,2-Dibromo-3-chloropropane	ND	0.50	0.50	ug/L	1	12/19/19	HM	SW8260C
1,2-Dibromoethane	ND	0.25	0.25	ug/L	1	12/19/19	HM	SW8260C
1,2-Dichlorobenzene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
1,2-Dichloroethane	ND	0.60	0.50	ug/L	1	12/19/19	HM	SW8260C
1,2-Dichloropropane	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
1,3,5-Trimethylbenzene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
1,3-Dichlorobenzene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
1,3-Dichloropropane	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
1,4-Dichlorobenzene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
2,2-Dichloropropane	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
2-Chlorotoluene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
2-Hexanone	ND	2.5	2.5	ug/L	1	12/19/19	HM	SW8260C
2-Isopropyltoluene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
4-Chlorotoluene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
4-Methyl-2-pentanone	ND	2.5	2.5	ug/L	1	12/19/19	HM	SW8260C
Acetone	4.0	JS 5.0	2.5	ug/L	1	12/19/19	HM	SW8260C
Acrolein	ND	5.0	2.5	ug/L	1	12/19/19	HM	SW8260C
Acrylonitrile	ND	5.0	2.5	ug/L	1	12/19/19	HM	SW8260C
Benzene	ND	0.70	0.25	ug/L	1	12/19/19	HM	SW8260C
Bromobenzene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Bromochloromethane	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Bromodichloromethane	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Bromoform	ND	5.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Bromomethane	ND	5.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Carbon Disulfide	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Carbon tetrachloride	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Chlorobenzene	ND	5.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Chloroethane	ND	5.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Chloroform	ND	5.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Chloromethane	ND	5.0	0.25	ug/L	1	12/19/19	HM	SW8260C
cis-1,2-Dichloroethene	9.9	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
cis-1,3-Dichloropropene	ND	0.40	0.25	ug/L	1	12/19/19	HM	SW8260C
Dibromochloromethane	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Dibromomethane	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Dichlorodifluoromethane	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Ethylbenzene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Hexachlorobutadiene	ND	0.50	0.20	ug/L	1	12/19/19	HM	SW8260C
Isopropylbenzene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
m&p-Xylene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C

1

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Methyl ethyl ketone	ND	2.5	2.5	ug/L	1	12/19/19	HM	SW8260C
Methyl t-butyl ether (MTBE)	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Methylene chloride	ND	3.0	1.0	ug/L	1	12/19/19	HM	SW8260C
Naphthalene	ND	1.0	1.0	ug/L	1	12/19/19	HM	SW8260C
n-Butylbenzene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
n-Propylbenzene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
o-Xylene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
p-Isopropyltoluene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
sec-Butylbenzene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Styrene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
tert-Butylbenzene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Tetrachloroethene	13	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Tetrahydrofuran (THF)	ND	5.0	2.5	ug/L	1	12/19/19	HM	SW8260C
Toluene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
trans-1,2-Dichloroethene	ND	5.0	0.25	ug/L	1	12/19/19	HM	SW8260C
trans-1,3-Dichloropropene	ND	0.40	0.25	ug/L	1	12/19/19	HM	SW8260C
trans-1,4-dichloro-2-butene	ND	2.5	2.5	ug/L	1	12/19/19	HM	SW8260C
Trichloroethene	3.1	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Trichlorofluoromethane	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Trichlorotrifluoroethane	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Vinyl chloride	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
<u>QA/QC Surrogates</u>								
% 1,2-dichlorobenzene-d4	97			%	1	12/19/19	HM	70 - 130 %
% Bromofluorobenzene	102			%	1	12/19/19	HM	70 - 130 %
% Dibromofluoromethane	91			%	1	12/19/19	HM	70 - 130 %
% Toluene-d8	102			%	1	12/19/19	HM	70 - 130 %
<u>Volatiles</u>								
1,1,1,2-Tetrachloroethane	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Acrolein	ND	5.0	2.5	ug/L	1	12/19/19	HM	SW8260C
Acrylonitrile	ND	5.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Tert-butyl alcohol	ND	50	10	ug/L	1	12/19/19	HM	SW8260C
<u>1,4-dioxane</u>								
1,4-dioxane	ND	0.20	0.20	ug/l	1	12/20/19	AW	SW8270DSIM
<u>QA/QC Surrogates</u>								
% 1,4-dioxane-d8	67			%	1	12/20/19	AW	30 - 130 %
<u>Semivolatiles</u>								
1,2,4,5-Tetrachlorobenzene	ND	3.5	3.5	ug/L	1	12/24/19	WB	SW8270D
1,2,4-Trichlorobenzene	ND	5.1	1.5	ug/L	1	12/24/19	WB	SW8270D
1,2-Dichlorobenzene	ND	1.0	1.0	ug/L	1	12/24/19	WB	SW8270D
1,2-Diphenylhydrazine	ND	5.1	1.6	ug/L	1	12/24/19	WB	SW8270D
1,3-Dichlorobenzene	ND	1.0	1.0	ug/L	1	12/24/19	WB	SW8270D
1,4-Dichlorobenzene	ND	1.0	1.0	ug/L	1	12/24/19	WB	SW8270D
2,4,5-Trichlorophenol	ND	1.0	1.0	ug/L	1	12/24/19	WB	SW8270D
2,4,6-Trichlorophenol	ND	1.0	1.0	ug/L	1	12/24/19	WB	SW8270D
2,4-Dichlorophenol	ND	1.0	1.0	ug/L	1	12/24/19	WB	SW8270D
2,4-Dimethylphenol	ND	1.0	1.0	ug/L	1	12/24/19	WB	SW8270D
2,4-Dinitrophenol	ND	1.0	1.0	ug/L	1	12/24/19	WB	SW8270D

Client ID: MW4

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
2,4-Dinitrotoluene	ND	5.0	2.0	ug/L	1	12/24/19	WB	SW8270D
2,6-Dinitrotoluene	ND	5.0	1.6	ug/L	1	12/24/19	WB	SW8270D
2-Chloronaphthalene	ND	5.1	1.4	ug/L	1	12/24/19	WB	SW8270D
2-Chlorophenol	ND	1.0	1.0	ug/L	1	12/24/19	WB	SW8270D
2-Methylnaphthalene	ND	5.1	1.5	ug/L	1	12/24/19	WB	SW8270D
2-Methylphenol (o-cresol)	ND	1.0	1.0	ug/L	1	12/24/19	WB	SW8270D
2-Nitroaniline	ND	5.0	2.0	ug/L	1	12/24/19	WB	SW8270D
2-Nitrophenol	ND	1.0	1.0	ug/L	1	12/24/19	WB	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	1.0	1.0	ug/L	1	12/24/19	WB	SW8270D
3,3'-Dichlorobenzidine	ND	5.0	2.4	ug/L	1	12/24/19	WB	SW8270D
3-Nitroaniline	ND	5.0	2.0	ug/L	1	12/24/19	WB	SW8270D
4,6-Dinitro-2-methylphenol	ND	1.0	1.0	ug/L	1	12/24/19	WB	SW8270D
4-Bromophenyl phenyl ether	ND	5.1	1.5	ug/L	1	12/24/19	WB	SW8270D
4-Chloro-3-methylphenol	ND	1.0	1.0	ug/L	1	12/24/19	WB	SW8270D
4-Chloroaniline	ND	3.5	2.4	ug/L	1	12/24/19	WB	SW8270D
4-Chlorophenyl phenyl ether	ND	5.1	1.7	ug/L	1	12/24/19	WB	SW8270D
4-Nitroaniline	ND	5.0	1.7	ug/L	1	12/24/19	WB	SW8270D
4-Nitrophenol	ND	1.0	1.0	ug/L	1	12/24/19	WB	SW8270D
Acenaphthene	ND	5.1	1.5	ug/L	1	12/24/19	WB	SW8270D
Acetophenone	ND	5.1	1.6	ug/L	1	12/24/19	WB	SW8270D
Aniline	ND	3.5	3.5	ug/L	1	12/24/19	WB	SW8270D
Anthracene	ND	5.1	1.7	ug/L	1	12/24/19	WB	SW8270D
Benzidine	ND	4.5	3.0	ug/L	1	12/24/19	WB	SW8270D
Benzoic acid	ND	25	10	ug/L	1	12/24/19	WB	SW8270D
Benzyl butyl phthalate	ND	5.1	1.3	ug/L	1	12/24/19	WB	SW8270D
Bis(2-chloroethoxy)methane	ND	5.0	1.4	ug/L	1	12/24/19	WB	SW8270D
Bis(2-chloroethyl)ether	ND	1.0	1.0	ug/L	1	12/24/19	WB	SW8270D
Bis(2-chloroisopropyl)ether	ND	5.1	1.4	ug/L	1	12/24/19	WB	SW8270D
Bis(2-ethylhexyl)phthalate	ND	1.0	1.0	ug/L	1	12/24/19	WB	SW8270D
Carbazole	ND	5.1	3.8	ug/L	1	12/24/19	WB	SW8270D
Dibenzofuran	ND	5.0	1.5	ug/L	1	12/24/19	WB	SW8270D
Diethyl phthalate	ND	5.1	1.6	ug/L	1	12/24/19	WB	SW8270D
Dimethylphthalate	ND	5.1	1.6	ug/L	1	12/24/19	WB	SW8270D
Di-n-butylphthalate	ND	5.1	1.3	ug/L	1	12/24/19	WB	SW8270D
Di-n-octylphthalate	ND	5.1	1.3	ug/L	1	12/24/19	WB	SW8270D
Fluoranthene	ND	5.1	1.6	ug/L	1	12/24/19	WB	SW8270D
Fluorene	ND	5.1	1.7	ug/L	1	12/24/19	WB	SW8270D
Hexachlorocyclopentadiene	ND	5.0	1.5	ug/L	1	12/24/19	WB	SW8270D
Hexachloroethane	ND	1.0	1.0	ug/L	1	12/24/19	WB	SW8270D
Isophorone	ND	5.1	1.4	ug/L	1	12/24/19	WB	SW8270D
Naphthalene	ND	5.0	1.5	ug/L	1	12/24/19	WB	SW8270D
N-Nitrosodi-n-propylamine	ND	5.1	1.6	ug/L	1	12/24/19	WB	SW8270D
N-Nitrosodiphenylamine	ND	5.1	1.9	ug/L	1	12/24/19	WB	SW8270D
Pentachloronitrobenzene	ND	2.5	2.5	ug/L	1	12/24/19	WB	SW8270D
Phenol	ND	1.0	1.0	ug/L	1	12/24/19	WB	SW8270D
Pyrene	ND	5.1	1.7	ug/L	1	12/24/19	WB	SW8270D
Pyridine	ND	10	1.2	ug/L	1	12/24/19	WB	SW8270D
<u>QA/QC Surrogates</u>								
% 2,4,6-Tribromophenol	69			%	1	12/24/19	WB	15 - 110 %

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
% 2-Fluorobiphenyl	67			%	1	12/24/19	WB	30 - 130 %
% 2-Fluorophenol	48			%	1	12/24/19	WB	15 - 110 %
% Nitrobenzene-d5	44			%	1	12/24/19	WB	30 - 130 %
% Phenol-d5	<10			%	1	12/24/19	WB	15 - 110 % 3
% Terphenyl-d14	27			%	1	12/24/19	WB	30 - 130 % 3

Semivolatiles

Acenaphthylene	ND	0.51	0.51	ug/L	1	12/23/19	WB	SW8270D (SIM)
Benz(a)anthracene	ND	0.02	0.02	ug/L	1	12/23/19	WB	SW8270D (SIM)
Benzo(a)pyrene	ND	0.02	0.02	ug/L	1	12/23/19	WB	SW8270D (SIM)
Benzo(b)fluoranthene	ND	0.02	0.02	ug/L	1	12/23/19	WB	SW8270D (SIM)
Benzo(ghi)perylene	ND	0.51	0.51	ug/L	1	12/23/19	WB	SW8270D (SIM)
Benzo(k)fluoranthene	ND	0.02	0.02	ug/L	1	12/23/19	WB	SW8270D (SIM)
Chrysene	ND	0.02	0.02	ug/L	1	12/23/19	WB	SW8270D (SIM)
Dibenz(a,h)anthracene	ND	0.51	0.51	ug/L	1	12/23/19	WB	SW8270D (SIM)
Hexachlorobenzene	ND	0.04	0.04	ug/L	1	12/23/19	WB	SW8270D (SIM)
Hexachlorobutadiene	ND	0.50	0.50	ug/L	1	12/23/19	WB	SW8270D (SIM)
Indeno(1,2,3-cd)pyrene	ND	0.02	0.02	ug/L	1	12/23/19	WB	SW8270D (SIM)
Nitrobenzene	ND	0.40	0.40	ug/L	1	12/23/19	WB	SW8270D (SIM)
N-Nitrosodimethylamine	ND	0.10	0.10	ug/L	1	12/23/19	WB	SW8270D (SIM)
Pentachlorophenol	ND	0.51	0.51	ug/L	1	12/23/19	WB	SW8270D (SIM)
Phenanthrene	ND	0.51	0.51	ug/L	1	12/23/19	WB	SW8270D (SIM)

QA/QC Surrogates

% 2,4,6-Tribromophenol	71			%	1	12/23/19	WB	15 - 110 %
% 2-Fluorobiphenyl	60			%	1	12/23/19	WB	30 - 130 %
% 2-Fluorophenol	43			%	1	12/23/19	WB	15 - 110 %
% Nitrobenzene-d5	45			%	1	12/23/19	WB	30 - 130 %
% Phenol-d5	<10			%	1	12/23/19	WB	15 - 110 % 3
% Terphenyl-d14	26			%	1	12/23/19	WB	30 - 130 % 3
Extraction for 1,4-Dioxane	Completed					12/19/19	S/S	

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

3 = This parameter exceeds laboratory specified limits.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low J=Estimated Below RL LOD=Limit of Detection MDL=Method Detection Limit1

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

Volatile Comment:

To achieve client's objectives, where the lowest calibration standard or LOD justifies lowering the RL/PQL, the RL/PQL of some compounds have been lowered to meet criteria.

Semi-Volatile Comment:

Poor surrogate recovery was observed for one acid and/or one base surrogate. The other surrogates associated with this sample were within QA/QC criteria. No significant bias suspected.

Semi-Volatile Comment:

To achieve client's objectives, where the lowest calibration standard or LOD justifies lowering the RL/PQL, the RL/PQL of some compounds have been lowered to meet criteria.

S - Laboratory solvent, contamination is possible.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

December 30, 2019

Reviewed and Released by: Phyllis Shiller, Laboratory Director



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823



Analysis Report

December 30, 2019

FOR: Attn: Mr. Charles B. Sosik, P.G.
Environmental Business Consultants
1808 Middle Country Rd
Ridge NY 11961-2406

Sample Information

Matrix: GROUND WATER
Location Code: EBC
Rush Request: 72 Hour
P.O.#:

Custody Information

Collected by: TB
Received by: CP
Analyzed by: see "By" below

Date Time
12/17/19 14:03
12/18/19 17:12

Laboratory Data

SDG ID: GCE90170
Phoenix ID: CE90174

Project ID: 26-22 4TH ST QUEENS
Client ID: MW5

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Silver	ND	0.005	0.001	mg/L	1	12/20/19	TH	SW6010D
Aluminum	0.896	0.025	0.0024	mg/L	1	12/20/19	TH	SW6010D
Arsenic - LDL	ND	0.004	0.001	mg/L	1	12/20/19	TH	SW6010D
Barium	0.221	0.010	0.001	mg/L	1	12/20/19	TH	SW6010D
Beryllium	ND	0.001	0.001	mg/L	1	12/20/19	TH	SW6010D
Calcium	119	0.010	0.003	mg/L	1	12/20/19	TH	SW6010D
Cadmium	ND	0.004	0.0005	mg/L	1	12/20/19	TH	SW6010D
Cobalt	0.005	J 0.005	0.001	mg/L	1	12/20/19	TH	SW6010D
Chromium	ND	0.003	0.003	mg/L	1	12/20/19	EK	SW6010D
Copper	0.005	0.005	0.001	mg/L	1	12/20/19	TH	SW6010D
Iron	1.29	0.01	0.01	mg/L	1	12/20/19	TH	SW6010D
Mercury	ND	0.0002	0.00015	mg/L	1	12/19/19	RS	SW7470A
Potassium	16.7	0.1	0.1	mg/L	1	12/20/19	TH	SW6010D
Magnesium	20.5	0.010	0.01	mg/L	1	12/20/19	TH	SW6010D
Manganese	0.721	0.005	0.001	mg/L	1	12/20/19	TH	SW6010D
Sodium	97.8	1.0	1.0	mg/L	10	12/20/19	TH	SW6010D
Nickel	0.008	0.004	0.001	mg/L	1	12/20/19	TH	SW6010D
Lead	ND	0.002	0.001	mg/L	1	12/20/19	TH	SW6010D
Antimony	ND	0.0030	0.0030	mg/L	5	12/19/19	CPP	SW6020B
Selenium	0.016	0.010	0.010	mg/L	5	12/23/19	CPP	SW6020B
Thallium	ND	0.0005	0.0005	mg/L	5	12/19/19	CPP	SW6020B
Vanadium	0.003	J 0.010	0.001	mg/L	1	12/20/19	TH	SW6010D
Zinc	0.009	J 0.010	0.002	mg/L	1	12/20/19	TH	SW6010D
Mercury Digestion	Completed					12/19/19	LS/LS	SW7470A
PCB Extraction (LDL)	Completed					12/19/19	AT/AT	SW3510C
Extraction for Pest (LDL)	Completed					12/19/19	AT/AT	SW3510C
Semi-Volatile Extraction	Completed					12/20/19	P/AK	SW3520C
Total Metals Digestion	Completed					12/19/19	AG	

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Total Metals Digestion MS	Completed					12/18/19	AG	
<u>Pesticides</u>								
4,4' -DDD	ND	0.010	0.010	ug/L	1	12/20/19	AW	SW8081B
4,4' -DDE	ND	0.005	0.005	ug/L	1	12/20/19	AW	SW8081B
4,4' -DDT	0.028	0.005	0.005	ug/L	1	12/20/19	AW	SW8081B
a-BHC	ND	0.005	0.005	ug/L	1	12/20/19	AW	SW8081B
a-chlordane	ND	0.010	0.010	ug/L	1	12/20/19	AW	SW8081B
Alachlor	ND	0.075	0.075	ug/L	1	12/20/19	AW	SW8081B
Aldrin	ND	0.002	0.002	ug/L	1	12/20/19	AW	SW8081B
b-BHC	ND	0.005	0.005	ug/L	1	12/20/19	AW	SW8081B
Chlordane	ND	0.050	0.050	ug/L	1	12/20/19	AW	SW8081B
d-BHC	ND	0.005	0.005	ug/L	1	12/20/19	AW	SW8081B
Dieldrin	ND	0.002	0.002	ug/L	1	12/20/19	AW	SW8081B
Endosulfan I	ND	0.010	0.010	ug/L	1	12/20/19	AW	SW8081B
Endosulfan II	ND	0.010	0.010	ug/L	1	12/20/19	AW	SW8081B
Endosulfan Sulfate	ND	0.010	0.010	ug/L	1	12/20/19	AW	SW8081B
Endrin	ND	0.010	0.010	ug/L	1	12/20/19	AW	SW8081B
Endrin Aldehyde	ND	0.010	0.010	ug/L	1	12/20/19	AW	SW8081B
Endrin ketone	ND	0.010	0.010	ug/L	1	12/20/19	AW	SW8081B
g-BHC (Lindane)	ND	0.005	0.005	ug/L	1	12/20/19	AW	SW8081B
g-chlordane	ND	0.010	0.010	ug/L	1	12/20/19	AW	SW8081B
Heptachlor	ND	0.010	0.010	ug/L	1	12/20/19	AW	SW8081B
Heptachlor epoxide	ND	0.010	0.010	ug/L	1	12/20/19	AW	SW8081B
Methoxychlor	ND	0.10	0.10	ug/L	1	12/20/19	AW	SW8081B
Toxaphene	ND	0.20	0.20	ug/L	1	12/20/19	AW	SW8081B
<u>QA/QC Surrogates</u>								
%DCBP (Surrogate Rec)	96			%	1	12/20/19	AW	30 - 150 %
%DCBP (Surrogate Rec) (Confirmation)	67			%	1	12/20/19	AW	30 - 150 %
%TCMX (Surrogate Rec)	104			%	1	12/20/19	AW	30 - 150 %
%TCMX (Surrogate Rec) (Confirmation)	61			%	1	12/20/19	AW	30 - 150 %
<u>Polychlorinated Biphenyls</u>								
PCB-1016	ND	0.050	0.050	ug/L	1	12/20/19	SC	SW8082A
PCB-1221	ND	0.050	0.050	ug/L	1	12/20/19	SC	SW8082A
PCB-1232	ND	0.050	0.050	ug/L	1	12/20/19	SC	SW8082A
PCB-1242	ND	0.050	0.050	ug/L	1	12/20/19	SC	SW8082A
PCB-1248	ND	0.050	0.050	ug/L	1	12/20/19	SC	SW8082A
PCB-1254	ND	0.050	0.050	ug/L	1	12/20/19	SC	SW8082A
PCB-1260	ND	0.050	0.050	ug/L	1	12/20/19	SC	SW8082A
PCB-1262	ND	0.050	0.050	ug/L	1	12/20/19	SC	SW8082A
PCB-1268	ND	0.050	0.050	ug/L	1	12/20/19	SC	SW8082A
<u>QA/QC Surrogates</u>								
% DCBP	91			%	1	12/20/19	SC	30 - 150 %
% DCBP (Confirmation)	84			%	1	12/20/19	SC	30 - 150 %
% TCMX	93			%	1	12/20/19	SC	30 - 150 %
% TCMX (Confirmation)	79			%	1	12/20/19	SC	30 - 150 %
<u>Volatiles</u>								
1,1,1,2-Tetrachloroethane	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
1,1,1-Trichloroethane	ND	5.0	0.25	ug/L	1	12/19/19	HM	SW8260C
1,1,2,2-Tetrachloroethane	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
1,1,2-Trichloroethane	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
1,1-Dichloroethane	ND	5.0	0.25	ug/L	1	12/19/19	HM	SW8260C
1,1-Dichloroethene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
1,1-Dichloropropene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
1,2,3-Trichlorobenzene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
1,2,3-Trichloropropane	ND	0.25	0.25	ug/L	1	12/19/19	HM	SW8260C
1,2,4-Trichlorobenzene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
1,2,4-Trimethylbenzene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
1,2-Dibromo-3-chloropropane	ND	0.50	0.50	ug/L	1	12/19/19	HM	SW8260C
1,2-Dibromoethane	ND	0.25	0.25	ug/L	1	12/19/19	HM	SW8260C
1,2-Dichlorobenzene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
1,2-Dichloroethane	ND	0.60	0.50	ug/L	1	12/19/19	HM	SW8260C
1,2-Dichloropropane	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
1,3,5-Trimethylbenzene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
1,3-Dichlorobenzene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
1,3-Dichloropropane	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
1,4-Dichlorobenzene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
2,2-Dichloropropane	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
2-Chlorotoluene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
2-Hexanone	ND	2.5	2.5	ug/L	1	12/19/19	HM	SW8260C
2-Isopropyltoluene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
4-Chlorotoluene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
4-Methyl-2-pentanone	ND	2.5	2.5	ug/L	1	12/19/19	HM	SW8260C
Acetone	ND	5.0	2.5	ug/L	1	12/19/19	HM	SW8260C
Acrolein	ND	5.0	2.5	ug/L	1	12/19/19	HM	SW8260C
Acrylonitrile	ND	5.0	2.5	ug/L	1	12/19/19	HM	SW8260C
Benzene	ND	0.70	0.25	ug/L	1	12/19/19	HM	SW8260C
Bromobenzene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Bromochloromethane	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Bromodichloromethane	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Bromoform	ND	5.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Bromomethane	ND	5.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Carbon Disulfide	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Carbon tetrachloride	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Chlorobenzene	ND	5.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Chloroethane	ND	5.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Chloroform	ND	5.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Chloromethane	ND	5.0	0.25	ug/L	1	12/19/19	HM	SW8260C
cis-1,2-Dichloroethene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
cis-1,3-Dichloropropene	ND	0.40	0.25	ug/L	1	12/19/19	HM	SW8260C
Dibromochloromethane	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Dibromomethane	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Dichlorodifluoromethane	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Ethylbenzene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Hexachlorobutadiene	ND	0.50	0.20	ug/L	1	12/19/19	HM	SW8260C
Isopropylbenzene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
m&p-Xylene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Methyl ethyl ketone	ND	2.5	2.5	ug/L	1	12/19/19	HM	SW8260C
Methyl t-butyl ether (MTBE)	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Methylene chloride	ND	3.0	1.0	ug/L	1	12/19/19	HM	SW8260C
Naphthalene	ND	1.0	1.0	ug/L	1	12/19/19	HM	SW8260C
n-Butylbenzene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
n-Propylbenzene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
o-Xylene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
p-Isopropyltoluene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
sec-Butylbenzene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Styrene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
tert-Butylbenzene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Tetrachloroethene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Tetrahydrofuran (THF)	ND	5.0	2.5	ug/L	1	12/19/19	HM	SW8260C
Toluene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
trans-1,2-Dichloroethene	ND	5.0	0.25	ug/L	1	12/19/19	HM	SW8260C
trans-1,3-Dichloropropene	ND	0.40	0.25	ug/L	1	12/19/19	HM	SW8260C
trans-1,4-dichloro-2-butene	ND	2.5	2.5	ug/L	1	12/19/19	HM	SW8260C
Trichloroethene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Trichlorofluoromethane	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Trichlorotrifluoroethane	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Vinyl chloride	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
<u>QA/QC Surrogates</u>								
% 1,2-dichlorobenzene-d4	100			%	1	12/19/19	HM	70 - 130 %
% Bromofluorobenzene	101			%	1	12/19/19	HM	70 - 130 %
% Dibromofluoromethane	93			%	1	12/19/19	HM	70 - 130 %
% Toluene-d8	104			%	1	12/19/19	HM	70 - 130 %
<u>Volatiles</u>								
1,1,1,2-Tetrachloroethane	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Acrolein	ND	5.0	2.5	ug/L	1	12/19/19	HM	SW8260C
Acrylonitrile	ND	5.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Tert-butyl alcohol	ND	50	10	ug/L	1	12/19/19	HM	SW8260C
<u>1,4-dioxane</u>								
1,4-dioxane	0.25	0.20	0.20	ug/l	1	12/20/19	AW	SW8270DSIM
<u>QA/QC Surrogates</u>								
% 1,4-dioxane-d8	64			%	1	12/20/19	AW	30 - 130 %
<u>Semivolatiles</u>								
1,2,4,5-Tetrachlorobenzene	ND	3.6	3.6	ug/L	1	12/24/19	WB	SW8270D
1,2,4-Trichlorobenzene	ND	5.2	1.6	ug/L	1	12/24/19	WB	SW8270D
1,2-Dichlorobenzene	ND	1.0	1.0	ug/L	1	12/24/19	WB	SW8270D
1,2-Diphenylhydrazine	ND	5.2	1.7	ug/L	1	12/24/19	WB	SW8270D
1,3-Dichlorobenzene	ND	1.0	1.0	ug/L	1	12/24/19	WB	SW8270D
1,4-Dichlorobenzene	ND	1.0	1.0	ug/L	1	12/24/19	WB	SW8270D
2,4,5-Trichlorophenol	ND	1.0	1.0	ug/L	1	12/24/19	WB	SW8270D
2,4,6-Trichlorophenol	ND	1.0	1.0	ug/L	1	12/24/19	WB	SW8270D
2,4-Dichlorophenol	ND	1.0	1.0	ug/L	1	12/24/19	WB	SW8270D
2,4-Dimethylphenol	ND	1.0	1.0	ug/L	1	12/24/19	WB	SW8270D
2,4-Dinitrophenol	ND	1.0	1.0	ug/L	1	12/24/19	WB	SW8270D

Client ID: MW5

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
2,4-Dinitrotoluene	ND	5.0	2.0	ug/L	1	12/24/19	WB	SW8270D
2,6-Dinitrotoluene	ND	5.0	1.6	ug/L	1	12/24/19	WB	SW8270D
2-Chloronaphthalene	ND	5.2	1.5	ug/L	1	12/24/19	WB	SW8270D
2-Chlorophenol	ND	1.0	1.0	ug/L	1	12/24/19	WB	SW8270D
2-Methylnaphthalene	ND	5.2	1.5	ug/L	1	12/24/19	WB	SW8270D
2-Methylphenol (o-cresol)	ND	1.0	1.0	ug/L	1	12/24/19	WB	SW8270D
2-Nitroaniline	ND	5.0	2.1	ug/L	1	12/24/19	WB	SW8270D
2-Nitrophenol	ND	1.0	1.0	ug/L	1	12/24/19	WB	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	1.0	1.0	ug/L	1	12/24/19	WB	SW8270D
3,3'-Dichlorobenzidine	ND	5.0	2.4	ug/L	1	12/24/19	WB	SW8270D
3-Nitroaniline	ND	5.0	2.1	ug/L	1	12/24/19	WB	SW8270D
4,6-Dinitro-2-methylphenol	ND	1.0	1.0	ug/L	1	12/24/19	WB	SW8270D
4-Bromophenyl phenyl ether	ND	5.2	1.5	ug/L	1	12/24/19	WB	SW8270D
4-Chloro-3-methylphenol	ND	1.0	1.0	ug/L	1	12/24/19	WB	SW8270D
4-Chloroaniline	ND	3.6	2.4	ug/L	1	12/24/19	WB	SW8270D
4-Chlorophenyl phenyl ether	ND	5.2	1.7	ug/L	1	12/24/19	WB	SW8270D
4-Nitroaniline	ND	5.0	1.7	ug/L	1	12/24/19	WB	SW8270D
4-Nitrophenol	ND	1.0	1.0	ug/L	1	12/24/19	WB	SW8270D
Acenaphthene	ND	5.2	1.6	ug/L	1	12/24/19	WB	SW8270D
Acetophenone	ND	5.2	1.6	ug/L	1	12/24/19	WB	SW8270D
Aniline	ND	3.6	3.6	ug/L	1	12/24/19	WB	SW8270D
Anthracene	ND	5.2	1.7	ug/L	1	12/24/19	WB	SW8270D
Benzidine	ND	4.6	3.0	ug/L	1	12/24/19	WB	SW8270D
Benzoic acid	ND	26	10	ug/L	1	12/24/19	WB	SW8270D
Benzyl butyl phthalate	ND	5.2	1.3	ug/L	1	12/24/19	WB	SW8270D
Bis(2-chloroethoxy)methane	ND	5.0	1.4	ug/L	1	12/24/19	WB	SW8270D
Bis(2-chloroethyl)ether	ND	1.0	1.0	ug/L	1	12/24/19	WB	SW8270D
Bis(2-chloroisopropyl)ether	ND	5.2	1.4	ug/L	1	12/24/19	WB	SW8270D
Bis(2-ethylhexyl)phthalate	ND	1.0	1.0	ug/L	1	12/24/19	WB	SW8270D
Carbazole	ND	5.2	3.9	ug/L	1	12/24/19	WB	SW8270D
Dibenzofuran	ND	5.0	1.5	ug/L	1	12/24/19	WB	SW8270D
Diethyl phthalate	ND	5.2	1.6	ug/L	1	12/24/19	WB	SW8270D
Dimethylphthalate	ND	5.2	1.6	ug/L	1	12/24/19	WB	SW8270D
Di-n-butylphthalate	ND	5.2	1.4	ug/L	1	12/24/19	WB	SW8270D
Di-n-octylphthalate	ND	5.2	1.3	ug/L	1	12/24/19	WB	SW8270D
Fluoranthene	ND	5.2	1.7	ug/L	1	12/24/19	WB	SW8270D
Fluorene	ND	5.2	1.7	ug/L	1	12/24/19	WB	SW8270D
Hexachlorocyclopentadiene	ND	5.0	1.6	ug/L	1	12/24/19	WB	SW8270D
Hexachloroethane	ND	1.0	1.0	ug/L	1	12/24/19	WB	SW8270D
Isophorone	ND	5.2	1.4	ug/L	1	12/24/19	WB	SW8270D
Naphthalene	ND	5.0	1.5	ug/L	1	12/24/19	WB	SW8270D
N-Nitrosodi-n-propylamine	ND	5.2	1.7	ug/L	1	12/24/19	WB	SW8270D
N-Nitrosodiphenylamine	ND	5.2	2.0	ug/L	1	12/24/19	WB	SW8270D
Pentachloronitrobenzene	ND	2.6	2.6	ug/L	1	12/24/19	WB	SW8270D
Phenol	ND	1.0	1.0	ug/L	1	12/24/19	WB	SW8270D
Pyrene	ND	5.2	1.8	ug/L	1	12/24/19	WB	SW8270D
Pyridine	ND	10	1.3	ug/L	1	12/24/19	WB	SW8270D
<u>QA/QC Surrogates</u>								
% 2,4,6-Tribromophenol	76			%	1	12/24/19	WB	15 - 110 %

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
% 2-Fluorobiphenyl	71			%	1	12/24/19	WB	30 - 130 %
% 2-Fluorophenol	55			%	1	12/24/19	WB	15 - 110 %
% Nitrobenzene-d5	49			%	1	12/24/19	WB	30 - 130 %
% Phenol-d5	58			%	1	12/24/19	WB	15 - 110 %
% Terphenyl-d14	73			%	1	12/24/19	WB	30 - 130 %

Semivolatiles

Acenaphthylene	ND	0.52	0.52	ug/L	1	12/23/19	WB	SW8270D (SIM)
Benz(a)anthracene	ND	0.02	0.02	ug/L	1	12/23/19	WB	SW8270D (SIM)
Benzo(a)pyrene	ND	0.02	0.02	ug/L	1	12/23/19	WB	SW8270D (SIM)
Benzo(b)fluoranthene	ND	0.02	0.02	ug/L	1	12/23/19	WB	SW8270D (SIM)
Benzo(ghi)perylene	ND	0.52	0.52	ug/L	1	12/23/19	WB	SW8270D (SIM)
Benzo(k)fluoranthene	ND	0.02	0.02	ug/L	1	12/23/19	WB	SW8270D (SIM)
Chrysene	ND	0.02	0.02	ug/L	1	12/23/19	WB	SW8270D (SIM)
Dibenz(a,h)anthracene	ND	0.52	0.52	ug/L	1	12/23/19	WB	SW8270D (SIM)
Hexachlorobenzene	ND	0.04	0.04	ug/L	1	12/23/19	WB	SW8270D (SIM)
Hexachlorobutadiene	ND	0.50	0.50	ug/L	1	12/23/19	WB	SW8270D (SIM)
Indeno(1,2,3-cd)pyrene	ND	0.02	0.02	ug/L	1	12/23/19	WB	SW8270D (SIM)
Nitrobenzene	ND	0.40	0.40	ug/L	1	12/23/19	WB	SW8270D (SIM)
N-Nitrosodimethylamine	ND	0.10	0.10	ug/L	1	12/23/19	WB	SW8270D (SIM)
Pentachlorophenol	ND	0.52	0.52	ug/L	1	12/23/19	WB	SW8270D (SIM)
Phenanthrene	ND	0.52	0.52	ug/L	1	12/23/19	WB	SW8270D (SIM)

QA/QC Surrogates

% 2,4,6-Tribromophenol	66			%	1	12/23/19	WB	15 - 110 %
% 2-Fluorobiphenyl	57			%	1	12/23/19	WB	30 - 130 %
% 2-Fluorophenol	48			%	1	12/23/19	WB	15 - 110 %
% Nitrobenzene-d5	43			%	1	12/23/19	WB	30 - 130 %
% Phenol-d5	50			%	1	12/23/19	WB	15 - 110 %
% Terphenyl-d14	65			%	1	12/23/19	WB	30 - 130 %
Extraction for 1,4-Dioxane	Completed					12/19/19	S/S	

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low J=Estimated Below RL LOD=Limit of Detection MDL=Method Detection Limit1

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

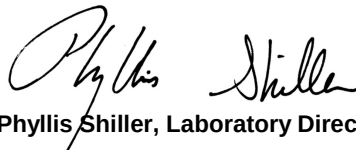
Volatile Comment:

To achieve client's objectives, where the lowest calibration standard or LOD justifies lowering the RL/PQL, the RL/PQL of some compounds have been lowered to meet criteria.

Semi-Volatile Comment:

To achieve client's objectives, where the lowest calibration standard or LOD justifies lowering the RL/PQL, the RL/PQL of some compounds have been lowered to meet criteria.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

December 30, 2019

Reviewed and Released by: Phyllis Shiller, Laboratory Director



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823



Analysis Report

December 30, 2019

FOR: Attn: Mr. Charles B. Sosik, P.G.
Environmental Business Consultants
1808 Middle Country Rd
Ridge NY 11961-2406

Sample Information

Matrix: GROUND WATER
Location Code: EBC
Rush Request: 72 Hour
P.O.#:

Custody Information

Collected by: TB
Received by: CP
Analyzed by: see "By" below

Date Time
12/17/19 11:52
12/18/19 17:12

Laboratory Data

SDG ID: GCE90170
Phoenix ID: CE90175

Project ID: 26-22 4TH ST QUEENS
Client ID: MW6

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Silver	ND	0.005	0.001	mg/L	1	12/20/19	TH	SW6010D
Aluminum	1.01	0.025	0.0024	mg/L	1	12/20/19	TH	SW6010D
Arsenic - LDL	ND	0.004	0.001	mg/L	1	12/20/19	TH	SW6010D
Barium	0.127	0.010	0.001	mg/L	1	12/20/19	TH	SW6010D
Beryllium	ND	0.001	0.001	mg/L	1	12/20/19	TH	SW6010D
Calcium	54.7	0.010	0.003	mg/L	1	12/20/19	TH	SW6010D
Cadmium	ND	0.004	0.0005	mg/L	1	12/20/19	TH	SW6010D
Cobalt	0.005	J 0.005	0.001	mg/L	1	12/20/19	TH	SW6010D
Chromium	ND	0.003	0.003	mg/L	1	12/20/19	EK	SW6010D
Copper	0.007	0.005	0.001	mg/L	1	12/20/19	TH	SW6010D
Iron	1.50	0.01	0.01	mg/L	1	12/20/19	TH	SW6010D
Mercury	ND	0.0002	0.00015	mg/L	1	12/19/19	RS	SW7470A
Potassium	9.4	0.1	0.1	mg/L	1	12/20/19	TH	SW6010D
Magnesium	10.9	0.010	0.01	mg/L	1	12/20/19	TH	SW6010D
Manganese	1.47	0.005	0.001	mg/L	1	12/20/19	TH	SW6010D
Sodium	143	1.0	1.0	mg/L	10	12/20/19	TH	SW6010D
Nickel	0.005	0.004	0.001	mg/L	1	12/20/19	TH	SW6010D
Lead	0.002	0.002	0.001	mg/L	1	12/20/19	TH	SW6010D
Antimony	ND	0.0030	0.0030	mg/L	5	12/19/19	CPP	SW6020B
Selenium	ND	0.010	0.010	mg/L	5	12/23/19	CPP	SW6020B
Thallium	ND	0.0005	0.0005	mg/L	5	12/19/19	CPP	SW6020B
Vanadium	0.005	J 0.010	0.001	mg/L	1	12/20/19	TH	SW6010D
Zinc	0.008	J 0.010	0.002	mg/L	1	12/20/19	TH	SW6010D
Mercury Digestion	Completed					12/19/19	LS/LS	SW7470A
PCB Extraction (LDL)	Completed					12/19/19	AT/AT	SW3510C
Extraction for Pest (LDL)	Completed					12/19/19	AT/AT	SW3510C
Semi-Volatile Extraction	Completed					12/20/19	P/AK	SW3520C
Total Metals Digestion	Completed					12/19/19	AG	

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Total Metals Digestion MS	Completed					12/18/19	AG	
<u>Pesticides</u>								
4,4' -DDD	ND	0.005	0.005	ug/L	1	12/20/19	AW	SW8081B
4,4' -DDE	ND	0.005	0.005	ug/L	1	12/20/19	AW	SW8081B
4,4' -DDT	ND	0.010	0.010	ug/L	1	12/20/19	AW	SW8081B
a-BHC	ND	0.005	0.005	ug/L	1	12/20/19	AW	SW8081B
a-chlordane	ND	0.010	0.010	ug/L	1	12/20/19	AW	SW8081B
Alachlor	ND	0.076	0.076	ug/L	1	12/20/19	AW	SW8081B
Aldrin	ND	0.002	0.002	ug/L	1	12/20/19	AW	SW8081B
b-BHC	ND	0.005	0.005	ug/L	1	12/20/19	AW	SW8081B
Chlordane	ND	0.020	0.020	ug/L	1	12/20/19	AW	SW8081B
d-BHC	ND	0.005	0.005	ug/L	1	12/20/19	AW	SW8081B
Dieldrin	ND	0.004	0.004	ug/L	1	12/20/19	AW	SW8081B
Endosulfan I	ND	0.010	0.010	ug/L	1	12/20/19	AW	SW8081B
Endosulfan II	ND	0.010	0.010	ug/L	1	12/20/19	AW	SW8081B
Endosulfan Sulfate	ND	0.010	0.010	ug/L	1	12/20/19	AW	SW8081B
Endrin	ND	0.005	0.005	ug/L	1	12/20/19	AW	SW8081B
Endrin Aldehyde	ND	0.010	0.010	ug/L	1	12/20/19	AW	SW8081B
Endrin ketone	ND	0.010	0.010	ug/L	1	12/20/19	AW	SW8081B
g-BHC (Lindane)	ND	0.005	0.005	ug/L	1	12/20/19	AW	SW8081B
g-chlordane	ND	0.010	0.010	ug/L	1	12/20/19	AW	SW8081B
Heptachlor	ND	0.005	0.005	ug/L	1	12/20/19	AW	SW8081B
Heptachlor epoxide	ND	0.005	0.005	ug/L	1	12/20/19	AW	SW8081B
Methoxychlor	ND	0.10	0.10	ug/L	1	12/20/19	AW	SW8081B
Toxaphene	ND	0.20	0.20	ug/L	1	12/20/19	AW	SW8081B
<u>QA/QC Surrogates</u>								
%DCBP (Surrogate Rec)	97			%	1	12/20/19	AW	30 - 150 %
%DCBP (Surrogate Rec) (Confirmation)	63			%	1	12/20/19	AW	30 - 150 %
%TCMX (Surrogate Rec)	111			%	1	12/20/19	AW	30 - 150 %
%TCMX (Surrogate Rec) (Confirmation)	58			%	1	12/20/19	AW	30 - 150 %
<u>Polychlorinated Biphenyls</u>								
PCB-1016	ND	0.051	0.051	ug/L	1	12/20/19	SC	SW8082A
PCB-1221	ND	0.051	0.051	ug/L	1	12/20/19	SC	SW8082A
PCB-1232	ND	0.051	0.051	ug/L	1	12/20/19	SC	SW8082A
PCB-1242	ND	0.051	0.051	ug/L	1	12/20/19	SC	SW8082A
PCB-1248	ND	0.051	0.051	ug/L	1	12/20/19	SC	SW8082A
PCB-1254	ND	0.051	0.051	ug/L	1	12/20/19	SC	SW8082A
PCB-1260	ND	0.051	0.051	ug/L	1	12/20/19	SC	SW8082A
PCB-1262	ND	0.051	0.051	ug/L	1	12/20/19	SC	SW8082A
PCB-1268	ND	0.051	0.051	ug/L	1	12/20/19	SC	SW8082A
<u>QA/QC Surrogates</u>								
% DCBP	85			%	1	12/20/19	SC	30 - 150 %
% DCBP (Confirmation)	76			%	1	12/20/19	SC	30 - 150 %
% TCMX	81			%	1	12/20/19	SC	30 - 150 %
% TCMX (Confirmation)	74			%	1	12/20/19	SC	30 - 150 %
<u>Volatiles</u>								
1,1,1,2-Tetrachloroethane	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C

Client ID: MW6

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
1,1,1-Trichloroethane	ND	5.0	0.25	ug/L	1	12/19/19	HM	SW8260C
1,1,2,2-Tetrachloroethane	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
1,1,2-Trichloroethane	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
1,1-Dichloroethane	ND	5.0	0.25	ug/L	1	12/19/19	HM	SW8260C
1,1-Dichloroethene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
1,1-Dichloropropene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
1,2,3-Trichlorobenzene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
1,2,3-Trichloropropane	ND	0.25	0.25	ug/L	1	12/19/19	HM	SW8260C
1,2,4-Trichlorobenzene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
1,2,4-Trimethylbenzene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
1,2-Dibromo-3-chloropropane	ND	0.50	0.50	ug/L	1	12/19/19	HM	SW8260C
1,2-Dibromoethane	ND	0.25	0.25	ug/L	1	12/19/19	HM	SW8260C
1,2-Dichlorobenzene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
1,2-Dichloroethane	ND	0.60	0.50	ug/L	1	12/19/19	HM	SW8260C
1,2-Dichloropropane	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
1,3,5-Trimethylbenzene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
1,3-Dichlorobenzene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
1,3-Dichloropropane	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
1,4-Dichlorobenzene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
2,2-Dichloropropane	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
2-Chlorotoluene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
2-Hexanone	ND	2.5	2.5	ug/L	1	12/19/19	HM	SW8260C
2-Isopropyltoluene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
4-Chlorotoluene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
4-Methyl-2-pentanone	ND	2.5	2.5	ug/L	1	12/19/19	HM	SW8260C
Acetone	ND	5.0	2.5	ug/L	1	12/19/19	HM	SW8260C
Acrolein	ND	5.0	2.5	ug/L	1	12/19/19	HM	SW8260C
Acrylonitrile	ND	5.0	2.5	ug/L	1	12/19/19	HM	SW8260C
Benzene	ND	0.70	0.25	ug/L	1	12/19/19	HM	SW8260C
Bromobenzene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Bromochloromethane	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Bromodichloromethane	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Bromoform	ND	5.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Bromomethane	ND	5.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Carbon Disulfide	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Carbon tetrachloride	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Chlorobenzene	ND	5.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Chloroethane	ND	5.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Chloroform	ND	5.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Chloromethane	ND	5.0	0.25	ug/L	1	12/19/19	HM	SW8260C
cis-1,2-Dichloroethene	0.39	J 1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
cis-1,3-Dichloropropene	ND	0.40	0.25	ug/L	1	12/19/19	HM	SW8260C
Dibromochloromethane	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Dibromomethane	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Dichlorodifluoromethane	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Ethylbenzene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Hexachlorobutadiene	ND	0.50	0.20	ug/L	1	12/19/19	HM	SW8260C
Isopropylbenzene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
m&p-Xylene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C

1

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Methyl ethyl ketone	ND	2.5	2.5	ug/L	1	12/19/19	HM	SW8260C
Methyl t-butyl ether (MTBE)	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Methylene chloride	ND	3.0	1.0	ug/L	1	12/19/19	HM	SW8260C
Naphthalene	ND	1.0	1.0	ug/L	1	12/19/19	HM	SW8260C
n-Butylbenzene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
n-Propylbenzene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
o-Xylene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
p-Isopropyltoluene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
sec-Butylbenzene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Styrene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
tert-Butylbenzene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Tetrachloroethene	1.4	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Tetrahydrofuran (THF)	ND	5.0	2.5	ug/L	1	12/19/19	HM	SW8260C
Toluene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
trans-1,2-Dichloroethene	ND	5.0	0.25	ug/L	1	12/19/19	HM	SW8260C
trans-1,3-Dichloropropene	ND	0.40	0.25	ug/L	1	12/19/19	HM	SW8260C
trans-1,4-dichloro-2-butene	ND	2.5	2.5	ug/L	1	12/19/19	HM	SW8260C
Trichloroethene	0.28	J 1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Trichlorofluoromethane	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Trichlorotrifluoroethane	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Vinyl chloride	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
<u>QA/QC Surrogates</u>								
% 1,2-dichlorobenzene-d4	98			%	1	12/19/19	HM	70 - 130 %
% Bromofluorobenzene	104			%	1	12/19/19	HM	70 - 130 %
% Dibromofluoromethane	99			%	1	12/19/19	HM	70 - 130 %
% Toluene-d8	107			%	1	12/19/19	HM	70 - 130 %
<u>Volatiles</u>								
1,1,1,2-Tetrachloroethane	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Acrolein	ND	5.0	2.5	ug/L	1	12/19/19	HM	SW8260C
Acrylonitrile	ND	5.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Tert-butyl alcohol	ND	50	10	ug/L	1	12/19/19	HM	SW8260C
<u>1,4-dioxane</u>								
1,4-dioxane	0.96	0.20	0.20	ug/l	1	12/20/19	AW	SW8270DSIM
<u>QA/QC Surrogates</u>								
% 1,4-dioxane-d8	62			%	1	12/20/19	AW	30 - 130 %
<u>Semivolatiles</u>								
1,2,4,5-Tetrachlorobenzene	ND	3.7	3.7	ug/L	1	12/24/19	WB	SW8270D
1,2,4-Trichlorobenzene	ND	5.4	1.6	ug/L	1	12/24/19	WB	SW8270D
1,2-Dichlorobenzene	ND	1.1	1.1	ug/L	1	12/24/19	WB	SW8270D
1,2-Diphenylhydrazine	ND	5.4	1.7	ug/L	1	12/24/19	WB	SW8270D
1,3-Dichlorobenzene	ND	1.1	1.1	ug/L	1	12/24/19	WB	SW8270D
1,4-Dichlorobenzene	ND	1.1	1.1	ug/L	1	12/24/19	WB	SW8270D
2,4,5-Trichlorophenol	ND	1.1	1.1	ug/L	1	12/24/19	WB	SW8270D
2,4,6-Trichlorophenol	ND	1.1	1.1	ug/L	1	12/24/19	WB	SW8270D
2,4-Dichlorophenol	ND	1.1	1.1	ug/L	1	12/24/19	WB	SW8270D
2,4-Dimethylphenol	ND	1.1	1.1	ug/L	1	12/24/19	WB	SW8270D
2,4-Dinitrophenol	ND	1.1	1.1	ug/L	1	12/24/19	WB	SW8270D

Client ID: MW6

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
2,4-Dinitrotoluene	ND	5.0	2.1	ug/L	1	12/24/19	WB	SW8270D
2,6-Dinitrotoluene	ND	5.0	1.7	ug/L	1	12/24/19	WB	SW8270D
2-Chloronaphthalene	ND	5.4	1.5	ug/L	1	12/24/19	WB	SW8270D
2-Chlorophenol	ND	1.1	1.1	ug/L	1	12/24/19	WB	SW8270D
2-Methylnaphthalene	ND	5.4	1.6	ug/L	1	12/24/19	WB	SW8270D
2-Methylphenol (o-cresol)	ND	1.1	1.1	ug/L	1	12/24/19	WB	SW8270D
2-Nitroaniline	ND	5.0	2.1	ug/L	1	12/24/19	WB	SW8270D
2-Nitrophenol	ND	1.1	1.1	ug/L	1	12/24/19	WB	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	1.1	1.1	ug/L	1	12/24/19	WB	SW8270D
3,3'-Dichlorobenzidine	ND	5.0	2.5	ug/L	1	12/24/19	WB	SW8270D
3-Nitroaniline	ND	5.0	2.1	ug/L	1	12/24/19	WB	SW8270D
4,6-Dinitro-2-methylphenol	ND	1.1	1.1	ug/L	1	12/24/19	WB	SW8270D
4-Bromophenyl phenyl ether	ND	5.4	1.6	ug/L	1	12/24/19	WB	SW8270D
4-Chloro-3-methylphenol	ND	1.1	1.1	ug/L	1	12/24/19	WB	SW8270D
4-Chloroaniline	ND	3.7	2.5	ug/L	1	12/24/19	WB	SW8270D
4-Chlorophenyl phenyl ether	ND	5.4	1.8	ug/L	1	12/24/19	WB	SW8270D
4-Nitroaniline	ND	5.0	1.8	ug/L	1	12/24/19	WB	SW8270D
4-Nitrophenol	ND	1.1	1.1	ug/L	1	12/24/19	WB	SW8270D
Acenaphthene	ND	5.4	1.6	ug/L	1	12/24/19	WB	SW8270D
Acetophenone	ND	5.4	1.7	ug/L	1	12/24/19	WB	SW8270D
Aniline	ND	3.7	3.7	ug/L	1	12/24/19	WB	SW8270D
Anthracene	ND	5.4	1.8	ug/L	1	12/24/19	WB	SW8270D
Benzidine	ND	4.8	3.1	ug/L	1	12/24/19	WB	SW8270D
Benzoic acid	ND	27	11	ug/L	1	12/24/19	WB	SW8270D
Benzyl butyl phthalate	ND	5.4	1.4	ug/L	1	12/24/19	WB	SW8270D
Bis(2-chloroethoxy)methane	ND	5.0	1.5	ug/L	1	12/24/19	WB	SW8270D
Bis(2-chloroethyl)ether	ND	1.1	1.1	ug/L	1	12/24/19	WB	SW8270D
Bis(2-chloroisopropyl)ether	ND	5.4	1.5	ug/L	1	12/24/19	WB	SW8270D
Bis(2-ethylhexyl)phthalate	ND	1.1	1.1	ug/L	1	12/24/19	WB	SW8270D
Carbazole	ND	5.4	4.1	ug/L	1	12/24/19	WB	SW8270D
Dibenzofuran	ND	5.0	1.6	ug/L	1	12/24/19	WB	SW8270D
Diethyl phthalate	ND	5.4	1.7	ug/L	1	12/24/19	WB	SW8270D
Dimethylphthalate	ND	5.4	1.7	ug/L	1	12/24/19	WB	SW8270D
Di-n-butylphthalate	ND	5.4	1.4	ug/L	1	12/24/19	WB	SW8270D
Di-n-octylphthalate	ND	5.4	1.4	ug/L	1	12/24/19	WB	SW8270D
Fluoranthene	ND	5.4	1.7	ug/L	1	12/24/19	WB	SW8270D
Fluorene	ND	5.4	1.8	ug/L	1	12/24/19	WB	SW8270D
Hexachlorocyclopentadiene	ND	5.0	1.6	ug/L	1	12/24/19	WB	SW8270D
Hexachloroethane	ND	1.1	1.1	ug/L	1	12/24/19	WB	SW8270D
Isophorone	ND	5.4	1.5	ug/L	1	12/24/19	WB	SW8270D
Naphthalene	ND	5.0	1.5	ug/L	1	12/24/19	WB	SW8270D
N-Nitrosodi-n-propylamine	ND	5.4	1.7	ug/L	1	12/24/19	WB	SW8270D
N-Nitrosodiphenylamine	ND	5.4	2.1	ug/L	1	12/24/19	WB	SW8270D
Pentachloronitrobenzene	ND	2.7	2.7	ug/L	1	12/24/19	WB	SW8270D
Phenol	ND	1.1	1.1	ug/L	1	12/24/19	WB	SW8270D
Pyrene	ND	5.4	1.8	ug/L	1	12/24/19	WB	SW8270D
Pyridine	ND	11	1.3	ug/L	1	12/24/19	WB	SW8270D

QA/QC Surrogates

% 2,4,6-Tribromophenol	85			%	1	12/24/19	WB	15 - 110 %

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
% 2-Fluorobiphenyl	65			%	1	12/24/19	WB	30 - 130 %
% 2-Fluorophenol	51			%	1	12/24/19	WB	15 - 110 %
% Nitrobenzene-d5	46			%	1	12/24/19	WB	30 - 130 %
% Phenol-d5	58			%	1	12/24/19	WB	15 - 110 %
% Terphenyl-d14	68			%	1	12/24/19	WB	30 - 130 %

Semivolatiles

Acenaphthylene	ND	0.54	0.54	ug/L	1	12/23/19	WB	SW8270D (SIM)
Benz(a)anthracene	ND	0.02	0.02	ug/L	1	12/23/19	WB	SW8270D (SIM)
Benzo(a)pyrene	ND	0.02	0.02	ug/L	1	12/23/19	WB	SW8270D (SIM)
Benzo(b)fluoranthene	ND	0.02	0.02	ug/L	1	12/23/19	WB	SW8270D (SIM)
Benzo(ghi)perylene	ND	0.54	0.54	ug/L	1	12/23/19	WB	SW8270D (SIM)
Benzo(k)fluoranthene	ND	0.02	0.02	ug/L	1	12/23/19	WB	SW8270D (SIM)
Chrysene	ND	0.02	0.02	ug/L	1	12/23/19	WB	SW8270D (SIM)
Dibenz(a,h)anthracene	ND	0.54	0.54	ug/L	1	12/23/19	WB	SW8270D (SIM)
Hexachlorobenzene	ND	0.04	0.04	ug/L	1	12/23/19	WB	SW8270D (SIM)
Hexachlorobutadiene	ND	0.50	0.50	ug/L	1	12/23/19	WB	SW8270D (SIM)
Indeno(1,2,3-cd)pyrene	ND	0.02	0.02	ug/L	1	12/23/19	WB	SW8270D (SIM)
Nitrobenzene	ND	0.40	0.40	ug/L	1	12/23/19	WB	SW8270D (SIM)
N-Nitrosodimethylamine	ND	0.11	0.11	ug/L	1	12/23/19	WB	SW8270D (SIM)
Pentachlorophenol	ND	0.54	0.54	ug/L	1	12/23/19	WB	SW8270D (SIM)
Phenanthrene	ND	0.54	0.54	ug/L	1	12/23/19	WB	SW8270D (SIM)

QA/QC Surrogates

% 2,4,6-Tribromophenol	84			%	1	12/23/19	WB	15 - 110 %
% 2-Fluorobiphenyl	58			%	1	12/23/19	WB	30 - 130 %
% 2-Fluorophenol	46			%	1	12/23/19	WB	15 - 110 %
% Nitrobenzene-d5	48			%	1	12/23/19	WB	30 - 130 %
% Phenol-d5	60			%	1	12/23/19	WB	15 - 110 %
% Terphenyl-d14	70			%	1	12/23/19	WB	30 - 130 %
Extraction for 1,4-Dioxane	Completed					12/19/19	S/S	

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low J=Estimated Below RL LOD=Limit of Detection MDL=Method Detection Limit1

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

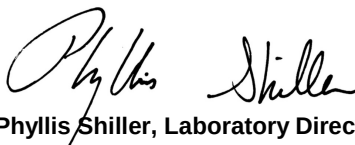
Volatile Comment:

To achieve client's objectives, where the lowest calibration standard or LOD justifies lowering the RL/PQL, the RL/PQL of some compounds have been lowered to meet criteria.

Semi-Volatile Comment:

To achieve client's objectives, where the lowest calibration standard or LOD justifies lowering the RL/PQL, the RL/PQL of some compounds have been lowered to meet criteria.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

December 30, 2019

Reviewed and Released by: Phyllis Shiller, Laboratory Director



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823



Analysis Report

December 30, 2019

FOR: Attn: Mr. Charles B. Sosik, P.G.
Environmental Business Consultants
1808 Middle Country Rd
Ridge NY 11961-2406

Sample Information

Matrix: GROUND WATER
Location Code: EBC
Rush Request: 72 Hour
P.O.#:

Custody Information

Collected by: TB
Received by: CP
Analyzed by: see "By" below

Date Time

12/17/19
12/18/19 17:12

Laboratory Data

SDG ID: GCE90170
Phoenix ID: CE90176

Project ID: 26-22 4TH ST QUEENS
Client ID: TRIP BLANK

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
<u>Volatiles</u>								
1,1,1,2-Tetrachloroethane	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
1,1,1-Trichloroethane	ND	5.0	0.25	ug/L	1	12/19/19	HM	SW8260C
1,1,2,2-Tetrachloroethane	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
1,1,2-Trichloroethane	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
1,1-Dichloroethane	ND	5.0	0.25	ug/L	1	12/19/19	HM	SW8260C
1,1-Dichloroethene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
1,1-Dichloropropene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
1,2,3-Trichlorobenzene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
1,2,3-Trichloropropane	ND	0.25	0.25	ug/L	1	12/19/19	HM	SW8260C
1,2,4-Trichlorobenzene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
1,2,4-Trimethylbenzene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
1,2-Dibromo-3-chloropropane	ND	0.50	0.50	ug/L	1	12/19/19	HM	SW8260C
1,2-Dibromoethane	ND	0.25	0.25	ug/L	1	12/19/19	HM	SW8260C
1,2-Dichlorobenzene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
1,2-Dichloroethane	ND	0.60	0.50	ug/L	1	12/19/19	HM	SW8260C
1,2-Dichloropropane	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
1,3,5-Trimethylbenzene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
1,3-Dichlorobenzene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
1,3-Dichloropropane	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
1,4-Dichlorobenzene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
2,2-Dichloropropane	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
2-Chlorotoluene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
2-Hexanone	ND	2.5	2.5	ug/L	1	12/19/19	HM	SW8260C
2-Isopropyltoluene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
4-Chlorotoluene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
4-Methyl-2-pentanone	ND	2.5	2.5	ug/L	1	12/19/19	HM	SW8260C

Client ID: TRIP BLANK

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Acetone	ND	5.0	2.5	ug/L	1	12/19/19	HM	SW8260C
Acrolein	ND	5.0	2.5	ug/L	1	12/19/19	HM	SW8260C
Acrylonitrile	ND	5.0	2.5	ug/L	1	12/19/19	HM	SW8260C
Benzene	ND	0.70	0.25	ug/L	1	12/19/19	HM	SW8260C
Bromobenzene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Bromochloromethane	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Bromodichloromethane	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Bromoform	ND	5.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Bromomethane	ND	5.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Carbon Disulfide	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Carbon tetrachloride	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Chlorobenzene	ND	5.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Chloroethane	ND	5.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Chloroform	ND	5.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Chloromethane	ND	5.0	0.25	ug/L	1	12/19/19	HM	SW8260C
cis-1,2-Dichloroethene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
cis-1,3-Dichloropropene	ND	0.40	0.25	ug/L	1	12/19/19	HM	SW8260C
Dibromochloromethane	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Dibromomethane	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Dichlorodifluoromethane	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Ethylbenzene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Hexachlorobutadiene	ND	0.50	0.20	ug/L	1	12/19/19	HM	SW8260C
Isopropylbenzene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
m&p-Xylene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Methyl ethyl ketone	ND	2.5	2.5	ug/L	1	12/19/19	HM	SW8260C
Methyl t-butyl ether (MTBE)	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Methylene chloride	ND	3.0	1.0	ug/L	1	12/19/19	HM	SW8260C
Naphthalene	ND	1.0	1.0	ug/L	1	12/19/19	HM	SW8260C
n-Butylbenzene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
n-Propylbenzene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
o-Xylene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
p-Isopropyltoluene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
sec-Butylbenzene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Styrene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
tert-Butylbenzene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Tetrachloroethene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Tetrahydrofuran (THF)	ND	5.0	2.5	ug/L	1	12/19/19	HM	SW8260C
Toluene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
trans-1,2-Dichloroethene	ND	5.0	0.25	ug/L	1	12/19/19	HM	SW8260C
trans-1,3-Dichloropropene	ND	0.40	0.25	ug/L	1	12/19/19	HM	SW8260C
trans-1,4-dichloro-2-butene	ND	2.5	2.5	ug/L	1	12/19/19	HM	SW8260C
Trichloroethene	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Trichlorofluoromethane	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Trichlorotrifluoroethane	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Vinyl chloride	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
<u>QA/QC Surrogates</u>								
% 1,2-dichlorobenzene-d4	100			%	1	12/19/19	HM	70 - 130 %
% Bromofluorobenzene	105			%	1	12/19/19	HM	70 - 130 %
% Dibromofluoromethane	96			%	1	12/19/19	HM	70 - 130 %

1

Client ID: TRIP BLANK

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
% Toluene-d8	106			%	1	12/19/19	HM	70 - 130 %
<u>1,4-dioxane</u>								
1,4-dioxane	ND	100	50	ug/l	1	12/19/19	HM	SW8260C
<u>QA/QC Surrogates</u>								
% 1,2-dichlorobenzene-d4	100			%	1	12/19/19	HM	70 - 130 %
% Bromofluorobenzene	105			%	1	12/19/19	HM	70 - 130 %
% Dibromofluoromethane	96			%	1	12/19/19	HM	70 - 130 %
% Toluene-d8	106			%	1	12/19/19	HM	70 - 130 %
<u>Volatiles</u>								
1,1,1,2-Tetrachloroethane	ND	1.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Acrolein	ND	5.0	2.5	ug/L	1	12/19/19	HM	SW8260C
Acrylonitrile	ND	5.0	0.25	ug/L	1	12/19/19	HM	SW8260C
Tert-butyl alcohol	ND	50	10	ug/L	1	12/19/19	HM	SW8260C

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit1

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

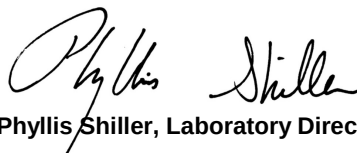
Comments:

TRIP BLANK INCLUDED.

Volatile Comment:

To achieve client's objectives, where the lowest calibration standard or LOD justifies lowering the RL/PQL, the RL/PQL of some compounds have been lowered to meet criteria.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

December 30, 2019

Reviewed and Released by: Phyllis Shiller, Laboratory Director

Monday, December 30, 2019

Criteria: NY: 375GWP, GW

State: NY

Sample Criteria Exceedances Report

GCE90170 - EBC

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units
CE90170	\$8260DP25R	Tetrachloroethene	NY / TAGM - Volatile Organics / Groundwater Standards	9.9	1.0	5	5	ug/L
CE90170	\$8260DP25R	1,2-Dibromo-3-chloropropane	NY / TOGS - Water Quality / GA Criteria	ND	0.50	0.04	0.04	ug/L
CE90170	\$8260DP25R	1,2-Dibromoethane	NY / TOGS - Water Quality / GA Criteria	ND	0.25	0.0006	0.0006	ug/L
CE90170	\$8260DP25R	Tetrachloroethene	NY / TOGS - Water Quality / GA Criteria	9.9	1.0	5	5	ug/L
CE90170	\$8260DP25R	1,2,3-Trichloropropane	NY / TOGS - Water Quality / GA Criteria	ND	0.25	0.04	0.04	ug/L
CE90170	\$DP8270-SIMR	Benzo(b)fluoranthene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CE90170	\$DP8270-SIMR	Indeno(1,2,3-cd)pyrene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CE90170	\$DP8270-SIMR	Chrysene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CE90170	\$DP8270-SIMR	Benzo(k)fluoranthene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CE90170	\$DP8270-SIMR	Benzo(a)pyrene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CE90170	\$DP8270-SIMR	Benz(a)anthracene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CE90170	\$DP8270-SIMR	Benzo(k)fluoranthene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	ug/L
CE90170	\$DP8270-SIMR	Benz(a)anthracene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	ug/L
CE90170	\$DP8270-SIMR	Chrysene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	ug/L
CE90170	\$DP8270-SIMR	Indeno(1,2,3-cd)pyrene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	ug/L
CE90170	\$DP8270-SIMR	Benzo(b)fluoranthene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	ug/L
CE90170	\$DPPEST_GA	Toxaphene	NY / TOGS - Water Quality / GA Criteria	ND	0.20	0.06	0.06	ug/L
CE90170	AL-WM	Aluminum	NY / TOGS - Water Quality / GA Criteria	1.25	0.025	0.1	0.1	mg/L
CE90170	FE-WMDP	Iron	NY / TOGS - Water Quality / GA Criteria	1.19	0.01	0.3	0.3	mg/L
CE90171	\$8260DP25R	Tetrachloroethene	NY / TAGM - Volatile Organics / Groundwater Standards	43	5.0	5	5	ug/L
CE90171	\$8260DP25R	1,2-Dibromo-3-chloropropane	NY / TOGS - Water Quality / GA Criteria	ND	0.50	0.04	0.04	ug/L
CE90171	\$8260DP25R	1,2-Dibromoethane	NY / TOGS - Water Quality / GA Criteria	ND	0.25	0.0006	0.0006	ug/L
CE90171	\$8260DP25R	Tetrachloroethene	NY / TOGS - Water Quality / GA Criteria	43	5.0	5	5	ug/L
CE90171	\$8260DP25R	1,2,3-Trichloropropane	NY / TOGS - Water Quality / GA Criteria	ND	0.25	0.04	0.04	ug/L
CE90171	\$DP8270-SIMR	Benzo(a)pyrene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CE90171	\$DP8270-SIMR	Indeno(1,2,3-cd)pyrene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CE90171	\$DP8270-SIMR	Chrysene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CE90171	\$DP8270-SIMR	Benzo(k)fluoranthene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CE90171	\$DP8270-SIMR	Benzo(b)fluoranthene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CE90171	\$DP8270-SIMR	Benz(a)anthracene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CE90171	\$DP8270-SIMR	Benz(a)anthracene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	ug/L
CE90171	\$DP8270-SIMR	Benzo(k)fluoranthene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	ug/L
CE90171	\$DP8270-SIMR	Chrysene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	ug/L
CE90171	\$DP8270-SIMR	Indeno(1,2,3-cd)pyrene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	ug/L
CE90171	\$DP8270-SIMR	Benzo(b)fluoranthene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	ug/L
CE90171	\$DPPEST_GA	Toxaphene	NY / TOGS - Water Quality / GA Criteria	ND	0.20	0.06	0.06	ug/L
CE90171	AL-WM	Aluminum	NY / TOGS - Water Quality / GA Criteria	8.31	0.025	0.1	0.1	mg/L
CE90171	FE-WMDP	Iron	NY / TOGS - Water Quality / GA Criteria	15.8	0.01	0.3	0.3	mg/L
CE90171	MN-WMDP	Manganese	NY / TOGS - Water Quality / GA Criteria	1.07	0.005	0.3	0.3	mg/L
CE90171	NA-WM	Sodium	NY / TOGS - Water Quality / GA Criteria	46.7	0.10	20	20	mg/L
CE90171	PB-WM	Lead	NY / TOGS - Water Quality / GA Criteria	0.084	0.002	0.025	0.025	mg/L

Monday, December 30, 2019

Criteria: NY: 375GWP, GW

State: NY

Sample Criteria Exceedances Report

GCE90170 - EBC

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units
CE90171	SE-WM-MS	Selenium	NY / TOGS - Water Quality / GA Criteria	0.014	0.010	0.01	0.01	mg/L
CE90172	\$8260DP25R	Tetrachloroethene	NY / TAGM - Volatile Organics / Groundwater Standards	9.1	1.0	5	5	ug/L
CE90172	\$8260DP25R	1,2-Dibromoethane	NY / TOGS - Water Quality / GA Criteria	ND	0.25	0.0006	0.0006	ug/L
CE90172	\$8260DP25R	1,2-Dibromo-3-chloropropane	NY / TOGS - Water Quality / GA Criteria	ND	0.50	0.04	0.04	ug/L
CE90172	\$8260DP25R	1,2,3-Trichloropropane	NY / TOGS - Water Quality / GA Criteria	ND	0.25	0.04	0.04	ug/L
CE90172	\$8260DP25R	Tetrachloroethene	NY / TOGS - Water Quality / GA Criteria	9.1	1.0	5	5	ug/L
CE90172	\$DP8270-SIMR	Chrysene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CE90172	\$DP8270-SIMR	Benz(a)anthracene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CE90172	\$DP8270-SIMR	Indeno(1,2,3-cd)pyrene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CE90172	\$DP8270-SIMR	Benzo(a)pyrene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CE90172	\$DP8270-SIMR	Benzo(b)fluoranthene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CE90172	\$DP8270-SIMR	Benzo(k)fluoranthene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CE90172	\$DP8270-SIMR	Indeno(1,2,3-cd)pyrene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	ug/L
CE90172	\$DP8270-SIMR	Benzo(b)fluoranthene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	ug/L
CE90172	\$DP8270-SIMR	Benz(a)anthracene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	ug/L
CE90172	\$DP8270-SIMR	Benzo(k)fluoranthene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	ug/L
CE90172	\$DP8270-SIMR	Chrysene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	ug/L
CE90172	\$DPPEST_GA	Toxaphene	NY / TOGS - Water Quality / GA Criteria	ND	0.20	0.06	0.06	ug/L
CE90172	AL-WM	Aluminum	NY / TOGS - Water Quality / GA Criteria	1.09	0.025	0.1	0.1	mg/L
CE90172	FE-WMDP	Iron	NY / TOGS - Water Quality / GA Criteria	1.24	0.01	0.3	0.3	mg/L
CE90172	MN-WMDP	Manganese	NY / TOGS - Water Quality / GA Criteria	0.680	0.005	0.3	0.3	mg/L
CE90172	NA-WM	Sodium	NY / TOGS - Water Quality / GA Criteria	209	1.0	20	20	mg/L
CE90173	\$8260DP25R	Tetrachloroethene	NY / TAGM - Volatile Organics / Groundwater Standards	13	1.0	5	5	ug/L
CE90173	\$8260DP25R	Tetrachloroethene	NY / TOGS - Water Quality / GA Criteria	13	1.0	5	5	ug/L
CE90173	\$8260DP25R	cis-1,2-Dichloroethene	NY / TOGS - Water Quality / GA Criteria	9.9	1.0	5	5	ug/L
CE90173	\$8260DP25R	1,2-Dibromoethane	NY / TOGS - Water Quality / GA Criteria	ND	0.25	0.0006	0.0006	ug/L
CE90173	\$8260DP25R	1,2,3-Trichloropropane	NY / TOGS - Water Quality / GA Criteria	ND	0.25	0.04	0.04	ug/L
CE90173	\$8260DP25R	1,2-Dibromo-3-chloropropane	NY / TOGS - Water Quality / GA Criteria	ND	0.50	0.04	0.04	ug/L
CE90173	\$DP8270-SIMR	Benzo(a)pyrene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CE90173	\$DP8270-SIMR	Benz(a)anthracene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CE90173	\$DP8270-SIMR	Benzo(b)fluoranthene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CE90173	\$DP8270-SIMR	Benzo(k)fluoranthene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CE90173	\$DP8270-SIMR	Chrysene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CE90173	\$DP8270-SIMR	Indeno(1,2,3-cd)pyrene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CE90173	\$DP8270-SIMR	Benz(a)anthracene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	ug/L
CE90173	\$DP8270-SIMR	Benzo(k)fluoranthene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	ug/L
CE90173	\$DP8270-SIMR	Chrysene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	ug/L
CE90173	\$DP8270-SIMR	Indeno(1,2,3-cd)pyrene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	ug/L
CE90173	\$DP8270-SIMR	Benzo(b)fluoranthene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	ug/L
CE90173	\$DPPEST_GA	4,4' -DDT	NY / TAGM - Pest/Herb/PCBs / Groundwater Standards	0.026	0.005	0.01	0.01	ug/L

Monday, December 30, 2019

Criteria: NY: 375GWP, GW

State: NY

Sample Criteria Exceedances Report

GCE90170 - EBC

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units
CE90173	\$DPPEST_GA	Toxaphene	NY / TOGS - Water Quality / GA Criteria	ND	0.20	0.06	0.06	ug/L
CE90173	AL-WM	Aluminum	NY / TOGS - Water Quality / GA Criteria	1.53	0.025	0.1	0.1	mg/L
CE90173	FE-WMDP	Iron	NY / TOGS - Water Quality / GA Criteria	2.24	0.01	0.3	0.3	mg/L
CE90173	MN-WMDP	Manganese	NY / TOGS - Water Quality / GA Criteria	1.94	0.005	0.3	0.3	mg/L
CE90173	NA-WM	Sodium	NY / TOGS - Water Quality / GA Criteria	112	1.0	20	20	mg/L
CE90174	\$8260DP25R	1,2,3-Trichloropropane	NY / TOGS - Water Quality / GA Criteria	ND	0.25	0.04	0.04	ug/L
CE90174	\$8260DP25R	1,2-Dibromo-3-chloropropane	NY / TOGS - Water Quality / GA Criteria	ND	0.50	0.04	0.04	ug/L
CE90174	\$8260DP25R	1,2-Dibromoethane	NY / TOGS - Water Quality / GA Criteria	ND	0.25	0.0006	0.0006	ug/L
CE90174	\$DP8270-SIMR	Benzo(k)fluoranthene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CE90174	\$DP8270-SIMR	Indeno(1,2,3-cd)pyrene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CE90174	\$DP8270-SIMR	Chrysene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CE90174	\$DP8270-SIMR	Benz(a)anthracene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CE90174	\$DP8270-SIMR	Benzo(b)fluoranthene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CE90174	\$DP8270-SIMR	Benzo(a)pyrene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CE90174	\$DP8270-SIMR	Benzo(b)fluoranthene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	ug/L
CE90174	\$DP8270-SIMR	Benzo(k)fluoranthene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	ug/L
CE90174	\$DP8270-SIMR	Chrysene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	ug/L
CE90174	\$DP8270-SIMR	Indeno(1,2,3-cd)pyrene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	ug/L
CE90174	\$DP8270-SIMR	Benz(a)anthracene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	ug/L
CE90174	\$DPPEST_GA	4,4' -DDT	NY / TAGM - Pest/Herb/PCBs / Groundwater Standards	0.028	0.005	0.01	0.01	ug/L
CE90174	\$DPPEST_GA	Toxaphene	NY / TOGS - Water Quality / GA Criteria	ND	0.20	0.06	0.06	ug/L
CE90174	AL-WM	Aluminum	NY / TOGS - Water Quality / GA Criteria	0.896	0.025	0.1	0.1	mg/L
CE90174	FE-WMDP	Iron	NY / TOGS - Water Quality / GA Criteria	1.29	0.01	0.3	0.3	mg/L
CE90174	MN-WMDP	Manganese	NY / TOGS - Water Quality / GA Criteria	0.721	0.005	0.3	0.3	mg/L
CE90174	NA-WM	Sodium	NY / TOGS - Water Quality / GA Criteria	97.8	1.0	20	20	mg/L
CE90174	SE-WM-MS	Selenium	NY / TOGS - Water Quality / GA Criteria	0.016	0.010	0.01	0.01	mg/L
CE90175	\$8260DP25R	1,2,3-Trichloropropane	NY / TOGS - Water Quality / GA Criteria	ND	0.25	0.04	0.04	ug/L
CE90175	\$8260DP25R	1,2-Dibromoethane	NY / TOGS - Water Quality / GA Criteria	ND	0.25	0.0006	0.0006	ug/L
CE90175	\$8260DP25R	1,2-Dibromo-3-chloropropane	NY / TOGS - Water Quality / GA Criteria	ND	0.50	0.04	0.04	ug/L
CE90175	\$DP8270-SIMF	2,4,5-Trichlorophenol	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	1.1	1	1	ug/L
CE90175	\$DP8270-SIMF	Phenol	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	1.1	1	1	ug/L
CE90175	\$DP8270-SIMF	2,4-Dichlorophenol	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	1.1	1	1	ug/L
CE90175	\$DP8270-SIMF	2-Chlorophenol	NY / TOGS - Water Quality / GA Criteria	ND	1.1	1	1	ug/L
CE90175	\$DP8270-SIMF	Bis(2-chloroethyl)ether	NY / TOGS - Water Quality / GA Criteria	ND	1.1	1	1	ug/L
CE90175	\$DP8270-SIMF	4-Nitrophenol	NY / TOGS - Water Quality / GA Criteria	ND	1.1	1	1	ug/L
CE90175	\$DP8270-SIMF	4-Chloro-3-methylphenol	NY / TOGS - Water Quality / GA Criteria	ND	1.1	1	1	ug/L
CE90175	\$DP8270-SIMF	4,6-Dinitro-2-methylphenol	NY / TOGS - Water Quality / GA Criteria	ND	1.1	1	1	ug/L
CE90175	\$DP8270-SIMF	2-Methylphenol (o-cresol)	NY / TOGS - Water Quality / GA Criteria	ND	1.1	1	1	ug/L
CE90175	\$DP8270-SIMF	Phenol	NY / TOGS - Water Quality / GA Criteria	ND	1.1	1	1	ug/L
CE90175	\$DP8270-SIMF	2,4-Dinitrophenol	NY / TOGS - Water Quality / GA Criteria	ND	1.1	1	1	ug/L

Monday, December 30, 2019

Criteria: NY: 375GWP, GW

State: NY

Sample Criteria Exceedances Report

GCE90170 - EBC

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units
CE90175	\$DP8270-SIMF	2,4-Dimethylphenol	NY / TOGS - Water Quality / GA Criteria	ND	1.1	1	1	ug/L
CE90175	\$DP8270-SIMF	2,4-Dichlorophenol	NY / TOGS - Water Quality / GA Criteria	ND	1.1	1	1	ug/L
CE90175	\$DP8270-SIMF	2,4,6-Trichlorophenol	NY / TOGS - Water Quality / GA Criteria	ND	1.1	1	1	ug/L
CE90175	\$DP8270-SIMF	2,4,5-Trichlorophenol	NY / TOGS - Water Quality / GA Criteria	ND	1.1	1	1	ug/L
CE90175	\$DP8270-SIMF	2-Nitrophenol	NY / TOGS - Water Quality / GA Criteria	ND	1.1	1	1	ug/L
CE90175	\$DP8270-SIMR	Benzo(k)fluoranthene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CE90175	\$DP8270-SIMR	Chrysene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CE90175	\$DP8270-SIMR	Indeno(1,2,3-cd)pyrene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CE90175	\$DP8270-SIMR	Benzo(a)pyrene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CE90175	\$DP8270-SIMR	Benz(a)anthracene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CE90175	\$DP8270-SIMR	Benzo(b)fluoranthene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CE90175	\$DP8270-SIMR	Indeno(1,2,3-cd)pyrene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	ug/L
CE90175	\$DP8270-SIMR	Benzo(b)fluoranthene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	ug/L
CE90175	\$DP8270-SIMR	Benzo(k)fluoranthene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	ug/L
CE90175	\$DP8270-SIMR	Chrysene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	ug/L
CE90175	\$DP8270-SIMR	Benz(a)anthracene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	ug/L
CE90175	\$DPPEST_GA	Toxaphene	NY / TOGS - Water Quality / GA Criteria	ND	0.20	0.06	0.06	ug/L
CE90175	AL-WM	Aluminum	NY / TOGS - Water Quality / GA Criteria	1.01	0.025	0.1	0.1	mg/L
CE90175	FE-WMDP	Iron	NY / TOGS - Water Quality / GA Criteria	1.50	0.01	0.3	0.3	mg/L
CE90175	MN-WMDP	Manganese	NY / TOGS - Water Quality / GA Criteria	1.47	0.005	0.3	0.3	mg/L
CE90175	NA-WM	Sodium	NY / TOGS - Water Quality / GA Criteria	143	1.0	20	20	mg/L
CE90176	\$8260DP25R	1,2-Dibromoethane	NY / TOGS - Water Quality / GA Criteria	ND	0.25	0.0006	0.0006	ug/L
CE90176	\$8260DP25R	1,2,3-Trichloropropane	NY / TOGS - Water Quality / GA Criteria	ND	0.25	0.04	0.04	ug/L
CE90176	\$8260DP25R	1,2-Dibromo-3-chloropropane	NY / TOGS - Water Quality / GA Criteria	ND	0.50	0.04	0.04	ug/L

Phoenix Laboratories does not assume responsibility for the data contained in this exceedance report. It is provided as an additional tool to identify requested criteria exceedences. All efforts are made to ensure the accuracy of the data (obtained from appropriate agencies). A lack of exceedence information does not necessarily suggest conformance to the criteria. It is ultimately the site professional's responsibility to determine appropriate compliance.



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823



NY Temperature Narration

December 30, 2019

SDG I.D.: GCE90170

The samples in this delivery group were received at 1.4°C.
(Note acceptance criteria for relevant matrices is above freezing up to 6°C)



NY/NJ CHAIN OF CUSTODY RECORD

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Email: info@phoenixlabs.com Fax (860) 645-0823
Client Services (860) 645-8726

Customer: Environmental Business Consultants
Address: 1808 Middle Country Road
Ridge, NY 11961

Project: 26-22 4th St, Queens
Report to: Environmental Business Consultants
Invoice to: Environmental Business Consultants

Project P.O.:

Fax: _____
Phone: 631-504-6000
Email: jil@phoenixlabs.com

Contact Options:

Coolant: IPK ☒ ICE ☐ No
Cooler: Yes ☒ No ☐

Temp: 1 C Pg 1 of 1

This section MUST be completed with Bottle Quantities.

Client Sample - Information - Identification				Analysis Request	
Sampler's Signature <u>Tony Balado</u>	Customer Sample Identification <u>mw1</u>	Sample Matrix <u>GW</u>	Date Sampled <u>12-17-19</u>	Date: <u>12-18-19</u>	
Matrix Code: DW=Drinking Water GW=Ground Water SW=Surface Water WW=Waste Water RW=Raw Water SE=Sediment SL=Sludge S=Soil SD=Solid W=Wipe OIL=Oil B=Bulk L=Liquid					
PHOENIX USE ONLY SAMPLE #	Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled	
90170	mw1	GW	12-17-19	8:23	
90171	mw2	GW	12-17-19	10:17	
90172	mw3	GW	12-17-19	8:28	
90173	mw4	GW	12-17-19	10:16	
90174	mw5	GW	12-18-19	2:03	
90175	mw6	GW	12-18-19	11:52	
90176	TRIP BLANKS	GW	—	—	

Relinquished by: <u>[Signature]</u>	Accepted by: <u>[Signature]</u>	Date: <u>12-18-19</u>	Time: <u>12:00</u>
Comments, Special Requirements or Regulations:			
State where samples were collected: <u>NY</u>			
Turnaround:		NJ	
☐ 1 Day* ☐ 2 Days* ☐ 3 Days* ☒ 5 Days ☐ 10 Days ☐ Other		☐ Res. Criteria ☐ Non-Res. Criteria ☐ Impact to GW Soil ☐ Cleanup Criteria ☐ GW Criteria	
* SURCHARGE APPLIES			
Data Format		Data Package	
☐ Phoenix Std Report ☒ Excel ☒ PDF ☐ GIS/Key ☒ EQUIS ☐ NJ Hazsite EDD ☒ NY EZ EDD (ASP) ☐ Other		☐ Restricted/Residential ☐ Commercial ☐ Industrial	
NY		NY 375 GWP ☒ NY375 Unrestricted Use Soil ☐ NY375 Residential Soil ☐ Restricted/Residential Commercial ☐ Industrial	



Wednesday, December 18, 2019

Attn: Mr. Charles B. Sosik, P.G.
Environmental Business Consultants
1808 Middle Country Rd
Ridge NY 11961-2406

Project ID: 26-22 4TH ST QUEENS
SDG ID: GCE85356
Sample ID#s: CE85356 - CE85378

This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory. This report is incomplete unless all pages indicated in the pagination at the bottom of the page are included.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Phyllis Shiller".

Phyllis Shiller

Laboratory Director

NELAC - #NY11301
CT Lab Registration #PH-0618
MA Lab Registration #M-CT007
ME Lab Registration #CT-007
NH Lab Registration #213693-A,B

NJ Lab Registration #CT-003
NY Lab Registration #11301
PA Lab Registration #68-03530
RI Lab Registration #63
UT Lab Registration #CT00007
VT Lab Registration #VT11301



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823



SDG Comments

December 18, 2019

SDG I.D.: GCE85356

Please be advised that the NY 375 soil criteria for chromium are based on hexavalent chromium and trivalent chromium.

Any compound that is not detected above the MDL/LOD is reported as ND on the report and is reported in the electronic deliverables (EDD) as <RL or U at the RL per state and EPA guidance.

Version 1: Analysis results minus raw data.

Version 2: Complete report with raw data.



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823



Sample Id Cross Reference

December 18, 2019

SDG I.D.: GCE85356

Project ID: 26-22 4TH ST QUEENS

Client Id	Lab Id	Matrix
19B4 (0-2)	CE85356	SOIL
19B4 (8-10)	CE85357	SOIL
19B5 (0-2)	CE85358	SOIL
19B5 (8-10)	CE85359	SOIL
19B6 (0-2)	CE85360	SOIL
19B6 (8-10)	CE85361	SOIL
19B7 (0-2)	CE85362	SOIL
19B7 (8-10)	CE85363	SOIL
19B8 (0-2)	CE85364	SOIL
19B8 (8-10)	CE85365	SOIL
19B9 (0-2)	CE85366	SOIL
19B9 (8-10)	CE85367	SOIL
19B9 (12`)	CE85368	SOIL
19B10 (0-2)	CE85369	SOIL
19B10 (8-10)	CE85370	SOIL
19B3 (0-2)	CE85371	SOIL
19B3 (8-10)	CE85372	SOIL
19B2 (0-2)	CE85373	SOIL
19B2 (8-10)	CE85374	SOIL
19B1 (0-2)	CE85375	SOIL
19B1 (8-10)	CE85376	SOIL
TRIP BLANK HIGH	CE85377	SOIL
TRIP BLANK LOW	CE85378	SOIL



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823



Analysis Report

December 18, 2019

FOR: Attn: Mr. Charles B. Sosik, P.G.
Environmental Business Consultants
1808 Middle Country Rd
Ridge NY 11961-2406

Sample Information

Matrix: SOIL
Location Code: EBC
Rush Request: 72 Hour
P.O.#:

Custody Information

Collected by: TB
Received by: CP
Analyzed by: see "By" below

Date

12/10/19
12/11/19

Time

8:35
16:00

Laboratory Data

SDG ID: GCE85356
Phoenix ID: CE85356

Project ID: 26-22 4TH ST QUEENS
Client ID: 19B4 (0-2)

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Silver	ND	0.35	0.35	mg/Kg	1	12/12/19	EK	SW6010D
Aluminum	10400	35	7.0	mg/Kg	10	12/12/19	EK	SW6010D
Arsenic	4.18	0.70	0.70	mg/Kg	1	12/12/19	EK	SW6010D
Barium	103	0.7	0.35	mg/Kg	1	12/12/19	EK	SW6010D
Beryllium	0.46	0.28	0.14	mg/Kg	1	12/12/19	EK	SW6010D
Calcium	7310	3.5	3.2	mg/Kg	1	12/12/19	EK	SW6010D
Cadmium	0.71	0.35	0.35	mg/Kg	1	12/12/19	EK	SW6010D
Cobalt	5.20	0.35	0.35	mg/Kg	1	12/12/19	EK	SW6010D
Chromium	19.8	0.35	0.35	mg/Kg	1	12/12/19	EK	SW6010D
Copper	34.2	0.7	0.35	mg/kg	1	12/12/19	EK	SW6010D
Iron	17200	35	35	mg/Kg	10	12/12/19	EK	SW6010D
Mercury	0.35	0.07	0.04	mg/Kg	5	12/12/19	RS	SW7471B
Potassium	1290	7	2.7	mg/Kg	1	12/12/19	EK	SW6010D
Magnesium	4250	3.5	3.5	mg/Kg	1	12/12/19	EK	SW6010D
Manganese	285	3.5	3.5	mg/Kg	10	12/12/19	EK	SW6010D
Sodium	159	7	3.0	mg/Kg	1	12/12/19	EK	SW6010D
Nickel	14.2	0.35	0.35	mg/Kg	1	12/12/19	EK	SW6010D
Lead	169	0.7	0.35	mg/Kg	1	12/12/19	EK	SW6010D
Antimony	ND	3.5	3.5	mg/Kg	1	12/12/19	EK	SW6010D
Selenium	ND	1.4	1.2	mg/Kg	1	12/12/19	EK	SW6010D
Thallium	ND	1.4	1.4	mg/Kg	1	12/12/19	EK	SW6010D
Vanadium	26.6	0.35	0.35	mg/Kg	1	12/12/19	EK	SW6010D
Zinc	175	0.7	0.35	mg/Kg	1	12/12/19	EK	SW6010D
Percent Solid	90			%		12/11/19	VT	SW846-%Solid
Extraction for SVOA SIM	Completed					12/11/19	BB/LA	SW3545A
Soil Extraction for PCB	Completed					12/11/19	MM/L	SW3545A
Soil Extraction for Pesticides	Completed					12/11/19	MM/L	SW3545A
Soil Extraction for SVOA	Completed					12/11/19	BB/LA	SW3545A

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Mercury Digestion	Completed					12/12/19	LS/LS	SW7471B
Total Metals Digest	Completed					12/11/19	JJ/AG/BF	SW3050B

Polychlorinated Biphenyls

PCB-1016	ND	73	73	ug/Kg	2	12/16/19	SC	SW8082A
PCB-1221	ND	73	73	ug/Kg	2	12/16/19	SC	SW8082A
PCB-1232	ND	73	73	ug/Kg	2	12/16/19	SC	SW8082A
PCB-1242	ND	73	73	ug/Kg	2	12/16/19	SC	SW8082A
PCB-1248	ND	73	73	ug/Kg	2	12/16/19	SC	SW8082A
PCB-1254	ND	73	73	ug/Kg	2	12/16/19	SC	SW8082A
PCB-1260	ND	73	73	ug/Kg	2	12/16/19	SC	SW8082A
PCB-1262	ND	73	73	ug/Kg	2	12/16/19	SC	SW8082A
PCB-1268	ND	73	73	ug/Kg	2	12/16/19	SC	SW8082A

QA/QC Surrogates

% DCBP	92			%	2	12/16/19	SC	30 - 150 %
% DCBP (Confirmation)	94			%	2	12/16/19	SC	30 - 150 %
% TCMX	77			%	2	12/16/19	SC	30 - 150 %
% TCMX (Confirmation)	79			%	2	12/16/19	SC	30 - 150 %

Pesticides - Soil

4,4' -DDD	5.8	2.2	2.2	ug/Kg	2	12/12/19	CG	SW8081B
4,4' -DDE	ND	2.2	2.2	ug/Kg	2	12/12/19	CG	SW8081B
4,4' -DDT	2.5	2.2	2.2	ug/Kg	2	12/12/19	CG	SW8081B
a-BHC	ND	7.3	7.3	ug/Kg	2	12/12/19	CG	SW8081B
a-Chlordane	ND	3.7	3.7	ug/Kg	2	12/12/19	CG	SW8081B
Aldrin	ND	3.7	3.7	ug/Kg	2	12/12/19	CG	SW8081B
b-BHC	ND	7.3	7.3	ug/Kg	2	12/12/19	CG	SW8081B
Chlordane	ND	37	37	ug/Kg	2	12/12/19	CG	SW8081B
d-BHC	ND	7.3	7.3	ug/Kg	2	12/12/19	CG	SW8081B
Dieldrin	ND	3.7	3.7	ug/Kg	2	12/12/19	CG	SW8081B
Endosulfan I	ND	7.3	7.3	ug/Kg	2	12/12/19	CG	SW8081B
Endosulfan II	ND	7.3	7.3	ug/Kg	2	12/12/19	CG	SW8081B
Endosulfan sulfate	ND	7.3	7.3	ug/Kg	2	12/12/19	CG	SW8081B
Endrin	ND	7.3	7.3	ug/Kg	2	12/12/19	CG	SW8081B
Endrin aldehyde	ND	7.3	7.3	ug/Kg	2	12/12/19	CG	SW8081B
Endrin ketone	ND	7.3	7.3	ug/Kg	2	12/12/19	CG	SW8081B
g-BHC	ND	1.5	1.5	ug/Kg	2	12/12/19	CG	SW8081B
g-Chlordane	ND	3.7	3.7	ug/Kg	2	12/12/19	CG	SW8081B
Heptachlor	ND	7.3	7.3	ug/Kg	2	12/12/19	CG	SW8081B
Heptachlor epoxide	ND	7.3	7.3	ug/Kg	2	12/12/19	CG	SW8081B
Methoxychlor	ND	37	37	ug/Kg	2	12/12/19	CG	SW8081B
Toxaphene	ND	150	150	ug/Kg	2	12/12/19	CG	SW8081B

QA/QC Surrogates

% DCBP	86			%	2	12/12/19	CG	30 - 150 %
% DCBP (Confirmation)	81			%	2	12/12/19	CG	30 - 150 %
% TCMX	71			%	2	12/12/19	CG	30 - 150 %
% TCMX (Confirmation)	67			%	2	12/12/19	CG	30 - 150 %

Volatiles

1,1,1,2-Tetrachloroethane	ND	5.2	1.0	ug/Kg	1	12/11/19	JLI	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
1,1,1-Trichloroethane	ND	5.2	0.52	ug/Kg	1	12/11/19	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	5.2	1.0	ug/Kg	1	12/11/19	JLI	SW8260C
1,1,2-Trichloroethane	ND	5.2	1.0	ug/Kg	1	12/11/19	JLI	SW8260C
1,1-Dichloroethane	ND	5.2	1.0	ug/Kg	1	12/11/19	JLI	SW8260C
1,1-Dichloroethene	ND	5.2	0.52	ug/Kg	1	12/11/19	JLI	SW8260C
1,1-Dichloropropene	ND	5.2	0.52	ug/Kg	1	12/11/19	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	5.2	1.0	ug/Kg	1	12/11/19	JLI	SW8260C
1,2,3-Trichloropropane	ND	5.2	0.52	ug/Kg	1	12/11/19	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	5.2	1.0	ug/Kg	1	12/11/19	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	5.2	0.52	ug/Kg	1	12/11/19	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	5.2	1.0	ug/Kg	1	12/11/19	JLI	SW8260C
1,2-Dibromoethane	ND	5.2	0.52	ug/Kg	1	12/11/19	JLI	SW8260C
1,2-Dichlorobenzene	ND	5.2	0.52	ug/Kg	1	12/11/19	JLI	SW8260C
1,2-Dichloroethane	ND	5.2	0.52	ug/Kg	1	12/11/19	JLI	SW8260C
1,2-Dichloropropane	ND	5.2	1.0	ug/Kg	1	12/11/19	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	5.2	0.52	ug/Kg	1	12/11/19	JLI	SW8260C
1,3-Dichlorobenzene	ND	5.2	0.52	ug/Kg	1	12/11/19	JLI	SW8260C
1,3-Dichloropropane	ND	5.2	1.0	ug/Kg	1	12/11/19	JLI	SW8260C
1,4-Dichlorobenzene	ND	5.2	0.52	ug/Kg	1	12/11/19	JLI	SW8260C
2,2-Dichloropropane	ND	5.2	0.52	ug/Kg	1	12/11/19	JLI	SW8260C
2-Chlorotoluene	ND	5.2	1.0	ug/Kg	1	12/11/19	JLI	SW8260C
2-Hexanone	ND	26	5.2	ug/Kg	1	12/11/19	JLI	SW8260C
2-Isopropyltoluene	ND	5.2	0.52	ug/Kg	1	12/11/19	JLI	SW8260C
4-Chlorotoluene	ND	5.2	0.52	ug/Kg	1	12/11/19	JLI	SW8260C
4-Methyl-2-pentanone	ND	26	5.2	ug/Kg	1	12/11/19	JLI	SW8260C
Acetone	91	S 26	5.2	ug/Kg	1	12/11/19	JLI	SW8260C
Acrylonitrile	ND	10	1.0	ug/Kg	1	12/11/19	JLI	SW8260C
Benzene	ND	5.2	0.52	ug/Kg	1	12/11/19	JLI	SW8260C
Bromobenzene	ND	5.2	0.52	ug/Kg	1	12/11/19	JLI	SW8260C
Bromochloromethane	ND	5.2	0.52	ug/Kg	1	12/11/19	JLI	SW8260C
Bromodichloromethane	ND	5.2	1.0	ug/Kg	1	12/11/19	JLI	SW8260C
Bromoform	ND	5.2	1.0	ug/Kg	1	12/11/19	JLI	SW8260C
Bromomethane	ND	5.2	2.1	ug/Kg	1	12/11/19	JLI	SW8260C
Carbon Disulfide	ND	5.2	1.0	ug/Kg	1	12/11/19	JLI	SW8260C
Carbon tetrachloride	ND	5.2	1.0	ug/Kg	1	12/11/19	JLI	SW8260C
Chlorobenzene	ND	5.2	0.52	ug/Kg	1	12/11/19	JLI	SW8260C
Chloroethane	ND	5.2	0.52	ug/Kg	1	12/11/19	JLI	SW8260C
Chloroform	ND	5.2	0.52	ug/Kg	1	12/11/19	JLI	SW8260C
Chloromethane	ND	5.2	1.0	ug/Kg	1	12/11/19	JLI	SW8260C
cis-1,2-Dichloroethene	0.62	J 5.2	0.52	ug/Kg	1	12/11/19	JLI	SW8260C
cis-1,3-Dichloropropene	ND	5.2	0.52	ug/Kg	1	12/11/19	JLI	SW8260C
Dibromochloromethane	ND	5.2	1.0	ug/Kg	1	12/11/19	JLI	SW8260C
Dibromomethane	ND	5.2	1.0	ug/Kg	1	12/11/19	JLI	SW8260C
Dichlorodifluoromethane	ND	5.2	0.52	ug/Kg	1	12/11/19	JLI	SW8260C
Ethylbenzene	ND	5.2	0.52	ug/Kg	1	12/11/19	JLI	SW8260C
Hexachlorobutadiene	ND	5.2	0.52	ug/Kg	1	12/11/19	JLI	SW8260C
Isopropylbenzene	ND	5.2	0.52	ug/Kg	1	12/11/19	JLI	SW8260C
m&p-Xylene	ND	5.2	1.0	ug/Kg	1	12/11/19	JLI	SW8260C
Methyl Ethyl Ketone	19	J 31	5.2	ug/Kg	1	12/11/19	JLI	SW8260C

1

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Methyl t-butyl ether (MTBE)	ND	10	1.0	ug/Kg	1	12/11/19	JLI	SW8260C
Methylene chloride	ND	5.2	5.2	ug/Kg	1	12/11/19	JLI	SW8260C
Naphthalene	ND	5.2	1.0	ug/Kg	1	12/11/19	JLI	SW8260C
n-Butylbenzene	ND	5.2	0.52	ug/Kg	1	12/11/19	JLI	SW8260C
n-Propylbenzene	ND	5.2	1.0	ug/Kg	1	12/11/19	JLI	SW8260C
o-Xylene	ND	5.2	1.0	ug/Kg	1	12/11/19	JLI	SW8260C
p-Isopropyltoluene	ND	5.2	0.52	ug/Kg	1	12/11/19	JLI	SW8260C
sec-Butylbenzene	ND	5.2	0.52	ug/Kg	1	12/11/19	JLI	SW8260C
Styrene	ND	5.2	0.52	ug/Kg	1	12/11/19	JLI	SW8260C
tert-Butylbenzene	ND	5.2	0.52	ug/Kg	1	12/11/19	JLI	SW8260C
Tetrachloroethene	ND	5.2	1.0	ug/Kg	1	12/11/19	JLI	SW8260C
Tetrahydrofuran (THF)	ND	10	2.6	ug/Kg	1	12/11/19	JLI	SW8260C
Toluene	ND	5.2	0.52	ug/Kg	1	12/11/19	JLI	SW8260C
trans-1,2-Dichloroethene	ND	5.2	0.52	ug/Kg	1	12/11/19	JLI	SW8260C
trans-1,3-Dichloropropene	ND	5.2	0.52	ug/Kg	1	12/11/19	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	10	2.6	ug/Kg	1	12/11/19	JLI	SW8260C
Trichloroethene	1.2	J 5.2	0.52	ug/Kg	1	12/11/19	JLI	SW8260C
Trichlorofluoromethane	ND	5.2	1.0	ug/Kg	1	12/11/19	JLI	SW8260C
Trichlorotrifluoroethane	ND	5.2	0.52	ug/Kg	1	12/11/19	JLI	SW8260C
Vinyl chloride	ND	5.2	0.52	ug/Kg	1	12/11/19	JLI	SW8260C
<u>QA/QC Surrogates</u>								
% 1,2-dichlorobenzene-d4	97			%	1	12/11/19	JLI	70 - 130 %
% Bromofluorobenzene	97			%	1	12/11/19	JLI	70 - 130 %
% Dibromofluoromethane	93			%	1	12/11/19	JLI	70 - 130 %
% Toluene-d8	94			%	1	12/11/19	JLI	70 - 130 %
<u>Volatiles</u>								
1,1,1,2-Tetrachloroethane	ND	21	1.0	ug/Kg	1	12/11/19	JLI	SW8260C
Acrolein	ND	5.2	1.0	ug/Kg	1	12/11/19	JLI	SW8260C
Acrylonitrile	ND	21	0.52	ug/Kg	1	12/11/19	JLI	SW8260C
Tert-butyl alcohol	ND	100	21	ug/Kg	1	12/11/19	JLI	SW8260C
<u>Semivolatiles</u>								
1,2,4,5-Tetrachlorobenzene	ND	260	130	ug/Kg	1	12/12/19	WB	SW8270D
1,2,4-Trichlorobenzene	ND	260	110	ug/Kg	1	12/12/19	WB	SW8270D
1,2-Dichlorobenzene	ND	260	100	ug/Kg	1	12/12/19	WB	SW8270D
1,2-Diphenylhydrazine	ND	260	120	ug/Kg	1	12/12/19	WB	SW8270D
1,3-Dichlorobenzene	ND	260	110	ug/Kg	1	12/12/19	WB	SW8270D
1,4-Dichlorobenzene	ND	260	110	ug/Kg	1	12/12/19	WB	SW8270D
2,4,5-Trichlorophenol	ND	260	200	ug/Kg	1	12/12/19	WB	SW8270D
2,4,6-Trichlorophenol	ND	180	120	ug/Kg	1	12/12/19	WB	SW8270D
2,4-Dichlorophenol	ND	180	130	ug/Kg	1	12/12/19	WB	SW8270D
2,4-Dimethylphenol	ND	260	91	ug/Kg	1	12/12/19	WB	SW8270D
2,4-Dinitrophenol	ND	260	260	ug/Kg	1	12/12/19	WB	SW8270D
2,4-Dinitrotoluene	ND	180	140	ug/Kg	1	12/12/19	WB	SW8270D
2,6-Dinitrotoluene	ND	180	120	ug/Kg	1	12/12/19	WB	SW8270D
2-Chloronaphthalene	ND	260	100	ug/Kg	1	12/12/19	WB	SW8270D
2-Chlorophenol	ND	260	100	ug/Kg	1	12/12/19	WB	SW8270D
2-Methylnaphthalene	ND	260	110	ug/Kg	1	12/12/19	WB	SW8270D
2-Methylphenol (o-cresol)	ND	260	170	ug/Kg	1	12/12/19	WB	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
2-Nitroaniline	ND	260	260	ug/Kg	1	12/12/19	WB	SW8270D
2-Nitrophenol	ND	260	230	ug/Kg	1	12/12/19	WB	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	260	140	ug/Kg	1	12/12/19	WB	SW8270D
3,3'-Dichlorobenzidine	ND	180	170	ug/Kg	1	12/12/19	WB	SW8270D
3-Nitroaniline	ND	370	730	ug/Kg	1	12/12/19	WB	SW8270D
4,6-Dinitro-2-methylphenol	ND	220	73	ug/Kg	1	12/12/19	WB	SW8270D
4-Bromophenyl phenyl ether	ND	260	110	ug/Kg	1	12/12/19	WB	SW8270D
4-Chloro-3-methylphenol	ND	260	130	ug/Kg	1	12/12/19	WB	SW8270D
4-Chloroaniline	ND	290	170	ug/Kg	1	12/12/19	WB	SW8270D
4-Chlorophenyl phenyl ether	ND	260	120	ug/Kg	1	12/12/19	WB	SW8270D
4-Nitroaniline	ND	370	120	ug/Kg	1	12/12/19	WB	SW8270D
4-Nitrophenol	ND	370	170	ug/Kg	1	12/12/19	WB	SW8270D
Acenaphthene	ND	260	110	ug/Kg	1	12/12/19	WB	SW8270D
Acenaphthylene	ND	260	100	ug/Kg	1	12/12/19	WB	SW8270D
Acetophenone	ND	260	110	ug/Kg	1	12/12/19	WB	SW8270D
Aniline	ND	290	290	ug/Kg	1	12/12/19	WB	SW8270D
Anthracene	ND	260	120	ug/Kg	1	12/12/19	WB	SW8270D
Benz(a)anthracene	ND	260	120	ug/Kg	1	12/12/19	WB	SW8270D
Benzidine	ND	370	220	ug/Kg	1	12/12/19	WB	SW8270D
Benzo(a)pyrene	ND	180	120	ug/Kg	1	12/12/19	WB	SW8270D
Benzo(b)fluoranthene	ND	260	130	ug/Kg	1	12/12/19	WB	SW8270D
Benzo(ghi)perylene	ND	260	120	ug/Kg	1	12/12/19	WB	SW8270D
Benzo(k)fluoranthene	ND	260	120	ug/Kg	1	12/12/19	WB	SW8270D
Benzoic acid	ND	1800	730	ug/Kg	1	12/12/19	WB	SW8270D
Benzyl butyl phthalate	ND	260	95	ug/Kg	1	12/12/19	WB	SW8270D
Bis(2-chloroethoxy)methane	ND	260	100	ug/Kg	1	12/12/19	WB	SW8270D
Bis(2-chloroethyl)ether	ND	180	99	ug/Kg	1	12/12/19	WB	SW8270D
Bis(2-chloroisopropyl)ether	ND	260	100	ug/Kg	1	12/12/19	WB	SW8270D
Bis(2-ethylhexyl)phthalate	ND	260	110	ug/Kg	1	12/12/19	WB	SW8270D
Carbazole	ND	180	150	ug/Kg	1	12/12/19	WB	SW8270D
Chrysene	ND	260	120	ug/Kg	1	12/12/19	WB	SW8270D
Dibenz(a,h)anthracene	ND	180	120	ug/Kg	1	12/12/19	WB	SW8270D
Dibenzofuran	ND	260	110	ug/Kg	1	12/12/19	WB	SW8270D
Diethyl phthalate	ND	260	120	ug/Kg	1	12/12/19	WB	SW8270D
Dimethylphthalate	ND	260	110	ug/Kg	1	12/12/19	WB	SW8270D
Di-n-butylphthalate	ND	260	97	ug/Kg	1	12/12/19	WB	SW8270D
Di-n-octylphthalate	ND	260	95	ug/Kg	1	12/12/19	WB	SW8270D
Fluoranthene	190	J 260	120	ug/Kg	1	12/12/19	WB	SW8270D
Fluorene	ND	260	120	ug/Kg	1	12/12/19	WB	SW8270D
Hexachlorobenzene	ND	180	110	ug/Kg	1	12/12/19	WB	SW8270D
Hexachlorobutadiene	ND	260	130	ug/Kg	1	12/12/19	WB	SW8270D
Hexachlorocyclopentadiene	ND	260	110	ug/Kg	1	12/12/19	WB	SW8270D
Hexachloroethane	ND	180	110	ug/Kg	1	12/12/19	WB	SW8270D
Indeno(1,2,3-cd)pyrene	ND	260	120	ug/Kg	1	12/12/19	WB	SW8270D
Isophorone	ND	1800	1800	ug/Kg	1	12/12/19	WB	SW8270D
Naphthalene	ND	260	110	ug/Kg	1	12/12/19	WB	SW8270D
Nitrobenzene	ND	180	130	ug/Kg	1	12/12/19	WB	SW8270D
N-Nitrosodimethylamine	ND	260	100	ug/Kg	1	12/12/19	WB	SW8270D
N-Nitrosodi-n-propylamine	ND	180	120	ug/Kg	1	12/12/19	WB	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
N-Nitrosodiphenylamine	ND	260	140	ug/Kg	1	12/12/19	WB	SW8270D
Pentachloronitrobenzene	ND	260	140	ug/Kg	1	12/12/19	WB	SW8270D
Pentachlorophenol	ND	220	140	ug/Kg	1	12/12/19	WB	SW8270D
Phenanthrene	120	J 260	100	ug/Kg	1	12/12/19	WB	SW8270D
Phenol	ND	260	120	ug/Kg	1	12/12/19	WB	SW8270D
Pyrene	180	J 260	130	ug/Kg	1	12/12/19	WB	SW8270D
Pyridine	ND	260	90	ug/Kg	1	12/12/19	WB	SW8270D
<u>QA/QC Surrogates</u>								
% 2,4,6-Tribromophenol	43			%	1	12/12/19	WB	30 - 130 %
% 2-Fluorobiphenyl	65			%	1	12/12/19	WB	30 - 130 %
% 2-Fluorophenol	37			%	1	12/12/19	WB	30 - 130 %
% Nitrobenzene-d5	66			%	1	12/12/19	WB	30 - 130 %
% Phenol-d5	60			%	1	12/12/19	WB	30 - 130 %
% Terphenyl-d14	57			%	1	12/12/19	WB	30 - 130 %
<u>1,4-Dioxane</u>								
1,4-dioxane	ND	73	73	ug/Kg	1	12/12/19	WB	SW8270D (SIM)
<u>QA/QC Surrogates</u>								
% 2-Fluorobiphenyl	59			%	1	12/12/19	WB	30 - 130 %
% Nitrobenzene-d5	97			%	1	12/12/19	WB	30 - 130 %
% Terphenyl-d14	59			%	1	12/12/19	WB	30 - 130 %
Field Extraction	Completed					12/10/19		SW5035A

1

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low J=Estimated Below RL LOD=Limit of Detection MDL=Method Detection Limit1

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

Please be advised that the NY 375 soil criteria for chromium are based on hexavalent chromium and trivalent chromium.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

S - Laboratory solvent, contamination is possible.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

December 18, 2019

Reviewed and Released by: Greg Lawrence, Assistant Lab Director



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823



Analysis Report

December 18, 2019

FOR: Attn: Mr. Charles B. Sosik, P.G.
Environmental Business Consultants
1808 Middle Country Rd
Ridge NY 11961-2406

Sample Information

Matrix: SOIL
Location Code: EBC
Rush Request: 72 Hour
P.O.#:

Custody Information

Collected by: TB
Received by: CP
Analyzed by: see "By" below

Date

12/10/19 8:45
12/11/19 16:00

Time

Laboratory Data

SDG ID: GCE85356
Phoenix ID: CE85357

Project ID: 26-22 4TH ST QUEENS
Client ID: 19B4 (8-10)

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Silver	ND	0.38	0.38	mg/Kg	1	12/12/19	EK	SW6010D
Aluminum	8480	38	7.6	mg/Kg	10	12/12/19	EK	SW6010D
Arsenic	ND	0.76	0.76	mg/Kg	1	12/12/19	EK	SW6010D
Barium	55.9	0.8	0.38	mg/Kg	1	12/12/19	EK	SW6010D
Beryllium	0.27	0.31	0.15	mg/Kg	1	12/12/19	EK	SW6010D
Calcium	1180	38	35	mg/Kg	10	12/12/19	EK	SW6010D
Cadmium	0.41	0.38	0.38	mg/Kg	1	12/12/19	EK	SW6010D
Cobalt	4.68	0.38	0.38	mg/Kg	1	12/12/19	EK	SW6010D
Chromium	19.3	0.38	0.38	mg/Kg	1	12/12/19	EK	SW6010D
Copper	26.7	0.8	0.38	mg/kg	1	12/12/19	EK	SW6010D
Iron	16200	38	38	mg/Kg	10	12/12/19	EK	SW6010D
Mercury	ND	0.03	0.02	mg/Kg	2	12/12/19	RS	SW7471B
Potassium	1520	8	3.0	mg/Kg	1	12/12/19	EK	SW6010D
Magnesium	3870	3.8	3.8	mg/Kg	1	12/12/19	EK	SW6010D
Manganese	416	3.8	3.8	mg/Kg	10	12/12/19	EK	SW6010D
Sodium	250	8	3.3	mg/Kg	1	12/12/19	EK	SW6010D
Nickel	13.9	0.38	0.38	mg/Kg	1	12/12/19	EK	SW6010D
Lead	4.1	0.8	0.38	mg/Kg	1	12/12/19	EK	SW6010D
Antimony	ND	3.8	3.8	mg/Kg	1	12/12/19	EK	SW6010D
Selenium	ND	1.5	1.3	mg/Kg	1	12/12/19	EK	SW6010D
Thallium	ND	1.5	1.5	mg/Kg	1	12/12/19	EK	SW6010D
Vanadium	31.1	0.38	0.38	mg/Kg	1	12/12/19	EK	SW6010D
Zinc	32.9	0.8	0.38	mg/Kg	1	12/12/19	EK	SW6010D
Percent Solid	83			%		12/11/19	VT	SW846-%Solid
Extraction for SVOA SIM	Completed					12/11/19	BB/LA	SW3545A
Soil Extraction for PCB	Completed					12/11/19	MM/L	SW3545A
Soil Extraction for Pesticides	Completed					12/11/19	MM/L	SW3545A
Soil Extraction for SVOA	Completed					12/11/19	BB/LA	SW3545A

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Mercury Digestion	Completed					12/12/19	LS/LS	SW7471B
Total Metals Digest	Completed					12/11/19	JJ/AG/BF	SW3050B

Polychlorinated Biphenyls

PCB-1016	ND	79	79	ug/Kg	2	12/12/19	SC	SW8082A
PCB-1221	ND	79	79	ug/Kg	2	12/12/19	SC	SW8082A
PCB-1232	ND	79	79	ug/Kg	2	12/12/19	SC	SW8082A
PCB-1242	ND	79	79	ug/Kg	2	12/12/19	SC	SW8082A
PCB-1248	ND	79	79	ug/Kg	2	12/12/19	SC	SW8082A
PCB-1254	ND	79	79	ug/Kg	2	12/12/19	SC	SW8082A
PCB-1260	ND	79	79	ug/Kg	2	12/12/19	SC	SW8082A
PCB-1262	ND	79	79	ug/Kg	2	12/12/19	SC	SW8082A
PCB-1268	ND	79	79	ug/Kg	2	12/12/19	SC	SW8082A

QA/QC Surrogates

% DCBP	96			%	2	12/12/19	SC	30 - 150 %
% DCBP (Confirmation)	91			%	2	12/12/19	SC	30 - 150 %
% TCMX	101			%	2	12/12/19	SC	30 - 150 %
% TCMX (Confirmation)	85			%	2	12/12/19	SC	30 - 150 %

Pesticides - Soil

4,4' -DDD	8.1	2.4	2.4	ug/Kg	2	12/14/19	CG	SW8081B
4,4' -DDE	ND	2.4	2.4	ug/Kg	2	12/14/19	CG	SW8081B
4,4' -DDT	ND	3.3	3.3	ug/Kg	2	12/14/19	CG	SW8081B
a-BHC	ND	7.9	7.9	ug/Kg	2	12/14/19	CG	SW8081B
a-Chlordane	ND	3.9	3.9	ug/Kg	2	12/14/19	CG	SW8081B
Aldrin	ND	3.9	3.9	ug/Kg	2	12/14/19	CG	SW8081B
b-BHC	ND	7.9	7.9	ug/Kg	2	12/14/19	CG	SW8081B
Chlordane	ND	39	39	ug/Kg	2	12/14/19	CG	SW8081B
d-BHC	ND	7.9	7.9	ug/Kg	2	12/14/19	CG	SW8081B
Dieldrin	ND	3.9	3.9	ug/Kg	2	12/14/19	CG	SW8081B
Endosulfan I	ND	7.9	7.9	ug/Kg	2	12/14/19	CG	SW8081B
Endosulfan II	ND	7.9	7.9	ug/Kg	2	12/14/19	CG	SW8081B
Endosulfan sulfate	ND	7.9	7.9	ug/Kg	2	12/14/19	CG	SW8081B
Endrin	ND	7.9	7.9	ug/Kg	2	12/14/19	CG	SW8081B
Endrin aldehyde	ND	7.9	7.9	ug/Kg	2	12/14/19	CG	SW8081B
Endrin ketone	ND	7.9	7.9	ug/Kg	2	12/14/19	CG	SW8081B
g-BHC	ND	1.6	1.6	ug/Kg	2	12/14/19	CG	SW8081B
g-Chlordane	ND	3.9	3.9	ug/Kg	2	12/14/19	CG	SW8081B
Heptachlor	ND	7.9	7.9	ug/Kg	2	12/14/19	CG	SW8081B
Heptachlor epoxide	ND	7.9	7.9	ug/Kg	2	12/14/19	CG	SW8081B
Methoxychlor	ND	39	39	ug/Kg	2	12/14/19	CG	SW8081B
Toxaphene	ND	160	160	ug/Kg	2	12/14/19	CG	SW8081B

QA/QC Surrogates

% DCBP	57			%	2	12/14/19	CG	30 - 150 %
% DCBP (Confirmation)	66			%	2	12/14/19	CG	30 - 150 %
% TCMX	53			%	2	12/14/19	CG	30 - 150 %
% TCMX (Confirmation)	51			%	2	12/14/19	CG	30 - 150 %

Volatiles

1,1,1,2-Tetrachloroethane	ND	5.6	1.1	ug/Kg	1	12/12/19	JLI	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
1,1,1-Trichloroethane	ND	5.6	0.56	ug/Kg	1	12/12/19	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	5.6	1.1	ug/Kg	1	12/12/19	JLI	SW8260C
1,1,2-Trichloroethane	ND	5.6	1.1	ug/Kg	1	12/12/19	JLI	SW8260C
1,1-Dichloroethane	ND	5.6	1.1	ug/Kg	1	12/12/19	JLI	SW8260C
1,1-Dichloroethene	ND	5.6	0.56	ug/Kg	1	12/12/19	JLI	SW8260C
1,1-Dichloropropene	ND	5.6	0.56	ug/Kg	1	12/12/19	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	5.6	1.1	ug/Kg	1	12/12/19	JLI	SW8260C
1,2,3-Trichloropropane	ND	5.6	0.56	ug/Kg	1	12/12/19	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	5.6	1.1	ug/Kg	1	12/12/19	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	5.6	0.56	ug/Kg	1	12/12/19	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	5.6	1.1	ug/Kg	1	12/12/19	JLI	SW8260C
1,2-Dibromoethane	ND	5.6	0.56	ug/Kg	1	12/12/19	JLI	SW8260C
1,2-Dichlorobenzene	ND	5.6	0.56	ug/Kg	1	12/12/19	JLI	SW8260C
1,2-Dichloroethane	ND	5.6	0.56	ug/Kg	1	12/12/19	JLI	SW8260C
1,2-Dichloropropane	ND	5.6	1.1	ug/Kg	1	12/12/19	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	5.6	0.56	ug/Kg	1	12/12/19	JLI	SW8260C
1,3-Dichlorobenzene	ND	5.6	0.56	ug/Kg	1	12/12/19	JLI	SW8260C
1,3-Dichloropropane	ND	5.6	1.1	ug/Kg	1	12/12/19	JLI	SW8260C
1,4-Dichlorobenzene	ND	5.6	0.56	ug/Kg	1	12/12/19	JLI	SW8260C
2,2-Dichloropropane	ND	5.6	0.56	ug/Kg	1	12/12/19	JLI	SW8260C
2-Chlorotoluene	ND	5.6	1.1	ug/Kg	1	12/12/19	JLI	SW8260C
2-Hexanone	ND	28	5.6	ug/Kg	1	12/12/19	JLI	SW8260C
2-Isopropyltoluene	ND	5.6	0.56	ug/Kg	1	12/12/19	JLI	SW8260C
4-Chlorotoluene	ND	5.6	0.56	ug/Kg	1	12/12/19	JLI	SW8260C
4-Methyl-2-pentanone	ND	28	5.6	ug/Kg	1	12/12/19	JLI	SW8260C
Acetone	ND	28	5.6	ug/Kg	1	12/12/19	JLI	SW8260C
Acrylonitrile	ND	11	1.1	ug/Kg	1	12/12/19	JLI	SW8260C
Benzene	ND	5.6	0.56	ug/Kg	1	12/12/19	JLI	SW8260C
Bromobenzene	ND	5.6	0.56	ug/Kg	1	12/12/19	JLI	SW8260C
Bromochloromethane	ND	5.6	0.56	ug/Kg	1	12/12/19	JLI	SW8260C
Bromodichloromethane	ND	5.6	1.1	ug/Kg	1	12/12/19	JLI	SW8260C
Bromoform	ND	5.6	1.1	ug/Kg	1	12/12/19	JLI	SW8260C
Bromomethane	ND	5.6	2.2	ug/Kg	1	12/12/19	JLI	SW8260C
Carbon Disulfide	ND	5.6	1.1	ug/Kg	1	12/12/19	JLI	SW8260C
Carbon tetrachloride	ND	5.6	1.1	ug/Kg	1	12/12/19	JLI	SW8260C
Chlorobenzene	ND	5.6	0.56	ug/Kg	1	12/12/19	JLI	SW8260C
Chloroethane	ND	5.6	0.56	ug/Kg	1	12/12/19	JLI	SW8260C
Chloroform	ND	5.6	0.56	ug/Kg	1	12/12/19	JLI	SW8260C
Chloromethane	ND	5.6	1.1	ug/Kg	1	12/12/19	JLI	SW8260C
cis-1,2-Dichloroethene	ND	5.6	0.56	ug/Kg	1	12/12/19	JLI	SW8260C
cis-1,3-Dichloropropene	ND	5.6	0.56	ug/Kg	1	12/12/19	JLI	SW8260C
Dibromochloromethane	ND	5.6	1.1	ug/Kg	1	12/12/19	JLI	SW8260C
Dibromomethane	ND	5.6	1.1	ug/Kg	1	12/12/19	JLI	SW8260C
Dichlorodifluoromethane	ND	5.6	0.56	ug/Kg	1	12/12/19	JLI	SW8260C
Ethylbenzene	ND	5.6	0.56	ug/Kg	1	12/12/19	JLI	SW8260C
Hexachlorobutadiene	ND	5.6	0.56	ug/Kg	1	12/12/19	JLI	SW8260C
Isopropylbenzene	ND	5.6	0.56	ug/Kg	1	12/12/19	JLI	SW8260C
m&p-Xylene	ND	5.6	1.1	ug/Kg	1	12/12/19	JLI	SW8260C
Methyl Ethyl Ketone	ND	34	5.6	ug/Kg	1	12/12/19	JLI	SW8260C

1

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Methyl t-butyl ether (MTBE)	ND	11	1.1	ug/Kg	1	12/12/19	JLI	SW8260C
Methylene chloride	ND	5.6	5.6	ug/Kg	1	12/12/19	JLI	SW8260C
Naphthalene	ND	5.6	1.1	ug/Kg	1	12/12/19	JLI	SW8260C
n-Butylbenzene	ND	5.6	0.56	ug/Kg	1	12/12/19	JLI	SW8260C
n-Propylbenzene	ND	5.6	1.1	ug/Kg	1	12/12/19	JLI	SW8260C
o-Xylene	ND	5.6	1.1	ug/Kg	1	12/12/19	JLI	SW8260C
p-Isopropyltoluene	ND	5.6	0.56	ug/Kg	1	12/12/19	JLI	SW8260C
sec-Butylbenzene	ND	5.6	0.56	ug/Kg	1	12/12/19	JLI	SW8260C
Styrene	ND	5.6	0.56	ug/Kg	1	12/12/19	JLI	SW8260C
tert-Butylbenzene	ND	5.6	0.56	ug/Kg	1	12/12/19	JLI	SW8260C
Tetrachloroethene	ND	5.6	1.1	ug/Kg	1	12/12/19	JLI	SW8260C
Tetrahydrofuran (THF)	ND	11	2.8	ug/Kg	1	12/12/19	JLI	SW8260C
Toluene	ND	5.6	0.56	ug/Kg	1	12/12/19	JLI	SW8260C
trans-1,2-Dichloroethene	ND	5.6	0.56	ug/Kg	1	12/12/19	JLI	SW8260C
trans-1,3-Dichloropropene	ND	5.6	0.56	ug/Kg	1	12/12/19	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	11	2.8	ug/Kg	1	12/12/19	JLI	SW8260C
Trichloroethene	ND	5.6	0.56	ug/Kg	1	12/12/19	JLI	SW8260C
Trichlorofluoromethane	ND	5.6	1.1	ug/Kg	1	12/12/19	JLI	SW8260C
Trichlorotrifluoroethane	ND	5.6	0.56	ug/Kg	1	12/12/19	JLI	SW8260C
Vinyl chloride	ND	5.6	0.56	ug/Kg	1	12/12/19	JLI	SW8260C
<u>QA/QC Surrogates</u>								
% 1,2-dichlorobenzene-d4	96			%	1	12/12/19	JLI	70 - 130 %
% Bromofluorobenzene	98			%	1	12/12/19	JLI	70 - 130 %
% Dibromofluoromethane	93			%	1	12/12/19	JLI	70 - 130 %
% Toluene-d8	95			%	1	12/12/19	JLI	70 - 130 %
<u>Volatiles</u>								
1,1,1,2-Tetrachloroethane	ND	22	1.1	ug/Kg	1	12/12/19	JLI	SW8260C
Acrolein	ND	5.6	1.1	ug/Kg	1	12/12/19	JLI	SW8260C
Acrylonitrile	ND	22	0.56	ug/Kg	1	12/12/19	JLI	SW8260C
Tert-butyl alcohol	ND	110	22	ug/Kg	1	12/12/19	JLI	SW8260C
<u>Semivolatiles</u>								
1,2,4,5-Tetrachlorobenzene	ND	280	140	ug/Kg	1	12/12/19	WB	SW8270D
1,2,4-Trichlorobenzene	ND	280	120	ug/Kg	1	12/12/19	WB	SW8270D
1,2-Dichlorobenzene	ND	280	110	ug/Kg	1	12/12/19	WB	SW8270D
1,2-Diphenylhydrazine	ND	280	130	ug/Kg	1	12/12/19	WB	SW8270D
1,3-Dichlorobenzene	ND	280	120	ug/Kg	1	12/12/19	WB	SW8270D
1,4-Dichlorobenzene	ND	280	120	ug/Kg	1	12/12/19	WB	SW8270D
2,4,5-Trichlorophenol	ND	280	220	ug/Kg	1	12/12/19	WB	SW8270D
2,4,6-Trichlorophenol	ND	200	130	ug/Kg	1	12/12/19	WB	SW8270D
2,4-Dichlorophenol	ND	200	140	ug/Kg	1	12/12/19	WB	SW8270D
2,4-Dimethylphenol	ND	280	99	ug/Kg	1	12/12/19	WB	SW8270D
2,4-Dinitrophenol	ND	280	280	ug/Kg	1	12/12/19	WB	SW8270D
2,4-Dinitrotoluene	ND	200	160	ug/Kg	1	12/12/19	WB	SW8270D
2,6-Dinitrotoluene	ND	200	130	ug/Kg	1	12/12/19	WB	SW8270D
2-Chloronaphthalene	ND	280	110	ug/Kg	1	12/12/19	WB	SW8270D
2-Chlorophenol	ND	280	110	ug/Kg	1	12/12/19	WB	SW8270D
2-Methylnaphthalene	ND	280	120	ug/Kg	1	12/12/19	WB	SW8270D
2-Methylphenol (o-cresol)	ND	280	190	ug/Kg	1	12/12/19	WB	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
2-Nitroaniline	ND	280	280	ug/Kg	1	12/12/19	WB	SW8270D
2-Nitrophenol	ND	280	250	ug/Kg	1	12/12/19	WB	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	280	160	ug/Kg	1	12/12/19	WB	SW8270D
3,3'-Dichlorobenzidine	ND	200	190	ug/Kg	1	12/12/19	WB	SW8270D
3-Nitroaniline	ND	400	800	ug/Kg	1	12/12/19	WB	SW8270D
4,6-Dinitro-2-methylphenol	ND	240	80	ug/Kg	1	12/12/19	WB	SW8270D
4-Bromophenyl phenyl ether	ND	280	120	ug/Kg	1	12/12/19	WB	SW8270D
4-Chloro-3-methylphenol	ND	280	140	ug/Kg	1	12/12/19	WB	SW8270D
4-Chloroaniline	ND	320	190	ug/Kg	1	12/12/19	WB	SW8270D
4-Chlorophenyl phenyl ether	ND	280	130	ug/Kg	1	12/12/19	WB	SW8270D
4-Nitroaniline	ND	400	130	ug/Kg	1	12/12/19	WB	SW8270D
4-Nitrophenol	ND	400	180	ug/Kg	1	12/12/19	WB	SW8270D
Acenaphthene	ND	280	120	ug/Kg	1	12/12/19	WB	SW8270D
Acenaphthylene	ND	280	110	ug/Kg	1	12/12/19	WB	SW8270D
Acetophenone	ND	280	120	ug/Kg	1	12/12/19	WB	SW8270D
Aniline	ND	320	320	ug/Kg	1	12/12/19	WB	SW8270D
Anthracene	ND	280	130	ug/Kg	1	12/12/19	WB	SW8270D
Benz(a)anthracene	ND	280	130	ug/Kg	1	12/12/19	WB	SW8270D
Benzidine	ND	400	230	ug/Kg	1	12/12/19	WB	SW8270D
Benzo(a)pyrene	ND	200	130	ug/Kg	1	12/12/19	WB	SW8270D
Benzo(b)fluoranthene	ND	280	140	ug/Kg	1	12/12/19	WB	SW8270D
Benzo(ghi)perylene	ND	280	130	ug/Kg	1	12/12/19	WB	SW8270D
Benzo(k)fluoranthene	ND	280	130	ug/Kg	1	12/12/19	WB	SW8270D
Benzoic acid	ND	2000	800	ug/Kg	1	12/12/19	WB	SW8270D
Benzyl butyl phthalate	ND	280	100	ug/Kg	1	12/12/19	WB	SW8270D
Bis(2-chloroethoxy)methane	ND	280	110	ug/Kg	1	12/12/19	WB	SW8270D
Bis(2-chloroethyl)ether	ND	200	110	ug/Kg	1	12/12/19	WB	SW8270D
Bis(2-chloroisopropyl)ether	ND	280	110	ug/Kg	1	12/12/19	WB	SW8270D
Bis(2-ethylhexyl)phthalate	ND	280	110	ug/Kg	1	12/12/19	WB	SW8270D
Carbazole	ND	200	160	ug/Kg	1	12/12/19	WB	SW8270D
Chrysene	ND	280	130	ug/Kg	1	12/12/19	WB	SW8270D
Dibenz(a,h)anthracene	ND	200	130	ug/Kg	1	12/12/19	WB	SW8270D
Dibenzofuran	ND	280	120	ug/Kg	1	12/12/19	WB	SW8270D
Diethyl phthalate	ND	280	130	ug/Kg	1	12/12/19	WB	SW8270D
Dimethylphthalate	ND	280	120	ug/Kg	1	12/12/19	WB	SW8270D
Di-n-butylphthalate	ND	280	110	ug/Kg	1	12/12/19	WB	SW8270D
Di-n-octylphthalate	ND	280	100	ug/Kg	1	12/12/19	WB	SW8270D
Fluoranthene	ND	280	130	ug/Kg	1	12/12/19	WB	SW8270D
Fluorene	ND	280	130	ug/Kg	1	12/12/19	WB	SW8270D
Hexachlorobenzene	ND	200	120	ug/Kg	1	12/12/19	WB	SW8270D
Hexachlorobutadiene	ND	280	140	ug/Kg	1	12/12/19	WB	SW8270D
Hexachlorocyclopentadiene	ND	280	120	ug/Kg	1	12/12/19	WB	SW8270D
Hexachloroethane	ND	200	120	ug/Kg	1	12/12/19	WB	SW8270D
Indeno(1,2,3-cd)pyrene	ND	280	130	ug/Kg	1	12/12/19	WB	SW8270D
Isophorone	ND	200	110	ug/Kg	1	12/12/19	WB	SW8270D
Naphthalene	ND	280	110	ug/Kg	1	12/12/19	WB	SW8270D
Nitrobenzene	ND	200	140	ug/Kg	1	12/12/19	WB	SW8270D
N-Nitrosodimethylamine	ND	280	110	ug/Kg	1	12/12/19	WB	SW8270D
N-Nitrosodi-n-propylamine	ND	200	130	ug/Kg	1	12/12/19	WB	SW8270D

1

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
N-Nitrosodiphenylamine	ND	280	150	ug/Kg	1	12/12/19	WB	SW8270D
Pentachloronitrobenzene	ND	280	150	ug/Kg	1	12/12/19	WB	SW8270D
Pentachlorophenol	ND	240	150	ug/Kg	1	12/12/19	WB	SW8270D
Phenanthrene	ND	280	110	ug/Kg	1	12/12/19	WB	SW8270D
Phenol	ND	280	130	ug/Kg	1	12/12/19	WB	SW8270D
Pyrene	ND	280	140	ug/Kg	1	12/12/19	WB	SW8270D
Pyridine	ND	280	98	ug/Kg	1	12/12/19	WB	SW8270D
<u>QA/QC Surrogates</u>								
% 2,4,6-Tribromophenol	60			%	1	12/12/19	WB	30 - 130 %
% 2-Fluorobiphenyl	65			%	1	12/12/19	WB	30 - 130 %
% 2-Fluorophenol	60			%	1	12/12/19	WB	30 - 130 %
% Nitrobenzene-d5	57			%	1	12/12/19	WB	30 - 130 %
% Phenol-d5	61			%	1	12/12/19	WB	30 - 130 %
% Terphenyl-d14	66			%	1	12/12/19	WB	30 - 130 %
<u>1,4-Dioxane</u>								
1,4-dioxane	ND	80	80	ug/Kg	1	12/12/19	WB	SW8270D (SIM)
<u>QA/QC Surrogates</u>								
% 2-Fluorobiphenyl	55			%	1	12/12/19	WB	30 - 130 %
% Nitrobenzene-d5	70			%	1	12/12/19	WB	30 - 130 %
% Terphenyl-d14	61			%	1	12/12/19	WB	30 - 130 %
Field Extraction	Completed					12/10/19		SW5035A

1

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low J=Estimated Below RL LOD=Limit of Detection MDL=Method Detection Limit1

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

Please be advised that the NY 375 soil criteria for chromium are based on hexavalent chromium and trivalent chromium.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

December 18, 2019

Reviewed and Released by: Greg Lawrence, Assistant Lab Director



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823



Analysis Report

December 18, 2019

FOR: Attn: Mr. Charles B. Sosik, P.G.
Environmental Business Consultants
1808 Middle Country Rd
Ridge NY 11961-2406

Sample Information

Matrix: SOIL
Location Code: EBC
Rush Request: 72 Hour
P.O.#:

Custody Information

Collected by: TB
Received by: CP
Analyzed by: see "By" below

Date	Time
12/10/19	9:46
12/11/19	16:00

Laboratory Data

SDG ID: GCE85356
Phoenix ID: CE85358

Project ID: 26-22 4TH ST QUEENS
Client ID: 19B5 (0-2)

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Silver	ND	0.33	0.33	mg/Kg	1	12/12/19	EK	SW6010D
Aluminum	9630	33	6.6	mg/Kg	10	12/12/19	EK	SW6010D
Arsenic	2.37	0.66	0.66	mg/Kg	1	12/12/19	EK	SW6010D
Barium	59.7	0.7	0.33	mg/Kg	1	12/12/19	EK	SW6010D
Beryllium	0.39	0.26	0.13	mg/Kg	1	12/12/19	EK	SW6010D
Calcium	12400	33	30	mg/Kg	10	12/12/19	EK	SW6010D
Cadmium	0.37	0.33	0.33	mg/Kg	1	12/12/19	EK	SW6010D
Cobalt	4.73	0.33	0.33	mg/Kg	1	12/12/19	EK	SW6010D
Chromium	21.7	0.33	0.33	mg/Kg	1	12/12/19	EK	SW6010D
Copper	25.8	0.7	0.33	mg/kg	1	12/12/19	EK	SW6010D
Iron	15900	33	33	mg/Kg	10	12/12/19	EK	SW6010D
Mercury	2.26	0.14	0.08	mg/Kg	10	12/12/19	RS	SW7471B
Potassium	1560	7	2.6	mg/Kg	1	12/12/19	EK	SW6010D
Magnesium	8310	33	33	mg/Kg	10	12/12/19	EK	SW6010D
Manganese	224	3.3	3.3	mg/Kg	10	12/12/19	EK	SW6010D
Sodium	210	7	2.8	mg/Kg	1	12/12/19	EK	SW6010D
Nickel	14.0	0.33	0.33	mg/Kg	1	12/12/19	EK	SW6010D
Lead	77.3	0.7	0.33	mg/Kg	1	12/12/19	EK	SW6010D
Antimony	ND	3.3	3.3	mg/Kg	1	12/12/19	EK	SW6010D
Selenium	ND	1.3	1.1	mg/Kg	1	12/12/19	EK	SW6010D
Thallium	ND	1.3	1.3	mg/Kg	1	12/12/19	EK	SW6010D
Vanadium	31.0	0.33	0.33	mg/Kg	1	12/12/19	EK	SW6010D
Zinc	44.2	0.7	0.33	mg/Kg	1	12/12/19	EK	SW6010D
Percent Solid	89			%		12/11/19	VT	SW846-%Solid
Extraction for SVOA SIM	Completed					12/11/19	BB/LA	SW3545A
Soil Extraction for PCB	Completed					12/11/19	MM/L	SW3545A
Soil Extraction for Pesticides	Completed					12/11/19	MM/L	SW3545A
Soil Extraction for SVOA	Completed					12/11/19	AT/B/LA	SW3545A

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Mercury Digestion	Completed					12/12/19	LS/LS	SW7471B
Total Metals Digest	Completed					12/11/19	JJ/AG/BF	SW3050B

Polychlorinated Biphenyls

PCB-1016	ND	73	73	ug/Kg	2	12/12/19	SC	SW8082A
PCB-1221	ND	73	73	ug/Kg	2	12/12/19	SC	SW8082A
PCB-1232	ND	73	73	ug/Kg	2	12/12/19	SC	SW8082A
PCB-1242	ND	73	73	ug/Kg	2	12/12/19	SC	SW8082A
PCB-1248	ND	73	73	ug/Kg	2	12/12/19	SC	SW8082A
PCB-1254	ND	73	73	ug/Kg	2	12/12/19	SC	SW8082A
PCB-1260	ND	73	73	ug/Kg	2	12/12/19	SC	SW8082A
PCB-1262	ND	73	73	ug/Kg	2	12/12/19	SC	SW8082A
PCB-1268	ND	73	73	ug/Kg	2	12/12/19	SC	SW8082A

QA/QC Surrogates

% DCBP	106			%	2	12/12/19	SC	30 - 150 %
% DCBP (Confirmation)	98			%	2	12/12/19	SC	30 - 150 %
% TCMX	105			%	2	12/12/19	SC	30 - 150 %
% TCMX (Confirmation)	88			%	2	12/12/19	SC	30 - 150 %

Pesticides - Soil

4,4' -DDD	ND	2.2	2.2	ug/Kg	2	12/12/19	CG	SW8081B
4,4' -DDE	ND	2.2	2.2	ug/Kg	2	12/12/19	CG	SW8081B
4,4' -DDT	ND	2.2	2.2	ug/Kg	2	12/12/19	CG	SW8081B
a-BHC	ND	7.3	7.3	ug/Kg	2	12/12/19	CG	SW8081B
a-Chlordane	ND	3.7	3.7	ug/Kg	2	12/12/19	CG	SW8081B
Aldrin	ND	3.7	3.7	ug/Kg	2	12/12/19	CG	SW8081B
b-BHC	ND	7.3	7.3	ug/Kg	2	12/12/19	CG	SW8081B
Chlordane	ND	37	37	ug/Kg	2	12/12/19	CG	SW8081B
d-BHC	ND	7.3	7.3	ug/Kg	2	12/12/19	CG	SW8081B
Dieldrin	ND	3.7	3.7	ug/Kg	2	12/12/19	CG	SW8081B
Endosulfan I	ND	7.3	7.3	ug/Kg	2	12/12/19	CG	SW8081B
Endosulfan II	ND	7.3	7.3	ug/Kg	2	12/12/19	CG	SW8081B
Endosulfan sulfate	ND	7.3	7.3	ug/Kg	2	12/12/19	CG	SW8081B
Endrin	ND	7.3	7.3	ug/Kg	2	12/12/19	CG	SW8081B
Endrin aldehyde	ND	7.3	7.3	ug/Kg	2	12/12/19	CG	SW8081B
Endrin ketone	ND	7.3	7.3	ug/Kg	2	12/12/19	CG	SW8081B
g-BHC	ND	1.5	1.5	ug/Kg	2	12/12/19	CG	SW8081B
g-Chlordane	ND	3.7	3.7	ug/Kg	2	12/12/19	CG	SW8081B
Heptachlor	ND	7.3	7.3	ug/Kg	2	12/12/19	CG	SW8081B
Heptachlor epoxide	ND	7.3	7.3	ug/Kg	2	12/12/19	CG	SW8081B
Methoxychlor	ND	37	37	ug/Kg	2	12/12/19	CG	SW8081B
Toxaphene	ND	150	150	ug/Kg	2	12/12/19	CG	SW8081B

QA/QC Surrogates

% DCBP	66			%	2	12/12/19	CG	30 - 150 %
% DCBP (Confirmation)	72			%	2	12/12/19	CG	30 - 150 %
% TCMX	58			%	2	12/12/19	CG	30 - 150 %
% TCMX (Confirmation)	60			%	2	12/12/19	CG	30 - 150 %

Volatiles

1,1,1,2-Tetrachloroethane	ND	5.8	1.2	ug/Kg	1	12/12/19	JLI	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
1,1,1-Trichloroethane	ND	5.8	0.58	ug/Kg	1	12/12/19	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	5.8	1.2	ug/Kg	1	12/12/19	JLI	SW8260C
1,1,2-Trichloroethane	ND	5.8	1.2	ug/Kg	1	12/12/19	JLI	SW8260C
1,1-Dichloroethane	ND	5.8	1.2	ug/Kg	1	12/12/19	JLI	SW8260C
1,1-Dichloroethene	ND	5.8	0.58	ug/Kg	1	12/12/19	JLI	SW8260C
1,1-Dichloropropene	ND	5.8	0.58	ug/Kg	1	12/12/19	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	5.8	1.2	ug/Kg	1	12/12/19	JLI	SW8260C
1,2,3-Trichloropropane	ND	5.8	0.58	ug/Kg	1	12/12/19	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	5.8	1.2	ug/Kg	1	12/12/19	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	5.8	0.58	ug/Kg	1	12/12/19	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	5.8	1.2	ug/Kg	1	12/12/19	JLI	SW8260C
1,2-Dibromoethane	ND	5.8	0.58	ug/Kg	1	12/12/19	JLI	SW8260C
1,2-Dichlorobenzene	ND	5.8	0.58	ug/Kg	1	12/12/19	JLI	SW8260C
1,2-Dichloroethane	ND	5.8	0.58	ug/Kg	1	12/12/19	JLI	SW8260C
1,2-Dichloropropane	ND	5.8	1.2	ug/Kg	1	12/12/19	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	5.8	0.58	ug/Kg	1	12/12/19	JLI	SW8260C
1,3-Dichlorobenzene	ND	5.8	0.58	ug/Kg	1	12/12/19	JLI	SW8260C
1,3-Dichloropropane	ND	5.8	1.2	ug/Kg	1	12/12/19	JLI	SW8260C
1,4-Dichlorobenzene	ND	5.8	0.58	ug/Kg	1	12/12/19	JLI	SW8260C
2,2-Dichloropropane	ND	5.8	0.58	ug/Kg	1	12/12/19	JLI	SW8260C
2-Chlorotoluene	ND	5.8	1.2	ug/Kg	1	12/12/19	JLI	SW8260C
2-Hexanone	ND	29	5.8	ug/Kg	1	12/12/19	JLI	SW8260C
2-Isopropyltoluene	ND	5.8	0.58	ug/Kg	1	12/12/19	JLI	SW8260C
4-Chlorotoluene	ND	5.8	0.58	ug/Kg	1	12/12/19	JLI	SW8260C
4-Methyl-2-pentanone	ND	29	5.8	ug/Kg	1	12/12/19	JLI	SW8260C
Acetone	12	JS 29	5.8	ug/Kg	1	12/12/19	JLI	SW8260C
Acrylonitrile	ND	12	1.2	ug/Kg	1	12/12/19	JLI	SW8260C
Benzene	ND	5.8	0.58	ug/Kg	1	12/12/19	JLI	SW8260C
Bromobenzene	ND	5.8	0.58	ug/Kg	1	12/12/19	JLI	SW8260C
Bromochloromethane	ND	5.8	0.58	ug/Kg	1	12/12/19	JLI	SW8260C
Bromodichloromethane	ND	5.8	1.2	ug/Kg	1	12/12/19	JLI	SW8260C
Bromoform	ND	5.8	1.2	ug/Kg	1	12/12/19	JLI	SW8260C
Bromomethane	ND	5.8	2.3	ug/Kg	1	12/12/19	JLI	SW8260C
Carbon Disulfide	ND	5.8	1.2	ug/Kg	1	12/12/19	JLI	SW8260C
Carbon tetrachloride	ND	5.8	1.2	ug/Kg	1	12/12/19	JLI	SW8260C
Chlorobenzene	ND	5.8	0.58	ug/Kg	1	12/12/19	JLI	SW8260C
Chloroethane	ND	5.8	0.58	ug/Kg	1	12/12/19	JLI	SW8260C
Chloroform	ND	5.8	0.58	ug/Kg	1	12/12/19	JLI	SW8260C
Chloromethane	ND	5.8	1.2	ug/Kg	1	12/12/19	JLI	SW8260C
cis-1,2-Dichloroethene	ND	5.8	0.58	ug/Kg	1	12/12/19	JLI	SW8260C
cis-1,3-Dichloropropene	ND	5.8	0.58	ug/Kg	1	12/12/19	JLI	SW8260C
Dibromochloromethane	ND	5.8	1.2	ug/Kg	1	12/12/19	JLI	SW8260C
Dibromomethane	ND	5.8	1.2	ug/Kg	1	12/12/19	JLI	SW8260C
Dichlorodifluoromethane	ND	5.8	0.58	ug/Kg	1	12/12/19	JLI	SW8260C
Ethylbenzene	ND	5.8	0.58	ug/Kg	1	12/12/19	JLI	SW8260C
Hexachlorobutadiene	ND	5.8	0.58	ug/Kg	1	12/12/19	JLI	SW8260C
Isopropylbenzene	ND	5.8	0.58	ug/Kg	1	12/12/19	JLI	SW8260C
m&p-Xylene	ND	5.8	1.2	ug/Kg	1	12/12/19	JLI	SW8260C
Methyl Ethyl Ketone	ND	35	5.8	ug/Kg	1	12/12/19	JLI	SW8260C

1

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Methyl t-butyl ether (MTBE)	ND	12	1.2	ug/Kg	1	12/12/19	JLI	SW8260C
Methylene chloride	ND	5.8	5.8	ug/Kg	1	12/12/19	JLI	SW8260C
Naphthalene	ND	5.8	1.2	ug/Kg	1	12/12/19	JLI	SW8260C
n-Butylbenzene	ND	5.8	0.58	ug/Kg	1	12/12/19	JLI	SW8260C
n-Propylbenzene	ND	5.8	1.2	ug/Kg	1	12/12/19	JLI	SW8260C
o-Xylene	ND	5.8	1.2	ug/Kg	1	12/12/19	JLI	SW8260C
p-Isopropyltoluene	ND	5.8	0.58	ug/Kg	1	12/12/19	JLI	SW8260C
sec-Butylbenzene	ND	5.8	0.58	ug/Kg	1	12/12/19	JLI	SW8260C
Styrene	ND	5.8	0.58	ug/Kg	1	12/12/19	JLI	SW8260C
tert-Butylbenzene	ND	5.8	0.58	ug/Kg	1	12/12/19	JLI	SW8260C
Tetrachloroethene	760	310	62	ug/Kg	50	12/12/19	JLI	SW8260C
Tetrahydrofuran (THF)	ND	12	2.9	ug/Kg	1	12/12/19	JLI	SW8260C
Toluene	ND	5.8	0.58	ug/Kg	1	12/12/19	JLI	SW8260C
trans-1,2-Dichloroethene	ND	5.8	0.58	ug/Kg	1	12/12/19	JLI	SW8260C
trans-1,3-Dichloropropene	ND	5.8	0.58	ug/Kg	1	12/12/19	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	12	2.9	ug/Kg	1	12/12/19	JLI	SW8260C
Trichloroethene	ND	5.8	0.58	ug/Kg	1	12/12/19	JLI	SW8260C
Trichlorofluoromethane	ND	5.8	1.2	ug/Kg	1	12/12/19	JLI	SW8260C
Trichlorotrifluoroethane	ND	5.8	0.58	ug/Kg	1	12/12/19	JLI	SW8260C
Vinyl chloride	ND	5.8	0.58	ug/Kg	1	12/12/19	JLI	SW8260C
<u>QA/QC Surrogates</u>								
% 1,2-dichlorobenzene-d4	98			%	1	12/12/19	JLI	70 - 130 %
% Bromofluorobenzene	94			%	1	12/12/19	JLI	70 - 130 %
% Dibromofluoromethane	93			%	1	12/12/19	JLI	70 - 130 %
% Toluene-d8	94			%	1	12/12/19	JLI	70 - 130 %
% 1,2-dichlorobenzene-d4 (50x)	96			%	50	12/12/19	JLI	70 - 130 %
% Bromofluorobenzene (50x)	97			%	50	12/12/19	JLI	70 - 130 %
% Dibromofluoromethane (50x)	90			%	50	12/12/19	JLI	70 - 130 %
% Toluene-d8 (50x)	93			%	50	12/12/19	JLI	70 - 130 %
<u>Volatiles</u>								
1,1,1,2-Tetrachloroethane	ND	23	1.2	ug/Kg	1	12/12/19	JLI	SW8260C
Acrolein	ND	5.8	1.2	ug/Kg	1	12/12/19	JLI	SW8260C
Acrylonitrile	ND	23	0.58	ug/Kg	1	12/12/19	JLI	SW8260C
Tert-butyl alcohol	ND	120	23	ug/Kg	1	12/12/19	JLI	SW8260C
<u>Semivolatiles</u>								
1,2,4,5-Tetrachlorobenzene	ND	260	130	ug/Kg	1	12/12/19	WB	SW8270D
1,2,4-Trichlorobenzene	ND	260	110	ug/Kg	1	12/12/19	WB	SW8270D
1,2-Dichlorobenzene	ND	260	100	ug/Kg	1	12/12/19	WB	SW8270D
1,2-Diphenylhydrazine	ND	260	120	ug/Kg	1	12/12/19	WB	SW8270D
1,3-Dichlorobenzene	ND	260	110	ug/Kg	1	12/12/19	WB	SW8270D
1,4-Dichlorobenzene	ND	260	110	ug/Kg	1	12/12/19	WB	SW8270D
2,4,5-Trichlorophenol	ND	260	200	ug/Kg	1	12/12/19	WB	SW8270D
2,4,6-Trichlorophenol	ND	180	120	ug/Kg	1	12/12/19	WB	SW8270D
2,4-Dichlorophenol	ND	180	130	ug/Kg	1	12/12/19	WB	SW8270D
2,4-Dimethylphenol	ND	260	91	ug/Kg	1	12/12/19	WB	SW8270D
2,4-Dinitrophenol	ND	260	260	ug/Kg	1	12/12/19	WB	SW8270D
2,4-Dinitrotoluene	ND	180	140	ug/Kg	1	12/12/19	WB	SW8270D
2,6-Dinitrotoluene	ND	180	120	ug/Kg	1	12/12/19	WB	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
2-Chloronaphthalene	ND	260	100	ug/Kg	1	12/12/19	WB	SW8270D
2-Chlorophenol	ND	260	100	ug/Kg	1	12/12/19	WB	SW8270D
2-Methylnaphthalene	ND	260	110	ug/Kg	1	12/12/19	WB	SW8270D
2-Methylphenol (o-cresol)	ND	260	170	ug/Kg	1	12/12/19	WB	SW8270D
2-Nitroaniline	ND	260	260	ug/Kg	1	12/12/19	WB	SW8270D
2-Nitrophenol	ND	260	230	ug/Kg	1	12/12/19	WB	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	260	140	ug/Kg	1	12/12/19	WB	SW8270D
3,3'-Dichlorobenzidine	ND	180	170	ug/Kg	1	12/12/19	WB	SW8270D
3-Nitroaniline	ND	370	730	ug/Kg	1	12/12/19	WB	SW8270D
4,6-Dinitro-2-methylphenol	ND	220	73	ug/Kg	1	12/12/19	WB	SW8270D
4-Bromophenyl phenyl ether	ND	260	110	ug/Kg	1	12/12/19	WB	SW8270D
4-Chloro-3-methylphenol	ND	260	130	ug/Kg	1	12/12/19	WB	SW8270D
4-Chloroaniline	ND	290	170	ug/Kg	1	12/12/19	WB	SW8270D
4-Chlorophenyl phenyl ether	ND	260	120	ug/Kg	1	12/12/19	WB	SW8270D
4-Nitroaniline	ND	370	120	ug/Kg	1	12/12/19	WB	SW8270D
4-Nitrophenol	ND	370	170	ug/Kg	1	12/12/19	WB	SW8270D
Acenaphthene	ND	260	110	ug/Kg	1	12/12/19	WB	SW8270D
Acenaphthylene	ND	260	100	ug/Kg	1	12/12/19	WB	SW8270D
Acetophenone	ND	260	110	ug/Kg	1	12/12/19	WB	SW8270D
Aniline	ND	290	290	ug/Kg	1	12/12/19	WB	SW8270D
Anthracene	ND	260	120	ug/Kg	1	12/12/19	WB	SW8270D
Benz(a)anthracene	ND	260	120	ug/Kg	1	12/12/19	WB	SW8270D
Benzidine	ND	370	220	ug/Kg	1	12/12/19	WB	SW8270D
Benzo(a)pyrene	ND	180	120	ug/Kg	1	12/12/19	WB	SW8270D
Benzo(b)fluoranthene	ND	260	130	ug/Kg	1	12/12/19	WB	SW8270D
Benzo(ghi)perylene	ND	260	120	ug/Kg	1	12/12/19	WB	SW8270D
Benzo(k)fluoranthene	ND	260	120	ug/Kg	1	12/12/19	WB	SW8270D
Benzoic acid	ND	1800	730	ug/Kg	1	12/12/19	WB	SW8270D
Benzyl butyl phthalate	ND	260	95	ug/Kg	1	12/12/19	WB	SW8270D
Bis(2-chloroethoxy)methane	ND	260	100	ug/Kg	1	12/12/19	WB	SW8270D
Bis(2-chloroethyl)ether	ND	180	99	ug/Kg	1	12/12/19	WB	SW8270D
Bis(2-chloroisopropyl)ether	ND	260	100	ug/Kg	1	12/12/19	WB	SW8270D
Bis(2-ethylhexyl)phthalate	ND	260	110	ug/Kg	1	12/12/19	WB	SW8270D
Carbazole	ND	180	150	ug/Kg	1	12/12/19	WB	SW8270D
Chrysene	ND	260	120	ug/Kg	1	12/12/19	WB	SW8270D
Dibenz(a,h)anthracene	ND	180	120	ug/Kg	1	12/12/19	WB	SW8270D
Dibenzofuran	ND	260	110	ug/Kg	1	12/12/19	WB	SW8270D
Diethyl phthalate	ND	260	120	ug/Kg	1	12/12/19	WB	SW8270D
Dimethylphthalate	ND	260	110	ug/Kg	1	12/12/19	WB	SW8270D
Di-n-butylphthalate	ND	260	97	ug/Kg	1	12/12/19	WB	SW8270D
Di-n-octylphthalate	ND	260	95	ug/Kg	1	12/12/19	WB	SW8270D
Fluoranthene	ND	260	120	ug/Kg	1	12/12/19	WB	SW8270D
Fluorene	ND	260	120	ug/Kg	1	12/12/19	WB	SW8270D
Hexachlorobenzene	ND	180	110	ug/Kg	1	12/12/19	WB	SW8270D
Hexachlorobutadiene	ND	260	130	ug/Kg	1	12/12/19	WB	SW8270D
Hexachlorocyclopentadiene	ND	260	110	ug/Kg	1	12/12/19	WB	SW8270D
Hexachloroethane	ND	180	110	ug/Kg	1	12/12/19	WB	SW8270D
Indeno(1,2,3-cd)pyrene	ND	260	120	ug/Kg	1	12/12/19	WB	SW8270D
Isophorone	ND	180	100	ug/Kg	1	12/12/19	WB	SW8270D

1

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Naphthalene	ND	260	110	ug/Kg	1	12/12/19	WB	SW8270D
Nitrobenzene	ND	180	130	ug/Kg	1	12/12/19	WB	SW8270D
N-Nitrosodimethylamine	ND	260	100	ug/Kg	1	12/12/19	WB	SW8270D
N-Nitrosodi-n-propylamine	ND	180	120	ug/Kg	1	12/12/19	WB	SW8270D
N-Nitrosodiphenylamine	ND	260	140	ug/Kg	1	12/12/19	WB	SW8270D
Pentachloronitrobenzene	ND	260	140	ug/Kg	1	12/12/19	WB	SW8270D
Pentachlorophenol	ND	220	140	ug/Kg	1	12/12/19	WB	SW8270D
Phenanthrene	ND	260	100	ug/Kg	1	12/12/19	WB	SW8270D
Phenol	ND	260	120	ug/Kg	1	12/12/19	WB	SW8270D
Pyrene	ND	260	130	ug/Kg	1	12/12/19	WB	SW8270D
Pyridine	ND	260	90	ug/Kg	1	12/12/19	WB	SW8270D
<u>QA/QC Surrogates</u>								
% 2,4,6-Tribromophenol	54			%	1	12/12/19	WB	30 - 130 %
% 2-Fluorobiphenyl	60			%	1	12/12/19	WB	30 - 130 %
% 2-Fluorophenol	52			%	1	12/12/19	WB	30 - 130 %
% Nitrobenzene-d5	49			%	1	12/12/19	WB	30 - 130 %
% Phenol-d5	56			%	1	12/12/19	WB	30 - 130 %
% Terphenyl-d14	60			%	1	12/12/19	WB	30 - 130 %
<u>1,4-Dioxane</u>								
1,4-dioxane	ND	74	74	ug/Kg	1	12/12/19	WB	SW8270D (SIM)
<u>QA/QC Surrogates</u>								
% 2-Fluorobiphenyl	45			%	1	12/12/19	WB	30 - 130 %
% Nitrobenzene-d5	54			%	1	12/12/19	WB	30 - 130 %
% Terphenyl-d14	55			%	1	12/12/19	WB	30 - 130 %
Field Extraction	Completed					12/10/19		SW5035A

1

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low J=Estimated Below RL LOD=Limit of Detection MDL=Method Detection Limit1

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

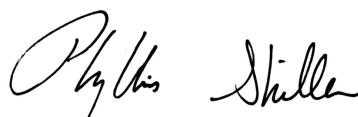
Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

Please be advised that the NY 375 soil criteria for chromium are based on hexavalent chromium and trivalent chromium.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

S - Laboratory solvent, contamination is possible.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

December 18, 2019

Reviewed and Released by: Greg Lawrence, Assistant Lab Director



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823



Analysis Report

December 18, 2019

FOR: Attn: Mr. Charles B. Sosik, P.G.
Environmental Business Consultants
1808 Middle Country Rd
Ridge NY 11961-2406

Sample Information

Matrix: SOIL
Location Code: EBC
Rush Request: 72 Hour
P.O.#:

Custody Information

Collected by: TB
Received by: CP
Analyzed by: see "By" below

Date

12/10/19
12/11/19

Time

9:54
16:00

Laboratory Data

SDG ID: GCE85356
Phoenix ID: CE85359

Project ID: 26-22 4TH ST QUEENS
Client ID: 19B5 (8-10)

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Silver	ND	0.39	0.39	mg/Kg	1	12/12/19	EK	SW6010D
Aluminum	6600	39	7.7	mg/Kg	10	12/12/19	EK	SW6010D
Arsenic	ND	0.77	0.77	mg/Kg	1	12/12/19	EK	SW6010D
Barium	40.4	0.8	0.39	mg/Kg	1	12/12/19	EK	SW6010D
Beryllium	0.20	0.31	0.15	mg/Kg	1	12/12/19	EK	SW6010D
Calcium	1290	39	36	mg/Kg	10	12/12/19	EK	SW6010D
Cadmium	ND	0.39	0.39	mg/Kg	1	12/12/19	EK	SW6010D
Cobalt	2.97	0.39	0.39	mg/Kg	1	12/12/19	EK	SW6010D
Chromium	12.3	0.39	0.39	mg/Kg	1	12/12/19	EK	SW6010D
Copper	16.4	0.8	0.39	mg/kg	1	12/12/19	EK	SW6010D
Iron	9300	39	39	mg/Kg	10	12/12/19	EK	SW6010D
Mercury	ND	0.03	0.02	mg/Kg	2	12/12/19	RS	SW7471B
Potassium	1630	8	3.0	mg/Kg	1	12/12/19	EK	SW6010D
Magnesium	2920	3.9	3.9	mg/Kg	1	12/12/19	EK	SW6010D
Manganese	128	0.39	0.39	mg/Kg	1	12/12/19	EK	SW6010D
Sodium	187	8	3.3	mg/Kg	1	12/12/19	EK	SW6010D
Nickel	9.63	0.39	0.39	mg/Kg	1	12/12/19	EK	SW6010D
Lead	2.8	0.8	0.39	mg/Kg	1	12/12/19	EK	SW6010D
Antimony	ND	3.9	3.9	mg/Kg	1	12/12/19	EK	SW6010D
Selenium	ND	1.5	1.3	mg/Kg	1	12/12/19	EK	SW6010D
Thallium	ND	1.5	1.5	mg/Kg	1	12/12/19	EK	SW6010D
Vanadium	15.7	0.39	0.39	mg/Kg	1	12/12/19	EK	SW6010D
Zinc	25.9	0.8	0.39	mg/Kg	1	12/12/19	EK	SW6010D
Percent Solid	85			%		12/11/19	VT	SW846-%Solid
Extraction for SVOA SIM	Completed					12/11/19	BB/LA	SW3545A
Soil Extraction for PCB	Completed					12/11/19	MM/L	SW3545A
Soil Extraction for Pesticides	Completed					12/11/19	MM/L	SW3545A
Soil Extraction for SVOA	Completed					12/11/19	AT/B/LA	SW3545A

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Mercury Digestion	Completed					12/12/19	LS/LS	SW7471B
Total Metals Digest	Completed					12/11/19	JJ/AG/BF	SW3050B

Polychlorinated Biphenyls

PCB-1016	ND	77	77	ug/Kg	2	12/12/19	SC	SW8082A
PCB-1221	ND	77	77	ug/Kg	2	12/12/19	SC	SW8082A
PCB-1232	ND	77	77	ug/Kg	2	12/12/19	SC	SW8082A
PCB-1242	ND	77	77	ug/Kg	2	12/12/19	SC	SW8082A
PCB-1248	ND	77	77	ug/Kg	2	12/12/19	SC	SW8082A
PCB-1254	ND	77	77	ug/Kg	2	12/12/19	SC	SW8082A
PCB-1260	ND	77	77	ug/Kg	2	12/12/19	SC	SW8082A
PCB-1262	ND	77	77	ug/Kg	2	12/12/19	SC	SW8082A
PCB-1268	ND	77	77	ug/Kg	2	12/12/19	SC	SW8082A

QA/QC Surrogates

% DCBP	96			%	2	12/12/19	SC	30 - 150 %
% DCBP (Confirmation)	91			%	2	12/12/19	SC	30 - 150 %
% TCMX	96			%	2	12/12/19	SC	30 - 150 %
% TCMX (Confirmation)	80			%	2	12/12/19	SC	30 - 150 %

Pesticides - Soil

4,4' -DDD	ND	2.3	2.3	ug/Kg	2	12/14/19	CG	SW8081B
4,4' -DDE	ND	2.3	2.3	ug/Kg	2	12/14/19	CG	SW8081B
4,4' -DDT	ND	2.3	2.3	ug/Kg	2	12/14/19	CG	SW8081B
a-BHC	ND	7.7	7.7	ug/Kg	2	12/14/19	CG	SW8081B
a-Chlordane	ND	3.9	3.9	ug/Kg	2	12/14/19	CG	SW8081B
Aldrin	ND	3.9	3.9	ug/Kg	2	12/14/19	CG	SW8081B
b-BHC	ND	7.7	7.7	ug/Kg	2	12/14/19	CG	SW8081B
Chlordane	ND	39	39	ug/Kg	2	12/14/19	CG	SW8081B
d-BHC	ND	7.7	7.7	ug/Kg	2	12/14/19	CG	SW8081B
Dieldrin	ND	3.9	3.9	ug/Kg	2	12/14/19	CG	SW8081B
Endosulfan I	ND	7.7	7.7	ug/Kg	2	12/14/19	CG	SW8081B
Endosulfan II	ND	7.7	7.7	ug/Kg	2	12/14/19	CG	SW8081B
Endosulfan sulfate	ND	7.7	7.7	ug/Kg	2	12/14/19	CG	SW8081B
Endrin	ND	7.7	7.7	ug/Kg	2	12/14/19	CG	SW8081B
Endrin aldehyde	ND	7.7	7.7	ug/Kg	2	12/14/19	CG	SW8081B
Endrin ketone	ND	7.7	7.7	ug/Kg	2	12/14/19	CG	SW8081B
g-BHC	ND	1.5	1.5	ug/Kg	2	12/14/19	CG	SW8081B
g-Chlordane	ND	3.9	3.9	ug/Kg	2	12/14/19	CG	SW8081B
Heptachlor	ND	7.7	7.7	ug/Kg	2	12/14/19	CG	SW8081B
Heptachlor epoxide	ND	7.7	7.7	ug/Kg	2	12/14/19	CG	SW8081B
Methoxychlor	ND	39	39	ug/Kg	2	12/14/19	CG	SW8081B
Toxaphene	ND	150	150	ug/Kg	2	12/14/19	CG	SW8081B

QA/QC Surrogates

% DCBP	58			%	2	12/14/19	CG	30 - 150 %
% DCBP (Confirmation)	74			%	2	12/14/19	CG	30 - 150 %
% TCMX	64			%	2	12/14/19	CG	30 - 150 %
% TCMX (Confirmation)	62			%	2	12/14/19	CG	30 - 150 %

Volatiles

1,1,1,2-Tetrachloroethane	ND	7.1	1.4	ug/Kg	1	12/12/19	JLI	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
1,1,1-Trichloroethane	ND	7.1	0.71	ug/Kg	1	12/12/19	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	7.1	1.4	ug/Kg	1	12/12/19	JLI	SW8260C
1,1,2-Trichloroethane	ND	7.1	1.4	ug/Kg	1	12/12/19	JLI	SW8260C
1,1-Dichloroethane	ND	7.1	1.4	ug/Kg	1	12/12/19	JLI	SW8260C
1,1-Dichloroethene	ND	7.1	0.71	ug/Kg	1	12/12/19	JLI	SW8260C
1,1-Dichloropropene	ND	7.1	0.71	ug/Kg	1	12/12/19	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	7.1	1.4	ug/Kg	1	12/12/19	JLI	SW8260C
1,2,3-Trichloropropane	ND	7.1	0.71	ug/Kg	1	12/12/19	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	7.1	1.4	ug/Kg	1	12/12/19	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	7.1	0.71	ug/Kg	1	12/12/19	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	7.1	1.4	ug/Kg	1	12/12/19	JLI	SW8260C
1,2-Dibromoethane	ND	7.1	0.71	ug/Kg	1	12/12/19	JLI	SW8260C
1,2-Dichlorobenzene	ND	7.1	0.71	ug/Kg	1	12/12/19	JLI	SW8260C
1,2-Dichloroethane	ND	7.1	0.71	ug/Kg	1	12/12/19	JLI	SW8260C
1,2-Dichloropropane	ND	7.1	1.4	ug/Kg	1	12/12/19	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	7.1	0.71	ug/Kg	1	12/12/19	JLI	SW8260C
1,3-Dichlorobenzene	ND	7.1	0.71	ug/Kg	1	12/12/19	JLI	SW8260C
1,3-Dichloropropane	ND	7.1	1.4	ug/Kg	1	12/12/19	JLI	SW8260C
1,4-Dichlorobenzene	ND	7.1	0.71	ug/Kg	1	12/12/19	JLI	SW8260C
2,2-Dichloropropane	ND	7.1	0.71	ug/Kg	1	12/12/19	JLI	SW8260C
2-Chlorotoluene	ND	7.1	1.4	ug/Kg	1	12/12/19	JLI	SW8260C
2-Hexanone	ND	36	7.1	ug/Kg	1	12/12/19	JLI	SW8260C
2-Isopropyltoluene	ND	7.1	0.71	ug/Kg	1	12/12/19	JLI	SW8260C
4-Chlorotoluene	ND	7.1	0.71	ug/Kg	1	12/12/19	JLI	SW8260C
4-Methyl-2-pentanone	ND	36	7.1	ug/Kg	1	12/12/19	JLI	SW8260C
Acetone	ND	36	7.1	ug/Kg	1	12/12/19	JLI	SW8260C
Acrylonitrile	ND	14	1.4	ug/Kg	1	12/12/19	JLI	SW8260C
Benzene	ND	7.1	0.71	ug/Kg	1	12/12/19	JLI	SW8260C
Bromobenzene	ND	7.1	0.71	ug/Kg	1	12/12/19	JLI	SW8260C
Bromochloromethane	ND	7.1	0.71	ug/Kg	1	12/12/19	JLI	SW8260C
Bromodichloromethane	ND	7.1	1.4	ug/Kg	1	12/12/19	JLI	SW8260C
Bromoform	ND	7.1	1.4	ug/Kg	1	12/12/19	JLI	SW8260C
Bromomethane	ND	7.1	2.8	ug/Kg	1	12/12/19	JLI	SW8260C
Carbon Disulfide	ND	7.1	1.4	ug/Kg	1	12/12/19	JLI	SW8260C
Carbon tetrachloride	ND	7.1	1.4	ug/Kg	1	12/12/19	JLI	SW8260C
Chlorobenzene	ND	7.1	0.71	ug/Kg	1	12/12/19	JLI	SW8260C
Chloroethane	ND	7.1	0.71	ug/Kg	1	12/12/19	JLI	SW8260C
Chloroform	ND	7.1	0.71	ug/Kg	1	12/12/19	JLI	SW8260C
Chloromethane	ND	7.1	1.4	ug/Kg	1	12/12/19	JLI	SW8260C
cis-1,2-Dichloroethene	ND	7.1	0.71	ug/Kg	1	12/12/19	JLI	SW8260C
cis-1,3-Dichloropropene	ND	7.1	0.71	ug/Kg	1	12/12/19	JLI	SW8260C
Dibromochloromethane	ND	7.1	1.4	ug/Kg	1	12/12/19	JLI	SW8260C
Dibromomethane	ND	7.1	1.4	ug/Kg	1	12/12/19	JLI	SW8260C
Dichlorodifluoromethane	ND	7.1	0.71	ug/Kg	1	12/12/19	JLI	SW8260C
Ethylbenzene	ND	7.1	0.71	ug/Kg	1	12/12/19	JLI	SW8260C
Hexachlorobutadiene	ND	7.1	0.71	ug/Kg	1	12/12/19	JLI	SW8260C
Isopropylbenzene	ND	7.1	0.71	ug/Kg	1	12/12/19	JLI	SW8260C
m&p-Xylene	ND	7.1	1.4	ug/Kg	1	12/12/19	JLI	SW8260C
Methyl Ethyl Ketone	ND	43	7.1	ug/Kg	1	12/12/19	JLI	SW8260C

1

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Methyl t-butyl ether (MTBE)	ND	14	1.4	ug/Kg	1	12/12/19	JLI	SW8260C
Methylene chloride	ND	7.1	7.1	ug/Kg	1	12/12/19	JLI	SW8260C
Naphthalene	ND	7.1	1.4	ug/Kg	1	12/12/19	JLI	SW8260C
n-Butylbenzene	ND	7.1	0.71	ug/Kg	1	12/12/19	JLI	SW8260C
n-Propylbenzene	ND	7.1	1.4	ug/Kg	1	12/12/19	JLI	SW8260C
o-Xylene	ND	7.1	1.4	ug/Kg	1	12/12/19	JLI	SW8260C
p-Isopropyltoluene	ND	7.1	0.71	ug/Kg	1	12/12/19	JLI	SW8260C
sec-Butylbenzene	ND	7.1	0.71	ug/Kg	1	12/12/19	JLI	SW8260C
Styrene	ND	7.1	0.71	ug/Kg	1	12/12/19	JLI	SW8260C
tert-Butylbenzene	ND	7.1	0.71	ug/Kg	1	12/12/19	JLI	SW8260C
Tetrachloroethene	ND	7.1	1.4	ug/Kg	1	12/12/19	JLI	SW8260C
Tetrahydrofuran (THF)	ND	14	3.6	ug/Kg	1	12/12/19	JLI	SW8260C
Toluene	ND	7.1	0.71	ug/Kg	1	12/12/19	JLI	SW8260C
trans-1,2-Dichloroethene	ND	7.1	0.71	ug/Kg	1	12/12/19	JLI	SW8260C
trans-1,3-Dichloropropene	ND	7.1	0.71	ug/Kg	1	12/12/19	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	14	3.6	ug/Kg	1	12/12/19	JLI	SW8260C
Trichloroethene	ND	7.1	0.71	ug/Kg	1	12/12/19	JLI	SW8260C
Trichlorofluoromethane	ND	7.1	1.4	ug/Kg	1	12/12/19	JLI	SW8260C
Trichlorotrifluoroethane	ND	7.1	0.71	ug/Kg	1	12/12/19	JLI	SW8260C
Vinyl chloride	ND	7.1	0.71	ug/Kg	1	12/12/19	JLI	SW8260C
<u>QA/QC Surrogates</u>								
% 1,2-dichlorobenzene-d4	94			%	1	12/12/19	JLI	70 - 130 %
% Bromofluorobenzene	97			%	1	12/12/19	JLI	70 - 130 %
% Dibromofluoromethane	90			%	1	12/12/19	JLI	70 - 130 %
% Toluene-d8	94			%	1	12/12/19	JLI	70 - 130 %
<u>Volatiles</u>								
1,1,1,2-Tetrachloroethane	ND	28	1.4	ug/Kg	1	12/12/19	JLI	SW8260C
Acrolein	ND	7.1	1.4	ug/Kg	1	12/12/19	JLI	SW8260C
Acrylonitrile	ND	28	0.71	ug/Kg	1	12/12/19	JLI	SW8260C
Tert-butyl alcohol	ND	140	28	ug/Kg	1	12/12/19	JLI	SW8260C
<u>Semivolatiles</u>								
1,2,4,5-Tetrachlorobenzene	ND	270	130	ug/Kg	1	12/12/19	WB	SW8270D
1,2,4-Trichlorobenzene	ND	270	120	ug/Kg	1	12/12/19	WB	SW8270D
1,2-Dichlorobenzene	ND	270	110	ug/Kg	1	12/12/19	WB	SW8270D
1,2-Diphenylhydrazine	ND	270	120	ug/Kg	1	12/12/19	WB	SW8270D
1,3-Dichlorobenzene	ND	270	110	ug/Kg	1	12/12/19	WB	SW8270D
1,4-Dichlorobenzene	ND	270	110	ug/Kg	1	12/12/19	WB	SW8270D
2,4,5-Trichlorophenol	ND	270	210	ug/Kg	1	12/12/19	WB	SW8270D
2,4,6-Trichlorophenol	ND	190	120	ug/Kg	1	12/12/19	WB	SW8270D
2,4-Dichlorophenol	ND	190	130	ug/Kg	1	12/12/19	WB	SW8270D
2,4-Dimethylphenol	ND	270	95	ug/Kg	1	12/12/19	WB	SW8270D
2,4-Dinitrophenol	ND	270	270	ug/Kg	1	12/12/19	WB	SW8270D
2,4-Dinitrotoluene	ND	190	150	ug/Kg	1	12/12/19	WB	SW8270D
2,6-Dinitrotoluene	ND	190	120	ug/Kg	1	12/12/19	WB	SW8270D
2-Chloronaphthalene	ND	270	110	ug/Kg	1	12/12/19	WB	SW8270D
2-Chlorophenol	ND	270	110	ug/Kg	1	12/12/19	WB	SW8270D
2-Methylnaphthalene	ND	270	110	ug/Kg	1	12/12/19	WB	SW8270D
2-Methylphenol (o-cresol)	ND	270	180	ug/Kg	1	12/12/19	WB	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
2-Nitroaniline	ND	270	270	ug/Kg	1	12/12/19	WB	SW8270D
2-Nitrophenol	ND	270	240	ug/Kg	1	12/12/19	WB	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	270	150	ug/Kg	1	12/12/19	WB	SW8270D
3,3'-Dichlorobenzidine	ND	190	180	ug/Kg	1	12/12/19	WB	SW8270D
3-Nitroaniline	ND	380	770	ug/Kg	1	12/12/19	WB	SW8270D
4,6-Dinitro-2-methylphenol	ND	230	77	ug/Kg	1	12/12/19	WB	SW8270D
4-Bromophenyl phenyl ether	ND	270	110	ug/Kg	1	12/12/19	WB	SW8270D
4-Chloro-3-methylphenol	ND	270	130	ug/Kg	1	12/12/19	WB	SW8270D
4-Chloroaniline	ND	310	180	ug/Kg	1	12/12/19	WB	SW8270D
4-Chlorophenyl phenyl ether	ND	270	130	ug/Kg	1	12/12/19	WB	SW8270D
4-Nitroaniline	ND	380	130	ug/Kg	1	12/12/19	WB	SW8270D
4-Nitrophenol	ND	380	170	ug/Kg	1	12/12/19	WB	SW8270D
Acenaphthene	ND	270	120	ug/Kg	1	12/12/19	WB	SW8270D
Acenaphthylene	ND	270	110	ug/Kg	1	12/12/19	WB	SW8270D
Acetophenone	ND	270	120	ug/Kg	1	12/12/19	WB	SW8270D
Aniline	ND	310	310	ug/Kg	1	12/12/19	WB	SW8270D
Anthracene	ND	270	130	ug/Kg	1	12/12/19	WB	SW8270D
Benz(a)anthracene	ND	270	130	ug/Kg	1	12/12/19	WB	SW8270D
Benzidine	ND	380	230	ug/Kg	1	12/12/19	WB	SW8270D
Benzo(a)pyrene	ND	190	120	ug/Kg	1	12/12/19	WB	SW8270D
Benzo(b)fluoranthene	ND	270	130	ug/Kg	1	12/12/19	WB	SW8270D
Benzo(ghi)perylene	ND	270	120	ug/Kg	1	12/12/19	WB	SW8270D
Benzo(k)fluoranthene	ND	270	130	ug/Kg	1	12/12/19	WB	SW8270D
Benzoic acid	ND	1900	770	ug/Kg	1	12/12/19	WB	SW8270D
Benzyl butyl phthalate	ND	270	99	ug/Kg	1	12/12/19	WB	SW8270D
Bis(2-chloroethoxy)methane	ND	270	110	ug/Kg	1	12/12/19	WB	SW8270D
Bis(2-chloroethyl)ether	ND	190	100	ug/Kg	1	12/12/19	WB	SW8270D
Bis(2-chloroisopropyl)ether	ND	270	110	ug/Kg	1	12/12/19	WB	SW8270D
Bis(2-ethylhexyl)phthalate	ND	270	110	ug/Kg	1	12/12/19	WB	SW8270D
Carbazole	ND	190	150	ug/Kg	1	12/12/19	WB	SW8270D
Chrysene	ND	270	130	ug/Kg	1	12/12/19	WB	SW8270D
Dibenz(a,h)anthracene	ND	190	120	ug/Kg	1	12/12/19	WB	SW8270D
Dibenzofuran	ND	270	110	ug/Kg	1	12/12/19	WB	SW8270D
Diethyl phthalate	ND	270	120	ug/Kg	1	12/12/19	WB	SW8270D
Dimethylphthalate	ND	270	120	ug/Kg	1	12/12/19	WB	SW8270D
Di-n-butylphthalate	ND	270	100	ug/Kg	1	12/12/19	WB	SW8270D
Di-n-octylphthalate	ND	270	99	ug/Kg	1	12/12/19	WB	SW8270D
Fluoranthene	ND	270	120	ug/Kg	1	12/12/19	WB	SW8270D
Fluorene	ND	270	130	ug/Kg	1	12/12/19	WB	SW8270D
Hexachlorobenzene	ND	190	110	ug/Kg	1	12/12/19	WB	SW8270D
Hexachlorobutadiene	ND	270	140	ug/Kg	1	12/12/19	WB	SW8270D
Hexachlorocyclopentadiene	ND	270	120	ug/Kg	1	12/12/19	WB	SW8270D
Hexachloroethane	ND	190	110	ug/Kg	1	12/12/19	WB	SW8270D
Indeno(1,2,3-cd)pyrene	ND	270	130	ug/Kg	1	12/12/19	WB	SW8270D
Isophorone	ND	190	110	ug/Kg	1	12/12/19	WB	SW8270D
Naphthalene	ND	270	110	ug/Kg	1	12/12/19	WB	SW8270D
Nitrobenzene	ND	190	130	ug/Kg	1	12/12/19	WB	SW8270D
N-Nitrosodimethylamine	ND	270	110	ug/Kg	1	12/12/19	WB	SW8270D
N-Nitrosodi-n-propylamine	ND	190	120	ug/Kg	1	12/12/19	WB	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
N-Nitrosodiphenylamine	ND	270	150	ug/Kg	1	12/12/19	WB	SW8270D
Pentachloronitrobenzene	ND	270	140	ug/Kg	1	12/12/19	WB	SW8270D
Pentachlorophenol	ND	230	140	ug/Kg	1	12/12/19	WB	SW8270D
Phenanthrene	ND	270	110	ug/Kg	1	12/12/19	WB	SW8270D
Phenol	ND	270	120	ug/Kg	1	12/12/19	WB	SW8270D
Pyrene	ND	270	130	ug/Kg	1	12/12/19	WB	SW8270D
Pyridine	ND	270	94	ug/Kg	1	12/12/19	WB	SW8270D
<u>QA/QC Surrogates</u>								
% 2,4,6-Tribromophenol	57			%	1	12/12/19	WB	30 - 130 %
% 2-Fluorobiphenyl	56			%	1	12/12/19	WB	30 - 130 %
% 2-Fluorophenol	55			%	1	12/12/19	WB	30 - 130 %
% Nitrobenzene-d5	51			%	1	12/12/19	WB	30 - 130 %
% Phenol-d5	57			%	1	12/12/19	WB	30 - 130 %
% Terphenyl-d14	63			%	1	12/12/19	WB	30 - 130 %
<u>1,4-Dioxane</u>								
1,4-dioxane	ND	77	77	ug/Kg	1	12/12/19	WB	SW8270D (SIM)
<u>QA/QC Surrogates</u>								
% 2-Fluorobiphenyl	53			%	1	12/12/19	WB	30 - 130 %
% Nitrobenzene-d5	66			%	1	12/12/19	WB	30 - 130 %
% Terphenyl-d14	61			%	1	12/12/19	WB	30 - 130 %
Field Extraction	Completed					12/10/19		SW5035A

1

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low J=Estimated Below RL LOD=Limit of Detection MDL=Method Detection Limit1

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

Please be advised that the NY 375 soil criteria for chromium are based on hexavalent chromium and trivalent chromium.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

December 18, 2019

Reviewed and Released by: Greg Lawrence, Assistant Lab Director



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823



Analysis Report

December 18, 2019

FOR: Attn: Mr. Charles B. Sosik, P.G.
Environmental Business Consultants
1808 Middle Country Rd
Ridge NY 11961-2406

Sample Information

Matrix: SOIL
Location Code: EBC
Rush Request: 72 Hour
P.O.#:

Custody Information

Collected by: TB
Received by: CP
Analyzed by: see "By" below

Date

12/10/19
12/11/19

Time

10:43
16:00

Laboratory Data

SDG ID: GCE85356
Phoenix ID: CE85360

Project ID: 26-22 4TH ST QUEENS
Client ID: 19B6 (0-2)

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Silver	ND	0.36	0.36	mg/Kg	1	12/12/19	EK	SW6010D
Aluminum	9470	36	7.1	mg/Kg	10	12/12/19	EK	SW6010D
Arsenic	11.6	0.71	0.71	mg/Kg	1	12/12/19	EK	SW6010D
Barium	180	0.7	0.36	mg/Kg	1	12/12/19	EK	SW6010D
Beryllium	0.47	0.28	0.14	mg/Kg	1	12/12/19	EK	SW6010D
Calcium	7350	36	33	mg/Kg	10	12/12/19	EK	SW6010D
Cadmium	1.33	0.36	0.36	mg/Kg	1	12/12/19	EK	SW6010D
Cobalt	5.13	0.36	0.36	mg/Kg	1	12/12/19	EK	SW6010D
Chromium	23.9	0.36	0.36	mg/Kg	1	12/12/19	EK	SW6010D
Copper	85.0	0.7	0.36	mg/kg	1	12/12/19	EK	SW6010D
Iron	20500	36	36	mg/Kg	10	12/12/19	EK	SW6010D
Mercury	0.36	0.14	0.09	mg/Kg	10	12/12/19	RS	SW7471B
Potassium	1130	7	2.8	mg/Kg	1	12/12/19	EK	SW6010D
Magnesium	3070	3.6	3.6	mg/Kg	1	12/12/19	EK	SW6010D
Manganese	300	3.6	3.6	mg/Kg	10	12/12/19	EK	SW6010D
Sodium	159	7	3.1	mg/Kg	1	12/12/19	EK	SW6010D
Nickel	19.2	0.36	0.36	mg/Kg	1	12/12/19	EK	SW6010D
Lead	343	0.7	0.36	mg/Kg	1	12/12/19	EK	SW6010D
Antimony	ND	3.6	3.6	mg/Kg	1	12/12/19	EK	SW6010D
Selenium	ND	1.4	1.2	mg/Kg	1	12/12/19	EK	SW6010D
Thallium	ND	1.4	1.4	mg/Kg	1	12/12/19	EK	SW6010D
Vanadium	32.8	0.36	0.36	mg/Kg	1	12/12/19	EK	SW6010D
Zinc	284	0.7	0.36	mg/Kg	1	12/12/19	EK	SW6010D
Percent Solid	89			%		12/11/19	VT	SW846-%Solid
Extraction for SVOA SIM	Completed					12/11/19	BB/LA	SW3545A
Soil Extraction for PCB	Completed					12/16/19	MM/L	SW3545A
Soil Extraction for PCB	Completed					12/16/19	MM/L	SW3545A
Soil Extraction for Pesticides	Completed					12/16/19	MM	SW3545A

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Soil Extraction for SVOA	Completed					12/11/19	AT/B/LA	SW3545A
Mercury Digestion	Completed					12/12/19	LS/LS	SW7471B
Total Metals Digest	Completed					12/11/19	JJ/AG/BF	SW3050B

Polychlorinated Biphenyls

PCB-1016	ND	73	73	ug/Kg	2	12/17/19	SC	SW8082A
PCB-1221	ND	73	73	ug/Kg	2	12/17/19	SC	SW8082A
PCB-1232	ND	73	73	ug/Kg	2	12/17/19	SC	SW8082A
PCB-1242	ND	73	73	ug/Kg	2	12/17/19	SC	SW8082A
PCB-1248	ND	73	73	ug/Kg	2	12/17/19	SC	SW8082A
PCB-1254	ND	73	73	ug/Kg	2	12/17/19	SC	SW8082A
PCB-1260	ND	73	73	ug/Kg	2	12/17/19	SC	SW8082A
PCB-1262	ND	73	73	ug/Kg	2	12/17/19	SC	SW8082A
PCB-1268	ND	73	73	ug/Kg	2	12/17/19	SC	SW8082A

QA/QC Surrogates

% DCBP	97			%	2	12/17/19	SC	30 - 150 %
% DCBP (Confirmation)	97			%	2	12/17/19	SC	30 - 150 %
% TCMX	81			%	2	12/17/19	SC	30 - 150 %
% TCMX (Confirmation)	81			%	2	12/17/19	SC	30 - 150 %

Pesticides - Soil

4,4' -DDD	ND	2.2	2.2	ug/Kg	2	12/14/19	CG	SW8081B
4,4' -DDE	ND	2.2	2.2	ug/Kg	2	12/14/19	CG	SW8081B
4,4' -DDT	ND	2.2	2.2	ug/Kg	2	12/14/19	CG	SW8081B
a-BHC	ND	7.3	7.3	ug/Kg	2	12/14/19	CG	SW8081B
a-Chlordane	ND	3.7	3.7	ug/Kg	2	12/14/19	CG	SW8081B
Aldrin	ND	3.7	3.7	ug/Kg	2	12/14/19	CG	SW8081B
b-BHC	ND	7.3	7.3	ug/Kg	2	12/14/19	CG	SW8081B
Chlordane	ND	37	37	ug/Kg	2	12/14/19	CG	SW8081B
d-BHC	ND	7.3	7.3	ug/Kg	2	12/14/19	CG	SW8081B
Dieldrin	ND	3.7	3.7	ug/Kg	2	12/14/19	CG	SW8081B
Endosulfan I	ND	7.3	7.3	ug/Kg	2	12/14/19	CG	SW8081B
Endosulfan II	ND	7.3	7.3	ug/Kg	2	12/14/19	CG	SW8081B
Endosulfan sulfate	ND	7.3	7.3	ug/Kg	2	12/14/19	CG	SW8081B
Endrin	ND	7.3	7.3	ug/Kg	2	12/14/19	CG	SW8081B
Endrin aldehyde	ND	7.3	7.3	ug/Kg	2	12/14/19	CG	SW8081B
Endrin ketone	ND	7.3	7.3	ug/Kg	2	12/14/19	CG	SW8081B
g-BHC	ND	1.5	1.5	ug/Kg	2	12/14/19	CG	SW8081B
g-Chlordane	ND	3.7	3.7	ug/Kg	2	12/14/19	CG	SW8081B
Heptachlor	ND	7.3	7.3	ug/Kg	2	12/14/19	CG	SW8081B
Heptachlor epoxide	ND	7.3	7.3	ug/Kg	2	12/14/19	CG	SW8081B
Methoxychlor	ND	37	37	ug/Kg	2	12/14/19	CG	SW8081B
Toxaphene	ND	150	150	ug/Kg	2	12/14/19	CG	SW8081B

QA/QC Surrogates

% DCBP	52			%	2	12/14/19	CG	30 - 150 %
% DCBP (Confirmation)	59			%	2	12/14/19	CG	30 - 150 %
% TCMX	51			%	2	12/14/19	CG	30 - 150 %
% TCMX (Confirmation)	49			%	2	12/14/19	CG	30 - 150 %

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
<u>Volatiles</u>								
1,1,1,2-Tetrachloroethane	ND	5.2	1.0	ug/Kg	1	12/12/19	JLI	SW8260C
1,1,1-Trichloroethane	ND	5.2	0.52	ug/Kg	1	12/12/19	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	5.2	1.0	ug/Kg	1	12/12/19	JLI	SW8260C
1,1,2-Trichloroethane	ND	5.2	1.0	ug/Kg	1	12/12/19	JLI	SW8260C
1,1-Dichloroethane	ND	5.2	1.0	ug/Kg	1	12/12/19	JLI	SW8260C
1,1-Dichloroethene	ND	5.2	0.52	ug/Kg	1	12/12/19	JLI	SW8260C
1,1-Dichloropropene	ND	5.2	0.52	ug/Kg	1	12/12/19	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	5.2	1.0	ug/Kg	1	12/12/19	JLI	SW8260C
1,2,3-Trichloropropane	ND	5.2	0.52	ug/Kg	1	12/12/19	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	5.2	1.0	ug/Kg	1	12/12/19	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	5.2	0.52	ug/Kg	1	12/12/19	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	5.2	1.0	ug/Kg	1	12/12/19	JLI	SW8260C
1,2-Dibromoethane	ND	5.2	0.52	ug/Kg	1	12/12/19	JLI	SW8260C
1,2-Dichlorobenzene	ND	5.2	0.52	ug/Kg	1	12/12/19	JLI	SW8260C
1,2-Dichloroethane	ND	5.2	0.52	ug/Kg	1	12/12/19	JLI	SW8260C
1,2-Dichloropropane	ND	5.2	1.0	ug/Kg	1	12/12/19	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	5.2	0.52	ug/Kg	1	12/12/19	JLI	SW8260C
1,3-Dichlorobenzene	ND	5.2	0.52	ug/Kg	1	12/12/19	JLI	SW8260C
1,3-Dichloropropane	ND	5.2	1.0	ug/Kg	1	12/12/19	JLI	SW8260C
1,4-Dichlorobenzene	ND	5.2	0.52	ug/Kg	1	12/12/19	JLI	SW8260C
2,2-Dichloropropane	ND	5.2	0.52	ug/Kg	1	12/12/19	JLI	SW8260C
2-Chlorotoluene	ND	5.2	1.0	ug/Kg	1	12/12/19	JLI	SW8260C
2-Hexanone	ND	26	5.2	ug/Kg	1	12/12/19	JLI	SW8260C
2-Isopropyltoluene	ND	5.2	0.52	ug/Kg	1	12/12/19	JLI	SW8260C
4-Chlorotoluene	ND	5.2	0.52	ug/Kg	1	12/12/19	JLI	SW8260C
4-Methyl-2-pentanone	ND	26	5.2	ug/Kg	1	12/12/19	JLI	SW8260C
Acetone	73	S 26	5.2	ug/Kg	1	12/12/19	JLI	SW8260C
Acrylonitrile	ND	10	1.0	ug/Kg	1	12/12/19	JLI	SW8260C
Benzene	ND	5.2	0.52	ug/Kg	1	12/12/19	JLI	SW8260C
Bromobenzene	ND	5.2	0.52	ug/Kg	1	12/12/19	JLI	SW8260C
Bromochloromethane	ND	5.2	0.52	ug/Kg	1	12/12/19	JLI	SW8260C
Bromodichloromethane	ND	5.2	1.0	ug/Kg	1	12/12/19	JLI	SW8260C
Bromoform	ND	5.2	1.0	ug/Kg	1	12/12/19	JLI	SW8260C
Bromomethane	ND	5.2	2.1	ug/Kg	1	12/12/19	JLI	SW8260C
Carbon Disulfide	ND	5.2	1.0	ug/Kg	1	12/12/19	JLI	SW8260C
Carbon tetrachloride	ND	5.2	1.0	ug/Kg	1	12/12/19	JLI	SW8260C
Chlorobenzene	ND	5.2	0.52	ug/Kg	1	12/12/19	JLI	SW8260C
Chloroethane	ND	5.2	0.52	ug/Kg	1	12/12/19	JLI	SW8260C
Chloroform	ND	5.2	0.52	ug/Kg	1	12/12/19	JLI	SW8260C
Chloromethane	ND	5.2	1.0	ug/Kg	1	12/12/19	JLI	SW8260C
cis-1,2-Dichloroethene	ND	5.2	0.52	ug/Kg	1	12/12/19	JLI	SW8260C
cis-1,3-Dichloropropene	ND	5.2	0.52	ug/Kg	1	12/12/19	JLI	SW8260C
Dibromochloromethane	ND	5.2	1.0	ug/Kg	1	12/12/19	JLI	SW8260C
Dibromomethane	ND	5.2	1.0	ug/Kg	1	12/12/19	JLI	SW8260C
Dichlorodifluoromethane	ND	5.2	0.52	ug/Kg	1	12/12/19	JLI	SW8260C
Ethylbenzene	ND	5.2	0.52	ug/Kg	1	12/12/19	JLI	SW8260C
Hexachlorobutadiene	ND	5.2	0.52	ug/Kg	1	12/12/19	JLI	SW8260C
Isopropylbenzene	ND	5.2	0.52	ug/Kg	1	12/12/19	JLI	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
m&p-Xylene	ND	5.2	1.0	ug/Kg	1	12/12/19	JLI	SW8260C
Methyl Ethyl Ketone	16	J 31	5.2	ug/Kg	1	12/12/19	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	10	1.0	ug/Kg	1	12/12/19	JLI	SW8260C
Methylene chloride	ND	5.2	5.2	ug/Kg	1	12/12/19	JLI	SW8260C
Naphthalene	ND	5.2	1.0	ug/Kg	1	12/12/19	JLI	SW8260C
n-Butylbenzene	ND	5.2	0.52	ug/Kg	1	12/12/19	JLI	SW8260C
n-Propylbenzene	ND	5.2	1.0	ug/Kg	1	12/12/19	JLI	SW8260C
o-Xylene	ND	5.2	1.0	ug/Kg	1	12/12/19	JLI	SW8260C
p-Isopropyltoluene	ND	5.2	0.52	ug/Kg	1	12/12/19	JLI	SW8260C
sec-Butylbenzene	ND	5.2	0.52	ug/Kg	1	12/12/19	JLI	SW8260C
Styrene	ND	5.2	0.52	ug/Kg	1	12/12/19	JLI	SW8260C
tert-Butylbenzene	ND	5.2	0.52	ug/Kg	1	12/12/19	JLI	SW8260C
Tetrachloroethene	ND	5.2	1.0	ug/Kg	1	12/12/19	JLI	SW8260C
Tetrahydrofuran (THF)	ND	10	2.6	ug/Kg	1	12/12/19	JLI	SW8260C
Toluene	ND	5.2	0.52	ug/Kg	1	12/12/19	JLI	SW8260C
trans-1,2-Dichloroethene	ND	5.2	0.52	ug/Kg	1	12/12/19	JLI	SW8260C
trans-1,3-Dichloropropene	ND	5.2	0.52	ug/Kg	1	12/12/19	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	10	2.6	ug/Kg	1	12/12/19	JLI	SW8260C
Trichloroethene	ND	5.2	0.52	ug/Kg	1	12/12/19	JLI	SW8260C
Trichlorofluoromethane	ND	5.2	1.0	ug/Kg	1	12/12/19	JLI	SW8260C
Trichlorotrifluoroethane	ND	5.2	0.52	ug/Kg	1	12/12/19	JLI	SW8260C
Vinyl chloride	ND	5.2	0.52	ug/Kg	1	12/12/19	JLI	SW8260C
<u>QA/QC Surrogates</u>								
% 1,2-dichlorobenzene-d4	97			%	1	12/12/19	JLI	70 - 130 %
% Bromofluorobenzene	92			%	1	12/12/19	JLI	70 - 130 %
% Dibromofluoromethane	94			%	1	12/12/19	JLI	70 - 130 %
% Toluene-d8	92			%	1	12/12/19	JLI	70 - 130 %
<u>Volatiles</u>								
1,1,1,2-Tetrachloroethane	ND	21	1.0	ug/Kg	1	12/12/19	JLI	SW8260C
Acrolein	ND	5.2	1.0	ug/Kg	1	12/12/19	JLI	SW8260C
Acrylonitrile	ND	21	0.52	ug/Kg	1	12/12/19	JLI	SW8260C
Tert-butyl alcohol	ND	100	21	ug/Kg	1	12/12/19	JLI	SW8260C
<u>Semivolatiles</u>								
1,2,4,5-Tetrachlorobenzene	ND	260	130	ug/Kg	1	12/12/19	WB	SW8270D
1,2,4-Trichlorobenzene	ND	260	110	ug/Kg	1	12/12/19	WB	SW8270D
1,2-Dichlorobenzene	ND	260	100	ug/Kg	1	12/12/19	WB	SW8270D
1,2-Diphenylhydrazine	ND	260	120	ug/Kg	1	12/12/19	WB	SW8270D
1,3-Dichlorobenzene	ND	260	110	ug/Kg	1	12/12/19	WB	SW8270D
1,4-Dichlorobenzene	ND	260	110	ug/Kg	1	12/12/19	WB	SW8270D
2,4,5-Trichlorophenol	ND	260	200	ug/Kg	1	12/12/19	WB	SW8270D
2,4,6-Trichlorophenol	ND	190	120	ug/Kg	1	12/12/19	WB	SW8270D
2,4-Dichlorophenol	ND	190	130	ug/Kg	1	12/12/19	WB	SW8270D
2,4-Dimethylphenol	ND	260	92	ug/Kg	1	12/12/19	WB	SW8270D
2,4-Dinitrophenol	ND	260	260	ug/Kg	1	12/12/19	WB	SW8270D
2,4-Dinitrotoluene	ND	190	150	ug/Kg	1	12/12/19	WB	SW8270D
2,6-Dinitrotoluene	ND	190	120	ug/Kg	1	12/12/19	WB	SW8270D
2-Chloronaphthalene	ND	260	110	ug/Kg	1	12/12/19	WB	SW8270D
2-Chlorophenol	ND	260	110	ug/Kg	1	12/12/19	WB	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
2-Methylnaphthalene	ND	260	110	ug/Kg	1	12/12/19	WB	SW8270D
2-Methylphenol (o-cresol)	ND	260	170	ug/Kg	1	12/12/19	WB	SW8270D
2-Nitroaniline	ND	260	260	ug/Kg	1	12/12/19	WB	SW8270D
2-Nitrophenol	ND	260	240	ug/Kg	1	12/12/19	WB	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	260	150	ug/Kg	1	12/12/19	WB	SW8270D
3,3'-Dichlorobenzidine	ND	190	180	ug/Kg	1	12/12/19	WB	SW8270D
3-Nitroaniline	ND	370	740	ug/Kg	1	12/12/19	WB	SW8270D
4,6-Dinitro-2-methylphenol	ND	220	74	ug/Kg	1	12/12/19	WB	SW8270D
4-Bromophenyl phenyl ether	ND	260	110	ug/Kg	1	12/12/19	WB	SW8270D
4-Chloro-3-methylphenol	ND	260	130	ug/Kg	1	12/12/19	WB	SW8270D
4-Chloroaniline	ND	300	170	ug/Kg	1	12/12/19	WB	SW8270D
4-Chlorophenyl phenyl ether	ND	260	130	ug/Kg	1	12/12/19	WB	SW8270D
4-Nitroaniline	ND	370	120	ug/Kg	1	12/12/19	WB	SW8270D
4-Nitrophenol	ND	370	170	ug/Kg	1	12/12/19	WB	SW8270D
Acenaphthene	ND	260	110	ug/Kg	1	12/12/19	WB	SW8270D
Acenaphthylene	ND	260	100	ug/Kg	1	12/12/19	WB	SW8270D
Acetophenone	ND	260	120	ug/Kg	1	12/12/19	WB	SW8270D
Aniline	ND	300	300	ug/Kg	1	12/12/19	WB	SW8270D
Anthracene	ND	260	120	ug/Kg	1	12/12/19	WB	SW8270D
Benz(a)anthracene	420	260	130	ug/Kg	1	12/12/19	WB	SW8270D
Benzidine	ND	370	220	ug/Kg	1	12/12/19	WB	SW8270D
Benzo(a)pyrene	420	190	120	ug/Kg	1	12/12/19	WB	SW8270D
Benzo(b)fluoranthene	360	260	130	ug/Kg	1	12/12/19	WB	SW8270D
Benzo(ghi)perylene	270	260	120	ug/Kg	1	12/12/19	WB	SW8270D
Benzo(k)fluoranthene	350	260	120	ug/Kg	1	12/12/19	WB	SW8270D
Benzoic acid	ND	1900	740	ug/Kg	1	12/12/19	WB	SW8270D
Benzyl butyl phthalate	ND	260	96	ug/Kg	1	12/12/19	WB	SW8270D
Bis(2-chloroethoxy)methane	ND	260	100	ug/Kg	1	12/12/19	WB	SW8270D
Bis(2-chloroethyl)ether	ND	190	100	ug/Kg	1	12/12/19	WB	SW8270D
Bis(2-chloroisopropyl)ether	ND	260	100	ug/Kg	1	12/12/19	WB	SW8270D
Bis(2-ethylhexyl)phthalate	ND	260	110	ug/Kg	1	12/12/19	WB	SW8270D
Carbazole	ND	190	150	ug/Kg	1	12/12/19	WB	SW8270D
Chrysene	460	260	130	ug/Kg	1	12/12/19	WB	SW8270D
Dibenz(a,h)anthracene	ND	190	120	ug/Kg	1	12/12/19	WB	SW8270D
Dibenzofuran	ND	260	110	ug/Kg	1	12/12/19	WB	SW8270D
Diethyl phthalate	ND	260	120	ug/Kg	1	12/12/19	WB	SW8270D
Dimethylphthalate	ND	260	120	ug/Kg	1	12/12/19	WB	SW8270D
Di-n-butylphthalate	ND	260	99	ug/Kg	1	12/12/19	WB	SW8270D
Di-n-octylphthalate	ND	260	96	ug/Kg	1	12/12/19	WB	SW8270D
Fluoranthene	760	260	120	ug/Kg	1	12/12/19	WB	SW8270D
Fluorene	ND	260	120	ug/Kg	1	12/12/19	WB	SW8270D
Hexachlorobenzene	ND	190	110	ug/Kg	1	12/12/19	WB	SW8270D
Hexachlorobutadiene	ND	260	130	ug/Kg	1	12/12/19	WB	SW8270D
Hexachlorocyclopentadiene	ND	260	110	ug/Kg	1	12/12/19	WB	SW8270D
Hexachloroethane	ND	190	110	ug/Kg	1	12/12/19	WB	SW8270D
Indeno(1,2,3-cd)pyrene	300	260	120	ug/Kg	1	12/12/19	WB	SW8270D
Isophorone	ND	190	100	ug/Kg	1	12/12/19	WB	SW8270D
Naphthalene	ND	260	110	ug/Kg	1	12/12/19	WB	SW8270D
Nitrobenzene	ND	190	130	ug/Kg	1	12/12/19	WB	SW8270D

1

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
N-Nitrosodimethylamine	ND	260	100	ug/Kg	1	12/12/19	WB	SW8270D
N-Nitrosodi-n-propylamine	ND	190	120	ug/Kg	1	12/12/19	WB	SW8270D
N-Nitrosodiphenylamine	ND	260	140	ug/Kg	1	12/12/19	WB	SW8270D
Pentachloronitrobenzene	ND	260	140	ug/Kg	1	12/12/19	WB	SW8270D
Pentachlorophenol	ND	220	140	ug/Kg	1	12/12/19	WB	SW8270D
Phenanthrene	430	260	110	ug/Kg	1	12/12/19	WB	SW8270D
Phenol	ND	260	120	ug/Kg	1	12/12/19	WB	SW8270D
Pyrene	710	260	130	ug/Kg	1	12/12/19	WB	SW8270D
Pyridine	ND	260	92	ug/Kg	1	12/12/19	WB	SW8270D
<u>QA/QC Surrogates</u>								
% 2,4,6-Tribromophenol	72			%	1	12/12/19	WB	30 - 130 %
% 2-Fluorobiphenyl	68			%	1	12/12/19	WB	30 - 130 %
% 2-Fluorophenol	66			%	1	12/12/19	WB	30 - 130 %
% Nitrobenzene-d5	58			%	1	12/12/19	WB	30 - 130 %
% Phenol-d5	67			%	1	12/12/19	WB	30 - 130 %
% Terphenyl-d14	65			%	1	12/12/19	WB	30 - 130 %
<u>1,4-Dioxane</u>								
1,4-dioxane	ND	73	73	ug/Kg	1	12/12/19	WB	SW8270D (SIM)
<u>QA/QC Surrogates</u>								
% 2-Fluorobiphenyl	52			%	1	12/12/19	WB	30 - 130 %
% Nitrobenzene-d5	70			%	1	12/12/19	WB	30 - 130 %
% Terphenyl-d14	47			%	1	12/12/19	WB	30 - 130 %
Field Extraction	Completed					12/10/19		SW5035A

1

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low J=Estimated Below RL LOD=Limit of Detection MDL=Method Detection Limit1

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

Please be advised that the NY 375 soil criteria for chromium are based on hexavalent chromium and trivalent chromium.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

S - Laboratory solvent, contamination is possible.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

December 18, 2019

Reviewed and Released by: Greg Lawrence, Assistant Lab Director



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823



Analysis Report

December 18, 2019

FOR: Attn: Mr. Charles B. Sosik, P.G.
Environmental Business Consultants
1808 Middle Country Rd
Ridge NY 11961-2406

Sample Information

Matrix: SOIL
Location Code: EBC
Rush Request: 72 Hour
P.O.#:

Custody Information

Collected by: TB
Received by: CP
Analyzed by: see "By" below

Date

12/10/19
12/11/19

Time

10:54
16:00

Laboratory Data

SDG ID: GCE85356
Phoenix ID: CE85361

Project ID: 26-22 4TH ST QUEENS
Client ID: 19B6 (8-10)

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Silver	ND	0.33	0.33	mg/Kg	1	12/12/19	EK	SW6010D
Aluminum	17000	33	6.6	mg/Kg	10	12/12/19	EK	SW6010D
Arsenic	ND	0.66	0.66	mg/Kg	1	12/12/19	EK	SW6010D
Barium	407	0.7	0.33	mg/Kg	1	12/12/19	EK	SW6010D
Beryllium	0.31	0.26	0.13	mg/Kg	1	12/12/19	EK	SW6010D
Calcium	2820	33	30	mg/Kg	10	12/12/19	EK	SW6010D
Cadmium	0.59	0.33	0.33	mg/Kg	1	12/12/19	EK	SW6010D
Cobalt	4.33	0.33	0.33	mg/Kg	1	12/12/19	EK	SW6010D
Chromium	23.5	0.33	0.33	mg/Kg	1	12/12/19	EK	SW6010D
Copper	41.7	0.7	0.33	mg/kg	1	12/12/19	EK	SW6010D
Iron	33000	33	33	mg/Kg	10	12/12/19	EK	SW6010D
Mercury	ND	0.03	0.02	mg/Kg	2	12/12/19	RS	SW7471B
Potassium	9310	66	26	mg/Kg	10	12/12/19	EK	SW6010D
Magnesium	8170	33	33	mg/Kg	10	12/12/19	EK	SW6010D
Manganese	358	3.3	3.3	mg/Kg	10	12/12/19	EK	SW6010D
Sodium	249	7	2.8	mg/Kg	1	12/12/19	EK	SW6010D
Nickel	20.2	0.33	0.33	mg/Kg	1	12/12/19	EK	SW6010D
Lead	3.3	0.7	0.33	mg/Kg	1	12/12/19	EK	SW6010D
Antimony	ND	3.3	3.3	mg/Kg	1	12/12/19	EK	SW6010D
Selenium	ND	1.3	1.1	mg/Kg	1	12/12/19	EK	SW6010D
Thallium	ND	1.3	1.3	mg/Kg	1	12/12/19	EK	SW6010D
Vanadium	65.6	0.33	0.33	mg/Kg	1	12/12/19	EK	SW6010D
Zinc	69.6	0.7	0.33	mg/Kg	1	12/12/19	EK	SW6010D
Percent Solid	91			%		12/11/19	VT	SW846-%Solid
Extraction for SVOA SIM	Completed					12/11/19	BB/LA	SW3545A
Soil Extraction for PCB	Completed					12/11/19	MM/L	SW3545A
Soil Extraction for Pesticides	Completed					12/11/19	MM/L	SW3545A
Soil Extraction for SVOA	Completed					12/11/19	AT/B/LA	SW3545A

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Mercury Digestion	Completed					12/12/19	LS/LS	SW7471B
Total Metals Digest	Completed					12/11/19	JJ/AG/BF	SW3050B

Polychlorinated Biphenyls

PCB-1016	ND	72	72	ug/Kg	2	12/13/19	SC	SW8082A
PCB-1221	ND	72	72	ug/Kg	2	12/13/19	SC	SW8082A
PCB-1232	ND	72	72	ug/Kg	2	12/13/19	SC	SW8082A
PCB-1242	ND	72	72	ug/Kg	2	12/13/19	SC	SW8082A
PCB-1248	ND	72	72	ug/Kg	2	12/13/19	SC	SW8082A
PCB-1254	ND	72	72	ug/Kg	2	12/13/19	SC	SW8082A
PCB-1260	ND	72	72	ug/Kg	2	12/13/19	SC	SW8082A
PCB-1262	ND	72	72	ug/Kg	2	12/13/19	SC	SW8082A
PCB-1268	ND	72	72	ug/Kg	2	12/13/19	SC	SW8082A

QA/QC Surrogates

% DCBP	88			%	2	12/13/19	SC	30 - 150 %
% DCBP (Confirmation)	83			%	2	12/13/19	SC	30 - 150 %
% TCMX	71			%	2	12/13/19	SC	30 - 150 %
% TCMX (Confirmation)	68			%	2	12/13/19	SC	30 - 150 %

Pesticides - Soil

4,4' -DDD	ND	2.2	2.2	ug/Kg	2	12/12/19	CG	SW8081B
4,4' -DDE	ND	2.2	2.2	ug/Kg	2	12/12/19	CG	SW8081B
4,4' -DDT	ND	2.2	2.2	ug/Kg	2	12/12/19	CG	SW8081B
a-BHC	ND	7.2	7.2	ug/Kg	2	12/12/19	CG	SW8081B
a-Chlordane	ND	3.6	3.6	ug/Kg	2	12/12/19	CG	SW8081B
Aldrin	ND	3.6	3.6	ug/Kg	2	12/12/19	CG	SW8081B
b-BHC	ND	7.2	7.2	ug/Kg	2	12/12/19	CG	SW8081B
Chlordane	ND	36	36	ug/Kg	2	12/12/19	CG	SW8081B
d-BHC	ND	7.2	7.2	ug/Kg	2	12/12/19	CG	SW8081B
Dieldrin	ND	3.6	3.6	ug/Kg	2	12/12/19	CG	SW8081B
Endosulfan I	ND	7.2	7.2	ug/Kg	2	12/12/19	CG	SW8081B
Endosulfan II	ND	7.2	7.2	ug/Kg	2	12/12/19	CG	SW8081B
Endosulfan sulfate	ND	7.2	7.2	ug/Kg	2	12/12/19	CG	SW8081B
Endrin	ND	7.2	7.2	ug/Kg	2	12/12/19	CG	SW8081B
Endrin aldehyde	ND	7.2	7.2	ug/Kg	2	12/12/19	CG	SW8081B
Endrin ketone	ND	7.2	7.2	ug/Kg	2	12/12/19	CG	SW8081B
g-BHC	ND	1.4	1.4	ug/Kg	2	12/12/19	CG	SW8081B
g-Chlordane	ND	3.6	3.6	ug/Kg	2	12/12/19	CG	SW8081B
Heptachlor	ND	7.2	7.2	ug/Kg	2	12/12/19	CG	SW8081B
Heptachlor epoxide	ND	7.2	7.2	ug/Kg	2	12/12/19	CG	SW8081B
Methoxychlor	ND	36	36	ug/Kg	2	12/12/19	CG	SW8081B
Toxaphene	ND	140	140	ug/Kg	2	12/12/19	CG	SW8081B

QA/QC Surrogates

% DCBP	63			%	2	12/12/19	CG	30 - 150 %
% DCBP (Confirmation)	74			%	2	12/12/19	CG	30 - 150 %
% TCMX	57			%	2	12/12/19	CG	30 - 150 %
% TCMX (Confirmation)	56			%	2	12/12/19	CG	30 - 150 %

Volatiles

1,1,1,2-Tetrachloroethane	ND	4.6	0.92	ug/Kg	1	12/12/19	JLI	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
1,1,1-Trichloroethane	ND	4.6	0.46	ug/Kg	1	12/12/19	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	4.6	0.92	ug/Kg	1	12/12/19	JLI	SW8260C
1,1,2-Trichloroethane	ND	4.6	0.92	ug/Kg	1	12/12/19	JLI	SW8260C
1,1-Dichloroethane	ND	4.6	0.92	ug/Kg	1	12/12/19	JLI	SW8260C
1,1-Dichloroethene	ND	4.6	0.46	ug/Kg	1	12/12/19	JLI	SW8260C
1,1-Dichloropropene	ND	4.6	0.46	ug/Kg	1	12/12/19	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	4.6	0.92	ug/Kg	1	12/12/19	JLI	SW8260C
1,2,3-Trichloropropane	ND	4.6	0.46	ug/Kg	1	12/12/19	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	4.6	0.92	ug/Kg	1	12/12/19	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	4.6	0.46	ug/Kg	1	12/12/19	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	4.6	0.92	ug/Kg	1	12/12/19	JLI	SW8260C
1,2-Dibromoethane	ND	4.6	0.46	ug/Kg	1	12/12/19	JLI	SW8260C
1,2-Dichlorobenzene	ND	4.6	0.46	ug/Kg	1	12/12/19	JLI	SW8260C
1,2-Dichloroethane	ND	4.6	0.46	ug/Kg	1	12/12/19	JLI	SW8260C
1,2-Dichloropropane	ND	4.6	0.92	ug/Kg	1	12/12/19	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	4.6	0.46	ug/Kg	1	12/12/19	JLI	SW8260C
1,3-Dichlorobenzene	ND	4.6	0.46	ug/Kg	1	12/12/19	JLI	SW8260C
1,3-Dichloropropane	ND	4.6	0.92	ug/Kg	1	12/12/19	JLI	SW8260C
1,4-Dichlorobenzene	ND	4.6	0.46	ug/Kg	1	12/12/19	JLI	SW8260C
2,2-Dichloropropane	ND	4.6	0.46	ug/Kg	1	12/12/19	JLI	SW8260C
2-Chlorotoluene	ND	4.6	0.92	ug/Kg	1	12/12/19	JLI	SW8260C
2-Hexanone	ND	23	4.6	ug/Kg	1	12/12/19	JLI	SW8260C
2-Isopropyltoluene	ND	4.6	0.46	ug/Kg	1	12/12/19	JLI	SW8260C
4-Chlorotoluene	ND	4.6	0.46	ug/Kg	1	12/12/19	JLI	SW8260C
4-Methyl-2-pentanone	ND	23	4.6	ug/Kg	1	12/12/19	JLI	SW8260C
Acetone	ND	23	4.6	ug/Kg	1	12/12/19	JLI	SW8260C
Acrylonitrile	ND	9.2	0.92	ug/Kg	1	12/12/19	JLI	SW8260C
Benzene	ND	4.6	0.46	ug/Kg	1	12/12/19	JLI	SW8260C
Bromobenzene	ND	4.6	0.46	ug/Kg	1	12/12/19	JLI	SW8260C
Bromochloromethane	ND	4.6	0.46	ug/Kg	1	12/12/19	JLI	SW8260C
Bromodichloromethane	ND	4.6	0.92	ug/Kg	1	12/12/19	JLI	SW8260C
Bromoform	ND	4.6	0.92	ug/Kg	1	12/12/19	JLI	SW8260C
Bromomethane	ND	4.6	1.8	ug/Kg	1	12/12/19	JLI	SW8260C
Carbon Disulfide	ND	4.6	0.92	ug/Kg	1	12/12/19	JLI	SW8260C
Carbon tetrachloride	ND	4.6	0.92	ug/Kg	1	12/12/19	JLI	SW8260C
Chlorobenzene	ND	4.6	0.46	ug/Kg	1	12/12/19	JLI	SW8260C
Chloroethane	ND	4.6	0.46	ug/Kg	1	12/12/19	JLI	SW8260C
Chloroform	ND	4.6	0.46	ug/Kg	1	12/12/19	JLI	SW8260C
Chloromethane	ND	4.6	0.92	ug/Kg	1	12/12/19	JLI	SW8260C
cis-1,2-Dichloroethene	ND	4.6	0.46	ug/Kg	1	12/12/19	JLI	SW8260C
cis-1,3-Dichloropropene	ND	4.6	0.46	ug/Kg	1	12/12/19	JLI	SW8260C
Dibromochloromethane	ND	4.6	0.92	ug/Kg	1	12/12/19	JLI	SW8260C
Dibromomethane	ND	4.6	0.92	ug/Kg	1	12/12/19	JLI	SW8260C
Dichlorodifluoromethane	ND	4.6	0.46	ug/Kg	1	12/12/19	JLI	SW8260C
Ethylbenzene	ND	4.6	0.46	ug/Kg	1	12/12/19	JLI	SW8260C
Hexachlorobutadiene	ND	4.6	0.46	ug/Kg	1	12/12/19	JLI	SW8260C
Isopropylbenzene	ND	4.6	0.46	ug/Kg	1	12/12/19	JLI	SW8260C
m&p-Xylene	ND	4.6	0.92	ug/Kg	1	12/12/19	JLI	SW8260C
Methyl Ethyl Ketone	ND	28	4.6	ug/Kg	1	12/12/19	JLI	SW8260C

1

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Methyl t-butyl ether (MTBE)	ND	9.2	0.92	ug/Kg	1	12/12/19	JLI	SW8260C
Methylene chloride	ND	4.6	4.6	ug/Kg	1	12/12/19	JLI	SW8260C
Naphthalene	ND	4.6	0.92	ug/Kg	1	12/12/19	JLI	SW8260C
n-Butylbenzene	ND	4.6	0.46	ug/Kg	1	12/12/19	JLI	SW8260C
n-Propylbenzene	ND	4.6	0.92	ug/Kg	1	12/12/19	JLI	SW8260C
o-Xylene	ND	4.6	0.92	ug/Kg	1	12/12/19	JLI	SW8260C
p-Isopropyltoluene	ND	4.6	0.46	ug/Kg	1	12/12/19	JLI	SW8260C
sec-Butylbenzene	ND	4.6	0.46	ug/Kg	1	12/12/19	JLI	SW8260C
Styrene	ND	4.6	0.46	ug/Kg	1	12/12/19	JLI	SW8260C
tert-Butylbenzene	ND	4.6	0.46	ug/Kg	1	12/12/19	JLI	SW8260C
Tetrachloroethene	ND	4.6	0.92	ug/Kg	1	12/12/19	JLI	SW8260C
Tetrahydrofuran (THF)	ND	9.2	2.3	ug/Kg	1	12/12/19	JLI	SW8260C
Toluene	ND	4.6	0.46	ug/Kg	1	12/12/19	JLI	SW8260C
trans-1,2-Dichloroethene	ND	4.6	0.46	ug/Kg	1	12/12/19	JLI	SW8260C
trans-1,3-Dichloropropene	ND	4.6	0.46	ug/Kg	1	12/12/19	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	9.2	2.3	ug/Kg	1	12/12/19	JLI	SW8260C
Trichloroethene	ND	4.6	0.46	ug/Kg	1	12/12/19	JLI	SW8260C
Trichlorofluoromethane	ND	4.6	0.92	ug/Kg	1	12/12/19	JLI	SW8260C
Trichlorotrifluoroethane	ND	4.6	0.46	ug/Kg	1	12/12/19	JLI	SW8260C
Vinyl chloride	ND	4.6	0.46	ug/Kg	1	12/12/19	JLI	SW8260C
<u>QA/QC Surrogates</u>								
% 1,2-dichlorobenzene-d4	97			%	1	12/12/19	JLI	70 - 130 %
% Bromofluorobenzene	98			%	1	12/12/19	JLI	70 - 130 %
% Dibromofluoromethane	92			%	1	12/12/19	JLI	70 - 130 %
% Toluene-d8	94			%	1	12/12/19	JLI	70 - 130 %
<u>Volatiles</u>								
1,1,1,2-Tetrachloroethane	ND	18	0.92	ug/Kg	1	12/12/19	JLI	SW8260C
Acrolein	ND	4.6	0.92	ug/Kg	1	12/12/19	JLI	SW8260C
Acrylonitrile	ND	18	0.46	ug/Kg	1	12/12/19	JLI	SW8260C
Tert-butyl alcohol	ND	92	18	ug/Kg	1	12/12/19	JLI	SW8260C
<u>Semivolatiles</u>								
1,2,4,5-Tetrachlorobenzene	ND	260	130	ug/Kg	1	12/12/19	WB	SW8270D
1,2,4-Trichlorobenzene	ND	260	110	ug/Kg	1	12/12/19	WB	SW8270D
1,2-Dichlorobenzene	ND	260	100	ug/Kg	1	12/12/19	WB	SW8270D
1,2-Diphenylhydrazine	ND	260	120	ug/Kg	1	12/12/19	WB	SW8270D
1,3-Dichlorobenzene	ND	260	110	ug/Kg	1	12/12/19	WB	SW8270D
1,4-Dichlorobenzene	ND	260	110	ug/Kg	1	12/12/19	WB	SW8270D
2,4,5-Trichlorophenol	ND	260	200	ug/Kg	1	12/12/19	WB	SW8270D
2,4,6-Trichlorophenol	ND	180	120	ug/Kg	1	12/12/19	WB	SW8270D
2,4-Dichlorophenol	ND	180	130	ug/Kg	1	12/12/19	WB	SW8270D
2,4-Dimethylphenol	ND	260	91	ug/Kg	1	12/12/19	WB	SW8270D
2,4-Dinitrophenol	ND	260	260	ug/Kg	1	12/12/19	WB	SW8270D
2,4-Dinitrotoluene	ND	180	140	ug/Kg	1	12/12/19	WB	SW8270D
2,6-Dinitrotoluene	ND	180	120	ug/Kg	1	12/12/19	WB	SW8270D
2-Chloronaphthalene	ND	260	100	ug/Kg	1	12/12/19	WB	SW8270D
2-Chlorophenol	ND	260	100	ug/Kg	1	12/12/19	WB	SW8270D
2-Methylnaphthalene	ND	260	110	ug/Kg	1	12/12/19	WB	SW8270D
2-Methylphenol (o-cresol)	ND	260	170	ug/Kg	1	12/12/19	WB	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
2-Nitroaniline	ND	260	260	ug/Kg	1	12/12/19	WB	SW8270D
2-Nitrophenol	ND	260	230	ug/Kg	1	12/12/19	WB	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	260	140	ug/Kg	1	12/12/19	WB	SW8270D
3,3'-Dichlorobenzidine	ND	180	170	ug/Kg	1	12/12/19	WB	SW8270D
3-Nitroaniline	ND	370	730	ug/Kg	1	12/12/19	WB	SW8270D
4,6-Dinitro-2-methylphenol	ND	220	73	ug/Kg	1	12/12/19	WB	SW8270D
4-Bromophenyl phenyl ether	ND	260	110	ug/Kg	1	12/12/19	WB	SW8270D
4-Chloro-3-methylphenol	ND	260	130	ug/Kg	1	12/12/19	WB	SW8270D
4-Chloroaniline	ND	290	170	ug/Kg	1	12/12/19	WB	SW8270D
4-Chlorophenyl phenyl ether	ND	260	120	ug/Kg	1	12/12/19	WB	SW8270D
4-Nitroaniline	ND	370	120	ug/Kg	1	12/12/19	WB	SW8270D
4-Nitrophenol	ND	370	170	ug/Kg	1	12/12/19	WB	SW8270D
Acenaphthene	ND	260	110	ug/Kg	1	12/12/19	WB	SW8270D
Acenaphthylene	ND	260	100	ug/Kg	1	12/12/19	WB	SW8270D
Acetophenone	ND	260	110	ug/Kg	1	12/12/19	WB	SW8270D
Aniline	ND	290	290	ug/Kg	1	12/12/19	WB	SW8270D
Anthracene	ND	260	120	ug/Kg	1	12/12/19	WB	SW8270D
Benz(a)anthracene	ND	260	120	ug/Kg	1	12/12/19	WB	SW8270D
Benzidine	ND	370	210	ug/Kg	1	12/12/19	WB	SW8270D
Benzo(a)pyrene	ND	180	120	ug/Kg	1	12/12/19	WB	SW8270D
Benzo(b)fluoranthene	ND	260	120	ug/Kg	1	12/12/19	WB	SW8270D
Benzo(ghi)perylene	ND	260	120	ug/Kg	1	12/12/19	WB	SW8270D
Benzo(k)fluoranthene	ND	260	120	ug/Kg	1	12/12/19	WB	SW8270D
Benzoic acid	ND	1800	730	ug/Kg	1	12/12/19	WB	SW8270D
Benzyl butyl phthalate	ND	260	94	ug/Kg	1	12/12/19	WB	SW8270D
Bis(2-chloroethoxy)methane	ND	260	100	ug/Kg	1	12/12/19	WB	SW8270D
Bis(2-chloroethyl)ether	ND	180	99	ug/Kg	1	12/12/19	WB	SW8270D
Bis(2-chloroisopropyl)ether	ND	260	100	ug/Kg	1	12/12/19	WB	SW8270D
Bis(2-ethylhexyl)phthalate	ND	260	110	ug/Kg	1	12/12/19	WB	SW8270D
Carbazole	ND	180	150	ug/Kg	1	12/12/19	WB	SW8270D
Chrysene	ND	260	120	ug/Kg	1	12/12/19	WB	SW8270D
Dibenz(a,h)anthracene	ND	180	120	ug/Kg	1	12/12/19	WB	SW8270D
Dibenzofuran	ND	260	110	ug/Kg	1	12/12/19	WB	SW8270D
Diethyl phthalate	ND	260	120	ug/Kg	1	12/12/19	WB	SW8270D
Dimethylphthalate	ND	260	110	ug/Kg	1	12/12/19	WB	SW8270D
Di-n-butylphthalate	ND	260	97	ug/Kg	1	12/12/19	WB	SW8270D
Di-n-octylphthalate	ND	260	94	ug/Kg	1	12/12/19	WB	SW8270D
Fluoranthene	ND	260	120	ug/Kg	1	12/12/19	WB	SW8270D
Fluorene	ND	260	120	ug/Kg	1	12/12/19	WB	SW8270D
Hexachlorobenzene	ND	180	110	ug/Kg	1	12/12/19	WB	SW8270D
Hexachlorobutadiene	ND	260	130	ug/Kg	1	12/12/19	WB	SW8270D
Hexachlorocyclopentadiene	ND	260	110	ug/Kg	1	12/12/19	WB	SW8270D
Hexachloroethane	ND	180	110	ug/Kg	1	12/12/19	WB	SW8270D
Indeno(1,2,3-cd)pyrene	ND	260	120	ug/Kg	1	12/12/19	WB	SW8270D
Isophorone	ND	180	100	ug/Kg	1	12/12/19	WB	SW8270D
Naphthalene	ND	260	110	ug/Kg	1	12/12/19	WB	SW8270D
Nitrobenzene	ND	180	130	ug/Kg	1	12/12/19	WB	SW8270D
N-Nitrosodimethylamine	ND	260	100	ug/Kg	1	12/12/19	WB	SW8270D
N-Nitrosodi-n-propylamine	ND	180	120	ug/Kg	1	12/12/19	WB	SW8270D

1

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
N-Nitrosodiphenylamine	ND	260	140	ug/Kg	1	12/12/19	WB	SW8270D
Pentachloronitrobenzene	ND	260	140	ug/Kg	1	12/12/19	WB	SW8270D
Pentachlorophenol	ND	220	140	ug/Kg	1	12/12/19	WB	SW8270D
Phenanthrene	ND	260	100	ug/Kg	1	12/12/19	WB	SW8270D
Phenol	ND	260	120	ug/Kg	1	12/12/19	WB	SW8270D
Pyrene	ND	260	130	ug/Kg	1	12/12/19	WB	SW8270D
Pyridine	ND	260	90	ug/Kg	1	12/12/19	WB	SW8270D
<u>QA/QC Surrogates</u>								
% 2,4,6-Tribromophenol	58			%	1	12/12/19	WB	30 - 130 %
% 2-Fluorobiphenyl	60			%	1	12/12/19	WB	30 - 130 %
% 2-Fluorophenol	56			%	1	12/12/19	WB	30 - 130 %
% Nitrobenzene-d5	50			%	1	12/12/19	WB	30 - 130 %
% Phenol-d5	56			%	1	12/12/19	WB	30 - 130 %
% Terphenyl-d14	63			%	1	12/12/19	WB	30 - 130 %
<u>1,4-Dioxane</u>								
1,4-dioxane	ND	73	73	ug/Kg	1	12/12/19	WB	SW8270D (SIM)
<u>QA/QC Surrogates</u>								
% 2-Fluorobiphenyl	52			%	1	12/12/19	WB	30 - 130 %
% Nitrobenzene-d5	76			%	1	12/12/19	WB	30 - 130 %
% Terphenyl-d14	61			%	1	12/12/19	WB	30 - 130 %
Field Extraction	Completed					12/10/19		SW5035A

1

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit1

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

Please be advised that the NY 375 soil criteria for chromium are based on hexavalent chromium and trivalent chromium.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

December 18, 2019

Reviewed and Released by: Greg Lawrence, Assistant Lab Director



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823



Analysis Report

December 18, 2019

FOR: Attn: Mr. Charles B. Sosik, P.G.
Environmental Business Consultants
1808 Middle Country Rd
Ridge NY 11961-2406

Sample Information

Matrix: SOIL
Location Code: EBC
Rush Request: 72 Hour
P.O.#:

Custody Information

Collected by: TB
Received by: CP
Analyzed by: see "By" below

Date Time
12/10/19 11:20
12/11/19 16:00

Laboratory Data

SDG ID: GCE85356
Phoenix ID: CE85362

Project ID: 26-22 4TH ST QUEENS
Client ID: 19B7 (0-2)

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Silver	ND	0.37	0.37	mg/Kg	1	12/12/19	EK	SW6010D
Aluminum	8640	37	7.4	mg/Kg	10	12/12/19	EK	SW6010D
Arsenic	12.4	0.74	0.74	mg/Kg	1	12/12/19	EK	SW6010D
Barium	233	0.7	0.37	mg/Kg	1	12/12/19	EK	SW6010D
Beryllium	0.40	0.30	0.15	mg/Kg	1	12/12/19	EK	SW6010D
Calcium	14500	37	34	mg/Kg	10	12/12/19	EK	SW6010D
Cadmium	1.36	0.37	0.37	mg/Kg	1	12/12/19	EK	SW6010D
Cobalt	7.74	0.37	0.37	mg/Kg	1	12/12/19	EK	SW6010D
Chromium	22.0	0.37	0.37	mg/Kg	1	12/12/19	EK	SW6010D
Copper	83.1	0.7	0.37	mg/kg	1	12/12/19	EK	SW6010D
Iron	29300	37	37	mg/Kg	10	12/12/19	EK	SW6010D
Mercury	0.31	0.07	0.04	mg/Kg	5	12/12/19	RS	SW7471B
Potassium	1240	7	2.9	mg/Kg	1	12/12/19	EK	SW6010D
Magnesium	6140	37	37	mg/Kg	10	12/12/19	EK	SW6010D
Manganese	370	3.7	3.7	mg/Kg	10	12/12/19	EK	SW6010D
Sodium	290	7	3.2	mg/Kg	1	12/12/19	EK	SW6010D
Nickel	22.2	0.37	0.37	mg/Kg	1	12/12/19	EK	SW6010D
Lead	885	7.4	3.7	mg/Kg	10	12/12/19	EK	SW6010D
Antimony	4.3	3.7	3.7	mg/Kg	1	12/12/19	EK	SW6010D
Selenium	ND	1.5	1.3	mg/Kg	1	12/12/19	EK	SW6010D
Thallium	ND	1.5	1.5	mg/Kg	1	12/12/19	EK	SW6010D
Vanadium	34.2	0.37	0.37	mg/Kg	1	12/12/19	EK	SW6010D
Zinc	261	0.7	0.37	mg/Kg	1	12/12/19	EK	SW6010D
Percent Solid	85			%		12/11/19	VT	SW846-%Solid
Extraction for SVOA SIM	Completed					12/11/19	BB/LA	SW3545A
Soil Extraction for PCB	Completed					12/11/19	MM/L	SW3545A
Soil Extraction for Pesticides	Completed					12/11/19	MM/L	SW3545A
Soil Extraction for SVOA	Completed					12/11/19	AT/B/LA	SW3545A

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Mercury Digestion	Completed					12/12/19	LS/LS	SW7471B
Total Metals Digest	Completed					12/11/19	JJ/AG/BF	SW3050B

Polychlorinated Biphenyls

PCB-1016	ND	77	77	ug/Kg	2	12/16/19	SC	SW8082A
PCB-1221	ND	77	77	ug/Kg	2	12/16/19	SC	SW8082A
PCB-1232	ND	77	77	ug/Kg	2	12/16/19	SC	SW8082A
PCB-1242	ND	77	77	ug/Kg	2	12/16/19	SC	SW8082A
PCB-1248	ND	77	77	ug/Kg	2	12/16/19	SC	SW8082A
PCB-1254	ND	77	77	ug/Kg	2	12/16/19	SC	SW8082A
PCB-1260	110	77	77	ug/Kg	2	12/16/19	SC	SW8082A
PCB-1262	ND	77	77	ug/Kg	2	12/16/19	SC	SW8082A
PCB-1268	ND	77	77	ug/Kg	2	12/16/19	SC	SW8082A

QA/QC Surrogates

% DCBP	108			%	2	12/16/19	SC	30 - 150 %
% DCBP (Confirmation)	76			%	2	12/16/19	SC	30 - 150 %
% TCMX	83			%	2	12/16/19	SC	30 - 150 %
% TCMX (Confirmation)	74			%	2	12/16/19	SC	30 - 150 %

Pesticides - Soil

4,4' -DDD	17	2.3	2.3	ug/Kg	2	12/14/19	CG	SW8081B
4,4' -DDE	ND	3.0	3.0	ug/Kg	2	12/14/19	CG	SW8081B
4,4' -DDT	6.4	2.3	2.3	ug/Kg	2	12/14/19	CG	SW8081B
a-BHC	ND	7.7	7.7	ug/Kg	2	12/14/19	CG	SW8081B
a-Chlordane	ND	3.8	3.8	ug/Kg	2	12/14/19	CG	SW8081B
Aldrin	ND	3.8	3.8	ug/Kg	2	12/14/19	CG	SW8081B
b-BHC	ND	7.7	7.7	ug/Kg	2	12/14/19	CG	SW8081B
Chlordane	ND	38	38	ug/Kg	2	12/14/19	CG	SW8081B
d-BHC	ND	7.7	7.7	ug/Kg	2	12/14/19	CG	SW8081B
Dieldrin	ND	3.8	3.8	ug/Kg	2	12/14/19	CG	SW8081B
Endosulfan I	ND	7.7	7.7	ug/Kg	2	12/14/19	CG	SW8081B
Endosulfan II	ND	7.7	7.7	ug/Kg	2	12/14/19	CG	SW8081B
Endosulfan sulfate	ND	7.7	7.7	ug/Kg	2	12/14/19	CG	SW8081B
Endrin	ND	7.7	7.7	ug/Kg	2	12/14/19	CG	SW8081B
Endrin aldehyde	ND	7.7	7.7	ug/Kg	2	12/14/19	CG	SW8081B
Endrin ketone	ND	7.7	7.7	ug/Kg	2	12/14/19	CG	SW8081B
g-BHC	ND	1.5	1.5	ug/Kg	2	12/14/19	CG	SW8081B
g-Chlordane	ND	3.8	3.8	ug/Kg	2	12/14/19	CG	SW8081B
Heptachlor	ND	7.7	7.7	ug/Kg	2	12/14/19	CG	SW8081B
Heptachlor epoxide	ND	7.7	7.7	ug/Kg	2	12/14/19	CG	SW8081B
Methoxychlor	ND	38	38	ug/Kg	2	12/14/19	CG	SW8081B
Toxaphene	ND	150	150	ug/Kg	2	12/14/19	CG	SW8081B

QA/QC Surrogates

% DCBP	78			%	2	12/14/19	CG	30 - 150 %
% DCBP (Confirmation)	74			%	2	12/14/19	CG	30 - 150 %
% TCMX	59			%	2	12/14/19	CG	30 - 150 %
% TCMX (Confirmation)	61			%	2	12/14/19	CG	30 - 150 %

Volatiles

1,1,1,2-Tetrachloroethane	ND	4.0	0.80	ug/Kg	1	12/12/19	JLI	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
1,1,1-Trichloroethane	ND	4.0	0.40	ug/Kg	1	12/12/19	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	4.0	0.80	ug/Kg	1	12/12/19	JLI	SW8260C
1,1,2-Trichloroethane	ND	4.0	0.80	ug/Kg	1	12/12/19	JLI	SW8260C
1,1-Dichloroethane	ND	4.0	0.80	ug/Kg	1	12/12/19	JLI	SW8260C
1,1-Dichloroethene	ND	4.0	0.40	ug/Kg	1	12/12/19	JLI	SW8260C
1,1-Dichloropropene	ND	4.0	0.40	ug/Kg	1	12/12/19	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	4.0	0.80	ug/Kg	1	12/12/19	JLI	SW8260C
1,2,3-Trichloropropane	ND	4.0	0.40	ug/Kg	1	12/12/19	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	4.0	0.80	ug/Kg	1	12/12/19	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	4.0	0.40	ug/Kg	1	12/12/19	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	4.0	0.80	ug/Kg	1	12/12/19	JLI	SW8260C
1,2-Dibromoethane	ND	4.0	0.40	ug/Kg	1	12/12/19	JLI	SW8260C
1,2-Dichlorobenzene	ND	4.0	0.40	ug/Kg	1	12/12/19	JLI	SW8260C
1,2-Dichloroethane	ND	4.0	0.40	ug/Kg	1	12/12/19	JLI	SW8260C
1,2-Dichloropropane	ND	4.0	0.80	ug/Kg	1	12/12/19	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	4.0	0.40	ug/Kg	1	12/12/19	JLI	SW8260C
1,3-Dichlorobenzene	ND	4.0	0.40	ug/Kg	1	12/12/19	JLI	SW8260C
1,3-Dichloropropane	ND	4.0	0.80	ug/Kg	1	12/12/19	JLI	SW8260C
1,4-Dichlorobenzene	ND	4.0	0.40	ug/Kg	1	12/12/19	JLI	SW8260C
2,2-Dichloropropane	ND	4.0	0.40	ug/Kg	1	12/12/19	JLI	SW8260C
2-Chlorotoluene	ND	4.0	0.80	ug/Kg	1	12/12/19	JLI	SW8260C
2-Hexanone	ND	20	4.0	ug/Kg	1	12/12/19	JLI	SW8260C
2-Isopropyltoluene	ND	4.0	0.40	ug/Kg	1	12/12/19	JLI	SW8260C
4-Chlorotoluene	ND	4.0	0.40	ug/Kg	1	12/12/19	JLI	SW8260C
4-Methyl-2-pentanone	ND	20	4.0	ug/Kg	1	12/12/19	JLI	SW8260C
Acetone	34	S 20	4.0	ug/Kg	1	12/12/19	JLI	SW8260C
Acrylonitrile	ND	8.0	0.80	ug/Kg	1	12/12/19	JLI	SW8260C
Benzene	ND	4.0	0.40	ug/Kg	1	12/12/19	JLI	SW8260C
Bromobenzene	ND	4.0	0.40	ug/Kg	1	12/12/19	JLI	SW8260C
Bromochloromethane	ND	4.0	0.40	ug/Kg	1	12/12/19	JLI	SW8260C
Bromodichloromethane	ND	4.0	0.80	ug/Kg	1	12/12/19	JLI	SW8260C
Bromoform	ND	4.0	0.80	ug/Kg	1	12/12/19	JLI	SW8260C
Bromomethane	ND	4.0	1.6	ug/Kg	1	12/12/19	JLI	SW8260C
Carbon Disulfide	ND	4.0	0.80	ug/Kg	1	12/12/19	JLI	SW8260C
Carbon tetrachloride	ND	4.0	0.80	ug/Kg	1	12/12/19	JLI	SW8260C
Chlorobenzene	ND	4.0	0.40	ug/Kg	1	12/12/19	JLI	SW8260C
Chloroethane	ND	4.0	0.40	ug/Kg	1	12/12/19	JLI	SW8260C
Chloroform	ND	4.0	0.40	ug/Kg	1	12/12/19	JLI	SW8260C
Chloromethane	ND	4.0	0.80	ug/Kg	1	12/12/19	JLI	SW8260C
cis-1,2-Dichloroethene	ND	4.0	0.40	ug/Kg	1	12/12/19	JLI	SW8260C
cis-1,3-Dichloropropene	ND	4.0	0.40	ug/Kg	1	12/12/19	JLI	SW8260C
Dibromochloromethane	ND	4.0	0.80	ug/Kg	1	12/12/19	JLI	SW8260C
Dibromomethane	ND	4.0	0.80	ug/Kg	1	12/12/19	JLI	SW8260C
Dichlorodifluoromethane	ND	4.0	0.40	ug/Kg	1	12/12/19	JLI	SW8260C
Ethylbenzene	ND	4.0	0.40	ug/Kg	1	12/12/19	JLI	SW8260C
Hexachlorobutadiene	ND	4.0	0.40	ug/Kg	1	12/12/19	JLI	SW8260C
Isopropylbenzene	ND	4.0	0.40	ug/Kg	1	12/12/19	JLI	SW8260C
m&p-Xylene	ND	4.0	0.80	ug/Kg	1	12/12/19	JLI	SW8260C
Methyl Ethyl Ketone	6.3	J 24	4.0	ug/Kg	1	12/12/19	JLI	SW8260C

1

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Methyl t-butyl ether (MTBE)	ND	8.0	0.80	ug/Kg	1	12/12/19	JLI	SW8260C
Methylene chloride	ND	4.0	4.0	ug/Kg	1	12/12/19	JLI	SW8260C
Naphthalene	1.3	J 4.0	0.80	ug/Kg	1	12/12/19	JLI	SW8260C
n-Butylbenzene	ND	4.0	0.40	ug/Kg	1	12/12/19	JLI	SW8260C
n-Propylbenzene	ND	4.0	0.80	ug/Kg	1	12/12/19	JLI	SW8260C
o-Xylene	ND	4.0	0.80	ug/Kg	1	12/12/19	JLI	SW8260C
p-Isopropyltoluene	ND	4.0	0.40	ug/Kg	1	12/12/19	JLI	SW8260C
sec-Butylbenzene	ND	4.0	0.40	ug/Kg	1	12/12/19	JLI	SW8260C
Styrene	ND	4.0	0.40	ug/Kg	1	12/12/19	JLI	SW8260C
tert-Butylbenzene	ND	4.0	0.40	ug/Kg	1	12/12/19	JLI	SW8260C
Tetrachloroethene	110	100	50	ug/Kg	50	12/12/19	JLI	SW8260C
Tetrahydrofuran (THF)	ND	8.0	2.0	ug/Kg	1	12/12/19	JLI	SW8260C
Toluene	ND	4.0	0.40	ug/Kg	1	12/12/19	JLI	SW8260C
trans-1,2-Dichloroethene	ND	4.0	0.40	ug/Kg	1	12/12/19	JLI	SW8260C
trans-1,3-Dichloropropene	ND	4.0	0.40	ug/Kg	1	12/12/19	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	8.0	2.0	ug/Kg	1	12/12/19	JLI	SW8260C
Trichloroethene	83	J 250	25	ug/Kg	50	12/12/19	JLI	SW8260C
Trichlorofluoromethane	ND	4.0	0.80	ug/Kg	1	12/12/19	JLI	SW8260C
Trichlorotrifluoroethane	ND	4.0	0.40	ug/Kg	1	12/12/19	JLI	SW8260C
Vinyl chloride	ND	4.0	0.40	ug/Kg	1	12/12/19	JLI	SW8260C
<u>QA/QC Surrogates</u>								
% 1,2-dichlorobenzene-d4	98			%	1	12/12/19	JLI	70 - 130 %
% Bromofluorobenzene	90			%	1	12/12/19	JLI	70 - 130 %
% Dibromofluoromethane	94			%	1	12/12/19	JLI	70 - 130 %
% Toluene-d8	91			%	1	12/12/19	JLI	70 - 130 %
% 1,2-dichlorobenzene-d4 (50x)	96			%	50	12/12/19	JLI	70 - 130 %
% Bromofluorobenzene (50x)	97			%	50	12/12/19	JLI	70 - 130 %
% Dibromofluoromethane (50x)	89			%	50	12/12/19	JLI	70 - 130 %
% Toluene-d8 (50x)	94			%	50	12/12/19	JLI	70 - 130 %
<u>Volatiles</u>								
1,1,1,2-Tetrachloroethane	ND	16	0.80	ug/Kg	1	12/12/19	JLI	SW8260C
Acrolein	ND	4.0	0.80	ug/Kg	1	12/12/19	JLI	SW8260C
Acrylonitrile	ND	16	0.40	ug/Kg	1	12/12/19	JLI	SW8260C
Tert-butyl alcohol	ND	80	16	ug/Kg	1	12/12/19	JLI	SW8260C
<u>Semivolatiles</u>								
1,2,4,5-Tetrachlorobenzene	ND	270	140	ug/Kg	1	12/12/19	WB	SW8270D
1,2,4-Trichlorobenzene	ND	270	120	ug/Kg	1	12/12/19	WB	SW8270D
1,2-Dichlorobenzene	ND	270	110	ug/Kg	1	12/12/19	WB	SW8270D
1,2-Diphenylhydrazine	ND	270	130	ug/Kg	1	12/12/19	WB	SW8270D
1,3-Dichlorobenzene	ND	270	120	ug/Kg	1	12/12/19	WB	SW8270D
1,4-Dichlorobenzene	ND	270	120	ug/Kg	1	12/12/19	WB	SW8270D
2,4,5-Trichlorophenol	ND	270	210	ug/Kg	1	12/12/19	WB	SW8270D
2,4,6-Trichlorophenol	ND	200	130	ug/Kg	1	12/12/19	WB	SW8270D
2,4-Dichlorophenol	ND	200	140	ug/Kg	1	12/12/19	WB	SW8270D
2,4-Dimethylphenol	ND	270	97	ug/Kg	1	12/12/19	WB	SW8270D
2,4-Dinitrophenol	ND	270	270	ug/Kg	1	12/12/19	WB	SW8270D
2,4-Dinitrotoluene	ND	200	150	ug/Kg	1	12/12/19	WB	SW8270D
2,6-Dinitrotoluene	ND	200	120	ug/Kg	1	12/12/19	WB	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
2-Chloronaphthalene	ND	270	110	ug/Kg	1	12/12/19	WB	SW8270D
2-Chlorophenol	ND	270	110	ug/Kg	1	12/12/19	WB	SW8270D
2-Methylnaphthalene	ND	270	120	ug/Kg	1	12/12/19	WB	SW8270D
2-Methylphenol (o-cresol)	ND	270	180	ug/Kg	1	12/12/19	WB	SW8270D
2-Nitroaniline	ND	270	270	ug/Kg	1	12/12/19	WB	SW8270D
2-Nitrophenol	ND	270	250	ug/Kg	1	12/12/19	WB	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	270	150	ug/Kg	1	12/12/19	WB	SW8270D
3,3'-Dichlorobenzidine	ND	200	180	ug/Kg	1	12/12/19	WB	SW8270D
3-Nitroaniline	ND	390	780	ug/Kg	1	12/12/19	WB	SW8270D
4,6-Dinitro-2-methylphenol	ND	230	78	ug/Kg	1	12/12/19	WB	SW8270D
4-Bromophenyl phenyl ether	ND	270	110	ug/Kg	1	12/12/19	WB	SW8270D
4-Chloro-3-methylphenol	ND	270	140	ug/Kg	1	12/12/19	WB	SW8270D
4-Chloroaniline	ND	310	180	ug/Kg	1	12/12/19	WB	SW8270D
4-Chlorophenyl phenyl ether	ND	270	130	ug/Kg	1	12/12/19	WB	SW8270D
4-Nitroaniline	ND	390	130	ug/Kg	1	12/12/19	WB	SW8270D
4-Nitrophenol	ND	390	180	ug/Kg	1	12/12/19	WB	SW8270D
Acenaphthene	ND	270	120	ug/Kg	1	12/12/19	WB	SW8270D
Acenaphthylene	ND	270	110	ug/Kg	1	12/12/19	WB	SW8270D
Acetophenone	ND	270	120	ug/Kg	1	12/12/19	WB	SW8270D
Aniline	ND	310	310	ug/Kg	1	12/12/19	WB	SW8270D
Anthracene	170	J 270	130	ug/Kg	1	12/12/19	WB	SW8270D
Benz(a)anthracene	850	270	130	ug/Kg	1	12/12/19	WB	SW8270D
Benzidine	ND	390	230	ug/Kg	1	12/12/19	WB	SW8270D
Benzo(a)pyrene	810	200	130	ug/Kg	1	12/12/19	WB	SW8270D
Benzo(b)fluoranthene	610	270	130	ug/Kg	1	12/12/19	WB	SW8270D
Benzo(ghi)perylene	600	270	130	ug/Kg	1	12/12/19	WB	SW8270D
Benzo(k)fluoranthene	470	270	130	ug/Kg	1	12/12/19	WB	SW8270D
Benzoic acid	ND	2000	780	ug/Kg	1	12/12/19	WB	SW8270D
Benzyl butyl phthalate	ND	270	100	ug/Kg	1	12/12/19	WB	SW8270D
Bis(2-chloroethoxy)methane	ND	270	110	ug/Kg	1	12/12/19	WB	SW8270D
Bis(2-chloroethyl)ether	ND	200	110	ug/Kg	1	12/12/19	WB	SW8270D
Bis(2-chloroisopropyl)ether	ND	270	110	ug/Kg	1	12/12/19	WB	SW8270D
Bis(2-ethylhexyl)phthalate	ND	270	110	ug/Kg	1	12/12/19	WB	SW8270D
Carbazole	ND	200	160	ug/Kg	1	12/12/19	WB	SW8270D
Chrysene	1000	270	130	ug/Kg	1	12/12/19	WB	SW8270D
Dibenz(a,h)anthracene	ND	200	130	ug/Kg	1	12/12/19	WB	SW8270D
Dibenzofuran	ND	270	110	ug/Kg	1	12/12/19	WB	SW8270D
Diethyl phthalate	ND	270	120	ug/Kg	1	12/12/19	WB	SW8270D
Dimethylphthalate	ND	270	120	ug/Kg	1	12/12/19	WB	SW8270D
Di-n-butylphthalate	ND	270	100	ug/Kg	1	12/12/19	WB	SW8270D
Di-n-octylphthalate	ND	270	100	ug/Kg	1	12/12/19	WB	SW8270D
Fluoranthene	1300	270	130	ug/Kg	1	12/12/19	WB	SW8270D
Fluorene	ND	270	130	ug/Kg	1	12/12/19	WB	SW8270D
Hexachlorobenzene	ND	200	110	ug/Kg	1	12/12/19	WB	SW8270D
Hexachlorobutadiene	ND	270	140	ug/Kg	1	12/12/19	WB	SW8270D
Hexachlorocyclopentadiene	ND	270	120	ug/Kg	1	12/12/19	WB	SW8270D
Hexachloroethane	ND	200	120	ug/Kg	1	12/12/19	WB	SW8270D
Indeno(1,2,3-cd)pyrene	410	270	130	ug/Kg	1	12/12/19	WB	SW8270D
Isophorone	ND	200	110	ug/Kg	1	12/12/19	WB	SW8270D

1

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Naphthalene	ND	270	110	ug/Kg	1	12/12/19	WB	SW8270D
Nitrobenzene	ND	200	140	ug/Kg	1	12/12/19	WB	SW8270D
N-Nitrosodimethylamine	ND	270	110	ug/Kg	1	12/12/19	WB	SW8270D
N-Nitrosodi-n-propylamine	ND	200	130	ug/Kg	1	12/12/19	WB	SW8270D
N-Nitrosodiphenylamine	ND	270	150	ug/Kg	1	12/12/19	WB	SW8270D
Pentachloronitrobenzene	ND	270	150	ug/Kg	1	12/12/19	WB	SW8270D
Pentachlorophenol	ND	230	150	ug/Kg	1	12/12/19	WB	SW8270D
Phenanthrene	1000	270	110	ug/Kg	1	12/12/19	WB	SW8270D
Phenol	ND	270	130	ug/Kg	1	12/12/19	WB	SW8270D
Pyrene	1300	270	130	ug/Kg	1	12/12/19	WB	SW8270D
Pyridine	ND	270	96	ug/Kg	1	12/12/19	WB	SW8270D
<u>QA/QC Surrogates</u>								
% 2,4,6-Tribromophenol	55			%	1	12/12/19	WB	30 - 130 %
% 2-Fluorobiphenyl	58			%	1	12/12/19	WB	30 - 130 %
% 2-Fluorophenol	48			%	1	12/12/19	WB	30 - 130 %
% Nitrobenzene-d5	47			%	1	12/12/19	WB	30 - 130 %
% Phenol-d5	48			%	1	12/12/19	WB	30 - 130 %
% Terphenyl-d14	52			%	1	12/12/19	WB	30 - 130 %
<u>1,4-Dioxane</u>								
1,4-dioxane	ND	78	78	ug/Kg	1	12/12/19	WB	SW8270D (SIM)
<u>QA/QC Surrogates</u>								
% 2-Fluorobiphenyl	60			%	1	12/12/19	WB	30 - 130 %
% Nitrobenzene-d5	77			%	1	12/12/19	WB	30 - 130 %
% Terphenyl-d14	55			%	1	12/12/19	WB	30 - 130 %
Field Extraction	Completed					12/10/19		SW5035A

1

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low J=Estimated Below RL LOD=Limit of Detection MDL=Method Detection Limit1

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

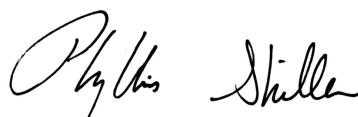
Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

Please be advised that the NY 375 soil criteria for chromium are based on hexavalent chromium and trivalent chromium.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

S - Laboratory solvent, contamination is possible.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

December 18, 2019

Reviewed and Released by: Greg Lawrence, Assistant Lab Director



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823



Analysis Report

December 18, 2019

FOR: Attn: Mr. Charles B. Sosik, P.G.
Environmental Business Consultants
1808 Middle Country Rd
Ridge NY 11961-2406

Sample Information

Matrix: SOIL
Location Code: EBC
Rush Request: 72 Hour
P.O.#:

Custody Information

Collected by: TB
Received by: CP
Analyzed by: see "By" below

Date Time
12/10/19 11:33
12/11/19 16:00

Laboratory Data

SDG ID: GCE85356
Phoenix ID: CE85363

Project ID: 26-22 4TH ST QUEENS
Client ID: 19B7 (8-10)

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Silver	ND	0.35	0.35	mg/Kg	1	12/12/19	EK	SW6010D
Aluminum	11400	35	7.0	mg/Kg	10	12/12/19	EK	SW6010D
Arsenic	1.61	0.70	0.70	mg/Kg	1	12/12/19	EK	SW6010D
Barium	51.1	0.7	0.35	mg/Kg	1	12/12/19	EK	SW6010D
Beryllium	0.44	0.28	0.14	mg/Kg	1	12/12/19	EK	SW6010D
Calcium	975	35	32	mg/Kg	10	12/12/19	EK	SW6010D
Cadmium	0.41	0.35	0.35	mg/Kg	1	12/12/19	EK	SW6010D
Cobalt	6.48	0.35	0.35	mg/Kg	1	12/12/19	EK	SW6010D
Chromium	23.9	0.35	0.35	mg/Kg	1	12/12/19	EK	SW6010D
Copper	19.1	0.7	0.35	mg/kg	1	12/12/19	EK	SW6010D
Iron	18600	35	35	mg/Kg	10	12/12/19	EK	SW6010D
Mercury	ND	0.03	0.02	mg/Kg	2	12/12/19	RS	SW7471B
Potassium	1950	7	2.7	mg/Kg	1	12/12/19	EK	SW6010D
Magnesium	4460	3.5	3.5	mg/Kg	1	12/12/19	EK	SW6010D
Manganese	509	3.5	3.5	mg/Kg	10	12/12/19	EK	SW6010D
Sodium	204	7	3.0	mg/Kg	1	12/12/19	EK	SW6010D
Nickel	21.4	0.35	0.35	mg/Kg	1	12/12/19	EK	SW6010D
Lead	6.4	0.7	0.35	mg/Kg	1	12/12/19	EK	SW6010D
Antimony	ND	3.5	3.5	mg/Kg	1	12/12/19	EK	SW6010D
Selenium	ND	1.4	1.2	mg/Kg	1	12/12/19	EK	SW6010D
Thallium	ND	1.4	1.4	mg/Kg	1	12/12/19	EK	SW6010D
Vanadium	30.0	0.35	0.35	mg/Kg	1	12/12/19	EK	SW6010D
Zinc	37.4	0.7	0.35	mg/Kg	1	12/12/19	EK	SW6010D
Percent Solid	87			%		12/11/19	VT	SW846-%Solid
Extraction for SVOA SIM	Completed					12/11/19	BB/LA	SW3545A
Soil Extraction for PCB	Completed					12/11/19	MM/L	SW3545A
Soil Extraction for Pesticides	Completed					12/11/19	MM/L	SW3545A
Soil Extraction for SVOA	Completed					12/11/19	AT/B/LA	SW3545A

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Mercury Digestion	Completed					12/12/19	LS/LS	SW7471B
Total Metals Digest	Completed					12/11/19	JJ/AG/BF	SW3050B

Polychlorinated Biphenyls

PCB-1016	ND	77	77	ug/Kg	2	12/12/19	SC	SW8082A
PCB-1221	ND	77	77	ug/Kg	2	12/12/19	SC	SW8082A
PCB-1232	ND	77	77	ug/Kg	2	12/12/19	SC	SW8082A
PCB-1242	ND	77	77	ug/Kg	2	12/12/19	SC	SW8082A
PCB-1248	ND	77	77	ug/Kg	2	12/12/19	SC	SW8082A
PCB-1254	ND	77	77	ug/Kg	2	12/12/19	SC	SW8082A
PCB-1260	ND	77	77	ug/Kg	2	12/12/19	SC	SW8082A
PCB-1262	ND	77	77	ug/Kg	2	12/12/19	SC	SW8082A
PCB-1268	ND	77	77	ug/Kg	2	12/12/19	SC	SW8082A

QA/QC Surrogates

% DCBP	98			%	2	12/12/19	SC	30 - 150 %
% DCBP (Confirmation)	96			%	2	12/12/19	SC	30 - 150 %
% TCMX	97			%	2	12/12/19	SC	30 - 150 %
% TCMX (Confirmation)	81			%	2	12/12/19	SC	30 - 150 %

Pesticides - Soil

4,4' -DDD	ND	2.3	2.3	ug/Kg	2	12/12/19	CG	SW8081B
4,4' -DDE	ND	2.3	2.3	ug/Kg	2	12/12/19	CG	SW8081B
4,4' -DDT	ND	2.3	2.3	ug/Kg	2	12/12/19	CG	SW8081B
a-BHC	ND	7.7	7.7	ug/Kg	2	12/12/19	CG	SW8081B
a-Chlordane	ND	3.8	3.8	ug/Kg	2	12/12/19	CG	SW8081B
Aldrin	ND	3.8	3.8	ug/Kg	2	12/12/19	CG	SW8081B
b-BHC	ND	7.7	7.7	ug/Kg	2	12/12/19	CG	SW8081B
Chlordane	ND	38	38	ug/Kg	2	12/12/19	CG	SW8081B
d-BHC	ND	7.7	7.7	ug/Kg	2	12/12/19	CG	SW8081B
Dieldrin	ND	3.8	3.8	ug/Kg	2	12/12/19	CG	SW8081B
Endosulfan I	ND	7.7	7.7	ug/Kg	2	12/12/19	CG	SW8081B
Endosulfan II	ND	7.7	7.7	ug/Kg	2	12/12/19	CG	SW8081B
Endosulfan sulfate	ND	7.7	7.7	ug/Kg	2	12/12/19	CG	SW8081B
Endrin	ND	7.7	7.7	ug/Kg	2	12/12/19	CG	SW8081B
Endrin aldehyde	ND	7.7	7.7	ug/Kg	2	12/12/19	CG	SW8081B
Endrin ketone	ND	7.7	7.7	ug/Kg	2	12/12/19	CG	SW8081B
g-BHC	ND	1.5	1.5	ug/Kg	2	12/12/19	CG	SW8081B
g-Chlordane	ND	3.8	3.8	ug/Kg	2	12/12/19	CG	SW8081B
Heptachlor	ND	7.7	7.7	ug/Kg	2	12/12/19	CG	SW8081B
Heptachlor epoxide	ND	7.7	7.7	ug/Kg	2	12/12/19	CG	SW8081B
Methoxychlor	ND	38	38	ug/Kg	2	12/12/19	CG	SW8081B
Toxaphene	ND	150	150	ug/Kg	2	12/12/19	CG	SW8081B

QA/QC Surrogates

% DCBP	59			%	2	12/12/19	CG	30 - 150 %
% DCBP (Confirmation)	68			%	2	12/12/19	CG	30 - 150 %
% TCMX	54			%	2	12/12/19	CG	30 - 150 %
% TCMX (Confirmation)	53			%	2	12/12/19	CG	30 - 150 %

Volatiles

1,1,1,2-Tetrachloroethane	ND	4.2	0.84	ug/Kg	1	12/12/19	JLI	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
1,1,1-Trichloroethane	ND	4.2	0.42	ug/Kg	1	12/12/19	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	4.2	0.84	ug/Kg	1	12/12/19	JLI	SW8260C
1,1,2-Trichloroethane	ND	4.2	0.84	ug/Kg	1	12/12/19	JLI	SW8260C
1,1-Dichloroethane	ND	4.2	0.84	ug/Kg	1	12/12/19	JLI	SW8260C
1,1-Dichloroethene	ND	4.2	0.42	ug/Kg	1	12/12/19	JLI	SW8260C
1,1-Dichloropropene	ND	4.2	0.42	ug/Kg	1	12/12/19	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	4.2	0.84	ug/Kg	1	12/12/19	JLI	SW8260C
1,2,3-Trichloropropane	ND	4.2	0.42	ug/Kg	1	12/12/19	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	4.2	0.84	ug/Kg	1	12/12/19	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	4.2	0.42	ug/Kg	1	12/12/19	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	4.2	0.84	ug/Kg	1	12/12/19	JLI	SW8260C
1,2-Dibromoethane	ND	4.2	0.42	ug/Kg	1	12/12/19	JLI	SW8260C
1,2-Dichlorobenzene	ND	4.2	0.42	ug/Kg	1	12/12/19	JLI	SW8260C
1,2-Dichloroethane	ND	4.2	0.42	ug/Kg	1	12/12/19	JLI	SW8260C
1,2-Dichloropropane	ND	4.2	0.84	ug/Kg	1	12/12/19	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	4.2	0.42	ug/Kg	1	12/12/19	JLI	SW8260C
1,3-Dichlorobenzene	ND	4.2	0.42	ug/Kg	1	12/12/19	JLI	SW8260C
1,3-Dichloropropane	ND	4.2	0.84	ug/Kg	1	12/12/19	JLI	SW8260C
1,4-Dichlorobenzene	ND	4.2	0.42	ug/Kg	1	12/12/19	JLI	SW8260C
2,2-Dichloropropane	ND	4.2	0.42	ug/Kg	1	12/12/19	JLI	SW8260C
2-Chlorotoluene	ND	4.2	0.84	ug/Kg	1	12/12/19	JLI	SW8260C
2-Hexanone	ND	21	4.2	ug/Kg	1	12/12/19	JLI	SW8260C
2-Isopropyltoluene	ND	4.2	0.42	ug/Kg	1	12/12/19	JLI	SW8260C
4-Chlorotoluene	ND	4.2	0.42	ug/Kg	1	12/12/19	JLI	SW8260C
4-Methyl-2-pentanone	ND	21	4.2	ug/Kg	1	12/12/19	JLI	SW8260C
Acetone	5.0	JS 21	4.2	ug/Kg	1	12/12/19	JLI	SW8260C
Acrylonitrile	ND	8.4	0.84	ug/Kg	1	12/12/19	JLI	SW8260C
Benzene	ND	4.2	0.42	ug/Kg	1	12/12/19	JLI	SW8260C
Bromobenzene	ND	4.2	0.42	ug/Kg	1	12/12/19	JLI	SW8260C
Bromochloromethane	ND	4.2	0.42	ug/Kg	1	12/12/19	JLI	SW8260C
Bromodichloromethane	ND	4.2	0.84	ug/Kg	1	12/12/19	JLI	SW8260C
Bromoform	ND	4.2	0.84	ug/Kg	1	12/12/19	JLI	SW8260C
Bromomethane	ND	4.2	1.7	ug/Kg	1	12/12/19	JLI	SW8260C
Carbon Disulfide	ND	4.2	0.84	ug/Kg	1	12/12/19	JLI	SW8260C
Carbon tetrachloride	ND	4.2	0.84	ug/Kg	1	12/12/19	JLI	SW8260C
Chlorobenzene	ND	4.2	0.42	ug/Kg	1	12/12/19	JLI	SW8260C
Chloroethane	ND	4.2	0.42	ug/Kg	1	12/12/19	JLI	SW8260C
Chloroform	ND	4.2	0.42	ug/Kg	1	12/12/19	JLI	SW8260C
Chloromethane	ND	4.2	0.84	ug/Kg	1	12/12/19	JLI	SW8260C
cis-1,2-Dichloroethene	ND	4.2	0.42	ug/Kg	1	12/12/19	JLI	SW8260C
cis-1,3-Dichloropropene	ND	4.2	0.42	ug/Kg	1	12/12/19	JLI	SW8260C
Dibromochloromethane	ND	4.2	0.84	ug/Kg	1	12/12/19	JLI	SW8260C
Dibromomethane	ND	4.2	0.84	ug/Kg	1	12/12/19	JLI	SW8260C
Dichlorodifluoromethane	ND	4.2	0.42	ug/Kg	1	12/12/19	JLI	SW8260C
Ethylbenzene	ND	4.2	0.42	ug/Kg	1	12/12/19	JLI	SW8260C
Hexachlorobutadiene	ND	4.2	0.42	ug/Kg	1	12/12/19	JLI	SW8260C
Isopropylbenzene	ND	4.2	0.42	ug/Kg	1	12/12/19	JLI	SW8260C
m&p-Xylene	ND	4.2	0.84	ug/Kg	1	12/12/19	JLI	SW8260C
Methyl Ethyl Ketone	ND	25	4.2	ug/Kg	1	12/12/19	JLI	SW8260C

1

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Methyl t-butyl ether (MTBE)	ND	8.4	0.84	ug/Kg	1	12/12/19	JLI	SW8260C
Methylene chloride	ND	4.2	4.2	ug/Kg	1	12/12/19	JLI	SW8260C
Naphthalene	ND	4.2	0.84	ug/Kg	1	12/12/19	JLI	SW8260C
n-Butylbenzene	ND	4.2	0.42	ug/Kg	1	12/12/19	JLI	SW8260C
n-Propylbenzene	ND	4.2	0.84	ug/Kg	1	12/12/19	JLI	SW8260C
o-Xylene	ND	4.2	0.84	ug/Kg	1	12/12/19	JLI	SW8260C
p-Isopropyltoluene	ND	4.2	0.42	ug/Kg	1	12/12/19	JLI	SW8260C
sec-Butylbenzene	ND	4.2	0.42	ug/Kg	1	12/12/19	JLI	SW8260C
Styrene	ND	4.2	0.42	ug/Kg	1	12/12/19	JLI	SW8260C
tert-Butylbenzene	ND	4.2	0.42	ug/Kg	1	12/12/19	JLI	SW8260C
Tetrachloroethene	ND	4.2	0.84	ug/Kg	1	12/12/19	JLI	SW8260C
Tetrahydrofuran (THF)	ND	8.4	2.1	ug/Kg	1	12/12/19	JLI	SW8260C
Toluene	ND	4.2	0.42	ug/Kg	1	12/12/19	JLI	SW8260C
trans-1,2-Dichloroethene	ND	4.2	0.42	ug/Kg	1	12/12/19	JLI	SW8260C
trans-1,3-Dichloropropene	ND	4.2	0.42	ug/Kg	1	12/12/19	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	8.4	2.1	ug/Kg	1	12/12/19	JLI	SW8260C
Trichloroethene	ND	4.2	0.42	ug/Kg	1	12/12/19	JLI	SW8260C
Trichlorofluoromethane	ND	4.2	0.84	ug/Kg	1	12/12/19	JLI	SW8260C
Trichlorotrifluoroethane	ND	4.2	0.42	ug/Kg	1	12/12/19	JLI	SW8260C
Vinyl chloride	ND	4.2	0.42	ug/Kg	1	12/12/19	JLI	SW8260C
<u>QA/QC Surrogates</u>								
% 1,2-dichlorobenzene-d4	95			%	1	12/12/19	JLI	70 - 130 %
% Bromofluorobenzene	99			%	1	12/12/19	JLI	70 - 130 %
% Dibromofluoromethane	95			%	1	12/12/19	JLI	70 - 130 %
% Toluene-d8	95			%	1	12/12/19	JLI	70 - 130 %
<u>Volatiles</u>								
1,1,1,2-Tetrachloroethane	ND	17	0.84	ug/Kg	1	12/12/19	JLI	SW8260C
Acrolein	ND	4.2	0.84	ug/Kg	1	12/12/19	JLI	SW8260C
Acrylonitrile	ND	17	0.42	ug/Kg	1	12/12/19	JLI	SW8260C
Tert-butyl alcohol	ND	84	17	ug/Kg	1	12/12/19	JLI	SW8260C
<u>Semivolatiles</u>								
1,2,4,5-Tetrachlorobenzene	ND	270	130	ug/Kg	1	12/12/19	WB	SW8270D
1,2,4-Trichlorobenzene	ND	270	110	ug/Kg	1	12/12/19	WB	SW8270D
1,2-Dichlorobenzene	ND	270	110	ug/Kg	1	12/12/19	WB	SW8270D
1,2-Diphenylhydrazine	ND	270	120	ug/Kg	1	12/12/19	WB	SW8270D
1,3-Dichlorobenzene	ND	270	110	ug/Kg	1	12/12/19	WB	SW8270D
1,4-Dichlorobenzene	ND	270	110	ug/Kg	1	12/12/19	WB	SW8270D
2,4,5-Trichlorophenol	ND	270	210	ug/Kg	1	12/12/19	WB	SW8270D
2,4,6-Trichlorophenol	ND	190	120	ug/Kg	1	12/12/19	WB	SW8270D
2,4-Dichlorophenol	ND	190	130	ug/Kg	1	12/12/19	WB	SW8270D
2,4-Dimethylphenol	ND	270	94	ug/Kg	1	12/12/19	WB	SW8270D
2,4-Dinitrophenol	ND	270	270	ug/Kg	1	12/12/19	WB	SW8270D
2,4-Dinitrotoluene	ND	190	150	ug/Kg	1	12/12/19	WB	SW8270D
2,6-Dinitrotoluene	ND	190	120	ug/Kg	1	12/12/19	WB	SW8270D
2-Chloronaphthalene	ND	270	110	ug/Kg	1	12/12/19	WB	SW8270D
2-Chlorophenol	ND	270	110	ug/Kg	1	12/12/19	WB	SW8270D
2-Methylnaphthalene	ND	270	110	ug/Kg	1	12/12/19	WB	SW8270D
2-Methylphenol (o-cresol)	ND	270	180	ug/Kg	1	12/12/19	WB	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
2-Nitroaniline	ND	270	270	ug/Kg	1	12/12/19	WB	SW8270D
2-Nitrophenol	ND	270	240	ug/Kg	1	12/12/19	WB	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	270	150	ug/Kg	1	12/12/19	WB	SW8270D
3,3'-Dichlorobenzidine	ND	190	180	ug/Kg	1	12/12/19	WB	SW8270D
3-Nitroaniline	ND	380	760	ug/Kg	1	12/12/19	WB	SW8270D
4,6-Dinitro-2-methylphenol	ND	230	76	ug/Kg	1	12/12/19	WB	SW8270D
4-Bromophenyl phenyl ether	ND	270	110	ug/Kg	1	12/12/19	WB	SW8270D
4-Chloro-3-methylphenol	ND	270	130	ug/Kg	1	12/12/19	WB	SW8270D
4-Chloroaniline	ND	300	180	ug/Kg	1	12/12/19	WB	SW8270D
4-Chlorophenyl phenyl ether	ND	270	130	ug/Kg	1	12/12/19	WB	SW8270D
4-Nitroaniline	ND	380	130	ug/Kg	1	12/12/19	WB	SW8270D
4-Nitrophenol	ND	380	170	ug/Kg	1	12/12/19	WB	SW8270D
Acenaphthene	ND	270	120	ug/Kg	1	12/12/19	WB	SW8270D
Acenaphthylene	ND	270	110	ug/Kg	1	12/12/19	WB	SW8270D
Acetophenone	ND	270	120	ug/Kg	1	12/12/19	WB	SW8270D
Aniline	ND	300	300	ug/Kg	1	12/12/19	WB	SW8270D
Anthracene	ND	270	120	ug/Kg	1	12/12/19	WB	SW8270D
Benz(a)anthracene	ND	270	130	ug/Kg	1	12/12/19	WB	SW8270D
Benzidine	ND	380	220	ug/Kg	1	12/12/19	WB	SW8270D
Benzo(a)pyrene	ND	190	120	ug/Kg	1	12/12/19	WB	SW8270D
Benzo(b)fluoranthene	ND	270	130	ug/Kg	1	12/12/19	WB	SW8270D
Benzo(ghi)perylene	ND	270	120	ug/Kg	1	12/12/19	WB	SW8270D
Benzo(k)fluoranthene	ND	270	130	ug/Kg	1	12/12/19	WB	SW8270D
Benzoic acid	ND	1900	760	ug/Kg	1	12/12/19	WB	SW8270D
Benzyl butyl phthalate	ND	270	98	ug/Kg	1	12/12/19	WB	SW8270D
Bis(2-chloroethoxy)methane	ND	270	100	ug/Kg	1	12/12/19	WB	SW8270D
Bis(2-chloroethyl)ether	ND	190	100	ug/Kg	1	12/12/19	WB	SW8270D
Bis(2-chloroisopropyl)ether	ND	270	110	ug/Kg	1	12/12/19	WB	SW8270D
Bis(2-ethylhexyl)phthalate	ND	270	110	ug/Kg	1	12/12/19	WB	SW8270D
Carbazole	ND	190	150	ug/Kg	1	12/12/19	WB	SW8270D
Chrysene	ND	270	130	ug/Kg	1	12/12/19	WB	SW8270D
Dibenz(a,h)anthracene	ND	190	120	ug/Kg	1	12/12/19	WB	SW8270D
Dibenzofuran	ND	270	110	ug/Kg	1	12/12/19	WB	SW8270D
Diethyl phthalate	ND	270	120	ug/Kg	1	12/12/19	WB	SW8270D
Dimethylphthalate	ND	270	120	ug/Kg	1	12/12/19	WB	SW8270D
Di-n-butylphthalate	ND	270	100	ug/Kg	1	12/12/19	WB	SW8270D
Di-n-octylphthalate	ND	270	98	ug/Kg	1	12/12/19	WB	SW8270D
Fluoranthene	ND	270	120	ug/Kg	1	12/12/19	WB	SW8270D
Fluorene	ND	270	130	ug/Kg	1	12/12/19	WB	SW8270D
Hexachlorobenzene	ND	190	110	ug/Kg	1	12/12/19	WB	SW8270D
Hexachlorobutadiene	ND	270	140	ug/Kg	1	12/12/19	WB	SW8270D
Hexachlorocyclopentadiene	ND	270	120	ug/Kg	1	12/12/19	WB	SW8270D
Hexachloroethane	ND	190	110	ug/Kg	1	12/12/19	WB	SW8270D
Indeno(1,2,3-cd)pyrene	ND	270	130	ug/Kg	1	12/12/19	WB	SW8270D
Isophorone	ND	190	110	ug/Kg	1	12/12/19	WB	SW8270D
Naphthalene	ND	270	110	ug/Kg	1	12/12/19	WB	SW8270D
Nitrobenzene	ND	190	130	ug/Kg	1	12/12/19	WB	SW8270D
N-Nitrosodimethylamine	ND	270	110	ug/Kg	1	12/12/19	WB	SW8270D
N-Nitrosodi-n-propylamine	ND	190	120	ug/Kg	1	12/12/19	WB	SW8270D

1

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
N-Nitrosodiphenylamine	ND	270	150	ug/Kg	1	12/12/19	WB	SW8270D
Pentachloronitrobenzene	ND	270	140	ug/Kg	1	12/12/19	WB	SW8270D
Pentachlorophenol	ND	230	140	ug/Kg	1	12/12/19	WB	SW8270D
Phenanthrene	ND	270	110	ug/Kg	1	12/12/19	WB	SW8270D
Phenol	ND	270	120	ug/Kg	1	12/12/19	WB	SW8270D
Pyrene	ND	270	130	ug/Kg	1	12/12/19	WB	SW8270D
Pyridine	ND	270	93	ug/Kg	1	12/12/19	WB	SW8270D
<u>QA/QC Surrogates</u>								
% 2,4,6-Tribromophenol	50			%	1	12/12/19	WB	30 - 130 %
% 2-Fluorobiphenyl	54			%	1	12/12/19	WB	30 - 130 %
% 2-Fluorophenol	53			%	1	12/12/19	WB	30 - 130 %
% Nitrobenzene-d5	50			%	1	12/12/19	WB	30 - 130 %
% Phenol-d5	50			%	1	12/12/19	WB	30 - 130 %
% Terphenyl-d14	58			%	1	12/12/19	WB	30 - 130 %
<u>1,4-Dioxane</u>								
1,4-dioxane	ND	75	75	ug/Kg	1	12/12/19	WB	SW8270D (SIM)
<u>QA/QC Surrogates</u>								
% 2-Fluorobiphenyl	44			%	1	12/12/19	WB	30 - 130 %
% Nitrobenzene-d5	56			%	1	12/12/19	WB	30 - 130 %
% Terphenyl-d14	58			%	1	12/12/19	WB	30 - 130 %
Field Extraction	Completed					12/10/19		SW5035A

1

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low J=Estimated Below RL LOD=Limit of Detection MDL=Method Detection Limit1

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

Please be advised that the NY 375 soil criteria for chromium are based on hexavalent chromium and trivalent chromium.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

S - Laboratory solvent, contamination is possible.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

December 18, 2019

Reviewed and Released by: Greg Lawrence, Assistant Lab Director



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823



Analysis Report

December 18, 2019

FOR: Attn: Mr. Charles B. Sosik, P.G.
Environmental Business Consultants
1808 Middle Country Rd
Ridge NY 11961-2406

Sample Information

Matrix: SOIL
Location Code: EBC
Rush Request: 72 Hour
P.O.#:

Custody Information

Collected by: TB
Received by: CP
Analyzed by: see "By" below

Date

12/10/19 12:20
12/11/19 16:00

Time

Laboratory Data

SDG ID: GCE85356
Phoenix ID: CE85364

Project ID: 26-22 4TH ST QUEENS
Client ID: 19B8 (0-2)

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Silver	ND	0.36	0.36	mg/Kg	1	12/12/19	EK	SW6010D
Aluminum	5140	36	7.3	mg/Kg	10	12/12/19	EK	SW6010D
Arsenic	14.2	0.73	0.73	mg/Kg	1	12/12/19	EK	SW6010D
Barium	179	0.7	0.36	mg/Kg	1	12/12/19	EK	SW6010D
Beryllium	0.41	0.29	0.15	mg/Kg	1	12/12/19	EK	SW6010D
Calcium	3000	36	33	mg/Kg	10	12/12/19	EK	SW6010D
Cadmium	1.82	0.36	0.36	mg/Kg	1	12/12/19	EK	SW6010D
Cobalt	5.27	0.36	0.36	mg/Kg	1	12/12/19	EK	SW6010D
Chromium	17.0	0.36	0.36	mg/Kg	1	12/12/19	EK	SW6010D
Copper	73.6	0.7	0.36	mg/kg	1	12/12/19	EK	SW6010D
Iron	32600	36	36	mg/Kg	10	12/12/19	EK	SW6010D
Mercury	0.40	0.08	0.05	mg/Kg	5	12/12/19	RS	SW7471B
Potassium	992	7	2.8	mg/Kg	1	12/12/19	EK	SW6010D
Magnesium	1370	3.6	3.6	mg/Kg	1	12/12/19	EK	SW6010D
Manganese	126	0.36	0.36	mg/Kg	1	12/12/19	EK	SW6010D
Sodium	295	7	3.1	mg/Kg	1	12/12/19	EK	SW6010D
Nickel	18.4	0.36	0.36	mg/Kg	1	12/12/19	EK	SW6010D
Lead	412	0.7	0.36	mg/Kg	1	12/12/19	EK	SW6010D
Antimony	4.3	3.6	3.6	mg/Kg	1	12/12/19	EK	SW6010D
Selenium	ND	1.5	1.2	mg/Kg	1	12/12/19	EK	SW6010D
Thallium	ND	1.5	1.5	mg/Kg	1	12/12/19	EK	SW6010D
Vanadium	21.2	0.36	0.36	mg/Kg	1	12/12/19	EK	SW6010D
Zinc	262	0.7	0.36	mg/Kg	1	12/12/19	EK	SW6010D
Percent Solid	84			%		12/11/19	VT	SW846-%Solid
Extraction for SVOA SIM	Completed					12/11/19	BB/LA	SW3545A
Soil Extraction for PCB	Completed					12/13/19	MM/LL	SW3545A
Soil Extraction for PCB	Completed					12/13/19	MM/LL	SW3545A
Soil Extraction for Pesticides	Completed					12/13/19	MM	SW3545A

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Soil Extraction for SVOA	Completed					12/11/19	AT/B/LA	SW3545A
Mercury Digestion	Completed					12/12/19	LS/LS	SW7471B
Total Metals Digest	Completed					12/11/19	JJ/AG/BF	SW3050B

Polychlorinated Biphenyls

PCB-1016	ND	78	78	ug/Kg	2	12/16/19	SC	SW8082A
PCB-1221	ND	78	78	ug/Kg	2	12/16/19	SC	SW8082A
PCB-1232	ND	78	78	ug/Kg	2	12/16/19	SC	SW8082A
PCB-1242	ND	78	78	ug/Kg	2	12/16/19	SC	SW8082A
PCB-1248	ND	78	78	ug/Kg	2	12/16/19	SC	SW8082A
PCB-1254	ND	78	78	ug/Kg	2	12/16/19	SC	SW8082A
PCB-1260	130	78	78	ug/Kg	2	12/16/19	SC	SW8082A
PCB-1262	ND	78	78	ug/Kg	2	12/16/19	SC	SW8082A
PCB-1268	ND	78	78	ug/Kg	2	12/16/19	SC	SW8082A

QA/QC Surrogates

% DCBP	89			%	2	12/16/19	SC	30 - 150 %
% DCBP (Confirmation)	84			%	2	12/16/19	SC	30 - 150 %
% TCMX	84			%	2	12/16/19	SC	30 - 150 %
% TCMX (Confirmation)	78			%	2	12/16/19	SC	30 - 150 %

Pesticides - Soil

4,4' -DDD	6.5	2.4	2.4	ug/Kg	2	12/12/19	CG	SW8081B
4,4' -DDE	ND	2.4	2.4	ug/Kg	2	12/12/19	CG	SW8081B
4,4' -DDT	5.9	2.4	2.4	ug/Kg	2	12/12/19	CG	SW8081B
a-BHC	ND	7.9	7.9	ug/Kg	2	12/12/19	CG	SW8081B
a-Chlordane	ND	3.9	3.9	ug/Kg	2	12/12/19	CG	SW8081B
Aldrin	ND	3.9	3.9	ug/Kg	2	12/12/19	CG	SW8081B
b-BHC	ND	7.9	7.9	ug/Kg	2	12/12/19	CG	SW8081B
Chlordane	ND	39	39	ug/Kg	2	12/12/19	CG	SW8081B
d-BHC	ND	7.9	7.9	ug/Kg	2	12/12/19	CG	SW8081B
Dieldrin	ND	3.9	3.9	ug/Kg	2	12/12/19	CG	SW8081B
Endosulfan I	ND	7.9	7.9	ug/Kg	2	12/12/19	CG	SW8081B
Endosulfan II	ND	7.9	7.9	ug/Kg	2	12/12/19	CG	SW8081B
Endosulfan sulfate	ND	7.9	7.9	ug/Kg	2	12/12/19	CG	SW8081B
Endrin	ND	7.9	7.9	ug/Kg	2	12/12/19	CG	SW8081B
Endrin aldehyde	ND	7.9	7.9	ug/Kg	2	12/12/19	CG	SW8081B
Endrin ketone	ND	7.9	7.9	ug/Kg	2	12/12/19	CG	SW8081B
g-BHC	ND	1.6	1.6	ug/Kg	2	12/12/19	CG	SW8081B
g-Chlordane	ND	3.9	3.9	ug/Kg	2	12/12/19	CG	SW8081B
Heptachlor	ND	7.9	7.9	ug/Kg	2	12/12/19	CG	SW8081B
Heptachlor epoxide	ND	7.9	7.9	ug/Kg	2	12/12/19	CG	SW8081B
Methoxychlor	ND	39	39	ug/Kg	2	12/12/19	CG	SW8081B
Toxaphene	ND	160	160	ug/Kg	2	12/12/19	CG	SW8081B

QA/QC Surrogates

% DCBP	71			%	2	12/12/19	CG	30 - 150 %
% DCBP (Confirmation)	72			%	2	12/12/19	CG	30 - 150 %
% TCMX	63			%	2	12/12/19	CG	30 - 150 %
% TCMX (Confirmation)	63			%	2	12/12/19	CG	30 - 150 %

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
<u>Volatiles</u>								
1,1,1,2-Tetrachloroethane	ND	8.2	1.6	ug/Kg	1	12/12/19	JLI	SW8260C
1,1,1-Trichloroethane	ND	8.2	0.82	ug/Kg	1	12/12/19	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	230	46	ug/Kg	50	12/12/19	JLI	SW8260C
1,1,2-Trichloroethane	ND	8.2	1.6	ug/Kg	1	12/12/19	JLI	SW8260C
1,1-Dichloroethane	ND	8.2	1.6	ug/Kg	1	12/12/19	JLI	SW8260C
1,1-Dichloroethene	ND	8.2	0.82	ug/Kg	1	12/12/19	JLI	SW8260C
1,1-Dichloropropene	ND	8.2	0.82	ug/Kg	1	12/12/19	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	230	46	ug/Kg	50	12/12/19	JLI	SW8260C
1,2,3-Trichloropropane	ND	230	23	ug/Kg	50	12/12/19	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	230	46	ug/Kg	50	12/12/19	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	230	23	ug/Kg	50	12/12/19	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	230	46	ug/Kg	50	12/12/19	JLI	SW8260C
1,2-Dibromoethane	ND	8.2	0.82	ug/Kg	1	12/12/19	JLI	SW8260C
1,2-Dichlorobenzene	ND	230	23	ug/Kg	50	12/12/19	JLI	SW8260C
1,2-Dichloroethane	ND	8.2	0.82	ug/Kg	1	12/12/19	JLI	SW8260C
1,2-Dichloropropane	ND	8.2	1.6	ug/Kg	1	12/12/19	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	230	23	ug/Kg	50	12/12/19	JLI	SW8260C
1,3-Dichlorobenzene	ND	230	23	ug/Kg	50	12/12/19	JLI	SW8260C
1,3-Dichloropropane	ND	8.2	1.6	ug/Kg	1	12/12/19	JLI	SW8260C
1,4-Dichlorobenzene	ND	230	23	ug/Kg	50	12/12/19	JLI	SW8260C
2,2-Dichloropropane	ND	8.2	0.82	ug/Kg	1	12/12/19	JLI	SW8260C
2-Chlorotoluene	ND	230	46	ug/Kg	50	12/12/19	JLI	SW8260C
2-Hexanone	ND	41	8.2	ug/Kg	1	12/12/19	JLI	SW8260C
2-Isopropyltoluene	ND	230	23	ug/Kg	50	12/12/19	JLI	SW8260C
4-Chlorotoluene	ND	230	23	ug/Kg	50	12/12/19	JLI	SW8260C
4-Methyl-2-pentanone	ND	41	8.2	ug/Kg	1	12/12/19	JLI	SW8260C
Acetone	15	JS 41	8.2	ug/Kg	1	12/12/19	JLI	SW8260C
Acrylonitrile	ND	16	1.6	ug/Kg	1	12/12/19	JLI	SW8260C
Benzene	ND	8.2	0.82	ug/Kg	1	12/12/19	JLI	SW8260C
Bromobenzene	ND	230	23	ug/Kg	50	12/12/19	JLI	SW8260C
Bromochloromethane	ND	8.2	0.82	ug/Kg	1	12/12/19	JLI	SW8260C
Bromodichloromethane	ND	8.2	1.6	ug/Kg	1	12/12/19	JLI	SW8260C
Bromoform	ND	8.2	1.6	ug/Kg	1	12/12/19	JLI	SW8260C
Bromomethane	ND	8.2	3.3	ug/Kg	1	12/12/19	JLI	SW8260C
Carbon Disulfide	ND	8.2	1.6	ug/Kg	1	12/12/19	JLI	SW8260C
Carbon tetrachloride	ND	8.2	1.6	ug/Kg	1	12/12/19	JLI	SW8260C
Chlorobenzene	ND	8.2	0.82	ug/Kg	1	12/12/19	JLI	SW8260C
Chloroethane	ND	8.2	0.82	ug/Kg	1	12/12/19	JLI	SW8260C
Chloroform	ND	8.2	0.82	ug/Kg	1	12/12/19	JLI	SW8260C
Chloromethane	ND	8.2	1.6	ug/Kg	1	12/12/19	JLI	SW8260C
cis-1,2-Dichloroethene	ND	8.2	0.82	ug/Kg	1	12/12/19	JLI	SW8260C
cis-1,3-Dichloropropene	ND	8.2	0.82	ug/Kg	1	12/12/19	JLI	SW8260C
Dibromochloromethane	ND	8.2	1.6	ug/Kg	1	12/12/19	JLI	SW8260C
Dibromomethane	ND	8.2	1.6	ug/Kg	1	12/12/19	JLI	SW8260C
Dichlorodifluoromethane	ND	8.2	0.82	ug/Kg	1	12/12/19	JLI	SW8260C
Ethylbenzene	ND	8.2	0.82	ug/Kg	1	12/12/19	JLI	SW8260C
Hexachlorobutadiene	ND	230	23	ug/Kg	50	12/12/19	JLI	SW8260C
Isopropylbenzene	ND	230	23	ug/Kg	50	12/12/19	JLI	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
m&p-Xylene	ND	8.2	1.6	ug/Kg	1	12/12/19	JLI	SW8260C
Methyl Ethyl Ketone	ND	49	8.2	ug/Kg	1	12/12/19	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	16	1.6	ug/Kg	1	12/12/19	JLI	SW8260C
Methylene chloride	ND	8.2	8.2	ug/Kg	1	12/12/19	JLI	SW8260C
Naphthalene	ND	230	46	ug/Kg	50	12/12/19	JLI	SW8260C
n-Butylbenzene	ND	230	23	ug/Kg	50	12/12/19	JLI	SW8260C
n-Propylbenzene	ND	230	46	ug/Kg	50	12/12/19	JLI	SW8260C
o-Xylene	ND	8.2	1.6	ug/Kg	1	12/12/19	JLI	SW8260C
p-Isopropyltoluene	ND	230	23	ug/Kg	50	12/12/19	JLI	SW8260C
sec-Butylbenzene	ND	230	23	ug/Kg	50	12/12/19	JLI	SW8260C
Styrene	ND	8.2	0.82	ug/Kg	1	12/12/19	JLI	SW8260C
tert-Butylbenzene	ND	230	23	ug/Kg	50	12/12/19	JLI	SW8260C
Tetrachloroethene	1400	230	46	ug/Kg	50	12/12/19	JLI	SW8260C
Tetrahydrofuran (THF)	ND	16	4.1	ug/Kg	1	12/12/19	JLI	SW8260C
Toluene	ND	8.2	0.82	ug/Kg	1	12/12/19	JLI	SW8260C
trans-1,2-Dichloroethene	ND	8.2	0.82	ug/Kg	1	12/12/19	JLI	SW8260C
trans-1,3-Dichloropropene	ND	8.2	0.82	ug/Kg	1	12/12/19	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	460	120	ug/Kg	50	12/12/19	JLI	SW8260C
Trichloroethene	13	8.2	0.82	ug/Kg	1	12/12/19	JLI	SW8260C
Trichlorofluoromethane	ND	8.2	1.6	ug/Kg	1	12/12/19	JLI	SW8260C
Trichlorotrifluoroethane	ND	8.2	0.82	ug/Kg	1	12/12/19	JLI	SW8260C
Vinyl chloride	ND	8.2	0.82	ug/Kg	1	12/12/19	JLI	SW8260C
<u>QA/QC Surrogates</u>								
% 1,2-dichlorobenzene-d4	107			%	1	12/12/19	JLI	70 - 130 %
% Bromofluorobenzene	79			%	1	12/12/19	JLI	70 - 130 %
% Dibromofluoromethane	97			%	1	12/12/19	JLI	70 - 130 %
% Toluene-d8	93			%	1	12/12/19	JLI	70 - 130 %
% 1,2-dichlorobenzene-d4 (50x)	96			%	50	12/12/19	JLI	70 - 130 %
% Bromofluorobenzene (50x)	97			%	50	12/12/19	JLI	70 - 130 %
% Dibromofluoromethane (50x)	89			%	50	12/12/19	JLI	70 - 130 %
% Toluene-d8 (50x)	93			%	50	12/12/19	JLI	70 - 130 %
<u>Volatiles</u>								
1,1,1,2-Tetrachloroethane	ND	33	1.6	ug/Kg	1	12/12/19	JLI	SW8260C
Acrolein	ND	8.2	1.6	ug/Kg	1	12/12/19	JLI	SW8260C
Acrylonitrile	ND	33	0.82	ug/Kg	1	12/12/19	JLI	SW8260C
Tert-butyl alcohol	ND	160	33	ug/Kg	1	12/12/19	JLI	SW8260C
<u>Semivolatiles</u>								
1,2,4,5-Tetrachlorobenzene	ND	270	140	ug/Kg	1	12/12/19	WB	SW8270D
1,2,4-Trichlorobenzene	ND	270	120	ug/Kg	1	12/12/19	WB	SW8270D
1,2-Dichlorobenzene	ND	270	110	ug/Kg	1	12/12/19	WB	SW8270D
1,2-Diphenylhydrazine	ND	270	130	ug/Kg	1	12/12/19	WB	SW8270D
1,3-Dichlorobenzene	ND	270	110	ug/Kg	1	12/12/19	WB	SW8270D
1,4-Dichlorobenzene	ND	270	110	ug/Kg	1	12/12/19	WB	SW8270D
2,4,5-Trichlorophenol	ND	270	210	ug/Kg	1	12/12/19	WB	SW8270D
2,4,6-Trichlorophenol	ND	190	120	ug/Kg	1	12/12/19	WB	SW8270D
2,4-Dichlorophenol	ND	190	140	ug/Kg	1	12/12/19	WB	SW8270D
2,4-Dimethylphenol	ND	270	96	ug/Kg	1	12/12/19	WB	SW8270D
2,4-Dinitrophenol	ND	270	270	ug/Kg	1	12/12/19	WB	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
2,4-Dinitrotoluene	ND	190	150	ug/Kg	1	12/12/19	WB	SW8270D
2,6-Dinitrotoluene	ND	190	120	ug/Kg	1	12/12/19	WB	SW8270D
2-Chloronaphthalene	ND	270	110	ug/Kg	1	12/12/19	WB	SW8270D
2-Chlorophenol	ND	270	110	ug/Kg	1	12/12/19	WB	SW8270D
2-Methylnaphthalene	ND	270	120	ug/Kg	1	12/12/19	WB	SW8270D
2-Methylphenol (o-cresol)	ND	270	180	ug/Kg	1	12/12/19	WB	SW8270D
2-Nitroaniline	ND	270	270	ug/Kg	1	12/12/19	WB	SW8270D
2-Nitrophenol	ND	270	250	ug/Kg	1	12/12/19	WB	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	270	150	ug/Kg	1	12/12/19	WB	SW8270D
3,3'-Dichlorobenzidine	ND	190	180	ug/Kg	1	12/12/19	WB	SW8270D
3-Nitroaniline	ND	390	780	ug/Kg	1	12/12/19	WB	SW8270D
4,6-Dinitro-2-methylphenol	ND	230	78	ug/Kg	1	12/12/19	WB	SW8270D
4-Bromophenyl phenyl ether	ND	270	110	ug/Kg	1	12/12/19	WB	SW8270D
4-Chloro-3-methylphenol	ND	270	140	ug/Kg	1	12/12/19	WB	SW8270D
4-Chloroaniline	ND	310	180	ug/Kg	1	12/12/19	WB	SW8270D
4-Chlorophenyl phenyl ether	ND	270	130	ug/Kg	1	12/12/19	WB	SW8270D
4-Nitroaniline	ND	390	130	ug/Kg	1	12/12/19	WB	SW8270D
4-Nitrophenol	ND	390	180	ug/Kg	1	12/12/19	WB	SW8270D
Acenaphthene	ND	270	120	ug/Kg	1	12/12/19	WB	SW8270D
Acenaphthylene	ND	270	110	ug/Kg	1	12/12/19	WB	SW8270D
Acetophenone	ND	270	120	ug/Kg	1	12/12/19	WB	SW8270D
Aniline	ND	310	310	ug/Kg	1	12/12/19	WB	SW8270D
Anthracene	ND	270	130	ug/Kg	1	12/12/19	WB	SW8270D
Benz(a)anthracene	460	270	130	ug/Kg	1	12/12/19	WB	SW8270D
Benzidine	ND	390	230	ug/Kg	1	12/12/19	WB	SW8270D
Benzo(a)pyrene	440	190	130	ug/Kg	1	12/12/19	WB	SW8270D
Benzo(b)fluoranthene	440	270	130	ug/Kg	1	12/12/19	WB	SW8270D
Benzo(ghi)perylene	300	270	130	ug/Kg	1	12/12/19	WB	SW8270D
Benzo(k)fluoranthene	420	270	130	ug/Kg	1	12/12/19	WB	SW8270D
Benzoic acid	ND	1900	780	ug/Kg	1	12/12/19	WB	SW8270D
Benzyl butyl phthalate	ND	270	100	ug/Kg	1	12/12/19	WB	SW8270D
Bis(2-chloroethoxy)methane	ND	270	110	ug/Kg	1	12/12/19	WB	SW8270D
Bis(2-chloroethyl)ether	ND	190	100	ug/Kg	1	12/12/19	WB	SW8270D
Bis(2-chloroisopropyl)ether	ND	270	110	ug/Kg	1	12/12/19	WB	SW8270D
Bis(2-ethylhexyl)phthalate	ND	270	110	ug/Kg	1	12/12/19	WB	SW8270D
Carbazole	ND	190	160	ug/Kg	1	12/12/19	WB	SW8270D
Chrysene	520	270	130	ug/Kg	1	12/12/19	WB	SW8270D
Dibenz(a,h)anthracene	ND	190	130	ug/Kg	1	12/12/19	WB	SW8270D
Dibenzofuran	ND	270	110	ug/Kg	1	12/12/19	WB	SW8270D
Diethyl phthalate	ND	270	120	ug/Kg	1	12/12/19	WB	SW8270D
Dimethylphthalate	ND	270	120	ug/Kg	1	12/12/19	WB	SW8270D
Di-n-butylphthalate	ND	270	100	ug/Kg	1	12/12/19	WB	SW8270D
Di-n-octylphthalate	ND	270	100	ug/Kg	1	12/12/19	WB	SW8270D
Fluoranthene	950	270	130	ug/Kg	1	12/12/19	WB	SW8270D
Fluorene	ND	270	130	ug/Kg	1	12/12/19	WB	SW8270D
Hexachlorobenzene	ND	190	110	ug/Kg	1	12/12/19	WB	SW8270D
Hexachlorobutadiene	ND	270	140	ug/Kg	1	12/12/19	WB	SW8270D
Hexachlorocyclopentadiene	ND	270	120	ug/Kg	1	12/12/19	WB	SW8270D
Hexachloroethane	ND	190	120	ug/Kg	1	12/12/19	WB	SW8270D

1

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Indeno(1,2,3-cd)pyrene	310	270	130	ug/Kg	1	12/12/19	WB	SW8270D
Isophorone	ND	190	110	ug/Kg	1	12/12/19	WB	SW8270D
Naphthalene	ND	270	110	ug/Kg	1	12/12/19	WB	SW8270D
Nitrobenzene	ND	190	140	ug/Kg	1	12/12/19	WB	SW8270D
N-Nitrosodimethylamine	ND	270	110	ug/Kg	1	12/12/19	WB	SW8270D
N-Nitrosodi-n-propylamine	ND	190	130	ug/Kg	1	12/12/19	WB	SW8270D
N-Nitrosodiphenylamine	ND	270	150	ug/Kg	1	12/12/19	WB	SW8270D
Pentachloronitrobenzene	ND	270	140	ug/Kg	1	12/12/19	WB	SW8270D
Pentachlorophenol	ND	230	150	ug/Kg	1	12/12/19	WB	SW8270D
Phenanthrene	480	270	110	ug/Kg	1	12/12/19	WB	SW8270D
Phenol	ND	270	120	ug/Kg	1	12/12/19	WB	SW8270D
Pyrene	840	270	130	ug/Kg	1	12/12/19	WB	SW8270D
Pyridine	ND	270	96	ug/Kg	1	12/12/19	WB	SW8270D
<u>QA/QC Surrogates</u>								
% 2,4,6-Tribromophenol	57			%	1	12/12/19	WB	30 - 130 %
% 2-Fluorobiphenyl	53			%	1	12/12/19	WB	30 - 130 %
% 2-Fluorophenol	38			%	1	12/12/19	WB	30 - 130 %
% Nitrobenzene-d5	38			%	1	12/12/19	WB	30 - 130 %
% Phenol-d5	45			%	1	12/12/19	WB	30 - 130 %
% Terphenyl-d14	56			%	1	12/12/19	WB	30 - 130 %
<u>1,4-Dioxane</u>								
1,4-dioxane	ND	77	77	ug/Kg	1	12/12/19	WB	SW8270D (SIM)
<u>QA/QC Surrogates</u>								
% 2-Fluorobiphenyl	52			%	1	12/12/19	WB	30 - 130 %
% Nitrobenzene-d5	59			%	1	12/12/19	WB	30 - 130 %
% Terphenyl-d14	53			%	1	12/12/19	WB	30 - 130 %
Field Extraction	Completed					12/10/19		SW5035A

Client ID: 19B8 (0-2)

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low J=Estimated Below RL LOD=Limit of Detection MDL=Method Detection Limit1

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

Please be advised that the NY 375 soil criteria for chromium are based on hexavalent chromium and trivalent chromium.

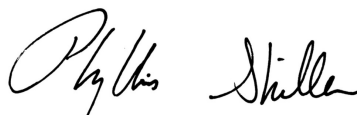
Volatile Comment:

There was a suppression of the last internal standard in the low level analysis, all affected compounds are reported from the methanol preserved high level analysis which did not exhibit this interference.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

S - Laboratory solvent, contamination is possible.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

December 18, 2019

Reviewed and Released by: Greg Lawrence, Assistant Lab Director



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823



Analysis Report

December 18, 2019

FOR: Attn: Mr. Charles B. Sosik, P.G.
Environmental Business Consultants
1808 Middle Country Rd
Ridge NY 11961-2406

Sample Information

Matrix: SOIL
Location Code: EBC
Rush Request: 72 Hour
P.O.#:

Custody Information

Collected by: TB
Received by: CP
Analyzed by: see "By" below

Date

12/10/19
12/11/19

Time

12:34
16:00

Laboratory Data

SDG ID: GCE85356
Phoenix ID: CE85365

Project ID: 26-22 4TH ST QUEENS
Client ID: 19B8 (8-10)

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Silver	ND	0.35	0.35	mg/Kg	1	12/12/19	EK	SW6010D
Aluminum	15500	35	7.1	mg/Kg	10	12/12/19	EK	SW6010D
Arsenic	1.06	0.71	0.71	mg/Kg	1	12/12/19	EK	SW6010D
Barium	104	0.7	0.35	mg/Kg	1	12/12/19	EK	SW6010D
Beryllium	0.36	0.28	0.14	mg/Kg	1	12/12/19	EK	SW6010D
Calcium	1430	35	33	mg/Kg	10	12/12/19	EK	SW6010D
Cadmium	0.50	0.35	0.35	mg/Kg	1	12/12/19	EK	SW6010D
Cobalt	5.67	0.35	0.35	mg/Kg	1	12/12/19	EK	SW6010D
Chromium	38.5	0.35	0.35	mg/Kg	1	12/12/19	EK	SW6010D
Copper	34.9	0.7	0.35	mg/kg	1	12/12/19	EK	SW6010D
Iron	24700	35	35	mg/Kg	10	12/12/19	EK	SW6010D
Mercury	ND	0.03	0.02	mg/Kg	2	12/12/19	RS	SW7471B
Potassium	4680	71	28	mg/Kg	10	12/12/19	EK	SW6010D
Magnesium	7340	35	35	mg/Kg	10	12/12/19	EK	SW6010D
Manganese	248	3.5	3.5	mg/Kg	10	12/12/19	EK	SW6010D
Sodium	286	7	3.1	mg/Kg	1	12/12/19	EK	SW6010D
Nickel	31.7	0.35	0.35	mg/Kg	1	12/12/19	EK	SW6010D
Lead	5.2	0.7	0.35	mg/Kg	1	12/12/19	EK	SW6010D
Antimony	ND	3.5	3.5	mg/Kg	1	12/12/19	EK	SW6010D
Selenium	ND	1.4	1.2	mg/Kg	1	12/12/19	EK	SW6010D
Thallium	ND	1.4	1.4	mg/Kg	1	12/12/19	EK	SW6010D
Vanadium	47.0	0.35	0.35	mg/Kg	1	12/12/19	EK	SW6010D
Zinc	57.4	0.7	0.35	mg/Kg	1	12/12/19	EK	SW6010D
Percent Solid	87			%		12/11/19	VT	SW846-%Solid
Extraction for SVOA SIM	Completed					12/11/19	BB/LA	SW3545A
Soil Extraction for PCB	Completed					12/11/19	MM/L	SW3545A
Soil Extraction for Pesticides	Completed					12/11/19	MM/L	SW3545A
Soil Extraction for SVOA	Completed					12/11/19	AT/B/LA	SW3545A

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Mercury Digestion	Completed					12/12/19	LS/LS	SW7471B
Total Metals Digest	Completed					12/11/19	JJ/AG/BF	SW3050B

Polychlorinated Biphenyls

PCB-1016	ND	75	75	ug/Kg	2	12/12/19	SC	SW8082A
PCB-1221	ND	75	75	ug/Kg	2	12/12/19	SC	SW8082A
PCB-1232	ND	75	75	ug/Kg	2	12/12/19	SC	SW8082A
PCB-1242	ND	75	75	ug/Kg	2	12/12/19	SC	SW8082A
PCB-1248	ND	75	75	ug/Kg	2	12/12/19	SC	SW8082A
PCB-1254	ND	75	75	ug/Kg	2	12/12/19	SC	SW8082A
PCB-1260	ND	75	75	ug/Kg	2	12/12/19	SC	SW8082A
PCB-1262	ND	75	75	ug/Kg	2	12/12/19	SC	SW8082A
PCB-1268	ND	75	75	ug/Kg	2	12/12/19	SC	SW8082A

QA/QC Surrogates

% DCBP	101			%	2	12/12/19	SC	30 - 150 %
% DCBP (Confirmation)	95			%	2	12/12/19	SC	30 - 150 %
% TCMX	95			%	2	12/12/19	SC	30 - 150 %
% TCMX (Confirmation)	79			%	2	12/12/19	SC	30 - 150 %

Pesticides - Soil

4,4' -DDD	ND	2.2	2.2	ug/Kg	2	12/12/19	CG	SW8081B
4,4' -DDE	ND	2.2	2.2	ug/Kg	2	12/12/19	CG	SW8081B
4,4' -DDT	ND	2.2	2.2	ug/Kg	2	12/12/19	CG	SW8081B
a-BHC	ND	7.5	7.5	ug/Kg	2	12/12/19	CG	SW8081B
a-Chlordane	ND	3.7	3.7	ug/Kg	2	12/12/19	CG	SW8081B
Aldrin	ND	3.7	3.7	ug/Kg	2	12/12/19	CG	SW8081B
b-BHC	ND	7.5	7.5	ug/Kg	2	12/12/19	CG	SW8081B
Chlordane	ND	37	37	ug/Kg	2	12/12/19	CG	SW8081B
d-BHC	ND	7.5	7.5	ug/Kg	2	12/12/19	CG	SW8081B
Dieldrin	ND	3.7	3.7	ug/Kg	2	12/12/19	CG	SW8081B
Endosulfan I	ND	7.5	7.5	ug/Kg	2	12/12/19	CG	SW8081B
Endosulfan II	ND	7.5	7.5	ug/Kg	2	12/12/19	CG	SW8081B
Endosulfan sulfate	ND	7.5	7.5	ug/Kg	2	12/12/19	CG	SW8081B
Endrin	ND	7.5	7.5	ug/Kg	2	12/12/19	CG	SW8081B
Endrin aldehyde	ND	7.5	7.5	ug/Kg	2	12/12/19	CG	SW8081B
Endrin ketone	ND	7.5	7.5	ug/Kg	2	12/12/19	CG	SW8081B
g-BHC	ND	1.5	1.5	ug/Kg	2	12/12/19	CG	SW8081B
g-Chlordane	ND	3.7	3.7	ug/Kg	2	12/12/19	CG	SW8081B
Heptachlor	ND	7.5	7.5	ug/Kg	2	12/12/19	CG	SW8081B
Heptachlor epoxide	ND	7.5	7.5	ug/Kg	2	12/12/19	CG	SW8081B
Methoxychlor	ND	37	37	ug/Kg	2	12/12/19	CG	SW8081B
Toxaphene	ND	150	150	ug/Kg	2	12/12/19	CG	SW8081B

QA/QC Surrogates

% DCBP	61			%	2	12/12/19	CG	30 - 150 %
% DCBP (Confirmation)	79			%	2	12/12/19	CG	30 - 150 %
% TCMX	56			%	2	12/12/19	CG	30 - 150 %
% TCMX (Confirmation)	59			%	2	12/12/19	CG	30 - 150 %

Volatiles

1,1,1,2-Tetrachloroethane	ND	4.6	0.92	ug/Kg	1	12/12/19	JLI	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
1,1,1-Trichloroethane	ND	4.6	0.46	ug/Kg	1	12/12/19	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	4.6	0.92	ug/Kg	1	12/12/19	JLI	SW8260C
1,1,2-Trichloroethane	ND	4.6	0.92	ug/Kg	1	12/12/19	JLI	SW8260C
1,1-Dichloroethane	ND	4.6	0.92	ug/Kg	1	12/12/19	JLI	SW8260C
1,1-Dichloroethene	ND	4.6	0.46	ug/Kg	1	12/12/19	JLI	SW8260C
1,1-Dichloropropene	ND	4.6	0.46	ug/Kg	1	12/12/19	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	4.6	0.92	ug/Kg	1	12/12/19	JLI	SW8260C
1,2,3-Trichloropropane	ND	4.6	0.46	ug/Kg	1	12/12/19	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	4.6	0.92	ug/Kg	1	12/12/19	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	4.6	0.46	ug/Kg	1	12/12/19	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	4.6	0.92	ug/Kg	1	12/12/19	JLI	SW8260C
1,2-Dibromoethane	ND	4.6	0.46	ug/Kg	1	12/12/19	JLI	SW8260C
1,2-Dichlorobenzene	ND	4.6	0.46	ug/Kg	1	12/12/19	JLI	SW8260C
1,2-Dichloroethane	ND	4.6	0.46	ug/Kg	1	12/12/19	JLI	SW8260C
1,2-Dichloropropane	ND	4.6	0.92	ug/Kg	1	12/12/19	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	4.6	0.46	ug/Kg	1	12/12/19	JLI	SW8260C
1,3-Dichlorobenzene	ND	4.6	0.46	ug/Kg	1	12/12/19	JLI	SW8260C
1,3-Dichloropropane	ND	4.6	0.92	ug/Kg	1	12/12/19	JLI	SW8260C
1,4-Dichlorobenzene	ND	4.6	0.46	ug/Kg	1	12/12/19	JLI	SW8260C
2,2-Dichloropropane	ND	4.6	0.46	ug/Kg	1	12/12/19	JLI	SW8260C
2-Chlorotoluene	ND	4.6	0.92	ug/Kg	1	12/12/19	JLI	SW8260C
2-Hexanone	ND	23	4.6	ug/Kg	1	12/12/19	JLI	SW8260C
2-Isopropyltoluene	ND	4.6	0.46	ug/Kg	1	12/12/19	JLI	SW8260C
4-Chlorotoluene	ND	4.6	0.46	ug/Kg	1	12/12/19	JLI	SW8260C
4-Methyl-2-pentanone	ND	23	4.6	ug/Kg	1	12/12/19	JLI	SW8260C
Acetone	9.7	JS 23	4.6	ug/Kg	1	12/12/19	JLI	SW8260C
Acrylonitrile	ND	9.2	0.92	ug/Kg	1	12/12/19	JLI	SW8260C
Benzene	ND	4.6	0.46	ug/Kg	1	12/12/19	JLI	SW8260C
Bromobenzene	ND	4.6	0.46	ug/Kg	1	12/12/19	JLI	SW8260C
Bromochloromethane	ND	4.6	0.46	ug/Kg	1	12/12/19	JLI	SW8260C
Bromodichloromethane	ND	4.6	0.92	ug/Kg	1	12/12/19	JLI	SW8260C
Bromoform	ND	4.6	0.92	ug/Kg	1	12/12/19	JLI	SW8260C
Bromomethane	ND	4.6	1.8	ug/Kg	1	12/12/19	JLI	SW8260C
Carbon Disulfide	ND	4.6	0.92	ug/Kg	1	12/12/19	JLI	SW8260C
Carbon tetrachloride	ND	4.6	0.92	ug/Kg	1	12/12/19	JLI	SW8260C
Chlorobenzene	ND	4.6	0.46	ug/Kg	1	12/12/19	JLI	SW8260C
Chloroethane	ND	4.6	0.46	ug/Kg	1	12/12/19	JLI	SW8260C
Chloroform	ND	4.6	0.46	ug/Kg	1	12/12/19	JLI	SW8260C
Chloromethane	ND	4.6	0.92	ug/Kg	1	12/12/19	JLI	SW8260C
cis-1,2-Dichloroethene	ND	4.6	0.46	ug/Kg	1	12/12/19	JLI	SW8260C
cis-1,3-Dichloropropene	ND	4.6	0.46	ug/Kg	1	12/12/19	JLI	SW8260C
Dibromochloromethane	ND	4.6	0.92	ug/Kg	1	12/12/19	JLI	SW8260C
Dibromomethane	ND	4.6	0.92	ug/Kg	1	12/12/19	JLI	SW8260C
Dichlorodifluoromethane	ND	4.6	0.46	ug/Kg	1	12/12/19	JLI	SW8260C
Ethylbenzene	ND	4.6	0.46	ug/Kg	1	12/12/19	JLI	SW8260C
Hexachlorobutadiene	ND	4.6	0.46	ug/Kg	1	12/12/19	JLI	SW8260C
Isopropylbenzene	ND	4.6	0.46	ug/Kg	1	12/12/19	JLI	SW8260C
m&p-Xylene	ND	4.6	0.92	ug/Kg	1	12/12/19	JLI	SW8260C
Methyl Ethyl Ketone	ND	28	4.6	ug/Kg	1	12/12/19	JLI	SW8260C

1

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Methyl t-butyl ether (MTBE)	ND	9.2	0.92	ug/Kg	1	12/12/19	JLI	SW8260C
Methylene chloride	ND	4.6	4.6	ug/Kg	1	12/12/19	JLI	SW8260C
Naphthalene	ND	4.6	0.92	ug/Kg	1	12/12/19	JLI	SW8260C
n-Butylbenzene	ND	4.6	0.46	ug/Kg	1	12/12/19	JLI	SW8260C
n-Propylbenzene	ND	4.6	0.92	ug/Kg	1	12/12/19	JLI	SW8260C
o-Xylene	ND	4.6	0.92	ug/Kg	1	12/12/19	JLI	SW8260C
p-Isopropyltoluene	ND	4.6	0.46	ug/Kg	1	12/12/19	JLI	SW8260C
sec-Butylbenzene	ND	4.6	0.46	ug/Kg	1	12/12/19	JLI	SW8260C
Styrene	ND	4.6	0.46	ug/Kg	1	12/12/19	JLI	SW8260C
tert-Butylbenzene	ND	4.6	0.46	ug/Kg	1	12/12/19	JLI	SW8260C
Tetrachloroethene	ND	4.6	0.92	ug/Kg	1	12/12/19	JLI	SW8260C
Tetrahydrofuran (THF)	ND	9.2	2.3	ug/Kg	1	12/12/19	JLI	SW8260C
Toluene	ND	4.6	0.46	ug/Kg	1	12/12/19	JLI	SW8260C
trans-1,2-Dichloroethene	ND	4.6	0.46	ug/Kg	1	12/12/19	JLI	SW8260C
trans-1,3-Dichloropropene	ND	4.6	0.46	ug/Kg	1	12/12/19	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	9.2	2.3	ug/Kg	1	12/12/19	JLI	SW8260C
Trichloroethene	ND	4.6	0.46	ug/Kg	1	12/12/19	JLI	SW8260C
Trichlorofluoromethane	ND	4.6	0.92	ug/Kg	1	12/12/19	JLI	SW8260C
Trichlorotrifluoroethane	ND	4.6	0.46	ug/Kg	1	12/12/19	JLI	SW8260C
Vinyl chloride	ND	4.6	0.46	ug/Kg	1	12/12/19	JLI	SW8260C
<u>QA/QC Surrogates</u>								
% 1,2-dichlorobenzene-d4	95			%	1	12/12/19	JLI	70 - 130 %
% Bromofluorobenzene	97			%	1	12/12/19	JLI	70 - 130 %
% Dibromofluoromethane	93			%	1	12/12/19	JLI	70 - 130 %
% Toluene-d8	94			%	1	12/12/19	JLI	70 - 130 %
<u>Volatiles</u>								
1,1,1,2-Tetrachloroethane	ND	18	0.92	ug/Kg	1	12/12/19	JLI	SW8260C
Acrolein	ND	4.6	0.92	ug/Kg	1	12/12/19	JLI	SW8260C
Acrylonitrile	ND	18	0.46	ug/Kg	1	12/12/19	JLI	SW8260C
Tert-butyl alcohol	ND	92	18	ug/Kg	1	12/12/19	JLI	SW8260C
<u>Semivolatiles</u>								
1,2,4,5-Tetrachlorobenzene	ND	270	130	ug/Kg	1	12/12/19	WB	SW8270D
1,2,4-Trichlorobenzene	ND	270	120	ug/Kg	1	12/12/19	WB	SW8270D
1,2-Dichlorobenzene	ND	270	110	ug/Kg	1	12/12/19	WB	SW8270D
1,2-Diphenylhydrazine	ND	270	120	ug/Kg	1	12/12/19	WB	SW8270D
1,3-Dichlorobenzene	ND	270	110	ug/Kg	1	12/12/19	WB	SW8270D
1,4-Dichlorobenzene	ND	270	110	ug/Kg	1	12/12/19	WB	SW8270D
2,4,5-Trichlorophenol	ND	270	210	ug/Kg	1	12/12/19	WB	SW8270D
2,4,6-Trichlorophenol	ND	190	120	ug/Kg	1	12/12/19	WB	SW8270D
2,4-Dichlorophenol	ND	190	130	ug/Kg	1	12/12/19	WB	SW8270D
2,4-Dimethylphenol	ND	270	95	ug/Kg	1	12/12/19	WB	SW8270D
2,4-Dinitrophenol	ND	270	270	ug/Kg	1	12/12/19	WB	SW8270D
2,4-Dinitrotoluene	ND	190	150	ug/Kg	1	12/12/19	WB	SW8270D
2,6-Dinitrotoluene	ND	190	120	ug/Kg	1	12/12/19	WB	SW8270D
2-Chloronaphthalene	ND	270	110	ug/Kg	1	12/12/19	WB	SW8270D
2-Chlorophenol	ND	270	110	ug/Kg	1	12/12/19	WB	SW8270D
2-Methylnaphthalene	ND	270	110	ug/Kg	1	12/12/19	WB	SW8270D
2-Methylphenol (o-cresol)	ND	270	180	ug/Kg	1	12/12/19	WB	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
2-Nitroaniline	ND	270	270	ug/Kg	1	12/12/19	WB	SW8270D
2-Nitrophenol	ND	270	240	ug/Kg	1	12/12/19	WB	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	270	150	ug/Kg	1	12/12/19	WB	SW8270D
3,3'-Dichlorobenzidine	ND	190	180	ug/Kg	1	12/12/19	WB	SW8270D
3-Nitroaniline	ND	380	760	ug/Kg	1	12/12/19	WB	SW8270D
4,6-Dinitro-2-methylphenol	ND	230	76	ug/Kg	1	12/12/19	WB	SW8270D
4-Bromophenyl phenyl ether	ND	270	110	ug/Kg	1	12/12/19	WB	SW8270D
4-Chloro-3-methylphenol	ND	270	130	ug/Kg	1	12/12/19	WB	SW8270D
4-Chloroaniline	ND	310	180	ug/Kg	1	12/12/19	WB	SW8270D
4-Chlorophenyl phenyl ether	ND	270	130	ug/Kg	1	12/12/19	WB	SW8270D
4-Nitroaniline	ND	380	130	ug/Kg	1	12/12/19	WB	SW8270D
4-Nitrophenol	ND	380	170	ug/Kg	1	12/12/19	WB	SW8270D
Acenaphthene	ND	270	120	ug/Kg	1	12/12/19	WB	SW8270D
Acenaphthylene	ND	270	110	ug/Kg	1	12/12/19	WB	SW8270D
Acetophenone	ND	270	120	ug/Kg	1	12/12/19	WB	SW8270D
Aniline	ND	310	310	ug/Kg	1	12/12/19	WB	SW8270D
Anthracene	ND	270	130	ug/Kg	1	12/12/19	WB	SW8270D
Benz(a)anthracene	ND	270	130	ug/Kg	1	12/12/19	WB	SW8270D
Benzidine	ND	380	220	ug/Kg	1	12/12/19	WB	SW8270D
Benzo(a)pyrene	ND	190	120	ug/Kg	1	12/12/19	WB	SW8270D
Benzo(b)fluoranthene	ND	270	130	ug/Kg	1	12/12/19	WB	SW8270D
Benzo(ghi)perylene	ND	270	120	ug/Kg	1	12/12/19	WB	SW8270D
Benzo(k)fluoranthene	ND	270	130	ug/Kg	1	12/12/19	WB	SW8270D
Benzoic acid	ND	1900	760	ug/Kg	1	12/12/19	WB	SW8270D
Benzyl butyl phthalate	ND	270	99	ug/Kg	1	12/12/19	WB	SW8270D
Bis(2-chloroethoxy)methane	ND	270	110	ug/Kg	1	12/12/19	WB	SW8270D
Bis(2-chloroethyl)ether	ND	190	100	ug/Kg	1	12/12/19	WB	SW8270D
Bis(2-chloroisopropyl)ether	ND	270	110	ug/Kg	1	12/12/19	WB	SW8270D
Bis(2-ethylhexyl)phthalate	ND	270	110	ug/Kg	1	12/12/19	WB	SW8270D
Carbazole	ND	190	150	ug/Kg	1	12/12/19	WB	SW8270D
Chrysene	ND	270	130	ug/Kg	1	12/12/19	WB	SW8270D
Dibenz(a,h)anthracene	ND	190	120	ug/Kg	1	12/12/19	WB	SW8270D
Dibenzofuran	ND	270	110	ug/Kg	1	12/12/19	WB	SW8270D
Diethyl phthalate	ND	270	120	ug/Kg	1	12/12/19	WB	SW8270D
Dimethylphthalate	ND	270	120	ug/Kg	1	12/12/19	WB	SW8270D
Di-n-butylphthalate	ND	270	100	ug/Kg	1	12/12/19	WB	SW8270D
Di-n-octylphthalate	ND	270	99	ug/Kg	1	12/12/19	WB	SW8270D
Fluoranthene	ND	270	120	ug/Kg	1	12/12/19	WB	SW8270D
Fluorene	ND	270	130	ug/Kg	1	12/12/19	WB	SW8270D
Hexachlorobenzene	ND	190	110	ug/Kg	1	12/12/19	WB	SW8270D
Hexachlorobutadiene	ND	270	140	ug/Kg	1	12/12/19	WB	SW8270D
Hexachlorocyclopentadiene	ND	270	120	ug/Kg	1	12/12/19	WB	SW8270D
Hexachloroethane	ND	190	110	ug/Kg	1	12/12/19	WB	SW8270D
Indeno(1,2,3-cd)pyrene	ND	270	130	ug/Kg	1	12/12/19	WB	SW8270D
Isophorone	ND	190	110	ug/Kg	1	12/12/19	WB	SW8270D
Naphthalene	ND	270	110	ug/Kg	1	12/12/19	WB	SW8270D
Nitrobenzene	ND	190	130	ug/Kg	1	12/12/19	WB	SW8270D
N-Nitrosodimethylamine	ND	270	110	ug/Kg	1	12/12/19	WB	SW8270D
N-Nitrosodi-n-propylamine	ND	190	120	ug/Kg	1	12/12/19	WB	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
N-Nitrosodiphenylamine	ND	270	150	ug/Kg	1	12/12/19	WB	SW8270D
Pentachloronitrobenzene	ND	270	140	ug/Kg	1	12/12/19	WB	SW8270D
Pentachlorophenol	ND	230	140	ug/Kg	1	12/12/19	WB	SW8270D
Phenanthrene	ND	270	110	ug/Kg	1	12/12/19	WB	SW8270D
Phenol	ND	270	120	ug/Kg	1	12/12/19	WB	SW8270D
Pyrene	ND	270	130	ug/Kg	1	12/12/19	WB	SW8270D
Pyridine	ND	270	94	ug/Kg	1	12/12/19	WB	SW8270D
<u>QA/QC Surrogates</u>								
% 2,4,6-Tribromophenol	54			%	1	12/12/19	WB	30 - 130 %
% 2-Fluorobiphenyl	60			%	1	12/12/19	WB	30 - 130 %
% 2-Fluorophenol	55			%	1	12/12/19	WB	30 - 130 %
% Nitrobenzene-d5	48			%	1	12/12/19	WB	30 - 130 %
% Phenol-d5	54			%	1	12/12/19	WB	30 - 130 %
% Terphenyl-d14	64			%	1	12/12/19	WB	30 - 130 %
<u>1,4-Dioxane</u>								
1,4-dioxane	ND	75	75	ug/Kg	1	12/12/19	WB	SW8270D (SIM)
<u>QA/QC Surrogates</u>								
% 2-Fluorobiphenyl	42			%	1	12/12/19	WB	30 - 130 %
% Nitrobenzene-d5	59			%	1	12/12/19	WB	30 - 130 %
% Terphenyl-d14	56			%	1	12/12/19	WB	30 - 130 %
Field Extraction	Completed					12/10/19		SW5035A

1

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low J=Estimated Below RL LOD=Limit of Detection MDL=Method Detection Limit1

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

Please be advised that the NY 375 soil criteria for chromium are based on hexavalent chromium and trivalent chromium.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

S - Laboratory solvent, contamination is possible.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

December 18, 2019

Reviewed and Released by: Greg Lawrence, Assistant Lab Director



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823



Analysis Report

December 18, 2019

FOR: Attn: Mr. Charles B. Sosik, P.G.
Environmental Business Consultants
1808 Middle Country Rd
Ridge NY 11961-2406

Sample Information

Matrix: SOIL
Location Code: EBC
Rush Request: 72 Hour
P.O.#:

Custody Information

Collected by: TB
Received by: CP
Analyzed by: see "By" below

Date

12/10/19 12:45
12/11/19 16:00

Time

Laboratory Data

SDG ID: GCE85356
Phoenix ID: CE85366

Project ID: 26-22 4TH ST QUEENS
Client ID: 19B9 (0-2)

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Silver	ND	0.36	0.36	mg/Kg	1	12/12/19	EK	SW6010D
Aluminum	7490	36	7.2	mg/Kg	10	12/12/19	EK	SW6010D
Arsenic	3.32	0.72	0.72	mg/Kg	1	12/12/19	EK	SW6010D
Barium	88.5	0.7	0.36	mg/Kg	1	12/12/19	EK	SW6010D
Beryllium	0.31	0.29	0.14	mg/Kg	1	12/12/19	EK	SW6010D
Calcium	41000	36	33	mg/Kg	10	12/12/19	EK	SW6010D
Cadmium	0.45	0.36	0.36	mg/Kg	1	12/12/19	EK	SW6010D
Cobalt	3.45	0.36	0.36	mg/Kg	1	12/12/19	EK	SW6010D
Chromium	14.6	0.36	0.36	mg/Kg	1	12/12/19	EK	SW6010D
Copper	22.3	0.7	0.36	mg/kg	1	12/12/19	EK	SW6010D
Iron	12400	36	36	mg/Kg	10	12/12/19	EK	SW6010D
Mercury	0.04	0.03	0.02	mg/Kg	2	12/12/19	RS	SW7471B
Potassium	1490	7	2.8	mg/Kg	1	12/12/19	EK	SW6010D
Magnesium	4020	3.6	3.6	mg/Kg	1	12/12/19	EK	SW6010D
Manganese	206	3.6	3.6	mg/Kg	10	12/12/19	EK	SW6010D
Sodium	439	7	3.1	mg/Kg	1	12/12/19	EK	SW6010D
Nickel	12.8	0.36	0.36	mg/Kg	1	12/12/19	EK	SW6010D
Lead	384	0.7	0.36	mg/Kg	1	12/12/19	EK	SW6010D
Antimony	ND	3.6	3.6	mg/Kg	1	12/12/19	EK	SW6010D
Selenium	ND	1.4	1.2	mg/Kg	1	12/12/19	EK	SW6010D
Thallium	ND	1.4	1.4	mg/Kg	1	12/12/19	EK	SW6010D
Vanadium	26.3	0.36	0.36	mg/Kg	1	12/12/19	EK	SW6010D
Zinc	426	7.2	3.6	mg/Kg	10	12/12/19	EK	SW6010D
Percent Solid	88			%		12/11/19	VT	SW846-%Solid
Extraction for SVOA SIM	Completed					12/12/19	K/R/LA	SW3545A
Soil Extraction for PCB	Completed					12/11/19	MM/E	SW3545A
Soil Extraction for Pesticides	Completed					12/11/19	MM/E	SW3545A
Soil Extraction for SVOA	Completed					12/11/19	AT/B/LA	SW3545A

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Mercury Digestion	Completed					12/12/19	LS/LS	SW7471B
Total Metals Digest	Completed					12/11/19	JJ/AG/BF	SW3050B

Polychlorinated Biphenyls

PCB-1016	ND	78	78	ug/Kg	2	12/12/19	SC	SW8082A
PCB-1221	ND	78	78	ug/Kg	2	12/12/19	SC	SW8082A
PCB-1232	ND	78	78	ug/Kg	2	12/12/19	SC	SW8082A
PCB-1242	ND	78	78	ug/Kg	2	12/12/19	SC	SW8082A
PCB-1248	ND	78	78	ug/Kg	2	12/12/19	SC	SW8082A
PCB-1254	ND	78	78	ug/Kg	2	12/12/19	SC	SW8082A
PCB-1260	ND	78	78	ug/Kg	2	12/12/19	SC	SW8082A
PCB-1262	ND	78	78	ug/Kg	2	12/12/19	SC	SW8082A
PCB-1268	ND	78	78	ug/Kg	2	12/12/19	SC	SW8082A

QA/QC Surrogates

% DCBP	89			%	2	12/12/19	SC	30 - 150 %
% DCBP (Confirmation)	88			%	2	12/12/19	SC	30 - 150 %
% TCMX	84			%	2	12/12/19	SC	30 - 150 %
% TCMX (Confirmation)	81			%	2	12/12/19	SC	30 - 150 %

Pesticides - Soil

4,4' -DDD	ND	2.4	2.4	ug/Kg	2	12/12/19	CG	SW8081B
4,4' -DDE	ND	2.4	2.4	ug/Kg	2	12/12/19	CG	SW8081B
4,4' -DDT	ND	2.4	2.4	ug/Kg	2	12/12/19	CG	SW8081B
a-BHC	ND	7.8	7.8	ug/Kg	2	12/12/19	CG	SW8081B
a-Chlordane	ND	3.9	3.9	ug/Kg	2	12/12/19	CG	SW8081B
Aldrin	ND	3.9	3.9	ug/Kg	2	12/12/19	CG	SW8081B
b-BHC	ND	7.8	7.8	ug/Kg	2	12/12/19	CG	SW8081B
Chlordane	ND	39	39	ug/Kg	2	12/12/19	CG	SW8081B
d-BHC	ND	7.8	7.8	ug/Kg	2	12/12/19	CG	SW8081B
Dieldrin	ND	3.9	3.9	ug/Kg	2	12/12/19	CG	SW8081B
Endosulfan I	ND	7.8	7.8	ug/Kg	2	12/12/19	CG	SW8081B
Endosulfan II	ND	7.8	7.8	ug/Kg	2	12/12/19	CG	SW8081B
Endosulfan sulfate	ND	7.8	7.8	ug/Kg	2	12/12/19	CG	SW8081B
Endrin	ND	7.8	7.8	ug/Kg	2	12/12/19	CG	SW8081B
Endrin aldehyde	ND	7.8	7.8	ug/Kg	2	12/12/19	CG	SW8081B
Endrin ketone	ND	7.8	7.8	ug/Kg	2	12/12/19	CG	SW8081B
g-BHC	ND	1.6	1.6	ug/Kg	2	12/12/19	CG	SW8081B
g-Chlordane	ND	3.9	3.9	ug/Kg	2	12/12/19	CG	SW8081B
Heptachlor	ND	7.8	7.8	ug/Kg	2	12/12/19	CG	SW8081B
Heptachlor epoxide	ND	7.8	7.8	ug/Kg	2	12/12/19	CG	SW8081B
Methoxychlor	ND	39	39	ug/Kg	2	12/12/19	CG	SW8081B
Toxaphene	ND	160	160	ug/Kg	2	12/12/19	CG	SW8081B

QA/QC Surrogates

% DCBP	71			%	2	12/12/19	CG	30 - 150 %
% DCBP (Confirmation)	82			%	2	12/12/19	CG	30 - 150 %
% TCMX	64			%	2	12/12/19	CG	30 - 150 %
% TCMX (Confirmation)	66			%	2	12/12/19	CG	30 - 150 %

Volatiles

1,1,1,2-Tetrachloroethane	ND	7.3	1.5	ug/Kg	1	12/12/19	JLI	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
1,1,1-Trichloroethane	ND	7.3	0.73	ug/Kg	1	12/12/19	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	380	76	ug/Kg	50	12/12/19	JLI	SW8260C
1,1,2-Trichloroethane	ND	7.3	1.5	ug/Kg	1	12/12/19	JLI	SW8260C
1,1-Dichloroethane	ND	7.3	1.5	ug/Kg	1	12/12/19	JLI	SW8260C
1,1-Dichloroethene	ND	7.3	0.73	ug/Kg	1	12/12/19	JLI	SW8260C
1,1-Dichloropropene	ND	7.3	0.73	ug/Kg	1	12/12/19	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	380	76	ug/Kg	50	12/12/19	JLI	SW8260C
1,2,3-Trichloropropane	ND	380	38	ug/Kg	50	12/12/19	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	380	76	ug/Kg	50	12/12/19	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	380	38	ug/Kg	50	12/12/19	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	380	76	ug/Kg	50	12/12/19	JLI	SW8260C
1,2-Dibromoethane	ND	7.3	0.73	ug/Kg	1	12/12/19	JLI	SW8260C
1,2-Dichlorobenzene	ND	380	38	ug/Kg	50	12/12/19	JLI	SW8260C
1,2-Dichloroethane	ND	7.3	0.73	ug/Kg	1	12/12/19	JLI	SW8260C
1,2-Dichloropropane	ND	7.3	1.5	ug/Kg	1	12/12/19	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	380	38	ug/Kg	50	12/12/19	JLI	SW8260C
1,3-Dichlorobenzene	ND	380	38	ug/Kg	50	12/12/19	JLI	SW8260C
1,3-Dichloropropane	ND	7.3	1.5	ug/Kg	1	12/12/19	JLI	SW8260C
1,4-Dichlorobenzene	ND	380	38	ug/Kg	50	12/12/19	JLI	SW8260C
2,2-Dichloropropane	ND	7.3	0.73	ug/Kg	1	12/12/19	JLI	SW8260C
2-Chlorotoluene	ND	380	76	ug/Kg	50	12/12/19	JLI	SW8260C
2-Hexanone	ND	36	7.3	ug/Kg	1	12/12/19	JLI	SW8260C
2-Isopropyltoluene	ND	380	38	ug/Kg	50	12/12/19	JLI	SW8260C
4-Chlorotoluene	ND	380	38	ug/Kg	50	12/12/19	JLI	SW8260C
4-Methyl-2-pentanone	ND	36	7.3	ug/Kg	1	12/12/19	JLI	SW8260C
Acetone	15	JS 36	7.3	ug/Kg	1	12/12/19	JLI	SW8260C
Acrylonitrile	ND	15	1.5	ug/Kg	1	12/12/19	JLI	SW8260C
Benzene	ND	7.3	0.73	ug/Kg	1	12/12/19	JLI	SW8260C
Bromobenzene	ND	380	38	ug/Kg	50	12/12/19	JLI	SW8260C
Bromochloromethane	ND	7.3	0.73	ug/Kg	1	12/12/19	JLI	SW8260C
Bromodichloromethane	ND	7.3	1.5	ug/Kg	1	12/12/19	JLI	SW8260C
Bromoform	ND	7.3	1.5	ug/Kg	1	12/12/19	JLI	SW8260C
Bromomethane	ND	7.3	2.9	ug/Kg	1	12/12/19	JLI	SW8260C
Carbon Disulfide	ND	7.3	1.5	ug/Kg	1	12/12/19	JLI	SW8260C
Carbon tetrachloride	ND	7.3	1.5	ug/Kg	1	12/12/19	JLI	SW8260C
Chlorobenzene	ND	7.3	0.73	ug/Kg	1	12/12/19	JLI	SW8260C
Chloroethane	ND	7.3	0.73	ug/Kg	1	12/12/19	JLI	SW8260C
Chloroform	ND	7.3	0.73	ug/Kg	1	12/12/19	JLI	SW8260C
Chloromethane	ND	7.3	1.5	ug/Kg	1	12/12/19	JLI	SW8260C
cis-1,2-Dichloroethene	ND	7.3	0.73	ug/Kg	1	12/12/19	JLI	SW8260C
cis-1,3-Dichloropropene	ND	7.3	0.73	ug/Kg	1	12/12/19	JLI	SW8260C
Dibromochloromethane	ND	7.3	1.5	ug/Kg	1	12/12/19	JLI	SW8260C
Dibromomethane	ND	7.3	1.5	ug/Kg	1	12/12/19	JLI	SW8260C
Dichlorodifluoromethane	ND	7.3	0.73	ug/Kg	1	12/12/19	JLI	SW8260C
Ethylbenzene	ND	7.3	0.73	ug/Kg	1	12/12/19	JLI	SW8260C
Hexachlorobutadiene	ND	380	38	ug/Kg	50	12/12/19	JLI	SW8260C
Isopropylbenzene	ND	380	38	ug/Kg	50	12/12/19	JLI	SW8260C
m&p-Xylene	ND	7.3	1.5	ug/Kg	1	12/12/19	JLI	SW8260C
Methyl Ethyl Ketone	ND	44	7.3	ug/Kg	1	12/12/19	JLI	SW8260C

1

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Methyl t-butyl ether (MTBE)	ND	15	1.5	ug/Kg	1	12/12/19	JLI	SW8260C
Methylene chloride	ND	7.3	7.3	ug/Kg	1	12/12/19	JLI	SW8260C
Naphthalene	ND	380	76	ug/Kg	50	12/12/19	JLI	SW8260C
n-Butylbenzene	ND	380	38	ug/Kg	50	12/12/19	JLI	SW8260C
n-Propylbenzene	ND	380	76	ug/Kg	50	12/12/19	JLI	SW8260C
o-Xylene	ND	7.3	1.5	ug/Kg	1	12/12/19	JLI	SW8260C
p-Isopropyltoluene	ND	380	38	ug/Kg	50	12/12/19	JLI	SW8260C
sec-Butylbenzene	ND	380	38	ug/Kg	50	12/12/19	JLI	SW8260C
Styrene	ND	7.3	0.73	ug/Kg	1	12/12/19	JLI	SW8260C
tert-Butylbenzene	ND	380	38	ug/Kg	50	12/12/19	JLI	SW8260C
Tetrachloroethene	97	J 380	76	ug/Kg	50	12/12/19	JLI	SW8260C
Tetrahydrofuran (THF)	ND	15	3.6	ug/Kg	1	12/12/19	JLI	SW8260C
Toluene	42	J 380	38	ug/Kg	50	12/12/19	JLI	SW8260C
trans-1,2-Dichloroethene	ND	7.3	0.73	ug/Kg	1	12/12/19	JLI	SW8260C
trans-1,3-Dichloropropene	ND	7.3	0.73	ug/Kg	1	12/12/19	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	760	190	ug/Kg	50	12/12/19	JLI	SW8260C
Trichloroethene	ND	7.3	0.73	ug/Kg	1	12/12/19	JLI	SW8260C
Trichlorofluoromethane	ND	7.3	1.5	ug/Kg	1	12/12/19	JLI	SW8260C
Trichlorotrifluoroethane	ND	7.3	0.73	ug/Kg	1	12/12/19	JLI	SW8260C
Vinyl chloride	ND	7.3	0.73	ug/Kg	1	12/12/19	JLI	SW8260C
<u>QA/QC Surrogates</u>								
% 1,2-dichlorobenzene-d4	121			%	1	12/12/19	JLI	70 - 130 %
% Bromofluorobenzene	73			%	1	12/12/19	JLI	70 - 130 %
% Dibromofluoromethane	99			%	1	12/12/19	JLI	70 - 130 %
% Toluene-d8	94			%	1	12/12/19	JLI	70 - 130 %
% 1,2-dichlorobenzene-d4 (50x)	96			%	50	12/12/19	JLI	70 - 130 %
% Bromofluorobenzene (50x)	98			%	50	12/12/19	JLI	70 - 130 %
% Dibromofluoromethane (50x)	89			%	50	12/12/19	JLI	70 - 130 %
% Toluene-d8 (50x)	94			%	50	12/12/19	JLI	70 - 130 %
<u>Volatiles</u>								
1,1,1,2-Tetrachloroethane	ND	29	1.5	ug/Kg	1	12/12/19	JLI	SW8260C
Acrolein	ND	7.3	1.5	ug/Kg	1	12/12/19	JLI	SW8260C
Acrylonitrile	ND	29	0.73	ug/Kg	1	12/12/19	JLI	SW8260C
Tert-butyl alcohol	ND	150	29	ug/Kg	1	12/12/19	JLI	SW8260C
<u>Semivolatiles</u>								
1,2,4,5-Tetrachlorobenzene	ND	260	130	ug/Kg	1	12/12/19	WB	SW8270D
1,2,4-Trichlorobenzene	ND	260	110	ug/Kg	1	12/12/19	WB	SW8270D
1,2-Dichlorobenzene	ND	260	110	ug/Kg	1	12/12/19	WB	SW8270D
1,2-Diphenylhydrazine	ND	260	120	ug/Kg	1	12/12/19	WB	SW8270D
1,3-Dichlorobenzene	ND	260	110	ug/Kg	1	12/12/19	WB	SW8270D
1,4-Dichlorobenzene	ND	260	110	ug/Kg	1	12/12/19	WB	SW8270D
2,4,5-Trichlorophenol	ND	260	210	ug/Kg	1	12/12/19	WB	SW8270D
2,4,6-Trichlorophenol	ND	190	120	ug/Kg	1	12/12/19	WB	SW8270D
2,4-Dichlorophenol	ND	190	130	ug/Kg	1	12/12/19	WB	SW8270D
2,4-Dimethylphenol	ND	260	94	ug/Kg	1	12/12/19	WB	SW8270D
2,4-Dinitrophenol	ND	260	260	ug/Kg	1	12/12/19	WB	SW8270D
2,4-Dinitrotoluene	ND	190	150	ug/Kg	1	12/12/19	WB	SW8270D
2,6-Dinitrotoluene	ND	190	120	ug/Kg	1	12/12/19	WB	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
2-Chloronaphthalene	ND	260	110	ug/Kg	1	12/12/19	WB	SW8270D
2-Chlorophenol	ND	260	110	ug/Kg	1	12/12/19	WB	SW8270D
2-Methylnaphthalene	ND	260	110	ug/Kg	1	12/12/19	WB	SW8270D
2-Methylphenol (o-cresol)	ND	260	180	ug/Kg	1	12/12/19	WB	SW8270D
2-Nitroaniline	ND	260	260	ug/Kg	1	12/12/19	WB	SW8270D
2-Nitrophenol	ND	260	240	ug/Kg	1	12/12/19	WB	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	260	150	ug/Kg	1	12/12/19	WB	SW8270D
3,3'-Dichlorobenzidine	ND	190	180	ug/Kg	1	12/12/19	WB	SW8270D
3-Nitroaniline	ND	380	750	ug/Kg	1	12/12/19	WB	SW8270D
4,6-Dinitro-2-methylphenol	ND	230	75	ug/Kg	1	12/12/19	WB	SW8270D
4-Bromophenyl phenyl ether	ND	260	110	ug/Kg	1	12/12/19	WB	SW8270D
4-Chloro-3-methylphenol	ND	260	130	ug/Kg	1	12/12/19	WB	SW8270D
4-Chloroaniline	ND	300	180	ug/Kg	1	12/12/19	WB	SW8270D
4-Chlorophenyl phenyl ether	ND	260	130	ug/Kg	1	12/12/19	WB	SW8270D
4-Nitroaniline	ND	380	130	ug/Kg	1	12/12/19	WB	SW8270D
4-Nitrophenol	ND	380	170	ug/Kg	1	12/12/19	WB	SW8270D
Acenaphthene	ND	260	110	ug/Kg	1	12/12/19	WB	SW8270D
Acenaphthylene	ND	260	110	ug/Kg	1	12/12/19	WB	SW8270D
Acetophenone	ND	260	120	ug/Kg	1	12/12/19	WB	SW8270D
Aniline	ND	300	300	ug/Kg	1	12/12/19	WB	SW8270D
Anthracene	ND	260	120	ug/Kg	1	12/12/19	WB	SW8270D
Benz(a)anthracene	150	J 260	130	ug/Kg	1	12/12/19	WB	SW8270D
Benzidine	ND	380	220	ug/Kg	1	12/12/19	WB	SW8270D
Benzo(a)pyrene	130	J 190	120	ug/Kg	1	12/12/19	WB	SW8270D
Benzo(b)fluoranthene	ND	260	130	ug/Kg	1	12/12/19	WB	SW8270D
Benzo(ghi)perylene	ND	260	120	ug/Kg	1	12/12/19	WB	SW8270D
Benzo(k)fluoranthene	ND	260	130	ug/Kg	1	12/12/19	WB	SW8270D
Benzoic acid	ND	1900	750	ug/Kg	1	12/12/19	WB	SW8270D
Benzyl butyl phthalate	ND	260	97	ug/Kg	1	12/12/19	WB	SW8270D
Bis(2-chloroethoxy)methane	ND	260	100	ug/Kg	1	12/12/19	WB	SW8270D
Bis(2-chloroethyl)ether	ND	190	100	ug/Kg	1	12/12/19	WB	SW8270D
Bis(2-chloroisopropyl)ether	ND	260	100	ug/Kg	1	12/12/19	WB	SW8270D
Bis(2-ethylhexyl)phthalate	ND	260	110	ug/Kg	1	12/12/19	WB	SW8270D
Carbazole	ND	190	150	ug/Kg	1	12/12/19	WB	SW8270D
Chrysene	160	J 260	130	ug/Kg	1	12/12/19	WB	SW8270D
Dibenz(a,h)anthracene	ND	190	120	ug/Kg	1	12/12/19	WB	SW8270D
Dibenzofuran	ND	260	110	ug/Kg	1	12/12/19	WB	SW8270D
Diethyl phthalate	ND	260	120	ug/Kg	1	12/12/19	WB	SW8270D
Dimethylphthalate	ND	260	120	ug/Kg	1	12/12/19	WB	SW8270D
Di-n-butylphthalate	ND	260	100	ug/Kg	1	12/12/19	WB	SW8270D
Di-n-octylphthalate	ND	260	97	ug/Kg	1	12/12/19	WB	SW8270D
Fluoranthene	270	260	120	ug/Kg	1	12/12/19	WB	SW8270D
Fluorene	ND	260	120	ug/Kg	1	12/12/19	WB	SW8270D
Hexachlorobenzene	ND	190	110	ug/Kg	1	12/12/19	WB	SW8270D
Hexachlorobutadiene	ND	260	140	ug/Kg	1	12/12/19	WB	SW8270D
Hexachlorocyclopentadiene	ND	260	120	ug/Kg	1	12/12/19	WB	SW8270D
Hexachloroethane	ND	190	110	ug/Kg	1	12/12/19	WB	SW8270D
Indeno(1,2,3-cd)pyrene	ND	260	130	ug/Kg	1	12/12/19	WB	SW8270D
Isophorone	ND	190	110	ug/Kg	1	12/12/19	WB	SW8270D

1

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Naphthalene	ND	260	110	ug/Kg	1	12/12/19	WB	SW8270D
Nitrobenzene	ND	190	130	ug/Kg	1	12/12/19	WB	SW8270D
N-Nitrosodimethylamine	ND	260	110	ug/Kg	1	12/12/19	WB	SW8270D
N-Nitrosodi-n-propylamine	ND	190	120	ug/Kg	1	12/12/19	WB	SW8270D
N-Nitrosodiphenylamine	ND	260	140	ug/Kg	1	12/12/19	WB	SW8270D
Pentachloronitrobenzene	ND	260	140	ug/Kg	1	12/12/19	WB	SW8270D
Pentachlorophenol	ND	230	140	ug/Kg	1	12/12/19	WB	SW8270D
Phenanthrene	190	J 260	110	ug/Kg	1	12/12/19	WB	SW8270D
Phenol	ND	260	120	ug/Kg	1	12/12/19	WB	SW8270D
Pyrene	270	260	130	ug/Kg	1	12/12/19	WB	SW8270D
Pyridine	ND	260	93	ug/Kg	1	12/12/19	WB	SW8270D
<u>QA/QC Surrogates</u>								
% 2,4,6-Tribromophenol	46			%	1	12/12/19	WB	30 - 130 %
% 2-Fluorobiphenyl	60			%	1	12/12/19	WB	30 - 130 %
% 2-Fluorophenol	54			%	1	12/12/19	WB	30 - 130 %
% Nitrobenzene-d5	54			%	1	12/12/19	WB	30 - 130 %
% Phenol-d5	56			%	1	12/12/19	WB	30 - 130 %
% Terphenyl-d14	59			%	1	12/12/19	WB	30 - 130 %
<u>1,4-Dioxane</u>								
1,4-dioxane	ND	75	75	ug/Kg	1	12/13/19	WB	SW8270D (SIM)
<u>QA/QC Surrogates</u>								
% 2-Fluorobiphenyl	27			%	1	12/13/19	WB	30 - 130 %
% Nitrobenzene-d5	43			%	1	12/13/19	WB	30 - 130 %
% Terphenyl-d14	35			%	1	12/13/19	WB	30 - 130 %
Field Extraction	Completed					12/10/19		SW5035A

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

3 = This parameter exceeds laboratory specified limits.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low J=Estimated Below RL LOD=Limit of Detection MDL=Method Detection Limit1

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

Please be advised that the NY 375 soil criteria for chromium are based on hexavalent chromium and trivalent chromium.

Volatile Comment:

There was a suppression of the last internal standard in the low level analysis, all affected compounds are reported from the methanol preserved high level analysis which did not exhibit this interference.

Semi-Volatile Comment:

Poor surrogate recovery was observed for one acid and/or one base surrogate. The other surrogates associated with this sample were within QA/QC criteria. No significant bias suspected.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

S - Laboratory solvent, contamination is possible.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

December 18, 2019

Reviewed and Released by: Greg Lawrence, Assistant Lab Director



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823



Analysis Report

December 18, 2019

FOR: Attn: Mr. Charles B. Sosik, P.G.
Environmental Business Consultants
1808 Middle Country Rd
Ridge NY 11961-2406

Sample Information

Matrix: SOIL
Location Code: EBC
Rush Request: 72 Hour
P.O.#:

Custody Information

Collected by: TB
Received by: CP
Analyzed by: see "By" below

Date

12/10/19
12/11/19

Time

12:59
16:00

Laboratory Data

SDG ID: GCE85356
Phoenix ID: CE85367

Project ID: 26-22 4TH ST QUEENS
Client ID: 19B9 (8-10)

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Silver	ND	0.36	0.36	mg/Kg	1	12/12/19	EK	SW6010D
Aluminum	11300	36	7.1	mg/Kg	10	12/12/19	EK	SW6010D
Arsenic	1.80	0.71	0.71	mg/Kg	1	12/12/19	EK	SW6010D
Barium	82.5	0.7	0.36	mg/Kg	1	12/12/19	EK	SW6010D
Beryllium	0.42	0.28	0.14	mg/Kg	1	12/12/19	EK	SW6010D
Calcium	1820	3.6	3.3	mg/Kg	1	12/12/19	EK	SW6010D
Cadmium	0.47	0.36	0.36	mg/Kg	1	12/12/19	EK	SW6010D
Cobalt	6.31	0.36	0.36	mg/Kg	1	12/12/19	EK	SW6010D
Chromium	28.6	0.36	0.36	mg/Kg	1	12/12/19	EK	SW6010D
Copper	38.8	0.7	0.36	mg/kg	1	12/12/19	EK	SW6010D
Iron	19700	36	36	mg/Kg	10	12/12/19	EK	SW6010D
Mercury	0.06	0.03	0.02	mg/Kg	2	12/12/19	RS	SW7471B
Potassium	1780	7	2.8	mg/Kg	1	12/12/19	EK	SW6010D
Magnesium	4450	3.6	3.6	mg/Kg	1	12/12/19	EK	SW6010D
Manganese	269	3.6	3.6	mg/Kg	10	12/12/19	EK	SW6010D
Sodium	238	7	3.1	mg/Kg	1	12/12/19	EK	SW6010D
Nickel	21.3	0.36	0.36	mg/Kg	1	12/12/19	EK	SW6010D
Lead	9.1	0.7	0.36	mg/Kg	1	12/12/19	EK	SW6010D
Antimony	ND	3.6	3.6	mg/Kg	1	12/12/19	EK	SW6010D
Selenium	ND	1.4	1.2	mg/Kg	1	12/12/19	EK	SW6010D
Thallium	ND	1.4	1.4	mg/Kg	1	12/12/19	EK	SW6010D
Vanadium	33.5	0.36	0.36	mg/Kg	1	12/12/19	EK	SW6010D
Zinc	41.5	0.7	0.36	mg/Kg	1	12/12/19	EK	SW6010D
Percent Solid	88			%		12/11/19	VT	SW846-%Solid
Extraction for SVOA SIM	Completed					12/12/19	K/R/LA	SW3545A
Soil Extraction for PCB	Completed					12/13/19	MM/LL	SW3545A
Soil Extraction for PCB	Completed					12/13/19	MM/LL	SW3545A
Soil Extraction for Pesticides	Completed					12/13/19	MM	SW3545A

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Soil Extraction for SVOA	Completed					12/11/19	BB/LA	SW3545A
Mercury Digestion	Completed					12/12/19	LS/LS	SW7471B
Total Metals Digest	Completed					12/11/19	JJ/AG/BF	SW3050B

Polychlorinated Biphenyls

PCB-1016	ND	75	75	ug/Kg	2	12/16/19	SC	SW8082A
PCB-1221	ND	75	75	ug/Kg	2	12/16/19	SC	SW8082A
PCB-1232	ND	75	75	ug/Kg	2	12/16/19	SC	SW8082A
PCB-1242	ND	75	75	ug/Kg	2	12/16/19	SC	SW8082A
PCB-1248	ND	75	75	ug/Kg	2	12/16/19	SC	SW8082A
PCB-1254	ND	75	75	ug/Kg	2	12/16/19	SC	SW8082A
PCB-1260	ND	75	75	ug/Kg	2	12/16/19	SC	SW8082A
PCB-1262	ND	75	75	ug/Kg	2	12/16/19	SC	SW8082A
PCB-1268	ND	75	75	ug/Kg	2	12/16/19	SC	SW8082A

QA/QC Surrogates

% DCBP	67			%	2	12/16/19	SC	30 - 150 %
% DCBP (Confirmation)	62			%	2	12/16/19	SC	30 - 150 %
% TCMX	61			%	2	12/16/19	SC	30 - 150 %
% TCMX (Confirmation)	56			%	2	12/16/19	SC	30 - 150 %

Pesticides - Soil

4,4' -DDD	ND	2.2	2.2	ug/Kg	2	12/12/19	CG	SW8081B
4,4' -DDE	ND	2.2	2.2	ug/Kg	2	12/12/19	CG	SW8081B
4,4' -DDT	ND	2.2	2.2	ug/Kg	2	12/12/19	CG	SW8081B
a-BHC	ND	7.5	7.5	ug/Kg	2	12/12/19	CG	SW8081B
a-Chlordane	ND	3.7	3.7	ug/Kg	2	12/12/19	CG	SW8081B
Aldrin	ND	3.7	3.7	ug/Kg	2	12/12/19	CG	SW8081B
b-BHC	ND	7.5	7.5	ug/Kg	2	12/12/19	CG	SW8081B
Chlordane	ND	37	37	ug/Kg	2	12/12/19	CG	SW8081B
d-BHC	ND	7.5	7.5	ug/Kg	2	12/12/19	CG	SW8081B
Dieldrin	ND	3.7	3.7	ug/Kg	2	12/12/19	CG	SW8081B
Endosulfan I	ND	7.5	7.5	ug/Kg	2	12/12/19	CG	SW8081B
Endosulfan II	ND	7.5	7.5	ug/Kg	2	12/12/19	CG	SW8081B
Endosulfan sulfate	ND	7.5	7.5	ug/Kg	2	12/12/19	CG	SW8081B
Endrin	ND	7.5	7.5	ug/Kg	2	12/12/19	CG	SW8081B
Endrin aldehyde	ND	7.5	7.5	ug/Kg	2	12/12/19	CG	SW8081B
Endrin ketone	ND	7.5	7.5	ug/Kg	2	12/12/19	CG	SW8081B
g-BHC	ND	1.5	1.5	ug/Kg	2	12/12/19	CG	SW8081B
g-Chlordane	ND	3.7	3.7	ug/Kg	2	12/12/19	CG	SW8081B
Heptachlor	ND	7.5	7.5	ug/Kg	2	12/12/19	CG	SW8081B
Heptachlor epoxide	ND	7.5	7.5	ug/Kg	2	12/12/19	CG	SW8081B
Methoxychlor	ND	37	37	ug/Kg	2	12/12/19	CG	SW8081B
Toxaphene	ND	150	150	ug/Kg	2	12/12/19	CG	SW8081B

QA/QC Surrogates

% DCBP	70			%	2	12/12/19	CG	30 - 150 %
% DCBP (Confirmation)	77			%	2	12/12/19	CG	30 - 150 %
% TCMX	71			%	2	12/12/19	CG	30 - 150 %
% TCMX (Confirmation)	74			%	2	12/12/19	CG	30 - 150 %

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
<u>Volatiles</u>								
1,1,1,2-Tetrachloroethane	ND	6.3	1.3	ug/Kg	1	12/12/19	JLI	SW8260C
1,1,1-Trichloroethane	ND	6.3	0.63	ug/Kg	1	12/12/19	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	6.3	1.3	ug/Kg	1	12/12/19	JLI	SW8260C
1,1,2-Trichloroethane	ND	6.3	1.3	ug/Kg	1	12/12/19	JLI	SW8260C
1,1-Dichloroethane	ND	6.3	1.3	ug/Kg	1	12/12/19	JLI	SW8260C
1,1-Dichloroethene	ND	6.3	0.63	ug/Kg	1	12/12/19	JLI	SW8260C
1,1-Dichloropropene	ND	6.3	0.63	ug/Kg	1	12/12/19	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	6.3	1.3	ug/Kg	1	12/12/19	JLI	SW8260C
1,2,3-Trichloropropane	ND	6.3	0.63	ug/Kg	1	12/12/19	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	6.3	1.3	ug/Kg	1	12/12/19	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	6.3	0.63	ug/Kg	1	12/12/19	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	6.3	1.3	ug/Kg	1	12/12/19	JLI	SW8260C
1,2-Dibromoethane	ND	6.3	0.63	ug/Kg	1	12/12/19	JLI	SW8260C
1,2-Dichlorobenzene	ND	6.3	0.63	ug/Kg	1	12/12/19	JLI	SW8260C
1,2-Dichloroethane	ND	6.3	0.63	ug/Kg	1	12/12/19	JLI	SW8260C
1,2-Dichloropropane	ND	6.3	1.3	ug/Kg	1	12/12/19	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	6.3	0.63	ug/Kg	1	12/12/19	JLI	SW8260C
1,3-Dichlorobenzene	ND	6.3	0.63	ug/Kg	1	12/12/19	JLI	SW8260C
1,3-Dichloropropane	ND	6.3	1.3	ug/Kg	1	12/12/19	JLI	SW8260C
1,4-Dichlorobenzene	ND	6.3	0.63	ug/Kg	1	12/12/19	JLI	SW8260C
2,2-Dichloropropane	ND	6.3	0.63	ug/Kg	1	12/12/19	JLI	SW8260C
2-Chlorotoluene	ND	6.3	1.3	ug/Kg	1	12/12/19	JLI	SW8260C
2-Hexanone	ND	32	6.3	ug/Kg	1	12/12/19	JLI	SW8260C
2-Isopropyltoluene	ND	6.3	0.63	ug/Kg	1	12/12/19	JLI	SW8260C
4-Chlorotoluene	ND	6.3	0.63	ug/Kg	1	12/12/19	JLI	SW8260C
4-Methyl-2-pentanone	ND	32	6.3	ug/Kg	1	12/12/19	JLI	SW8260C
Acetone	47	S 32	6.3	ug/Kg	1	12/12/19	JLI	SW8260C
Acrylonitrile	ND	13	1.3	ug/Kg	1	12/12/19	JLI	SW8260C
Benzene	ND	6.3	0.63	ug/Kg	1	12/12/19	JLI	SW8260C
Bromobenzene	ND	6.3	0.63	ug/Kg	1	12/12/19	JLI	SW8260C
Bromochloromethane	ND	6.3	0.63	ug/Kg	1	12/12/19	JLI	SW8260C
Bromodichloromethane	ND	6.3	1.3	ug/Kg	1	12/12/19	JLI	SW8260C
Bromoform	ND	6.3	1.3	ug/Kg	1	12/12/19	JLI	SW8260C
Bromomethane	ND	6.3	2.5	ug/Kg	1	12/12/19	JLI	SW8260C
Carbon Disulfide	1.3	J 6.3	1.3	ug/Kg	1	12/12/19	JLI	SW8260C
Carbon tetrachloride	ND	6.3	1.3	ug/Kg	1	12/12/19	JLI	SW8260C
Chlorobenzene	ND	6.3	0.63	ug/Kg	1	12/12/19	JLI	SW8260C
Chloroethane	ND	6.3	0.63	ug/Kg	1	12/12/19	JLI	SW8260C
Chloroform	ND	6.3	0.63	ug/Kg	1	12/12/19	JLI	SW8260C
Chloromethane	ND	6.3	1.3	ug/Kg	1	12/12/19	JLI	SW8260C
cis-1,2-Dichloroethene	ND	6.3	0.63	ug/Kg	1	12/12/19	JLI	SW8260C
cis-1,3-Dichloropropene	ND	6.3	0.63	ug/Kg	1	12/12/19	JLI	SW8260C
Dibromochloromethane	ND	6.3	1.3	ug/Kg	1	12/12/19	JLI	SW8260C
Dibromomethane	ND	6.3	1.3	ug/Kg	1	12/12/19	JLI	SW8260C
Dichlorodifluoromethane	ND	6.3	0.63	ug/Kg	1	12/12/19	JLI	SW8260C
Ethylbenzene	ND	6.3	0.63	ug/Kg	1	12/12/19	JLI	SW8260C
Hexachlorobutadiene	ND	6.3	0.63	ug/Kg	1	12/12/19	JLI	SW8260C
Isopropylbenzene	ND	6.3	0.63	ug/Kg	1	12/12/19	JLI	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
m&p-Xylene	ND	6.3	1.3	ug/Kg	1	12/12/19	JLI	SW8260C
Methyl Ethyl Ketone	7.9	J 38	6.3	ug/Kg	1	12/12/19	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	13	1.3	ug/Kg	1	12/12/19	JLI	SW8260C
Methylene chloride	ND	6.3	6.3	ug/Kg	1	12/12/19	JLI	SW8260C
Naphthalene	2.9	J 6.3	1.3	ug/Kg	1	12/12/19	JLI	SW8260C
n-Butylbenzene	ND	6.3	0.63	ug/Kg	1	12/12/19	JLI	SW8260C
n-Propylbenzene	ND	6.3	1.3	ug/Kg	1	12/12/19	JLI	SW8260C
o-Xylene	ND	6.3	1.3	ug/Kg	1	12/12/19	JLI	SW8260C
p-Isopropyltoluene	ND	6.3	0.63	ug/Kg	1	12/12/19	JLI	SW8260C
sec-Butylbenzene	ND	6.3	0.63	ug/Kg	1	12/12/19	JLI	SW8260C
Styrene	ND	6.3	0.63	ug/Kg	1	12/12/19	JLI	SW8260C
tert-Butylbenzene	ND	6.3	0.63	ug/Kg	1	12/12/19	JLI	SW8260C
Tetrachloroethene	ND	6.3	1.3	ug/Kg	1	12/12/19	JLI	SW8260C
Tetrahydrofuran (THF)	ND	13	3.2	ug/Kg	1	12/12/19	JLI	SW8260C
Toluene	ND	6.3	0.63	ug/Kg	1	12/12/19	JLI	SW8260C
trans-1,2-Dichloroethene	ND	6.3	0.63	ug/Kg	1	12/12/19	JLI	SW8260C
trans-1,3-Dichloropropene	ND	6.3	0.63	ug/Kg	1	12/12/19	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	13	3.2	ug/Kg	1	12/12/19	JLI	SW8260C
Trichloroethene	ND	6.3	0.63	ug/Kg	1	12/12/19	JLI	SW8260C
Trichlorofluoromethane	ND	6.3	1.3	ug/Kg	1	12/12/19	JLI	SW8260C
Trichlorotrifluoroethane	ND	6.3	0.63	ug/Kg	1	12/12/19	JLI	SW8260C
Vinyl chloride	ND	6.3	0.63	ug/Kg	1	12/12/19	JLI	SW8260C
<u>QA/QC Surrogates</u>								
% 1,2-dichlorobenzene-d4	87			%	1	12/12/19	JLI	70 - 130 %
% Bromofluorobenzene	121			%	1	12/12/19	JLI	70 - 130 %
% Dibromofluoromethane	91			%	1	12/12/19	JLI	70 - 130 %
% Toluene-d8	94			%	1	12/12/19	JLI	70 - 130 %
<u>Volatiles</u>								
1,1,1,2-Tetrachloroethane	ND	25	1.3	ug/Kg	1	12/12/19	JLI	SW8260C
Acrolein	ND	6.3	1.3	ug/Kg	1	12/12/19	JLI	SW8260C
Acrylonitrile	ND	25	0.63	ug/Kg	1	12/12/19	JLI	SW8260C
Tert-butyl alcohol	ND	130	25	ug/Kg	1	12/12/19	JLI	SW8260C
Client MS/MSD	Completed					12/14/19		
<u>Semivolatiles</u>								
1,2,4,5-Tetrachlorobenzene	ND	260	130	ug/Kg	1	12/12/19	WB	SW8270D
1,2,4-Trichlorobenzene	ND	260	110	ug/Kg	1	12/12/19	WB	SW8270D
1,2-Dichlorobenzene	ND	260	100	ug/Kg	1	12/12/19	WB	SW8270D
1,2-Diphenylhydrazine	ND	260	120	ug/Kg	1	12/12/19	WB	SW8270D
1,3-Dichlorobenzene	ND	260	110	ug/Kg	1	12/12/19	WB	SW8270D
1,4-Dichlorobenzene	ND	260	110	ug/Kg	1	12/12/19	WB	SW8270D
2,4,5-Trichlorophenol	ND	260	200	ug/Kg	1	12/12/19	WB	SW8270D
2,4,6-Trichlorophenol	ND	180	120	ug/Kg	1	12/12/19	WB	SW8270D
2,4-Dichlorophenol	ND	180	130	ug/Kg	1	12/12/19	WB	SW8270D
2,4-Dimethylphenol	ND	260	91	ug/Kg	1	12/12/19	WB	SW8270D
2,4-Dinitrophenol	ND	260	260	ug/Kg	1	12/12/19	WB	SW8270D
2,4-Dinitrotoluene	ND	180	140	ug/Kg	1	12/12/19	WB	SW8270D
2,6-Dinitrotoluene	ND	180	120	ug/Kg	1	12/12/19	WB	SW8270D
2-Chloronaphthalene	ND	260	100	ug/Kg	1	12/12/19	WB	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
2-Chlorophenol	ND	260	100	ug/Kg	1	12/12/19	WB	SW8270D
2-Methylnaphthalene	ND	260	110	ug/Kg	1	12/12/19	WB	SW8270D
2-Methylphenol (o-cresol)	ND	260	170	ug/Kg	1	12/12/19	WB	SW8270D
2-Nitroaniline	ND	260	260	ug/Kg	1	12/12/19	WB	SW8270D
2-Nitrophenol	ND	260	230	ug/Kg	1	12/12/19	WB	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	260	140	ug/Kg	1	12/12/19	WB	SW8270D
3,3'-Dichlorobenzidine	ND	180	170	ug/Kg	1	12/12/19	WB	SW8270D
3-Nitroaniline	ND	370	740	ug/Kg	1	12/12/19	WB	SW8270D
4,6-Dinitro-2-methylphenol	ND	220	74	ug/Kg	1	12/12/19	WB	SW8270D
4-Bromophenyl phenyl ether	ND	260	110	ug/Kg	1	12/12/19	WB	SW8270D
4-Chloro-3-methylphenol	ND	260	130	ug/Kg	1	12/12/19	WB	SW8270D
4-Chloroaniline	ND	290	170	ug/Kg	1	12/12/19	WB	SW8270D
4-Chlorophenyl phenyl ether	ND	260	120	ug/Kg	1	12/12/19	WB	SW8270D
4-Nitroaniline	ND	370	120	ug/Kg	1	12/12/19	WB	SW8270D
4-Nitrophenol	ND	370	170	ug/Kg	1	12/12/19	WB	SW8270D
Acenaphthene	ND	260	110	ug/Kg	1	12/12/19	WB	SW8270D
Acenaphthylene	ND	260	100	ug/Kg	1	12/12/19	WB	SW8270D
Acetophenone	ND	260	110	ug/Kg	1	12/12/19	WB	SW8270D
Aniline	ND	290	290	ug/Kg	1	12/12/19	WB	SW8270D
Anthracene	ND	260	120	ug/Kg	1	12/12/19	WB	SW8270D
Benz(a)anthracene	ND	260	120	ug/Kg	1	12/12/19	WB	SW8270D
Benzidine	ND	370	220	ug/Kg	1	12/12/19	WB	SW8270D
Benzo(a)pyrene	ND	180	120	ug/Kg	1	12/12/19	WB	SW8270D
Benzo(b)fluoranthene	ND	260	130	ug/Kg	1	12/12/19	WB	SW8270D
Benzo(ghi)perylene	ND	260	120	ug/Kg	1	12/12/19	WB	SW8270D
Benzo(k)fluoranthene	ND	260	120	ug/Kg	1	12/12/19	WB	SW8270D
Benzoic acid	ND	1800	740	ug/Kg	1	12/12/19	WB	SW8270D
Benzyl butyl phthalate	ND	260	95	ug/Kg	1	12/12/19	WB	SW8270D
Bis(2-chloroethoxy)methane	ND	260	100	ug/Kg	1	12/12/19	WB	SW8270D
Bis(2-chloroethyl)ether	ND	180	99	ug/Kg	1	12/12/19	WB	SW8270D
Bis(2-chloroisopropyl)ether	ND	260	100	ug/Kg	1	12/12/19	WB	SW8270D
Bis(2-ethylhexyl)phthalate	ND	260	110	ug/Kg	1	12/12/19	WB	SW8270D
Carbazole	ND	180	150	ug/Kg	1	12/12/19	WB	SW8270D
Chrysene	ND	260	120	ug/Kg	1	12/12/19	WB	SW8270D
Dibenz(a,h)anthracene	ND	180	120	ug/Kg	1	12/12/19	WB	SW8270D
Dibenzofuran	ND	260	110	ug/Kg	1	12/12/19	WB	SW8270D
Diethyl phthalate	ND	260	120	ug/Kg	1	12/12/19	WB	SW8270D
Dimethylphthalate	ND	260	110	ug/Kg	1	12/12/19	WB	SW8270D
Di-n-butylphthalate	ND	260	98	ug/Kg	1	12/12/19	WB	SW8270D
Di-n-octylphthalate	ND	260	95	ug/Kg	1	12/12/19	WB	SW8270D
Fluoranthene	ND	260	120	ug/Kg	1	12/12/19	WB	SW8270D
Fluorene	ND	260	120	ug/Kg	1	12/12/19	WB	SW8270D
Hexachlorobenzene	ND	180	110	ug/Kg	1	12/12/19	WB	SW8270D
Hexachlorobutadiene	ND	260	130	ug/Kg	1	12/12/19	WB	SW8270D
Hexachlorocyclopentadiene	ND	260	110	ug/Kg	1	12/12/19	WB	SW8270D
Hexachloroethane	ND	180	110	ug/Kg	1	12/12/19	WB	SW8270D
Indeno(1,2,3-cd)pyrene	ND	260	120	ug/Kg	1	12/12/19	WB	SW8270D
Isophorone	ND	180	100	ug/Kg	1	12/12/19	WB	SW8270D
Naphthalene	ND	260	110	ug/Kg	1	12/12/19	WB	SW8270D

1

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Nitrobenzene	ND	180	130	ug/Kg	1	12/12/19	WB	SW8270D
N-Nitrosodimethylamine	ND	260	100	ug/Kg	1	12/12/19	WB	SW8270D
N-Nitrosodi-n-propylamine	ND	180	120	ug/Kg	1	12/12/19	WB	SW8270D
N-Nitrosodiphenylamine	ND	260	140	ug/Kg	1	12/12/19	WB	SW8270D
Pentachloronitrobenzene	ND	260	140	ug/Kg	1	12/12/19	WB	SW8270D
Pentachlorophenol	ND	220	140	ug/Kg	1	12/12/19	WB	SW8270D
Phenanthrene	ND	260	110	ug/Kg	1	12/12/19	WB	SW8270D
Phenol	ND	260	120	ug/Kg	1	12/12/19	WB	SW8270D
Pyrene	ND	260	130	ug/Kg	1	12/12/19	WB	SW8270D
Pyridine	ND	260	91	ug/Kg	1	12/12/19	WB	SW8270D
<u>QA/QC Surrogates</u>								
% 2,4,6-Tribromophenol	65			%	1	12/12/19	WB	30 - 130 %
% 2-Fluorobiphenyl	68			%	1	12/12/19	WB	30 - 130 %
% 2-Fluorophenol	63			%	1	12/12/19	WB	30 - 130 %
% Nitrobenzene-d5	61			%	1	12/12/19	WB	30 - 130 %
% Phenol-d5	62			%	1	12/12/19	WB	30 - 130 %
% Terphenyl-d14	64			%	1	12/12/19	WB	30 - 130 %
<u>1,4-Dioxane</u>								
1,4-dioxane	ND	75	75	ug/Kg	1	12/13/19	WB	SW8270D (SIM)
<u>QA/QC Surrogates</u>								
% 2-Fluorobiphenyl	39			%	1	12/13/19	WB	30 - 130 %
% Nitrobenzene-d5	39			%	1	12/13/19	WB	30 - 130 %
% Terphenyl-d14	44			%	1	12/13/19	WB	30 - 130 %
Field Extraction	Completed					12/10/19		SW5035A

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low J=Estimated Below RL LOD=Limit of Detection MDL=Method Detection Limit1

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

Please be advised that the NY 375 soil criteria for chromium are based on hexavalent chromium and trivalent chromium.

Volatile Comment:

To achieve client's objectives, where the lowest calibration standard or LOD justifies lowering the RL/PQL, the RL/PQL of some compounds have been lowered to meet criteria.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

S - Laboratory solvent, contamination is possible.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

December 18, 2019

Reviewed and Released by: Greg Lawrence, Assistant Lab Director



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823



Analysis Report

December 18, 2019

FOR: Attn: Mr. Charles B. Sosik, P.G.
Environmental Business Consultants
1808 Middle Country Rd
Ridge NY 11961-2406

Sample Information

Matrix: SOIL
Location Code: EBC
Rush Request: 72 Hour
P.O.#:

Custody Information

Collected by: TB
Received by: CP
Analyzed by: see "By" below

Date	Time
12/10/19	13:18
12/11/19	16:00

Laboratory Data

SDG ID: GCE85356
Phoenix ID: CE85368

Project ID: 26-22 4TH ST QUEENS
Client ID: 19B9 (12`)

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Silver	ND	0.33	0.33	mg/Kg	1	12/12/19	EK	SW6010D
Aluminum	12800	33	6.6	mg/Kg	10	12/12/19	EK	SW6010D
Arsenic	0.79	0.66	0.66	mg/Kg	1	12/12/19	EK	SW6010D
Barium	231	0.7	0.33	mg/Kg	1	12/12/19	EK	SW6010D
Beryllium	0.20	0.26	0.13	mg/Kg	1	12/12/19	EK	SW6010D
Calcium	2610	33	30	mg/Kg	10	12/12/19	EK	SW6010D
Cadmium	0.49	0.33	0.33	mg/Kg	1	12/12/19	EK	SW6010D
Cobalt	4.87	0.33	0.33	mg/Kg	1	12/12/19	EK	SW6010D
Chromium	21.3	0.33	0.33	mg/Kg	1	12/12/19	EK	SW6010D
Copper	48.0	0.7	0.33	mg/kg	1	12/12/19	EK	SW6010D
Iron	25100	33	33	mg/Kg	10	12/12/19	EK	SW6010D
Mercury	ND	0.03	0.02	mg/Kg	2	12/12/19	RS	SW7471B
Potassium	7080	66	26	mg/Kg	10	12/12/19	EK	SW6010D
Magnesium	6960	33	33	mg/Kg	10	12/12/19	EK	SW6010D
Manganese	368	3.3	3.3	mg/Kg	10	12/12/19	EK	SW6010D
Sodium	250	7	2.8	mg/Kg	1	12/12/19	EK	SW6010D
Nickel	20.6	0.33	0.33	mg/Kg	1	12/12/19	EK	SW6010D
Lead	2.4	0.7	0.33	mg/Kg	1	12/12/19	EK	SW6010D
Antimony	ND	3.3	3.3	mg/Kg	1	12/12/19	EK	SW6010D
Selenium	ND	1.3	1.1	mg/Kg	1	12/12/19	EK	SW6010D
Thallium	ND	1.3	1.3	mg/Kg	1	12/12/19	EK	SW6010D
Vanadium	49.7	0.33	0.33	mg/Kg	1	12/12/19	EK	SW6010D
Zinc	40.1	0.7	0.33	mg/Kg	1	12/12/19	EK	SW6010D
Percent Solid	91			%		12/11/19	VT	SW846-%Solid
Extraction for SVOA SIM	Completed					12/12/19	K/R/LA	SW3545A
Soil Extraction for PCB	Completed					12/11/19	MM/E	SW3545A
Soil Extraction for Pesticides	Completed					12/11/19	MM/E	SW3545A
Soil Extraction for SVOA	Completed					12/11/19	AT/B/LA	SW3545A

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Mercury Digestion	Completed					12/12/19	LS/LS	SW7471B
Total Metals Digest	Completed					12/11/19	JJ/AG/BF	SW3050B

Polychlorinated Biphenyls

PCB-1016	ND	73	73	ug/Kg	2	12/12/19	SC	SW8082A
PCB-1221	ND	73	73	ug/Kg	2	12/12/19	SC	SW8082A
PCB-1232	ND	73	73	ug/Kg	2	12/12/19	SC	SW8082A
PCB-1242	ND	73	73	ug/Kg	2	12/12/19	SC	SW8082A
PCB-1248	ND	73	73	ug/Kg	2	12/12/19	SC	SW8082A
PCB-1254	ND	73	73	ug/Kg	2	12/12/19	SC	SW8082A
PCB-1260	ND	73	73	ug/Kg	2	12/12/19	SC	SW8082A
PCB-1262	ND	73	73	ug/Kg	2	12/12/19	SC	SW8082A
PCB-1268	ND	73	73	ug/Kg	2	12/12/19	SC	SW8082A

QA/QC Surrogates

% DCBP	78			%	2	12/12/19	SC	30 - 150 %
% DCBP (Confirmation)	78			%	2	12/12/19	SC	30 - 150 %
% TCMX	64			%	2	12/12/19	SC	30 - 150 %
% TCMX (Confirmation)	63			%	2	12/12/19	SC	30 - 150 %

Pesticides - Soil

4,4' -DDD	ND	2.2	2.2	ug/Kg	2	12/12/19	CG	SW8081B
4,4' -DDE	ND	2.2	2.2	ug/Kg	2	12/12/19	CG	SW8081B
4,4' -DDT	ND	2.2	2.2	ug/Kg	2	12/12/19	CG	SW8081B
a-BHC	ND	7.3	7.3	ug/Kg	2	12/12/19	CG	SW8081B
a-Chlordane	ND	3.6	3.6	ug/Kg	2	12/12/19	CG	SW8081B
Aldrin	ND	3.6	3.6	ug/Kg	2	12/12/19	CG	SW8081B
b-BHC	ND	7.3	7.3	ug/Kg	2	12/12/19	CG	SW8081B
Chlordane	ND	36	36	ug/Kg	2	12/12/19	CG	SW8081B
d-BHC	ND	7.3	7.3	ug/Kg	2	12/12/19	CG	SW8081B
Dieldrin	ND	3.6	3.6	ug/Kg	2	12/12/19	CG	SW8081B
Endosulfan I	ND	7.3	7.3	ug/Kg	2	12/12/19	CG	SW8081B
Endosulfan II	ND	7.3	7.3	ug/Kg	2	12/12/19	CG	SW8081B
Endosulfan sulfate	ND	7.3	7.3	ug/Kg	2	12/12/19	CG	SW8081B
Endrin	ND	7.3	7.3	ug/Kg	2	12/12/19	CG	SW8081B
Endrin aldehyde	ND	7.3	7.3	ug/Kg	2	12/12/19	CG	SW8081B
Endrin ketone	ND	7.3	7.3	ug/Kg	2	12/12/19	CG	SW8081B
g-BHC	ND	1.5	1.5	ug/Kg	2	12/12/19	CG	SW8081B
g-Chlordane	ND	3.6	3.6	ug/Kg	2	12/12/19	CG	SW8081B
Heptachlor	ND	7.3	7.3	ug/Kg	2	12/12/19	CG	SW8081B
Heptachlor epoxide	ND	7.3	7.3	ug/Kg	2	12/12/19	CG	SW8081B
Methoxychlor	ND	36	36	ug/Kg	2	12/12/19	CG	SW8081B
Toxaphene	ND	150	150	ug/Kg	2	12/12/19	CG	SW8081B

QA/QC Surrogates

% DCBP	65			%	2	12/12/19	CG	30 - 150 %
% DCBP (Confirmation)	78			%	2	12/12/19	CG	30 - 150 %
% TCMX	59			%	2	12/12/19	CG	30 - 150 %
% TCMX (Confirmation)	58			%	2	12/12/19	CG	30 - 150 %

Volatiles

1,1,1,2-Tetrachloroethane	ND	4.3	0.87	ug/Kg	1	12/12/19	JLI	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
1,1,1-Trichloroethane	ND	4.3	0.43	ug/Kg	1	12/12/19	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	4.3	0.87	ug/Kg	1	12/12/19	JLI	SW8260C
1,1,2-Trichloroethane	ND	4.3	0.87	ug/Kg	1	12/12/19	JLI	SW8260C
1,1-Dichloroethane	ND	4.3	0.87	ug/Kg	1	12/12/19	JLI	SW8260C
1,1-Dichloroethene	ND	4.3	0.43	ug/Kg	1	12/12/19	JLI	SW8260C
1,1-Dichloropropene	ND	4.3	0.43	ug/Kg	1	12/12/19	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	4.3	0.87	ug/Kg	1	12/12/19	JLI	SW8260C
1,2,3-Trichloropropane	ND	4.3	0.43	ug/Kg	1	12/12/19	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	4.3	0.87	ug/Kg	1	12/12/19	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	4.3	0.43	ug/Kg	1	12/12/19	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	4.3	0.87	ug/Kg	1	12/12/19	JLI	SW8260C
1,2-Dibromoethane	ND	4.3	0.43	ug/Kg	1	12/12/19	JLI	SW8260C
1,2-Dichlorobenzene	ND	4.3	0.43	ug/Kg	1	12/12/19	JLI	SW8260C
1,2-Dichloroethane	ND	4.3	0.43	ug/Kg	1	12/12/19	JLI	SW8260C
1,2-Dichloropropane	ND	4.3	0.87	ug/Kg	1	12/12/19	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	4.3	0.43	ug/Kg	1	12/12/19	JLI	SW8260C
1,3-Dichlorobenzene	ND	4.3	0.43	ug/Kg	1	12/12/19	JLI	SW8260C
1,3-Dichloropropane	ND	4.3	0.87	ug/Kg	1	12/12/19	JLI	SW8260C
1,4-Dichlorobenzene	ND	4.3	0.43	ug/Kg	1	12/12/19	JLI	SW8260C
2,2-Dichloropropane	ND	4.3	0.43	ug/Kg	1	12/12/19	JLI	SW8260C
2-Chlorotoluene	ND	4.3	0.87	ug/Kg	1	12/12/19	JLI	SW8260C
2-Hexanone	ND	22	4.3	ug/Kg	1	12/12/19	JLI	SW8260C
2-Isopropyltoluene	ND	4.3	0.43	ug/Kg	1	12/12/19	JLI	SW8260C
4-Chlorotoluene	ND	4.3	0.43	ug/Kg	1	12/12/19	JLI	SW8260C
4-Methyl-2-pentanone	ND	22	4.3	ug/Kg	1	12/12/19	JLI	SW8260C
Acetone	ND	22	4.3	ug/Kg	1	12/12/19	JLI	SW8260C
Acrylonitrile	ND	8.7	0.87	ug/Kg	1	12/12/19	JLI	SW8260C
Benzene	ND	4.3	0.43	ug/Kg	1	12/12/19	JLI	SW8260C
Bromobenzene	ND	4.3	0.43	ug/Kg	1	12/12/19	JLI	SW8260C
Bromochloromethane	ND	4.3	0.43	ug/Kg	1	12/12/19	JLI	SW8260C
Bromodichloromethane	ND	4.3	0.87	ug/Kg	1	12/12/19	JLI	SW8260C
Bromoform	ND	4.3	0.87	ug/Kg	1	12/12/19	JLI	SW8260C
Bromomethane	ND	4.3	1.7	ug/Kg	1	12/12/19	JLI	SW8260C
Carbon Disulfide	ND	4.3	0.87	ug/Kg	1	12/12/19	JLI	SW8260C
Carbon tetrachloride	ND	4.3	0.87	ug/Kg	1	12/12/19	JLI	SW8260C
Chlorobenzene	ND	4.3	0.43	ug/Kg	1	12/12/19	JLI	SW8260C
Chloroethane	ND	4.3	0.43	ug/Kg	1	12/12/19	JLI	SW8260C
Chloroform	ND	4.3	0.43	ug/Kg	1	12/12/19	JLI	SW8260C
Chloromethane	ND	4.3	0.87	ug/Kg	1	12/12/19	JLI	SW8260C
cis-1,2-Dichloroethene	ND	4.3	0.43	ug/Kg	1	12/12/19	JLI	SW8260C
cis-1,3-Dichloropropene	ND	4.3	0.43	ug/Kg	1	12/12/19	JLI	SW8260C
Dibromochloromethane	ND	4.3	0.87	ug/Kg	1	12/12/19	JLI	SW8260C
Dibromomethane	ND	4.3	0.87	ug/Kg	1	12/12/19	JLI	SW8260C
Dichlorodifluoromethane	ND	4.3	0.43	ug/Kg	1	12/12/19	JLI	SW8260C
Ethylbenzene	ND	4.3	0.43	ug/Kg	1	12/12/19	JLI	SW8260C
Hexachlorobutadiene	ND	4.3	0.43	ug/Kg	1	12/12/19	JLI	SW8260C
Isopropylbenzene	ND	4.3	0.43	ug/Kg	1	12/12/19	JLI	SW8260C
m&p-Xylene	ND	4.3	0.87	ug/Kg	1	12/12/19	JLI	SW8260C
Methyl Ethyl Ketone	ND	26	4.3	ug/Kg	1	12/12/19	JLI	SW8260C

1

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Methyl t-butyl ether (MTBE)	ND	8.7	0.87	ug/Kg	1	12/12/19	JLI	SW8260C
Methylene chloride	ND	4.3	4.3	ug/Kg	1	12/12/19	JLI	SW8260C
Naphthalene	ND	4.3	0.87	ug/Kg	1	12/12/19	JLI	SW8260C
n-Butylbenzene	ND	4.3	0.43	ug/Kg	1	12/12/19	JLI	SW8260C
n-Propylbenzene	ND	4.3	0.87	ug/Kg	1	12/12/19	JLI	SW8260C
o-Xylene	ND	4.3	0.87	ug/Kg	1	12/12/19	JLI	SW8260C
p-Isopropyltoluene	ND	4.3	0.43	ug/Kg	1	12/12/19	JLI	SW8260C
sec-Butylbenzene	ND	4.3	0.43	ug/Kg	1	12/12/19	JLI	SW8260C
Styrene	ND	4.3	0.43	ug/Kg	1	12/12/19	JLI	SW8260C
tert-Butylbenzene	ND	4.3	0.43	ug/Kg	1	12/12/19	JLI	SW8260C
Tetrachloroethene	ND	4.3	0.87	ug/Kg	1	12/12/19	JLI	SW8260C
Tetrahydrofuran (THF)	ND	8.7	2.2	ug/Kg	1	12/12/19	JLI	SW8260C
Toluene	ND	4.3	0.43	ug/Kg	1	12/12/19	JLI	SW8260C
trans-1,2-Dichloroethene	ND	4.3	0.43	ug/Kg	1	12/12/19	JLI	SW8260C
trans-1,3-Dichloropropene	ND	4.3	0.43	ug/Kg	1	12/12/19	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	8.7	2.2	ug/Kg	1	12/12/19	JLI	SW8260C
Trichloroethene	ND	4.3	0.43	ug/Kg	1	12/12/19	JLI	SW8260C
Trichlorofluoromethane	ND	4.3	0.87	ug/Kg	1	12/12/19	JLI	SW8260C
Trichlorotrifluoroethane	ND	4.3	0.43	ug/Kg	1	12/12/19	JLI	SW8260C
Vinyl chloride	ND	4.3	0.43	ug/Kg	1	12/12/19	JLI	SW8260C
<u>QA/QC Surrogates</u>								
% 1,2-dichlorobenzene-d4	95			%	1	12/12/19	JLI	70 - 130 %
% Bromofluorobenzene	97			%	1	12/12/19	JLI	70 - 130 %
% Dibromofluoromethane	92			%	1	12/12/19	JLI	70 - 130 %
% Toluene-d8	94			%	1	12/12/19	JLI	70 - 130 %
<u>Volatiles</u>								
1,1,1,2-Tetrachloroethane	ND	17	0.87	ug/Kg	1	12/12/19	JLI	SW8260C
Acrolein	ND	4.3	0.87	ug/Kg	1	12/12/19	JLI	SW8260C
Acrylonitrile	ND	17	0.43	ug/Kg	1	12/12/19	JLI	SW8260C
Tert-butyl alcohol	ND	87	17	ug/Kg	1	12/12/19	JLI	SW8260C
<u>Semivolatiles</u>								
1,2,4,5-Tetrachlorobenzene	ND	250	130	ug/Kg	1	12/12/19	WB	SW8270D
1,2,4-Trichlorobenzene	ND	250	110	ug/Kg	1	12/12/19	WB	SW8270D
1,2-Dichlorobenzene	ND	250	100	ug/Kg	1	12/12/19	WB	SW8270D
1,2-Diphenylhydrazine	ND	250	120	ug/Kg	1	12/12/19	WB	SW8270D
1,3-Dichlorobenzene	ND	250	110	ug/Kg	1	12/12/19	WB	SW8270D
1,4-Dichlorobenzene	ND	250	110	ug/Kg	1	12/12/19	WB	SW8270D
2,4,5-Trichlorophenol	ND	250	200	ug/Kg	1	12/12/19	WB	SW8270D
2,4,6-Trichlorophenol	ND	180	120	ug/Kg	1	12/12/19	WB	SW8270D
2,4-Dichlorophenol	ND	180	130	ug/Kg	1	12/12/19	WB	SW8270D
2,4-Dimethylphenol	ND	250	89	ug/Kg	1	12/12/19	WB	SW8270D
2,4-Dinitrophenol	ND	250	250	ug/Kg	1	12/12/19	WB	SW8270D
2,4-Dinitrotoluene	ND	180	140	ug/Kg	1	12/12/19	WB	SW8270D
2,6-Dinitrotoluene	ND	180	110	ug/Kg	1	12/12/19	WB	SW8270D
2-Chloronaphthalene	ND	250	100	ug/Kg	1	12/12/19	WB	SW8270D
2-Chlorophenol	ND	250	100	ug/Kg	1	12/12/19	WB	SW8270D
2-Methylnaphthalene	ND	250	110	ug/Kg	1	12/12/19	WB	SW8270D
2-Methylphenol (o-cresol)	ND	250	170	ug/Kg	1	12/12/19	WB	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
2-Nitroaniline	ND	250	250	ug/Kg	1	12/12/19	WB	SW8270D
2-Nitrophenol	ND	250	230	ug/Kg	1	12/12/19	WB	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	250	140	ug/Kg	1	12/12/19	WB	SW8270D
3,3'-Dichlorobenzidine	ND	180	170	ug/Kg	1	12/12/19	WB	SW8270D
3-Nitroaniline	ND	360	720	ug/Kg	1	12/12/19	WB	SW8270D
4,6-Dinitro-2-methylphenol	ND	220	72	ug/Kg	1	12/12/19	WB	SW8270D
4-Bromophenyl phenyl ether	ND	250	110	ug/Kg	1	12/12/19	WB	SW8270D
4-Chloro-3-methylphenol	ND	250	130	ug/Kg	1	12/12/19	WB	SW8270D
4-Chloroaniline	ND	290	170	ug/Kg	1	12/12/19	WB	SW8270D
4-Chlorophenyl phenyl ether	ND	250	120	ug/Kg	1	12/12/19	WB	SW8270D
4-Nitroaniline	ND	360	120	ug/Kg	1	12/12/19	WB	SW8270D
4-Nitrophenol	ND	360	160	ug/Kg	1	12/12/19	WB	SW8270D
Acenaphthene	ND	250	110	ug/Kg	1	12/12/19	WB	SW8270D
Acenaphthylene	ND	250	100	ug/Kg	1	12/12/19	WB	SW8270D
Acetophenone	ND	250	110	ug/Kg	1	12/12/19	WB	SW8270D
Aniline	ND	290	290	ug/Kg	1	12/12/19	WB	SW8270D
Anthracene	ND	250	120	ug/Kg	1	12/12/19	WB	SW8270D
Benz(a)anthracene	ND	250	120	ug/Kg	1	12/12/19	WB	SW8270D
Benzidine	ND	360	210	ug/Kg	1	12/12/19	WB	SW8270D
Benzo(a)pyrene	ND	180	120	ug/Kg	1	12/12/19	WB	SW8270D
Benzo(b)fluoranthene	ND	250	120	ug/Kg	1	12/12/19	WB	SW8270D
Benzo(ghi)perylene	ND	250	120	ug/Kg	1	12/12/19	WB	SW8270D
Benzo(k)fluoranthene	ND	250	120	ug/Kg	1	12/12/19	WB	SW8270D
Benzoic acid	ND	1800	720	ug/Kg	1	12/12/19	WB	SW8270D
Benzyl butyl phthalate	ND	250	93	ug/Kg	1	12/12/19	WB	SW8270D
Bis(2-chloroethoxy)methane	ND	250	100	ug/Kg	1	12/12/19	WB	SW8270D
Bis(2-chloroethyl)ether	ND	180	97	ug/Kg	1	12/12/19	WB	SW8270D
Bis(2-chloroisopropyl)ether	ND	250	100	ug/Kg	1	12/12/19	WB	SW8270D
Bis(2-ethylhexyl)phthalate	ND	250	100	ug/Kg	1	12/12/19	WB	SW8270D
Carbazole	ND	180	140	ug/Kg	1	12/12/19	WB	SW8270D
Chrysene	ND	250	120	ug/Kg	1	12/12/19	WB	SW8270D
Dibenz(a,h)anthracene	ND	180	120	ug/Kg	1	12/12/19	WB	SW8270D
Dibenzofuran	ND	250	110	ug/Kg	1	12/12/19	WB	SW8270D
Diethyl phthalate	ND	250	110	ug/Kg	1	12/12/19	WB	SW8270D
Dimethylphthalate	ND	250	110	ug/Kg	1	12/12/19	WB	SW8270D
Di-n-butylphthalate	ND	250	96	ug/Kg	1	12/12/19	WB	SW8270D
Di-n-octylphthalate	ND	250	93	ug/Kg	1	12/12/19	WB	SW8270D
Fluoranthene	ND	250	120	ug/Kg	1	12/12/19	WB	SW8270D
Fluorene	ND	250	120	ug/Kg	1	12/12/19	WB	SW8270D
Hexachlorobenzene	ND	180	110	ug/Kg	1	12/12/19	WB	SW8270D
Hexachlorobutadiene	ND	250	130	ug/Kg	1	12/12/19	WB	SW8270D
Hexachlorocyclopentadiene	ND	250	110	ug/Kg	1	12/12/19	WB	SW8270D
Hexachloroethane	ND	180	110	ug/Kg	1	12/12/19	WB	SW8270D
Indeno(1,2,3-cd)pyrene	ND	250	120	ug/Kg	1	12/12/19	WB	SW8270D
Isophorone	ND	180	100	ug/Kg	1	12/12/19	WB	SW8270D
Naphthalene	ND	250	100	ug/Kg	1	12/12/19	WB	SW8270D
Nitrobenzene	ND	180	130	ug/Kg	1	12/12/19	WB	SW8270D
N-Nitrosodimethylamine	ND	250	100	ug/Kg	1	12/12/19	WB	SW8270D
N-Nitrosodi-n-propylamine	ND	180	120	ug/Kg	1	12/12/19	WB	SW8270D

1

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
N-Nitrosodiphenylamine	ND	250	140	ug/Kg	1	12/12/19	WB	SW8270D
Pentachloronitrobenzene	ND	250	130	ug/Kg	1	12/12/19	WB	SW8270D
Pentachlorophenol	ND	220	140	ug/Kg	1	12/12/19	WB	SW8270D
Phenanthrene	ND	250	100	ug/Kg	1	12/12/19	WB	SW8270D
Phenol	ND	250	120	ug/Kg	1	12/12/19	WB	SW8270D
Pyrene	ND	250	120	ug/Kg	1	12/12/19	WB	SW8270D
Pyridine	ND	250	89	ug/Kg	1	12/12/19	WB	SW8270D
<u>QA/QC Surrogates</u>								
% 2,4,6-Tribromophenol	46			%	1	12/12/19	WB	30 - 130 %
% 2-Fluorobiphenyl	55			%	1	12/12/19	WB	30 - 130 %
% 2-Fluorophenol	55			%	1	12/12/19	WB	30 - 130 %
% Nitrobenzene-d5	52			%	1	12/12/19	WB	30 - 130 %
% Phenol-d5	55			%	1	12/12/19	WB	30 - 130 %
% Terphenyl-d14	53			%	1	12/12/19	WB	30 - 130 %
<u>1,4-Dioxane</u>								
1,4-dioxane	ND	73	73	ug/Kg	1	12/13/19	WB	SW8270D (SIM)
<u>QA/QC Surrogates</u>								
% 2-Fluorobiphenyl	29			%	1	12/13/19	WB	30 - 130 % 3
% Nitrobenzene-d5	35			%	1	12/13/19	WB	30 - 130 %
% Terphenyl-d14	38			%	1	12/13/19	WB	30 - 130 %
Field Extraction	Completed					12/10/19		SW5035A 1

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

3 = This parameter exceeds laboratory specified limits.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low J=Estimated Below RL LOD=Limit of Detection MDL=Method Detection Limit1

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

Please be advised that the NY 375 soil criteria for chromium are based on hexavalent chromium and trivalent chromium.

Semi-Volatile Comment:

Poor surrogate recovery was observed for one acid and/or one base surrogate. The other surrogates associated with this sample were within QA/QC criteria. No significant bias suspected.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

December 18, 2019

Reviewed and Released by: Greg Lawrence, Assistant Lab Director



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823



Analysis Report

December 18, 2019

FOR: Attn: Mr. Charles B. Sosik, P.G.
Environmental Business Consultants
1808 Middle Country Rd
Ridge NY 11961-2406

Sample Information

Matrix: SOIL
Location Code: EBC
Rush Request: 72 Hour
P.O.#:

Custody Information

Collected by: TB
Received by: CP
Analyzed by: see "By" below

Date

12/10/19
12/11/19

Time

13:57
16:00

Laboratory Data

SDG ID: GCE85356
Phoenix ID: CE85369

Project ID: 26-22 4TH ST QUEENS
Client ID: 19B10 (0-2)

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Silver	ND	0.39	0.39	mg/Kg	1	12/12/19	EK	SW6010D
Aluminum	8530	39	7.8	mg/Kg	10	12/12/19	EK	SW6010D
Arsenic	9.29	0.78	0.78	mg/Kg	1	12/12/19	EK	SW6010D
Barium	401	0.8	0.39	mg/Kg	1	12/12/19	EK	SW6010D
Beryllium	0.43	0.31	0.16	mg/Kg	1	12/12/19	EK	SW6010D
Calcium	6480	3.9	3.6	mg/Kg	1	12/12/19	EK	SW6010D
Cadmium	1.79	0.39	0.39	mg/Kg	1	12/12/19	EK	SW6010D
Cobalt	5.20	0.39	0.39	mg/Kg	1	12/12/19	EK	SW6010D
Chromium	25.8	0.39	0.39	mg/Kg	1	12/12/19	EK	SW6010D
Copper	97.5	0.8	0.39	mg/kg	1	12/12/19	EK	SW6010D
Iron	16700	39	39	mg/Kg	10	12/12/19	EK	SW6010D
Mercury	0.22	0.08	0.05	mg/Kg	5	12/12/19	RS	SW7471B
Potassium	1130	8	3.0	mg/Kg	1	12/12/19	EK	SW6010D
Magnesium	3330	3.9	3.9	mg/Kg	1	12/12/19	EK	SW6010D
Manganese	230	3.9	3.9	mg/Kg	10	12/12/19	EK	SW6010D
Sodium	149	8	3.4	mg/Kg	1	12/12/19	EK	SW6010D
Nickel	16.5	0.39	0.39	mg/Kg	1	12/12/19	EK	SW6010D
Lead	655	0.8	0.39	mg/Kg	1	12/12/19	EK	SW6010D
Antimony	ND	3.9	3.9	mg/Kg	1	12/12/19	EK	SW6010D
Selenium	ND	1.6	1.3	mg/Kg	1	12/12/19	EK	SW6010D
Thallium	ND	1.6	1.6	mg/Kg	1	12/12/19	EK	SW6010D
Vanadium	28.8	0.39	0.39	mg/Kg	1	12/12/19	EK	SW6010D
Zinc	555	7.8	3.9	mg/Kg	10	12/12/19	EK	SW6010D
Percent Solid	81			%		12/11/19	VT	SW846-%Solid
Extraction for SVOA SIM	Completed					12/12/19	K/R/LA	SW3545A
Soil Extraction for PCB	Completed					12/11/19	MM/E	SW3545A
Soil Extraction for Pesticides	Completed					12/11/19	MM/E	SW3545A
Soil Extraction for SVOA	Completed					12/11/19	AT/B/EE	SW3545A

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Mercury Digestion	Completed					12/12/19	LS/LS	SW7471B
Total Metals Digest	Completed					12/11/19	JJ/AG/BF	SW3050B

Polychlorinated Biphenyls

PCB-1016	ND	81	81	ug/Kg	2	12/12/19	SC	SW8082A
PCB-1221	ND	81	81	ug/Kg	2	12/12/19	SC	SW8082A
PCB-1232	ND	81	81	ug/Kg	2	12/12/19	SC	SW8082A
PCB-1242	ND	81	81	ug/Kg	2	12/12/19	SC	SW8082A
PCB-1248	ND	81	81	ug/Kg	2	12/12/19	SC	SW8082A
PCB-1254	ND	81	81	ug/Kg	2	12/12/19	SC	SW8082A
PCB-1260	ND	81	81	ug/Kg	2	12/12/19	SC	SW8082A
PCB-1262	ND	81	81	ug/Kg	2	12/12/19	SC	SW8082A
PCB-1268	ND	81	81	ug/Kg	2	12/12/19	SC	SW8082A

QA/QC Surrogates

% DCBP	80			%	2	12/12/19	SC	30 - 150 %
% DCBP (Confirmation)	77			%	2	12/12/19	SC	30 - 150 %
% TCMX	78			%	2	12/12/19	SC	30 - 150 %
% TCMX (Confirmation)	74			%	2	12/12/19	SC	30 - 150 %

Pesticides - Soil

4,4' -DDD	ND	2.4	2.4	ug/Kg	2	12/12/19	CG	SW8081B
4,4' -DDE	ND	2.4	2.4	ug/Kg	2	12/12/19	CG	SW8081B
4,4' -DDT	ND	2.4	2.4	ug/Kg	2	12/12/19	CG	SW8081B
a-BHC	ND	8.1	8.1	ug/Kg	2	12/12/19	CG	SW8081B
a-Chlordane	ND	4.0	4.0	ug/Kg	2	12/12/19	CG	SW8081B
Aldrin	ND	4.0	4.0	ug/Kg	2	12/12/19	CG	SW8081B
b-BHC	ND	8.1	8.1	ug/Kg	2	12/12/19	CG	SW8081B
Chlordane	ND	40	40	ug/Kg	2	12/12/19	CG	SW8081B
d-BHC	ND	8.1	8.1	ug/Kg	2	12/12/19	CG	SW8081B
Dieldrin	ND	4.0	4.0	ug/Kg	2	12/12/19	CG	SW8081B
Endosulfan I	ND	8.1	8.1	ug/Kg	2	12/12/19	CG	SW8081B
Endosulfan II	ND	8.1	8.1	ug/Kg	2	12/12/19	CG	SW8081B
Endosulfan sulfate	ND	8.1	8.1	ug/Kg	2	12/12/19	CG	SW8081B
Endrin	ND	8.1	8.1	ug/Kg	2	12/12/19	CG	SW8081B
Endrin aldehyde	ND	8.1	8.1	ug/Kg	2	12/12/19	CG	SW8081B
Endrin ketone	ND	8.1	8.1	ug/Kg	2	12/12/19	CG	SW8081B
g-BHC	ND	1.6	1.6	ug/Kg	2	12/12/19	CG	SW8081B
g-Chlordane	ND	4.0	4.0	ug/Kg	2	12/12/19	CG	SW8081B
Heptachlor	ND	8.1	8.1	ug/Kg	2	12/12/19	CG	SW8081B
Heptachlor epoxide	ND	8.1	8.1	ug/Kg	2	12/12/19	CG	SW8081B
Methoxychlor	ND	40	40	ug/Kg	2	12/12/19	CG	SW8081B
Toxaphene	ND	160	160	ug/Kg	2	12/12/19	CG	SW8081B

QA/QC Surrogates

% DCBP	79			%	2	12/12/19	CG	30 - 150 %
% DCBP (Confirmation)	81			%	2	12/12/19	CG	30 - 150 %
% TCMX	76			%	2	12/12/19	CG	30 - 150 %
% TCMX (Confirmation)	68			%	2	12/12/19	CG	30 - 150 %

Volatiles

1,1,1,2-Tetrachloroethane	ND	4.9	0.98	ug/Kg	1	12/12/19	JLI	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
1,1,1-Trichloroethane	ND	4.9	0.49	ug/Kg	1	12/12/19	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	4.9	0.98	ug/Kg	1	12/12/19	JLI	SW8260C
1,1,2-Trichloroethane	ND	4.9	0.98	ug/Kg	1	12/12/19	JLI	SW8260C
1,1-Dichloroethane	ND	4.9	0.98	ug/Kg	1	12/12/19	JLI	SW8260C
1,1-Dichloroethene	ND	4.9	0.49	ug/Kg	1	12/12/19	JLI	SW8260C
1,1-Dichloropropene	ND	4.9	0.49	ug/Kg	1	12/12/19	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	4.9	0.98	ug/Kg	1	12/12/19	JLI	SW8260C
1,2,3-Trichloropropane	ND	4.9	0.49	ug/Kg	1	12/12/19	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	4.9	0.98	ug/Kg	1	12/12/19	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	4.9	0.49	ug/Kg	1	12/12/19	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	4.9	0.98	ug/Kg	1	12/12/19	JLI	SW8260C
1,2-Dibromoethane	ND	4.9	0.49	ug/Kg	1	12/12/19	JLI	SW8260C
1,2-Dichlorobenzene	ND	4.9	0.49	ug/Kg	1	12/12/19	JLI	SW8260C
1,2-Dichloroethane	ND	4.9	0.49	ug/Kg	1	12/12/19	JLI	SW8260C
1,2-Dichloropropane	ND	4.9	0.98	ug/Kg	1	12/12/19	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	4.9	0.49	ug/Kg	1	12/12/19	JLI	SW8260C
1,3-Dichlorobenzene	ND	4.9	0.49	ug/Kg	1	12/12/19	JLI	SW8260C
1,3-Dichloropropane	ND	4.9	0.98	ug/Kg	1	12/12/19	JLI	SW8260C
1,4-Dichlorobenzene	ND	4.9	0.49	ug/Kg	1	12/12/19	JLI	SW8260C
2,2-Dichloropropane	ND	4.9	0.49	ug/Kg	1	12/12/19	JLI	SW8260C
2-Chlorotoluene	ND	4.9	0.98	ug/Kg	1	12/12/19	JLI	SW8260C
2-Hexanone	ND	24	4.9	ug/Kg	1	12/12/19	JLI	SW8260C
2-Isopropyltoluene	ND	4.9	0.49	ug/Kg	1	12/12/19	JLI	SW8260C
4-Chlorotoluene	ND	4.9	0.49	ug/Kg	1	12/12/19	JLI	SW8260C
4-Methyl-2-pentanone	ND	24	4.9	ug/Kg	1	12/12/19	JLI	SW8260C
Acetone	39	S 24	4.9	ug/Kg	1	12/12/19	JLI	SW8260C
Acrylonitrile	ND	9.8	0.98	ug/Kg	1	12/12/19	JLI	SW8260C
Benzene	ND	4.9	0.49	ug/Kg	1	12/12/19	JLI	SW8260C
Bromobenzene	ND	4.9	0.49	ug/Kg	1	12/12/19	JLI	SW8260C
Bromochloromethane	ND	4.9	0.49	ug/Kg	1	12/12/19	JLI	SW8260C
Bromodichloromethane	ND	4.9	0.98	ug/Kg	1	12/12/19	JLI	SW8260C
Bromoform	ND	4.9	0.98	ug/Kg	1	12/12/19	JLI	SW8260C
Bromomethane	ND	4.9	2.0	ug/Kg	1	12/12/19	JLI	SW8260C
Carbon Disulfide	ND	4.9	0.98	ug/Kg	1	12/12/19	JLI	SW8260C
Carbon tetrachloride	ND	4.9	0.98	ug/Kg	1	12/12/19	JLI	SW8260C
Chlorobenzene	ND	4.9	0.49	ug/Kg	1	12/12/19	JLI	SW8260C
Chloroethane	ND	4.9	0.49	ug/Kg	1	12/12/19	JLI	SW8260C
Chloroform	ND	4.9	0.49	ug/Kg	1	12/12/19	JLI	SW8260C
Chloromethane	ND	4.9	0.98	ug/Kg	1	12/12/19	JLI	SW8260C
cis-1,2-Dichloroethene	1.8	J 4.9	0.49	ug/Kg	1	12/12/19	JLI	SW8260C
cis-1,3-Dichloropropene	ND	4.9	0.49	ug/Kg	1	12/12/19	JLI	SW8260C
Dibromochloromethane	ND	4.9	0.98	ug/Kg	1	12/12/19	JLI	SW8260C
Dibromomethane	ND	4.9	0.98	ug/Kg	1	12/12/19	JLI	SW8260C
Dichlorodifluoromethane	ND	4.9	0.49	ug/Kg	1	12/12/19	JLI	SW8260C
Ethylbenzene	ND	4.9	0.49	ug/Kg	1	12/12/19	JLI	SW8260C
Hexachlorobutadiene	ND	4.9	0.49	ug/Kg	1	12/12/19	JLI	SW8260C
Isopropylbenzene	ND	4.9	0.49	ug/Kg	1	12/12/19	JLI	SW8260C
m&p-Xylene	ND	4.9	0.98	ug/Kg	1	12/12/19	JLI	SW8260C
Methyl Ethyl Ketone	6.8	J 29	4.9	ug/Kg	1	12/12/19	JLI	SW8260C

1

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Methyl t-butyl ether (MTBE)	ND	9.8	0.98	ug/Kg	1	12/12/19	JLI	SW8260C
Methylene chloride	ND	4.9	4.9	ug/Kg	1	12/12/19	JLI	SW8260C
Naphthalene	ND	4.9	0.98	ug/Kg	1	12/12/19	JLI	SW8260C
n-Butylbenzene	ND	4.9	0.49	ug/Kg	1	12/12/19	JLI	SW8260C
n-Propylbenzene	ND	4.9	0.98	ug/Kg	1	12/12/19	JLI	SW8260C
o-Xylene	ND	4.9	0.98	ug/Kg	1	12/12/19	JLI	SW8260C
p-Isopropyltoluene	ND	4.9	0.49	ug/Kg	1	12/12/19	JLI	SW8260C
sec-Butylbenzene	ND	4.9	0.49	ug/Kg	1	12/12/19	JLI	SW8260C
Styrene	ND	4.9	0.49	ug/Kg	1	12/12/19	JLI	SW8260C
tert-Butylbenzene	ND	4.9	0.49	ug/Kg	1	12/12/19	JLI	SW8260C
Tetrachloroethene	ND	4.9	0.98	ug/Kg	1	12/12/19	JLI	SW8260C
Tetrahydrofuran (THF)	ND	9.8	2.4	ug/Kg	1	12/12/19	JLI	SW8260C
Toluene	ND	4.9	0.49	ug/Kg	1	12/12/19	JLI	SW8260C
trans-1,2-Dichloroethene	ND	4.9	0.49	ug/Kg	1	12/12/19	JLI	SW8260C
trans-1,3-Dichloropropene	ND	4.9	0.49	ug/Kg	1	12/12/19	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	9.8	2.4	ug/Kg	1	12/12/19	JLI	SW8260C
Trichloroethene	ND	4.9	0.49	ug/Kg	1	12/12/19	JLI	SW8260C
Trichlorofluoromethane	ND	4.9	0.98	ug/Kg	1	12/12/19	JLI	SW8260C
Trichlorotrifluoroethane	ND	4.9	0.49	ug/Kg	1	12/12/19	JLI	SW8260C
Vinyl chloride	ND	4.9	0.49	ug/Kg	1	12/12/19	JLI	SW8260C
<u>QA/QC Surrogates</u>								
% 1,2-dichlorobenzene-d4	97			%	1	12/12/19	JLI	70 - 130 %
% Bromofluorobenzene	96			%	1	12/12/19	JLI	70 - 130 %
% Dibromofluoromethane	92			%	1	12/12/19	JLI	70 - 130 %
% Toluene-d8	94			%	1	12/12/19	JLI	70 - 130 %
<u>Volatiles</u>								
1,1,1,2-Tetrachloroethane	ND	20	0.98	ug/Kg	1	12/12/19	JLI	SW8260C
Acrolein	ND	4.9	0.98	ug/Kg	1	12/12/19	JLI	SW8260C
Acrylonitrile	ND	20	0.49	ug/Kg	1	12/12/19	JLI	SW8260C
Tert-butyl alcohol	ND	98	20	ug/Kg	1	12/12/19	JLI	SW8260C
<u>Semivolatiles</u>								
1,2,4,5-Tetrachlorobenzene	ND	280	140	ug/Kg	1	12/12/19	WB	SW8270D
1,2,4-Trichlorobenzene	ND	280	120	ug/Kg	1	12/12/19	WB	SW8270D
1,2-Dichlorobenzene	ND	280	110	ug/Kg	1	12/12/19	WB	SW8270D
1,2-Diphenylhydrazine	ND	280	130	ug/Kg	1	12/12/19	WB	SW8270D
1,3-Dichlorobenzene	ND	280	120	ug/Kg	1	12/12/19	WB	SW8270D
1,4-Dichlorobenzene	ND	280	120	ug/Kg	1	12/12/19	WB	SW8270D
2,4,5-Trichlorophenol	ND	280	220	ug/Kg	1	12/12/19	WB	SW8270D
2,4,6-Trichlorophenol	ND	200	130	ug/Kg	1	12/12/19	WB	SW8270D
2,4-Dichlorophenol	ND	200	140	ug/Kg	1	12/12/19	WB	SW8270D
2,4-Dimethylphenol	ND	280	100	ug/Kg	1	12/12/19	WB	SW8270D
2,4-Dinitrophenol	ND	280	280	ug/Kg	1	12/12/19	WB	SW8270D
2,4-Dinitrotoluene	ND	200	160	ug/Kg	1	12/12/19	WB	SW8270D
2,6-Dinitrotoluene	ND	200	130	ug/Kg	1	12/12/19	WB	SW8270D
2-Chloronaphthalene	ND	280	120	ug/Kg	1	12/12/19	WB	SW8270D
2-Chlorophenol	ND	280	120	ug/Kg	1	12/12/19	WB	SW8270D
2-Methylnaphthalene	ND	280	120	ug/Kg	1	12/12/19	WB	SW8270D
2-Methylphenol (o-cresol)	ND	280	190	ug/Kg	1	12/12/19	WB	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
2-Nitroaniline	ND	280	280	ug/Kg	1	12/12/19	WB	SW8270D
2-Nitrophenol	ND	280	260	ug/Kg	1	12/12/19	WB	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	280	160	ug/Kg	1	12/12/19	WB	SW8270D
3,3'-Dichlorobenzidine	ND	200	190	ug/Kg	1	12/12/19	WB	SW8270D
3-Nitroaniline	ND	410	810	ug/Kg	1	12/12/19	WB	SW8270D
4,6-Dinitro-2-methylphenol	ND	240	81	ug/Kg	1	12/12/19	WB	SW8270D
4-Bromophenyl phenyl ether	ND	280	120	ug/Kg	1	12/12/19	WB	SW8270D
4-Chloro-3-methylphenol	ND	280	140	ug/Kg	1	12/12/19	WB	SW8270D
4-Chloroaniline	ND	320	190	ug/Kg	1	12/12/19	WB	SW8270D
4-Chlorophenyl phenyl ether	ND	280	140	ug/Kg	1	12/12/19	WB	SW8270D
4-Nitroaniline	ND	410	140	ug/Kg	1	12/12/19	WB	SW8270D
4-Nitrophenol	ND	410	180	ug/Kg	1	12/12/19	WB	SW8270D
Acenaphthene	ND	280	120	ug/Kg	1	12/12/19	WB	SW8270D
Acenaphthylene	ND	280	110	ug/Kg	1	12/12/19	WB	SW8270D
Acetophenone	ND	280	130	ug/Kg	1	12/12/19	WB	SW8270D
Aniline	ND	320	320	ug/Kg	1	12/12/19	WB	SW8270D
Anthracene	200	J 280	130	ug/Kg	1	12/12/19	WB	SW8270D
Benz(a)anthracene	830	280	140	ug/Kg	1	12/12/19	WB	SW8270D
Benzidine	ND	410	240	ug/Kg	1	12/12/19	WB	SW8270D
Benzo(a)pyrene	760	200	130	ug/Kg	1	12/12/19	WB	SW8270D
Benzo(b)fluoranthene	700	280	140	ug/Kg	1	12/12/19	WB	SW8270D
Benzo(ghi)perylene	490	280	130	ug/Kg	1	12/12/19	WB	SW8270D
Benzo(k)fluoranthene	620	280	130	ug/Kg	1	12/12/19	WB	SW8270D
Benzoic acid	ND	2000	810	ug/Kg	1	12/12/19	WB	SW8270D
Benzyl butyl phthalate	ND	280	100	ug/Kg	1	12/12/19	WB	SW8270D
Bis(2-chloroethoxy)methane	ND	280	110	ug/Kg	1	12/12/19	WB	SW8270D
Bis(2-chloroethyl)ether	ND	200	110	ug/Kg	1	12/12/19	WB	SW8270D
Bis(2-chloroisopropyl)ether	ND	280	110	ug/Kg	1	12/12/19	WB	SW8270D
Bis(2-ethylhexyl)phthalate	ND	280	120	ug/Kg	1	12/12/19	WB	SW8270D
Carbazole	ND	200	160	ug/Kg	1	12/12/19	WB	SW8270D
Chrysene	860	280	140	ug/Kg	1	12/12/19	WB	SW8270D
Dibenz(a,h)anthracene	ND	200	130	ug/Kg	1	12/12/19	WB	SW8270D
Dibenzofuran	ND	280	120	ug/Kg	1	12/12/19	WB	SW8270D
Diethyl phthalate	ND	280	130	ug/Kg	1	12/12/19	WB	SW8270D
Dimethylphthalate	ND	280	130	ug/Kg	1	12/12/19	WB	SW8270D
Di-n-butylphthalate	ND	280	110	ug/Kg	1	12/12/19	WB	SW8270D
Di-n-octylphthalate	ND	280	100	ug/Kg	1	12/12/19	WB	SW8270D
Fluoranthene	1800	280	130	ug/Kg	1	12/12/19	WB	SW8270D
Fluorene	ND	280	130	ug/Kg	1	12/12/19	WB	SW8270D
Hexachlorobenzene	ND	200	120	ug/Kg	1	12/12/19	WB	SW8270D
Hexachlorobutadiene	ND	280	150	ug/Kg	1	12/12/19	WB	SW8270D
Hexachlorocyclopentadiene	ND	280	120	ug/Kg	1	12/12/19	WB	SW8270D
Hexachloroethane	ND	200	120	ug/Kg	1	12/12/19	WB	SW8270D
Indeno(1,2,3-cd)pyrene	560	280	130	ug/Kg	1	12/12/19	WB	SW8270D
Isophorone	ND	200	110	ug/Kg	1	12/12/19	WB	SW8270D
Naphthalene	ND	280	120	ug/Kg	1	12/12/19	WB	SW8270D
Nitrobenzene	ND	200	140	ug/Kg	1	12/12/19	WB	SW8270D
N-Nitrosodimethylamine	ND	280	110	ug/Kg	1	12/12/19	WB	SW8270D
N-Nitrosodi-n-propylamine	ND	200	130	ug/Kg	1	12/12/19	WB	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
N-Nitrosodiphenylamine	ND	280	160	ug/Kg	1	12/12/19	WB	SW8270D
Pentachloronitrobenzene	ND	280	150	ug/Kg	1	12/12/19	WB	SW8270D
Pentachlorophenol	ND	240	150	ug/Kg	1	12/12/19	WB	SW8270D
Phenanthrene	1200	280	120	ug/Kg	1	12/12/19	WB	SW8270D
Phenol	ND	280	130	ug/Kg	1	12/12/19	WB	SW8270D
Pyrene	1500	280	140	ug/Kg	1	12/12/19	WB	SW8270D
Pyridine	ND	280	100	ug/Kg	1	12/12/19	WB	SW8270D
<u>QA/QC Surrogates</u>								
% 2,4,6-Tribromophenol	68			%	1	12/12/19	WB	30 - 130 %
% 2-Fluorobiphenyl	68			%	1	12/12/19	WB	30 - 130 %
% 2-Fluorophenol	67			%	1	12/12/19	WB	30 - 130 %
% Nitrobenzene-d5	63			%	1	12/12/19	WB	30 - 130 %
% Phenol-d5	68			%	1	12/12/19	WB	30 - 130 %
% Terphenyl-d14	65			%	1	12/12/19	WB	30 - 130 %
<u>1,4-Dioxane</u>								
1,4-dioxane	ND	81	81	ug/Kg	1	12/13/19	WB	SW8270D (SIM)
<u>QA/QC Surrogates</u>								
% 2-Fluorobiphenyl	40			%	1	12/13/19	WB	30 - 130 %
% Nitrobenzene-d5	47			%	1	12/13/19	WB	30 - 130 %
% Terphenyl-d14	41			%	1	12/13/19	WB	30 - 130 %
Field Extraction	Completed					12/10/19		SW5035A

1

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low J=Estimated Below RL LOD=Limit of Detection MDL=Method Detection Limit1

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

Please be advised that the NY 375 soil criteria for chromium are based on hexavalent chromium and trivalent chromium.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

S - Laboratory solvent, contamination is possible.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

December 18, 2019

Reviewed and Released by: Greg Lawrence, Assistant Lab Director



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823



Analysis Report

December 18, 2019

FOR: Attn: Mr. Charles B. Sosik, P.G.
Environmental Business Consultants
1808 Middle Country Rd
Ridge NY 11961-2406

Sample Information

Matrix: SOIL
Location Code: EBC
Rush Request: 72 Hour
P.O.#:

Custody Information

Collected by: TB
Received by: CP
Analyzed by: see "By" below

Date

12/10/19 14:01
12/11/19 16:00

Time

Laboratory Data

SDG ID: GCE85356
Phoenix ID: CE85370

Project ID: 26-22 4TH ST QUEENS
Client ID: 19B10 (8-10)

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Silver	ND	0.37	0.37	mg/Kg	1	12/12/19	EK	SW6010D
Aluminum	6770	37	7.4	mg/Kg	10	12/12/19	EK	SW6010D
Arsenic	0.86	0.74	0.74	mg/Kg	1	12/12/19	EK	SW6010D
Barium	29.5	0.7	0.37	mg/Kg	1	12/12/19	EK	SW6010D
Beryllium	0.19	0.30	0.15	mg/Kg	1	12/12/19	EK	SW6010D
Calcium	1650	3.7	3.4	mg/Kg	1	12/12/19	EK	SW6010D
Cadmium	0.38	0.37	0.37	mg/Kg	1	12/12/19	EK	SW6010D
Cobalt	4.64	0.37	0.37	mg/Kg	1	12/12/19	EK	SW6010D
Chromium	18.6	0.37	0.37	mg/Kg	1	12/12/19	EK	SW6010D
Copper	29.1	0.7	0.37	mg/kg	1	12/12/19	EK	SW6010D
Iron	13100	37	37	mg/Kg	10	12/12/19	EK	SW6010D
Mercury	ND	0.03	0.02	mg/Kg	2	12/12/19	RS	SW7471B
Potassium	1210	7	2.9	mg/Kg	1	12/12/19	EK	SW6010D
Magnesium	3240	3.7	3.7	mg/Kg	1	12/12/19	EK	SW6010D
Manganese	158	3.7	3.7	mg/Kg	10	12/12/19	EK	SW6010D
Sodium	145	7	3.2	mg/Kg	1	12/12/19	EK	SW6010D
Nickel	15.2	0.37	0.37	mg/Kg	1	12/12/19	EK	SW6010D
Lead	8.4	0.7	0.37	mg/Kg	1	12/12/19	EK	SW6010D
Antimony	ND	3.7	3.7	mg/Kg	1	12/12/19	EK	SW6010D
Selenium	ND	1.5	1.3	mg/Kg	1	12/12/19	EK	SW6010D
Thallium	ND	1.5	1.5	mg/Kg	1	12/12/19	EK	SW6010D
Vanadium	27.7	0.37	0.37	mg/Kg	1	12/12/19	EK	SW6010D
Zinc	36.1	0.7	0.37	mg/Kg	1	12/12/19	EK	SW6010D
Percent Solid	81			%		12/11/19	VT	SW846-%Solid
Extraction for SVOA SIM	Completed					12/12/19	K/R/LA	SW3545A
Soil Extraction for PCB	Completed					12/11/19	MM/E	SW3545A
Soil Extraction for Pesticides	Completed					12/11/19	MM/E	SW3545A
Soil Extraction for SVOA	Completed					12/11/19	AT/B/EE	SW3545A

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Mercury Digestion	Completed					12/12/19	LS/LS	SW7471B
Total Metals Digest	Completed					12/11/19	JJ/AG/BF	SW3050B

Polychlorinated Biphenyls

PCB-1016	ND	82	82	ug/Kg	2	12/12/19	SC	SW8082A
PCB-1221	ND	82	82	ug/Kg	2	12/12/19	SC	SW8082A
PCB-1232	ND	82	82	ug/Kg	2	12/12/19	SC	SW8082A
PCB-1242	ND	82	82	ug/Kg	2	12/12/19	SC	SW8082A
PCB-1248	ND	82	82	ug/Kg	2	12/12/19	SC	SW8082A
PCB-1254	ND	82	82	ug/Kg	2	12/12/19	SC	SW8082A
PCB-1260	ND	82	82	ug/Kg	2	12/12/19	SC	SW8082A
PCB-1262	ND	82	82	ug/Kg	2	12/12/19	SC	SW8082A
PCB-1268	ND	82	82	ug/Kg	2	12/12/19	SC	SW8082A

QA/QC Surrogates

% DCBP	77			%	2	12/12/19	SC	30 - 150 %
% DCBP (Confirmation)	78			%	2	12/12/19	SC	30 - 150 %
% TCMX	70			%	2	12/12/19	SC	30 - 150 %
% TCMX (Confirmation)	69			%	2	12/12/19	SC	30 - 150 %

Pesticides - Soil

4,4' -DDD	ND	2.5	2.5	ug/Kg	2	12/12/19	CG	SW8081B
4,4' -DDE	ND	2.5	2.5	ug/Kg	2	12/12/19	CG	SW8081B
4,4' -DDT	ND	2.5	2.5	ug/Kg	2	12/12/19	CG	SW8081B
a-BHC	ND	8.2	8.2	ug/Kg	2	12/12/19	CG	SW8081B
a-Chlordane	ND	4.1	4.1	ug/Kg	2	12/12/19	CG	SW8081B
Aldrin	ND	4.1	4.1	ug/Kg	2	12/12/19	CG	SW8081B
b-BHC	ND	8.2	8.2	ug/Kg	2	12/12/19	CG	SW8081B
Chlordane	ND	41	41	ug/Kg	2	12/12/19	CG	SW8081B
d-BHC	ND	8.2	8.2	ug/Kg	2	12/12/19	CG	SW8081B
Dieldrin	ND	4.1	4.1	ug/Kg	2	12/12/19	CG	SW8081B
Endosulfan I	ND	8.2	8.2	ug/Kg	2	12/12/19	CG	SW8081B
Endosulfan II	ND	8.2	8.2	ug/Kg	2	12/12/19	CG	SW8081B
Endosulfan sulfate	ND	8.2	8.2	ug/Kg	2	12/12/19	CG	SW8081B
Endrin	ND	8.2	8.2	ug/Kg	2	12/12/19	CG	SW8081B
Endrin aldehyde	ND	8.2	8.2	ug/Kg	2	12/12/19	CG	SW8081B
Endrin ketone	ND	8.2	8.2	ug/Kg	2	12/12/19	CG	SW8081B
g-BHC	ND	1.6	1.6	ug/Kg	2	12/12/19	CG	SW8081B
g-Chlordane	ND	4.1	4.1	ug/Kg	2	12/12/19	CG	SW8081B
Heptachlor	ND	8.2	8.2	ug/Kg	2	12/12/19	CG	SW8081B
Heptachlor epoxide	ND	8.2	8.2	ug/Kg	2	12/12/19	CG	SW8081B
Methoxychlor	ND	41	41	ug/Kg	2	12/12/19	CG	SW8081B
Toxaphene	ND	160	160	ug/Kg	2	12/12/19	CG	SW8081B

QA/QC Surrogates

% DCBP	62			%	2	12/12/19	CG	30 - 150 %
% DCBP (Confirmation)	75			%	2	12/12/19	CG	30 - 150 %
% TCMX	61			%	2	12/12/19	CG	30 - 150 %
% TCMX (Confirmation)	61			%	2	12/12/19	CG	30 - 150 %

Volatiles

1,1,1,2-Tetrachloroethane	ND	9.2	1.8	ug/Kg	1	12/12/19	JLI	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
1,1,1-Trichloroethane	ND	9.2	0.92	ug/Kg	1	12/12/19	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	9.2	1.8	ug/Kg	1	12/12/19	JLI	SW8260C
1,1,2-Trichloroethane	ND	9.2	1.8	ug/Kg	1	12/12/19	JLI	SW8260C
1,1-Dichloroethane	ND	9.2	1.8	ug/Kg	1	12/12/19	JLI	SW8260C
1,1-Dichloroethene	ND	9.2	0.92	ug/Kg	1	12/12/19	JLI	SW8260C
1,1-Dichloropropene	ND	9.2	0.92	ug/Kg	1	12/12/19	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	9.2	1.8	ug/Kg	1	12/12/19	JLI	SW8260C
1,2,3-Trichloropropane	ND	9.2	0.92	ug/Kg	1	12/12/19	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	9.2	1.8	ug/Kg	1	12/12/19	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	9.2	0.92	ug/Kg	1	12/12/19	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	9.2	1.8	ug/Kg	1	12/12/19	JLI	SW8260C
1,2-Dibromoethane	ND	9.2	0.92	ug/Kg	1	12/12/19	JLI	SW8260C
1,2-Dichlorobenzene	ND	9.2	0.92	ug/Kg	1	12/12/19	JLI	SW8260C
1,2-Dichloroethane	ND	9.2	0.92	ug/Kg	1	12/12/19	JLI	SW8260C
1,2-Dichloropropane	ND	9.2	1.8	ug/Kg	1	12/12/19	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	9.2	0.92	ug/Kg	1	12/12/19	JLI	SW8260C
1,3-Dichlorobenzene	ND	9.2	0.92	ug/Kg	1	12/12/19	JLI	SW8260C
1,3-Dichloropropane	ND	9.2	1.8	ug/Kg	1	12/12/19	JLI	SW8260C
1,4-Dichlorobenzene	ND	9.2	0.92	ug/Kg	1	12/12/19	JLI	SW8260C
2,2-Dichloropropane	ND	9.2	0.92	ug/Kg	1	12/12/19	JLI	SW8260C
2-Chlorotoluene	ND	9.2	1.8	ug/Kg	1	12/12/19	JLI	SW8260C
2-Hexanone	ND	46	9.2	ug/Kg	1	12/12/19	JLI	SW8260C
2-Isopropyltoluene	ND	9.2	0.92	ug/Kg	1	12/12/19	JLI	SW8260C
4-Chlorotoluene	ND	9.2	0.92	ug/Kg	1	12/12/19	JLI	SW8260C
4-Methyl-2-pentanone	ND	46	9.2	ug/Kg	1	12/12/19	JLI	SW8260C
Acetone	23	JS 46	9.2	ug/Kg	1	12/12/19	JLI	SW8260C
Acrylonitrile	ND	18	1.8	ug/Kg	1	12/12/19	JLI	SW8260C
Benzene	ND	9.2	0.92	ug/Kg	1	12/12/19	JLI	SW8260C
Bromobenzene	ND	9.2	0.92	ug/Kg	1	12/12/19	JLI	SW8260C
Bromochloromethane	ND	9.2	0.92	ug/Kg	1	12/12/19	JLI	SW8260C
Bromodichloromethane	ND	9.2	1.8	ug/Kg	1	12/12/19	JLI	SW8260C
Bromoform	ND	9.2	1.8	ug/Kg	1	12/12/19	JLI	SW8260C
Bromomethane	ND	9.2	3.7	ug/Kg	1	12/12/19	JLI	SW8260C
Carbon Disulfide	ND	9.2	1.8	ug/Kg	1	12/12/19	JLI	SW8260C
Carbon tetrachloride	ND	9.2	1.8	ug/Kg	1	12/12/19	JLI	SW8260C
Chlorobenzene	ND	9.2	0.92	ug/Kg	1	12/12/19	JLI	SW8260C
Chloroethane	ND	9.2	0.92	ug/Kg	1	12/12/19	JLI	SW8260C
Chloroform	ND	9.2	0.92	ug/Kg	1	12/12/19	JLI	SW8260C
Chloromethane	ND	9.2	1.8	ug/Kg	1	12/12/19	JLI	SW8260C
cis-1,2-Dichloroethene	7.1	J 9.2	0.92	ug/Kg	1	12/12/19	JLI	SW8260C
cis-1,3-Dichloropropene	ND	9.2	0.92	ug/Kg	1	12/12/19	JLI	SW8260C
Dibromochloromethane	ND	9.2	1.8	ug/Kg	1	12/12/19	JLI	SW8260C
Dibromomethane	ND	9.2	1.8	ug/Kg	1	12/12/19	JLI	SW8260C
Dichlorodifluoromethane	ND	9.2	0.92	ug/Kg	1	12/12/19	JLI	SW8260C
Ethylbenzene	ND	9.2	0.92	ug/Kg	1	12/12/19	JLI	SW8260C
Hexachlorobutadiene	ND	9.2	0.92	ug/Kg	1	12/12/19	JLI	SW8260C
Isopropylbenzene	ND	9.2	0.92	ug/Kg	1	12/12/19	JLI	SW8260C
m&p-Xylene	ND	9.2	1.8	ug/Kg	1	12/12/19	JLI	SW8260C
Methyl Ethyl Ketone	ND	55	9.2	ug/Kg	1	12/12/19	JLI	SW8260C

1

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Methyl t-butyl ether (MTBE)	ND	18	1.8	ug/Kg	1	12/12/19	JLI	SW8260C
Methylene chloride	ND	9.2	9.2	ug/Kg	1	12/12/19	JLI	SW8260C
Naphthalene	ND	9.2	1.8	ug/Kg	1	12/12/19	JLI	SW8260C
n-Butylbenzene	ND	9.2	0.92	ug/Kg	1	12/12/19	JLI	SW8260C
n-Propylbenzene	ND	9.2	1.8	ug/Kg	1	12/12/19	JLI	SW8260C
o-Xylene	ND	9.2	1.8	ug/Kg	1	12/12/19	JLI	SW8260C
p-Isopropyltoluene	ND	9.2	0.92	ug/Kg	1	12/12/19	JLI	SW8260C
sec-Butylbenzene	ND	9.2	0.92	ug/Kg	1	12/12/19	JLI	SW8260C
Styrene	ND	9.2	0.92	ug/Kg	1	12/12/19	JLI	SW8260C
tert-Butylbenzene	ND	9.2	0.92	ug/Kg	1	12/12/19	JLI	SW8260C
Tetrachloroethene	3.6	J 9.2	1.8	ug/Kg	1	12/12/19	JLI	SW8260C
Tetrahydrofuran (THF)	ND	18	4.6	ug/Kg	1	12/12/19	JLI	SW8260C
Toluene	ND	9.2	0.92	ug/Kg	1	12/12/19	JLI	SW8260C
trans-1,2-Dichloroethene	ND	9.2	0.92	ug/Kg	1	12/12/19	JLI	SW8260C
trans-1,3-Dichloropropene	ND	9.2	0.92	ug/Kg	1	12/12/19	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	18	4.6	ug/Kg	1	12/12/19	JLI	SW8260C
Trichloroethene	1.2	J 9.2	0.92	ug/Kg	1	12/12/19	JLI	SW8260C
Trichlorofluoromethane	ND	9.2	1.8	ug/Kg	1	12/12/19	JLI	SW8260C
Trichlorotrifluoroethane	ND	9.2	0.92	ug/Kg	1	12/12/19	JLI	SW8260C
Vinyl chloride	ND	9.2	0.92	ug/Kg	1	12/12/19	JLI	SW8260C
<u>QA/QC Surrogates</u>								
% 1,2-dichlorobenzene-d4	96			%	1	12/12/19	JLI	70 - 130 %
% Bromofluorobenzene	98			%	1	12/12/19	JLI	70 - 130 %
% Dibromofluoromethane	92			%	1	12/12/19	JLI	70 - 130 %
% Toluene-d8	95			%	1	12/12/19	JLI	70 - 130 %
<u>Volatiles</u>								
1,1,1,2-Tetrachloroethane	ND	37	1.8	ug/Kg	1	12/12/19	JLI	SW8260C
Acrolein	ND	9.2	1.8	ug/Kg	1	12/12/19	JLI	SW8260C
Acrylonitrile	ND	37	0.92	ug/Kg	1	12/12/19	JLI	SW8260C
Tert-butyl alcohol	ND	180	37	ug/Kg	1	12/12/19	JLI	SW8260C
<u>Semivolatiles</u>								
1,2,4,5-Tetrachlorobenzene	ND	280	140	ug/Kg	1	12/12/19	WB	SW8270D
1,2,4-Trichlorobenzene	ND	280	120	ug/Kg	1	12/12/19	WB	SW8270D
1,2-Dichlorobenzene	ND	280	110	ug/Kg	1	12/12/19	WB	SW8270D
1,2-Diphenylhydrazine	ND	280	130	ug/Kg	1	12/12/19	WB	SW8270D
1,3-Dichlorobenzene	ND	280	120	ug/Kg	1	12/12/19	WB	SW8270D
1,4-Dichlorobenzene	ND	280	120	ug/Kg	1	12/12/19	WB	SW8270D
2,4,5-Trichlorophenol	ND	280	220	ug/Kg	1	12/12/19	WB	SW8270D
2,4,6-Trichlorophenol	ND	200	130	ug/Kg	1	12/12/19	WB	SW8270D
2,4-Dichlorophenol	ND	200	140	ug/Kg	1	12/12/19	WB	SW8270D
2,4-Dimethylphenol	ND	280	99	ug/Kg	1	12/12/19	WB	SW8270D
2,4-Dinitrophenol	ND	280	280	ug/Kg	1	12/12/19	WB	SW8270D
2,4-Dinitrotoluene	ND	200	160	ug/Kg	1	12/12/19	WB	SW8270D
2,6-Dinitrotoluene	ND	200	130	ug/Kg	1	12/12/19	WB	SW8270D
2-Chloronaphthalene	ND	280	110	ug/Kg	1	12/12/19	WB	SW8270D
2-Chlorophenol	ND	280	110	ug/Kg	1	12/12/19	WB	SW8270D
2-Methylnaphthalene	ND	280	120	ug/Kg	1	12/12/19	WB	SW8270D
2-Methylphenol (o-cresol)	ND	280	190	ug/Kg	1	12/12/19	WB	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
2-Nitroaniline	ND	280	280	ug/Kg	1	12/12/19	WB	SW8270D
2-Nitrophenol	ND	280	250	ug/Kg	1	12/12/19	WB	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	280	160	ug/Kg	1	12/12/19	WB	SW8270D
3,3'-Dichlorobenzidine	ND	200	190	ug/Kg	1	12/12/19	WB	SW8270D
3-Nitroaniline	ND	400	800	ug/Kg	1	12/12/19	WB	SW8270D
4,6-Dinitro-2-methylphenol	ND	240	80	ug/Kg	1	12/12/19	WB	SW8270D
4-Bromophenyl phenyl ether	ND	280	120	ug/Kg	1	12/12/19	WB	SW8270D
4-Chloro-3-methylphenol	ND	280	140	ug/Kg	1	12/12/19	WB	SW8270D
4-Chloroaniline	ND	320	190	ug/Kg	1	12/12/19	WB	SW8270D
4-Chlorophenyl phenyl ether	ND	280	130	ug/Kg	1	12/12/19	WB	SW8270D
4-Nitroaniline	ND	400	130	ug/Kg	1	12/12/19	WB	SW8270D
4-Nitrophenol	ND	400	180	ug/Kg	1	12/12/19	WB	SW8270D
Acenaphthene	ND	280	120	ug/Kg	1	12/12/19	WB	SW8270D
Acenaphthylene	ND	280	110	ug/Kg	1	12/12/19	WB	SW8270D
Acetophenone	ND	280	120	ug/Kg	1	12/12/19	WB	SW8270D
Aniline	ND	320	320	ug/Kg	1	12/12/19	WB	SW8270D
Anthracene	ND	280	130	ug/Kg	1	12/12/19	WB	SW8270D
Benz(a)anthracene	ND	280	130	ug/Kg	1	12/12/19	WB	SW8270D
Benzidine	ND	400	230	ug/Kg	1	12/12/19	WB	SW8270D
Benzo(a)pyrene	ND	200	130	ug/Kg	1	12/12/19	WB	SW8270D
Benzo(b)fluoranthene	ND	280	140	ug/Kg	1	12/12/19	WB	SW8270D
Benzo(ghi)perylene	ND	280	130	ug/Kg	1	12/12/19	WB	SW8270D
Benzo(k)fluoranthene	ND	280	130	ug/Kg	1	12/12/19	WB	SW8270D
Benzoic acid	ND	2000	800	ug/Kg	1	12/12/19	WB	SW8270D
Benzyl butyl phthalate	ND	280	100	ug/Kg	1	12/12/19	WB	SW8270D
Bis(2-chloroethoxy)methane	ND	280	110	ug/Kg	1	12/12/19	WB	SW8270D
Bis(2-chloroethyl)ether	ND	200	110	ug/Kg	1	12/12/19	WB	SW8270D
Bis(2-chloroisopropyl)ether	ND	280	110	ug/Kg	1	12/12/19	WB	SW8270D
Bis(2-ethylhexyl)phthalate	ND	280	110	ug/Kg	1	12/12/19	WB	SW8270D
Carbazole	ND	200	160	ug/Kg	1	12/12/19	WB	SW8270D
Chrysene	ND	280	130	ug/Kg	1	12/12/19	WB	SW8270D
Dibenz(a,h)anthracene	ND	200	130	ug/Kg	1	12/12/19	WB	SW8270D
Dibenzofuran	ND	280	120	ug/Kg	1	12/12/19	WB	SW8270D
Diethyl phthalate	ND	280	130	ug/Kg	1	12/12/19	WB	SW8270D
Dimethylphthalate	ND	280	120	ug/Kg	1	12/12/19	WB	SW8270D
Di-n-butylphthalate	ND	280	110	ug/Kg	1	12/12/19	WB	SW8270D
Di-n-octylphthalate	ND	280	100	ug/Kg	1	12/12/19	WB	SW8270D
Fluoranthene	ND	280	130	ug/Kg	1	12/12/19	WB	SW8270D
Fluorene	ND	280	130	ug/Kg	1	12/12/19	WB	SW8270D
Hexachlorobenzene	ND	200	120	ug/Kg	1	12/12/19	WB	SW8270D
Hexachlorobutadiene	ND	280	140	ug/Kg	1	12/12/19	WB	SW8270D
Hexachlorocyclopentadiene	ND	280	120	ug/Kg	1	12/12/19	WB	SW8270D
Hexachloroethane	ND	200	120	ug/Kg	1	12/12/19	WB	SW8270D
Indeno(1,2,3-cd)pyrene	ND	280	130	ug/Kg	1	12/12/19	WB	SW8270D
Isophorone	ND	200	110	ug/Kg	1	12/12/19	WB	SW8270D
Naphthalene	ND	280	110	ug/Kg	1	12/12/19	WB	SW8270D
Nitrobenzene	ND	200	140	ug/Kg	1	12/12/19	WB	SW8270D
N-Nitrosodimethylamine	ND	280	110	ug/Kg	1	12/12/19	WB	SW8270D
N-Nitrosodi-n-propylamine	ND	200	130	ug/Kg	1	12/12/19	WB	SW8270D

1

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
N-Nitrosodiphenylamine	ND	280	150	ug/Kg	1	12/12/19	WB	SW8270D
Pentachloronitrobenzene	ND	280	150	ug/Kg	1	12/12/19	WB	SW8270D
Pentachlorophenol	ND	240	150	ug/Kg	1	12/12/19	WB	SW8270D
Phenanthrene	ND	280	110	ug/Kg	1	12/12/19	WB	SW8270D
Phenol	ND	280	130	ug/Kg	1	12/12/19	WB	SW8270D
Pyrene	ND	280	140	ug/Kg	1	12/12/19	WB	SW8270D
Pyridine	ND	280	98	ug/Kg	1	12/12/19	WB	SW8270D
<u>QA/QC Surrogates</u>								
% 2,4,6-Tribromophenol	59			%	1	12/12/19	WB	30 - 130 %
% 2-Fluorobiphenyl	62			%	1	12/12/19	WB	30 - 130 %
% 2-Fluorophenol	66			%	1	12/12/19	WB	30 - 130 %
% Nitrobenzene-d5	60			%	1	12/12/19	WB	30 - 130 %
% Phenol-d5	62			%	1	12/12/19	WB	30 - 130 %
% Terphenyl-d14	68			%	1	12/12/19	WB	30 - 130 %
<u>1,4-Dioxane</u>								
1,4-dioxane	ND	82	82	ug/Kg	1	12/13/19	WB	SW8270D (SIM)
<u>QA/QC Surrogates</u>								
% 2-Fluorobiphenyl	34			%	1	12/13/19	WB	30 - 130 %
% Nitrobenzene-d5	46			%	1	12/13/19	WB	30 - 130 %
% Terphenyl-d14	42			%	1	12/13/19	WB	30 - 130 %
Field Extraction	Completed					12/10/19		SW5035A

1

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low J=Estimated Below RL LOD=Limit of Detection MDL=Method Detection Limit1

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

Please be advised that the NY 375 soil criteria for chromium are based on hexavalent chromium and trivalent chromium.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

S - Laboratory solvent, contamination is possible.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

December 18, 2019

Reviewed and Released by: Greg Lawrence, Assistant Lab Director



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823



Analysis Report

December 18, 2019

FOR: Attn: Mr. Charles B. Sosik, P.G.
Environmental Business Consultants
1808 Middle Country Rd
Ridge NY 11961-2406

Sample Information

Matrix: SOIL
Location Code: EBC
Rush Request: 72 Hour
P.O.#:

Custody Information

Collected by: TB
Received by: CP
Analyzed by: see "By" below

Date

12/10/19 14:20
12/11/19 16:00

Time

Laboratory Data

SDG ID: GCE85356
Phoenix ID: CE85371

Project ID: 26-22 4TH ST QUEENS
Client ID: 19B3 (0-2)

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Silver	ND	0.35	0.35	mg/Kg	1	12/12/19	EK	SW6010D
Aluminum	9830	35	6.9	mg/Kg	10	12/12/19	EK	SW6010D
Arsenic	9.64	0.69	0.69	mg/Kg	1	12/12/19	EK	SW6010D
Barium	370	0.7	0.35	mg/Kg	1	12/12/19	EK	SW6010D
Beryllium	0.47	0.28	0.14	mg/Kg	1	12/12/19	EK	SW6010D
Calcium	6340	3.5	3.2	mg/Kg	1	12/12/19	EK	SW6010D
Cadmium	1.06	0.35	0.35	mg/Kg	1	12/12/19	EK	SW6010D
Cobalt	5.42	0.35	0.35	mg/Kg	1	12/12/19	EK	SW6010D
Chromium	18.8	0.35	0.35	mg/Kg	1	12/12/19	EK	SW6010D
Copper	79.1	0.7	0.35	mg/kg	1	12/12/19	EK	SW6010D
Iron	18800	35	35	mg/Kg	10	12/12/19	EK	SW6010D
Mercury	0.83	0.07	0.04	mg/Kg	5	12/12/19	RS	SW7471B
Potassium	1020	7	2.7	mg/Kg	1	12/12/19	EK	SW6010D
Magnesium	3630	3.5	3.5	mg/Kg	1	12/12/19	EK	SW6010D
Manganese	323	3.5	3.5	mg/Kg	10	12/12/19	EK	SW6010D
Sodium	214	7	3.0	mg/Kg	1	12/12/19	EK	SW6010D
Nickel	16.2	0.35	0.35	mg/Kg	1	12/12/19	EK	SW6010D
Lead	783	6.9	3.5	mg/Kg	10	12/12/19	EK	SW6010D
Antimony	ND	3.5	3.5	mg/Kg	1	12/12/19	EK	SW6010D
Selenium	ND	1.4	1.2	mg/Kg	1	12/12/19	EK	SW6010D
Thallium	ND	1.4	1.4	mg/Kg	1	12/12/19	EK	SW6010D
Vanadium	31.3	0.35	0.35	mg/Kg	1	12/12/19	EK	SW6010D
Zinc	316	0.7	0.35	mg/Kg	1	12/12/19	EK	SW6010D
Percent Solid	87			%		12/11/19	VT	SW846-%Solid
Extraction for SVOA SIM	Completed					12/12/19	K/R/LA	SW3545A
Soil Extraction for PCB	Completed					12/11/19	MM/E	SW3545A
Soil Extraction for Pesticides	Completed					12/11/19	MM/E	SW3545A
Soil Extraction for SVOA	Completed					12/11/19	AT/B/EE	SW3545A

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Mercury Digestion	Completed					12/12/19	LS/LS	SW7471B
Total Metals Digest	Completed					12/11/19	JJ/AG/BF	SW3050B

Polychlorinated Biphenyls

PCB-1016	ND	75	75	ug/Kg	2	12/12/19	SC	SW8082A
PCB-1221	ND	75	75	ug/Kg	2	12/12/19	SC	SW8082A
PCB-1232	ND	75	75	ug/Kg	2	12/12/19	SC	SW8082A
PCB-1242	ND	75	75	ug/Kg	2	12/12/19	SC	SW8082A
PCB-1248	ND	75	75	ug/Kg	2	12/12/19	SC	SW8082A
PCB-1254	ND	75	75	ug/Kg	2	12/12/19	SC	SW8082A
PCB-1260	ND	75	75	ug/Kg	2	12/12/19	SC	SW8082A
PCB-1262	ND	75	75	ug/Kg	2	12/12/19	SC	SW8082A
PCB-1268	ND	75	75	ug/Kg	2	12/12/19	SC	SW8082A

QA/QC Surrogates

% DCBP	73			%	2	12/12/19	SC	30 - 150 %
% DCBP (Confirmation)	72			%	2	12/12/19	SC	30 - 150 %
% TCMX	70			%	2	12/12/19	SC	30 - 150 %
% TCMX (Confirmation)	68			%	2	12/12/19	SC	30 - 150 %

Pesticides - Soil

4,4' -DDD	ND	2.3	2.3	ug/Kg	2	12/12/19	CG	SW8081B
4,4' -DDE	ND	2.3	2.3	ug/Kg	2	12/12/19	CG	SW8081B
4,4' -DDT	ND	2.3	2.3	ug/Kg	2	12/12/19	CG	SW8081B
a-BHC	ND	7.5	7.5	ug/Kg	2	12/12/19	CG	SW8081B
a-Chlordane	ND	3.8	3.8	ug/Kg	2	12/12/19	CG	SW8081B
Aldrin	ND	3.8	3.8	ug/Kg	2	12/12/19	CG	SW8081B
b-BHC	ND	7.5	7.5	ug/Kg	2	12/12/19	CG	SW8081B
Chlordane	ND	38	38	ug/Kg	2	12/12/19	CG	SW8081B
d-BHC	ND	7.5	7.5	ug/Kg	2	12/12/19	CG	SW8081B
Dieldrin	ND	3.8	3.8	ug/Kg	2	12/12/19	CG	SW8081B
Endosulfan I	ND	7.5	7.5	ug/Kg	2	12/12/19	CG	SW8081B
Endosulfan II	ND	7.5	7.5	ug/Kg	2	12/12/19	CG	SW8081B
Endosulfan sulfate	ND	7.5	7.5	ug/Kg	2	12/12/19	CG	SW8081B
Endrin	ND	7.5	7.5	ug/Kg	2	12/12/19	CG	SW8081B
Endrin aldehyde	ND	7.5	7.5	ug/Kg	2	12/12/19	CG	SW8081B
Endrin ketone	ND	7.5	7.5	ug/Kg	2	12/12/19	CG	SW8081B
g-BHC	ND	1.5	1.5	ug/Kg	2	12/12/19	CG	SW8081B
g-Chlordane	ND	3.8	3.8	ug/Kg	2	12/12/19	CG	SW8081B
Heptachlor	ND	7.5	7.5	ug/Kg	2	12/12/19	CG	SW8081B
Heptachlor epoxide	ND	7.5	7.5	ug/Kg	2	12/12/19	CG	SW8081B
Methoxychlor	ND	38	38	ug/Kg	2	12/12/19	CG	SW8081B
Toxaphene	ND	150	150	ug/Kg	2	12/12/19	CG	SW8081B

QA/QC Surrogates

% DCBP	60			%	2	12/12/19	CG	30 - 150 %
% DCBP (Confirmation)	72			%	2	12/12/19	CG	30 - 150 %
% TCMX	62			%	2	12/12/19	CG	30 - 150 %
% TCMX (Confirmation)	62			%	2	12/12/19	CG	30 - 150 %

Volatiles

1,1,1,2-Tetrachloroethane	ND	3.4	0.68	ug/Kg	1	12/12/19	JLI	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
1,1,1-Trichloroethane	ND	3.4	0.34	ug/Kg	1	12/12/19	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	3.4	0.68	ug/Kg	1	12/12/19	JLI	SW8260C
1,1,2-Trichloroethane	ND	3.4	0.68	ug/Kg	1	12/12/19	JLI	SW8260C
1,1-Dichloroethane	ND	3.4	0.68	ug/Kg	1	12/12/19	JLI	SW8260C
1,1-Dichloroethene	ND	3.4	0.34	ug/Kg	1	12/12/19	JLI	SW8260C
1,1-Dichloropropene	ND	3.4	0.34	ug/Kg	1	12/12/19	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	3.4	0.68	ug/Kg	1	12/12/19	JLI	SW8260C
1,2,3-Trichloropropane	ND	3.4	0.34	ug/Kg	1	12/12/19	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	3.4	0.68	ug/Kg	1	12/12/19	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	3.4	0.34	ug/Kg	1	12/12/19	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	3.4	0.68	ug/Kg	1	12/12/19	JLI	SW8260C
1,2-Dibromoethane	ND	3.4	0.34	ug/Kg	1	12/12/19	JLI	SW8260C
1,2-Dichlorobenzene	ND	3.4	0.34	ug/Kg	1	12/12/19	JLI	SW8260C
1,2-Dichloroethane	ND	3.4	0.34	ug/Kg	1	12/12/19	JLI	SW8260C
1,2-Dichloropropane	ND	3.4	0.68	ug/Kg	1	12/12/19	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	3.4	0.34	ug/Kg	1	12/12/19	JLI	SW8260C
1,3-Dichlorobenzene	ND	3.4	0.34	ug/Kg	1	12/12/19	JLI	SW8260C
1,3-Dichloropropane	ND	3.4	0.68	ug/Kg	1	12/12/19	JLI	SW8260C
1,4-Dichlorobenzene	ND	3.4	0.34	ug/Kg	1	12/12/19	JLI	SW8260C
2,2-Dichloropropane	ND	3.4	0.34	ug/Kg	1	12/12/19	JLI	SW8260C
2-Chlorotoluene	ND	3.4	0.68	ug/Kg	1	12/12/19	JLI	SW8260C
2-Hexanone	ND	17	3.4	ug/Kg	1	12/12/19	JLI	SW8260C
2-Isopropyltoluene	ND	3.4	0.34	ug/Kg	1	12/12/19	JLI	SW8260C
4-Chlorotoluene	ND	3.4	0.34	ug/Kg	1	12/12/19	JLI	SW8260C
4-Methyl-2-pentanone	ND	17	3.4	ug/Kg	1	12/12/19	JLI	SW8260C
Acetone	5.2	JS 17	3.4	ug/Kg	1	12/12/19	JLI	SW8260C
Acrylonitrile	ND	6.8	0.68	ug/Kg	1	12/12/19	JLI	SW8260C
Benzene	ND	3.4	0.34	ug/Kg	1	12/12/19	JLI	SW8260C
Bromobenzene	ND	3.4	0.34	ug/Kg	1	12/12/19	JLI	SW8260C
Bromochloromethane	ND	3.4	0.34	ug/Kg	1	12/12/19	JLI	SW8260C
Bromodichloromethane	ND	3.4	0.68	ug/Kg	1	12/12/19	JLI	SW8260C
Bromoform	ND	3.4	0.68	ug/Kg	1	12/12/19	JLI	SW8260C
Bromomethane	ND	3.4	1.4	ug/Kg	1	12/12/19	JLI	SW8260C
Carbon Disulfide	ND	3.4	0.68	ug/Kg	1	12/12/19	JLI	SW8260C
Carbon tetrachloride	ND	3.4	0.68	ug/Kg	1	12/12/19	JLI	SW8260C
Chlorobenzene	ND	3.4	0.34	ug/Kg	1	12/12/19	JLI	SW8260C
Chloroethane	ND	3.4	0.34	ug/Kg	1	12/12/19	JLI	SW8260C
Chloroform	ND	3.4	0.34	ug/Kg	1	12/12/19	JLI	SW8260C
Chloromethane	ND	3.4	0.68	ug/Kg	1	12/12/19	JLI	SW8260C
cis-1,2-Dichloroethene	61	J 250	29	ug/Kg	50	12/13/19	JLI	SW8260C
cis-1,3-Dichloropropene	ND	3.4	0.34	ug/Kg	1	12/12/19	JLI	SW8260C
Dibromochloromethane	ND	3.4	0.68	ug/Kg	1	12/12/19	JLI	SW8260C
Dibromomethane	ND	3.4	0.68	ug/Kg	1	12/12/19	JLI	SW8260C
Dichlorodifluoromethane	ND	3.4	0.34	ug/Kg	1	12/12/19	JLI	SW8260C
Ethylbenzene	ND	3.4	0.34	ug/Kg	1	12/12/19	JLI	SW8260C
Hexachlorobutadiene	ND	3.4	0.34	ug/Kg	1	12/12/19	JLI	SW8260C
Isopropylbenzene	ND	3.4	0.34	ug/Kg	1	12/12/19	JLI	SW8260C
m&p-Xylene	ND	3.4	0.68	ug/Kg	1	12/12/19	JLI	SW8260C
Methyl Ethyl Ketone	ND	20	3.4	ug/Kg	1	12/12/19	JLI	SW8260C

1

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Methyl t-butyl ether (MTBE)	ND	6.8	0.68	ug/Kg	1	12/12/19	JLI	SW8260C
Methylene chloride	ND	3.4	3.4	ug/Kg	1	12/12/19	JLI	SW8260C
Naphthalene	1100	290	58	ug/Kg	50	12/13/19	JLI	SW8260C
n-Butylbenzene	ND	3.4	0.34	ug/Kg	1	12/12/19	JLI	SW8260C
n-Propylbenzene	ND	3.4	0.68	ug/Kg	1	12/12/19	JLI	SW8260C
o-Xylene	ND	3.4	0.68	ug/Kg	1	12/12/19	JLI	SW8260C
p-Isopropyltoluene	ND	3.4	0.34	ug/Kg	1	12/12/19	JLI	SW8260C
sec-Butylbenzene	ND	3.4	0.34	ug/Kg	1	12/12/19	JLI	SW8260C
Styrene	ND	3.4	0.34	ug/Kg	1	12/12/19	JLI	SW8260C
tert-Butylbenzene	ND	3.4	0.34	ug/Kg	1	12/12/19	JLI	SW8260C
Tetrachloroethene	5600	290	58	ug/Kg	50	12/13/19	JLI	SW8260C
Tetrahydrofuran (THF)	ND	6.8	1.7	ug/Kg	1	12/12/19	JLI	SW8260C
Toluene	ND	3.4	0.34	ug/Kg	1	12/12/19	JLI	SW8260C
trans-1,2-Dichloroethene	ND	3.4	0.34	ug/Kg	1	12/12/19	JLI	SW8260C
trans-1,3-Dichloropropene	ND	3.4	0.34	ug/Kg	1	12/12/19	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	6.8	1.7	ug/Kg	1	12/12/19	JLI	SW8260C
Trichloroethene	180	170	29	ug/Kg	50	12/13/19	JLI	SW8260C
Trichlorofluoromethane	ND	3.4	0.68	ug/Kg	1	12/12/19	JLI	SW8260C
Trichlorotrifluoroethane	ND	3.4	0.34	ug/Kg	1	12/12/19	JLI	SW8260C
Vinyl chloride	ND	3.4	0.34	ug/Kg	1	12/12/19	JLI	SW8260C
<u>QA/QC Surrogates</u>								
% 1,2-dichlorobenzene-d4	101			%	1	12/12/19	JLI	70 - 130 %
% Bromofluorobenzene	88			%	1	12/12/19	JLI	70 - 130 %
% Dibromofluoromethane	93			%	1	12/12/19	JLI	70 - 130 %
% Toluene-d8	93			%	1	12/12/19	JLI	70 - 130 %
% 1,2-dichlorobenzene-d4 (50x)	96			%	50	12/13/19	JLI	70 - 130 %
% Bromofluorobenzene (50x)	99			%	50	12/13/19	JLI	70 - 130 %
% Dibromofluoromethane (50x)	91			%	50	12/13/19	JLI	70 - 130 %
% Toluene-d8 (50x)	94			%	50	12/13/19	JLI	70 - 130 %
<u>Volatiles</u>								
1,1,1,2-Tetrachloroethane	ND	14	0.68	ug/Kg	1	12/12/19	JLI	SW8260C
Acrolein	ND	3.4	0.68	ug/Kg	1	12/12/19	JLI	SW8260C
Acrylonitrile	ND	14	0.34	ug/Kg	1	12/12/19	JLI	SW8260C
Tert-butyl alcohol	ND	68	14	ug/Kg	1	12/12/19	JLI	SW8260C
<u>Semivolatiles</u>								
1,2,4,5-Tetrachlorobenzene	ND	260	130	ug/Kg	1	12/12/19	WB	SW8270D
1,2,4-Trichlorobenzene	ND	260	110	ug/Kg	1	12/12/19	WB	SW8270D
1,2-Dichlorobenzene	ND	260	100	ug/Kg	1	12/12/19	WB	SW8270D
1,2-Diphenylhydrazine	ND	260	120	ug/Kg	1	12/12/19	WB	SW8270D
1,3-Dichlorobenzene	ND	260	110	ug/Kg	1	12/12/19	WB	SW8270D
1,4-Dichlorobenzene	ND	260	110	ug/Kg	1	12/12/19	WB	SW8270D
2,4,5-Trichlorophenol	ND	260	200	ug/Kg	1	12/12/19	WB	SW8270D
2,4,6-Trichlorophenol	ND	190	120	ug/Kg	1	12/12/19	WB	SW8270D
2,4-Dichlorophenol	ND	190	130	ug/Kg	1	12/12/19	WB	SW8270D
2,4-Dimethylphenol	ND	260	92	ug/Kg	1	12/12/19	WB	SW8270D
2,4-Dinitrophenol	ND	260	260	ug/Kg	1	12/12/19	WB	SW8270D
2,4-Dinitrotoluene	ND	190	150	ug/Kg	1	12/12/19	WB	SW8270D
2,6-Dinitrotoluene	ND	190	120	ug/Kg	1	12/12/19	WB	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
2-Chloronaphthalene	ND	260	110	ug/Kg	1	12/12/19	WB	SW8270D
2-Chlorophenol	ND	260	110	ug/Kg	1	12/12/19	WB	SW8270D
2-Methylnaphthalene	ND	260	110	ug/Kg	1	12/12/19	WB	SW8270D
2-Methylphenol (o-cresol)	ND	260	170	ug/Kg	1	12/12/19	WB	SW8270D
2-Nitroaniline	ND	260	260	ug/Kg	1	12/12/19	WB	SW8270D
2-Nitrophenol	ND	260	240	ug/Kg	1	12/12/19	WB	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	260	150	ug/Kg	1	12/12/19	WB	SW8270D
3,3'-Dichlorobenzidine	ND	190	180	ug/Kg	1	12/12/19	WB	SW8270D
3-Nitroaniline	ND	370	740	ug/Kg	1	12/12/19	WB	SW8270D
4,6-Dinitro-2-methylphenol	ND	220	74	ug/Kg	1	12/12/19	WB	SW8270D
4-Bromophenyl phenyl ether	ND	260	110	ug/Kg	1	12/12/19	WB	SW8270D
4-Chloro-3-methylphenol	ND	260	130	ug/Kg	1	12/12/19	WB	SW8270D
4-Chloroaniline	ND	300	170	ug/Kg	1	12/12/19	WB	SW8270D
4-Chlorophenyl phenyl ether	ND	260	120	ug/Kg	1	12/12/19	WB	SW8270D
4-Nitroaniline	ND	370	120	ug/Kg	1	12/12/19	WB	SW8270D
4-Nitrophenol	ND	370	170	ug/Kg	1	12/12/19	WB	SW8270D
Acenaphthene	ND	260	110	ug/Kg	1	12/12/19	WB	SW8270D
Acenaphthylene	ND	260	100	ug/Kg	1	12/12/19	WB	SW8270D
Acetophenone	ND	260	120	ug/Kg	1	12/12/19	WB	SW8270D
Aniline	ND	300	300	ug/Kg	1	12/12/19	WB	SW8270D
Anthracene	130	J 260	120	ug/Kg	1	12/12/19	WB	SW8270D
Benz(a)anthracene	630	260	120	ug/Kg	1	12/12/19	WB	SW8270D
Benzidine	ND	370	220	ug/Kg	1	12/12/19	WB	SW8270D
Benzo(a)pyrene	650	190	120	ug/Kg	1	12/12/19	WB	SW8270D
Benzo(b)fluoranthene	610	260	130	ug/Kg	1	12/12/19	WB	SW8270D
Benzo(ghi)perylene	420	260	120	ug/Kg	1	12/12/19	WB	SW8270D
Benzo(k)fluoranthene	530	260	120	ug/Kg	1	12/12/19	WB	SW8270D
Benzoic acid	ND	1900	740	ug/Kg	1	12/12/19	WB	SW8270D
Benzyl butyl phthalate	ND	260	96	ug/Kg	1	12/12/19	WB	SW8270D
Bis(2-chloroethoxy)methane	ND	260	100	ug/Kg	1	12/12/19	WB	SW8270D
Bis(2-chloroethyl)ether	ND	190	100	ug/Kg	1	12/12/19	WB	SW8270D
Bis(2-chloroisopropyl)ether	ND	260	100	ug/Kg	1	12/12/19	WB	SW8270D
Bis(2-ethylhexyl)phthalate	ND	260	110	ug/Kg	1	12/12/19	WB	SW8270D
Carbazole	ND	190	150	ug/Kg	1	12/12/19	WB	SW8270D
Chrysene	710	260	120	ug/Kg	1	12/12/19	WB	SW8270D
Dibenz(a,h)anthracene	ND	190	120	ug/Kg	1	12/12/19	WB	SW8270D
Dibenzofuran	ND	260	110	ug/Kg	1	12/12/19	WB	SW8270D
Diethyl phthalate	ND	260	120	ug/Kg	1	12/12/19	WB	SW8270D
Dimethylphthalate	ND	260	120	ug/Kg	1	12/12/19	WB	SW8270D
Di-n-butylphthalate	ND	260	99	ug/Kg	1	12/12/19	WB	SW8270D
Di-n-octylphthalate	ND	260	96	ug/Kg	1	12/12/19	WB	SW8270D
Fluoranthene	1400	260	120	ug/Kg	1	12/12/19	WB	SW8270D
Fluorene	ND	260	120	ug/Kg	1	12/12/19	WB	SW8270D
Hexachlorobenzene	ND	190	110	ug/Kg	1	12/12/19	WB	SW8270D
Hexachlorobutadiene	ND	260	130	ug/Kg	1	12/12/19	WB	SW8270D
Hexachlorocyclopentadiene	ND	260	110	ug/Kg	1	12/12/19	WB	SW8270D
Hexachloroethane	ND	190	110	ug/Kg	1	12/12/19	WB	SW8270D
Indeno(1,2,3-cd)pyrene	250	J 260	120	ug/Kg	1	12/12/19	WB	SW8270D
Isophorone	ND	190	100	ug/Kg	1	12/12/19	WB	SW8270D

1

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Naphthalene	ND	260	110	ug/Kg	1	12/12/19	WB	SW8270D
Nitrobenzene	ND	190	130	ug/Kg	1	12/12/19	WB	SW8270D
N-Nitrosodimethylamine	ND	260	100	ug/Kg	1	12/12/19	WB	SW8270D
N-Nitrosodi-n-propylamine	ND	190	120	ug/Kg	1	12/12/19	WB	SW8270D
N-Nitrosodiphenylamine	ND	260	140	ug/Kg	1	12/12/19	WB	SW8270D
Pentachloronitrobenzene	ND	260	140	ug/Kg	1	12/12/19	WB	SW8270D
Pentachlorophenol	ND	220	140	ug/Kg	1	12/12/19	WB	SW8270D
Phenanthrene	760	260	110	ug/Kg	1	12/12/19	WB	SW8270D
Phenol	ND	260	120	ug/Kg	1	12/12/19	WB	SW8270D
Pyrene	1200	260	130	ug/Kg	1	12/12/19	WB	SW8270D
Pyridine	ND	260	91	ug/Kg	1	12/12/19	WB	SW8270D
<u>QA/QC Surrogates</u>								
% 2,4,6-Tribromophenol	61			%	1	12/12/19	WB	30 - 130 %
% 2-Fluorobiphenyl	67			%	1	12/12/19	WB	30 - 130 %
% 2-Fluorophenol	62			%	1	12/12/19	WB	30 - 130 %
% Nitrobenzene-d5	63			%	1	12/12/19	WB	30 - 130 %
% Phenol-d5	61			%	1	12/12/19	WB	30 - 130 %
% Terphenyl-d14	66			%	1	12/12/19	WB	30 - 130 %
<u>1,4-Dioxane</u>								
1,4-dioxane	ND	75	75	ug/Kg	1	12/13/19	WB	SW8270D (SIM)
<u>QA/QC Surrogates</u>								
% 2-Fluorobiphenyl	31			%	1	12/13/19	WB	30 - 130 %
% Nitrobenzene-d5	31			%	1	12/13/19	WB	30 - 130 %
% Terphenyl-d14	42			%	1	12/13/19	WB	30 - 130 %
Field Extraction	Completed					12/10/19		SW5035A

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low J=Estimated Below RL LOD=Limit of Detection MDL=Method Detection Limit1

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

Please be advised that the NY 375 soil criteria for chromium are based on hexavalent chromium and trivalent chromium.

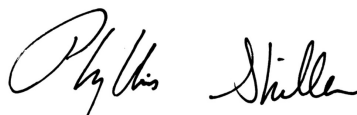
Volatile Comment:

To achieve client's objectives, where the lowest calibration standard or LOD justifies lowering the RL/PQL, the RL/PQL of some compounds have been lowered to meet criteria.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

S - Laboratory solvent, contamination is possible.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

December 18, 2019

Reviewed and Released by: Greg Lawrence, Assistant Lab Director



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823



Analysis Report

December 18, 2019

FOR: Attn: Mr. Charles B. Sosik, P.G.
Environmental Business Consultants
1808 Middle Country Rd
Ridge NY 11961-2406

Sample Information

Matrix: SOIL
Location Code: EBC
Rush Request: 72 Hour
P.O.#:

Custody Information

Collected by: TB
Received by: CP
Analyzed by: see "By" below

Date

12/10/19
12/11/19

Time

14:23
16:00

Laboratory Data

SDG ID: GCE85356
Phoenix ID: CE85372

Project ID: 26-22 4TH ST QUEENS
Client ID: 19B3 (8-10)

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Silver	ND	0.38	0.38	mg/Kg	1	12/13/19	TH	SW6010D
Aluminum	7460	38	7.6	mg/Kg	10	12/12/19	TH	SW6010D
Arsenic	ND	0.76	0.76	mg/Kg	1	12/13/19	TH	SW6010D
Barium	39.4	0.8	0.38	mg/Kg	1	12/13/19	TH	SW6010D
Beryllium	0.20	0.31	0.15	mg/Kg	1	12/13/19	TH	SW6010D
Calcium	1490	38	35	mg/Kg	10	12/12/19	TH	SW6010D
Cadmium	ND	0.38	0.38	mg/Kg	1	12/13/19	TH	SW6010D
Cobalt	3.40	0.38	0.38	mg/Kg	1	12/13/19	TH	SW6010D
Chromium	16.7	0.38	0.38	mg/Kg	1	12/13/19	TH	SW6010D
Copper	14.9	0.8	0.38	mg/kg	1	12/13/19	TH	SW6010D
Iron	10200	38	38	mg/Kg	10	12/12/19	TH	SW6010D
Mercury	0.17	0.03	0.02	mg/Kg	2	12/12/19	RS	SW7471B
Potassium	675	8	3.0	mg/Kg	1	12/13/19	TH	SW6010D
Magnesium	2550	38	38	mg/Kg	10	12/12/19	EK	SW6010D
Manganese	78.1	3.8	3.8	mg/Kg	10	12/12/19	TH	SW6010D
Sodium	139	8	3.3	mg/Kg	1	12/13/19	TH	SW6010D
Nickel	12.2	0.38	0.38	mg/Kg	1	12/13/19	TH	SW6010D
Lead	8.1	0.8	0.38	mg/Kg	1	12/13/19	TH	SW6010D
Antimony	ND	3.8	3.8	mg/Kg	1	12/13/19	TH	SW6010D
Selenium	ND	1.5	1.3	mg/Kg	1	12/13/19	TH	SW6010D
Thallium	ND	1.5	1.5	mg/Kg	1	12/13/19	TH	SW6010D
Vanadium	20.2	0.38	0.38	mg/Kg	1	12/13/19	TH	SW6010D
Zinc	31.8	0.8	0.38	mg/Kg	1	12/13/19	TH	SW6010D
Percent Solid	84			%		12/11/19	VT	SW846-%Solid
Extraction for SVOA SIM	Completed					12/12/19	K/R/LA	SW3545A
Soil Extraction for PCB	Completed					12/11/19	MM/E	SW3545A
Soil Extraction for Pesticides	Completed					12/11/19	MM/E	SW3545A
Soil Extraction for SVOA	Completed					12/11/19	AT/B/EE	SW3545A

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Mercury Digestion	Completed					12/12/19	LS/LS	SW7471B
Total Metals Digest	Completed					12/11/19	JJ/AG/BF	SW3050B

Polychlorinated Biphenyls

PCB-1016	ND	77	77	ug/Kg	2	12/13/19	SC	SW8082A
PCB-1221	ND	77	77	ug/Kg	2	12/13/19	SC	SW8082A
PCB-1232	ND	77	77	ug/Kg	2	12/13/19	SC	SW8082A
PCB-1242	ND	77	77	ug/Kg	2	12/13/19	SC	SW8082A
PCB-1248	ND	77	77	ug/Kg	2	12/13/19	SC	SW8082A
PCB-1254	ND	77	77	ug/Kg	2	12/13/19	SC	SW8082A
PCB-1260	ND	77	77	ug/Kg	2	12/13/19	SC	SW8082A
PCB-1262	ND	77	77	ug/Kg	2	12/13/19	SC	SW8082A
PCB-1268	ND	77	77	ug/Kg	2	12/13/19	SC	SW8082A

QA/QC Surrogates

% DCBP	88			%	2	12/13/19	SC	30 - 150 %
% DCBP (Confirmation)	81			%	2	12/13/19	SC	30 - 150 %
% TCMX	79			%	2	12/13/19	SC	30 - 150 %
% TCMX (Confirmation)	74			%	2	12/13/19	SC	30 - 150 %

Pesticides - Soil

4,4' -DDD	ND	2.3	2.3	ug/Kg	2	12/14/19	CG	SW8081B
4,4' -DDE	ND	2.3	2.3	ug/Kg	2	12/14/19	CG	SW8081B
4,4' -DDT	ND	2.3	2.3	ug/Kg	2	12/14/19	CG	SW8081B
a-BHC	ND	7.7	7.7	ug/Kg	2	12/14/19	CG	SW8081B
a-Chlordane	ND	3.9	3.9	ug/Kg	2	12/14/19	CG	SW8081B
Aldrin	ND	3.9	3.9	ug/Kg	2	12/14/19	CG	SW8081B
b-BHC	ND	7.7	7.7	ug/Kg	2	12/14/19	CG	SW8081B
Chlordane	ND	39	39	ug/Kg	2	12/14/19	CG	SW8081B
d-BHC	ND	7.7	7.7	ug/Kg	2	12/14/19	CG	SW8081B
Dieldrin	ND	3.9	3.9	ug/Kg	2	12/14/19	CG	SW8081B
Endosulfan I	ND	7.7	7.7	ug/Kg	2	12/14/19	CG	SW8081B
Endosulfan II	ND	7.7	7.7	ug/Kg	2	12/14/19	CG	SW8081B
Endosulfan sulfate	ND	7.7	7.7	ug/Kg	2	12/14/19	CG	SW8081B
Endrin	ND	7.7	7.7	ug/Kg	2	12/14/19	CG	SW8081B
Endrin aldehyde	ND	7.7	7.7	ug/Kg	2	12/14/19	CG	SW8081B
Endrin ketone	ND	7.7	7.7	ug/Kg	2	12/14/19	CG	SW8081B
g-BHC	ND	1.5	1.5	ug/Kg	2	12/14/19	CG	SW8081B
g-Chlordane	ND	3.9	3.9	ug/Kg	2	12/14/19	CG	SW8081B
Heptachlor	ND	7.7	7.7	ug/Kg	2	12/14/19	CG	SW8081B
Heptachlor epoxide	ND	7.7	7.7	ug/Kg	2	12/14/19	CG	SW8081B
Methoxychlor	ND	39	39	ug/Kg	2	12/14/19	CG	SW8081B
Toxaphene	ND	150	150	ug/Kg	2	12/14/19	CG	SW8081B

QA/QC Surrogates

% DCBP	68			%	2	12/14/19	CG	30 - 150 %
% DCBP (Confirmation)	78			%	2	12/14/19	CG	30 - 150 %
% TCMX	63			%	2	12/14/19	CG	30 - 150 %
% TCMX (Confirmation)	61			%	2	12/14/19	CG	30 - 150 %

Volatiles

1,1,1,2-Tetrachloroethane	ND	8.1	1.6	ug/Kg	1	12/12/19	JLI	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
1,1,1-Trichloroethane	ND	8.1	0.81	ug/Kg	1	12/12/19	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	8.1	1.6	ug/Kg	1	12/12/19	JLI	SW8260C
1,1,2-Trichloroethane	ND	8.1	1.6	ug/Kg	1	12/12/19	JLI	SW8260C
1,1-Dichloroethane	ND	8.1	1.6	ug/Kg	1	12/12/19	JLI	SW8260C
1,1-Dichloroethene	ND	8.1	0.81	ug/Kg	1	12/12/19	JLI	SW8260C
1,1-Dichloropropene	ND	8.1	0.81	ug/Kg	1	12/12/19	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	8.1	1.6	ug/Kg	1	12/12/19	JLI	SW8260C
1,2,3-Trichloropropane	ND	8.1	0.81	ug/Kg	1	12/12/19	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	8.1	1.6	ug/Kg	1	12/12/19	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	8.1	0.81	ug/Kg	1	12/12/19	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	8.1	1.6	ug/Kg	1	12/12/19	JLI	SW8260C
1,2-Dibromoethane	ND	8.1	0.81	ug/Kg	1	12/12/19	JLI	SW8260C
1,2-Dichlorobenzene	ND	8.1	0.81	ug/Kg	1	12/12/19	JLI	SW8260C
1,2-Dichloroethane	ND	8.1	0.81	ug/Kg	1	12/12/19	JLI	SW8260C
1,2-Dichloropropane	ND	8.1	1.6	ug/Kg	1	12/12/19	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	8.1	0.81	ug/Kg	1	12/12/19	JLI	SW8260C
1,3-Dichlorobenzene	ND	8.1	0.81	ug/Kg	1	12/12/19	JLI	SW8260C
1,3-Dichloropropane	ND	8.1	1.6	ug/Kg	1	12/12/19	JLI	SW8260C
1,4-Dichlorobenzene	ND	8.1	0.81	ug/Kg	1	12/12/19	JLI	SW8260C
2,2-Dichloropropane	ND	8.1	0.81	ug/Kg	1	12/12/19	JLI	SW8260C
2-Chlorotoluene	ND	8.1	1.6	ug/Kg	1	12/12/19	JLI	SW8260C
2-Hexanone	ND	40	8.1	ug/Kg	1	12/12/19	JLI	SW8260C
2-Isopropyltoluene	ND	8.1	0.81	ug/Kg	1	12/12/19	JLI	SW8260C
4-Chlorotoluene	ND	8.1	0.81	ug/Kg	1	12/12/19	JLI	SW8260C
4-Methyl-2-pentanone	ND	40	8.1	ug/Kg	1	12/12/19	JLI	SW8260C
Acetone	43	S 40	8.1	ug/Kg	1	12/12/19	JLI	SW8260C
Acrylonitrile	ND	16	1.6	ug/Kg	1	12/12/19	JLI	SW8260C
Benzene	ND	8.1	0.81	ug/Kg	1	12/12/19	JLI	SW8260C
Bromobenzene	ND	8.1	0.81	ug/Kg	1	12/12/19	JLI	SW8260C
Bromochloromethane	ND	8.1	0.81	ug/Kg	1	12/12/19	JLI	SW8260C
Bromodichloromethane	ND	8.1	1.6	ug/Kg	1	12/12/19	JLI	SW8260C
Bromoform	ND	8.1	1.6	ug/Kg	1	12/12/19	JLI	SW8260C
Bromomethane	ND	8.1	3.2	ug/Kg	1	12/12/19	JLI	SW8260C
Carbon Disulfide	21	8.1	1.6	ug/Kg	1	12/12/19	JLI	SW8260C
Carbon tetrachloride	ND	8.1	1.6	ug/Kg	1	12/12/19	JLI	SW8260C
Chlorobenzene	ND	8.1	0.81	ug/Kg	1	12/12/19	JLI	SW8260C
Chloroethane	ND	8.1	0.81	ug/Kg	1	12/12/19	JLI	SW8260C
Chloroform	ND	8.1	0.81	ug/Kg	1	12/12/19	JLI	SW8260C
Chloromethane	ND	8.1	1.6	ug/Kg	1	12/12/19	JLI	SW8260C
cis-1,2-Dichloroethene	9.2	8.1	0.81	ug/Kg	1	12/12/19	JLI	SW8260C
cis-1,3-Dichloropropene	ND	8.1	0.81	ug/Kg	1	12/12/19	JLI	SW8260C
Dibromochloromethane	ND	8.1	1.6	ug/Kg	1	12/12/19	JLI	SW8260C
Dibromomethane	ND	8.1	1.6	ug/Kg	1	12/12/19	JLI	SW8260C
Dichlorodifluoromethane	ND	8.1	0.81	ug/Kg	1	12/12/19	JLI	SW8260C
Ethylbenzene	ND	8.1	0.81	ug/Kg	1	12/12/19	JLI	SW8260C
Hexachlorobutadiene	ND	8.1	0.81	ug/Kg	1	12/12/19	JLI	SW8260C
Isopropylbenzene	ND	8.1	0.81	ug/Kg	1	12/12/19	JLI	SW8260C
m&p-Xylene	ND	8.1	1.6	ug/Kg	1	12/12/19	JLI	SW8260C
Methyl Ethyl Ketone	ND	49	8.1	ug/Kg	1	12/12/19	JLI	SW8260C

1

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Methyl t-butyl ether (MTBE)	ND	16	1.6	ug/Kg	1	12/12/19	JLI	SW8260C
Methylene chloride	ND	8.1	8.1	ug/Kg	1	12/12/19	JLI	SW8260C
Naphthalene	18	8.1	1.6	ug/Kg	1	12/12/19	JLI	SW8260C
n-Butylbenzene	ND	8.1	0.81	ug/Kg	1	12/12/19	JLI	SW8260C
n-Propylbenzene	ND	8.1	1.6	ug/Kg	1	12/12/19	JLI	SW8260C
o-Xylene	ND	8.1	1.6	ug/Kg	1	12/12/19	JLI	SW8260C
p-Isopropyltoluene	ND	8.1	0.81	ug/Kg	1	12/12/19	JLI	SW8260C
sec-Butylbenzene	ND	8.1	0.81	ug/Kg	1	12/12/19	JLI	SW8260C
Styrene	ND	8.1	0.81	ug/Kg	1	12/12/19	JLI	SW8260C
tert-Butylbenzene	ND	8.1	0.81	ug/Kg	1	12/12/19	JLI	SW8260C
Tetrachloroethene	21	8.1	1.6	ug/Kg	1	12/12/19	JLI	SW8260C
Tetrahydrofuran (THF)	ND	16	4.0	ug/Kg	1	12/12/19	JLI	SW8260C
Toluene	ND	8.1	0.81	ug/Kg	1	12/12/19	JLI	SW8260C
trans-1,2-Dichloroethene	ND	8.1	0.81	ug/Kg	1	12/12/19	JLI	SW8260C
trans-1,3-Dichloropropene	ND	8.1	0.81	ug/Kg	1	12/12/19	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	16	4.0	ug/Kg	1	12/12/19	JLI	SW8260C
Trichloroethene	5.5	J 8.1	0.81	ug/Kg	1	12/12/19	JLI	SW8260C
Trichlorofluoromethane	ND	8.1	1.6	ug/Kg	1	12/12/19	JLI	SW8260C
Trichlorotrifluoroethane	ND	8.1	0.81	ug/Kg	1	12/12/19	JLI	SW8260C
Vinyl chloride	3.3	J 8.1	0.81	ug/Kg	1	12/12/19	JLI	SW8260C
<u>QA/QC Surrogates</u>								
% 1,2-dichlorobenzene-d4	96			%	1	12/12/19	JLI	70 - 130 %
% Bromofluorobenzene	93			%	1	12/12/19	JLI	70 - 130 %
% Dibromofluoromethane	90			%	1	12/12/19	JLI	70 - 130 %
% Toluene-d8	92			%	1	12/12/19	JLI	70 - 130 %
<u>Volatiles</u>								
1,1,1,2-Tetrachloroethane	ND	32	1.6	ug/Kg	1	12/12/19	JLI	SW8260C
Acrolein	ND	8.1	1.6	ug/Kg	1	12/12/19	JLI	SW8260C
Acrylonitrile	ND	32	0.81	ug/Kg	1	12/12/19	JLI	SW8260C
Tert-butyl alcohol	ND	160	32	ug/Kg	1	12/12/19	JLI	SW8260C
<u>Semivolatiles</u>								
1,2,4,5-Tetrachlorobenzene	ND	270	140	ug/Kg	1	12/12/19	WB	SW8270D
1,2,4-Trichlorobenzene	ND	270	120	ug/Kg	1	12/12/19	WB	SW8270D
1,2-Dichlorobenzene	ND	270	110	ug/Kg	1	12/12/19	WB	SW8270D
1,2-Diphenylhydrazine	ND	270	130	ug/Kg	1	12/12/19	WB	SW8270D
1,3-Dichlorobenzene	ND	270	110	ug/Kg	1	12/12/19	WB	SW8270D
1,4-Dichlorobenzene	ND	270	110	ug/Kg	1	12/12/19	WB	SW8270D
2,4,5-Trichlorophenol	ND	270	210	ug/Kg	1	12/12/19	WB	SW8270D
2,4,6-Trichlorophenol	ND	190	120	ug/Kg	1	12/12/19	WB	SW8270D
2,4-Dichlorophenol	ND	190	140	ug/Kg	1	12/12/19	WB	SW8270D
2,4-Dimethylphenol	ND	270	95	ug/Kg	1	12/12/19	WB	SW8270D
2,4-Dinitrophenol	ND	270	270	ug/Kg	1	12/12/19	WB	SW8270D
2,4-Dinitrotoluene	ND	190	150	ug/Kg	1	12/12/19	WB	SW8270D
2,6-Dinitrotoluene	ND	190	120	ug/Kg	1	12/12/19	WB	SW8270D
2-Chloronaphthalene	ND	270	110	ug/Kg	1	12/12/19	WB	SW8270D
2-Chlorophenol	ND	270	110	ug/Kg	1	12/12/19	WB	SW8270D
2-Methylnaphthalene	ND	270	110	ug/Kg	1	12/12/19	WB	SW8270D
2-Methylphenol (o-cresol)	ND	270	180	ug/Kg	1	12/12/19	WB	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
2-Nitroaniline	ND	270	270	ug/Kg	1	12/12/19	WB	SW8270D
2-Nitrophenol	ND	270	240	ug/Kg	1	12/12/19	WB	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	270	150	ug/Kg	1	12/12/19	WB	SW8270D
3,3'-Dichlorobenzidine	ND	190	180	ug/Kg	1	12/12/19	WB	SW8270D
3-Nitroaniline	ND	380	770	ug/Kg	1	12/12/19	WB	SW8270D
4,6-Dinitro-2-methylphenol	ND	230	77	ug/Kg	1	12/12/19	WB	SW8270D
4-Bromophenyl phenyl ether	ND	270	110	ug/Kg	1	12/12/19	WB	SW8270D
4-Chloro-3-methylphenol	ND	270	140	ug/Kg	1	12/12/19	WB	SW8270D
4-Chloroaniline	ND	310	180	ug/Kg	1	12/12/19	WB	SW8270D
4-Chlorophenyl phenyl ether	ND	270	130	ug/Kg	1	12/12/19	WB	SW8270D
4-Nitroaniline	ND	380	130	ug/Kg	1	12/12/19	WB	SW8270D
4-Nitrophenol	ND	380	170	ug/Kg	1	12/12/19	WB	SW8270D
Acenaphthene	ND	270	120	ug/Kg	1	12/12/19	WB	SW8270D
Acenaphthylene	ND	270	110	ug/Kg	1	12/12/19	WB	SW8270D
Acetophenone	ND	270	120	ug/Kg	1	12/12/19	WB	SW8270D
Aniline	ND	310	310	ug/Kg	1	12/12/19	WB	SW8270D
Anthracene	ND	270	130	ug/Kg	1	12/12/19	WB	SW8270D
Benz(a)anthracene	ND	270	130	ug/Kg	1	12/12/19	WB	SW8270D
Benzidine	ND	380	230	ug/Kg	1	12/12/19	WB	SW8270D
Benzo(a)pyrene	ND	190	130	ug/Kg	1	12/12/19	WB	SW8270D
Benzo(b)fluoranthene	ND	270	130	ug/Kg	1	12/12/19	WB	SW8270D
Benzo(ghi)perylene	ND	270	120	ug/Kg	1	12/12/19	WB	SW8270D
Benzo(k)fluoranthene	ND	270	130	ug/Kg	1	12/12/19	WB	SW8270D
Benzoic acid	ND	1900	770	ug/Kg	1	12/12/19	WB	SW8270D
Benzyl butyl phthalate	ND	270	99	ug/Kg	1	12/12/19	WB	SW8270D
Bis(2-chloroethoxy)methane	ND	270	110	ug/Kg	1	12/12/19	WB	SW8270D
Bis(2-chloroethyl)ether	ND	190	100	ug/Kg	1	12/12/19	WB	SW8270D
Bis(2-chloroisopropyl)ether	ND	270	110	ug/Kg	1	12/12/19	WB	SW8270D
Bis(2-ethylhexyl)phthalate	ND	270	110	ug/Kg	1	12/12/19	WB	SW8270D
Carbazole	ND	190	150	ug/Kg	1	12/12/19	WB	SW8270D
Chrysene	ND	270	130	ug/Kg	1	12/12/19	WB	SW8270D
Dibenz(a,h)anthracene	ND	190	120	ug/Kg	1	12/12/19	WB	SW8270D
Dibenzofuran	ND	270	110	ug/Kg	1	12/12/19	WB	SW8270D
Diethyl phthalate	ND	270	120	ug/Kg	1	12/12/19	WB	SW8270D
Dimethylphthalate	ND	270	120	ug/Kg	1	12/12/19	WB	SW8270D
Di-n-butylphthalate	ND	270	100	ug/Kg	1	12/12/19	WB	SW8270D
Di-n-octylphthalate	ND	270	99	ug/Kg	1	12/12/19	WB	SW8270D
Fluoranthene	190	J 270	120	ug/Kg	1	12/12/19	WB	SW8270D
Fluorene	ND	270	130	ug/Kg	1	12/12/19	WB	SW8270D
Hexachlorobenzene	ND	190	110	ug/Kg	1	12/12/19	WB	SW8270D
Hexachlorobutadiene	ND	270	140	ug/Kg	1	12/12/19	WB	SW8270D
Hexachlorocyclopentadiene	ND	270	120	ug/Kg	1	12/12/19	WB	SW8270D
Hexachloroethane	ND	190	120	ug/Kg	1	12/12/19	WB	SW8270D
Indeno(1,2,3-cd)pyrene	ND	270	130	ug/Kg	1	12/12/19	WB	SW8270D
Isophorone	ND	190	110	ug/Kg	1	12/12/19	WB	SW8270D
Naphthalene	ND	270	110	ug/Kg	1	12/12/19	WB	SW8270D
Nitrobenzene	ND	190	130	ug/Kg	1	12/12/19	WB	SW8270D
N-Nitrosodimethylamine	ND	270	110	ug/Kg	1	12/12/19	WB	SW8270D
N-Nitrosodi-n-propylamine	ND	190	120	ug/Kg	1	12/12/19	WB	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
N-Nitrosodiphenylamine	ND	270	150	ug/Kg	1	12/12/19	WB	SW8270D
Pentachloronitrobenzene	ND	270	140	ug/Kg	1	12/12/19	WB	SW8270D
Pentachlorophenol	ND	230	150	ug/Kg	1	12/12/19	WB	SW8270D
Phenanthrene	ND	270	110	ug/Kg	1	12/12/19	WB	SW8270D
Phenol	ND	270	120	ug/Kg	1	12/12/19	WB	SW8270D
Pyrene	170	J 270	130	ug/Kg	1	12/12/19	WB	SW8270D
Pyridine	ND	270	95	ug/Kg	1	12/12/19	WB	SW8270D
<u>QA/QC Surrogates</u>								
% 2,4,6-Tribromophenol	64			%	1	12/12/19	WB	30 - 130 %
% 2-Fluorobiphenyl	65			%	1	12/12/19	WB	30 - 130 %
% 2-Fluorophenol	64			%	1	12/12/19	WB	30 - 130 %
% Nitrobenzene-d5	61			%	1	12/12/19	WB	30 - 130 %
% Phenol-d5	61			%	1	12/12/19	WB	30 - 130 %
% Terphenyl-d14	67			%	1	12/12/19	WB	30 - 130 %
<u>1,4-Dioxane</u>								
1,4-dioxane	ND	79	79	ug/Kg	1	12/13/19	WB	SW8270D (SIM)
<u>QA/QC Surrogates</u>								
% 2-Fluorobiphenyl	Interference			%	1	12/13/19	WB	30 - 130 %
% Nitrobenzene-d5	23			%	1	12/13/19	WB	30 - 130 %
% Terphenyl-d14	41			%	1	12/13/19	WB	30 - 130 %
Field Extraction	Completed					12/10/19		SW5035A

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

3 = This parameter exceeds laboratory specified limits.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low J=Estimated Below RL LOD=Limit of Detection MDL=Method Detection Limit1

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

Please be advised that the NY 375 soil criteria for chromium are based on hexavalent chromium and trivalent chromium.

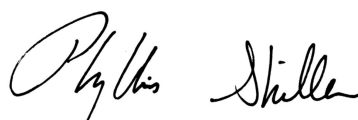
Semi-Volatile Comment:

Poor surrogate recovery was observed for one acid and/or one base surrogate. The other surrogates associated with this sample were within QA/QC criteria. No significant bias suspected.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

S - Laboratory solvent, contamination is possible.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

December 18, 2019

Reviewed and Released by: Greg Lawrence, Assistant Lab Director



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823



Analysis Report

December 18, 2019

FOR: Attn: Mr. Charles B. Sosik, P.G.
Environmental Business Consultants
1808 Middle Country Rd
Ridge NY 11961-2406

Sample Information

Matrix: SOIL
Location Code: EBC
Rush Request: 72 Hour
P.O.#:

Custody Information

Collected by: TB
Received by: CP
Analyzed by: see "By" below

Date

12/10/19
12/11/19

Time

14:51
16:00

Laboratory Data

SDG ID: GCE85356
Phoenix ID: CE85373

Project ID: 26-22 4TH ST QUEENS
Client ID: 19B2 (0-2)

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Silver	ND	0.36	0.36	mg/Kg	1	12/13/19	TH	SW6010D
Aluminum	11100	36	7.1	mg/Kg	10	12/12/19	TH	SW6010D
Arsenic	3.89	0.71	0.71	mg/Kg	1	12/13/19	TH	SW6010D
Barium	86.3	0.7	0.36	mg/Kg	1	12/13/19	TH	SW6010D
Beryllium	0.49	0.28	0.14	mg/Kg	1	12/13/19	TH	SW6010D
Calcium	14300	36	33	mg/Kg	10	12/12/19	TH	SW6010D
Cadmium	0.54	0.36	0.36	mg/Kg	1	12/13/19	TH	SW6010D
Cobalt	5.84	0.36	0.36	mg/Kg	1	12/13/19	TH	SW6010D
Chromium	18.4	0.36	0.36	mg/Kg	1	12/13/19	TH	SW6010D
Copper	35.7	0.7	0.36	mg/kg	1	12/13/19	TH	SW6010D
Iron	17400	36	36	mg/Kg	10	12/12/19	TH	SW6010D
Mercury	0.24	0.07	0.04	mg/Kg	5	12/12/19	RS	SW7471B
Potassium	1030	7	2.8	mg/Kg	1	12/13/19	TH	SW6010D
Magnesium	8540	36	36	mg/Kg	10	12/12/19	TH	SW6010D
Manganese	314	3.6	3.6	mg/Kg	10	12/12/19	TH	SW6010D
Sodium	528	7	3.1	mg/Kg	1	12/13/19	TH	SW6010D
Nickel	15.6	0.36	0.36	mg/Kg	1	12/13/19	TH	SW6010D
Lead	93.0	0.7	0.36	mg/Kg	1	12/13/19	TH	SW6010D
Antimony	ND	3.6	3.6	mg/Kg	1	12/13/19	TH	SW6010D
Selenium	ND	1.4	1.2	mg/Kg	1	12/13/19	TH	SW6010D
Thallium	ND	1.4	1.4	mg/Kg	1	12/13/19	TH	SW6010D
Vanadium	31.7	0.36	0.36	mg/Kg	1	12/13/19	TH	SW6010D
Zinc	128	0.7	0.36	mg/Kg	1	12/13/19	TH	SW6010D
Percent Solid	89			%		12/11/19	VT	SW846-%Solid
Extraction for SVOA SIM	Completed					12/12/19	K/R/LA	SW3545A
Soil Extraction for PCB	Completed					12/11/19	MM/E	SW3545A
Soil Extraction for Pesticides	Completed					12/11/19	MM/E	SW3545A
Soil Extraction for SVOA	Completed					12/11/19	AT/B/EE	SW3545A

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Mercury Digestion	Completed					12/12/19	LS/LS	SW7471B
Total Metals Digest	Completed					12/11/19	JJ/AG/BF	SW3050B

Polychlorinated Biphenyls

PCB-1016	ND	73	73	ug/Kg	2	12/12/19	SC	SW8082A
PCB-1221	ND	73	73	ug/Kg	2	12/12/19	SC	SW8082A
PCB-1232	ND	73	73	ug/Kg	2	12/12/19	SC	SW8082A
PCB-1242	ND	73	73	ug/Kg	2	12/12/19	SC	SW8082A
PCB-1248	ND	73	73	ug/Kg	2	12/12/19	SC	SW8082A
PCB-1254	ND	73	73	ug/Kg	2	12/12/19	SC	SW8082A
PCB-1260	ND	73	73	ug/Kg	2	12/12/19	SC	SW8082A
PCB-1262	ND	73	73	ug/Kg	2	12/12/19	SC	SW8082A
PCB-1268	ND	73	73	ug/Kg	2	12/12/19	SC	SW8082A

QA/QC Surrogates

% DCBP	100			%	2	12/12/19	SC	30 - 150 %
% DCBP (Confirmation)	95			%	2	12/12/19	SC	30 - 150 %
% TCMX	88			%	2	12/12/19	SC	30 - 150 %
% TCMX (Confirmation)	79			%	2	12/12/19	SC	30 - 150 %

Pesticides - Soil

4,4' -DDD	3.2	2.2	2.2	ug/Kg	2	12/13/19	CG	SW8081B
4,4' -DDE	ND	2.2	2.2	ug/Kg	2	12/13/19	CG	SW8081B
4,4' -DDT	3.6	2.2	2.2	ug/Kg	2	12/13/19	CG	SW8081B
a-BHC	ND	7.3	7.3	ug/Kg	2	12/13/19	CG	SW8081B
a-Chlordane	ND	3.6	3.6	ug/Kg	2	12/13/19	CG	SW8081B
Aldrin	ND	3.6	3.6	ug/Kg	2	12/13/19	CG	SW8081B
b-BHC	ND	7.3	7.3	ug/Kg	2	12/13/19	CG	SW8081B
Chlordane	ND	36	36	ug/Kg	2	12/13/19	CG	SW8081B
d-BHC	ND	7.3	7.3	ug/Kg	2	12/13/19	CG	SW8081B
Dieldrin	ND	3.6	3.6	ug/Kg	2	12/13/19	CG	SW8081B
Endosulfan I	ND	7.3	7.3	ug/Kg	2	12/13/19	CG	SW8081B
Endosulfan II	ND	7.3	7.3	ug/Kg	2	12/13/19	CG	SW8081B
Endosulfan sulfate	ND	7.3	7.3	ug/Kg	2	12/13/19	CG	SW8081B
Endrin	ND	7.3	7.3	ug/Kg	2	12/13/19	CG	SW8081B
Endrin aldehyde	ND	7.3	7.3	ug/Kg	2	12/13/19	CG	SW8081B
Endrin ketone	ND	7.3	7.3	ug/Kg	2	12/13/19	CG	SW8081B
g-BHC	ND	1.5	1.5	ug/Kg	2	12/13/19	CG	SW8081B
g-Chlordane	ND	3.6	3.6	ug/Kg	2	12/13/19	CG	SW8081B
Heptachlor	ND	7.3	7.3	ug/Kg	2	12/13/19	CG	SW8081B
Heptachlor epoxide	ND	7.3	7.3	ug/Kg	2	12/13/19	CG	SW8081B
Methoxychlor	ND	36	36	ug/Kg	2	12/13/19	CG	SW8081B
Toxaphene	ND	150	150	ug/Kg	2	12/13/19	CG	SW8081B

QA/QC Surrogates

% DCBP	67			%	2	12/13/19	CG	30 - 150 %
% DCBP (Confirmation)	77			%	2	12/13/19	CG	30 - 150 %
% TCMX	64			%	2	12/13/19	CG	30 - 150 %
% TCMX (Confirmation)	65			%	2	12/13/19	CG	30 - 150 %

Volatiles

1,1,1,2-Tetrachloroethane	ND	6.4	1.3	ug/Kg	1	12/12/19	JLI	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
1,1,1-Trichloroethane	ND	6.4	0.64	ug/Kg	1	12/12/19	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	6.4	1.3	ug/Kg	1	12/12/19	JLI	SW8260C
1,1,2-Trichloroethane	ND	6.4	1.3	ug/Kg	1	12/12/19	JLI	SW8260C
1,1-Dichloroethane	ND	6.4	1.3	ug/Kg	1	12/12/19	JLI	SW8260C
1,1-Dichloroethene	ND	6.4	0.64	ug/Kg	1	12/12/19	JLI	SW8260C
1,1-Dichloropropene	ND	6.4	0.64	ug/Kg	1	12/12/19	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	6.4	1.3	ug/Kg	1	12/12/19	JLI	SW8260C
1,2,3-Trichloropropane	ND	6.4	0.64	ug/Kg	1	12/12/19	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	6.4	1.3	ug/Kg	1	12/12/19	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	6.4	0.64	ug/Kg	1	12/12/19	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	6.4	1.3	ug/Kg	1	12/12/19	JLI	SW8260C
1,2-Dibromoethane	ND	6.4	0.64	ug/Kg	1	12/12/19	JLI	SW8260C
1,2-Dichlorobenzene	ND	6.4	0.64	ug/Kg	1	12/12/19	JLI	SW8260C
1,2-Dichloroethane	ND	6.4	0.64	ug/Kg	1	12/12/19	JLI	SW8260C
1,2-Dichloropropane	ND	6.4	1.3	ug/Kg	1	12/12/19	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	6.4	0.64	ug/Kg	1	12/12/19	JLI	SW8260C
1,3-Dichlorobenzene	ND	6.4	0.64	ug/Kg	1	12/12/19	JLI	SW8260C
1,3-Dichloropropane	ND	6.4	1.3	ug/Kg	1	12/12/19	JLI	SW8260C
1,4-Dichlorobenzene	ND	6.4	0.64	ug/Kg	1	12/12/19	JLI	SW8260C
2,2-Dichloropropane	ND	6.4	0.64	ug/Kg	1	12/12/19	JLI	SW8260C
2-Chlorotoluene	ND	6.4	1.3	ug/Kg	1	12/12/19	JLI	SW8260C
2-Hexanone	ND	32	6.4	ug/Kg	1	12/12/19	JLI	SW8260C
2-Isopropyltoluene	ND	6.4	0.64	ug/Kg	1	12/12/19	JLI	SW8260C
4-Chlorotoluene	ND	6.4	0.64	ug/Kg	1	12/12/19	JLI	SW8260C
4-Methyl-2-pentanone	ND	32	6.4	ug/Kg	1	12/12/19	JLI	SW8260C
Acetone	6.6	JS 32	6.4	ug/Kg	1	12/12/19	JLI	SW8260C
Acrylonitrile	ND	13	1.3	ug/Kg	1	12/12/19	JLI	SW8260C
Benzene	ND	6.4	0.64	ug/Kg	1	12/12/19	JLI	SW8260C
Bromobenzene	ND	6.4	0.64	ug/Kg	1	12/12/19	JLI	SW8260C
Bromochloromethane	ND	6.4	0.64	ug/Kg	1	12/12/19	JLI	SW8260C
Bromodichloromethane	ND	6.4	1.3	ug/Kg	1	12/12/19	JLI	SW8260C
Bromoform	ND	6.4	1.3	ug/Kg	1	12/12/19	JLI	SW8260C
Bromomethane	ND	6.4	2.6	ug/Kg	1	12/12/19	JLI	SW8260C
Carbon Disulfide	ND	6.4	1.3	ug/Kg	1	12/12/19	JLI	SW8260C
Carbon tetrachloride	ND	6.4	1.3	ug/Kg	1	12/12/19	JLI	SW8260C
Chlorobenzene	ND	6.4	0.64	ug/Kg	1	12/12/19	JLI	SW8260C
Chloroethane	ND	6.4	0.64	ug/Kg	1	12/12/19	JLI	SW8260C
Chloroform	ND	6.4	0.64	ug/Kg	1	12/12/19	JLI	SW8260C
Chloromethane	ND	6.4	1.3	ug/Kg	1	12/12/19	JLI	SW8260C
cis-1,2-Dichloroethene	ND	6.4	0.64	ug/Kg	1	12/12/19	JLI	SW8260C
cis-1,3-Dichloropropene	ND	6.4	0.64	ug/Kg	1	12/12/19	JLI	SW8260C
Dibromochloromethane	ND	6.4	1.3	ug/Kg	1	12/12/19	JLI	SW8260C
Dibromomethane	ND	6.4	1.3	ug/Kg	1	12/12/19	JLI	SW8260C
Dichlorodifluoromethane	ND	6.4	0.64	ug/Kg	1	12/12/19	JLI	SW8260C
Ethylbenzene	ND	6.4	0.64	ug/Kg	1	12/12/19	JLI	SW8260C
Hexachlorobutadiene	ND	6.4	0.64	ug/Kg	1	12/12/19	JLI	SW8260C
Isopropylbenzene	ND	6.4	0.64	ug/Kg	1	12/12/19	JLI	SW8260C
m&p-Xylene	ND	6.4	1.3	ug/Kg	1	12/12/19	JLI	SW8260C
Methyl Ethyl Ketone	ND	38	6.4	ug/Kg	1	12/12/19	JLI	SW8260C

1

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Methyl t-butyl ether (MTBE)	ND	13	1.3	ug/Kg	1	12/12/19	JLI	SW8260C
Methylene chloride	ND	6.4	6.4	ug/Kg	1	12/12/19	JLI	SW8260C
Naphthalene	ND	6.4	1.3	ug/Kg	1	12/12/19	JLI	SW8260C
n-Butylbenzene	ND	6.4	0.64	ug/Kg	1	12/12/19	JLI	SW8260C
n-Propylbenzene	ND	6.4	1.3	ug/Kg	1	12/12/19	JLI	SW8260C
o-Xylene	ND	6.4	1.3	ug/Kg	1	12/12/19	JLI	SW8260C
p-Isopropyltoluene	ND	6.4	0.64	ug/Kg	1	12/12/19	JLI	SW8260C
sec-Butylbenzene	ND	6.4	0.64	ug/Kg	1	12/12/19	JLI	SW8260C
Styrene	ND	6.4	0.64	ug/Kg	1	12/12/19	JLI	SW8260C
tert-Butylbenzene	ND	6.4	0.64	ug/Kg	1	12/12/19	JLI	SW8260C
Tetrachloroethene	2.8	J 6.4	1.3	ug/Kg	1	12/12/19	JLI	SW8260C
Tetrahydrofuran (THF)	ND	13	3.2	ug/Kg	1	12/12/19	JLI	SW8260C
Toluene	ND	6.4	0.64	ug/Kg	1	12/12/19	JLI	SW8260C
trans-1,2-Dichloroethene	ND	6.4	0.64	ug/Kg	1	12/12/19	JLI	SW8260C
trans-1,3-Dichloropropene	ND	6.4	0.64	ug/Kg	1	12/12/19	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	13	3.2	ug/Kg	1	12/12/19	JLI	SW8260C
Trichloroethene	ND	6.4	0.64	ug/Kg	1	12/12/19	JLI	SW8260C
Trichlorofluoromethane	ND	6.4	1.3	ug/Kg	1	12/12/19	JLI	SW8260C
Trichlorotrifluoroethane	ND	6.4	0.64	ug/Kg	1	12/12/19	JLI	SW8260C
Vinyl chloride	ND	6.4	0.64	ug/Kg	1	12/12/19	JLI	SW8260C
<u>QA/QC Surrogates</u>								
% 1,2-dichlorobenzene-d4	95			%	1	12/12/19	JLI	70 - 130 %
% Bromofluorobenzene	92			%	1	12/12/19	JLI	70 - 130 %
% Dibromofluoromethane	93			%	1	12/12/19	JLI	70 - 130 %
% Toluene-d8	92			%	1	12/12/19	JLI	70 - 130 %
<u>Volatiles</u>								
1,1,1,2-Tetrachloroethane	ND	26	1.3	ug/Kg	1	12/12/19	JLI	SW8260C
Acrolein	ND	6.4	1.3	ug/Kg	1	12/12/19	JLI	SW8260C
Acrylonitrile	ND	26	0.64	ug/Kg	1	12/12/19	JLI	SW8260C
Tert-butyl alcohol	ND	130	26	ug/Kg	1	12/12/19	JLI	SW8260C
<u>Semivolatiles</u>								
1,2,4,5-Tetrachlorobenzene	ND	250	130	ug/Kg	1	12/12/19	WB	SW8270D
1,2,4-Trichlorobenzene	ND	250	110	ug/Kg	1	12/12/19	WB	SW8270D
1,2-Dichlorobenzene	ND	250	100	ug/Kg	1	12/12/19	WB	SW8270D
1,2-Diphenylhydrazine	ND	250	120	ug/Kg	1	12/12/19	WB	SW8270D
1,3-Dichlorobenzene	ND	250	110	ug/Kg	1	12/12/19	WB	SW8270D
1,4-Dichlorobenzene	ND	250	110	ug/Kg	1	12/12/19	WB	SW8270D
2,4,5-Trichlorophenol	ND	250	200	ug/Kg	1	12/12/19	WB	SW8270D
2,4,6-Trichlorophenol	ND	180	120	ug/Kg	1	12/12/19	WB	SW8270D
2,4-Dichlorophenol	ND	180	130	ug/Kg	1	12/12/19	WB	SW8270D
2,4-Dimethylphenol	ND	250	90	ug/Kg	1	12/12/19	WB	SW8270D
2,4-Dinitrophenol	ND	250	250	ug/Kg	1	12/12/19	WB	SW8270D
2,4-Dinitrotoluene	ND	180	140	ug/Kg	1	12/12/19	WB	SW8270D
2,6-Dinitrotoluene	ND	180	110	ug/Kg	1	12/12/19	WB	SW8270D
2-Chloronaphthalene	ND	250	100	ug/Kg	1	12/12/19	WB	SW8270D
2-Chlorophenol	ND	250	100	ug/Kg	1	12/12/19	WB	SW8270D
2-Methylnaphthalene	ND	250	110	ug/Kg	1	12/12/19	WB	SW8270D
2-Methylphenol (o-cresol)	ND	250	170	ug/Kg	1	12/12/19	WB	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
2-Nitroaniline	ND	250	250	ug/Kg	1	12/12/19	WB	SW8270D
2-Nitrophenol	ND	250	230	ug/Kg	1	12/12/19	WB	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	250	140	ug/Kg	1	12/12/19	WB	SW8270D
3,3'-Dichlorobenzidine	ND	180	170	ug/Kg	1	12/12/19	WB	SW8270D
3-Nitroaniline	ND	360	730	ug/Kg	1	12/12/19	WB	SW8270D
4,6-Dinitro-2-methylphenol	ND	220	73	ug/Kg	1	12/12/19	WB	SW8270D
4-Bromophenyl phenyl ether	ND	250	110	ug/Kg	1	12/12/19	WB	SW8270D
4-Chloro-3-methylphenol	ND	250	130	ug/Kg	1	12/12/19	WB	SW8270D
4-Chloroaniline	ND	290	170	ug/Kg	1	12/12/19	WB	SW8270D
4-Chlorophenyl phenyl ether	ND	250	120	ug/Kg	1	12/12/19	WB	SW8270D
4-Nitroaniline	ND	360	120	ug/Kg	1	12/12/19	WB	SW8270D
4-Nitrophenol	ND	360	160	ug/Kg	1	12/12/19	WB	SW8270D
Acenaphthene	ND	250	110	ug/Kg	1	12/12/19	WB	SW8270D
Acenaphthylene	ND	250	100	ug/Kg	1	12/12/19	WB	SW8270D
Acetophenone	ND	250	110	ug/Kg	1	12/12/19	WB	SW8270D
Aniline	ND	290	290	ug/Kg	1	12/12/19	WB	SW8270D
Anthracene	ND	250	120	ug/Kg	1	12/12/19	WB	SW8270D
Benz(a)anthracene	220	J 250	120	ug/Kg	1	12/12/19	WB	SW8270D
Benzidine	ND	360	210	ug/Kg	1	12/12/19	WB	SW8270D
Benzo(a)pyrene	230	180	120	ug/Kg	1	12/12/19	WB	SW8270D
Benzo(b)fluoranthene	240	J 250	120	ug/Kg	1	12/12/19	WB	SW8270D
Benzo(ghi)perylene	200	J 250	120	ug/Kg	1	12/12/19	WB	SW8270D
Benzo(k)fluoranthene	220	J 250	120	ug/Kg	1	12/12/19	WB	SW8270D
Benzoic acid	ND	1800	730	ug/Kg	1	12/12/19	WB	SW8270D
Benzyl butyl phthalate	ND	250	94	ug/Kg	1	12/12/19	WB	SW8270D
Bis(2-chloroethoxy)methane	ND	250	100	ug/Kg	1	12/12/19	WB	SW8270D
Bis(2-chloroethyl)ether	ND	180	98	ug/Kg	1	12/12/19	WB	SW8270D
Bis(2-chloroisopropyl)ether	ND	250	100	ug/Kg	1	12/12/19	WB	SW8270D
Bis(2-ethylhexyl)phthalate	ND	250	100	ug/Kg	1	12/12/19	WB	SW8270D
Carbazole	ND	180	150	ug/Kg	1	12/12/19	WB	SW8270D
Chrysene	310	250	120	ug/Kg	1	12/12/19	WB	SW8270D
Dibenz(a,h)anthracene	ND	180	120	ug/Kg	1	12/12/19	WB	SW8270D
Dibenzofuran	ND	250	110	ug/Kg	1	12/12/19	WB	SW8270D
Diethyl phthalate	ND	250	110	ug/Kg	1	12/12/19	WB	SW8270D
Dimethylphthalate	ND	250	110	ug/Kg	1	12/12/19	WB	SW8270D
Di-n-butylphthalate	ND	250	97	ug/Kg	1	12/12/19	WB	SW8270D
Di-n-octylphthalate	ND	250	94	ug/Kg	1	12/12/19	WB	SW8270D
Fluoranthene	530	250	120	ug/Kg	1	12/12/19	WB	SW8270D
Fluorene	ND	250	120	ug/Kg	1	12/12/19	WB	SW8270D
Hexachlorobenzene	ND	180	110	ug/Kg	1	12/12/19	WB	SW8270D
Hexachlorobutadiene	ND	250	130	ug/Kg	1	12/12/19	WB	SW8270D
Hexachlorocyclopentadiene	ND	250	110	ug/Kg	1	12/12/19	WB	SW8270D
Hexachloroethane	ND	180	110	ug/Kg	1	12/12/19	WB	SW8270D
Indeno(1,2,3-cd)pyrene	120	J 250	120	ug/Kg	1	12/12/19	WB	SW8270D
Isophorone	ND	180	100	ug/Kg	1	12/12/19	WB	SW8270D
Naphthalene	ND	250	100	ug/Kg	1	12/12/19	WB	SW8270D
Nitrobenzene	ND	180	130	ug/Kg	1	12/12/19	WB	SW8270D
N-Nitrosodimethylamine	ND	250	100	ug/Kg	1	12/12/19	WB	SW8270D
N-Nitrosodi-n-propylamine	ND	180	120	ug/Kg	1	12/12/19	WB	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
N-Nitrosodiphenylamine	ND	250	140	ug/Kg	1	12/12/19	WB	SW8270D
Pentachloronitrobenzene	ND	250	140	ug/Kg	1	12/12/19	WB	SW8270D
Pentachlorophenol	ND	220	140	ug/Kg	1	12/12/19	WB	SW8270D
Phenanthrene	290	250	100	ug/Kg	1	12/12/19	WB	SW8270D
Phenol	ND	250	120	ug/Kg	1	12/12/19	WB	SW8270D
Pyrene	490	250	130	ug/Kg	1	12/12/19	WB	SW8270D
Pyridine	ND	250	89	ug/Kg	1	12/12/19	WB	SW8270D
<u>QA/QC Surrogates</u>								
% 2,4,6-Tribromophenol	65			%	1	12/12/19	WB	30 - 130 %
% 2-Fluorobiphenyl	64			%	1	12/12/19	WB	30 - 130 %
% 2-Fluorophenol	59			%	1	12/12/19	WB	30 - 130 %
% Nitrobenzene-d5	59			%	1	12/12/19	WB	30 - 130 %
% Phenol-d5	60			%	1	12/12/19	WB	30 - 130 %
% Terphenyl-d14	63			%	1	12/12/19	WB	30 - 130 %
<u>1,4-Dioxane</u>								
1,4-dioxane	ND	73	73	ug/Kg	1	12/13/19	WB	SW8270D (SIM)
<u>QA/QC Surrogates</u>								
% 2-Fluorobiphenyl	41			%	1	12/13/19	WB	30 - 130 %
% Nitrobenzene-d5	55			%	1	12/13/19	WB	30 - 130 %
% Terphenyl-d14	43			%	1	12/13/19	WB	30 - 130 %
Field Extraction	Completed					12/10/19		SW5035A

1

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low J=Estimated Below RL LOD=Limit of Detection MDL=Method Detection Limit1

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

Please be advised that the NY 375 soil criteria for chromium are based on hexavalent chromium and trivalent chromium.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

S - Laboratory solvent, contamination is possible.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

December 18, 2019

Reviewed and Released by: Greg Lawrence, Assistant Lab Director



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823



Analysis Report

December 18, 2019

FOR: Attn: Mr. Charles B. Sosik, P.G.
Environmental Business Consultants
1808 Middle Country Rd
Ridge NY 11961-2406

Sample Information

Matrix: SOIL
Location Code: EBC
Rush Request: 72 Hour
P.O.#:

Custody Information

Collected by: TB
Received by: CP
Analyzed by: see "By" below

Date	Time
12/10/19	15:20
12/11/19	16:00

Laboratory Data

SDG ID: GCE85356
Phoenix ID: CE85374

Project ID: 26-22 4TH ST QUEENS
Client ID: 19B2 (8-10)

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Silver	ND	0.34	0.34	mg/Kg	1	12/13/19	TH	SW6010D
Aluminum	17300	34	6.8	mg/Kg	10	12/13/19	EK	SW6010D
Arsenic	1.44	0.68	0.68	mg/Kg	1	12/13/19	TH	SW6010D
Barium	195	0.7	0.34	mg/Kg	1	12/13/19	TH	SW6010D
Beryllium	0.54	0.27	0.14	mg/Kg	1	12/13/19	TH	SW6010D
Calcium	2180	34	31	mg/Kg	10	12/13/19	EK	SW6010D
Cadmium	ND	0.34	0.34	mg/Kg	1	12/13/19	TH	SW6010D
Cobalt	2.05	0.34	0.34	mg/Kg	1	12/13/19	TH	SW6010D
Chromium	40.7	0.34	0.34	mg/Kg	1	12/13/19	TH	SW6010D
Copper	7.1	0.7	0.34	mg/kg	1	12/13/19	TH	SW6010D
Iron	22000	34	34	mg/Kg	10	12/13/19	EK	SW6010D
Mercury	ND	0.07	0.04	mg/Kg	5	12/12/19	RS	SW7471B
Potassium	8070	68	26	mg/Kg	10	12/12/19	TH	SW6010D
Magnesium	6310	34	34	mg/Kg	10	12/13/19	EK	SW6010D
Manganese	821	3.4	3.4	mg/Kg	10	12/12/19	TH	SW6010D
Sodium	290	7	2.9	mg/Kg	1	12/13/19	TH	SW6010D
Nickel	25.0	0.34	0.34	mg/Kg	1	12/13/19	TH	SW6010D
Lead	5.8	0.7	0.34	mg/Kg	1	12/13/19	TH	SW6010D
Antimony	ND	3.4	3.4	mg/Kg	1	12/13/19	TH	SW6010D
Selenium	ND	1.4	1.2	mg/Kg	1	12/13/19	TH	SW6010D
Thallium	ND	1.4	1.4	mg/Kg	1	12/13/19	TH	SW6010D
Vanadium	45.6	0.34	0.34	mg/Kg	1	12/13/19	TH	SW6010D
Zinc	69.6	0.7	0.34	mg/Kg	1	12/13/19	TH	SW6010D
Percent Solid	91			%		12/11/19	VT	SW846-%Solid
Extraction for SVOA SIM	Completed					12/12/19	K/R/LA	SW3545A
Soil Extraction for PCB	Completed					12/11/19	MM/E	SW3545A
Soil Extraction for Pesticides	Completed					12/11/19	MM/E	SW3545A
Soil Extraction for SVOA	Completed					12/11/19	AT/B/EE	SW3545A

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Mercury Digestion	Completed					12/12/19	LS/LS	SW7471B
Total Metals Digest	Completed					12/11/19	JJ/AG/BF	SW3050B

Polychlorinated Biphenyls

PCB-1016	ND	72	72	ug/Kg	2	12/12/19	SC	SW8082A
PCB-1221	ND	72	72	ug/Kg	2	12/12/19	SC	SW8082A
PCB-1232	ND	72	72	ug/Kg	2	12/12/19	SC	SW8082A
PCB-1242	ND	72	72	ug/Kg	2	12/12/19	SC	SW8082A
PCB-1248	ND	72	72	ug/Kg	2	12/12/19	SC	SW8082A
PCB-1254	ND	72	72	ug/Kg	2	12/12/19	SC	SW8082A
PCB-1260	ND	72	72	ug/Kg	2	12/12/19	SC	SW8082A
PCB-1262	ND	72	72	ug/Kg	2	12/12/19	SC	SW8082A
PCB-1268	ND	72	72	ug/Kg	2	12/12/19	SC	SW8082A

QA/QC Surrogates

% DCBP	80			%	2	12/12/19	SC	30 - 150 %
% DCBP (Confirmation)	80			%	2	12/12/19	SC	30 - 150 %
% TCMX	72			%	2	12/12/19	SC	30 - 150 %
% TCMX (Confirmation)	71			%	2	12/12/19	SC	30 - 150 %

Pesticides - Soil

4,4' -DDD	ND	2.2	2.2	ug/Kg	2	12/13/19	CG	SW8081B
4,4' -DDE	ND	2.2	2.2	ug/Kg	2	12/13/19	CG	SW8081B
4,4' -DDT	ND	2.2	2.2	ug/Kg	2	12/13/19	CG	SW8081B
a-BHC	ND	7.2	7.2	ug/Kg	2	12/13/19	CG	SW8081B
a-Chlordane	ND	3.6	3.6	ug/Kg	2	12/13/19	CG	SW8081B
Aldrin	ND	3.6	3.6	ug/Kg	2	12/13/19	CG	SW8081B
b-BHC	ND	7.2	7.2	ug/Kg	2	12/13/19	CG	SW8081B
Chlordane	ND	36	36	ug/Kg	2	12/13/19	CG	SW8081B
d-BHC	ND	7.2	7.2	ug/Kg	2	12/13/19	CG	SW8081B
Dieldrin	ND	3.6	3.6	ug/Kg	2	12/13/19	CG	SW8081B
Endosulfan I	ND	7.2	7.2	ug/Kg	2	12/13/19	CG	SW8081B
Endosulfan II	ND	7.2	7.2	ug/Kg	2	12/13/19	CG	SW8081B
Endosulfan sulfate	ND	7.2	7.2	ug/Kg	2	12/13/19	CG	SW8081B
Endrin	ND	7.2	7.2	ug/Kg	2	12/13/19	CG	SW8081B
Endrin aldehyde	ND	7.2	7.2	ug/Kg	2	12/13/19	CG	SW8081B
Endrin ketone	ND	7.2	7.2	ug/Kg	2	12/13/19	CG	SW8081B
g-BHC	ND	1.4	1.4	ug/Kg	2	12/13/19	CG	SW8081B
g-Chlordane	ND	3.6	3.6	ug/Kg	2	12/13/19	CG	SW8081B
Heptachlor	ND	7.2	7.2	ug/Kg	2	12/13/19	CG	SW8081B
Heptachlor epoxide	ND	7.2	7.2	ug/Kg	2	12/13/19	CG	SW8081B
Methoxychlor	ND	36	36	ug/Kg	2	12/13/19	CG	SW8081B
Toxaphene	ND	140	140	ug/Kg	2	12/13/19	CG	SW8081B

QA/QC Surrogates

% DCBP	63			%	2	12/13/19	CG	30 - 150 %
% DCBP (Confirmation)	74			%	2	12/13/19	CG	30 - 150 %
% TCMX	60			%	2	12/13/19	CG	30 - 150 %
% TCMX (Confirmation)	60			%	2	12/13/19	CG	30 - 150 %

Volatiles

1,1,1,2-Tetrachloroethane	ND	12	2.4	ug/Kg	1	12/12/19	JLI	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
1,1,1-Trichloroethane	ND	12	1.2	ug/Kg	1	12/12/19	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	12	2.4	ug/Kg	1	12/12/19	JLI	SW8260C
1,1,2-Trichloroethane	ND	12	2.4	ug/Kg	1	12/12/19	JLI	SW8260C
1,1-Dichloroethane	ND	12	2.4	ug/Kg	1	12/12/19	JLI	SW8260C
1,1-Dichloroethene	ND	12	1.2	ug/Kg	1	12/12/19	JLI	SW8260C
1,1-Dichloropropene	ND	12	1.2	ug/Kg	1	12/12/19	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	12	2.4	ug/Kg	1	12/12/19	JLI	SW8260C
1,2,3-Trichloropropane	ND	12	1.2	ug/Kg	1	12/12/19	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	12	2.4	ug/Kg	1	12/12/19	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	12	1.2	ug/Kg	1	12/12/19	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	12	2.4	ug/Kg	1	12/12/19	JLI	SW8260C
1,2-Dibromoethane	ND	12	1.2	ug/Kg	1	12/12/19	JLI	SW8260C
1,2-Dichlorobenzene	ND	12	1.2	ug/Kg	1	12/12/19	JLI	SW8260C
1,2-Dichloroethane	ND	12	1.2	ug/Kg	1	12/12/19	JLI	SW8260C
1,2-Dichloropropane	ND	12	2.4	ug/Kg	1	12/12/19	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	12	1.2	ug/Kg	1	12/12/19	JLI	SW8260C
1,3-Dichlorobenzene	ND	12	1.2	ug/Kg	1	12/12/19	JLI	SW8260C
1,3-Dichloropropane	ND	12	2.4	ug/Kg	1	12/12/19	JLI	SW8260C
1,4-Dichlorobenzene	ND	12	1.2	ug/Kg	1	12/12/19	JLI	SW8260C
2,2-Dichloropropane	ND	12	1.2	ug/Kg	1	12/12/19	JLI	SW8260C
2-Chlorotoluene	ND	12	2.4	ug/Kg	1	12/12/19	JLI	SW8260C
2-Hexanone	ND	61	12	ug/Kg	1	12/12/19	JLI	SW8260C
2-Isopropyltoluene	ND	12	1.2	ug/Kg	1	12/12/19	JLI	SW8260C
4-Chlorotoluene	ND	12	1.2	ug/Kg	1	12/12/19	JLI	SW8260C
4-Methyl-2-pentanone	ND	61	12	ug/Kg	1	12/12/19	JLI	SW8260C
Acetone	ND	50	12	ug/Kg	1	12/12/19	JLI	SW8260C
Acrylonitrile	ND	24	2.4	ug/Kg	1	12/12/19	JLI	SW8260C
Benzene	ND	12	1.2	ug/Kg	1	12/12/19	JLI	SW8260C
Bromobenzene	ND	12	1.2	ug/Kg	1	12/12/19	JLI	SW8260C
Bromochloromethane	ND	12	1.2	ug/Kg	1	12/12/19	JLI	SW8260C
Bromodichloromethane	ND	12	2.4	ug/Kg	1	12/12/19	JLI	SW8260C
Bromoform	ND	12	2.4	ug/Kg	1	12/12/19	JLI	SW8260C
Bromomethane	ND	12	4.9	ug/Kg	1	12/12/19	JLI	SW8260C
Carbon Disulfide	ND	12	2.4	ug/Kg	1	12/12/19	JLI	SW8260C
Carbon tetrachloride	ND	12	2.4	ug/Kg	1	12/12/19	JLI	SW8260C
Chlorobenzene	ND	12	1.2	ug/Kg	1	12/12/19	JLI	SW8260C
Chloroethane	ND	12	1.2	ug/Kg	1	12/12/19	JLI	SW8260C
Chloroform	ND	12	1.2	ug/Kg	1	12/12/19	JLI	SW8260C
Chloromethane	ND	12	2.4	ug/Kg	1	12/12/19	JLI	SW8260C
cis-1,2-Dichloroethene	ND	12	1.2	ug/Kg	1	12/12/19	JLI	SW8260C
cis-1,3-Dichloropropene	ND	12	1.2	ug/Kg	1	12/12/19	JLI	SW8260C
Dibromochloromethane	ND	12	2.4	ug/Kg	1	12/12/19	JLI	SW8260C
Dibromomethane	ND	12	2.4	ug/Kg	1	12/12/19	JLI	SW8260C
Dichlorodifluoromethane	ND	12	1.2	ug/Kg	1	12/12/19	JLI	SW8260C
Ethylbenzene	ND	12	1.2	ug/Kg	1	12/12/19	JLI	SW8260C
Hexachlorobutadiene	ND	12	1.2	ug/Kg	1	12/12/19	JLI	SW8260C
Isopropylbenzene	ND	12	1.2	ug/Kg	1	12/12/19	JLI	SW8260C
m&p-Xylene	ND	12	2.4	ug/Kg	1	12/12/19	JLI	SW8260C
Methyl Ethyl Ketone	ND	73	12	ug/Kg	1	12/12/19	JLI	SW8260C

1

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Methyl t-butyl ether (MTBE)	ND	24	2.4	ug/Kg	1	12/12/19	JLI	SW8260C
Methylene chloride	ND	12	12	ug/Kg	1	12/12/19	JLI	SW8260C
Naphthalene	ND	12	2.4	ug/Kg	1	12/12/19	JLI	SW8260C
n-Butylbenzene	ND	12	1.2	ug/Kg	1	12/12/19	JLI	SW8260C
n-Propylbenzene	ND	12	2.4	ug/Kg	1	12/12/19	JLI	SW8260C
o-Xylene	ND	12	2.4	ug/Kg	1	12/12/19	JLI	SW8260C
p-Isopropyltoluene	ND	12	1.2	ug/Kg	1	12/12/19	JLI	SW8260C
sec-Butylbenzene	ND	12	1.2	ug/Kg	1	12/12/19	JLI	SW8260C
Styrene	ND	12	1.2	ug/Kg	1	12/12/19	JLI	SW8260C
tert-Butylbenzene	ND	12	1.2	ug/Kg	1	12/12/19	JLI	SW8260C
Tetrachloroethene	150	120	61	ug/Kg	50	12/13/19	JLI	SW8260C
Tetrahydrofuran (THF)	ND	24	6.1	ug/Kg	1	12/12/19	JLI	SW8260C
Toluene	ND	12	1.2	ug/Kg	1	12/12/19	JLI	SW8260C
trans-1,2-Dichloroethene	ND	12	1.2	ug/Kg	1	12/12/19	JLI	SW8260C
trans-1,3-Dichloropropene	ND	12	1.2	ug/Kg	1	12/12/19	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	24	6.1	ug/Kg	1	12/12/19	JLI	SW8260C
Trichloroethene	ND	12	1.2	ug/Kg	1	12/12/19	JLI	SW8260C
Trichlorofluoromethane	ND	12	2.4	ug/Kg	1	12/12/19	JLI	SW8260C
Trichlorotrifluoroethane	ND	12	1.2	ug/Kg	1	12/12/19	JLI	SW8260C
Vinyl chloride	ND	12	1.2	ug/Kg	1	12/12/19	JLI	SW8260C
<u>QA/QC Surrogates</u>								
% 1,2-dichlorobenzene-d4	94			%	1	12/12/19	JLI	70 - 130 %
% Bromofluorobenzene	86			%	1	12/12/19	JLI	70 - 130 %
% Dibromofluoromethane	95			%	1	12/12/19	JLI	70 - 130 %
% Toluene-d8	92			%	1	12/12/19	JLI	70 - 130 %
% 1,2-dichlorobenzene-d4 (50x)	96			%	50	12/13/19	JLI	70 - 130 %
% Bromofluorobenzene (50x)	95			%	50	12/13/19	JLI	70 - 130 %
% Dibromofluoromethane (50x)	92			%	50	12/13/19	JLI	70 - 130 %
% Toluene-d8 (50x)	93			%	50	12/13/19	JLI	70 - 130 %
<u>Volatiles</u>								
1,1,1,2-Tetrachloroethane	ND	49	2.4	ug/Kg	1	12/12/19	JLI	SW8260C
Acrolein	ND	12	2.4	ug/Kg	1	12/12/19	JLI	SW8260C
Acrylonitrile	ND	49	1.2	ug/Kg	1	12/12/19	JLI	SW8260C
Tert-butyl alcohol	ND	240	49	ug/Kg	1	12/12/19	JLI	SW8260C
<u>Semivolatiles</u>								
1,2,4,5-Tetrachlorobenzene	ND	250	120	ug/Kg	1	12/12/19	WB	SW8270D
1,2,4-Trichlorobenzene	ND	250	110	ug/Kg	1	12/12/19	WB	SW8270D
1,2-Dichlorobenzene	ND	250	100	ug/Kg	1	12/12/19	WB	SW8270D
1,2-Diphenylhydrazine	ND	250	120	ug/Kg	1	12/12/19	WB	SW8270D
1,3-Dichlorobenzene	ND	250	110	ug/Kg	1	12/12/19	WB	SW8270D
1,4-Dichlorobenzene	ND	250	110	ug/Kg	1	12/12/19	WB	SW8270D
2,4,5-Trichlorophenol	ND	250	190	ug/Kg	1	12/12/19	WB	SW8270D
2,4,6-Trichlorophenol	ND	180	110	ug/Kg	1	12/12/19	WB	SW8270D
2,4-Dichlorophenol	ND	180	120	ug/Kg	1	12/12/19	WB	SW8270D
2,4-Dimethylphenol	ND	250	88	ug/Kg	1	12/12/19	WB	SW8270D
2,4-Dinitrophenol	ND	250	250	ug/Kg	1	12/12/19	WB	SW8270D
2,4-Dinitrotoluene	ND	180	140	ug/Kg	1	12/12/19	WB	SW8270D
2,6-Dinitrotoluene	ND	180	110	ug/Kg	1	12/12/19	WB	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
2-Chloronaphthalene	ND	250	100	ug/Kg	1	12/12/19	WB	SW8270D
2-Chlorophenol	ND	250	100	ug/Kg	1	12/12/19	WB	SW8270D
2-Methylnaphthalene	ND	250	110	ug/Kg	1	12/12/19	WB	SW8270D
2-Methylphenol (o-cresol)	ND	250	170	ug/Kg	1	12/12/19	WB	SW8270D
2-Nitroaniline	ND	250	250	ug/Kg	1	12/12/19	WB	SW8270D
2-Nitrophenol	ND	250	230	ug/Kg	1	12/12/19	WB	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	250	140	ug/Kg	1	12/12/19	WB	SW8270D
3,3'-Dichlorobenzidine	ND	180	170	ug/Kg	1	12/12/19	WB	SW8270D
3-Nitroaniline	ND	350	710	ug/Kg	1	12/12/19	WB	SW8270D
4,6-Dinitro-2-methylphenol	ND	210	71	ug/Kg	1	12/12/19	WB	SW8270D
4-Bromophenyl phenyl ether	ND	250	100	ug/Kg	1	12/12/19	WB	SW8270D
4-Chloro-3-methylphenol	ND	250	120	ug/Kg	1	12/12/19	WB	SW8270D
4-Chloroaniline	ND	280	170	ug/Kg	1	12/12/19	WB	SW8270D
4-Chlorophenyl phenyl ether	ND	250	120	ug/Kg	1	12/12/19	WB	SW8270D
4-Nitroaniline	ND	350	120	ug/Kg	1	12/12/19	WB	SW8270D
4-Nitrophenol	ND	350	160	ug/Kg	1	12/12/19	WB	SW8270D
Acenaphthene	ND	250	110	ug/Kg	1	12/12/19	WB	SW8270D
Acenaphthylene	ND	250	99	ug/Kg	1	12/12/19	WB	SW8270D
Acetophenone	ND	250	110	ug/Kg	1	12/12/19	WB	SW8270D
Aniline	ND	280	280	ug/Kg	1	12/12/19	WB	SW8270D
Anthracene	ND	250	120	ug/Kg	1	12/12/19	WB	SW8270D
Benz(a)anthracene	ND	250	120	ug/Kg	1	12/12/19	WB	SW8270D
Benzidine	ND	350	210	ug/Kg	1	12/12/19	WB	SW8270D
Benzo(a)pyrene	ND	180	120	ug/Kg	1	12/12/19	WB	SW8270D
Benzo(b)fluoranthene	ND	250	120	ug/Kg	1	12/12/19	WB	SW8270D
Benzo(ghi)perylene	ND	250	120	ug/Kg	1	12/12/19	WB	SW8270D
Benzo(k)fluoranthene	ND	250	120	ug/Kg	1	12/12/19	WB	SW8270D
Benzoic acid	ND	1800	710	ug/Kg	1	12/12/19	WB	SW8270D
Benzyl butyl phthalate	ND	250	92	ug/Kg	1	12/12/19	WB	SW8270D
Bis(2-chloroethoxy)methane	ND	250	98	ug/Kg	1	12/12/19	WB	SW8270D
Bis(2-chloroethyl)ether	ND	180	96	ug/Kg	1	12/12/19	WB	SW8270D
Bis(2-chloroisopropyl)ether	ND	250	99	ug/Kg	1	12/12/19	WB	SW8270D
Bis(2-ethylhexyl)phthalate	ND	250	100	ug/Kg	1	12/12/19	WB	SW8270D
Carbazole	ND	180	140	ug/Kg	1	12/12/19	WB	SW8270D
Chrysene	ND	250	120	ug/Kg	1	12/12/19	WB	SW8270D
Dibenz(a,h)anthracene	ND	180	120	ug/Kg	1	12/12/19	WB	SW8270D
Dibenzofuran	ND	250	100	ug/Kg	1	12/12/19	WB	SW8270D
Diethyl phthalate	ND	250	110	ug/Kg	1	12/12/19	WB	SW8270D
Dimethylphthalate	ND	250	110	ug/Kg	1	12/12/19	WB	SW8270D
Di-n-butylphthalate	ND	250	94	ug/Kg	1	12/12/19	WB	SW8270D
Di-n-octylphthalate	ND	250	92	ug/Kg	1	12/12/19	WB	SW8270D
Fluoranthene	ND	250	120	ug/Kg	1	12/12/19	WB	SW8270D
Fluorene	ND	250	120	ug/Kg	1	12/12/19	WB	SW8270D
Hexachlorobenzene	ND	180	100	ug/Kg	1	12/12/19	WB	SW8270D
Hexachlorobutadiene	ND	250	130	ug/Kg	1	12/12/19	WB	SW8270D
Hexachlorocyclopentadiene	ND	250	110	ug/Kg	1	12/12/19	WB	SW8270D
Hexachloroethane	ND	180	110	ug/Kg	1	12/12/19	WB	SW8270D
Indeno(1,2,3-cd)pyrene	ND	250	120	ug/Kg	1	12/12/19	WB	SW8270D
Isophorone	ND	180	99	ug/Kg	1	12/12/19	WB	SW8270D

1

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Naphthalene	ND	250	100	ug/Kg	1	12/12/19	WB	SW8270D
Nitrobenzene	ND	180	120	ug/Kg	1	12/12/19	WB	SW8270D
N-Nitrosodimethylamine	ND	250	100	ug/Kg	1	12/12/19	WB	SW8270D
N-Nitrosodi-n-propylamine	ND	180	120	ug/Kg	1	12/12/19	WB	SW8270D
N-Nitrosodiphenylamine	ND	250	140	ug/Kg	1	12/12/19	WB	SW8270D
Pentachloronitrobenzene	ND	250	130	ug/Kg	1	12/12/19	WB	SW8270D
Pentachlorophenol	ND	210	130	ug/Kg	1	12/12/19	WB	SW8270D
Phenanthrene	ND	250	100	ug/Kg	1	12/12/19	WB	SW8270D
Phenol	ND	250	110	ug/Kg	1	12/12/19	WB	SW8270D
Pyrene	ND	250	120	ug/Kg	1	12/12/19	WB	SW8270D
Pyridine	ND	250	87	ug/Kg	1	12/12/19	WB	SW8270D
<u>QA/QC Surrogates</u>								
% 2,4,6-Tribromophenol	67			%	1	12/12/19	WB	30 - 130 %
% 2-Fluorobiphenyl	62			%	1	12/12/19	WB	30 - 130 %
% 2-Fluorophenol	68			%	1	12/12/19	WB	30 - 130 %
% Nitrobenzene-d5	65			%	1	12/12/19	WB	30 - 130 %
% Phenol-d5	70			%	1	12/12/19	WB	30 - 130 %
% Terphenyl-d14	63			%	1	12/12/19	WB	30 - 130 %
<u>1,4-Dioxane</u>								
1,4-dioxane	ND	73	73	ug/Kg	1	12/13/19	WB	SW8270D (SIM)
<u>QA/QC Surrogates</u>								
% 2-Fluorobiphenyl	34			%	1	12/13/19	WB	30 - 130 %
% Nitrobenzene-d5	41			%	1	12/13/19	WB	30 - 130 %
% Terphenyl-d14	41			%	1	12/13/19	WB	30 - 130 %
Field Extraction	Completed					12/10/19		SW5035A

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit1

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

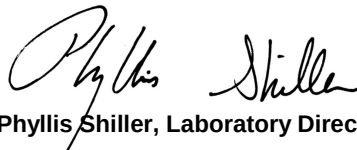
Please be advised that the NY 375 soil criteria for chromium are based on hexavalent chromium and trivalent chromium.

Volatile Comment:

To achieve client's objectives, where the lowest calibration standard or LOD justifies lowering the RL/PQL, the RL/PQL of some compounds have been lowered to meet criteria.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

December 18, 2019

Reviewed and Released by: Greg Lawrence, Assistant Lab Director



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823



Analysis Report

December 18, 2019

FOR: Attn: Mr. Charles B. Sosik, P.G.
Environmental Business Consultants
1808 Middle Country Rd
Ridge NY 11961-2406

Sample Information

Matrix: SOIL
Location Code: EBC
Rush Request: 72 Hour
P.O.#:

Custody Information

Collected by: TB
Received by: CP
Analyzed by: see "By" below

Date	Time
12/10/19	15:30
12/11/19	16:00

Laboratory Data

SDG ID: GCE85356
Phoenix ID: CE85375

Project ID: 26-22 4TH ST QUEENS
Client ID: 19B1 (0-2)

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Silver	ND	0.33	0.33	mg/Kg	1	12/13/19	TH	SW6010D
Aluminum	12500	33	6.7	mg/Kg	10	12/13/19	EK	SW6010D
Arsenic	3.91	0.67	0.67	mg/Kg	1	12/13/19	TH	SW6010D
Barium	106	0.7	0.33	mg/Kg	1	12/13/19	TH	SW6010D
Beryllium	0.60	0.27	0.13	mg/Kg	1	12/13/19	TH	SW6010D
Calcium	4400	33	31	mg/Kg	10	12/13/19	EK	SW6010D
Cadmium	0.40	0.33	0.33	mg/Kg	1	12/13/19	TH	SW6010D
Cobalt	6.06	0.33	0.33	mg/Kg	1	12/13/19	TH	SW6010D
Chromium	17.6	0.33	0.33	mg/Kg	1	12/13/19	TH	SW6010D
Copper	20.2	0.7	0.33	mg/kg	1	12/13/19	TH	SW6010D
Iron	17900	33	33	mg/Kg	10	12/13/19	EK	SW6010D
Mercury	0.43	0.07	0.04	mg/Kg	5	12/12/19	RS	SW7471B
Potassium	1370	7	2.6	mg/Kg	1	12/13/19	TH	SW6010D
Magnesium	3810	33	33	mg/Kg	10	12/13/19	EK	SW6010D
Manganese	449	3.3	3.3	mg/Kg	10	12/12/19	TH	SW6010D
Sodium	449	7	2.9	mg/Kg	1	12/13/19	TH	SW6010D
Nickel	12.7	0.33	0.33	mg/Kg	1	12/13/19	TH	SW6010D
Lead	56.0	0.7	0.33	mg/Kg	1	12/13/19	TH	SW6010D
Antimony	ND	3.3	3.3	mg/Kg	1	12/13/19	TH	SW6010D
Selenium	ND	1.3	1.1	mg/Kg	1	12/13/19	TH	SW6010D
Thallium	ND	1.3	1.3	mg/Kg	1	12/13/19	EK	SW6010D
Vanadium	29.9	0.33	0.33	mg/Kg	1	12/13/19	TH	SW6010D
Zinc	64.4	0.7	0.33	mg/Kg	1	12/13/19	TH	SW6010D
Percent Solid	89			%		12/11/19	VT	SW846-%Solid
Extraction for SVOA SIM	Completed					12/12/19	K/R/LA	SW3545A
Soil Extraction for PCB	Completed					12/11/19	MM/E	SW3545A
Soil Extraction for Pesticides	Completed					12/11/19	MM/E	SW3545A
Soil Extraction for SVOA	Completed					12/11/19	AT/B/EE	SW3545A

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Mercury Digestion	Completed					12/12/19	LS/LS	SW7471B
Total Metals Digest	Completed					12/11/19	JJ/AG/BF	SW3050B

Polychlorinated Biphenyls

PCB-1016	ND	75	75	ug/Kg	2	12/12/19	SC	SW8082A
PCB-1221	ND	75	75	ug/Kg	2	12/12/19	SC	SW8082A
PCB-1232	ND	75	75	ug/Kg	2	12/12/19	SC	SW8082A
PCB-1242	ND	75	75	ug/Kg	2	12/12/19	SC	SW8082A
PCB-1248	ND	75	75	ug/Kg	2	12/12/19	SC	SW8082A
PCB-1254	ND	75	75	ug/Kg	2	12/12/19	SC	SW8082A
PCB-1260	ND	75	75	ug/Kg	2	12/12/19	SC	SW8082A
PCB-1262	ND	75	75	ug/Kg	2	12/12/19	SC	SW8082A
PCB-1268	ND	75	75	ug/Kg	2	12/12/19	SC	SW8082A

QA/QC Surrogates

% DCBP	79			%	2	12/12/19	SC	30 - 150 %
% DCBP (Confirmation)	83			%	2	12/12/19	SC	30 - 150 %
% TCMX	74			%	2	12/12/19	SC	30 - 150 %
% TCMX (Confirmation)	73			%	2	12/12/19	SC	30 - 150 %

Pesticides - Soil

4,4' -DDD	ND	2.2	2.2	ug/Kg	2	12/13/19	CG	SW8081B
4,4' -DDE	ND	2.2	2.2	ug/Kg	2	12/13/19	CG	SW8081B
4,4' -DDT	ND	2.2	2.2	ug/Kg	2	12/13/19	CG	SW8081B
a-BHC	ND	7.5	7.5	ug/Kg	2	12/13/19	CG	SW8081B
a-Chlordane	ND	3.7	3.7	ug/Kg	2	12/13/19	CG	SW8081B
Aldrin	ND	3.7	3.7	ug/Kg	2	12/13/19	CG	SW8081B
b-BHC	ND	7.5	7.5	ug/Kg	2	12/13/19	CG	SW8081B
Chlordane	ND	37	37	ug/Kg	2	12/13/19	CG	SW8081B
d-BHC	ND	7.5	7.5	ug/Kg	2	12/13/19	CG	SW8081B
Dieldrin	ND	3.7	3.7	ug/Kg	2	12/13/19	CG	SW8081B
Endosulfan I	ND	7.5	7.5	ug/Kg	2	12/13/19	CG	SW8081B
Endosulfan II	ND	7.5	7.5	ug/Kg	2	12/13/19	CG	SW8081B
Endosulfan sulfate	ND	7.5	7.5	ug/Kg	2	12/13/19	CG	SW8081B
Endrin	ND	7.5	7.5	ug/Kg	2	12/13/19	CG	SW8081B
Endrin aldehyde	ND	7.5	7.5	ug/Kg	2	12/13/19	CG	SW8081B
Endrin ketone	ND	7.5	7.5	ug/Kg	2	12/13/19	CG	SW8081B
g-BHC	ND	1.5	1.5	ug/Kg	2	12/13/19	CG	SW8081B
g-Chlordane	ND	3.7	3.7	ug/Kg	2	12/13/19	CG	SW8081B
Heptachlor	ND	7.5	7.5	ug/Kg	2	12/13/19	CG	SW8081B
Heptachlor epoxide	ND	7.5	7.5	ug/Kg	2	12/13/19	CG	SW8081B
Methoxychlor	ND	37	37	ug/Kg	2	12/13/19	CG	SW8081B
Toxaphene	ND	150	150	ug/Kg	2	12/13/19	CG	SW8081B

QA/QC Surrogates

% DCBP	73			%	2	12/13/19	CG	30 - 150 %
% DCBP (Confirmation)	61			%	2	12/13/19	CG	30 - 150 %
% TCMX	63			%	2	12/13/19	CG	30 - 150 %
% TCMX (Confirmation)	62			%	2	12/13/19	CG	30 - 150 %

Volatiles

1,1,1,2-Tetrachloroethane	ND	3.5	0.71	ug/Kg	1	12/12/19	JLI	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
1,1,1-Trichloroethane	ND	3.5	0.35	ug/Kg	1	12/12/19	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	3.5	0.71	ug/Kg	1	12/12/19	JLI	SW8260C
1,1,2-Trichloroethane	ND	3.5	0.71	ug/Kg	1	12/12/19	JLI	SW8260C
1,1-Dichloroethane	ND	3.5	0.71	ug/Kg	1	12/12/19	JLI	SW8260C
1,1-Dichloroethene	ND	3.5	0.35	ug/Kg	1	12/12/19	JLI	SW8260C
1,1-Dichloropropene	ND	3.5	0.35	ug/Kg	1	12/12/19	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	3.5	0.71	ug/Kg	1	12/12/19	JLI	SW8260C
1,2,3-Trichloropropane	ND	3.5	0.35	ug/Kg	1	12/12/19	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	3.5	0.71	ug/Kg	1	12/12/19	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	3.5	0.35	ug/Kg	1	12/12/19	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	3.5	0.71	ug/Kg	1	12/12/19	JLI	SW8260C
1,2-Dibromoethane	ND	3.5	0.35	ug/Kg	1	12/12/19	JLI	SW8260C
1,2-Dichlorobenzene	ND	3.5	0.35	ug/Kg	1	12/12/19	JLI	SW8260C
1,2-Dichloroethane	ND	3.5	0.35	ug/Kg	1	12/12/19	JLI	SW8260C
1,2-Dichloropropane	ND	3.5	0.71	ug/Kg	1	12/12/19	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	3.5	0.35	ug/Kg	1	12/12/19	JLI	SW8260C
1,3-Dichlorobenzene	ND	3.5	0.35	ug/Kg	1	12/12/19	JLI	SW8260C
1,3-Dichloropropane	ND	3.5	0.71	ug/Kg	1	12/12/19	JLI	SW8260C
1,4-Dichlorobenzene	ND	3.5	0.35	ug/Kg	1	12/12/19	JLI	SW8260C
2,2-Dichloropropane	ND	3.5	0.35	ug/Kg	1	12/12/19	JLI	SW8260C
2-Chlorotoluene	ND	3.5	0.71	ug/Kg	1	12/12/19	JLI	SW8260C
2-Hexanone	ND	18	3.5	ug/Kg	1	12/12/19	JLI	SW8260C
2-Isopropyltoluene	ND	3.5	0.35	ug/Kg	1	12/12/19	JLI	SW8260C
4-Chlorotoluene	ND	3.5	0.35	ug/Kg	1	12/12/19	JLI	SW8260C
4-Methyl-2-pentanone	ND	18	3.5	ug/Kg	1	12/12/19	JLI	SW8260C
Acetone	3.7	JS 18	3.5	ug/Kg	1	12/12/19	JLI	SW8260C
Acrylonitrile	ND	7.1	0.71	ug/Kg	1	12/12/19	JLI	SW8260C
Benzene	ND	3.5	0.35	ug/Kg	1	12/12/19	JLI	SW8260C
Bromobenzene	ND	3.5	0.35	ug/Kg	1	12/12/19	JLI	SW8260C
Bromochloromethane	ND	3.5	0.35	ug/Kg	1	12/12/19	JLI	SW8260C
Bromodichloromethane	ND	3.5	0.71	ug/Kg	1	12/12/19	JLI	SW8260C
Bromoform	ND	3.5	0.71	ug/Kg	1	12/12/19	JLI	SW8260C
Bromomethane	ND	3.5	1.4	ug/Kg	1	12/12/19	JLI	SW8260C
Carbon Disulfide	ND	3.5	0.71	ug/Kg	1	12/12/19	JLI	SW8260C
Carbon tetrachloride	ND	3.5	0.71	ug/Kg	1	12/12/19	JLI	SW8260C
Chlorobenzene	ND	3.5	0.35	ug/Kg	1	12/12/19	JLI	SW8260C
Chloroethane	ND	3.5	0.35	ug/Kg	1	12/12/19	JLI	SW8260C
Chloroform	ND	3.5	0.35	ug/Kg	1	12/12/19	JLI	SW8260C
Chloromethane	ND	3.5	0.71	ug/Kg	1	12/12/19	JLI	SW8260C
cis-1,2-Dichloroethene	ND	3.5	0.35	ug/Kg	1	12/12/19	JLI	SW8260C
cis-1,3-Dichloropropene	ND	3.5	0.35	ug/Kg	1	12/12/19	JLI	SW8260C
Dibromochloromethane	ND	3.5	0.71	ug/Kg	1	12/12/19	JLI	SW8260C
Dibromomethane	ND	3.5	0.71	ug/Kg	1	12/12/19	JLI	SW8260C
Dichlorodifluoromethane	ND	3.5	0.35	ug/Kg	1	12/12/19	JLI	SW8260C
Ethylbenzene	ND	3.5	0.35	ug/Kg	1	12/12/19	JLI	SW8260C
Hexachlorobutadiene	ND	3.5	0.35	ug/Kg	1	12/12/19	JLI	SW8260C
Isopropylbenzene	ND	3.5	0.35	ug/Kg	1	12/12/19	JLI	SW8260C
m&p-Xylene	ND	3.5	0.71	ug/Kg	1	12/12/19	JLI	SW8260C
Methyl Ethyl Ketone	ND	21	3.5	ug/Kg	1	12/12/19	JLI	SW8260C

1

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Methyl t-butyl ether (MTBE)	ND	7.1	0.71	ug/Kg	1	12/12/19	JLI	SW8260C
Methylene chloride	ND	3.5	3.5	ug/Kg	1	12/12/19	JLI	SW8260C
Naphthalene	ND	3.5	0.71	ug/Kg	1	12/12/19	JLI	SW8260C
n-Butylbenzene	ND	3.5	0.35	ug/Kg	1	12/12/19	JLI	SW8260C
n-Propylbenzene	ND	3.5	0.71	ug/Kg	1	12/12/19	JLI	SW8260C
o-Xylene	ND	3.5	0.71	ug/Kg	1	12/12/19	JLI	SW8260C
p-Isopropyltoluene	ND	3.5	0.35	ug/Kg	1	12/12/19	JLI	SW8260C
sec-Butylbenzene	ND	3.5	0.35	ug/Kg	1	12/12/19	JLI	SW8260C
Styrene	ND	3.5	0.35	ug/Kg	1	12/12/19	JLI	SW8260C
tert-Butylbenzene	ND	3.5	0.35	ug/Kg	1	12/12/19	JLI	SW8260C
Tetrachloroethene	1.7	J 3.5	0.71	ug/Kg	1	12/12/19	JLI	SW8260C
Tetrahydrofuran (THF)	ND	7.1	1.8	ug/Kg	1	12/12/19	JLI	SW8260C
Toluene	ND	3.5	0.35	ug/Kg	1	12/12/19	JLI	SW8260C
trans-1,2-Dichloroethene	ND	3.5	0.35	ug/Kg	1	12/12/19	JLI	SW8260C
trans-1,3-Dichloropropene	ND	3.5	0.35	ug/Kg	1	12/12/19	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	7.1	1.8	ug/Kg	1	12/12/19	JLI	SW8260C
Trichloroethene	ND	3.5	0.35	ug/Kg	1	12/12/19	JLI	SW8260C
Trichlorofluoromethane	ND	3.5	0.71	ug/Kg	1	12/12/19	JLI	SW8260C
Trichlorotrifluoroethane	ND	3.5	0.35	ug/Kg	1	12/12/19	JLI	SW8260C
Vinyl chloride	ND	3.5	0.35	ug/Kg	1	12/12/19	JLI	SW8260C
<u>QA/QC Surrogates</u>								
% 1,2-dichlorobenzene-d4	95			%	1	12/12/19	JLI	70 - 130 %
% Bromofluorobenzene	94			%	1	12/12/19	JLI	70 - 130 %
% Dibromofluoromethane	93			%	1	12/12/19	JLI	70 - 130 %
% Toluene-d8	93			%	1	12/12/19	JLI	70 - 130 %
<u>Volatiles</u>								
1,1,1,2-Tetrachloroethane	ND	14	0.71	ug/Kg	1	12/12/19	JLI	SW8260C
Acrolein	ND	3.5	0.71	ug/Kg	1	12/12/19	JLI	SW8260C
Acrylonitrile	ND	14	0.35	ug/Kg	1	12/12/19	JLI	SW8260C
Tert-butyl alcohol	ND	71	14	ug/Kg	1	12/12/19	JLI	SW8260C
<u>Semivolatiles</u>								
1,2,4,5-Tetrachlorobenzene	ND	260	130	ug/Kg	1	12/12/19	WB	SW8270D
1,2,4-Trichlorobenzene	ND	260	110	ug/Kg	1	12/12/19	WB	SW8270D
1,2-Dichlorobenzene	ND	260	100	ug/Kg	1	12/12/19	WB	SW8270D
1,2-Diphenylhydrazine	ND	260	120	ug/Kg	1	12/12/19	WB	SW8270D
1,3-Dichlorobenzene	ND	260	110	ug/Kg	1	12/12/19	WB	SW8270D
1,4-Dichlorobenzene	ND	260	110	ug/Kg	1	12/12/19	WB	SW8270D
2,4,5-Trichlorophenol	ND	260	200	ug/Kg	1	12/12/19	WB	SW8270D
2,4,6-Trichlorophenol	ND	190	120	ug/Kg	1	12/12/19	WB	SW8270D
2,4-Dichlorophenol	ND	190	130	ug/Kg	1	12/12/19	WB	SW8270D
2,4-Dimethylphenol	ND	260	92	ug/Kg	1	12/12/19	WB	SW8270D
2,4-Dinitrophenol	ND	260	260	ug/Kg	1	12/12/19	WB	SW8270D
2,4-Dinitrotoluene	ND	190	150	ug/Kg	1	12/12/19	WB	SW8270D
2,6-Dinitrotoluene	ND	190	120	ug/Kg	1	12/12/19	WB	SW8270D
2-Chloronaphthalene	ND	260	110	ug/Kg	1	12/12/19	WB	SW8270D
2-Chlorophenol	ND	260	110	ug/Kg	1	12/12/19	WB	SW8270D
2-Methylnaphthalene	ND	260	110	ug/Kg	1	12/12/19	WB	SW8270D
2-Methylphenol (o-cresol)	ND	260	170	ug/Kg	1	12/12/19	WB	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
2-Nitroaniline	ND	260	260	ug/Kg	1	12/12/19	WB	SW8270D
2-Nitrophenol	ND	260	240	ug/Kg	1	12/12/19	WB	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	260	150	ug/Kg	1	12/12/19	WB	SW8270D
3,3'-Dichlorobenzidine	ND	190	180	ug/Kg	1	12/12/19	WB	SW8270D
3-Nitroaniline	ND	370	740	ug/Kg	1	12/12/19	WB	SW8270D
4,6-Dinitro-2-methylphenol	ND	220	74	ug/Kg	1	12/12/19	WB	SW8270D
4-Bromophenyl phenyl ether	ND	260	110	ug/Kg	1	12/12/19	WB	SW8270D
4-Chloro-3-methylphenol	ND	260	130	ug/Kg	1	12/12/19	WB	SW8270D
4-Chloroaniline	ND	300	170	ug/Kg	1	12/12/19	WB	SW8270D
4-Chlorophenyl phenyl ether	ND	260	120	ug/Kg	1	12/12/19	WB	SW8270D
4-Nitroaniline	ND	370	120	ug/Kg	1	12/12/19	WB	SW8270D
4-Nitrophenol	ND	370	170	ug/Kg	1	12/12/19	WB	SW8270D
Acenaphthene	ND	260	110	ug/Kg	1	12/12/19	WB	SW8270D
Acenaphthylene	ND	260	100	ug/Kg	1	12/12/19	WB	SW8270D
Acetophenone	ND	260	120	ug/Kg	1	12/12/19	WB	SW8270D
Aniline	ND	300	300	ug/Kg	1	12/12/19	WB	SW8270D
Anthracene	ND	260	120	ug/Kg	1	12/12/19	WB	SW8270D
Benz(a)anthracene	510	260	120	ug/Kg	1	12/12/19	WB	SW8270D
Benzidine	ND	370	220	ug/Kg	1	12/12/19	WB	SW8270D
Benzo(a)pyrene	470	190	120	ug/Kg	1	12/12/19	WB	SW8270D
Benzo(b)fluoranthene	460	260	130	ug/Kg	1	12/12/19	WB	SW8270D
Benzo(ghi)perylene	380	260	120	ug/Kg	1	12/12/19	WB	SW8270D
Benzo(k)fluoranthene	420	260	120	ug/Kg	1	12/12/19	WB	SW8270D
Benzoic acid	ND	1900	740	ug/Kg	1	12/12/19	WB	SW8270D
Benzyl butyl phthalate	ND	260	96	ug/Kg	1	12/12/19	WB	SW8270D
Bis(2-chloroethoxy)methane	ND	260	100	ug/Kg	1	12/12/19	WB	SW8270D
Bis(2-chloroethyl)ether	ND	190	100	ug/Kg	1	12/12/19	WB	SW8270D
Bis(2-chloroisopropyl)ether	ND	260	100	ug/Kg	1	12/12/19	WB	SW8270D
Bis(2-ethylhexyl)phthalate	ND	260	110	ug/Kg	1	12/12/19	WB	SW8270D
Carbazole	ND	190	150	ug/Kg	1	12/12/19	WB	SW8270D
Chrysene	740	260	120	ug/Kg	1	12/12/19	WB	SW8270D
Dibenz(a,h)anthracene	ND	190	120	ug/Kg	1	12/12/19	WB	SW8270D
Dibenzofuran	ND	260	110	ug/Kg	1	12/12/19	WB	SW8270D
Diethyl phthalate	ND	260	120	ug/Kg	1	12/12/19	WB	SW8270D
Dimethylphthalate	ND	260	120	ug/Kg	1	12/12/19	WB	SW8270D
Di-n-butylphthalate	ND	260	99	ug/Kg	1	12/12/19	WB	SW8270D
Di-n-octylphthalate	ND	260	96	ug/Kg	1	12/12/19	WB	SW8270D
Fluoranthene	1200	260	120	ug/Kg	1	12/12/19	WB	SW8270D
Fluorene	ND	260	120	ug/Kg	1	12/12/19	WB	SW8270D
Hexachlorobenzene	ND	190	110	ug/Kg	1	12/12/19	WB	SW8270D
Hexachlorobutadiene	ND	260	130	ug/Kg	1	12/12/19	WB	SW8270D
Hexachlorocyclopentadiene	ND	260	110	ug/Kg	1	12/12/19	WB	SW8270D
Hexachloroethane	ND	190	110	ug/Kg	1	12/12/19	WB	SW8270D
Indeno(1,2,3-cd)pyrene	310	260	120	ug/Kg	1	12/12/19	WB	SW8270D
Isophorone	ND	190	100	ug/Kg	1	12/12/19	WB	SW8270D
Naphthalene	ND	260	110	ug/Kg	1	12/12/19	WB	SW8270D
Nitrobenzene	ND	190	130	ug/Kg	1	12/12/19	WB	SW8270D
N-Nitrosodimethylamine	ND	260	100	ug/Kg	1	12/12/19	WB	SW8270D
N-Nitrosodi-n-propylamine	ND	190	120	ug/Kg	1	12/12/19	WB	SW8270D

1

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
N-Nitrosodiphenylamine	ND	260	140	ug/Kg	1	12/12/19	WB	SW8270D
Pentachloronitrobenzene	ND	260	140	ug/Kg	1	12/12/19	WB	SW8270D
Pentachlorophenol	ND	220	140	ug/Kg	1	12/12/19	WB	SW8270D
Phenanthrene	470	260	110	ug/Kg	1	12/12/19	WB	SW8270D
Phenol	ND	260	120	ug/Kg	1	12/12/19	WB	SW8270D
Pyrene	1100	260	130	ug/Kg	1	12/12/19	WB	SW8270D
Pyridine	ND	260	91	ug/Kg	1	12/12/19	WB	SW8270D
<u>QA/QC Surrogates</u>								
% 2,4,6-Tribromophenol	67			%	1	12/12/19	WB	30 - 130 %
% 2-Fluorobiphenyl	66			%	1	12/12/19	WB	30 - 130 %
% 2-Fluorophenol	62			%	1	12/12/19	WB	30 - 130 %
% Nitrobenzene-d5	62			%	1	12/12/19	WB	30 - 130 %
% Phenol-d5	67			%	1	12/12/19	WB	30 - 130 %
% Terphenyl-d14	65			%	1	12/12/19	WB	30 - 130 %
<u>1,4-Dioxane</u>								
1,4-dioxane	ND	73	73	ug/Kg	1	12/13/19	WB	SW8270D (SIM)
<u>QA/QC Surrogates</u>								
% 2-Fluorobiphenyl	36			%	1	12/13/19	WB	30 - 130 %
% Nitrobenzene-d5	36			%	1	12/13/19	WB	30 - 130 %
% Terphenyl-d14	43			%	1	12/13/19	WB	30 - 130 %
Field Extraction	Completed					12/10/19		SW5035A

1

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low J=Estimated Below RL LOD=Limit of Detection MDL=Method Detection Limit1

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

Please be advised that the NY 375 soil criteria for chromium are based on hexavalent chromium and trivalent chromium.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

S - Laboratory solvent, contamination is possible.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

December 18, 2019

Reviewed and Released by: Greg Lawrence, Assistant Lab Director



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823



Analysis Report

December 18, 2019

FOR: Attn: Mr. Charles B. Sosik, P.G.
Environmental Business Consultants
1808 Middle Country Rd
Ridge NY 11961-2406

Sample Information

Matrix: SOIL
Location Code: EBC
Rush Request: 72 Hour
P.O.#:

Custody Information

Collected by: TB
Received by: CP
Analyzed by: see "By" below

Date

12/10/19
12/11/19

Time

15:32
16:00

Laboratory Data

SDG ID: GCE85356
Phoenix ID: CE85376

Project ID: 26-22 4TH ST QUEENS
Client ID: 19B1 (8-10)

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Silver	ND	0.37	0.37	mg/Kg	1	12/13/19	TH	SW6010D
Aluminum	14900	37	7.4	mg/Kg	10	12/13/19	EK	SW6010D
Arsenic	2.37	0.74	0.74	mg/Kg	1	12/13/19	TH	SW6010D
Barium	54.4	0.7	0.37	mg/Kg	1	12/13/19	TH	SW6010D
Beryllium	0.42	0.30	0.15	mg/Kg	1	12/13/19	TH	SW6010D
Calcium	996	37	34	mg/Kg	10	12/13/19	EK	SW6010D
Cadmium	0.41	0.37	0.37	mg/Kg	1	12/13/19	TH	SW6010D
Cobalt	6.88	0.37	0.37	mg/Kg	1	12/13/19	TH	SW6010D
Chromium	25.3	0.37	0.37	mg/Kg	1	12/13/19	TH	SW6010D
Copper	11.9	0.7	0.37	mg/kg	1	12/13/19	TH	SW6010D
Iron	20500	37	37	mg/Kg	10	12/13/19	EK	SW6010D
Mercury	ND	0.03	0.02	mg/Kg	2	12/12/19	RS	SW7471B
Potassium	918	7	2.9	mg/Kg	1	12/13/19	TH	SW6010D
Magnesium	2930	37	37	mg/Kg	10	12/13/19	EK	SW6010D
Manganese	384	3.7	3.7	mg/Kg	10	12/12/19	TH	SW6010D
Sodium	251	7	3.2	mg/Kg	1	12/13/19	TH	SW6010D
Nickel	13.8	0.37	0.37	mg/Kg	1	12/13/19	TH	SW6010D
Lead	8.9	0.7	0.37	mg/Kg	1	12/13/19	TH	SW6010D
Antimony	ND	3.7	3.7	mg/Kg	1	12/13/19	TH	SW6010D
Selenium	ND	1.5	1.3	mg/Kg	1	12/13/19	TH	SW6010D
Thallium	ND	1.5	1.5	mg/Kg	1	12/13/19	TH	SW6010D
Vanadium	34.0	0.37	0.37	mg/Kg	1	12/13/19	TH	SW6010D
Zinc	47.7	0.7	0.37	mg/Kg	1	12/13/19	TH	SW6010D
Percent Solid	81			%		12/11/19	VT	SW846-%Solid
Extraction for SVOA SIM	Completed					12/12/19	K/R/LA	SW3545A
Soil Extraction for PCB	Completed					12/12/19	MM/L	SW3545A
Soil Extraction for Pesticides	Completed					12/12/19	MM/L	SW3545A
Soil Extraction for SVOA	Completed					12/12/19	K/R/LA	SW3545A

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Mercury Digestion	Completed					12/12/19	LS/LS	SW7471B
Total Metals Digest	Completed					12/11/19	JJ/AG/BF	SW3050B

Polychlorinated Biphenyls

PCB-1016	ND	81	81	ug/Kg	2	12/14/19	SC	SW8082A
PCB-1221	ND	81	81	ug/Kg	2	12/14/19	SC	SW8082A
PCB-1232	ND	81	81	ug/Kg	2	12/14/19	SC	SW8082A
PCB-1242	ND	81	81	ug/Kg	2	12/14/19	SC	SW8082A
PCB-1248	ND	81	81	ug/Kg	2	12/14/19	SC	SW8082A
PCB-1254	ND	81	81	ug/Kg	2	12/14/19	SC	SW8082A
PCB-1260	ND	81	81	ug/Kg	2	12/14/19	SC	SW8082A
PCB-1262	ND	81	81	ug/Kg	2	12/14/19	SC	SW8082A
PCB-1268	ND	81	81	ug/Kg	2	12/14/19	SC	SW8082A

QA/QC Surrogates

% DCBP	64			%	2	12/14/19	SC	30 - 150 %
% DCBP (Confirmation)	70			%	2	12/14/19	SC	30 - 150 %
% TCMX	64			%	2	12/14/19	SC	30 - 150 %
% TCMX (Confirmation)	65			%	2	12/14/19	SC	30 - 150 %

Pesticides - Soil

4,4' -DDD	ND	2.4	2.4	ug/Kg	2	12/13/19	CG	SW8081B
4,4' -DDE	ND	2.4	2.4	ug/Kg	2	12/13/19	CG	SW8081B
4,4' -DDT	ND	2.4	2.4	ug/Kg	2	12/13/19	CG	SW8081B
a-BHC	ND	8.1	8.1	ug/Kg	2	12/13/19	CG	SW8081B
a-Chlordane	ND	4.1	4.1	ug/Kg	2	12/13/19	CG	SW8081B
Aldrin	ND	4.1	4.1	ug/Kg	2	12/13/19	CG	SW8081B
b-BHC	ND	8.1	8.1	ug/Kg	2	12/13/19	CG	SW8081B
Chlordane	ND	41	41	ug/Kg	2	12/13/19	CG	SW8081B
d-BHC	ND	8.1	8.1	ug/Kg	2	12/13/19	CG	SW8081B
Dieldrin	ND	4.1	4.1	ug/Kg	2	12/13/19	CG	SW8081B
Endosulfan I	ND	8.1	8.1	ug/Kg	2	12/13/19	CG	SW8081B
Endosulfan II	ND	8.1	8.1	ug/Kg	2	12/13/19	CG	SW8081B
Endosulfan sulfate	ND	8.1	8.1	ug/Kg	2	12/13/19	CG	SW8081B
Endrin	ND	8.1	8.1	ug/Kg	2	12/13/19	CG	SW8081B
Endrin aldehyde	ND	8.1	8.1	ug/Kg	2	12/13/19	CG	SW8081B
Endrin ketone	ND	8.1	8.1	ug/Kg	2	12/13/19	CG	SW8081B
g-BHC	ND	1.6	1.6	ug/Kg	2	12/13/19	CG	SW8081B
g-Chlordane	ND	4.1	4.1	ug/Kg	2	12/13/19	CG	SW8081B
Heptachlor	ND	8.1	8.1	ug/Kg	2	12/13/19	CG	SW8081B
Heptachlor epoxide	ND	8.1	8.1	ug/Kg	2	12/13/19	CG	SW8081B
Methoxychlor	ND	41	41	ug/Kg	2	12/13/19	CG	SW8081B
Toxaphene	ND	160	160	ug/Kg	2	12/13/19	CG	SW8081B

QA/QC Surrogates

% DCBP	60			%	2	12/13/19	CG	30 - 150 %
% DCBP (Confirmation)	67			%	2	12/13/19	CG	30 - 150 %
% TCMX	51			%	2	12/13/19	CG	30 - 150 %
% TCMX (Confirmation)	51			%	2	12/13/19	CG	30 - 150 %

Volatiles

1,1,1,2-Tetrachloroethane	ND	6.7	1.3	ug/Kg	1	12/12/19	JLI	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
1,1,1-Trichloroethane	ND	6.7	0.67	ug/Kg	1	12/12/19	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	6.7	1.3	ug/Kg	1	12/12/19	JLI	SW8260C
1,1,2-Trichloroethane	ND	6.7	1.3	ug/Kg	1	12/12/19	JLI	SW8260C
1,1-Dichloroethane	ND	6.7	1.3	ug/Kg	1	12/12/19	JLI	SW8260C
1,1-Dichloroethene	ND	6.7	0.67	ug/Kg	1	12/12/19	JLI	SW8260C
1,1-Dichloropropene	ND	6.7	0.67	ug/Kg	1	12/12/19	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	6.7	1.3	ug/Kg	1	12/12/19	JLI	SW8260C
1,2,3-Trichloropropane	ND	6.7	0.67	ug/Kg	1	12/12/19	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	6.7	1.3	ug/Kg	1	12/12/19	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	6.7	0.67	ug/Kg	1	12/12/19	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	6.7	1.3	ug/Kg	1	12/12/19	JLI	SW8260C
1,2-Dibromoethane	ND	6.7	0.67	ug/Kg	1	12/12/19	JLI	SW8260C
1,2-Dichlorobenzene	ND	6.7	0.67	ug/Kg	1	12/12/19	JLI	SW8260C
1,2-Dichloroethane	ND	6.7	0.67	ug/Kg	1	12/12/19	JLI	SW8260C
1,2-Dichloropropane	ND	6.7	1.3	ug/Kg	1	12/12/19	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	6.7	0.67	ug/Kg	1	12/12/19	JLI	SW8260C
1,3-Dichlorobenzene	ND	6.7	0.67	ug/Kg	1	12/12/19	JLI	SW8260C
1,3-Dichloropropane	ND	6.7	1.3	ug/Kg	1	12/12/19	JLI	SW8260C
1,4-Dichlorobenzene	ND	6.7	0.67	ug/Kg	1	12/12/19	JLI	SW8260C
2,2-Dichloropropane	ND	6.7	0.67	ug/Kg	1	12/12/19	JLI	SW8260C
2-Chlorotoluene	ND	6.7	1.3	ug/Kg	1	12/12/19	JLI	SW8260C
2-Hexanone	ND	34	6.7	ug/Kg	1	12/12/19	JLI	SW8260C
2-Isopropyltoluene	ND	6.7	0.67	ug/Kg	1	12/12/19	JLI	SW8260C
4-Chlorotoluene	ND	6.7	0.67	ug/Kg	1	12/12/19	JLI	SW8260C
4-Methyl-2-pentanone	ND	34	6.7	ug/Kg	1	12/12/19	JLI	SW8260C
Acetone	9.1	JS 34	6.7	ug/Kg	1	12/12/19	JLI	SW8260C
Acrylonitrile	ND	13	1.3	ug/Kg	1	12/12/19	JLI	SW8260C
Benzene	ND	6.7	0.67	ug/Kg	1	12/12/19	JLI	SW8260C
Bromobenzene	ND	6.7	0.67	ug/Kg	1	12/12/19	JLI	SW8260C
Bromochloromethane	ND	6.7	0.67	ug/Kg	1	12/12/19	JLI	SW8260C
Bromodichloromethane	ND	6.7	1.3	ug/Kg	1	12/12/19	JLI	SW8260C
Bromoform	ND	6.7	1.3	ug/Kg	1	12/12/19	JLI	SW8260C
Bromomethane	ND	6.7	2.7	ug/Kg	1	12/12/19	JLI	SW8260C
Carbon Disulfide	ND	6.7	1.3	ug/Kg	1	12/12/19	JLI	SW8260C
Carbon tetrachloride	ND	6.7	1.3	ug/Kg	1	12/12/19	JLI	SW8260C
Chlorobenzene	ND	6.7	0.67	ug/Kg	1	12/12/19	JLI	SW8260C
Chloroethane	ND	6.7	0.67	ug/Kg	1	12/12/19	JLI	SW8260C
Chloroform	ND	6.7	0.67	ug/Kg	1	12/12/19	JLI	SW8260C
Chloromethane	ND	6.7	1.3	ug/Kg	1	12/12/19	JLI	SW8260C
cis-1,2-Dichloroethene	ND	6.7	0.67	ug/Kg	1	12/12/19	JLI	SW8260C
cis-1,3-Dichloropropene	ND	6.7	0.67	ug/Kg	1	12/12/19	JLI	SW8260C
Dibromochloromethane	ND	6.7	1.3	ug/Kg	1	12/12/19	JLI	SW8260C
Dibromomethane	ND	6.7	1.3	ug/Kg	1	12/12/19	JLI	SW8260C
Dichlorodifluoromethane	ND	6.7	0.67	ug/Kg	1	12/12/19	JLI	SW8260C
Ethylbenzene	ND	6.7	0.67	ug/Kg	1	12/12/19	JLI	SW8260C
Hexachlorobutadiene	ND	6.7	0.67	ug/Kg	1	12/12/19	JLI	SW8260C
Isopropylbenzene	ND	6.7	0.67	ug/Kg	1	12/12/19	JLI	SW8260C
m&p-Xylene	ND	6.7	1.3	ug/Kg	1	12/12/19	JLI	SW8260C
Methyl Ethyl Ketone	ND	40	6.7	ug/Kg	1	12/12/19	JLI	SW8260C

1

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Methyl t-butyl ether (MTBE)	ND	13	1.3	ug/Kg	1	12/12/19	JLI	SW8260C
Methylene chloride	ND	6.7	6.7	ug/Kg	1	12/12/19	JLI	SW8260C
Naphthalene	ND	6.7	1.3	ug/Kg	1	12/12/19	JLI	SW8260C
n-Butylbenzene	ND	6.7	0.67	ug/Kg	1	12/12/19	JLI	SW8260C
n-Propylbenzene	ND	6.7	1.3	ug/Kg	1	12/12/19	JLI	SW8260C
o-Xylene	ND	6.7	1.3	ug/Kg	1	12/12/19	JLI	SW8260C
p-Isopropyltoluene	ND	6.7	0.67	ug/Kg	1	12/12/19	JLI	SW8260C
sec-Butylbenzene	ND	6.7	0.67	ug/Kg	1	12/12/19	JLI	SW8260C
Styrene	ND	6.7	0.67	ug/Kg	1	12/12/19	JLI	SW8260C
tert-Butylbenzene	ND	6.7	0.67	ug/Kg	1	12/12/19	JLI	SW8260C
Tetrachloroethene	ND	6.7	1.3	ug/Kg	1	12/12/19	JLI	SW8260C
Tetrahydrofuran (THF)	ND	13	3.4	ug/Kg	1	12/12/19	JLI	SW8260C
Toluene	ND	6.7	0.67	ug/Kg	1	12/12/19	JLI	SW8260C
trans-1,2-Dichloroethene	ND	6.7	0.67	ug/Kg	1	12/12/19	JLI	SW8260C
trans-1,3-Dichloropropene	ND	6.7	0.67	ug/Kg	1	12/12/19	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	13	3.4	ug/Kg	1	12/12/19	JLI	SW8260C
Trichloroethene	ND	6.7	0.67	ug/Kg	1	12/12/19	JLI	SW8260C
Trichlorofluoromethane	ND	6.7	1.3	ug/Kg	1	12/12/19	JLI	SW8260C
Trichlorotrifluoroethane	ND	6.7	0.67	ug/Kg	1	12/12/19	JLI	SW8260C
Vinyl chloride	ND	6.7	0.67	ug/Kg	1	12/12/19	JLI	SW8260C
<u>QA/QC Surrogates</u>								
% 1,2-dichlorobenzene-d4	95			%	1	12/12/19	JLI	70 - 130 %
% Bromofluorobenzene	96			%	1	12/12/19	JLI	70 - 130 %
% Dibromofluoromethane	93			%	1	12/12/19	JLI	70 - 130 %
% Toluene-d8	93			%	1	12/12/19	JLI	70 - 130 %
<u>Volatiles</u>								
1,1,1,2-Tetrachloroethane	ND	27	1.3	ug/Kg	1	12/12/19	JLI	SW8260C
Acrolein	ND	6.7	1.3	ug/Kg	1	12/12/19	JLI	SW8260C
Acrylonitrile	ND	27	0.67	ug/Kg	1	12/12/19	JLI	SW8260C
Tert-butyl alcohol	ND	130	27	ug/Kg	1	12/12/19	JLI	SW8260C
<u>Semivolatiles</u>								
1,2,4,5-Tetrachlorobenzene	ND	290	140	ug/Kg	1	12/13/19	WB	SW8270D
1,2,4-Trichlorobenzene	ND	290	120	ug/Kg	1	12/13/19	WB	SW8270D
1,2-Dichlorobenzene	ND	290	120	ug/Kg	1	12/13/19	WB	SW8270D
1,2-Diphenylhydrazine	ND	290	130	ug/Kg	1	12/13/19	WB	SW8270D
1,3-Dichlorobenzene	ND	290	120	ug/Kg	1	12/13/19	WB	SW8270D
1,4-Dichlorobenzene	ND	290	120	ug/Kg	1	12/13/19	WB	SW8270D
2,4,5-Trichlorophenol	ND	290	220	ug/Kg	1	12/13/19	WB	SW8270D
2,4,6-Trichlorophenol	ND	200	130	ug/Kg	1	12/13/19	WB	SW8270D
2,4-Dichlorophenol	ND	200	140	ug/Kg	1	12/13/19	WB	SW8270D
2,4-Dimethylphenol	ND	290	100	ug/Kg	1	12/13/19	WB	SW8270D
2,4-Dinitrophenol	ND	290	290	ug/Kg	1	12/13/19	WB	SW8270D
2,4-Dinitrotoluene	ND	200	160	ug/Kg	1	12/13/19	WB	SW8270D
2,6-Dinitrotoluene	ND	200	130	ug/Kg	1	12/13/19	WB	SW8270D
2-Chloronaphthalene	ND	290	120	ug/Kg	1	12/13/19	WB	SW8270D
2-Chlorophenol	ND	290	120	ug/Kg	1	12/13/19	WB	SW8270D
2-Methylnaphthalene	ND	290	120	ug/Kg	1	12/13/19	WB	SW8270D
2-Methylphenol (o-cresol)	ND	290	190	ug/Kg	1	12/13/19	WB	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
2-Nitroaniline	ND	290	290	ug/Kg	1	12/13/19	WB	SW8270D
2-Nitrophenol	ND	290	260	ug/Kg	1	12/13/19	WB	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	290	160	ug/Kg	1	12/13/19	WB	SW8270D
3,3'-Dichlorobenzidine	ND	200	190	ug/Kg	1	12/13/19	WB	SW8270D
3-Nitroaniline	ND	410	820	ug/Kg	1	12/13/19	WB	SW8270D
4,6-Dinitro-2-methylphenol	ND	250	82	ug/Kg	1	12/13/19	WB	SW8270D
4-Bromophenyl phenyl ether	ND	290	120	ug/Kg	1	12/13/19	WB	SW8270D
4-Chloro-3-methylphenol	ND	290	140	ug/Kg	1	12/13/19	WB	SW8270D
4-Chloroaniline	ND	330	190	ug/Kg	1	12/13/19	WB	SW8270D
4-Chlorophenyl phenyl ether	ND	290	140	ug/Kg	1	12/13/19	WB	SW8270D
4-Nitroaniline	ND	410	140	ug/Kg	1	12/13/19	WB	SW8270D
4-Nitrophenol	ND	410	190	ug/Kg	1	12/13/19	WB	SW8270D
Acenaphthene	ND	290	120	ug/Kg	1	12/13/19	WB	SW8270D
Acenaphthylene	ND	290	110	ug/Kg	1	12/13/19	WB	SW8270D
Acetophenone	ND	290	130	ug/Kg	1	12/13/19	WB	SW8270D
Aniline	ND	330	330	ug/Kg	1	12/13/19	WB	SW8270D
Anthracene	ND	290	130	ug/Kg	1	12/13/19	WB	SW8270D
Benz(a)anthracene	ND	290	140	ug/Kg	1	12/13/19	WB	SW8270D
Benzidine	ND	410	240	ug/Kg	1	12/13/19	WB	SW8270D
Benzo(a)pyrene	ND	200	130	ug/Kg	1	12/13/19	WB	SW8270D
Benzo(b)fluoranthene	ND	290	140	ug/Kg	1	12/13/19	WB	SW8270D
Benzo(ghi)perylene	ND	290	130	ug/Kg	1	12/13/19	WB	SW8270D
Benzo(k)fluoranthene	ND	290	140	ug/Kg	1	12/13/19	WB	SW8270D
Benzoic acid	ND	2000	820	ug/Kg	1	12/13/19	WB	SW8270D
Benzyl butyl phthalate	ND	290	110	ug/Kg	1	12/13/19	WB	SW8270D
Bis(2-chloroethoxy)methane	ND	290	110	ug/Kg	1	12/13/19	WB	SW8270D
Bis(2-chloroethyl)ether	ND	200	110	ug/Kg	1	12/13/19	WB	SW8270D
Bis(2-chloroisopropyl)ether	ND	290	110	ug/Kg	1	12/13/19	WB	SW8270D
Bis(2-ethylhexyl)phthalate	ND	290	120	ug/Kg	1	12/13/19	WB	SW8270D
Carbazole	ND	200	160	ug/Kg	1	12/13/19	WB	SW8270D
Chrysene	ND	290	140	ug/Kg	1	12/13/19	WB	SW8270D
Dibenz(a,h)anthracene	ND	200	130	ug/Kg	1	12/13/19	WB	SW8270D
Dibenzofuran	ND	290	120	ug/Kg	1	12/13/19	WB	SW8270D
Diethyl phthalate	ND	290	130	ug/Kg	1	12/13/19	WB	SW8270D
Dimethylphthalate	ND	290	130	ug/Kg	1	12/13/19	WB	SW8270D
Di-n-butylphthalate	ND	290	110	ug/Kg	1	12/13/19	WB	SW8270D
Di-n-octylphthalate	ND	290	110	ug/Kg	1	12/13/19	WB	SW8270D
Fluoranthene	ND	290	130	ug/Kg	1	12/13/19	WB	SW8270D
Fluorene	ND	290	140	ug/Kg	1	12/13/19	WB	SW8270D
Hexachlorobenzene	ND	200	120	ug/Kg	1	12/13/19	WB	SW8270D
Hexachlorobutadiene	ND	290	150	ug/Kg	1	12/13/19	WB	SW8270D
Hexachlorocyclopentadiene	ND	290	130	ug/Kg	1	12/13/19	WB	SW8270D
Hexachloroethane	ND	200	120	ug/Kg	1	12/13/19	WB	SW8270D
Indeno(1,2,3-cd)pyrene	ND	290	140	ug/Kg	1	12/13/19	WB	SW8270D
Isophorone	ND	200	110	ug/Kg	1	12/13/19	WB	SW8270D
Naphthalene	ND	290	120	ug/Kg	1	12/13/19	WB	SW8270D
Nitrobenzene	ND	200	140	ug/Kg	1	12/13/19	WB	SW8270D
N-Nitrosodimethylamine	ND	290	120	ug/Kg	1	12/13/19	WB	SW8270D
N-Nitrosodi-n-propylamine	ND	200	130	ug/Kg	1	12/13/19	WB	SW8270D

1

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
N-Nitrosodiphenylamine	ND	290	160	ug/Kg	1	12/13/19	WB	SW8270D
Pentachloronitrobenzene	ND	290	150	ug/Kg	1	12/13/19	WB	SW8270D
Pentachlorophenol	ND	250	150	ug/Kg	1	12/13/19	WB	SW8270D
Phenanthrene	ND	290	120	ug/Kg	1	12/13/19	WB	SW8270D
Phenol	ND	290	130	ug/Kg	1	12/13/19	WB	SW8270D
Pyrene	ND	290	140	ug/Kg	1	12/13/19	WB	SW8270D
Pyridine	ND	290	100	ug/Kg	1	12/13/19	WB	SW8270D
<u>QA/QC Surrogates</u>								
% 2,4,6-Tribromophenol	58			%	1	12/13/19	WB	30 - 130 %
% 2-Fluorobiphenyl	31			%	1	12/13/19	WB	30 - 130 %
% 2-Fluorophenol	27			%	1	12/13/19	WB	30 - 130 % 3
% Nitrobenzene-d5	25			%	1	12/13/19	WB	30 - 130 % 3
% Phenol-d5	30			%	1	12/13/19	WB	30 - 130 %
% Terphenyl-d14	61			%	1	12/13/19	WB	30 - 130 %
<u>1,4-Dioxane</u>								
1,4-dioxane	ND	81	81	ug/Kg	1	12/13/19	WB	SW8270D (SIM)
<u>QA/QC Surrogates</u>								
% 2-Fluorobiphenyl	28			%	1	12/13/19	WB	30 - 130 % 3
% Nitrobenzene-d5	47			%	1	12/13/19	WB	30 - 130 %
% Terphenyl-d14	41			%	1	12/13/19	WB	30 - 130 %
Field Extraction	Completed					12/10/19		SW5035A 1

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

3 = This parameter exceeds laboratory specified limits.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low J=Estimated Below RL LOD=Limit of Detection MDL=Method Detection Limit1

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

Please be advised that the NY 375 soil criteria for chromium are based on hexavalent chromium and trivalent chromium.

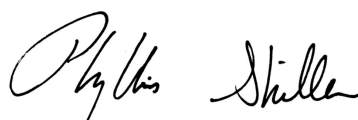
Semi-Volatile Comment:

Poor surrogate recovery was observed for one acid and/or one base surrogate. The other surrogates associated with this sample were within QA/QC criteria. No significant bias suspected.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

S - Laboratory solvent, contamination is possible.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

December 18, 2019

Reviewed and Released by: Greg Lawrence, Assistant Lab Director



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823



Analysis Report

December 18, 2019

FOR: Attn: Mr. Charles B. Sosik, P.G.
Environmental Business Consultants
1808 Middle Country Rd
Ridge NY 11961-2406

Sample Information

Matrix: SOIL
Location Code: EBC
Rush Request: 72 Hour
P.O.#:

Custody Information

Collected by: TB
Received by: CP
Analyzed by: see "By" below

Date

12/10/19

Time

16:00

Laboratory Data

SDG ID: GCE85356
Phoenix ID: CE85377

Project ID: 26-22 4TH ST QUEENS
Client ID: TRIP BLANK HIGH

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
<u>Volatiles</u>								
1,1,1,2-Tetrachloroethane	ND	250	50	ug/Kg	50	12/12/19	JLI	SW8260C
1,1,1-Trichloroethane	ND	250	25	ug/Kg	50	12/12/19	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	250	50	ug/Kg	50	12/12/19	JLI	SW8260C
1,1,2-Trichloroethane	ND	250	50	ug/Kg	50	12/12/19	JLI	SW8260C
1,1-Dichloroethane	ND	250	50	ug/Kg	50	12/12/19	JLI	SW8260C
1,1-Dichloroethene	ND	250	25	ug/Kg	50	12/12/19	JLI	SW8260C
1,1-Dichloropropene	ND	250	25	ug/Kg	50	12/12/19	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	250	50	ug/Kg	50	12/12/19	JLI	SW8260C
1,2,3-Trichloropropane	ND	250	25	ug/Kg	50	12/12/19	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	250	50	ug/Kg	50	12/12/19	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	250	25	ug/Kg	50	12/12/19	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	250	50	ug/Kg	50	12/12/19	JLI	SW8260C
1,2-Dibromoethane	ND	250	25	ug/Kg	50	12/12/19	JLI	SW8260C
1,2-Dichlorobenzene	ND	250	25	ug/Kg	50	12/12/19	JLI	SW8260C
1,2-Dichloroethane	ND	250	25	ug/Kg	50	12/12/19	JLI	SW8260C
1,2-Dichloropropane	ND	250	50	ug/Kg	50	12/12/19	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	250	25	ug/Kg	50	12/12/19	JLI	SW8260C
1,3-Dichlorobenzene	ND	250	25	ug/Kg	50	12/12/19	JLI	SW8260C
1,3-Dichloropropane	ND	250	50	ug/Kg	50	12/12/19	JLI	SW8260C
1,4-Dichlorobenzene	ND	250	25	ug/Kg	50	12/12/19	JLI	SW8260C
2,2-Dichloropropane	ND	250	25	ug/Kg	50	12/12/19	JLI	SW8260C
2-Chlorotoluene	ND	250	50	ug/Kg	50	12/12/19	JLI	SW8260C
2-Hexanone	ND	1300	250	ug/Kg	50	12/12/19	JLI	SW8260C
2-Isopropyltoluene	ND	250	25	ug/Kg	50	12/12/19	JLI	SW8260C
4-Chlorotoluene	ND	250	25	ug/Kg	50	12/12/19	JLI	SW8260C
4-Methyl-2-pentanone	ND	1300	250	ug/Kg	50	12/12/19	JLI	SW8260C

Client ID: TRIP BLANK HIGH

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Acetone	ND	1300	250	ug/Kg	50	12/12/19	JLI	SW8260C
Acrylonitrile	ND	500	50	ug/Kg	50	12/12/19	JLI	SW8260C
Benzene	ND	250	25	ug/Kg	50	12/12/19	JLI	SW8260C
Bromobenzene	ND	250	25	ug/Kg	50	12/12/19	JLI	SW8260C
Bromochloromethane	ND	250	25	ug/Kg	50	12/12/19	JLI	SW8260C
Bromodichloromethane	ND	250	50	ug/Kg	50	12/12/19	JLI	SW8260C
Bromoform	ND	250	50	ug/Kg	50	12/12/19	JLI	SW8260C
Bromomethane	ND	250	100	ug/Kg	50	12/12/19	JLI	SW8260C
Carbon Disulfide	ND	250	50	ug/Kg	50	12/12/19	JLI	SW8260C
Carbon tetrachloride	ND	250	50	ug/Kg	50	12/12/19	JLI	SW8260C
Chlorobenzene	ND	250	25	ug/Kg	50	12/12/19	JLI	SW8260C
Chloroethane	ND	250	25	ug/Kg	50	12/12/19	JLI	SW8260C
Chloroform	ND	250	25	ug/Kg	50	12/12/19	JLI	SW8260C
Chloromethane	ND	250	50	ug/Kg	50	12/12/19	JLI	SW8260C
cis-1,2-Dichloroethene	ND	250	25	ug/Kg	50	12/12/19	JLI	SW8260C
cis-1,3-Dichloropropene	ND	250	25	ug/Kg	50	12/12/19	JLI	SW8260C
Dibromochloromethane	ND	250	50	ug/Kg	50	12/12/19	JLI	SW8260C
Dibromomethane	ND	250	50	ug/Kg	50	12/12/19	JLI	SW8260C
Dichlorodifluoromethane	ND	250	25	ug/Kg	50	12/12/19	JLI	SW8260C
Ethylbenzene	ND	250	25	ug/Kg	50	12/12/19	JLI	SW8260C
Hexachlorobutadiene	ND	250	25	ug/Kg	50	12/12/19	JLI	SW8260C
Isopropylbenzene	ND	250	25	ug/Kg	50	12/12/19	JLI	SW8260C
m&p-Xylene	ND	250	50	ug/Kg	50	12/12/19	JLI	SW8260C
Methyl Ethyl Ketone	ND	1500	250	ug/Kg	50	12/12/19	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	500	50	ug/Kg	50	12/12/19	JLI	SW8260C
Methylene chloride	ND	250	250	ug/Kg	50	12/12/19	JLI	SW8260C
Naphthalene	ND	250	50	ug/Kg	50	12/12/19	JLI	SW8260C
n-Butylbenzene	ND	250	25	ug/Kg	50	12/12/19	JLI	SW8260C
n-Propylbenzene	ND	250	50	ug/Kg	50	12/12/19	JLI	SW8260C
o-Xylene	ND	250	50	ug/Kg	50	12/12/19	JLI	SW8260C
p-Isopropyltoluene	ND	250	25	ug/Kg	50	12/12/19	JLI	SW8260C
sec-Butylbenzene	ND	250	25	ug/Kg	50	12/12/19	JLI	SW8260C
Styrene	ND	250	25	ug/Kg	50	12/12/19	JLI	SW8260C
tert-Butylbenzene	ND	250	25	ug/Kg	50	12/12/19	JLI	SW8260C
Tetrachloroethene	ND	250	50	ug/Kg	50	12/12/19	JLI	SW8260C
Tetrahydrofuran (THF)	ND	500	130	ug/Kg	50	12/12/19	JLI	SW8260C
Toluene	ND	250	25	ug/Kg	50	12/12/19	JLI	SW8260C
trans-1,2-Dichloroethene	ND	250	25	ug/Kg	50	12/12/19	JLI	SW8260C
trans-1,3-Dichloropropene	ND	250	25	ug/Kg	50	12/12/19	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	500	130	ug/Kg	50	12/12/19	JLI	SW8260C
Trichloroethene	ND	250	25	ug/Kg	50	12/12/19	JLI	SW8260C
Trichlorofluoromethane	ND	250	50	ug/Kg	50	12/12/19	JLI	SW8260C
Trichlorotrifluoroethane	ND	250	25	ug/Kg	50	12/12/19	JLI	SW8260C
Vinyl chloride	ND	250	25	ug/Kg	50	12/12/19	JLI	SW8260C
<u>QA/QC Surrogates</u>								
% 1,2-dichlorobenzene-d4 (50x)	95			%	50	12/12/19	JLI	70 - 130 %
% Bromofluorobenzene (50x)	97			%	50	12/12/19	JLI	70 - 130 %
% Dibromofluoromethane (50x)	92			%	50	12/12/19	JLI	70 - 130 %
% Toluene-d8 (50x)	93			%	50	12/12/19	JLI	70 - 130 %

1

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
<u>1,4-dioxane</u>								
1,4-dioxane	ND	3800	2000	ug/kg	50	12/12/19	JLI	SW8260C
<u>QA/QC Surrogates</u>								
% 1,2-dichlorobenzene-d4 (50x)	95			%	50	12/12/19	JLI	70 - 130 %
% Bromofluorobenzene (50x)	97			%	50	12/12/19	JLI	70 - 130 %
% Dibromofluoromethane (50x)	92			%	50	12/12/19	JLI	70 - 130 %
% Toluene-d8 (50x)	93			%	50	12/12/19	JLI	70 - 130 %
<u>Volatiles</u>								
1,1,1,2-Tetrachloroethane	ND	1000	50	ug/Kg	50	12/12/19	JLI	SW8260C
Acrolein	ND	250	50	ug/Kg	50	12/12/19	JLI	SW8260C
Acrylonitrile	ND	1000	25	ug/Kg	50	12/12/19	JLI	SW8260C
Tert-butyl alcohol	ND	5000	1000	ug/Kg	50	12/12/19	JLI	SW8260C
Field Extraction	Completed					12/10/19		SW5035A

1

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit1

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

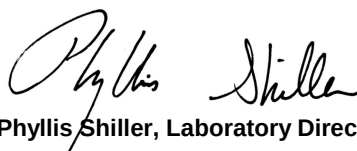
Comments:

TRIP BLANK INCLUDED.

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

December 18, 2019

Reviewed and Released by: Greg Lawrence, Assistant Lab Director



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823



Analysis Report

December 18, 2019

FOR: Attn: Mr. Charles B. Sosik, P.G.
Environmental Business Consultants
1808 Middle Country Rd
Ridge NY 11961-2406

Sample Information

Matrix: SOIL
Location Code: EBC
Rush Request: 72 Hour
P.O.#:

Custody Information

Collected by: TB
Received by: CP
Analyzed by: see "By" below

Date Time

12/10/19
12/11/19 16:00

Laboratory Data

SDG ID: GCE85356
Phoenix ID: CE85378

Project ID: 26-22 4TH ST QUEENS
Client ID: TRIP BLANK LOW

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
<u>Volatiles</u>								
1,1,1,2-Tetrachloroethane	ND	5.0	1.0	ug/Kg	1	12/12/19	JLI	SW8260C
1,1,1-Trichloroethane	ND	5.0	0.50	ug/Kg	1	12/12/19	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	5.0	1.0	ug/Kg	1	12/12/19	JLI	SW8260C
1,1,2-Trichloroethane	ND	5.0	1.0	ug/Kg	1	12/12/19	JLI	SW8260C
1,1-Dichloroethane	ND	5.0	1.0	ug/Kg	1	12/12/19	JLI	SW8260C
1,1-Dichloroethene	ND	5.0	0.50	ug/Kg	1	12/12/19	JLI	SW8260C
1,1-Dichloropropene	ND	5.0	0.50	ug/Kg	1	12/12/19	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	5.0	1.0	ug/Kg	1	12/12/19	JLI	SW8260C
1,2,3-Trichloropropane	ND	5.0	0.50	ug/Kg	1	12/12/19	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	5.0	1.0	ug/Kg	1	12/12/19	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	5.0	0.50	ug/Kg	1	12/12/19	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	5.0	1.0	ug/Kg	1	12/12/19	JLI	SW8260C
1,2-Dibromoethane	ND	5.0	0.50	ug/Kg	1	12/12/19	JLI	SW8260C
1,2-Dichlorobenzene	ND	5.0	0.50	ug/Kg	1	12/12/19	JLI	SW8260C
1,2-Dichloroethane	ND	5.0	0.50	ug/Kg	1	12/12/19	JLI	SW8260C
1,2-Dichloropropane	ND	5.0	1.0	ug/Kg	1	12/12/19	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	5.0	0.50	ug/Kg	1	12/12/19	JLI	SW8260C
1,3-Dichlorobenzene	ND	5.0	0.50	ug/Kg	1	12/12/19	JLI	SW8260C
1,3-Dichloropropane	ND	5.0	1.0	ug/Kg	1	12/12/19	JLI	SW8260C
1,4-Dichlorobenzene	ND	5.0	0.50	ug/Kg	1	12/12/19	JLI	SW8260C
2,2-Dichloropropane	ND	5.0	0.50	ug/Kg	1	12/12/19	JLI	SW8260C
2-Chlorotoluene	ND	5.0	1.0	ug/Kg	1	12/12/19	JLI	SW8260C
2-Hexanone	ND	25	5.0	ug/Kg	1	12/12/19	JLI	SW8260C
2-Isopropyltoluene	ND	5.0	0.50	ug/Kg	1	12/12/19	JLI	SW8260C
4-Chlorotoluene	ND	5.0	0.50	ug/Kg	1	12/12/19	JLI	SW8260C
4-Methyl-2-pentanone	ND	25	5.0	ug/Kg	1	12/12/19	JLI	SW8260C

Client ID: TRIP BLANK LOW

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Acetone	ND	25	5.0	ug/Kg	1	12/12/19	JLI	SW8260C
Acrylonitrile	ND	10	1.0	ug/Kg	1	12/12/19	JLI	SW8260C
Benzene	ND	5.0	0.50	ug/Kg	1	12/12/19	JLI	SW8260C
Bromobenzene	ND	5.0	0.50	ug/Kg	1	12/12/19	JLI	SW8260C
Bromochloromethane	ND	5.0	0.50	ug/Kg	1	12/12/19	JLI	SW8260C
Bromodichloromethane	ND	5.0	1.0	ug/Kg	1	12/12/19	JLI	SW8260C
Bromoform	ND	5.0	1.0	ug/Kg	1	12/12/19	JLI	SW8260C
Bromomethane	ND	5.0	2.0	ug/Kg	1	12/12/19	JLI	SW8260C
Carbon Disulfide	ND	5.0	1.0	ug/Kg	1	12/12/19	JLI	SW8260C
Carbon tetrachloride	ND	5.0	1.0	ug/Kg	1	12/12/19	JLI	SW8260C
Chlorobenzene	ND	5.0	0.50	ug/Kg	1	12/12/19	JLI	SW8260C
Chloroethane	ND	5.0	0.50	ug/Kg	1	12/12/19	JLI	SW8260C
Chloroform	ND	5.0	0.50	ug/Kg	1	12/12/19	JLI	SW8260C
Chloromethane	ND	5.0	1.0	ug/Kg	1	12/12/19	JLI	SW8260C
cis-1,2-Dichloroethene	ND	5.0	0.50	ug/Kg	1	12/12/19	JLI	SW8260C
cis-1,3-Dichloropropene	ND	5.0	0.50	ug/Kg	1	12/12/19	JLI	SW8260C
Dibromochloromethane	ND	5.0	1.0	ug/Kg	1	12/12/19	JLI	SW8260C
Dibromomethane	ND	5.0	1.0	ug/Kg	1	12/12/19	JLI	SW8260C
Dichlorodifluoromethane	ND	5.0	0.50	ug/Kg	1	12/12/19	JLI	SW8260C
Ethylbenzene	ND	5.0	0.50	ug/Kg	1	12/12/19	JLI	SW8260C
Hexachlorobutadiene	ND	5.0	0.50	ug/Kg	1	12/12/19	JLI	SW8260C
Isopropylbenzene	ND	5.0	0.50	ug/Kg	1	12/12/19	JLI	SW8260C
m&p-Xylene	ND	5.0	1.0	ug/Kg	1	12/12/19	JLI	SW8260C
Methyl Ethyl Ketone	ND	30	5.0	ug/Kg	1	12/12/19	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	10	1.0	ug/Kg	1	12/12/19	JLI	SW8260C
Methylene chloride	ND	5.0	5.0	ug/Kg	1	12/12/19	JLI	SW8260C
Naphthalene	ND	5.0	1.0	ug/Kg	1	12/12/19	JLI	SW8260C
n-Butylbenzene	ND	5.0	0.50	ug/Kg	1	12/12/19	JLI	SW8260C
n-Propylbenzene	ND	5.0	1.0	ug/Kg	1	12/12/19	JLI	SW8260C
o-Xylene	ND	5.0	1.0	ug/Kg	1	12/12/19	JLI	SW8260C
p-Isopropyltoluene	ND	5.0	0.50	ug/Kg	1	12/12/19	JLI	SW8260C
sec-Butylbenzene	ND	5.0	0.50	ug/Kg	1	12/12/19	JLI	SW8260C
Styrene	ND	5.0	0.50	ug/Kg	1	12/12/19	JLI	SW8260C
tert-Butylbenzene	ND	5.0	0.50	ug/Kg	1	12/12/19	JLI	SW8260C
Tetrachloroethene	ND	5.0	1.0	ug/Kg	1	12/12/19	JLI	SW8260C
Tetrahydrofuran (THF)	ND	10	2.5	ug/Kg	1	12/12/19	JLI	SW8260C
Toluene	ND	5.0	0.50	ug/Kg	1	12/12/19	JLI	SW8260C
trans-1,2-Dichloroethene	ND	5.0	0.50	ug/Kg	1	12/12/19	JLI	SW8260C
trans-1,3-Dichloropropene	ND	5.0	0.50	ug/Kg	1	12/12/19	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	10	2.5	ug/Kg	1	12/12/19	JLI	SW8260C
Trichloroethene	ND	5.0	0.50	ug/Kg	1	12/12/19	JLI	SW8260C
Trichlorofluoromethane	ND	5.0	1.0	ug/Kg	1	12/12/19	JLI	SW8260C
Trichlorotrifluoroethane	ND	5.0	0.50	ug/Kg	1	12/12/19	JLI	SW8260C
Vinyl chloride	ND	5.0	0.50	ug/Kg	1	12/12/19	JLI	SW8260C
<u>QA/QC Surrogates</u>								
% 1,2-dichlorobenzene-d4	94			%	1	12/12/19	JLI	70 - 130 %
% Bromofluorobenzene	96			%	1	12/12/19	JLI	70 - 130 %
% Dibromofluoromethane	92			%	1	12/12/19	JLI	70 - 130 %
% Toluene-d8	93			%	1	12/12/19	JLI	70 - 130 %

1

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
<u>1,4-dioxane</u>								
1,4-dioxane	ND	75	40	ug/kg	1	12/12/19	JLI	SW8260C
<u>QA/QC Surrogates</u>								
% 1,2-dichlorobenzene-d4	94			%	1	12/12/19	JLI	70 - 130 %
% Bromofluorobenzene	96			%	1	12/12/19	JLI	70 - 130 %
% Dibromofluoromethane	92			%	1	12/12/19	JLI	70 - 130 %
% Toluene-d8	93			%	1	12/12/19	JLI	70 - 130 %
<u>Volatiles</u>								
1,1,1,2-Tetrachloroethane	ND	20	1.0	ug/Kg	1	12/12/19	JLI	SW8260C
Acrolein	ND	5.0	1.0	ug/Kg	1	12/12/19	JLI	SW8260C
Acrylonitrile	ND	20	0.50	ug/Kg	1	12/12/19	JLI	SW8260C
Tert-butyl alcohol	ND	100	20	ug/Kg	1	12/12/19	JLI	SW8260C
Field Extraction	Completed					12/10/19		SW5035A

1

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit1

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

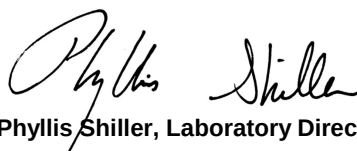
Comments:

TRIP BLANK INCLUDED.

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

December 18, 2019

Reviewed and Released by: Greg Lawrence, Assistant Lab Director

Wednesday, December 18, 2019

Criteria: NY: 375, 375GWP, 375RRS, 375RS

State: NY

Sample Criteria Exceedances Report

GCE85356 - EBC

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units
CE85356	\$8260MADPR	Acetone	NY / 375-6.8 Volatiles / Ground Water Protection	91	26	50	50	ug/Kg
CE85356	\$8260MADPR	Acetone	NY / 375-6.8 Volatiles / Unrestricted Use Soil	91	26	50	50	ug/Kg
CE85356	\$PESTSMDPR	4,4' -DDD	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	5.8	2.2	3.3	3.3	ug/Kg
CE85356	HG-SM	Mercury	NY / 375-6.8 Metals / Unrestricted Use Soil	0.35	0.07	0.18	0.18	mg/Kg
CE85356	PB-SMDP	Lead	NY / 375-6.8 Metals / Unrestricted Use Soil	169	0.7	63	63	mg/Kg
CE85356	ZN-SMDP	Zinc	NY / 375-6.8 Metals / Unrestricted Use Soil	175	0.7	109	109	mg/Kg
CE85357	\$PESTSMDPR	4,4' -DDD	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	8.1	2.4	3.3	3.3	ug/Kg
CE85358	HG-SM	Mercury	NY / 375-6.8 Metals / Ground Water Protection	2.26	0.14	0.73	0.73	mg/Kg
CE85358	HG-SM	Mercury	NY / 375-6.8 Metals / Residential	2.26	0.14	0.81	0.81	mg/Kg
CE85358	HG-SM	Mercury	NY / 375-6.8 Metals / Residential Restricted	2.26	0.14	0.81	0.81	mg/Kg
CE85358	HG-SM	Mercury	NY / 375-6.8 Metals / Unrestricted Use Soil	2.26	0.14	0.18	0.18	mg/Kg
CE85358	PB-SMDP	Lead	NY / 375-6.8 Metals / Unrestricted Use Soil	77.3	0.7	63	63	mg/Kg
CE85360	\$8260MADPR	Acetone	NY / 375-6.8 Volatiles / Ground Water Protection	73	26	50	50	ug/Kg
CE85360	\$8260MADPR	Acetone	NY / 375-6.8 Volatiles / Unrestricted Use Soil	73	26	50	50	ug/Kg
CE85360	CU-SM	Copper	NY / 375-6.8 Metals / Unrestricted Use Soil	85.0	0.7	50	50	mg/kg
CE85360	HG-SM	Mercury	NY / 375-6.8 Metals / Unrestricted Use Soil	0.36	0.14	0.18	0.18	mg/Kg
CE85360	PB-SMDP	Lead	NY / 375-6.8 Metals / Unrestricted Use Soil	343	0.7	63	63	mg/Kg
CE85360	ZN-SMDP	Zinc	NY / 375-6.8 Metals / Unrestricted Use Soil	284	0.7	109	109	mg/Kg
CE85361	BA-SMDP	Barium	NY / 375-6.8 Metals / Residential	407	0.7	350	350	mg/Kg
CE85361	BA-SMDP	Barium	NY / 375-6.8 Metals / Residential Restricted	407	0.7	400	400	mg/Kg
CE85361	BA-SMDP	Barium	NY / 375-6.8 Metals / Unrestricted Use Soil	407	0.7	350	350	mg/Kg
CE85362	\$PCB_SMRDP	PCB-1260	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	110	77	100	100	ug/Kg
CE85362	\$PESTSMDPR	4,4' -DDD	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	17	2.3	3.3	3.3	ug/Kg
CE85362	\$PESTSMDPR	4,4' -DDT	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	6.4	2.3	3.3	3.3	ug/Kg
CE85362	CU-SM	Copper	NY / 375-6.8 Metals / Unrestricted Use Soil	83.1	0.7	50	50	mg/kg
CE85362	HG-SM	Mercury	NY / 375-6.8 Metals / Unrestricted Use Soil	0.31	0.07	0.18	0.18	mg/Kg
CE85362	PB-SMDP	Lead	NY / 375-6.8 Metals / Ground Water Protection	885	7.4	450	450	mg/Kg
CE85362	PB-SMDP	Lead	NY / 375-6.8 Metals / Residential	885	7.4	400	400	mg/Kg
CE85362	PB-SMDP	Lead	NY / 375-6.8 Metals / Residential Restricted	885	7.4	400	400	mg/Kg
CE85362	PB-SMDP	Lead	NY / 375-6.8 Metals / Unrestricted Use Soil	885	7.4	63	63	mg/Kg
CE85362	ZN-SMDP	Zinc	NY / 375-6.8 Metals / Unrestricted Use Soil	261	0.7	109	109	mg/Kg
CE85364	\$8260MADPR	Tetrachloroethene	NY / 375-6.8 Volatiles / Ground Water Protection	1400	230	1300	1300	ug/Kg
CE85364	\$8260MADPR	Tetrachloroethene	NY / 375-6.8 Volatiles / Unrestricted Use Soil	1400	230	1300	1300	ug/Kg
CE85364	\$PCB_SMRDP	PCB-1260	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	130	78	100	100	ug/Kg
CE85364	\$PESTSMDPR	4,4' -DDD	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	6.5	2.4	3.3	3.3	ug/Kg
CE85364	\$PESTSMDPR	4,4' -DDT	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	5.9	2.4	3.3	3.3	ug/Kg
CE85364	AS-SM	Arsenic	NY / 375-6.8 Metals / Unrestricted Use Soil	14.2	0.73	13	13	mg/Kg

Wednesday, December 18, 2019

Criteria: NY: 375, 375GWP, 375RRS, 375RS

State: NY

Sample Criteria Exceedances Report

GCE85356 - EBC

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units
CE85364	CU-SM	Copper	NY / 375-6.8 Metals / Unrestricted Use Soil	73.6	0.7	50	50	mg/kg
CE85364	HG-SM	Mercury	NY / 375-6.8 Metals / Unrestricted Use Soil	0.40	0.08	0.18	0.18	mg/Kg
CE85364	PB-SMDP	Lead	NY / 375-6.8 Metals / Residential	412	0.7	400	400	mg/Kg
CE85364	PB-SMDP	Lead	NY / 375-6.8 Metals / Residential Restricted	412	0.7	400	400	mg/Kg
CE85364	PB-SMDP	Lead	NY / 375-6.8 Metals / Unrestricted Use Soil	412	0.7	63	63	mg/Kg
CE85364	ZN-SMDP	Zinc	NY / 375-6.8 Metals / Unrestricted Use Soil	262	0.7	109	109	mg/Kg
CE85365	CR-SM	Chromium	NY / 375-6.8 Metals / Unrestricted Use Soil	38.5	0.35	30		mg/Kg
CE85365	NI-SM	Nickel	NY / 375-6.8 Metals / Unrestricted Use Soil	31.7	0.35	30	30	mg/Kg
CE85366	PB-SMDP	Lead	NY / 375-6.8 Metals / Unrestricted Use Soil	384	0.7	63	63	mg/Kg
CE85366	ZN-SMDP	Zinc	NY / 375-6.8 Metals / Unrestricted Use Soil	426	7.2	109	109	mg/Kg
CE85369	\$8270SMRDP	Indeno(1,2,3-cd)pyrene	NY / 375-6.8 Semivolatiles / Residential	560	280	500	500	ug/Kg
CE85369	\$8270SMRDP	Indeno(1,2,3-cd)pyrene	NY / 375-6.8 Semivolatiles / Residential Restricted	560	280	500	500	ug/Kg
CE85369	\$8270SMRDP	Indeno(1,2,3-cd)pyrene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	560	280	500	500	ug/Kg
CE85369	BA-SMDP	Barium	NY / 375-6.8 Metals / Residential	401	0.8	350	350	mg/Kg
CE85369	BA-SMDP	Barium	NY / 375-6.8 Metals / Residential Restricted	401	0.8	400	400	mg/Kg
CE85369	BA-SMDP	Barium	NY / 375-6.8 Metals / Unrestricted Use Soil	401	0.8	350	350	mg/Kg
CE85369	CU-SM	Copper	NY / 375-6.8 Metals / Unrestricted Use Soil	97.5	0.8	50	50	mg/kg
CE85369	HG-SM	Mercury	NY / 375-6.8 Metals / Unrestricted Use Soil	0.22	0.08	0.18	0.18	mg/Kg
CE85369	PB-SMDP	Lead	NY / 375-6.8 Metals / Ground Water Protection	655	0.8	450	450	mg/Kg
CE85369	PB-SMDP	Lead	NY / 375-6.8 Metals / Residential	655	0.8	400	400	mg/Kg
CE85369	PB-SMDP	Lead	NY / 375-6.8 Metals / Residential Restricted	655	0.8	400	400	mg/Kg
CE85369	PB-SMDP	Lead	NY / 375-6.8 Metals / Unrestricted Use Soil	655	0.8	63	63	mg/Kg
CE85369	ZN-SMDP	Zinc	NY / 375-6.8 Metals / Unrestricted Use Soil	555	7.8	109	109	mg/Kg
CE85371	\$8260MADPR	Tetrachloroethene	NY / 375-6.8 Volatiles / Ground Water Protection	5600	290	1300	1300	ug/Kg
CE85371	\$8260MADPR	Tetrachloroethene	NY / 375-6.8 Volatiles / Residential	5600	290	5500	5500	ug/Kg
CE85371	\$8260MADPR	Tetrachloroethene	NY / 375-6.8 Volatiles / Unrestricted Use Soil	5600	290	1300	1300	ug/Kg
CE85371	BA-SMDP	Barium	NY / 375-6.8 Metals / Residential	370	0.7	350	350	mg/Kg
CE85371	BA-SMDP	Barium	NY / 375-6.8 Metals / Unrestricted Use Soil	370	0.7	350	350	mg/Kg
CE85371	CU-SM	Copper	NY / 375-6.8 Metals / Unrestricted Use Soil	79.1	0.7	50	50	mg/kg
CE85371	HG-SM	Mercury	NY / 375-6.8 Metals / Ground Water Protection	0.83	0.07	0.73	0.73	mg/Kg
CE85371	HG-SM	Mercury	NY / 375-6.8 Metals / Residential	0.83	0.07	0.81	0.81	mg/Kg
CE85371	HG-SM	Mercury	NY / 375-6.8 Metals / Residential Restricted	0.83	0.07	0.81	0.81	mg/Kg
CE85371	HG-SM	Mercury	NY / 375-6.8 Metals / Unrestricted Use Soil	0.83	0.07	0.18	0.18	mg/Kg
CE85371	PB-SMDP	Lead	NY / 375-6.8 Metals / Ground Water Protection	783	6.9	450	450	mg/Kg
CE85371	PB-SMDP	Lead	NY / 375-6.8 Metals / Residential	783	6.9	400	400	mg/Kg
CE85371	PB-SMDP	Lead	NY / 375-6.8 Metals / Residential Restricted	783	6.9	400	400	mg/Kg
CE85371	PB-SMDP	Lead	NY / 375-6.8 Metals / Unrestricted Use Soil	783	6.9	63	63	mg/Kg
CE85371	ZN-SMDP	Zinc	NY / 375-6.8 Metals / Unrestricted Use Soil	316	0.7	109	109	mg/Kg

Wednesday, December 18, 2019

Criteria: NY: 375, 375GWP, 375RRS, 375RS

State: NY

Sample Criteria Exceedances Report

GCE85356 - EBC

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units
CE85373	\$PESTSMDPR	4,4' -DDT	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	3.6	2.2	3.3	3.3	ug/Kg
CE85373	HG-SM	Mercury	NY / 375-6.8 Metals / Unrestricted Use Soil	0.24	0.07	0.18	0.18	mg/Kg
CE85373	PB-SMDP	Lead	NY / 375-6.8 Metals / Unrestricted Use Soil	93.0	0.7	63	63	mg/Kg
CE85373	ZN-SMDP	Zinc	NY / 375-6.8 Metals / Unrestricted Use Soil	128	0.7	109	109	mg/Kg
CE85374	CR-SM	Chromium	NY / 375-6.8 Metals / Unrestricted Use Soil	40.7	0.34	30		mg/Kg
CE85375	HG-SM	Mercury	NY / 375-6.8 Metals / Unrestricted Use Soil	0.43	0.07	0.18	0.18	mg/Kg

Phoenix Laboratories does not assume responsibility for the data contained in this exceedance report. It is provided as an additional tool to identify requested criteria exceedences. All efforts are made to ensure the accuracy of the data (obtained from appropriate agencies). A lack of exceedence information does not necessarily suggest conformance to the criteria. It is ultimately the site professional's responsibility to determine appropriate compliance.



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823



NY Temperature Narration

December 18, 2019

SDG I.D.: GCE85356

The samples in this delivery group were received at 2.8°C.
(Note acceptance criteria for relevant matrices is above freezing up to 6°C)



NY/NJ CHAIN OF CUSTODY RECORD

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Email: info@phoenixlabs.com Fax (860) 645-0823
Client Services (860) 645-8726

Customer: Environmental Business Consultants
Address: 1808 Middle Country Road
Ridge, NY 11961

Project: 26-22-4th St. Queens
Report to: Environmental Business Consultants
Invoice to: Environmental Business Consultants

Project P.O.:

This section **MUST** be completed with Bottle Quantities.

Sampler's Signature: Tony Balao Date: 12.10.19

Matrix Code:
DW=Drinking Water GW=Ground Water SW=Surface Water WW=Waste Water
RW=Raw Water SE=Sediment SL=Sludge S=Soil SD=Solid W=Wipe
OIL=Oil B=Bulk L=Liquid

Client Sample - Information - Identification

Analysis Request

Specs 8160 2000 + 14-Dioxin
PCBs 10000 6000
TIN METALS 6000

PHOENIX USE ONLY SAMPLE #	Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled
85307	1989(8-10)	S	12.10.19	12:59
85308	1989(12)	S	12.10.19	1:18
85309	19810(2-2)	S	12.10.19	1:57
85310	19810(8-10)	S	12.10.19	2:01
85311	1983(2-2)	S	12.10.19	2:20
85312	1983(8-10)	S	12.10.19	2:23
85313	1982(2-2)	S	12.10.19	2:51
85314	1982(8-10)	S	12.10.19	3:20
85315	1981(2-2)	S	12.10.19	3:30
85316	1981(8-10)	S	12.10.19	3:32
85317	TB HCL/LC	S	-	-

Relinquished by: [Signature] Accepted by: [Signature]
Date: 12-11-19 Date: 12-11-19
Time: 12:30 Time: 10:00

Comments, Special Requirements or Regulations:

85378-TB LL Please run MS/MSD on 1989(8-10)

Turnaround:
☐ 1 Day*
☐ 2 Days*
☐ 3 Days*
☒ 5 Days
☐ 10 Days
☐ Other
*SURCHARGE APPLIES

NJ
☐ Res. Criteria
☐ Non-Res. Criteria
☐ Impact to GW Soil
☐ Cleanup Criteria
☐ GW Criteria

NY
☐ NY 375 GWP
☒ NY375 Unrestricted Use Soil
☒ NY375 Residential Soil
☒ Restricted/Residential Commercial
☐ Industrial

Data Format
☐ Phoenix Std Report
☒ Excel
☒ PDF
☐ GIS/Key
☒ EQUIS
☒ NJ Hazsite EDD
☒ NY EZ EDD (ASP)
☐ Other

Data Package

☐ NJ Reduced Deliv.*
☒ NY Enhanced (ASP B)*
☐ Other

State where samples were collected: NY

Cooler: Yes ☒ No ☐
Coolant: IPK ☒ ICE ☐ No ☐

Temp: 78 Pg 2 of 2
Contact Options:
Fax: ☐
Phone: 631-504-6000
Email: ☒



Monday, December 16, 2019

Attn: Mr. Charles B. Sosik, P.G.
Environmental Business Consultants
1808 Middle Country Rd
Ridge NY 11961-2406

Project ID: 26-22 4TH ST. QUEENS
SDG ID: GCE85314
Sample ID#s: CE85314 - CE85321

This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory. This report is incomplete unless all pages indicated in the pagination at the bottom of the page are included.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Phyllis Shiller".

Phyllis/Shiller

Laboratory Director

NELAC - #NY11301
CT Lab Registration #PH-0618
MA Lab Registration #M-CT007
ME Lab Registration #CT-007
NH Lab Registration #213693-A,B

NJ Lab Registration #CT-003
NY Lab Registration #11301
PA Lab Registration #68-03530
RI Lab Registration #63
UT Lab Registration #CT00007
VT Lab Registration #VT11301



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823



SDG Comments

December 16, 2019

SDG I.D.: GCE85314

Any compound that is not detected above the MDL/LOD is reported as ND on the report and is reported in the electronic deliverables (EDD) as <RL or U at the RL per state and EPA guidance.

Version 1: Analysis results minus raw data.

Version 2: Complete report with raw data.



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823



Sample Id Cross Reference

December 16, 2019

SDG I.D.: GCE85314

Project ID: 26-22 4TH ST. QUEENS

Client Id	Lab Id	Matrix
SS 5	CE85314	AIR
SS 8	CE85315	AIR
SS 1	CE85316	AIR
SS 6	CE85317	AIR
SS 3	CE85318	AIR
SS 2	CE85319	AIR
SS 7	CE85320	AIR
SS 4	CE85321	AIR



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823



Analysis Report

December 16, 2019

FOR: Attn: Mr. Charles B. Sosik, P.G.
Environmental Business Consultants
1808 Middle Country Rd
Ridge NY 11961-2406

Sample Information

Matrix: AIR
Location Code: EBC
Rush Request: 72 Hour
P.O.#:
Canister Id: 23872

Custody Information

Collected by: TB
Received by: CP
Analyzed by: see "By" below

Date Time
12/11/19 9:17
12/11/19 16:00

Laboratory Data

SDG ID: GCE85314
Phoenix ID: CE85314

Project ID: 26-22 4TH ST. QUEENS
Client ID: SS 5

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution
Volatiles (TO15)									
1,1,1,2-Tetrachloroethane	ND	0.146	0.146	ND	1.00	1.00	12/12/19	KCA	1
1,1,1-Trichloroethane	ND	0.183	0.183	ND	1.00	1.00	12/12/19	KCA	1
1,1,2,2-Tetrachloroethane	ND	0.146	0.146	ND	1.00	1.00	12/12/19	KCA	1
1,1,2-Trichloroethane	ND	0.183	0.183	ND	1.00	1.00	12/12/19	KCA	1
1,1-Dichloroethane	ND	0.247	0.247	ND	1.00	1.00	12/12/19	KCA	1
1,1-Dichloroethene	ND	0.051	0.051	ND	0.20	0.20	12/12/19	KCA	1
1,2,4-Trichlorobenzene	ND	0.135	0.135	ND	1.00	1.00	12/12/19	KCA	1
1,2,4-Trimethylbenzene	0.408	0.204	0.204	2.00	1.00	1.00	12/12/19	KCA	1
1,2-Dibromoethane(EDB)	ND	0.130	0.130	ND	1.00	1.00	12/12/19	KCA	1
1,2-Dichlorobenzene	ND	0.166	0.166	ND	1.00	1.00	12/12/19	KCA	1
1,2-Dichloroethane	ND	0.247	0.247	ND	1.00	1.00	12/12/19	KCA	1
1,2-dichloropropane	ND	0.217	0.217	ND	1.00	1.00	12/12/19	KCA	1
1,2-Dichlorotetrafluoroethane	ND	0.143	0.143	ND	1.00	1.00	12/12/19	KCA	1
1,3,5-Trimethylbenzene	ND	0.204	0.204	ND	1.00	1.00	12/12/19	KCA	1
1,3-Butadiene	ND	0.452	0.452	ND	1.00	1.00	12/12/19	KCA	1
1,3-Dichlorobenzene	ND	0.166	0.166	ND	1.00	1.00	12/12/19	KCA	1
1,4-Dichlorobenzene	ND	0.166	0.166	ND	1.00	1.00	12/12/19	KCA	1
1,4-Dioxane	ND	0.278	0.278	ND	1.00	1.00	12/12/19	KCA	1
2-Hexanone(MBK)	ND	0.244	0.244	ND	1.00	1.00	12/12/19	KCA	1
4-Ethyltoluene	0.402	0.204	0.204	1.97	1.00	1.00	12/12/19	KCA	1
4-Isopropyltoluene	ND	0.182	0.182	ND	1.00	1.00	12/12/19	KCA	1
4-Methyl-2-pentanone(MIBK)	0.684	0.244	0.244	2.80	1.00	1.00	12/12/19	KCA	1
Acetone	35.0	0.421	0.421	83.1	1.00	1.00	12/12/19	KCA	1
Acrylonitrile	ND	0.461	0.461	ND	1.00	1.00	12/12/19	KCA	1
Benzene	0.551	0.313	0.313	1.76	1.00	1.00	12/12/19	KCA	1
Benzyl chloride	ND	0.193	0.193	ND	1.00	1.00	12/12/19	KCA	1

Client ID: SS 5

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution
Bromodichloromethane	ND	0.149	0.149	ND	1.00	1.00	12/12/19	KCA	1
Bromoform	ND	0.097	0.097	ND	1.00	1.00	12/12/19	KCA	1
Bromomethane	ND	0.258	0.258	ND	1.00	1.00	12/12/19	KCA	1
Carbon Disulfide	0.716	0.321	0.321	2.23	1.00	1.00	12/12/19	KCA	1
Carbon Tetrachloride	0.039	0.032	0.032	0.25	0.20	0.20	12/12/19	KCA	1
Chlorobenzene	ND	0.217	0.217	ND	1.00	1.00	12/12/19	KCA	1
Chloroethane	ND	0.379	0.379	ND	1.00	1.00	12/12/19	KCA	1
Chloroform	0.561	0.205	0.205	2.74	1.00	1.00	12/12/19	KCA	1
Chloromethane	ND	0.485	0.485	ND	1.00	1.00	12/12/19	KCA	1
Cis-1,2-Dichloroethene	ND	0.051	0.051	ND	0.20	0.20	12/12/19	KCA	1
cis-1,3-Dichloropropene	ND	0.221	0.221	ND	1.00	1.00	12/12/19	KCA	1
Cyclohexane	0.438	0.291	0.291	1.51	1.00	1.00	12/12/19	KCA	1
Dibromochloromethane	ND	0.118	0.118	ND	1.00	1.00	12/12/19	KCA	1
Dichlorodifluoromethane	0.957	0.202	0.202	4.73	1.00	1.00	12/12/19	KCA	1
Ethanol	32.2	0.531	0.531	60.6	1.00	1.00	12/12/19	KCA	1
Ethyl acetate	ND	0.278	0.278	ND	1.00	1.00	12/12/19	KCA	1
Ethylbenzene	0.354	0.230	0.230	1.54	1.00	1.00	12/12/19	KCA	1
Heptane	0.263	0.244	0.244	1.08	1.00	1.00	12/12/19	KCA	1
Hexachlorobutadiene	ND	0.094	0.094	ND	1.00	1.00	12/12/19	KCA	1
Hexane	0.578	0.284	0.284	2.04	1.00	1.00	12/12/19	KCA	1
Isopropylalcohol	1.37	0.407	0.407	3.37	1.00	1.00	12/12/19	KCA	1
Isopropylbenzene	ND	0.204	0.204	ND	1.00	1.00	12/12/19	KCA	1
m,p-Xylene	1.23	0.230	0.230	5.34	1.00	1.00	12/12/19	KCA	1
Methyl Ethyl Ketone	5.13	0.339	0.339	15.1	1.00	1.00	12/12/19	KCA	1
Methyl tert-butyl ether(MTBE)	ND	0.278	0.278	ND	1.00	1.00	12/12/19	KCA	1
Methylene Chloride	ND	0.864	0.864	ND	3.00	3.00	12/12/19	KCA	1
n-Butylbenzene	ND	0.182	0.182	ND	1.00	1.00	12/12/19	KCA	1
o-Xylene	0.582	0.230	0.230	2.53	1.00	1.00	12/12/19	KCA	1
Propylene	ND	0.581	0.581	ND	1.00	1.00	12/12/19	KCA	1
sec-Butylbenzene	ND	0.182	0.182	ND	1.00	1.00	12/12/19	KCA	1
Styrene	ND	0.235	0.235	ND	1.00	1.00	12/12/19	KCA	1
Tetrachloroethene	1.78	0.037	0.037	12.1	0.25	0.25	12/12/19	KCA	1
Tetrahydrofuran	6.27	0.339	0.339	18.5	1.00	1.00	12/12/19	KCA	1
Toluene	1.83	0.266	0.266	6.89	1.00	1.00	12/12/19	KCA	1
Trans-1,2-Dichloroethene	ND	0.252	0.252	ND	1.00	1.00	12/12/19	KCA	1
trans-1,3-Dichloropropene	ND	0.221	0.221	ND	1.00	1.00	12/12/19	KCA	1
Trichloroethene	1.55	0.037	0.037	8.32	0.20	0.20	12/12/19	KCA	1
Trichlorofluoromethane	ND	0.178	0.178	ND	1.00	1.00	12/12/19	KCA	1
Trichlorotrifluoroethane	ND	0.131	0.131	ND	1.00	1.00	12/12/19	KCA	1
Vinyl Chloride	ND	0.078	0.078	ND	0.20	0.20	12/12/19	KCA	1
<u>QA/OC Surrogates/Internals</u>									
% Bromofluorobenzene	97	%	%	97	%	%	12/12/19	KCA	1
% IS-1,4-Difluorobenzene	103	%	%	103	%	%	12/12/19	KCA	1
% IS-Bromochloromethane	100	%	%	100	%	%	12/12/19	KCA	1
% IS-Chlorobenzene-d5	111	%	%	111	%	%	12/12/19	KCA	1

Client ID: SS 5

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution

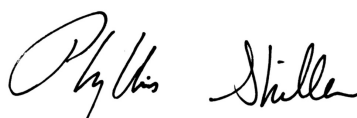
1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit1

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

December 16, 2019

Reviewed and Released by: Greg Lawrence, Assistant Lab Director



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823



Analysis Report

December 16, 2019

FOR: Attn: Mr. Charles B. Sosik, P.G.
Environmental Business Consultants
1808 Middle Country Rd
Ridge NY 11961-2406

Sample Information

Matrix: AIR
Location Code: EBC
Rush Request: 72 Hour
P.O.#:
Canister Id: 23329

Custody Information

Collected by: TB
Received by: CP
Analyzed by: see "By" below

Date Time
12/11/19 9:06
12/11/19 16:00

Laboratory Data

SDG ID: GCE85314
Phoenix ID: CE85315

Project ID: 26-22 4TH ST. QUEENS
Client ID: SS 8

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution
Volatiles (TO15)									
1,1,1,2-Tetrachloroethane	ND	0.146	0.146	ND	1.00	1.00	12/12/19	KCA	1
1,1,1-Trichloroethane	ND	0.183	0.183	ND	1.00	1.00	12/12/19	KCA	1
1,1,2,2-Tetrachloroethane	ND	0.146	0.146	ND	1.00	1.00	12/12/19	KCA	1
1,1,2-Trichloroethane	ND	0.183	0.183	ND	1.00	1.00	12/12/19	KCA	1
1,1-Dichloroethane	ND	0.247	0.247	ND	1.00	1.00	12/12/19	KCA	1
1,1-Dichloroethene	ND	0.051	0.051	ND	0.20	0.20	12/12/19	KCA	1
1,2,4-Trichlorobenzene	ND	0.135	0.135	ND	1.00	1.00	12/12/19	KCA	1
1,2,4-Trimethylbenzene	0.278	0.204	0.204	1.37	1.00	1.00	12/12/19	KCA	1
1,2-Dibromoethane(EDB)	ND	0.130	0.130	ND	1.00	1.00	12/12/19	KCA	1
1,2-Dichlorobenzene	ND	0.166	0.166	ND	1.00	1.00	12/12/19	KCA	1
1,2-Dichloroethane	ND	0.247	0.247	ND	1.00	1.00	12/12/19	KCA	1
1,2-dichloropropane	ND	0.217	0.217	ND	1.00	1.00	12/12/19	KCA	1
1,2-Dichlorotetrafluoroethane	ND	0.143	0.143	ND	1.00	1.00	12/12/19	KCA	1
1,3,5-Trimethylbenzene	ND	0.204	0.204	ND	1.00	1.00	12/12/19	KCA	1
1,3-Butadiene	ND	0.452	0.452	ND	1.00	1.00	12/12/19	KCA	1
1,3-Dichlorobenzene	ND	0.166	0.166	ND	1.00	1.00	12/12/19	KCA	1
1,4-Dichlorobenzene	ND	0.166	0.166	ND	1.00	1.00	12/12/19	KCA	1
1,4-Dioxane	ND	0.278	0.278	ND	1.00	1.00	12/12/19	KCA	1
2-Hexanone(MBK)	ND	0.244	0.244	ND	1.00	1.00	12/12/19	KCA	1
4-Ethyltoluene	0.300	0.204	0.204	1.47	1.00	1.00	12/12/19	KCA	1
4-Isopropyltoluene	ND	0.182	0.182	ND	1.00	1.00	12/12/19	KCA	1
4-Methyl-2-pentanone(MIBK)	0.430	0.244	0.244	1.76	1.00	1.00	12/12/19	KCA	1
Acetone	17.9	0.421	0.421	42.5	1.00	1.00	12/12/19	KCA	1
Acrylonitrile	ND	0.461	0.461	ND	1.00	1.00	12/12/19	KCA	1
Benzene	0.596	0.313	0.313	1.90	1.00	1.00	12/12/19	KCA	1
Benzyl chloride	ND	0.193	0.193	ND	1.00	1.00	12/12/19	KCA	1

Client ID: SS 8

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution
Bromodichloromethane	ND	0.149	0.149	ND	1.00	1.00	12/12/19	KCA	1
Bromoform	ND	0.097	0.097	ND	1.00	1.00	12/12/19	KCA	1
Bromomethane	ND	0.258	0.258	ND	1.00	1.00	12/12/19	KCA	1
Carbon Disulfide	3.74	0.321	0.321	11.6	1.00	1.00	12/12/19	KCA	1
Carbon Tetrachloride	0.034	0.032	0.032	0.21	0.20	0.20	12/12/19	KCA	1
Chlorobenzene	ND	0.217	0.217	ND	1.00	1.00	12/12/19	KCA	1
Chloroethane	ND	0.379	0.379	ND	1.00	1.00	12/12/19	KCA	1
Chloroform	ND	0.205	0.205	ND	1.00	1.00	12/12/19	KCA	1
Chloromethane	ND	0.485	0.485	ND	1.00	1.00	12/12/19	KCA	1
Cis-1,2-Dichloroethene	ND	0.051	0.051	ND	0.20	0.20	12/12/19	KCA	1
cis-1,3-Dichloropropene	ND	0.221	0.221	ND	1.00	1.00	12/12/19	KCA	1
Cyclohexane	ND	0.291	0.291	ND	1.00	1.00	12/12/19	KCA	1
Dibromochloromethane	ND	0.118	0.118	ND	1.00	1.00	12/12/19	KCA	1
Dichlorodifluoromethane	0.454	0.202	0.202	2.24	1.00	1.00	12/12/19	KCA	1
Ethanol	22.4	0.531	0.531	42.2	1.00	1.00	12/12/19	KCA	1
Ethyl acetate	ND	0.278	0.278	ND	1.00	1.00	12/12/19	KCA	1
Ethylbenzene	0.281	0.230	0.230	1.22	1.00	1.00	12/12/19	KCA	1
Heptane	10.7	0.244	0.244	43.8	1.00	1.00	12/12/19	KCA	1
Hexachlorobutadiene	ND	0.094	0.094	ND	1.00	1.00	12/12/19	KCA	1
Hexane	28.3	0.284	0.284	100	1.00	1.00	12/12/19	KCA	1
Isopropylalcohol	0.558	0.407	0.407	1.37	1.00	1.00	12/12/19	KCA	1
Isopropylbenzene	ND	0.204	0.204	ND	1.00	1.00	12/12/19	KCA	1
m,p-Xylene	0.963	0.230	0.230	4.18	1.00	1.00	12/12/19	KCA	1
Methyl Ethyl Ketone	2.58	0.339	0.339	7.60	1.00	1.00	12/12/19	KCA	1
Methyl tert-butyl ether(MTBE)	ND	0.278	0.278	ND	1.00	1.00	12/12/19	KCA	1
Methylene Chloride	ND	0.864	0.864	ND	3.00	3.00	12/12/19	KCA	1
n-Butylbenzene	ND	0.182	0.182	ND	1.00	1.00	12/12/19	KCA	1
o-Xylene	0.437	0.230	0.230	1.90	1.00	1.00	12/12/19	KCA	1
Propylene	ND	0.581	0.581	ND	1.00	1.00	12/12/19	KCA	1
sec-Butylbenzene	ND	0.182	0.182	ND	1.00	1.00	12/12/19	KCA	1
Styrene	ND	0.235	0.235	ND	1.00	1.00	12/12/19	KCA	1
Tetrachloroethene	8.24	0.037	0.037	55.9	0.25	0.25	12/12/19	KCA	1
Tetrahydrofuran	ND	0.339	0.339	ND	1.00	1.00	12/12/19	KCA	1
Toluene	1.58	0.266	0.266	5.95	1.00	1.00	12/12/19	KCA	1
Trans-1,2-Dichloroethene	ND	0.252	0.252	ND	1.00	1.00	12/12/19	KCA	1
trans-1,3-Dichloropropene	ND	0.221	0.221	ND	1.00	1.00	12/12/19	KCA	1
Trichloroethene	ND	0.037	0.037	ND	0.20	0.20	12/12/19	KCA	1
Trichlorofluoromethane	ND	0.178	0.178	ND	1.00	1.00	12/12/19	KCA	1
Trichlorotrifluoroethane	ND	0.131	0.131	ND	1.00	1.00	12/12/19	KCA	1
Vinyl Chloride	ND	0.078	0.078	ND	0.20	0.20	12/12/19	KCA	1
<u>QA/OC Surrogates/Internals</u>									
% Bromofluorobenzene	99	%	%	99	%	%	12/12/19	KCA	1
% IS-1,4-Difluorobenzene	103	%	%	103	%	%	12/12/19	KCA	1
% IS-Bromochloromethane	88	%	%	88	%	%	12/12/19	KCA	1
% IS-Chlorobenzene-d5	113	%	%	113	%	%	12/12/19	KCA	1

Client ID: SS 8

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit1

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

December 16, 2019

Reviewed and Released by: Greg Lawrence, Assistant Lab Director



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823



Analysis Report

December 16, 2019

FOR: Attn: Mr. Charles B. Sosik, P.G.
Environmental Business Consultants
1808 Middle Country Rd
Ridge NY 11961-2406

Sample Information

Matrix: AIR
Location Code: EBC
Rush Request: 72 Hour
P.O.#:
Canister Id: 17160

Custody Information

Collected by: TB
Received by: CP
Analyzed by: see "By" below

Date Time
12/11/19 9:48
12/11/19 16:00

Laboratory Data

SDG ID: GCE85314
Phoenix ID: CE85316

Project ID: 26-22 4TH ST. QUEENS
Client ID: SS 1

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution
<u>Volatiles (TO15)</u>									
1,1,1,2-Tetrachloroethane	ND	0.146	0.146	ND	1.00	1.00	12/12/19	KCA	1
1,1,1-Trichloroethane	ND	0.183	0.183	ND	1.00	1.00	12/12/19	KCA	1
1,1,2,2-Tetrachloroethane	ND	0.146	0.146	ND	1.00	1.00	12/12/19	KCA	1
1,1,2-Trichloroethane	ND	0.183	0.183	ND	1.00	1.00	12/12/19	KCA	1
1,1-Dichloroethane	ND	0.247	0.247	ND	1.00	1.00	12/12/19	KCA	1
1,1-Dichloroethene	ND	0.051	0.051	ND	0.20	0.20	12/12/19	KCA	1
1,2,4-Trichlorobenzene	ND	0.135	0.135	ND	1.00	1.00	12/12/19	KCA	1
1,2,4-Trimethylbenzene	0.218	0.204	0.204	1.07	1.00	1.00	12/12/19	KCA	1
1,2-Dibromoethane(EDB)	ND	0.130	0.130	ND	1.00	1.00	12/12/19	KCA	1
1,2-Dichlorobenzene	ND	0.166	0.166	ND	1.00	1.00	12/12/19	KCA	1
1,2-Dichloroethane	ND	0.247	0.247	ND	1.00	1.00	12/12/19	KCA	1
1,2-dichloropropane	ND	0.217	0.217	ND	1.00	1.00	12/12/19	KCA	1
1,2-Dichlorotetrafluoroethane	ND	0.143	0.143	ND	1.00	1.00	12/12/19	KCA	1
1,3,5-Trimethylbenzene	ND	0.204	0.204	ND	1.00	1.00	12/12/19	KCA	1
1,3-Butadiene	ND	0.452	0.452	ND	1.00	1.00	12/12/19	KCA	1
1,3-Dichlorobenzene	ND	0.166	0.166	ND	1.00	1.00	12/12/19	KCA	1
1,4-Dichlorobenzene	ND	0.166	0.166	ND	1.00	1.00	12/12/19	KCA	1
1,4-Dioxane	ND	0.278	0.278	ND	1.00	1.00	12/12/19	KCA	1
2-Hexanone(MBK)	ND	0.244	0.244	ND	1.00	1.00	12/12/19	KCA	1
4-Ethyltoluene	0.259	0.204	0.204	1.27	1.00	1.00	12/12/19	KCA	1
4-Isopropyltoluene	ND	0.182	0.182	ND	1.00	1.00	12/12/19	KCA	1
4-Methyl-2-pentanone(MIBK)	0.293	0.244	0.244	1.20	1.00	1.00	12/12/19	KCA	1
Acetone	16.1	0.421	0.421	38.2	1.00	1.00	12/12/19	KCA	1
Acrylonitrile	ND	0.461	0.461	ND	1.00	1.00	12/12/19	KCA	1
Benzene	0.371	0.313	0.313	1.18	1.00	1.00	12/12/19	KCA	1
Benzyl chloride	ND	0.193	0.193	ND	1.00	1.00	12/12/19	KCA	1

Client ID: SS 1

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution
Bromodichloromethane	ND	0.149	0.149	ND	1.00	1.00	12/12/19	KCA	1
Bromoform	ND	0.097	0.097	ND	1.00	1.00	12/12/19	KCA	1
Bromomethane	ND	0.258	0.258	ND	1.00	1.00	12/12/19	KCA	1
Carbon Disulfide	0.459	0.321	0.321	1.43	1.00	1.00	12/12/19	KCA	1
Carbon Tetrachloride	0.059	0.032	0.032	0.37	0.20	0.20	12/12/19	KCA	1
Chlorobenzene	ND	0.217	0.217	ND	1.00	1.00	12/12/19	KCA	1
Chloroethane	ND	0.379	0.379	ND	1.00	1.00	12/12/19	KCA	1
Chloroform	ND	0.205	0.205	ND	1.00	1.00	12/12/19	KCA	1
Chloromethane	ND	0.485	0.485	ND	1.00	1.00	12/12/19	KCA	1
Cis-1,2-Dichloroethene	ND	0.051	0.051	ND	0.20	0.20	12/12/19	KCA	1
cis-1,3-Dichloropropene	ND	0.221	0.221	ND	1.00	1.00	12/12/19	KCA	1
Cyclohexane	ND	0.291	0.291	ND	1.00	1.00	12/12/19	KCA	1
Dibromochloromethane	ND	0.118	0.118	ND	1.00	1.00	12/12/19	KCA	1
Dichlorodifluoromethane	0.329	0.202	0.202	1.63	1.00	1.00	12/12/19	KCA	1
Ethanol	22.5	0.531	0.531	42.4	1.00	1.00	12/12/19	KCA	1
Ethyl acetate	0.474	0.278	0.278	1.71	1.00	1.00	12/12/19	KCA	1
Ethylbenzene	ND	0.230	0.230	ND	1.00	1.00	12/12/19	KCA	1
Heptane	ND	0.244	0.244	ND	1.00	1.00	12/12/19	KCA	1
Hexachlorobutadiene	ND	0.094	0.094	ND	1.00	1.00	12/12/19	KCA	1
Hexane	1.95	0.284	0.284	6.87	1.00	1.00	12/12/19	KCA	1
Isopropylalcohol	0.756	0.407	0.407	1.86	1.00	1.00	12/12/19	KCA	1
Isopropylbenzene	ND	0.204	0.204	ND	1.00	1.00	12/12/19	KCA	1
m,p-Xylene	0.703	0.230	0.230	3.05	1.00	1.00	12/12/19	KCA	1
Methyl Ethyl Ketone	1.97	0.339	0.339	5.81	1.00	1.00	12/12/19	KCA	1
Methyl tert-butyl ether(MTBE)	ND	0.278	0.278	ND	1.00	1.00	12/12/19	KCA	1
Methylene Chloride	1.21	0.864	0.864	4.20	3.00	3.00	12/12/19	KCA	1
n-Butylbenzene	ND	0.182	0.182	ND	1.00	1.00	12/12/19	KCA	1
o-Xylene	0.315	0.230	0.230	1.37	1.00	1.00	12/12/19	KCA	1
Propylene	ND	0.581	0.581	ND	1.00	1.00	12/12/19	KCA	1
sec-Butylbenzene	ND	0.182	0.182	ND	1.00	1.00	12/12/19	KCA	1
Styrene	ND	0.235	0.235	ND	1.00	1.00	12/12/19	KCA	1
Tetrachloroethene	1.46	0.037	0.037	9.9	0.25	0.25	12/12/19	KCA	1
Tetrahydrofuran	2.29	0.339	0.339	6.75	1.00	1.00	12/12/19	KCA	1
Toluene	0.990	0.266	0.266	3.73	1.00	1.00	12/12/19	KCA	1
Trans-1,2-Dichloroethene	ND	0.252	0.252	ND	1.00	1.00	12/12/19	KCA	1
trans-1,3-Dichloropropene	ND	0.221	0.221	ND	1.00	1.00	12/12/19	KCA	1
Trichloroethene	ND	0.037	0.037	ND	0.20	0.20	12/12/19	KCA	1
Trichlorofluoromethane	0.324	0.178	0.178	1.82	1.00	1.00	12/12/19	KCA	1
Trichlorotrifluoroethane	ND	0.131	0.131	ND	1.00	1.00	12/12/19	KCA	1
Vinyl Chloride	ND	0.078	0.078	ND	0.20	0.20	12/12/19	KCA	1
<u>QA/OC Surrogates/Internals</u>									
% Bromofluorobenzene	95	%	%	95	%	%	12/12/19	KCA	1
% IS-1,4-Difluorobenzene	110	%	%	110	%	%	12/12/19	KCA	1
% IS-Bromochloromethane	101	%	%	101	%	%	12/12/19	KCA	1
% IS-Chlorobenzene-d5	113	%	%	113	%	%	12/12/19	KCA	1

Client ID: SS 1

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit1

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

December 16, 2019

Reviewed and Released by: Greg Lawrence, Assistant Lab Director



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823



Analysis Report

December 16, 2019

FOR: Attn: Mr. Charles B. Sosik, P.G.
Environmental Business Consultants
1808 Middle Country Rd
Ridge NY 11961-2406

Sample Information

Matrix: AIR
Location Code: EBC
Rush Request: 72 Hour
P.O.#:
Canister Id: 455

Custody Information

Collected by: TB
Received by: CP
Analyzed by: see "By" below

Date

12/11/19 8:54
12/11/19 16:00

Time

Project ID: 26-22 4TH ST. QUEENS
Client ID: SS 6

Laboratory Data

SDG ID: GCE85314
Phoenix ID: CE85317

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution
Volatiles (TO15)									
1,1,1,2-Tetrachloroethane	ND	0.146	0.146	ND	1.00	1.00	12/15/19	KCA	1
1,1,1-Trichloroethane	ND	0.183	0.183	ND	1.00	1.00	12/15/19	KCA	1
1,1,2,2-Tetrachloroethane	ND	0.146	0.146	ND	1.00	1.00	12/15/19	KCA	1
1,1,2-Trichloroethane	ND	0.183	0.183	ND	1.00	1.00	12/15/19	KCA	1
1,1-Dichloroethane	ND	0.247	0.247	ND	1.00	1.00	12/15/19	KCA	1
1,1-Dichloroethene	ND	0.051	0.051	ND	0.20	0.20	12/15/19	KCA	1
1,2,4-Trichlorobenzene	ND	0.135	0.135	ND	1.00	1.00	12/15/19	KCA	1
1,2,4-Trimethylbenzene	0.341	0.204	0.204	1.68	1.00	1.00	12/15/19	KCA	1
1,2-Dibromoethane(EDB)	ND	0.130	0.130	ND	1.00	1.00	12/15/19	KCA	1
1,2-Dichlorobenzene	ND	0.166	0.166	ND	1.00	1.00	12/15/19	KCA	1
1,2-Dichloroethane	ND	0.247	0.247	ND	1.00	1.00	12/15/19	KCA	1
1,2-dichloropropane	ND	0.217	0.217	ND	1.00	1.00	12/15/19	KCA	1
1,2-Dichlorotetrafluoroethane	2.55	0.143	0.143	17.8	1.00	1.00	12/15/19	KCA	1
1,3,5-Trimethylbenzene	ND	0.204	0.204	ND	1.00	1.00	12/15/19	KCA	1
1,3-Butadiene	ND	0.452	0.452	ND	1.00	1.00	12/15/19	KCA	1
1,3-Dichlorobenzene	ND	0.166	0.166	ND	1.00	1.00	12/15/19	KCA	1
1,4-Dichlorobenzene	ND	0.166	0.166	ND	1.00	1.00	12/15/19	KCA	1
1,4-Dioxane	ND	0.278	0.278	ND	1.00	1.00	12/15/19	KCA	1
2-Hexanone(MBK)	ND	0.244	0.244	ND	1.00	1.00	12/15/19	KCA	1
4-Ethyltoluene	0.303	0.204	0.204	1.49	1.00	1.00	12/15/19	KCA	1
4-Isopropyltoluene	ND	0.182	0.182	ND	1.00	1.00	12/15/19	KCA	1
4-Methyl-2-pentanone(MIBK)	1.05	0.244	0.244	4.30	1.00	1.00	12/15/19	KCA	1
Acetone	16.8	0.421	0.421	39.9	1.00	1.00	12/15/19	KCA	1
Acrylonitrile	ND	0.461	0.461	ND	1.00	1.00	12/15/19	KCA	1
Benzene	1.23	0.313	0.313	3.93	1.00	1.00	12/15/19	KCA	1
Benzyl chloride	ND	0.193	0.193	ND	1.00	1.00	12/15/19	KCA	1

Client ID: SS 6

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution
Bromodichloromethane	ND	0.149	0.149	ND	1.00	1.00	12/15/19	KCA	1
Bromoform	ND	0.097	0.097	ND	1.00	1.00	12/15/19	KCA	1
Bromomethane	ND	0.258	0.258	ND	1.00	1.00	12/15/19	KCA	1
Carbon Disulfide	1.57	0.321	0.321	4.89	1.00	1.00	12/15/19	KCA	1
Carbon Tetrachloride	0.040	0.032	0.032	0.25	0.20	0.20	12/15/19	KCA	1
Chlorobenzene	ND	0.217	0.217	ND	1.00	1.00	12/15/19	KCA	1
Chloroethane	ND	0.379	0.379	ND	1.00	1.00	12/15/19	KCA	1
Chloroform	ND	0.205	0.205	ND	1.00	1.00	12/15/19	KCA	1
Chloromethane	ND	0.485	0.485	ND	1.00	1.00	12/15/19	KCA	1
Cis-1,2-Dichloroethene	ND	0.051	0.051	ND	0.20	0.20	12/15/19	KCA	1
cis-1,3-Dichloropropene	ND	0.221	0.221	ND	1.00	1.00	12/15/19	KCA	1
Cyclohexane	ND	0.291	0.291	ND	1.00	1.00	12/15/19	KCA	1
Dibromochloromethane	ND	0.118	0.118	ND	1.00	1.00	12/15/19	KCA	1
Dichlorodifluoromethane	0.884	0.202	0.202	4.37	1.00	1.00	12/15/19	KCA	1
Ethanol	16.2	0.531	0.531	30.5	1.00	1.00	12/15/19	KCA	1
Ethyl acetate	ND	0.278	0.278	ND	1.00	1.00	12/15/19	KCA	1
Ethylbenzene	0.320	0.230	0.230	1.39	1.00	1.00	12/15/19	KCA	1
Heptane	1.27	0.244	0.244	5.20	1.00	1.00	12/15/19	KCA	1
Hexachlorobutadiene	ND	0.094	0.094	ND	1.00	1.00	12/15/19	KCA	1
Hexane	5.50	0.284	0.284	19.4	1.00	1.00	12/15/19	KCA	1
Isopropylalcohol	ND	0.407	0.407	ND	1.00	1.00	12/15/19	KCA	1
Isopropylbenzene	ND	0.204	0.204	ND	1.00	1.00	12/15/19	KCA	1
m,p-Xylene	1.06	0.230	0.230	4.60	1.00	1.00	12/15/19	KCA	1
Methyl Ethyl Ketone	1.97	0.339	0.339	5.81	1.00	1.00	12/15/19	KCA	1
Methyl tert-butyl ether(MTBE)	ND	0.278	0.278	ND	1.00	1.00	12/15/19	KCA	1
Methylene Chloride	ND	0.864	0.864	ND	3.00	3.00	12/15/19	KCA	1
n-Butylbenzene	ND	0.182	0.182	ND	1.00	1.00	12/15/19	KCA	1
o-Xylene	0.435	0.230	0.230	1.89	1.00	1.00	12/15/19	KCA	1
Propylene	ND	0.581	0.581	ND	1.00	1.00	12/15/19	KCA	1
sec-Butylbenzene	ND	0.182	0.182	ND	1.00	1.00	12/15/19	KCA	1
Styrene	ND	0.235	0.235	ND	1.00	1.00	12/15/19	KCA	1
Tetrachloroethene	166	0.184	0.184	1130	1.25	1.25	12/12/19	KCA	5
Tetrahydrofuran	1.83	0.339	0.339	5.39	1.00	1.00	12/15/19	KCA	1
Toluene	2.21	0.266	0.266	8.32	1.00	1.00	12/15/19	KCA	1
Trans-1,2-Dichloroethene	ND	0.252	0.252	ND	1.00	1.00	12/15/19	KCA	1
trans-1,3-Dichloropropene	ND	0.221	0.221	ND	1.00	1.00	12/15/19	KCA	1
Trichloroethene	2.44	0.037	0.037	13.1	0.20	0.20	12/15/19	KCA	1
Trichlorofluoromethane	0.624	0.178	0.178	3.50	1.00	1.00	12/15/19	KCA	1
Trichlorotrifluoroethane	ND	0.131	0.131	ND	1.00	1.00	12/15/19	KCA	1
Vinyl Chloride	ND	0.078	0.078	ND	0.20	0.20	12/15/19	KCA	1
<u>QA/OC Surrogates/Internals</u>									
% Bromofluorobenzene	101	%	%	101	%	%	12/15/19	KCA	1
% IS-1,4-Difluorobenzene	98	%	%	98	%	%	12/15/19	KCA	1
% IS-Bromochloromethane	120	%	%	120	%	%	12/15/19	KCA	1
% IS-Chlorobenzene-d5	99	%	%	99	%	%	12/15/19	KCA	1
% Bromofluorobenzene (5x)	103	%	%	103	%	%	12/12/19	KCA	5
% IS-1,4-Difluorobenzene (5x)	108	%	%	108	%	%	12/12/19	KCA	5
% IS-Bromochloromethane (5x)	104	%	%	104	%	%	12/12/19	KCA	5
% IS-Chlorobenzene-d5 (5x)	97	%	%	97	%	%	12/12/19	KCA	5

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution

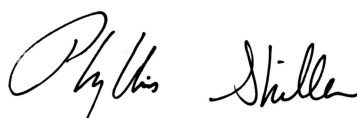
1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit1

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

December 16, 2019

Reviewed and Released by: Greg Lawrence, Assistant Lab Director



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823



Analysis Report

December 16, 2019

FOR: Attn: Mr. Charles B. Sosik, P.G.
Environmental Business Consultants
1808 Middle Country Rd
Ridge NY 11961-2406

Sample Information

Matrix: AIR
Location Code: EBC
Rush Request: 72 Hour
P.O.#:
Canister Id: 496

Custody Information

Collected by: TB
Received by: CP
Analyzed by: see "By" below

Date Time
12/11/19 9:31
12/11/19 16:00

Laboratory Data

SDG ID: GCE85314
Phoenix ID: CE85318

Project ID: 26-22 4TH ST. QUEENS
Client ID: SS 3

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution
Volatiles (TO15)									
1,1,1,2-Tetrachloroethane	ND	0.146	0.146	ND	1.00	1.00	12/13/19	KCA	1
1,1,1-Trichloroethane	ND	0.183	0.183	ND	1.00	1.00	12/13/19	KCA	1
1,1,2,2-Tetrachloroethane	ND	0.146	0.146	ND	1.00	1.00	12/13/19	KCA	1
1,1,2-Trichloroethane	ND	0.183	0.183	ND	1.00	1.00	12/13/19	KCA	1
1,1-Dichloroethane	ND	0.247	0.247	ND	1.00	1.00	12/13/19	KCA	1
1,1-Dichloroethene	ND	0.051	0.051	ND	0.20	0.20	12/13/19	KCA	1
1,2,4-Trichlorobenzene	ND	0.135	0.135	ND	1.00	1.00	12/13/19	KCA	1
1,2,4-Trimethylbenzene	0.474	0.204	0.204	2.33	1.00	1.00	12/13/19	KCA	1
1,2-Dibromoethane(EDB)	ND	0.130	0.130	ND	1.00	1.00	12/13/19	KCA	1
1,2-Dichlorobenzene	ND	0.166	0.166	ND	1.00	1.00	12/13/19	KCA	1
1,2-Dichloroethane	ND	0.247	0.247	ND	1.00	1.00	12/13/19	KCA	1
1,2-dichloropropane	ND	0.217	0.217	ND	1.00	1.00	12/13/19	KCA	1
1,2-Dichlorotetrafluoroethane	0.729	0.143	0.143	5.09	1.00	1.00	12/13/19	KCA	1
1,3,5-Trimethylbenzene	ND	0.204	0.204	ND	1.00	1.00	12/13/19	KCA	1
1,3-Butadiene	ND	0.452	0.452	ND	1.00	1.00	12/13/19	KCA	1
1,3-Dichlorobenzene	ND	0.166	0.166	ND	1.00	1.00	12/13/19	KCA	1
1,4-Dichlorobenzene	ND	0.166	0.166	ND	1.00	1.00	12/13/19	KCA	1
1,4-Dioxane	ND	0.278	0.278	ND	1.00	1.00	12/13/19	KCA	1
2-Hexanone(MBK)	ND	0.244	0.244	ND	1.00	1.00	12/13/19	KCA	1
4-Ethyltoluene	0.509	0.204	0.204	2.50	1.00	1.00	12/13/19	KCA	1
4-Isopropyltoluene	ND	0.182	0.182	ND	1.00	1.00	12/13/19	KCA	1
4-Methyl-2-pentanone(MIBK)	0.393	0.244	0.244	1.61	1.00	1.00	12/13/19	KCA	1
Acetone	16.3	0.421	0.421	38.7	1.00	1.00	12/13/19	KCA	1
Acrylonitrile	ND	0.461	0.461	ND	1.00	1.00	12/13/19	KCA	1
Benzene	1.31	0.313	0.313	4.18	1.00	1.00	12/13/19	KCA	1
Benzyl chloride	ND	0.193	0.193	ND	1.00	1.00	12/13/19	KCA	1

Client ID: SS 3

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution
Bromodichloromethane	ND	0.149	0.149	ND	1.00	1.00	12/13/19	KCA	1
Bromoform	ND	0.097	0.097	ND	1.00	1.00	12/13/19	KCA	1
Bromomethane	ND	0.258	0.258	ND	1.00	1.00	12/13/19	KCA	1
Carbon Disulfide	3.25	0.321	0.321	10.1	1.00	1.00	12/13/19	KCA	1
Carbon Tetrachloride	0.073	0.032	0.032	0.46	0.20	0.20	12/13/19	KCA	1
Chlorobenzene	ND	0.217	0.217	ND	1.00	1.00	12/13/19	KCA	1
Chloroethane	ND	0.379	0.379	ND	1.00	1.00	12/13/19	KCA	1
Chloroform	5.36	0.205	0.205	26.2	1.00	1.00	12/13/19	KCA	1
Chloromethane	ND	0.485	0.485	ND	1.00	1.00	12/13/19	KCA	1
Cis-1,2-Dichloroethene	1.43	0.051	0.051	5.67	0.20	0.20	12/13/19	KCA	1
cis-1,3-Dichloropropene	ND	0.221	0.221	ND	1.00	1.00	12/13/19	KCA	1
Cyclohexane	0.316	0.291	0.291	1.09	1.00	1.00	12/13/19	KCA	1
Dibromochloromethane	ND	0.118	0.118	ND	1.00	1.00	12/13/19	KCA	1
Dichlorodifluoromethane	0.446	0.202	0.202	2.20	1.00	1.00	12/13/19	KCA	1
Ethanol	20.5	0.531	0.531	38.6	1.00	1.00	12/13/19	KCA	1
Ethyl acetate	ND	0.278	0.278	ND	1.00	1.00	12/13/19	KCA	1
Ethylbenzene	0.453	0.230	0.230	1.97	1.00	1.00	12/13/19	KCA	1
Heptane	2.87	0.244	0.244	11.8	1.00	1.00	12/13/19	KCA	1
Hexachlorobutadiene	ND	0.094	0.094	ND	1.00	1.00	12/13/19	KCA	1
Hexane	6.53	0.284	0.284	23.0	1.00	1.00	12/13/19	KCA	1
Isopropylalcohol	0.672	0.407	0.407	1.65	1.00	1.00	12/13/19	KCA	1
Isopropylbenzene	ND	0.204	0.204	ND	1.00	1.00	12/13/19	KCA	1
m,p-Xylene	1.98	0.230	0.230	8.59	1.00	1.00	12/13/19	KCA	1
Methyl Ethyl Ketone	2.46	0.339	0.339	7.25	1.00	1.00	12/13/19	KCA	1
Methyl tert-butyl ether(MTBE)	ND	0.278	0.278	ND	1.00	1.00	12/13/19	KCA	1
Methylene Chloride	1.51	0.864	0.864	5.24	3.00	3.00	12/13/19	KCA	1
n-Butylbenzene	ND	0.182	0.182	ND	1.00	1.00	12/13/19	KCA	1
o-Xylene	0.886	0.230	0.230	3.84	1.00	1.00	12/13/19	KCA	1
Propylene	ND	0.581	0.581	ND	1.00	1.00	12/13/19	KCA	1
sec-Butylbenzene	ND	0.182	0.182	ND	1.00	1.00	12/13/19	KCA	1
Styrene	ND	0.235	0.235	ND	1.00	1.00	12/13/19	KCA	1
Tetrachloroethene	50.8	0.184	0.184	344	1.25	1.25	12/12/19	KCA	5
Tetrahydrofuran	ND	0.339	0.339	ND	1.00	1.00	12/13/19	KCA	1
Toluene	3.13	0.266	0.266	11.8	1.00	1.00	12/13/19	KCA	1
Trans-1,2-Dichloroethene	ND	0.252	0.252	ND	1.00	1.00	12/13/19	KCA	1
trans-1,3-Dichloropropene	ND	0.221	0.221	ND	1.00	1.00	12/13/19	KCA	1
Trichloroethene	10.7	0.037	0.037	57.5	0.20	0.20	12/13/19	KCA	1
Trichlorofluoromethane	0.277	0.178	0.178	1.56	1.00	1.00	12/13/19	KCA	1
Trichlorotrifluoroethane	ND	0.131	0.131	ND	1.00	1.00	12/13/19	KCA	1
Vinyl Chloride	ND	0.078	0.078	ND	0.20	0.20	12/13/19	KCA	1
<u>QA/OC Surrogates/Internals</u>									
% Bromofluorobenzene	99	%	%	99	%	%	12/13/19	KCA	1
% IS-1,4-Difluorobenzene	81	%	%	81	%	%	12/13/19	KCA	1
% IS-Bromochloromethane	89	%	%	89	%	%	12/13/19	KCA	1
% IS-Chlorobenzene-d5	99	%	%	99	%	%	12/13/19	KCA	1
% Bromofluorobenzene (5x)	100	%	%	100	%	%	12/12/19	KCA	5
% IS-1,4-Difluorobenzene (5x)	98	%	%	98	%	%	12/12/19	KCA	5
% IS-Bromochloromethane (5x)	99	%	%	99	%	%	12/12/19	KCA	5
% IS-Chlorobenzene-d5 (5x)	100	%	%	100	%	%	12/12/19	KCA	5

Client ID: SS 3

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution

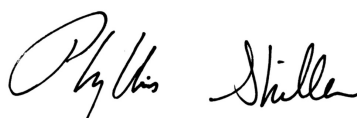
1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit1

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

December 16, 2019

Reviewed and Released by: Greg Lawrence, Assistant Lab Director



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823



Analysis Report

December 16, 2019

FOR: Attn: Mr. Charles B. Sosik, P.G.
Environmental Business Consultants
1808 Middle Country Rd
Ridge NY 11961-2406

Sample Information

Matrix: AIR
Location Code: EBC
Rush Request: 72 Hour
P.O.#:
Canister Id: 368

Custody Information

Collected by: TB
Received by: CP
Analyzed by: see "By" below

Date

12/11/19 11:14
12/11/19 16:00

Time

Laboratory Data

SDG ID: GCE85314
Phoenix ID: CE85319

Project ID: 26-22 4TH ST. QUEENS
Client ID: SS 2

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution
Volatiles (TO15)									
1,1,1,2-Tetrachloroethane	ND	0.146	0.146	ND	1.00	1.00	12/13/19	KCA	1
1,1,1-Trichloroethane	ND	0.183	0.183	ND	1.00	1.00	12/13/19	KCA	1
1,1,2,2-Tetrachloroethane	ND	0.146	0.146	ND	1.00	1.00	12/13/19	KCA	1
1,1,2-Trichloroethane	ND	0.183	0.183	ND	1.00	1.00	12/13/19	KCA	1
1,1-Dichloroethane	ND	0.247	0.247	ND	1.00	1.00	12/13/19	KCA	1
1,1-Dichloroethene	0.094	0.051	0.051	0.37	0.20	0.20	12/13/19	KCA	1
1,2,4-Trichlorobenzene	ND	0.135	0.135	ND	1.00	1.00	12/13/19	KCA	1
1,2,4-Trimethylbenzene	0.226	0.204	0.204	1.11	1.00	1.00	12/13/19	KCA	1
1,2-Dibromoethane(EDB)	ND	0.130	0.130	ND	1.00	1.00	12/13/19	KCA	1
1,2-Dichlorobenzene	ND	0.166	0.166	ND	1.00	1.00	12/13/19	KCA	1
1,2-Dichloroethane	ND	0.247	0.247	ND	1.00	1.00	12/13/19	KCA	1
1,2-dichloropropane	ND	0.217	0.217	ND	1.00	1.00	12/13/19	KCA	1
1,2-Dichlorotetrafluoroethane	0.373	0.143	0.143	2.61	1.00	1.00	12/13/19	KCA	1
1,3,5-Trimethylbenzene	ND	0.204	0.204	ND	1.00	1.00	12/13/19	KCA	1
1,3-Butadiene	0.537	0.452	0.452	1.19	1.00	1.00	12/13/19	KCA	1
1,3-Dichlorobenzene	ND	0.166	0.166	ND	1.00	1.00	12/13/19	KCA	1
1,4-Dichlorobenzene	ND	0.166	0.166	ND	1.00	1.00	12/13/19	KCA	1
1,4-Dioxane	ND	0.278	0.278	ND	1.00	1.00	12/13/19	KCA	1
2-Hexanone(MBK)	ND	0.244	0.244	ND	1.00	1.00	12/13/19	KCA	1
4-Ethyltoluene	0.270	0.204	0.204	1.33	1.00	1.00	12/13/19	KCA	1
4-Isopropyltoluene	ND	0.182	0.182	ND	1.00	1.00	12/13/19	KCA	1
4-Methyl-2-pentanone(MIBK)	0.303	0.244	0.244	1.24	1.00	1.00	12/13/19	KCA	1
Acetone	23.0	0.421	0.421	54.6	1.00	1.00	12/13/19	KCA	1
Acrylonitrile	ND	0.461	0.461	ND	1.00	1.00	12/13/19	KCA	1
Benzene	0.578	0.313	0.313	1.85	1.00	1.00	12/13/19	KCA	1
Benzyl chloride	ND	0.193	0.193	ND	1.00	1.00	12/13/19	KCA	1

Client ID: SS 2

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution
Bromodichloromethane	ND	0.149	0.149	ND	1.00	1.00	12/13/19	KCA	1
Bromoform	ND	0.097	0.097	ND	1.00	1.00	12/13/19	KCA	1
Bromomethane	ND	0.258	0.258	ND	1.00	1.00	12/13/19	KCA	1
Carbon Disulfide	3.99	0.321	0.321	12.4	1.00	1.00	12/13/19	KCA	1
Carbon Tetrachloride	0.063	0.032	0.032	0.40	0.20	0.20	12/13/19	KCA	1
Chlorobenzene	ND	0.217	0.217	ND	1.00	1.00	12/13/19	KCA	1
Chloroethane	ND	0.379	0.379	ND	1.00	1.00	12/13/19	KCA	1
Chloroform	1.39	0.205	0.205	6.78	1.00	1.00	12/13/19	KCA	1
Chloromethane	ND	0.485	0.485	ND	1.00	1.00	12/13/19	KCA	1
Cis-1,2-Dichloroethene	4.72	0.051	0.051	18.7	0.20	0.20	12/13/19	KCA	1
cis-1,3-Dichloropropene	ND	0.221	0.221	ND	1.00	1.00	12/13/19	KCA	1
Cyclohexane	ND	0.291	0.291	ND	1.00	1.00	12/13/19	KCA	1
Dibromochloromethane	ND	0.118	0.118	ND	1.00	1.00	12/13/19	KCA	1
Dichlorodifluoromethane	0.266	0.202	0.202	1.31	1.00	1.00	12/13/19	KCA	1
Ethanol	30.2	0.531	0.531	56.9	1.00	1.00	12/13/19	KCA	1
Ethyl acetate	0.526	0.278	0.278	1.89	1.00	1.00	12/13/19	KCA	1
Ethylbenzene	ND	0.230	0.230	ND	1.00	1.00	12/13/19	KCA	1
Heptane	0.321	0.244	0.244	1.31	1.00	1.00	12/13/19	KCA	1
Hexachlorobutadiene	ND	0.094	0.094	ND	1.00	1.00	12/13/19	KCA	1
Hexane	2.19	0.284	0.284	7.71	1.00	1.00	12/13/19	KCA	1
Isopropylalcohol	1.16	0.407	0.407	2.85	1.00	1.00	12/13/19	KCA	1
Isopropylbenzene	ND	0.204	0.204	ND	1.00	1.00	12/13/19	KCA	1
m,p-Xylene	0.655	0.230	0.230	2.84	1.00	1.00	12/13/19	KCA	1
Methyl Ethyl Ketone	2.98	0.339	0.339	8.78	1.00	1.00	12/13/19	KCA	1
Methyl tert-butyl ether(MTBE)	ND	0.278	0.278	ND	1.00	1.00	12/13/19	KCA	1
Methylene Chloride	ND	0.864	0.864	ND	3.00	3.00	12/13/19	KCA	1
n-Butylbenzene	ND	0.182	0.182	ND	1.00	1.00	12/13/19	KCA	1
o-Xylene	0.296	0.230	0.230	1.28	1.00	1.00	12/13/19	KCA	1
Propylene	ND	0.581	0.581	ND	1.00	1.00	12/13/19	KCA	1
sec-Butylbenzene	ND	0.182	0.182	ND	1.00	1.00	12/13/19	KCA	1
Styrene	ND	0.235	0.235	ND	1.00	1.00	12/13/19	KCA	1
Tetrachloroethene	36.5	0.037	0.037	247	0.25	0.25	12/13/19	KCA	1
Tetrahydrofuran	3.16	0.339	0.339	9.31	1.00	1.00	12/13/19	KCA	1
Toluene	1.05	0.266	0.266	3.95	1.00	1.00	12/13/19	KCA	1
Trans-1,2-Dichloroethene	0.283	0.252	0.252	1.12	1.00	1.00	12/13/19	KCA	1
trans-1,3-Dichloropropene	ND	0.221	0.221	ND	1.00	1.00	12/13/19	KCA	1
Trichloroethene	5.97	0.037	0.037	32.1	0.20	0.20	12/13/19	KCA	1
Trichlorofluoromethane	0.189	0.178	0.178	1.06	1.00	1.00	12/13/19	KCA	1
Trichlorotrifluoroethane	ND	0.131	0.131	ND	1.00	1.00	12/13/19	KCA	1
Vinyl Chloride	ND	0.078	0.078	ND	0.20	0.20	12/13/19	KCA	1
<u>QA/OC Surrogates/Internals</u>									
% Bromofluorobenzene	104	%	%	104	%	%	12/13/19	KCA	1
% IS-1,4-Difluorobenzene	92	%	%	92	%	%	12/13/19	KCA	1
% IS-Bromochloromethane	92	%	%	92	%	%	12/13/19	KCA	1
% IS-Chlorobenzene-d5	97	%	%	97	%	%	12/13/19	KCA	1

Client ID: SS 2

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit1

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

December 16, 2019

Reviewed and Released by: Greg Lawrence, Assistant Lab Director



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823



Analysis Report

December 16, 2019

FOR: Attn: Mr. Charles B. Sosik, P.G.
Environmental Business Consultants
1808 Middle Country Rd
Ridge NY 11961-2406

Sample Information

Matrix: AIR
Location Code: EBC
Rush Request: 72 Hour
P.O.#:
Canister Id: 11292

Custody Information

Collected by: TB
Received by: CP
Analyzed by: see "By" below

Date

12/11/19 9:04
12/11/19 16:00

Time

P.O.#:

Laboratory Data

SDG ID: GCE85314
Phoenix ID: CE85320

Project ID: 26-22 4TH ST. QUEENS
Client ID: SS 7

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution
Volatiles (TO15)									
1,1,1,2-Tetrachloroethane	ND	0.146	0.146	ND	1.00	1.00	12/15/19	KCA	1
1,1,1-Trichloroethane	ND	0.183	0.183	ND	1.00	1.00	12/15/19	KCA	1
1,1,2,2-Tetrachloroethane	ND	0.146	0.146	ND	1.00	1.00	12/15/19	KCA	1
1,1,2-Trichloroethane	ND	0.183	0.183	ND	1.00	1.00	12/15/19	KCA	1
1,1-Dichloroethane	ND	0.247	0.247	ND	1.00	1.00	12/15/19	KCA	1
1,1-Dichloroethene	ND	0.051	0.051	ND	0.20	0.20	12/15/19	KCA	1
1,2,4-Trichlorobenzene	ND	0.135	0.135	ND	1.00	1.00	12/15/19	KCA	1
1,2,4-Trimethylbenzene	0.335	0.204	0.204	1.65	1.00	1.00	12/15/19	KCA	1
1,2-Dibromoethane(EDB)	ND	0.130	0.130	ND	1.00	1.00	12/15/19	KCA	1
1,2-Dichlorobenzene	ND	0.166	0.166	ND	1.00	1.00	12/15/19	KCA	1
1,2-Dichloroethane	ND	0.247	0.247	ND	1.00	1.00	12/15/19	KCA	1
1,2-dichloropropane	ND	0.217	0.217	ND	1.00	1.00	12/15/19	KCA	1
1,2-Dichlorotetrafluoroethane	0.303	0.143	0.143	2.12	1.00	1.00	12/15/19	KCA	1
1,3,5-Trimethylbenzene	ND	0.204	0.204	ND	1.00	1.00	12/15/19	KCA	1
1,3-Butadiene	ND	0.452	0.452	ND	1.00	1.00	12/15/19	KCA	1
1,3-Dichlorobenzene	ND	0.166	0.166	ND	1.00	1.00	12/15/19	KCA	1
1,4-Dichlorobenzene	ND	0.166	0.166	ND	1.00	1.00	12/15/19	KCA	1
1,4-Dioxane	ND	0.278	0.278	ND	1.00	1.00	12/15/19	KCA	1
2-Hexanone(MBK)	ND	0.244	0.244	ND	1.00	1.00	12/15/19	KCA	1
4-Ethyltoluene	0.278	0.204	0.204	1.37	1.00	1.00	12/15/19	KCA	1
4-Isopropyltoluene	ND	0.182	0.182	ND	1.00	1.00	12/15/19	KCA	1
4-Methyl-2-pentanone(MIBK)	0.498	0.244	0.244	2.04	1.00	1.00	12/15/19	KCA	1
Acetone	14.2	0.421	0.421	33.7	1.00	1.00	12/15/19	KCA	1
Acrylonitrile	ND	0.461	0.461	ND	1.00	1.00	12/15/19	KCA	1
Benzene	0.928	0.313	0.313	2.96	1.00	1.00	12/15/19	KCA	1
Benzyl chloride	ND	0.193	0.193	ND	1.00	1.00	12/15/19	KCA	1

Client ID: SS 7

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution
Bromodichloromethane	ND	0.149	0.149	ND	1.00	1.00	12/15/19	KCA	1
Bromoform	ND	0.097	0.097	ND	1.00	1.00	12/15/19	KCA	1
Bromomethane	ND	0.258	0.258	ND	1.00	1.00	12/15/19	KCA	1
Carbon Disulfide	10.1	0.321	0.321	31.4	1.00	1.00	12/15/19	KCA	1
Carbon Tetrachloride	0.046	0.032	0.032	0.29	0.20	0.20	12/15/19	KCA	1
Chlorobenzene	ND	0.217	0.217	ND	1.00	1.00	12/15/19	KCA	1
Chloroethane	ND	0.379	0.379	ND	1.00	1.00	12/15/19	KCA	1
Chloroform	1.49	0.205	0.205	7.27	1.00	1.00	12/15/19	KCA	1
Chloromethane	ND	0.485	0.485	ND	1.00	1.00	12/15/19	KCA	1
Cis-1,2-Dichloroethene	0.167	0.051	0.051	0.66	0.20	0.20	12/15/19	KCA	1
cis-1,3-Dichloropropene	ND	0.221	0.221	ND	1.00	1.00	12/15/19	KCA	1
Cyclohexane	2.53	0.291	0.291	8.70	1.00	1.00	12/15/19	KCA	1
Dibromochloromethane	ND	0.118	0.118	ND	1.00	1.00	12/15/19	KCA	1
Dichlorodifluoromethane	0.500	0.202	0.202	2.47	1.00	1.00	12/15/19	KCA	1
Ethanol	25.0	0.531	0.531	47.1	1.00	1.00	12/15/19	KCA	1
Ethyl acetate	ND	0.278	0.278	ND	1.00	1.00	12/15/19	KCA	1
Ethylbenzene	0.329	0.230	0.230	1.43	1.00	1.00	12/15/19	KCA	1
Heptane	0.794	0.244	0.244	3.25	1.00	1.00	12/15/19	KCA	1
Hexachlorobutadiene	ND	0.094	0.094	ND	1.00	1.00	12/15/19	KCA	1
Hexane	2.76	0.284	0.284	9.7	1.00	1.00	12/15/19	KCA	1
Isopropylalcohol	1.12	0.407	0.407	2.75	1.00	1.00	12/15/19	KCA	1
Isopropylbenzene	ND	0.204	0.204	ND	1.00	1.00	12/15/19	KCA	1
m,p-Xylene	1.09	0.230	0.230	4.73	1.00	1.00	12/15/19	KCA	1
Methyl Ethyl Ketone	3.06	0.339	0.339	9.02	1.00	1.00	12/15/19	KCA	1
Methyl tert-butyl ether(MTBE)	ND	0.278	0.278	ND	1.00	1.00	12/15/19	KCA	1
Methylene Chloride	ND	0.864	0.864	ND	3.00	3.00	12/15/19	KCA	1
n-Butylbenzene	ND	0.182	0.182	ND	1.00	1.00	12/15/19	KCA	1
o-Xylene	0.435	0.230	0.230	1.89	1.00	1.00	12/15/19	KCA	1
Propylene	ND	0.581	0.581	ND	1.00	1.00	12/15/19	KCA	1
sec-Butylbenzene	ND	0.182	0.182	ND	1.00	1.00	12/15/19	KCA	1
Styrene	ND	0.235	0.235	ND	1.00	1.00	12/15/19	KCA	1
Tetrachloroethene	0.896	0.037	0.037	6.07	0.25	0.25	12/15/19	KCA	1
Tetrahydrofuran	2.60	0.339	0.339	7.66	1.00	1.00	12/15/19	KCA	1
Toluene	2.50	0.266	0.266	9.42	1.00	1.00	12/15/19	KCA	1
Trans-1,2-Dichloroethene	ND	0.252	0.252	ND	1.00	1.00	12/15/19	KCA	1
trans-1,3-Dichloropropene	ND	0.221	0.221	ND	1.00	1.00	12/15/19	KCA	1
Trichloroethene	ND	0.037	0.037	ND	0.20	0.20	12/15/19	KCA	1
Trichlorofluoromethane	ND	0.178	0.178	ND	1.00	1.00	12/15/19	KCA	1
Trichlorotrifluoroethane	ND	0.131	0.131	ND	1.00	1.00	12/15/19	KCA	1
Vinyl Chloride	0.708	0.078	0.078	1.81	0.20	0.20	12/15/19	KCA	1
<u>QA/OC Surrogates/Internals</u>									
% Bromofluorobenzene	100	%	%	100	%	%	12/15/19	KCA	1
% IS-1,4-Difluorobenzene	85	%	%	85	%	%	12/15/19	KCA	1
% IS-Bromochloromethane	107	%	%	107	%	%	12/15/19	KCA	1
% IS-Chlorobenzene-d5	88	%	%	88	%	%	12/15/19	KCA	1

Client ID: SS 7

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit1

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

December 16, 2019

Reviewed and Released by: Greg Lawrence, Assistant Lab Director



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823



Analysis Report

December 16, 2019

FOR: Attn: Mr. Charles B. Sosik, P.G.
Environmental Business Consultants
1808 Middle Country Rd
Ridge NY 11961-2406

Sample Information

Matrix: AIR
Location Code: EBC
Rush Request: 72 Hour
P.O.#:
Canister Id: 28596

Custody Information

Collected by: TB
Received by: CP
Analyzed by: see "By" below

Date

12/11/19 9:18
12/11/19 16:00

Time

Project ID: 26-22 4TH ST. QUEENS
Client ID: SS 4

Laboratory Data

SDG ID: GCE85314
Phoenix ID: CE85321

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution
<u>Volatiles (TO15)</u>									
1,1,1,2-Tetrachloroethane	ND	0.146	0.146	ND	1.00	1.00	12/16/19	KCA	1
1,1,1-Trichloroethane	ND	0.183	0.183	ND	1.00	1.00	12/16/19	KCA	1
1,1,2,2-Tetrachloroethane	ND	0.146	0.146	ND	1.00	1.00	12/16/19	KCA	1
1,1,2-Trichloroethane	ND	0.183	0.183	ND	1.00	1.00	12/16/19	KCA	1
1,1-Dichloroethane	ND	0.247	0.247	ND	1.00	1.00	12/16/19	KCA	1
1,1-Dichloroethene	0.904	0.051	0.051	3.58	0.20	0.20	12/16/19	KCA	1
1,2,4-Trichlorobenzene	ND	0.135	0.135	ND	1.00	1.00	12/16/19	KCA	1
1,2,4-Trimethylbenzene	0.389	0.204	0.204	1.91	1.00	1.00	12/16/19	KCA	1
1,2-Dibromoethane(EDB)	ND	0.130	0.130	ND	1.00	1.00	12/16/19	KCA	1
1,2-Dichlorobenzene	ND	0.166	0.166	ND	1.00	1.00	12/16/19	KCA	1
1,2-Dichloroethane	ND	0.247	0.247	ND	1.00	1.00	12/16/19	KCA	1
1,2-dichloropropane	ND	0.217	0.217	ND	1.00	1.00	12/16/19	KCA	1
1,2-Dichlorotetrafluoroethane	ND	0.143	0.143	ND	1.00	1.00	12/16/19	KCA	1
1,3,5-Trimethylbenzene	ND	0.204	0.204	ND	1.00	1.00	12/16/19	KCA	1
1,3-Butadiene	ND	0.452	0.452	ND	1.00	1.00	12/16/19	KCA	1
1,3-Dichlorobenzene	ND	0.166	0.166	ND	1.00	1.00	12/16/19	KCA	1
1,4-Dichlorobenzene	ND	0.166	0.166	ND	1.00	1.00	12/16/19	KCA	1
1,4-Dioxane	ND	0.278	0.278	ND	1.00	1.00	12/16/19	KCA	1
2-Hexanone(MBK)	ND	0.244	0.244	ND	1.00	1.00	12/16/19	KCA	1
4-Ethyltoluene	0.350	0.204	0.204	1.72	1.00	1.00	12/16/19	KCA	1
4-Isopropyltoluene	ND	0.182	0.182	ND	1.00	1.00	12/16/19	KCA	1
4-Methyl-2-pentanone(MIBK)	0.671	0.244	0.244	2.75	1.00	1.00	12/16/19	KCA	1
Acetone	17.8	0.421	0.421	42.3	1.00	1.00	12/16/19	KCA	1
Acrylonitrile	ND	0.461	0.461	ND	1.00	1.00	12/16/19	KCA	1
Benzene	0.939	0.313	0.313	3.00	1.00	1.00	12/16/19	KCA	1
Benzyl chloride	ND	0.193	0.193	ND	1.00	1.00	12/16/19	KCA	1

Client ID: SS 4

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution
Bromodichloromethane	ND	0.149	0.149	ND	1.00	1.00	12/16/19	KCA	1
Bromoform	ND	0.097	0.097	ND	1.00	1.00	12/16/19	KCA	1
Bromomethane	ND	0.258	0.258	ND	1.00	1.00	12/16/19	KCA	1
Carbon Disulfide	11.7	0.321	0.321	36.4	1.00	1.00	12/16/19	KCA	1
Carbon Tetrachloride	0.035	0.032	0.032	0.22	0.20	0.20	12/16/19	KCA	1
Chlorobenzene	ND	0.217	0.217	ND	1.00	1.00	12/16/19	KCA	1
Chloroethane	ND	0.379	0.379	ND	1.00	1.00	12/16/19	KCA	1
Chloroform	0.553	0.205	0.205	2.70	1.00	1.00	12/16/19	KCA	1
Chloromethane	ND	0.485	0.485	ND	1.00	1.00	12/16/19	KCA	1
Cis-1,2-Dichloroethene	50.7	0.252	0.252	201	1.00	1.00	12/13/19	KCA	5
cis-1,3-Dichloropropene	ND	0.221	0.221	ND	1.00	1.00	12/16/19	KCA	1
Cyclohexane	2.38	0.291	0.291	8.19	1.00	1.00	12/16/19	KCA	1
Dibromochloromethane	ND	0.118	0.118	ND	1.00	1.00	12/16/19	KCA	1
Dichlorodifluoromethane	0.256	0.202	0.202	1.27	1.00	1.00	12/16/19	KCA	1
Ethanol	21.5	0.531	0.531	40.5	1.00	1.00	12/16/19	KCA	1
Ethyl acetate	ND	0.278	0.278	ND	1.00	1.00	12/16/19	KCA	1
Ethylbenzene	0.283	0.230	0.230	1.23	1.00	1.00	12/16/19	KCA	1
Heptane	1.62	0.244	0.244	6.64	1.00	1.00	12/16/19	KCA	1
Hexachlorobutadiene	ND	0.094	0.094	ND	1.00	1.00	12/16/19	KCA	1
Hexane	5.98	0.284	0.284	21.1	1.00	1.00	12/16/19	KCA	1
Isopropylalcohol	1.67	0.407	0.407	4.10	1.00	1.00	12/16/19	KCA	1
Isopropylbenzene	ND	0.204	0.204	ND	1.00	1.00	12/16/19	KCA	1
m,p-Xylene	0.932	0.230	0.230	4.04	1.00	1.00	12/16/19	KCA	1
Methyl Ethyl Ketone	3.70	0.339	0.339	10.9	1.00	1.00	12/16/19	KCA	1
Methyl tert-butyl ether(MTBE)	ND	0.278	0.278	ND	1.00	1.00	12/16/19	KCA	1
Methylene Chloride	ND	0.864	0.864	ND	3.00	3.00	12/16/19	KCA	1
n-Butylbenzene	ND	0.182	0.182	ND	1.00	1.00	12/16/19	KCA	1
o-Xylene	0.434	0.230	0.230	1.88	1.00	1.00	12/16/19	KCA	1
Propylene	ND	0.581	0.581	ND	1.00	1.00	12/16/19	KCA	1
sec-Butylbenzene	0.389	0.182	0.182	2.13	1.00	1.00	12/16/19	KCA	1
Styrene	ND	0.235	0.235	ND	1.00	1.00	12/16/19	KCA	1
Tetrachloroethene	2.04	0.037	0.037	13.8	0.25	0.25	12/16/19	KCA	1
Tetrahydrofuran	1.98	0.339	0.339	5.84	1.00	1.00	12/16/19	KCA	1
Toluene	1.58	0.266	0.266	5.95	1.00	1.00	12/16/19	KCA	1
Trans-1,2-Dichloroethene	3.88	0.252	0.252	15.4	1.00	1.00	12/16/19	KCA	1
trans-1,3-Dichloropropene	ND	0.221	0.221	ND	1.00	1.00	12/16/19	KCA	1
Trichloroethene	1.71	0.037	0.037	9.18	0.20	0.20	12/16/19	KCA	1
Trichlorofluoromethane	ND	0.178	0.178	ND	1.00	1.00	12/16/19	KCA	1
Trichlorotrifluoroethane	ND	0.131	0.131	ND	1.00	1.00	12/16/19	KCA	1
Vinyl Chloride	27.4	0.078	0.078	70.0	0.20	0.20	12/16/19	KCA	1
<u>QA/OC Surrogates/Internals</u>									
% Bromofluorobenzene	100	%	%	100	%	%	12/16/19	KCA	1
% IS-1,4-Difluorobenzene	81	%	%	81	%	%	12/16/19	KCA	1
% IS-Bromochloromethane	103	%	%	103	%	%	12/16/19	KCA	1
% IS-Chlorobenzene-d5	88	%	%	88	%	%	12/16/19	KCA	1
% Bromofluorobenzene (5x)	95	%	%	95	%	%	12/13/19	KCA	5
% IS-1,4-Difluorobenzene (5x)	94	%	%	94	%	%	12/13/19	KCA	5
% IS-Bromochloromethane (5x)	79	%	%	79	%	%	12/13/19	KCA	5
% IS-Chlorobenzene-d5 (5x)	101	%	%	101	%	%	12/13/19	KCA	5

Client ID: SS 4

Parameter	ppbv Result	ppbv RL	LOD/ MDL	ug/m3 Result	ug/m3 RL	LOD/ MDL	Date/Time	By	Dilution

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit1

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

December 16, 2019

Reviewed and Released by: Greg Lawrence, Assistant Lab Director



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823



Canister Sampling Information

December 16, 2019

FOR: Attn: Mr. Charles B. Sosik, P.G.
Environmental Business Consultants
1808 Middle Country Rd
Ridge NY 11961-2406

Location Code: EBC

SDG I.D.: GCE85314

Project ID: 26-22 4TH ST. QUEENS

Client Id	Lab Id	Canister		Reg. Id	Chk Out Date	Laboratory					Field			
		Id	Type			Out Hg	In Hg	Out Flow	In Flow	Flow RPD	Start Hg	End Hg	Sampling Start Date	Sampling End Date
SS 5	CE85314	23872	6.0L	5522	12/05/19	-30	-3	43	47	8.9	-29	-3	12/11/19 7:20	12/11/19 9:17
SS 8	CE85315	23329	6.0L	0163	12/05/19	-30	-4	43	46	6.7	-30	-5	12/11/19 7:15	12/11/19 9:06
SS 1	CE85316	17160	6.0L	7007	12/05/19	-30	-3	43	44	2.3	-29	-5	12/11/19 7:50	12/11/19 9:48
SS 6	CE85317	455	6.0L	5593	12/05/19	-30	-3	43	47	8.9	-30	-5	12/11/19 7:00	12/11/19 8:54
SS 3	CE85318	496	6.0L	3408	12/05/19	-30	-4	43	45	4.5	-30	-5	12/11/19 7:35	12/11/19 9:31
SS 2	CE85319	368	6.0L	4960	12/05/19	-30	-3	43	45	4.5	-30	-5	12/11/19 9:11	12/11/19 11:14
SS 7	CE85320	11292	6.0L	2975	12/05/19	-30	-5	43	44	2.3	-29	-5	12/11/19 7:07	12/11/19 9:04
SS 4	CE85321	28596	6.0L	3190	12/05/19	-30	-5	43	45	4.5	-30	-5	12/11/19 7:27	12/11/19 9:18

Monday, December 16, 2019

Criteria: None
State: NY

Sample Criteria Exceedances Report
GCE85314 - EBC

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units

*** No Data to Display ***

Phoenix Laboratories does not assume responsibility for the data contained in this exceedance report. It is provided as an additional tool to identify requested criteria exceedences. All efforts are made to ensure the accuracy of the data (obtained from appropriate agencies). A lack of exceedence information does not necessarily suggest conformance to the criteria. It is ultimately the site professional's responsibility to determine appropriate compliance.



587 East Middle Turnpike, P.O. Box 370, Meriden, CT 06060
Telephone: 860/693-1100 • Fax: 860/693-1583

CHAIN OF CUSTODY RECORD AIR ANALYSES

P.O. #

Page / of /

Data Delivery:

☐ Fax #:

☒ Email: J. J. J.

☐ Phone #:

800-827-5426

email: greg@phoenixlabs.com

Report to:	Project Name:	Data Format:	Other:
Customer:	26-22 4 th St. Queens	(Circle) <u>Excel</u>	<u>ASP CAT B</u>
Address:	Invoice to:	Requested Deliverable:	RCP MCP N Deliverables
	Sampled by:	Quote Number:	
	<u>Tony Balado</u>		

Phoenix ID #	Client Sample ID	Canister ID #	Canister Size (L)	Outgoing Canister Pressure (° Hg)	Incoming Canister Pressure (° Hg)	Flow Regulator ID #	Flow Controller Setting (ml/min)	Sampling Start Time	Sampling End Time	Sample Start Date	Canister Pressure at Start (° Hg)	Canister Pressure at End (° Hg)	Matrix	Soil Gas	Grab (G) Comp	TO-15	APH
THIS SECTION FOR LAB USE ONLY																	
85314	SS5	23872	6.0	-30	-3	5522	43	7:20	9:17	12-11-19	-29	-3	X	X		X	
85315	SS8	23329	1	1	-4	0163	1	7:13	9:06	12-11-19	-30	-5	X	X		X	
85316	SS1	17160	1	1	-3	7007	1	7:50	9:48	12-11-19	-29	-5	X	X		X	
85317	SS6	465	1	1	-3	5593	1	7:00	8:54	12-11-19	-30	-5	X	X		X	
		23346	1	1		4967											
		21326	1	1		7004											
85318	SS3	496	1	1	-4	3408	1	7:35	9:31	12-11-19	-30	-5	X	X		X	
85319	SS2	368	1	1	-3	4960	1	9:11	11:14	12-11-19	-30	-5	X	X		X	
85320	SS7	11292	1	1	-5	2975	1	7:07	9:04	12-11-19	-29	-5	X	X		X	
85321	SS4	2896	1	1	-5	3910	1	7:27	9:19	12-11-19	-30	-5	X	X		X	

Relinquished by: [Signature] Date: 12-11-19
Accepted by: [Signature] Date: 12-11-19
I attest that all media released by Phoenix Environmental Laboratories, Inc. have been received in good working condition and agree to the terms and conditions as listed on the back of this document.

State Where Samples Collected:	NY	Requested Criteria:	MAI	NI	NY	PA:	VT:
Turnaround Time:	☐ 1 Day	☐ 2 Day	☐ 3 Day	☐ 4 Day	☒ 5 Day	Vapor Intrusion	Indoor Air Residential
SPECIAL INSTRUCTIONS, OC REQUIREMENTS, REGULATORY INFORMATION:		TAC I/C		Indoor Air Residential	Indoor Air Residential	Indoor Air Residential	Indoor Air Residential
(10)(6-0)		TAC RES		Ind/Commercial	Ind/Commercial	Non-Residential	Ind/Commercial
(24H)		SVVC I/C		Soil Gas: Residential	Soil Gas: Residential	Soil Gas: Residential	Soil Gas: Residential
		SVVC RES		Ind/Commercial	Ind/Commercial	Ind/Commercial	Ind/Commercial
		GWV I/C		Ind/Commercial	Ind/Commercial	Ind/Commercial	Ind/Commercial
		GWV RES		Ind/Commercial	Ind/Commercial	Ind/Commercial	Ind/Commercial

APPENDIX - F
Laboratory Reports - Alpha



ANALYTICAL REPORT

Lab Number:	L1960803
Client:	Environmental Business Consultants Inc 1808 Middle Country Road Ridge, NY 11961
ATTN:	Charlie Sosik
Phone:	(631) 504-6000
Project Name:	26-22 4TH ST, QUEENS
Project Number:	BGP1902
Report Date:	01/22/20

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).

Six Park Row, Mansfield, MA 02048
508-261-7467 (Fax) -- -- - emccarter@mansfieldma.com



Project Name: 26-22 4TH ST, QUEENS
Project Number: BGP1902

Lab Number: L1960803
Report Date: 01/22/20

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1960803-01	MW1	WATER	26-22 4TH ST, QUEENS	12/18/19 08:23	12/19/19
L1960803-02	MW2	WATER	26-22 4TH ST, QUEENS	12/18/19 10:17	12/19/19
L1960803-03	MW3	WATER	26-22 4TH ST, QUEENS	12/17/19 08:28	12/19/19
L1960803-04	MW4	WATER	26-22 4TH ST, QUEENS	12/17/19 10:16	12/19/19
L1960803-05	MW5	WATER	26-22 4TH ST, QUEENS	12/17/19 14:03	12/19/19
L1960803-06	MW6	WATER	26-22 4TH ST, QUEENS	12/17/19 11:52	12/19/19
L1960803-07	TRIP BLANK	WATER	26-22 4TH ST, QUEENS	12/18/19 00:00	12/19/19
L1960803-08	FIELD BLANK	WATER	26-22 4TH ST, QUEENS	12/18/19 00:00	12/19/19

Project Name: 26-22 4TH ST, QUEENS
Project Number: BGP1902

Lab Number: L1960803
Report Date: 01/22/20

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: 26-22 4TH ST, QUEENS
Project Number: BGP1902

Lab Number: L1960803
Report Date: 01/22/20

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.

Perfluorinated Alkyl Acids by Isotope Dilution

L1960803-02 and -06: Extracted Internal Standard recoveries were outside the acceptance criteria for individual analytes. Please refer to the surrogate section of the report for details.

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:



Elizabeth Porta

Title: Technical Director/Representative

Date: 01/22/20

ORGANICS

SEMIVOLATILES

Project Name: 26-22 4TH ST, QUEENS**Lab Number:** L1960803**Project Number:** BGP1902**Report Date:** 01/22/20**SAMPLE RESULTS**

Lab ID: L1960803-01
 Client ID: MW1
 Sample Location: 26-22 4TH ST, QUEENS

Date Collected: 12/18/19 08:23
 Date Received: 12/19/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 134,LCMSMS-ID
 Analytical Date: 01/18/20 00:37
 Analyst: JW

Extraction Method: ALPHA 23528
 Extraction Date: 12/26/19 09:28

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	2.28		ng/l	1.96	0.400	1
Perfluoropentanoic Acid (PFPeA)	3.36		ng/l	1.96	0.388	1
Perfluorobutanesulfonic Acid (PFBS)	5.12		ng/l	1.96	0.233	1
Perfluorohexanoic Acid (PFHxA)	2.91		ng/l	1.96	0.322	1
Perfluoroheptanoic Acid (PFHpA)	1.24	J	ng/l	1.96	0.221	1
Perfluorohexanesulfonic Acid (PFHxS)	0.776	J	ng/l	1.96	0.369	1
Perfluorooctanoic Acid (PFOA)	2.45		ng/l	1.96	0.231	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	1.96	1.30	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.96	0.674	1
Perfluorononanoic Acid (PFNA)	1.07	J	ng/l	1.96	0.306	1
Perfluorooctanesulfonic Acid (PFOS)	12.6		ng/l	1.96	0.494	1
Perfluorodecanoic Acid (PFDA)	1.64	J	ng/l	1.96	0.298	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.96	1.19	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	1.96	0.635	1
Perfluoroundecanoic Acid (PFUnA)	0.412	J	ng/l	1.96	0.255	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	1.96	0.961	1
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	1.96	0.569	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	1.96	0.788	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.96	0.365	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	1.96	0.321	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	1.96	0.243	1
PFOA/PFOS, Total	15.1		ng/l	1.96	0.231	1

Project Name: 26-22 4TH ST, QUEENS**Lab Number:** L1960803**Project Number:** BGP1902**Report Date:** 01/22/20**SAMPLE RESULTS**

Lab ID: L1960803-01
 Client ID: MW1
 Sample Location: 26-22 4TH ST, QUEENS

Date Collected: 12/18/19 08:23
 Date Received: 12/19/19
 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)	78		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	86		16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	87		31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	65		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	77		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	98		47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	82		36-149
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	210		1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	83		34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	89		42-146
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	77		38-144
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	132		7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	63		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	73		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)	65		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	67		33-143

Project Name: 26-22 4TH ST, QUEENS**Lab Number:** L1960803**Project Number:** BGP1902**Report Date:** 01/22/20**SAMPLE RESULTS**

Lab ID: L1960803-02
 Client ID: MW2
 Sample Location: 26-22 4TH ST, QUEENS

Date Collected: 12/18/19 10:17
 Date Received: 12/19/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 134,LCMSMS-ID
 Analytical Date: 01/18/20 01:10
 Analyst: JW

Extraction Method: ALPHA 23528
 Extraction Date: 12/26/19 09:28

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	15.4		ng/l	2.04	0.416	1
Perfluoropentanoic Acid (PFPeA)	16.7		ng/l	2.04	0.404	1
Perfluorobutanesulfonic Acid (PFBS)	10.9		ng/l	2.04	0.243	1
Perfluorohexanoic Acid (PFHxA)	15.3		ng/l	2.04	0.335	1
Perfluoroheptanoic Acid (PFHpA)	12.6		ng/l	2.04	0.230	1
Perfluorohexanesulfonic Acid (PFHxS)	9.20		ng/l	2.04	0.384	1
Perfluorooctanoic Acid (PFOA)	64.3		ng/l	2.04	0.241	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	2.04	1.36	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	2.04	0.702	1
Perfluorononanoic Acid (PFNA)	2.52		ng/l	2.04	0.318	1
Perfluorooctanesulfonic Acid (PFOS)	20.7		ng/l	2.04	0.514	1
Perfluorodecanoic Acid (PFDA)	0.584	J	ng/l	2.04	0.310	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	2.04	1.24	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	0.718	J	ng/l	2.04	0.661	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	2.04	0.265	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	2.04	1.00	1
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	2.04	0.592	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	2.04	0.820	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	2.04	0.380	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	2.04	0.334	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	2.04	0.253	1
PFOA/PFOS, Total	85.0		ng/l	2.04	0.241	1

Project Name: 26-22 4TH ST, QUEENS
Project Number: BGP1902

Lab Number: L1960803
Report Date: 01/22/20

SAMPLE RESULTS

Lab ID: L1960803-02
Client ID: MW2
Sample Location: 26-22 4TH ST, QUEENS

Date Collected: 12/18/19 10:17
Date Received: 12/19/19
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)	98				2-156	
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	82				16-173	
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	88				31-159	
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	64				21-145	
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	81				30-139	
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	104				47-153	
Perfluoro[13C8]Octanoic Acid (M8PFOA)	92				36-149	
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	275			Q	1-244	
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	102				34-146	
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	93				42-146	
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	85				38-144	
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	173			Q	7-170	
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	80				1-181	
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	85				40-144	
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	33				1-87	
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	79				23-146	
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	77				24-161	
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	73				33-143	

Project Name: 26-22 4TH ST, QUEENS
Project Number: BGP1902

Lab Number: L1960803
Report Date: 01/22/20

SAMPLE RESULTS

Lab ID: L1960803-03
Client ID: MW3
Sample Location: 26-22 4TH ST, QUEENS

Date Collected: 12/17/19 08:28
Date Received: 12/19/19
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 134,LCMSMS-ID
Analytical Date: 01/18/20 01:26
Analyst: JW

Extraction Method: ALPHA 23528
Extraction Date: 12/26/19 09:28

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	8.66		ng/l	1.99	0.406	1
Perfluoropentanoic Acid (PFPeA)	17.4		ng/l	1.99	0.394	1
Perfluorobutanesulfonic Acid (PFBS)	3.65		ng/l	1.99	0.237	1
Perfluorohexanoic Acid (PFHxA)	14.8		ng/l	1.99	0.327	1
Perfluoroheptanoic Acid (PFHpA)	11.2		ng/l	1.99	0.224	1
Perfluorohexanesulfonic Acid (PFHxS)	6.23		ng/l	1.99	0.374	1
Perfluorooctanoic Acid (PFOA)	42.8		ng/l	1.99	0.235	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	1.99	1.33	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.99	0.685	1
Perfluorononanoic Acid (PFNA)	2.89		ng/l	1.99	0.311	1
Perfluorooctanesulfonic Acid (PFOS)	19.5		ng/l	1.99	0.502	1
Perfluorodecanoic Acid (PFDA)	0.382	J	ng/l	1.99	0.303	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.99	1.21	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	1.99	0.645	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.99	0.259	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	1.99	0.976	1
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	1.99	0.578	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	0.932	J	ng/l	1.99	0.801	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.99	0.370	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	1.99	0.326	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	1.99	0.247	1
PFOA/PFOS, Total	62.3		ng/l	1.99	0.235	1

Project Name: 26-22 4TH ST, QUEENS**Lab Number:** L1960803**Project Number:** BGP1902**Report Date:** 01/22/20**SAMPLE RESULTS**

Lab ID: L1960803-03
 Client ID: MW3
 Sample Location: 26-22 4TH ST, QUEENS

Date Collected: 12/17/19 08:28
 Date Received: 12/19/19
 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)	107		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	116		16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	100		31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	80		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	91		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	104		47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	99		36-149
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	216		1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	100		34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	98		42-146
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	86		38-144
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	138		7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	72		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	81		40-144
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	25		1-87
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	74		23-146
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	78		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	72		33-143

Project Name: 26-22 4TH ST, QUEENS**Lab Number:** L1960803**Project Number:** BGP1902**Report Date:** 01/22/20**SAMPLE RESULTS**

Lab ID: L1960803-04
 Client ID: MW4
 Sample Location: 26-22 4TH ST, QUEENS

Date Collected: 12/17/19 10:16
 Date Received: 12/19/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 134,LCMSMS-ID
 Analytical Date: 01/18/20 01:59
 Analyst: JW

Extraction Method: ALPHA 23528
 Extraction Date: 12/26/19 09:28

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	18.8		ng/l	1.87	0.382	1
Perfluoropentanoic Acid (PFPeA)	24.4		ng/l	1.87	0.371	1
Perfluorobutanesulfonic Acid (PFBS)	7.32		ng/l	1.87	0.223	1
Perfluorohexanoic Acid (PFHxA)	19.3		ng/l	1.87	0.307	1
Perfluoroheptanoic Acid (PFHpA)	14.2		ng/l	1.87	0.211	1
Perfluorohexanesulfonic Acid (PFHxS)	5.72		ng/l	1.87	0.352	1
Perfluorooctanoic Acid (PFOA)	58.6		ng/l	1.87	0.221	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	1.87	1.25	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.87	0.644	1
Perfluorononanoic Acid (PFNA)	4.50		ng/l	1.87	0.292	1
Perfluorooctanesulfonic Acid (PFOS)	31.5		ng/l	1.87	0.472	1
Perfluorodecanoic Acid (PFDA)	0.464	J	ng/l	1.87	0.285	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.87	1.13	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	1.87	0.607	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.87	0.243	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	1.87	0.918	1
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	1.87	0.543	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	1.87	0.753	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.87	0.348	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	1.87	0.306	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	1.87	0.232	1
PFOA/PFOS, Total	90.1		ng/l	1.87	0.221	1

Project Name: 26-22 4TH ST, QUEENS**Lab Number:** L1960803**Project Number:** BGP1902**Report Date:** 01/22/20**SAMPLE RESULTS**

Lab ID: L1960803-04
 Client ID: MW4
 Sample Location: 26-22 4TH ST, QUEENS

Date Collected: 12/17/19 10:16
 Date Received: 12/19/19
 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)	97		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	94		16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	89		31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	73		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	89		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	95		47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	94		36-149
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	236		1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	97		34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	76		42-146
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	81		38-144
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	159		7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	75		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	79		40-144
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	29		1-87
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	80		23-146
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	74		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	67		33-143

Project Name: 26-22 4TH ST, QUEENS**Lab Number:** L1960803**Project Number:** BGP1902**Report Date:** 01/22/20**SAMPLE RESULTS**

Lab ID: L1960803-05
 Client ID: MW5
 Sample Location: 26-22 4TH ST, QUEENS

Date Collected: 12/17/19 14:03
 Date Received: 12/19/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 134,LCMSMS-ID
 Analytical Date: 01/18/20 02:16
 Analyst: JW

Extraction Method: ALPHA 23528
 Extraction Date: 12/26/19 09:28

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	5.41		ng/l	2.00	0.408	1
Perfluoropentanoic Acid (PFPeA)	8.68		ng/l	2.00	0.396	1
Perfluorobutanesulfonic Acid (PFBS)	9.42		ng/l	2.00	0.238	1
Perfluorohexanoic Acid (PFHxA)	9.98		ng/l	2.00	0.328	1
Perfluoroheptanoic Acid (PFHpA)	4.26		ng/l	2.00	0.225	1
Perfluorohexanesulfonic Acid (PFHxS)	0.912	J	ng/l	2.00	0.376	1
Perfluorooctanoic Acid (PFOA)	16.1		ng/l	2.00	0.236	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	2.54		ng/l	2.00	1.33	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	2.00	0.688	1
Perfluorononanoic Acid (PFNA)	1.47	J	ng/l	2.00	0.312	1
Perfluorooctanesulfonic Acid (PFOS)	4.01		ng/l	2.00	0.504	1
Perfluorodecanoic Acid (PFDA)	0.516	J	ng/l	2.00	0.304	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	2.00	1.21	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	2.00	0.648	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	2.00	0.260	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	2.00	0.980	1
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	2.00	0.580	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	2.00	0.804	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	2.00	0.372	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	2.00	0.327	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	2.00	0.248	1
PFOA/PFOS, Total	20.1		ng/l	2.00	0.236	1

Project Name: 26-22 4TH ST, QUEENS
Project Number: BGP1902

Lab Number: L1960803
Report Date: 01/22/20

SAMPLE RESULTS

Lab ID: L1960803-05
Client ID: MW5
Sample Location: 26-22 4TH ST, QUEENS

Date Collected: 12/17/19 14:03
Date Received: 12/19/19
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)	86		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	89		16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	89		31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	67		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	78		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	97		47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	83		36-149
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	178		1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	82		34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	77		42-146
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	70		38-144
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	117		7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	56		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	73		40-144
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	14		1-87
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	64		23-146
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	66		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	69		33-143

Project Name: 26-22 4TH ST, QUEENS**Lab Number:** L1960803**Project Number:** BGP1902**Report Date:** 01/22/20**SAMPLE RESULTS**

Lab ID: L1960803-06
 Client ID: MW6
 Sample Location: 26-22 4TH ST, QUEENS

Date Collected: 12/17/19 11:52
 Date Received: 12/19/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 134,LCMSMS-ID
 Analytical Date: 01/18/20 02:33
 Analyst: JW

Extraction Method: ALPHA 23528
 Extraction Date: 12/26/19 09:28

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	9.55		ng/l	1.86	0.380	1
Perfluoropentanoic Acid (PFPeA)	8.03		ng/l	1.86	0.369	1
Perfluorobutanesulfonic Acid (PFBS)	3.94		ng/l	1.86	0.222	1
Perfluorohexanoic Acid (PFHxA)	11.5		ng/l	1.86	0.306	1
Perfluoroheptanoic Acid (PFHpA)	6.19		ng/l	1.86	0.210	1
Perfluorohexanesulfonic Acid (PFHxS)	2.09		ng/l	1.86	0.351	1
Perfluorooctanoic Acid (PFOA)	29.7		ng/l	1.86	0.220	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	1.86	1.24	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.86	0.642	1
Perfluorononanoic Acid (PFNA)	6.33		ng/l	1.86	0.291	1
Perfluorooctanesulfonic Acid (PFOS)	51.4		ng/l	1.86	0.470	1
Perfluorodecanoic Acid (PFDA)	3.43		ng/l	1.86	0.284	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.86	1.13	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	1.86	0.604	1
Perfluoroundecanoic Acid (PFUnA)	0.552	J	ng/l	1.86	0.242	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	1.86	0.914	1
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	1.86	0.541	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	1.27	J	ng/l	1.86	0.750	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.86	0.347	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	1.86	0.305	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	1.86	0.231	1
PFOA/PFOS, Total	81.1		ng/l	1.86	0.220	1

Project Name: 26-22 4TH ST, QUEENS
Project Number: BGP1902

Lab Number: L1960803
Report Date: 01/22/20

SAMPLE RESULTS

Lab ID: L1960803-06
Client ID: MW6
Sample Location: 26-22 4TH ST, QUEENS

Date Collected: 12/17/19 11:52
Date Received: 12/19/19
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)	108			2-156		
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	111			16-173		
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	105			31-159		
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	89			21-145		
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	100			30-139		
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	110			47-153		
Perfluoro[13C8]Octanoic Acid (M8PFOA)	108			36-149		
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	238			1-244		
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	113			34-146		
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	98			42-146		
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	90			38-144		
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	176		Q	7-170		
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	85			1-181		
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	92			40-144		
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	29			1-87		
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	87			23-146		
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	83			24-161		
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	79			33-143		

Project Name: 26-22 4TH ST, QUEENS**Lab Number:** L1960803**Project Number:** BGP1902**Report Date:** 01/22/20**SAMPLE RESULTS**

Lab ID: L1960803-07
 Client ID: TRIP BLANK
 Sample Location: 26-22 4TH ST, QUEENS

Date Collected: 12/18/19 00:00
 Date Received: 12/19/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 134,LCMSMS-ID
 Analytical Date: 01/17/20 21:51
 Analyst: JW

Extraction Method: ALPHA 23528
 Extraction Date: 12/26/19 09:28

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	ND		ng/l	1.77	0.360	1
Perfluoropentanoic Acid (PFPeA)	ND		ng/l	1.77	0.350	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/l	1.77	0.210	1
Perfluorohexanoic Acid (PFHxA)	0.300	J	ng/l	1.77	0.290	1
Perfluoroheptanoic Acid (PFHpA)	ND		ng/l	1.77	0.199	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	1.77	0.332	1
Perfluorooctanoic Acid (PFOA)	ND		ng/l	1.77	0.208	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	1.77	1.18	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.77	0.608	1
Perfluorononanoic Acid (PFNA)	ND		ng/l	1.77	0.276	1
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/l	1.77	0.445	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.77	0.268	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.77	1.07	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	1.77	0.572	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.77	0.230	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	1.77	0.866	1
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	1.77	0.512	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	1.77	0.710	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.77	0.329	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	1.77	0.289	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	1.77	0.219	1
PFOA/PFOS, Total	ND		ng/l	1.77	0.208	1

Project Name: 26-22 4TH ST, QUEENS
Project Number: BGP1902

Lab Number: L1960803
Report Date: 01/22/20

SAMPLE RESULTS

Lab ID: L1960803-07
Client ID: TRIP BLANK
Sample Location: 26-22 4TH ST, QUEENS

Date Collected: 12/18/19 00:00
Date Received: 12/19/19
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)	108		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	121		16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	106		31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	101		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	113		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	119		47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	111		36-149
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	121		1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	119		34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	114		42-146
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	107		38-144
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	123		7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	90		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	114		40-144
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	41		1-87
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	104		23-146
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	106		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	95		33-143

Project Name: 26-22 4TH ST, QUEENS
Project Number: BGP1902

Lab Number: L1960803
Report Date: 01/22/20

SAMPLE RESULTS

Lab ID: L1960803-08
Client ID: FIELD BLANK
Sample Location: 26-22 4TH ST, QUEENS

Date Collected: 12/18/19 00:00
Date Received: 12/19/19
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 134,LCMSMS-ID
Analytical Date: 01/17/20 22:07
Analyst: JW

Extraction Method: ALPHA 23528
Extraction Date: 12/26/19 09:28

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	ND		ng/l	2.10	0.428	1
Perfluoropentanoic Acid (PFPeA)	ND		ng/l	2.10	0.416	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/l	2.10	0.250	1
Perfluorohexanoic Acid (PFHxA)	0.408	J	ng/l	2.10	0.344	1
Perfluoroheptanoic Acid (PFHpA)	ND		ng/l	2.10	0.236	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	2.10	0.395	1
Perfluorooctanoic Acid (PFOA)	ND		ng/l	2.10	0.248	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	2.10	1.40	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	2.10	0.723	1
Perfluorononanoic Acid (PFNA)	ND		ng/l	2.10	0.328	1
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/l	2.10	0.529	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	2.10	0.319	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	2.10	1.27	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	2.10	0.681	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	2.10	0.273	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	2.10	1.03	1
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	2.10	0.609	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	2.10	0.844	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	2.10	0.391	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	2.10	0.344	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	2.10	0.260	1
PFOA/PFOS, Total	ND		ng/l	2.10	0.248	1

Project Name: 26-22 4TH ST, QUEENS
Project Number: BGP1902

Lab Number: L1960803
Report Date: 01/22/20

SAMPLE RESULTS

Lab ID: L1960803-08
Client ID: FIELD BLANK
Sample Location: 26-22 4TH ST, QUEENS

Date Collected: 12/18/19 00:00
Date Received: 12/19/19
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)	100		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	110		16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	97		31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	90		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	99		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	103		47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	97		36-149
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	107		1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	98		34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	102		42-146
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	95		38-144
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	115		7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	85		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	99		40-144
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	41		1-87
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	96		23-146
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	90		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	84		33-143

Project Name: 26-22 4TH ST, QUEENS
Project Number: BGP1902

Lab Number: L1960803
Report Date: 01/22/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 134,LCMSMS-ID
Analytical Date: 01/17/20 20:28
Analyst: JW

Extraction Method: ALPHA 23528
Extraction Date: 12/26/19 09:28

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab for sample(s): 01-08 Batch: WG1324807-1					
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)	0.400	J	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)	1.18	J	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)	0.868	J	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)	0.268	J	ng/l	2.00	0.248
PFOA/PFOS, Total	ND		ng/l	2.00	0.236

Project Name: 26-22 4TH ST, QUEENS
Project Number: BGP1902

Lab Number: L1960803
Report Date: 01/22/20

Method Blank Analysis Batch Quality Control

Analytical Method: 134,LCMSMS-ID
Analytical Date: 01/17/20 20:28
Analyst: JW

Extraction Method: ALPHA 23528
Extraction Date: 12/26/19 09:28

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab for sample(s): 01-08 Batch: WG1324807-1					

Surrogate (Extracted Internal Standard)	%Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	110		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	118		16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	106		31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	101		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	109		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	111		47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	108		36-149
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	111		1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	109		34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	102		42-146
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	99		38-144
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	123		7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	76		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	106		40-144
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	37		1-87
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	93		23-146
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	98		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	94		33-143

Lab Control Sample Analysis

Batch Quality Control

Project Name: 26-22 4TH ST, QUEENS

Project Number: BGP1902

Lab Number: L1960803

Report Date: 01/22/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 01-08 Batch: WG1324807-2 WG1324807-3								
Perfluorobutanoic Acid (PFBA)	117		115		67-148	2		30
Perfluoropentanoic Acid (PFPeA)	122		121		63-161	1		30
Perfluorobutanesulfonic Acid (PFBS)	119		117		65-157	2		30
Perfluorohexanoic Acid (PFHxA)	118		117		69-168	1		30
Perfluoroheptanoic Acid (PFHpA)	116		117		58-159	1		30
Perfluorohexanesulfonic Acid (PFHxS)	106		112		69-177	6		30
Perfluorooctanoic Acid (PFOA)	122		124		63-159	2		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	150		129		49-187	15		30
Perfluoroheptanesulfonic Acid (PFHpS)	131		126		61-179	4		30
Perfluorononanoic Acid (PFNA)	119		119		68-171	0		30
Perfluorooctanesulfonic Acid (PFOS)	122		114		52-151	7		30
Perfluorodecanoic Acid (PFDA)	118		112		63-171	5		30
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	149		150		56-173	1		30
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	124		135		60-166	8		30
Perfluoroundecanoic Acid (PFUnA)	117		114		60-153	3		30
Perfluorodecanesulfonic Acid (PFDS)	119		112		38-156	6		30
Perfluorooctanesulfonamide (FOSA)	119		120		46-170	1		30
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	144		118		45-170	20		30
Perfluorododecanoic Acid (PFDoA)	118		121		67-153	3		30
Perfluorotridecanoic Acid (PFTrDA)	133		133		48-158	0		30
Perfluorotetradecanoic Acid (PFTA)	122		124		59-182	2		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: 26-22 4TH ST, QUEENS

Project Number: BGP1902

Lab Number: L1960803

Report Date: 01/22/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 01-08 Batch: WG1324807-2 WG1324807-3								

Surrogate (Extracted Internal Standard)	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	96		91		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	104		96		16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	93		93		31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	88		85		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	97		90		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	101		95		47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	95		88		36-149
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	102		104		1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	96		92		34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	89		89		42-146
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	89		86		38-144
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	110		108		7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	76		71		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	94		94		40-144
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	42		37		1-87
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	72		85		23-146
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	90		81		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	86		79		33-143

Matrix Spike Analysis

Batch Quality Control

Project Name: 26-22 4TH ST, QUEENS

Project Number: BGP1902

Lab Number: L1960803

Report Date: 01/22/20

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): 01-08 QC Batch ID: WG1324807-4 QC Sample: L1960803-01 Client ID: MW1												
Perfluorobutanoic Acid (PFBA)	2.28	40.2	47.0	111	-	-	-	-	67-148	-	-	30
Perfluoropentanoic Acid (PFPeA)	3.36	40.2	51.5	120	-	-	-	-	63-161	-	-	30
Perfluorobutanesulfonic Acid (PFBS)	5.12	35.6	46.3	116	-	-	-	-	65-157	-	-	30
Perfluorohexanoic Acid (PFHxA)	2.91	40.2	48.7	114	-	-	-	-	69-168	-	-	30
Perfluoroheptanoic Acid (PFHpA)	1.24J	40.2	45.9	114	-	-	-	-	58-159	-	-	30
Perfluorohexanesulfonic Acid (PFHxS)	0.776J	36.6	40.9	112	-	-	-	-	69-177	-	-	30
Perfluorooctanoic Acid (PFOA)	2.45	40.2	49.9	118	-	-	-	-	63-159	-	-	30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND	38.2	48.3	127	-	-	-	-	49-187	-	-	30
Perfluoroheptanesulfonic Acid (PFHpS)	ND	38.2	48.0	126	-	-	-	-	61-179	-	-	30
Perfluorononanoic Acid (PFNA)	1.07J	40.2	48.0	120	-	-	-	-	68-171	-	-	30
Perfluorooctanesulfonic Acid (PFOS)	12.6	37.2	53.5	110	-	-	-	-	52-151	-	-	30
Perfluorodecanoic Acid (PFDA)	1.64J	40.2	45.3	113	-	-	-	-	63-171	-	-	30
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND	38.6	58.5	152	-	-	-	-	56-173	-	-	30
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND	40.2	50.4	125	-	-	-	-	60-166	-	-	30
Perfluoroundecanoic Acid (PFUnA)	0.412J	40.2	46.8	117	-	-	-	-	60-153	-	-	30
Perfluorodecanesulfonic Acid (PFDS)	ND	38.8	40.8	105	-	-	-	-	38-156	-	-	30
Perfluorooctanesulfonamide (FOSA)	ND	40.2	44.5	111	-	-	-	-	46-170	-	-	30
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND	40.2	50.1	125	-	-	-	-	45-170	-	-	30
Perfluorododecanoic Acid (PFDoA)	ND	40.2	47.4	118	-	-	-	-	67-153	-	-	30
Perfluorotridecanoic Acid (PFTrDA)	ND	40.2	52.9	132	-	-	-	-	48-158	-	-	30
Perfluorotetradecanoic Acid (PFTA)	ND	40.2	47.7	119	-	-	-	-	59-182	-	-	30

Matrix Spike Analysis**Batch Quality Control****Project Name:** 26-22 4TH ST, QUEENS**Project Number:** BGP1902**Lab Number:** L1960803**Report Date:** 01/22/20

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): 01-08 QC Batch ID: WG1324807-4 QC Sample: L1960803-01 Client ID: MW1												

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)	150				7-170
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	219				1-244
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	79				23-146
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	77				1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	86				40-144
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	86				38-144
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	73				21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	86				30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	109				47-153
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	78				24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	80				33-143
Perfluoro[13C4]Butanoic Acid (MPFBA)	90				2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	98				16-173
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	29				1-87
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	95				42-146
Perfluoro[13C8]Octanoic Acid (M8PFOA)	92				36-149
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	93				34-146
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	98				31-159

Lab Duplicate Analysis Batch Quality Control

Project Name: 26-22 4TH ST, QUEENS

Project Number: BGP1902

Lab Number: L1960803

Report Date: 01/22/20

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 01-08 QC Batch ID: WG1324807-5 QC Sample: L1960803-03 Client ID: MW3						
Perfluorobutanoic Acid (PFBA)	8.66	8.38	ng/l	3		30
Perfluoropentanoic Acid (PFPeA)	17.4	16.6	ng/l	5		30
Perfluorobutanesulfonic Acid (PFBS)	3.65	3.83	ng/l	5		30
Perfluorohexanoic Acid (PFHxA)	14.8	14.5	ng/l	2		30
Perfluoroheptanoic Acid (PFHpA)	11.2	11.2	ng/l	0		30
Perfluorohexanesulfonic Acid (PFHxS)	6.23	5.93	ng/l	5		30
Perfluorooctanoic Acid (PFOA)	42.8	42.7	ng/l	0		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND	ND	ng/l	NC		30
Perfluoroheptanesulfonic Acid (PFHpS)	ND	ND	ng/l	NC		30
Perfluorononanoic Acid (PFNA)	2.89	2.89	ng/l	0		30
Perfluorooctanesulfonic Acid (PFOS)	19.5	19.3	ng/l	1		30
Perfluorodecanoic Acid (PFDA)	0.382J	0.316J	ng/l	NC		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)	ND	ND	ng/l	NC		30
Perfluorodecanesulfonic Acid (PFDS)	ND	ND	ng/l	NC		30
Perfluorooctanesulfonamide (FOSA)	ND	ND	ng/l	NC		30
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	0.932J	ND	ng/l	NC		30
Perfluorododecanoic Acid (PFDoA)	ND	ND	ng/l	NC		30
Perfluorotridecanoic Acid (PFTrDA)	ND	ND	ng/l	NC		30

Lab Duplicate Analysis **Batch Quality Control**

Project Name: 26-22 4TH ST, QUEENS

Project Number: BGP1902

Lab Number: L1960803

Report Date: 01/22/20

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 01-08 QC Batch ID: WG1324807-5 QC Sample: L1960803-03 Client ID: MW3						
Perfluorotetradecanoic Acid (PFTA)	ND	ND	ng/l	NC		30
PFOA/PFOS, Total	62.3	62.0	ng/l	0		30

Surrogate (Extracted Internal Standard)	%Recovery	Qualifier	%Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	107		87		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	116		95		16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	100		97		31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	80		71		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	91		82		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	104		107		47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	99		85		36-149
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	216		188		1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	100		87		34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	98		83		42-146
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	86		74		38-144
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	138		133		7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	72		60		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	81		73		40-144
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	25		16		1-87
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	74		63		23-146
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	78		70		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	72		67		33-143

Project Name: 26-22 4TH ST, QUEENS**Lab Number:** L1960803**Project Number:** BGP1902**Report Date:** 01/22/20**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(*)
L1960803-01A	2 Plastic/1 Plastic/1 H2O Plastic	A	NA		3.4	Y	Absent		A2-NY-537-ISOTOPE(14)
L1960803-01B	2 Plastic/1 Plastic/1 H2O Plastic	A	NA		3.4	Y	Absent		A2-NY-537-ISOTOPE(14)
L1960803-02A	2 Plastic/1 Plastic/1 H2O Plastic	A	NA		3.4	Y	Absent		A2-NY-537-ISOTOPE(14)
L1960803-02B	2 Plastic/1 Plastic/1 H2O Plastic	A	NA		3.4	Y	Absent		A2-NY-537-ISOTOPE(14)
L1960803-03A	2 Plastic/1 Plastic/1 H2O Plastic	A	NA		3.4	Y	Absent		A2-NY-537-ISOTOPE(14)
L1960803-03B	2 Plastic/1 Plastic/1 H2O Plastic	A	NA		3.4	Y	Absent		A2-NY-537-ISOTOPE(14)
L1960803-04A	2 Plastic/1 Plastic/1 H2O Plastic	A	NA		3.4	Y	Absent		A2-NY-537-ISOTOPE(14)
L1960803-04B	2 Plastic/1 Plastic/1 H2O Plastic	A	NA		3.4	Y	Absent		A2-NY-537-ISOTOPE(14)
L1960803-05A	2 Plastic/1 Plastic/1 H2O Plastic	A	NA		3.4	Y	Absent		A2-NY-537-ISOTOPE(14)
L1960803-05B	2 Plastic/1 Plastic/1 H2O Plastic	A	NA		3.4	Y	Absent		A2-NY-537-ISOTOPE(14)
L1960803-06A	2 Plastic/1 Plastic/1 H2O Plastic	A	NA		3.4	Y	Absent		A2-NY-537-ISOTOPE(14)
L1960803-06B	2 Plastic/1 Plastic/1 H2O Plastic	A	NA		3.4	Y	Absent		A2-NY-537-ISOTOPE(14)
L1960803-07A	2 Plastic/1 Plastic/1 H2O Plastic	A	NA		3.4	Y	Absent		A2-NY-537-ISOTOPE(14)
L1960803-07B	2 Plastic/1 Plastic/1 H2O Plastic	A	NA		3.4	Y	Absent		A2-NY-537-ISOTOPE(14)
L1960803-08A	2 Plastic/1 Plastic/1 H2O Plastic	A	NA		3.4	Y	Absent		A2-NY-537-ISOTOPE(14)

Container Comments

L1960803-07B Did Not Receive.

Project Name: 26-22 4TH ST, QUEENS
Project Number: BGP1902

Serial_No:01222018:42
Lab Number: L1960803
Report Date: 01/22/20

PFAS PARAMETER SUMMARY

Parameter	Acronym	CAS Number
PERFLUOROALKYL CARBOXYLIC ACIDS (PFCAs)		
Perfluorooctadecanoic Acid	PFODA	16517-11-6
Perfluorohexadecanoic Acid	PFHxDA	67905-19-5
Perfluorotetradecanoic Acid	PFTA	376-06-7
Perfluorotridecanoic Acid	PFTrDA	72629-94-8
Perfluorododecanoic Acid	PFDoA	307-55-1
Perfluoroundecanoic Acid	PFUnA	2058-94-8
Perfluorodecanoic Acid	PFDA	335-76-2
Perfluorononanoic Acid	PFNA	375-95-1
Perfluorooctanoic Acid	PFOA	335-67-1
Perfluoroheptanoic Acid	PFHpA	375-85-9
Perfluorohexanoic Acid	PFHxA	307-24-4
Perfluoropentanoic Acid	PFPeA	2706-90-3
Perfluorobutanoic Acid	PFBA	375-22-4
PERFLUOROALKYL SULFONIC ACIDS (PFSAs)		
Perfluorododecanesulfonic Acid	PFDoDS	79780-39-5
Perfluorodecanesulfonic Acid	PFDS	335-77-3
Perfluorononanesulfonic Acid	PFNS	68259-12-1
Perfluorooctanesulfonic Acid	PFOS	1763-23-1
Perfluoroheptanesulfonic Acid	PFHpS	375-92-8
Perfluorohexanesulfonic Acid	PFHxS	355-46-4
Perfluoropentanesulfonic Acid	PFPeS	2706-91-4
Perfluorobutanesulfonic Acid	PFBS	375-73-5
FLUOROTELOMERS		
1H,1H,2H,2H-Perfluorododecanesulfonic Acid	10:2FTS	120226-60-0
1H,1H,2H,2H-Perfluorodecanesulfonic Acid	8:2FTS	39108-34-4
1H,1H,2H,2H-Perfluorooctanesulfonic Acid	6:2FTS	27619-97-2
1H,1H,2H,2H-Perfluorohexanesulfonic Acid	4:2FTS	757124-72-4
PERFLUOROALKANE SULFONAMIDES (FASAs)		
Perfluorooctanesulfonamide	FOSA	754-91-6
N-Ethyl Perfluorooctane Sulfonamide	NEtFOSA	4151-50-2
N-Methyl Perfluorooctane Sulfonamide	NMeFOSA	31506-32-8
PERFLUOROALKANE SULFONYL SUBSTANCES		
N-Ethyl Perfluorooctanesulfonamido Ethanol	NEtFOSE	1691-99-2
N-Methyl Perfluorooctanesulfonamido Ethanol	NMeFOSE	24448-09-7
N-Ethyl Perfluorooctanesulfonamidoacetic Acid	NEtFOSAA	2991-50-6
N-Methyl Perfluorooctanesulfonamidoacetic Acid	NMeFOSAA	2355-31-9
PER- and POLYFLUOROALKYL ETHER CARBOXYLIC ACIDS		
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-Propanoic Acid	HFPO-DA	13252-13-6
4,8-Dioxa-3h-Perfluorononanoic Acid	ADONA	919005-14-4
CHLORO-PERFLUOROALKYL SULFONIC ACIDS		
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid	11Cl-PF3OUdS	763051-92-9
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid	9Cl-PF3ONS	756426-58-1

Project Name: 26-22 4TH ST, QUEENS
Project Number: BGP1902

Lab Number: L1960803
Report Date: 01/22/20

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: 26-22 4TH ST, QUEENS
Project Number: BGP1902

Lab Number: L1960803
Report Date: 01/22/20

- 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.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

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.

The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

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 Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- 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

Report Format: DU Report with 'J' Qualifiers



Project Name: 26-22 4TH ST, QUEENS
Project Number: BGP1902

Lab Number: L1960803
Report Date: 01/22/20

Data Qualifiers

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.

Project Name: 26-22 4TH ST, QUEENS
Project Number: BGP1902

Lab Number: L1960803
Report Date: 01/22/20

REFERENCES

- 134 Determination of Selected Perfluorinated Alkyl Acids in Drinking Water by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry (LC/MS/MS) using Isotope Dilution. Alpha SOP 23528.

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 15

Published Date: 8/15/2019 9:53:42 AM

Page 1 of 1

Certification Information

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

Westborough Facility**EPA 624/624.1:** m/p-xylene, o-xylene**EPA 8260C:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.**EPA 8270D:** NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.**SM4500:** NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.**Mansfield Facility****SM 2540D:** TSS**EPA 8082A:** NPW: PCB: 1, 5, 31, 87, 101, 110, 141, 151, 153, 180, 183, 187.**EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Biological Tissue Matrix: EPA 3050B

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

Westborough Facility:**Drinking Water****EPA 300.0:** Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,****EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B****EPA 332:** Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.**Microbiology:** **SM9215B, SM9223-P/A, SM9223B-Colilert-QT, SM9222D.****Non-Potable Water****SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH:** Ammonia-N and Kjeldahl-N, **EPA 350.1:**Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E,****SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.**EPA 624.1:** Volatile Halocarbons & Aromatics,**EPA 608.3:** Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs**EPA 625.1:** SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.**Microbiology:** **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.****Mansfield Facility:****Drinking Water****EPA 200.7:** Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.**EPA 522.****Non-Potable Water****EPA 200.7:** Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.**EPA 200.8:** Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.**EPA 245.1** Hg.**SM2340B**

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



ANALYTICAL REPORT

Lab Number:	L1959860
Client:	Environmental Business Consultants Inc 1808 Middle Country Road Ridge, NY 11961
ATTN:	Charlie Sosik
Phone:	(631) 504-6000
Project Name:	Not Specified
Project Number:	BGP1902
Report Date:	01/22/20

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).

Six Park Row, Mansfield, MA 02048
508-261-7467 (Fax) -- -- - emccarter@mansfieldma.com



Project Name: Not Specified
Project Number: BGP1902

Lab Number: L1959860
Report Date: 01/22/20

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1959860-01	19B1 (0-2)	SOIL	22-26 4TH STREET, QUEENS	12/10/19 03:30	12/13/19
L1959860-02	19B1 (8-10)	SOIL	22-26 4TH STREET, QUEENS	12/10/19 03:32	12/13/19
L1959860-03	19B2 (0-2)	SOIL	22-26 4TH STREET, QUEENS	12/10/19 02:51	12/13/19
L1959860-04	19B2 (8-10)	SOIL	22-26 4TH STREET, QUEENS	12/10/19 03:20	12/13/19
L1959860-05	19B3 (0-2)	SOIL	22-26 4TH STREET, QUEENS	12/10/19 02:20	12/13/19
L1959860-06	19B3 (8-10)	SOIL	22-26 4TH STREET, QUEENS	12/10/19 02:23	12/13/19
L1959860-07	19B4 (0-2)	SOIL	22-26 4TH STREET, QUEENS	12/10/19 08:35	12/13/19
L1959860-08	19B4 (8-10)	SOIL	22-26 4TH STREET, QUEENS	12/10/19 08:45	12/13/19
L1959860-09	19B5 (0-2)	SOIL	22-26 4TH STREET, QUEENS	12/10/19 09:46	12/13/19
L1959860-10	19B5 (8-10)	SOIL	22-26 4TH STREET, QUEENS	12/10/19 09:54	12/13/19
L1959860-11	19B6 (0-2)	SOIL	22-26 4TH STREET, QUEENS	12/10/19 10:43	12/13/19
L1959860-12	19B6 (8-10)	SOIL	22-26 4TH STREET, QUEENS	12/10/19 10:54	12/13/19
L1959860-13	19B7 (0-2)	SOIL	22-26 4TH STREET, QUEENS	12/10/19 11:20	12/13/19
L1959860-14	19B7 (8-10)	SOIL	22-26 4TH STREET, QUEENS	12/10/19 11:33	12/13/19
L1959860-15	19B8 (0-2)	SOIL	22-26 4TH STREET, QUEENS	12/10/19 12:20	12/13/19
L1959860-16	19B8 (8-10)	SOIL	22-26 4TH STREET, QUEENS	12/10/19 12:34	12/13/19
L1959860-17	19B9 (0-2)	SOIL	22-26 4TH STREET, QUEENS	12/10/19 12:45	12/13/19
L1959860-18	19B9 (8-10)	SOIL	22-26 4TH STREET, QUEENS	12/10/19 12:59	12/13/19
L1959860-19	19B10 (0-2)	SOIL	22-26 4TH STREET, QUEENS	12/10/19 13:57	12/13/19
L1959860-20	19B10 (8-10)	SOIL	22-26 4TH STREET, QUEENS	12/10/19 14:01	12/13/19
L1959860-21	TRIP BLANK	WATER	22-26 4TH STREET, QUEENS	12/10/19 00:00	12/13/19
L1959860-22	FIELD BLANK	WATER	22-26 4TH STREET, QUEENS	12/10/19 08:02	12/13/19

Project Name: Not Specified
Project Number: BGP1902

Lab Number: L1959860
Report Date: 01/22/20

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: Not Specified
Project Number: BGP1902

Lab Number: L1959860
Report Date: 01/22/20

Case Narrative (continued)

Perfluorinated Alkyl Acids by Isotope Dilution

L1959860-01, -03, -04, -07, -08, -09, -11, -15, and -20: Extracted Internal Standard recoveries were outside the acceptance criteria for individual analytes. Please refer to the surrogate section of the report for details.

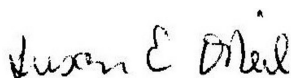
L1959860-20: The reporting limit was elevated for Perfluorooctanesulfonamide (FOSA) due to low recovery of the extracted internal standard Perfluoro[13C8]Octanesulfonamide (M8FOSA). The low recovery was attributed to the sample matrix.

WG1321572-1: The Method Blank, associated with L1959860-21 and -22 has a concentration above the reporting limit for PFHxS, 6:2 FTS, and PFOS. Since the samples were non-detect to the RL for these target analytes, no further actions were taken. The results of the original analysis are reported.

WG1323884-4 and WG1323884-5: Extracted Internal Standard recoveries were outside the acceptance criteria for individual analytes. Please refer to the surrogate section of the report for details.

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:



Susan O'Neil

Title: Technical Director/Representative

Date: 01/22/20

ORGANICS

SEMIVOLATILES

Project Name: Not Specified

Lab Number: L1959860

Project Number: BGP1902

Report Date: 01/22/20

SAMPLE RESULTS

Lab ID: L1959860-01
 Client ID: 19B1 (0-2)
 Sample Location: 22-26 4TH STREET, QUEENS

Date Collected: 12/10/19 03:30
 Date Received: 12/13/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 134,LCMSMS-ID
 Analytical Date: 01/16/20 22:35
 Analyst: JW
 Percent Solids: 90%

Extraction Method: ALPHA 23528
 Extraction Date: 12/23/19 10:20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	ND		ug/kg	0.979	0.022	1
Perfluoropentanoic Acid (PFPeA)	ND		ug/kg	0.979	0.045	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ug/kg	0.979	0.038	1
Perfluorohexanoic Acid (PFHxA)	0.083	J	ug/kg	0.979	0.051	1
Perfluoroheptanoic Acid (PFHpA)	ND		ug/kg	0.979	0.044	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ug/kg	0.979	0.059	1
Perfluorooctanoic Acid (PFOA)	0.078	J	ug/kg	0.979	0.041	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ug/kg	0.979	0.176	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ug/kg	0.979	0.134	1
Perfluorononanoic Acid (PFNA)	ND		ug/kg	0.979	0.073	1
Perfluorooctanesulfonic Acid (PFOS)	ND		ug/kg	0.979	0.127	1
Perfluorodecanoic Acid (PFDA)	ND		ug/kg	0.979	0.066	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ug/kg	0.979	0.281	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ug/kg	0.979	0.197	1
Perfluoroundecanoic Acid (PFUnA)	ND		ug/kg	0.979	0.046	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ug/kg	0.979	0.150	1
Perfluorooctanesulfonamide (FOSA)	ND		ug/kg	0.979	0.096	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	0.122	J	ug/kg	0.979	0.083	1
Perfluorododecanoic Acid (PFDoA)	ND		ug/kg	0.979	0.069	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ug/kg	0.979	0.200	1
Perfluorotetradecanoic Acid (PFTA)	ND		ug/kg	0.979	0.053	1
PFOA/PFOS, Total	0.078	J	ug/kg	0.979	0.041	1

Project Name: Not Specified

Lab Number: L1959860

Project Number: BGP1902

Report Date: 01/22/20

SAMPLE RESULTS

Lab ID: L1959860-01

Date Collected: 12/10/19 03:30

Client ID: 19B1 (0-2)

Date Received: 12/13/19

Sample Location: 22-26 4TH STREET, QUEENS

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)	91				60-153	
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	101				65-182	
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	93				70-151	
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	86				61-147	
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	91				62-149	
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	98				63-166	
Perfluoro[13C8]Octanoic Acid (M8PFOA)	93				62-152	
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	94				32-182	
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	97				61-154	
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	101				65-151	
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	96				65-150	
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	105				25-186	
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	39			Q	45-137	
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	99				64-158	
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	29				1-125	
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	45				42-136	
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	97				56-148	
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	90				26-160	

Project Name: Not Specified

Lab Number: L1959860

Project Number: BGP1902

Report Date: 01/22/20

SAMPLE RESULTS

Lab ID: L1959860-02
 Client ID: 19B1 (8-10)
 Sample Location: 22-26 4TH STREET, QUEENS

Date Collected: 12/10/19 03:32
 Date Received: 12/13/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 134,LCMSMS-ID
 Analytical Date: 01/16/20 23:08
 Analyst: JW
 Percent Solids: 83%

Extraction Method: ALPHA 23528
 Extraction Date: 12/23/19 10:20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	ND		ug/kg	1.07	0.024	1
Perfluoropentanoic Acid (PFPeA)	ND		ug/kg	1.07	0.049	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ug/kg	1.07	0.042	1
Perfluorohexanoic Acid (PFHxA)	0.071	J	ug/kg	1.07	0.056	1
Perfluoroheptanoic Acid (PFHpA)	ND		ug/kg	1.07	0.048	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ug/kg	1.07	0.065	1
Perfluorooctanoic Acid (PFOA)	0.140	J	ug/kg	1.07	0.045	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ug/kg	1.07	0.192	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ug/kg	1.07	0.146	1
Perfluorononanoic Acid (PFNA)	ND		ug/kg	1.07	0.080	1
Perfluorooctanesulfonic Acid (PFOS)	ND		ug/kg	1.07	0.139	1
Perfluorodecanoic Acid (PFDA)	ND		ug/kg	1.07	0.072	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ug/kg	1.07	0.307	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ug/kg	1.07	0.216	1
Perfluoroundecanoic Acid (PFUnA)	ND		ug/kg	1.07	0.050	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ug/kg	1.07	0.164	1
Perfluorooctanesulfonamide (FOSA)	ND		ug/kg	1.07	0.105	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ug/kg	1.07	0.091	1
Perfluorododecanoic Acid (PFDoA)	ND		ug/kg	1.07	0.075	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ug/kg	1.07	0.219	1
Perfluorotetradecanoic Acid (PFTA)	ND		ug/kg	1.07	0.058	1
PFOA/PFOS, Total	0.140	J	ug/kg	1.07	0.045	1

Project Name: Not Specified

Lab Number: L1959860

Project Number: BGP1902

Report Date: 01/22/20

SAMPLE RESULTS

Lab ID: L1959860-02

Date Collected: 12/10/19 03:32

Client ID: 19B1 (8-10)

Date Received: 12/13/19

Sample Location: 22-26 4TH STREET, QUEENS

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)	89				60-153	
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	100				65-182	
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	91				70-151	
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	83				61-147	
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	86				62-149	
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	99				63-166	
Perfluoro[13C8]Octanoic Acid (M8PFOA)	90				62-152	
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	82				32-182	
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	94				61-154	
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	99				65-151	
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	92				65-150	
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	98				25-186	
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	45				45-137	
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	100				64-158	
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	41				1-125	
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	56				42-136	
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	93				56-148	
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	85				26-160	

Project Name: Not Specified

Lab Number: L1959860

Project Number: BGP1902

Report Date: 01/22/20

SAMPLE RESULTS

Lab ID: L1959860-03
 Client ID: 19B2 (0-2)
 Sample Location: 22-26 4TH STREET, QUEENS

Date Collected: 12/10/19 02:51
 Date Received: 12/13/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 134,LCMSMS-ID
 Analytical Date: 01/16/20 23:41
 Analyst: JW
 Percent Solids: 92%

Extraction Method: ALPHA 23528
 Extraction Date: 12/23/19 10:20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	ND		ug/kg	1.00	0.023	1
Perfluoropentanoic Acid (PFPeA)	ND		ug/kg	1.00	0.046	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ug/kg	1.00	0.039	1
Perfluorohexanoic Acid (PFHxA)	ND		ug/kg	1.00	0.053	1
Perfluoroheptanoic Acid (PFHpA)	ND		ug/kg	1.00	0.045	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ug/kg	1.00	0.061	1
Perfluorooctanoic Acid (PFOA)	0.376	J	ug/kg	1.00	0.042	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ug/kg	1.00	0.180	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ug/kg	1.00	0.136	1
Perfluorononanoic Acid (PFNA)	ND		ug/kg	1.00	0.075	1
Perfluorooctanesulfonic Acid (PFOS)	0.629	J	ug/kg	1.00	0.130	1
Perfluorodecanoic Acid (PFDA)	ND		ug/kg	1.00	0.067	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ug/kg	1.00	0.287	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ug/kg	1.00	0.202	1
Perfluoroundecanoic Acid (PFUnA)	ND		ug/kg	1.00	0.047	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ug/kg	1.00	0.153	1
Perfluorooctanesulfonamide (FOSA)	ND		ug/kg	1.00	0.098	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ug/kg	1.00	0.085	1
Perfluorododecanoic Acid (PFDoA)	ND		ug/kg	1.00	0.070	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ug/kg	1.00	0.205	1
Perfluorotetradecanoic Acid (PFTA)	ND		ug/kg	1.00	0.054	1
PFOA/PFOS, Total	1.01	J	ug/kg	1.00	0.042	1

Project Name: Not Specified

Lab Number: L1959860

Project Number: BGP1902

Report Date: 01/22/20

SAMPLE RESULTS

Lab ID: L1959860-03
 Client ID: 19B2 (0-2)
 Sample Location: 22-26 4TH STREET, QUEENS

Date Collected: 12/10/19 02:51
 Date Received: 12/13/19
 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)	96		60-153
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	106		65-182
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	101		70-151
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	92		61-147
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	96		62-149
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	116		63-166
Perfluoro[13C8]Octanoic Acid (M8PFOA)	100		62-152
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	112		32-182
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	105		61-154
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	113		65-151
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	102		65-150
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	126		25-186
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	41	Q	45-137
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	111		64-158
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	12		1-125
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	52		42-136
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	107		56-148
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	95		26-160

Project Name: Not Specified

Lab Number: L1959860

Project Number: BGP1902

Report Date: 01/22/20

SAMPLE RESULTS

Lab ID: L1959860-04
 Client ID: 19B2 (8-10)
 Sample Location: 22-26 4TH STREET, QUEENS

Date Collected: 12/10/19 03:20
 Date Received: 12/13/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 134,LCMSMS-ID
 Analytical Date: 01/16/20 23:58
 Analyst: JW
 Percent Solids: 93%

Extraction Method: ALPHA 23528
 Extraction Date: 12/23/19 10:20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	ND		ug/kg	0.998	0.023	1
Perfluoropentanoic Acid (PFPeA)	ND		ug/kg	0.998	0.046	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ug/kg	0.998	0.039	1
Perfluorohexanoic Acid (PFHxA)	ND		ug/kg	0.998	0.052	1
Perfluoroheptanoic Acid (PFHpA)	ND		ug/kg	0.998	0.045	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ug/kg	0.998	0.060	1
Perfluorooctanoic Acid (PFOA)	0.042	J	ug/kg	0.998	0.042	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ug/kg	0.998	0.179	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ug/kg	0.998	0.136	1
Perfluorononanoic Acid (PFNA)	ND		ug/kg	0.998	0.075	1
Perfluorooctanesulfonic Acid (PFOS)	ND		ug/kg	0.998	0.130	1
Perfluorodecanoic Acid (PFDA)	ND		ug/kg	0.998	0.067	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ug/kg	0.998	0.286	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ug/kg	0.998	0.201	1
Perfluoroundecanoic Acid (PFUnA)	ND		ug/kg	0.998	0.047	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ug/kg	0.998	0.153	1
Perfluorooctanesulfonamide (FOSA)	ND		ug/kg	0.998	0.098	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ug/kg	0.998	0.084	1
Perfluorododecanoic Acid (PFDoA)	ND		ug/kg	0.998	0.070	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ug/kg	0.998	0.204	1
Perfluorotetradecanoic Acid (PFTA)	ND		ug/kg	0.998	0.054	1
PFOA/PFOS, Total	0.042	J	ug/kg	0.998	0.042	1

Project Name: Not Specified

Lab Number: L1959860

Project Number: BGP1902

Report Date: 01/22/20

SAMPLE RESULTS

Lab ID: L1959860-04
 Client ID: 19B2 (8-10)
 Sample Location: 22-26 4TH STREET, QUEENS

Date Collected: 12/10/19 03:20
 Date Received: 12/13/19
 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)	85		60-153
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	97		65-182
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	97		70-151
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	82		61-147
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	87		62-149
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	102		63-166
Perfluoro[13C8]Octanoic Acid (M8PFOA)	89		62-152
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	98		32-182
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	93		61-154
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	94		65-151
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	93		65-150
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	111		25-186
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	28	Q	45-137
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	94		64-158
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	6		1-125
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	32	Q	42-136
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	96		56-148
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	84		26-160

Project Name: Not Specified

Lab Number: L1959860

Project Number: BGP1902

Report Date: 01/22/20

SAMPLE RESULTS

Lab ID: L1959860-05
 Client ID: 19B3 (0-2)
 Sample Location: 22-26 4TH STREET, QUEENS

Date Collected: 12/10/19 02:20
 Date Received: 12/13/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 134,LCMSMS-ID
 Analytical Date: 01/17/20 00:15
 Analyst: JW
 Percent Solids: 84%

Extraction Method: ALPHA 23528
 Extraction Date: 12/23/19 10:20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	ND		ug/kg	1.06	0.024	1
Perfluoropentanoic Acid (PFPeA)	ND		ug/kg	1.06	0.049	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ug/kg	1.06	0.042	1
Perfluorohexanoic Acid (PFHxA)	ND		ug/kg	1.06	0.056	1
Perfluoroheptanoic Acid (PFHpA)	ND		ug/kg	1.06	0.048	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ug/kg	1.06	0.064	1
Perfluorooctanoic Acid (PFOA)	0.060	J	ug/kg	1.06	0.045	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ug/kg	1.06	0.191	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ug/kg	1.06	0.145	1
Perfluorononanoic Acid (PFNA)	ND		ug/kg	1.06	0.080	1
Perfluorooctanesulfonic Acid (PFOS)	ND		ug/kg	1.06	0.138	1
Perfluorodecanoic Acid (PFDA)	ND		ug/kg	1.06	0.071	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ug/kg	1.06	0.306	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ug/kg	1.06	0.215	1
Perfluoroundecanoic Acid (PFUnA)	ND		ug/kg	1.06	0.050	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ug/kg	1.06	0.163	1
Perfluorooctanesulfonamide (FOSA)	ND		ug/kg	1.06	0.104	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ug/kg	1.06	0.090	1
Perfluorododecanoic Acid (PFDoA)	ND		ug/kg	1.06	0.075	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ug/kg	1.06	0.218	1
Perfluorotetradecanoic Acid (PFTA)	ND		ug/kg	1.06	0.058	1
PFOA/PFOS, Total	0.060	J	ug/kg	1.06	0.045	1

Project Name: Not Specified

Lab Number: L1959860

Project Number: BGP1902

Report Date: 01/22/20

SAMPLE RESULTS

Lab ID: L1959860-05

Date Collected: 12/10/19 02:20

Client ID: 19B3 (0-2)

Date Received: 12/13/19

Sample Location: 22-26 4TH STREET, QUEENS

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)	93		60-153
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	102		65-182
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	86		70-151
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	87		61-147
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	93		62-149
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	96		63-166
Perfluoro[13C8]Octanoic Acid (M8PFOA)	97		62-152
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	96		32-182
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	105		61-154
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	91		65-151
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	100		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)	51		45-137
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	104		64-158
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	16		1-125
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	66		42-136
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	101		56-148
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	88		26-160

Project Name: Not Specified

Lab Number: L1959860

Project Number: BGP1902

Report Date: 01/22/20

SAMPLE RESULTS

Lab ID: L1959860-06
 Client ID: 19B3 (8-10)
 Sample Location: 22-26 4TH STREET, QUEENS

Date Collected: 12/10/19 02:23
 Date Received: 12/13/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 134,LCMSMS-ID
 Analytical Date: 01/17/20 00:31
 Analyst: JW
 Percent Solids: 90%

Extraction Method: ALPHA 23528
 Extraction Date: 12/23/19 10:20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	ND		ug/kg	1.07	0.024	1
Perfluoropentanoic Acid (PFPeA)	ND		ug/kg	1.07	0.049	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ug/kg	1.07	0.042	1
Perfluorohexanoic Acid (PFHxA)	0.056	J	ug/kg	1.07	0.056	1
Perfluoroheptanoic Acid (PFHpA)	ND		ug/kg	1.07	0.049	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ug/kg	1.07	0.065	1
Perfluorooctanoic Acid (PFOA)	0.091	J	ug/kg	1.07	0.045	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ug/kg	1.07	0.193	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ug/kg	1.07	0.147	1
Perfluorononanoic Acid (PFNA)	ND		ug/kg	1.07	0.081	1
Perfluorooctanesulfonic Acid (PFOS)	0.214	J	ug/kg	1.07	0.140	1
Perfluorodecanoic Acid (PFDA)	ND		ug/kg	1.07	0.072	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ug/kg	1.07	0.308	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ug/kg	1.07	0.216	1
Perfluoroundecanoic Acid (PFUnA)	ND		ug/kg	1.07	0.050	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ug/kg	1.07	0.164	1
Perfluorooctanesulfonamide (FOSA)	ND		ug/kg	1.07	0.105	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ug/kg	1.07	0.091	1
Perfluorododecanoic Acid (PFDoA)	ND		ug/kg	1.07	0.075	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ug/kg	1.07	0.220	1
Perfluorotetradecanoic Acid (PFTA)	ND		ug/kg	1.07	0.058	1
PFOA/PFOS, Total	0.305	J	ug/kg	1.07	0.045	1

Project Name: Not Specified

Lab Number: L1959860

Project Number: BGP1902

Report Date: 01/22/20

SAMPLE RESULTS

Lab ID: L1959860-06

Date Collected: 12/10/19 02:23

Client ID: 19B3 (8-10)

Date Received: 12/13/19

Sample Location: 22-26 4TH STREET, QUEENS

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)	94		60-153
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	103		65-182
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	91		70-151
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	89		61-147
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	96		62-149
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	97		63-166
Perfluoro[13C8]Octanoic Acid (M8PFOA)	96		62-152
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	99		32-182
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	103		61-154
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	94		65-151
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	98		65-150
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	117		25-186
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	70		45-137
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	105		64-158
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	46		1-125
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	71		42-136
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	100		56-148
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	91		26-160

Project Name: Not Specified

Lab Number: L1959860

Project Number: BGP1902

Report Date: 01/22/20

SAMPLE RESULTS

Lab ID: L1959860-07
 Client ID: 19B4 (0-2)
 Sample Location: 22-26 4TH STREET, QUEENS

Date Collected: 12/10/19 08:35
 Date Received: 12/13/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 134,LCMSMS-ID
 Analytical Date: 01/17/20 00:48
 Analyst: JW
 Percent Solids: 79%

Extraction Method: ALPHA 23528
 Extraction Date: 12/23/19 10:20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	ND		ug/kg	1.19	0.027	1
Perfluoropentanoic Acid (PFPeA)	ND		ug/kg	1.19	0.055	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ug/kg	1.19	0.047	1
Perfluorohexanoic Acid (PFHxA)	ND		ug/kg	1.19	0.063	1
Perfluoroheptanoic Acid (PFHpA)	ND		ug/kg	1.19	0.054	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ug/kg	1.19	0.072	1
Perfluorooctanoic Acid (PFOA)	ND		ug/kg	1.19	0.050	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ug/kg	1.19	0.214	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ug/kg	1.19	0.163	1
Perfluorononanoic Acid (PFNA)	ND		ug/kg	1.19	0.090	1
Perfluorooctanesulfonic Acid (PFOS)	ND		ug/kg	1.19	0.155	1
Perfluorodecanoic Acid (PFDA)	ND		ug/kg	1.19	0.080	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ug/kg	1.19	0.342	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ug/kg	1.19	0.240	1
Perfluoroundecanoic Acid (PFUnA)	ND		ug/kg	1.19	0.056	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ug/kg	1.19	0.182	1
Perfluorooctanesulfonamide (FOSA)	ND		ug/kg	1.19	0.117	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ug/kg	1.19	0.101	1
Perfluorododecanoic Acid (PFDoA)	ND		ug/kg	1.19	0.084	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ug/kg	1.19	0.244	1
Perfluorotetradecanoic Acid (PFTA)	ND		ug/kg	1.19	0.064	1
PFOA/PFOS, Total	ND		ug/kg	1.19	0.050	1

Project Name: Not Specified

Lab Number: L1959860

Project Number: BGP1902

Report Date: 01/22/20

SAMPLE RESULTS

Lab ID: L1959860-07

Date Collected: 12/10/19 08:35

Client ID: 19B4 (0-2)

Date Received: 12/13/19

Sample Location: 22-26 4TH STREET, QUEENS

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)	79				60-153	
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	89				65-182	
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	92				70-151	
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	79				61-147	
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	86				62-149	
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	104				63-166	
Perfluoro[13C8]Octanoic Acid (M8PFOA)	87				62-152	
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	88				32-182	
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	92				61-154	
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	95				65-151	
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	87				65-150	
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	108				25-186	
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	23			Q	45-137	
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	94				64-158	
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	9				1-125	
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	30			Q	42-136	
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	89				56-148	
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	48				26-160	

Project Name: Not Specified

Lab Number: L1959860

Project Number: BGP1902

Report Date: 01/22/20

SAMPLE RESULTS

Lab ID: L1959860-08
 Client ID: 19B4 (8-10)
 Sample Location: 22-26 4TH STREET, QUEENS

Date Collected: 12/10/19 08:45
 Date Received: 12/13/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 134,LCMSMS-ID
 Analytical Date: 01/17/20 01:04
 Analyst: JW
 Percent Solids: 82%

Extraction Method: ALPHA 23528
 Extraction Date: 12/23/19 10:20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	ND		ug/kg	1.19	0.027	1
Perfluoropentanoic Acid (PFPeA)	ND		ug/kg	1.19	0.055	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ug/kg	1.19	0.047	1
Perfluorohexanoic Acid (PFHxA)	ND		ug/kg	1.19	0.063	1
Perfluoroheptanoic Acid (PFHpA)	ND		ug/kg	1.19	0.054	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ug/kg	1.19	0.072	1
Perfluorooctanoic Acid (PFOA)	ND		ug/kg	1.19	0.050	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ug/kg	1.19	0.214	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ug/kg	1.19	0.163	1
Perfluorononanoic Acid (PFNA)	ND		ug/kg	1.19	0.089	1
Perfluorooctanesulfonic Acid (PFOS)	ND		ug/kg	1.19	0.155	1
Perfluorodecanoic Acid (PFDA)	ND		ug/kg	1.19	0.080	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ug/kg	1.19	0.342	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ug/kg	1.19	0.240	1
Perfluoroundecanoic Acid (PFUnA)	ND		ug/kg	1.19	0.056	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ug/kg	1.19	0.182	1
Perfluorooctanesulfonamide (FOSA)	ND		ug/kg	1.19	0.117	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ug/kg	1.19	0.101	1
Perfluorododecanoic Acid (PFDoA)	ND		ug/kg	1.19	0.084	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ug/kg	1.19	0.244	1
Perfluorotetradecanoic Acid (PFTA)	ND		ug/kg	1.19	0.064	1
PFOA/PFOS, Total	ND		ug/kg	1.19	0.050	1

Project Name: Not Specified

Lab Number: L1959860

Project Number: BGP1902

Report Date: 01/22/20

SAMPLE RESULTS

Lab ID: L1959860-08
 Client ID: 19B4 (8-10)
 Sample Location: 22-26 4TH STREET, QUEENS

Date Collected: 12/10/19 08:45
 Date Received: 12/13/19
 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)	66		60-153
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	77		65-182
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	87		70-151
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	69		61-147
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	77		62-149
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	94		63-166
Perfluoro[13C8]Octanoic Acid (M8PFOA)	81		62-152
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	86		32-182
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	84		61-154
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	98		65-151
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	83		65-150
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	98		25-186
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	9	Q	45-137
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	90		64-158
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	6		1-125
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	12	Q	42-136
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	88		56-148
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	66		26-160

Project Name: Not Specified

Lab Number: L1959860

Project Number: BGP1902

Report Date: 01/22/20

SAMPLE RESULTS

Lab ID: L1959860-09
 Client ID: 19B5 (0-2)
 Sample Location: 22-26 4TH STREET, QUEENS

Date Collected: 12/10/19 09:46
 Date Received: 12/13/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 134,LCMSMS-ID
 Analytical Date: 01/17/20 01:21
 Analyst: JW
 Percent Solids: 71%

Extraction Method: ALPHA 23528
 Extraction Date: 12/23/19 10:20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	ND		ug/kg	1.37	0.031	1
Perfluoropentanoic Acid (PFPeA)	ND		ug/kg	1.37	0.063	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ug/kg	1.37	0.053	1
Perfluorohexanoic Acid (PFHxA)	ND		ug/kg	1.37	0.072	1
Perfluoroheptanoic Acid (PFHpA)	ND		ug/kg	1.37	0.062	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ug/kg	1.37	0.083	1
Perfluorooctanoic Acid (PFOA)	ND		ug/kg	1.37	0.057	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ug/kg	1.37	0.246	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ug/kg	1.37	0.187	1
Perfluorononanoic Acid (PFNA)	ND		ug/kg	1.37	0.103	1
Perfluorooctanesulfonic Acid (PFOS)	ND		ug/kg	1.37	0.178	1
Perfluorodecanoic Acid (PFDA)	ND		ug/kg	1.37	0.092	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ug/kg	1.37	0.393	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ug/kg	1.37	0.276	1
Perfluoroundecanoic Acid (PFUnA)	ND		ug/kg	1.37	0.064	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ug/kg	1.37	0.209	1
Perfluorooctanesulfonamide (FOSA)	ND		ug/kg	1.37	0.134	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ug/kg	1.37	0.116	1
Perfluorododecanoic Acid (PFDoA)	ND		ug/kg	1.37	0.096	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ug/kg	1.37	0.280	1
Perfluorotetradecanoic Acid (PFTA)	ND		ug/kg	1.37	0.074	1
PFOA/PFOS, Total	ND		ug/kg	1.37	0.057	1

Project Name: Not Specified

Lab Number: L1959860

Project Number: BGP1902

Report Date: 01/22/20

SAMPLE RESULTS

Lab ID: L1959860-09
 Client ID: 19B5 (0-2)
 Sample Location: 22-26 4TH STREET, QUEENS

Date Collected: 12/10/19 09:46
 Date Received: 12/13/19
 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)	86		60-153
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	97		65-182
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	89		70-151
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	84		61-147
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	92		62-149
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	100		63-166
Perfluoro[13C8]Octanoic Acid (M8PFOA)	94		62-152
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	99		32-182
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	99		61-154
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	92		65-151
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	93		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)	30	Q	45-137
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	98		64-158
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	13		1-125
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	33	Q	42-136
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	96		56-148
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	72		26-160

Project Name: Not Specified

Lab Number: L1959860

Project Number: BGP1902

Report Date: 01/22/20

SAMPLE RESULTS

Lab ID: L1959860-10
 Client ID: 19B5 (8-10)
 Sample Location: 22-26 4TH STREET, QUEENS

Date Collected: 12/10/19 09:54
 Date Received: 12/13/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 134,LCMSMS-ID
 Analytical Date: 01/17/20 01:54
 Analyst: JW
 Percent Solids: 84%

Extraction Method: ALPHA 23528
 Extraction Date: 12/23/19 10:20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	ND		ug/kg	1.06	0.024	1
Perfluoropentanoic Acid (PFPeA)	ND		ug/kg	1.06	0.049	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ug/kg	1.06	0.041	1
Perfluorohexanoic Acid (PFHxA)	ND		ug/kg	1.06	0.056	1
Perfluoroheptanoic Acid (PFHpA)	ND		ug/kg	1.06	0.048	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ug/kg	1.06	0.064	1
Perfluorooctanoic Acid (PFOA)	ND		ug/kg	1.06	0.044	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ug/kg	1.06	0.190	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ug/kg	1.06	0.145	1
Perfluorononanoic Acid (PFNA)	ND		ug/kg	1.06	0.080	1
Perfluorooctanesulfonic Acid (PFOS)	ND		ug/kg	1.06	0.138	1
Perfluorodecanoic Acid (PFDA)	ND		ug/kg	1.06	0.071	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ug/kg	1.06	0.304	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ug/kg	1.06	0.214	1
Perfluoroundecanoic Acid (PFUnA)	ND		ug/kg	1.06	0.050	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ug/kg	1.06	0.162	1
Perfluorooctanesulfonamide (FOSA)	ND		ug/kg	1.06	0.104	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	0.188	J	ug/kg	1.06	0.090	1
Perfluorododecanoic Acid (PFDoA)	ND		ug/kg	1.06	0.074	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ug/kg	1.06	0.217	1
Perfluorotetradecanoic Acid (PFTA)	ND		ug/kg	1.06	0.057	1
PFOA/PFOS, Total	ND		ug/kg	1.06	0.044	1

Project Name: Not Specified

Lab Number: L1959860

Project Number: BGP1902

Report Date: 01/22/20

SAMPLE RESULTS

Lab ID: L1959860-10
 Client ID: 19B5 (8-10)
 Sample Location: 22-26 4TH STREET, QUEENS

Date Collected: 12/10/19 09:54
 Date Received: 12/13/19
 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)	96		65-182
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	90		70-151
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	82		61-147
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	89		62-149
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	100		63-166
Perfluoro[13C8]Octanoic Acid (M8PFOA)	92		62-152
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	101		32-182
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	94		61-154
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	93		65-151
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	91		65-150
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	104		25-186
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	61		45-137
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	100		64-158
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	15		1-125
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	64		42-136
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	94		56-148
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	69		26-160

Project Name: Not Specified

Lab Number: L1959860

Project Number: BGP1902

Report Date: 01/22/20

SAMPLE RESULTS

Lab ID: L1959860-11
 Client ID: 19B6 (0-2)
 Sample Location: 22-26 4TH STREET, QUEENS

Date Collected: 12/10/19 10:43
 Date Received: 12/13/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 134,LCMSMS-ID
 Analytical Date: 01/17/20 02:10
 Analyst: JW
 Percent Solids: 88%

Extraction Method: ALPHA 23528
 Extraction Date: 12/23/19 10:20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	ND		ug/kg	1.02	0.023	1
Perfluoropentanoic Acid (PFPeA)	ND		ug/kg	1.02	0.047	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ug/kg	1.02	0.040	1
Perfluorohexanoic Acid (PFHxA)	ND		ug/kg	1.02	0.054	1
Perfluoroheptanoic Acid (PFHpA)	ND		ug/kg	1.02	0.046	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ug/kg	1.02	0.062	1
Perfluorooctanoic Acid (PFOA)	ND		ug/kg	1.02	0.043	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ug/kg	1.02	0.184	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ug/kg	1.02	0.140	1
Perfluorononanoic Acid (PFNA)	ND		ug/kg	1.02	0.077	1
Perfluorooctanesulfonic Acid (PFOS)	ND		ug/kg	1.02	0.133	1
Perfluorodecanoic Acid (PFDA)	ND		ug/kg	1.02	0.069	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ug/kg	1.02	0.294	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ug/kg	1.02	0.206	1
Perfluoroundecanoic Acid (PFUnA)	ND		ug/kg	1.02	0.048	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ug/kg	1.02	0.157	1
Perfluorooctanesulfonamide (FOSA)	ND		ug/kg	1.02	0.100	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ug/kg	1.02	0.087	1
Perfluorododecanoic Acid (PFDoA)	ND		ug/kg	1.02	0.072	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ug/kg	1.02	0.210	1
Perfluorotetradecanoic Acid (PFTA)	ND		ug/kg	1.02	0.055	1
PFOA/PFOS, Total	ND		ug/kg	1.02	0.043	1

Project Name: Not Specified

Lab Number: L1959860

Project Number: BGP1902

Report Date: 01/22/20

SAMPLE RESULTS

Lab ID: L1959860-11

Date Collected: 12/10/19 10:43

Client ID: 19B6 (0-2)

Date Received: 12/13/19

Sample Location: 22-26 4TH STREET, QUEENS

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)	49		Q	60-153		
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	56		Q	65-182		
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	112			70-151		
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	52		Q	61-147		
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	63			62-149		
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	118			63-166		
Perfluoro[13C8]Octanoic Acid (M8PFOA)	75			62-152		
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	128			32-182		
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	90			61-154		
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	121			65-151		
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	98			65-150		
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	142			25-186		
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	67			45-137		
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	114			64-158		
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	3			1-125		
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	69			42-136		
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	113			56-148		
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	99			26-160		

Project Name: Not Specified

Lab Number: L1959860

Project Number: BGP1902

Report Date: 01/22/20

SAMPLE RESULTS

Lab ID: L1959860-12
 Client ID: 19B6 (8-10)
 Sample Location: 22-26 4TH STREET, QUEENS

Date Collected: 12/10/19 10:54
 Date Received: 12/13/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 134,LCMSMS-ID
 Analytical Date: 01/17/20 02:27
 Analyst: JW
 Percent Solids: 83%

Extraction Method: ALPHA 23528
 Extraction Date: 12/23/19 10:20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	ND		ug/kg	1.13	0.026	1
Perfluoropentanoic Acid (PFPeA)	ND		ug/kg	1.13	0.052	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ug/kg	1.13	0.044	1
Perfluorohexanoic Acid (PFHxA)	ND		ug/kg	1.13	0.059	1
Perfluoroheptanoic Acid (PFHpA)	ND		ug/kg	1.13	0.051	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ug/kg	1.13	0.068	1
Perfluorooctanoic Acid (PFOA)	ND		ug/kg	1.13	0.047	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ug/kg	1.13	0.202	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ug/kg	1.13	0.154	1
Perfluorononanoic Acid (PFNA)	ND		ug/kg	1.13	0.085	1
Perfluorooctanesulfonic Acid (PFOS)	ND		ug/kg	1.13	0.146	1
Perfluorodecanoic Acid (PFDA)	ND		ug/kg	1.13	0.076	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ug/kg	1.13	0.324	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ug/kg	1.13	0.227	1
Perfluoroundecanoic Acid (PFUnA)	ND		ug/kg	1.13	0.053	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ug/kg	1.13	0.172	1
Perfluorooctanesulfonamide (FOSA)	ND		ug/kg	1.13	0.110	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ug/kg	1.13	0.095	1
Perfluorododecanoic Acid (PFDoA)	ND		ug/kg	1.13	0.079	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ug/kg	1.13	0.230	1
Perfluorotetradecanoic Acid (PFTA)	ND		ug/kg	1.13	0.061	1
PFOA/PFOS, Total	ND		ug/kg	1.13	0.047	1

Project Name: Not Specified

Lab Number: L1959860

Project Number: BGP1902

Report Date: 01/22/20

SAMPLE RESULTS

Lab ID: L1959860-12
 Client ID: 19B6 (8-10)
 Sample Location: 22-26 4TH STREET, QUEENS

Date Collected: 12/10/19 10:54
 Date Received: 12/13/19
 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)	89		60-153
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	97		65-182
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	87		70-151
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	82		61-147
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	88		62-149
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	89		63-166
Perfluoro[13C8]Octanoic Acid (M8PFOA)	89		62-152
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	90		32-182
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	93		61-154
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	88		65-151
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	90		65-150
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	98		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)	96		64-158
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	28		1-125
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	50		42-136
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	89		56-148
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	44		26-160

Project Name: Not Specified

Lab Number: L1959860

Project Number: BGP1902

Report Date: 01/22/20

SAMPLE RESULTS

Lab ID: L1959860-13
 Client ID: 19B7 (0-2)
 Sample Location: 22-26 4TH STREET, QUEENS

Date Collected: 12/10/19 11:20
 Date Received: 12/13/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 134,LCMSMS-ID
 Analytical Date: 01/17/20 02:44
 Analyst: JW
 Percent Solids: 85%

Extraction Method: ALPHA 23528
 Extraction Date: 12/23/19 10:20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	ND		ug/kg	1.09	0.025	1
Perfluoropentanoic Acid (PFPeA)	ND		ug/kg	1.09	0.050	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ug/kg	1.09	0.042	1
Perfluorohexanoic Acid (PFHxA)	ND		ug/kg	1.09	0.057	1
Perfluoroheptanoic Acid (PFHpA)	ND		ug/kg	1.09	0.049	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ug/kg	1.09	0.066	1
Perfluorooctanoic Acid (PFOA)	ND		ug/kg	1.09	0.046	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ug/kg	1.09	0.195	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ug/kg	1.09	0.148	1
Perfluorononanoic Acid (PFNA)	ND		ug/kg	1.09	0.082	1
Perfluorooctanesulfonic Acid (PFOS)	ND		ug/kg	1.09	0.141	1
Perfluorodecanoic Acid (PFDA)	ND		ug/kg	1.09	0.073	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ug/kg	1.09	0.312	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ug/kg	1.09	0.219	1
Perfluoroundecanoic Acid (PFUnA)	ND		ug/kg	1.09	0.051	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ug/kg	1.09	0.166	1
Perfluorooctanesulfonamide (FOSA)	ND		ug/kg	1.09	0.106	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ug/kg	1.09	0.092	1
Perfluorododecanoic Acid (PFDoA)	ND		ug/kg	1.09	0.076	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ug/kg	1.09	0.222	1
Perfluorotetradecanoic Acid (PFTA)	ND		ug/kg	1.09	0.059	1
PFOA/PFOS, Total	ND		ug/kg	1.09	0.046	1

Project Name: Not Specified

Lab Number: L1959860

Project Number: BGP1902

Report Date: 01/22/20

SAMPLE RESULTS

Lab ID: L1959860-13

Date Collected: 12/10/19 11:20

Client ID: 19B7 (0-2)

Date Received: 12/13/19

Sample Location: 22-26 4TH STREET, QUEENS

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)	98		60-153
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	107		65-182
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	99		70-151
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	89		61-147
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	97		62-149
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	103		63-166
Perfluoro[13C8]Octanoic Acid (M8PFOA)	101		62-152
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	140		32-182
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	111		61-154
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	100		65-151
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	105		65-150
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	176		25-186
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	75		45-137
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	110		64-158
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	3		1-125
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	97		42-136
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	104		56-148
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	90		26-160

Project Name: Not Specified

Lab Number: L1959860

Project Number: BGP1902

Report Date: 01/22/20

SAMPLE RESULTS

Lab ID: L1959860-14
 Client ID: 19B7 (8-10)
 Sample Location: 22-26 4TH STREET, QUEENS

Date Collected: 12/10/19 11:33
 Date Received: 12/13/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 134,LCMSMS-ID
 Analytical Date: 01/17/20 03:00
 Analyst: JW
 Percent Solids: 86%

Extraction Method: ALPHA 23528
 Extraction Date: 12/23/19 10:20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	ND		ug/kg	1.08	0.025	1
Perfluoropentanoic Acid (PFPeA)	ND		ug/kg	1.08	0.050	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ug/kg	1.08	0.042	1
Perfluorohexanoic Acid (PFHxA)	0.058	J	ug/kg	1.08	0.057	1
Perfluoroheptanoic Acid (PFHpA)	ND		ug/kg	1.08	0.049	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ug/kg	1.08	0.066	1
Perfluorooctanoic Acid (PFOA)	0.049	J	ug/kg	1.08	0.045	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ug/kg	1.08	0.195	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ug/kg	1.08	0.148	1
Perfluorononanoic Acid (PFNA)	ND		ug/kg	1.08	0.081	1
Perfluorooctanesulfonic Acid (PFOS)	ND		ug/kg	1.08	0.141	1
Perfluorodecanoic Acid (PFDA)	ND		ug/kg	1.08	0.073	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ug/kg	1.08	0.311	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ug/kg	1.08	0.218	1
Perfluoroundecanoic Acid (PFUnA)	ND		ug/kg	1.08	0.051	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ug/kg	1.08	0.166	1
Perfluorooctanesulfonamide (FOSA)	ND		ug/kg	1.08	0.106	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ug/kg	1.08	0.092	1
Perfluorododecanoic Acid (PFDoA)	ND		ug/kg	1.08	0.076	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ug/kg	1.08	0.222	1
Perfluorotetradecanoic Acid (PFTA)	ND		ug/kg	1.08	0.059	1
PFOA/PFOS, Total	0.049	J	ug/kg	1.08	0.045	1

Project Name: Not Specified

Lab Number: L1959860

Project Number: BGP1902

Report Date: 01/22/20

SAMPLE RESULTS

Lab ID: L1959860-14

Date Collected: 12/10/19 11:33

Client ID: 19B7 (8-10)

Date Received: 12/13/19

Sample Location: 22-26 4TH STREET, QUEENS

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			60-153		
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	101			65-182		
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	95			70-151		
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	85			61-147		
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	90			62-149		
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	102			63-166		
Perfluoro[13C8]Octanoic Acid (M8PFOA)	93			62-152		
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	104			32-182		
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	99			61-154		
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	100			65-151		
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	96			65-150		
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	121			25-186		
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	50			45-137		
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	103			64-158		
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	30			1-125		
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	56			42-136		
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	97			56-148		
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	81			26-160		

Project Name: Not Specified

Lab Number: L1959860

Project Number: BGP1902

Report Date: 01/22/20

SAMPLE RESULTS

Lab ID: L1959860-15
 Client ID: 19B8 (0-2)
 Sample Location: 22-26 4TH STREET, QUEENS

Date Collected: 12/10/19 12:20
 Date Received: 12/13/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 134,LCMSMS-ID
 Analytical Date: 01/17/20 03:17
 Analyst: JW
 Percent Solids: 90%

Extraction Method: ALPHA 23528
 Extraction Date: 12/23/19 10:20

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)	ND		ug/kg	1.04	0.044	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ug/kg	1.04	0.187	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	0.299	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ug/kg	1.04	0.210	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	0.213	1
Perfluorotetradecanoic Acid (PFTA)	ND		ug/kg	1.04	0.056	1
PFOA/PFOS, Total	ND		ug/kg	1.04	0.044	1

Project Name: Not Specified

Lab Number: L1959860

Project Number: BGP1902

Report Date: 01/22/20

SAMPLE RESULTS

Lab ID: L1959860-15

Date Collected: 12/10/19 12:20

Client ID: 19B8 (0-2)

Date Received: 12/13/19

Sample Location: 22-26 4TH STREET, QUEENS

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)	49	Q	60-153
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	53	Q	65-182
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	72		70-151
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	45	Q	61-147
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	49	Q	62-149
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	76		63-166
Perfluoro[13C8]Octanoic Acid (M8PFOA)	51	Q	62-152
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	29	Q	32-182
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	54	Q	61-154
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	77		65-151
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	51	Q	65-150
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	31		25-186
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	13	Q	45-137
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	58	Q	64-158
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	38		1-125
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	16	Q	42-136
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	53	Q	56-148
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	50		26-160

Project Name: Not Specified

Lab Number: L1959860

Project Number: BGP1902

Report Date: 01/22/20

SAMPLE RESULTS

Lab ID: L1959860-16
 Client ID: 19B8 (8-10)
 Sample Location: 22-26 4TH STREET, QUEENS

Date Collected: 12/10/19 12:34
 Date Received: 12/13/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 134,LCMSMS-ID
 Analytical Date: 01/17/20 03:33
 Analyst: JW
 Percent Solids: 85%

Extraction Method: ALPHA 23528
 Extraction Date: 12/23/19 10:20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	ND		ug/kg	1.11	0.025	1
Perfluoropentanoic Acid (PFPeA)	ND		ug/kg	1.11	0.051	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ug/kg	1.11	0.043	1
Perfluorohexanoic Acid (PFHxA)	ND		ug/kg	1.11	0.058	1
Perfluoroheptanoic Acid (PFHpA)	ND		ug/kg	1.11	0.050	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ug/kg	1.11	0.067	1
Perfluorooctanoic Acid (PFOA)	ND		ug/kg	1.11	0.047	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ug/kg	1.11	0.199	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ug/kg	1.11	0.152	1
Perfluorononanoic Acid (PFNA)	ND		ug/kg	1.11	0.083	1
Perfluorooctanesulfonic Acid (PFOS)	ND		ug/kg	1.11	0.144	1
Perfluorodecanoic Acid (PFDA)	ND		ug/kg	1.11	0.074	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ug/kg	1.11	0.318	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ug/kg	1.11	0.224	1
Perfluoroundecanoic Acid (PFUnA)	ND		ug/kg	1.11	0.052	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ug/kg	1.11	0.170	1
Perfluorooctanesulfonamide (FOSA)	ND		ug/kg	1.11	0.109	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ug/kg	1.11	0.094	1
Perfluorododecanoic Acid (PFDoA)	ND		ug/kg	1.11	0.078	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ug/kg	1.11	0.227	1
Perfluorotetradecanoic Acid (PFTA)	ND		ug/kg	1.11	0.060	1
PFOA/PFOS, Total	ND		ug/kg	1.11	0.047	1

Project Name: Not Specified

Lab Number: L1959860

Project Number: BGP1902

Report Date: 01/22/20

SAMPLE RESULTS

Lab ID: L1959860-16
 Client ID: 19B8 (8-10)
 Sample Location: 22-26 4TH STREET, QUEENS

Date Collected: 12/10/19 12:34
 Date Received: 12/13/19
 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)	99		60-153
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	108		65-182
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	99		70-151
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	92		61-147
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	99		62-149
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	110		63-166
Perfluoro[13C8]Octanoic Acid (M8PFOA)	101		62-152
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	114		32-182
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	105		61-154
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	107		65-151
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	102		65-150
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	123		25-186
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	61		45-137
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	113		64-158
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	69		1-125
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	64		42-136
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	105		56-148
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	90		26-160

Project Name: Not Specified

Lab Number: L1959860

Project Number: BGP1902

Report Date: 01/22/20

SAMPLE RESULTS

Lab ID: L1959860-17
 Client ID: 19B9 (0-2)
 Sample Location: 22-26 4TH STREET, QUEENS

Date Collected: 12/10/19 12:45
 Date Received: 12/13/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 134,LCMSMS-ID
 Analytical Date: 01/17/20 03:50
 Analyst: JW
 Percent Solids: 91%

Extraction Method: ALPHA 23528
 Extraction Date: 12/23/19 10:20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	ND		ug/kg	1.00	0.023	1
Perfluoropentanoic Acid (PFPeA)	ND		ug/kg	1.00	0.046	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ug/kg	1.00	0.039	1
Perfluorohexanoic Acid (PFHxA)	ND		ug/kg	1.00	0.053	1
Perfluoroheptanoic Acid (PFHpA)	ND		ug/kg	1.00	0.045	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ug/kg	1.00	0.061	1
Perfluorooctanoic Acid (PFOA)	ND		ug/kg	1.00	0.042	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ug/kg	1.00	0.180	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ug/kg	1.00	0.137	1
Perfluorononanoic Acid (PFNA)	ND		ug/kg	1.00	0.075	1
Perfluorooctanesulfonic Acid (PFOS)	ND		ug/kg	1.00	0.130	1
Perfluorodecanoic Acid (PFDA)	ND		ug/kg	1.00	0.067	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ug/kg	1.00	0.288	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ug/kg	1.00	0.202	1
Perfluoroundecanoic Acid (PFUnA)	ND		ug/kg	1.00	0.047	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ug/kg	1.00	0.154	1
Perfluorooctanesulfonamide (FOSA)	ND		ug/kg	1.00	0.098	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ug/kg	1.00	0.085	1
Perfluorododecanoic Acid (PFDoA)	ND		ug/kg	1.00	0.070	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ug/kg	1.00	0.205	1
Perfluorotetradecanoic Acid (PFTA)	ND		ug/kg	1.00	0.054	1
PFOA/PFOS, Total	ND		ug/kg	1.00	0.042	1

Project Name: Not Specified

Lab Number: L1959860

Project Number: BGP1902

Report Date: 01/22/20

SAMPLE RESULTS

Lab ID: L1959860-17

Date Collected: 12/10/19 12:45

Client ID: 19B9 (0-2)

Date Received: 12/13/19

Sample Location: 22-26 4TH STREET, QUEENS

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)	96		60-153
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	106		65-182
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	89		70-151
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	90		61-147
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	96		62-149
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	96		63-166
Perfluoro[13C8]Octanoic Acid (M8PFOA)	100		62-152
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	103		32-182
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	109		61-154
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	100		65-151
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	103		65-150
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	118		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)	111		64-158
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	15		1-125
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	70		42-136
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	104		56-148
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	94		26-160

Project Name: Not Specified

Lab Number: L1959860

Project Number: BGP1902

Report Date: 01/22/20

SAMPLE RESULTS

Lab ID: L1959860-18
 Client ID: 19B9 (8-10)
 Sample Location: 22-26 4TH STREET, QUEENS

Date Collected: 12/10/19 12:59
 Date Received: 12/13/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 134,LCMSMS-ID
 Analytical Date: 01/17/20 04:06
 Analyst: JW
 Percent Solids: 85%

Extraction Method: ALPHA 23528
 Extraction Date: 12/23/19 10:20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	ND		ug/kg	1.09	0.025	1
Perfluoropentanoic Acid (PFPeA)	ND		ug/kg	1.09	0.050	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ug/kg	1.09	0.043	1
Perfluorohexanoic Acid (PFHxA)	ND		ug/kg	1.09	0.057	1
Perfluoroheptanoic Acid (PFHpA)	ND		ug/kg	1.09	0.049	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ug/kg	1.09	0.066	1
Perfluorooctanoic Acid (PFOA)	ND		ug/kg	1.09	0.046	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ug/kg	1.09	0.196	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ug/kg	1.09	0.149	1
Perfluorononanoic Acid (PFNA)	ND		ug/kg	1.09	0.082	1
Perfluorooctanesulfonic Acid (PFOS)	ND		ug/kg	1.09	0.142	1
Perfluorodecanoic Acid (PFDA)	ND		ug/kg	1.09	0.073	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ug/kg	1.09	0.313	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ug/kg	1.09	0.220	1
Perfluoroundecanoic Acid (PFUnA)	ND		ug/kg	1.09	0.051	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ug/kg	1.09	0.167	1
Perfluorooctanesulfonamide (FOSA)	ND		ug/kg	1.09	0.107	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ug/kg	1.09	0.092	1
Perfluorododecanoic Acid (PFDoA)	ND		ug/kg	1.09	0.076	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ug/kg	1.09	0.223	1
Perfluorotetradecanoic Acid (PFTA)	ND		ug/kg	1.09	0.059	1
PFOA/PFOS, Total	ND		ug/kg	1.09	0.046	1

Project Name: Not Specified

Lab Number: L1959860

Project Number: BGP1902

Report Date: 01/22/20

SAMPLE RESULTS

Lab ID: L1959860-18

Date Collected: 12/10/19 12:59

Client ID: 19B9 (8-10)

Date Received: 12/13/19

Sample Location: 22-26 4TH STREET, QUEENS

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)	97		60-153
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	105		65-182
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	92		70-151
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	89		61-147
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	93		62-149
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	100		63-166
Perfluoro[13C8]Octanoic Acid (M8PFOA)	94		62-152
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	98		32-182
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	100		61-154
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	102		65-151
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	98		65-150
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	109		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)	110		64-158
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	66		1-125
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	61		42-136
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	107		56-148
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	89		26-160

Project Name: Not Specified

Lab Number: L1959860

Project Number: BGP1902

Report Date: 01/22/20

SAMPLE RESULTS

Lab ID: L1959860-19
 Client ID: 19B10 (0-2)
 Sample Location: 22-26 4TH STREET, QUEENS

Date Collected: 12/10/19 13:57
 Date Received: 12/13/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 134,LCMSMS-ID
 Analytical Date: 01/17/20 04:23
 Analyst: JW
 Percent Solids: 79%

Extraction Method: ALPHA 23528
 Extraction Date: 12/23/19 10:20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	ND		ug/kg	1.11	0.025	1
Perfluoropentanoic Acid (PFPeA)	ND		ug/kg	1.11	0.051	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ug/kg	1.11	0.043	1
Perfluorohexanoic Acid (PFHxA)	ND		ug/kg	1.11	0.058	1
Perfluoroheptanoic Acid (PFHpA)	ND		ug/kg	1.11	0.050	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ug/kg	1.11	0.067	1
Perfluorooctanoic Acid (PFOA)	ND		ug/kg	1.11	0.047	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ug/kg	1.11	0.199	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ug/kg	1.11	0.152	1
Perfluorononanoic Acid (PFNA)	ND		ug/kg	1.11	0.083	1
Perfluorooctanesulfonic Acid (PFOS)	ND		ug/kg	1.11	0.144	1
Perfluorodecanoic Acid (PFDA)	ND		ug/kg	1.11	0.074	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ug/kg	1.11	0.319	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ug/kg	1.11	0.224	1
Perfluoroundecanoic Acid (PFUnA)	ND		ug/kg	1.11	0.052	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ug/kg	1.11	0.170	1
Perfluorooctanesulfonamide (FOSA)	ND		ug/kg	1.11	0.109	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ug/kg	1.11	0.094	1
Perfluorododecanoic Acid (PFDoA)	ND		ug/kg	1.11	0.078	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ug/kg	1.11	0.227	1
Perfluorotetradecanoic Acid (PFTA)	ND		ug/kg	1.11	0.060	1
PFOA/PFOS, Total	ND		ug/kg	1.11	0.047	1

Project Name: Not Specified

Lab Number: L1959860

Project Number: BGP1902

Report Date: 01/22/20

SAMPLE RESULTS

Lab ID: L1959860-19

Date Collected: 12/10/19 13:57

Client ID: 19B10 (0-2)

Date Received: 12/13/19

Sample Location: 22-26 4TH STREET, QUEENS

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)	96		60-153
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	105		65-182
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	102		70-151
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	89		61-147
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	95		62-149
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	110		63-166
Perfluoro[13C8]Octanoic Acid (M8PFOA)	98		62-152
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	118		32-182
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	107		61-154
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	112		65-151
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	99		65-150
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	137		25-186
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	61		45-137
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	110		64-158
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	64		1-125
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	71		42-136
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	108		56-148
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	93		26-160

Project Name: Not Specified

Lab Number: L1959860

Project Number: BGP1902

Report Date: 01/22/20

SAMPLE RESULTS

Lab ID: L1959860-20
 Client ID: 19B10 (8-10)
 Sample Location: 22-26 4TH STREET, QUEENS

Date Collected: 12/10/19 14:01
 Date Received: 12/13/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 134,LCMSMS-ID
 Analytical Date: 01/17/20 04:56
 Analyst: JW
 Percent Solids: 83%

Extraction Method: ALPHA 23528
 Extraction Date: 12/23/19 10:20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	ND		ug/kg	1.15	0.026	1
Perfluoropentanoic Acid (PFPeA)	ND		ug/kg	1.15	0.053	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ug/kg	1.15	0.045	1
Perfluorohexanoic Acid (PFHxA)	ND		ug/kg	1.15	0.060	1
Perfluoroheptanoic Acid (PFHpA)	ND		ug/kg	1.15	0.052	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ug/kg	1.15	0.070	1
Perfluorooctanoic Acid (PFOA)	ND		ug/kg	1.15	0.048	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ug/kg	1.15	0.206	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ug/kg	1.15	0.157	1
Perfluorononanoic Acid (PFNA)	ND		ug/kg	1.15	0.086	1
Perfluorooctanesulfonic Acid (PFOS)	ND		ug/kg	1.15	0.149	1
Perfluorodecanoic Acid (PFDA)	ND		ug/kg	1.15	0.077	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ug/kg	1.15	0.330	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ug/kg	1.15	0.231	1
Perfluoroundecanoic Acid (PFUnA)	ND		ug/kg	1.15	0.054	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ug/kg	1.15	0.176	1
Perfluorooctanesulfonamide (FOSA)	ND		ug/kg	11.0	0.112	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ug/kg	1.15	0.097	1
Perfluorododecanoic Acid (PFDoA)	ND		ug/kg	1.15	0.080	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ug/kg	1.15	0.235	1
Perfluorotetradecanoic Acid (PFTA)	ND		ug/kg	1.15	0.062	1
PFOA/PFOS, Total	ND		ug/kg	1.15	0.048	1

Project Name: Not Specified

Lab Number: L1959860

Project Number: BGP1902

Report Date: 01/22/20

SAMPLE RESULTS

Lab ID: L1959860-20
 Client ID: 19B10 (8-10)
 Sample Location: 22-26 4TH STREET, QUEENS

Date Collected: 12/10/19 14:01
 Date Received: 12/13/19
 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)	70		60-153
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	81		65-182
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	93		70-151
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	74		61-147
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	83		62-149
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	98		63-166
Perfluoro[13C8]Octanoic Acid (M8PFOA)	88		62-152
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	107		32-182
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	94		61-154
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	96		65-151
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	93		65-150
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	108		25-186
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	35	Q	45-137
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	98		64-158
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	0	Q	1-125
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	40	Q	42-136
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	94		56-148
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	69		26-160

Project Name: Not Specified

Lab Number: L1959860

Project Number: BGP1902

Report Date: 01/22/20

SAMPLE RESULTS

Lab ID: L1959860-21
 Client ID: TRIP BLANK
 Sample Location: 22-26 4TH STREET, QUEENS

Date Collected: 12/10/19 00:00
 Date Received: 12/13/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 134,LCMSMS-ID
 Analytical Date: 01/10/20 15:18
 Analyst: JW

Extraction Method: ALPHA 23528
 Extraction Date: 12/17/19 06:19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	ND		ng/l	1.74	0.354	1
Perfluoropentanoic Acid (PFPeA)	ND		ng/l	1.74	0.344	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/l	1.74	0.206	1
Perfluorohexanoic Acid (PFHxA)	0.299	J	ng/l	1.74	0.285	1
Perfluoroheptanoic Acid (PFHpA)	ND		ng/l	1.74	0.195	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	1.74	0.326	1
Perfluorooctanoic Acid (PFOA)	ND		ng/l	1.74	0.205	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	1.74	1.16	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.74	0.597	1
Perfluorononanoic Acid (PFNA)	ND		ng/l	1.74	0.271	1
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/l	1.74	0.438	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.74	0.264	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.74	1.05	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	1.74	0.562	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.74	0.226	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	1.74	0.851	1
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	1.74	0.503	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	1.74	0.698	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.74	0.323	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	1.74	0.284	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	1.74	0.215	1
PFOA/PFOS, Total	ND		ng/l	1.74	0.205	1

Project Name: Not Specified

Lab Number: L1959860

Project Number: BGP1902

Report Date: 01/22/20

SAMPLE RESULTS

Lab ID: L1959860-21

Date Collected: 12/10/19 00:00

Client ID: TRIP BLANK

Date Received: 12/13/19

Sample Location: 22-26 4TH STREET, QUEENS

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)	102		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	120		16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	101		31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	92		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	100		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	106		47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	102		36-149
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	109		1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	109		34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	106		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)	139		7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	78		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	115		40-144
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	48		1-87
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	89		23-146
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	104		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	92		33-143

Project Name: Not Specified

Lab Number: L1959860

Project Number: BGP1902

Report Date: 01/22/20

SAMPLE RESULTS

Lab ID: L1959860-22
 Client ID: FIELD BLANK
 Sample Location: 22-26 4TH STREET, QUEENS

Date Collected: 12/10/19 08:02
 Date Received: 12/13/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 134,LCMSMS-ID
 Analytical Date: 01/10/20 15:35
 Analyst: JW

Extraction Method: ALPHA 23528
 Extraction Date: 12/17/19 06:19

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)	0.324	J	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: Not Specified

Lab Number: L1959860

Project Number: BGP1902

Report Date: 01/22/20

SAMPLE RESULTS

Lab ID: L1959860-22
 Client ID: FIELD BLANK
 Sample Location: 22-26 4TH STREET, QUEENS

Date Collected: 12/10/19 08:02
 Date Received: 12/13/19
 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)	100		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	117		16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	95		31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	91		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	98		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	102		47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	101		36-149
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	120		1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	107		34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	105		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)	147		7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	82		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	112		40-144
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	49		1-87
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	92		23-146
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	107		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	86		33-143

Project Name: Not Specified
Project Number: BGP1902

Lab Number: L1959860
Report Date: 01/22/20

Method Blank Analysis Batch Quality Control

Analytical Method: 134,LCMSMS-ID
Analytical Date: 01/10/20 13:38
Analyst: JW

Extraction Method: ALPHA 23528
Extraction Date: 12/17/19 06:19

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab for sample(s): 21-22 Batch: WG1321572-1					
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)	0.764	J	ng/l	2.00	0.328
Perfluoroheptanoic Acid (PFHpA)	ND		ng/l	2.00	0.225
Perfluorohexanesulfonic Acid (PFHxS)	2.05		ng/l	2.00	0.376
Perfluorooctanoic Acid (PFOA)	1.50	J	ng/l	2.00	0.236
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	4.94		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)	3.25		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	4.75	J	ng/l	2.00	0.236

Project Name: Not Specified
Project Number: BGP1902

Lab Number: L1959860
Report Date: 01/22/20

Method Blank Analysis Batch Quality Control

Analytical Method: 134,LCMSMS-ID
 Analytical Date: 01/10/20 13:38
 Analyst: JW

Extraction Method: ALPHA 23528
 Extraction Date: 12/17/19 06:19

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab for sample(s): 21-22 Batch: WG1321572-1					

Surrogate (Extracted Internal Standard)	%Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	92		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	111		16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	89		31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	82		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	89		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	95		47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	91		36-149
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	124		1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	96		34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	90		42-146
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	86		38-144
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	139		7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	80		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	95		40-144
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	35		1-87
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	90		23-146
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	86		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	80		33-143

Project Name: Not Specified
Project Number: BGP1902

Lab Number: L1959860
Report Date: 01/22/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 134,LCMSMS-ID
Analytical Date: 01/16/20 21:45
Analyst: JW

Extraction Method: ALPHA 23528
Extraction Date: 12/23/19 10:20

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab for sample(s): 01-20 Batch: WG1323884-1					
Perfluorobutanoic Acid (PFBA)	0.118	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: Not Specified
Project Number: BGP1902

Lab Number: L1959860
Report Date: 01/22/20

Method Blank Analysis Batch Quality Control

Analytical Method: 134,LCMSMS-ID
 Analytical Date: 01/16/20 21:45
 Analyst: JW

Extraction Method: ALPHA 23528
 Extraction Date: 12/23/19 10:20

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab for sample(s): 01-20 Batch: WG1323884-1					

Surrogate (Extracted Internal Standard)	%Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	81		60-153
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	94		65-182
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	101		70-151
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	83		61-147
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	91		62-149
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	109		63-166
Perfluoro[13C8]Octanoic Acid (M8PFOA)	96		62-152
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	108		32-182
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	99		61-154
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	101		65-151
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	98		65-150
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	119		25-186
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	78		45-137
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	104		64-158
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	1		1-125
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	82		42-136
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	95		56-148
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	84		26-160

Lab Control Sample Analysis **Batch Quality Control**

Project Name: Not Specified

Project Number: BGP1902

Lab Number: L1959860

Report Date: 01/22/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 21-22 Batch: WG1321572-2 WG1321572-3								
Perfluorobutanoic Acid (PFBA)	106		112		67-148	6		30
Perfluoropentanoic Acid (PFPeA)	108		116		63-161	7		30
Perfluorobutanesulfonic Acid (PFBS)	99		104		65-157	5		30
Perfluorohexanoic Acid (PFHxA)	108		117		69-168	8		30
Perfluoroheptanoic Acid (PFHpA)	107		115		58-159	7		30
Perfluorohexanesulfonic Acid (PFHxS)	106		113		69-177	6		30
Perfluorooctanoic Acid (PFOA)	111		121		63-159	9		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	132		131		49-187	1		30
Perfluoroheptanesulfonic Acid (PFHpS)	108		116		61-179	7		30
Perfluorononanoic Acid (PFNA)	107		114		68-171	6		30
Perfluorooctanesulfonic Acid (PFOS)	116		117		52-151	1		30
Perfluorodecanoic Acid (PFDA)	103		115		63-171	11		30
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	128		124		56-173	3		30
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	118		124		60-166	5		30
Perfluoroundecanoic Acid (PFUnA)	102		114		60-153	11		30
Perfluorodecanesulfonic Acid (PFDS)	121		115		38-156	5		30
Perfluorooctanesulfonamide (FOSA)	99		110		46-170	11		30
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	101		128		45-170	24		30
Perfluorododecanoic Acid (PFDoA)	107		117		67-153	9		30
Perfluorotridecanoic Acid (PFTrDA)	112		120		48-158	7		30
Perfluorotetradecanoic Acid (PFTA)	114		121		59-182	6		30

Lab Control Sample Analysis **Batch Quality Control**

Project Name: Not Specified

Project Number: BGP1902

Lab Number: L1959860

Report Date: 01/22/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 21-22 Batch: WG1321572-2 WG1321572-3								

Surrogate (Extracted Internal Standard)	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	93		90		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	107		104		16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	94		87		31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	84		81		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	89		87		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	99		93		47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	92		88		36-149
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	109		108		1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	96		94		34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	95		91		42-146
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	89		85		38-144
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	117		114		7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	71		73		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	98		98		40-144
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	42		29		1-87
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	87		81		23-146
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	92		92		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	77		81		33-143

Lab Control Sample Analysis

Batch Quality Control

Project Name: Not Specified

Project Number: BGP1902

Lab Number: L1959860

Report Date: 01/22/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 01-20 Batch: WG1323884-2 WG1323884-3								
Perfluorobutanoic Acid (PFBA)	108		107		71-135	1		30
Perfluoropentanoic Acid (PFPeA)	111		109		69-132	2		30
Perfluorobutanesulfonic Acid (PFBS)	108		105		72-128	3		30
Perfluorohexanoic Acid (PFHxA)	109		107		70-132	2		30
Perfluoroheptanoic Acid (PFHpA)	107		104		71-131	3		30
Perfluorohexanesulfonic Acid (PFHxS)	102		99		67-130	3		30
Perfluorooctanoic Acid (PFOA)	108		111		69-133	3		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	114		128		64-140	12		30
Perfluoroheptanesulfonic Acid (PFHpS)	111		111		70-132	0		30
Perfluorononanoic Acid (PFNA)	111		108		72-129	3		30
Perfluorooctanesulfonic Acid (PFOS)	104		99		68-136	5		30
Perfluorodecanoic Acid (PFDA)	109		104		69-133	5		30
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	127		121		65-137	5		30
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	125		116		63-144	7		30
Perfluoroundecanoic Acid (PFUnA)	101		109		64-136	8		30
Perfluorodecanesulfonic Acid (PFDS)	107		107		59-134	0		30
Perfluorooctanesulfonamide (FOSA)	101		111		67-137	9		30
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	96		103		61-139	7		30
Perfluorododecanoic Acid (PFDoA)	108		111		69-135	3		30
Perfluorotridecanoic Acid (PFTrDA)	108		112		66-139	4		30
Perfluorotetradecanoic Acid (PFTA)	115		113		69-133	2		30

Lab Control Sample Analysis **Batch Quality Control**

Project Name: Not Specified
Project Number: BGP1902

Lab Number: L1959860
Report Date: 01/22/20

Parameter	LCS %Recovery	Qual	LCS %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 01-20 Batch: WG1323884-2 WG1323884-3								

Surrogate (Extracted Internal Standard)	LCS %Recovery	Qual	LCS %Recovery	Qual	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	73		84		60-153
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	84		96		65-182
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	93		99		70-151
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	76		82		61-147
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	82		88		62-149
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	103		105		63-166
Perfluoro[13C8]Octanoic Acid (M8PFOA)	89		93		62-152
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	101		104		32-182
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	95		97		61-154
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	102		103		65-151
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	93		98		65-150
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	107		119		25-186
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	69		77		45-137
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	99		106		64-158
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	1		1		1-125
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	77		75		42-136
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	98		99		56-148
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	81		88		26-160

Matrix Spike Analysis

Batch Quality Control

Project Name: Not Specified

Project Number: BGP1902

Lab Number: L1959860

Report Date: 01/22/20

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): 01-20 QC Batch ID: WG1323884-4 QC Sample: L1959860-01 Client ID: 19B1 (0-2)												
Perfluorobutanoic Acid (PFBA)	ND	4.89	5.05	103	-	-	-	-	71-135	-	-	30
Perfluoropentanoic Acid (PFPeA)	ND	4.89	5.32	109	-	-	-	-	69-132	-	-	30
Perfluorobutanesulfonic Acid (PFBS)	ND	4.34	4.45	103	-	-	-	-	72-128	-	-	30
Perfluorohexanoic Acid (PFHxA)	0.083J	4.89	5.17	106	-	-	-	-	70-132	-	-	30
Perfluoroheptanoic Acid (PFHpA)	ND	4.89	5.17	106	-	-	-	-	71-131	-	-	30
Perfluorohexanesulfonic Acid (PFHxS)	ND	4.46	4.65	104	-	-	-	-	67-130	-	-	30
Perfluorooctanoic Acid (PFOA)	0.078J	4.89	5.49	112	-	-	-	-	69-133	-	-	30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND	4.65	5.92	127	-	-	-	-	64-140	-	-	30
Perfluoroheptanesulfonic Acid (PFHpS)	ND	4.65	5.08	109	-	-	-	-	70-132	-	-	30
Perfluorononanoic Acid (PFNA)	ND	4.89	5.26	107	-	-	-	-	72-129	-	-	30
Perfluorooctanesulfonic Acid (PFOS)	ND	4.53	4.96	109	-	-	-	-	68-136	-	-	30
Perfluorodecanoic Acid (PFDA)	ND	4.89	5.03	103	-	-	-	-	69-133	-	-	30
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND	4.7	5.70	121	-	-	-	-	65-137	-	-	30
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND	4.89	6.06	124	-	-	-	-	63-144	-	-	30
Perfluoroundecanoic Acid (PFUnA)	ND	4.89	5.06	103	-	-	-	-	64-136	-	-	30
Perfluorodecanesulfonic Acid (PFDS)	ND	4.73	5.27	111	-	-	-	-	59-134	-	-	30
Perfluorooctanesulfonamide (FOSA)	ND	4.89	5.06	103	-	-	-	-	67-137	-	-	30
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	0.122J	4.89	4.66	95	-	-	-	-	61-139	-	-	30
Perfluorododecanoic Acid (PFDoA)	ND	4.89	5.34	109	-	-	-	-	69-135	-	-	30
Perfluorotridecanoic Acid (PFTrDA)	ND	4.89	5.46	112	-	-	-	-	66-139	-	-	30
Perfluorotetradecanoic Acid (PFTA)	ND	4.89	5.32	109	-	-	-	-	69-133	-	-	30

Matrix Spike Analysis**Batch Quality Control****Project Name:** Not Specified**Lab Number:** L1959860**Project Number:** BGP1902**Report Date:** 01/22/20

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): 01-20 QC Batch ID: WG1323884-4 QC Sample: L1959860-01 Client ID: 19B1 (0-2)												

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)	115				25-186
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	100				32-182
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	50				42-136
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	38	Q			45-137
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	103				64-158
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	96				65-150
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	87				61-147
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	92				62-149
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	105				63-166
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	101				56-148
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	89				26-160
Perfluoro[13C4]Butanoic Acid (MPFBA)	92				60-153
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	102				65-182
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	18				1-125
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	100				65-151
Perfluoro[13C8]Octanoic Acid (M8PFOA)	93				62-152
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	98				61-154
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	101				70-151

Lab Duplicate Analysis Batch Quality Control

Project Name: Not Specified

Project Number: BGP1902

Lab Number: L1959860

Report Date: 01/22/20

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 01-20 QC Batch ID: WG1323884-5 QC Sample: L1959860-02 Client ID: 19B1 (8-10)						
Perfluorobutanoic Acid (PFBA)	ND	ND	ug/kg	NC		30
Perfluoropentanoic Acid (PFPeA)	ND	ND	ug/kg	NC		30
Perfluorobutanesulfonic Acid (PFBS)	ND	ND	ug/kg	NC		30
Perfluorohexanoic Acid (PFHxA)	0.071J	0.058J	ug/kg	NC		30
Perfluoroheptanoic Acid (PFHpA)	ND	ND	ug/kg	NC		30
Perfluorohexanesulfonic Acid (PFHxS)	ND	ND	ug/kg	NC		30
Perfluorooctanoic Acid (PFOA)	0.140J	0.153J	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)	ND	ND	ug/kg	NC		30
Perfluorooctanesulfonic Acid (PFOS)	ND	ND	ug/kg	NC		30
Perfluorodecanoic Acid (PFDA)	ND	ND	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)	ND	ND	ug/kg	NC		30
Perfluorodecanesulfonic Acid (PFDS)	ND	ND	ug/kg	NC		30
Perfluorooctanesulfonamide (FOSA)	ND	ND	ug/kg	NC		30
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND	ND	ug/kg	NC		30
Perfluorododecanoic Acid (PFDoA)	ND	ND	ug/kg	NC		30
Perfluorotridecanoic Acid (PFTrDA)	ND	ND	ug/kg	NC		30

Lab Duplicate Analysis **Batch Quality Control**

Project Name: Not Specified

Project Number: BGP1902

Lab Number: L1959860

Report Date: 01/22/20

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 01-20 QC Batch ID: WG1323884-5 QC Sample: L1959860-02 Client ID: 19B1 (8-10)						
Perfluorotetradecanoic Acid (PFTA)	ND	ND	ug/kg	NC		30
PFOA/PFOS, Total	0.140J	0.153J	ug/kg	NC		30

Surrogate (Extracted Internal Standard)	%Recovery	Qualifier	%Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	89		90		60-153
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	100		100		65-182
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	91		98		70-151
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	83		86		61-147
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	86		91		62-149
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	99		102		63-166
Perfluoro[13C8]Octanoic Acid (M8PFOA)	90		94		62-152
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	82		92		32-182
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	94		99		61-154
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	99		102		65-151
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	92		89		65-150
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	98		106		25-186
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	45		42	Q	45-137
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	100		102		64-158
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	41		38		1-125
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	56		47		42-136
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	93		96		56-148
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	85		83		26-160

INORGANICS & MISCELLANEOUS

Project Name: Not Specified

Project Number: BGP1902

Lab Number: L1959860

Report Date: 01/22/20

SAMPLE RESULTS

Lab ID: L1959860-01

Client ID: 19B1 (0-2)

Sample Location: 22-26 4TH STREET, QUEENS

Date Collected: 12/10/19 03:30

Date Received: 12/13/19

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 - Mansfield Lab										
Solids, Total	90.4		%	0.100	0.100	1	-	12/31/19 13:10	121,2540G	AL



Project Name: Not Specified

Project Number: BGP1902

Lab Number: L1959860

Report Date: 01/22/20

SAMPLE RESULTS

Lab ID: L1959860-02

Client ID: 19B1 (8-10)

Sample Location: 22-26 4TH STREET, QUEENS

Date Collected: 12/10/19 03:32

Date Received: 12/13/19

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 - Mansfield Lab										
Solids, Total	83.2		%	0.100	0.100	1	-	12/31/19 13:10	121,2540G	AL



Project Name: Not Specified

Project Number: BGP1902

Lab Number: L1959860

Report Date: 01/22/20

SAMPLE RESULTS

Lab ID: L1959860-03

Client ID: 19B2 (0-2)

Sample Location: 22-26 4TH STREET, QUEENS

Date Collected: 12/10/19 02:51

Date Received: 12/13/19

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 - Mansfield Lab										
Solids, Total	92.1		%	0.100	0.100	1	-	12/31/19 13:10	121,2540G	AL



Project Name: Not Specified**Project Number:** BGP1902**Lab Number:** L1959860**Report Date:** 01/22/20**SAMPLE RESULTS****Lab ID:** L1959860-04**Client ID:** 19B2 (8-10)**Sample Location:** 22-26 4TH STREET, QUEENS**Date Collected:** 12/10/19 03:20**Date Received:** 12/13/19**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 - Mansfield Lab										
Solids, Total	92.6		%	0.100	0.100	1	-	12/31/19 13:10	121,2540G	AL



Project Name: Not Specified**Project Number:** BGP1902**Lab Number:** L1959860**Report Date:** 01/22/20**SAMPLE RESULTS****Lab ID:** L1959860-05**Client ID:** 19B3 (0-2)**Sample Location:** 22-26 4TH STREET, QUEENS**Date Collected:** 12/10/19 02:20**Date Received:** 12/13/19**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 - Mansfield Lab										
Solids, Total	84.4		%	0.100	0.100	1	-	12/31/19 13:10	121,2540G	AL



Project Name: Not Specified**Project Number:** BGP1902**Lab Number:** L1959860**Report Date:** 01/22/20**SAMPLE RESULTS****Lab ID:** L1959860-06**Client ID:** 19B3 (8-10)**Sample Location:** 22-26 4TH STREET, QUEENS**Date Collected:** 12/10/19 02:23**Date Received:** 12/13/19**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 - Mansfield Lab										
Solids, Total	89.9		%	0.100	0.100	1	-	12/31/19 13:10	121,2540G	AL



Project Name: Not Specified

Project Number: BGP1902

Lab Number: L1959860

Report Date: 01/22/20

SAMPLE RESULTS

Lab ID: L1959860-07

Client ID: 19B4 (0-2)

Sample Location: 22-26 4TH STREET, QUEENS

Date Collected: 12/10/19 08:35

Date Received: 12/13/19

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 - Mansfield Lab										
Solids, Total	78.9		%	0.100	0.100	1	-	12/31/19 13:10	121,2540G	AL



Project Name: Not Specified

Project Number: BGP1902

Lab Number: L1959860

Report Date: 01/22/20

SAMPLE RESULTS

Lab ID: L1959860-08

Client ID: 19B4 (8-10)

Sample Location: 22-26 4TH STREET, QUEENS

Date Collected: 12/10/19 08:45

Date Received: 12/13/19

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 - Mansfield Lab										
Solids, Total	81.6		%	0.100	0.100	1	-	12/31/19 13:10	121,2540G	AL



Project Name: Not Specified

Project Number: BGP1902

Lab Number: L1959860

Report Date: 01/22/20

SAMPLE RESULTS

Lab ID: L1959860-09

Client ID: 19B5 (0-2)

Sample Location: 22-26 4TH STREET, QUEENS

Date Collected: 12/10/19 09:46

Date Received: 12/13/19

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 - Mansfield Lab										
Solids, Total	71.3		%	0.100	0.100	1	-	12/31/19 13:10	121,2540G	AL



Project Name: Not Specified

Project Number: BGP1902

Lab Number: L1959860

Report Date: 01/22/20

SAMPLE RESULTS

Lab ID: L1959860-10

Client ID: 19B5 (8-10)

Sample Location: 22-26 4TH STREET, QUEENS

Date Collected: 12/10/19 09:54

Date Received: 12/13/19

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 - Mansfield Lab										
Solids, Total	83.7		%	0.100	0.100	1	-	12/31/19 13:10	121,2540G	AL



Project Name: Not Specified

Project Number: BGP1902

Lab Number: L1959860

Report Date: 01/22/20

SAMPLE RESULTS

Lab ID: L1959860-11

Client ID: 19B6 (0-2)

Sample Location: 22-26 4TH STREET, QUEENS

Date Collected: 12/10/19 10:43

Date Received: 12/13/19

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 - Mansfield Lab										
Solids, Total	87.9		%	0.100	0.100	1	-	12/31/19 13:10	121,2540G	AL



Project Name: Not Specified

Project Number: BGP1902

Lab Number: L1959860

Report Date: 01/22/20

SAMPLE RESULTS

Lab ID: L1959860-12

Client ID: 19B6 (8-10)

Sample Location: 22-26 4TH STREET, QUEENS

Date Collected: 12/10/19 10:54

Date Received: 12/13/19

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 - Mansfield Lab										
Solids, Total	82.9		%	0.100	0.100	1	-	12/31/19 13:10	121,2540G	AL



Project Name: Not Specified**Project Number:** BGP1902**Lab Number:** L1959860**Report Date:** 01/22/20**SAMPLE RESULTS****Lab ID:** L1959860-13**Client ID:** 19B7 (0-2)**Sample Location:** 22-26 4TH STREET, QUEENS**Date Collected:** 12/10/19 11:20**Date Received:** 12/13/19**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 - Mansfield Lab										
Solids, Total	84.8		%	0.100	0.100	1	-	12/31/19 13:10	121,2540G	AL



Project Name: Not Specified

Project Number: BGP1902

Lab Number: L1959860

Report Date: 01/22/20

SAMPLE RESULTS

Lab ID: L1959860-14

Client ID: 19B7 (8-10)

Sample Location: 22-26 4TH STREET, QUEENS

Date Collected: 12/10/19 11:33

Date Received: 12/13/19

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 - Mansfield Lab										
Solids, Total	86.2		%	0.100	0.100	1	-	12/31/19 13:10	121,2540G	AL



Project Name: Not Specified

Project Number: BGP1902

Lab Number: L1959860

Report Date: 01/22/20

SAMPLE RESULTS

Lab ID: L1959860-15

Client ID: 19B8 (0-2)

Sample Location: 22-26 4TH STREET, QUEENS

Date Collected: 12/10/19 12:20

Date Received: 12/13/19

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 - Mansfield Lab										
Solids, Total	89.6		%	0.100	0.100	1	-	12/31/19 13:10	121,2540G	AL



Project Name: Not Specified

Project Number: BGP1902

Lab Number: L1959860

Report Date: 01/22/20

SAMPLE RESULTS

Lab ID: L1959860-16

Client ID: 19B8 (8-10)

Sample Location: 22-26 4TH STREET, QUEENS

Date Collected: 12/10/19 12:34

Date Received: 12/13/19

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 - Mansfield Lab										
Solids, Total	84.6		%	0.100	0.100	1	-	12/31/19 13:10	121,2540G	AL



Project Name: Not Specified

Project Number: BGP1902

Lab Number: L1959860

Report Date: 01/22/20

SAMPLE RESULTS

Lab ID: L1959860-17

Client ID: 19B9 (0-2)

Sample Location: 22-26 4TH STREET, QUEENS

Date Collected: 12/10/19 12:45

Date Received: 12/13/19

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 - Mansfield Lab										
Solids, Total	91.4		%	0.100	0.100	1	-	12/31/19 13:10	121,2540G	AL



Project Name: Not Specified

Project Number: BGP1902

Lab Number: L1959860

Report Date: 01/22/20

SAMPLE RESULTS

Lab ID: L1959860-18

Client ID: 19B9 (8-10)

Sample Location: 22-26 4TH STREET, QUEENS

Date Collected: 12/10/19 12:59

Date Received: 12/13/19

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 - Mansfield Lab										
Solids, Total	85.2		%	0.100	0.100	1	-	12/31/19 13:10	121,2540G	AL



Project Name: Not Specified**Project Number:** BGP1902**Lab Number:** L1959860**Report Date:** 01/22/20**SAMPLE RESULTS****Lab ID:** L1959860-19**Client ID:** 19B10 (0-2)**Sample Location:** 22-26 4TH STREET, QUEENS**Date Collected:** 12/10/19 13:57**Date Received:** 12/13/19**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 - Mansfield Lab										
Solids, Total	79.0		%	0.100	0.100	1	-	12/31/19 13:10	121,2540G	AL



Project Name: Not Specified

Project Number: BGP1902

Lab Number: L1959860

Report Date: 01/22/20

SAMPLE RESULTS

Lab ID: L1959860-20

Client ID: 19B10 (8-10)

Sample Location: 22-26 4TH STREET, QUEENS

Date Collected: 12/10/19 14:01

Date Received: 12/13/19

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 - Mansfield Lab										
Solids, Total	83.1		%	0.100	0.100	1	-	12/31/19 13:10	121,2540G	AL



Lab Duplicate Analysis
*Batch Quality Control***Project Name:** Not Specified**Project Number:** BGP1902**Lab Number:** L1959860**Report Date:** 01/22/20

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Mansfield Lab Associated sample(s): 01-20 QC Batch ID: WG1326165-1 QC Sample: L1959860-01 Client ID: 19B1 (0-2)						
Solids, Total	90.4	90.8	%	0		10

Project Name: Not Specified**Lab Number:** L1959860**Project Number:** BGP1902**Report Date:** 01/22/20**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(*)
L1959860-01A	Plastic 8oz unpreserved	A	NA		2.3	Y	Absent		A2-NY-537-ISOTOPE(28)
L1959860-01B	Plastic 2oz unpreserved for TS	A	NA		2.3	Y	Absent		A2-TS(7)
L1959860-02A	Plastic 8oz unpreserved	A	NA		2.3	Y	Absent		A2-NY-537-ISOTOPE(28)
L1959860-02B	Plastic 2oz unpreserved for TS	A	NA		2.3	Y	Absent		A2-TS(7)
L1959860-03A	Plastic 8oz unpreserved	A	NA		2.3	Y	Absent		A2-NY-537-ISOTOPE(28)
L1959860-03B	Plastic 2oz unpreserved for TS	A	NA		2.3	Y	Absent		A2-TS(7)
L1959860-04A	Plastic 8oz unpreserved	A	NA		2.3	Y	Absent		A2-NY-537-ISOTOPE(28)
L1959860-04B	Plastic 2oz unpreserved for TS	A	NA		2.3	Y	Absent		A2-TS(7)
L1959860-05A	Plastic 8oz unpreserved	A	NA		2.3	Y	Absent		A2-NY-537-ISOTOPE(28)
L1959860-05B	Plastic 2oz unpreserved for TS	A	NA		2.3	Y	Absent		A2-TS(7)
L1959860-06A	Plastic 8oz unpreserved	A	NA		2.3	Y	Absent		A2-NY-537-ISOTOPE(28)
L1959860-06B	Plastic 2oz unpreserved for TS	A	NA		2.3	Y	Absent		A2-TS(7)
L1959860-07A	Plastic 8oz unpreserved	A	NA		2.3	Y	Absent		A2-NY-537-ISOTOPE(28)
L1959860-07B	Plastic 2oz unpreserved for TS	A	NA		2.3	Y	Absent		A2-TS(7)
L1959860-08A	Plastic 8oz unpreserved	A	NA		2.3	Y	Absent		A2-NY-537-ISOTOPE(28)
L1959860-08B	Plastic 2oz unpreserved for TS	A	NA		2.3	Y	Absent		A2-TS(7)
L1959860-09A	Plastic 8oz unpreserved	A	NA		2.3	Y	Absent		A2-NY-537-ISOTOPE(28)
L1959860-09B	Plastic 2oz unpreserved for TS	A	NA		2.3	Y	Absent		A2-TS(7)
L1959860-10A	Plastic 8oz unpreserved	A	NA		2.3	Y	Absent		A2-NY-537-ISOTOPE(28)
L1959860-10B	Plastic 2oz unpreserved for TS	A	NA		2.3	Y	Absent		A2-TS(7)
L1959860-11A	Plastic 8oz unpreserved	A	NA		2.3	Y	Absent		A2-NY-537-ISOTOPE(28)
L1959860-11B	Plastic 2oz unpreserved for TS	A	NA		2.3	Y	Absent		A2-TS(7)
L1959860-12A	Plastic 8oz unpreserved	A	NA		2.3	Y	Absent		A2-NY-537-ISOTOPE(28)

Project Name: Not Specified**Lab Number:** L1959860**Project Number:** BGP1902**Report Date:** 01/22/20**Container Information**

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1959860-12B	Plastic 2oz unpreserved for TS	A	NA		2.3	Y	Absent		A2-TS(7)
L1959860-13A	Plastic 8oz unpreserved	A	NA		2.3	Y	Absent		A2-NY-537-ISOTOPE(28)
L1959860-13B	Plastic 2oz unpreserved for TS	A	NA		2.3	Y	Absent		A2-TS(7)
L1959860-14A	Plastic 8oz unpreserved	A	NA		2.3	Y	Absent		A2-NY-537-ISOTOPE(28)
L1959860-14B	Plastic 2oz unpreserved for TS	A	NA		2.3	Y	Absent		A2-TS(7)
L1959860-15A	Plastic 8oz unpreserved	A	NA		2.3	Y	Absent		A2-NY-537-ISOTOPE(28)
L1959860-15B	Plastic 2oz unpreserved for TS	A	NA		2.3	Y	Absent		A2-TS(7)
L1959860-16A	Plastic 8oz unpreserved	A	NA		2.3	Y	Absent		A2-NY-537-ISOTOPE(28)
L1959860-16B	Plastic 2oz unpreserved for TS	A	NA		2.3	Y	Absent		A2-TS(7)
L1959860-17A	Plastic 8oz unpreserved	A	NA		2.3	Y	Absent		A2-NY-537-ISOTOPE(28)
L1959860-17B	Plastic 2oz unpreserved for TS	A	NA		2.3	Y	Absent		A2-TS(7)
L1959860-18A	Plastic 8oz unpreserved	A	NA		2.3	Y	Absent		A2-NY-537-ISOTOPE(28)
L1959860-18B	Plastic 2oz unpreserved for TS	A	NA		2.3	Y	Absent		A2-TS(7)
L1959860-19A	Plastic 8oz unpreserved	A	NA		2.3	Y	Absent		A2-NY-537-ISOTOPE(28)
L1959860-19B	Plastic 2oz unpreserved for TS	A	NA		2.3	Y	Absent		A2-TS(7)
L1959860-20A	Plastic 8oz unpreserved	A	NA		2.3	Y	Absent		A2-NY-537-ISOTOPE(28)
L1959860-20B	Plastic 2oz unpreserved for TS	A	NA		2.3	Y	Absent		A2-TS(7)
L1959860-21A	2 Plastic/1 Plastic/1 H2O Plastic	A	NA		2.3	Y	Absent		A2-NY-537-ISOTOPE(14)
L1959860-22A	2 Plastic/1 Plastic/1 H2O Plastic	A	NA		2.3	Y	Absent		A2-NY-537-ISOTOPE(14)

Project Name: Not Specified
Project Number: BGP1902

Serial_No:01222011:29
Lab Number: L1959860
Report Date: 01/22/20

PFAS PARAMETER SUMMARY

Parameter	Acronym	CAS Number
PERFLUOROALKYL CARBOXYLIC ACIDS (PFCAs)		
Perfluorooctadecanoic Acid	PFODA	16517-11-6
Perfluorohexadecanoic Acid	PFHxDA	67905-19-5
Perfluorotetradecanoic Acid	PFTA	376-06-7
Perfluorotridecanoic Acid	PFTTrDA	72629-94-8
Perfluorododecanoic Acid	PFDoA	307-55-1
Perfluoroundecanoic Acid	PFUnA	2058-94-8
Perfluorodecanoic Acid	PFDA	335-76-2
Perfluorononanoic Acid	PFNA	375-95-1
Perfluorooctanoic Acid	PFOA	335-67-1
Perfluoroheptanoic Acid	PFHpA	375-85-9
Perfluorohexanoic Acid	PFHxA	307-24-4
Perfluoropentanoic Acid	PFPeA	2706-90-3
Perfluorobutanoic Acid	PFBA	375-22-4
PERFLUOROALKYL SULFONIC ACIDS (PFSAs)		
Perfluorododecanesulfonic Acid	PFDoDS	79780-39-5
Perfluorodecanesulfonic Acid	PFDS	335-77-3
Perfluorononanesulfonic Acid	PFNS	68259-12-1
Perfluorooctanesulfonic Acid	PFOS	1763-23-1
Perfluoroheptanesulfonic Acid	PFHpS	375-92-8
Perfluorohexanesulfonic Acid	PFHxS	355-46-4
Perfluoropentanesulfonic Acid	PFPeS	2706-91-4
Perfluorobutanesulfonic Acid	PFBS	375-73-5
FLUOROTELOMERS		
1H,1H,2H,2H-Perfluorododecanesulfonic Acid	10:2FTS	120226-60-0
1H,1H,2H,2H-Perfluorodecanesulfonic Acid	8:2FTS	39108-34-4
1H,1H,2H,2H-Perfluorooctanesulfonic Acid	6:2FTS	27619-97-2
1H,1H,2H,2H-Perfluorohexanesulfonic Acid	4:2FTS	757124-72-4
PERFLUOROALKANE SULFONAMIDES (FASAs)		
Perfluorooctanesulfonamide	FOSA	754-91-6
N-Ethyl Perfluorooctane Sulfonamide	NEtFOSA	4151-50-2
N-Methyl Perfluorooctane Sulfonamide	NMeFOSA	31506-32-8
PERFLUOROALKANE SULFONYL SUBSTANCES		
N-Ethyl Perfluorooctanesulfonamido Ethanol	NEtFOSE	1691-99-2
N-Methyl Perfluorooctanesulfonamido Ethanol	NMeFOSE	24448-09-7
N-Ethyl Perfluorooctanesulfonamidoacetic Acid	NEtFOSAA	2991-50-6
N-Methyl Perfluorooctanesulfonamidoacetic Acid	NMeFOSAA	2355-31-9
PER- and POLYFLUOROALKYL ETHER CARBOXYLIC ACIDS		
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-Propanoic Acid	HFPO-DA	13252-13-6
4,8-Dioxa-3h-Perfluorononanoic Acid	ADONA	919005-14-4
CHLORO-PERFLUOROALKYL SULFONIC ACIDS		
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid	11Cl-PF3OUdS	763051-92-9
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid	9Cl-PF3ONS	756426-58-1

Project Name: Not Specified**Lab Number:** L1959860**Project Number:** BGP1902**Report Date:** 01/22/20

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: Not Specified**Lab Number:** L1959860**Project Number:** BGP1902**Report Date:** 01/22/20

- 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.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

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.

The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

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 Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- 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

Report Format: DU Report with 'J' Qualifiers



Project Name: Not Specified**Lab Number:** L1959860**Project Number:** BGP1902**Report Date:** 01/22/20**Data Qualifiers**

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: Not Specified
Project Number: BGP1902

Lab Number: L1959860
Report Date: 01/22/20

REFERENCES

- 121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.
- 134 Determination of Selected Perfluorinated Alkyl Acids in Drinking Water by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry (LC/MS/MS) using Isotope Dilution. Alpha SOP 23528.

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 15

Published Date: 8/15/2019 9:53:42 AM

Page 1 of 1

Certification Information

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

Westborough Facility**EPA 624/624.1:** m/p-xylene, o-xylene**EPA 8260C:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.**EPA 8270D:** NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.**SM4500:** NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.**Mansfield Facility****SM 2540D:** TSS**EPA 8082A:** NPW: PCB: 1, 5, 31, 87, 101, 110, 141, 151, 153, 180, 183, 187.**EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Biological Tissue Matrix: EPA 3050B

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

Westborough Facility:**Drinking Water****EPA 300.0:** Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,****EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B****EPA 332:** Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.**Microbiology:** **SM9215B, SM9223-P/A, SM9223B-Colilert-QT, SM9222D.****Non-Potable Water****SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH:** Ammonia-N and Kjeldahl-N, **EPA 350.1:**Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E,****SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.**EPA 624.1:** Volatile Halocarbons & Aromatics,**EPA 608.3:** Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs**EPA 625.1:** SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.**Microbiology:** **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.****Mansfield Facility:****Drinking Water****EPA 200.7:** Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1 Hg.****EPA 522.****Non-Potable Water****EPA 200.7:** Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.**EPA 200.8:** Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.**EPA 245.1 Hg.****SM2340B**

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

Page 93 of 95

 NEW YORK CHAIN OF CUSTODY		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 <u>1</u> of <u>2</u>		Date Rec'd in Lab <u>12/14/19</u>		ALPHA Job # <u>L1959860</u>	
Westborough, MA 01581 8 Walkup Dr. TEL: 508-898-8220 FAX: 508-898-9193		Mansfield, MA 02048 320 Forbes Blvd TEL: 508-822-9300 FAX: 508-822-3288		Project Information Project Name: _____ Project Location: <u>22-26 4th Street, Queens</u> Project #: <u>BGP1902</u> (Use Project name as Project #) ☐		Deliverables ☒ ASP-A ☒ ASP-B ☒ EQuS (1 File) ☒ EQuS (4 File) ☐ Other		Billing Information ☐ Same as Client Info PO # _____	
Client Information Client: <u>EBC</u> Address: <u>1808 Middle Country Rd</u> <u>Ridge, NY 11961</u> Phone: <u>631-504-6000</u> Fax: _____ Email: <u>File</u>		Project Manager: <u>Charlie Sosik</u> ALPHAQuote #: _____ Turn-Around Time Standard ☒ Due Date: _____ Rush (only if pre approved) ☐ # of Days: _____		Regulatory Requirement ☐ NY TOGS ☐ NY Part 375 ☐ AWO Standards ☐ NY CP-51 ☒ NY Restricted Use ☐ Other ☒ NY Unrestricted Use ☐ NYC Sewer Discharge		Disposal Site Information Please identify below location of applicable disposal facilities. Disposal Facility: ☐ NJ ☐ NY ☐ Other: _____			
These samples have been previously analyzed by Alpha ☐						ANALYSIS		Sample Filtration ☐ Done ☒ Lab to do Preservation ☐ Lab to do (Please Specify below)	
Other project specific requirements/comments: _____ _____ Please specify Metals or TAL: _____						PFAS 537		Sample Specific Comments	
ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date Time		Sample Matrix	Sampler's Initials				
-11	19B6(0-2)	10-Dec	10:43	S	TB	x			
-12	19B6(8-10)	10-Dec	10:54	S	TB	x			
-13	19B7(0-2)	10-Dec	11:20	S	TB	x			
-14	19B7(8-10)	10-Dec	11:33	S	TB	x			
-15	19B8(0-2)	10-Dec	12:20	S	TB	x			
-16	19B8(8-10)	10-Dec	12:34	S	TB	x			
-17	19B9(0-2)	10-Dec	12:45	S	TB	x			
-18	19B9(8-10)	10-Dec	12:59	S	TB	x			
-19	19B10(0-2)	10-Dec	1:57	S	TB	x			
-20	19B10(8-10)	10-Dec	2:01	S	TB	x			
Preservative Code: A = None B = HCl C = HNO ₃ D = H ₂ SO ₄ E = NaOH F = MeOH G = NaHSO ₄ H = Na ₂ S ₂ O ₃ I/E = Zn Ac/NaOH O = Other		Container Code: P = Plastic A = Amber Glass V = Vial G = Glass B = Bacteria Cup C = Cube O = Other E = Encore D = BOD Bottle		Westboro: Certification No: MA935 Mansfield: Certification No: MA015		Container Type Preservative		Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S <u>TERMS & CONDITIONS</u> .	
Relinquished By: <u>P.S.</u>		Date/Time: <u>12/13/19 16:36</u> <u>12/13/19 22:00</u> <u>12/14/19 00:15</u>		Received By: <u>DS. AAL</u> <u>W</u> <u>ACE - MC</u>		Date/Time: <u>12/13/19 13:34</u> <u>12/13/19 17:00</u> <u>12/13/19 22:00</u> <u>12/14/19 00:45</u>			

 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 2 of 3		Date Rec'd in Lab 12/14/19		ALPHA Job # LA59860																																																																																																																																																																																				
		Project Information Project Name: _____ Project Location: 22-26 4th Street, Queens Project #: BGP1902 (Use Project name as Project #) ☐				Deliverables ☒ ASP-A ☒ ASP-B ☒ EQuIS (1 File) ☒ EQuIS (4 File) ☐ Other				Billing Information ☐ Same as Client Info PO #: _____																																																																																																																																																																																		
		Client Information Client: EBC Address: 1808 Middle Country Rd Ridge, NY 11961 Phone: 631-504-6000 Fax: _____ Email: File				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																																																																																																																																																																																		
Turn-Around Time Standard ☒ Due Date: _____ Rush (only if pre approved) ☐ # of Days: _____				ANALYSIS PFAS 637				Sample Filtration ☐ Done ☒ Lab to do Preservation ☐ Lab to do (Please Specify below)																																																																																																																																																																																				
These samples have been previously analyzed by Alpha ☐ Other project specific requirements/comments: _____ Please specify Metals or TAL: _____										Total Bottles																																																																																																																																																																																		
<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2">ALPHA Lab ID (Lab Use Only)</th> <th rowspan="2">Sample ID</th> <th colspan="2">Collection</th> <th rowspan="2">Sample Matrix</th> <th rowspan="2">Sampler's Initials</th> <th colspan="8">ANALYSIS</th> <th rowspan="2">Sample Specific Comments</th> </tr> <tr> <th>Date</th> <th>Time</th> <th colspan="8"></th> </tr> </thead> <tbody> <tr> <td>-21</td> <td>Trip Blank</td> <td>10-Dec</td> <td>-</td> <td>S</td> <td>TB</td> <td>x</td> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> <td>2</td> </tr> <tr> <td>-22</td> <td>Field Blank</td> <td>10-Dec</td> <td>8:02</td> <td>S</td> <td>TB</td> <td>x</td> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> <td>2</td> </tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table>											ALPHA Lab ID (Lab Use Only)	Sample ID	Collection		Sample Matrix	Sampler's Initials	ANALYSIS								Sample Specific Comments	Date	Time									-21	Trip Blank	10-Dec	-	S	TB	x										2	-22	Field Blank	10-Dec	8:02	S	TB	x										2																																																																																																																							
ALPHA Lab ID (Lab Use Only)	Sample ID	Collection		Sample Matrix	Sampler's Initials	ANALYSIS								Sample Specific Comments																																																																																																																																																																														
		Date	Time																																																																																																																																																																																									
-21	Trip Blank	10-Dec	-	S	TB	x											2																																																																																																																																																																											
-22	Field Blank	10-Dec	8:02	S	TB	x											2																																																																																																																																																																											
Preservative Code: A - None B - HCl C - HNO ₃ D - H ₂ SO ₄ E - NaOH F - MeOH G - NaHSO ₄ H - Na ₂ S ₂ O ₃ K/E - Zn Ac/NaOH O - Other				Container Code: P - Plastic A - Amber Glass V - Vial G - Glass B - Bacteria Cup C - Cube O - Other E - Encore D - BOD Bottle				Westboro: Certification No: MA935 Mansfield: Certification No: MA015				Container Type: P Preservative: A				Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS																																																																																																																																																																												
Relinquished By: <i>[Signature]</i>				Date/Time: 12/13/19 16:36				Received By: <i>[Signature]</i>				Date/Time: 12/13/19 13:34				12/13/19 17:00																																																																																																																																																																												
<i>[Signature]</i>				12/13/19 22:00				<i>[Signature]</i>				12/13/19 22:00				12/14/19 00:49																																																																																																																																																																												

APPENDIX - G
DUSRS

Kevin Brussee

From: dec.sm.NYENVDATA [NYENVDATA@dec.ny.gov]
Sent: Monday, May 04, 2020 7:13 AM
To: akasten@ebcincny.com
Cc: Alam, Rafi S (DEC); Walsh, Steven J (DEC)
Subject: RE: C241234 - Former Andors Medical System - Additional Remedial Investigations Sample Datasets

Amy,

Thank you for following up. I've rolled back the data I loaded earlier, and loaded the 20200312 1320.C241234.NYEDEC_MERGE.Zip data to C241234, and 20200309 1559.C203121. NYSDEC_MERGE.zip to C203121.

Also – something I failed to mention before:

Our format includes a conditional check in the Location_v4 section's loc_type column. Depending on the data provider's choice of location type code for a location, the data provider is warned that they must include child records for that location in the Well_v4 and WellConstruction_v4 sections. The error message looks like this:

provider	sys_loc_code	loc_type	latitude	longitude	surf_elev	elev_unit
IEC	MW-10	MW	40.740946	-73.354631	54	ft
IEC	MW-12	MONITORING	40.740946	-73.354631	54	ft
IEC	MW-2	MONITORING	40.740738	-73.354258	53	ft

If the loc_type is associated with a well, then a child record must exist in the Well and WellCor

The format does not display the error message on your end because the locations had the location type code 'MONITORING' in place of 'MW', and our format presently allows for 'MONITORING' locations without Well_v4 and WellConstruction_v4 rows.

Now, per internal conversations with Bureau Coordinators, I've been directed to ask data providers to leave an explanation for that location type code choice, in the body of the e-mail and in the Location_v4.remark field, for the NYSDEC Project Manager to find and address.

In the meantime – the data meets the built-in standards of our published format. So I like I said the upload worked out. If you and Steven Walsh or Rafi Alam determine that further revisions are required for the data loaded to these sites, or perhaps that you have and want to utilize the required Well_v4 and WellConstruction_v4 data, then I invite you to submit updated Initial and Subsurface Investigation group data with those wells and revised loc type codes.

Thank you,
Aaron
NYSDEC EIMS Team



From: Kasten, Amy <akasten@ebcincny.com>
Sent: Friday, May 01, 2020 5:08 PM
To: dec.sm.NYENVDATA <NYENVDATA@dec.ny.gov>
Cc: Alam, Rafi S (DEC) <Rafi.Alam@dec.ny.gov>
Subject: RE: C241234 - Former Andors Medical System - Additional Remedial Investigations Sample Datasets

ATTENTION: This email came from an external source. Do not open attachments or click on links from unknown senders or unexpected emails.

Hi Aaron.

That dataset is for 310 grand concourse not 26-30 4th avenue. The ZIP files were correctly labeled, the email header for the 3/12 email was incorrect in addition to them being the first submission and not additional.

20200309 1559.C203121.NYSDEC_MERGE.Zip is for 310 Grand Concourse and is additional RI data

20200312 1320.C241234.NYEDEC_MERGE.Zip is for 26-30 4th Avenue (Former Andor medical System) and is the initial RI data

Sorry for the confusion,

Amy Kasten

Environmental Geologist



Environmental Business Consultants

Ph: 631.504.6000 ext. 122

Fax: 631.924.2870

Cell: 631.882.7776

Akasten@ebcincny.com

From: dec.sm.NYENVDATA [<mailto:NYENVDATA@dec.ny.gov>]

Sent: Friday, May 01, 2020 4:54 PM

To: akasten@ebcincny.com

Cc: Alam, Rafi S (DEC)

Subject: RE: C241234 - Former Andors Medical System - Additional Remedial Investigations Sample Datasets

Amy,

We have reviewed the data from the mistakenly labeled 20200309 1559.C203121.NYSDEC_MERGE, and the follow-up dataset 20200312 1320.C241234.NYSDEC_MERGE. We have successfully uploaded the data from both to C241234, named Former Andor Medical Systems in our database. The data is available for use within our system.

Thank you,

Aaron

NYSDEC EIMS Team



From: Kasten, Amy <akasten@ebcincny.com>

Sent: Friday, March 13, 2020 10:43 AM

To: dec.sm.NYENVDATA <NYENVDATA@dec.ny.gov>

Subject: RE: C241234 - Former Andors Medical System - Additional Remedial Investigations Sample Datasets

ATTENTION: This email came from an external source. Do not open attachments or click on links from unknown senders or unexpected emails.

Hi Aaron,

This is the first submission for the Former Andors Medical System.

Amy Kasten
Environmental Geologist



Environmental Business Consultants

Ph: 631.504.6000 ext. 122

Fax: 631.924.2870

Cell: 631.882.7776

Akasten@ebcincny.com

From: dec.sm.NYENVDATA [<mailto:NYENVDATA@dec.ny.gov>]

Sent: Friday, March 13, 2020 10:41 AM

To: Kasten, Amy

Subject: RE: C241234 - Former Andors Medical System - Additional Remedial Investigations Sample Datasets

One item, though – You indicate in your message that this is ***additional*** data – but this is the first data we've tracked for C241234 - Former Andors Medical System. Can you let us know if/when you submitted data previously for this site?

Thank you,
Aaron
NYSDEC EIMS Team



From: dec.sm.NYENVDATA

Sent: Friday, March 13, 2020 10:39 AM

To: 'Kasten, Amy' <akasten@ebcincny.com>

Subject: RE: C241234 - Former Andors Medical System - Additional Remedial Investigations Sample Datasets

Thank you. I'll revise the subject thread of your message accordingly from here on out, and track the data for C241234 - Former Andors Medical System.

Aaron
NYSDEC EIMS Team



From: Kasten, Amy <akasten@ebcincny.com>

Sent: Friday, March 13, 2020 10:33 AM

To: dec.sm.NYENVDATA <NYENVDATA@dec.ny.gov>

Subject: RE: C203121 - 310 Grand Concourse - Additional Remedial Investigations Sample Datasets

ATTENTION: This email came from an external source. Do not open attachments or click on links from unknown senders or

unexpected emails.

My Apologies. It is for the Site in the body of the email 26-30 4th Avenue in Queens. C241234 - Former Andors Medical System.

Amy Kasten
Environmental Geologist



Environmental Business Consultants

Ph: 631.504.6000 ext. 122

Fax: 631.924.2870

Cell: 631.882.7776

Akasten@ebcincny.com

From: dec.sm.NYENVDATA [<mailto:NYENVDATA@dec.ny.gov>]

Sent: Friday, March 13, 2020 10:29 AM

To: Kasten, Amy

Subject: RE: C203121 - 310 Grand Concourse - Additional Remedial Investigations Sample Datasets

Amy,

Please confirm whether the data you submitted yesterday is intended for the site listed in the subject head, or the site identified in the EDD name and the body of the message.

Aaron
NYSDEC EIMS Team



From: Kasten, Amy <akasten@ebcincny.com>

Sent: Thursday, March 12, 2020 1:23 PM

To: dec.sm.NYENVDATA <NYENVDATA@dec.ny.gov>; Morrison, Douglas (DEC) <Douglas.Morrison@dec.ny.gov>

Cc: 'Charlie Sosik' <csosik@ebcincny.com>; ssurruco@ebcincny.com; Alam, Rafi S (DEC) <Rafi.Alam@dec.ny.gov>

Subject: RE: C203121 - 310 Grand Concourse - Additional Remedial Investigations Sample Datasets

ATTENTION: This email came from an external source. Do not open attachments or click on links from unknown senders or unexpected emails.

Good Afternoon,

Attached are the Additional EDDs for the Remedial Investigation samples that were collected at BCP Project Number C241234 – Former Andor Medical Systems 26-30 4th Avenue in Queens, NY. The DEC Project Manager is Rafi Alam. If there are any issues with the datasets please contact us.

Thanks,

Amy Kasten
Environmental Geologist



Environmental Business Consultants

Ph: 631.504.6000 ext. 122

Fax: 631.924.2870

Cell: 631.882.7776

Akasten@ebcincny.com



**Data Usability Summary Report for
Phoenix Environmental Laboratories, Inc.
SDG: GCE85314**

**8 Soil Gas Samples
Collected December 11, 2019**

Prepared by: Donald Anné
April 13, 2020

Geology

Hydrology

Remediation

Water Supply

The data packages contain the documentation required by NYSDEC ASP. The proper chain of custody procedures were followed by the samplers. All information appeared legible and complete. The data pack contained the results for 8 soil gas samples analyzed for TO-15 volatiles.

The overall performances of the analyses are acceptable. Phoenix Environmental Laboratories, Inc. did fulfill the requirements of the analytical methods.

The data are mostly acceptable with some issues that are identified in the accompanying data validation reviews. The following data were qualified:

- The “not detected” volatile result for chloroform was qualified as “estimated” (UJ) in samples SS 6 because the percent recovery for chloroform was below QC limits, but not below 10% in the associated air/vapor LCS.
- The positive volatile results for chloroform were qualified as “estimated, biased low” (J-) in samples SS 7 and SS 4 because the percent recovery for chloroform was below QC limits, but not below 10% in the associated air/vapor LCS.
- The positive volatile results for o-xylene were qualified as “estimated, biased high” (J+) in samples SS 5, SS 8, SS 1, SS 3, and SS 2 because the percent recovery for o-xylene was above QC limits in the associated air/vapor LCS.
- The positive volatile results for dichlorodifluoromethane were qualified as “estimated” (J) in samples SS 5, SS 8, SS 1, SS 3, and SS 2 because the %D for dichlorodifluoromethane was above the allowable maximum in the associated continuing calibration.

All data are considered usable with estimated (J, J+, J-, or UJ) data associated with a higher level of quantitative uncertainty. Detailed information on data quality is included in the data validation reviews.

z:\projects\2020\20600-20620\20606-andor medical systems\gce85314.dus.docx

679 Plank Road • Clifton Park, New York 12065 • (518) 348-6995 • Fax (518) 348-6966

www.alphageoscience.com



**Data Usability Summary Report for
Phoenix Environmental Laboratories, Inc.
SDG: GCE85356**

**21 Soil Samples and 2 Trip Blanks
Collected December 10, 2019**

Prepared by: Donald Anné
April 13, 2020

Geology

Hydrology

Remediation

Water Supply

The data packages contain the documentation required by NYSDEC ASP. The proper chain of custody procedures were followed by the samplers. All information appeared legible and complete. The data pack contained the results for 21 soil samples and 2 trip blanks analyzed for volatiles and the results for 21 soil samples analyzed for 1,4-dioxane, semi-volatiles, PCBs, pesticides, TAL metals.

The overall performances of the analyses are acceptable. Phoenix Environmental Laboratories, Inc. did fulfill the requirements of the analytical methods.

The data are acceptable with some minor issues that are identified in the accompanying data validation reviews. The following data were flagged:

- The positive volatile results for acetone were qualified as “estimated” (J) in the following samples because the %D for acetone was above the allowable maximum in the associated continuing calibration.

19B6 (0-2) 19B3 (0-2) 19B3 (8-10) 19B2 (0-2) 19B1 (0-2) 19B1 (8-10)
- The “not detected” volatile results for bromomethane, chloroethane, and trichlorofluoromethane were qualified as “estimated” (UJ) in sample 19B7 (0-2) because 2 of 2 percent recoveries (%Rs) for chloroethane and trichlorofluoromethane and 1 of 2 %Rs for bromomethane were below QC limits, but not below 10% in the soil MS/MSD sample.
- The positive volatile result for acetone were qualified as “estimated, biased low” (J-) in sample 19B7 (0-2) because 2 of 2 percent recoveries for acetone were below QC limits, but not below 10% in the soil MS/MSD sample.
- The “not detected” semi-volatile results for 58 base/neutral compounds were qualified as “estimated” (UJ) in sample 19B1 (8-10) because 2 of 3 surrogate recoveries were below control limits, but not below 10% in the sample.

- The “not detected” semi-volatile results for benzidine, benzoic acid, and pentachlorophenol were qualified as “estimated” (UJ) in all 21 soil samples except sample 19B1 (8-10) because 2 of 2 percent recoveries (%Rs) for benzidine and benzoic acid and 1 of 2 %Rs for pentachlorophenol were below QC limits, but not below 10% in the associated soil LCS/LCSDs.
- The “not detected” semi-volatile result for benzidine was qualified as “rejected, unusable” (R) in sample 19B1 (8-10) because 2 of 2 percent recoveries for benzidine acid were below QC limits and 1 of 2 below 10% in the associated soil LCS/LCSDs.
- The “not detected” semi-volatile results for hexachlorocyclopentadiene and 2,4-dinitrophenol were qualified as “estimated” (UJ) in sample 19B9 (8-10) because 2 of 2 percent recoveries for hexachlorocyclopentadiene and 2,4-dinitrophenol were below QC limits, but not below 10% in the soil MS/MSD sample.
- The “not detected” semi-volatile result for benzo(g,h,i)perylene was qualified as “rejected, unusable” (R) in sample 19B9 (8-10) because 1 of 2 percent recoveries for benzo(g,h,i)perylene was below QC limits and below 10% in the soil MS/MSD sample.
- The positive pesticide results for 4,4'-DDD were qualified as “estimated, biased high” (J+) in samples 19B4 (0-2), 19B4 (8-10), and 19B8 (0-2) because the %RPDs for dual column quantitation of 4,4'-DDD were above the allowable maximum, but not above 70% and the higher results were reported.
- The positive metal results for potassium and sodium were qualified as “estimated, biased high” (J+) in all 21 soil samples because the percent recoveries for potassium and sodium were above control limits in the associated soil spike and batch spike samples.
- Positive metal results for copper and lead were qualified as “estimated, biased low” (J-) in samples 19B3 (8-10), 19B2 0-2, 19B2 (8-10), 19B1 (0-2), and 19B1 (8-10) because the percent recoveries for copper and lead were below control limits, but not below 10% in the associated soil batch spike sample.
- The positive metal results for cobalt and zinc were qualified as “estimated” (J) in samples 19B3 (8-10), 19B2 0-2, 19B2 (8-10), 19B1 (0-2), and 19B1 (8-10) because the relative percent differences for cobalt and zinc were above the allowable maximum in the associated soil batch duplicate sample.

- The positive metal results for arsenic were qualified as “estimated” (J) in samples 19B2 0-2, 19B2 (8-10), 19B1 (0-2), and 19B1 (8-10) because the relative percent difference for arsenic was above the allowable maximum in the associated soil batch duplicate sample.
- The “not detected” SIM semi-volatile result for 1,4-dioxane was qualified as “estimated” (UJ) in sample 19B3 (8-10) because 2 of 3 surrogate recoveries were below control limits, but not below 10% in the sample.

All data that are not qualified rejected, unusable (R) are considered usable, with estimated (J, J-, J+, or UJ) data associated with a higher level of quantitative uncertainty. Detailed information on data quality is included in the data validation reviews.



**Data Usability Summary Report for
Phoenix Environmental Laboratories, Inc.
SDG: GCE90170**

**6 Ground Water Samples and 1 Trip Blank
Collected December 17-18, 2019**

Prepared by: Donald Anné
April 13, 2020

Geology

Hydrology

Remediation

Water Supply

The data packages contain the documentation required by NYSDEC ASP. The proper chain of custody procedures were followed by the samplers. All information appeared legible and complete. The data pack contained the results for 6 ground water samples and 1 trip blank analyzed for volatiles and the results for 6 ground water samples analyzed for 1,4-dioxane, semi-volatiles, SIM Semi-volatiles, PCBs, pesticides, TAL metals.

The overall performances of the analyses are acceptable. Phoenix Environmental Laboratories, Inc. did fulfill the requirements of the analytical methods.

The data are acceptable with some minor issues that are identified in the accompanying data validation reviews. The following data were flagged:

- The “not detected” semi-volatile results for 13 acid extractable compounds were qualified as “rejected, unusable” (R) in samples MW1, MW2, and MW4 because 1 of 3 acid extractable surrogate recoveries was below QC limits and below 10% in the samples.
- The “not detected” SIM semi-volatile results for pentachlorophenol were qualified as “estimated” (UJ) in samples MW3 and MW6 because 1 of 2 percent recoveries for pentachlorophenol was below QC limits, but not below 10% in the associated aqueous LCS/LCSD.
- The “not detected” SIM semi-volatile results for 8 compounds were qualified as “estimated” (UJ) in sample MW4 because the areas of internal standards that are used to quantitate the results were below control limits, but not below 25% in the sample.
- The “not detected” SIM semi-volatile results for 9 compounds were qualified as “estimated” (UJ) in sample MW5 because the areas of internal standards that are used to quantitate the results were below control limits, but not below 25% in the sample.

- The “not detected” SIM semi-volatile results for pentachlorophenol were qualified as “rejected, unusable” (R) in samples MW1, MW2, and MW4 because 1 of 3 acid extractable surrogate recoveries was below QC limits and below 10% in the samples.
- The “not detected” SIM semi-volatile results for 6 compounds were qualified as “rejected, unusable” (R) in sample MW5 because the area of internal standard that is used to quantitate the results was below control limits and below 25% in the sample.
- The “not detected” metal results for mercury were qualified as “estimated” (UJ) in samples MW1, MW3, MW4, MW5, and MW6 because the percent recovery for mercury was below QC limits, but not below 30% in the associated CRDL sample.
- Positive metal result for mercury was qualified as “estimated, biased low” (J-) in sample MW2 because the percent recovery for mercury was below control limits, but not below 10% in the associated CRDL sample and less than 4 times the spiking level.
- The positive metal results for sodium were qualified as “estimated” (J) in all 6 ground water samples because the %D for sodium was above the allowable maximum in the associated aqueous batch serial dilution sample and levels in the sample were above the PQL.

All data are that are not qualified rejected, unusable (R) are considered usable, with estimated (J, J-, or UJ) data associated with a higher level of quantitative uncertainty. Detailed information on data quality is included in the data validation reviews.



Geology

Hydrology

Remediation

Water Supply

**Data Usability Summary Report for
Phoenix Environmental Laboratories, Inc.
SDG: GCF22921**

**6 Ground Water Samples and 1 Trip Blank
Collected January 28, 2020**

Prepared by: Donald Anné
April 13, 2020

The data packages contain the documentation required by NYSDEC ASP. The proper chain of custody procedures were followed by the samplers. All information appeared legible and complete. The data pack contained the results for 1 ground water sample and 1 trip blank analyzed for volatiles; the results for 1 ground water sample analyzed for 1,4-dioxane, semi-volatiles, SIM Semi-volatiles, PCBs, pesticides, total TAL metals; and 6 ground water samples analyzed for dissolved TAL metals.

The overall performances of the analyses are acceptable. Phoenix Environmental Laboratories, Inc. did fulfill the requirements of the analytical methods.

The data are acceptable with some minor issues that are identified in the accompanying data validation reviews. The following data were flagged:

- The “not detected” semi-volatile result for hexachlorocyclopentadiene was qualified as “estimated” (UJ) in sample MW3 because 2 of 2 percent recoveries for hexachlorocyclopentadiene were below QC limits, but not below 10% in the associated aqueous LCS/LCSD.

All data are considered usable, with estimated (UJ) data associated with a higher level of quantitative uncertainty. Detailed information on data quality is included in the data validation reviews.



Geology

Hydrology

Remediation

Water Supply

**Data Usability Summary Report
for Alpha Analytical Labs
SDG Number: L1959860**

**20 Soil Samples, 1 Field Blank,
and 1 Trip Blank
Collected December 10, 2019**

Prepared by: Donald Anné
April 13, 2020

The data package contained the documentation as required by NYSDEC ASP. The proper chain of custody procedures were followed by the samplers. All information appeared legible and complete. The data pack contained the results of PFAS analyses for 20 soil samples, 1 field blank, and 1 trip blank.

The overall performances of the analyses are acceptable. Alpha Analytical Labs did fulfill the requirements of the analytical methods.

The data are mostly acceptable with some issues that are identified in the accompanying data validation reviews. The following data were qualified:

- The positive PFAS results for PFHxA were qualified as “not detected” (U) for the trip and field blanks because the level reported in the trip and field blanks were not significantly greater than (more than 3 times) the associated method blank level.
- The “not detected” PFAS results for NMeFOSAA were qualified as estimated (UJ) in samples 19B1 (0-2) and 19B2 (0-2) because percent recovery for the surrogate used to quantitate the result was below control limits, but not below 10% in the samples.
- The “not detected” PFAS result for NEtFOSAA was qualified as estimated (UJ) in sample 19B4 (8-10) because percent recovery for the surrogate used to quantitate the result was below control limits, but not below 10% in the sample.
- The “not detected” PFAS results for NMeFOSAA and NEtFOSAA were qualified as estimated (UJ) in samples 19B2 (8-10), 19B4 (0-2), 19B5 (0-2), and 19B5 (8-10) because percent recoveries for the surrogates used to quantitate the results were below control limits, but not below 10% in the samples.

- The “not detected” PFAS results for PFBA, PFPeA, and PFHxA were qualified as estimated (UJ) in sample 19B6 (0-2) because percent recoveries for the surrogates used to quantitate the results were below control limits, but not below 10% in the sample.
- The “not detected” PFAS results for 13 compounds were qualified as estimated (UJ) in sample 19B8 (0-2) because percent recoveries for the surrogates used to quantitate the results were below control limits, but not below 10% in the sample.
- The “not detected” PFAS result for NMeFOSAA was qualified as rejected, unusable (R) in sample 19B4 (8-10) because percent recovery for the surrogate used to quantitate the result was below control limits and below 10% in the sample.
- The “not detected” PFAS result for FOSA was qualified as rejected, unusable (R) in sample 19B10 (8-10) because percent recovery for the surrogate used to quantitate the result was below control limits and below 10% in the sample.

All data that are not qualified rejected, unusable (R) are considered usable with estimated (UJ) data associated with a higher level of quantitative uncertainty. Detailed information on data quality is included in the data validation review.



Geology

Hydrology

Remediation

Water Supply

**Data Usability Summary Report
for Alpha Analytical Labs
SDG Number: L1960803**

**6 Ground Water Samples, 1 Field Blank,
and 1 Trip Blank
Collected December 17-18, 2019**

Prepared by: Donald Anné
April 13, 2020

The data package contained the documentation as required by NYSDEC ASP. The proper chain of custody procedures were followed by the samplers. All information appeared legible and complete. The data pack contained the results of PFAS analyses for 6 ground water samples, 1 field blank, and 1 trip blank.

The overall performances of the analyses are acceptable. Alpha Analytical Labs did fulfill the requirements of the analytical methods.

The data are mostly acceptable with some issues that are identified in the accompanying data validation reviews. The following data were qualified:

- The positive PFAS results for PFHxA were qualified as “not detected” (U) for the trip and field blanks because the level reported in the trip and field blanks were not significantly greater than (more than 3 times) the associated method blank level.
- The positive PFAS results for NMeFOSAA was qualified as “not detected” (U) for sample MW2 because the level reported in sample MW2 was not significantly greater than (more than 3 times) the associated method blank level.
- The positive PFAS results for NEtFOSAA were qualified as “not detected” (U) for sample MW3 and MW6 because the level reported in samples MW3 and MW6 were not significantly greater than (more than 3 times) the associated method blank level.

All data are considered usable. Detailed information on data quality is included in the data validation review.