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**1840 PARK AVENUE SITE**  
**1840-1856 PARK AVENUE**  
**NEW YORK, NEW YORK 10035**  
**Block 1751, Lot No. 33**

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**REMEDIAL INVESTIGATION  
REPORT**

July 2019

*Prepared for:*

126th Street Equities LLC  
316 West 118<sup>th</sup> Street  
New York, NY 10026

***EBC***

***ENVIRONMENTAL BUSINESS CONSULTANTS***

1808 Middle Country Road  
Ridge, NY 11961

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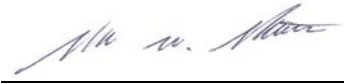
## LIST OF ACRONYMS

<b>Acronym</b>	<b>Definition</b>
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
PFAS	Per- and Polyfluoroalkyl Substances
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 CERTIFICATION

I, Keith Butler, 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.



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Keith W. Butler  
Senior Project Manager

Date: 7/12/2019

## 1.0 INTRODUCTION

### 1.1 Project Background

This Remedial Investigation Report (RIR) was prepared on behalf of 126th Street Equities, LLC for the property located at 1840-1856 Park Avenue in the Harlem section of New York, New York 10035 (hereafter referred to as the Site). This RIR along with a Remedial Action Work Plan and related documents are being submitted to the New York State Department of Environmental Conservation (NYSDEC) with an application to admit the Project Site into the New York State Brownfield Cleanup Program (BCP).

The purpose of this Remedial Investigation Report is to collect data of sufficient quality and quantity to characterize the nature and extent of residual contamination associated with the historic Site operations 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 commercial 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 March 2019 through June 2019.

### 1.2 Site Location and Description

The street address for the Site is 1840-1856 Park Avenue, New York, NY 10035 (**Figure 1**). The Site is located in the Harlem neighborhood of New York (Manhattan) and is comprised of portion of a single tax parcel (Block: 1751, Lot No. 33, formerly Lot Nos. 33, 35, 36, 37, 38, 40, 132, and 137) totaling 9,458 square feet (0.22 acres). The far southern portion of Lot No. 33 having an area of 2,452 ft<sup>2</sup> is to be excluded from the development project and the scope of this investigation. The Site has approximately 170 feet of street frontage along Park Avenue, 75 feet of street frontage along East 127<sup>th</sup> Street, and 90 feet of Street frontage along East 126<sup>th</sup> Street (**Figure 2**). The property is currently developed with an asphalt-paved parking lot, with an approximately 5 x 8-foot attendant's booth. No buildings or other structures are present, except for the aforementioned attendant's booth, although chain-link and/or corrugated metal fencing are present along the northern, southern and eastern property boundaries, with access gates leading from East 126<sup>th</sup> (south) and East 127<sup>th</sup> Streets (north).. Historically the property developed with multiple low-rise commercial/retail and residential buildings, including several auto repair shops and equipment storage yard.

The elevation of the Site is approximately 21 feet above the National Geodetic Vertical Datum (NGVD). The topographic gradient of the surrounding area slopes gently downward to the east. The depth to groundwater beneath the Site, is approximately 15-16 feet below grade. Based on measurements made on Site, groundwater flows generally to the east toward Park Avenue.

The area immediately surrounding the Site is a densely developed urban area, consisting primarily of residential and mixed-use (commercial/retail and residential) properties. East 127<sup>th</sup> Street is to the north, followed by the Promise Academy Charter School (80 East 128<sup>th</sup> Street) with East 128<sup>th</sup> Street

beyond. East 126<sup>th</sup> Street is to the south, followed by a public parking lot (1824 Park Avenue), with a commercial office building beyond. Park Avenue and elevated Metro-North railroad tracks are to the east, followed by the Association to Benefit Children, a parking lot and a commercial building. Residential apartment buildings are to the west (59 East 126<sup>th</sup> Street and 78 East 127<sup>th</sup> Street), followed by additional apartment buildings. The nearest sensitive receptor, the Promise Academy Charter School (80 East 128<sup>th</sup> Street) is located adjacent to the north, across East 127<sup>th</sup>.

### 1.3 Redevelopment Plans

The proposed redevelopment project consists of removing the existing parking lot attendant's booth and constructing a 19-story mixed-use (commercial/residential) building, with a single basement level. The building will occupy the majority of site footprint, with a paved yard area at the southeastern portion. The cellar level will consist of 7,842 SF of commercial space, utility/mechanical rooms, a bicycle room, restrooms, elevators and stairways. The first floor will include 9,273 SF of commercial space, the residential entrance lobby, restrooms, elevators and stairways. The 2nd floor will contain 6,487 SF of commercial space, utility space, elevators and stairways. The 3rd floor will consist of utility and mechanical space, a bicycle room, and recreational space, including an outdoor recreation area atop the 2<sup>nd</sup> floor roof. Floors 4 through 18 will consist of 155 studio, 1 and 2 bedroom residential apartments, elevators and stairways. Rooftop mechanical and stair penthouses will be located atop the 18th floor level, including an 820 SF indoor recreational space and a 4,700 SF outdoor recreation area. The proposed building will have a base height (19<sup>th</sup> floor rooftop) of 204 feet, with a small set back at (9<sup>th</sup> floor rooftop) 102' 8", and a total height (top of mechanical penthouse bulkhead) of 234' 8". The depth of the basement floor level will be 16.5 feet below the existing grade, with an additional 5 feet of soil excavated to accommodate the elevator pit. The proposed building will have a footprint of 11,610 SF.

### 1.4 Site History

The Site was comprised of ten small tax parcels, nine of which fronted east along Park Avenue, with the tenth fronting south, along E. 126th Street, by 1896. Each of the parcels was developed with a single 4-story building occupying the majority of the parcel footprint, with a small rear yard area. The use of the buildings was not identified in 1896, although each was noted to be mixed-use (retail/residential) by 1911, including a Chinese laundry. By 1939, a small 1-story auto repair shop was present at the northwestern corner of the property. The auto repair facility was demolished by 1951. The two southernmost parcels (one along Park Avenue and the other along E. 126th Street) were undeveloped by 1968. Between 1979 and 1980, the building at 1846 Park Avenue was demolished. The 1854 and 1856 Park Avenue buildings were demolished by 1986. Between 1991 and 1992, the northwestern corner was developed with a small 1-story auto repair shop. The remaining commercial/retail and residential buildings were demolished between 1996 and 2001, with the auto repair shop demolished circa 2008. Central portions of the property appear to have been utilized as an equipment storage yard through the mid-2010s, when the property was converted to the existing parking lot facility. Further details on the Site history are presented in Section 1.5.1.

### 1.5 Summary of Previous Investigations

Environmental investigations performed at the Site include the following:

- Phase I Environmental Site Assessment, EBC, January 3, 2019.

A copy of the previous report is provided in **Attachment A**.

#### 1.5.1 January 2019 – Phase I Environmental Site Assessment (EBC)

EBC was able to establish a history for the Site based upon the on a review of Sanborn Maps, historic aerial photos, historic topographic maps and city directories. According to these historic documents, the subject property was comprised of ten small tax parcels, nine of which fronted east along Park Avenue, with the tenth fronting south, along E. 126th Street, by 1896. Each of the parcels was developed with a single 4-story building occupying the majority of the parcel footprint, with a small rear yard area. The use of the buildings was not identified in 1896, although each was noted to be mixed-use (retail/residential) by 1911, including a Chinese laundry. By 1939, a small 1-story auto repair shop was present at the northwestern corner of the property. The auto repair facility was demolished by 1951. The two southernmost parcels (one along Park Avenue and the other along E. 126th Street) were undeveloped by 1968. Between 1979 and 1980, the building at 1846 Park Avenue was demolished. The 1854 and 1856 Park Avenue buildings were demolished by 1986. Between 1991 and 1992, the northwestern corner was developed with a small 1-story auto repair shop. The remaining commercial/retail and residential buildings were demolished between 1996 and 2001, with the auto repair shop demolished circa 2008. Central portions of the property appear to have been utilized as an equipment storage yard through the mid-2010s, when the property was converted to the existing parking lot facility.

Based on the results of the site inspection, records review and interviews, it was determined that there was one recognized environmental condition (REC) identified for the Site. RECs are those conditions, which could adversely affect the environmental integrity of the property. The REC is summarized below:

- Information obtained from multiple historic sources indicates that the northwestern portion of the property was utilized for auto repairs. Although, the subject property was not cross-referenced on any regulatory database indicative of hazardous waste generation, petroleum storage or spills, there is a potential for historic auto repair operations to have impacted the subsurface. As such, the historic use of the property is considered a REC.

In addition to the aforementioned REC, EBC also identified several environmental concerns (ASTM Non-Scope issues/Business Environmental Risks [BERs]), which are summarized as follows:

- The subject property (each of the nine lots) is identified as having E-HazMat, Noise and Air restrictions (E-422), which were determined during the East Harlem Rezoning completed by the City in December 2017 (CEQR 17DCP048M). The Hazardous Materials designation indicates that there is a potential for soil and groundwater beneath the Site to be impacted by historic operations at the Site or adjacent properties. As such, the property requires an environmental assessment and review by the NYCOER to determine if the current and/or historic use of the property has impacted the subsurface and if additional investigation/remediation is warranted. The Noise E-Designation requires a minimum 41 decibels (dBA) attenuation level for indoor spaces and alternative ventilation to achieve an acceptable indoor noise environment of 45 dBA. The Air E-Designation requires that any

new residential and/or commercial development use only natural gas as the type of fuel for heating and hot water systems. The HazMat, Noise, and Air E-designations require the issuance of a Notice to Proceed by the NYC Office of Environmental Remediation (OER) before the property can be redeveloped. The presence of E-HazMat, Noise, and Air designations is considered a BER.

- Information obtained from multiple historic sources indicate that the subject property was developed with multiple commercial/retail and residential buildings. Following demolition, the building basements were backfilled to grade. Fill material may have included construction and demolition (C&D) debris associated with the building demolition and/or material from an unknown off-site source. As no documentation regarding the nature or source of the fill materials utilized to backfill the basements of the former buildings following their demolition was provided for review. There is a potential for contaminated and/or structurally unsuitable fill materials to be present on the site. The potential presence of undocumented fill material is considered a BER.

## 2.0 REMEDIAL INVESTIGATION

### 2.1 Field Investigation

The field work portion of the RI was conducted by EBC from March 12, 2019 through June 7, 2019. The field investigation consisted of a geophysical survey, environmental sampling, field observations and measurements to determine:

- Local geologic/hydro geological conditions;
- The presence/absence of underground storage tanks;
- 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 of Manchester, CT (NY Cert No. 11301). A sample matrix showing the number, type and analysis of samples collected during the Remedial Investigation is provided as **Table 1**.

### 2.2 Geophysical Investigation

A geophysical survey was conducted on Site on March 12, 2019 using ground-penetrating radar equipment (GPR) before any subsurface work was initiated. EBC participated in this event by identifying the survey area at the northwestern portion of the site (former auto repair shop), as well as the soil boring, groundwater monitoring well, and soil vapor implant locations to be cleared by GPR. The geophysical survey identified one anomaly consistent with a possible UST. The anomaly was approximately 3-feet by 5-feet in size, consistent with a 275-gallon tank, and located approximately 35 feet south of the northern property boundary and 35 feet east of the western property boundary. The location of the suspected UST is shown on **Figure 3**. A geophysical report was not prepared as the UST and cleared boring locations were located and marked the same day as the remedial investigation sampling was conducted.

### 2.3 Soil Sampling

#### 2.3.1 Soil Borings

A total of seven soil borings were advanced between March 18 through March 19, 2019, to identify source areas and to obtain general soil quality information present at the Site. An additional eight borings advanced on June 7, 2019 to further delineate petroleum impacts and fill materials (**Figure 3**).

Soil borings were collected in continuous five-foot intervals to terminal depths of 10 to 20 feet below grade. For the borings completed in March 2019, two samples were retained for analysis: one from the 0 to 2 foot interval and one from the 16 to 18 foot interval, with the deeper sample representing the zone immediately below the proposed basement level. For the borings completed on June 7, 2019, two samples were also collected from each boring: one from the 0 to 2 foot interval

and one from either the 5 to 7 foot or 6 to 8 foot interval for the petroleum delineation area or the 8 to 10 foot interval for the fill delineation area.

Soil recovered from each soil boring was field screened by an environmental professional for the presence of volatile organic compounds (VOCs) with a photo-ionization detector (PID) and visually inspected for evidence of contamination. Soil boring logs are provided in **Appendix A**.

Thirty-two (32) soil samples were retained for analysis from the 15 soil boring locations, including one duplicate sample. Samples were collected in pre-cleaned, laboratory supplied glassware, stored in a cooler with ice and submitted for analysis to Phoenix Environmental Laboratories (Phoenix) of 587 East Middle Turnpike, Manchester, CT 06040, a New York State ELAP certified environmental laboratory (ELAP Certification No. 11301). Samples were analyzed for one or more of the following analyses depending on boring location and depth: VOCs (USEPA Method 8260), SVOCs (USEPA Method 8270), TAL metals (USEPA Methods 6010/7471), and Pesticides and polychlorinated biphenyls (PCBs) (USEPA Method 8081/8082). Samples collected for supplemental petroleum-impact delineation were analyzed for VOCs and SVOCs only. Soil sample analytical results were compared to NYSDEC Part 375.6 Unrestricted Use and Residential Restricted SCOs.

## 2.4 Monitoring Well Installation

Three (3) temporary 1-inch diameter monitoring wells (MW1 through MW3) were installed at the Site on March 18, 2019, using a track mounted Geoprobe™ Model 6712DT drilling machine. Each of the wells was installed to a depth of approximately 25 feet below grade with 10 feet of 0.010 PVC well screen and 15 feet of PVC riser.

A No. 2 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 were surveyed to determine relative casing elevation to the nearest 0.01 ft and horizontal position to the nearest 0.1 ft. Groundwater elevations and monitoring well specifications for each well is provided in **Table 2**. Monitoring well locations are identified in **Figure 4**. Well completion log reports detailing monitoring well construction are provided in **Appendix B**.

In addition, an existing 1-inch diameter monitoring well (MW-4), installed to a depth of 35 feet below grade (screen length and construction details unknown) was also sampled as part of the RI. Prior to sampling, a synoptic round of depth-to-groundwater (DTW) measurements were obtained from wells MW1 through MW4 to determine the water table elevation and to calculate the volume of standing water in the well. Depth to water and survey readings are provided in **Table 2**. A groundwater elevation map from the March 19, 2019 depth to water readings is provided as **Figure 5**.

### 2.4.1 Groundwater Sampling

Four on-site monitoring wells (MW1 through MW4) were sampled on March 19, 2019. In addition, one duplicate groundwater sample was also collected. Samples were collected from the monitoring wells using low-flow sampling techniques and were monitored continuously until parameters stabilized. A peristaltic pump and polyethylene sampling tube were used to purge and collect samples from each well location. Sample tubing and the silicone pump tubing were replaced



between each sample location. Samples were collected directly into pre-cleaned laboratory supplied glassware, stored in a cooler with ice and submitted to Phoenix Environmental Laboratories of Manchester, CT, a New York State ELAP certified environmental laboratory (ELAP Certification No. 11301). Groundwater sampling logs are provided in **Appendix C**.

Each of the groundwater samples collected from the monitoring wells were analyzed for VOCs / SVOCs by USEPA method 8260 / 8270, target analyte list (TAL) metals and dissolved metals by USEPA methods 6010/7471 and Pesticides/PCBs by USEPA method 8081/8082, PFAS compounds and 1,4-dioxane.

## 2.5 Soil Vapor Sampling

Six on-Site soil vapor samples were collected during the RI. Each of the samples (SS1 through SS6) were collected at a depth of 12 feet below grade (asphalt-paved parking lot), which is approximately three (3) above the water table) on March 20, 2019. Soil vapor sampling locations are shown on **Figure 4 and Figure 8**. 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 Soil Vapor Implants

Six on-Site soil vapor implants were installed at the Site on March 18 and March 19, 2019. The sub-slab vapor implants were installed using Geoprobe™ equipment and tooling. The vapor probes that were installed were the Geoprobe™ Model AT86 series, which are constructed of a 6-inch length of double woven stainless steel wire. The six of the soil vapor probes (SV1-SV6) were installed to a depth of 12 feet below grade which represents a depth approximately three feet above the water table. Each probe was attached to ¼ inch polyethylene tubing which extended approximately 18 inches beyond that needed to reach the surface. The tubing was capped with a ¼ inch plastic end to prevent the infiltration of foreign particles into the tube. Coarse sand was placed in the annular space around the probe and tubing. The remainder of the borehole was sealed with a bentonite slurry to the surface in order to provide an air tight seal.

### 2.5.2 Surface Seal Test Procedure

Prior to sampling, each sampling location was tested to ensure that a proper surface seal had been accomplished. In accordance with NYSDOH guidance ([NYSDOH Final Guidance on Soil Vapor Intrusion, October 2006](#)), 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. Prior to testing and collecting samples, the surface immediately surrounding the polyethylene tubing of the vapor implant was sealed using a 1 foot ft by 1 ft square sheet of 2 mil HDPE plastic firmly adhered to a wetted layer of granular bentonite. The seal was then tested 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 (Dielectric Model MGD-2002, Multi-Gas Detector) for a minimum of 15 minutes. The tracer gas test procedure was employed at all seven soil vapor sampling locations. No surface seal leaks were observed at any of the locations.



### 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) of air was purged from the implant using a calibrated vacuum pump. After purging, a 6-liter Summa® canister, fitted with a 2-hour flow regulator, was attached to the surface tube of each of the three vapor implants. Prior to initiating sample collection, sample identification, canister number, date and start time were recorded on tags attached to each canister and in a bound field note book. Sampling then proceeded by fully opening the flow control valve on each canister in turn. Immediately after opening the flow control valve on a canister, the initial vacuum (inches of mercury) was recorded in the field book, on the sample tag and on a sample log sheet (**Appendix D**). When the vacuum level in the canister was between 3 and 6 inches of mercury (approx 2 hours), the valve was closed and the canisters were detached from the sampling tube.

Sample canisters were picked up the following day by a Phoenix laboratory courier and delivered to the laboratory for analysis of VOCs by USEPA Method TO-15.

## 2.6 Laboratory Analysis

Data tables summarizing the laboratory results are provided in **Tables 3** through **13** and copies of the laboratory reports (with chains-of-custody) are included in digital format in **Appendix E**. Soil sample results were compared to both Unrestricted Use, Restricted Commercial and Restricted Industrial Soil Cleanup Objectives (SCOs) as promulgated in 6 NYCRR Subpart 375-6. 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. Soil vapor analytical results were compared to Outdoor Background Levels for Selected Compounds and sub-slab and indoor air guidance levels as presented in the NYSDOH Guidance for Evaluating Soil Vapor Intrusion in the State of New York, October 2006. **Table 14** contains a list of parameters detected above Track 1 unrestricted soil cleanup objectives and the range in detections. **Table 15** contains a list of parameters detected above ambient groundwater standards and the range in detections.

### 2.6.1 Analytical Results – Soil Samples

A total of thirty-two (32) soil samples were collected from 15 soil borings (SB1 through SB7, P1 through p4 and F1 through F4) for laboratory analysis of VOCs (USEPA Method 8260), SVOCs (USEPA Method 8270), TAL metals (USEPA Methods 6010/7471) and pesticides/PCBs USEPA Method 8081/8082). The samples from borings P1 through P4 were analyzed only for VOCs and SVOCs.

Soil sampling results are summarized in **Tables 3** through **6**. All soil results above Unrestricted Use SCOs are presented in **Table 14** and posted on **Figure 6**. Soil samples collected from the borings had elevated levels of VOCs, SVOCs, metals, pesticides and PCBs that exceeded Unrestricted Use, Restricted Commercial and/or Restricted Industrial SCOs as follows:

#### VOCs in Soil Above Unrestricted Use SCOs:

SB5 (0-2') - Acetone (720 µg/Kg), ethylbenzene (32,000 µg/Kg), m&p xylenes (180,000 µg/Kg), o xylene (74,000 µg/Kg), and toluene (5,900 µg/Kg)

**VOCs in Soil Above Restricted Residential SCOs:**

*SB5 (0-2')* - m&p xylenes (180,000 µg/Kg)

**SVOCs in Soil Above Unrestricted Use SCOs:**

*SB1 (0-2')* - Benzo(a)anthracene (2,100 µg/Kg), benzo(a)pyrene (2,600 µg/Kg), benzo(b)fluoranthene (2,900 µg/Kg), benzo(k)fluoranthene (2,400 µg/Kg), chrysene (2,500 µg/Kg), dibenzo(a,h)anthracene (570 µg/Kg), and indeno(1,2,3-cd)pyrene (1,900 µg/Kg)

*SB5 (0-2')* - Benzo(a)anthracene (66,000 µg/Kg), benzo(a)pyrene (44,000 µg/Kg), benzo(b)fluoranthene (45,000 µg/Kg), benzo(k)fluoranthene (39,000 µg/Kg), chrysene (58,000 µg/Kg), dibenzo(a,h)anthracene (6,300 µg/Kg), and indeno(1,2,3-cd)pyrene (21,000 µg/Kg)

*F1 (0-2')* - Benzo(a)anthracene (1,900 µg/Kg), benzo(a)pyrene (1,900 µg/Kg), benzo(b)fluoranthene (1,600 µg/Kg), benzo(k)fluoranthene (1,700 µg/Kg), chrysene (1,700 µg/Kg), dibenzo(a,h)anthracene (350 µg/Kg), and indeno(1,2,3-cd)pyrene (1,200 µg/Kg)

*F2 (0-2')* - Benzo(a)anthracene (11,000 µg/Kg), benzo(a)pyrene (8,700 µg/Kg), benzo(b)fluoranthene (7,000 µg/Kg), benzo(k)fluoranthene (5,900 µg/Kg), chrysene (9,400 µg/Kg), dibenzo(a,h)anthracene (1,800 µg/Kg), and indeno(1,2,3-cd)pyrene (5,400 µg/Kg)

*F3 (0-2')* - Benzo(a)anthracene (1,800 µg/Kg), benzo(a)pyrene (2,200 µg/Kg), benzo(b)fluoranthene (1,800 µg/Kg), benzo(k)fluoranthene (1,700 µg/Kg), chrysene (2,000 µg/Kg), dibenzo(a,h)anthracene (500 µg/Kg), and indeno(1,2,3-cd)pyrene (1,200 µg/Kg)

*F3 (5-7')* - Benzo(a)pyrene (1,100 µg/Kg), benzo(b)fluoranthene (1,500 µg/Kg), benzo(k)fluoranthene (1,300 µg/Kg), chrysene (1,600 µg/Kg), and indeno(1,2,3-cd)pyrene (1,000 µg/Kg)

*F4 (0-2')* - Benzo(a)pyrene (1,100 µg/Kg), benzo(b)fluoranthene (1,200 µg/Kg), benzo(k)fluoranthene (1,000 µg/Kg), chrysene (1,100 µg/Kg), dibenzo(a,h)anthracene (360 µg/Kg), and indeno(1,2,3-cd)pyrene (1,700 µg/Kg)

*Soil Duplicate (SB1 0-2')* - Benzo(a)anthracene (4,300 µg/Kg), benzo(a)pyrene (4,000 µg/Kg), benzo(b)fluoranthene (4,300 µg/Kg), benzo(k)fluoranthene (3,700 µg/Kg), chrysene (4,600 µg/Kg), dibenzo(a,h)anthracene (820 µg/Kg), and indeno(1,2,3-cd)pyrene (1,200 µg/Kg)

**SVOCs in Soil Above Restricted Residential SCOs:**

*SB1 (0-2')* - Benzo(a)anthracene (2,100 µg/Kg), benzo(a)pyrene (2,600 µg/Kg), benzo(b)fluoranthene (2,900 µg/Kg), dibenzo(a,h)anthracene (570 µg/Kg), and indeno(1,2,3-cd)pyrene (1,900 µg/Kg)

*SB5 (0-2')* - Benzo(a)anthracene (66,000 µg/Kg), benzo(a)pyrene (44,000 µg/Kg), benzo(b)fluoranthene (45,000 µg/Kg), benzo(k)fluoranthene (39,000 µg/Kg), chrysene (58,000 µg/Kg), dibenzo(a,h)anthracene (6,300 µg/Kg), and indeno(1,2,3-cd)pyrene (21,000 µg/Kg)

*F1 (0-2')* - Benzo(a)anthracene (1,900 µg/Kg), benzo(a)pyrene (1,900 µg/Kg), benzo(b)fluoranthene (1,600 µg/Kg), dibenzo(a,h)anthracene (350 µg/Kg), and indeno(1,2,3-cd)pyrene (1,200 µg/Kg)

F2 (0-2') - Benzo(a)anthracene (11,000 µg/Kg), benzo(a)pyrene (8,700 µg/Kg), benzo(b)fluoranthene (7,000 µg/Kg), benzo(k)fluoranthene (5,900 µg/Kg), chrysene (9,400 µg/Kg), dibenzo(a,h)anthracene (1,800 µg/Kg), and indeno(1,2,3-cd)pyrene (5,400 µg/Kg)

F3 (0-2') - Benzo(a)anthracene (1,800 µg/Kg), benzo(a)pyrene (2,200 µg/Kg), benzo(b)fluoranthene (1,800 µg/Kg), dibenzo(a,h)anthracene (500 µg/Kg), and indeno(1,2,3-cd)pyrene (1,200 µg/Kg)

F3 (5-7') - Benzo(a)pyrene (1,100 µg/Kg), benzo(b)fluoranthene (1,500 µg/Kg), and indeno(1,2,3-cd)pyrene (1,000 µg/Kg)

F4 (0-2') - Benzo(a)pyrene (1,100 µg/Kg), benzo(b)fluoranthene (1,200 µg/Kg), dibenzo(a,h)anthracene (360 µg/Kg), and indeno(1,2,3-cd)pyrene (1,700 µg/Kg)

Soil Duplicate (SB1 0-2') – Benzo(a)anthracene (4,300 µg/Kg), benzo(a)pyrene (4,000 µg/Kg), benzo(b)fluoranthene (4,300 µg/Kg), benzo(k)fluoranthene (3,700 µg/Kg), chrysene (4,600 µg/Kg), dibenzo(a,h)anthracene (820 µg/Kg), and indeno(1,2,3-cd)pyrene (1,200 µg/Kg)

**SVOCs in Soil Above Restricted Commercial SCOs:**

SB1 (0-2') - Benzo(a)pyrene (2,600 µg/Kg) and dibenzo(a,h)anthracene (570 µg/Kg)

SB5 (0-2') - Benzo(a)anthracene (66,000 µg/Kg), benzo(a)pyrene (44,000 µg/Kg), benzo(b)fluoranthene (45,000 µg/Kg), chrysene (58,000 µg/Kg), dibenzo(a,h)anthracene (6,300 µg/Kg), and indeno(1,2,3-cd)pyrene (21,000 µg/Kg)

F1 (0-2') - Benzo(a)pyrene (1,900 µg/Kg)

F2 (0-2') - Benzo(a)anthracene (11,000 µg/Kg), benzo(a)pyrene (8,700 µg/Kg), benzo(b)fluoranthene (7,000 µg/Kg), benzo(k)fluoranthene (5,900 µg/Kg), chrysene (9,400 µg/Kg), dibenzo(a,h)anthracene (1,800 µg/Kg), and indeno(1,2,3-cd)pyrene (5,400 µg/Kg)

F3 (0-2') - Benzo(a)pyrene (2,200 µg/Kg)

F3 (5-7') - Benzo(a)pyrene (1,100 µg/Kg)

F4 (0-2') - Benzo(a)pyrene (1,100 µg/Kg)

Soil Duplicate (SB1 0-2') – Benzo(a)pyrene (4,000 µg/Kg) and, dibenzo(a,h)anthracene (820 µg/Kg)

**SVOCs in Soil Above Restricted Industrial SCOs:**

SB1 (0-2') - Benzo(a)pyrene (2,600 µg/Kg)

SB5 (0-2') - Benzo(a)pyrene (44,000 µg/Kg), benzo(b)fluoranthene (45,000 µg/Kg) dibenzo(a,h)anthracene (6,300 µg/Kg), and indeno(1,2,3-cd)pyrene (21,000 µg/Kg)

F1 (0-2') - Benzo(a)pyrene (1,900 µg/Kg)

F2 (0-2') – Benzo(a)pyrene (8,700 µg/Kg) and dibenzo(a,h)anthracene (1,800 µg/Kg)

F3 (0-2') - Benzo(a)pyrene (2,200 µg/Kg)

Soil Duplicate (SB1 0-2') – Benzo(a)pyrene (4,000 µg/Kg )

**Metals in Soil Above Unrestricted Use SCOs:**

SB1 (0-2') – Barium (491 mg/Kg), lead (2,420 mg/Kg), mercury (0.49 mg/Kg) and zinc (348 mg/Kg)

SB2 (0-2') – Copper (137 mg/Kg), lead (122 mg/Kg), mercury (0.19 mg/Kg), nickel (31.8 mg/Kg) and zinc (110 mg/Kg)

SB3 (0-2') – Lead (182 mg/Kg), mercury (0.37 mg/Kg), and zinc (1,210 mg/Kg)

SB4 (0-2') – Copper (63.4 mg/Kg), lead (152 mg/Kg), mercury (0.23 mg/Kg), and zinc (184 mg/Kg)

SB5 (0-2') – Copper (50.4 mg/Kg) and mercury (0.31 mg/Kg)

SB6 (0-2') – Mercury (0.75 mg/Kg)

SB7 (0-2') – Lead (235 mg/Kg), mercury (0.34 mg/Kg), and zinc (161 mg/Kg)

F1 (0-2') – Copper (67.4 mg/Kg), lead (168 mg/Kg), mercury (0.31 mg/Kg), and zinc (194 mg/Kg)

F1 (5-7') – Lead (103 mg/Kg) and mercury (0.29 mg/Kg)

F3 (0-2') – Barium (447 mg/Kg), lead (102 mg/Kg), and zinc (241 mg/Kg)

F4 (0-2') – Barium (508 mg/Kg), copper (75.7 mg/Kg), lead (619 mg/Kg), mercury (1.58 mg/Kg), and zinc (290 mg/Kg)

F3 (5-7') – Barium (995 mg/Kg), cadmium (4.05 mg/Kg), copper (36.4 mg/Kg), lead (653 mg/Kg), mercury (1.21 mg/Kg), and zinc (911 mg/Kg)

Soil Duplicate (SB1 0-2') – Copper 53.9 mg/Kg), lead (1,450 mg/Kg), mercury (0.53 mg/Kg), and zinc (306 mg/Kg)

**Metals in Soil Above Restricted Residential SCOs:**

SB1 (0-2') – Barium (491 mg/Kg) and lead (2,420 mg/Kg)

F3 (0-2') – Barium (447 mg/Kg)

F4 (0-2') – Barium (508 mg/Kg), lead (619 mg/Kg), and mercury (1.58 mg/Kg)

F3 (5-7') – Barium (995 mg/Kg), lead (653 mg/Kg), and mercury (1.21 mg/Kg)

Soil Duplicate (SB1 0-2') – Lead (1,450 mg/Kg)

**Metals in Soil Above Restricted Commercial SCOs:**

SB1 (0-2') – Barium (491 mg/Kg) and lead (2,420 mg/Kg)

F3 (0-2') – Barium (447 mg/Kg)

F4 (0-2') – Barium (508 mg/Kg)

F3 (5-7') – Barium (995 mg/Kg)

Soil Duplicate (SB1 0-2') – Lead (1,450 mg/Kg)

**Pesticides in Soil Above Unrestricted Use SCOs:**

SB1 (0-2') – 4,4'-DDE (5.8 µg/Kg), 4,4'-DDT (30 µg/Kg), and dieldrin (40 µg/Kg)

SB2 (0-2') – 4,4'-DDD (15 µg/Kg) and 4,4'-DDE (4.6 µg/Kg)

SB3 (0-2') – 4,4'-DDD (8.6 µg/Kg), 4,4'-DDE (61 µg/Kg), 4,4'-DDT (78 µg/Kg), and dieldrin (9.8 µg/Kg)

SB4 (0-5') – 4,4'-DDE (4.9 µg/Kg) and 4,4'-DDT (33 µg/Kg)

SB5 (0-2') – 4,4'-DDT (53 µg/Kg) and dieldrin (25 µg/Kg)

SB6 (0-2') – 4,4'-DDE (5.2 µg/Kg) and 4,4'-DDT (4.7 µg/Kg)

SB7 (0-2') – 4,4'-DDT (7 µg/Kg)

F1 (0-2') – 4,4'-DDD (12 µg/Kg), 4,4'-DDE (18 µg/Kg), 4,4'-DDT (34 µg/Kg), and dieldrin (7.2 µg/Kg)

F1 (5-7') – 4,4'-DDD (18 µg/Kg), 4,4'-DDE (110 µg/Kg), 4,4'-DDT (210 µg/Kg), and dieldrin (16 µg/Kg)

F2 (0-2') – 4,4'-DDT (4.3 µg/Kg)

F3 (0-2') – 4,4'-DDD (92 µg/Kg), 4,4'-DDE (24 µg/Kg), and dieldrin (14 µg/Kg)

F3 (5-7') – 4,4'-DDD (200 µg/Kg), 4,4'-DDE (130 µg/Kg), 4,4'-DDT (98 µg/Kg), and dieldrin (250 µg/Kg)

Soil Duplicate (SB1 0-2') – 4,4'-DDE (7.6 µg/Kg), 4,4'-DDT (49 µg/Kg), and dieldrin (40 µg/Kg)

**Pesticides in Soil Above Restricted Residential Use SCOs:**

F3 (5-7') – Dieldrin (250 µg/Kg)

**PCBs in Soil Above Unrestricted Use SCOs:**

SB3 (0-2') – PCB-1254 (120 µg/Kg)

*2.6.2 Analytical Results – Groundwater Samples*

A total of five (5) groundwater samples, including one duplicate were collected from four (4) on-site groundwater monitoring wells (MW1 to MW4) for laboratory analysis of VOCs (USEPA Method 8260), SVOCs (USEPA Method 8270), TAL metals (total and dissolved) (USEPA Methods

6010/7471), and pesticides/PCBs (USEPA Method 8081/8082). One sample from monitoring well MW4 was also analyzed for PFAS Compounds (USEPA Method 537) and 1,4-dioxane (USEPA Method 8260).

The results of groundwater samples collected during the RI are summarized in **Tables 7** through **13**. Groundwater samples collected from the monitoring wells exhibited concentrations of several VOCs, metals, and pesticides that exceeded NYSDEC Division of Water, Technical & Operational Guidance Series 1.1.1, Ambient Water Quality Standards and Guidance Values (AWQS), June 1998. Groundwater parameters reported above groundwater standards are presented in **Table 15** and posted on **Figure 7**.

**VOCs in Groundwater Above NYSDEC AWQS:**

*MW1* – Tetrachloroethene (5.4 µg/L)

*MW2* – Tetrachloroethene (7 µg/L)

*MW3* – Tetrachloroethene (7.4 µg/L)

*MW3* – Tetrachloroethene (5.2 µg/L)

*GW Duplicate (MW4)* – Tetrachloroethene (5.1 µg/L)

**Emerging Contaminants in Groundwater:**

*MW4* – Perfluorobutanoic acid (PFBA) (19.9 ng/L), perfluoropentanoic acid (PFPeA) (35.2 ng/L), perfluorobutanesulfonic acid (PFBS) (6.67 ng/L), perfluorohexanoic acid (PFHxA) (26.6 ng/L), perfluoroheptanoic acid (PFHpA) (14.1 ng/L), perfluorohexanesulfonic acid (PFHxS) (13.0 ng/L), perfluorooctanoic acid (PFOA) (34.3 ng/L), 1H, 1H, 2H, 2H-Perfluorooctanesulfonic Acid (6:2FTS) (1.61 ng/L), Perfluoroheptanesulfonic Acid (PFHpS) (0.609 ng/L), perfluorononanoic acid (PFNA) (3.05 ng/L), perfluorooctanesulfonic acid (PFOS) (55 ng/L), Perfluorodecanoic Acid (PFDA) (1.52 ng/L), and Perfluorodecanesulfonic Acid (PFDS) (0.391 ng/L). EBC notes that the combined concentration of PFOA and PFOS is 89.3 ng/L, which exceeds the USEPA Health Advisory Level of 70 ng/L for drinking water.

**Dissolved Metals in Groundwater Above NYSDEC AWQS:**

*MW1* – Sodium (215 mg/L)

*MW2* – Manganese (0.89 mg/L) and sodium (295 mg/L)

*MW3* – Manganese (1.11 mg/L) and sodium (242 mg/L)

*MW4* – Sodium (208 mg/L)

*GW Duplicate (MW4)* - Sodium (201 mg/L)

**Total Metals in Groundwater Above NYSDEC AWQS:**

*MW1* – Aluminum (1.43 mg/L), iron (1.3 mg/L), manganese (0.335 mg/L) and sodium (255 mg/L)

*MW2* – Aluminum (1.99 mg/L), iron (2 mg/L), manganese (1.01 mg/L) and sodium (314 mg/L)



MW3 – Aluminum (2.8 mg/L), iron (3.16 mg/L), manganese (1.31 mg/L) and sodium (247 mg/L)

MW4 – Aluminum (1.85 mg/L), iron (2.02 mg/L), manganese (0.332 mg/L) and sodium (224 mg/L)

GW Duplicate (MW4) - Aluminum (1.8 mg/L), iron (1.9 mg/L), manganese (0.319 mg/L) and sodium (232 mg/L)

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.

#### **Pesticides in Groundwater Above NYSDEC AWQS:**

MW1 – Dieldrin (0.011 µg/L)

MW3 – Dieldrin (0.016 µg/L)

MW4 – Dieldrin (0.01 µg/L)

GW Duplicate (MW4) – Dieldrin (0.018 µg/L)

#### *2.6.3 Analytical Results – Soil Vapor Samples*

In order to determine the vapor quality in the soil beneath the Site, sub-slab soil vapor samples were collected from six soil vapor implants (SV1 – SV6) installed across the Site. Analytical results were compared to the compounds listed in Table 3.1 of the Air Guideline Values Derived by the NYSDOH located in the New York State Department of Health (NYSDOH) Final Guidance for Evaluating Soil Vapor Intrusion, dated October 2006 and revised May 2017.

Total petroleum-related VOCs (BTEX compounds) were detected in all six on-site soil vapor samples, ranging from 7.23 µg/m<sup>3</sup> in SV1 to 11.58 µg/m<sup>3</sup> in SV4. Individual BTEX compounds included benzene (max. 2.39 µg/m<sup>3</sup>), ethylbenzene (1.15 µg/m<sup>3</sup>), toluene (max. 3.54 µg/m<sup>3</sup>), m&p xylenes (max. 4.3 µg/m<sup>3</sup>) and o-xylene (max. 1.22 µg/m<sup>3</sup>).

One or more chlorinated VOCs (CVOCs) were also detected in each of the six on-site soil vapor samples, including 1,1,1-trichloroethane (1,1,1-TCA), carbon tetrachloride, PCE, and TCE, but at concentrations below their respective monitoring level ranges established within the State DOH soil vapor guidance matrix. Total CVOC concentrations ranged from 2.31 µg/m<sup>3</sup> in sample SV5 to 59.58 µg/m<sup>3</sup> in sample SV1.

Four compounds are considered in NYSDOH Decision Matrix A: TCE, cis-1,2-dichloroethene (Cis-1,2-DCE), 1,1-dichloroethene (1,1-DCE) and carbon tetrachloride. TCE was detected in three of the six samples at concentrations ranging from 0.32 µg/m<sup>3</sup> (SV6) to 0.98 µg/m<sup>3</sup> (SV4). Cis-1,2-DCE was detected in one of the six samples at a concentration of 0.43 µg/m<sup>3</sup> (SV4). 1,1-DCE was not detected in any of the six samples at concentrations above its laboratory method detection limit (MDL). Carbon tetrachloride was detected in each of the six samples at concentrations ranging from 0.22 µg/m<sup>3</sup> (SV6) to 0.33 µg/m<sup>3</sup> (SV2).

Three compounds are considered in NYSDOH Decision Matrix B: PCE, 1,1,1-Trichloroethane, and Methylene Chloride. PCE was detected in five of the six samples at concentrations ranging from

0.64  $\mu\text{g}/\text{m}^3$  (SV4) to 1.61  $\mu\text{g}/\text{m}^3$  (SV1). 1,1,1-Trichloroethane was detected in each of the six samples at concentrations ranging from 1.28  $\mu\text{g}/\text{m}^3$  (SV5) to 57.3  $\mu\text{g}/\text{m}^3$  (SV1). Methylene Chloride was detected in one of the six samples at a concentration 4.44  $\mu\text{g}/\text{m}^3$  (SV1).

One compound is considered in NYSDOH Decision Matrix C: Vinyl chloride. This compound was not detected in any of the samples at concentrations above its laboratory MDL.

Soil vapor results are summarized on **Table 13** and posted on **Figure 8**.

#### 2.6.4 Data Usability Summary Report

Data validation services have been requested from Koman Government Solutions, LLC (KGS) of Westborough, Massachusetts.. The Data Usability Summary Reports prepared by KGS will be submitted to the NYSDEC upon receipt.



### 3.0 HYDROGEOLOGIC ASSESSMENT AND PHYSICAL SETTING

#### 3.1 Site Topography

The elevation of the Site is approximately 21 feet above the National Geodetic Vertical Datum (NGVD), as determined from the United States Geological Survey (USGS) 7.5-minute series topographic map for the Central Park, NY-NJ Quadrangle). The subject property is relatively flat with the general topographic gradient sloping downward to the east..

#### 3.2 Surrounding Land Use

The Site is located within a densely developed, mixed-use urban area and is zoned for mixed manufacturing and residential (M1-6/R9). Adjacent land uses include a charter school to the north, a parking lot and mixed (commercial/residential) building to the south, elevated railroad lines and commercial buildings to the east and apartments to the west.

#### 3.3 Regional Geology / Hydrogeology

According to the USGS Ground Water Atlas of the United States, New York region (1995), the site is located within the New England Physiographic Province, which is underlain by metamorphic and sedimentary rocks of the Cambrian and Ordovician period. The bedrock that underlies much of the island of Manhattan is known as the Manhattan schist, which is a formation of mica schist rock that is well suited for the foundations of tall buildings, and in fact, the two large concentrations of skyscrapers on the island occur where the formation is close to the surface.

#### 3.4 Site Geology / Hydrogeology

Subsurface soils at the Site consists of dark brown silty sand, mixed with fill material (brick and wood fragments) from the surface to approximately 5 and 8 feet below grade, underlain by brown fine to medium-grained sand with mixtures of silt and coarse sand to a depth of at least 20 feet below grade. Soil Boring lots are included in **Appendix A**.

Groundwater at the Site is present under water table conditions at a depth of 15 to 16 feet below grade (**Table 2**). Based upon on-site measurements, groundwater flow is generally to the east towards Park Avenue (**Figure 5**).

## 4.0 NATURE AND EXTENT OF CONTAMINATION

### 4.1 Identification of Source Areas

Petroleum VOC contamination was reported in the northwestern portion of the Site in the vicinity of soil borings SB5 and P4. This area represents the location of several historic auto repair shops, as well as a potential UST identified during the geophysical survey. This impacted area is estimated to be approximately 40 sf. Total petroleum VOCs in SB5 reached a maximum of 291,000 µg/Kg at the 0-2 ft interval, and decreased to non-detectable levels at the water table at 16-18 ft. A small area of petroleum contamination was also identified at boring F3 (6-8') Total VOCs in sample F3 (6-8') were 2,331 µg/Kg, and are likely attributable to the presence of heterogeneous fill material.

Historic fill materials have been identified across the Site to depths 6 to 10 feet below grade. Depending on location, the historic fill material contains SVOCs, pesticides, PCBs, and one or more metals including arsenic, barium, beryllium, cadmium, chromium, copper, lead, mercury, nickel, and zinc above unrestricted and/or restricted use SCOs. Most notably were pesticide impacts in samples SB5 (0-2'), F1 (5-7') and F3 (6-8') and metals impacts in samples SB1 (0-2'), F3 (0-2'), F3 (6-8') and F4 (0-2').

### 4.2 Groundwater Impacts

The chlorinated VOC PCE was detected above its NYSDEC Ambient Water Quality Standard (AWQ) in each of the samples collected across the Site. However, as PCE was not detected in site soils, with the exception of one shallow (0-2') sample, the presence of PCE appears attributable to an off-site source of generally degraded regional water quality.

The pesticide dieldrin was detected in each of the four groundwater samples collected/analyzed, with concentrations exceeding the AWQ in three samples (0.01 to 0.016 ug/L). This compound was detected in shallow to intermediate soil samples (0 to 8'), but was not identified in any of the deep (16-18') samples.

Two dissolved metals were detected above standards, including manganese and sodium in most of the wells. These metals are consistent with general groundwater quality throughout the area.

Moderate levels of PFAS compounds were detected in the one groundwater sample collected from the site (MW4). The combined PFOA and PFOS concentration measured in this sample (89.3 ng/L) was above the USEPA Health Advisory Level of 70 ng/L.

### 4.3 Soil-Vapor Impacts

Petroleum-related VOCs were generally identified at low levels in soil vapor samples, and consistent with typical levels with total BTEX concentrations ranging from 7.23 to 11.58 ug/m<sup>3</sup>. One or more chlorinated VOCs, including 1,1,1-trichloroethane (1,1,1-TCA), carbon tetrachloride, PCE, and TCE were identified in each of the six soil vapor samples collected across the Site, but at concentrations below their respective NYSDOH mitigation values. Acetone was reported in moderate to high concentrations (130 to 729 ug/m<sup>3</sup>) in each of the six samples and is most likely a laboratory introduced contaminant.

#### 4.4 Site Conceptual Model

VOC contamination at the Site consists of high concentrations of petroleum-related VOCs in soil at the northwestern portion of the property (surrounding boring SB5). This area is with the location of historic auto repair facilities and a potential UST. This area appears limited in horizontal extent as evidenced by samples collected from borings P1 through P4. As such, it appears likely that these impacts are related to surface spills which have occurred over time and/or a release from the potential UST.

The SVOCs, pesticides and metals, as well as limited VOCs and PCBs reported in soil across the Site are related to the presence of documented fill materials, which was mostly likely placed onsite during to backfilling of former building foundations/basements previously demolished at the Site.

Groundwater impacted with low-levels of chlorinated VOCs, specifically PCE, appear attributable to an off-site source and/or degraded regional groundwater quality given the absence of this compound in Site soils. is associated with the chlorinated and petroleum VOC impacted soil areas. In this case, solvents released at the surface migrated through the soil column to the water table. These constituents then dissolved into the groundwater, which was in contact with the contaminated soil, and migrated with groundwater flow. The compounds documented to be present in Site soils were not detected in groundwater, with the exception of the pesticide dieldrin. As such, it is possible that the presence of this compound in groundwater is related to it migrating through Site soils; however, it was not identified in any of the deep soil samples collected/analyzed.

## 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

Source areas of the Site include petroleum-related VOCs in soil at the northwestern portions of the Site, in the vicinity of boring SB-5. The impact in this area, appears limited, as it did not extend to the deep soil sample (16-18') at this location, nor were impacts identified in samples from boring P1 through P4.

Elevated levels of SVOCs, pesticides, metals, and PCBs are also present in fill materials throughout the Site, extending to depths of approximately 8 to 10 feet.

### 5.2 Contaminant Release and Transport Mechanism

Petroleum contamination is present in soil at the northwestern portion of the Site. However, these impacts appear limited to a small area of shallow to intermediate soils, with no direct contact to groundwater. No petroleum impacts to groundwater were identified.

Groundwater impacts are relatively low and limited one chlorinated VOC, detected at relatively equal concentrations across the Site. This limited migration of impacted water across the Site, which is attributable to an offsite source or degraded regional groundwater quality.

There does not appear to be any migration of petroleum or chlorinated VOCs in soil vapor either on the property or migrating from the property.

### 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/fill material at the site may be exposed to petroleum VOCs, SVOCs, PCBs, pesticides and heavy metals through several routes. Workers excavating impacted soil may be exposed 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 excavation, however, security measures including an 8 ft. high construction fence and 24 hr. security will minimize potential exposure through this route. Potential vapor intrusion does not appear to be a significant

concern for residents of the planned construction. In addition, remediation of the source areas is expected to further reduce or eliminate this potential.

Potential Off-Site Exposures: Off-Site residents could also be exposed to dust or vapors during the excavation of impacted soil/fill material. 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 light end petroleum VOCs. This potential will be further reduced following the removal of the source are under the planned redevelopment of the Site.

Soil vapor samples and collected/analyzed as part of this investigation did not exhibit evidence of petroleum or chlorinated VOCs in excess of applicable regulatory criteria. As such, no impacts related to the offsite migration of vapors is expected.

Potential Off-Site Environmental Impacts: Since VOCs in groundwater may be migrating beneath the Site at low concentrations in a generally eastern direction, the groundwater to surface water discharge pathway was evaluated. The Harlem River is located approximately one-quarter mile to the northeast at its closest point. Based upon the concentrations of contaminants currently in groundwater beneath the Site and the documented flow direction to the east, there are no expected impacts to surface water environments from contaminants migrating from the Site.

## 6.0 CONCLUSIONS AND RECOMENDATIONS

Subsurface soils at the Site consist of historic fill materials to depths of approximately 6 to 10 feet below grade. Native silty sand and gravel are present immediately below this layer. The fill material contains elevated levels of metals, pesticides, PCBs and SVOCs.

Groundwater at the Site is present under water table conditions at a depth of 15 to 16 feet below grade and flows generally east.

The results of sampling performed during this RI identified an area of petroleum-related VOCs at the northwestern portion of the Site, with the highest concentrations in the vicinity of soil boring SB5. This area represents the location of several historic auto repair shops, as well as a potential UST identified during the geophysical survey. This impacted area is estimated to be approximately 40 sf. Total petroleum VOCs in SB5 reached a maximum of 291,000 µg/Kg at the 0-2 ft interval, and decreased to non-detectable levels at the water table at 16-18 ft. A small area of petroleum contamination was also identified at boring F3 (6-8') Total VOCs in sample F3 (6-8') were 2,331 µg/Kg, and are likely attributable to the presence of heterogeneous fill material.

Historic fill materials have been identified across the Site to depths 6 to 10 feet below grade. Depending on location, the historic fill material contains SVOCs, pesticides, PCBs, and one or more metals including arsenic, barium, beryllium, cadmium, chromium, copper, lead, mercury, nickel, and zinc above unrestricted and/or restricted use SCOs. Most notably were pesticide impacts in samples SB5 (0-2'), F1 (5-7') and F3 (6-8') and metals impacts in samples SB1 (0-2'), F3 (0-2'), F3 (6-8') and F4 (0-2').

The chlorinated VOC PCE was detected above its NYSDEC AWQ in each of the samples collected across the Site. However, as PCE was not detected in site soils, with the exception of one shallow sample, the presence of PCE appears attributable to an off-site source of generally degraded regional water quality.

The pesticide dieldrin was detected in each of the four groundwater samples collected/analyzed, with concentrations exceeding the AWQ in three samples. This compound was detected in shallow to intermediate soil samples, but was not identified in any of the deep soil samples.

Moderate levels of PFAS compounds were detected in the one groundwater sample collected from the site (MW4). The combined PFOA and PFOS concentration measured in this sample (89.3 ng/L) was above the USEPA Health Advisory Level of 70 ng/L.

Petroleum-related and chlorinated VOCs were generally identified at low levels in soil vapor samples. Chlorinated VOC concentrations were below their respective NYSDOH mitigation values.

The qualitative exposure assessment identified potential completed routes of exposure to construction workers and remediation workers through inhalation, ingestion and dermal contact of petroleum-related and chlorinated VOCs, SVOCs, 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. Vapor exposure for occupants of the proposed building is low. No potential off-site exposures were identified.

Potential environmental impacts through the groundwater to surface water discharge were considered unlikely based on the concentrations of VOCs in groundwater, the groundwater flow direction at the Site and the distance to the Harlem River.

Recommendations include excavation and disposal of petroleum-contaminated soil within the source area, and proper handling and disposal of all soils/fill materials excavated for structural elements of the proposed new building. 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, Phase I Environmental Site Assessment – January 2019.

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

NYSDEC, Division of Environmental Remediation, May 2010, *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 Environmental Remediation, March 2019, *Sampling for 1,4-Dioxane and Per- and Polyfluoroalkyl Substances (PFAS) Under DEC's Part 375 Remedial Programs*

NYSDEC, Division of Water, June 1998, Addendums April 2000 and June 2004, *Technical and Operational Guidance Series 1:1:1, Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations*.

NYSDOH, Center for Environmental Health, October 2006, Updated May 2017, *Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York*.



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# **TABLES**

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

<b>Matrix</b>	<b>Location</b>	<b>Number of Samples</b>	<b>Rationale for Sampling</b>	<b>Laboratory Analysis</b>
Subsurface soil (0 to 18 feet bgs)	15 soil borings throughout the site. Samples collected at various intervals for analysis, including 0-2', 5-7', 8-10' and 16-18'	30	To evaluate the extent of soil impact and obtain information on soil quality at the Site.	VOCs EPA Method 8260B, SVOCs EPA Method 8270, pesticide / PCBs EPA Method 8081/8082, and TAL metals.
<b>Total (Soils)</b>		30		
Groundwater (water table)	From 3 temporary monitoring wells and one previously existing monitoring well across the Site.	4	To assess groundwater quality at the Site.	VOCs EPA Method 8260B plus TICs, SVOCs EPA Method 8270 plus TICs, pesticide / PCBs EPA Method 8081/8082, TAL metals and dissolved and total.
<b>Total (Groundwater)</b>		4		
Soil Gas (5 ft below existing grade)	Six soil gas implants installed across the Site.	6	Evaluate soil gas across the Site.	VOCs EPA Method TO15
<b>Total (Soil Gas)</b>		6		
Duplicates	Soil and groundwater duplicates	2	To meet requirements of QA / QC program	VOCs EPA Method 8260B, SVOCs EPA Method 8270 BN, pesticide / PCBs EPA Method 8081/8082, TAL metals.
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
<b>Total (QA / QC Samples)</b>		6		

Table 2  
 1840-1856 Park Avenue,  
 Manhattan, NY  
 Soil Boring / Well Information

SAMPLE ID	Date	Total Depth (ft)	Diameter (in)	Construction Materials	Screen Length (ft)	DTW (ft)	DTP	Survey Reading	Casing Elevation	GW ELV
SB1	3/18/2019	20	2.25	Geoprobe 6712 DT	-	-	-	-	-	-
SB2	3/18/2019	20	2.25	Geoprobe 6712 DT	-	-	-	-	-	-
SB3	3/18/2019	20	2.25	Geoprobe 6712 DT	-	-	-	-	-	-
SB4	3/19/2019	20	2.25	Geoprobe 6712 DT	-	-	-	-	-	-
SB5	3/19/2019	20	2.25	Geoprobe 6712 DT	-	-	-	-	-	-
SB6	3/19/2019	20	2.25	Geoprobe 6712 DT	-	-	-	-	-	-
SB7	3/19/2019	20	2.25	Geoprobe 6712 DT	-	-	-	-	-	-
MW1	3/19/2019	25	1	PVC	10.00	16.32	-	4.38	95.62	79.30
MW2	3/19/2019	25	1	PVC	10.00	15.87	-	4.92	95.08	79.21
MW3	3/19/2019	25	1	PVC	10.00	15.74	-	5.02	94.98	79.24
MW4	-	35	1	PVC	-	15.07	-	6.00	94.00	78.93









TABLE 5  
1840-1856 Park Avenue  
New York, New York  
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*	SB1				SB2				SB3				SB4				SB5				SB6			
				(0-2) 3/18/2019 µg/Kg		(16-18) 3/19/2019 µg/Kg		(0-2) 3/18/2019 µg/Kg		(16-18) 3/18/2019 µg/Kg		(0-2) 3/18/2019 µg/Kg		(16-18) 3/18/2019 µg/Kg		(0-2) 3/19/2019 µg/Kg		(16-18) 3/19/2019 µg/Kg		(0-2) 3/19/2019 µg/Kg		(16-18) 3/19/2019 µg/Kg		(0-2) 3/19/2019 µg/Kg		(16-18) 3/19/2019 µg/Kg	
				Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
4,4'-DDD	3.3	13,000	92,000	<2.3	2.3	<2.2	2.2	15	2.3	<2.2	2.2	8.6	2.2	<2.2	2.2	3.3	2.2	<2.1	2.1	130	22	<2.2	2.2	2.8	2.3	<2.5	2.5
4,4'-DDE	3.3	8,900	62,000	5.8	2.3	<2.2	2.2	4.6	2.3	<2.2	2.2	61	2.2	<2.2	2.2	4.9	2.2	<2.1	2.1	<22	22	<2.2	2.2	5.2	2.3	<2.5	2.5
4,4'-DDT	3.3	7,900	47,000	30	2.3	<2.2	2.2	<2.3	2.3	<2.2	2.2	78	2.2	<2.2	2.2	33	2.2	<2.1	2.1	53	22	<2.2	2.2	4.7	2.3	<2.5	2.5
a-BHC	20	480	3,400	<7.5	7.5	<7.3	7.3	<7.6	7.6	<7.3	7.3	<7.3	7.3	<7.4	7.4	<7.3	7.3	<7.1	7.1	<15	15	<7.3	7.3	<7.5	7.5	<8.3	8.3
a-Chlordane	94	4,200	24,000	6.6	3.8	<3.7	3.7	<3.8	3.8	<3.7	3.7	28	3.6	<3.7	3.7	6.1	3.7	<3.5	3.5	<36	36	<3.6	3.6	<7.5	7.5	<4.2	4.2
Aldrin	5	97	680	<3.8	3.8	<3.7	3.7	<3.8	3.8	<3.7	3.7	<3.6	3.6	<3.7	3.7	<3.7	3.7	<3.5	3.5	<15	15	<3.6	3.6	<3.8	3.8	<4.2	4.2
b-BHC	36	360	3,000	<7.5	7.5	<7.3	7.3	<7.6	7.6	<7.3	7.3	<7.3	7.3	<7.4	7.4	<7.3	7.3	<7.1	7.1	<15	15	<7.3	7.3	<7.5	7.5	<8.3	8.3
Chlordane	94	4,200	24,000	39	3.8	<3.7	3.7	<3.8	3.8	<3.7	3.7	160	3.6	<3.7	3.7	<3.7	3.7	<3.5	3.5	<360	360	<3.6	3.6	<3.8	3.8	<4.2	4.2
d-BHC	40	100,000	500,000	<7.5	7.5	<7.3	7.3	<7.6	7.6	<7.3	7.3	<7.3	7.3	<7.4	7.4	<7.3	7.3	<7.1	7.1	<15	15	<7.3	7.3	<7.5	7.5	<8.3	8.3
Dieldrin	5	200	1,400	40	3.8	<3.7	3.7	<3.8	3.8	<3.7	3.7	9.8	3.6	<3.7	3.7	<3.7	3.7	<3.5	3.5	25	15	<3.6	3.6	<3.8	3.8	<4.2	4.2
Endosulfan I	2,400	24,000	200,000	<7.5	7.5	<7.3	7.3	<7.6	7.6	<7.3	7.3	<7.3	7.3	<7.4	7.4	<7.3	7.3	<7.1	7.1	<73	73	<7.3	7.3	<7.5	7.5	<8.3	8.3
Endosulfan II	2,400	24,000	200,000	<7.5	7.5	<7.3	7.3	<7.6	7.6	<7.3	7.3	<7.3	7.3	<7.4	7.4	<7.3	7.3	<7.1	7.1	<73	73	<7.3	7.3	<7.5	7.5	<8.3	8.3
Endosulfan sulfate	2,400	24,000	200,000	<7.5	7.5	<7.3	7.3	<7.6	7.6	<7.3	7.3	<7.3	7.3	<7.4	7.4	<7.3	7.3	<7.1	7.1	<73	73	<7.3	7.3	<7.5	7.5	<8.3	8.3
Endrin	14	11,000	89,000	<7.5	7.5	<7.3	7.3	<7.6	7.6	<7.3	7.3	<7.3	7.3	<7.4	7.4	<7.3	7.3	<7.1	7.1	<38	38	<7.3	7.3	<7.5	7.5	<8.3	8.3
Endrin aldehyde				<7.5	7.5	<7.3	7.3	<7.6	7.6	<7.3	7.3	<7.3	7.3	<7.4	7.4	<7.3	7.3	<7.1	7.1	<73	73	<7.3	7.3	<7.5	7.5	<8.3	8.3
Endrin ketone				<7.5	7.5	<7.3	7.3	<7.6	7.6	<7.3	7.3	<7.3	7.3	<7.4	7.4	<7.3	7.3	<7.1	7.1	<73	73	<7.3	7.3	<7.5	7.5	<8.3	8.3
g-BHC				<1.5	1.5	<1.5	1.5	<1.5	1.5	<1.5	1.5	<1.5	1.5	<1.5	1.5	<1.5	1.5	<1.4	1.4	<15	15	<1.5	1.5	<1.5	1.5	<1.7	1.7
g-Chlordane				7.5	3.8	<3.7	3.7	<3.8	3.8	<3.7	3.7	28	3.6	<3.7	3.7	<3.7	3.7	<3.5	3.5	<36	36	<3.6	3.6	<7.5	7.5	<4.2	4.2
Heptachlor	42	2,100	15,000	<7.5	7.5	<7.3	7.3	<7.6	7.6	<7.3	7.3	<7.3	7.3	<7.4	7.4	<7.3	7.3	<7.1	7.1	<36	36	<7.3	7.3	<7.5	7.5	<8.3	8.3
Heptachlor epoxide				<7.5	7.5	<7.3	7.3	<7.6	7.6	<7.3	7.3	<7.3	7.3	<7.4	7.4	<7.3	7.3	<7.1	7.1	<73	73	<7.3	7.3	<7.5	7.5	<8.3	8.3
Methoxychlor				<38	38	<37	37	<38	38	<37	37	<36	36	<37	37	<37	37	<35	35	<360	360	<36	36	<38	38	<42	42
Toxaphene				<150	150	<150	150	<150	150	<150	150	<150	150	<150	150	<150	150	<140	140	<1500	1,500	<150	150	<150	150	<170	170
PCB-1016	100	1,000	1,000	<75	75	<73	73	<76	76	<73	73	<73	73	<74	74	<73	73	<71	71	<73	73	<73	73	<75	75	<83	83
PCB-1221	100	1,000	1,000	<75	75	<73	73	<76	76	<73	73	<73	73	<74	74	<73	73	<71	71	<73	73	<73	73	<75	75	<83	83
PCB-1232	100	1,000	1,000	<75	75	<73	73	<76	76	<73	73	<73	73	<74	74	<73	73	<71	71	<73	73	<73	73	<75	75	<83	83
PCB-1242	100	1,000	1,000	<75	75	<73	73	<76	76	<73	73	<73	73	<74	74	<73	73	<71	71	<73	73	<73	73	<75	75	<83	83
PCB-1248	100	1,000	1,000	<75	75	<73	73	<76	76	<73	73	<73	73	<74	74	<73	73	<71	71	<73	73	<73	73	<75	75	<83	83
PCB-1254	100	1,000	1,000	<75	75	<73	73	<76	76	<73	73	120	73	<74	74	<73	73	<71	71	<73	73	<73	73	<75	75	<83	83
PCB-1260	100	1,000	1,000	<75	75	<73	73	<76	76	<73	73	<73	73	<74	74	<73	73	<71	71	82	73	<73	73	<75	75	<83	83
PCB-1262	100	1,000	1,000	<75	75	<73	73	<76	76	<73	73	<73	73	<74	74	<73	73	<71	71	<73	73	<73	73	<75	75	<83	83
PCB-1268	100	1,000	1,000	<75	75	<73	73	<76	76	<73	73	<73	73	<74	74	<73	73	<71	71	<73	73	<73	73	<75	75	<83	83

Notes:  
 \* - 6 NYCRR Part 375-6 Remedial Program Soil Cleanup Objectives  
 BCG - Below Cellar Grade  
 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  
1840-1856 Park Avenue  
New York, New York  
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*	SB7				F1				F2				F3				F4				Duplicate	
				(0-2) 3/19/2019 µg/Kg		(16-18) 3/19/2019 µg/Kg		(0-2) 6/7/2019 µg/Kg		(5-7) 6/7/2019 µg/Kg		(0-2) 6/7/2019 µg/Kg		(5-7) 6/7/2019 µg/Kg		(0-2) 6/7/2019 µg/Kg		(5-7) 6/7/2019 µg/Kg		(0-2) 6/7/2019 µg/Kg		(5-7) 6/7/2019 µg/Kg		3/18/2019 µg/Kg	
				Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
4,4'-DDD	3.3	13,000	92,000	<2.2	2.2	<2.3	2.3	<b>12</b>	2.4	<b>18</b>	2.3	<2.1	2.1	<2.1	2.1	<b>92</b>	11	<b>200</b>	12	<2.2	2.2	<2.2	2.2	<2.3	2.3
4,4'-DDE	3.3	8,900	62,000	<2.2	2.2	<2.3	2.3	<b>18</b>	2.4	<b>110</b>	23	<3.0	3.0	<2.1	2.1	<b>24</b>	2.2	<b>130</b>	12	<2.2	2.2	<2.2	2.2	<b>7.6</b>	2.3
4,4'-DDT	3.3	7,900	47,000	<b>7</b>	2.2	<2.3	2.3	<b>34</b>	2.4	<b>210</b>	23	<b>4.3</b>	2.1	<2.1	2.1	<2.2	2.2	<6.3	8.3	<2.2	2.2	<2.2	2.2	<b>49</b>	2.3
a-BHC	20	480	3,400	<7.2	7.2	<7.6	7.6	<7.9	7.9	<7.6	7.6	<7.1	7.1	<7.0	7.0	<7.4	7.4	<8.3	8.3	<7.4	7.4	<7.4	7.4	<7.6	7.6
a-Chlordane	94	4,200	24,000	<3.6	3.6	<3.8	3.8	<b>26</b>	4.0	<b>54</b>	3.8	<b>12</b>	3.5	<3.5	3.5	<b>24</b>	3.7	<b>98</b>	21	<3.7	3.7	<3.7	3.7	<10	10
Aldrin	5	97	680	<3.6	3.6	<3.8	3.8	<4.0	4.0	<3.8	3.8	<3.5	3.5	<3.5	3.5	<3.7	3.7	<8.3	8.3	<3.7	3.7	<3.7	3.7	<3.8	3.8
b-BHC	36	360	3,000	<7.2	7.2	<7.6	7.6	<7.9	7.9	<7.6	7.6	<7.1	7.1	<7.0	7.0	<7.4	7.4	<8.3	8.3	<7.4	7.4	<7.4	7.4	<7.6	7.6
Chlordane	94	4,200	24,000	<3.6	3.6	<3.8	3.8	<b>110</b>	4.0	<b>190</b>	3.8	<b>34</b>	14	<3.5	3.5	<b>73</b>	3.7	<b>330</b>	210	<3.7	3.7	<3.7	3.7	<b>67</b>	3.8
d-BHC	40	100,000	500,000	<7.2	7.2	<7.6	7.6	<7.9	7.9	<7.6	7.6	<7.1	7.1	<7.0	7.0	<7.4	7.4	<8.3	8.3	<7.4	7.4	<7.4	7.4	<7.6	7.6
Dieldrin	5	200	1,400	<3.6	3.6	<3.8	3.8	<b>7.2</b>	4.0	<b>16</b>	3.8	<3.5	3.5	<3.5	3.5	<b>14</b>	3.7	<b>250</b>	21	<3.7	3.7	<3.7	3.7	<b>40</b>	3.8
Endosulfan I	2,400	24,000	200,000	<7.2	7.2	<7.6	7.6	<7.9	7.9	<7.6	7.6	<7.1	7.1	<7.0	7.0	<7.4	7.4	<4.2	4.2	<7.4	7.4	<7.4	7.4	<7.6	7.6
Endosulfan II	2,400	24,000	200,000	<7.2	7.2	<7.6	7.6	<7.9	7.9	<7.6	7.6	<7.1	7.1	<7.0	7.0	<7.4	7.4	<4.2	4.2	<7.4	7.4	<7.4	7.4	<7.6	7.6
Endosulfan sulfate	2,400	24,000	200,000	<7.2	7.2	<7.6	7.6	<7.9	7.9	<7.6	7.6	<7.1	7.1	<7.0	7.0	<7.4	7.4	<4.2	4.2	<7.4	7.4	<7.4	7.4	<7.6	7.6
Endrin	14	11,000	89,000	<7.2	7.2	<7.6	7.6	<7.9	7.9	<7.6	7.6	<7.1	7.1	<7.0	7.0	<7.4	7.4	<2.1	2.1	<7.4	7.4	<7.4	7.4	<7.6	7.6
Endrin aldehyde				<7.2	7.2	<7.6	7.6	<7.9	7.9	<7.6	7.6	<7.1	7.1	<7.0	7.0	<7.4	7.4	<4.2	4.2	<7.4	7.4	<7.4	7.4	<7.6	7.6
Endrin ketone				<7.2	7.2	<7.6	7.6	<7.9	7.9	<7.6	7.6	<7.1	7.1	<7.0	7.0	<7.4	7.4	<4.2	4.2	<7.4	7.4	<7.4	7.4	<7.6	7.6
g-BHC				<1.4	1.4	<1.5	1.5	<1.6	1.6	<1.5	1.5	<1.4	1.4	<1.4	1.4	<1.5	1.5	<8.3	8.3	<1.5	1.5	<1.5	1.5	<1.5	1.5
g-Chlordane				<3.6	3.6	<3.8	3.8	<b>23</b>	4.0	<b>31</b>	3.8	<b>6.2</b>	3.5	<3.5	3.5	<b>14</b>	3.7	<b>70</b>	21	<3.7	3.7	<3.7	3.7	<b>9.4</b>	3.8
Heptachlor	42	2,100	15,000	<7.2	7.2	<7.6	7.6	<7.9	7.9	<7.6	7.6	<7.1	7.1	<7.0	7.0	<7.4	7.4	<4.2	4.2	<7.4	7.4	<7.4	7.4	<7.6	7.6
Heptachlor epoxide				<7.2	7.2	<7.6	7.6	<7.9	7.9	<b>9.1</b>	7.6	<7.1	7.1	<7.0	7.0	<7.4	7.4	<4.2	4.2	<7.4	7.4	<7.4	7.4	<7.6	7.6
Methoxychlor				<3.6	3.6	<3.8	3.8	<4.0	4.0	<3.8	3.8	<3.5	3.5	<3.5	3.5	<3.7	3.7	<2.10	2.10	<3.7	3.7	<3.7	3.7	<3.8	3.8
Toxaphene				<140	140	<150	150	<160	160	<150	150	<140	140	<140	140	<150	150	<830	830	<150	150	<150	150	<150	150
PCBs																									
PCB-1016	100	1,000	1,000	<72	72	<76	76	<78	78	<76	76	<71	71	<70	70	<74	74	<83	83	<74	74	<74	74	<76	76
PCB-1221	100	1,000	1,000	<72	72	<76	76	<78	78	<76	76	<71	71	<70	70	<74	74	<83	83	<74	74	<74	74	<76	76
PCB-1232	100	1,000	1,000	<72	72	<76	76	<78	78	<76	76	<71	71	<70	70	<74	74	<83	83	<74	74	<74	74	<76	76
PCB-1242	100	1,000	1,000	<72	72	<76	76	<78	78	<76	76	<71	71	<70	70	<74	74	<83	83	<74	74	<74	74	<76	76
PCB-1248	100	1,000	1,000	<72	72	<76	76	<78	78	<76	76	<71	71	<70	70	<74	74	<83	83	<74	74	<74	74	<76	76
PCB-1254	100	1,000	1,000	<72	72	<76	76	<78	78	<76	76	<71	71	<70	70	<74	74	<83	83	<74	74	<74	74	<76	76
PCB-1260	100	1,000	1,000	<72	72	<76	76	<78	78	<76	76	<71	71	<70	70	<74	74	<83	83	<74	74	<74	74	<76	76
PCB-1262	100	1,000	1,000	<72	72	<76	76	<78	78	<76	76	<71	71	<70	70	<74	74	<83	83	<74	74	<74	74	<76	76
PCB-1268	100	1,000	1,000	<72	72	<76	76	<78	78	<76	76	<71	71	<70	70	<74	74	<83	83	<74	74	<74	74	<76	76

Notes:  
\* - 6 NYCRR Part 375-6 Remedial Program Soil Cleanup Objectives  
BCG - Below Cellar Grade  
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 RRSCO Guidance Value

TABLE 6  
1840-1856 Avenue  
New York, New York  
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*	SB1				SB2				SB3				SB4				SB5				SB6			
				(0-2) 3/18/2019 mg/Kg		(16-18) 3/18/2019 mg/Kg		(0-2) 3/18/2019 mg/Kg		(16-18) 3/18/2019 mg/Kg		(0-2) 3/18/2019 mg/Kg		(16-18) 3/18/2019 mg/Kg		(0-2) 3/19/2019 mg/Kg		(16-18) 3/19/2019 mg/Kg		(0-2) 3/19/2019 mg/Kg		(16-18) 3/19/2019 mg/Kg		(0-2) 3/19/2019 mg/Kg		(16-18) 3/19/2019 mg/Kg	
				Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
Aluminum				10,400	40	3,070	39	17,900	34	4,760	36	6,520	33	4,370	35	10,300	32	7,390	32	6,910	38	4,400	36	9,140	36	7,910	45
Antimony				< 5.0	5.0	< 3.9	3.9	< 3.4	3.4	< 3.6	3.6	< 3.3	3.3	< 3.5	3.5	< 3.2	3.2	< 3.2	3.2	< 3.8	3.8	< 3.6	3.6	< 3.6	3.6	< 4.5	4.5
Arsenic	13	16	16	7.57	0.80	1.01	0.77	3.24	0.68	1.19	0.71	5.77	0.67	1.05	0.69	3.54	0.65	1.67	0.64	6.5	0.76	< 0.73	0.73	5.47	0.73	2.29	0.90
Barium	350	350	400	491	0.8	32.9	0.8	73.9	0.7	64.7	0.7	189	0.7	51.2	0.7	108	0.6	43.3	0.6	97.3	0.8	24.1	0.7	89	0.7	175	0.9
Beryllium	7.2	14	590	0.43	0.32	< 0.31	0.31	0.42	0.27	0.32	0.28	0.29	0.27	0.29	0.28	0.43	0.26	0.35	0.26	0.46	0.30	< 0.29	0.29	0.42	0.29	0.65	0.36
Cadmium	2.5	2.5	9.3	1.13	0.40	< 0.39	0.39	1.22	0.34	< 0.36	0.36	1.24	0.33	< 0.35	0.35	0.63	0.32	< 0.32	0.32	0.52	0.38	< 0.36	0.36	0.44	0.36	< 0.45	0.45
Calcium				25,500	40	968	3.9	9,150	3.4	1,450	3.6	57,100	33	1,540	3.5	38,700	32	2,760	3.2	51,800	38	1,540	3.6	30,000	36	18,300	45
Chromium	30	180	1,500	25.9	0.40	9.66	0.39	23.5	0.34	13.5	0.36	20.6	0.33	11.5	0.35	21.7	0.32	20.1	0.32	29.4	0.36	9.01	0.36	17.3	0.36	17.2	0.45
Cobalt				8.1	0.40	3.87	0.39	11.7	0.34	5.14	0.36	5.71	0.33	4.42	0.35	10.4	0.32	5.28	0.32	7.34	0.38	3.06	0.36	8.03	0.36	7.29	0.45
Copper	50	270	270	35	0.8	20.9	0.8	137	0.8	25	0.7	29.5	0.7	16.9	0.7	63.4	0.6	35.2	0.6	50.4	0.8	9.5	0.7	41.8	0.7	17	0.9
Iron				20,700	40	9,080	3.9	21,900	34	10,200	36	23,100	33	8,670	35	22,200	32	8,720	32	23,900	38	7,720	3.6	17,100	36	15,300	45
Lead	63	400	1,000	2,420	80	2.3	0.8	122	0.7	4.4	0.7	182	6.7	4	0.7	152	6.5	4	0.6	53.5	0.8	1.8	0.7	61.1	0.7	6.6	0.9
Magnesium				4,200	4.0	1,280	3.9	5,440	34	2,020	3.6	13,400	33	2,090	3.5	15,900	32	3,270	3.2	23,900	38	1,870	3.6	13,200	36	7,530	45
Manganese	1,600	2,000	10,000	398	4.0	250	3.9	259	3.4	411	3.6	284	3.3	298	3.5	291	3.2	118	0.32	228	3.8	96	0.36	602	3.6	409	4.5
Mercury	0.18	0.81	2.8	0.49	0.07	< 0.03	0.03	0.19	0.07	< 0.03	0.03	0.37	0.06	< 0.03	0.03	0.23	0.07	< 0.03	0.03	0.31	0.07	< 0.03	0.03	0.75	0.08	< 0.08	0.08
Nickel	30	140	310	20.9	0.40	8.04	0.39	31.8	0.34	11.4	0.36	14.2	0.33	10.7	0.35	18.5	0.32	15.9	0.32	14.5	0.38	9.64	0.36	17.4	0.36	16.6	0.45
Potassium				1,180	8	569	8	1,060	7	820	7	1,230	7	1,080	7	2,570	6	840	6	1,940	8	988	7	1,720	7	2,800	9
Selenium	3.9	36	1,500	< 1.6	1.6	< 1.5	1.5	< 1.4	1.4	< 1.4	1.4	< 1.3	1.3	< 1.4	1.4	< 1.3	1.3	< 1.3	1.3	< 1.5	1.5	< 1.5	1.5	< 1.5	1.5	< 1.8	1.8
Silver	2	36	1,500	< 0.40	0.40	< 0.39	0.39	< 0.34	0.34	< 0.36	0.36	< 0.33	0.33	< 0.35	0.35	< 0.32	0.32	< 0.32	0.32	< 0.38	0.38	< 0.36	0.36	< 0.36	0.36	< 0.45	0.45
Sodium				413	8	135	8	1,010	7	259	7	430	7	241	7	751	6	606	6	584	8	131	7	611	7	331	9
Thallium				< 1.8	1.8	< 1.5	1.5	< 1.4	1.4	< 1.4	1.4	< 1.3	1.3	< 1.4	1.4	< 1.3	1.3	< 1.3	1.3	< 1.5	1.5	< 1.5	1.5	< 1.5	1.5	< 1.8	1.8
Vanadium				33	0.40	13.9	0.39	46.7	0.34	17.2	0.36	28.4	0.33	18	0.35	70.4	0.32	20.7	0.32	61	0.38	13.3	0.36	41.2	0.36	23	0.45
Zinc	109	2,200	10,000	348	8.0	11	0.8	110	0.7	18.1	0.7	1,210	6.7	15.1	0.7	184	6.5	20.1	0.6	91.9	0.8	46.4	0.7	74.8	0.7	31.1	0.9

Notes:

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

BCG - Below Cellar Grade

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 RRSCO Guidance Value

TABLE 6  
1840-1856 Avenue  
New York, New York  
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*	SB7				F1				F2				F3				F4				Duplicate	
				(0-2) 3/19/2019 mg/Kg		(16-18) 3/19/2019 mg/Kg		(0-2) 6/7/2019 mg/Kg		(5-7) 6/7/2019 mg/Kg		(0-2) 6/7/2019 mg/Kg		(5-7) 6/7/2019 mg/Kg		(0-2) 6/7/2019 mg/Kg		(5-7) 6/7/2019 mg/Kg		(0-2) 6/7/2019 mg/Kg		(5-7) 6/7/2019 mg/Kg		3/18/2019 mg/kg	
				Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
Aluminum				8,760	33	5,270	40	7,300	37	7,210	35	11,100	32	4,640	32	8,460	38	4,750	43	5,620	37	10,600	39	8,990	38
Antimony				< 3.3	3.3	< 4.0	4.0	< 3.7	3.7	< 3.5	3.5	< 3.2	3.2	< 3.2	3.2	< 3.8	3.8	7	4.3	7.3	3.7	< 3.9	3.9	< 3.8	3.8
Arsenic	13	16	16	3.53	0.65	1.2	0.80	4.5	0.73	2.67	0.89	3.63	0.64	1.09	0.83	2.77	0.76	2.7	0.86	5.78	0.75	3.25	0.78	5.89	0.76
Barium	350	350	400	254	0.7	34	0.8	106	0.7	74.2	0.7	73.8	0.6	17.6	0.6	447	0.8	995	0.9	508	0.7	24.9	0.8	274	0.8
Beryllium	7.2	14	590	0.39	0.26	0.38	0.32	0.32	0.29	0.29	0.28	0.38	0.26	0.21	0.25	0.37	0.30	0.2	0.34	0.26	0.30	0.3	0.31	0.38	0.31
Cadmium	2.5	2.5	9.3	0.51	0.33	< 0.40	0.40	0.92	0.37	< 0.35	0.35	0.34	0.32	< 0.32	0.32	0.47	0.38	4.05	0.43	0.83	0.37	< 0.39	0.39	1.08	0.38
Calcium				21,100	33	1,450	4.0	61,600	37	22,100	35	10,200	32	1,550	3.2	13,700	38	85,200	43	33,700	37	753	3.9	24,000	38
Chromium	30	180	1,500	24.2	0.33	20.1	0.40	19.2	0.37	14.1	0.35	26.3	0.32	9.22	0.32	23.3	3.8	36.4	0.43	15.3	0.37	15.5	0.39	20.4	0.38
Cobalt				7.7	0.33	3.48	0.40	5.42	0.37	5.68	0.35	9.14	0.32	3.59	0.32	7.86	0.38	7.05	0.43	4.7	0.37	7.13	0.39	7.51	0.38
Copper	50	270	270	29.6	0.7	17	0.8	67.4	0.7	21.3	0.7	44.6	0.6	5.9	0.6	18.3	0.8	24	0.9	75.7	0.7	11.9	0.8	53.9	0.8
Iron				16,500	33	9,200	4.0	11,200	37	14,600	35	19,400	32	7,250	3.2	15,300	38	12,800	43	10,500	37	14,100	39	30,500	38
Lead	63	400	1,000	235	6.5	2.7	0.8	168	7.3	103	0.7	57.8	0.6	2.5	0.6	102	0.8	653	8.6	619	7.5	6.3	0.8	1,450	7.6
Magnesium				5,760	33	1,950	4.0	5,330	3.7	3,260	3.5	4,680	3.2	1,910	3.2	2,890	3.8	4,700	4.3	5,710	3.7	2,420	3.9	4,010	3.8
Manganese	1,600	2,000	10,000	486	3.3	81.5	0.40	307	3.7	324	3.5	298	3.2	169	3.2	309	3.8	264	4.3	173	3.7	335	3.9	398	3.8
Mercury	0.18	0.81	2.8	0.34	0.07	< 0.03	0.03	0.31	0.08	0.29	0.15	0.13	0.07	< 0.03	0.03	0.12	0.07	1.21	0.08	1.58	0.13	< 0.07	0.07	0.53	0.07
Nickel	30	140	310	20.2	0.33	11.1	0.40	27.3	0.37	11.2	0.35	19.2	0.32	8.92	0.32	18.8	0.38	9.3	0.43	12.2	0.37	12.7	0.39	19.6	0.38
Potassium				1,810	7	728	8	940	7	1,140	7	1,650	6	592	6	1,480	8	1,240	9	1,040	7	875	8	1,120	8
Selenium	3.9	36	1,500	< 1.3	1.3	< 1.6	1.6	< 1.5	1.5	< 1.4	1.4	< 1.3	1.3	< 1.3	1.3	< 1.5	1.5	< 1.7	1.7	< 1.5	1.5	< 1.6	1.6	< 1.5	1.5
Silver	2	36	1,500	< 0.33	0.33	< 0.40	0.40	< 0.37	0.37	< 0.35	0.35	< 0.32	0.32	< 0.32	0.32	< 0.38	0.38	< 0.43	0.43	< 0.37	0.37	< 0.39	0.39	< 0.38	0.38
Sodium				210	7	246	8	706	7	195	7	492	6	84	6	167	8	487	9	239	7	154	8	200	8
Thallium				< 1.3	1.3	< 1.6	1.6	< 1.5	1.5	< 1.4	1.4	< 1.3	1.3	< 1.3	1.3	< 1.5	1.5	< 1.7	1.7	< 1.5	1.5	< 1.6	1.6	< 1.5	1.5
Vanadium				31.5	0.33	16.7	0.40	26.6	0.37	15.2	0.35	41.5	0.32	10.7	0.32	26.3	0.38	19.2	0.43	23.2	0.37	20.7	0.39	27.5	0.38
Zinc	109	2,200	10,000	348	8.0	11	0.8	194	7.3	76.2	0.7	70.9	0.6	14.5	0.6	241	7.8	911	8.6	290	7.5	26.5	0.8	306	7.6

Notes:  
\* - 6 NYCRR Part 375-6 Remedial Program Soil Cleanup Objectives  
BCG - Below Cellar Grade  
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 RRSCO Guidance Value

TABLE 7  
1840-1856 Park Avenue  
New York, New York  
Ground Water Analytical Results  
Volatile Organic Compounds

Compound	NYSDEC Groundwater Quality Standards µg/L	MW1 3/19/2019 µg/L		MW2 3/19/2019 µg/L		MW3 3/19/2019 µg/L		MW4 3/19/2019 µg/L		GW Duplicate 3/19/2019 µg/L	
		Results	RL	Results	RL	Results	RL	Results	RL	Results	RL
		1,1,1-Trichloroethane	5	< 2.0	2.0	< 2.0	2.0	< 2.0	2.0	< 2.0	2.0
1,1,2,2-Tetrachloroethane	5	< 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	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
1,1-Dichloroethane	5	< 2.0	2.0	< 2.0	2.0	< 2.0	2.0	< 2.0	2.0	< 2.0	2.0
1,1-Dichloroethene	5	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
1,2,3-Trichlorobenzene		< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
1,2,4-Trichlorobenzene		< 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	< 0.50	0.50	< 0.50	0.50	< 0.50	0.50	< 0.50	0.50	< 0.50	0.50
1,2-Dibromoethane		< 0.25	0.25	< 0.25	0.25	< 0.25	0.25	< 0.25	0.25	< 0.25	0.25
1,2-Dichlorobenzene	5	< 2.0	2.0	< 2.0	2.0	< 2.0	2.0	< 2.0	2.0	< 2.0	2.0
1,2-Dichloroethane	0.6	< 0.60	0.60	< 0.60	0.60	< 0.60	0.60	< 0.60	0.60	< 0.60	0.60
1,2-Dichloropropane	0.94	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
1,3-Dichlorobenzene		< 2.0	2.0	< 2.0	2.0	< 2.0	2.0	< 2.0	2.0	< 2.0	2.0
1,4-Dichlorobenzene	5	< 2.0	2.0	< 2.0	2.0	< 2.0	2.0	< 2.0	2.0	< 2.0	2.0
1,4-dioxane		< 100	100	< 100	100	< 100	100	< 0.20	0.20	< 0.20	0.20
2-Hexanone (Methyl Butyl Ketone)		< 2.5	2.5	< 2.5	2.5	< 2.5	2.5	< 2.5	2.5	< 2.5	2.5
4-Methyl-2-Pentanone		< 2.5	2.5	< 2.5	2.5	< 2.5	2.5	< 2.5	2.5	< 2.5	2.5
Acetone		< 5.0	5.0	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0
Benzene	1	< 0.70	0.70	< 0.70	0.70	< 0.70	0.70	< 0.70	0.70	< 0.70	0.70
Bromochloromethane	5	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
Bromodichloromethane		< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
Bromoform		< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
Bromomethane	5	< 2.0	2.0	< 2.0	2.0	< 2.0	2.0	< 2.0	2.0	< 2.0	2.0
Carbon Disulfide	60	< 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	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
Chlorobenzene	5	< 2.0	2.0	< 2.0	2.0	< 2.0	2.0	< 2.0	2.0	< 2.0	2.0
Chloroethane	5	< 2.0	2.0	< 2.0	2.0	< 2.0	2.0	< 2.0	2.0	< 2.0	2.0
Chloroform	7	<b>3.5</b>	2.0	<b>1.3</b>	2.0	<b>0.74</b>	2.0	<b>1.9</b>	2.0	<b>1.8</b>	2.0
Chloromethane	60	< 2.0	2.0	< 2.0	2.0	< 2.0	2.0	< 2.0	2.0	< 2.0	2.0
cis-1,2-Dichloroethene	5	< 1.0	1.0	<b>0.86</b>	1.0	<b>0.46</b>	1.0	<b>0.27</b>	1.0	<b>0.28</b>	1.0
cis-1,3-Dichloropropene		< 0.40	0.40	< 0.40	0.40	< 0.40	0.40	< 0.40	0.40	< 0.40	0.40
Cyclohexane		< 5.0	5.0	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0
Dibromochloromethane		< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
Dichlorodifluoromethane	5	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
Ethylbenzene	5	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
Isopropylbenzene	5	< 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	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
Methyl Ethyl Ketone (2-Butanone)		< 5.0	5.0	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0
Methyl t-butyl ether (MTBE)	10	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
Methylacetate		< 2.5	2.5	< 2.5	2.5	< 2.5	2.5	< 2.5	2.5	< 2.5	2.5
Methylcyclohexane		< 2.0	2.0	< 2.0	2.0	< 2.0	2.0	< 2.0	2.0	< 2.0	2.0
Methylene chloride	5	< 3.0	3.0	< 3.0	3.0	< 3.0	3.0	< 3.0	3.0	< 3.0	3.0
o-Xylene	5	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
Styrene	5	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
Tetrachloroethene	5	<b>5.4</b>	1.0	<b>7</b>	1.0	<b>7.4</b>	1.0	<b>5.2</b>	1.0	<b>5.1</b>	1.0
Toluene	5	< 2.0	2.0	< 2.0	2.0	< 2.0	2.0	< 2.0	2.0	< 2.0	2.0
Total Xylenes		< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
trans-1,2-Dichloroethene	5	< 2.0	2.0	< 2.0	2.0	< 2.0	2.0	< 2.0	2.0	< 2.0	2.0
trans-1,3-Dichloropropene	0.4	< 0.40	0.40	< 0.40	0.40	< 0.40	0.40	< 0.40	0.40	< 0.40	0.40
Trichloroethene	5	<b>1.3</b>	1.0	<b>1.9</b>	1.0	<b>2.4</b>	1.0	<b>1.7</b>	1.0	<b>1.7</b>	1.0
Trichlorofluoromethane	5	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
Trichlorotrifluoroethane		< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
Vinyl Chloride	2	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0

Notes:

RL- Reporting Limit

Bold/highlighted- Indicated exceedance of the NYSDEC Groundwater Standard

TABLE 8  
1840-1856 Park Avenue  
New York, New York  
Groundwater Analytical Results  
Semi-Volatile Organic Compounds

Compound	NYSDEC Groundwater Quality Standards µg/L	MW1		MW2		MW3		MW4		GW Duplicate	
		3/19/2019		3/19/2019		3/19/2019		3/19/2019		3/19/2019	
		Results	RL	Results	RL	Results	RL	Results	RL	Results	RL
1,1-Biphenyl		< 3.5	3.5	< 3.4	3.4	< 3.5	3.5	< 3.5	3.5	< 3.7	3.7
1,2,4,5-Tetrachlorobenzene		< 3.5	3.5	< 3.4	3.4	< 3.5	3.5	< 3.5	3.5	< 3.7	3.7
2,3,4,6-tetrachlorophenol		< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
2,4,5-Trichlorophenol	1	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
2,4,6-Trichlorophenol		< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
2,4-Dichlorophenol	1	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
2,4-Dimethylphenol		< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
2,4-Dinitrophenol	5	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
2,4-Dinitrotoluene		< 5.0	5.0	< 4.9	4.9	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0
2,6-Dinitrotoluene	5	< 5.0	5.0	< 4.9	4.9	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0
2-Chloronaphthalene		< 5.1	5.1	< 4.9	4.9	< 5.0	5.0	< 5.1	5.1	< 5.3	5.3
2-Chlorophenol	50	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
2-Methylnaphthalene	50	< 5.1	5.1	< 4.9	4.9	< 5.0	5.0	< 5.1	5.1	< 5.3	5.3
2-Methylphenol (o-cresol)	5	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
2-Nitroaniline	5	< 5.0	5.0	< 4.9	4.9	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0
2-Nitrophenol	5	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
3&4-Methylphenol (m&p-cresol)		< 5.1	5.1	< 4.9	4.9	< 5.0	5.0	< 5.1	5.1	< 5.3	5.3
3,3'-Dichlorobenzidine		< 5.0	5.0	< 4.9	4.9	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0
3-Nitroaniline	5	< 5.0	5.0	< 4.9	4.9	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0
4,6-Dinitro-2-methylphenol		< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
4-Bromophenyl phenyl ether		< 5.1	5.1	< 4.9	4.9	< 5.0	5.0	< 5.1	5.1	< 5.3	5.3
4-Chloro-3-methylphenol	5	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
4-Chloroaniline	5	< 5.0	5.0	< 4.9	4.9	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0
4-Chlorophenyl phenyl ether		< 5.1	5.1	< 4.9	4.9	< 5.0	5.0	< 5.1	5.1	< 5.3	5.3
4-Nitroaniline		< 5.0	5.0	< 4.9	4.9	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0
4-Nitrophenol	5	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
Acenaphthene	20	< 5.1	5.1	< 4.9	4.9	< 5.0	5.0	< 5.1	5.1	< 5.3	5.3
Acetophenone		< 5.1	5.1	< 4.9	4.9	< 5.0	5.0	< 5.1	5.1	< 5.3	5.3
Anthracene	50	< 0.51	0.51	< 0.49	0.49	< 0.50	0.50	< 0.51	0.51	< 0.53	0.53
Atrazine		< 1.0	1.0	< 0.98	0.98	< 0.99	0.99	< 1.0	1.0	< 1.1	1.1
Benz(a)anthracene	0.002	< 0.02	0.02	< 0.02	0.02	< 0.02	0.02	< 0.02	0.02	< 0.02	0.02
Benzaldehyde		< 5.1	5.1	< 4.9	4.9	< 5.0	5.0	< 5.1	5.1	< 5.3	5.3
Benzo(a)pyrene	0.002	< 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
Benzo(ghi)perylene	5	< 0.51	0.51	< 0.49	0.49	< 0.50	0.50	< 0.51	0.51	< 0.53	0.53
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
Benzyl butyl phthalate	50	< 5.1	5.1	< 4.9	4.9	< 5.0	5.0	< 5.1	5.1	< 5.3	5.3
Bis(2-chloroethoxy)methane		< 5.0	5.0	< 4.9	4.9	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0
Bis(2-chloroethyl)ether		< 0.51	0.51	< 0.49	0.49	< 0.50	0.50	< 0.51	0.51	< 0.53	0.53
Bis(2-chloroisopropyl)ether		< 5.1	5.1	< 4.9	4.9	< 5.0	5.0	< 5.1	5.1	< 5.3	5.3
Bis(2-ethylhexyl)phthalate	50	< 1.0	1.0	< 0.98	0.98	< 0.99	0.99	< 1.0	1.0	< 1.1	1.1
Caprolactam		< 5.1	5.1	< 4.9	4.9	< 5.0	5.0	< 5.1	5.1	< 5.3	5.3
Carbazole		< 5.1	5.1	< 4.9	4.9	< 5.0	5.0	< 5.1	5.1	< 5.3	5.3
Chrysene	0.002	< 0.02	0.02	< 0.02	0.02	< 0.02	0.02	< 0.02	0.02	< 0.02	0.02
Dibenz(a,h)anthracene	50	< 0.51	0.51	< 0.49	0.49	< 0.50	0.50	< 0.51	0.51	< 0.53	0.53
Dibenzofuran	5	< 5.0	5.0	< 4.9	4.9	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0
Diethyl phthalate	50	<b>4.8</b>	5.1	< 4.9	4.9	<b>1.7</b>	5.0	< 5.1	5.1	< 5.3	5.3
Dimethylphthalate	50	< 5.1	5.1	< 4.9	4.9	< 5.0	5.0	< 5.1	5.1	< 5.3	5.3
Di-n-butylphthalate	50	< 5.1	5.1	< 4.9	4.9	< 5.0	5.0	< 5.1	5.1	< 5.3	5.3
Di-n-octylphthalate	50	< 5.1	5.1	< 4.9	4.9	< 5.0	5.0	< 5.1	5.1	< 5.3	5.3
Fluoranthene	50	< 0.51	0.51	< 0.49	0.49	< 0.50	0.50	< 0.51	0.51	< 0.53	0.53
Fluorene	50	< 0.51	0.51	< 0.49	0.49	< 0.50	0.50	< 0.51	0.51	< 0.53	0.53
Hexachlorobenzene	0.35	< 0.04	0.04	< 0.04	0.04	< 0.04	0.04	< 0.04	0.04	< 0.04	0.04
Hexachlorobutadiene		< 0.50	0.50	< 0.49	0.49	< 0.50	0.50	< 0.50	0.50	< 0.50	0.50
Hexachlorocyclopentadiene		< 0.51	0.51	< 0.49	0.49	< 0.50	0.50	< 0.51	0.51	< 0.53	0.53
Hexachlorocyclopentadiene		< 5.0	5.0	< 4.9	4.9	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0
Hexachloroethane		< 1.0	1.0	< 0.98	0.98	< 0.99	0.99	< 1.0	1.0	< 1.1	1.1
Indeno(1,2,3-cd)pyrene	0.002	< 0.02	0.02	< 0.02	0.02	< 0.02	0.02	< 0.02	0.02	< 0.02	0.02
Isophorone	50	< 5.1	5.1	< 4.9	4.9	< 5.0	5.0	< 5.1	5.1	< 5.3	5.3
Naphthalene	10	< 5.0	5.0	< 4.9	4.9	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0
Nitrobenzene	5	< 0.40	0.40	< 0.39	0.39	< 0.40	0.40	< 0.40	0.40	< 0.40	0.40
N-Nitrosodimethylamine		< 0.20	0.20	< 0.20	0.20	< 0.20	0.20	< 0.20	0.20	< 0.21	0.21
N-Nitrosodi-n-propylamine		< 5.1	5.1	< 4.9	4.9	< 5.0	5.0	< 5.1	5.1	< 5.3	5.3
N-Nitrosodiphenylamine		< 5.1	5.1	< 4.9	4.9	< 5.0	5.0	< 5.1	5.1	< 5.3	5.3
Pentachlorophenol	1	< 0.51	0.51	< 0.49	0.49	< 0.50	0.50	< 0.51	0.51	< 0.53	0.53
Phenanthrene	50	< 0.51	0.51	< 0.49	0.49	< 0.50	0.50	< 0.51	0.51	< 0.53	0.53
Phenol	1	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
Pyrene	50	< 0.51	0.51	< 0.49	0.49	< 0.50	0.50	< 0.51	0.51	< 0.53	0.53

Notes:

RL- Reporting Limit

Bold/highlighted- Indicated exceedance of the NYSDEC Groundwater Standard

TABLE 9  
 1840-1856 Park Avenue  
 New York, New York  
 Groundwater Analytical Results  
 Pesticides/PCBs

	Compound	NYSDEC Groundwater Quality Standards μg/L	MW1 3/19/2019 μg/L		MW2 3/19/2019 μg/L		MW3 3/19/2019 μg/L		MW4 3/19/2019 μg/L		GW Duplicate 3/19/2019 μg/L	
			Results	RL	Results	RL	Results	RL	Results	RL	Results	RL
			PCBs	PCB-1016	0.09	< 0.049	0.049	< 0.050	0.050	< 0.049	0.049	< 0.047
PCB-1221	0.09	< 0.049		0.049	< 0.050	0.050	< 0.049	0.049	< 0.047	0.047	< 0.063	0.063
PCB-1232	0.09	< 0.049		0.049	< 0.050	0.050	< 0.049	0.049	< 0.047	0.047	< 0.063	0.063
PCB-1242	0.09	< 0.049		0.049	< 0.050	0.050	< 0.049	0.049	< 0.047	0.047	< 0.063	0.063
PCB-1248	0.09	< 0.049		0.049	< 0.050	0.050	< 0.049	0.049	< 0.047	0.047	< 0.063	0.063
PCB-1254	0.09	< 0.049		0.049	< 0.050	0.050	< 0.049	0.049	< 0.047	0.047	< 0.063	0.063
PCB-1260	0.09	< 0.049		0.049	< 0.050	0.050	< 0.049	0.049	< 0.047	0.047	< 0.063	0.063
PCB-1262	0.09	< 0.049		0.049	< 0.050	0.050	< 0.049	0.049	< 0.047	0.047	< 0.063	0.063
PCB-1268	0.09	< 0.049		0.049	< 0.050	0.050	< 0.049	0.049	< 0.047	0.047	< 0.063	0.063
Pesticides	4,4-DDD	0.3	< 0.010	0.010	< 0.010	0.010	< 0.010	0.010	< 0.009	0.009	< 0.010	0.010
	4,4-DDE	0.2	< 0.010	0.010	< 0.010	0.010	< 0.010	0.010	< 0.009	0.009	< 0.003	0.003
	4,4-DDT	0.11	< 0.010	0.010	< 0.010	0.010	< 0.010	0.010	< 0.009	0.009	< 0.003	0.003
	a-BHC	0.94	< 0.005	0.005	< 0.005	0.005	< 0.005	0.005	< 0.005	0.005	< 0.006	0.006
	a-Chlordane		< 0.010	0.010	< 0.010	0.010	< 0.010	0.010	< 0.009	0.009	< 0.013	0.013
	Alachlor		< 0.074	0.074	< 0.075	0.075	< 0.074	0.074	< 0.071	0.071	< 0.094	0.094
	Aldrin		< 0.002	0.002	< 0.002	0.002	< 0.002	0.002	< 0.001	0.001	< 0.002	0.002
	b-BHC	0.04	< 0.005	0.005	< 0.005	0.005	< 0.005	0.005	< 0.005	0.005	< 0.006	0.006
	Chlordane	0.05	< 0.05	0.05	< 0.050	0.050	< 0.05	0.05	< 0.05	0.05	< 0.050	0.050
	d-BHC	0.04	< 0.005	0.005	< 0.005	0.005	< 0.005	0.005	< 0.005	0.005	< 0.006	0.006
	Dieldrin	0.004	<b>0.011</b>	0.002	<b>0.004</b>	0.002	<b>0.016</b>	0.002	<b>0.01</b>	0.001	<b>0.018</b>	0.002
	Endosulfan I		< 0.010	0.010	< 0.010	0.010	< 0.010	0.010	< 0.009	0.009	< 0.013	0.013
	Endosulfan II		< 0.010	0.010	< 0.010	0.010	< 0.010	0.010	< 0.009	0.009	< 0.013	0.013
	Endosulfan Sulfate		< 0.010	0.010	< 0.010	0.010	< 0.010	0.010	< 0.009	0.009	< 0.013	0.013
	Endrin		< 0.010	0.010	< 0.010	0.010	< 0.010	0.010	< 0.009	0.009	< 0.006	0.006
	Endrin aldehyde	5	< 0.010	0.010	< 0.010	0.010	< 0.010	0.010	< 0.009	0.009	< 0.013	0.013
	Endrin ketone		< 0.010	0.010	< 0.010	0.010	< 0.010	0.010	< 0.009	0.009	< 0.013	0.013
	gamma-BHC	0.05	< 0.005	0.005	< 0.005	0.005	< 0.005	0.005	< 0.005	0.005	< 0.006	0.006
	g-Chlordane		< 0.010	0.010	< 0.010	0.010	< 0.010	0.010	< 0.009	0.009	< 0.013	0.013
	Heptachlor	0.04	< 0.010	0.010	< 0.010	0.010	< 0.010	0.010	< 0.009	0.009	< 0.006	0.006
	Heptachlor epoxide	0.03	< 0.010	0.010	< 0.010	0.010	< 0.010	0.010	< 0.009	0.009	< 0.006	0.006
Methoxychlor	35	< 0.098	0.098	< 0.10	0.10	< 0.098	0.098	< 0.094	0.094	< 0.13	0.13	
Toxaphene		< 0.25	0.25	< 0.25	0.25	< 0.25	0.25	< 0.24	0.24	< 0.25	0.25	

Notes:

RL- Reporting limit

ND - Non-detect

ND\* - Due to matrix interference from non target compounds in the sample an elevated RL was reported.

**Bold/highlighted- Indicated exceedance of the NYSDEC Groundwater Standard**

Table 10  
 1840-1856 Park Avenue  
 New York, New York  
 Groundwater Analytical Results  
 Total Metals

Compound  Total Metals	NYSDEC Groundwater Quality Standards mg/L	MW1 3/19/2019 mg/L		MW2 3/19/2019 mg/L		MW3 3/19/2019 mg/L		MW4 3/19/2019 mg/L		GW Duplicate 3/19/2019 mg/L	
		Results	RL	Results	RL	Results	RL	Results	RL	Results	RL
		Aluminum	0.1	<b>1.43</b>	0.010	<b>1.99</b>	0.010	<b>2.8</b>	0.010	<b>1.85</b>	0.010
Arsenic - LDL	0.025	< 0.004	0.004	< 0.004	0.004	< 0.004	0.004	< 0.004	0.004	< 0.004	0.004
Barium	1	<b>0.078</b>	0.010	<b>0.07</b>	0.010	<b>0.076</b>	0.010	<b>0.091</b>	0.010	<b>0.089</b>	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
Cadmium	0.005	< 0.004	0.004	< 0.004	0.004	< 0.004	0.004	< 0.004	0.004	< 0.004	0.004
Calcium		<b>78.2</b>	0.010	<b>138</b>	0.010	<b>99.4</b>	0.010	<b>82.4</b>	0.010	<b>80.1</b>	0.010
Chromium	0.05	<b>0.002</b>	0.001	<b>0.003</b>	0.001	<b>0.004</b>	0.001	<b>0.003</b>	0.001	<b>0.002</b>	0.001
Cobalt		< 0.005	0.005	< 0.005	0.005	< 0.005	0.005	< 0.005	0.005	< 0.005	0.005
Copper	0.2	<b>0.007</b>	0.005	<b>0.012</b>	0.005	<b>0.012</b>	0.005	<b>0.007</b>	0.005	<b>0.007</b>	0.005
Iron	0.3	<b>1.3</b>	0.01	<b>2</b>	0.01	<b>3.16</b>	0.01	<b>2.02</b>	0.01	<b>1.9</b>	0.01
Lead	0.025	< 0.002	0.002	<b>0.003</b>	0.002	< 0.002	0.002	< 0.002	0.002	< 0.002	0.002
Magnesium	35	<b>11.3</b>	0.010	<b>20.4</b>	0.010	<b>16.4</b>	0.010	<b>15</b>	0.010	<b>14.7</b>	0.010
Manganese	0.3	<b>0.335</b>	0.005	<b>1.01</b>	0.005	<b>1.31</b>	0.005	<b>0.332</b>	0.005	<b>0.319</b>	0.005
Mercury	0.0007	< 0.0002	0.0002	< 0.0002	0.0002	< 0.0002	0.0002	< 0.0002	0.0002	< 0.0002	0.0002
Nickel	0.1	< 0.004	0.004	<b>0.006</b>	0.004	<b>0.007</b>	0.004	<b>0.005</b>	0.004	<b>0.005</b>	0.004
Potassium		<b>10.6</b>	0.1	<b>12.9</b>	0.1	<b>11</b>	0.1	<b>8.9</b>	0.1	<b>8.7</b>	0.1
Antimony	0.003	< 0.0030	0.0030	< 0.0030	0.0030	< 0.0030	0.0030	< 0.0030	0.0030	< 0.0030	0.0030
Selenium	0.01	< 0.010	0.010	< 0.010	0.010	< 0.010	0.010	< 0.010	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
Sodium	20	<b>256</b>	10	<b>314</b>	10	<b>247</b>	10	<b>224</b>	1.0	<b>232</b>	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
Vanadium		< 0.010	0.010	< 0.010	0.010	< 0.010	0.010	< 0.010	0.010	< 0.010	0.010
Zinc	5	< 0.010	0.010	< 0.010	0.010	< 0.010	0.010	< 0.010	0.010	< 0.010	0.010

Notes:

RL- Reporting limit

NS - No Standard

**Bold/highlighted- Indicated exceedance of the NYSDEC Groundwater Standard**

Table 11  
 1840-1856 Park Avenue  
 New York, New York  
 Groundwater Analytical Results  
 Dissolved Metals

Compound  Dissolved Metals	NYSDEC Groundwater Quality Standards mg/L	MW1		MW2		MW3		MW4		GW Duplicate	
		3/19/2019 mg/L		3/19/2019 mg/L		3/19/2019 mg/L		3/19/2019 mg/L		3/19/2019 mg/L	
		Results	RL	Results	RL	Results	RL	Results	RL	Results	RL
Aluminum	0.1	<b>0.042</b>	0.011	<b>0.06</b>	0.011	<b>0.048</b>	0.011	<b>0.039</b>	0.011	<b>0.041</b>	0.011
Arsenic	0.025	< 0.003	0.003	< 0.003	0.003	< 0.003	0.003	< 0.003	0.003	< 0.003	0.003
Barium	1	<b>0.046</b>	0.011	<b>0.039</b>	0.011	<b>0.052</b>	0.011	<b>0.072</b>	0.011	<b>0.072</b>	0.011
Beryllium	0.003	< 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
Calcium		<b>80.6</b>	0.01	<b>137</b>	0.01	<b>101</b>	0.01	<b>80.8</b>	0.01	<b>80.4</b>	0.01
Chromium	0.05	< 0.001	0.001	< 0.001	0.001	< 0.001	0.001	< 0.001	0.001	< 0.001	0.001
Cobalt		< 0.005	0.005	< 0.005	0.005	< 0.005	0.005	< 0.005	0.005	< 0.005	0.005
Copper	0.2	< 0.005	0.005	< 0.005	0.005	< 0.005	0.005	< 0.005	0.005	< 0.005	0.005
Antimony -LDL	0.003	< 0.0003	0.0003	< 0.0003	0.0003	< 0.0003	0.0003	< 0.0003	0.0003	< 0.0003	0.0003
Selenium -LDL	0.01	< 0.01	0.01	< 0.01	0.01	< 0.01	0.01	< 0.01	0.01	< 0.01	0.01
Thallium	0.0005	< 0.0003	0.0003	< 0.0003	0.0003	< 0.0003	0.0003	< 0.0003	0.0003	< 0.0003	0.0003
Iron	0.3	< 0.01	0.01	< 0.01	0.01	< 0.01	0.01	< 0.01	0.01	< 0.01	0.01
Lead	0.025	< 0.002	0.002	< 0.002	0.002	< 0.002	0.002	< 0.002	0.002	< 0.002	0.002
Magnesium	35	<b>11.3</b>	0.01	<b>18.9</b>	0.01	<b>15.4</b>	0.01	<b>14.1</b>	0.01	<b>13.9</b>	0.01
Manganese	0.3	<b>0.262</b>	0.005	<b>0.89</b>	0.005	<b>1.11</b>	0.005	<b>0.258</b>	0.005	<b>0.252</b>	0.005
Mercury	0.0007	< 0.0002	0.0002	< 0.0002	0.0002	< 0.0002	0.0002	< 0.0002	0.0002	< 0.0002	0.0002
Nickel	0.1	< 0.004	0.004	< 0.004	0.004	< 0.004	0.004	< 0.004	0.004	< 0.004	0.004
Potassium		<b>10.2</b>	0.1	<b>12.4</b>	0.1	<b>10.6</b>	0.1	<b>8.5</b>	0.1	<b>8.5</b>	0.1
Silver	0.05	< 0.005	0.005	< 0.005	0.005	< 0.005	0.005	< 0.005	0.005	< 0.005	0.005
Sodium	20	<b>215</b>	1.1	<b>295</b>	1.1	<b>242</b>	1.1	<b>208</b>	1.1	<b>201</b>	1.1
Vanadium		< 0.011	0.011	< 0.011	0.011	< 0.011	0.011	< 0.011	0.011	< 0.011	0.011
Zinc	5	< 0.011	0.011	< 0.011	0.011	< 0.011	0.011	< 0.011	0.011	< 0.011	0.011

Notes:

RL- Reporting limit

NS - No Standard

**Bold/highlighted- Indicated exceedance of the NYSDEC Groundwater Standard**



Table 12  
 1840-1856 Park Avenue  
 New York, New York  
 Groundwater Analytical Results  
 PFAS and 1,4-dioxane

Compound	MW4 3/19/2019 ng/L	
	Results	RL
Perfluorobutanoic Acid (PFBA)	<b>19.9</b>	1.92
Perfluoropentanoic Acid (PFPeA)	<b>35.2</b>	1.92
Perfluorobutanesulfonic Acid (PFBS)	<b>6.67</b>	1.92
Perfluorohexanoic Acid (PFHxA)	<b>26.6</b>	1.92
Perfluoroheptanoic Acid (PFHpA)	<b>14.1</b>	1.92
Perfluorohexanesulfonic Acid (PFHxS)	<b>13</b>	1.92
Perfluorooctanoic Acid (PFOA)	<b>34.3</b>	1.92
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	<b>1.61</b>	1.92
Perfluoroheptanesulfonic Acid (PFHpS)	<b>0.609</b>	1.92
Perfluorononanoic Acid (PFNA)	<b>3.05</b>	1.92
Perfluorooctanesulfonic Acid (PFOS)	<b>55</b>	1.92
Perfluorodecanoic Acid (PFDA)	<b>1.52</b>	1.92
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND	1.92
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND	1.92
Perfluoroundecanoic Acid (PFUnA)	ND	1.92
Perfluorodecanesulfonic Acid (PFDS)	<b>0.391</b>	1.92
Perfluorooctanesulfonamide (FOSA)	ND	1.92
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND	1.92
Perfluorododecanoic Acid (PFDoA)	ND	1.92
Perfluorotridecanoic Acid (PFTrDA)	ND	1.92
Perfluorotetradecanoic Acid (PFTA)	ND	1.92
1,4-dioxane	ND	200
Combined PFOA and PFOS	<b>89.3</b>	
<b>Total PFAS</b>	<b>493.07</b>	

**Notes:**

ND - Not Detected

RL- Reporting Limit

The USEPA Healty Advisory Level for Drinking Water is 70 ppt for combined concentrations of PFOA and PFOS



TABLE 14  
 1840-1956 Park Avenue  
 New York, NY  
 Parameters Detected Above Track 1 Soil Cleanup Objectives

COMPOUND	Range in Exceedances	Frequency of Detection	SB1		SB2		SB3		SB4		SB5		SB6		SB7		F1		F2		F3		F4	
			(0-2)	(16-18)	(0-2)	(16-18)	(0-2)	(16-18)	(0-2)	(16-18)	(0-2)	(16-18)	(0-2)	(16-18)	(0-2)	(16-18)	(0-2)	(5-7)	(0-2)	(5-7)	(0-2)	(5-7)	(0-2)	(5-7)
			3/18/2019	3/18/2019	3/18/2019	3/18/2019	3/18/2019	3/18/2019	3/19/2019	3/19/2019	3/19/2019	3/19/2019	3/19/2019	3/19/2019	3/19/2019	3/19/2019	3/19/2019	3/19/2019	6/7/2019	6/7/2019	6/7/2019	6/7/2019	6/7/2019	6/7/2019
<i>Sample Results in ug/kg</i>																								
Acetone	720	1	-	-	-	-	-	-	-	-	720	-	-	-	-	-	-	-	-	-	-	-	-	-
n-Butylbenzene	32,000	1	-	-	-	-	-	-	-	-	32,000	-	-	-	-	-	-	-	-	-	-	-	-	-
Toluene	5,900	1	-	-	-	-	-	-	-	-	5,900	-	-	-	-	-	-	-	-	-	-	-	-	-
Xylenes Total	254,000	1	-	-	-	-	-	-	-	-	254,000	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Sample Results in ug/kg</i>																								
Benzo(a)anthracene	2,100-66,000	5	2,100	-	-	-	-	-	-	-	66,000	-	-	-	-	-	1,900	-	11,000	-	1,800	-	-	-
Benzo(a)pyrene	2,600-44,000	7	2,600	-	-	-	-	-	-	-	44,000	-	-	-	-	-	1,900	-	8,700	-	2,200	1,100	1,100	-
Benzo(b)fluoranthene	2,900-45,000	7	2,900	-	-	-	-	-	-	-	45,000	-	-	-	-	-	1,600	-	7,000	-	1,800	1,500	1,200	-
Benzo(k)fluoranthene	2,400-39,000	7	2,400	-	-	-	-	-	-	-	39,000	-	-	-	-	-	1,700	-	5,900	-	1,700	1,300	1,000	-
Chrysene	2,500-58,000	7	2,500	-	-	-	-	-	-	-	58,000	-	-	-	-	-	1,700	-	9,400	-	2,000	1,600	1,100	-
Dibenzo(a,h)anthracene	570-6,300	6	570	-	-	-	-	-	-	-	6,300	-	-	-	-	-	350	-	1,800	-	500	-	360	-
Indeno(1,2,3-cd)pyrene	1,900-21,000	7	1,900	-	-	-	-	-	-	-	21,000	-	-	-	-	-	1,200	-	5,400	-	1,700	1,100	1,200	-
<i>Sample Results in ug/kg</i>																								
4,4'-DDD	8.6-200	7	-	-	15	-	8.6	-	-	-	130	-	-	-	-	-	12	18	-	-	92	200	-	-
4,4'-DDE	4.6-130	9	5.8	-	4.6	-	61	-	4.9	-	-	-	5.2	-	-	-	18	110	-	-	24	130	-	-
4,4'-DDT	4.7-210	9	30	-	-	-	78	-	33	-	53	-	4.7	-	7	-	34	210	4.3	-	-	-	-	-
a-Chlordane	98	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	98	-	-
Dieldrin	7.2-250	7	40	-	-	-	9.8	-	-	-	25	-	-	-	-	-	7.2	16	-	-	14	250	-	-
PCB-1254	120	1	-	-	-	-	120	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Sample Results in mg/kg</i>																								
Barium	447-995	4	491	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	447	995	508	-
Beryllium	0.26	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.26	-
Cadmium	4.05	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.05	-	-
Chromium	36.4	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	36.4	-	-
Copper	50.4-137	5	-	-	137	-	-	-	63.4	-	50.4	-	-	-	-	-	67.4	-	-	-	-	-	-	-
Lead	102-2,420	10	2,420	-	122	-	182	-	152	-	-	-	-	-	235	103	168	103	-	-	102	653	619	-
Mercury	0.19-1.58	11	0.49	-	0.19	-	0.37	-	0.23	-	0.31	-	0.75	-	0.34	0.29	0.31	0.29	-	-	-	1.21	1.68	-
Nickel	31.8	1	-	-	31.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Zinc	110-1,210	9	348	-	110	-	1,210	-	184	-	-	-	-	-	348	-	194	-	-	-	241	911	290	-

Notes:  
 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 15  
 1840-1856 Park Avenue  
 New York, NY  
 Parameters Detected Above Ambient Water Quality Standards

VOCs

COMPOUND	Range in Detections	MW1		MW2		MW3		MW-4	
		3/19/2019		3/19/2019		3/19/2019		3/19/2019	
<i>Sample Results in (µg/L)</i>									
<b>Tetrachloroethene</b>	<b>5.2-7.4</b>	<b>5.4</b>		<b>7</b>		<b>7.4</b>		<b>5.2</b>	

Pesticides/PCBs

COMPOUND	Range in Detections	MW1		MW2		MW3		MW-4	
		3/19/2019		3/19/2019		3/19/2019		3/19/2019	
<i>Sample Results in (mg/L)</i>									
<b>Dieldrin</b>	<b>0.004-0.016</b>	<b>0.011</b>		<b>-</b>		<b>0.016</b>		<b>0.01</b>	

Metals (Dissolved)

COMPOUND	Range in Detections	MW1		MW2		MW3		MW-4	
		3/19/2019		3/19/2019		3/19/2019		3/19/2019	
<i>Sample Results in (mg/L)</i>									
<b>Manganese</b>	<b>0.258-1.11</b>	<b>-</b>		<b>0.89</b>		<b>1.11</b>		<b>-</b>	
<b>Sodium</b>	<b>208-295</b>	<b>215</b>		<b>295</b>		<b>242</b>		<b>208</b>	

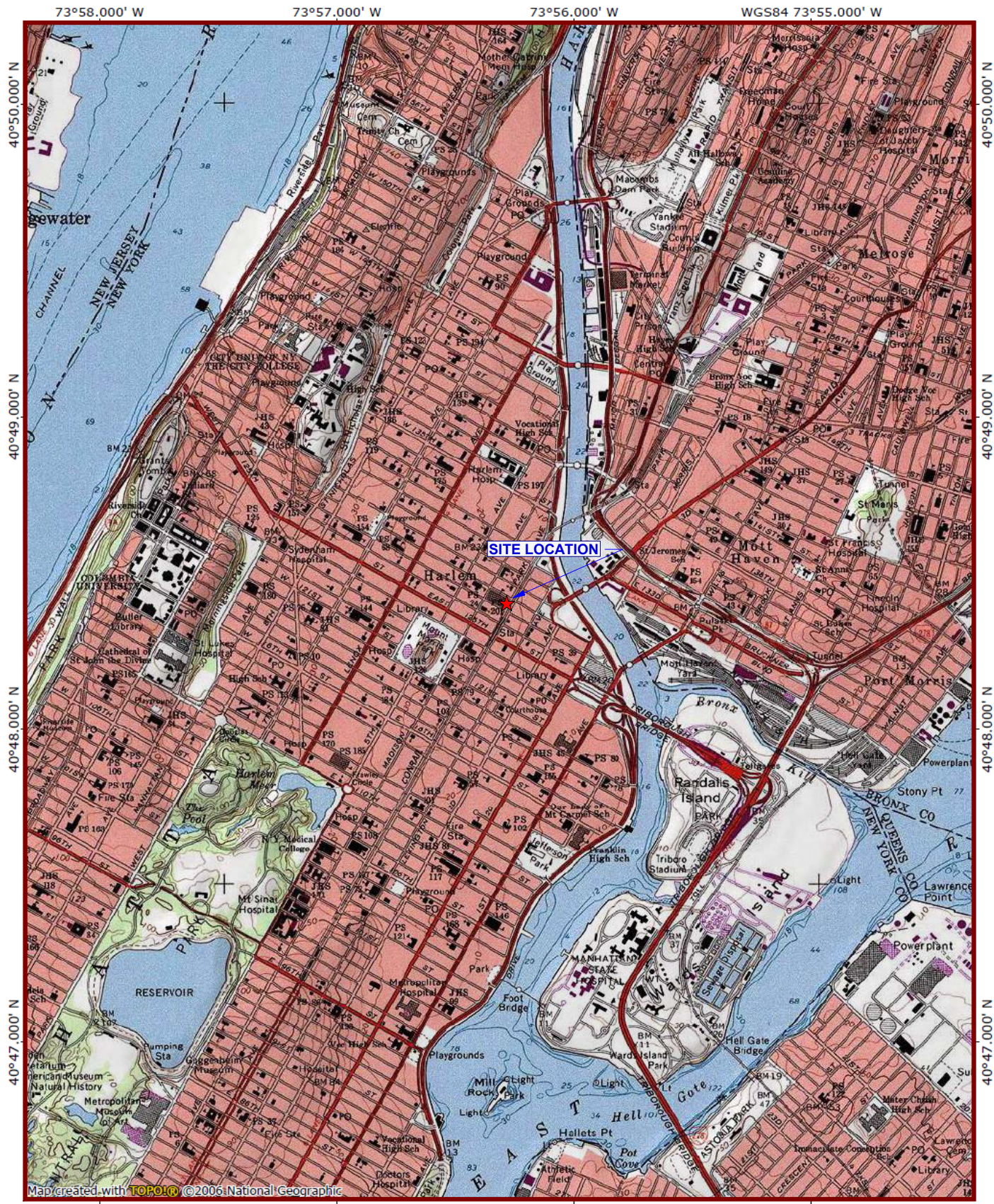
Notes:

**Bold/highlighted-** Indicated exceedance of the NYSDEC Groundwater Standard

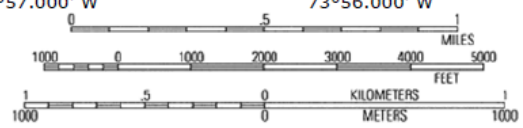
---

# **FIGURES**





Map created with TOPO! © 2006 National Geographic



MN | TN  
13°  
02/01/19

**Figure No.**  
**1**

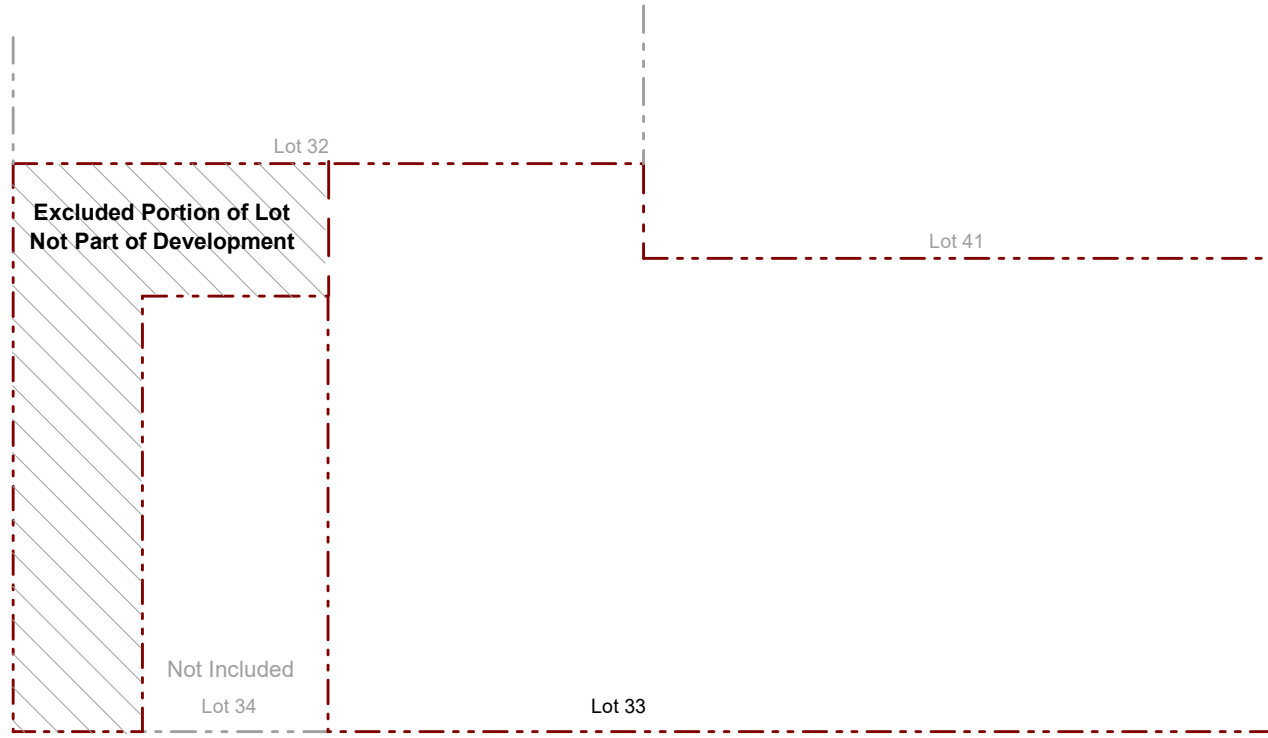
Site Name:	<b>REDEVELOPMENT PROJECT</b>
Site Address:	<b>1840-1856 PARK AVENUE, MANHATTAN, NY</b>
Drawing Title:	<b>SITE LOCATION MAP</b>





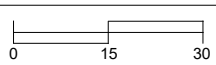
East 126th Street  
SIDEWALK

East 127th Street  
SIDEWALK





SIDEWALK  
Park Avenue


**SCALE:**



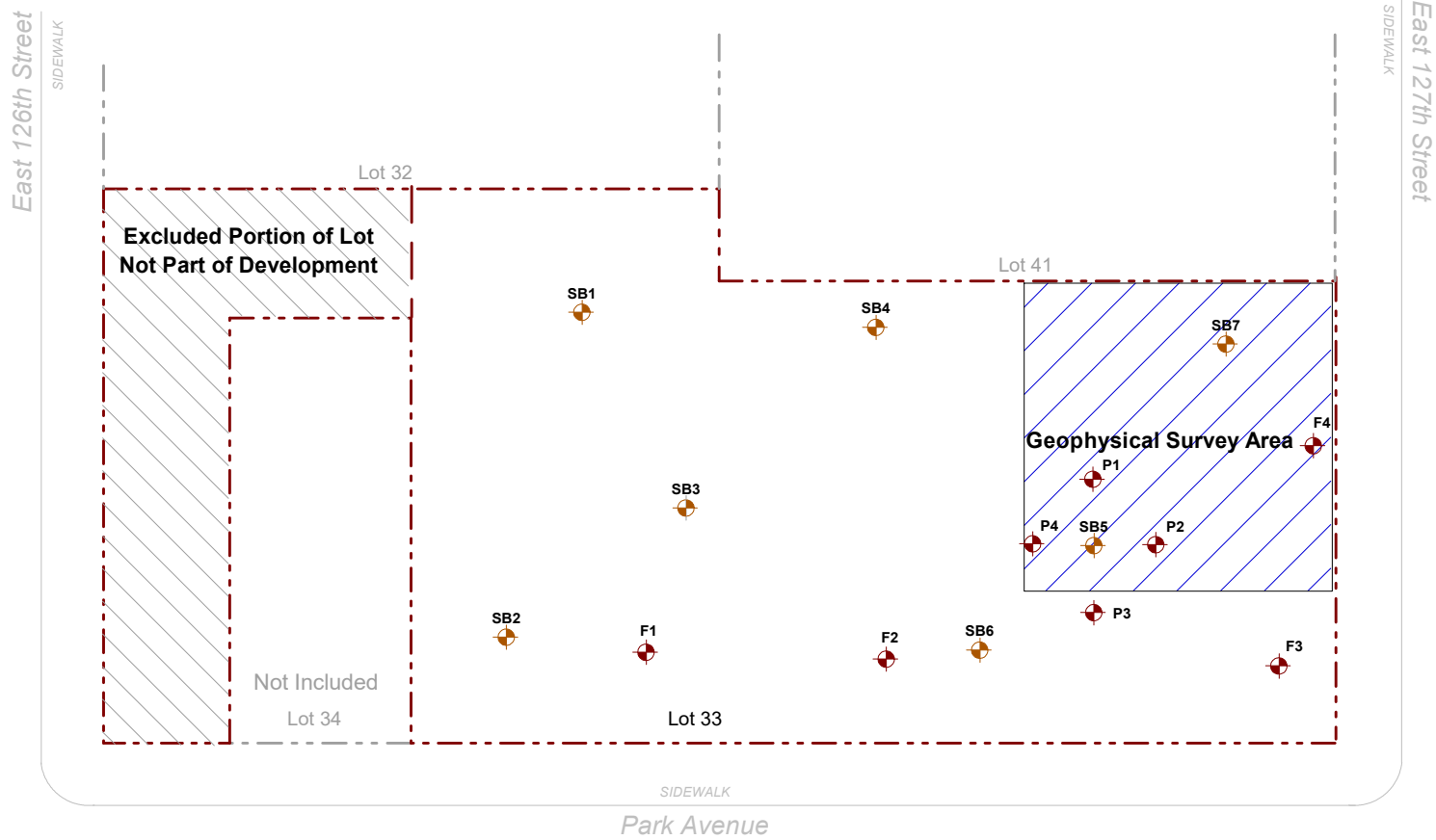
Scale 1 Inch = 30 feet

**KEY:**

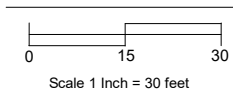
-  Property Boundary
-  Excluded Portion of Lot

	<b>Figure No.</b> <b>2</b>	Site Name: <b>Redevelopment Project</b>
		Site Address: <b>1840- 1856 Park Avenue, Manhattan, NY</b>
		Drawing Title: <b>Site Boundary Map</b>

Phone 631.504.6000  
Fax 631.924.2870



**SCALE:**



**KEY:**

- Property Boundary
- Geophysical Area
- Excluded Portion of Lot
- ◆ March 2019 Soil Boring Sample Location
- ◆ June 2019 Soil Boring Sample Location



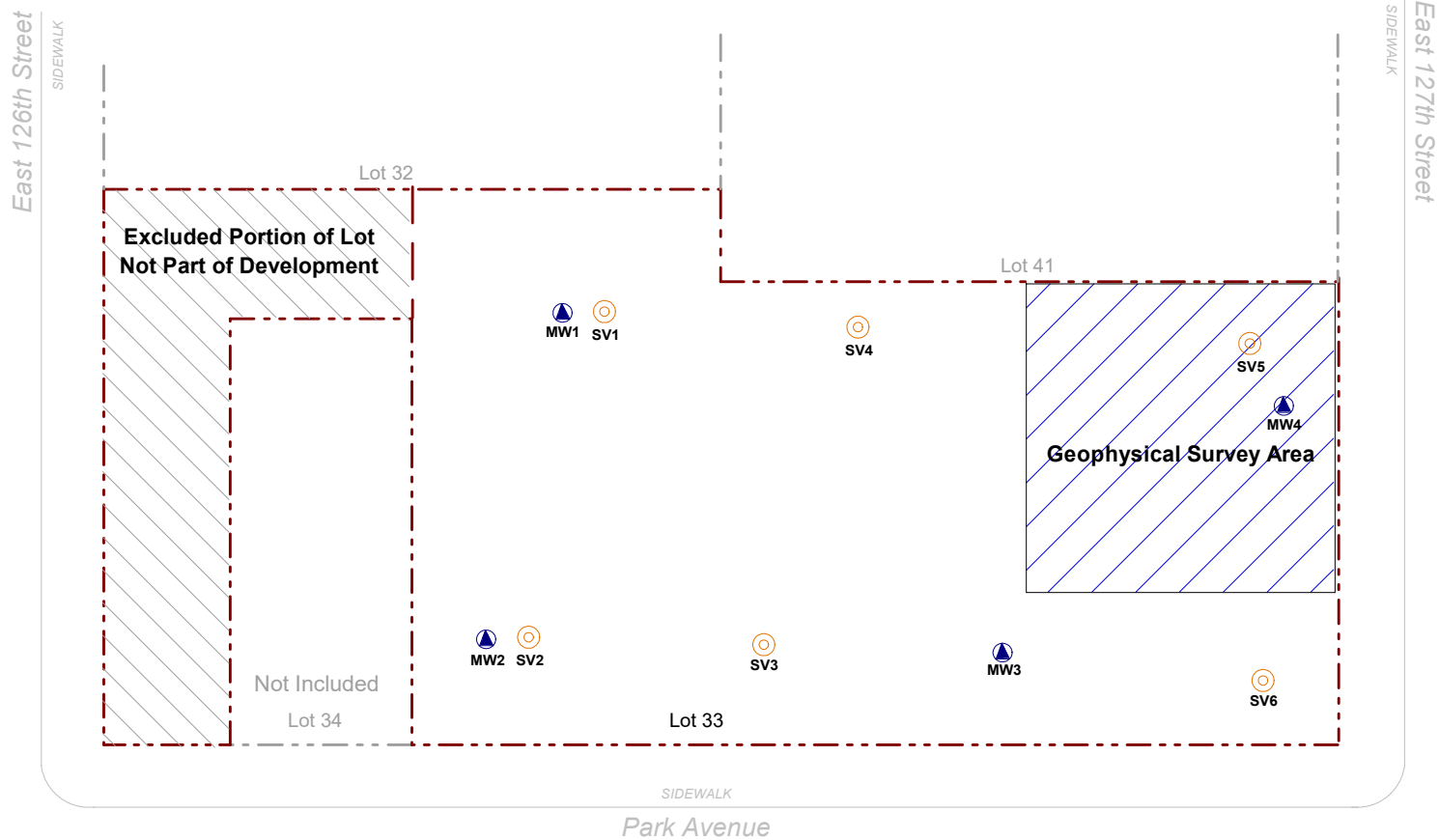
**Environmental Business Consultants**

Phone 631.504.6000  
Fax 631.924.2870

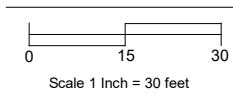
**Figure No.**  
**3**

Site Name:	Redevelopment Project
Site Address:	1840- 1856 Park Avenue, Manhattan, NY
Drawing Title:	Soil Sampling Locations





**SCALE:**



**KEY:**

- Property Boundary
- Geophysical Area
- Excluded Portion of Lot
- Soil Vapor Sample Location
- Groundwater Sample Location



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Figure No.  
**4**

Site Name:	Redevelopment Project
Site Address:	1840- 1856 Park Avenue, Manhattan, NY
Drawing Title:	Monitoring Well and Soil Gas Locations

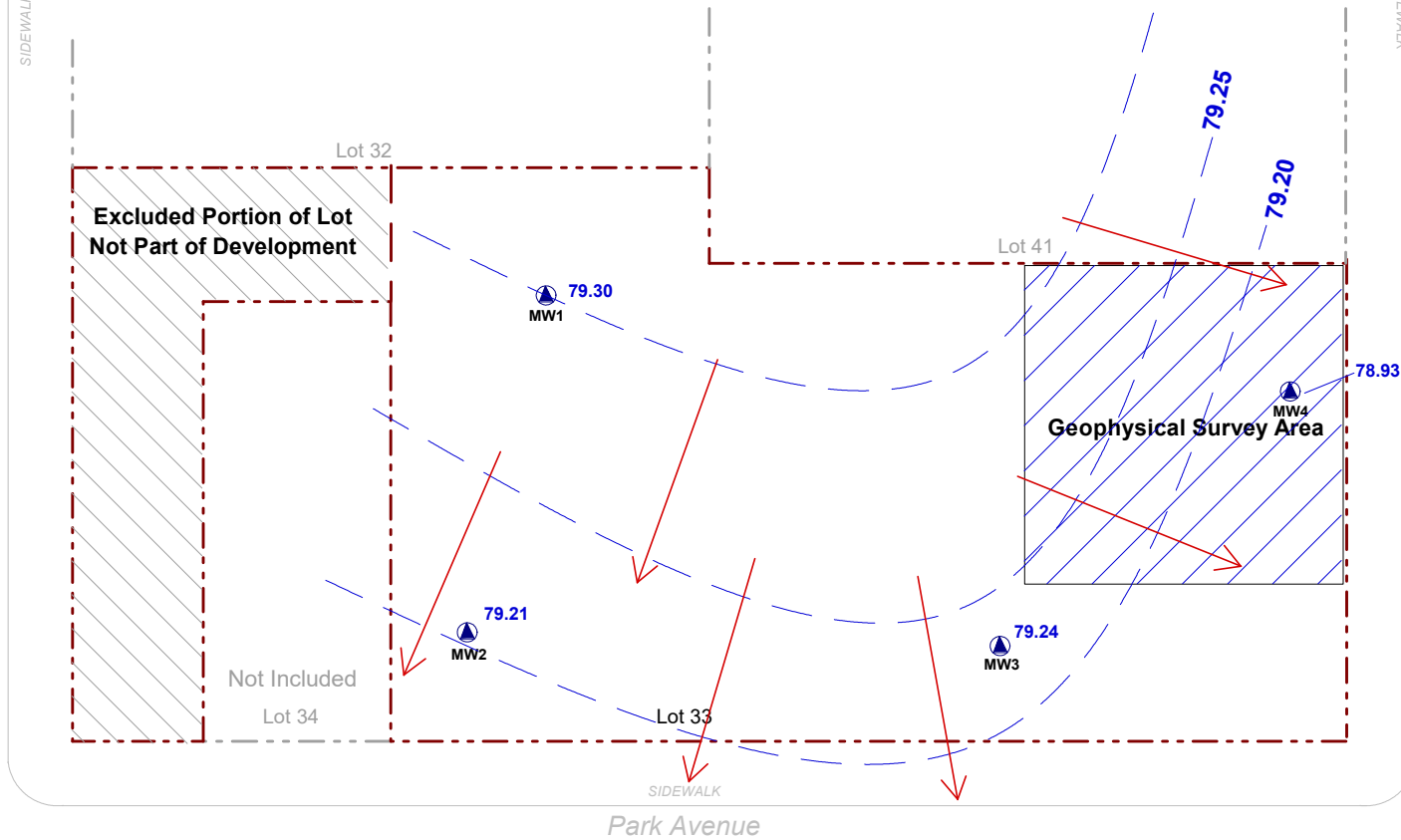


East 126th Street

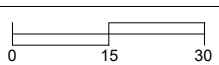
SIDEWALK

East 127th Street

SIDEWALK



**SCALE:**



Scale 1 Inch = 30 feet

**KEY:**

- Property Boundary
- Geophysical Area
- Excluded Portion of Lot
- Groundwater Sample Location
- Groundwater Flow Direction

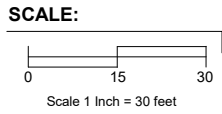


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Figure No.  
**5**

Site Name:	Redevelopment Project
Site Address:	1840- 1856 Park Avenue, Manhattan, NY
Drawing Title:	Groundwater Contour Map

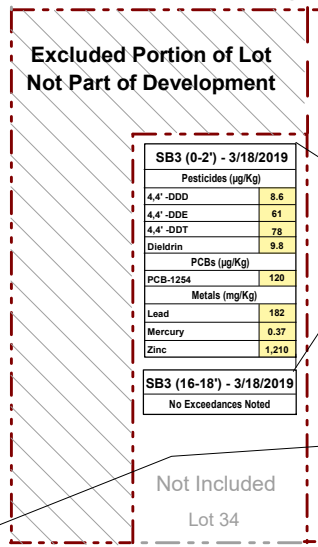


**KEY:**

- Property Boundary
- Geophysical Area
- March 2019 Soil Boring Sample Location
- June 2019 Soil Boring Sample Location
- Exceedance above UUSCOs
- Exceedance above RRSCOs
- Exceedance above RCSCOs

East 126th Street  
SIDEWALK

East 127th Street  
SIDEWALK



**SB1 (0-2') - 3/18/2019**

SVOCs (µg/Kg)	
Benzo(a)anthracene	2,100
Benzo(a)pyrene	2,600
Benzo(b)fluoranthene	2,900
Benzo(k)fluoranthene	2,400
Chrysene	2,500
Dibenz(a,h)anthracene	570
Indeno(1,2,3-cd)pyrene	1,900
Pesticides (µg/Kg)	
4,4'-DDE	5.8
4,4'-DDT	30
Dieldrin	40
Metals (mg/Kg)	
Barium	491
Lead	2,420
Mercury	11.1
Zinc	4.44

**SB4 (0-2') - 3/19/2019**

Pesticides (µg/Kg)	
4,4'-DDE	4.9
4,4'-DDT	33
Metals (mg/Kg)	
Copper	63.4
Lead	152
Mercury	0.23
Zinc	184

**SB7 (0-2') - 3/19/2019**

Pesticides (µg/Kg)	
4,4'-DDT	7
Metals (mg/Kg)	
Lead	235
Mercury	0.34
Zinc	348

**SB1 (16-18') - 3/18/2019**

No Exceedances Noted

**SB4 (16-18') - 3/18/2019**

No Exceedances Noted

**SB7 (16-18') - 3/18/2019**

No Exceedances Noted

**SB3 (0-2') - 3/18/2019**

Pesticides (µg/Kg)	
4,4'-DDD	8.6
4,4'-DDE	61
4,4'-DDT	78
Dieldrin	9.8
PCBs (µg/Kg)	
PCB-1254	120
Metals (mg/Kg)	
Lead	182
Mercury	0.37
Zinc	1,210

**SB3 (16-18') - 3/18/2019**

No Exceedances Noted

**SB2 (0-2') - 3/18/2019**

Pesticides (µg/Kg)	
4,4'-DDD	15
4,4'-DDE	4.6
Metals (mg/Kg)	
Copper	137
Lead	122
Mercury	0.19
Nickel	31.8
Zinc	110

**SB2 (16-18') - 3/18/2019**

No Exceedances Noted

**P1 - 6/7/2019**

No Exceedances Noted

**P4 - 6/7/2019**

No Exceedances Noted

**P1 - 6/7/2019**

No Exceedances Noted

**P2 - 6/7/2019**

No Exceedances Noted

**P3 - 6/7/2019**

No Exceedances Noted

**P2 - 6/7/2019**

No Exceedances Noted

**F4 (0-2') - 6/7/2019**

SVOCs (µg/Kg)	
Benzo(a)pyrene	1,100
Benzo(b)fluoranthene	1,200
Benzo(k)fluoranthene	1,000
Chrysene	1,100
Dibenz(a,h)anthracene	360
Indeno(1,2,3-cd)pyrene	1,200
Metals (mg/Kg)	
Barium	508
Beryllium	0.26
Copper	75.7
Lead	619
Mercury	1.58
Zinc	290

**F4 (5-7') - 6/7/2019**

No Exceedances Noted

**SB5 (0-2') - 3/19/2019**

VOCs (µg/Kg)	
Acetone	720
Ethylbenzene	32,000
M&P Xylenes	180,000
O-Xylene	74,000
Toluene	5,900
SVOCs (µg/Kg)	
Benzo(a)anthracene	66,000
Benzo(a)pyrene	44,000
Benzo(b)fluoranthene	45,000
Benzo(k)fluoranthene	39,000
Chrysene	66,000
Dibenz(a,h)anthracene	6,300
Indeno(1,2,3-cd)pyrene	21,600
Pesticides (µg/Kg)	
4,4'-DDD	130
4,4'-DDT	53
Dieldrin	25
Metals (mg/Kg)	
Copper	50.4
Mercury	0.31

**SB5 (16-18') - 3/18/2019**

No Exceedances Noted

**F1 (5-7') - 6/7/2019**

Pesticides (µg/Kg)	
4,4'-DDD	18
4,4'-DDE	110
4,4'-DDT	210
Dieldrin	16
Metals (mg/Kg)	
Lead	103
Mercury	0.29

**F1 (0-2') - 6/7/2019**

SVOCs (µg/Kg)	
Benzo(a)anthracene	1,900
Benzo(a)pyrene	1,900
Benzo(b)fluoranthene	1,600
Benzo(k)fluoranthene	1,700
Chrysene	1,700
Dibenz(a,h)anthracene	350
Indeno(1,2,3-cd)pyrene	1,200
Pesticides (µg/Kg)	
4,4'-DDD	12
4,4'-DDE	18
4,4'-DDT	34
Dieldrin	7.2
Metals (mg/Kg)	
Copper	67.4
Lead	168
Mercury	0.31
Zinc	194

**F2 (0-2') - 6/7/2019**

SVOCs (µg/Kg)	
Benzo(a)anthracene	11,000
Benzo(a)pyrene	8,700
Benzo(b)fluoranthene	7,000
Benzo(k)fluoranthene	5,900
Chrysene	9,400
Dibenz(a,h)anthracene	1,600
Indeno(1,2,3-cd)pyrene	5,400
Pesticides (µg/Kg)	
4,4'-DDT	4.3

**F2 (5-7') - 6/7/2019**

No Exceedances Noted

**SB6 (0-2') - 3/19/2019**

Pesticides (µg/Kg)	
4,4'-DDE	5.2
4,4'-DDT	4.7
Metals (mg/Kg)	
Mercury	0.75

**SB6 (16-18') - 3/18/2019**

No Exceedances Noted

**F3 (5-7') - 6/7/2019**

SVOCs (µg/Kg)	
Benzo(a)pyrene	1,100
Benzo(b)fluoranthene	1,500
Benzo(k)fluoranthene	1,300
Chrysene	1,600
Indeno(1,2,3-cd)pyrene	1,000
Pesticides (µg/Kg)	
4,4'-DDD	200
4,4'-DDE	130
a-Chlordane	98
4,4'-DDT	250
Metals (mg/Kg)	
Barium	995
Cadmium	4.05
Chromium	36.4
Lead	653
Mercury	1.21
Zinc	911

**F3 (0-2') - 6/7/2019**

SVOCs (µg/Kg)	
Benzo(a)anthracene	1,800
Benzo(a)pyrene	2,200
Benzo(b)fluoranthene	1,800
Benzo(k)fluoranthene	1,700
Chrysene	2,000
Dibenz(a,h)anthracene	500
Indeno(1,2,3-cd)pyrene	1,700
Pesticides (µg/Kg)	
4,4'-DDD	92
4,4'-DDE	24
Dieldrin	14
Metals (mg/Kg)	
Barium	447
Lead	102
Zinc	241



East 126th Street  
SIDEWALK

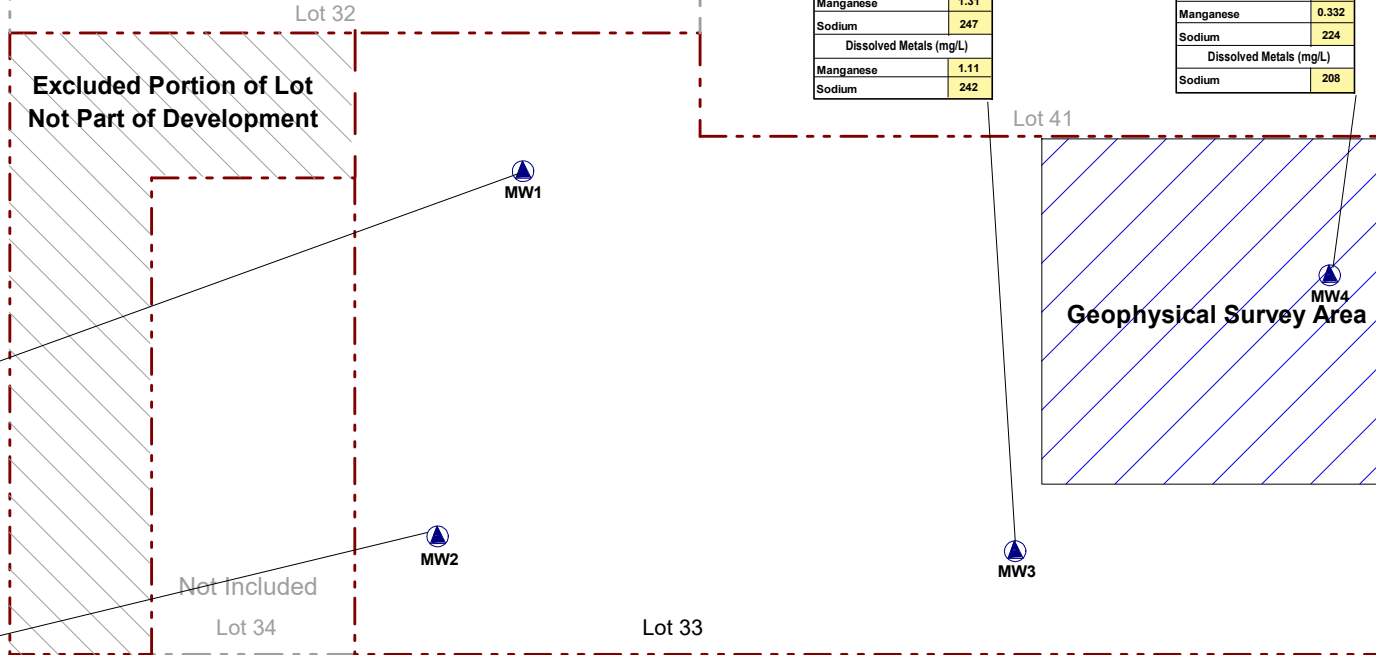
East 127th Street  
SIDEWALK

MW3 - 3/19/2019	
VOCs (µg/L)	
Tetrachloroethene	7.4
Pesticides (µg/L)	
Dieldrin	0.016
Total Metals (mg/L)	
Aluminum	2.8
Iron	3.16
Manganese	1.31
Sodium	247
Dissolved Metals (mg/L)	
Manganese	1.11
Sodium	242

MW4 - 3/19/2019	
VOCs (µg/L)	
Tetrachloroethene	5.1
Pesticides (µg/L)	
Dieldrin	0.01
Total Metals (mg/L)	
Aluminum	1.85
Iron	2.02
Manganese	0.332
Sodium	224
Dissolved Metals (mg/L)	
Manganese	1.11
Sodium	208

MW1 - 3/19/2019	
VOCs (µg/L)	
Tetrachloroethene	5.4
Pesticides (µg/L)	
Dieldrin	0.011
Total Metals (mg/L)	
Aluminum	1.43
Iron	1.3
Manganese	0.335
Sodium	256
Dissolved Metals (mg/L)	
Sodium	215

MW2 - 3/19/2019	
VOCs (µg/L)	
Tetrachloroethene	7
Total Metals (mg/L)	
Aluminum	1.99
Iron	2
Manganese	1.01
Sodium	314
Dissolved Metals (mg/L)	
Manganese	0.89
Sodium	295



SCALE:



Scale 1 Inch = 30 feet

KEY:

- Property Boundary
- Geophysical Area
- Excluded Portion of Lot
- Soil Vapor Sample Location
- Groundwater Sample Location
- Soil Boring Sample Location

**EB**  
**C**  
**Environmental Business Consultants**

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Fax 631.924.2870

Figure No.  
**7**

Site Name: **Redevelopment Project**  
Site Address: **1840- 1856 Park Avenue, Manhattan, NY**  
Drawing Title: **Groundwater Exceedences**



SV1 - 3/20/2019

1,1,1-Trichloroethane	57.3
1,2,4-Trichlorobenzene	2.91
1,2,4-Trimethylbenzene	1.13
1,3-Dichlorobenzene	1.72
4-Methyl-2-pentanone	1.12
Acetone	165
Benzene	1.3
Carbon Tetrachloride	0.28
Chloroform	1.69
Dichlorodifluoromethane	3.62
Ethanol	33
Heptane	1.01
Hexane	1.07
Isopropylalcohol	2.34
Xylene (m&p)	2.8
Methyl Ethyl Ketone	11.1
Methylene Chloride	4.44
Tetrachloroethene	1.61
Tetrahydrofuran	10.7
Toluene	3.13
Trichloroethene	0.39
Trichlorofluoromethane	6.18

SV2 - 3/20/2019

1,1,1-Trichloroethane	3.18
1,2,4-Trichlorobenzene	2.92
1,2,4-Trimethylbenzene	1.1
1,2-Dichlorotetrafluoroethane	12.6
1,3-Dichlorobenzene	1.65
4-Methyl-2-pentanone	1.19
Acetone	130
Benzene	2.12
Carbon Disulfide	8.06
Carbon Tetrachloride	0.33
Chloromethane	1.32
Dichlorodifluoromethane	3.06
Ethanol	32.6
Ethyl Acetate	8.25
Heptane	1.02
Hexane	1.58
Isopropylalcohol	2.34
Xylene (m&p)	3.17
Methyl Ethyl Ketone	14.9
Propylene	9.15
Tetrahydrofuran	14.9
Toluene	3.11
Trichlorofluoromethane	8.42

SV3 - 3/20/2019

1,1,1-Trichloroethane	1.29
1,2,4-Trichlorobenzene	2.06
1,2,4-Trimethylbenzene	1
Acetone	347
Benzene	1.53
Carbon Tetrachloride	0.26
Dichlorodifluoromethane	20.9
Ethanol	27.3
Heptane	1.06
Isopropylalcohol	3.12
Xylene (m&p)	2.57
Methyl Ethyl Ketone	20.3
Propylene	5.85
Tetrachloroethene	1.03
Tetrahydrofuran	15.6
Toluene	3.31
Trichlorofluoromethane	454

SV5 - 3/20/2019

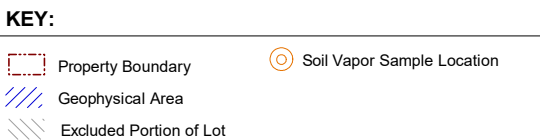
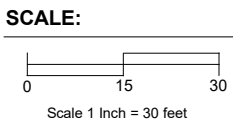
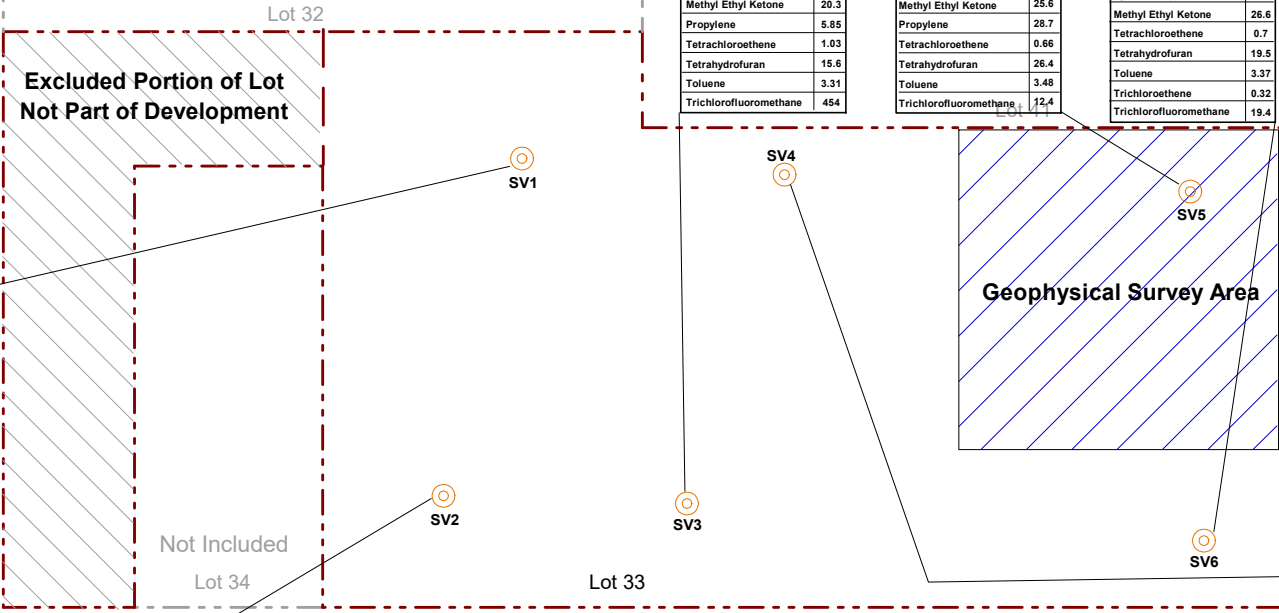
1,1,1-Trichloroethane	1.28
1,3-Butadiene	2.09
4-Methyl-2-pentanone	1.67
Acetone	254
Benzene	1.96
Carbon Disulfide	1.75
Carbon Tetrachloride	0.37
Chloroform	1.13
Dichlorodifluoromethane	4.05
Ethanol	37.1
Hexane	1.71
Xylene (m&p)	3.37
Methyl Ethyl Ketone	25.6
Propylene	28.7
Tetrachloroethene	0.66
Tetrahydrofuran	26.4
Toluene	3.48
Trichlorofluoromethane	12.4

SV6 - 3/20/2019

1,1,1-Trichloroethane	4.11
4-Methyl-2-pentanone	1.76
Acetone	729
Benzene	2.39
Carbon Disulfide	11
Carbon Tetrachloride	0.22
Chloromethane	9.16
Dichlorodifluoromethane	4.53
Ethanol	28.2
Heptane	2.04
Hexane	2.68
Isopropylalcohol	4.27
Xylene (m&p)	2.54
Methyl Ethyl Ketone	26.6
Tetrachloroethene	0.7
Tetrahydrofuran	19.5
Toluene	3.37
Trichloroethene	0.32
Trichlorofluoromethane	19.4

SV4 - 3/20/2019

1,1,1-Trichloroethane	8.29
1,2,4-Trimethylbenzene	1.15
4-Methyl-2-pentanone	1.52
Acetone	261
Benzene	1.37
Carbon Tetrachloride	0.3
Chloroform	2.63
Chloromethane	4.52
cis-1,2-Dichloroethene	0.43
Dichlorodifluoromethane	11.4
Ethanol	63.8
Ethylbenzene	1.15
Heptane	1.26
Hexane	2.87
Isopropylalcohol	4.79
Xylene (m&p)	4.3
Methyl Ethyl Ketone	4.27
Xylene (o)	1.22
Propylene	11
Tetrachloroethene	0.64
Tetrahydrofuran	2.98
Toluene	3.54
Trichloroethene	0.98
Trichlorofluoromethane	14.7



<p>Phone 631.504.6000 Fax 631.924.2870</p>	<p><b>Figure No.</b> <b>8</b></p>	Site Name: <b>Redevelopment Plan</b>
		Site Address: <b>1840- 1856 Park Avenue, Manhattan, NY</b>
		Drawing Title: <b>Soil Vapor Detections</b>

---

**APPENDIX – A**  
***Soil Boring Logs***







# Geologic Boring Log Details



## SB3 Boring Log

Location: 40' from property boundary along Park Ave. and 100' from the property boundary along East 127th St.		Depth to Water (ft. from grade.)	Site Elevation Datum
Site Name: ART1803	Address: 1840 Park Avenue, Manhattan	Date	DTW
		Groundwater depth	Ground Elevation
Drilling Company:	Method:		
C2 Environmental	Geoprobe 6712DT	Well Specifications	
Date Started: 3/18/2019	Date Completed: 3/18/2019	None	
Completion Depth: 20 Feet	Geologist: Tony Balado		

SB3 (NTS)	DEPTH (ft below cellar grade)	SAMPLES			SOIL DESCRIPTION
		Reco- very (in.)	Blow per 6 in.	PID (ppm)	
	0				
	to	12		0.0	23" - Dry brown/black sand with brick
	5				*Retained Soil Sample SB3(0-2)
	to	9		0.0	9" - Wet brown/black sand with brick
	10				10" - Dry brown medium to coarse sand and gravel
	to	23		0.0	
	15				5" - Dry brown medium to coarse sand
	to	15		0.0	5" - Saturated brown medium to coarse sand
	20				5" - Saturated brown silt
					*Retained Soil Sample SB3(16-18)









# Geologic Boring Log Details



## F1 Boring Log

Location: 22' from eastern property boundary 115' from the northern property boundary		Depth to Water (ft. from grade.)	Site Elevation Datum
Site Name: ART1803	Address: 1840 Park Avenue, Manhattan	Date	DTW
Drilling Company: C2 Environmental		Groundwater depth	Ground Elevation
Method: Geoprobe 6712DT		Well Specifications	
Date Started: 6/7/2019	Date Completed: 6/7/2019	None	
Completion Depth: 15 Feet	Geologist: David Rukki		

F1 (NTS)	DEPTH (ft below cellar grade)	SAMPLES			SOIL DESCRIPTION
		Reco- very (in.)	Blow per 6 in.	PID (ppm)	
	0				0-4" - Crushed concrete and asphalt
	to	18		0.0	4-11" - Brown silty sand, with fill material (brick)
	5				11-18" - Fill material mixed w/lt. brown silty sand
	to	16		0.0	<i>*Retained Soil Sample F1(0-2)</i>
	10				0-7" - Brown silty sand with fill. No odor.
	to	30		0.0	7-16" - Light brown/black silty sand with fill.
	15				<i>*Retained Soil Sample F1(5-7)</i>
					0-4" - Light brown silty sand
					4"-9" - Crushed brick/fill
					9-24" - Light brown silty sand
					24-30" - Crushed stone

# Geologic Boring Log Details



## F2 Boring Log

Location: 22' from eastern property boundary 76' from the northern property boundary		Depth to Water (ft. from grade.)		Site Elevation Datum	
Site Name: ART1803		Address: 1840 Park Avenue, Manhattan		Date	DTW
Drilling Company:		Method:		Groundwater depth	
C2 Environmental		Geoprobe 6712DT		Well Specifications	
Date Started: 6/7/2019		Date Completed: 6/7/2019		None	
Completion Depth: 15 Feet		Geologist: David Rukki			

F2 (NTS)	DEPTH (ft below cellar grade)	SAMPLES			SOIL DESCRIPTION
		Reco- very (in.)	Blow per 6 in.	PID (ppm)	
	0				0-12" - Dark silty sand with f-m gravel 12-19" - Fill material mixed with brown silty sand 19-27" - Dk. Brown silty sand, some fill. No odor.
	to	27		0.0	<i>*Retained Soil Sample F2(0-2)</i>
	5				0-4" - Dk. Brown to black silty sand. No odor. 4-14" - Light brown silty sand.
	to	14		0.0	<i>*Retained Soil Sample F2(5-7)</i>
	10				0-3" - Light brown silty sand 3-8" - Light brown silty sand, with f-m gravel 9-24" - Light brown silty sand 8-13" - Light brown silty sand with crushed stone
	to	13		0.0	
	15				















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**APPENDIX – B**  
***Monitoring Well Completion Reports***

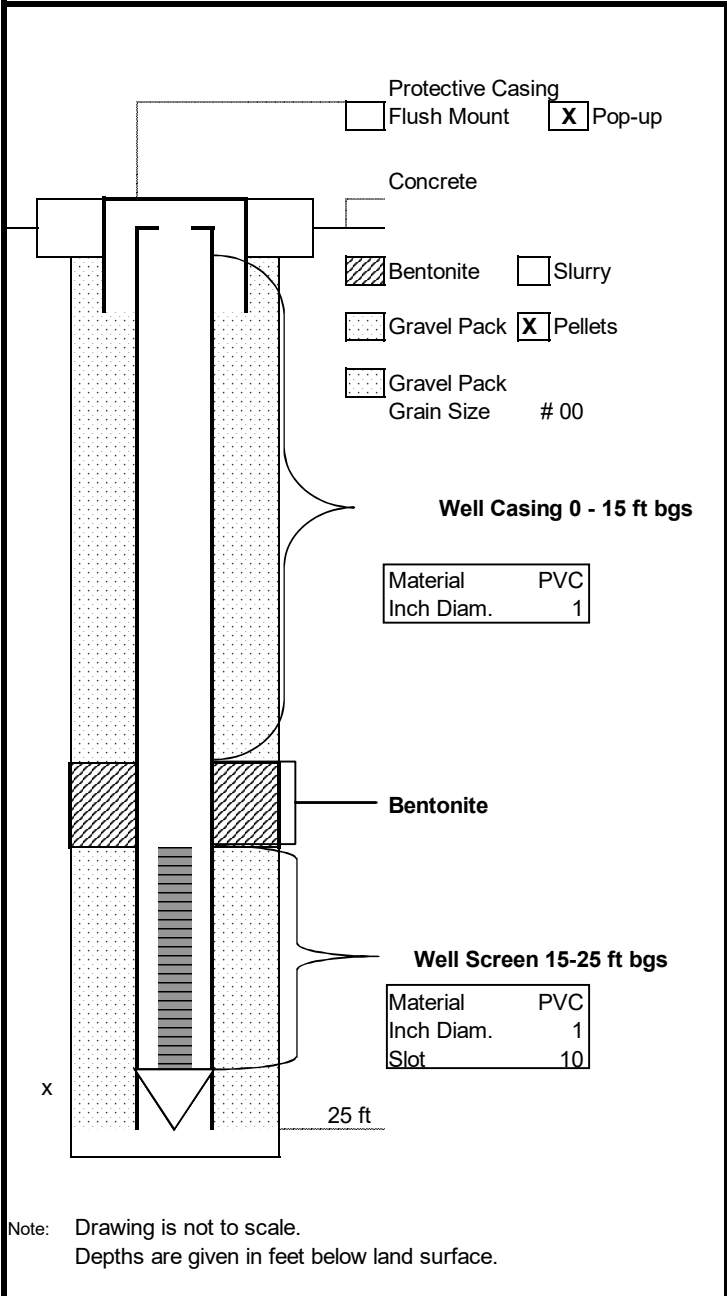


ENVIRONMENTAL BUSINESS CONSULTANTS

# GROUNDWATER MONITORING WELL

## CONSTRUCTION LOG

### MW1



Monitoring Well No.: MW1

Project: 1840 Park Avenue, New York, NY

Depth to Groundwater: 16.32      Date: 3/19/2019

Installation Depth: 25 ft bg

Survey Point Elevation: 95.62

Installation Date: 3/18/2019

Drilling Contractor: C2

Installation Method: Hollow Geoprobe Rods

Water Removed During Development:

Hydrogeologist: Anthony Balado

Company Name: EBC

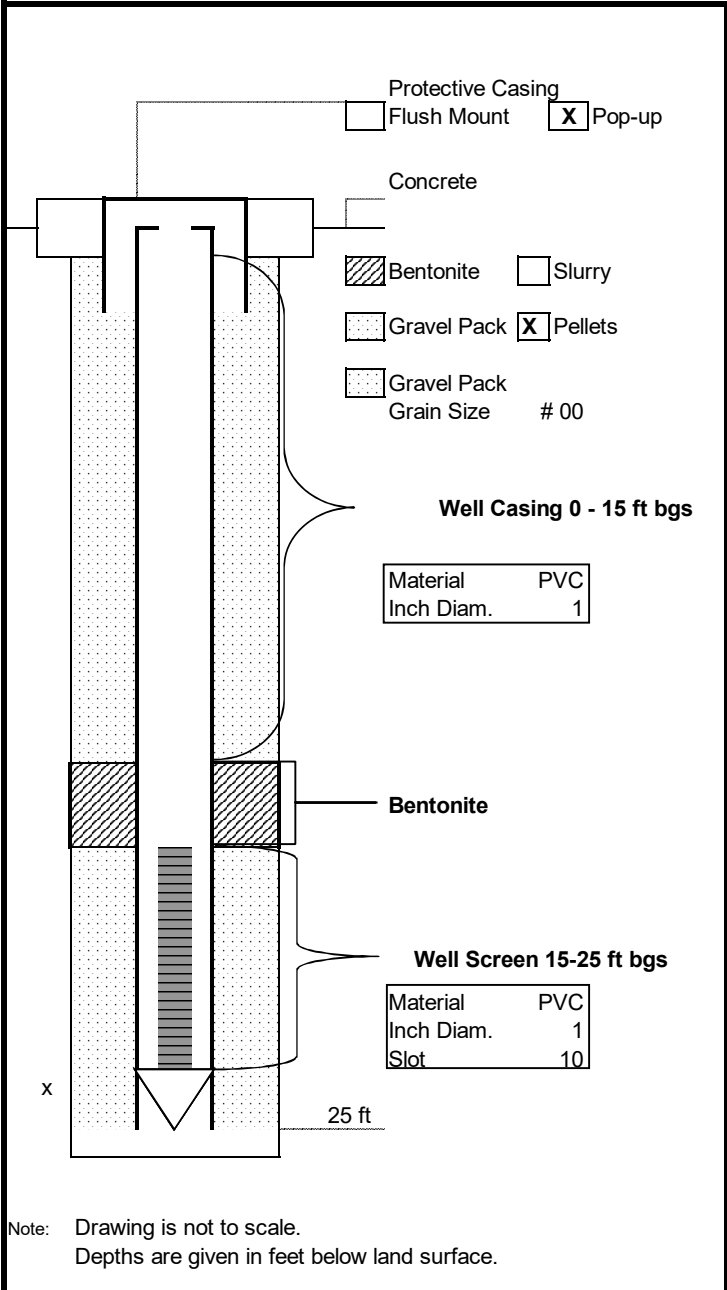


ENVIRONMENTAL BUSINESS CONSULTANTS

# GROUNDWATER MONITORING WELL

## CONSTRUCTION LOG

### MW2



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

Monitoring Well No.: MW2

Project: 1840 Park Avenue, New York, NY

Depth to Groundwater: 15.87      Date: 3/19/2019

Installation Depth: 25 ft bg

Survey Point Elevation: 95.08

Installation Date: 3/18/2019

Drilling Contractor: C2

Installation Method: Hollow Geoprobe Rods

Water Removed During Development:

Hydrogeologist: Anthony Balado

Company Name: EBC



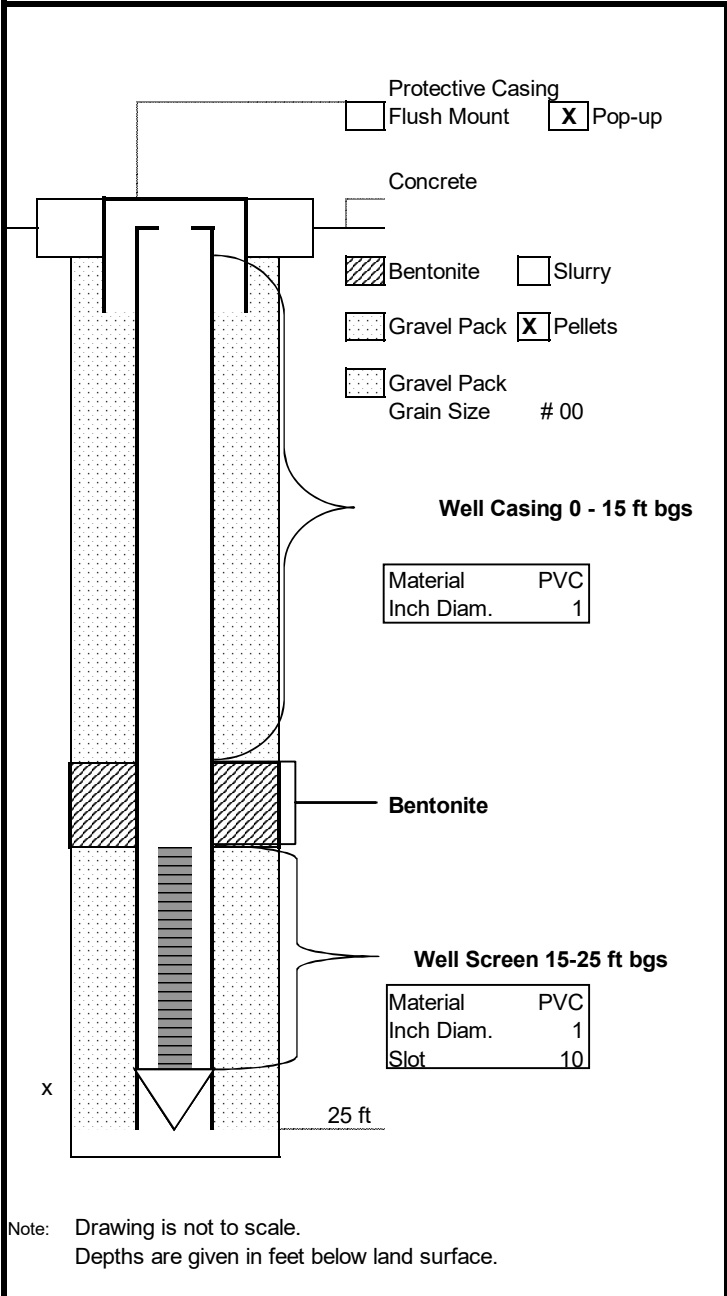


ENVIRONMENTAL BUSINESS CONSULTANTS

# GROUNDWATER MONITORING WELL

## CONSTRUCTION LOG

### MW3



Monitoring Well No.: MW3

Project: 1840 Park Avenue, New York, NY

Depth to Groundwater: 15.74      Date: 3/19/2019

Installation Depth: 25 ft bg

Survey Point Elevation: 94.98

Installation Date: 3/18/2019

Drilling Contractor: C2

Installation Method: Hollow Geoprobe Rods

Water Removed During Development:

Hydrogeologist: Anthony Balado

Company Name: EBC

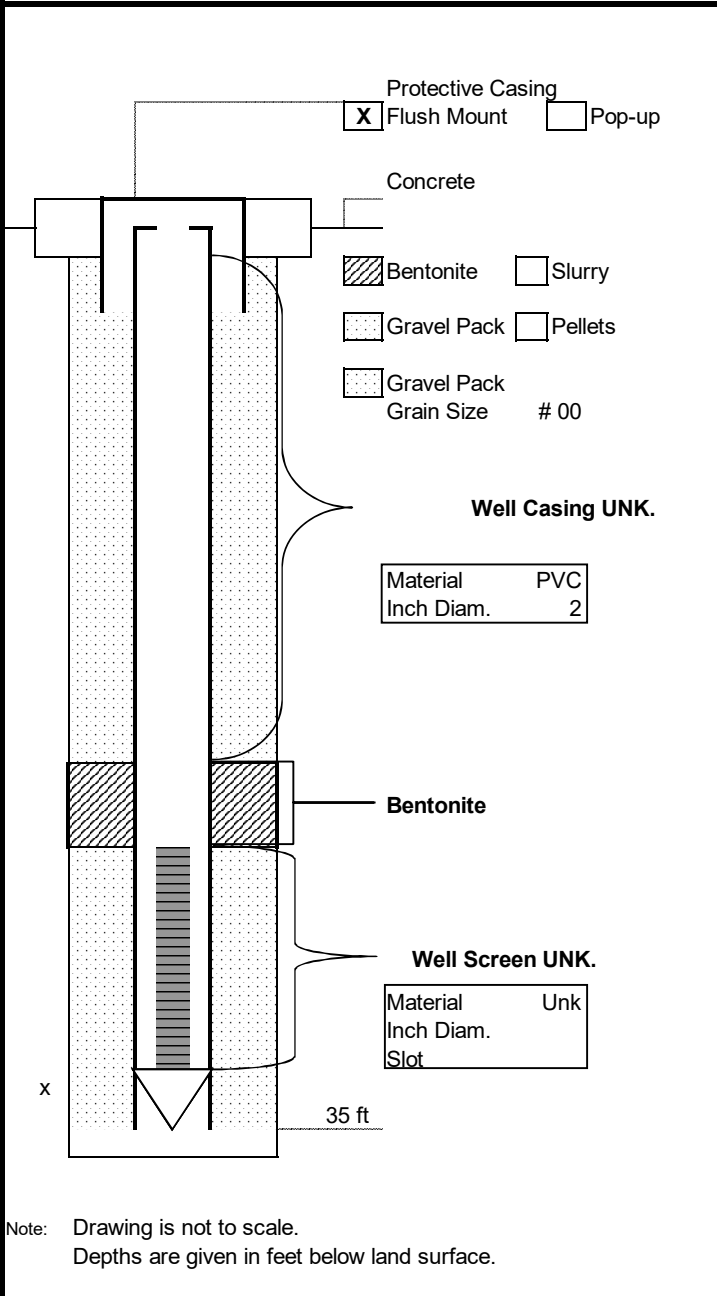


ENVIRONMENTAL BUSINESS CONSULTANTS

# GROUNDWATER MONITORING WELL

## CONSTRUCTION LOG

### MW4



Monitoring Well No.: MW4

Project: 1840 Park Avenue, New York, NY

Depth to Groundwater: 15.07      Date: 3/19/2019

Installation Depth: 35 ft bg

Survey Point Elevation: 94

Installation Date: Unk.

Drilling Contractor: Unk.

Installation Method: Unk.

Water Removed During Development:

Hydrogeologist: Anthony Balado

Company Name: EBC

---

**APPENDIX - C**  
***Groundwater Sampling Logs***



**ENVIRONMENTAL BUSINESS CONSULTANTS**

### GROUNDWATER PURGE / SAMPLE LOGS

1840-1856 Park Avenue, Manhattan, NY

Well I.D.: MW 1      Date: 3/19/2019

Well Depth (from TOC): 25'      Equipment: Peristaltic Pump

Static Water Level (from TOC): 16.32'

Height of Water in Well: 8.68'

Gallons of Water per Well Volume: 0.35

Flow Rate: 400ml/min.

Time	Pump Rate	Gal. Removed	pH	Cond. (mS/cm)	Temp. (deg. C)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	TDS	Comments
8:20		0.0								Turbid, Brown
8:25		0.75								clear
8:30		1.75								clear
8:35		2.75								clear

Note 400 ml = 0.11 gallons



ENVIRONMENTAL BUSINESS CONSULTANTS

# GROUNDWATER PURGE / SAMPLE LOGS

1840-1856 Park Avenue, Manhattan, NY

Well I.D.: MW2

Date: 3/19/2019

Well Depth (from TOC):

24.96'

Equipment: Peristaltic Pump

Static Water Level (from TOC):

15.87'

Height of Water in Well:

9.09'

Gallons of Water per Well Volume:

0.37

Flow Rate: 400ml/min.

Time	Pump Rate	Gal. Removed	pH	Cond. (mS/cm)	Temp. (deg. C)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	TDS	Comments
9:55		0.0								Turbid, below
10:00		1.0								clear
10:05		2.0								clear
10:10		3.0								clear

Note 400 ml = 0.11 gallons



ENVIRONMENTAL BUSINESS CONSULTANTS

# GROUNDWATER PURGE / SAMPLE LOGS

1840-1856 Park Avenue, Manhattan, NY

Well I.D.: MW 3

Date: 3/19/2019

Well Depth (from TOC): 25'

Equipment: Peristaltic Pump

Static Water Level (from TOC): 15.74'

Height of Water in Well: 9.26'

Gallons of Water per Well Volume: 0.38

Flow Rate: 400ml/min.

Time	Pump Rate	Gal. Removed	pH	Cond. (mS/cm)	Temp. (deg. C)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	TDS	Comments
10:30		0.0								Turbid, brown
10:35		0.5								Clear
10:40		1.5								Clear
10:45		2.5								Clear

Note 400 ml = 0.11 gallons



ENVIRONMENTAL BUSINESS CONSULTANTS

GROUNDWATER PURGE / SAMPLE LOGS  
1840-1856 Park Avenue, Manhattan, NY

Well I.D.: MW H Date: 3/19/2019  
Well Depth (from TOC): 35' Equipment: Peristaltic Pump  
Static Water Level (from TOC): 15.07'  
Height of Water in Well: 19.93'  
Gallons of Water per Well Volume: 0.81

Flow Rate: 400ml/min.

Time	Pump Rate	Gal. Removed	pH	Cond. (mS/cm)	Temp. (deg. C)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	TDS	Comments
7:20		0.0								Turbid, brown
7:25		1.0								clear
7:30		2.0								clear
7:35		3.0								clear
7:40		4.0								clear
7:45		5.0								clear

Note 400 ml = 0.11 gallons

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**APPENDIX - D**  
***Soil Vapor Sampling Logs***





H2504

CHAIN OF CUSTODY RECORD  
AIR ANALYSES

800-827-5426  
email: greg@phoenixlabs.com

P.O. # \_\_\_\_\_ Page \_\_\_\_\_ of \_\_\_\_\_

Data Delivery:  
 Fax #: \_\_\_\_\_  
 Email: Site  
 Phone #: \_\_\_\_\_

Report to: Keith Butler  
Customer: EBC  
Address: \_\_\_\_\_

Invoice to: \_\_\_\_\_

Project Name: 1540 PARK AVE, MANHATTAN  
Requested Deliverable: RCP  ASP CAT B   
MCP  NJ Deliverables

State where samples collected: \_\_\_\_\_

Sampled by: TONY BALABO

Phoenix ID #	Client Sample ID	THIS SECTION FOR LAB USE ONLY										Ambient/Indoor Air	Soil Gas	Grab (G) Composite (C)	TO-14	TO-15	
		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)
71047	SV2	28577	6.0	-30	-4	3409	43	8:23	6:22	3-20-19	-29	-4	X				
71048	SV4	16004				3406		8:31	10:32	3-20-19	-30	-5	X				
71049	SV5	28580			-3	3408		8:13	10:16	3-20-19	-30	-4	X				
71050	SV6	19931			-3	3957		8:17	10:18	3-20-19	-30	-4	X				
71051	SV1	21333			-2	3920		8:26	10:30	3-20-19	-30	-5	X				
71052	SV3	21363			-3	5061		8:21	10:21	3-20-19	-29	-5	X				
		12868			-3	3130											

Relinquished by: [Signature] Date: 3-20-19 Time: 12:15  
 Accepted by: [Signature] Date: 3-20-19 Time: 11:00

Requested Criteria: \_\_\_\_\_

Turnaround Time: \_\_\_\_\_

Quote Number: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Special Instructions, OC Requirements, Regulatory Information: \_\_\_\_\_

Requested Deliverable:  24 Hour  48 Hour  72 Hour  Standard

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.

---

**APPENDIX - E**  
***Laboratory Reports (On Disk)***



Thursday, March 28, 2019

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

Project ID: 1840 PARK AVE MANHATTAN  
SDG ID: GCC70170  
Sample ID#s: CC70170 - CC70178

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 that reads "Phyllis Shiller". The signature is written in a cursive style.

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



## Sample Id Cross Reference

March 28, 2019

SDG I.D.: GCC70170

Project ID: 1840 PARK AVE MANHATTAN

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Client Id	Lab Id	Matrix
SB1 (0-2)	CC70170	SOIL
SB1 (16-18)	CC70171	SOIL
SB2 (0-2)	CC70172	SOIL
SB2 (16-18)	CC70173	SOIL
SB3 (0-2)	CC70174	SOIL
SB3 (16-18)	CC70175	SOIL
SOIL DUPLUCATE	CC70176	SOIL
TB HL	CC70177	SOIL
TB LL	CC70178	SOIL



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



## SDG Comments

March 28, 2019

SDG I.D.: GCC70170

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



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



# Analysis Report

March 28, 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: SW  
 Analyzed by: see "By" below

## Date

03/18/19  
 03/19/19

## Time

9:15  
 13:48

## Laboratory Data

SDG ID: GCC70170  
 Phoenix ID: CC70170

Project ID: 1840 PARK AVE MANHATTAN  
 Client ID: SB1 (0-2)

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.40	0.40		mg/Kg	1	03/20/19	CPP	SW6010D
Aluminum	10400	40		mg/Kg	10	03/20/19	CPP	SW6010D
Arsenic	7.57	0.80		mg/Kg	1	03/20/19	CPP	SW6010D
Barium	491	0.8		mg/Kg	1	03/20/19	EK	SW6010D
Beryllium	0.43	0.32		mg/Kg	1	03/20/19	CPP	SW6010D
Calcium	25500	40		mg/Kg	10	03/20/19	CPP	SW6010D
Cadmium	1.13	0.40		mg/Kg	1	03/20/19	CPP	SW6010D
Cobalt	8.10	0.40		mg/Kg	1	03/20/19	CPP	SW6010D
Chromium	25.9	0.40		mg/Kg	1	03/20/19	CPP	SW6010D
Copper	35.0	0.8		mg/kg	1	03/20/19	CPP	SW6010D
Iron	20700	40		mg/Kg	10	03/20/19	CPP	SW6010D
Mercury	0.49	0.07		mg/Kg	1	03/20/19	RS	SW7471B
Potassium	1180	8		mg/Kg	1	03/20/19	CPP	SW6010D
Magnesium	4200	4.0		mg/Kg	1	03/20/19	CPP	SW6010D
Manganese	398	4.0		mg/Kg	10	03/20/19	CPP	SW6010D
Sodium	413	8		mg/Kg	1	03/20/19	EK	SW6010D
Nickel	20.9	0.40		mg/Kg	1	03/20/19	CPP	SW6010D
Lead	2420	80		mg/Kg	100	03/22/19	EK	SW6010D
Antimony	< 5.0	5.0		mg/Kg	1	03/20/19	EK	SW6010D
Selenium	< 1.6	1.6		mg/Kg	1	03/20/19	CPP	SW6010D
Thallium	< 1.6	1.6		mg/Kg	1	03/20/19	CPP	SW6010D
Vanadium	33.0	0.40		mg/Kg	1	03/20/19	CPP	SW6010D
Zinc	348	8.0		mg/Kg	10	03/20/19	EK	SW6010D
Percent Solid	87			%		03/19/19	ML	SW846-%Solid
Soil Extraction for PCB	Completed					03/19/19	MM/V	SW3545A
Soil Extraction for Pesticides	Completed					03/19/19	MM/V	SW3545A
Soil Extraction for SVOA	Completed					03/19/19	JJ/LV	SW3545A
Mercury Digestion	Completed					03/20/19	I/I	SW7471B

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Total Metals Digest	Completed					03/19/19	B/AG	SW3050B
<b><u>Polychlorinated Biphenyls</u></b>								
PCB-1016	ND	75	75	ug/Kg	2	03/20/19	SC	SW8082A
PCB-1221	ND	75	75	ug/Kg	2	03/20/19	SC	SW8082A
PCB-1232	ND	75	75	ug/Kg	2	03/20/19	SC	SW8082A
PCB-1242	ND	75	75	ug/Kg	2	03/20/19	SC	SW8082A
PCB-1248	ND	75	75	ug/Kg	2	03/20/19	SC	SW8082A
PCB-1254	ND	75	75	ug/Kg	2	03/20/19	SC	SW8082A
PCB-1260	ND	75	75	ug/Kg	2	03/20/19	SC	SW8082A
PCB-1262	ND	75	75	ug/Kg	2	03/20/19	SC	SW8082A
PCB-1268	ND	75	75	ug/Kg	2	03/20/19	SC	SW8082A
<b><u>QA/QC Surrogates</u></b>								
% DCBP	68			%	2	03/20/19	SC	30 - 150 %
% DCBP (Confirmation)	67			%	2	03/20/19	SC	30 - 150 %
% TCMX	69			%	2	03/20/19	SC	30 - 150 %
% TCMX (Confirmation)	69			%	2	03/20/19	SC	30 - 150 %
<b><u>Pesticides - Soil</u></b>								
4,4' -DDD	ND	2.3		ug/Kg	2	03/21/19	CW	SW8081B
4,4' -DDE	5.8	2.3		ug/Kg	2	03/21/19	CW	SW8081B
4,4' -DDT	30	2.3		ug/Kg	2	03/21/19	CW	SW8081B
a-BHC	ND	7.5		ug/Kg	2	03/21/19	CW	SW8081B
a-Chlordane	6.6	3.8		ug/Kg	2	03/21/19	CW	SW8081B
Aldrin	ND	3.8		ug/Kg	2	03/21/19	CW	SW8081B
b-BHC	ND	7.5		ug/Kg	2	03/21/19	CW	SW8081B
Chlordane	39	38		ug/Kg	2	03/21/19	CW	SW8081B
d-BHC	ND	7.5		ug/Kg	2	03/21/19	CW	SW8081B
Dieldrin	40	3.8		ug/Kg	2	03/21/19	CW	SW8081B
Endosulfan I	ND	7.5		ug/Kg	2	03/21/19	CW	SW8081B
Endosulfan II	ND	7.5		ug/Kg	2	03/21/19	CW	SW8081B
Endosulfan sulfate	ND	7.5		ug/Kg	2	03/21/19	CW	SW8081B
Endrin	ND	7.5		ug/Kg	2	03/21/19	CW	SW8081B
Endrin aldehyde	ND	7.5		ug/Kg	2	03/21/19	CW	SW8081B
Endrin ketone	ND	7.5		ug/Kg	2	03/21/19	CW	SW8081B
g-BHC	ND	1.5		ug/Kg	2	03/21/19	CW	SW8081B
g-Chlordane	7.5	3.8		ug/Kg	2	03/21/19	CW	SW8081B
Heptachlor	ND	7.5		ug/Kg	2	03/21/19	CW	SW8081B
Heptachlor epoxide	ND	7.5		ug/Kg	2	03/21/19	CW	SW8081B
Methoxychlor	ND	38		ug/Kg	2	03/21/19	CW	SW8081B
Toxaphene	ND	150		ug/Kg	2	03/21/19	CW	SW8081B
<b><u>QA/QC Surrogates</u></b>								
% DCBP	56			%	2	03/21/19	CW	30 - 150 %
% DCBP (Confirmation)	61			%	2	03/21/19	CW	30 - 150 %
% TCMX	66			%	2	03/21/19	CW	30 - 150 %
% TCMX (Confirmation)	65			%	2	03/21/19	CW	30 - 150 %
<b><u>1,4-dioxane</u></b>								
1,4-dioxane	ND	100		ug/kg	1	03/20/19	JLI	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
<b><u>Volatiles</u></b>								
1,1,1-Trichloroethane	ND	7.4	0.74	ug/Kg	1	03/20/19	PS	SW8260C
1,1,2,2-Tetrachloroethane	ND	490	98	ug/Kg	50	03/21/19	PS	SW8260C
1,1,2-Trichloroethane	ND	7.4	1.5	ug/Kg	1	03/20/19	PS	SW8260C
1,1-Dichloroethane	ND	7.4	1.5	ug/Kg	1	03/20/19	PS	SW8260C
1,1-Dichloroethene	ND	7.4	0.74	ug/Kg	1	03/20/19	PS	SW8260C
1,2,3-Trichlorobenzene	ND	490	98	ug/Kg	50	03/21/19	PS	SW8260C
1,2,4-Trichlorobenzene	ND	490	98	ug/Kg	50	03/21/19	PS	SW8260C
1,2-Dibromo-3-chloropropane	ND	490	98	ug/Kg	50	03/21/19	PS	SW8260C
1,2-Dibromoethane	ND	7.4	0.74	ug/Kg	1	03/20/19	PS	SW8260C
1,2-Dichlorobenzene	ND	490	49	ug/Kg	50	03/21/19	PS	SW8260C
1,2-Dichloroethane	ND	7.4	0.74	ug/Kg	1	03/20/19	PS	SW8260C
1,2-Dichloropropane	ND	7.4	1.5	ug/Kg	1	03/20/19	PS	SW8260C
1,3-Dichlorobenzene	ND	490	49	ug/Kg	50	03/21/19	PS	SW8260C
1,4-Dichlorobenzene	ND	490	49	ug/Kg	50	03/21/19	PS	SW8260C
2-Hexanone	ND	37	7.4	ug/Kg	1	03/20/19	PS	SW8260C
4-Methyl-2-pentanone	ND	37	7.4	ug/Kg	1	03/20/19	PS	SW8260C
Acetone	20	JSL 29	5.7	ug/Kg	1	03/23/19	PS	SW8260C
Benzene	ND	7.4	0.74	ug/Kg	1	03/20/19	PS	SW8260C
Bromochloromethane	ND	7.4	0.74	ug/Kg	1	03/20/19	PS	SW8260C
Bromodichloromethane	ND	7.4	1.5	ug/Kg	1	03/20/19	PS	SW8260C
Bromoform	ND	7.4	1.5	ug/Kg	1	03/20/19	PS	SW8260C
Bromomethane	ND	7.4	3.0	ug/Kg	1	03/20/19	PS	SW8260C
Carbon Disulfide	ND	7.4	1.5	ug/Kg	1	03/20/19	PS	SW8260C
Carbon tetrachloride	ND	7.4	1.5	ug/Kg	1	03/20/19	PS	SW8260C
Chlorobenzene	ND	7.4	0.74	ug/Kg	1	03/20/19	PS	SW8260C
Chloroethane	ND	7.4	0.74	ug/Kg	1	03/20/19	PS	SW8260C
Chloroform	ND	7.4	0.74	ug/Kg	1	03/20/19	PS	SW8260C
Chloromethane	ND	7.4	1.5	ug/Kg	1	03/20/19	PS	SW8260C
cis-1,2-Dichloroethene	ND	7.4	0.74	ug/Kg	1	03/20/19	PS	SW8260C
cis-1,3-Dichloropropene	ND	7.4	0.74	ug/Kg	1	03/20/19	PS	SW8260C
Cyclohexane	ND	7.4	1.5	ug/Kg	1	03/20/19	PS	SW8260C
Dibromochloromethane	ND	7.4	1.5	ug/Kg	1	03/20/19	PS	SW8260C
Dichlorodifluoromethane	ND	7.4	0.74	ug/Kg	1	03/20/19	PS	SW8260C
Ethylbenzene	ND	7.4	0.74	ug/Kg	1	03/20/19	PS	SW8260C
Isopropylbenzene	ND	490	49	ug/Kg	50	03/21/19	PS	SW8260C
m&p-Xylene	ND	7.4	1.5	ug/Kg	1	03/20/19	PS	SW8260C
Methyl ethyl ketone	ND	44	7.4	ug/Kg	1	03/20/19	PS	SW8260C
Methyl t-butyl ether (MTBE)	ND	15	1.5	ug/Kg	1	03/20/19	PS	SW8260C
Methylacetate	ND	7.4	7.4	ug/Kg	1	03/20/19	PS	SW8260C
Methylcyclohexane	ND	7.4	1.5	ug/Kg	1	03/20/19	PS	SW8260C
Methylene chloride	ND	7.4	7.4	ug/Kg	1	03/20/19	PS	SW8260C
o-Xylene	ND	7.4	1.5	ug/Kg	1	03/20/19	PS	SW8260C
Styrene	ND	7.4	0.74	ug/Kg	1	03/20/19	PS	SW8260C
Tetrachloroethene	ND	7.4	1.5	ug/Kg	1	03/20/19	PS	SW8260C
Toluene	ND	7.4	0.74	ug/Kg	1	03/20/19	PS	SW8260C
Total Xylenes	ND	7.4	7.4	ug/Kg	1	03/20/19	PS	SW8260C
trans-1,2-Dichloroethene	ND	7.4	0.74	ug/Kg	1	03/20/19	PS	SW8260C
trans-1,3-Dichloropropene	ND	7.4	0.74	ug/Kg	1	03/20/19	PS	SW8260C



Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Trichloroethene	ND	7.4	0.74	ug/Kg	1	03/20/19	PS	SW8260C
Trichlorofluoromethane	ND	7.4	1.5	ug/Kg	1	03/20/19	PS	SW8260C
Trichlorotrifluoroethane	ND	7.4	0.74	ug/Kg	1	03/20/19	PS	SW8260C
Vinyl chloride	ND	7.4	0.74	ug/Kg	1	03/20/19	PS	SW8260C
<b><u>QA/QC Surrogates</u></b>								
% 1,2-dichlorobenzene-d4	95			%	1	03/20/19	PS	70 - 130 %
% Bromofluorobenzene	82			%	1	03/20/19	PS	70 - 130 %
% Dibromofluoromethane	100			%	1	03/20/19	PS	70 - 130 %
% Toluene-d8	90			%	1	03/20/19	PS	70 - 130 %
% 1,2-dichlorobenzene-d4 (50x)	96			%	50	03/21/19	PS	70 - 130 %
% Bromofluorobenzene (50x)	93			%	50	03/21/19	PS	70 - 130 %
% Dibromofluoromethane (50x)	96			%	50	03/21/19	PS	70 - 130 %
% Toluene-d8 (50x)	92			%	50	03/21/19	PS	70 - 130 %
<b><u>Volatiles</u></b>								
1,1,1,2-Tetrachloroethane	ND	30		ug/Kg	1	03/20/19	JLI	SW8260C
Acrolein	ND	7.4		ug/Kg	1	03/20/19	JLI	SW8260C
Acrylonitrile	ND	30		ug/Kg	1	03/20/19	JLI	SW8260C
Tert-butyl alcohol	ND	150		ug/Kg	1	03/20/19	JLI	SW8260C
Volatile Library Search Top 10	Completed					03/21/19	JLI	
<b><u>Semivolatiles</u></b>								
1,1-Biphenyl	ND	270	120	ug/Kg	1	03/21/19	AW	SW8270D
1,2,4,5-Tetrachlorobenzene	ND	270	130	ug/Kg	1	03/21/19	AW	SW8270D
2,3,4,6-tetrachlorophenol	ND	270	180	ug/Kg	1	03/21/19	AW	SW8270D
2,4,5-Trichlorophenol	ND	270	210	ug/Kg	1	03/21/19	AW	SW8270D
2,4,6-Trichlorophenol	ND	150	120	ug/Kg	1	03/21/19	AW	SW8270D
2,4-Dichlorophenol	ND	150	130	ug/Kg	1	03/21/19	AW	SW8270D
2,4-Dimethylphenol	ND	270	95	ug/Kg	1	03/21/19	AW	SW8270D
2,4-Dinitrophenol	ND	270	270	ug/Kg	1	03/21/19	AW	SW8270D
2,4-Dinitrotoluene	ND	150	150	ug/Kg	1	03/21/19	AW	SW8270D
2,6-Dinitrotoluene	ND	150	120	ug/Kg	1	03/21/19	AW	SW8270D
2-Chloronaphthalene	ND	270	110	ug/Kg	1	03/21/19	AW	SW8270D
2-Chlorophenol	ND	270	110	ug/Kg	1	03/21/19	AW	SW8270D
2-Methylnaphthalene	ND	270	110	ug/Kg	1	03/21/19	AW	SW8270D
2-Methylphenol (o-cresol)	ND	270	180	ug/Kg	1	03/21/19	AW	SW8270D
2-Nitroaniline	ND	270	270	ug/Kg	1	03/21/19	AW	SW8270D
2-Nitrophenol	ND	270	240	ug/Kg	1	03/21/19	AW	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	270	150	ug/Kg	1	03/21/19	AW	SW8270D
3,3'-Dichlorobenzidine	ND	150	150	ug/Kg	1	03/21/19	AW	SW8270D
3-Nitroaniline	ND	760	270	ug/Kg	1	03/21/19	AW	SW8270D
4,6-Dinitro-2-methylphenol	ND	270	270	ug/Kg	1	03/21/19	AW	SW8270D
4-Bromophenyl phenyl ether	ND	270	110	ug/Kg	1	03/21/19	AW	SW8270D
4-Chloro-3-methylphenol	ND	270	130	ug/Kg	1	03/21/19	AW	SW8270D
4-Chloroaniline	ND	760	180	ug/Kg	1	03/21/19	AW	SW8270D
4-Chlorophenyl phenyl ether	ND	270	130	ug/Kg	1	03/21/19	AW	SW8270D
4-Nitroaniline	ND	1900	130	ug/Kg	1	03/21/19	AW	SW8270D
4-Nitrophenol	ND	270	170	ug/Kg	1	03/21/19	AW	SW8270D
Acenaphthene	ND	270	120	ug/Kg	1	03/21/19	AW	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Acenaphthylene	1200	150	110	ug/Kg	1	03/21/19	AW	SW8270D
Acetophenone	ND	270	120	ug/Kg	1	03/21/19	AW	SW8270D
Anthracene	610	270	130	ug/Kg	1	03/21/19	AW	SW8270D
Atrazine	ND	270	99	ug/Kg	1	03/21/19	AW	SW8270D
Benz(a)anthracene	2100	270	130	ug/Kg	1	03/21/19	AW	SW8270D
Benzaldehyde	ND	270	110	ug/Kg	1	03/21/19	AW	SW8270D
Benzo(a)pyrene	2600	150	120	ug/Kg	1	03/21/19	AW	SW8270D
Benzo(b)fluoranthene	2900	270	130	ug/Kg	1	03/21/19	AW	SW8270D
Benzo(ghi)perylene	1700	270	120	ug/Kg	1	03/21/19	AW	SW8270D
Benzo(k)fluoranthene	2400	270	130	ug/Kg	1	03/21/19	AW	SW8270D
Benzyl butyl phthalate	ND	270	99	ug/Kg	1	03/21/19	AW	SW8270D
Bis(2-chloroethoxy)methane	ND	270	110	ug/Kg	1	03/21/19	AW	SW8270D
Bis(2-chloroethyl)ether	ND	150	100	ug/Kg	1	03/21/19	AW	SW8270D
Bis(2-chloroisopropyl)ether	ND	270	110	ug/Kg	1	03/21/19	AW	SW8270D
Bis(2-ethylhexyl)phthalate	410	270	110	ug/Kg	1	03/21/19	AW	SW8270D
Caprolactam	ND	270	270	ug/Kg	1	03/21/19	AW	SW8270D
Carbazole	230	J 270	190	ug/Kg	1	03/21/19	AW	SW8270D
Chrysene	2500	270	130	ug/Kg	1	03/21/19	AW	SW8270D
Dibenz(a,h)anthracene	570	150	120	ug/Kg	1	03/21/19	AW	SW8270D
Dibenzofuran	ND	270	110	ug/Kg	1	03/21/19	AW	SW8270D
Diethyl phthalate	ND	270	120	ug/Kg	1	03/21/19	AW	SW8270D
Dimethylphthalate	ND	270	120	ug/Kg	1	03/21/19	AW	SW8270D
Di-n-butylphthalate	ND	270	100	ug/Kg	1	03/21/19	AW	SW8270D
Di-n-octylphthalate	130	J 270	99	ug/Kg	1	03/21/19	AW	SW8270D
Fluoranthene	4300	270	120	ug/Kg	1	03/21/19	AW	SW8270D
Fluorene	150	J 270	130	ug/Kg	1	03/21/19	AW	SW8270D
Hexachlorobenzene	ND	150	110	ug/Kg	1	03/21/19	AW	SW8270D
Hexachlorobutadiene	ND	270	140	ug/Kg	1	03/21/19	AW	SW8270D
Hexachlorocyclopentadiene	ND	270	120	ug/Kg	1	03/21/19	AW	SW8270D
Hexachloroethane	ND	150	110	ug/Kg	1	03/21/19	AW	SW8270D
Indeno(1,2,3-cd)pyrene	1900	270	130	ug/Kg	1	03/21/19	AW	SW8270D
Isophorone	ND	150	110	ug/Kg	1	03/21/19	AW	SW8270D
Naphthalene	ND	270	110	ug/Kg	1	03/21/19	AW	SW8270D
Nitrobenzene	ND	150	130	ug/Kg	1	03/21/19	AW	SW8270D
N-Nitrosodimethylamine	ND	270	110	ug/Kg	1	03/21/19	AW	SW8270D
N-Nitrosodi-n-propylamine	ND	150	120	ug/Kg	1	03/21/19	AW	SW8270D
N-Nitrosodiphenylamine	ND	150	150	ug/Kg	1	03/21/19	AW	SW8270D
Pentachlorophenol	ND	270	140	ug/Kg	1	03/21/19	AW	SW8270D
Phenanthrene	1900	150	110	ug/Kg	1	03/21/19	AW	SW8270D
Phenol	ND	270	120	ug/Kg	1	03/21/19	AW	SW8270D
Pyrene	3600	270	130	ug/Kg	1	03/21/19	AW	SW8270D
<b><u>QA/QC Surrogates</u></b>								
% 2,4,6-Tribromophenol	79			%	1	03/21/19	AW	30 - 130 %
% 2-Fluorobiphenyl	75			%	1	03/21/19	AW	30 - 130 %
% 2-Fluorophenol	68			%	1	03/21/19	AW	30 - 130 %
% Nitrobenzene-d5	79			%	1	03/21/19	AW	30 - 130 %
% Phenol-d5	74			%	1	03/21/19	AW	30 - 130 %
% Terphenyl-d14	54			%	1	03/21/19	AW	30 - 130 %

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
SVOA Library Search Top 15	Completed					03/28/19	MR	

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected at RL/PQL  
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 (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate  
results(%) listed in the report are not "detected" compounds.

**Comments:**

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.

**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.

L - Acetone is reported from a Phoenix prepared low level. A negative bias is possible.

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**

**March 28, 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

March 28, 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: SW  
 Analyzed by: see "By" below

## Date

03/18/19  
 03/19/19

## Time

10:15  
 13:48

## Laboratory Data

SDG ID: GCC70170  
 Phoenix ID: CC70171

Project ID: 1840 PARK AVE MANHATTAN  
 Client ID: SB1 (16-18)

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.39	0.39		mg/Kg	1	03/20/19	CPP	SW6010D
Aluminum	3070	39		mg/Kg	10	03/20/19	CPP	SW6010D
Arsenic	1.01	0.77		mg/Kg	1	03/20/19	CPP	SW6010D
Barium	32.9	0.8		mg/Kg	1	03/20/19	EK	SW6010D
Beryllium	< 0.31	0.31		mg/Kg	1	03/20/19	CPP	SW6010D
Calcium	968	3.9		mg/Kg	1	03/20/19	CPP	SW6010D
Cadmium	< 0.39	0.39		mg/Kg	1	03/20/19	CPP	SW6010D
Cobalt	3.87	0.39		mg/Kg	1	03/20/19	CPP	SW6010D
Chromium	9.66	0.39		mg/Kg	1	03/20/19	CPP	SW6010D
Copper	20.9	0.8		mg/kg	1	03/20/19	CPP	SW6010D
Iron	9080	3.9		mg/Kg	1	03/20/19	CPP	SW6010D
Mercury	< 0.03	0.03		mg/Kg	1	03/20/19	RS	SW7471B
Potassium	569	8		mg/Kg	1	03/20/19	CPP	SW6010D
Magnesium	1280	3.9		mg/Kg	1	03/20/19	CPP	SW6010D
Manganese	250	3.9		mg/Kg	10	03/20/19	CPP	SW6010D
Sodium	135	8		mg/Kg	1	03/20/19	EK	SW6010D
Nickel	8.04	0.39		mg/Kg	1	03/20/19	CPP	SW6010D
Lead	2.3	0.8		mg/Kg	1	03/20/19	EK	SW6010D
Antimony	< 3.9	3.9		mg/Kg	1	03/20/19	CPP	SW6010D
Selenium	< 1.5	1.5		mg/Kg	1	03/20/19	CPP	SW6010D
Thallium	< 1.5	1.5		mg/Kg	1	03/20/19	CPP	SW6010D
Vanadium	13.9	0.39		mg/Kg	1	03/20/19	CPP	SW6010D
Zinc	11.0	0.8		mg/Kg	1	03/20/19	EK	SW6010D
Percent Solid	90			%		03/19/19	ML	SW846-%Solid
Soil Extraction for PCB	Completed					03/19/19	MM/V	SW3545A
Soil Extraction for Pesticides	Completed					03/19/19	MM/V	SW3545A
Soil Extraction for SVOA	Completed					03/20/19	JJ/LV	SW3545A
Mercury Digestion	Completed					03/20/19	I/I	SW7471B

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Total Metals Digest	Completed					03/19/19	B/AG	SW3050B
<b><u>Polychlorinated Biphenyls</u></b>								
PCB-1016	ND	73	73	ug/Kg	2	03/20/19	SC	SW8082A
PCB-1221	ND	73	73	ug/Kg	2	03/20/19	SC	SW8082A
PCB-1232	ND	73	73	ug/Kg	2	03/20/19	SC	SW8082A
PCB-1242	ND	73	73	ug/Kg	2	03/20/19	SC	SW8082A
PCB-1248	ND	73	73	ug/Kg	2	03/20/19	SC	SW8082A
PCB-1254	ND	73	73	ug/Kg	2	03/20/19	SC	SW8082A
PCB-1260	ND	73	73	ug/Kg	2	03/20/19	SC	SW8082A
PCB-1262	ND	73	73	ug/Kg	2	03/20/19	SC	SW8082A
PCB-1268	ND	73	73	ug/Kg	2	03/20/19	SC	SW8082A
<b><u>QA/QC Surrogates</u></b>								
% DCBP	61			%	2	03/20/19	SC	30 - 150 %
% DCBP (Confirmation)	58			%	2	03/20/19	SC	30 - 150 %
% TCMX	63			%	2	03/20/19	SC	30 - 150 %
% TCMX (Confirmation)	63			%	2	03/20/19	SC	30 - 150 %
<b><u>Pesticides - Soil</u></b>								
4,4' -DDD	ND	2.2		ug/Kg	2	03/21/19	CW	SW8081B
4,4' -DDE	ND	2.2		ug/Kg	2	03/21/19	CW	SW8081B
4,4' -DDT	ND	2.2		ug/Kg	2	03/21/19	CW	SW8081B
a-BHC	ND	7.3		ug/Kg	2	03/21/19	CW	SW8081B
a-Chlordane	ND	3.7		ug/Kg	2	03/21/19	CW	SW8081B
Aldrin	ND	3.7		ug/Kg	2	03/21/19	CW	SW8081B
b-BHC	ND	7.3		ug/Kg	2	03/21/19	CW	SW8081B
Chlordane	ND	37		ug/Kg	2	03/21/19	CW	SW8081B
d-BHC	ND	7.3		ug/Kg	2	03/21/19	CW	SW8081B
Dieldrin	ND	3.7		ug/Kg	2	03/21/19	CW	SW8081B
Endosulfan I	ND	7.3		ug/Kg	2	03/21/19	CW	SW8081B
Endosulfan II	ND	7.3		ug/Kg	2	03/21/19	CW	SW8081B
Endosulfan sulfate	ND	7.3		ug/Kg	2	03/21/19	CW	SW8081B
Endrin	ND	7.3		ug/Kg	2	03/21/19	CW	SW8081B
Endrin aldehyde	ND	7.3		ug/Kg	2	03/21/19	CW	SW8081B
Endrin ketone	ND	7.3		ug/Kg	2	03/21/19	CW	SW8081B
g-BHC	ND	1.5		ug/Kg	2	03/21/19	CW	SW8081B
g-Chlordane	ND	3.7		ug/Kg	2	03/21/19	CW	SW8081B
Heptachlor	ND	7.3		ug/Kg	2	03/21/19	CW	SW8081B
Heptachlor epoxide	ND	7.3		ug/Kg	2	03/21/19	CW	SW8081B
Methoxychlor	ND	37		ug/Kg	2	03/21/19	CW	SW8081B
Toxaphene	ND	150		ug/Kg	2	03/21/19	CW	SW8081B
<b><u>QA/QC Surrogates</u></b>								
% DCBP	58			%	2	03/21/19	CW	30 - 150 %
% DCBP (Confirmation)	51			%	2	03/21/19	CW	30 - 150 %
% TCMX	59			%	2	03/21/19	CW	30 - 150 %
% TCMX (Confirmation)	60			%	2	03/21/19	CW	30 - 150 %
<b><u>1,4-dioxane</u></b>								
1,4-dioxane	ND	74		ug/kg	1	03/20/19	JLI	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
<b><u>Volatiles</u></b>								
1,1,1-Trichloroethane	ND	4.9	0.49	ug/Kg	1	03/20/19	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	4.9	0.99	ug/Kg	1	03/20/19	JLI	SW8260C
1,1,2-Trichloroethane	ND	4.9	0.99	ug/Kg	1	03/20/19	JLI	SW8260C
1,1-Dichloroethane	ND	4.9	0.99	ug/Kg	1	03/20/19	JLI	SW8260C
1,1-Dichloroethene	ND	4.9	0.49	ug/Kg	1	03/20/19	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	4.9	0.99	ug/Kg	1	03/20/19	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	4.9	0.99	ug/Kg	1	03/20/19	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	4.9	0.99	ug/Kg	1	03/20/19	JLI	SW8260C
1,2-Dibromoethane	ND	4.9	0.49	ug/Kg	1	03/20/19	JLI	SW8260C
1,2-Dichlorobenzene	ND	4.9	0.49	ug/Kg	1	03/20/19	JLI	SW8260C
1,2-Dichloroethane	ND	4.9	0.49	ug/Kg	1	03/20/19	JLI	SW8260C
1,2-Dichloropropane	ND	4.9	0.99	ug/Kg	1	03/20/19	JLI	SW8260C
1,3-Dichlorobenzene	ND	4.9	0.49	ug/Kg	1	03/20/19	JLI	SW8260C
1,4-Dichlorobenzene	ND	4.9	0.49	ug/Kg	1	03/20/19	JLI	SW8260C
2-Hexanone	ND	25	4.9	ug/Kg	1	03/20/19	JLI	SW8260C
4-Methyl-2-pentanone	ND	25	4.9	ug/Kg	1	03/20/19	JLI	SW8260C
Acetone	40	S 25	4.9	ug/Kg	1	03/20/19	JLI	SW8260C
Benzene	ND	4.9	0.49	ug/Kg	1	03/20/19	JLI	SW8260C
Bromochloromethane	ND	4.9	0.49	ug/Kg	1	03/20/19	JLI	SW8260C
Bromodichloromethane	ND	4.9	0.99	ug/Kg	1	03/20/19	JLI	SW8260C
Bromoform	ND	4.9	0.99	ug/Kg	1	03/20/19	JLI	SW8260C
Bromomethane	ND	4.9	2.0	ug/Kg	1	03/20/19	JLI	SW8260C
Carbon Disulfide	ND	4.9	0.99	ug/Kg	1	03/20/19	JLI	SW8260C
Carbon tetrachloride	ND	4.9	0.99	ug/Kg	1	03/20/19	JLI	SW8260C
Chlorobenzene	ND	4.9	0.49	ug/Kg	1	03/20/19	JLI	SW8260C
Chloroethane	ND	4.9	0.49	ug/Kg	1	03/20/19	JLI	SW8260C
Chloroform	ND	4.9	0.49	ug/Kg	1	03/20/19	JLI	SW8260C
Chloromethane	ND	4.9	0.99	ug/Kg	1	03/20/19	JLI	SW8260C
cis-1,2-Dichloroethene	ND	4.9	0.49	ug/Kg	1	03/20/19	JLI	SW8260C
cis-1,3-Dichloropropene	ND	4.9	0.49	ug/Kg	1	03/20/19	JLI	SW8260C
Cyclohexane	ND	4.9	0.99	ug/Kg	1	03/20/19	JLI	SW8260C
Dibromochloromethane	ND	4.9	0.99	ug/Kg	1	03/20/19	JLI	SW8260C
Dichlorodifluoromethane	ND	4.9	0.49	ug/Kg	1	03/20/19	JLI	SW8260C
Ethylbenzene	ND	4.9	0.49	ug/Kg	1	03/20/19	JLI	SW8260C
Isopropylbenzene	ND	4.9	0.49	ug/Kg	1	03/20/19	JLI	SW8260C
m&p-Xylene	ND	4.9	0.99	ug/Kg	1	03/20/19	JLI	SW8260C
Methyl ethyl ketone	ND	30	4.9	ug/Kg	1	03/20/19	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	9.9	0.99	ug/Kg	1	03/20/19	JLI	SW8260C
Methylacetate	ND	4.9	4.9	ug/Kg	1	03/20/19	JLI	SW8260C
Methylcyclohexane	ND	4.9	0.99	ug/Kg	1	03/20/19	JLI	SW8260C
Methylene chloride	ND	4.9	4.9	ug/Kg	1	03/20/19	JLI	SW8260C
o-Xylene	ND	4.9	0.99	ug/Kg	1	03/20/19	JLI	SW8260C
Styrene	ND	4.9	0.49	ug/Kg	1	03/20/19	JLI	SW8260C
Tetrachloroethene	ND	4.9	0.99	ug/Kg	1	03/20/19	JLI	SW8260C
Toluene	ND	4.9	0.49	ug/Kg	1	03/20/19	JLI	SW8260C
Total Xylenes	ND	4.9	4.9	ug/Kg	1	03/20/19	JLI	SW8260C
trans-1,2-Dichloroethene	ND	4.9	0.49	ug/Kg	1	03/20/19	JLI	SW8260C
trans-1,3-Dichloropropene	ND	4.9	0.49	ug/Kg	1	03/20/19	JLI	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Trichloroethene	ND	4.9	0.49	ug/Kg	1	03/20/19	JLI	SW8260C
Trichlorofluoromethane	ND	4.9	0.99	ug/Kg	1	03/20/19	JLI	SW8260C
Trichlorotrifluoroethane	ND	4.9	0.49	ug/Kg	1	03/20/19	JLI	SW8260C
Vinyl chloride	ND	4.9	0.49	ug/Kg	1	03/20/19	JLI	SW8260C
<b><u>QA/QC Surrogates</u></b>								
% 1,2-dichlorobenzene-d4	100			%	1	03/20/19	JLI	70 - 130 %
% Bromofluorobenzene	95			%	1	03/20/19	JLI	70 - 130 %
% Dibromofluoromethane	102			%	1	03/20/19	JLI	70 - 130 %
% Toluene-d8	95			%	1	03/20/19	JLI	70 - 130 %
<b><u>Volatiles</u></b>								
1,1,1,2-Tetrachloroethane	ND	20		ug/Kg	1	03/20/19	JLI	SW8260C
Acrolein	ND	4.9		ug/Kg	1	03/20/19	JLI	SW8260C
Acrylonitrile	ND	20		ug/Kg	1	03/20/19	JLI	SW8260C
Tert-butyl alcohol	ND	99		ug/Kg	1	03/20/19	JLI	SW8260C
Volatile Library Search Top 10	Completed					03/21/19	JLI	
<b><u>Semivolatiles</u></b>								
1,1-Biphenyl	ND	260	110	ug/Kg	1	03/21/19	WB	SW8270D
1,2,4,5-Tetrachlorobenzene	ND	260	130	ug/Kg	1	03/21/19	WB	SW8270D
2,3,4,6-tetrachlorophenol	ND	260	170	ug/Kg	1	03/21/19	WB	SW8270D
2,4,5-Trichlorophenol	ND	260	200	ug/Kg	1	03/21/19	WB	SW8270D
2,4,6-Trichlorophenol	ND	150	120	ug/Kg	1	03/21/19	WB	SW8270D
2,4-Dichlorophenol	ND	150	130	ug/Kg	1	03/21/19	WB	SW8270D
2,4-Dimethylphenol	ND	260	91	ug/Kg	1	03/21/19	WB	SW8270D
2,4-Dinitrophenol	ND	260	260	ug/Kg	1	03/21/19	WB	SW8270D
2,4-Dinitrotoluene	ND	150	140	ug/Kg	1	03/21/19	WB	SW8270D
2,6-Dinitrotoluene	ND	150	120	ug/Kg	1	03/21/19	WB	SW8270D
2-Chloronaphthalene	ND	260	100	ug/Kg	1	03/21/19	WB	SW8270D
2-Chlorophenol	ND	260	100	ug/Kg	1	03/21/19	WB	SW8270D
2-Methylnaphthalene	ND	260	110	ug/Kg	1	03/21/19	WB	SW8270D
2-Methylphenol (o-cresol)	ND	260	170	ug/Kg	1	03/21/19	WB	SW8270D
2-Nitroaniline	ND	260	260	ug/Kg	1	03/21/19	WB	SW8270D
2-Nitrophenol	ND	260	230	ug/Kg	1	03/21/19	WB	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	260	140	ug/Kg	1	03/21/19	WB	SW8270D
3,3'-Dichlorobenzidine	ND	150	150	ug/Kg	1	03/21/19	WB	SW8270D
3-Nitroaniline	ND	730	260	ug/Kg	1	03/21/19	WB	SW8270D
4,6-Dinitro-2-methylphenol	ND	260	260	ug/Kg	1	03/21/19	WB	SW8270D
4-Bromophenyl phenyl ether	ND	260	110	ug/Kg	1	03/21/19	WB	SW8270D
4-Chloro-3-methylphenol	ND	260	130	ug/Kg	1	03/21/19	WB	SW8270D
4-Chloroaniline	ND	730	170	ug/Kg	1	03/21/19	WB	SW8270D
4-Chlorophenyl phenyl ether	ND	260	120	ug/Kg	1	03/21/19	WB	SW8270D
4-Nitroaniline	ND	1800	120	ug/Kg	1	03/21/19	WB	SW8270D
4-Nitrophenol	ND	260	160	ug/Kg	1	03/21/19	WB	SW8270D
Acenaphthene	ND	260	110	ug/Kg	1	03/21/19	WB	SW8270D
Acenaphthylene	ND	150	100	ug/Kg	1	03/21/19	WB	SW8270D
Acetophenone	ND	260	110	ug/Kg	1	03/21/19	WB	SW8270D
Anthracene	ND	260	120	ug/Kg	1	03/21/19	WB	SW8270D
Atrazine	ND	260	95	ug/Kg	1	03/21/19	WB	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Benz(a)anthracene	ND	260	120	ug/Kg	1	03/21/19	WB	SW8270D
Benzaldehyde	ND	260	110	ug/Kg	1	03/21/19	WB	SW8270D
Benzo(a)pyrene	ND	150	120	ug/Kg	1	03/21/19	WB	SW8270D
Benzo(b)fluoranthene	ND	260	120	ug/Kg	1	03/21/19	WB	SW8270D
Benzo(ghi)perylene	ND	260	120	ug/Kg	1	03/21/19	WB	SW8270D
Benzo(k)fluoranthene	ND	260	120	ug/Kg	1	03/21/19	WB	SW8270D
Benzyl butyl phthalate	ND	260	94	ug/Kg	1	03/21/19	WB	SW8270D
Bis(2-chloroethoxy)methane	ND	260	100	ug/Kg	1	03/21/19	WB	SW8270D
Bis(2-chloroethyl)ether	ND	150	99	ug/Kg	1	03/21/19	WB	SW8270D
Bis(2-chloroisopropyl)ether	ND	260	100	ug/Kg	1	03/21/19	WB	SW8270D
Bis(2-ethylhexyl)phthalate	ND	260	110	ug/Kg	1	03/21/19	WB	SW8270D
Caprolactam	ND	260	260	ug/Kg	1	03/21/19	WB	SW8270D
Carbazole	ND	260	180	ug/Kg	1	03/21/19	WB	SW8270D
Chrysene	ND	260	120	ug/Kg	1	03/21/19	WB	SW8270D
Dibenz(a,h)anthracene	ND	150	120	ug/Kg	1	03/21/19	WB	SW8270D
Dibenzofuran	ND	260	110	ug/Kg	1	03/21/19	WB	SW8270D
Diethyl phthalate	ND	260	120	ug/Kg	1	03/21/19	WB	SW8270D
Dimethylphthalate	ND	260	110	ug/Kg	1	03/21/19	WB	SW8270D
Di-n-butylphthalate	ND	260	97	ug/Kg	1	03/21/19	WB	SW8270D
Di-n-octylphthalate	ND	260	94	ug/Kg	1	03/21/19	WB	SW8270D
Fluoranthene	ND	260	120	ug/Kg	1	03/21/19	WB	SW8270D
Fluorene	ND	260	120	ug/Kg	1	03/21/19	WB	SW8270D
Hexachlorobenzene	ND	150	110	ug/Kg	1	03/21/19	WB	SW8270D
Hexachlorobutadiene	ND	260	130	ug/Kg	1	03/21/19	WB	SW8270D
Hexachlorocyclopentadiene	ND	260	110	ug/Kg	1	03/21/19	WB	SW8270D
Hexachloroethane	ND	150	110	ug/Kg	1	03/21/19	WB	SW8270D
Indeno(1,2,3-cd)pyrene	ND	260	120	ug/Kg	1	03/21/19	WB	SW8270D
Isophorone	ND	150	100	ug/Kg	1	03/21/19	WB	SW8270D
Naphthalene	ND	260	110	ug/Kg	1	03/21/19	WB	SW8270D
Nitrobenzene	ND	150	130	ug/Kg	1	03/21/19	WB	SW8270D
N-Nitrosodimethylamine	ND	260	100	ug/Kg	1	03/21/19	WB	SW8270D
N-Nitrosodi-n-propylamine	ND	150	120	ug/Kg	1	03/21/19	WB	SW8270D
N-Nitrosodiphenylamine	ND	150	140	ug/Kg	1	03/21/19	WB	SW8270D
Pentachlorophenol	ND	260	140	ug/Kg	1	03/21/19	WB	SW8270D
Phenanthrene	ND	150	100	ug/Kg	1	03/21/19	WB	SW8270D
Phenol	ND	260	120	ug/Kg	1	03/21/19	WB	SW8270D
Pyrene	ND	260	130	ug/Kg	1	03/21/19	WB	SW8270D
<b>QA/QC Surrogates</b>								
% 2,4,6-Tribromophenol	75			%	1	03/21/19	WB	30 - 130 %
% 2-Fluorobiphenyl	57			%	1	03/21/19	WB	30 - 130 %
% 2-Fluorophenol	46			%	1	03/21/19	WB	30 - 130 %
% Nitrobenzene-d5	50			%	1	03/21/19	WB	30 - 130 %
% Phenol-d5	52			%	1	03/21/19	WB	30 - 130 %
% Terphenyl-d14	62			%	1	03/21/19	WB	30 - 130 %
SVOA Library Search Top 15	Completed					03/21/19	MR	



Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
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RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected at RL/PQL  
BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit  
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.

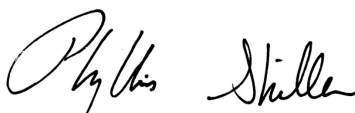
**Comments:**

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**

**March 28, 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

March 28, 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: SW  
 Analyzed by: see "By" below

## Date

03/18/19  
 03/19/19

## Time

9:15  
 13:48

## Laboratory Data

SDG ID: GCC70170  
 Phoenix ID: CC70172

Project ID: 1840 PARK AVE MANHATTAN  
 Client ID: SB2 (0-2)

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.34	0.34		mg/Kg	1	03/20/19	CPP	SW6010D
Aluminum	17900	34		mg/Kg	10	03/20/19	CPP	SW6010D
Arsenic	3.24	0.68		mg/Kg	1	03/20/19	CPP	SW6010D
Barium	73.9	0.7		mg/Kg	1	03/20/19	EK	SW6010D
Beryllium	0.42	0.27		mg/Kg	1	03/20/19	CPP	SW6010D
Calcium	9150	3.4		mg/Kg	1	03/20/19	CPP	SW6010D
Cadmium	1.22	0.34		mg/Kg	1	03/20/19	CPP	SW6010D
Cobalt	11.7	0.34		mg/Kg	1	03/20/19	CPP	SW6010D
Chromium	23.5	0.34		mg/Kg	1	03/20/19	CPP	SW6010D
Copper	137	6.8		mg/kg	10	03/20/19	CPP	SW6010D
Iron	21900	34		mg/Kg	10	03/20/19	CPP	SW6010D
Mercury	0.19	0.07		mg/Kg	1	03/20/19	RS	SW7471B
Potassium	1060	7		mg/Kg	1	03/20/19	CPP	SW6010D
Magnesium	5440	34		mg/Kg	10	03/20/19	CPP	SW6010D
Manganese	259	3.4		mg/Kg	10	03/20/19	CPP	SW6010D
Sodium	1010	7		mg/Kg	1	03/20/19	EK	SW6010D
Nickel	31.8	0.34		mg/Kg	1	03/20/19	CPP	SW6010D
Lead	122	0.7		mg/Kg	1	03/20/19	EK	SW6010D
Antimony	< 3.4	3.4		mg/Kg	1	03/20/19	CPP	SW6010D
Selenium	< 1.4	1.4		mg/Kg	1	03/20/19	CPP	SW6010D
Thallium	< 1.4	1.4		mg/Kg	1	03/20/19	CPP	SW6010D
Vanadium	46.7	0.34		mg/Kg	1	03/20/19	CPP	SW6010D
Zinc	110	0.7		mg/Kg	1	03/20/19	EK	SW6010D
Percent Solid	87			%		03/19/19	ML	SW846-%Solid
Soil Extraction for PCB	Completed					03/19/19	MM/V	SW3545A
Soil Extraction for Pesticides	Completed					03/19/19	MM/V	SW3545A
Soil Extraction for SVOA	Completed					03/19/19	JJ/LV	SW3545A
Mercury Digestion	Completed					03/20/19	I/I	SW7471B

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Total Metals Digest	Completed					03/19/19	B/AG	SW3050B
<b><u>Polychlorinated Biphenyls</u></b>								
PCB-1016	ND	76	76	ug/Kg	2	03/20/19	SC	SW8082A
PCB-1221	ND	76	76	ug/Kg	2	03/20/19	SC	SW8082A
PCB-1232	ND	76	76	ug/Kg	2	03/20/19	SC	SW8082A
PCB-1242	ND	76	76	ug/Kg	2	03/20/19	SC	SW8082A
PCB-1248	ND	76	76	ug/Kg	2	03/20/19	SC	SW8082A
PCB-1254	ND	76	76	ug/Kg	2	03/20/19	SC	SW8082A
PCB-1260	ND	76	76	ug/Kg	2	03/20/19	SC	SW8082A
PCB-1262	ND	76	76	ug/Kg	2	03/20/19	SC	SW8082A
PCB-1268	ND	76	76	ug/Kg	2	03/20/19	SC	SW8082A
<b><u>QA/QC Surrogates</u></b>								
% DCBP	69			%	2	03/20/19	SC	30 - 150 %
% DCBP (Confirmation)	67			%	2	03/20/19	SC	30 - 150 %
% TCMX	69			%	2	03/20/19	SC	30 - 150 %
% TCMX (Confirmation)	67			%	2	03/20/19	SC	30 - 150 %
<b><u>Pesticides - Soil</u></b>								
4,4' -DDD	15	2.3		ug/Kg	2	03/21/19	CW	SW8081B
4,4' -DDE	4.6	2.3		ug/Kg	2	03/21/19	CW	SW8081B
4,4' -DDT	ND	2.3		ug/Kg	2	03/21/19	CW	SW8081B
a-BHC	ND	7.6		ug/Kg	2	03/21/19	CW	SW8081B
a-Chlordane	ND	3.8		ug/Kg	2	03/21/19	CW	SW8081B
Aldrin	ND	3.8		ug/Kg	2	03/21/19	CW	SW8081B
b-BHC	ND	7.6		ug/Kg	2	03/21/19	CW	SW8081B
Chlordane	ND	38		ug/Kg	2	03/21/19	CW	SW8081B
d-BHC	ND	7.6		ug/Kg	2	03/21/19	CW	SW8081B
Dieldrin	ND	3.8		ug/Kg	2	03/21/19	CW	SW8081B
Endosulfan I	ND	7.6		ug/Kg	2	03/21/19	CW	SW8081B
Endosulfan II	ND	7.6		ug/Kg	2	03/21/19	CW	SW8081B
Endosulfan sulfate	ND	7.6		ug/Kg	2	03/21/19	CW	SW8081B
Endrin	ND	7.6		ug/Kg	2	03/21/19	CW	SW8081B
Endrin aldehyde	ND	7.6		ug/Kg	2	03/21/19	CW	SW8081B
Endrin ketone	ND	7.6		ug/Kg	2	03/21/19	CW	SW8081B
g-BHC	ND	1.5		ug/Kg	2	03/21/19	CW	SW8081B
g-Chlordane	ND	3.8		ug/Kg	2	03/21/19	CW	SW8081B
Heptachlor	ND	7.6		ug/Kg	2	03/21/19	CW	SW8081B
Heptachlor epoxide	ND	7.6		ug/Kg	2	03/21/19	CW	SW8081B
Methoxychlor	ND	38		ug/Kg	2	03/21/19	CW	SW8081B
Toxaphene	ND	150		ug/Kg	2	03/21/19	CW	SW8081B
<b><u>QA/QC Surrogates</u></b>								
% DCBP	60			%	2	03/21/19	CW	30 - 150 %
% DCBP (Confirmation)	50			%	2	03/21/19	CW	30 - 150 %
% TCMX	63			%	2	03/21/19	CW	30 - 150 %
% TCMX (Confirmation)	56			%	2	03/21/19	CW	30 - 150 %
<b><u>1,4-dioxane</u></b>								
1,4-dioxane	ND	87		ug/kg	1	03/20/19	JLI	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
<b><u>Volatiles</u></b>								
1,1,1-Trichloroethane	ND	5.8	0.58	ug/Kg	1	03/20/19	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	5.8	1.2	ug/Kg	1	03/20/19	JLI	SW8260C
1,1,2-Trichloroethane	ND	5.8	1.2	ug/Kg	1	03/20/19	JLI	SW8260C
1,1-Dichloroethane	ND	5.8	1.2	ug/Kg	1	03/20/19	JLI	SW8260C
1,1-Dichloroethene	ND	5.8	0.58	ug/Kg	1	03/20/19	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	5.8	1.2	ug/Kg	1	03/20/19	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	5.8	1.2	ug/Kg	1	03/20/19	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	5.8	1.2	ug/Kg	1	03/20/19	JLI	SW8260C
1,2-Dibromoethane	ND	5.8	0.58	ug/Kg	1	03/20/19	JLI	SW8260C
1,2-Dichlorobenzene	ND	5.8	0.58	ug/Kg	1	03/20/19	JLI	SW8260C
1,2-Dichloroethane	ND	5.8	0.58	ug/Kg	1	03/20/19	JLI	SW8260C
1,2-Dichloropropane	ND	5.8	1.2	ug/Kg	1	03/20/19	JLI	SW8260C
1,3-Dichlorobenzene	ND	5.8	0.58	ug/Kg	1	03/20/19	JLI	SW8260C
1,4-Dichlorobenzene	ND	5.8	0.58	ug/Kg	1	03/20/19	JLI	SW8260C
2-Hexanone	ND	29	5.8	ug/Kg	1	03/20/19	JLI	SW8260C
4-Methyl-2-pentanone	ND	29	5.8	ug/Kg	1	03/20/19	JLI	SW8260C
Acetone	45	S 29	5.8	ug/Kg	1	03/20/19	JLI	SW8260C
Benzene	ND	5.8	0.58	ug/Kg	1	03/20/19	JLI	SW8260C
Bromochloromethane	ND	5.8	0.58	ug/Kg	1	03/20/19	JLI	SW8260C
Bromodichloromethane	ND	5.8	1.2	ug/Kg	1	03/20/19	JLI	SW8260C
Bromoform	ND	5.8	1.2	ug/Kg	1	03/20/19	JLI	SW8260C
Bromomethane	ND	5.8	2.3	ug/Kg	1	03/20/19	JLI	SW8260C
Carbon Disulfide	ND	5.8	1.2	ug/Kg	1	03/20/19	JLI	SW8260C
Carbon tetrachloride	ND	5.8	1.2	ug/Kg	1	03/20/19	JLI	SW8260C
Chlorobenzene	ND	5.8	0.58	ug/Kg	1	03/20/19	JLI	SW8260C
Chloroethane	ND	5.8	0.58	ug/Kg	1	03/20/19	JLI	SW8260C
Chloroform	ND	5.8	0.58	ug/Kg	1	03/20/19	JLI	SW8260C
Chloromethane	ND	5.8	1.2	ug/Kg	1	03/20/19	JLI	SW8260C
cis-1,2-Dichloroethene	ND	5.8	0.58	ug/Kg	1	03/20/19	JLI	SW8260C
cis-1,3-Dichloropropene	ND	5.8	0.58	ug/Kg	1	03/20/19	JLI	SW8260C
Cyclohexane	ND	5.8	1.2	ug/Kg	1	03/20/19	JLI	SW8260C
Dibromochloromethane	ND	5.8	1.2	ug/Kg	1	03/20/19	JLI	SW8260C
Dichlorodifluoromethane	ND	5.8	0.58	ug/Kg	1	03/20/19	JLI	SW8260C
Ethylbenzene	ND	5.8	0.58	ug/Kg	1	03/20/19	JLI	SW8260C
Isopropylbenzene	ND	5.8	0.58	ug/Kg	1	03/20/19	JLI	SW8260C
m&p-Xylene	ND	5.8	1.2	ug/Kg	1	03/20/19	JLI	SW8260C
Methyl ethyl ketone	ND	35	5.8	ug/Kg	1	03/20/19	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	12	1.2	ug/Kg	1	03/20/19	JLI	SW8260C
Methylacetate	ND	5.8	5.8	ug/Kg	1	03/20/19	JLI	SW8260C
Methylcyclohexane	ND	5.8	1.2	ug/Kg	1	03/20/19	JLI	SW8260C
Methylene chloride	ND	5.8	5.8	ug/Kg	1	03/20/19	JLI	SW8260C
o-Xylene	ND	5.8	1.2	ug/Kg	1	03/20/19	JLI	SW8260C
Styrene	ND	5.8	0.58	ug/Kg	1	03/20/19	JLI	SW8260C
Tetrachloroethene	ND	5.8	1.2	ug/Kg	1	03/20/19	JLI	SW8260C
Toluene	ND	5.8	0.58	ug/Kg	1	03/20/19	JLI	SW8260C
Total Xylenes	ND	5.8	5.8	ug/Kg	1	03/20/19	JLI	SW8260C
trans-1,2-Dichloroethene	ND	5.8	0.58	ug/Kg	1	03/20/19	JLI	SW8260C
trans-1,3-Dichloropropene	ND	5.8	0.58	ug/Kg	1	03/20/19	JLI	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Trichloroethene	ND	5.8	0.58	ug/Kg	1	03/20/19	JLI	SW8260C
Trichlorofluoromethane	ND	5.8	1.2	ug/Kg	1	03/20/19	JLI	SW8260C
Trichlorotrifluoroethane	ND	5.8	0.58	ug/Kg	1	03/20/19	JLI	SW8260C
Vinyl chloride	ND	5.8	0.58	ug/Kg	1	03/20/19	JLI	SW8260C
<b><u>QA/QC Surrogates</u></b>								
% 1,2-dichlorobenzene-d4	97			%	1	03/20/19	JLI	70 - 130 %
% Bromofluorobenzene	93			%	1	03/20/19	JLI	70 - 130 %
% Dibromofluoromethane	102			%	1	03/20/19	JLI	70 - 130 %
% Toluene-d8	94			%	1	03/20/19	JLI	70 - 130 %
<b><u>Volatiles</u></b>								
1,1,1,2-Tetrachloroethane	ND	23		ug/Kg	1	03/20/19	JLI	SW8260C
Acrolein	ND	5.8		ug/Kg	1	03/20/19	JLI	SW8260C
Acrylonitrile	ND	23		ug/Kg	1	03/20/19	JLI	SW8260C
Tert-butyl alcohol	ND	120		ug/Kg	1	03/20/19	JLI	SW8260C
Volatile Library Search Top 10	Completed					03/21/19	JLI	
<b><u>Semivolatiles</u></b>								
1,1-Biphenyl	ND	260	120	ug/Kg	1	03/21/19	AW	SW8270D
1,2,4,5-Tetrachlorobenzene	ND	260	130	ug/Kg	1	03/21/19	AW	SW8270D
2,3,4,6-tetrachlorophenol	ND	260	180	ug/Kg	1	03/21/19	AW	SW8270D
2,4,5-Trichlorophenol	ND	260	210	ug/Kg	1	03/21/19	AW	SW8270D
2,4,6-Trichlorophenol	ND	150	120	ug/Kg	1	03/21/19	AW	SW8270D
2,4-Dichlorophenol	ND	150	130	ug/Kg	1	03/21/19	AW	SW8270D
2,4-Dimethylphenol	ND	260	94	ug/Kg	1	03/21/19	AW	SW8270D
2,4-Dinitrophenol	ND	260	260	ug/Kg	1	03/21/19	AW	SW8270D
2,4-Dinitrotoluene	ND	150	150	ug/Kg	1	03/21/19	AW	SW8270D
2,6-Dinitrotoluene	ND	150	120	ug/Kg	1	03/21/19	AW	SW8270D
2-Chloronaphthalene	ND	260	110	ug/Kg	1	03/21/19	AW	SW8270D
2-Chlorophenol	ND	260	110	ug/Kg	1	03/21/19	AW	SW8270D
2-Methylnaphthalene	ND	260	110	ug/Kg	1	03/21/19	AW	SW8270D
2-Methylphenol (o-cresol)	ND	260	180	ug/Kg	1	03/21/19	AW	SW8270D
2-Nitroaniline	ND	260	260	ug/Kg	1	03/21/19	AW	SW8270D
2-Nitrophenol	ND	260	240	ug/Kg	1	03/21/19	AW	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	260	150	ug/Kg	1	03/21/19	AW	SW8270D
3,3'-Dichlorobenzidine	ND	150	150	ug/Kg	1	03/21/19	AW	SW8270D
3-Nitroaniline	ND	750	260	ug/Kg	1	03/21/19	AW	SW8270D
4,6-Dinitro-2-methylphenol	ND	260	260	ug/Kg	1	03/21/19	AW	SW8270D
4-Bromophenyl phenyl ether	ND	260	110	ug/Kg	1	03/21/19	AW	SW8270D
4-Chloro-3-methylphenol	ND	260	130	ug/Kg	1	03/21/19	AW	SW8270D
4-Chloroaniline	ND	750	180	ug/Kg	1	03/21/19	AW	SW8270D
4-Chlorophenyl phenyl ether	ND	260	130	ug/Kg	1	03/21/19	AW	SW8270D
4-Nitroaniline	ND	1900	130	ug/Kg	1	03/21/19	AW	SW8270D
4-Nitrophenol	ND	260	170	ug/Kg	1	03/21/19	AW	SW8270D
Acenaphthene	ND	260	110	ug/Kg	1	03/21/19	AW	SW8270D
Acenaphthylene	ND	150	110	ug/Kg	1	03/21/19	AW	SW8270D
Acetophenone	ND	260	120	ug/Kg	1	03/21/19	AW	SW8270D
Anthracene	ND	260	120	ug/Kg	1	03/21/19	AW	SW8270D
Atrazine	ND	260	98	ug/Kg	1	03/21/19	AW	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Benz(a)anthracene	ND	260	130	ug/Kg	1	03/21/19	AW	SW8270D
Benzaldehyde	ND	260	110	ug/Kg	1	03/21/19	AW	SW8270D
Benzo(a)pyrene	ND	150	120	ug/Kg	1	03/21/19	AW	SW8270D
Benzo(b)fluoranthene	ND	260	130	ug/Kg	1	03/21/19	AW	SW8270D
Benzo(ghi)perylene	ND	260	120	ug/Kg	1	03/21/19	AW	SW8270D
Benzo(k)fluoranthene	ND	260	130	ug/Kg	1	03/21/19	AW	SW8270D
Benzyl butyl phthalate	ND	260	97	ug/Kg	1	03/21/19	AW	SW8270D
Bis(2-chloroethoxy)methane	ND	260	100	ug/Kg	1	03/21/19	AW	SW8270D
Bis(2-chloroethyl)ether	ND	150	100	ug/Kg	1	03/21/19	AW	SW8270D
Bis(2-chloroisopropyl)ether	ND	260	100	ug/Kg	1	03/21/19	AW	SW8270D
Bis(2-ethylhexyl)phthalate	ND	260	110	ug/Kg	1	03/21/19	AW	SW8270D
Caprolactam	ND	260	260	ug/Kg	1	03/21/19	AW	SW8270D
Carbazole	ND	260	190	ug/Kg	1	03/21/19	AW	SW8270D
Chrysene	ND	260	130	ug/Kg	1	03/21/19	AW	SW8270D
Dibenz(a,h)anthracene	ND	150	120	ug/Kg	1	03/21/19	AW	SW8270D
Dibenzofuran	ND	260	110	ug/Kg	1	03/21/19	AW	SW8270D
Diethyl phthalate	ND	260	120	ug/Kg	1	03/21/19	AW	SW8270D
Dimethylphthalate	ND	260	120	ug/Kg	1	03/21/19	AW	SW8270D
Di-n-butylphthalate	ND	260	100	ug/Kg	1	03/21/19	AW	SW8270D
Di-n-octylphthalate	ND	260	97	ug/Kg	1	03/21/19	AW	SW8270D
Fluoranthene	ND	260	120	ug/Kg	1	03/21/19	AW	SW8270D
Fluorene	ND	260	120	ug/Kg	1	03/21/19	AW	SW8270D
Hexachlorobenzene	ND	150	110	ug/Kg	1	03/21/19	AW	SW8270D
Hexachlorobutadiene	ND	260	140	ug/Kg	1	03/21/19	AW	SW8270D
Hexachlorocyclopentadiene	ND	260	120	ug/Kg	1	03/21/19	AW	SW8270D
Hexachloroethane	ND	150	110	ug/Kg	1	03/21/19	AW	SW8270D
Indeno(1,2,3-cd)pyrene	ND	260	130	ug/Kg	1	03/21/19	AW	SW8270D
Isophorone	ND	150	110	ug/Kg	1	03/21/19	AW	SW8270D
Naphthalene	ND	260	110	ug/Kg	1	03/21/19	AW	SW8270D
Nitrobenzene	ND	150	130	ug/Kg	1	03/21/19	AW	SW8270D
N-Nitrosodimethylamine	ND	260	110	ug/Kg	1	03/21/19	AW	SW8270D
N-Nitrosodi-n-propylamine	ND	150	120	ug/Kg	1	03/21/19	AW	SW8270D
N-Nitrosodiphenylamine	ND	150	140	ug/Kg	1	03/21/19	AW	SW8270D
Pentachlorophenol	ND	260	140	ug/Kg	1	03/21/19	AW	SW8270D
Phenanthrene	ND	150	110	ug/Kg	1	03/21/19	AW	SW8270D
Phenol	ND	260	120	ug/Kg	1	03/21/19	AW	SW8270D
Pyrene	ND	260	130	ug/Kg	1	03/21/19	AW	SW8270D
<b>QA/QC Surrogates</b>								
% 2,4,6-Tribromophenol	76			%	1	03/21/19	AW	30 - 130 %
% 2-Fluorobiphenyl	71			%	1	03/21/19	AW	30 - 130 %
% 2-Fluorophenol	57			%	1	03/21/19	AW	30 - 130 %
% Nitrobenzene-d5	60			%	1	03/21/19	AW	30 - 130 %
% Phenol-d5	58			%	1	03/21/19	AW	30 - 130 %
% Terphenyl-d14	51			%	1	03/21/19	AW	30 - 130 %
SVOA Library Search Top 15	Completed					03/21/19	MR	

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
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RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected at RL/PQL  
BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit  
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

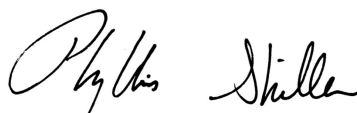
**Comments:**

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**

**March 28, 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

March 28, 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: SW  
 Analyzed by: see "By" below

## Date

03/18/19  
 03/19/19

## Time

10:54  
 13:48

## Laboratory Data

SDG ID: GCC70170  
 Phoenix ID: CC70173

Project ID: 1840 PARK AVE MANHATTAN  
 Client ID: SB2 (16-18)

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.36	0.36		mg/Kg	1	03/20/19	CPP	SW6010D
Aluminum	4760	36		mg/Kg	10	03/20/19	CPP	SW6010D
Arsenic	1.19	0.71		mg/Kg	1	03/20/19	CPP	SW6010D
Barium	64.7	0.7		mg/Kg	1	03/20/19	EK	SW6010D
Beryllium	0.32	0.28		mg/Kg	1	03/20/19	CPP	SW6010D
Calcium	1450	3.6		mg/Kg	1	03/20/19	CPP	SW6010D
Cadmium	< 0.36	0.36		mg/Kg	1	03/20/19	CPP	SW6010D
Cobalt	5.14	0.36		mg/Kg	1	03/20/19	CPP	SW6010D
Chromium	13.5	0.36		mg/Kg	1	03/20/19	CPP	SW6010D
Copper	25.0	0.7		mg/kg	1	03/20/19	CPP	SW6010D
Iron	10200	36		mg/Kg	10	03/20/19	CPP	SW6010D
Mercury	< 0.03	0.03		mg/Kg	1	03/20/19	RS	SW7471B
Potassium	820	7		mg/Kg	1	03/20/19	CPP	SW6010D
Magnesium	2020	3.6		mg/Kg	1	03/20/19	CPP	SW6010D
Manganese	411	3.6		mg/Kg	10	03/20/19	CPP	SW6010D
Sodium	259	7		mg/Kg	1	03/20/19	EK	SW6010D
Nickel	11.4	0.36		mg/Kg	1	03/20/19	CPP	SW6010D
Lead	4.4	0.7		mg/Kg	1	03/20/19	EK	SW6010D
Antimony	< 3.6	3.6		mg/Kg	1	03/20/19	CPP	SW6010D
Selenium	< 1.4	1.4		mg/Kg	1	03/20/19	CPP	SW6010D
Thallium	< 1.4	1.4		mg/Kg	1	03/20/19	CPP	SW6010D
Vanadium	17.2	0.36		mg/Kg	1	03/20/19	CPP	SW6010D
Zinc	18.1	0.7		mg/Kg	1	03/20/19	EK	SW6010D
Percent Solid	89			%		03/19/19	ML	SW846-%Solid
Soil Extraction for PCB	Completed					03/19/19	MM/V	SW3545A
Soil Extraction for Pesticides	Completed					03/19/19	MM/V	SW3545A
Soil Extraction for SVOA	Completed					03/19/19	JJ/LV	SW3545A
Mercury Digestion	Completed					03/20/19	I/I	SW7471B



Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Total Metals Digest	Completed					03/19/19	B/AG	SW3050B
<b><u>Polychlorinated Biphenyls</u></b>								
PCB-1016	ND	73	73	ug/Kg	2	03/20/19	SC	SW8082A
PCB-1221	ND	73	73	ug/Kg	2	03/20/19	SC	SW8082A
PCB-1232	ND	73	73	ug/Kg	2	03/20/19	SC	SW8082A
PCB-1242	ND	73	73	ug/Kg	2	03/20/19	SC	SW8082A
PCB-1248	ND	73	73	ug/Kg	2	03/20/19	SC	SW8082A
PCB-1254	ND	73	73	ug/Kg	2	03/20/19	SC	SW8082A
PCB-1260	ND	73	73	ug/Kg	2	03/20/19	SC	SW8082A
PCB-1262	ND	73	73	ug/Kg	2	03/20/19	SC	SW8082A
PCB-1268	ND	73	73	ug/Kg	2	03/20/19	SC	SW8082A
<b><u>QA/QC Surrogates</u></b>								
% DCBP	75			%	2	03/20/19	SC	30 - 150 %
% DCBP (Confirmation)	74			%	2	03/20/19	SC	30 - 150 %
% TCMX	78			%	2	03/20/19	SC	30 - 150 %
% TCMX (Confirmation)	75			%	2	03/20/19	SC	30 - 150 %
<b><u>Pesticides - Soil</u></b>								
4,4' -DDD	ND	2.2		ug/Kg	2	03/21/19	CW	SW8081B
4,4' -DDE	ND	2.2		ug/Kg	2	03/21/19	CW	SW8081B
4,4' -DDT	ND	2.2		ug/Kg	2	03/21/19	CW	SW8081B
a-BHC	ND	7.3		ug/Kg	2	03/21/19	CW	SW8081B
a-Chlordane	ND	3.7		ug/Kg	2	03/21/19	CW	SW8081B
Aldrin	ND	3.7		ug/Kg	2	03/21/19	CW	SW8081B
b-BHC	ND	7.3		ug/Kg	2	03/21/19	CW	SW8081B
Chlordane	ND	37		ug/Kg	2	03/21/19	CW	SW8081B
d-BHC	ND	7.3		ug/Kg	2	03/21/19	CW	SW8081B
Dieldrin	ND	3.7		ug/Kg	2	03/21/19	CW	SW8081B
Endosulfan I	ND	7.3		ug/Kg	2	03/21/19	CW	SW8081B
Endosulfan II	ND	7.3		ug/Kg	2	03/21/19	CW	SW8081B
Endosulfan sulfate	ND	7.3		ug/Kg	2	03/21/19	CW	SW8081B
Endrin	ND	7.3		ug/Kg	2	03/21/19	CW	SW8081B
Endrin aldehyde	ND	7.3		ug/Kg	2	03/21/19	CW	SW8081B
Endrin ketone	ND	7.3		ug/Kg	2	03/21/19	CW	SW8081B
g-BHC	ND	1.5		ug/Kg	2	03/21/19	CW	SW8081B
g-Chlordane	ND	3.7		ug/Kg	2	03/21/19	CW	SW8081B
Heptachlor	ND	7.3		ug/Kg	2	03/21/19	CW	SW8081B
Heptachlor epoxide	ND	7.3		ug/Kg	2	03/21/19	CW	SW8081B
Methoxychlor	ND	37		ug/Kg	2	03/21/19	CW	SW8081B
Toxaphene	ND	150		ug/Kg	2	03/21/19	CW	SW8081B
<b><u>QA/QC Surrogates</u></b>								
% DCBP	64			%	2	03/21/19	CW	30 - 150 %
% DCBP (Confirmation)	53			%	2	03/21/19	CW	30 - 150 %
% TCMX	65			%	2	03/21/19	CW	30 - 150 %
% TCMX (Confirmation)	64			%	2	03/21/19	CW	30 - 150 %
<b><u>1,4-dioxane</u></b>								
1,4-dioxane	ND	74		ug/kg	1	03/20/19	JLI	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
<b><u>Volatiles</u></b>								
1,1,1-Trichloroethane	ND	4.9	0.49	ug/Kg	1	03/20/19	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	4.9	0.99	ug/Kg	1	03/20/19	JLI	SW8260C
1,1,2-Trichloroethane	ND	4.9	0.99	ug/Kg	1	03/20/19	JLI	SW8260C
1,1-Dichloroethane	ND	4.9	0.99	ug/Kg	1	03/20/19	JLI	SW8260C
1,1-Dichloroethene	ND	4.9	0.49	ug/Kg	1	03/20/19	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	4.9	0.99	ug/Kg	1	03/20/19	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	4.9	0.99	ug/Kg	1	03/20/19	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	4.9	0.99	ug/Kg	1	03/20/19	JLI	SW8260C
1,2-Dibromoethane	ND	4.9	0.49	ug/Kg	1	03/20/19	JLI	SW8260C
1,2-Dichlorobenzene	ND	4.9	0.49	ug/Kg	1	03/20/19	JLI	SW8260C
1,2-Dichloroethane	ND	4.9	0.49	ug/Kg	1	03/20/19	JLI	SW8260C
1,2-Dichloropropane	ND	4.9	0.99	ug/Kg	1	03/20/19	JLI	SW8260C
1,3-Dichlorobenzene	ND	4.9	0.49	ug/Kg	1	03/20/19	JLI	SW8260C
1,4-Dichlorobenzene	ND	4.9	0.49	ug/Kg	1	03/20/19	JLI	SW8260C
2-Hexanone	ND	25	4.9	ug/Kg	1	03/20/19	JLI	SW8260C
4-Methyl-2-pentanone	ND	25	4.9	ug/Kg	1	03/20/19	JLI	SW8260C
Acetone	22	JS 25	4.9	ug/Kg	1	03/20/19	JLI	SW8260C
Benzene	ND	4.9	0.49	ug/Kg	1	03/20/19	JLI	SW8260C
Bromochloromethane	ND	4.9	0.49	ug/Kg	1	03/20/19	JLI	SW8260C
Bromodichloromethane	ND	4.9	0.99	ug/Kg	1	03/20/19	JLI	SW8260C
Bromoform	ND	4.9	0.99	ug/Kg	1	03/20/19	JLI	SW8260C
Bromomethane	ND	4.9	2.0	ug/Kg	1	03/20/19	JLI	SW8260C
Carbon Disulfide	ND	4.9	0.99	ug/Kg	1	03/20/19	JLI	SW8260C
Carbon tetrachloride	ND	4.9	0.99	ug/Kg	1	03/20/19	JLI	SW8260C
Chlorobenzene	ND	4.9	0.49	ug/Kg	1	03/20/19	JLI	SW8260C
Chloroethane	ND	4.9	0.49	ug/Kg	1	03/20/19	JLI	SW8260C
Chloroform	ND	4.9	0.49	ug/Kg	1	03/20/19	JLI	SW8260C
Chloromethane	ND	4.9	0.99	ug/Kg	1	03/20/19	JLI	SW8260C
cis-1,2-Dichloroethene	ND	4.9	0.49	ug/Kg	1	03/20/19	JLI	SW8260C
cis-1,3-Dichloropropene	ND	4.9	0.49	ug/Kg	1	03/20/19	JLI	SW8260C
Cyclohexane	ND	4.9	0.99	ug/Kg	1	03/20/19	JLI	SW8260C
Dibromochloromethane	ND	4.9	0.99	ug/Kg	1	03/20/19	JLI	SW8260C
Dichlorodifluoromethane	ND	4.9	0.49	ug/Kg	1	03/20/19	JLI	SW8260C
Ethylbenzene	ND	4.9	0.49	ug/Kg	1	03/20/19	JLI	SW8260C
Isopropylbenzene	ND	4.9	0.49	ug/Kg	1	03/20/19	JLI	SW8260C
m&p-Xylene	ND	4.9	0.99	ug/Kg	1	03/20/19	JLI	SW8260C
Methyl ethyl ketone	ND	30	4.9	ug/Kg	1	03/20/19	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	9.9	0.99	ug/Kg	1	03/20/19	JLI	SW8260C
Methylacetate	ND	4.9	4.9	ug/Kg	1	03/20/19	JLI	SW8260C
Methylcyclohexane	ND	4.9	0.99	ug/Kg	1	03/20/19	JLI	SW8260C
Methylene chloride	ND	4.9	4.9	ug/Kg	1	03/20/19	JLI	SW8260C
o-Xylene	ND	4.9	0.99	ug/Kg	1	03/20/19	JLI	SW8260C
Styrene	ND	4.9	0.49	ug/Kg	1	03/20/19	JLI	SW8260C
Tetrachloroethene	ND	4.9	0.99	ug/Kg	1	03/20/19	JLI	SW8260C
Toluene	ND	4.9	0.49	ug/Kg	1	03/20/19	JLI	SW8260C
Total Xylenes	ND	4.9	4.9	ug/Kg	1	03/20/19	JLI	SW8260C
trans-1,2-Dichloroethene	ND	4.9	0.49	ug/Kg	1	03/20/19	JLI	SW8260C
trans-1,3-Dichloropropene	ND	4.9	0.49	ug/Kg	1	03/20/19	JLI	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Trichloroethene	ND	4.9	0.49	ug/Kg	1	03/20/19	JLI	SW8260C
Trichlorofluoromethane	ND	4.9	0.99	ug/Kg	1	03/20/19	JLI	SW8260C
Trichlorotrifluoroethane	ND	4.9	0.49	ug/Kg	1	03/20/19	JLI	SW8260C
Vinyl chloride	ND	4.9	0.49	ug/Kg	1	03/20/19	JLI	SW8260C
<b><u>QA/QC Surrogates</u></b>								
% 1,2-dichlorobenzene-d4	96			%	1	03/20/19	JLI	70 - 130 %
% Bromofluorobenzene	96			%	1	03/20/19	JLI	70 - 130 %
% Dibromofluoromethane	99			%	1	03/20/19	JLI	70 - 130 %
% Toluene-d8	95			%	1	03/20/19	JLI	70 - 130 %
<b><u>Volatiles</u></b>								
1,1,1,2-Tetrachloroethane	ND	20		ug/Kg	1	03/20/19	JLI	SW8260C
Acrolein	ND	4.9		ug/Kg	1	03/20/19	JLI	SW8260C
Acrylonitrile	ND	20		ug/Kg	1	03/20/19	JLI	SW8260C
Tert-butyl alcohol	ND	99		ug/Kg	1	03/20/19	JLI	SW8260C
Volatile Library Search Top 10	Completed					03/21/19	JLI	
<b><u>Semivolatiles</u></b>								
1,1-Biphenyl	ND	260	110	ug/Kg	1	03/20/19	AW	SW8270D
1,2,4,5-Tetrachlorobenzene	ND	260	130	ug/Kg	1	03/20/19	AW	SW8270D
2,3,4,6-tetrachlorophenol	ND	260	170	ug/Kg	1	03/20/19	AW	SW8270D
2,4,5-Trichlorophenol	ND	260	200	ug/Kg	1	03/20/19	AW	SW8270D
2,4,6-Trichlorophenol	ND	150	120	ug/Kg	1	03/20/19	AW	SW8270D
2,4-Dichlorophenol	ND	150	130	ug/Kg	1	03/20/19	AW	SW8270D
2,4-Dimethylphenol	ND	260	92	ug/Kg	1	03/20/19	AW	SW8270D
2,4-Dinitrophenol	ND	260	260	ug/Kg	1	03/20/19	AW	SW8270D
2,4-Dinitrotoluene	ND	150	150	ug/Kg	1	03/20/19	AW	SW8270D
2,6-Dinitrotoluene	ND	150	120	ug/Kg	1	03/20/19	AW	SW8270D
2-Chloronaphthalene	ND	260	110	ug/Kg	1	03/20/19	AW	SW8270D
2-Chlorophenol	ND	260	110	ug/Kg	1	03/20/19	AW	SW8270D
2-Methylnaphthalene	ND	260	110	ug/Kg	1	03/20/19	AW	SW8270D
2-Methylphenol (o-cresol)	ND	260	170	ug/Kg	1	03/20/19	AW	SW8270D
2-Nitroaniline	ND	260	260	ug/Kg	1	03/20/19	AW	SW8270D
2-Nitrophenol	ND	260	230	ug/Kg	1	03/20/19	AW	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	260	150	ug/Kg	1	03/20/19	AW	SW8270D
3,3'-Dichlorobenzidine	ND	150	150	ug/Kg	1	03/20/19	AW	SW8270D
3-Nitroaniline	ND	740	260	ug/Kg	1	03/20/19	AW	SW8270D
4,6-Dinitro-2-methylphenol	ND	260	260	ug/Kg	1	03/20/19	AW	SW8270D
4-Bromophenyl phenyl ether	ND	260	110	ug/Kg	1	03/20/19	AW	SW8270D
4-Chloro-3-methylphenol	ND	260	130	ug/Kg	1	03/20/19	AW	SW8270D
4-Chloroaniline	ND	740	170	ug/Kg	1	03/20/19	AW	SW8270D
4-Chlorophenyl phenyl ether	ND	260	120	ug/Kg	1	03/20/19	AW	SW8270D
4-Nitroaniline	ND	1900	120	ug/Kg	1	03/20/19	AW	SW8270D
4-Nitrophenol	ND	260	170	ug/Kg	1	03/20/19	AW	SW8270D
Acenaphthene	ND	260	110	ug/Kg	1	03/20/19	AW	SW8270D
Acenaphthylene	ND	150	100	ug/Kg	1	03/20/19	AW	SW8270D
Acetophenone	ND	260	120	ug/Kg	1	03/20/19	AW	SW8270D
Anthracene	ND	260	120	ug/Kg	1	03/20/19	AW	SW8270D
Atrazine	ND	260	96	ug/Kg	1	03/20/19	AW	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Benz(a)anthracene	ND	260	120	ug/Kg	1	03/20/19	AW	SW8270D
Benzaldehyde	ND	260	110	ug/Kg	1	03/20/19	AW	SW8270D
Benzo(a)pyrene	ND	150	120	ug/Kg	1	03/20/19	AW	SW8270D
Benzo(b)fluoranthene	ND	260	130	ug/Kg	1	03/20/19	AW	SW8270D
Benzo(ghi)perylene	ND	260	120	ug/Kg	1	03/20/19	AW	SW8270D
Benzo(k)fluoranthene	ND	260	120	ug/Kg	1	03/20/19	AW	SW8270D
Benzyl butyl phthalate	ND	260	95	ug/Kg	1	03/20/19	AW	SW8270D
Bis(2-chloroethoxy)methane	ND	260	100	ug/Kg	1	03/20/19	AW	SW8270D
Bis(2-chloroethyl)ether	ND	150	100	ug/Kg	1	03/20/19	AW	SW8270D
Bis(2-chloroisopropyl)ether	ND	260	100	ug/Kg	1	03/20/19	AW	SW8270D
Bis(2-ethylhexyl)phthalate	ND	260	110	ug/Kg	1	03/20/19	AW	SW8270D
Caprolactam	ND	260	260	ug/Kg	1	03/20/19	AW	SW8270D
Carbazole	ND	260	190	ug/Kg	1	03/20/19	AW	SW8270D
Chrysene	ND	260	120	ug/Kg	1	03/20/19	AW	SW8270D
Dibenz(a,h)anthracene	ND	150	120	ug/Kg	1	03/20/19	AW	SW8270D
Dibenzofuran	ND	260	110	ug/Kg	1	03/20/19	AW	SW8270D
Diethyl phthalate	ND	260	120	ug/Kg	1	03/20/19	AW	SW8270D
Dimethylphthalate	ND	260	110	ug/Kg	1	03/20/19	AW	SW8270D
Di-n-butylphthalate	ND	260	98	ug/Kg	1	03/20/19	AW	SW8270D
Di-n-octylphthalate	ND	260	95	ug/Kg	1	03/20/19	AW	SW8270D
Fluoranthene	ND	260	120	ug/Kg	1	03/20/19	AW	SW8270D
Fluorene	ND	260	120	ug/Kg	1	03/20/19	AW	SW8270D
Hexachlorobenzene	ND	150	110	ug/Kg	1	03/20/19	AW	SW8270D
Hexachlorobutadiene	ND	260	130	ug/Kg	1	03/20/19	AW	SW8270D
Hexachlorocyclopentadiene	ND	260	110	ug/Kg	1	03/20/19	AW	SW8270D
Hexachloroethane	ND	150	110	ug/Kg	1	03/20/19	AW	SW8270D
Indeno(1,2,3-cd)pyrene	ND	260	120	ug/Kg	1	03/20/19	AW	SW8270D
Isophorone	ND	150	100	ug/Kg	1	03/20/19	AW	SW8270D
Naphthalene	ND	260	110	ug/Kg	1	03/20/19	AW	SW8270D
Nitrobenzene	ND	150	130	ug/Kg	1	03/20/19	AW	SW8270D
N-Nitrosodimethylamine	ND	260	100	ug/Kg	1	03/20/19	AW	SW8270D
N-Nitrosodi-n-propylamine	ND	150	120	ug/Kg	1	03/20/19	AW	SW8270D
N-Nitrosodiphenylamine	ND	150	140	ug/Kg	1	03/20/19	AW	SW8270D
Pentachlorophenol	ND	260	140	ug/Kg	1	03/20/19	AW	SW8270D
Phenanthrene	ND	150	110	ug/Kg	1	03/20/19	AW	SW8270D
Phenol	ND	260	120	ug/Kg	1	03/20/19	AW	SW8270D
Pyrene	ND	260	130	ug/Kg	1	03/20/19	AW	SW8270D
<b>QA/QC Surrogates</b>								
% 2,4,6-Tribromophenol	52			%	1	03/20/19	AW	30 - 130 %
% 2-Fluorobiphenyl	45			%	1	03/20/19	AW	30 - 130 %
% 2-Fluorophenol	39			%	1	03/20/19	AW	30 - 130 %
% Nitrobenzene-d5	44			%	1	03/20/19	AW	30 - 130 %
% Phenol-d5	43			%	1	03/20/19	AW	30 - 130 %
% Terphenyl-d14	44			%	1	03/20/19	AW	30 - 130 %
SVOA Library Search Top 15	Completed					03/22/19	MR	

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
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RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected at RL/PQL  
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.

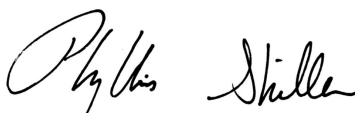
**Comments:**

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**

**March 28, 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

March 28, 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: SW  
 Analyzed by: see "By" below

## Date

03/18/19  
 03/19/19

## Time

12:30  
 13:48

## Laboratory Data

SDG ID: GCC70170  
 Phoenix ID: CC70174

Project ID: 1840 PARK AVE MANHATTAN  
 Client ID: SB3 (0-2)

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.33	0.33		mg/Kg	1	03/20/19	CPP	SW6010D
Aluminum	6520	33		mg/Kg	10	03/20/19	CPP	SW6010D
Arsenic	5.77	0.67		mg/Kg	1	03/20/19	CPP	SW6010D
Barium	189	0.7		mg/Kg	1	03/20/19	EK	SW6010D
Beryllium	0.29	0.27		mg/Kg	1	03/20/19	CPP	SW6010D
Calcium	57100	33		mg/Kg	10	03/20/19	CPP	SW6010D
Cadmium	1.24	0.33		mg/Kg	1	03/20/19	CPP	SW6010D
Cobalt	5.71	0.33		mg/Kg	1	03/20/19	CPP	SW6010D
Chromium	20.6	0.33		mg/Kg	1	03/20/19	CPP	SW6010D
Copper	29.5	0.7		mg/kg	1	03/20/19	CPP	SW6010D
Iron	23100	33		mg/Kg	10	03/20/19	CPP	SW6010D
Mercury	0.37	0.06		mg/Kg	1	03/20/19	RS	SW7471B
Potassium	1230	7		mg/Kg	1	03/20/19	CPP	SW6010D
Magnesium	13400	33		mg/Kg	10	03/20/19	CPP	SW6010D
Manganese	284	3.3		mg/Kg	10	03/20/19	CPP	SW6010D
Sodium	430	7		mg/Kg	1	03/20/19	EK	SW6010D
Nickel	14.2	0.33		mg/Kg	1	03/20/19	CPP	SW6010D
Lead	182	6.7		mg/Kg	10	03/20/19	EK	SW6010D
Antimony	< 3.3	3.3		mg/Kg	1	03/20/19	CPP	SW6010D
Selenium	< 1.3	1.3		mg/Kg	1	03/20/19	CPP	SW6010D
Thallium	< 1.3	1.3		mg/Kg	1	03/20/19	CPP	SW6010D
Vanadium	28.4	0.33		mg/Kg	1	03/20/19	CPP	SW6010D
Zinc	1210	6.7		mg/Kg	10	03/20/19	EK	SW6010D
Percent Solid	90			%		03/19/19	ML	SW846-%Solid
Soil Extraction for PCB	Completed					03/19/19	MM/V	SW3545A
Soil Extraction for Pesticides	Completed					03/19/19	MM/V	SW3545A
Soil Extraction for SVOA	Completed					03/19/19	JJ/LV	SW3545A
Mercury Digestion	Completed					03/20/19	I/I	SW7471B

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Total Metals Digest	Completed					03/19/19	B/AG	SW3050B
<b><u>Polychlorinated Biphenyls</u></b>								
PCB-1016	ND	73	73	ug/Kg	2	03/20/19	SC	SW8082A
PCB-1221	ND	73	73	ug/Kg	2	03/20/19	SC	SW8082A
PCB-1232	ND	73	73	ug/Kg	2	03/20/19	SC	SW8082A
PCB-1242	ND	73	73	ug/Kg	2	03/20/19	SC	SW8082A
PCB-1248	ND	73	73	ug/Kg	2	03/20/19	SC	SW8082A
PCB-1254	120	73	73	ug/Kg	2	03/20/19	SC	SW8082A
PCB-1260	ND	73	73	ug/Kg	2	03/20/19	SC	SW8082A
PCB-1262	ND	73	73	ug/Kg	2	03/20/19	SC	SW8082A
PCB-1268	ND	73	73	ug/Kg	2	03/20/19	SC	SW8082A
<b><u>QA/QC Surrogates</u></b>								
% DCBP	72			%	2	03/20/19	SC	30 - 150 %
% DCBP (Confirmation)	63			%	2	03/20/19	SC	30 - 150 %
% TCMX	68			%	2	03/20/19	SC	30 - 150 %
% TCMX (Confirmation)	65			%	2	03/20/19	SC	30 - 150 %
<b><u>Pesticides - Soil</u></b>								
4,4' -DDD	8.6	2.2		ug/Kg	2	03/21/19	CW	SW8081B
4,4' -DDE	61	2.2		ug/Kg	2	03/21/19	CW	SW8081B
4,4' -DDT	78	2.2		ug/Kg	2	03/21/19	CW	SW8081B
a-BHC	ND	7.3		ug/Kg	2	03/21/19	CW	SW8081B
a-Chlordane	28	3.6		ug/Kg	2	03/21/19	CW	SW8081B
Aldrin	ND	3.6		ug/Kg	2	03/21/19	CW	SW8081B
b-BHC	ND	7.3		ug/Kg	2	03/21/19	CW	SW8081B
Chlordane	160	36		ug/Kg	2	03/21/19	CW	SW8081B
d-BHC	ND	7.3		ug/Kg	2	03/21/19	CW	SW8081B
Dieldrin	9.8	3.6		ug/Kg	2	03/21/19	CW	SW8081B
Endosulfan I	ND	7.3		ug/Kg	2	03/21/19	CW	SW8081B
Endosulfan II	ND	7.3		ug/Kg	2	03/21/19	CW	SW8081B
Endosulfan sulfate	ND	7.3		ug/Kg	2	03/21/19	CW	SW8081B
Endrin	ND	7.3		ug/Kg	2	03/21/19	CW	SW8081B
Endrin aldehyde	ND	7.3		ug/Kg	2	03/21/19	CW	SW8081B
Endrin ketone	ND	7.3		ug/Kg	2	03/21/19	CW	SW8081B
g-BHC	ND	1.5		ug/Kg	2	03/21/19	CW	SW8081B
g-Chlordane	28	3.6		ug/Kg	2	03/21/19	CW	SW8081B
Heptachlor	ND	7.3		ug/Kg	2	03/21/19	CW	SW8081B
Heptachlor epoxide	ND	7.3		ug/Kg	2	03/21/19	CW	SW8081B
Methoxychlor	ND	36		ug/Kg	2	03/21/19	CW	SW8081B
Toxaphene	ND	150		ug/Kg	2	03/21/19	CW	SW8081B
<b><u>QA/QC Surrogates</u></b>								
% DCBP	56			%	2	03/21/19	CW	30 - 150 %
% DCBP (Confirmation)	55			%	2	03/21/19	CW	30 - 150 %
% TCMX	58			%	2	03/21/19	CW	30 - 150 %
% TCMX (Confirmation)	60			%	2	03/21/19	CW	30 - 150 %
<b><u>1,4-dioxane</u></b>								
1,4-dioxane	ND	100		ug/kg	1	03/20/19	JLI	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
<b><u>Volatiles</u></b>								
1,1,1-Trichloroethane	ND	9.5	0.95	ug/Kg	1	03/20/19	PS	SW8260C
1,1,2,2-Tetrachloroethane	ND	9.5	1.9	ug/Kg	1	03/20/19	PS	SW8260C
1,1,2-Trichloroethane	ND	9.5	1.9	ug/Kg	1	03/20/19	PS	SW8260C
1,1-Dichloroethane	ND	9.5	1.9	ug/Kg	1	03/20/19	PS	SW8260C
1,1-Dichloroethene	ND	9.5	0.95	ug/Kg	1	03/20/19	PS	SW8260C
1,2,3-Trichlorobenzene	ND	9.5	1.9	ug/Kg	1	03/20/19	PS	SW8260C
1,2,4-Trichlorobenzene	ND	9.5	1.9	ug/Kg	1	03/20/19	PS	SW8260C
1,2-Dibromo-3-chloropropane	ND	9.5	1.9	ug/Kg	1	03/20/19	PS	SW8260C
1,2-Dibromoethane	ND	9.5	0.95	ug/Kg	1	03/20/19	PS	SW8260C
1,2-Dichlorobenzene	ND	9.5	0.95	ug/Kg	1	03/20/19	PS	SW8260C
1,2-Dichloroethane	ND	9.5	0.95	ug/Kg	1	03/20/19	PS	SW8260C
1,2-Dichloropropane	ND	9.5	1.9	ug/Kg	1	03/20/19	PS	SW8260C
1,3-Dichlorobenzene	ND	9.5	0.95	ug/Kg	1	03/20/19	PS	SW8260C
1,4-Dichlorobenzene	ND	9.5	0.95	ug/Kg	1	03/20/19	PS	SW8260C
2-Hexanone	ND	48	9.5	ug/Kg	1	03/20/19	PS	SW8260C
4-Methyl-2-pentanone	ND	48	9.5	ug/Kg	1	03/20/19	PS	SW8260C
Acetone	25	JSL 28	5.5	ug/Kg	1	03/23/19	PS	SW8260C
Benzene	ND	9.5	0.95	ug/Kg	1	03/20/19	PS	SW8260C
Bromochloromethane	ND	9.5	0.95	ug/Kg	1	03/20/19	PS	SW8260C
Bromodichloromethane	ND	9.5	1.9	ug/Kg	1	03/20/19	PS	SW8260C
Bromoform	ND	9.5	1.9	ug/Kg	1	03/20/19	PS	SW8260C
Bromomethane	ND	9.5	3.8	ug/Kg	1	03/20/19	PS	SW8260C
Carbon Disulfide	ND	9.5	1.9	ug/Kg	1	03/20/19	PS	SW8260C
Carbon tetrachloride	ND	9.5	1.9	ug/Kg	1	03/20/19	PS	SW8260C
Chlorobenzene	ND	9.5	0.95	ug/Kg	1	03/20/19	PS	SW8260C
Chloroethane	ND	9.5	0.95	ug/Kg	1	03/20/19	PS	SW8260C
Chloroform	ND	9.5	0.95	ug/Kg	1	03/20/19	PS	SW8260C
Chloromethane	ND	9.5	1.9	ug/Kg	1	03/20/19	PS	SW8260C
cis-1,2-Dichloroethene	ND	9.5	0.95	ug/Kg	1	03/20/19	PS	SW8260C
cis-1,3-Dichloropropene	ND	9.5	0.95	ug/Kg	1	03/20/19	PS	SW8260C
Cyclohexane	ND	9.5	1.9	ug/Kg	1	03/20/19	PS	SW8260C
Dibromochloromethane	ND	9.5	1.9	ug/Kg	1	03/20/19	PS	SW8260C
Dichlorodifluoromethane	ND	9.5	0.95	ug/Kg	1	03/20/19	PS	SW8260C
Ethylbenzene	ND	9.5	0.95	ug/Kg	1	03/20/19	PS	SW8260C
Isopropylbenzene	ND	9.5	0.95	ug/Kg	1	03/20/19	PS	SW8260C
m&p-Xylene	ND	9.5	1.9	ug/Kg	1	03/20/19	PS	SW8260C
Methyl ethyl ketone	ND	57	9.5	ug/Kg	1	03/20/19	PS	SW8260C
Methyl t-butyl ether (MTBE)	ND	19	1.9	ug/Kg	1	03/20/19	PS	SW8260C
Methylacetate	ND	9.5	9.5	ug/Kg	1	03/20/19	PS	SW8260C
Methylcyclohexane	ND	9.5	1.9	ug/Kg	1	03/20/19	PS	SW8260C
Methylene chloride	ND	9.5	9.5	ug/Kg	1	03/20/19	PS	SW8260C
o-Xylene	ND	9.5	1.9	ug/Kg	1	03/20/19	PS	SW8260C
Styrene	ND	9.5	0.95	ug/Kg	1	03/20/19	PS	SW8260C
Tetrachloroethene	ND	9.5	1.9	ug/Kg	1	03/20/19	PS	SW8260C
Toluene	ND	9.5	0.95	ug/Kg	1	03/20/19	PS	SW8260C
Total Xylenes	ND	9.5	9.5	ug/Kg	1	03/20/19	PS	SW8260C
trans-1,2-Dichloroethene	ND	9.5	0.95	ug/Kg	1	03/20/19	PS	SW8260C
trans-1,3-Dichloropropene	ND	9.5	0.95	ug/Kg	1	03/20/19	PS	SW8260C



Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Trichloroethene	ND	9.5	0.95	ug/Kg	1	03/20/19	PS	SW8260C
Trichlorofluoromethane	ND	9.5	1.9	ug/Kg	1	03/20/19	PS	SW8260C
Trichlorotrifluoroethane	ND	9.5	0.95	ug/Kg	1	03/20/19	PS	SW8260C
Vinyl chloride	ND	9.5	0.95	ug/Kg	1	03/20/19	PS	SW8260C
<b><u>QA/QC Surrogates</u></b>								
% 1,2-dichlorobenzene-d4	96			%	1	03/20/19	PS	70 - 130 %
% Bromofluorobenzene	93			%	1	03/20/19	PS	70 - 130 %
% Dibromofluoromethane	93			%	1	03/20/19	PS	70 - 130 %
% Toluene-d8	95			%	1	03/20/19	PS	70 - 130 %
<b><u>Volatiles</u></b>								
1,1,1,2-Tetrachloroethane	ND	38		ug/Kg	1	03/20/19	JLI	SW8260C
Acrolein	ND	9.5		ug/Kg	1	03/20/19	JLI	SW8260C
Acrylonitrile	ND	38		ug/Kg	1	03/20/19	JLI	SW8260C
Tert-butyl alcohol	ND	190		ug/Kg	1	03/20/19	JLI	SW8260C
Volatile Library Search Top 10	Completed					03/21/19	JLI	
<b><u>Semivolatiles</u></b>								
1,1-Biphenyl	ND	250	110	ug/Kg	1	03/21/19	AW	SW8270D
1,2,4,5-Tetrachlorobenzene	ND	250	130	ug/Kg	1	03/21/19	AW	SW8270D
2,3,4,6-tetrachlorophenol	ND	250	170	ug/Kg	1	03/21/19	AW	SW8270D
2,4,5-Trichlorophenol	ND	250	200	ug/Kg	1	03/21/19	AW	SW8270D
2,4,6-Trichlorophenol	ND	140	120	ug/Kg	1	03/21/19	AW	SW8270D
2,4-Dichlorophenol	ND	140	130	ug/Kg	1	03/21/19	AW	SW8270D
2,4-Dimethylphenol	ND	250	89	ug/Kg	1	03/21/19	AW	SW8270D
2,4-Dinitrophenol	ND	250	250	ug/Kg	1	03/21/19	AW	SW8270D
2,4-Dinitrotoluene	ND	140	140	ug/Kg	1	03/21/19	AW	SW8270D
2,6-Dinitrotoluene	ND	140	110	ug/Kg	1	03/21/19	AW	SW8270D
2-Chloronaphthalene	ND	250	100	ug/Kg	1	03/21/19	AW	SW8270D
2-Chlorophenol	ND	250	100	ug/Kg	1	03/21/19	AW	SW8270D
2-Methylnaphthalene	ND	250	110	ug/Kg	1	03/21/19	AW	SW8270D
2-Methylphenol (o-cresol)	ND	250	170	ug/Kg	1	03/21/19	AW	SW8270D
2-Nitroaniline	ND	250	250	ug/Kg	1	03/21/19	AW	SW8270D
2-Nitrophenol	ND	250	230	ug/Kg	1	03/21/19	AW	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	250	140	ug/Kg	1	03/21/19	AW	SW8270D
3,3'-Dichlorobenzidine	ND	140	140	ug/Kg	1	03/21/19	AW	SW8270D
3-Nitroaniline	ND	720	250	ug/Kg	1	03/21/19	AW	SW8270D
4,6-Dinitro-2-methylphenol	ND	250	250	ug/Kg	1	03/21/19	AW	SW8270D
4-Bromophenyl phenyl ether	ND	250	110	ug/Kg	1	03/21/19	AW	SW8270D
4-Chloro-3-methylphenol	ND	250	130	ug/Kg	1	03/21/19	AW	SW8270D
4-Chloroaniline	ND	720	170	ug/Kg	1	03/21/19	AW	SW8270D
4-Chlorophenyl phenyl ether	ND	250	120	ug/Kg	1	03/21/19	AW	SW8270D
4-Nitroaniline	ND	1800	120	ug/Kg	1	03/21/19	AW	SW8270D
4-Nitrophenol	ND	250	160	ug/Kg	1	03/21/19	AW	SW8270D
Acenaphthene	ND	250	110	ug/Kg	1	03/21/19	AW	SW8270D
Acenaphthylene	ND	140	100	ug/Kg	1	03/21/19	AW	SW8270D
Acetophenone	ND	250	110	ug/Kg	1	03/21/19	AW	SW8270D
Anthracene	ND	250	120	ug/Kg	1	03/21/19	AW	SW8270D
Atrazine	ND	250	94	ug/Kg	1	03/21/19	AW	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Benz(a)anthracene	260	250	120	ug/Kg	1	03/21/19	AW	SW8270D
Benzaldehyde	ND	250	110	ug/Kg	1	03/21/19	AW	SW8270D
Benzo(a)pyrene	230	140	120	ug/Kg	1	03/21/19	AW	SW8270D
Benzo(b)fluoranthene	240	J 250	120	ug/Kg	1	03/21/19	AW	SW8270D
Benzo(ghi)perylene	270	250	120	ug/Kg	1	03/21/19	AW	SW8270D
Benzo(k)fluoranthene	210	J 250	120	ug/Kg	1	03/21/19	AW	SW8270D
Benzyl butyl phthalate	ND	250	93	ug/Kg	1	03/21/19	AW	SW8270D
Bis(2-chloroethoxy)methane	ND	250	100	ug/Kg	1	03/21/19	AW	SW8270D
Bis(2-chloroethyl)ether	ND	140	97	ug/Kg	1	03/21/19	AW	SW8270D
Bis(2-chloroisopropyl)ether	ND	250	100	ug/Kg	1	03/21/19	AW	SW8270D
Bis(2-ethylhexyl)phthalate	340	250	100	ug/Kg	1	03/21/19	AW	SW8270D
Caprolactam	ND	250	250	ug/Kg	1	03/21/19	AW	SW8270D
Carbazole	ND	250	180	ug/Kg	1	03/21/19	AW	SW8270D
Chrysene	310	250	120	ug/Kg	1	03/21/19	AW	SW8270D
Dibenz(a,h)anthracene	ND	140	120	ug/Kg	1	03/21/19	AW	SW8270D
Dibenzofuran	ND	250	110	ug/Kg	1	03/21/19	AW	SW8270D
Diethyl phthalate	ND	250	110	ug/Kg	1	03/21/19	AW	SW8270D
Dimethylphthalate	ND	250	110	ug/Kg	1	03/21/19	AW	SW8270D
Di-n-butylphthalate	ND	250	96	ug/Kg	1	03/21/19	AW	SW8270D
Di-n-octylphthalate	ND	250	93	ug/Kg	1	03/21/19	AW	SW8270D
Fluoranthene	260	250	120	ug/Kg	1	03/21/19	AW	SW8270D
Fluorene	ND	250	120	ug/Kg	1	03/21/19	AW	SW8270D
Hexachlorobenzene	ND	140	110	ug/Kg	1	03/21/19	AW	SW8270D
Hexachlorobutadiene	ND	250	130	ug/Kg	1	03/21/19	AW	SW8270D
Hexachlorocyclopentadiene	ND	250	110	ug/Kg	1	03/21/19	AW	SW8270D
Hexachloroethane	ND	140	110	ug/Kg	1	03/21/19	AW	SW8270D
Indeno(1,2,3-cd)pyrene	200	J 250	120	ug/Kg	1	03/21/19	AW	SW8270D
Isophorone	ND	140	100	ug/Kg	1	03/21/19	AW	SW8270D
Naphthalene	ND	250	100	ug/Kg	1	03/21/19	AW	SW8270D
Nitrobenzene	ND	140	130	ug/Kg	1	03/21/19	AW	SW8270D
N-Nitrosodimethylamine	ND	250	100	ug/Kg	1	03/21/19	AW	SW8270D
N-Nitrosodi-n-propylamine	ND	140	120	ug/Kg	1	03/21/19	AW	SW8270D
N-Nitrosodiphenylamine	ND	140	140	ug/Kg	1	03/21/19	AW	SW8270D
Pentachlorophenol	ND	250	140	ug/Kg	1	03/21/19	AW	SW8270D
Phenanthrene	470	140	100	ug/Kg	1	03/21/19	AW	SW8270D
Phenol	ND	250	120	ug/Kg	1	03/21/19	AW	SW8270D
Pyrene	290	250	120	ug/Kg	1	03/21/19	AW	SW8270D
<b>QA/QC Surrogates</b>								
% 2,4,6-Tribromophenol	66			%	1	03/21/19	AW	30 - 130 %
% 2-Fluorobiphenyl	57			%	1	03/21/19	AW	30 - 130 %
% 2-Fluorophenol	48			%	1	03/21/19	AW	30 - 130 %
% Nitrobenzene-d5	59			%	1	03/21/19	AW	30 - 130 %
% Phenol-d5	53			%	1	03/21/19	AW	30 - 130 %
% Terphenyl-d14	27			%	1	03/21/19	AW	30 - 130 %
SVOA Library Search Top 15	Completed					03/21/19	MR	

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
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3 = This parameter exceeds laboratory specified limits.

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

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.

L - Acetone is reported from a Phoenix prepared low level. A negative bias is possible.

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**

**March 28, 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

March 28, 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: SW  
 Analyzed by: see "By" below

## Date

03/18/19  
 03/19/19

## Time

12:45  
 13:48

## Laboratory Data

SDG ID: GCC70170  
 Phoenix ID: CC70175

Project ID: 1840 PARK AVE MANHATTAN  
 Client ID: SB3 (16-18)

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.35	0.35		mg/Kg	1	03/20/19	CPP	SW6010D
Aluminum	4370	35		mg/Kg	10	03/20/19	CPP	SW6010D
Arsenic	1.05	0.69		mg/Kg	1	03/20/19	CPP	SW6010D
Barium	51.2	0.7		mg/Kg	1	03/20/19	EK	SW6010D
Beryllium	0.29	0.28		mg/Kg	1	03/20/19	CPP	SW6010D
Calcium	1540	3.5		mg/Kg	1	03/20/19	CPP	SW6010D
Cadmium	< 0.35	0.35		mg/Kg	1	03/20/19	CPP	SW6010D
Cobalt	4.42	0.35		mg/Kg	1	03/20/19	CPP	SW6010D
Chromium	11.5	0.35		mg/Kg	1	03/20/19	CPP	SW6010D
Copper	16.9	0.7		mg/kg	1	03/20/19	CPP	SW6010D
Iron	8670	35		mg/Kg	10	03/20/19	CPP	SW6010D
Mercury	< 0.03	0.03		mg/Kg	1	03/20/19	RS	SW7471B
Potassium	1080	7		mg/Kg	1	03/20/19	CPP	SW6010D
Magnesium	2090	3.5		mg/Kg	1	03/20/19	CPP	SW6010D
Manganese	298	3.5		mg/Kg	10	03/20/19	CPP	SW6010D
Sodium	241	7		mg/Kg	1	03/20/19	EK	SW6010D
Nickel	10.7	0.35		mg/Kg	1	03/20/19	CPP	SW6010D
Lead	4.0	0.7		mg/Kg	1	03/20/19	EK	SW6010D
Antimony	< 3.5	3.5		mg/Kg	1	03/20/19	CPP	SW6010D
Selenium	< 1.4	1.4		mg/Kg	1	03/20/19	CPP	SW6010D
Thallium	< 1.4	1.4		mg/Kg	1	03/20/19	CPP	SW6010D
Vanadium	18.0	0.35		mg/Kg	1	03/20/19	CPP	SW6010D
Zinc	15.1	0.7		mg/Kg	1	03/20/19	EK	SW6010D
Percent Solid	88			%		03/19/19	ML	SW846-%Solid
Soil Extraction for PCB	Completed					03/19/19	MM/V	SW3545A
Soil Extraction for Pesticides	Completed					03/19/19	MM/V	SW3545A
Soil Extraction for SVOA	Completed					03/19/19	JJ/LV	SW3545A
Mercury Digestion	Completed					03/20/19	I/I	SW7471B

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Total Metals Digest	Completed					03/19/19	B/AG	SW3050B
<b><u>Polychlorinated Biphenyls</u></b>								
PCB-1016	ND	74	74	ug/Kg	2	03/20/19	SC	SW8082A
PCB-1221	ND	74	74	ug/Kg	2	03/20/19	SC	SW8082A
PCB-1232	ND	74	74	ug/Kg	2	03/20/19	SC	SW8082A
PCB-1242	ND	74	74	ug/Kg	2	03/20/19	SC	SW8082A
PCB-1248	ND	74	74	ug/Kg	2	03/20/19	SC	SW8082A
PCB-1254	ND	74	74	ug/Kg	2	03/20/19	SC	SW8082A
PCB-1260	ND	74	74	ug/Kg	2	03/20/19	SC	SW8082A
PCB-1262	ND	74	74	ug/Kg	2	03/20/19	SC	SW8082A
PCB-1268	ND	74	74	ug/Kg	2	03/20/19	SC	SW8082A
<b><u>QA/QC Surrogates</u></b>								
% DCBP	71			%	2	03/20/19	SC	30 - 150 %
% DCBP (Confirmation)	72			%	2	03/20/19	SC	30 - 150 %
% TCMX	63			%	2	03/20/19	SC	30 - 150 %
% TCMX (Confirmation)	61			%	2	03/20/19	SC	30 - 150 %
<b><u>Pesticides - Soil</u></b>								
4,4' -DDD	ND	2.2		ug/Kg	2	03/21/19	CW	SW8081B
4,4' -DDE	ND	2.2		ug/Kg	2	03/21/19	CW	SW8081B
4,4' -DDT	ND	2.2		ug/Kg	2	03/21/19	CW	SW8081B
a-BHC	ND	7.4		ug/Kg	2	03/21/19	CW	SW8081B
a-Chlordane	ND	3.7		ug/Kg	2	03/21/19	CW	SW8081B
Aldrin	ND	3.7		ug/Kg	2	03/21/19	CW	SW8081B
b-BHC	ND	7.4		ug/Kg	2	03/21/19	CW	SW8081B
Chlordane	ND	37		ug/Kg	2	03/21/19	CW	SW8081B
d-BHC	ND	7.4		ug/Kg	2	03/21/19	CW	SW8081B
Dieldrin	ND	3.7		ug/Kg	2	03/21/19	CW	SW8081B
Endosulfan I	ND	7.4		ug/Kg	2	03/21/19	CW	SW8081B
Endosulfan II	ND	7.4		ug/Kg	2	03/21/19	CW	SW8081B
Endosulfan sulfate	ND	7.4		ug/Kg	2	03/21/19	CW	SW8081B
Endrin	ND	7.4		ug/Kg	2	03/21/19	CW	SW8081B
Endrin aldehyde	ND	7.4		ug/Kg	2	03/21/19	CW	SW8081B
Endrin ketone	ND	7.4		ug/Kg	2	03/21/19	CW	SW8081B
g-BHC	ND	1.5		ug/Kg	2	03/21/19	CW	SW8081B
g-Chlordane	ND	3.7		ug/Kg	2	03/21/19	CW	SW8081B
Heptachlor	ND	7.4		ug/Kg	2	03/21/19	CW	SW8081B
Heptachlor epoxide	ND	7.4		ug/Kg	2	03/21/19	CW	SW8081B
Methoxychlor	ND	37		ug/Kg	2	03/21/19	CW	SW8081B
Toxaphene	ND	150		ug/Kg	2	03/21/19	CW	SW8081B
<b><u>QA/QC Surrogates</u></b>								
% DCBP	66			%	2	03/21/19	CW	30 - 150 %
% DCBP (Confirmation)	62			%	2	03/21/19	CW	30 - 150 %
% TCMX	54			%	2	03/21/19	CW	30 - 150 %
% TCMX (Confirmation)	59			%	2	03/21/19	CW	30 - 150 %
<b><u>1,4-dioxane</u></b>								
1,4-dioxane	ND	78		ug/kg	1	03/21/19	JLI	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
<b><u>Volatiles</u></b>								
1,1,1-Trichloroethane	ND	5.2	0.52	ug/Kg	1	03/21/19	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	5.2	1.0	ug/Kg	1	03/21/19	JLI	SW8260C
1,1,2-Trichloroethane	ND	5.2	1.0	ug/Kg	1	03/21/19	JLI	SW8260C
1,1-Dichloroethane	ND	5.2	1.0	ug/Kg	1	03/21/19	JLI	SW8260C
1,1-Dichloroethene	ND	5.2	0.52	ug/Kg	1	03/21/19	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	5.2	1.0	ug/Kg	1	03/21/19	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	5.2	1.0	ug/Kg	1	03/21/19	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	5.2	1.0	ug/Kg	1	03/21/19	JLI	SW8260C
1,2-Dibromoethane	ND	5.2	0.52	ug/Kg	1	03/21/19	JLI	SW8260C
1,2-Dichlorobenzene	ND	5.2	0.52	ug/Kg	1	03/21/19	JLI	SW8260C
1,2-Dichloroethane	ND	5.2	0.52	ug/Kg	1	03/21/19	JLI	SW8260C
1,2-Dichloropropane	ND	5.2	1.0	ug/Kg	1	03/21/19	JLI	SW8260C
1,3-Dichlorobenzene	ND	5.2	0.52	ug/Kg	1	03/21/19	JLI	SW8260C
1,4-Dichlorobenzene	ND	5.2	0.52	ug/Kg	1	03/21/19	JLI	SW8260C
2-Hexanone	ND	26	5.2	ug/Kg	1	03/21/19	JLI	SW8260C
4-Methyl-2-pentanone	ND	26	5.2	ug/Kg	1	03/21/19	JLI	SW8260C
Acetone	9.9	JS 26	5.2	ug/Kg	1	03/21/19	JLI	SW8260C
Benzene	ND	5.2	0.52	ug/Kg	1	03/21/19	JLI	SW8260C
Bromochloromethane	ND	5.2	0.52	ug/Kg	1	03/21/19	JLI	SW8260C
Bromodichloromethane	ND	5.2	1.0	ug/Kg	1	03/21/19	JLI	SW8260C
Bromoform	ND	5.2	1.0	ug/Kg	1	03/21/19	JLI	SW8260C
Bromomethane	ND	5.2	2.1	ug/Kg	1	03/21/19	JLI	SW8260C
Carbon Disulfide	ND	5.2	1.0	ug/Kg	1	03/21/19	JLI	SW8260C
Carbon tetrachloride	ND	5.2	1.0	ug/Kg	1	03/21/19	JLI	SW8260C
Chlorobenzene	ND	5.2	0.52	ug/Kg	1	03/21/19	JLI	SW8260C
Chloroethane	ND	5.2	0.52	ug/Kg	1	03/21/19	JLI	SW8260C
Chloroform	ND	5.2	0.52	ug/Kg	1	03/21/19	JLI	SW8260C
Chloromethane	ND	5.2	1.0	ug/Kg	1	03/21/19	JLI	SW8260C
cis-1,2-Dichloroethene	ND	5.2	0.52	ug/Kg	1	03/21/19	JLI	SW8260C
cis-1,3-Dichloropropene	ND	5.2	0.52	ug/Kg	1	03/21/19	JLI	SW8260C
Cyclohexane	ND	5.2	1.0	ug/Kg	1	03/21/19	JLI	SW8260C
Dibromochloromethane	ND	5.2	1.0	ug/Kg	1	03/21/19	JLI	SW8260C
Dichlorodifluoromethane	ND	5.2	0.52	ug/Kg	1	03/21/19	JLI	SW8260C
Ethylbenzene	ND	5.2	0.52	ug/Kg	1	03/21/19	JLI	SW8260C
Isopropylbenzene	ND	5.2	0.52	ug/Kg	1	03/21/19	JLI	SW8260C
m&p-Xylene	ND	5.2	1.0	ug/Kg	1	03/21/19	JLI	SW8260C
Methyl ethyl ketone	ND	31	5.2	ug/Kg	1	03/21/19	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	10	1.0	ug/Kg	1	03/21/19	JLI	SW8260C
Methylacetate	ND	5.2	5.2	ug/Kg	1	03/21/19	JLI	SW8260C
Methylcyclohexane	ND	5.2	1.0	ug/Kg	1	03/21/19	JLI	SW8260C
Methylene chloride	ND	5.2	5.2	ug/Kg	1	03/21/19	JLI	SW8260C
o-Xylene	ND	5.2	1.0	ug/Kg	1	03/21/19	JLI	SW8260C
Styrene	ND	5.2	0.52	ug/Kg	1	03/21/19	JLI	SW8260C
Tetrachloroethene	ND	5.2	1.0	ug/Kg	1	03/21/19	JLI	SW8260C
Toluene	ND	5.2	0.52	ug/Kg	1	03/21/19	JLI	SW8260C
Total Xylenes	ND	5.2	5.2	ug/Kg	1	03/21/19	JLI	SW8260C
trans-1,2-Dichloroethene	ND	5.2	0.52	ug/Kg	1	03/21/19	JLI	SW8260C
trans-1,3-Dichloropropene	ND	5.2	0.52	ug/Kg	1	03/21/19	JLI	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Trichloroethene	ND	5.2	0.52	ug/Kg	1	03/21/19	JLI	SW8260C
Trichlorofluoromethane	ND	5.2	1.0	ug/Kg	1	03/21/19	JLI	SW8260C
Trichlorotrifluoroethane	ND	5.2	0.52	ug/Kg	1	03/21/19	JLI	SW8260C
Vinyl chloride	ND	5.2	0.52	ug/Kg	1	03/21/19	JLI	SW8260C
<b><u>QA/QC Surrogates</u></b>								
% 1,2-dichlorobenzene-d4	100			%	1	03/21/19	JLI	70 - 130 %
% Bromofluorobenzene	97			%	1	03/21/19	JLI	70 - 130 %
% Dibromofluoromethane	95			%	1	03/21/19	JLI	70 - 130 %
% Toluene-d8	97			%	1	03/21/19	JLI	70 - 130 %
<b><u>Volatiles</u></b>								
1,1,1,2-Tetrachloroethane	ND	21		ug/Kg	1	03/21/19	JLI	SW8260C
Acrolein	ND	5.2		ug/Kg	1	03/21/19	JLI	SW8260C
Acrylonitrile	ND	21		ug/Kg	1	03/21/19	JLI	SW8260C
Tert-butyl alcohol	ND	100		ug/Kg	1	03/21/19	JLI	SW8260C
Volatile Library Search Top 10	Completed					03/21/19	JLI	
<b><u>Semivolatiles</u></b>								
1,1-Biphenyl	ND	260	110	ug/Kg	1	03/20/19	AW	SW8270D
1,2,4,5-Tetrachlorobenzene	ND	260	130	ug/Kg	1	03/20/19	AW	SW8270D
2,3,4,6-tetrachlorophenol	ND	260	170	ug/Kg	1	03/20/19	AW	SW8270D
2,4,5-Trichlorophenol	ND	260	200	ug/Kg	1	03/20/19	AW	SW8270D
2,4,6-Trichlorophenol	ND	150	120	ug/Kg	1	03/20/19	AW	SW8270D
2,4-Dichlorophenol	ND	150	130	ug/Kg	1	03/20/19	AW	SW8270D
2,4-Dimethylphenol	ND	260	91	ug/Kg	1	03/20/19	AW	SW8270D
2,4-Dinitrophenol	ND	260	260	ug/Kg	1	03/20/19	AW	SW8270D
2,4-Dinitrotoluene	ND	150	140	ug/Kg	1	03/20/19	AW	SW8270D
2,6-Dinitrotoluene	ND	150	120	ug/Kg	1	03/20/19	AW	SW8270D
2-Chloronaphthalene	ND	260	100	ug/Kg	1	03/20/19	AW	SW8270D
2-Chlorophenol	ND	260	100	ug/Kg	1	03/20/19	AW	SW8270D
2-Methylnaphthalene	ND	260	110	ug/Kg	1	03/20/19	AW	SW8270D
2-Methylphenol (o-cresol)	ND	260	170	ug/Kg	1	03/20/19	AW	SW8270D
2-Nitroaniline	ND	260	260	ug/Kg	1	03/20/19	AW	SW8270D
2-Nitrophenol	ND	260	230	ug/Kg	1	03/20/19	AW	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	260	140	ug/Kg	1	03/20/19	AW	SW8270D
3,3'-Dichlorobenzidine	ND	150	150	ug/Kg	1	03/20/19	AW	SW8270D
3-Nitroaniline	ND	740	260	ug/Kg	1	03/20/19	AW	SW8270D
4,6-Dinitro-2-methylphenol	ND	260	260	ug/Kg	1	03/20/19	AW	SW8270D
4-Bromophenyl phenyl ether	ND	260	110	ug/Kg	1	03/20/19	AW	SW8270D
4-Chloro-3-methylphenol	ND	260	130	ug/Kg	1	03/20/19	AW	SW8270D
4-Chloroaniline	ND	740	170	ug/Kg	1	03/20/19	AW	SW8270D
4-Chlorophenyl phenyl ether	ND	260	120	ug/Kg	1	03/20/19	AW	SW8270D
4-Nitroaniline	ND	1800	120	ug/Kg	1	03/20/19	AW	SW8270D
4-Nitrophenol	ND	260	170	ug/Kg	1	03/20/19	AW	SW8270D
Acenaphthene	ND	260	110	ug/Kg	1	03/20/19	AW	SW8270D
Acenaphthylene	ND	150	100	ug/Kg	1	03/20/19	AW	SW8270D
Acetophenone	ND	260	110	ug/Kg	1	03/20/19	AW	SW8270D
Anthracene	ND	260	120	ug/Kg	1	03/20/19	AW	SW8270D
Atrazine	ND	260	96	ug/Kg	1	03/20/19	AW	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Benz(a)anthracene	ND	260	120	ug/Kg	1	03/20/19	AW	SW8270D
Benzaldehyde	ND	260	110	ug/Kg	1	03/20/19	AW	SW8270D
Benzo(a)pyrene	ND	150	120	ug/Kg	1	03/20/19	AW	SW8270D
Benzo(b)fluoranthene	ND	260	130	ug/Kg	1	03/20/19	AW	SW8270D
Benzo(ghi)perylene	ND	260	120	ug/Kg	1	03/20/19	AW	SW8270D
Benzo(k)fluoranthene	ND	260	120	ug/Kg	1	03/20/19	AW	SW8270D
Benzyl butyl phthalate	ND	260	95	ug/Kg	1	03/20/19	AW	SW8270D
Bis(2-chloroethoxy)methane	ND	260	100	ug/Kg	1	03/20/19	AW	SW8270D
Bis(2-chloroethyl)ether	ND	150	99	ug/Kg	1	03/20/19	AW	SW8270D
Bis(2-chloroisopropyl)ether	ND	260	100	ug/Kg	1	03/20/19	AW	SW8270D
Bis(2-ethylhexyl)phthalate	ND	260	110	ug/Kg	1	03/20/19	AW	SW8270D
Caprolactam	ND	260	260	ug/Kg	1	03/20/19	AW	SW8270D
Carbazole	ND	260	180	ug/Kg	1	03/20/19	AW	SW8270D
Chrysene	ND	260	120	ug/Kg	1	03/20/19	AW	SW8270D
Dibenz(a,h)anthracene	ND	150	120	ug/Kg	1	03/20/19	AW	SW8270D
Dibenzofuran	ND	260	110	ug/Kg	1	03/20/19	AW	SW8270D
Diethyl phthalate	ND	260	120	ug/Kg	1	03/20/19	AW	SW8270D
Dimethylphthalate	ND	260	110	ug/Kg	1	03/20/19	AW	SW8270D
Di-n-butylphthalate	ND	260	98	ug/Kg	1	03/20/19	AW	SW8270D
Di-n-octylphthalate	ND	260	95	ug/Kg	1	03/20/19	AW	SW8270D
Fluoranthene	ND	260	120	ug/Kg	1	03/20/19	AW	SW8270D
Fluorene	ND	260	120	ug/Kg	1	03/20/19	AW	SW8270D
Hexachlorobenzene	ND	150	110	ug/Kg	1	03/20/19	AW	SW8270D
Hexachlorobutadiene	ND	260	130	ug/Kg	1	03/20/19	AW	SW8270D
Hexachlorocyclopentadiene	ND	260	110	ug/Kg	1	03/20/19	AW	SW8270D
Hexachloroethane	ND	150	110	ug/Kg	1	03/20/19	AW	SW8270D
Indeno(1,2,3-cd)pyrene	ND	260	120	ug/Kg	1	03/20/19	AW	SW8270D
Isophorone	ND	150	100	ug/Kg	1	03/20/19	AW	SW8270D
Naphthalene	ND	260	110	ug/Kg	1	03/20/19	AW	SW8270D
Nitrobenzene	ND	150	130	ug/Kg	1	03/20/19	AW	SW8270D
N-Nitrosodimethylamine	ND	260	100	ug/Kg	1	03/20/19	AW	SW8270D
N-Nitrosodi-n-propylamine	ND	150	120	ug/Kg	1	03/20/19	AW	SW8270D
N-Nitrosodiphenylamine	ND	150	140	ug/Kg	1	03/20/19	AW	SW8270D
Pentachlorophenol	ND	260	140	ug/Kg	1	03/20/19	AW	SW8270D
Phenanthrene	ND	150	110	ug/Kg	1	03/20/19	AW	SW8270D
Phenol	ND	260	120	ug/Kg	1	03/20/19	AW	SW8270D
Pyrene	ND	260	130	ug/Kg	1	03/20/19	AW	SW8270D
<b>QA/QC Surrogates</b>								
% 2,4,6-Tribromophenol	77			%	1	03/20/19	AW	30 - 130 %
% 2-Fluorobiphenyl	72			%	1	03/20/19	AW	30 - 130 %
% 2-Fluorophenol	69			%	1	03/20/19	AW	30 - 130 %
% Nitrobenzene-d5	69			%	1	03/20/19	AW	30 - 130 %
% Phenol-d5	71			%	1	03/20/19	AW	30 - 130 %
% Terphenyl-d14	61			%	1	03/20/19	AW	30 - 130 %
SVOA Library Search Top 15	Completed					03/28/19	MR	



Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
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RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected at RL/PQL  
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.

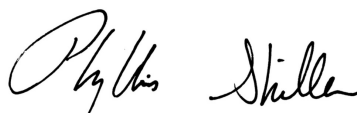
**Comments:**

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**

**March 28, 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

March 28, 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: SW  
 Analyzed by: see "By" below

## Date

03/18/19  
 03/19/19

## Time

13:48

## Laboratory Data

SDG ID: GCC70170  
 Phoenix ID: CC70176

Project ID: 1840 PARK AVE MANHATTAN  
 Client ID: SOIL DUPLUCATE

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.38	0.38		mg/Kg	1	03/20/19	CPP	SW6010D
Aluminum	8990	38		mg/Kg	10	03/20/19	CPP	SW6010D
Arsenic	5.89	0.76		mg/Kg	1	03/20/19	CPP	SW6010D
Barium	274	0.8		mg/Kg	1	03/20/19	EK	SW6010D
Beryllium	0.38	0.31		mg/Kg	1	03/20/19	CPP	SW6010D
Calcium	24000	38		mg/Kg	10	03/20/19	CPP	SW6010D
Cadmium	1.08	0.38		mg/Kg	1	03/20/19	CPP	SW6010D
Cobalt	7.51	0.38		mg/Kg	1	03/20/19	CPP	SW6010D
Chromium	20.4	0.38		mg/Kg	1	03/20/19	CPP	SW6010D
Copper	53.9	0.8		mg/kg	1	03/20/19	CPP	SW6010D
Iron	30500	38		mg/Kg	10	03/20/19	CPP	SW6010D
Mercury	0.53	0.07		mg/Kg	1	03/20/19	RS	SW7471B
Potassium	1120	8		mg/Kg	1	03/20/19	CPP	SW6010D
Magnesium	4010	3.8		mg/Kg	1	03/20/19	CPP	SW6010D
Manganese	398	3.8		mg/Kg	10	03/20/19	CPP	SW6010D
Sodium	200	8		mg/Kg	1	03/20/19	EK	SW6010D
Nickel	19.6	0.38		mg/Kg	1	03/20/19	CPP	SW6010D
Lead	1450	7.6		mg/Kg	10	03/20/19	EK	SW6010D
Antimony	< 3.8	3.8		mg/Kg	1	03/20/19	CPP	SW6010D
Selenium	< 1.5	1.5		mg/Kg	1	03/20/19	CPP	SW6010D
Thallium	< 1.5	1.5		mg/Kg	1	03/20/19	CPP	SW6010D
Vanadium	27.5	0.38		mg/Kg	1	03/20/19	CPP	SW6010D
Zinc	306	7.6		mg/Kg	10	03/20/19	EK	SW6010D
Percent Solid	86			%		03/19/19	ML	SW846-%Solid
Soil Extraction for PCB	Completed					03/19/19	MM/V	SW3545A
Soil Extraction for Pesticides	Completed					03/19/19	MM/V	SW3545A
Soil Extraction for SVOA	Completed					03/19/19	JJ/LV	SW3545A
Mercury Digestion	Completed					03/20/19	I/I	SW7471B

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Total Metals Digest	Completed					03/19/19	B/AG	SW3050B
<b><u>Polychlorinated Biphenyls</u></b>								
PCB-1016	ND	76	76	ug/Kg	2	03/20/19	SC	SW8082A
PCB-1221	ND	76	76	ug/Kg	2	03/20/19	SC	SW8082A
PCB-1232	ND	76	76	ug/Kg	2	03/20/19	SC	SW8082A
PCB-1242	ND	76	76	ug/Kg	2	03/20/19	SC	SW8082A
PCB-1248	ND	76	76	ug/Kg	2	03/20/19	SC	SW8082A
PCB-1254	ND	76	76	ug/Kg	2	03/20/19	SC	SW8082A
PCB-1260	ND	76	76	ug/Kg	2	03/20/19	SC	SW8082A
PCB-1262	ND	76	76	ug/Kg	2	03/20/19	SC	SW8082A
PCB-1268	ND	76	76	ug/Kg	2	03/20/19	SC	SW8082A
<b><u>QA/QC Surrogates</u></b>								
% DCBP	87			%	2	03/20/19	SC	30 - 150 %
% DCBP (Confirmation)	77			%	2	03/20/19	SC	30 - 150 %
% TCMX	74			%	2	03/20/19	SC	30 - 150 %
% TCMX (Confirmation)	71			%	2	03/20/19	SC	30 - 150 %
<b><u>Pesticides - Soil</u></b>								
4,4' -DDD	ND	2.3		ug/Kg	2	03/21/19	CW	SW8081B
4,4' -DDE	7.6	2.3		ug/Kg	2	03/21/19	CW	SW8081B
4,4' -DDT	49	2.3		ug/Kg	2	03/21/19	CW	SW8081B
a-BHC	ND	7.6		ug/Kg	2	03/21/19	CW	SW8081B
a-Chlordane	ND	10		ug/Kg	2	03/21/19	CW	SW8081B
Aldrin	ND	3.8		ug/Kg	2	03/21/19	CW	SW8081B
b-BHC	ND	7.6		ug/Kg	2	03/21/19	CW	SW8081B
Chlordane	67	38		ug/Kg	2	03/21/19	CW	SW8081B
d-BHC	ND	7.6		ug/Kg	2	03/21/19	CW	SW8081B
Dieldrin	40	3.8		ug/Kg	2	03/21/19	CW	SW8081B
Endosulfan I	ND	7.6		ug/Kg	2	03/21/19	CW	SW8081B
Endosulfan II	ND	7.6		ug/Kg	2	03/21/19	CW	SW8081B
Endosulfan sulfate	ND	7.6		ug/Kg	2	03/21/19	CW	SW8081B
Endrin	ND	7.6		ug/Kg	2	03/21/19	CW	SW8081B
Endrin aldehyde	ND	7.6		ug/Kg	2	03/21/19	CW	SW8081B
Endrin ketone	ND	7.6		ug/Kg	2	03/21/19	CW	SW8081B
g-BHC	ND	1.5		ug/Kg	2	03/21/19	CW	SW8081B
g-Chlordane	9.4	3.8		ug/Kg	2	03/21/19	CW	SW8081B
Heptachlor	ND	7.6		ug/Kg	2	03/21/19	CW	SW8081B
Heptachlor epoxide	ND	7.6		ug/Kg	2	03/21/19	CW	SW8081B
Methoxychlor	ND	38		ug/Kg	2	03/21/19	CW	SW8081B
Toxaphene	ND	150		ug/Kg	2	03/21/19	CW	SW8081B
<b><u>QA/QC Surrogates</u></b>								
% DCBP	62			%	2	03/21/19	CW	30 - 150 %
% DCBP (Confirmation)	59			%	2	03/21/19	CW	30 - 150 %
% TCMX	59			%	2	03/21/19	CW	30 - 150 %
% TCMX (Confirmation)	60			%	2	03/21/19	CW	30 - 150 %
<b><u>1,4-dioxane</u></b>								
1,4-dioxane	ND	100		ug/kg	1	03/21/19	JLI	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
<b><u>Volatiles</u></b>								
1,1,1-Trichloroethane	ND	8.1	0.81	ug/Kg	1	03/21/19	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	8.1	1.6	ug/Kg	1	03/21/19	JLI	SW8260C
1,1,2-Trichloroethane	ND	8.1	1.6	ug/Kg	1	03/21/19	JLI	SW8260C
1,1-Dichloroethane	ND	8.1	1.6	ug/Kg	1	03/21/19	JLI	SW8260C
1,1-Dichloroethene	ND	8.1	0.81	ug/Kg	1	03/21/19	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	8.1	1.6	ug/Kg	1	03/21/19	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	8.1	1.6	ug/Kg	1	03/21/19	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	8.1	1.6	ug/Kg	1	03/21/19	JLI	SW8260C
1,2-Dibromoethane	ND	8.1	0.81	ug/Kg	1	03/21/19	JLI	SW8260C
1,2-Dichlorobenzene	ND	8.1	0.81	ug/Kg	1	03/21/19	JLI	SW8260C
1,2-Dichloroethane	ND	8.1	0.81	ug/Kg	1	03/21/19	JLI	SW8260C
1,2-Dichloropropane	ND	8.1	1.6	ug/Kg	1	03/21/19	JLI	SW8260C
1,3-Dichlorobenzene	ND	8.1	0.81	ug/Kg	1	03/21/19	JLI	SW8260C
1,4-Dichlorobenzene	ND	8.1	0.81	ug/Kg	1	03/21/19	JLI	SW8260C
2-Hexanone	ND	40	8.1	ug/Kg	1	03/21/19	JLI	SW8260C
4-Methyl-2-pentanone	ND	40	8.1	ug/Kg	1	03/21/19	JLI	SW8260C
Acetone	36	JS 40	8.1	ug/Kg	1	03/21/19	JLI	SW8260C
Benzene	ND	8.1	0.81	ug/Kg	1	03/21/19	JLI	SW8260C
Bromochloromethane	ND	8.1	0.81	ug/Kg	1	03/21/19	JLI	SW8260C
Bromodichloromethane	ND	8.1	1.6	ug/Kg	1	03/21/19	JLI	SW8260C
Bromoform	ND	8.1	1.6	ug/Kg	1	03/21/19	JLI	SW8260C
Bromomethane	ND	8.1	3.2	ug/Kg	1	03/21/19	JLI	SW8260C
Carbon Disulfide	ND	8.1	1.6	ug/Kg	1	03/21/19	JLI	SW8260C
Carbon tetrachloride	ND	8.1	1.6	ug/Kg	1	03/21/19	JLI	SW8260C
Chlorobenzene	ND	8.1	0.81	ug/Kg	1	03/21/19	JLI	SW8260C
Chloroethane	ND	8.1	0.81	ug/Kg	1	03/21/19	JLI	SW8260C
Chloroform	ND	8.1	0.81	ug/Kg	1	03/21/19	JLI	SW8260C
Chloromethane	ND	8.1	1.6	ug/Kg	1	03/21/19	JLI	SW8260C
cis-1,2-Dichloroethene	ND	8.1	0.81	ug/Kg	1	03/21/19	JLI	SW8260C
cis-1,3-Dichloropropene	ND	8.1	0.81	ug/Kg	1	03/21/19	JLI	SW8260C
Cyclohexane	ND	8.1	1.6	ug/Kg	1	03/21/19	JLI	SW8260C
Dibromochloromethane	ND	8.1	1.6	ug/Kg	1	03/21/19	JLI	SW8260C
Dichlorodifluoromethane	ND	8.1	0.81	ug/Kg	1	03/21/19	JLI	SW8260C
Ethylbenzene	ND	8.1	0.81	ug/Kg	1	03/21/19	JLI	SW8260C
Isopropylbenzene	ND	8.1	0.81	ug/Kg	1	03/21/19	JLI	SW8260C
m&p-Xylene	ND	8.1	1.6	ug/Kg	1	03/21/19	JLI	SW8260C
Methyl ethyl ketone	ND	48	8.1	ug/Kg	1	03/21/19	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	16	1.6	ug/Kg	1	03/21/19	JLI	SW8260C
Methylacetate	ND	8.1	8.1	ug/Kg	1	03/21/19	JLI	SW8260C
Methylcyclohexane	ND	8.1	1.6	ug/Kg	1	03/21/19	JLI	SW8260C
Methylene chloride	ND	8.1	8.1	ug/Kg	1	03/21/19	JLI	SW8260C
o-Xylene	ND	8.1	1.6	ug/Kg	1	03/21/19	JLI	SW8260C
Styrene	ND	8.1	0.81	ug/Kg	1	03/21/19	JLI	SW8260C
Tetrachloroethene	ND	8.1	1.6	ug/Kg	1	03/21/19	JLI	SW8260C
Toluene	ND	8.1	0.81	ug/Kg	1	03/21/19	JLI	SW8260C
Total Xylenes	ND	8.1	8.1	ug/Kg	1	03/21/19	JLI	SW8260C
trans-1,2-Dichloroethene	ND	8.1	0.81	ug/Kg	1	03/21/19	JLI	SW8260C
trans-1,3-Dichloropropene	ND	8.1	0.81	ug/Kg	1	03/21/19	JLI	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Trichloroethene	ND	8.1	0.81	ug/Kg	1	03/21/19	JLI	SW8260C
Trichlorofluoromethane	ND	8.1	1.6	ug/Kg	1	03/21/19	JLI	SW8260C
Trichlorotrifluoroethane	ND	8.1	0.81	ug/Kg	1	03/21/19	JLI	SW8260C
Vinyl chloride	ND	8.1	0.81	ug/Kg	1	03/21/19	JLI	SW8260C
<b><u>QA/QC Surrogates</u></b>								
% 1,2-dichlorobenzene-d4	98			%	1	03/21/19	JLI	70 - 130 %
% Bromofluorobenzene	88			%	1	03/21/19	JLI	70 - 130 %
% Dibromofluoromethane	96			%	1	03/21/19	JLI	70 - 130 %
% Toluene-d8	94			%	1	03/21/19	JLI	70 - 130 %
<b><u>Volatiles</u></b>								
1,1,1,2-Tetrachloroethane	ND	32		ug/Kg	1	03/21/19	JLI	SW8260C
Acrolein	ND	8.1		ug/Kg	1	03/21/19	JLI	SW8260C
Acrylonitrile	ND	32		ug/Kg	1	03/21/19	JLI	SW8260C
Tert-butyl alcohol	ND	160		ug/Kg	1	03/21/19	JLI	SW8260C
Volatile Library Search Top 10	Completed					03/21/19	JLI	
<b><u>Semivolatiles</u></b>								
1,1-Biphenyl	ND	1300	580	ug/Kg	5	03/21/19	PS	SW8270D
1,2,4,5-Tetrachlorobenzene	ND	1300	660	ug/Kg	5	03/21/19	PS	SW8270D
2,3,4,6-tetrachlorophenol	ND	1300	880	ug/Kg	5	03/21/19	PS	SW8270D
2,4,5-Trichlorophenol	ND	1300	1000	ug/Kg	5	03/21/19	PS	SW8270D
2,4,6-Trichlorophenol	ND	750	600	ug/Kg	5	03/21/19	PS	SW8270D
2,4-Dichlorophenol	ND	750	660	ug/Kg	5	03/21/19	PS	SW8270D
2,4-Dimethylphenol	ND	1300	470	ug/Kg	5	03/21/19	PS	SW8270D
2,4-Dinitrophenol	ND	1300	1300	ug/Kg	5	03/21/19	PS	SW8270D
2,4-Dinitrotoluene	ND	750	740	ug/Kg	5	03/21/19	PS	SW8270D
2,6-Dinitrotoluene	ND	750	600	ug/Kg	5	03/21/19	PS	SW8270D
2-Chloronaphthalene	ND	1300	540	ug/Kg	5	03/21/19	PS	SW8270D
2-Chlorophenol	ND	1300	540	ug/Kg	5	03/21/19	PS	SW8270D
2-Methylnaphthalene	ND	1300	560	ug/Kg	5	03/21/19	PS	SW8270D
2-Methylphenol (o-cresol)	ND	330	330	ug/Kg	5	03/21/19	PS	SW8270D
2-Nitroaniline	ND	1300	1300	ug/Kg	5	03/21/19	PS	SW8270D
2-Nitrophenol	ND	1300	1200	ug/Kg	5	03/21/19	PS	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	1300	740	ug/Kg	5	03/21/19	PS	SW8270D
3,3'-Dichlorobenzidine	ND	750	750	ug/Kg	5	03/21/19	PS	SW8270D
3-Nitroaniline	ND	3800	1300	ug/Kg	5	03/21/19	PS	SW8270D
4,6-Dinitro-2-methylphenol	ND	1300	1300	ug/Kg	5	03/21/19	PS	SW8270D
4-Bromophenyl phenyl ether	ND	1300	550	ug/Kg	5	03/21/19	PS	SW8270D
4-Chloro-3-methylphenol	ND	1300	660	ug/Kg	5	03/21/19	PS	SW8270D
4-Chloroaniline	ND	3800	880	ug/Kg	5	03/21/19	PS	SW8270D
4-Chlorophenyl phenyl ether	ND	1300	630	ug/Kg	5	03/21/19	PS	SW8270D
4-Nitroaniline	ND	9400	630	ug/Kg	5	03/21/19	PS	SW8270D
4-Nitrophenol	ND	1300	850	ug/Kg	5	03/21/19	PS	SW8270D
Acenaphthene	ND	1300	570	ug/Kg	5	03/21/19	PS	SW8270D
Acenaphthylene	1400	750	530	ug/Kg	5	03/21/19	PS	SW8270D
Acetophenone	ND	1300	590	ug/Kg	5	03/21/19	PS	SW8270D
Anthracene	1400	1300	620	ug/Kg	5	03/21/19	PS	SW8270D
Atrazine	ND	1300	490	ug/Kg	5	03/21/19	PS	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Benz(a)anthracene	4300	1300	630	ug/Kg	5	03/21/19	PS	SW8270D
Benzaldehyde	ND	1300	560	ug/Kg	5	03/21/19	PS	SW8270D
Benzo(a)pyrene	4000	750	610	ug/Kg	5	03/21/19	PS	SW8270D
Benzo(b)fluoranthene	4300	1300	640	ug/Kg	5	03/21/19	PS	SW8270D
Benzo(ghi)perylene	2600	1300	610	ug/Kg	5	03/21/19	PS	SW8270D
Benzo(k)fluoranthene	3700	1300	630	ug/Kg	5	03/21/19	PS	SW8270D
Benzyl butyl phthalate	ND	1300	490	ug/Kg	5	03/21/19	PS	SW8270D
Bis(2-chloroethoxy)methane	ND	1300	520	ug/Kg	5	03/21/19	PS	SW8270D
Bis(2-chloroethyl)ether	ND	750	510	ug/Kg	5	03/21/19	PS	SW8270D
Bis(2-chloroisopropyl)ether	ND	1300	520	ug/Kg	5	03/21/19	PS	SW8270D
Bis(2-ethylhexyl)phthalate	ND	1300	540	ug/Kg	5	03/21/19	PS	SW8270D
Caprolactam	ND	1300	1300	ug/Kg	5	03/21/19	PS	SW8270D
Carbazole	ND	1300	940	ug/Kg	5	03/21/19	PS	SW8270D
Chrysene	4600	1300	630	ug/Kg	5	03/21/19	PS	SW8270D
Dibenz(a,h)anthracene	820	750	610	ug/Kg	5	03/21/19	PS	SW8270D
Dibenzofuran	ND	330	330	ug/Kg	5	03/21/19	PS	SW8270D
Diethyl phthalate	ND	1300	600	ug/Kg	5	03/21/19	PS	SW8270D
Dimethylphthalate	ND	1300	580	ug/Kg	5	03/21/19	PS	SW8270D
Di-n-butylphthalate	ND	1300	500	ug/Kg	5	03/21/19	PS	SW8270D
Di-n-octylphthalate	ND	1300	490	ug/Kg	5	03/21/19	PS	SW8270D
Fluoranthene	8200	1300	610	ug/Kg	5	03/21/19	PS	SW8270D
Fluorene	ND	1300	620	ug/Kg	5	03/21/19	PS	SW8270D
Hexachlorobenzene	ND	330	330	ug/Kg	5	03/21/19	PS	SW8270D
Hexachlorobutadiene	ND	1300	680	ug/Kg	5	03/21/19	PS	SW8270D
Hexachlorocyclopentadiene	ND	1300	580	ug/Kg	5	03/21/19	PS	SW8270D
Hexachloroethane	ND	750	570	ug/Kg	5	03/21/19	PS	SW8270D
Indeno(1,2,3-cd)pyrene	3100	1300	630	ug/Kg	5	03/21/19	PS	SW8270D
Isophorone	ND	750	530	ug/Kg	5	03/21/19	PS	SW8270D
Naphthalene	ND	1300	540	ug/Kg	5	03/21/19	PS	SW8270D
Nitrobenzene	ND	750	660	ug/Kg	5	03/21/19	PS	SW8270D
N-Nitrosodimethylamine	ND	1300	530	ug/Kg	5	03/21/19	PS	SW8270D
N-Nitrosodi-n-propylamine	ND	750	610	ug/Kg	5	03/21/19	PS	SW8270D
N-Nitrosodiphenylamine	ND	750	720	ug/Kg	5	03/21/19	PS	SW8270D
Pentachlorophenol	ND	800	710	ug/Kg	5	03/21/19	PS	SW8270D
Phenanthrene	7200	750	540	ug/Kg	5	03/21/19	PS	SW8270D
Phenol	ND	330	330	ug/Kg	5	03/21/19	PS	SW8270D
Pyrene	6700	1300	650	ug/Kg	5	03/21/19	PS	SW8270D
<b>QA/QC Surrogates</b>								
% 2,4,6-Tribromophenol (5x)	73			%	5	03/21/19	PS	30 - 130 %
% 2-Fluorobiphenyl (5x)	75			%	5	03/21/19	PS	30 - 130 %
% 2-Fluorophenol (5x)	65			%	5	03/21/19	PS	30 - 130 %
% Nitrobenzene-d5 (5x)	68			%	5	03/21/19	PS	30 - 130 %
% Phenol-d5 (5x)	64			%	5	03/21/19	PS	30 - 130 %
% Terphenyl-d14 (5x)	51			%	5	03/21/19	PS	30 - 130 %
SVOA Library Search Top 15	Completed					03/21/19	MR	

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
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RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected at RL/PQL  
BRL=Below Reporting Level L=Biased Low J=Estimated Below RL LOD=Limit of Detection MDL=Method Detection Limit  
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

**Comments:**

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

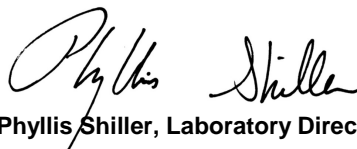
**Semi-Volatile Comment:**

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.

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**

**March 28, 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

March 28, 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: SW  
 Analyzed by: see "By" below

## Date

03/18/19  
 03/19/19

## Time

9:15  
 13:48

## Laboratory Data

SDG ID: GCC70170  
 Phoenix ID: CC70177

Project ID: 1840 PARK AVE MANHATTAN  
 Client ID: TB HL

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
<b><u>1,4-dioxane</u></b>								
1,4-dioxane	ND	2000		ug/kg	50	03/20/19	JLI	SW8260C
<b><u>Volatiles</u></b>								
1,1,1-Trichloroethane	ND	250	25	ug/Kg	50	03/20/19	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	250	50	ug/Kg	50	03/20/19	JLI	SW8260C
1,1,2-Trichloroethane	ND	250	50	ug/Kg	50	03/20/19	JLI	SW8260C
1,1-Dichloroethane	ND	250	50	ug/Kg	50	03/20/19	JLI	SW8260C
1,1-Dichloroethene	ND	250	25	ug/Kg	50	03/20/19	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	250	50	ug/Kg	50	03/20/19	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	250	50	ug/Kg	50	03/20/19	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	250	50	ug/Kg	50	03/20/19	JLI	SW8260C
1,2-Dibromoethane	ND	250	25	ug/Kg	50	03/20/19	JLI	SW8260C
1,2-Dichlorobenzene	ND	250	25	ug/Kg	50	03/20/19	JLI	SW8260C
1,2-Dichloroethane	ND	25	25	ug/Kg	50	03/20/19	JLI	SW8260C
1,2-Dichloropropane	ND	250	50	ug/Kg	50	03/20/19	JLI	SW8260C
1,3-Dichlorobenzene	ND	250	25	ug/Kg	50	03/20/19	JLI	SW8260C
1,4-Dichlorobenzene	ND	250	25	ug/Kg	50	03/20/19	JLI	SW8260C
2-Hexanone	ND	1300	250	ug/Kg	50	03/20/19	JLI	SW8260C
4-Methyl-2-pentanone	ND	1300	250	ug/Kg	50	03/20/19	JLI	SW8260C
Acetone	ND	250	250	ug/Kg	50	03/20/19	JLI	SW8260C
Benzene	ND	60	25	ug/Kg	50	03/20/19	JLI	SW8260C
Bromochloromethane	ND	250	25	ug/Kg	50	03/20/19	JLI	SW8260C
Bromodichloromethane	ND	250	50	ug/Kg	50	03/20/19	JLI	SW8260C
Bromoform	ND	250	50	ug/Kg	50	03/20/19	JLI	SW8260C
Bromomethane	ND	250	100	ug/Kg	50	03/20/19	JLI	SW8260C
Carbon Disulfide	ND	250	50	ug/Kg	50	03/20/19	JLI	SW8260C



Client ID: TB HL

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Carbon tetrachloride	ND	250	50	ug/Kg	50	03/20/19	JLI	SW8260C
Chlorobenzene	ND	250	25	ug/Kg	50	03/20/19	JLI	SW8260C
Chloroethane	ND	250	25	ug/Kg	50	03/20/19	JLI	SW8260C
Chloroform	ND	250	25	ug/Kg	50	03/20/19	JLI	SW8260C
Chloromethane	ND	250	50	ug/Kg	50	03/20/19	JLI	SW8260C
cis-1,2-Dichloroethene	ND	250	25	ug/Kg	50	03/20/19	JLI	SW8260C
cis-1,3-Dichloropropene	ND	250	25	ug/Kg	50	03/20/19	JLI	SW8260C
Cyclohexane	ND	250	50	ug/Kg	50	03/20/19	JLI	SW8260C
Dibromochloromethane	ND	250	50	ug/Kg	50	03/20/19	JLI	SW8260C
Dichlorodifluoromethane	ND	250	25	ug/Kg	50	03/20/19	JLI	SW8260C
Ethylbenzene	ND	250	25	ug/Kg	50	03/20/19	JLI	SW8260C
Isopropylbenzene	ND	250	25	ug/Kg	50	03/20/19	JLI	SW8260C
m&p-Xylene	ND	250	50	ug/Kg	50	03/20/19	JLI	SW8260C
Methyl ethyl ketone	ND	120	120	ug/Kg	50	03/20/19	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	500	50	ug/Kg	50	03/20/19	JLI	SW8260C
Methylacetate	ND	250	250	ug/Kg	50	03/20/19	JLI	SW8260C
Methylcyclohexane	ND	250	50	ug/Kg	50	03/20/19	JLI	SW8260C
Methylene chloride	ND	100	100	ug/Kg	50	03/20/19	JLI	SW8260C
o-Xylene	ND	250	50	ug/Kg	50	03/20/19	JLI	SW8260C
Styrene	ND	250	25	ug/Kg	50	03/20/19	JLI	SW8260C
Tetrachloroethene	ND	250	50	ug/Kg	50	03/20/19	JLI	SW8260C
Toluene	ND	250	25	ug/Kg	50	03/20/19	JLI	SW8260C
Total Xylenes	ND	250	250	ug/Kg	50	03/20/19	JLI	SW8260C
trans-1,2-Dichloroethene	ND	190	25	ug/Kg	50	03/20/19	JLI	SW8260C
trans-1,3-Dichloropropene	ND	250	25	ug/Kg	50	03/20/19	JLI	SW8260C
Trichloroethene	ND	250	25	ug/Kg	50	03/20/19	JLI	SW8260C
Trichlorofluoromethane	ND	250	50	ug/Kg	50	03/20/19	JLI	SW8260C
Trichlorotrifluoroethane	ND	250	25	ug/Kg	50	03/20/19	JLI	SW8260C
Vinyl chloride	ND	25	25	ug/Kg	50	03/20/19	JLI	SW8260C
<b><u>QA/QC Surrogates</u></b>								
% 1,2-dichlorobenzene-d4 (50x)	95			%	50	03/20/19	JLI	70 - 130 %
% Bromofluorobenzene (50x)	95			%	50	03/20/19	JLI	70 - 130 %
% Dibromofluoromethane (50x)	99			%	50	03/20/19	JLI	70 - 130 %
% Toluene-d8 (50x)	93			%	50	03/20/19	JLI	70 - 130 %
<b><u>Volatiles</u></b>								
1,1,1,2-Tetrachloroethane	ND	1000		ug/Kg	50	03/20/19	JLI	SW8260C
Acrolein	ND	250		ug/Kg	50	03/20/19	JLI	SW8260C
Acrylonitrile	ND	1000		ug/Kg	50	03/20/19	JLI	SW8260C
Tert-butyl alcohol	ND	5000		ug/Kg	50	03/20/19	JLI	SW8260C
Volatile Library Search Top 10	Completed					03/21/19	JLI	

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
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RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected at RL/PQL  
 BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit  
 QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

**Comments:**

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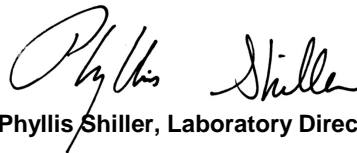
Results are reported on an ``as received`` basis, and are not corrected for dry weight.

**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**

**March 28, 2019**

**Reviewed and Released by: Phyllis Shiller, Laboratory Director**



Environmental Laboratories, Inc.  
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 Tel. (860) 645-1102 Fax (860) 645-0823



# Analysis Report

March 28, 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: SW  
 Analyzed by: see "By" below

## Date

03/18/19  
 03/19/19

## Time

9:15  
 13:48

## Laboratory Data

SDG ID: GCC70170  
 Phoenix ID: CC70178

Project ID: 1840 PARK AVE MANHATTAN  
 Client ID: TB LL

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
<b>1,4-dioxane</b>								
1,4-dioxane	ND	75		ug/kg	1	03/20/19	JLI	SW8260C
<b>Volatiles</b>								
1,1,1-Trichloroethane	ND	5.0	0.50	ug/Kg	1	03/20/19	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	5.0	1.0	ug/Kg	1	03/20/19	JLI	SW8260C
1,1,2-Trichloroethane	ND	5.0	1.0	ug/Kg	1	03/20/19	JLI	SW8260C
1,1-Dichloroethane	ND	5.0	1.0	ug/Kg	1	03/20/19	JLI	SW8260C
1,1-Dichloroethene	ND	5.0	0.50	ug/Kg	1	03/20/19	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	5.0	1.0	ug/Kg	1	03/20/19	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	5.0	1.0	ug/Kg	1	03/20/19	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	5.0	1.0	ug/Kg	1	03/20/19	JLI	SW8260C
1,2-Dibromoethane	ND	5.0	0.50	ug/Kg	1	03/20/19	JLI	SW8260C
1,2-Dichlorobenzene	ND	5.0	0.50	ug/Kg	1	03/20/19	JLI	SW8260C
1,2-Dichloroethane	ND	5.0	0.50	ug/Kg	1	03/20/19	JLI	SW8260C
1,2-Dichloropropane	ND	5.0	1.0	ug/Kg	1	03/20/19	JLI	SW8260C
1,3-Dichlorobenzene	ND	5.0	0.50	ug/Kg	1	03/20/19	JLI	SW8260C
1,4-Dichlorobenzene	ND	5.0	0.50	ug/Kg	1	03/20/19	JLI	SW8260C
2-Hexanone	ND	25	5.0	ug/Kg	1	03/20/19	JLI	SW8260C
4-Methyl-2-pentanone	ND	25	5.0	ug/Kg	1	03/20/19	JLI	SW8260C
Acetone	8.9	JS 25	5.0	ug/Kg	1	03/20/19	JLI	SW8260C
Benzene	ND	5.0	0.50	ug/Kg	1	03/20/19	JLI	SW8260C
Bromochloromethane	ND	5.0	0.50	ug/Kg	1	03/20/19	JLI	SW8260C
Bromodichloromethane	ND	5.0	1.0	ug/Kg	1	03/20/19	JLI	SW8260C
Bromoform	ND	5.0	1.0	ug/Kg	1	03/20/19	JLI	SW8260C
Bromomethane	ND	5.0	2.0	ug/Kg	1	03/20/19	JLI	SW8260C
Carbon Disulfide	ND	5.0	1.0	ug/Kg	1	03/20/19	JLI	SW8260C

Client ID: TB LL

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Carbon tetrachloride	ND	5.0	1.0	ug/Kg	1	03/20/19	JLI	SW8260C
Chlorobenzene	ND	5.0	0.50	ug/Kg	1	03/20/19	JLI	SW8260C
Chloroethane	ND	5.0	0.50	ug/Kg	1	03/20/19	JLI	SW8260C
Chloroform	ND	5.0	0.50	ug/Kg	1	03/20/19	JLI	SW8260C
Chloromethane	ND	5.0	1.0	ug/Kg	1	03/20/19	JLI	SW8260C
cis-1,2-Dichloroethene	ND	5.0	0.50	ug/Kg	1	03/20/19	JLI	SW8260C
cis-1,3-Dichloropropene	ND	5.0	0.50	ug/Kg	1	03/20/19	JLI	SW8260C
Cyclohexane	ND	5.0	1.0	ug/Kg	1	03/20/19	JLI	SW8260C
Dibromochloromethane	ND	5.0	1.0	ug/Kg	1	03/20/19	JLI	SW8260C
Dichlorodifluoromethane	ND	5.0	0.50	ug/Kg	1	03/20/19	JLI	SW8260C
Ethylbenzene	ND	5.0	0.50	ug/Kg	1	03/20/19	JLI	SW8260C
Isopropylbenzene	ND	5.0	0.50	ug/Kg	1	03/20/19	JLI	SW8260C
m&p-Xylene	ND	5.0	1.0	ug/Kg	1	03/20/19	JLI	SW8260C
Methyl ethyl ketone	ND	30	5.0	ug/Kg	1	03/20/19	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	10	1.0	ug/Kg	1	03/20/19	JLI	SW8260C
Methylacetate	ND	5.0	5.0	ug/Kg	1	03/20/19	JLI	SW8260C
Methylcyclohexane	ND	5.0	1.0	ug/Kg	1	03/20/19	JLI	SW8260C
Methylene chloride	ND	5.0	5.0	ug/Kg	1	03/20/19	JLI	SW8260C
o-Xylene	ND	5.0	1.0	ug/Kg	1	03/20/19	JLI	SW8260C
Styrene	ND	5.0	0.50	ug/Kg	1	03/20/19	JLI	SW8260C
Tetrachloroethene	ND	5.0	1.0	ug/Kg	1	03/20/19	JLI	SW8260C
Toluene	ND	5.0	0.50	ug/Kg	1	03/20/19	JLI	SW8260C
Total Xylenes	ND	5.0	5.0	ug/Kg	1	03/20/19	JLI	SW8260C
trans-1,2-Dichloroethene	ND	5.0	0.50	ug/Kg	1	03/20/19	JLI	SW8260C
trans-1,3-Dichloropropene	ND	5.0	0.50	ug/Kg	1	03/20/19	JLI	SW8260C
Trichloroethene	ND	5.0	0.50	ug/Kg	1	03/20/19	JLI	SW8260C
Trichlorofluoromethane	ND	5.0	1.0	ug/Kg	1	03/20/19	JLI	SW8260C
Trichlorotrifluoroethane	ND	5.0	0.50	ug/Kg	1	03/20/19	JLI	SW8260C
Vinyl chloride	ND	5.0	0.50	ug/Kg	1	03/20/19	JLI	SW8260C
<b><u>QA/QC Surrogates</u></b>								
% 1,2-dichlorobenzene-d4	96			%	1	03/20/19	JLI	70 - 130 %
% Bromofluorobenzene	94			%	1	03/20/19	JLI	70 - 130 %
% Dibromofluoromethane	99			%	1	03/20/19	JLI	70 - 130 %
% Toluene-d8	95			%	1	03/20/19	JLI	70 - 130 %
<b><u>Volatiles</u></b>								
1,1,1,2-Tetrachloroethane	ND	20		ug/Kg	1	03/20/19	JLI	SW8260C
Acrolein	ND	5.0		ug/Kg	1	03/20/19	JLI	SW8260C
Acrylonitrile	ND	20		ug/Kg	1	03/20/19	JLI	SW8260C
Tert-butyl alcohol	ND	100		ug/Kg	1	03/20/19	JLI	SW8260C
Volatile Library Search Top 10	Completed					03/21/19	JLI	

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
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RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected at RL/PQL  
 BRL=Below Reporting Level L=Biased Low J=Estimated Below RL LOD=Limit of Detection MDL=Method Detection Limit  
 QA/QC Surrogates: Surrogates are compounds (preceeded 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.

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**

**March 28, 2019**

**Reviewed and Released by: Phyllis Shiller, Laboratory Director**

1E  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID

SB1 (0-2)

Lab Name: Phoenix Environmental Labs

Client: EBC

Lab Code: Phoenix Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: GCC70170

Matrix:(soil/water) SOIL

Lab Sample ID: CC70170

Sample wt/vol: 3.87 (g/mL) g

Lab File ID: 0320\_22.D

Level: (low/med) Low

Date Received: 03/19/19

% Moisture: not dec. 13

Date Analyzed: 03/20/19

GC Column: rtx-vms ID: 0.18 (mm)

Dilution Factor: 1

Soil Extract Volume: 5000 (uL)

Soil Aliquot Vol (uL): 5000

Number TICs found: 0 CONCENTRATION UNITS:  
(ug/L or ug/KG) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1E  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID

SB1 (16-18)

Lab Name: Phoenix Environmental Labs Client: EBC

Lab Code: Phoenix Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: GCC70170

Matrix:(soil/water) SOIL Lab Sample ID: CC70171

Sample wt/vol: 5.64 (g/mL) g Lab File ID: 0320\_23.D

Level: (low/med) Low Date Received: 03/19/19

% Moisture: not dec. 10 Date Analyzed: 03/20/19

GC Column: rtx-vms ID: 0.18 (mm) Dilution Factor: \_\_\_\_\_ 1

Soil Extract Volume: 5000 (uL) Soil Aliquot Vol (uL): \_\_\_\_\_ 5000

Number TICs found: 0 CONCENTRATION UNITS: ug/Kg  
(ug/L or ug/KG)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1E  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID

SB2 (0-2)

Lab Name: Phoenix Environmental Labs

Client: EBC

Lab Code: Phoenix Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_ SDG No.: GCC70170

Matrix:(soil/water) SOIL

Lab Sample ID: CC70172

Sample wt/vol: 4.96 (g/mL) g

Lab File ID: 0320\_24.D

Level: (low/med) Low

Date Received: 03/19/19

% Moisture: not dec. 13

Date Analyzed: 03/20/19

GC Column: rtx-vms ID: 0.18 (mm)

Dilution Factor: 1

Soil Extract Volume: 5000 (uL)

Soil Aliquot Vol (uL): 5000

Number TICs found: 0 CONCENTRATION UNITS:  
(ug/L or ug/KG) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q



1E  
 VOLATILE ORGANICS ANALYSIS DATA SHEET  
 TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID

SB2 (16-18)

Lab Name: Phoenix Environmental Labs

Client: EBC

Lab Code: Phoenix Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_ SDG No.: GCC70170

Matrix:(soil/water) SOIL

Lab Sample ID: CC70173

Sample wt/vol: 5.71 (g/mL) g

Lab File ID: 0320\_25.D

Level: (low/med) Low

Date Received: 03/19/19

% Moisture: not dec. 11

Date Analyzed: 03/20/19

GC Column: rtx-vms ID: 0.18 (mm)

Dilution Factor: 1

Soil Extract Volume: 5000 (uL)

Soil Aliquot Vol (uL): 5000

CONCENTRATION UNITS:  
 (ug/L or ug/KG) ug/Kg

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1E  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID

SB3 (0-2)

Lab Name: Phoenix Environmental Labs

Client: EBC

Lab Code: Phoenix Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: GCC70170

Matrix:(soil/water) SOIL

Lab Sample ID: CC70174

Sample wt/vol: 2.92 (g/mL) g

Lab File ID: 0320\_26.D

Level: (low/med) Low

Date Received: 03/19/19

% Moisture: not dec. 10

Date Analyzed: 03/20/19

GC Column: rtx-vms ID: 0.18 (mm)

Dilution Factor: 1

Soil Extract Volume: 5000 (uL)

Soil Aliquot Vol (uL): 5000

Number TICs found: 0

CONCENTRATION UNITS:  
(ug/L or ug/KG) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1E  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID

SB3 (16-18)

Lab Name: Phoenix Environmental Labs

Client: EBC

Lab Code: Phoenix Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: GCC70170

Matrix:(soil/water) SOIL

Lab Sample ID: CC70175

Sample wt/vol: 5.46 (g/mL) g

Lab File ID: 0320L38.D

Level: (low/med) Low

Date Received: 03/19/19

% Moisture: not dec. 12

Date Analyzed: 03/21/19

GC Column: rtx-vms ID: 0.18 (mm)

Dilution Factor: 1

Soil Extract Volume: 5000 (uL)

Soil Aliquot Vol (uL): 5000

Number TICs found: 0 CONCENTRATION UNITS:  
(ug/L or ug/KG) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1E  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID  
**SOIL DUPLICATE**

Lab Name: Phoenix Environmental Labs Client: EBC  
Lab Code: Phoenix Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: GCC70170  
Matrix:(soil/water) SOIL Lab Sample ID: CC70176  
Sample wt/vol: 3.61 (g/mL) g Lab File ID: 0320L39.D  
Level: (low/med) Low Date Received: 03/19/19  
% Moisture: not dec. 14 Date Analyzed: 03/21/19  
GC Column: rtx-vms ID: 0.18 (mm) Dilution Factor: 1  
Soil Extract Volume: 5000 (uL) Soil Aliquot Vol (uL): 5000  
Number TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/KG) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

FORM I VOA-TIC

1E  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID

TB HL

Lab Name: Phoenix Environmental Labs

Client: EBC

Lab Code: Phoenix Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: GCC70170

Matrix:(soil/water) SOIL

Lab Sample ID: CC70177

Sample wt/vol: 10 (g/mL) g

Lab File ID: 0320\_21.D

Level: (low/med) Meth

Date Received: 03/19/19

% Moisture: not dec. 0

Date Analyzed: 03/20/19

GC Column: rtx-vms ID: 0.18 (mm)

Dilution Factor: 50

Soil Extract Volume: 10000 (uL)

Soil Aliquot Vol (uL): 100

CONCENTRATION UNITS:  
(ug/L or ug/KG)

Number TICs found: 0

ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1E  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID

TB LL

Lab Name: Phoenix Environmental Labs

Client: EBC

Lab Code: Phoenix Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: GCC70170

Matrix:(soil/water) SOIL

Lab Sample ID: CC70178

Sample wt/vol: 5 (g/mL) g

Lab File ID: 0320\_20.D

Level: (low/med) Low

Date Received: 03/19/19

% Moisture: not dec. 0

Date Analyzed: 03/20/19

GC Column: rtx-vms ID: 0.18 (mm)

Dilution Factor: 1

Soil Extract Volume: 5000 (uL)

Soil Aliquot Vol (uL): 5000

CONCENTRATION UNITS:

Number TICs found: 0 (ug/L or ug/KG) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q



1F  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID  
**SB1 (16-18)**

Lab Name: Phoenix Environmental Labs

Client: EBC

Lab Code: Phoenix Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: GCC70171

Matrix:(soil/water) SOIL

Lab Sample ID: CC70171

Sample wt/vol: 15.22 (g/mL) g

Lab File ID: 0321\_15.D

Level: (low/med) Low

Date Received: 03/19/19

% Moisture: not dec. 10 decanted:(Y/N) NA

Date Extracted: 03/21/19

GPC Cleanup (Y/N): N pH: NA

Date Analyzed: 3/21/2019

Conc. Extract Volume: 1000 (uL)

Dilution Factor 1

Injection Volume: 1 (uL)

CONCENTRATION UNITS:  
(ug/L or ug/KG)

Number TICs found: 1

ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	2.720	3200	JNA

FORM I SEMIVOA-TIC

A - Indicates that the tentatively identified compound is a suspected aldol condensation product.  
Aldol condensation products are produced during the extraction process.



1F  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID

SB2 (0-2)

Lab Name: Phoenix Environmental Labs

Client: EBC

Lab Code: Phoenix Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: GCC7017

Matrix:(soil/water) SOIL

Lab Sample ID: CC70172

Sample wt/vol: 15.23 (g/mL) g

Lab File ID: 0321\_17.D

Level: (low/med) Low

Date Received: 03/19/19

% Moisture: not dec. 13 decanted:(Y/N) NA

Date Extracted: 03/21/19

GPC Cleanup (Y/N): N pH: NA

Date Analyzed: 3/21/2019

Conc. Extract Volume: 1000 (uL)

Dilution Factor 1

Injection Volume: 1 (uL)

CONCENTRATION UNITS:

Number TICs found: 1 (ug/L or ug/KG) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	2.075	26000	JNA

FORM I SEMIVOA-TIC

A - Indicates that the tentatively identified compound is a suspected aldol condensation product. Aldol condensation products are produced during the extraction process.

1F  
 SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET  
 TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID  
 SB2 (16-18)

Lab Name: Phoenix Environmental Labs

Client: EBC

Lab Code: Phoenix Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_ SDG No.: GCC7017

Matrix:(soil/water) SOIL

Lab Sample ID: CC70173

Sample wt/vol: 15.18 (g/mL) g

Lab File ID: 0319\_31.D

Level: (low/med) Low

Date Received: 03/19/19

% Moisture: not dec. 11 decanted:(Y/N) NA

Date Extracted: 03/20/19

GPC Cleanup (Y/N): N pH: NA

Date Analyzed: 3/20/2019

Conc. Extract Volume: 1000 (uL)

Dilution Factor 1

Injection Volume: 1 (uL)

CONCENTRATION UNITS:  
 (ug/L or ug/KG) ug/Kg

Number TICs found: 1

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	2.096	13000	JNA

FORM I SEMIVOA-TIC

A - Indicates that the tentatively identified compound is a suspected aldol condensation product.  
 Aldol condensation products are produced during the extraction process.

1F  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID

SB3 (0-2)
-----------

Lab Name: Phoenix Environmental Labs

Client: EBC

Lab Code: Phoenix Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: GCC7017

Matrix:(soil/water) SOIL

Lab Sample ID: CC70174

Sample wt/vol: 15.4 (g/mL) g

Lab File ID: 0321\_19.D

Level: (low/med) Low

Date Received: 03/19/19

% Moisture: not dec. 10 decanted:(Y/N) NA

Date Extracted: 03/21/19

GPC Cleanup (Y/N): N pH: NA

Date Analyzed: 3/21/2019

Conc. Extract Volume: 1000 (uL)

Dilution Factor 1

Injection Volume: 1 (uL)

CONCENTRATION UNITS:  
(ug/L or ug/KG)

Number TICs found: 2

ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
000141-79-7	3-Penten-2-one, 4-methyl-	1.822	7600	JNA
000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	2.098	62000	JNA

FORM I SEMIVOA-TIC

A - Indicates that the tentatively identified compound is a suspected aldol condensation product.  
Aldol condensation products are produced during the extraction process.

1F  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID  
**SB3 (16-18)**

Lab Name: Phoenix Environmental Labs

Client: EBC

Lab Code: Phoenix Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: GCC7017

Matrix:(soil/water) SOIL

Lab Sample ID: CC70175

Sample wt/vol: 15.44 (g/mL) g

Lab File ID: 0319\_32.D

Level: (low/med) Low

Date Received: 03/19/19

% Moisture: not dec. 12 decanted:(Y/N) NA

Date Extracted: 03/20/19

GPC Cleanup (Y/N): N pH: NA

Date Analyzed: 3/20/2019

Conc. Extract Volume: 1000 (uL)

Dilution Factor 1

Injection Volume: 1 (uL)

CONCENTRATION UNITS:  
(ug/L or ug/KG)

Number TICs found: 2 ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	2.102	11000	JNA
	unknown	8.759	880	J

FORM I SEMIVOA-TIC

A - Indicates that the tentatively identified compound is a suspected aldol condensation product. Aldol condensation products are produced during the extraction process.

1F  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID  SOIL DUPLICATE
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Lab Name: Phoenix Environmental Labs

Client: EBC

Lab Code: Phoenix Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: GCC7017

Matrix:(soil/water) SOIL

Lab Sample ID: CC70176

Sample wt/vol: 15.43 (g/mL) g

Lab File ID: 0321\_14.D

Level: (low/med) Low

Date Received: 03/19/19

% Moisture: not dec. 14 decanted:(Y/N) NA

Date Extracted: 03/21/19

GPC Cleanup (Y/N): N pH: NA

Date Analyzed: 3/21/2019

Conc. Extract Volume: 1000 (uL)

Dilution Factor 5

Injection Volume: 1 (uL)

CONCENTRATION UNITS:  
(ug/L or ug/KG) ug/Kg

Number TICs found: 6

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
000141-79-7	3-Penten-2-one, 4-methyl-	1.828	9800	JNA
000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	2.069	100000	JNA
000085-44-9	Phthalic anhydride	4.784	2100	JN
000243-17-4	11H-Benzo[b]fluorene	8.409	1500	JN
000207-08-9	Benzo[k]fluoranthene	11.317	2000	JN
000198-55-0	Perylene	11.652	2900	JN

FORM I SEMIVOA-TIC

A - Indicates that the tentatively identified compound is a suspected aldol condensation product. Aldol condensation products are produced during the extraction process.



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



# QA/QC Report

March 28, 2019

## QA/QC Data

SDG I.D.: GCC70170

Parameter	Blank	Blk RL	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 470932 (mg/kg), QC Sample No: CC69813 (CC70170, CC70171, CC70172, CC70173, CC70174)													
Mercury - Soil	BRL	0.02	<0.03	<0.03	NC	95.1	99.7	4.7	78.5	83.2	5.8	70 - 130	30
Comment:													
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%. MS acceptance range is 75-125%.													
QA/QC Batch 470934 (mg/kg), QC Sample No: CC70334 (CC70176)													
Mercury - Soil	BRL	0.03	<0.03	<0.03	NC	97.5	97.0	0.5	105	101	3.9	70 - 130	30
Comment:													
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%. MS acceptance range is 75-125%.													
QA/QC Batch 470933 (mg/kg), QC Sample No: CC70860 (CC70175)													
Mercury - Soil	BRL	0.02	<0.03	<0.03	NC	93.5	88.9	5.0	99.5	104	4.4	70 - 130	30
Comment:													
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%. MS acceptance range is 75-125%.													
QA/QC Batch 470882 (mg/kg), QC Sample No: CC69974 (CC70170, CC70171, CC70172, CC70173, CC70174, CC70175, CC70176)													
<b>ICP Metals - Soil</b>													
Aluminum	BRL	5.1	11000	12600	13.6	106			NC			75 - 125	30
Antimony	BRL	3.4	<3.5	<3.9	NC	107			86.7			75 - 125	30
Arsenic	BRL	0.68	4.43	4.37	1.40	94.5			92.2			75 - 125	30
Barium	BRL	0.34	70.8	88.6	22.3	102			100			75 - 125	30
Beryllium	BRL	0.27	0.62	0.62	NC	104			98.2			75 - 125	30
Cadmium	BRL	0.34	<0.35	<0.39	NC	108			97.1			75 - 125	30
Calcium	BRL	5.1	3760	4890	26.1	102			NC			75 - 125	30
Chromium	BRL	0.34	18.4	17.4	5.60	101			99.5			75 - 125	30
Cobalt	BRL	0.34	7.71	6.26	20.8	105			97.7			75 - 125	30
Copper	BRL	0.68	47.8	41.0	15.3	101			98.3			75 - 125	30
Iron	BRL	5.1	17400	16500	5.30	110			NC			75 - 125	30
Lead	BRL	0.34	75.2	66.9	11.7	98.8			118			75 - 125	30
Magnesium	BRL	5.1	2580	2280	12.3	103			NC			75 - 125	30
Manganese	BRL	0.34	186	185	0.50	108			96.3			75 - 125	30
Nickel	BRL	0.34	10.8	8.97	18.5	106			95.6			75 - 125	30
Potassium	BRL	5.1	1320	1050	22.8	98.8			NC			75 - 125	30
Selenium	BRL	1.4	<1.4	<1.6	NC	86.3			79.7			75 - 125	30
Silver	BRL	0.34	<0.35	<0.39	NC	91.4			95.4			75 - 125	30
Sodium	BRL	5.1	1570	1700	8.00	103			NC			75 - 125	30
Thallium	BRL	3.1	<1.4	<3.5	NC	105			95.8			75 - 125	30
Vanadium	BRL	0.34	27.7	26.5	4.40	88.2			99.8			75 - 125	30
Zinc	BRL	0.68	91.2	84.3	7.90	96.5			92.8			75 - 125	30



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# QA/QC Report

March 28, 2019

## QA/QC Data

SDG I.D.: GCC70170

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
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QA/QC Batch 470844 (ug/Kg), QC Sample No: CC70856 2X (CC70170, CC70171, CC70172, CC70173, CC70174, CC70175, CC70176)

### Polychlorinated Biphenyls - Soil

PCB-1016	ND	33	94	101	7.2	79	82	3.7	40 - 140	30
PCB-1221	ND	33							40 - 140	30
PCB-1232	ND	33							40 - 140	30
PCB-1242	ND	33							40 - 140	30
PCB-1248	ND	33							40 - 140	30
PCB-1254	ND	33							40 - 140	30
PCB-1260	ND	33	107	117	8.9	92	95	3.2	40 - 140	30
PCB-1262	ND	33							40 - 140	30
PCB-1268	ND	33							40 - 140	30
% DCBP (Surrogate Rec)	83	%	98	110	11.5	85	87	2.3	30 - 150	30
% DCBP (Surrogate Rec) (Confirm)	81	%	93	102	9.2	79	81	2.5	30 - 150	30
% TCMX (Surrogate Rec)	87	%	98	111	12.4	80	83	3.7	30 - 150	30
% TCMX (Surrogate Rec) (Confirm)	81	%	96	104	8.0	76	79	3.9	30 - 150	30

QA/QC Batch 470847 (ug/Kg), QC Sample No: CC70856 2X (CC70170, CC70171, CC70172, CC70173, CC70174, CC70175, CC70176)

### Pesticides - Soil

4,4' -DDD	ND	1.7	88	90	2.2	56	64	13.3	40 - 140	30
4,4' -DDE	ND	1.7	82	84	2.4	50	58	14.8	40 - 140	30
4,4' -DDT	ND	1.7	78	81	3.8	44	54	20.4	40 - 140	30
a-BHC	ND	1.0	82	85	3.6	49	55	11.5	40 - 140	30
a-Chlordane	ND	3.3	83	84	1.2	51	58	12.8	40 - 140	30
Aldrin	ND	1.0	78	79	1.3	47	53	12.0	40 - 140	30
b-BHC	ND	1.0	88	88	0.0	56	63	11.8	40 - 140	30
Chlordane	ND	3.3	85	86	1.2	53	60	12.4	40 - 140	30
d-BHC	ND	3.3	93	88	5.5	55	62	12.0	40 - 140	30
Dieldrin	ND	1.0	81	84	3.6	51	57	11.1	40 - 140	30
Endosulfan I	ND	3.3	79	80	1.3	52	58	10.9	40 - 140	30
Endosulfan II	ND	3.3	85	90	5.7	57	63	10.0	40 - 140	30
Endosulfan sulfate	ND	3.3	82	86	4.8	49	55	11.5	40 - 140	30
Endrin	ND	3.3	80	81	1.2	53	61	14.0	40 - 140	30
Endrin aldehyde	ND	3.3	67	70	4.4	48	47	2.1	40 - 140	30
Endrin ketone	ND	3.3	78	80	2.5	48	54	11.8	40 - 140	30
g-BHC	ND	1.0	77	78	1.3	48	58	18.9	40 - 140	30
g-Chlordane	ND	3.3	85	86	1.2	53	60	12.4	40 - 140	30
Heptachlor	ND	3.3	86	87	1.2	53	59	10.7	40 - 140	30
Heptachlor epoxide	ND	3.3	81	82	1.2	48	54	11.8	40 - 140	30
Methoxychlor	ND	3.3	78	82	5.0	50	56	11.3	40 - 140	30
Toxaphene	ND	130	NA	NA	NC	NA	NA	NC	40 - 140	30
% DCBP	76	%	72	71	1.4	49	55	11.5	30 - 150	30
% DCBP (Confirmation)	80	%	80	78	2.5	55	62	12.0	30 - 150	30

## QA/QC Data

SDG I.D.: GCC70170

Parameter	Blk		LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
	Blank	RL								
% TCMX	91	%	85	86	1.2	59	63	6.6	30 - 150	30
% TCMX (Confirmation)	94	%	90	90	0.0	61	66	7.9	30 - 150	30

QA/QC Batch 470839 (ug/kg), QC Sample No: CC70334 (CC70170, CC70172, CC70173, CC70174, CC70175, CC70176)

### Semivolatiles - Soil

1,1-Biphenyl	ND	230	74	71	4.1	74			30 - 130	30
1,2,4,5-Tetrachlorobenzene	ND	230	73	67	8.6	70			30 - 130	30
2,3,4,6-tetrachlorophenol	ND	230	75	72	4.1	62			30 - 130	30
2,4,5-Trichlorophenol	ND	230	81	79	2.5	82			30 - 130	30
2,4,6-Trichlorophenol	ND	130	85	80	6.1	81			30 - 130	30
2,4-Dichlorophenol	ND	130	76	73	4.0	76			30 - 130	30
2,4-Dimethylphenol	ND	230	82	74	10.3	76			30 - 130	30
2,4-Dinitrophenol	ND	230	11	<10	NC	49			30 - 130	30
2,4-Dinitrotoluene	ND	130	79	74	6.5	74			30 - 130	30
2,6-Dinitrotoluene	ND	130	76	72	5.4	71			30 - 130	30
2-Chloronaphthalene	ND	230	71	69	2.9	70			30 - 130	30
2-Chlorophenol	ND	230	68	67	1.5	68			30 - 130	30
2-Methylnaphthalene	ND	230	70	67	4.4	70			30 - 130	30
2-Methylphenol (o-cresol)	ND	230	75	78	3.9	81			30 - 130	30
2-Nitroaniline	ND	330	118	110	7.0	111			30 - 130	30
2-Nitrophenol	ND	230	70	64	9.0	69			30 - 130	30
3&4-Methylphenol (m&p-cresol)	ND	230	86	87	1.2	90			30 - 130	30
3,3'-Dichlorobenzidine	ND	130	73	71	2.8	82			30 - 130	30
3-Nitroaniline	ND	330	91	88	3.4	86			30 - 130	30
4,6-Dinitro-2-methylphenol	ND	230	37	33	11.4	59			30 - 130	30
4-Bromophenyl phenyl ether	ND	230	74	69	7.0	71			30 - 130	30
4-Chloro-3-methylphenol	ND	230	91	86	5.6	88			30 - 130	30
4-Chloroaniline	ND	230	68	69	1.5	72			30 - 130	30
4-Chlorophenyl phenyl ether	ND	230	71	70	1.4	70			30 - 130	30
4-Nitroaniline	ND	230	81	76	6.4	79			30 - 130	30
4-Nitrophenol	ND	230	84	83	1.2	101			30 - 130	30
Acenaphthene	ND	230	74	69	7.0	68			30 - 130	30
Acenaphthylene	ND	130	77	72	6.7	64			30 - 130	30
Acetophenone	ND	230	63	65	3.1	77			30 - 130	30
Anthracene	ND	230	81	76	6.4	69			30 - 130	30
Atrazine	ND	130	70	66	5.9	59			30 - 130	30
Benz(a)anthracene	ND	230	73	71	2.8	56			30 - 130	30
Benzaldehyde	ND	230	<10	<10	NC	74			30 - 130	30
Benzo(a)pyrene	ND	130	73	68	7.1	53			30 - 130	30
Benzo(b)fluoranthene	ND	160	70	70	0.0	58			30 - 130	30
Benzo(ghi)perylene	ND	230	73	67	8.6	68			30 - 130	30
Benzo(k)fluoranthene	ND	230	74	68	8.5	42			30 - 130	30
Benzyl butyl phthalate	ND	230	74	73	1.4	80			30 - 130	30
Bis(2-chloroethoxy)methane	ND	230	73	69	5.6	71			30 - 130	30
Bis(2-chloroethyl)ether	ND	130	59	59	0.0	59			30 - 130	30
Bis(2-chloroisopropyl)ether	ND	230	53	53	0.0	53			30 - 130	30
Bis(2-ethylhexyl)phthalate	ND	230	77	75	2.6	82			30 - 130	30
Caprolactam	ND	230	80	77	3.8	78			30 - 130	30
Carbazole	ND	230	80	76	5.1	73			30 - 130	30
Chrysene	ND	230	75	71	5.5	48			30 - 130	30
Dibenz(a,h)anthracene	ND	130	77	75	2.6	87			30 - 130	30
Dibenzofuran	ND	230	80	73	9.2	73			30 - 130	30
Diethyl phthalate	ND	230	78	76	2.6	73			30 - 130	30



QA/QC Data

SDG I.D.: GCC70170

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
Dimethylphthalate	ND	230	78	75	3.9	73			30 - 130	30
Di-n-butylphthalate	ND	670	92	83	10.3	77			30 - 130	30
Di-n-octylphthalate	ND	230	80	79	1.3	80			30 - 130	30
Fluoranthene	ND	230	79	73	7.9	38			30 - 130	30
Fluorene	ND	230	78	77	1.3	71			30 - 130	30
Hexachlorobenzene	ND	130	72	68	5.7	68			30 - 130	30
Hexachlorobutadiene	ND	230	67	59	12.7	62			30 - 130	30
Hexachlorocyclopentadiene	ND	230	47	44	6.6	21			30 - 130	30 m
Hexachloroethane	ND	130	54	53	1.9	54			30 - 130	30
Indeno(1,2,3-cd)pyrene	ND	230	82	74	10.3	83			30 - 130	30
Isophorone	ND	130	66	61	7.9	63			30 - 130	30
Naphthalene	ND	230	73	68	7.1	74			30 - 130	30
Nitrobenzene	ND	130	70	68	2.9	74			30 - 130	30
N-Nitrosodimethylamine	ND	230	58	55	5.3	41			30 - 130	30
N-Nitrosodi-n-propylamine	ND	130	73	76	4.0	78			30 - 130	30
N-Nitrosodiphenylamine	ND	130	75	73	2.7	71			30 - 130	30
Pentachlorophenol	ND	230	82	80	2.5	70			30 - 130	30
Phenanthrene	ND	130	80	75	6.5	10			30 - 130	30 m
Phenol	ND	230	76	77	1.3	79			30 - 130	30
Pyrene	ND	230	78	74	5.3	43			30 - 130	30
% 2,4,6-Tribromophenol	70	%	78	73	6.6	78			30 - 130	30
% 2-Fluorobiphenyl	72	%	75	69	8.3	70			30 - 130	30
% 2-Fluorophenol	67	%	69	68	1.5	64			30 - 130	30
% Nitrobenzene-d5	66	%	67	66	1.5	71			30 - 130	30
% Phenol-d5	70	%	75	75	0.0	73			30 - 130	30
% Terphenyl-d14	65	%	68	64	6.1	42			30 - 130	30

Comment:

This batch consists of a BLK, LCS, LCSD, and MS

Additional 8270 criteria: 20% of compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 15-110%, for soils 30-130%)

QA/QC Batch 471024 (ug/kg), QC Sample No: CC71222 (CC70171)

Semivolatiles - Soil

1,1-Biphenyl	ND	230	49	62	23.4	62	57	8.4	30 - 130	30
1,2,4,5-Tetrachlorobenzene	ND	230	50	63	23.0	63	58	8.3	30 - 130	30
2,3,4,6-tetrachlorophenol	ND	230	50	66	27.6	64	59	8.1	30 - 130	30
2,4,5-Trichlorophenol	ND	230	60	75	22.2	75	71	5.5	30 - 130	30
2,4,6-Trichlorophenol	ND	130	56	73	26.4	72	66	8.7	30 - 130	30
2,4-Dichlorophenol	ND	130	55	70	24.0	70	65	7.4	30 - 130	30
2,4-Dimethylphenol	ND	230	63	77	20.0	75	68	9.8	30 - 130	30
2,4-Dinitrophenol	ND	230	21	31	38.5	28	30	6.9	30 - 130	30 l,m,r
2,4-Dinitrotoluene	ND	130	62	76	20.3	75	72	4.1	30 - 130	30
2,6-Dinitrotoluene	ND	130	59	74	22.6	74	68	8.5	30 - 130	30
2-Chloronaphthalene	ND	230	50	62	21.4	62	58	6.7	30 - 130	30
2-Chlorophenol	ND	230	48	65	30.1	61	59	3.3	30 - 130	30
2-Methylnaphthalene	ND	230	48	60	22.2	61	56	8.5	30 - 130	30
2-Methylphenol (o-cresol)	ND	230	59	77	26.5	70	69	1.4	30 - 130	30
2-Nitroaniline	ND	330	76	96	23.3	95	87	8.8	30 - 130	30
2-Nitrophenol	ND	230	52	71	30.9	70	65	7.4	30 - 130	30 r
3&4-Methylphenol (m&p-cresol)	ND	230	62	80	25.4	76	73	4.0	30 - 130	30
3,3'-Dichlorobenzidine	ND	130	67	79	16.4	90	82	9.3	30 - 130	30
3-Nitroaniline	ND	330	70	80	13.3	91	87	4.5	30 - 130	30
4,6-Dinitro-2-methylphenol	ND	230	34	51	40.0	51	50	2.0	30 - 130	30 r

QA/QC Data

SDG I.D.: GCC70170

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
4-Bromophenyl phenyl ether	ND	230	55	68	21.1	68	64	6.1	30 - 130	30	
4-Chloro-3-methylphenol	ND	230	64	80	22.2	82	76	7.6	30 - 130	30	
4-Chloroaniline	ND	230	55	58	5.3	71	66	7.3	30 - 130	30	
4-Chlorophenyl phenyl ether	ND	230	54	66	20.0	67	61	9.4	30 - 130	30	
4-Nitroaniline	ND	230	60	76	23.5	75	70	6.9	30 - 130	30	
4-Nitrophenol	ND	230	56	79	34.1	69	65	6.0	30 - 130	30	r
Acenaphthene	ND	230	55	67	19.7	68	63	7.6	30 - 130	30	
Acenaphthylene	ND	130	53	64	18.8	64	60	6.5	30 - 130	30	
Acetophenone	ND	230	48	64	28.6	61	59	3.3	30 - 130	30	
Anthracene	ND	230	57	69	19.0	70	65	7.4	30 - 130	30	
Atrazine	ND	130	51	65	24.1	67	61	9.4	30 - 130	30	
Benz(a)anthracene	ND	230	57	70	20.5	71	66	7.3	30 - 130	30	
Benzaldehyde	ND	230	<10	15	NC	57	84	38.3	30 - 130	30	lr
Benzo(a)pyrene	ND	130	55	68	21.1	69	65	6.0	30 - 130	30	
Benzo(b)fluoranthene	ND	160	57	71	21.9	72	68	5.7	30 - 130	30	
Benzo(ghi)perylene	ND	230	48	60	22.2	60	57	5.1	30 - 130	30	
Benzo(k)fluoranthene	ND	230	58	70	18.8	70	65	7.4	30 - 130	30	
Benzyl butyl phthalate	ND	230	61	77	23.2	76	70	8.2	30 - 130	30	
Bis(2-chloroethoxy)methane	ND	230	51	65	24.1	63	60	4.9	30 - 130	30	
Bis(2-chloroethyl)ether	ND	130	39	53	30.4	53	50	5.8	30 - 130	30	
Bis(2-chloroisopropyl)ether	ND	230	38	49	25.3	49	47	4.2	30 - 130	30	
Bis(2-ethylhexyl)phthalate	ND	230	64	78	19.7	79	73	7.9	30 - 130	30	
Caprolactam	ND	230	59	77	26.5	77	72	6.7	30 - 130	30	
Carbazole	ND	230	56	70	22.2	70	65	7.4	30 - 130	30	
Chrysene	ND	230	58	70	18.8	71	65	8.8	30 - 130	30	
Dibenz(a,h)anthracene	ND	130	56	67	17.9	68	64	6.1	30 - 130	30	
Dibenzofuran	ND	230	53	65	20.3	64	61	4.8	30 - 130	30	
Diethyl phthalate	ND	230	58	71	20.2	72	68	5.7	30 - 130	30	
Dimethylphthalate	ND	230	57	70	20.5	70	64	9.0	30 - 130	30	
Di-n-butylphthalate	ND	670	59	75	23.9	76	69	9.7	30 - 130	30	
Di-n-octylphthalate	ND	230	65	83	24.3	82	74	10.3	30 - 130	30	
Fluoranthene	ND	230	56	69	20.8	71	65	8.8	30 - 130	30	
Fluorene	ND	230	57	69	19.0	69	64	7.5	30 - 130	30	
Hexachlorobenzene	ND	130	56	67	17.9	69	62	10.7	30 - 130	30	
Hexachlorobutadiene	ND	230	43	56	26.3	58	52	10.9	30 - 130	30	
Hexachlorocyclopentadiene	ND	230	35	54	42.7	49	42	15.4	30 - 130	30	r
Hexachloroethane	ND	130	37	51	31.8	54	47	13.9	30 - 130	30	r
Indeno(1,2,3-cd)pyrene	ND	230	64	66	3.1	79	74	6.5	30 - 130	30	
Isophorone	ND	130	47	60	24.3	61	57	6.8	30 - 130	30	
Naphthalene	ND	230	46	58	23.1	60	55	8.7	30 - 130	30	
Nitrobenzene	ND	130	46	62	29.6	60	59	1.7	30 - 130	30	
N-Nitrosodimethylamine	ND	230	32	45	33.8	49	45	8.5	30 - 130	30	r
N-Nitrosodi-n-propylamine	ND	130	53	67	23.3	65	63	3.1	30 - 130	30	
N-Nitrosodiphenylamine	ND	130	57	71	21.9	70	64	9.0	30 - 130	30	
Pentachlorophenol	ND	230	43	64	39.3	60	53	12.4	30 - 130	30	r
Phenanthrene	ND	130	55	68	21.1	68	64	6.1	30 - 130	30	
Phenol	ND	230	59	69	15.6	74	71	4.1	30 - 130	30	
Pyrene	ND	230	57	69	19.0	71	65	8.8	30 - 130	30	
% 2,4,6-Tribromophenol	78	%	56	75	29.0	73	64	13.1	30 - 130	30	
% 2-Fluorobiphenyl	66	%	50	62	21.4	61	56	8.5	30 - 130	30	
% 2-Fluorophenol	60	%	42	59	33.7	53	52	1.9	30 - 130	30	r
% Nitrobenzene-d5	68	%	47	62	27.5	60	59	1.7	30 - 130	30	
% Phenol-d5	68	%	49	67	31.0	62	59	5.0	30 - 130	30	r

## QA/QC Data

SDG I.D.: GCC70170

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
% Terphenyl-d14	66	%	51	62	19.5	63	57	10.0	30 - 130	30

Comment:

Additional 8270 criteria: 20% of compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 15-110%, for soils 30-130%)

QA/QC Batch 471473 (ug/kg), QC Sample No: CC69286 (CC70170 (50X) )

### Volatiles - Soil

1,1,2,2-Tetrachloroethane	ND	3.0	88	97	9.7	84	96	13.3	70 - 130	30
1,2,3-Trichlorobenzene	ND	5.0	91	95	4.3	84	94	11.2	70 - 130	30
1,2,4-Trichlorobenzene	ND	5.0	91	93	2.2	79	90	13.0	70 - 130	30
1,2-Dibromo-3-chloropropane	ND	5.0	74	88	17.3	74	86	15.0	70 - 130	30
1,2-Dichlorobenzene	ND	5.0	100	106	5.8	92	103	11.3	70 - 130	30
1,3-Dichlorobenzene	ND	5.0	98	104	5.9	89	101	12.6	70 - 130	30
1,4-Dichlorobenzene	ND	5.0	100	105	4.9	91	104	13.3	70 - 130	30
Isopropylbenzene	ND	1.0	96	102	6.1	88	98	10.8	70 - 130	30
% 1,2-dichlorobenzene-d4	96	%	99	99	0.0	101	103	2.0	70 - 130	30
% Bromofluorobenzene	94	%	91	91	0.0	94	90	4.3	70 - 130	30
% Dibromofluoromethane	96	%	94	92	2.2	93	98	5.2	70 - 130	30
% Toluene-d8	98	%	96	98	2.1	98	99	1.0	70 - 130	30

Comment:

Additional 8260 criteria: 10% of LCS/LCSD compounds can be outside of acceptance criteria as long as recovery is 40-160%.

QA/QC Batch 471176 (ug/kg), QC Sample No: CC70625 (CC70170, CC70171, CC70172, CC70173, CC70174, CC70177 (50X) , CC70178)

### Volatiles - Soil

1,1,1,2-Tetrachloroethane	ND	5.0	95	99	4.1	100	88	12.8	70 - 130	30
1,1,1-Trichloroethane	ND	5.0	92	93	1.1	96	88	8.7	70 - 130	30
1,1,2,2-Tetrachloroethane	ND	3.0	96	101	5.1	106	95	10.9	70 - 130	30
1,1,2-Trichloroethane	ND	5.0	94	98	4.2	95	86	9.9	70 - 130	30
1,1-Dichloroethane	ND	5.0	94	97	3.1	98	90	8.5	70 - 130	30
1,1-Dichloroethene	ND	5.0	89	91	2.2	89	83	7.0	70 - 130	30
1,2,3-Trichlorobenzene	ND	5.0	100	107	6.8	66	108	48.3	70 - 130	30 m,r
1,2,4-Trichlorobenzene	ND	5.0	99	106	6.8	72	111	42.6	70 - 130	30 r
1,2-Dibromo-3-chloropropane	ND	5.0	85	93	9.0	92	90	2.2	70 - 130	30
1,2-Dibromoethane	ND	5.0	93	96	3.2	94	84	11.2	70 - 130	30
1,2-Dichlorobenzene	ND	5.0	96	103	7.0	96	105	9.0	70 - 130	30
1,2-Dichloroethane	ND	5.0	91	94	3.2	92	87	5.6	70 - 130	30
1,2-Dichloropropane	ND	5.0	93	97	4.2	96	88	8.7	70 - 130	30
1,3-Dichlorobenzene	ND	5.0	97	104	7.0	99	105	5.9	70 - 130	30
1,4-Dichlorobenzene	ND	5.0	97	103	6.0	97	105	7.9	70 - 130	30
1,4-dioxane	ND	100	90	104	14.4	110	100	9.5	70 - 130	30
2-Hexanone	ND	25	82	89	8.2	75	65	14.3	70 - 130	30 m
4-Methyl-2-pentanone	ND	25	87	94	7.7	86	78	9.8	70 - 130	30
Acetone	ND	10	79	82	3.7	73	60	19.5	70 - 130	30 m
Acrolein	ND	25	84	88	4.7	31	73	80.8	70 - 130	30 m,r
Acrylonitrile	ND	5.0	93	95	2.1	86	80	7.2	70 - 130	30
Benzene	ND	1.0	92	97	5.3	97	88	9.7	70 - 130	30
Bromochloromethane	ND	5.0	98	101	3.0	100	91	9.4	70 - 130	30
Bromodichloromethane	ND	5.0	92	96	4.3	97	86	12.0	70 - 130	30
Bromoform	ND	5.0	93	97	4.2	94	83	12.4	70 - 130	30
Bromomethane	ND	5.0	95	100	5.1	91	88	3.4	70 - 130	30
Carbon Disulfide	ND	5.0	94	98	4.2	89	82	8.2	70 - 130	30
Carbon tetrachloride	ND	5.0	93	96	3.2	92	84	9.1	70 - 130	30
Chlorobenzene	ND	5.0	97	102	5.0	99	85	15.2	70 - 130	30

QA/QC Data

SDG I.D.: GCC70170

Parameter	BIK		LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
	Blank	RL								
Chloroethane	ND	5.0	103	107	3.8	101	94	7.2	70 - 130	30
Chloroform	ND	5.0	95	99	4.1	93	85	9.0	70 - 130	30
Chloromethane	ND	5.0	88	91	3.4	86	79	8.5	70 - 130	30
cis-1,2-Dichloroethene	ND	5.0	95	100	5.1	99	90	9.5	70 - 130	30
cis-1,3-Dichloropropene	ND	5.0	90	94	4.3	90	82	9.3	70 - 130	30
Cyclohexane	ND	5.0	85	91	6.8	88	78	12.0	70 - 130	30
Dibromochloromethane	ND	3.0	96	100	4.1	99	88	11.8	70 - 130	30
Dichlorodifluoromethane	ND	5.0	94	104	10.1	87	82	5.9	70 - 130	30
Ethylbenzene	ND	1.0	98	102	4.0	102	89	13.6	70 - 130	30
Isopropylbenzene	ND	1.0	93	102	9.2	108	106	1.9	70 - 130	30
m&p-Xylene	ND	2.0	96	100	4.1	98	84	15.4	70 - 130	30
Methyl ethyl ketone	ND	5.0	92	92	0.0	83	82	1.2	70 - 130	30
Methyl t-butyl ether (MTBE)	ND	1.0	86	89	3.4	90	84	6.9	70 - 130	30
Methylacetate	ND	5.0	84	88	4.7	77	70	9.5	70 - 130	30
Methylcyclohexane	ND	5.0	88	94	6.6	87	75	14.8	70 - 130	30
Methylene chloride	ND	5.0	147	152	3.3	91	83	9.2	70 - 130	30
o-Xylene	ND	2.0	95	100	5.1	99	86	14.1	70 - 130	30
Styrene	ND	5.0	94	100	6.2	93	81	13.8	70 - 130	30
tert-butyl alcohol	ND	100	72	81	11.8	83	73	12.8	70 - 130	30
Tetrachloroethene	ND	5.0	97	101	4.0	98	89	9.6	70 - 130	30
Toluene	ND	1.0	93	98	5.2	97	87	10.9	70 - 130	30
trans-1,2-Dichloroethene	ND	5.0	89	96	7.6	95	87	8.8	70 - 130	30
trans-1,3-Dichloropropene	ND	5.0	87	91	4.5	83	76	8.8	70 - 130	30
Trichloroethene	ND	5.0	94	101	7.2	99	90	9.5	70 - 130	30
Trichlorofluoromethane	ND	5.0	89	94	5.5	89	83	7.0	70 - 130	30
Trichlorotrifluoroethane	ND	5.0	89	98	9.6	93	86	7.8	70 - 130	30
Vinyl chloride	ND	5.0	90	93	3.3	85	81	4.8	70 - 130	30
% 1,2-dichlorobenzene-d4	95	%	100	102	2.0	101	100	1.0	70 - 130	30
% Bromofluorobenzene	94	%	97	98	1.0	99	95	4.1	70 - 130	30
% Dibromofluoromethane	102	%	96	95	1.0	98	97	1.0	70 - 130	30
% Toluene-d8	95	%	99	99	0.0	97	99	2.0	70 - 130	30

Comment:

Additional 8260 criteria: 10% of LCS/LCSD compounds can be outside of acceptance criteria as long as recovery is 40-160%.

QA/QC Batch 471174 (ug/kg), QC Sample No: CC71798 (CC70175, CC70176)

Volatiles - Soil

1,1,1,2-Tetrachloroethane	ND	5.0	98	97	1.0	87	87	0.0	70 - 130	30
1,1,1-Trichloroethane	ND	5.0	97	97	0.0	89	89	0.0	70 - 130	30
1,1,2,2-Tetrachloroethane	ND	3.0	97	97	0.0	83	85	2.4	70 - 130	30
1,1,2-Trichloroethane	ND	5.0	92	93	1.1	85	85	0.0	70 - 130	30
1,1-Dichloroethane	ND	5.0	111	112	0.9	101	103	2.0	70 - 130	30
1,1-Dichloroethene	ND	5.0	95	94	1.1	86	90	4.5	70 - 130	30
1,2,3-Trichlorobenzene	ND	5.0	93	94	1.1	74	73	1.4	70 - 130	30
1,2,4-Trichlorobenzene	ND	5.0	94	94	0.0	74	73	1.4	70 - 130	30
1,2-Dibromo-3-chloropropane	ND	5.0	93	92	1.1	73	74	1.4	70 - 130	30
1,2-Dibromoethane	ND	5.0	95	94	1.1	83	83	0.0	70 - 130	30
1,2-Dichlorobenzene	ND	5.0	97	96	1.0	82	82	0.0	70 - 130	30
1,2-Dichloroethane	ND	5.0	95	96	1.0	85	85	0.0	70 - 130	30
1,2-Dichloropropane	ND	5.0	95	95	0.0	87	89	2.3	70 - 130	30
1,3-Dichlorobenzene	ND	5.0	97	97	0.0	84	84	0.0	70 - 130	30
1,4-Dichlorobenzene	ND	5.0	96	96	0.0	82	82	0.0	70 - 130	30
1,4-dioxane	ND	100	94	99	5.2	85	89	4.6	70 - 130	30
2-Hexanone	ND	25	89	88	1.1	71	70	1.4	70 - 130	30

QA/QC Data

SDG I.D.: GCC70170

Parameter	BIK		LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
	Blank	RL									
4-Methyl-2-pentanone	ND	25	92	92	0.0	78	78	0.0	70 - 130	30	
Acetone	ND	10	77	76	1.3	13	14	7.4	70 - 130	30	m
Acrolein	ND	25	93	92	1.1	54	55	1.8	70 - 130	30	m
Acrylonitrile	ND	5.0	111	111	0.0	94	96	2.1	70 - 130	30	
Benzene	ND	1.0	95	96	1.0	89	90	1.1	70 - 130	30	
Bromochloromethane	ND	5.0	96	97	1.0	86	87	1.2	70 - 130	30	
Bromodichloromethane	ND	5.0	96	97	1.0	84	86	2.4	70 - 130	30	
Bromoform	ND	5.0	98	97	1.0	78	79	1.3	70 - 130	30	
Bromomethane	ND	5.0	95	96	1.0	92	92	0.0	70 - 130	30	
Carbon Disulfide	ND	5.0	101	100	1.0	89	92	3.3	70 - 130	30	
Carbon tetrachloride	ND	5.0	105	105	0.0	93	95	2.1	70 - 130	30	
Chlorobenzene	ND	5.0	97	97	0.0	87	88	1.1	70 - 130	30	
Chloroethane	ND	5.0	95	96	1.0	85	89	4.6	70 - 130	30	
Chloroform	ND	5.0	95	96	1.0	87	89	2.3	70 - 130	30	
Chloromethane	ND	5.0	89	88	1.1	77	80	3.8	70 - 130	30	
cis-1,2-Dichloroethene	ND	5.0	96	96	0.0	88	89	1.1	70 - 130	30	
cis-1,3-Dichloropropene	ND	5.0	94	94	0.0	83	84	1.2	70 - 130	30	
Cyclohexane	ND	5.0	89	89	0.0	83	84	1.2	70 - 130	30	
Dibromochloromethane	ND	3.0	101	101	0.0	86	87	1.2	70 - 130	30	
Dichlorodifluoromethane	ND	5.0	95	95	0.0	86	87	1.2	70 - 130	30	
Ethylbenzene	ND	1.0	97	97	0.0	85	85	0.0	70 - 130	30	
Isopropylbenzene	ND	1.0	98	98	0.0	85	86	1.2	70 - 130	30	
m&p-Xylene	ND	2.0	98	97	1.0	83	83	0.0	70 - 130	30	
Methyl ethyl ketone	ND	5.0	92	87	5.6	75	75	0.0	70 - 130	30	
Methyl t-butyl ether (MTBE)	ND	1.0	90	89	1.1	79	81	2.5	70 - 130	30	
Methylacetate	ND	5.0	99	98	1.0	102	106	3.8	70 - 130	30	
Methylcyclohexane	ND	5.0	97	97	0.0	88	90	2.2	70 - 130	30	
Methylene chloride	ND	5.0	81	80	1.2	79	82	3.7	70 - 130	30	
o-Xylene	ND	2.0	97	97	0.0	84	84	0.0	70 - 130	30	
Styrene	ND	5.0	96	95	1.0	83	83	0.0	70 - 130	30	
tert-butyl alcohol	ND	100	87	86	1.2	70	76	8.2	70 - 130	30	
Tetrachloroethene	ND	5.0	98	98	0.0	89	90	1.1	70 - 130	30	
Toluene	ND	1.0	97	97	0.0	85	85	0.0	70 - 130	30	
trans-1,2-Dichloroethene	ND	5.0	93	91	2.2	85	87	2.3	70 - 130	30	
trans-1,3-Dichloropropene	ND	5.0	91	92	1.1	79	80	1.3	70 - 130	30	
Trichloroethene	ND	5.0	97	98	1.0	90	90	0.0	70 - 130	30	
Trichlorofluoromethane	ND	5.0	97	97	0.0	86	89	3.4	70 - 130	30	
Trichlorotrifluoroethane	ND	5.0	99	97	2.0	90	92	2.2	70 - 130	30	
Vinyl chloride	ND	5.0	92	92	0.0	85	87	2.3	70 - 130	30	
% 1,2-dichlorobenzene-d4	100	%	100	100	0.0	99	100	1.0	70 - 130	30	
% Bromofluorobenzene	97	%	100	99	1.0	100	99	1.0	70 - 130	30	
% Dibromofluoromethane	98	%	99	98	1.0	98	98	0.0	70 - 130	30	
% Toluene-d8	97	%	100	101	1.0	100	100	0.0	70 - 130	30	

Comment:

Additional 8260 criteria: 10% of LCS/LCSD compounds can be outside of acceptance criteria as long as recovery is 40-160%.

QA/QC Batch 471663 (ug/kg), QC Sample No: CC71958 (CC70170, CC70174)

Volatiles - Soil

Acetone	ND	10	76	73	4.0	60	79	27.3	70 - 130	30	m
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Comment:

Additional 8260 criteria: 10% of LCS/LCSD compounds can be outside of acceptance criteria as long as recovery is 40-160%.

# QA/QC Data

SDG I.D.: GCC70170

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
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l = This parameter is outside laboratory LCS/LCSD specified recovery limits.

m = This parameter is outside laboratory MS/MSD specified recovery limits.

r = This parameter is outside laboratory RPD specified recovery limits.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference

LCS - Laboratory Control Sample

LCSD - Laboratory Control Sample Duplicate

MS - Matrix Spike

MS Dup - Matrix Spike Duplicate

NC - No Criteria

Intf - Interference



Phyllis Shiller, Laboratory Director  
March 28, 2019

Thursday, March 28, 2019

Criteria: NY: 375, 375GWP, 375RRS, 375RS

State: NY

# Sample Criteria Exceedances Report

GCC70170 - EBC

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	Criteria	RL	Analysis Units
CC70170	\$DP8270_TCL	Benz(a)anthracene	NY / 375-6.8 Semivolatiles / Ground Water Protection	2100	270	1000	1000	1000	ug/Kg
CC70170	\$DP8270_TCL	Benzo(b)fluoranthene	NY / 375-6.8 Semivolatiles / Ground Water Protection	2900	270	1700	1700	1700	ug/Kg
CC70170	\$DP8270_TCL	Chrysene	NY / 375-6.8 Semivolatiles / Ground Water Protection	2500	270	1000	1000	1000	ug/Kg
CC70170	\$DP8270_TCL	Benzo(k)fluoranthene	NY / 375-6.8 Semivolatiles / Ground Water Protection	2400	270	1700	1700	1700	ug/Kg
CC70170	\$DP8270_TCL	Indeno(1,2,3-cd)pyrene	NY / 375-6.8 Semivolatiles / Residential	1900	270	500	500	500	ug/Kg
CC70170	\$DP8270_TCL	Benzo(a)anthracene	NY / 375-6.8 Semivolatiles / Residential	2100	270	1000	1000	1000	ug/Kg
CC70170	\$DP8270_TCL	Benzo(a)pyrene	NY / 375-6.8 Semivolatiles / Residential	2600	150	1000	1000	1000	ug/Kg
CC70170	\$DP8270_TCL	Dibenz(a,h)anthracene	NY / 375-6.8 Semivolatiles / Residential	570	150	330	330	330	ug/Kg
CC70170	\$DP8270_TCL	Benzo(b)fluoranthene	NY / 375-6.8 Semivolatiles / Residential	2900	270	1000	1000	1000	ug/Kg
CC70170	\$DP8270_TCL	Chrysene	NY / 375-6.8 Semivolatiles / Residential	2500	270	1000	1000	1000	ug/Kg
CC70170	\$DP8270_TCL	Benzo(k)fluoranthene	NY / 375-6.8 Semivolatiles / Residential	2400	270	1000	1000	1000	ug/Kg
CC70170	\$DP8270_TCL	Indeno(1,2,3-cd)pyrene	NY / 375-6.8 Semivolatiles / Residential Restricted	1900	270	500	500	500	ug/Kg
CC70170	\$DP8270_TCL	Dibenz(a,h)anthracene	NY / 375-6.8 Semivolatiles / Residential Restricted	570	150	330	330	330	ug/Kg
CC70170	\$DP8270_TCL	Benzo(b)fluoranthene	NY / 375-6.8 Semivolatiles / Residential Restricted	2900	270	1000	1000	1000	ug/Kg
CC70170	\$DP8270_TCL	Benzo(a)pyrene	NY / 375-6.8 Semivolatiles / Residential Restricted	2600	150	1000	1000	1000	ug/Kg
CC70170	\$DP8270_TCL	Benzo(a)anthracene	NY / 375-6.8 Semivolatiles / Residential Restricted	2100	270	1000	1000	1000	ug/Kg
CC70170	\$DP8270_TCL	Benzo(b)fluoranthene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	2900	270	1000	1000	1000	ug/Kg
CC70170	\$DP8270_TCL	Chrysene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	2500	270	1000	1000	1000	ug/Kg
CC70170	\$DP8270_TCL	Benzo(a)pyrene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	2600	150	1000	1000	1000	ug/Kg
CC70170	\$DP8270_TCL	Dibenz(a,h)anthracene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	570	150	330	330	330	ug/Kg
CC70170	\$DP8270_TCL	Benzo(a)anthracene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	2100	270	1000	1000	1000	ug/Kg
CC70170	\$DP8270_TCL	Indeno(1,2,3-cd)pyrene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	1900	270	500	500	500	ug/Kg
CC70170	\$DP8270_TCL	Benzo(k)fluoranthene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	2400	270	800	800	800	ug/Kg
CC70170	\$PESTSM_NY	Dieldrin	NY / 375-6.8 PCBs/Pesticides / Residential	40	3.8	39	39	39	ug/Kg
CC70170	\$PESTSM_NY	4,4' -DDE	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	5.8	2.3	3.3	3.3	3.3	ug/Kg
CC70170	\$PESTSM_NY	4,4' -DDT	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	30	2.3	3.3	3.3	3.3	ug/Kg
CC70170	\$PESTSM_NY	Dieldrin	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	40	3.8	5	5	5	ug/Kg
CC70170	BA-SMDP	Barium	NY / 375-6.8 Metals / Residential	491	0.8	350	350	350	mg/Kg
CC70170	BA-SMDP	Barium	NY / 375-6.8 Metals / Residential Restricted	491	0.8	400	400	400	mg/Kg
CC70170	BA-SMDP	Barium	NY / 375-6.8 Metals / Unrestricted Use Soil	491	0.8	350	350	350	mg/Kg
CC70170	HG-SM	Mercury	NY / 375-6.8 Metals / Unrestricted Use Soil	0.49	0.07	0.18	0.18	0.18	mg/Kg
CC70170	PB-SMDP	Lead	NY / 375-6.8 Metals / Ground Water Protection	2420	80	450	450	450	mg/Kg
CC70170	PB-SMDP	Lead	NY / 375-6.8 Metals / Residential	2420	80	400	400	400	mg/Kg
CC70170	PB-SMDP	Lead	NY / 375-6.8 Metals / Residential Restricted	2420	80	400	400	400	mg/Kg
CC70170	PB-SMDP	Lead	NY / 375-6.8 Metals / Unrestricted Use Soil	2420	80	63	63	63	mg/Kg
CC70170	ZN-SMDP	Zinc	NY / 375-6.8 Metals / Unrestricted Use Soil	348	8.0	109	109	109	mg/Kg
CC70172	\$PESTSM_NY	4,4' -DDD	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	15	2.3	3.3	3.3	3.3	ug/Kg
CC70172	\$PESTSM_NY	4,4' -DDE	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	4.6	2.3	3.3	3.3	3.3	ug/Kg
CC70172	CU-SM	Copper	NY / 375-6.8 Metals / Unrestricted Use Soil	137	6.8	50	50	50	mg/kg
CC70172	HG-SM	Mercury	NY / 375-6.8 Metals / Unrestricted Use Soil	0.19	0.07	0.18	0.18	0.18	mg/Kg
CC70172	NI-SM	Nickel	NY / 375-6.8 Metals / Unrestricted Use Soil	31.8	0.34	30	30	30	mg/Kg

Thursday, March 28, 2019

Criteria: NY: 375, 375GWP, 375RRS, 375RS

State: NY

# Sample Criteria Exceedances Report

GCC70170 - EBC

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	Criteria	RL	Analysis Units
CC70172	PB-SMDP	Lead	NY / 375-6.8 Metals / Unrestricted Use Soil	122	0.7	63	63	63	mg/Kg
CC70172	ZN-SMDP	Zinc	NY / 375-6.8 Metals / Unrestricted Use Soil	110	0.7	109	109	109	mg/Kg
CC70174	\$PCB_SMRDP	PCB-1254	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	120	73	100	100	100	ug/Kg
CC70174	\$PESTSM_NY	4,4' -DDD	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	8.6	2.2	3.3	3.3	3.3	ug/Kg
CC70174	\$PESTSM_NY	4,4' -DDE	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	61	2.2	3.3	3.3	3.3	ug/Kg
CC70174	\$PESTSM_NY	4,4' -DDT	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	78	2.2	3.3	3.3	3.3	ug/Kg
CC70174	\$PESTSM_NY	Dieldrin	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	9.8	3.6	5	5	5	ug/Kg
CC70174	HG-SM	Mercury	NY / 375-6.8 Metals / Unrestricted Use Soil	0.37	0.06	0.18	0.18	0.18	mg/Kg
CC70174	PB-SMDP	Lead	NY / 375-6.8 Metals / Unrestricted Use Soil	182	6.7	63	63	63	mg/Kg
CC70174	ZN-SMDP	Zinc	NY / 375-6.8 Metals / Unrestricted Use Soil	1210	6.7	109	109	109	mg/Kg
CC70176	\$DP8270_TCL	Benzo(k)fluoranthene	NY / 375-6.8 Semivolatiles / Ground Water Protection	3700	1300	1700	1700	1700	ug/Kg
CC70176	\$DP8270_TCL	Benzo(b)fluoranthene	NY / 375-6.8 Semivolatiles / Ground Water Protection	4300	1300	1700	1700	1700	ug/Kg
CC70176	\$DP8270_TCL	Benz(a)anthracene	NY / 375-6.8 Semivolatiles / Ground Water Protection	4300	1300	1000	1000	1000	ug/Kg
CC70176	\$DP8270_TCL	Chrysene	NY / 375-6.8 Semivolatiles / Ground Water Protection	4600	1300	1000	1000	1000	ug/Kg
CC70176	\$DP8270_TCL	Dibenz(a,h)anthracene	NY / 375-6.8 Semivolatiles / Residential	820	750	330	330	330	ug/Kg
CC70176	\$DP8270_TCL	Chrysene	NY / 375-6.8 Semivolatiles / Residential	4600	1300	1000	1000	1000	ug/Kg
CC70176	\$DP8270_TCL	Benzo(k)fluoranthene	NY / 375-6.8 Semivolatiles / Residential	3700	1300	1000	1000	1000	ug/Kg
CC70176	\$DP8270_TCL	Indeno(1,2,3-cd)pyrene	NY / 375-6.8 Semivolatiles / Residential	3100	1300	500	500	500	ug/Kg
CC70176	\$DP8270_TCL	Benz(a)anthracene	NY / 375-6.8 Semivolatiles / Residential	4300	1300	1000	1000	1000	ug/Kg
CC70176	\$DP8270_TCL	Benzo(b)fluoranthene	NY / 375-6.8 Semivolatiles / Residential	4300	1300	1000	1000	1000	ug/Kg
CC70176	\$DP8270_TCL	Benzo(a)pyrene	NY / 375-6.8 Semivolatiles / Residential	4000	750	1000	1000	1000	ug/Kg
CC70176	\$DP8270_TCL	Indeno(1,2,3-cd)pyrene	NY / 375-6.8 Semivolatiles / Residential Restricted	3100	1300	500	500	500	ug/Kg
CC70176	\$DP8270_TCL	Dibenz(a,h)anthracene	NY / 375-6.8 Semivolatiles / Residential Restricted	820	750	330	330	330	ug/Kg
CC70176	\$DP8270_TCL	Benz(a)anthracene	NY / 375-6.8 Semivolatiles / Residential Restricted	4300	1300	1000	1000	1000	ug/Kg
CC70176	\$DP8270_TCL	Chrysene	NY / 375-6.8 Semivolatiles / Residential Restricted	4600	1300	3900	3900	3900	ug/Kg
CC70176	\$DP8270_TCL	Benzo(a)pyrene	NY / 375-6.8 Semivolatiles / Residential Restricted	4000	750	1000	1000	1000	ug/Kg
CC70176	\$DP8270_TCL	Benzo(b)fluoranthene	NY / 375-6.8 Semivolatiles / Residential Restricted	4300	1300	1000	1000	1000	ug/Kg
CC70176	\$DP8270_TCL	Chrysene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	4600	1300	1000	1000	1000	ug/Kg
CC70176	\$DP8270_TCL	Benzo(a)pyrene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	4000	750	1000	1000	1000	ug/Kg
CC70176	\$DP8270_TCL	Benzo(b)fluoranthene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	4300	1300	1000	1000	1000	ug/Kg
CC70176	\$DP8270_TCL	Benzo(k)fluoranthene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	3700	1300	800	800	800	ug/Kg
CC70176	\$DP8270_TCL	Indeno(1,2,3-cd)pyrene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	3100	1300	500	500	500	ug/Kg
CC70176	\$DP8270_TCL	Benz(a)anthracene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	4300	1300	1000	1000	1000	ug/Kg
CC70176	\$DP8270_TCL	Dibenz(a,h)anthracene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	820	750	330	330	330	ug/Kg
CC70176	\$PESTSM_NY	Dieldrin	NY / 375-6.8 PCBs/Pesticides / Residential	40	3.8	39	39	39	ug/Kg
CC70176	\$PESTSM_NY	Dieldrin	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	40	3.8	5	5	5	ug/Kg
CC70176	\$PESTSM_NY	4,4' -DDE	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	7.6	2.3	3.3	3.3	3.3	ug/Kg
CC70176	\$PESTSM_NY	4,4' -DDT	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	49	2.3	3.3	3.3	3.3	ug/Kg
CC70176	CU-SM	Copper	NY / 375-6.8 Metals / Unrestricted Use Soil	53.9	0.8	50	50	50	mg/kg
CC70176	HG-SM	Mercury	NY / 375-6.8 Metals / Unrestricted Use Soil	0.53	0.07	0.18	0.18	0.18	mg/Kg



Thursday, March 28, 2019

Criteria: NY: 375, 375GWP, 375RRS, 375RS

State: NY

## Sample Criteria Exceedances Report

GCC70170 - EBC

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units
CC70176	PB-SMDP	Lead	NY / 375-6.8 Metals / Ground Water Protection	1450	7.6	450	450	mg/Kg
CC70176	PB-SMDP	Lead	NY / 375-6.8 Metals / Residential	1450	7.6	400	400	mg/Kg
CC70176	PB-SMDP	Lead	NY / 375-6.8 Metals / Residential Restricted	1450	7.6	400	400	mg/Kg
CC70176	PB-SMDP	Lead	NY / 375-6.8 Metals / Unrestricted Use Soil	1450	7.6	63	63	mg/Kg
CC70176	ZN-SMDP	Zinc	NY / 375-6.8 Metals / Unrestricted Use Soil	306	7.6	109	109	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



## Analysis Comments

March 28, 2019

SDG I.D.: GCC70170

The following analysis comments are made regarding exceptions to criteria not already noted in the Analysis Report or QA/QC Report:

### **PEST Narration**

**AU-ECD7 03/20/19-2:** CC70174, CC70175, CC70176

The following Continuing Calibration compounds did not meet % deviation criteria:

Samples: CC70174, CC70175, CC70176

Preceding CC 320B055 - 4,4'-DDD 48%L (20%), 4,4'-DDE 25%L (20%)

Succeeding CC 320B080 - None.

A low "1A" standard was run after the samples to demonstrate capability to detect any compounds outside of the CC acceptance criteria. All reported samples were ND for the affected compounds.

### **SVOA Narration**

**CHEM19 03/21/19-1:** CC70171

The following Initial Calibration compounds did not meet RSD% criteria: 4,6-Dinitro-2-methylphenol 30% (20%), Hexachlorocyclopentadiene 23% (20%)

The following Initial Calibration compounds did not meet maximum RSD% criteria: None.

The following Initial Calibration compounds did not meet recommended response factors: 2,4-Dinitrophenol 0 (0.01), 2-Nitrophenol 0.064 (0.1), Hexachlorobenzene 0.098 (0.1), Pentachlorophenol 0 (0.05)

The following Initial Calibration compounds did not meet minimum response factors: 2,4-Dinitrophenol 0 (0.01), Pentachlorophenol 0 (0.01)

The following Continuing Calibration compounds did not meet recommended response factors: 2-Nitrophenol 0.074 (0.1), Hexachlorobenzene 0.098 (0.1)

The following Continuing Calibration compounds did not meet minimum response factors: None.

Up to eight compounds can be outside of ICAL %RSD criteria and up to sixteen compounds can be outside of CCAL %Dev criteria if less than 40%.

**CHEM28 03/19/19-2:** CC70173, CC70175

The following Initial Calibration compounds did not meet RSD% criteria: 2,4-Dinitrophenol 28% (20%), 3&4-Methylphenol (m&p-cresol) 24% (20%), 4-Nitrophenol 30% (20%), Hexachlorocyclopentadiene 32% (20%), Pentachlorophenol 32% (20%)

The following Initial Calibration compounds did not meet maximum RSD% criteria: None.

The following Initial Calibration compounds did not meet recommended response factors: 2-Nitrophenol 0.063 (0.1), Bis(2-chloroethoxy)methane 0.269 (0.3)

The following Initial Calibration compounds did not meet minimum response factors: None.

The following Continuing Calibration compounds did not meet recommended response factors: 2-Nitrophenol 0.063 (0.1), Bis(2-chloroethoxy)methane 0.277 (0.3), Bis(2-chloroethyl)ether 0.699 (0.7)

The following Continuing Calibration compounds did not meet minimum response factors: None.

Up to eight compounds can be outside of ICAL %RSD criteria and up to sixteen compounds can be outside of CCAL %Dev criteria if less than 40%.

**CHEM28 03/21/19-1:** CC70170, CC70172, CC70174, CC70176



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## Analysis Comments

March 28, 2019

SDG I.D.: GCC70170

The following Initial Calibration compounds did not meet RSD% criteria: 2,4-Dinitrophenol 28% (20%), 3&4-Methylphenol (m&p-cresol) 24% (20%), 4-Nitrophenol 30% (20%), Hexachlorocyclopentadiene 32% (20%), Pentachlorophenol 32% (20%)  
The following Initial Calibration compounds did not meet maximum RSD% criteria: None.  
The following Initial Calibration compounds did not meet recommended response factors: 2-Nitrophenol 0.063 (0.1), Bis(2-chloroethoxy)methane 0.269 (0.3)  
The following Initial Calibration compounds did not meet minimum response factors: None.

The following Continuing Calibration compounds did not meet % deviation criteria: Hexachlorocyclopentadiene 40%L (30%), N-Nitrosodimethylamine 40%L (30%)  
The following Continuing Calibration compounds did not meet Maximum % deviation criteria: None.  
The following Continuing Calibration compounds did not meet recommended response factors: 2-Nitrophenol 0.065 (0.1), Hexachlorocyclopentadiene 0.048 (0.05)  
The following Continuing Calibration compounds did not meet minimum response factors: None.

Up to eight compounds can be outside of ICAL %RSD criteria and up to sixteen compounds can be outside of CCAL %Dev criteria if less than 40%.

### VOA Narration

**CHEM03 03/20/19-2:** CC70175, CC70176

The following Initial Calibration compounds did not meet RSD% criteria: Chloroethane 32% (20%), Methylene chloride 22% (20%)  
The following Initial Calibration compounds did not meet maximum RSD% criteria: None.  
The following Initial Calibration compounds did not meet recommended response factors: Acetone 0.084 (0.1), Acrolein 0.045 (0.05)  
The following Initial Calibration compounds did not meet minimum response factors: None.

The following Continuing Calibration compounds did not meet recommended response factors: Acrolein 0.042 (0.05)  
The following Continuing Calibration compounds did not meet minimum response factors: None.

Up to eight compounds can be outside of ICAL %RSD criteria and up to sixteen compounds can be outside of CCAL %Dev criteria if less than 40%.

**CHEM14 03/20/19-1:** CC70170, CC70171, CC70172, CC70173, CC70174, CC70177, CC70178

The following Initial Calibration compounds did not meet RSD% criteria: Chloroethane 27% (20%), Methylacetate 24% (20%)  
The following Initial Calibration compounds did not meet maximum RSD% criteria: None.  
The following Initial Calibration compounds did not meet recommended response factors: Tetrachloroethene 0.176 (0.2)  
The following Initial Calibration compounds did not meet minimum response factors: None.

The following Continuing Calibration compounds did not meet % deviation criteria: Methylene chloride 37%H (30%)  
The following Continuing Calibration compounds did not meet Maximum % deviation criteria: None.

Up to eight compounds can be outside of ICAL %RSD criteria and up to sixteen compounds can be outside of CCAL %Dev criteria if less than 40%.



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# NY Temperature Narration

March 28, 2019

SDG I.D.: GCC70170

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The samples in this delivery group were received at 1.6°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**

Coolant: IPK  ICE  No   
 Cooler: Yes  No

Temp 10 C Pg 1 of 1  
**Contact Options:**

Fax: \_\_\_\_\_  
 Phone: 631-504-6000  
 Email: fil

Project P.O.: \_\_\_\_\_

Project: 1840 Bark Ave, Manhattan  
 Report to: Environmental Business Consultants  
 Invoice to: Environmental Business Consultants

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

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

PHOENIX USE ONLY SAMPLE #	Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled	Analysis Request
70170	S81(0-2)	S	3-18-19	9:15	TEK VOCs 9260 TEK SVOCs 9270 TEK PCBs 9091 TEK Metals
70171	S81(16-18)			10:15	
70172	S82(0-2)			10:35	
70173	S82(16-18)			10:54	
70174	S83(0-2)			12:30	
70175	S83(16-18)			12:45	
70176	Soil Duplicate	-	-	-	
70177	TB HL	-	-	-	
70178	TB LL	-	-	-	

Relinquished by: [Signature] Accepted by: [Signature]

Date: 3-19-19 10:23  
 3-19-19 13:48

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

Comments, Special Requirements or Regulations:



Tuesday, April 02, 2019

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

Project ID: 1840 PARK AVE MANHATTAN  
SDG ID: GCC71637  
Sample ID#s: CC71637 - CC71646

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 that reads "Phyllis Shiller". The signature is written in a cursive style.

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.  
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Tel. (860) 645-1102 Fax (860) 645-0823



## SDG Comments

April 02, 2019

SDG I.D.: GCC71637

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



Environmental Laboratories, Inc.  
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Tel. (860) 645-1102 Fax (860) 645-0823



## Sample Id Cross Reference

April 02, 2019

SDG I.D.: GCC71637

Project ID: 1840 PARK AVE MANHATTAN

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Client Id	Lab Id	Matrix
SB4 (0-2)	CC71637	SOIL
SB4 (16-18)	CC71638	SOIL
SB5 (0-2)	CC71639	SOIL
SB5 (16-18)	CC71640	SOIL
SB6 (0-2)	CC71641	SOIL
SB6 (16-18)	CC71642	SOIL
SB7 (0-2)	CC71643	SOIL
SB7 (16-18)	CC71644	SOIL
TB HL	CC71645	SOIL
TB LL	CC71646	SOIL





Environmental Laboratories, Inc.  
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 Tel. (860) 645-1102 Fax (860) 645-0823



# Analysis Report

April 02, 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: SW  
 Analyzed by: see "By" below

## Date

03/19/19  
 03/20/19

## Time

11:40  
 16:00

## Laboratory Data

SDG ID: GCC71637  
 Phoenix ID: CC71637

Project ID: 1840 PARK AVE MANHATTAN  
 Client ID: SB4 (0-2)

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.32	0.32		mg/Kg	1	03/21/19	CPP	SW6010D
Aluminum	10300	32		mg/Kg	10	03/21/19	CPP	SW6010D
Arsenic	3.54	0.65		mg/Kg	1	03/21/19	CPP	SW6010D
Barium	108	0.6		mg/Kg	1	03/21/19	CPP	SW6010D
Beryllium	0.43	0.26		mg/Kg	1	03/21/19	CPP	SW6010D
Calcium	38700	32		mg/Kg	10	03/21/19	CPP	SW6010D
Cadmium	0.63	0.32		mg/Kg	1	03/21/19	CPP	SW6010D
Cobalt	10.4	0.32		mg/Kg	1	03/21/19	CPP	SW6010D
Chromium	21.7	0.32		mg/Kg	1	03/21/19	CPP	SW6010D
Copper	63.4	0.6		mg/kg	1	03/21/19	CPP	SW6010D
Iron	22200	32		mg/Kg	10	03/21/19	CPP	SW6010D
Mercury	0.23	0.07		mg/Kg	1	03/21/19	RS	SW7471B
Potassium	2570	6		mg/Kg	1	03/21/19	CPP	SW6010D
Magnesium	15900	32		mg/Kg	10	03/21/19	CPP	SW6010D
Manganese	291	3.2		mg/Kg	10	03/21/19	CPP	SW6010D
Sodium	751	6		mg/Kg	1	03/21/19	EK	SW6010D
Nickel	18.5	0.32		mg/Kg	1	03/21/19	CPP	SW6010D
Lead	152	6.5		mg/Kg	10	03/21/19	CPP	SW6010D
Antimony	< 3.2	3.2		mg/Kg	1	03/21/19	CPP	SW6010D
Selenium	< 1.3	1.3		mg/Kg	1	03/21/19	CPP	SW6010D
Thallium	< 1.3	1.3		mg/Kg	1	03/21/19	CPP	SW6010D
Vanadium	70.4	0.32		mg/Kg	1	03/21/19	CPP	SW6010D
Zinc	184	6.5		mg/Kg	10	03/21/19	CPP	SW6010D
Percent Solid	91			%		03/20/19	ML	SW846-%Solid
Soil Extraction for PCB	Completed					03/21/19	MM/V	SW3545A
Soil Extraction for Pesticides	Completed					03/21/19	MM/V	SW3545A
Soil Extraction for SVOA	Completed					03/21/19	JJ/LV	SW3545A
Mercury Digestion	Completed					03/21/19	W/W	SW7471B

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Total Metals Digest	Completed					03/20/19	S/AG/BF	SW3050B
<b><u>Polychlorinated Biphenyls</u></b>								
PCB-1016	ND	73	73	ug/Kg	2	03/22/19	SC	SW8082A
PCB-1221	ND	73	73	ug/Kg	2	03/22/19	SC	SW8082A
PCB-1232	ND	73	73	ug/Kg	2	03/22/19	SC	SW8082A
PCB-1242	ND	73	73	ug/Kg	2	03/22/19	SC	SW8082A
PCB-1248	ND	73	73	ug/Kg	2	03/22/19	SC	SW8082A
PCB-1254	ND	73	73	ug/Kg	2	03/22/19	SC	SW8082A
PCB-1260	ND	73	73	ug/Kg	2	03/22/19	SC	SW8082A
PCB-1262	ND	73	73	ug/Kg	2	03/22/19	SC	SW8082A
PCB-1268	ND	73	73	ug/Kg	2	03/22/19	SC	SW8082A
<b><u>QA/QC Surrogates</u></b>								
% DCBP	61			%	2	03/22/19	SC	30 - 150 %
% DCBP (Confirmation)	50			%	2	03/22/19	SC	30 - 150 %
% TCMX	65			%	2	03/22/19	SC	30 - 150 %
% TCMX (Confirmation)	60			%	2	03/22/19	SC	30 - 150 %
<b><u>Pesticides - Soil</u></b>								
4,4' -DDD	3.3	2.2		ug/Kg	2	03/23/19	CW	SW8081B
4,4' -DDE	4.9	2.2		ug/Kg	2	03/23/19	CW	SW8081B
4,4' -DDT	33	2.2		ug/Kg	2	03/23/19	CW	SW8081B
a-BHC	ND	7.3		ug/Kg	2	03/23/19	CW	SW8081B
a-Chlordane	6.1	3.7		ug/Kg	2	03/23/19	CW	SW8081B
Aldrin	ND	3.7		ug/Kg	2	03/23/19	CW	SW8081B
b-BHC	ND	7.3		ug/Kg	2	03/23/19	CW	SW8081B
Chlordane	ND	37		ug/Kg	2	03/23/19	CW	SW8081B
d-BHC	ND	7.3		ug/Kg	2	03/23/19	CW	SW8081B
Dieldrin	ND	3.7		ug/Kg	2	03/23/19	CW	SW8081B
Endosulfan I	ND	7.3		ug/Kg	2	03/23/19	CW	SW8081B
Endosulfan II	ND	7.3		ug/Kg	2	03/23/19	CW	SW8081B
Endosulfan sulfate	ND	7.3		ug/Kg	2	03/23/19	CW	SW8081B
Endrin	ND	7.3		ug/Kg	2	03/23/19	CW	SW8081B
Endrin aldehyde	ND	7.3		ug/Kg	2	03/23/19	CW	SW8081B
Endrin ketone	ND	7.3		ug/Kg	2	03/23/19	CW	SW8081B
g-BHC	ND	1.5		ug/Kg	2	03/23/19	CW	SW8081B
g-Chlordane	ND	3.7		ug/Kg	2	03/23/19	CW	SW8081B
Heptachlor	ND	7.3		ug/Kg	2	03/23/19	CW	SW8081B
Heptachlor epoxide	ND	7.3		ug/Kg	2	03/23/19	CW	SW8081B
Methoxychlor	ND	37		ug/Kg	2	03/23/19	CW	SW8081B
Toxaphene	ND	150		ug/Kg	2	03/23/19	CW	SW8081B
<b><u>QA/QC Surrogates</u></b>								
% DCBP	51			%	2	03/23/19	CW	30 - 150 %
% DCBP (Confirmation)	48			%	2	03/23/19	CW	30 - 150 %
% TCMX	59			%	2	03/23/19	CW	30 - 150 %
% TCMX (Confirmation)	55			%	2	03/23/19	CW	30 - 150 %
<b><u>1,4-dioxane</u></b>								
1,4-dioxane	ND	73		ug/kg	1	03/21/19	JLI	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
<b><u>Volatiles</u></b>								
1,1,1-Trichloroethane	ND	4.8	0.48	ug/Kg	1	03/21/19	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	4.8	0.97	ug/Kg	1	03/21/19	JLI	SW8260C
1,1,2-Trichloroethane	ND	4.8	0.97	ug/Kg	1	03/21/19	JLI	SW8260C
1,1-Dichloroethane	ND	4.8	0.97	ug/Kg	1	03/21/19	JLI	SW8260C
1,1-Dichloroethene	ND	4.8	0.48	ug/Kg	1	03/21/19	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	4.8	0.97	ug/Kg	1	03/21/19	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	4.8	0.97	ug/Kg	1	03/21/19	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	4.8	0.97	ug/Kg	1	03/21/19	JLI	SW8260C
1,2-Dibromoethane	ND	4.8	0.48	ug/Kg	1	03/21/19	JLI	SW8260C
1,2-Dichlorobenzene	ND	4.8	0.48	ug/Kg	1	03/21/19	JLI	SW8260C
1,2-Dichloroethane	ND	4.8	0.48	ug/Kg	1	03/21/19	JLI	SW8260C
1,2-Dichloropropane	ND	4.8	0.97	ug/Kg	1	03/21/19	JLI	SW8260C
1,3-Dichlorobenzene	ND	4.8	0.48	ug/Kg	1	03/21/19	JLI	SW8260C
1,4-Dichlorobenzene	ND	4.8	0.48	ug/Kg	1	03/21/19	JLI	SW8260C
2-Hexanone	ND	24	4.8	ug/Kg	1	03/21/19	JLI	SW8260C
4-Methyl-2-pentanone	ND	24	4.8	ug/Kg	1	03/21/19	JLI	SW8260C
Acetone	16	JS 24	4.8	ug/Kg	1	03/21/19	JLI	SW8260C
Benzene	ND	4.8	0.48	ug/Kg	1	03/21/19	JLI	SW8260C
Bromochloromethane	ND	4.8	0.48	ug/Kg	1	03/21/19	JLI	SW8260C
Bromodichloromethane	ND	4.8	0.97	ug/Kg	1	03/21/19	JLI	SW8260C
Bromoform	ND	4.8	0.97	ug/Kg	1	03/21/19	JLI	SW8260C
Bromomethane	ND	4.8	1.9	ug/Kg	1	03/21/19	JLI	SW8260C
Carbon Disulfide	ND	4.8	0.97	ug/Kg	1	03/21/19	JLI	SW8260C
Carbon tetrachloride	ND	4.8	0.97	ug/Kg	1	03/21/19	JLI	SW8260C
Chlorobenzene	ND	4.8	0.48	ug/Kg	1	03/21/19	JLI	SW8260C
Chloroethane	ND	4.8	0.48	ug/Kg	1	03/21/19	JLI	SW8260C
Chloroform	ND	4.8	0.48	ug/Kg	1	03/21/19	JLI	SW8260C
Chloromethane	ND	4.8	0.97	ug/Kg	1	03/21/19	JLI	SW8260C
cis-1,2-Dichloroethene	ND	4.8	0.48	ug/Kg	1	03/21/19	JLI	SW8260C
cis-1,3-Dichloropropene	ND	4.8	0.48	ug/Kg	1	03/21/19	JLI	SW8260C
Cyclohexane	ND	4.8	0.97	ug/Kg	1	03/21/19	JLI	SW8260C
Dibromochloromethane	ND	4.8	0.97	ug/Kg	1	03/21/19	JLI	SW8260C
Dichlorodifluoromethane	ND	4.8	0.48	ug/Kg	1	03/21/19	JLI	SW8260C
Ethylbenzene	ND	4.8	0.48	ug/Kg	1	03/21/19	JLI	SW8260C
Isopropylbenzene	ND	4.8	0.48	ug/Kg	1	03/21/19	JLI	SW8260C
m&p-Xylene	ND	4.8	0.97	ug/Kg	1	03/21/19	JLI	SW8260C
Methyl ethyl ketone	ND	29	4.8	ug/Kg	1	03/21/19	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	9.7	0.97	ug/Kg	1	03/21/19	JLI	SW8260C
Methylacetate	ND	4.8	4.8	ug/Kg	1	03/21/19	JLI	SW8260C
Methylcyclohexane	ND	4.8	0.97	ug/Kg	1	03/21/19	JLI	SW8260C
Methylene chloride	ND	4.8	4.8	ug/Kg	1	03/21/19	JLI	SW8260C
o-Xylene	ND	4.8	0.97	ug/Kg	1	03/21/19	JLI	SW8260C
Styrene	ND	4.8	0.48	ug/Kg	1	03/21/19	JLI	SW8260C
Tetrachloroethene	ND	4.8	0.97	ug/Kg	1	03/21/19	JLI	SW8260C
Toluene	ND	4.8	0.48	ug/Kg	1	03/21/19	JLI	SW8260C
Total Xylenes	ND	4.8	4.8	ug/Kg	1	03/21/19	JLI	SW8260C
trans-1,2-Dichloroethene	ND	4.8	0.48	ug/Kg	1	03/21/19	JLI	SW8260C
trans-1,3-Dichloropropene	ND	4.8	0.48	ug/Kg	1	03/21/19	JLI	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Trichloroethene	ND	4.8	0.48	ug/Kg	1	03/21/19	JLI	SW8260C
Trichlorofluoromethane	ND	4.8	0.97	ug/Kg	1	03/21/19	JLI	SW8260C
Trichlorotrifluoroethane	ND	4.8	0.48	ug/Kg	1	03/21/19	JLI	SW8260C
Vinyl chloride	ND	4.8	0.48	ug/Kg	1	03/21/19	JLI	SW8260C
<b><u>QA/QC Surrogates</u></b>								
% 1,2-dichlorobenzene-d4	99			%	1	03/21/19	JLI	70 - 130 %
% Bromofluorobenzene	93			%	1	03/21/19	JLI	70 - 130 %
% Dibromofluoromethane	97			%	1	03/21/19	JLI	70 - 130 %
% Toluene-d8	98			%	1	03/21/19	JLI	70 - 130 %
<b><u>Volatiles</u></b>								
1,1,1,2-Tetrachloroethane	ND	19		ug/Kg	1	03/21/19	JLI	SW8260C
Acrolein	ND	4.8		ug/Kg	1	03/21/19	JLI	SW8260C
Acrylonitrile	ND	19		ug/Kg	1	03/21/19	JLI	SW8260C
Tert-butyl alcohol	ND	97		ug/Kg	1	03/21/19	JLI	SW8260C
Volatile Library Search Top 10	Completed					03/22/19	JLI	
<b><u>Semivolatiles</u></b>								
1,1-Biphenyl	ND	260	110	ug/Kg	1	03/22/19	AW	SW8270D
1,2,4,5-Tetrachlorobenzene	ND	260	130	ug/Kg	1	03/22/19	AW	SW8270D
2,3,4,6-tetrachlorophenol	ND	260	170	ug/Kg	1	03/22/19	AW	SW8270D
2,4,5-Trichlorophenol	ND	260	200	ug/Kg	1	03/22/19	AW	SW8270D
2,4,6-Trichlorophenol	ND	150	120	ug/Kg	1	03/22/19	AW	SW8270D
2,4-Dichlorophenol	ND	150	130	ug/Kg	1	03/22/19	AW	SW8270D
2,4-Dimethylphenol	ND	260	91	ug/Kg	1	03/22/19	AW	SW8270D
2,4-Dinitrophenol	ND	260	260	ug/Kg	1	03/22/19	AW	SW8270D
2,4-Dinitrotoluene	ND	150	140	ug/Kg	1	03/22/19	AW	SW8270D
2,6-Dinitrotoluene	ND	150	120	ug/Kg	1	03/22/19	AW	SW8270D
2-Chloronaphthalene	ND	260	100	ug/Kg	1	03/22/19	AW	SW8270D
2-Chlorophenol	ND	260	100	ug/Kg	1	03/22/19	AW	SW8270D
2-Methylnaphthalene	ND	260	110	ug/Kg	1	03/22/19	AW	SW8270D
2-Methylphenol (o-cresol)	ND	260	170	ug/Kg	1	03/22/19	AW	SW8270D
2-Nitroaniline	ND	260	260	ug/Kg	1	03/22/19	AW	SW8270D
2-Nitrophenol	ND	260	230	ug/Kg	1	03/22/19	AW	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	260	140	ug/Kg	1	03/22/19	AW	SW8270D
3,3'-Dichlorobenzidine	ND	150	150	ug/Kg	1	03/22/19	AW	SW8270D
3-Nitroaniline	ND	730	260	ug/Kg	1	03/22/19	AW	SW8270D
4,6-Dinitro-2-methylphenol	ND	260	260	ug/Kg	1	03/22/19	AW	SW8270D
4-Bromophenyl phenyl ether	ND	260	110	ug/Kg	1	03/22/19	AW	SW8270D
4-Chloro-3-methylphenol	ND	260	130	ug/Kg	1	03/22/19	AW	SW8270D
4-Chloroaniline	ND	730	170	ug/Kg	1	03/22/19	AW	SW8270D
4-Chlorophenyl phenyl ether	ND	260	120	ug/Kg	1	03/22/19	AW	SW8270D
4-Nitroaniline	ND	1800	120	ug/Kg	1	03/22/19	AW	SW8270D
4-Nitrophenol	ND	260	170	ug/Kg	1	03/22/19	AW	SW8270D
Acenaphthene	ND	260	110	ug/Kg	1	03/22/19	AW	SW8270D
Acenaphthylene	ND	150	100	ug/Kg	1	03/22/19	AW	SW8270D
Acetophenone	ND	260	110	ug/Kg	1	03/22/19	AW	SW8270D
Anthracene	ND	260	120	ug/Kg	1	03/22/19	AW	SW8270D
Atrazine	ND	260	95	ug/Kg	1	03/22/19	AW	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Benz(a)anthracene	330	260	120	ug/Kg	1	03/22/19	AW	SW8270D
Benzaldehyde	ND	260	110	ug/Kg	1	03/22/19	AW	SW8270D
Benzo(a)pyrene	370	150	120	ug/Kg	1	03/22/19	AW	SW8270D
Benzo(b)fluoranthene	340	260	130	ug/Kg	1	03/22/19	AW	SW8270D
Benzo(ghi)perylene	240	J 260	120	ug/Kg	1	03/22/19	AW	SW8270D
Benzo(k)fluoranthene	310	260	120	ug/Kg	1	03/22/19	AW	SW8270D
Benzyl butyl phthalate	ND	260	94	ug/Kg	1	03/22/19	AW	SW8270D
Bis(2-chloroethoxy)methane	ND	260	100	ug/Kg	1	03/22/19	AW	SW8270D
Bis(2-chloroethyl)ether	ND	150	99	ug/Kg	1	03/22/19	AW	SW8270D
Bis(2-chloroisopropyl)ether	ND	260	100	ug/Kg	1	03/22/19	AW	SW8270D
Bis(2-ethylhexyl)phthalate	110	J 260	110	ug/Kg	1	03/22/19	AW	SW8270D
Caprolactam	ND	260	260	ug/Kg	1	03/22/19	AW	SW8270D
Carbazole	ND	260	180	ug/Kg	1	03/22/19	AW	SW8270D
Chrysene	370	260	120	ug/Kg	1	03/22/19	AW	SW8270D
Dibenz(a,h)anthracene	ND	150	120	ug/Kg	1	03/22/19	AW	SW8270D
Dibenzofuran	ND	260	110	ug/Kg	1	03/22/19	AW	SW8270D
Diethyl phthalate	ND	260	120	ug/Kg	1	03/22/19	AW	SW8270D
Dimethylphthalate	ND	260	110	ug/Kg	1	03/22/19	AW	SW8270D
Di-n-butylphthalate	ND	260	97	ug/Kg	1	03/22/19	AW	SW8270D
Di-n-octylphthalate	ND	260	94	ug/Kg	1	03/22/19	AW	SW8270D
Fluoranthene	570	260	120	ug/Kg	1	03/22/19	AW	SW8270D
Fluorene	ND	260	120	ug/Kg	1	03/22/19	AW	SW8270D
Hexachlorobenzene	ND	150	110	ug/Kg	1	03/22/19	AW	SW8270D
Hexachlorobutadiene	ND	260	130	ug/Kg	1	03/22/19	AW	SW8270D
Hexachlorocyclopentadiene	ND	260	110	ug/Kg	1	03/22/19	AW	SW8270D
Hexachloroethane	ND	150	110	ug/Kg	1	03/22/19	AW	SW8270D
Indeno(1,2,3-cd)pyrene	260	260	120	ug/Kg	1	03/22/19	AW	SW8270D
Isophorone	ND	150	100	ug/Kg	1	03/22/19	AW	SW8270D
Naphthalene	ND	260	110	ug/Kg	1	03/22/19	AW	SW8270D
Nitrobenzene	ND	150	130	ug/Kg	1	03/22/19	AW	SW8270D
N-Nitrosodimethylamine	ND	260	100	ug/Kg	1	03/22/19	AW	SW8270D
N-Nitrosodi-n-propylamine	ND	150	120	ug/Kg	1	03/22/19	AW	SW8270D
N-Nitrosodiphenylamine	ND	150	140	ug/Kg	1	03/22/19	AW	SW8270D
Pentachlorophenol	ND	260	140	ug/Kg	1	03/22/19	AW	SW8270D
Phenanthrene	240	150	100	ug/Kg	1	03/22/19	AW	SW8270D
Phenol	ND	260	120	ug/Kg	1	03/22/19	AW	SW8270D
Pyrene	560	260	130	ug/Kg	1	03/22/19	AW	SW8270D
<b><u>QA/QC Surrogates</u></b>								
% 2,4,6-Tribromophenol	52			%	1	03/22/19	AW	30 - 130 %
% 2-Fluorobiphenyl	56			%	1	03/22/19	AW	30 - 130 %
% 2-Fluorophenol	54			%	1	03/22/19	AW	30 - 130 %
% Nitrobenzene-d5	56			%	1	03/22/19	AW	30 - 130 %
% Phenol-d5	57			%	1	03/22/19	AW	30 - 130 %
% Terphenyl-d14	50			%	1	03/22/19	AW	30 - 130 %
SVOA Library Search Top 15	Completed					03/22/19	MR	

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
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RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected at RL/PQL  
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 (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

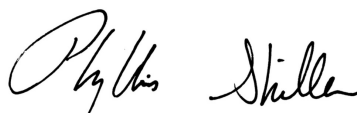
**Comments:**

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**

**April 02, 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

April 02, 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: SW  
 Analyzed by: see "By" below

## Date

03/19/19  
 03/20/19

## Time

11:55  
 16:00

## Laboratory Data

SDG ID: GCC71637  
 Phoenix ID: CC71638

Project ID: 1840 PARK AVE MANHATTAN  
 Client ID: SB4 (16-18)

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.32	0.32		mg/Kg	1	03/21/19	CPP	SW6010D
Aluminum	7390	32		mg/Kg	10	03/21/19	CPP	SW6010D
Arsenic	1.67	0.64		mg/Kg	1	03/21/19	CPP	SW6010D
Barium	43.3	0.6		mg/Kg	1	03/21/19	CPP	SW6010D
Beryllium	0.35	0.26		mg/Kg	1	03/21/19	CPP	SW6010D
Calcium	2760	3.2		mg/Kg	1	03/21/19	CPP	SW6010D
Cadmium	< 0.32	0.32		mg/Kg	1	03/21/19	CPP	SW6010D
Cobalt	5.28	0.32		mg/Kg	1	03/21/19	CPP	SW6010D
Chromium	20.1	0.32		mg/Kg	1	03/21/19	CPP	SW6010D
Copper	35.2	0.6		mg/kg	1	03/21/19	CPP	SW6010D
Iron	8720	32		mg/Kg	10	03/21/19	CPP	SW6010D
Mercury	< 0.03	0.03		mg/Kg	1	03/21/19	RS	SW7471B
Potassium	840	6		mg/Kg	1	03/21/19	CPP	SW6010D
Magnesium	3270	3.2		mg/Kg	1	03/21/19	CPP	SW6010D
Manganese	118	0.32		mg/Kg	1	03/21/19	CPP	SW6010D
Sodium	606	6		mg/Kg	1	03/21/19	EK	SW6010D
Nickel	15.9	0.32		mg/Kg	1	03/21/19	CPP	SW6010D
Lead	4.0	0.6		mg/Kg	1	03/21/19	CPP	SW6010D
Antimony	< 3.2	3.2		mg/Kg	1	03/21/19	CPP	SW6010D
Selenium	< 1.3	1.3		mg/Kg	1	03/21/19	CPP	SW6010D
Thallium	< 1.3	1.3		mg/Kg	1	03/21/19	CPP	SW6010D
Vanadium	20.7	0.32		mg/Kg	1	03/21/19	CPP	SW6010D
Zinc	20.1	0.6		mg/Kg	1	03/21/19	CPP	SW6010D
Percent Solid	92			%		03/20/19	ML	SW846-%Solid
Soil Extraction for PCB	Completed					03/21/19	MM/V	SW3545A
Soil Extraction for Pesticides	Completed					03/21/19	MM/V	SW3545A
Soil Extraction for SVOA	Completed					03/21/19	JJ/LV	SW3545A
Mercury Digestion	Completed					03/21/19	W/W	SW7471B

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Total Metals Digest	Completed					03/20/19	S/AG/BF	SW3050B
<b><u>Polychlorinated Biphenyls</u></b>								
PCB-1016	ND	71	71	ug/Kg	2	03/22/19	SC	SW8082A
PCB-1221	ND	71	71	ug/Kg	2	03/22/19	SC	SW8082A
PCB-1232	ND	71	71	ug/Kg	2	03/22/19	SC	SW8082A
PCB-1242	ND	71	71	ug/Kg	2	03/22/19	SC	SW8082A
PCB-1248	ND	71	71	ug/Kg	2	03/22/19	SC	SW8082A
PCB-1254	ND	71	71	ug/Kg	2	03/22/19	SC	SW8082A
PCB-1260	ND	71	71	ug/Kg	2	03/22/19	SC	SW8082A
PCB-1262	ND	71	71	ug/Kg	2	03/22/19	SC	SW8082A
PCB-1268	ND	71	71	ug/Kg	2	03/22/19	SC	SW8082A
<b><u>QA/QC Surrogates</u></b>								
% DCBP	67			%	2	03/22/19	SC	30 - 150 %
% DCBP (Confirmation)	65			%	2	03/22/19	SC	30 - 150 %
% TCMX	79			%	2	03/22/19	SC	30 - 150 %
% TCMX (Confirmation)	75			%	2	03/22/19	SC	30 - 150 %
<b><u>Pesticides - Soil</u></b>								
4,4' -DDD	ND	2.1		ug/Kg	2	03/25/19	CW	SW8081B
4,4' -DDE	ND	2.1		ug/Kg	2	03/25/19	CW	SW8081B
4,4' -DDT	ND	2.1		ug/Kg	2	03/25/19	CW	SW8081B
a-BHC	ND	7.1		ug/Kg	2	03/25/19	CW	SW8081B
a-Chlordane	ND	3.5		ug/Kg	2	03/25/19	CW	SW8081B
Aldrin	ND	3.5		ug/Kg	2	03/25/19	CW	SW8081B
b-BHC	ND	7.1		ug/Kg	2	03/25/19	CW	SW8081B
Chlordane	ND	35		ug/Kg	2	03/25/19	CW	SW8081B
d-BHC	ND	7.1		ug/Kg	2	03/25/19	CW	SW8081B
Dieldrin	ND	3.5		ug/Kg	2	03/25/19	CW	SW8081B
Endosulfan I	ND	7.1		ug/Kg	2	03/25/19	CW	SW8081B
Endosulfan II	ND	7.1		ug/Kg	2	03/25/19	CW	SW8081B
Endosulfan sulfate	ND	7.1		ug/Kg	2	03/25/19	CW	SW8081B
Endrin	ND	7.1		ug/Kg	2	03/25/19	CW	SW8081B
Endrin aldehyde	ND	7.1		ug/Kg	2	03/25/19	CW	SW8081B
Endrin ketone	ND	7.1		ug/Kg	2	03/25/19	CW	SW8081B
g-BHC	ND	1.4		ug/Kg	2	03/25/19	CW	SW8081B
g-Chlordane	ND	3.5		ug/Kg	2	03/25/19	CW	SW8081B
Heptachlor	ND	7.1		ug/Kg	2	03/25/19	CW	SW8081B
Heptachlor epoxide	ND	7.1		ug/Kg	2	03/25/19	CW	SW8081B
Methoxychlor	ND	35		ug/Kg	2	03/25/19	CW	SW8081B
Toxaphene	ND	140		ug/Kg	2	03/25/19	CW	SW8081B
<b><u>QA/QC Surrogates</u></b>								
% DCBP	69			%	2	03/25/19	CW	30 - 150 %
% DCBP (Confirmation)	105			%	2	03/25/19	CW	30 - 150 %
% TCMX	74			%	2	03/25/19	CW	30 - 150 %
% TCMX (Confirmation)	72			%	2	03/25/19	CW	30 - 150 %
<b><u>1,4-dioxane</u></b>								
1,4-dioxane	ND	65		ug/kg	1	03/21/19	JLI	SW8260C



Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
<b><u>Volatiles</u></b>								
1,1,1-Trichloroethane	ND	4.3	0.43	ug/Kg	1	03/21/19	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	4.3	0.87	ug/Kg	1	03/21/19	JLI	SW8260C
1,1,2-Trichloroethane	ND	4.3	0.87	ug/Kg	1	03/21/19	JLI	SW8260C
1,1-Dichloroethane	ND	4.3	0.87	ug/Kg	1	03/21/19	JLI	SW8260C
1,1-Dichloroethene	ND	4.3	0.43	ug/Kg	1	03/21/19	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	4.3	0.87	ug/Kg	1	03/21/19	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	4.3	0.87	ug/Kg	1	03/21/19	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	4.3	0.87	ug/Kg	1	03/21/19	JLI	SW8260C
1,2-Dibromoethane	ND	4.3	0.43	ug/Kg	1	03/21/19	JLI	SW8260C
1,2-Dichlorobenzene	ND	4.3	0.43	ug/Kg	1	03/21/19	JLI	SW8260C
1,2-Dichloroethane	ND	4.3	0.43	ug/Kg	1	03/21/19	JLI	SW8260C
1,2-Dichloropropane	ND	4.3	0.87	ug/Kg	1	03/21/19	JLI	SW8260C
1,3-Dichlorobenzene	ND	4.3	0.43	ug/Kg	1	03/21/19	JLI	SW8260C
1,4-Dichlorobenzene	ND	4.3	0.43	ug/Kg	1	03/21/19	JLI	SW8260C
2-Hexanone	ND	22	4.3	ug/Kg	1	03/21/19	JLI	SW8260C
4-Methyl-2-pentanone	ND	22	4.3	ug/Kg	1	03/21/19	JLI	SW8260C
Acetone	17	JS 22	4.3	ug/Kg	1	03/21/19	JLI	SW8260C
Benzene	ND	4.3	0.43	ug/Kg	1	03/21/19	JLI	SW8260C
Bromochloromethane	ND	4.3	0.43	ug/Kg	1	03/21/19	JLI	SW8260C
Bromodichloromethane	ND	4.3	0.87	ug/Kg	1	03/21/19	JLI	SW8260C
Bromoform	ND	4.3	0.87	ug/Kg	1	03/21/19	JLI	SW8260C
Bromomethane	ND	4.3	1.7	ug/Kg	1	03/21/19	JLI	SW8260C
Carbon Disulfide	ND	4.3	0.87	ug/Kg	1	03/21/19	JLI	SW8260C
Carbon tetrachloride	ND	4.3	0.87	ug/Kg	1	03/21/19	JLI	SW8260C
Chlorobenzene	ND	4.3	0.43	ug/Kg	1	03/21/19	JLI	SW8260C
Chloroethane	ND	4.3	0.43	ug/Kg	1	03/21/19	JLI	SW8260C
Chloroform	ND	4.3	0.43	ug/Kg	1	03/21/19	JLI	SW8260C
Chloromethane	ND	4.3	0.87	ug/Kg	1	03/21/19	JLI	SW8260C
cis-1,2-Dichloroethene	ND	4.3	0.43	ug/Kg	1	03/21/19	JLI	SW8260C
cis-1,3-Dichloropropene	ND	4.3	0.43	ug/Kg	1	03/21/19	JLI	SW8260C
Cyclohexane	ND	4.3	0.87	ug/Kg	1	03/21/19	JLI	SW8260C
Dibromochloromethane	ND	4.3	0.87	ug/Kg	1	03/21/19	JLI	SW8260C
Dichlorodifluoromethane	ND	4.3	0.43	ug/Kg	1	03/21/19	JLI	SW8260C
Ethylbenzene	ND	4.3	0.43	ug/Kg	1	03/21/19	JLI	SW8260C
Isopropylbenzene	ND	4.3	0.43	ug/Kg	1	03/21/19	JLI	SW8260C
m&p-Xylene	ND	4.3	0.87	ug/Kg	1	03/21/19	JLI	SW8260C
Methyl ethyl ketone	ND	26	4.3	ug/Kg	1	03/21/19	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	8.7	0.87	ug/Kg	1	03/21/19	JLI	SW8260C
Methylacetate	ND	4.3	4.3	ug/Kg	1	03/21/19	JLI	SW8260C
Methylcyclohexane	ND	4.3	0.87	ug/Kg	1	03/21/19	JLI	SW8260C
Methylene chloride	ND	4.3	4.3	ug/Kg	1	03/21/19	JLI	SW8260C
o-Xylene	ND	4.3	0.87	ug/Kg	1	03/21/19	JLI	SW8260C
Styrene	ND	4.3	0.43	ug/Kg	1	03/21/19	JLI	SW8260C
Tetrachloroethene	ND	4.3	0.87	ug/Kg	1	03/21/19	JLI	SW8260C
Toluene	ND	4.3	0.43	ug/Kg	1	03/21/19	JLI	SW8260C
Total Xylenes	ND	4.3	4.3	ug/Kg	1	03/21/19	JLI	SW8260C
trans-1,2-Dichloroethene	ND	4.3	0.43	ug/Kg	1	03/21/19	JLI	SW8260C
trans-1,3-Dichloropropene	ND	4.3	0.43	ug/Kg	1	03/21/19	JLI	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Trichloroethene	ND	4.3	0.43	ug/Kg	1	03/21/19	JLI	SW8260C
Trichlorofluoromethane	ND	4.3	0.87	ug/Kg	1	03/21/19	JLI	SW8260C
Trichlorotrifluoroethane	ND	4.3	0.43	ug/Kg	1	03/21/19	JLI	SW8260C
Vinyl chloride	ND	4.3	0.43	ug/Kg	1	03/21/19	JLI	SW8260C
<b><u>QA/QC Surrogates</u></b>								
% 1,2-dichlorobenzene-d4	100			%	1	03/21/19	JLI	70 - 130 %
% Bromofluorobenzene	95			%	1	03/21/19	JLI	70 - 130 %
% Dibromofluoromethane	100			%	1	03/21/19	JLI	70 - 130 %
% Toluene-d8	99			%	1	03/21/19	JLI	70 - 130 %
<b><u>Volatiles</u></b>								
1,1,1,2-Tetrachloroethane	ND	17		ug/Kg	1	03/21/19	JLI	SW8260C
Acrolein	ND	4.3		ug/Kg	1	03/21/19	JLI	SW8260C
Acrylonitrile	ND	17		ug/Kg	1	03/21/19	JLI	SW8260C
Tert-butyl alcohol	ND	87		ug/Kg	1	03/21/19	JLI	SW8260C
Volatile Library Search Top 10	Completed					03/22/19	JLI	
<b><u>Semivolatiles</u></b>								
1,1-Biphenyl	ND	250	110	ug/Kg	1	03/22/19	AW	SW8270D
1,2,4,5-Tetrachlorobenzene	ND	250	120	ug/Kg	1	03/22/19	AW	SW8270D
2,3,4,6-tetrachlorophenol	ND	250	170	ug/Kg	1	03/22/19	AW	SW8270D
2,4,5-Trichlorophenol	ND	250	190	ug/Kg	1	03/22/19	AW	SW8270D
2,4,6-Trichlorophenol	ND	140	110	ug/Kg	1	03/22/19	AW	SW8270D
2,4-Dichlorophenol	ND	140	120	ug/Kg	1	03/22/19	AW	SW8270D
2,4-Dimethylphenol	ND	250	88	ug/Kg	1	03/22/19	AW	SW8270D
2,4-Dinitrophenol	ND	250	250	ug/Kg	1	03/22/19	AW	SW8270D
2,4-Dinitrotoluene	ND	140	140	ug/Kg	1	03/22/19	AW	SW8270D
2,6-Dinitrotoluene	ND	140	110	ug/Kg	1	03/22/19	AW	SW8270D
2-Chloronaphthalene	ND	250	100	ug/Kg	1	03/22/19	AW	SW8270D
2-Chlorophenol	ND	250	100	ug/Kg	1	03/22/19	AW	SW8270D
2-Methylnaphthalene	ND	250	110	ug/Kg	1	03/22/19	AW	SW8270D
2-Methylphenol (o-cresol)	ND	250	170	ug/Kg	1	03/22/19	AW	SW8270D
2-Nitroaniline	ND	250	250	ug/Kg	1	03/22/19	AW	SW8270D
2-Nitrophenol	ND	250	220	ug/Kg	1	03/22/19	AW	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	250	140	ug/Kg	1	03/22/19	AW	SW8270D
3,3'-Dichlorobenzidine	ND	140	140	ug/Kg	1	03/22/19	AW	SW8270D
3-Nitroaniline	ND	710	250	ug/Kg	1	03/22/19	AW	SW8270D
4,6-Dinitro-2-methylphenol	ND	250	250	ug/Kg	1	03/22/19	AW	SW8270D
4-Bromophenyl phenyl ether	ND	250	100	ug/Kg	1	03/22/19	AW	SW8270D
4-Chloro-3-methylphenol	ND	250	120	ug/Kg	1	03/22/19	AW	SW8270D
4-Chloroaniline	ND	710	160	ug/Kg	1	03/22/19	AW	SW8270D
4-Chlorophenyl phenyl ether	ND	250	120	ug/Kg	1	03/22/19	AW	SW8270D
4-Nitroaniline	ND	1800	120	ug/Kg	1	03/22/19	AW	SW8270D
4-Nitrophenol	ND	250	160	ug/Kg	1	03/22/19	AW	SW8270D
Acenaphthene	ND	250	110	ug/Kg	1	03/22/19	AW	SW8270D
Acenaphthylene	ND	140	99	ug/Kg	1	03/22/19	AW	SW8270D
Acetophenone	ND	250	110	ug/Kg	1	03/22/19	AW	SW8270D
Anthracene	ND	250	120	ug/Kg	1	03/22/19	AW	SW8270D
Atrazine	ND	250	92	ug/Kg	1	03/22/19	AW	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Benz(a)anthracene	ND	250	120	ug/Kg	1	03/22/19	AW	SW8270D
Benzaldehyde	ND	250	100	ug/Kg	1	03/22/19	AW	SW8270D
Benzo(a)pyrene	ND	140	120	ug/Kg	1	03/22/19	AW	SW8270D
Benzo(b)fluoranthene	ND	250	120	ug/Kg	1	03/22/19	AW	SW8270D
Benzo(ghi)perylene	ND	250	110	ug/Kg	1	03/22/19	AW	SW8270D
Benzo(k)fluoranthene	ND	250	120	ug/Kg	1	03/22/19	AW	SW8270D
Benzyl butyl phthalate	ND	250	91	ug/Kg	1	03/22/19	AW	SW8270D
Bis(2-chloroethoxy)methane	ND	250	98	ug/Kg	1	03/22/19	AW	SW8270D
Bis(2-chloroethyl)ether	ND	140	95	ug/Kg	1	03/22/19	AW	SW8270D
Bis(2-chloroisopropyl)ether	ND	250	98	ug/Kg	1	03/22/19	AW	SW8270D
Bis(2-ethylhexyl)phthalate	ND	250	100	ug/Kg	1	03/22/19	AW	SW8270D
Caprolactam	ND	250	250	ug/Kg	1	03/22/19	AW	SW8270D
Carbazole	ND	250	180	ug/Kg	1	03/22/19	AW	SW8270D
Chrysene	ND	250	120	ug/Kg	1	03/22/19	AW	SW8270D
Dibenz(a,h)anthracene	ND	140	110	ug/Kg	1	03/22/19	AW	SW8270D
Dibenzofuran	ND	250	100	ug/Kg	1	03/22/19	AW	SW8270D
Diethyl phthalate	ND	250	110	ug/Kg	1	03/22/19	AW	SW8270D
Dimethylphthalate	ND	250	110	ug/Kg	1	03/22/19	AW	SW8270D
Di-n-butylphthalate	ND	250	94	ug/Kg	1	03/22/19	AW	SW8270D
Di-n-octylphthalate	ND	250	91	ug/Kg	1	03/22/19	AW	SW8270D
Fluoranthene	ND	250	110	ug/Kg	1	03/22/19	AW	SW8270D
Fluorene	ND	250	120	ug/Kg	1	03/22/19	AW	SW8270D
Hexachlorobenzene	ND	140	100	ug/Kg	1	03/22/19	AW	SW8270D
Hexachlorobutadiene	ND	250	130	ug/Kg	1	03/22/19	AW	SW8270D
Hexachlorocyclopentadiene	ND	250	110	ug/Kg	1	03/22/19	AW	SW8270D
Hexachloroethane	ND	140	110	ug/Kg	1	03/22/19	AW	SW8270D
Indeno(1,2,3-cd)pyrene	ND	250	120	ug/Kg	1	03/22/19	AW	SW8270D
Isophorone	ND	140	99	ug/Kg	1	03/22/19	AW	SW8270D
Naphthalene	ND	250	100	ug/Kg	1	03/22/19	AW	SW8270D
Nitrobenzene	ND	140	120	ug/Kg	1	03/22/19	AW	SW8270D
N-Nitrosodimethylamine	ND	250	100	ug/Kg	1	03/22/19	AW	SW8270D
N-Nitrosodi-n-propylamine	ND	140	110	ug/Kg	1	03/22/19	AW	SW8270D
N-Nitrosodiphenylamine	ND	140	140	ug/Kg	1	03/22/19	AW	SW8270D
Pentachlorophenol	ND	250	130	ug/Kg	1	03/22/19	AW	SW8270D
Phenanthrene	ND	140	100	ug/Kg	1	03/22/19	AW	SW8270D
Phenol	ND	250	110	ug/Kg	1	03/22/19	AW	SW8270D
Pyrene	ND	250	120	ug/Kg	1	03/22/19	AW	SW8270D
<b>QA/QC Surrogates</b>								
% 2,4,6-Tribromophenol	64			%	1	03/22/19	AW	30 - 130 %
% 2-Fluorobiphenyl	65			%	1	03/22/19	AW	30 - 130 %
% 2-Fluorophenol	65			%	1	03/22/19	AW	30 - 130 %
% Nitrobenzene-d5	63			%	1	03/22/19	AW	30 - 130 %
% Phenol-d5	68			%	1	03/22/19	AW	30 - 130 %
% Terphenyl-d14	63			%	1	03/22/19	AW	30 - 130 %
SVOA Library Search Top 15	Completed					03/22/19	MR	

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
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RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected at RL/PQL  
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 (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate  
results(%) listed in the report are not "detected" compounds.

**Comments:**

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**

**April 02, 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

April 02, 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: SW  
 Analyzed by: see "By" below

## Date

03/19/19  
 03/20/19

## Time

9:27  
 16:00

## Laboratory Data

SDG ID: GCC71637  
 Phoenix ID: CC71639

Project ID: 1840 PARK AVE MANHATTAN  
 Client ID: SB5 (0-2)

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.38	0.38		mg/Kg	1	03/21/19	CPP	SW6010D
Aluminum	6910	38		mg/Kg	10	03/21/19	CPP	SW6010D
Arsenic	6.50	0.76		mg/Kg	1	03/21/19	CPP	SW6010D
Barium	97.3	0.8		mg/Kg	1	03/21/19	CPP	SW6010D
Beryllium	0.46	0.30		mg/Kg	1	03/21/19	CPP	SW6010D
Calcium	51800	38		mg/Kg	10	03/21/19	CPP	SW6010D
Cadmium	0.52	0.38		mg/Kg	1	03/21/19	CPP	SW6010D
Cobalt	7.34	0.38		mg/Kg	1	03/21/19	CPP	SW6010D
Chromium	29.4	0.38		mg/Kg	1	03/21/19	CPP	SW6010D
Copper	50.4	0.8		mg/kg	1	03/21/19	CPP	SW6010D
Iron	23900	38		mg/Kg	10	03/21/19	CPP	SW6010D
Mercury	0.31	0.07		mg/Kg	1	03/21/19	RS	SW7471B
Potassium	1940	8		mg/Kg	1	03/21/19	CPP	SW6010D
Magnesium	23900	38		mg/Kg	10	03/21/19	CPP	SW6010D
Manganese	228	3.8		mg/Kg	10	03/21/19	CPP	SW6010D
Sodium	584	8		mg/Kg	1	03/21/19	EK	SW6010D
Nickel	14.5	0.38		mg/Kg	1	03/21/19	CPP	SW6010D
Lead	53.5	0.8		mg/Kg	1	03/21/19	CPP	SW6010D
Antimony	< 3.8	3.8		mg/Kg	1	03/21/19	CPP	SW6010D
Selenium	< 1.5	1.5		mg/Kg	1	03/21/19	CPP	SW6010D
Thallium	< 1.5	1.5		mg/Kg	1	03/21/19	CPP	SW6010D
Vanadium	61.0	0.38		mg/Kg	1	03/21/19	CPP	SW6010D
Zinc	91.9	0.8		mg/Kg	1	03/21/19	CPP	SW6010D
Percent Solid	90			%		03/20/19	ML	SW846-%Solid
Soil Extraction for PCB	Completed					03/21/19	MM/V	SW3545A
Soil Extraction for Pesticides	Completed					03/21/19	MM/V	SW3545A
Soil Extraction for SVOA	Completed					03/21/19	JJ/LV	SW3545A
Mercury Digestion	Completed					03/21/19	W/W	SW7471B

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Total Metals Digest	Completed					03/20/19	S/AG/BF	SW3050B
<b><u>Polychlorinated Biphenyls</u></b>								
PCB-1016	ND	73	73	ug/Kg	2	03/22/19	SC	SW8082A
PCB-1221	ND	73	73	ug/Kg	2	03/22/19	SC	SW8082A
PCB-1232	ND	73	73	ug/Kg	2	03/22/19	SC	SW8082A
PCB-1242	ND	73	73	ug/Kg	2	03/22/19	SC	SW8082A
PCB-1248	ND	73	73	ug/Kg	2	03/22/19	SC	SW8082A
PCB-1254	ND	73	73	ug/Kg	2	03/22/19	SC	SW8082A
PCB-1260	82	73	73	ug/Kg	2	03/22/19	SC	SW8082A
PCB-1262	ND	73	73	ug/Kg	2	03/22/19	SC	SW8082A
PCB-1268	ND	73	73	ug/Kg	2	03/22/19	SC	SW8082A
<b><u>QA/QC Surrogates</u></b>								
% DCBP	81			%	2	03/22/19	SC	30 - 150 %
% DCBP (Confirmation)	65			%	2	03/22/19	SC	30 - 150 %
% TCMX	75			%	2	03/22/19	SC	30 - 150 %
% TCMX (Confirmation)	69			%	2	03/22/19	SC	30 - 150 %
<b><u>Pesticides - Soil</u></b>								
4,4' -DDD	130	22		ug/Kg	20	03/23/19	CW	SW8081B
4,4' -DDE	ND	22		ug/Kg	20	03/23/19	CW	SW8081B
4,4' -DDT	53	22		ug/Kg	20	03/23/19	CW	SW8081B
a-BHC	ND	15		ug/Kg	20	03/23/19	CW	SW8081B
a-Chlordane	ND	36		ug/Kg	20	03/23/19	CW	SW8081B
Aldrin	ND	15		ug/Kg	20	03/23/19	CW	SW8081B
b-BHC	ND	15		ug/Kg	20	03/23/19	CW	SW8081B
Chlordane	ND	360		ug/Kg	20	03/23/19	CW	SW8081B
d-BHC	ND	15		ug/Kg	20	03/23/19	CW	SW8081B
Dieldrin	25	15		ug/Kg	20	03/23/19	CW	SW8081B
Endosulfan I	ND	73		ug/Kg	20	03/23/19	CW	SW8081B
Endosulfan II	ND	73		ug/Kg	20	03/23/19	CW	SW8081B
Endosulfan sulfate	ND	73		ug/Kg	20	03/23/19	CW	SW8081B
Endrin	ND	36		ug/Kg	20	03/23/19	CW	SW8081B
Endrin aldehyde	ND	73		ug/Kg	20	03/23/19	CW	SW8081B
Endrin ketone	ND	73		ug/Kg	20	03/23/19	CW	SW8081B
g-BHC	ND	15		ug/Kg	20	03/23/19	CW	SW8081B
g-Chlordane	ND	36		ug/Kg	20	03/23/19	CW	SW8081B
Heptachlor	ND	36		ug/Kg	20	03/23/19	CW	SW8081B
Heptachlor epoxide	ND	73		ug/Kg	20	03/23/19	CW	SW8081B
Methoxychlor	ND	360		ug/Kg	20	03/23/19	CW	SW8081B
Toxaphene	ND	1500		ug/Kg	20	03/23/19	CW	SW8081B
<b><u>QA/QC Surrogates</u></b>								
% DCBP	Diluted Out			%	20	03/23/19	CW	30 - 150 %
% DCBP (Confirmation)	Diluted Out			%	20	03/23/19	CW	30 - 150 %
% TCMX	Diluted Out			%	20	03/23/19	CW	30 - 150 %
% TCMX (Confirmation)	Diluted Out			%	20	03/23/19	CW	30 - 150 %
<b><u>1,4-dioxane</u></b>								
1,4-dioxane	ND	3700		ug/kg	50	03/21/19	JLI	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
<b><u>Volatiles</u></b>								
1,1,1-Trichloroethane	ND	470	47	ug/Kg	50	03/21/19	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	470	93	ug/Kg	50	03/21/19	JLI	SW8260C
1,1,2-Trichloroethane	ND	470	93	ug/Kg	50	03/21/19	JLI	SW8260C
1,1-Dichloroethane	ND	270	93	ug/Kg	50	03/21/19	JLI	SW8260C
1,1-Dichloroethene	ND	330	47	ug/Kg	50	03/21/19	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	470	93	ug/Kg	50	03/21/19	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	470	93	ug/Kg	50	03/21/19	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	470	93	ug/Kg	50	03/21/19	JLI	SW8260C
1,2-Dibromoethane	ND	470	47	ug/Kg	50	03/21/19	JLI	SW8260C
1,2-Dichlorobenzene	ND	470	47	ug/Kg	50	03/21/19	JLI	SW8260C
1,2-Dichloroethane	ND	47	47	ug/Kg	50	03/21/19	JLI	SW8260C
1,2-Dichloropropane	ND	470	93	ug/Kg	50	03/21/19	JLI	SW8260C
1,3-Dichlorobenzene	ND	470	47	ug/Kg	50	03/21/19	JLI	SW8260C
1,4-Dichlorobenzene	ND	470	47	ug/Kg	50	03/21/19	JLI	SW8260C
2-Hexanone	ND	2300	470	ug/Kg	50	03/21/19	JLI	SW8260C
4-Methyl-2-pentanone	ND	2300	470	ug/Kg	50	03/21/19	JLI	SW8260C
Acetone	720	S 470	470	ug/Kg	50	03/21/19	JLI	SW8260C
Benzene	ND	60	47	ug/Kg	50	03/21/19	JLI	SW8260C
Bromochloromethane	ND	470	47	ug/Kg	50	03/21/19	JLI	SW8260C
Bromodichloromethane	ND	470	93	ug/Kg	50	03/21/19	JLI	SW8260C
Bromoform	ND	470	93	ug/Kg	50	03/21/19	JLI	SW8260C
Bromomethane	ND	470	190	ug/Kg	50	03/21/19	JLI	SW8260C
Carbon Disulfide	ND	470	93	ug/Kg	50	03/21/19	JLI	SW8260C
Carbon tetrachloride	ND	470	93	ug/Kg	50	03/21/19	JLI	SW8260C
Chlorobenzene	ND	470	47	ug/Kg	50	03/21/19	JLI	SW8260C
Chloroethane	ND	470	47	ug/Kg	50	03/21/19	JLI	SW8260C
Chloroform	ND	370	47	ug/Kg	50	03/21/19	JLI	SW8260C
Chloromethane	ND	470	93	ug/Kg	50	03/21/19	JLI	SW8260C
cis-1,2-Dichloroethene	ND	250	47	ug/Kg	50	03/21/19	JLI	SW8260C
cis-1,3-Dichloropropene	ND	470	47	ug/Kg	50	03/21/19	JLI	SW8260C
Cyclohexane	ND	470	93	ug/Kg	50	03/21/19	JLI	SW8260C
Dibromochloromethane	ND	470	93	ug/Kg	50	03/21/19	JLI	SW8260C
Dichlorodifluoromethane	ND	470	47	ug/Kg	50	03/21/19	JLI	SW8260C
Ethylbenzene	32000	4700	470	ug/Kg	500	03/22/19	JLI	SW8260C
Isopropylbenzene	5900	4700	470	ug/Kg	500	03/22/19	JLI	SW8260C
m&p-Xylene	180000	4700	930	ug/Kg	500	03/22/19	JLI	SW8260C
Methyl ethyl ketone	ND	190	190	ug/Kg	50	03/21/19	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	930	93	ug/Kg	50	03/21/19	JLI	SW8260C
Methylacetate	ND	470	470	ug/Kg	50	03/21/19	JLI	SW8260C
Methylcyclohexane	4300	470	93	ug/Kg	50	03/21/19	JLI	SW8260C
Methylene chloride	ND	190	190	ug/Kg	50	03/21/19	JLI	SW8260C
o-Xylene	74000	4700	930	ug/Kg	500	03/22/19	JLI	SW8260C
Styrene	ND	470	47	ug/Kg	50	03/21/19	JLI	SW8260C
Tetrachloroethene	ND	470	93	ug/Kg	50	03/21/19	JLI	SW8260C
Toluene	5900	470	47	ug/Kg	50	03/21/19	JLI	SW8260C
Total Xylenes	254000	4700	4700	ug/Kg	500	03/22/19	JLI	SW8260C
trans-1,2-Dichloroethene	ND	190	47	ug/Kg	50	03/21/19	JLI	SW8260C
trans-1,3-Dichloropropene	ND	470	47	ug/Kg	50	03/21/19	JLI	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Trichloroethene	ND	470	47	ug/Kg	50	03/21/19	JLI	SW8260C
Trichlorofluoromethane	ND	470	93	ug/Kg	50	03/21/19	JLI	SW8260C
Trichlorotrifluoroethane	ND	470	47	ug/Kg	50	03/21/19	JLI	SW8260C
Vinyl chloride	ND	47	47	ug/Kg	50	03/21/19	JLI	SW8260C
<b><u>QA/QC Surrogates</u></b>								
% 1,2-dichlorobenzene-d4 (50x)	101			%	50	03/21/19	JLI	70 - 130 %
% Bromofluorobenzene (50x)	111			%	50	03/21/19	JLI	70 - 130 %
% Dibromofluoromethane (50x)	96			%	50	03/21/19	JLI	70 - 130 %
% Toluene-d8 (50x)	99			%	50	03/21/19	JLI	70 - 130 %
% 1,2-dichlorobenzene-d4 (500x)	98			%	500	03/22/19	JLI	70 - 130 %
% Bromofluorobenzene (500x)	97			%	500	03/22/19	JLI	70 - 130 %
% Dibromofluoromethane (500x)	102			%	500	03/22/19	JLI	70 - 130 %
% Toluene-d8 (500x)	100			%	500	03/22/19	JLI	70 - 130 %

**Volatiles**

1,1,1,2-Tetrachloroethane	ND	1900		ug/Kg	50	03/21/19	JLI	SW8260C
Acrolein	ND	470		ug/Kg	50	03/21/19	JLI	SW8260C
Acrylonitrile	ND	1900		ug/Kg	50	03/21/19	JLI	SW8260C
Tert-butyl alcohol	ND	9300		ug/Kg	50	03/21/19	JLI	SW8260C

Volatile Library Search Top 10 Completed 03/22/19 JLI

**Semivolatiles**

1,1-Biphenyl	ND	2500	1100	ug/Kg	10	03/22/19	WB	SW8270D
1,2,4,5-Tetrachlorobenzene	ND	2500	1300	ug/Kg	10	03/22/19	WB	SW8270D
2,3,4,6-tetrachlorophenol	ND	2500	1700	ug/Kg	10	03/22/19	WB	SW8270D
2,4,5-Trichlorophenol	ND	2500	2000	ug/Kg	10	03/22/19	WB	SW8270D
2,4,6-Trichlorophenol	ND	1400	1200	ug/Kg	10	03/22/19	WB	SW8270D
2,4-Dichlorophenol	ND	1400	1300	ug/Kg	10	03/22/19	WB	SW8270D
2,4-Dimethylphenol	ND	2500	890	ug/Kg	10	03/22/19	WB	SW8270D
2,4-Dinitrophenol	ND	2500	2500	ug/Kg	10	03/22/19	WB	SW8270D
2,4-Dinitrotoluene	ND	1400	1400	ug/Kg	10	03/22/19	WB	SW8270D
2,6-Dinitrotoluene	ND	1400	1100	ug/Kg	10	03/22/19	WB	SW8270D
2-Chloronaphthalene	ND	2500	1000	ug/Kg	10	03/22/19	WB	SW8270D
2-Chlorophenol	ND	2500	1000	ug/Kg	10	03/22/19	WB	SW8270D
2-Methylnaphthalene	1600	J 2500	1100	ug/Kg	10	03/22/19	WB	SW8270D
2-Methylphenol (o-cresol)	ND	720	720	ug/Kg	10	03/22/19	WB	SW8270D
2-Nitroaniline	ND	2500	2500	ug/Kg	10	03/22/19	WB	SW8270D
2-Nitrophenol	ND	2500	2300	ug/Kg	10	03/22/19	WB	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	2500	1400	ug/Kg	10	03/22/19	WB	SW8270D
3,3'-Dichlorobenzidine	ND	1400	1400	ug/Kg	10	03/22/19	WB	SW8270D
3-Nitroaniline	ND	7200	2500	ug/Kg	10	03/22/19	WB	SW8270D
4,6-Dinitro-2-methylphenol	ND	2500	2500	ug/Kg	10	03/22/19	WB	SW8270D
4-Bromophenyl phenyl ether	ND	2500	1100	ug/Kg	10	03/22/19	WB	SW8270D
4-Chloro-3-methylphenol	ND	2500	1300	ug/Kg	10	03/22/19	WB	SW8270D
4-Chloroaniline	ND	7200	1700	ug/Kg	10	03/22/19	WB	SW8270D
4-Chlorophenyl phenyl ether	ND	2500	1200	ug/Kg	10	03/22/19	WB	SW8270D
4-Nitroaniline	ND	18000	1200	ug/Kg	10	03/22/19	WB	SW8270D
4-Nitrophenol	ND	2500	1600	ug/Kg	10	03/22/19	WB	SW8270D
Acenaphthene	1300	J 2500	1100	ug/Kg	10	03/22/19	WB	SW8270D



Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Acenaphthylene	ND	1400	1000	ug/Kg	10	03/22/19	WB	SW8270D
Acetophenone	1700	J 2500	1100	ug/Kg	10	03/22/19	WB	SW8270D
Anthracene	7500	2500	1200	ug/Kg	10	03/22/19	WB	SW8270D
Atrazine	ND	2500	940	ug/Kg	10	03/22/19	WB	SW8270D
Benz(a)anthracene	66000	2500	1200	ug/Kg	10	03/22/19	WB	SW8270D
Benzaldehyde	ND	2500	1100	ug/Kg	10	03/22/19	WB	SW8270D
Benzo(a)pyrene	44000	1400	1200	ug/Kg	10	03/22/19	WB	SW8270D
Benzo(b)fluoranthene	45000	2500	1200	ug/Kg	10	03/22/19	WB	SW8270D
Benzo(ghi)perylene	15000	2500	1200	ug/Kg	10	03/22/19	WB	SW8270D
Benzo(k)fluoranthene	39000	2500	1200	ug/Kg	10	03/22/19	WB	SW8270D
Benzyl butyl phthalate	ND	2500	930	ug/Kg	10	03/22/19	WB	SW8270D
Bis(2-chloroethoxy)methane	ND	2500	1000	ug/Kg	10	03/22/19	WB	SW8270D
Bis(2-chloroethyl)ether	ND	1400	970	ug/Kg	10	03/22/19	WB	SW8270D
Bis(2-chloroisopropyl)ether	ND	2500	1000	ug/Kg	10	03/22/19	WB	SW8270D
Bis(2-ethylhexyl)phthalate	ND	2500	1000	ug/Kg	10	03/22/19	WB	SW8270D
Caprolactam	ND	2500	2500	ug/Kg	10	03/22/19	WB	SW8270D
Carbazole	3800	2500	1800	ug/Kg	10	03/22/19	WB	SW8270D
Chrysene	58000	2500	1200	ug/Kg	10	03/22/19	WB	SW8270D
Dibenz(a,h)anthracene	6300	1400	1200	ug/Kg	10	03/22/19	WB	SW8270D
Dibenzofuran	ND	720	720	ug/Kg	10	03/22/19	WB	SW8270D
Diethyl phthalate	ND	2500	1100	ug/Kg	10	03/22/19	WB	SW8270D
Dimethylphthalate	ND	2500	1100	ug/Kg	10	03/22/19	WB	SW8270D
Di-n-butylphthalate	ND	2500	960	ug/Kg	10	03/22/19	WB	SW8270D
Di-n-octylphthalate	ND	2500	930	ug/Kg	10	03/22/19	WB	SW8270D
Fluoranthene	95000	13000	5800	ug/Kg	50	03/22/19	WB	SW8270D
Fluorene	ND	2500	1200	ug/Kg	10	03/22/19	WB	SW8270D
Hexachlorobenzene	ND	720	720	ug/Kg	10	03/22/19	WB	SW8270D
Hexachlorobutadiene	ND	2500	1300	ug/Kg	10	03/22/19	WB	SW8270D
Hexachlorocyclopentadiene	ND	2500	1100	ug/Kg	10	03/22/19	WB	SW8270D
Hexachloroethane	ND	1400	1100	ug/Kg	10	03/22/19	WB	SW8270D
Indeno(1,2,3-cd)pyrene	21000	2500	1200	ug/Kg	10	03/22/19	WB	SW8270D
Isophorone	ND	1400	1000	ug/Kg	10	03/22/19	WB	SW8270D
Naphthalene	2700	2500	1000	ug/Kg	10	03/22/19	WB	SW8270D
Nitrobenzene	ND	1400	1300	ug/Kg	10	03/22/19	WB	SW8270D
N-Nitrosodimethylamine	ND	2500	1000	ug/Kg	10	03/22/19	WB	SW8270D
N-Nitrosodi-n-propylamine	ND	1400	1200	ug/Kg	10	03/22/19	WB	SW8270D
N-Nitrosodiphenylamine	ND	1400	1400	ug/Kg	10	03/22/19	WB	SW8270D
Pentachlorophenol	ND	800	800	ug/Kg	10	03/22/19	WB	SW8270D
Phenanthrene	26000	1400	1000	ug/Kg	10	03/22/19	WB	SW8270D
Phenol	ND	720	720	ug/Kg	10	03/22/19	WB	SW8270D
Pyrene	79000	13000	6200	ug/Kg	50	03/22/19	WB	SW8270D
<b>QA/QC Surrogates</b>								
% 2,4,6-Tribromophenol (10x)	Diluted Out			%	10	03/22/19	WB	30 - 130 %
% 2-Fluorobiphenyl (10x)	Diluted Out			%	10	03/22/19	WB	30 - 130 %
% 2-Fluorophenol (10x)	Diluted Out			%	10	03/22/19	WB	30 - 130 %
% Nitrobenzene-d5 (10x)	Diluted Out			%	10	03/22/19	WB	30 - 130 %
% Phenol-d5 (10x)	Diluted Out			%	10	03/22/19	WB	30 - 130 %
% Terphenyl-d14 (10x)	Diluted Out			%	10	03/22/19	WB	30 - 130 %
% 2,4,6-Tribromophenol (50x)	Diluted Out			%	50	03/22/19	WB	30 - 130 %

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
% 2-Fluorobiphenyl (50x)	Diluted Out			%	50	03/22/19	WB	30 - 130 %
% 2-Fluorophenol (50x)	Diluted Out			%	50	03/22/19	WB	30 - 130 %
% Nitrobenzene-d5 (50x)	Diluted Out			%	50	03/22/19	WB	30 - 130 %
% Phenol-d5 (50x)	Diluted Out			%	50	03/22/19	WB	30 - 130 %
% Terphenyl-d14 (50x)	Diluted Out			%	50	03/22/19	WB	30 - 130 %
SVOA Library Search Top 15	Completed					03/22/19	MR	

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected at RL/PQL  
BRL=Below Reporting Level L=Biased Low J=Estimated Below RL LOD=Limit of Detection MDL=Method Detection Limit  
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

**Comments:**

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

**Volatile Comment:**

Elevated reporting limits for volatiles due to the presence of target and/or non-target compounds.

**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.

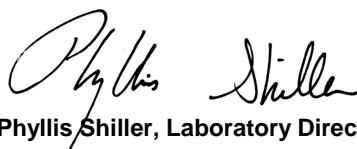
**Pesticide Comment:**

A dilution of the pesticide extract was necessary due to matrix interference caused by the presence of PCBs in the sample, the requested criteria could not be met for all pesticide compounds.

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**

**April 02, 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

April 02, 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: SW  
 Analyzed by: see "By" below

## Date

03/19/19  
 03/20/19

## Time

9:44  
 16:00

## Laboratory Data

SDG ID: GCC71637  
 Phoenix ID: CC71640

Project ID: 1840 PARK AVE MANHATTAN  
 Client ID: SB5 (16-18)

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.36	0.36		mg/Kg	1	03/21/19	CPP	SW6010D
Aluminum	4400	36		mg/Kg	10	03/21/19	CPP	SW6010D
Arsenic	< 0.73	0.73		mg/Kg	1	03/21/19	CPP	SW6010D
Barium	24.1	0.7		mg/Kg	1	03/21/19	CPP	SW6010D
Beryllium	< 0.29	0.29		mg/Kg	1	03/21/19	CPP	SW6010D
Calcium	1540	3.6		mg/Kg	1	03/21/19	CPP	SW6010D
Cadmium	< 0.36	0.36		mg/Kg	1	03/21/19	CPP	SW6010D
Cobalt	3.06	0.36		mg/Kg	1	03/21/19	CPP	SW6010D
Chromium	9.01	0.36		mg/Kg	1	03/21/19	CPP	SW6010D
Copper	9.5	0.7		mg/kg	1	03/21/19	CPP	SW6010D
Iron	7720	3.6		mg/Kg	1	03/21/19	CPP	SW6010D
Mercury	< 0.03	0.03		mg/Kg	1	03/21/19	RS	SW7471B
Potassium	988	7		mg/Kg	1	03/21/19	CPP	SW6010D
Magnesium	1870	3.6		mg/Kg	1	03/21/19	CPP	SW6010D
Manganese	96.0	0.36		mg/Kg	1	03/21/19	CPP	SW6010D
Sodium	131	7		mg/Kg	1	03/21/19	EK	SW6010D
Nickel	9.64	0.36		mg/Kg	1	03/21/19	CPP	SW6010D
Lead	1.8	0.7		mg/Kg	1	03/21/19	CPP	SW6010D
Antimony	< 3.6	3.6		mg/Kg	1	03/21/19	CPP	SW6010D
Selenium	< 1.5	1.5		mg/Kg	1	03/21/19	CPP	SW6010D
Thallium	< 1.5	1.5		mg/Kg	1	03/21/19	CPP	SW6010D
Vanadium	13.3	0.36		mg/Kg	1	03/21/19	CPP	SW6010D
Zinc	46.4	0.7		mg/Kg	1	03/21/19	CPP	SW6010D
Percent Solid	89			%		03/20/19	ML	SW846-%Solid
Soil Extraction for PCB	Completed					03/21/19	MM/V	SW3545A
Soil Extraction for Pesticides	Completed					03/21/19	MM/V	SW3545A
Soil Extraction for SVOA	Completed					03/21/19	JJ/LV	SW3545A
Mercury Digestion	Completed					03/21/19	W/W	SW7471B

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Total Metals Digest	Completed					03/20/19	S/AG/BF	SW3050B
<b><u>Polychlorinated Biphenyls</u></b>								
PCB-1016	ND	73	73	ug/Kg	2	03/22/19	SC	SW8082A
PCB-1221	ND	73	73	ug/Kg	2	03/22/19	SC	SW8082A
PCB-1232	ND	73	73	ug/Kg	2	03/22/19	SC	SW8082A
PCB-1242	ND	73	73	ug/Kg	2	03/22/19	SC	SW8082A
PCB-1248	ND	73	73	ug/Kg	2	03/22/19	SC	SW8082A
PCB-1254	ND	73	73	ug/Kg	2	03/22/19	SC	SW8082A
PCB-1260	ND	73	73	ug/Kg	2	03/22/19	SC	SW8082A
PCB-1262	ND	73	73	ug/Kg	2	03/22/19	SC	SW8082A
PCB-1268	ND	73	73	ug/Kg	2	03/22/19	SC	SW8082A
<b><u>QA/QC Surrogates</u></b>								
% DCBP	62			%	2	03/22/19	SC	30 - 150 %
% DCBP (Confirmation)	53			%	2	03/22/19	SC	30 - 150 %
% TCMX	67			%	2	03/22/19	SC	30 - 150 %
% TCMX (Confirmation)	64			%	2	03/22/19	SC	30 - 150 %
<b><u>Pesticides - Soil</u></b>								
4,4' -DDD	ND	2.2		ug/Kg	2	03/22/19	CW	SW8081B
4,4' -DDE	ND	2.2		ug/Kg	2	03/22/19	CW	SW8081B
4,4' -DDT	ND	2.2		ug/Kg	2	03/22/19	CW	SW8081B
a-BHC	ND	7.3		ug/Kg	2	03/22/19	CW	SW8081B
a-Chlordane	ND	3.6		ug/Kg	2	03/22/19	CW	SW8081B
Aldrin	ND	3.6		ug/Kg	2	03/22/19	CW	SW8081B
b-BHC	ND	7.3		ug/Kg	2	03/22/19	CW	SW8081B
Chlordane	ND	36		ug/Kg	2	03/22/19	CW	SW8081B
d-BHC	ND	7.3		ug/Kg	2	03/22/19	CW	SW8081B
Dieldrin	ND	3.6		ug/Kg	2	03/22/19	CW	SW8081B
Endosulfan I	ND	7.3		ug/Kg	2	03/22/19	CW	SW8081B
Endosulfan II	ND	7.3		ug/Kg	2	03/22/19	CW	SW8081B
Endosulfan sulfate	ND	7.3		ug/Kg	2	03/22/19	CW	SW8081B
Endrin	ND	7.3		ug/Kg	2	03/22/19	CW	SW8081B
Endrin aldehyde	ND	7.3		ug/Kg	2	03/22/19	CW	SW8081B
Endrin ketone	ND	7.3		ug/Kg	2	03/22/19	CW	SW8081B
g-BHC	ND	1.5		ug/Kg	2	03/22/19	CW	SW8081B
g-Chlordane	ND	3.6		ug/Kg	2	03/22/19	CW	SW8081B
Heptachlor	ND	7.3		ug/Kg	2	03/22/19	CW	SW8081B
Heptachlor epoxide	ND	7.3		ug/Kg	2	03/22/19	CW	SW8081B
Methoxychlor	ND	36		ug/Kg	2	03/22/19	CW	SW8081B
Toxaphene	ND	150		ug/Kg	2	03/22/19	CW	SW8081B
<b><u>QA/QC Surrogates</u></b>								
% DCBP	49			%	2	03/22/19	CW	30 - 150 %
% DCBP (Confirmation)	50			%	2	03/22/19	CW	30 - 150 %
% TCMX	66			%	2	03/22/19	CW	30 - 150 %
% TCMX (Confirmation)	62			%	2	03/22/19	CW	30 - 150 %
<b><u>1,4-dioxane</u></b>								
1,4-dioxane	ND	91		ug/kg	1	03/22/19	JLI	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
<b><u>Volatiles</u></b>								
1,1,1-Trichloroethane	ND	6.1	0.61	ug/Kg	1	03/22/19	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	6.1	1.2	ug/Kg	1	03/22/19	JLI	SW8260C
1,1,2-Trichloroethane	ND	6.1	1.2	ug/Kg	1	03/22/19	JLI	SW8260C
1,1-Dichloroethane	ND	6.1	1.2	ug/Kg	1	03/22/19	JLI	SW8260C
1,1-Dichloroethene	ND	6.1	0.61	ug/Kg	1	03/22/19	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	6.1	1.2	ug/Kg	1	03/22/19	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	6.1	1.2	ug/Kg	1	03/22/19	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	6.1	1.2	ug/Kg	1	03/22/19	JLI	SW8260C
1,2-Dibromoethane	ND	6.1	0.61	ug/Kg	1	03/22/19	JLI	SW8260C
1,2-Dichlorobenzene	ND	6.1	0.61	ug/Kg	1	03/22/19	JLI	SW8260C
1,2-Dichloroethane	ND	6.1	0.61	ug/Kg	1	03/22/19	JLI	SW8260C
1,2-Dichloropropane	ND	6.1	1.2	ug/Kg	1	03/22/19	JLI	SW8260C
1,3-Dichlorobenzene	ND	6.1	0.61	ug/Kg	1	03/22/19	JLI	SW8260C
1,4-Dichlorobenzene	ND	6.1	0.61	ug/Kg	1	03/22/19	JLI	SW8260C
2-Hexanone	ND	30	6.1	ug/Kg	1	03/22/19	JLI	SW8260C
4-Methyl-2-pentanone	ND	30	6.1	ug/Kg	1	03/22/19	JLI	SW8260C
Acetone	17	JS 30	6.1	ug/Kg	1	03/22/19	JLI	SW8260C
Benzene	ND	6.1	0.61	ug/Kg	1	03/22/19	JLI	SW8260C
Bromochloromethane	ND	6.1	0.61	ug/Kg	1	03/22/19	JLI	SW8260C
Bromodichloromethane	ND	6.1	1.2	ug/Kg	1	03/22/19	JLI	SW8260C
Bromoform	ND	6.1	1.2	ug/Kg	1	03/22/19	JLI	SW8260C
Bromomethane	ND	6.1	2.4	ug/Kg	1	03/22/19	JLI	SW8260C
Carbon Disulfide	ND	6.1	1.2	ug/Kg	1	03/22/19	JLI	SW8260C
Carbon tetrachloride	ND	6.1	1.2	ug/Kg	1	03/22/19	JLI	SW8260C
Chlorobenzene	ND	6.1	0.61	ug/Kg	1	03/22/19	JLI	SW8260C
Chloroethane	ND	6.1	0.61	ug/Kg	1	03/22/19	JLI	SW8260C
Chloroform	ND	6.1	0.61	ug/Kg	1	03/22/19	JLI	SW8260C
Chloromethane	ND	6.1	1.2	ug/Kg	1	03/22/19	JLI	SW8260C
cis-1,2-Dichloroethene	ND	6.1	0.61	ug/Kg	1	03/22/19	JLI	SW8260C
cis-1,3-Dichloropropene	ND	6.1	0.61	ug/Kg	1	03/22/19	JLI	SW8260C
Cyclohexane	ND	6.1	1.2	ug/Kg	1	03/22/19	JLI	SW8260C
Dibromochloromethane	ND	6.1	1.2	ug/Kg	1	03/22/19	JLI	SW8260C
Dichlorodifluoromethane	ND	6.1	0.61	ug/Kg	1	03/22/19	JLI	SW8260C
Ethylbenzene	ND	6.1	0.61	ug/Kg	1	03/22/19	JLI	SW8260C
Isopropylbenzene	ND	6.1	0.61	ug/Kg	1	03/22/19	JLI	SW8260C
m&p-Xylene	ND	6.1	1.2	ug/Kg	1	03/22/19	JLI	SW8260C
Methyl ethyl ketone	ND	36	6.1	ug/Kg	1	03/22/19	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	12	1.2	ug/Kg	1	03/22/19	JLI	SW8260C
Methylacetate	ND	6.1	6.1	ug/Kg	1	03/22/19	JLI	SW8260C
Methylcyclohexane	ND	6.1	1.2	ug/Kg	1	03/22/19	JLI	SW8260C
Methylene chloride	ND	6.1	6.1	ug/Kg	1	03/22/19	JLI	SW8260C
o-Xylene	ND	6.1	1.2	ug/Kg	1	03/22/19	JLI	SW8260C
Styrene	ND	6.1	0.61	ug/Kg	1	03/22/19	JLI	SW8260C
Tetrachloroethene	ND	6.1	1.2	ug/Kg	1	03/22/19	JLI	SW8260C
Toluene	ND	6.1	0.61	ug/Kg	1	03/22/19	JLI	SW8260C
Total Xylenes	ND	6.1	6.1	ug/Kg	1	03/22/19	JLI	SW8260C
trans-1,2-Dichloroethene	ND	6.1	0.61	ug/Kg	1	03/22/19	JLI	SW8260C
trans-1,3-Dichloropropene	ND	6.1	0.61	ug/Kg	1	03/22/19	JLI	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Trichloroethene	ND	6.1	0.61	ug/Kg	1	03/22/19	JLI	SW8260C
Trichlorofluoromethane	ND	6.1	1.2	ug/Kg	1	03/22/19	JLI	SW8260C
Trichlorotrifluoroethane	ND	6.1	0.61	ug/Kg	1	03/22/19	JLI	SW8260C
Vinyl chloride	ND	6.1	0.61	ug/Kg	1	03/22/19	JLI	SW8260C
<b><u>QA/QC Surrogates</u></b>								
% 1,2-dichlorobenzene-d4	100			%	1	03/22/19	JLI	70 - 130 %
% Bromofluorobenzene	98			%	1	03/22/19	JLI	70 - 130 %
% Dibromofluoromethane	93			%	1	03/22/19	JLI	70 - 130 %
% Toluene-d8	97			%	1	03/22/19	JLI	70 - 130 %
<b><u>Volatiles</u></b>								
1,1,1,2-Tetrachloroethane	ND	24		ug/Kg	1	03/22/19	JLI	SW8260C
Acrolein	ND	6.1		ug/Kg	1	03/22/19	JLI	SW8260C
Acrylonitrile	ND	24		ug/Kg	1	03/22/19	JLI	SW8260C
Tert-butyl alcohol	ND	120		ug/Kg	1	03/22/19	JLI	SW8260C
Volatile Library Search Top 10	Completed					03/25/19	JLI	
<b><u>Semivolatiles</u></b>								
1,1-Biphenyl	ND	250	110	ug/Kg	1	03/22/19	AW	SW8270D
1,2,4,5-Tetrachlorobenzene	ND	250	130	ug/Kg	1	03/22/19	AW	SW8270D
2,3,4,6-tetrachlorophenol	ND	250	170	ug/Kg	1	03/22/19	AW	SW8270D
2,4,5-Trichlorophenol	ND	250	200	ug/Kg	1	03/22/19	AW	SW8270D
2,4,6-Trichlorophenol	ND	150	120	ug/Kg	1	03/22/19	AW	SW8270D
2,4-Dichlorophenol	ND	150	130	ug/Kg	1	03/22/19	AW	SW8270D
2,4-Dimethylphenol	ND	250	90	ug/Kg	1	03/22/19	AW	SW8270D
2,4-Dinitrophenol	ND	250	250	ug/Kg	1	03/22/19	AW	SW8270D
2,4-Dinitrotoluene	ND	150	140	ug/Kg	1	03/22/19	AW	SW8270D
2,6-Dinitrotoluene	ND	150	110	ug/Kg	1	03/22/19	AW	SW8270D
2-Chloronaphthalene	ND	250	100	ug/Kg	1	03/22/19	AW	SW8270D
2-Chlorophenol	ND	250	100	ug/Kg	1	03/22/19	AW	SW8270D
2-Methylnaphthalene	ND	250	110	ug/Kg	1	03/22/19	AW	SW8270D
2-Methylphenol (o-cresol)	ND	250	170	ug/Kg	1	03/22/19	AW	SW8270D
2-Nitroaniline	ND	250	250	ug/Kg	1	03/22/19	AW	SW8270D
2-Nitrophenol	ND	250	230	ug/Kg	1	03/22/19	AW	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	250	140	ug/Kg	1	03/22/19	AW	SW8270D
3,3'-Dichlorobenzidine	ND	150	150	ug/Kg	1	03/22/19	AW	SW8270D
3-Nitroaniline	ND	730	250	ug/Kg	1	03/22/19	AW	SW8270D
4,6-Dinitro-2-methylphenol	ND	250	250	ug/Kg	1	03/22/19	AW	SW8270D
4-Bromophenyl phenyl ether	ND	250	110	ug/Kg	1	03/22/19	AW	SW8270D
4-Chloro-3-methylphenol	ND	250	130	ug/Kg	1	03/22/19	AW	SW8270D
4-Chloroaniline	ND	730	170	ug/Kg	1	03/22/19	AW	SW8270D
4-Chlorophenyl phenyl ether	ND	250	120	ug/Kg	1	03/22/19	AW	SW8270D
4-Nitroaniline	ND	1800	120	ug/Kg	1	03/22/19	AW	SW8270D
4-Nitrophenol	ND	250	160	ug/Kg	1	03/22/19	AW	SW8270D
Acenaphthene	ND	250	110	ug/Kg	1	03/22/19	AW	SW8270D
Acenaphthylene	ND	150	100	ug/Kg	1	03/22/19	AW	SW8270D
Acetophenone	ND	250	110	ug/Kg	1	03/22/19	AW	SW8270D
Anthracene	ND	250	120	ug/Kg	1	03/22/19	AW	SW8270D
Atrazine	ND	250	94	ug/Kg	1	03/22/19	AW	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Benz(a)anthracene	ND	250	120	ug/Kg	1	03/22/19	AW	SW8270D
Benzaldehyde	ND	250	110	ug/Kg	1	03/22/19	AW	SW8270D
Benzo(a)pyrene	ND	150	120	ug/Kg	1	03/22/19	AW	SW8270D
Benzo(b)fluoranthene	ND	250	120	ug/Kg	1	03/22/19	AW	SW8270D
Benzo(ghi)perylene	ND	250	120	ug/Kg	1	03/22/19	AW	SW8270D
Benzo(k)fluoranthene	ND	250	120	ug/Kg	1	03/22/19	AW	SW8270D
Benzyl butyl phthalate	ND	250	94	ug/Kg	1	03/22/19	AW	SW8270D
Bis(2-chloroethoxy)methane	ND	250	100	ug/Kg	1	03/22/19	AW	SW8270D
Bis(2-chloroethyl)ether	ND	150	98	ug/Kg	1	03/22/19	AW	SW8270D
Bis(2-chloroisopropyl)ether	ND	250	100	ug/Kg	1	03/22/19	AW	SW8270D
Bis(2-ethylhexyl)phthalate	ND	250	100	ug/Kg	1	03/22/19	AW	SW8270D
Caprolactam	ND	250	250	ug/Kg	1	03/22/19	AW	SW8270D
Carbazole	ND	250	180	ug/Kg	1	03/22/19	AW	SW8270D
Chrysene	ND	250	120	ug/Kg	1	03/22/19	AW	SW8270D
Dibenz(a,h)anthracene	ND	150	120	ug/Kg	1	03/22/19	AW	SW8270D
Dibenzofuran	ND	250	110	ug/Kg	1	03/22/19	AW	SW8270D
Diethyl phthalate	ND	250	110	ug/Kg	1	03/22/19	AW	SW8270D
Dimethylphthalate	ND	250	110	ug/Kg	1	03/22/19	AW	SW8270D
Di-n-butylphthalate	ND	250	97	ug/Kg	1	03/22/19	AW	SW8270D
Di-n-octylphthalate	ND	250	94	ug/Kg	1	03/22/19	AW	SW8270D
Fluoranthene	ND	250	120	ug/Kg	1	03/22/19	AW	SW8270D
Fluorene	ND	250	120	ug/Kg	1	03/22/19	AW	SW8270D
Hexachlorobenzene	ND	150	110	ug/Kg	1	03/22/19	AW	SW8270D
Hexachlorobutadiene	ND	250	130	ug/Kg	1	03/22/19	AW	SW8270D
Hexachlorocyclopentadiene	ND	250	110	ug/Kg	1	03/22/19	AW	SW8270D
Hexachloroethane	ND	150	110	ug/Kg	1	03/22/19	AW	SW8270D
Indeno(1,2,3-cd)pyrene	ND	250	120	ug/Kg	1	03/22/19	AW	SW8270D
Isophorone	ND	150	100	ug/Kg	1	03/22/19	AW	SW8270D
Naphthalene	ND	250	100	ug/Kg	1	03/22/19	AW	SW8270D
Nitrobenzene	ND	150	130	ug/Kg	1	03/22/19	AW	SW8270D
N-Nitrosodimethylamine	ND	250	100	ug/Kg	1	03/22/19	AW	SW8270D
N-Nitrosodi-n-propylamine	ND	150	120	ug/Kg	1	03/22/19	AW	SW8270D
N-Nitrosodiphenylamine	ND	150	140	ug/Kg	1	03/22/19	AW	SW8270D
Pentachlorophenol	ND	250	140	ug/Kg	1	03/22/19	AW	SW8270D
Phenanthrene	ND	150	100	ug/Kg	1	03/22/19	AW	SW8270D
Phenol	ND	250	120	ug/Kg	1	03/22/19	AW	SW8270D
Pyrene	ND	250	130	ug/Kg	1	03/22/19	AW	SW8270D
<b>QA/QC Surrogates</b>								
% 2,4,6-Tribromophenol	64			%	1	03/22/19	AW	30 - 130 %
% 2-Fluorobiphenyl	59			%	1	03/22/19	AW	30 - 130 %
% 2-Fluorophenol	59			%	1	03/22/19	AW	30 - 130 %
% Nitrobenzene-d5	57			%	1	03/22/19	AW	30 - 130 %
% Phenol-d5	60			%	1	03/22/19	AW	30 - 130 %
% Terphenyl-d14	60			%	1	03/22/19	AW	30 - 130 %
SVOA Library Search Top 15	Completed					03/22/19	MR	

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
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RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected at RL/PQL  
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:**

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**

**April 02, 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

April 02, 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: SW  
 Analyzed by: see "By" below

## Date

03/19/19  
 03/20/19

## Time

8:50  
 16:00

## Laboratory Data

SDG ID: GCC71637  
 Phoenix ID: CC71641

Project ID: 1840 PARK AVE MANHATTAN  
 Client ID: SB6 (0-2)

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.36	0.36		mg/Kg	1	03/21/19	CPP	SW6010D
Aluminum	9140	36		mg/Kg	10	03/21/19	CPP	SW6010D
Arsenic	5.47	0.73		mg/Kg	1	03/21/19	CPP	SW6010D
Barium	89.0	0.7		mg/Kg	1	03/21/19	CPP	SW6010D
Beryllium	0.42	0.29		mg/Kg	1	03/21/19	CPP	SW6010D
Calcium	30000	36		mg/Kg	10	03/21/19	CPP	SW6010D
Cadmium	0.44	0.36		mg/Kg	1	03/21/19	CPP	SW6010D
Cobalt	8.03	0.36		mg/Kg	1	03/21/19	CPP	SW6010D
Chromium	17.3	0.36		mg/Kg	1	03/21/19	CPP	SW6010D
Copper	41.8	0.7		mg/kg	1	03/21/19	CPP	SW6010D
Iron	17100	36		mg/Kg	10	03/21/19	CPP	SW6010D
Mercury	0.75	0.08		mg/Kg	1	03/21/19	RS	SW7471B
Potassium	1720	7		mg/Kg	1	03/21/19	CPP	SW6010D
Magnesium	13200	36		mg/Kg	10	03/21/19	CPP	SW6010D
Manganese	602	3.6		mg/Kg	10	03/21/19	CPP	SW6010D
Sodium	611	7		mg/Kg	1	03/21/19	EK	SW6010D
Nickel	17.4	0.36		mg/Kg	1	03/21/19	CPP	SW6010D
Lead	61.1	0.7		mg/Kg	1	03/21/19	CPP	SW6010D
Antimony	< 3.6	3.6		mg/Kg	1	03/21/19	CPP	SW6010D
Selenium	< 1.5	1.5		mg/Kg	1	03/21/19	CPP	SW6010D
Thallium	< 1.5	1.5		mg/Kg	1	03/21/19	CPP	SW6010D
Vanadium	41.2	0.36		mg/Kg	1	03/21/19	CPP	SW6010D
Zinc	74.8	0.7		mg/Kg	1	03/21/19	CPP	SW6010D
Percent Solid	88			%		03/20/19	ML	SW846-%Solid
Soil Extraction for PCB	Completed					03/21/19	MM/V	SW3545A
Soil Extraction for Pesticides	Completed					03/21/19	MM/V	SW3545A
Soil Extraction for SVOA	Completed					03/21/19	JJ/LV	SW3545A
Mercury Digestion	Completed					03/21/19	W/W	SW7471B

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Total Metals Digest	Completed					03/20/19	S/AG/BF	SW3050B
<b><u>Polychlorinated Biphenyls</u></b>								
PCB-1016	ND	75	75	ug/Kg	2	03/22/19	SC	SW8082A
PCB-1221	ND	75	75	ug/Kg	2	03/22/19	SC	SW8082A
PCB-1232	ND	75	75	ug/Kg	2	03/22/19	SC	SW8082A
PCB-1242	ND	75	75	ug/Kg	2	03/22/19	SC	SW8082A
PCB-1248	ND	75	75	ug/Kg	2	03/22/19	SC	SW8082A
PCB-1254	ND	75	75	ug/Kg	2	03/22/19	SC	SW8082A
PCB-1260	ND	75	75	ug/Kg	2	03/22/19	SC	SW8082A
PCB-1262	ND	75	75	ug/Kg	2	03/22/19	SC	SW8082A
PCB-1268	ND	75	75	ug/Kg	2	03/22/19	SC	SW8082A
<b><u>QA/QC Surrogates</u></b>								
% DCBP	58			%	2	03/22/19	SC	30 - 150 %
% DCBP (Confirmation)	38			%	2	03/22/19	SC	30 - 150 %
% TCMX	54			%	2	03/22/19	SC	30 - 150 %
% TCMX (Confirmation)	48			%	2	03/22/19	SC	30 - 150 %
<b><u>Pesticides - Soil</u></b>								
4,4' -DDD	2.8	2.3		ug/Kg	2	03/22/19	PS	SW8081B
4,4' -DDE	5.2	2.3		ug/Kg	2	03/22/19	PS	SW8081B
4,4' -DDT	4.7	2.3		ug/Kg	2	03/22/19	PS	SW8081B
a-BHC	ND	7.5		ug/Kg	2	03/22/19	PS	SW8081B
a-Chlordane	ND	7.5		ug/Kg	2	03/22/19	PS	SW8081B
Aldrin	ND	3.8		ug/Kg	2	03/22/19	PS	SW8081B
b-BHC	ND	7.5		ug/Kg	2	03/22/19	PS	SW8081B
Chlordane	ND	38		ug/Kg	2	03/22/19	PS	SW8081B
d-BHC	ND	7.5		ug/Kg	2	03/22/19	PS	SW8081B
Dieldrin	ND	3.8		ug/Kg	2	03/22/19	PS	SW8081B
Endosulfan I	ND	7.5		ug/Kg	2	03/22/19	PS	SW8081B
Endosulfan II	ND	7.5		ug/Kg	2	03/22/19	PS	SW8081B
Endosulfan sulfate	ND	7.5		ug/Kg	2	03/22/19	PS	SW8081B
Endrin	ND	7.5		ug/Kg	2	03/22/19	PS	SW8081B
Endrin aldehyde	ND	7.5		ug/Kg	2	03/22/19	PS	SW8081B
Endrin ketone	ND	7.5		ug/Kg	2	03/22/19	PS	SW8081B
g-BHC	ND	1.5		ug/Kg	2	03/22/19	PS	SW8081B
g-Chlordane	ND	7.5		ug/Kg	2	03/22/19	PS	SW8081B
Heptachlor	ND	7.5		ug/Kg	2	03/22/19	PS	SW8081B
Heptachlor epoxide	ND	7.5		ug/Kg	2	03/22/19	PS	SW8081B
Methoxychlor	ND	38		ug/Kg	2	03/22/19	PS	SW8081B
Toxaphene	ND	150		ug/Kg	2	03/22/19	PS	SW8081B
<b><u>QA/QC Surrogates</u></b>								
% DCBP	48			%	2	03/22/19	PS	30 - 150 %
% DCBP (Confirmation)	45			%	2	03/22/19	PS	30 - 150 %
% TCMX	52			%	2	03/22/19	PS	30 - 150 %
% TCMX (Confirmation)	48			%	2	03/22/19	PS	30 - 150 %
<b><u>1,4-dioxane</u></b>								
1,4-dioxane	ND	77		ug/kg	1	03/21/19	JLI	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
<b><u>Volatiles</u></b>								
1,1,1-Trichloroethane	ND	5.1	0.51	ug/Kg	1	03/21/19	PS	SW8260C
1,1,2,2-Tetrachloroethane	ND	430	87	ug/Kg	50	03/22/19	PS	SW8260C
1,1,2-Trichloroethane	ND	5.1	1.0	ug/Kg	1	03/21/19	PS	SW8260C
1,1-Dichloroethane	ND	5.1	1.0	ug/Kg	1	03/21/19	PS	SW8260C
1,1-Dichloroethene	ND	5.1	0.51	ug/Kg	1	03/21/19	PS	SW8260C
1,2,3-Trichlorobenzene	ND	430	87	ug/Kg	50	03/22/19	PS	SW8260C
1,2,4-Trichlorobenzene	ND	430	87	ug/Kg	50	03/22/19	PS	SW8260C
1,2-Dibromo-3-chloropropane	ND	430	87	ug/Kg	50	03/22/19	PS	SW8260C
1,2-Dibromoethane	ND	5.1	0.51	ug/Kg	1	03/21/19	PS	SW8260C
1,2-Dichlorobenzene	ND	430	43	ug/Kg	50	03/22/19	PS	SW8260C
1,2-Dichloroethane	ND	5.1	0.51	ug/Kg	1	03/21/19	PS	SW8260C
1,2-Dichloropropane	ND	5.1	1.0	ug/Kg	1	03/21/19	PS	SW8260C
1,3-Dichlorobenzene	ND	430	43	ug/Kg	50	03/22/19	PS	SW8260C
1,4-Dichlorobenzene	ND	430	43	ug/Kg	50	03/22/19	PS	SW8260C
2-Hexanone	ND	26	5.1	ug/Kg	1	03/21/19	PS	SW8260C
4-Methyl-2-pentanone	ND	26	5.1	ug/Kg	1	03/21/19	PS	SW8260C
Acetone	24	JSL 28	5.7	ug/Kg	1	03/22/19	PS	SW8260C
Benzene	1.5	J 5.1	0.51	ug/Kg	1	03/21/19	PS	SW8260C
Bromochloromethane	ND	5.1	0.51	ug/Kg	1	03/21/19	PS	SW8260C
Bromodichloromethane	ND	5.1	1.0	ug/Kg	1	03/21/19	PS	SW8260C
Bromoform	ND	5.1	1.0	ug/Kg	1	03/21/19	PS	SW8260C
Bromomethane	ND	5.1	2.0	ug/Kg	1	03/21/19	PS	SW8260C
Carbon Disulfide	2.8	J 5.1	1.0	ug/Kg	1	03/21/19	PS	SW8260C
Carbon tetrachloride	ND	5.1	1.0	ug/Kg	1	03/21/19	PS	SW8260C
Chlorobenzene	ND	5.1	0.51	ug/Kg	1	03/21/19	PS	SW8260C
Chloroethane	ND	5.1	0.51	ug/Kg	1	03/21/19	PS	SW8260C
Chloroform	ND	5.1	0.51	ug/Kg	1	03/21/19	PS	SW8260C
Chloromethane	ND	5.1	1.0	ug/Kg	1	03/21/19	PS	SW8260C
cis-1,2-Dichloroethene	ND	5.1	0.51	ug/Kg	1	03/21/19	PS	SW8260C
cis-1,3-Dichloropropene	ND	5.1	0.51	ug/Kg	1	03/21/19	PS	SW8260C
Cyclohexane	ND	5.1	1.0	ug/Kg	1	03/21/19	PS	SW8260C
Dibromochloromethane	ND	5.1	1.0	ug/Kg	1	03/21/19	PS	SW8260C
Dichlorodifluoromethane	ND	5.1	0.51	ug/Kg	1	03/21/19	PS	SW8260C
Ethylbenzene	3.8	J 5.1	0.51	ug/Kg	1	03/21/19	PS	SW8260C
Isopropylbenzene	ND	430	43	ug/Kg	50	03/22/19	PS	SW8260C
m&p-Xylene	13	5.1	1.0	ug/Kg	1	03/21/19	PS	SW8260C
Methyl ethyl ketone	18	J 31	5.1	ug/Kg	1	03/21/19	PS	SW8260C
Methyl t-butyl ether (MTBE)	ND	10	1.0	ug/Kg	1	03/21/19	PS	SW8260C
Methylacetate	23	5.1	5.1	ug/Kg	1	03/21/19	PS	SW8260C
Methylcyclohexane	2.4	J 5.1	1.0	ug/Kg	1	03/21/19	PS	SW8260C
Methylene chloride	ND	5.1	5.1	ug/Kg	1	03/21/19	PS	SW8260C
o-Xylene	8.9	5.1	1.0	ug/Kg	1	03/21/19	PS	SW8260C
Styrene	ND	5.1	0.51	ug/Kg	1	03/21/19	PS	SW8260C
Tetrachloroethene	ND	5.1	1.0	ug/Kg	1	03/21/19	PS	SW8260C
Toluene	73	J 430	43	ug/Kg	50	03/22/19	PS	SW8260C
Total Xylenes	21.9	5.1	5.1	ug/Kg	1	03/21/19	PS	SW8260C
trans-1,2-Dichloroethene	ND	5.1	0.51	ug/Kg	1	03/21/19	PS	SW8260C
trans-1,3-Dichloropropene	ND	5.1	0.51	ug/Kg	1	03/21/19	PS	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Trichloroethene	ND	5.1	0.51	ug/Kg	1	03/21/19	PS	SW8260C
Trichlorofluoromethane	ND	5.1	1.0	ug/Kg	1	03/21/19	PS	SW8260C
Trichlorotrifluoroethane	ND	5.1	0.51	ug/Kg	1	03/21/19	PS	SW8260C
Vinyl chloride	ND	5.1	0.51	ug/Kg	1	03/21/19	PS	SW8260C
<b><u>QA/QC Surrogates</u></b>								
% 1,2-dichlorobenzene-d4	99			%	1	03/21/19	PS	70 - 130 %
% Bromofluorobenzene	82			%	1	03/21/19	PS	70 - 130 %
% Dibromofluoromethane	112			%	1	03/21/19	PS	70 - 130 %
% Toluene-d8	91			%	1	03/21/19	PS	70 - 130 %
% 1,2-dichlorobenzene-d4 (50x)	100			%	50	03/22/19	PS	70 - 130 %
% Bromofluorobenzene (50x)	99			%	50	03/22/19	PS	70 - 130 %
% Dibromofluoromethane (50x)	92			%	50	03/22/19	PS	70 - 130 %
% Toluene-d8 (50x)	97			%	50	03/22/19	PS	70 - 130 %

**Volatiles**

1,1,1,2-Tetrachloroethane	ND	20		ug/Kg	1	03/21/19	JLI	SW8260C
Acrolein	ND	5.1		ug/Kg	1	03/21/19	JLI	SW8260C
Acrylonitrile	ND	20		ug/Kg	1	03/21/19	JLI	SW8260C
Tert-butyl alcohol	ND	100		ug/Kg	1	03/21/19	JLI	SW8260C

Volatile Library Search Top 10 Completed 03/22/19 JLI

**Semivolatiles**

1,1-Biphenyl	ND	260	110	ug/Kg	1	03/22/19	AW	SW8270D
1,2,4,5-Tetrachlorobenzene	ND	260	130	ug/Kg	1	03/22/19	AW	SW8270D
2,3,4,6-tetrachlorophenol	ND	260	170	ug/Kg	1	03/22/19	AW	SW8270D
2,4,5-Trichlorophenol	ND	260	200	ug/Kg	1	03/22/19	AW	SW8270D
2,4,6-Trichlorophenol	ND	150	120	ug/Kg	1	03/22/19	AW	SW8270D
2,4-Dichlorophenol	ND	150	130	ug/Kg	1	03/22/19	AW	SW8270D
2,4-Dimethylphenol	ND	260	91	ug/Kg	1	03/22/19	AW	SW8270D
2,4-Dinitrophenol	ND	260	260	ug/Kg	1	03/22/19	AW	SW8270D
2,4-Dinitrotoluene	ND	150	150	ug/Kg	1	03/22/19	AW	SW8270D
2,6-Dinitrotoluene	ND	150	120	ug/Kg	1	03/22/19	AW	SW8270D
2-Chloronaphthalene	ND	260	100	ug/Kg	1	03/22/19	AW	SW8270D
2-Chlorophenol	ND	260	100	ug/Kg	1	03/22/19	AW	SW8270D
2-Methylnaphthalene	ND	260	110	ug/Kg	1	03/22/19	AW	SW8270D
2-Methylphenol (o-cresol)	ND	260	170	ug/Kg	1	03/22/19	AW	SW8270D
2-Nitroaniline	ND	260	260	ug/Kg	1	03/22/19	AW	SW8270D
2-Nitrophenol	ND	260	230	ug/Kg	1	03/22/19	AW	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	260	150	ug/Kg	1	03/22/19	AW	SW8270D
3,3'-Dichlorobenzidine	ND	150	150	ug/Kg	1	03/22/19	AW	SW8270D
3-Nitroaniline	ND	740	260	ug/Kg	1	03/22/19	AW	SW8270D
4,6-Dinitro-2-methylphenol	ND	260	260	ug/Kg	1	03/22/19	AW	SW8270D
4-Bromophenyl phenyl ether	ND	260	110	ug/Kg	1	03/22/19	AW	SW8270D
4-Chloro-3-methylphenol	ND	260	130	ug/Kg	1	03/22/19	AW	SW8270D
4-Chloroaniline	ND	740	170	ug/Kg	1	03/22/19	AW	SW8270D
4-Chlorophenyl phenyl ether	ND	260	120	ug/Kg	1	03/22/19	AW	SW8270D
4-Nitroaniline	ND	1800	120	ug/Kg	1	03/22/19	AW	SW8270D
4-Nitrophenol	ND	260	170	ug/Kg	1	03/22/19	AW	SW8270D
Acenaphthene	ND	260	110	ug/Kg	1	03/22/19	AW	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Acenaphthylene	130	J 150	100	ug/Kg	1	03/22/19	AW	SW8270D
Acetophenone	ND	260	110	ug/Kg	1	03/22/19	AW	SW8270D
Anthracene	210	J 260	120	ug/Kg	1	03/22/19	AW	SW8270D
Atrazine	ND	260	96	ug/Kg	1	03/22/19	AW	SW8270D
Benz(a)anthracene	620	260	120	ug/Kg	1	03/22/19	AW	SW8270D
Benzaldehyde	ND	260	110	ug/Kg	1	03/22/19	AW	SW8270D
Benzo(a)pyrene	610	150	120	ug/Kg	1	03/22/19	AW	SW8270D
Benzo(b)fluoranthene	540	260	130	ug/Kg	1	03/22/19	AW	SW8270D
Benzo(ghi)perylene	340	260	120	ug/Kg	1	03/22/19	AW	SW8270D
Benzo(k)fluoranthene	490	260	120	ug/Kg	1	03/22/19	AW	SW8270D
Benzyl butyl phthalate	ND	260	95	ug/Kg	1	03/22/19	AW	SW8270D
Bis(2-chloroethoxy)methane	ND	260	100	ug/Kg	1	03/22/19	AW	SW8270D
Bis(2-chloroethyl)ether	ND	150	99	ug/Kg	1	03/22/19	AW	SW8270D
Bis(2-chloroisopropyl)ether	ND	260	100	ug/Kg	1	03/22/19	AW	SW8270D
Bis(2-ethylhexyl)phthalate	350	260	110	ug/Kg	1	03/22/19	AW	SW8270D
Caprolactam	ND	260	260	ug/Kg	1	03/22/19	AW	SW8270D
Carbazole	ND	260	180	ug/Kg	1	03/22/19	AW	SW8270D
Chrysene	630	260	120	ug/Kg	1	03/22/19	AW	SW8270D
Dibenz(a,h)anthracene	ND	150	120	ug/Kg	1	03/22/19	AW	SW8270D
Dibenzofuran	ND	260	110	ug/Kg	1	03/22/19	AW	SW8270D
Diethyl phthalate	ND	260	120	ug/Kg	1	03/22/19	AW	SW8270D
Dimethylphthalate	ND	260	110	ug/Kg	1	03/22/19	AW	SW8270D
Di-n-butylphthalate	ND	260	98	ug/Kg	1	03/22/19	AW	SW8270D
Di-n-octylphthalate	ND	260	95	ug/Kg	1	03/22/19	AW	SW8270D
Fluoranthene	1100	260	120	ug/Kg	1	03/22/19	AW	SW8270D
Fluorene	ND	260	120	ug/Kg	1	03/22/19	AW	SW8270D
Hexachlorobenzene	ND	150	110	ug/Kg	1	03/22/19	AW	SW8270D
Hexachlorobutadiene	ND	260	130	ug/Kg	1	03/22/19	AW	SW8270D
Hexachlorocyclopentadiene	ND	260	110	ug/Kg	1	03/22/19	AW	SW8270D
Hexachloroethane	ND	150	110	ug/Kg	1	03/22/19	AW	SW8270D
Indeno(1,2,3-cd)pyrene	360	260	120	ug/Kg	1	03/22/19	AW	SW8270D
Isophorone	ND	150	100	ug/Kg	1	03/22/19	AW	SW8270D
Naphthalene	ND	260	110	ug/Kg	1	03/22/19	AW	SW8270D
Nitrobenzene	ND	150	130	ug/Kg	1	03/22/19	AW	SW8270D
N-Nitrosodimethylamine	ND	260	100	ug/Kg	1	03/22/19	AW	SW8270D
N-Nitrosodi-n-propylamine	ND	150	120	ug/Kg	1	03/22/19	AW	SW8270D
N-Nitrosodiphenylamine	ND	150	140	ug/Kg	1	03/22/19	AW	SW8270D
Pentachlorophenol	ND	260	140	ug/Kg	1	03/22/19	AW	SW8270D
Phenanthrene	640	150	110	ug/Kg	1	03/22/19	AW	SW8270D
Phenol	ND	260	120	ug/Kg	1	03/22/19	AW	SW8270D
Pyrene	1100	260	130	ug/Kg	1	03/22/19	AW	SW8270D
<b><u>QA/QC Surrogates</u></b>								
% 2,4,6-Tribromophenol	54			%	1	03/22/19	AW	30 - 130 %
% 2-Fluorobiphenyl	56			%	1	03/22/19	AW	30 - 130 %
% 2-Fluorophenol	53			%	1	03/22/19	AW	30 - 130 %
% Nitrobenzene-d5	55			%	1	03/22/19	AW	30 - 130 %
% Phenol-d5	57			%	1	03/22/19	AW	30 - 130 %
% Terphenyl-d14	55			%	1	03/22/19	AW	30 - 130 %

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
SVOA Library Search Top 15	Completed					03/22/19	MR	

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected at RL/PQL  
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 (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate  
results(%) listed in the report are not "detected" compounds.

**Comments:**

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.

L - Acetone is reported from a Phoenix prepared low level. A negative bias is possible.

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**

**April 02, 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

April 02, 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: SW  
 Analyzed by: see "By" below

## Date

03/19/19  
 03/20/19

## Time

9:00  
 16:00

## Laboratory Data

SDG ID: GCC71637  
 Phoenix ID: CC71642

Project ID: 1840 PARK AVE MANHATTAN  
 Client ID: SB6 (16-18)

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.45	0.45		mg/Kg	1	03/21/19	CPP	SW6010D
Aluminum	7910	45		mg/Kg	10	03/21/19	CPP	SW6010D
Arsenic	2.29	0.90		mg/Kg	1	03/21/19	CPP	SW6010D
Barium	175	0.9		mg/Kg	1	03/21/19	CPP	SW6010D
Beryllium	0.65	0.36		mg/Kg	1	03/21/19	CPP	SW6010D
Calcium	18300	45		mg/Kg	10	03/21/19	CPP	SW6010D
Cadmium	< 0.45	0.45		mg/Kg	1	03/21/19	CPP	SW6010D
Cobalt	7.29	0.45		mg/Kg	1	03/21/19	CPP	SW6010D
Chromium	17.2	0.45		mg/Kg	1	03/21/19	CPP	SW6010D
Copper	17.0	0.9		mg/kg	1	03/21/19	CPP	SW6010D
Iron	15300	45		mg/Kg	10	03/21/19	CPP	SW6010D
Mercury	< 0.08	0.08		mg/Kg	1	03/21/19	RS	SW7471B
Potassium	2800	9		mg/Kg	1	03/21/19	CPP	SW6010D
Magnesium	7530	45		mg/Kg	10	03/21/19	CPP	SW6010D
Manganese	409	4.5		mg/Kg	10	03/21/19	CPP	SW6010D
Sodium	331	9		mg/Kg	1	03/21/19	EK	SW6010D
Nickel	16.6	0.45		mg/Kg	1	03/21/19	CPP	SW6010D
Lead	6.6	0.9		mg/Kg	1	03/21/19	CPP	SW6010D
Antimony	< 4.5	4.5		mg/Kg	1	03/21/19	CPP	SW6010D
Selenium	< 1.8	1.8		mg/Kg	1	03/21/19	CPP	SW6010D
Thallium	< 1.8	1.8		mg/Kg	1	03/21/19	CPP	SW6010D
Vanadium	23.0	0.45		mg/Kg	1	03/21/19	CPP	SW6010D
Zinc	31.1	0.9		mg/Kg	1	03/21/19	CPP	SW6010D
Percent Solid	79			%		03/20/19	ML	SW846-%Solid
Soil Extraction for PCB	Completed					03/21/19	MM/V	SW3545A
Soil Extraction for Pesticides	Completed					03/21/19	MM/V	SW3545A
Soil Extraction for SVOA	Completed					03/21/19	JJ/LV	SW3545A
Mercury Digestion	Completed					03/21/19	W/W	SW7471B

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Total Metals Digest	Completed					03/20/19	S/AG/BF	SW3050B
<b><u>Polychlorinated Biphenyls</u></b>								
PCB-1016	ND	83	83	ug/Kg	2	03/22/19	SC	SW8082A
PCB-1221	ND	83	83	ug/Kg	2	03/22/19	SC	SW8082A
PCB-1232	ND	83	83	ug/Kg	2	03/22/19	SC	SW8082A
PCB-1242	ND	83	83	ug/Kg	2	03/22/19	SC	SW8082A
PCB-1248	ND	83	83	ug/Kg	2	03/22/19	SC	SW8082A
PCB-1254	ND	83	83	ug/Kg	2	03/22/19	SC	SW8082A
PCB-1260	ND	83	83	ug/Kg	2	03/22/19	SC	SW8082A
PCB-1262	ND	83	83	ug/Kg	2	03/22/19	SC	SW8082A
PCB-1268	ND	83	83	ug/Kg	2	03/22/19	SC	SW8082A
<b><u>QA/QC Surrogates</u></b>								
% DCBP	64			%	2	03/22/19	SC	30 - 150 %
% DCBP (Confirmation)	53			%	2	03/22/19	SC	30 - 150 %
% TCMX	69			%	2	03/22/19	SC	30 - 150 %
% TCMX (Confirmation)	65			%	2	03/22/19	SC	30 - 150 %
<b><u>Pesticides - Soil</u></b>								
4,4' -DDD	ND	2.5		ug/Kg	2	03/22/19	CW	SW8081B
4,4' -DDE	ND	2.5		ug/Kg	2	03/22/19	CW	SW8081B
4,4' -DDT	ND	2.5		ug/Kg	2	03/22/19	CW	SW8081B
a-BHC	ND	8.3		ug/Kg	2	03/22/19	CW	SW8081B
a-Chlordane	ND	4.2		ug/Kg	2	03/22/19	CW	SW8081B
Aldrin	ND	4.2		ug/Kg	2	03/22/19	CW	SW8081B
b-BHC	ND	8.3		ug/Kg	2	03/22/19	CW	SW8081B
Chlordane	ND	42		ug/Kg	2	03/22/19	CW	SW8081B
d-BHC	ND	8.3		ug/Kg	2	03/22/19	CW	SW8081B
Dieldrin	ND	4.2		ug/Kg	2	03/22/19	CW	SW8081B
Endosulfan I	ND	8.3		ug/Kg	2	03/22/19	CW	SW8081B
Endosulfan II	ND	8.3		ug/Kg	2	03/22/19	CW	SW8081B
Endosulfan sulfate	ND	8.3		ug/Kg	2	03/22/19	CW	SW8081B
Endrin	ND	8.3		ug/Kg	2	03/22/19	CW	SW8081B
Endrin aldehyde	ND	8.3		ug/Kg	2	03/22/19	CW	SW8081B
Endrin ketone	ND	8.3		ug/Kg	2	03/22/19	CW	SW8081B
g-BHC	ND	1.7		ug/Kg	2	03/22/19	CW	SW8081B
g-Chlordane	ND	4.2		ug/Kg	2	03/22/19	CW	SW8081B
Heptachlor	ND	8.3		ug/Kg	2	03/22/19	CW	SW8081B
Heptachlor epoxide	ND	8.3		ug/Kg	2	03/22/19	CW	SW8081B
Methoxychlor	ND	42		ug/Kg	2	03/22/19	CW	SW8081B
Toxaphene	ND	170		ug/Kg	2	03/22/19	CW	SW8081B
<b><u>QA/QC Surrogates</u></b>								
% DCBP	50			%	2	03/22/19	CW	30 - 150 %
% DCBP (Confirmation)	54			%	2	03/22/19	CW	30 - 150 %
% TCMX	64			%	2	03/22/19	CW	30 - 150 %
% TCMX (Confirmation)	60			%	2	03/22/19	CW	30 - 150 %
<b><u>1,4-dioxane</u></b>								
1,4-dioxane	ND	75		ug/kg	1	03/21/19	JLI	SW8260C



Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
<b><u>Volatiles</u></b>								
1,1,1-Trichloroethane	ND	5.0	0.50	ug/Kg	1	03/21/19	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	5.0	1.0	ug/Kg	1	03/21/19	JLI	SW8260C
1,1,2-Trichloroethane	ND	5.0	1.0	ug/Kg	1	03/21/19	JLI	SW8260C
1,1-Dichloroethane	ND	5.0	1.0	ug/Kg	1	03/21/19	JLI	SW8260C
1,1-Dichloroethene	ND	5.0	0.50	ug/Kg	1	03/21/19	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	5.0	1.0	ug/Kg	1	03/21/19	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	5.0	1.0	ug/Kg	1	03/21/19	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	5.0	1.0	ug/Kg	1	03/21/19	JLI	SW8260C
1,2-Dibromoethane	ND	5.0	0.50	ug/Kg	1	03/21/19	JLI	SW8260C
1,2-Dichlorobenzene	ND	5.0	0.50	ug/Kg	1	03/21/19	JLI	SW8260C
1,2-Dichloroethane	ND	5.0	0.50	ug/Kg	1	03/21/19	JLI	SW8260C
1,2-Dichloropropane	ND	5.0	1.0	ug/Kg	1	03/21/19	JLI	SW8260C
1,3-Dichlorobenzene	ND	5.0	0.50	ug/Kg	1	03/21/19	JLI	SW8260C
1,4-Dichlorobenzene	ND	5.0	0.50	ug/Kg	1	03/21/19	JLI	SW8260C
2-Hexanone	ND	25	5.0	ug/Kg	1	03/21/19	JLI	SW8260C
4-Methyl-2-pentanone	ND	25	5.0	ug/Kg	1	03/21/19	JLI	SW8260C
Acetone	18	JS 25	5.0	ug/Kg	1	03/21/19	JLI	SW8260C
Benzene	ND	5.0	0.50	ug/Kg	1	03/21/19	JLI	SW8260C
Bromochloromethane	ND	5.0	0.50	ug/Kg	1	03/21/19	JLI	SW8260C
Bromodichloromethane	ND	5.0	1.0	ug/Kg	1	03/21/19	JLI	SW8260C
Bromoform	ND	5.0	1.0	ug/Kg	1	03/21/19	JLI	SW8260C
Bromomethane	ND	5.0	2.0	ug/Kg	1	03/21/19	JLI	SW8260C
Carbon Disulfide	ND	5.0	1.0	ug/Kg	1	03/21/19	JLI	SW8260C
Carbon tetrachloride	ND	5.0	1.0	ug/Kg	1	03/21/19	JLI	SW8260C
Chlorobenzene	ND	5.0	0.50	ug/Kg	1	03/21/19	JLI	SW8260C
Chloroethane	ND	5.0	0.50	ug/Kg	1	03/21/19	JLI	SW8260C
Chloroform	ND	5.0	0.50	ug/Kg	1	03/21/19	JLI	SW8260C
Chloromethane	ND	5.0	1.0	ug/Kg	1	03/21/19	JLI	SW8260C
cis-1,2-Dichloroethene	ND	5.0	0.50	ug/Kg	1	03/21/19	JLI	SW8260C
cis-1,3-Dichloropropene	ND	5.0	0.50	ug/Kg	1	03/21/19	JLI	SW8260C
Cyclohexane	ND	5.0	1.0	ug/Kg	1	03/21/19	JLI	SW8260C
Dibromochloromethane	ND	5.0	1.0	ug/Kg	1	03/21/19	JLI	SW8260C
Dichlorodifluoromethane	ND	5.0	0.50	ug/Kg	1	03/21/19	JLI	SW8260C
Ethylbenzene	ND	5.0	0.50	ug/Kg	1	03/21/19	JLI	SW8260C
Isopropylbenzene	ND	5.0	0.50	ug/Kg	1	03/21/19	JLI	SW8260C
m&p-Xylene	1.2	J 5.0	1.0	ug/Kg	1	03/21/19	JLI	SW8260C
Methyl ethyl ketone	ND	30	5.0	ug/Kg	1	03/21/19	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	10	1.0	ug/Kg	1	03/21/19	JLI	SW8260C
Methylacetate	ND	5.0	5.0	ug/Kg	1	03/21/19	JLI	SW8260C
Methylcyclohexane	ND	5.0	1.0	ug/Kg	1	03/21/19	JLI	SW8260C
Methylene chloride	ND	5.0	5.0	ug/Kg	1	03/21/19	JLI	SW8260C
o-Xylene	ND	5.0	1.0	ug/Kg	1	03/21/19	JLI	SW8260C
Styrene	ND	5.0	0.50	ug/Kg	1	03/21/19	JLI	SW8260C
Tetrachloroethene	1.1	J 5.0	1.0	ug/Kg	1	03/21/19	JLI	SW8260C
Toluene	ND	5.0	0.50	ug/Kg	1	03/21/19	JLI	SW8260C
Total Xylenes	ND	5.0	5.0	ug/Kg	1	03/21/19	JLI	SW8260C
trans-1,2-Dichloroethene	ND	5.0	0.50	ug/Kg	1	03/21/19	JLI	SW8260C
trans-1,3-Dichloropropene	ND	5.0	0.50	ug/Kg	1	03/21/19	JLI	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Trichloroethene	ND	5.0	0.50	ug/Kg	1	03/21/19	JLI	SW8260C
Trichlorofluoromethane	ND	5.0	1.0	ug/Kg	1	03/21/19	JLI	SW8260C
Trichlorotrifluoroethane	ND	5.0	0.50	ug/Kg	1	03/21/19	JLI	SW8260C
Vinyl chloride	ND	5.0	0.50	ug/Kg	1	03/21/19	JLI	SW8260C
<b><u>QA/QC Surrogates</u></b>								
% 1,2-dichlorobenzene-d4	100			%	1	03/21/19	JLI	70 - 130 %
% Bromofluorobenzene	94			%	1	03/21/19	JLI	70 - 130 %
% Dibromofluoromethane	101			%	1	03/21/19	JLI	70 - 130 %
% Toluene-d8	98			%	1	03/21/19	JLI	70 - 130 %
<b><u>Volatiles</u></b>								
1,1,1,2-Tetrachloroethane	ND	20		ug/Kg	1	03/21/19	JLI	SW8260C
Acrolein	ND	5.0		ug/Kg	1	03/21/19	JLI	SW8260C
Acrylonitrile	ND	20		ug/Kg	1	03/21/19	JLI	SW8260C
Tert-butyl alcohol	ND	100		ug/Kg	1	03/21/19	JLI	SW8260C
Volatile Library Search Top 10	Completed					03/22/19	JLI	
<b><u>Semivolatiles</u></b>								
1,1-Biphenyl	ND	290	130	ug/Kg	1	03/22/19	AW	SW8270D
1,2,4,5-Tetrachlorobenzene	ND	290	140	ug/Kg	1	03/22/19	AW	SW8270D
2,3,4,6-tetrachlorophenol	ND	290	190	ug/Kg	1	03/22/19	AW	SW8270D
2,4,5-Trichlorophenol	ND	290	220	ug/Kg	1	03/22/19	AW	SW8270D
2,4,6-Trichlorophenol	ND	160	130	ug/Kg	1	03/22/19	AW	SW8270D
2,4-Dichlorophenol	ND	160	140	ug/Kg	1	03/22/19	AW	SW8270D
2,4-Dimethylphenol	ND	290	100	ug/Kg	1	03/22/19	AW	SW8270D
2,4-Dinitrophenol	ND	290	290	ug/Kg	1	03/22/19	AW	SW8270D
2,4-Dinitrotoluene	ND	160	160	ug/Kg	1	03/22/19	AW	SW8270D
2,6-Dinitrotoluene	ND	160	130	ug/Kg	1	03/22/19	AW	SW8270D
2-Chloronaphthalene	ND	290	120	ug/Kg	1	03/22/19	AW	SW8270D
2-Chlorophenol	ND	290	120	ug/Kg	1	03/22/19	AW	SW8270D
2-Methylnaphthalene	ND	290	120	ug/Kg	1	03/22/19	AW	SW8270D
2-Methylphenol (o-cresol)	ND	290	190	ug/Kg	1	03/22/19	AW	SW8270D
2-Nitroaniline	ND	290	290	ug/Kg	1	03/22/19	AW	SW8270D
2-Nitrophenol	ND	290	260	ug/Kg	1	03/22/19	AW	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	290	160	ug/Kg	1	03/22/19	AW	SW8270D
3,3'-Dichlorobenzidine	ND	160	160	ug/Kg	1	03/22/19	AW	SW8270D
3-Nitroaniline	ND	820	290	ug/Kg	1	03/22/19	AW	SW8270D
4,6-Dinitro-2-methylphenol	ND	290	290	ug/Kg	1	03/22/19	AW	SW8270D
4-Bromophenyl phenyl ether	ND	290	120	ug/Kg	1	03/22/19	AW	SW8270D
4-Chloro-3-methylphenol	ND	290	140	ug/Kg	1	03/22/19	AW	SW8270D
4-Chloroaniline	ND	820	190	ug/Kg	1	03/22/19	AW	SW8270D
4-Chlorophenyl phenyl ether	ND	290	140	ug/Kg	1	03/22/19	AW	SW8270D
4-Nitroaniline	ND	2100	140	ug/Kg	1	03/22/19	AW	SW8270D
4-Nitrophenol	ND	290	190	ug/Kg	1	03/22/19	AW	SW8270D
Acenaphthene	ND	290	120	ug/Kg	1	03/22/19	AW	SW8270D
Acenaphthylene	ND	160	110	ug/Kg	1	03/22/19	AW	SW8270D
Acetophenone	ND	290	130	ug/Kg	1	03/22/19	AW	SW8270D
Anthracene	ND	290	130	ug/Kg	1	03/22/19	AW	SW8270D
Atrazine	ND	290	110	ug/Kg	1	03/22/19	AW	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Benz(a)anthracene	ND	290	140	ug/Kg	1	03/22/19	AW	SW8270D
Benzaldehyde	ND	290	120	ug/Kg	1	03/22/19	AW	SW8270D
Benzo(a)pyrene	ND	160	130	ug/Kg	1	03/22/19	AW	SW8270D
Benzo(b)fluoranthene	ND	290	140	ug/Kg	1	03/22/19	AW	SW8270D
Benzo(ghi)perylene	ND	290	130	ug/Kg	1	03/22/19	AW	SW8270D
Benzo(k)fluoranthene	ND	290	140	ug/Kg	1	03/22/19	AW	SW8270D
Benzyl butyl phthalate	ND	290	110	ug/Kg	1	03/22/19	AW	SW8270D
Bis(2-chloroethoxy)methane	ND	290	110	ug/Kg	1	03/22/19	AW	SW8270D
Bis(2-chloroethyl)ether	ND	160	110	ug/Kg	1	03/22/19	AW	SW8270D
Bis(2-chloroisopropyl)ether	ND	290	110	ug/Kg	1	03/22/19	AW	SW8270D
Bis(2-ethylhexyl)phthalate	ND	290	120	ug/Kg	1	03/22/19	AW	SW8270D
Caprolactam	ND	290	290	ug/Kg	1	03/22/19	AW	SW8270D
Carbazole	ND	290	210	ug/Kg	1	03/22/19	AW	SW8270D
Chrysene	ND	290	140	ug/Kg	1	03/22/19	AW	SW8270D
Dibenz(a,h)anthracene	ND	160	130	ug/Kg	1	03/22/19	AW	SW8270D
Dibenzofuran	ND	290	120	ug/Kg	1	03/22/19	AW	SW8270D
Diethyl phthalate	ND	290	130	ug/Kg	1	03/22/19	AW	SW8270D
Dimethylphthalate	ND	290	130	ug/Kg	1	03/22/19	AW	SW8270D
Di-n-butylphthalate	ND	290	110	ug/Kg	1	03/22/19	AW	SW8270D
Di-n-octylphthalate	ND	290	110	ug/Kg	1	03/22/19	AW	SW8270D
Fluoranthene	ND	290	130	ug/Kg	1	03/22/19	AW	SW8270D
Fluorene	ND	290	140	ug/Kg	1	03/22/19	AW	SW8270D
Hexachlorobenzene	ND	160	120	ug/Kg	1	03/22/19	AW	SW8270D
Hexachlorobutadiene	ND	290	150	ug/Kg	1	03/22/19	AW	SW8270D
Hexachlorocyclopentadiene	ND	290	130	ug/Kg	1	03/22/19	AW	SW8270D
Hexachloroethane	ND	160	120	ug/Kg	1	03/22/19	AW	SW8270D
Indeno(1,2,3-cd)pyrene	ND	290	140	ug/Kg	1	03/22/19	AW	SW8270D
Isophorone	ND	160	110	ug/Kg	1	03/22/19	AW	SW8270D
Naphthalene	ND	290	120	ug/Kg	1	03/22/19	AW	SW8270D
Nitrobenzene	ND	160	140	ug/Kg	1	03/22/19	AW	SW8270D
N-Nitrosodimethylamine	ND	290	120	ug/Kg	1	03/22/19	AW	SW8270D
N-Nitrosodi-n-propylamine	ND	160	130	ug/Kg	1	03/22/19	AW	SW8270D
N-Nitrosodiphenylamine	ND	160	160	ug/Kg	1	03/22/19	AW	SW8270D
Pentachlorophenol	ND	290	160	ug/Kg	1	03/22/19	AW	SW8270D
Phenanthrene	ND	160	120	ug/Kg	1	03/22/19	AW	SW8270D
Phenol	ND	290	130	ug/Kg	1	03/22/19	AW	SW8270D
Pyrene	ND	290	140	ug/Kg	1	03/22/19	AW	SW8270D
<b>QA/QC Surrogates</b>								
% 2,4,6-Tribromophenol	71			%	1	03/22/19	AW	30 - 130 %
% 2-Fluorobiphenyl	62			%	1	03/22/19	AW	30 - 130 %
% 2-Fluorophenol	63			%	1	03/22/19	AW	30 - 130 %
% Nitrobenzene-d5	58			%	1	03/22/19	AW	30 - 130 %
% Phenol-d5	65			%	1	03/22/19	AW	30 - 130 %
% Terphenyl-d14	70			%	1	03/22/19	AW	30 - 130 %
SVOA Library Search Top 15	Completed					03/22/19	MR	

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
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RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected at RL/PQL  
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 (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

**Comments:**

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**

**April 02, 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

April 02, 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: SW  
 Analyzed by: see "By" below

## Date

03/19/19  
 03/20/19

## Time

11:15  
 16:00

## Laboratory Data

SDG ID: GCC71637  
 Phoenix ID: CC71643

Project ID: 1840 PARK AVE MANHATTAN  
 Client ID: SB7 (0-2)

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.33	0.33		mg/Kg	1	03/21/19	CPP	SW6010D
Aluminum	8760	33		mg/Kg	10	03/21/19	CPP	SW6010D
Arsenic	3.53	0.65		mg/Kg	1	03/21/19	CPP	SW6010D
Barium	254	0.7		mg/Kg	1	03/21/19	CPP	SW6010D
Beryllium	0.39	0.26		mg/Kg	1	03/21/19	CPP	SW6010D
Calcium	21100	33		mg/Kg	10	03/21/19	CPP	SW6010D
Cadmium	0.51	0.33		mg/Kg	1	03/21/19	CPP	SW6010D
Cobalt	7.70	0.33		mg/Kg	1	03/21/19	CPP	SW6010D
Chromium	24.2	0.33		mg/Kg	1	03/21/19	CPP	SW6010D
Copper	29.6	0.7		mg/kg	1	03/21/19	CPP	SW6010D
Iron	16500	33		mg/Kg	10	03/21/19	CPP	SW6010D
Mercury	0.34	0.07		mg/Kg	1	03/21/19	RS	SW7471B
Potassium	1810	7		mg/Kg	1	03/21/19	CPP	SW6010D
Magnesium	5760	33		mg/Kg	10	03/21/19	CPP	SW6010D
Manganese	486	3.3		mg/Kg	10	03/21/19	CPP	SW6010D
Sodium	210	7		mg/Kg	1	03/21/19	EK	SW6010D
Nickel	20.2	0.33		mg/Kg	1	03/21/19	CPP	SW6010D
Lead	235	6.5		mg/Kg	10	03/21/19	CPP	SW6010D
Antimony	< 3.3	3.3		mg/Kg	1	03/21/19	CPP	SW6010D
Selenium	< 1.3	1.3		mg/Kg	1	03/21/19	CPP	SW6010D
Thallium	< 1.3	1.3		mg/Kg	1	03/21/19	CPP	SW6010D
Vanadium	31.5	0.33		mg/Kg	1	03/21/19	CPP	SW6010D
Zinc	161	6.5		mg/Kg	10	03/21/19	CPP	SW6010D
Percent Solid	90			%		03/20/19	ML	SW846-%Solid
Soil Extraction for PCB	Completed					03/21/19	MM/V	SW3545A
Soil Extraction for Pesticides	Completed					03/21/19	MM/V	SW3545A
Soil Extraction for SVOA	Completed					03/21/19	JJ/LV	SW3545A
Mercury Digestion	Completed					03/21/19	W/W	SW7471B

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Total Metals Digest	Completed					03/20/19	S/AG/BF	SW3050B
<b><u>Polychlorinated Biphenyls</u></b>								
PCB-1016	ND	72	72	ug/Kg	2	03/22/19	SC	SW8082A
PCB-1221	ND	72	72	ug/Kg	2	03/22/19	SC	SW8082A
PCB-1232	ND	72	72	ug/Kg	2	03/22/19	SC	SW8082A
PCB-1242	ND	72	72	ug/Kg	2	03/22/19	SC	SW8082A
PCB-1248	ND	72	72	ug/Kg	2	03/22/19	SC	SW8082A
PCB-1254	ND	72	72	ug/Kg	2	03/22/19	SC	SW8082A
PCB-1260	ND	72	72	ug/Kg	2	03/22/19	SC	SW8082A
PCB-1262	ND	72	72	ug/Kg	2	03/22/19	SC	SW8082A
PCB-1268	ND	72	72	ug/Kg	2	03/22/19	SC	SW8082A
<b><u>QA/QC Surrogates</u></b>								
% DCBP	69			%	2	03/22/19	SC	30 - 150 %
% DCBP (Confirmation)	53			%	2	03/22/19	SC	30 - 150 %
% TCMX	74			%	2	03/22/19	SC	30 - 150 %
% TCMX (Confirmation)	68			%	2	03/22/19	SC	30 - 150 %
<b><u>Pesticides - Soil</u></b>								
4,4' -DDD	ND	2.2		ug/Kg	2	03/22/19	CW	SW8081B
4,4' -DDE	ND	2.2		ug/Kg	2	03/22/19	CW	SW8081B
4,4' -DDT	7.0	2.2		ug/Kg	2	03/22/19	CW	SW8081B
a-BHC	ND	7.2		ug/Kg	2	03/22/19	CW	SW8081B
a-Chlordane	ND	3.6		ug/Kg	2	03/22/19	CW	SW8081B
Aldrin	ND	3.6		ug/Kg	2	03/22/19	CW	SW8081B
b-BHC	ND	7.2		ug/Kg	2	03/22/19	CW	SW8081B
Chlordane	ND	36		ug/Kg	2	03/22/19	CW	SW8081B
d-BHC	ND	7.2		ug/Kg	2	03/22/19	CW	SW8081B
Dieldrin	ND	3.6		ug/Kg	2	03/22/19	CW	SW8081B
Endosulfan I	ND	7.2		ug/Kg	2	03/22/19	CW	SW8081B
Endosulfan II	ND	7.2		ug/Kg	2	03/22/19	CW	SW8081B
Endosulfan sulfate	ND	7.2		ug/Kg	2	03/22/19	CW	SW8081B
Endrin	ND	7.2		ug/Kg	2	03/22/19	CW	SW8081B
Endrin aldehyde	ND	7.2		ug/Kg	2	03/22/19	CW	SW8081B
Endrin ketone	ND	7.2		ug/Kg	2	03/22/19	CW	SW8081B
g-BHC	ND	1.4		ug/Kg	2	03/22/19	CW	SW8081B
g-Chlordane	ND	3.6		ug/Kg	2	03/22/19	CW	SW8081B
Heptachlor	ND	7.2		ug/Kg	2	03/22/19	CW	SW8081B
Heptachlor epoxide	ND	7.2		ug/Kg	2	03/22/19	CW	SW8081B
Methoxychlor	ND	36		ug/Kg	2	03/22/19	CW	SW8081B
Toxaphene	ND	140		ug/Kg	2	03/22/19	CW	SW8081B
<b><u>QA/QC Surrogates</u></b>								
% DCBP	52			%	2	03/22/19	CW	30 - 150 %
% DCBP (Confirmation)	46			%	2	03/22/19	CW	30 - 150 %
% TCMX	61			%	2	03/22/19	CW	30 - 150 %
% TCMX (Confirmation)	58			%	2	03/22/19	CW	30 - 150 %
<b><u>1,4-dioxane</u></b>								
1,4-dioxane	ND	73		ug/kg	1	03/21/19	JLI	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
<b><u>Volatiles</u></b>								
1,1,1-Trichloroethane	ND	4.8	0.48	ug/Kg	1	03/21/19	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	4.8	0.97	ug/Kg	1	03/21/19	JLI	SW8260C
1,1,2-Trichloroethane	ND	4.8	0.97	ug/Kg	1	03/21/19	JLI	SW8260C
1,1-Dichloroethane	ND	4.8	0.97	ug/Kg	1	03/21/19	JLI	SW8260C
1,1-Dichloroethene	ND	4.8	0.48	ug/Kg	1	03/21/19	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	4.8	0.97	ug/Kg	1	03/21/19	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	4.8	0.97	ug/Kg	1	03/21/19	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	4.8	0.97	ug/Kg	1	03/21/19	JLI	SW8260C
1,2-Dibromoethane	ND	4.8	0.48	ug/Kg	1	03/21/19	JLI	SW8260C
1,2-Dichlorobenzene	ND	4.8	0.48	ug/Kg	1	03/21/19	JLI	SW8260C
1,2-Dichloroethane	ND	4.8	0.48	ug/Kg	1	03/21/19	JLI	SW8260C
1,2-Dichloropropane	ND	4.8	0.97	ug/Kg	1	03/21/19	JLI	SW8260C
1,3-Dichlorobenzene	ND	4.8	0.48	ug/Kg	1	03/21/19	JLI	SW8260C
1,4-Dichlorobenzene	ND	4.8	0.48	ug/Kg	1	03/21/19	JLI	SW8260C
2-Hexanone	ND	24	4.8	ug/Kg	1	03/21/19	JLI	SW8260C
4-Methyl-2-pentanone	ND	24	4.8	ug/Kg	1	03/21/19	JLI	SW8260C
Acetone	36	S 24	4.8	ug/Kg	1	03/21/19	JLI	SW8260C
Benzene	ND	4.8	0.48	ug/Kg	1	03/21/19	JLI	SW8260C
Bromochloromethane	ND	4.8	0.48	ug/Kg	1	03/21/19	JLI	SW8260C
Bromodichloromethane	ND	4.8	0.97	ug/Kg	1	03/21/19	JLI	SW8260C
Bromoform	ND	4.8	0.97	ug/Kg	1	03/21/19	JLI	SW8260C
Bromomethane	ND	4.8	1.9	ug/Kg	1	03/21/19	JLI	SW8260C
Carbon Disulfide	ND	4.8	0.97	ug/Kg	1	03/21/19	JLI	SW8260C
Carbon tetrachloride	ND	4.8	0.97	ug/Kg	1	03/21/19	JLI	SW8260C
Chlorobenzene	ND	4.8	0.48	ug/Kg	1	03/21/19	JLI	SW8260C
Chloroethane	ND	4.8	0.48	ug/Kg	1	03/21/19	JLI	SW8260C
Chloroform	ND	4.8	0.48	ug/Kg	1	03/21/19	JLI	SW8260C
Chloromethane	ND	4.8	0.97	ug/Kg	1	03/21/19	JLI	SW8260C
cis-1,2-Dichloroethene	ND	4.8	0.48	ug/Kg	1	03/21/19	JLI	SW8260C
cis-1,3-Dichloropropene	ND	4.8	0.48	ug/Kg	1	03/21/19	JLI	SW8260C
Cyclohexane	ND	4.8	0.97	ug/Kg	1	03/21/19	JLI	SW8260C
Dibromochloromethane	ND	4.8	0.97	ug/Kg	1	03/21/19	JLI	SW8260C
Dichlorodifluoromethane	ND	4.8	0.48	ug/Kg	1	03/21/19	JLI	SW8260C
Ethylbenzene	ND	4.8	0.48	ug/Kg	1	03/21/19	JLI	SW8260C
Isopropylbenzene	ND	4.8	0.48	ug/Kg	1	03/21/19	JLI	SW8260C
m&p-Xylene	ND	4.8	0.97	ug/Kg	1	03/21/19	JLI	SW8260C
Methyl ethyl ketone	ND	29	4.8	ug/Kg	1	03/21/19	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	9.7	0.97	ug/Kg	1	03/21/19	JLI	SW8260C
Methylacetate	7.2	4.8	4.8	ug/Kg	1	03/21/19	JLI	SW8260C
Methylcyclohexane	ND	4.8	0.97	ug/Kg	1	03/21/19	JLI	SW8260C
Methylene chloride	ND	4.8	4.8	ug/Kg	1	03/21/19	JLI	SW8260C
o-Xylene	ND	4.8	0.97	ug/Kg	1	03/21/19	JLI	SW8260C
Styrene	ND	4.8	0.48	ug/Kg	1	03/21/19	JLI	SW8260C
Tetrachloroethene	ND	4.8	0.97	ug/Kg	1	03/21/19	JLI	SW8260C
Toluene	ND	4.8	0.48	ug/Kg	1	03/21/19	JLI	SW8260C
Total Xylenes	ND	4.8	4.8	ug/Kg	1	03/21/19	JLI	SW8260C
trans-1,2-Dichloroethene	ND	4.8	0.48	ug/Kg	1	03/21/19	JLI	SW8260C
trans-1,3-Dichloropropene	ND	4.8	0.48	ug/Kg	1	03/21/19	JLI	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Trichloroethene	ND	4.8	0.48	ug/Kg	1	03/21/19	JLI	SW8260C
Trichlorofluoromethane	ND	4.8	0.97	ug/Kg	1	03/21/19	JLI	SW8260C
Trichlorotrifluoroethane	ND	4.8	0.48	ug/Kg	1	03/21/19	JLI	SW8260C
Vinyl chloride	ND	4.8	0.48	ug/Kg	1	03/21/19	JLI	SW8260C
<b><u>QA/QC Surrogates</u></b>								
% 1,2-dichlorobenzene-d4	98			%	1	03/21/19	JLI	70 - 130 %
% Bromofluorobenzene	94			%	1	03/21/19	JLI	70 - 130 %
% Dibromofluoromethane	100			%	1	03/21/19	JLI	70 - 130 %
% Toluene-d8	97			%	1	03/21/19	JLI	70 - 130 %
<b><u>Volatiles</u></b>								
1,1,1,2-Tetrachloroethane	ND	19		ug/Kg	1	03/21/19	JLI	SW8260C
Acrolein	ND	4.8		ug/Kg	1	03/21/19	JLI	SW8260C
Acrylonitrile	ND	19		ug/Kg	1	03/21/19	JLI	SW8260C
Tert-butyl alcohol	ND	97		ug/Kg	1	03/21/19	JLI	SW8260C
Volatile Library Search Top 10	Completed					03/22/19	JLI	
<b><u>Semivolatiles</u></b>								
1,1-Biphenyl	ND	260	110	ug/Kg	1	03/22/19	AW	SW8270D
1,2,4,5-Tetrachlorobenzene	ND	260	130	ug/Kg	1	03/22/19	AW	SW8270D
2,3,4,6-tetrachlorophenol	ND	260	170	ug/Kg	1	03/22/19	AW	SW8270D
2,4,5-Trichlorophenol	ND	260	200	ug/Kg	1	03/22/19	AW	SW8270D
2,4,6-Trichlorophenol	ND	150	120	ug/Kg	1	03/22/19	AW	SW8270D
2,4-Dichlorophenol	ND	150	130	ug/Kg	1	03/22/19	AW	SW8270D
2,4-Dimethylphenol	ND	260	91	ug/Kg	1	03/22/19	AW	SW8270D
2,4-Dinitrophenol	ND	260	260	ug/Kg	1	03/22/19	AW	SW8270D
2,4-Dinitrotoluene	ND	150	140	ug/Kg	1	03/22/19	AW	SW8270D
2,6-Dinitrotoluene	ND	150	120	ug/Kg	1	03/22/19	AW	SW8270D
2-Chloronaphthalene	ND	260	100	ug/Kg	1	03/22/19	AW	SW8270D
2-Chlorophenol	ND	260	100	ug/Kg	1	03/22/19	AW	SW8270D
2-Methylnaphthalene	ND	260	110	ug/Kg	1	03/22/19	AW	SW8270D
2-Methylphenol (o-cresol)	ND	260	170	ug/Kg	1	03/22/19	AW	SW8270D
2-Nitroaniline	ND	260	260	ug/Kg	1	03/22/19	AW	SW8270D
2-Nitrophenol	ND	260	230	ug/Kg	1	03/22/19	AW	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	260	140	ug/Kg	1	03/22/19	AW	SW8270D
3,3'-Dichlorobenzidine	ND	150	150	ug/Kg	1	03/22/19	AW	SW8270D
3-Nitroaniline	ND	730	260	ug/Kg	1	03/22/19	AW	SW8270D
4,6-Dinitro-2-methylphenol	ND	260	260	ug/Kg	1	03/22/19	AW	SW8270D
4-Bromophenyl phenyl ether	ND	260	110	ug/Kg	1	03/22/19	AW	SW8270D
4-Chloro-3-methylphenol	ND	260	130	ug/Kg	1	03/22/19	AW	SW8270D
4-Chloroaniline	ND	730	170	ug/Kg	1	03/22/19	AW	SW8270D
4-Chlorophenyl phenyl ether	ND	260	120	ug/Kg	1	03/22/19	AW	SW8270D
4-Nitroaniline	ND	1800	120	ug/Kg	1	03/22/19	AW	SW8270D
4-Nitrophenol	ND	260	170	ug/Kg	1	03/22/19	AW	SW8270D
Acenaphthene	ND	260	110	ug/Kg	1	03/22/19	AW	SW8270D
Acenaphthylene	ND	150	100	ug/Kg	1	03/22/19	AW	SW8270D
Acetophenone	ND	260	110	ug/Kg	1	03/22/19	AW	SW8270D
Anthracene	ND	260	120	ug/Kg	1	03/22/19	AW	SW8270D
Atrazine	ND	260	95	ug/Kg	1	03/22/19	AW	SW8270D



Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Benz(a)anthracene	270	260	120	ug/Kg	1	03/22/19	AW	SW8270D
Benzaldehyde	ND	260	110	ug/Kg	1	03/22/19	AW	SW8270D
Benzo(a)pyrene	260	150	120	ug/Kg	1	03/22/19	AW	SW8270D
Benzo(b)fluoranthene	240	J 260	130	ug/Kg	1	03/22/19	AW	SW8270D
Benzo(ghi)perylene	180	J 260	120	ug/Kg	1	03/22/19	AW	SW8270D
Benzo(k)fluoranthene	220	J 260	120	ug/Kg	1	03/22/19	AW	SW8270D
Benzyl butyl phthalate	ND	260	95	ug/Kg	1	03/22/19	AW	SW8270D
Bis(2-chloroethoxy)methane	ND	260	100	ug/Kg	1	03/22/19	AW	SW8270D
Bis(2-chloroethyl)ether	ND	150	99	ug/Kg	1	03/22/19	AW	SW8270D
Bis(2-chloroisopropyl)ether	ND	260	100	ug/Kg	1	03/22/19	AW	SW8270D
Bis(2-ethylhexyl)phthalate	ND	260	110	ug/Kg	1	03/22/19	AW	SW8270D
Caprolactam	ND	260	260	ug/Kg	1	03/22/19	AW	SW8270D
Carbazole	ND	260	180	ug/Kg	1	03/22/19	AW	SW8270D
Chrysene	290	260	120	ug/Kg	1	03/22/19	AW	SW8270D
Dibenz(a,h)anthracene	ND	150	120	ug/Kg	1	03/22/19	AW	SW8270D
Dibenzofuran	ND	260	110	ug/Kg	1	03/22/19	AW	SW8270D
Diethyl phthalate	ND	260	120	ug/Kg	1	03/22/19	AW	SW8270D
Dimethylphthalate	ND	260	110	ug/Kg	1	03/22/19	AW	SW8270D
Di-n-butylphthalate	ND	260	97	ug/Kg	1	03/22/19	AW	SW8270D
Di-n-octylphthalate	ND	260	95	ug/Kg	1	03/22/19	AW	SW8270D
Fluoranthene	460	260	120	ug/Kg	1	03/22/19	AW	SW8270D
Fluorene	ND	260	120	ug/Kg	1	03/22/19	AW	SW8270D
Hexachlorobenzene	ND	150	110	ug/Kg	1	03/22/19	AW	SW8270D
Hexachlorobutadiene	ND	260	130	ug/Kg	1	03/22/19	AW	SW8270D
Hexachlorocyclopentadiene	ND	260	110	ug/Kg	1	03/22/19	AW	SW8270D
Hexachloroethane	ND	150	110	ug/Kg	1	03/22/19	AW	SW8270D
Indeno(1,2,3-cd)pyrene	230	J 260	120	ug/Kg	1	03/22/19	AW	SW8270D
Isophorone	ND	150	100	ug/Kg	1	03/22/19	AW	SW8270D
Naphthalene	ND	260	110	ug/Kg	1	03/22/19	AW	SW8270D
Nitrobenzene	ND	150	130	ug/Kg	1	03/22/19	AW	SW8270D
N-Nitrosodimethylamine	ND	260	100	ug/Kg	1	03/22/19	AW	SW8270D
N-Nitrosodi-n-propylamine	ND	150	120	ug/Kg	1	03/22/19	AW	SW8270D
N-Nitrosodiphenylamine	ND	150	140	ug/Kg	1	03/22/19	AW	SW8270D
Pentachlorophenol	ND	260	140	ug/Kg	1	03/22/19	AW	SW8270D
Phenanthrene	150	150	100	ug/Kg	1	03/22/19	AW	SW8270D
Phenol	ND	260	120	ug/Kg	1	03/22/19	AW	SW8270D
Pyrene	470	260	130	ug/Kg	1	03/22/19	AW	SW8270D
<b><u>QA/QC Surrogates</u></b>								
% 2,4,6-Tribromophenol	52			%	1	03/22/19	AW	30 - 130 %
% 2-Fluorobiphenyl	52			%	1	03/22/19	AW	30 - 130 %
% 2-Fluorophenol	45			%	1	03/22/19	AW	30 - 130 %
% Nitrobenzene-d5	49			%	1	03/22/19	AW	30 - 130 %
% Phenol-d5	49			%	1	03/22/19	AW	30 - 130 %
% Terphenyl-d14	51			%	1	03/22/19	AW	30 - 130 %
SVOA Library Search Top 15	Completed					03/22/19	MR	

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
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RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected at RL/PQL  
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 (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

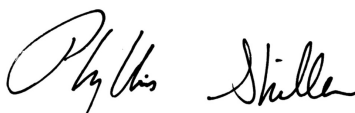
**Comments:**

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**

**April 02, 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

April 02, 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: SW  
 Analyzed by: see "By" below

## Date

03/19/19  
 03/20/19

## Time

11:25  
 16:00

## Laboratory Data

SDG ID: GCC71637  
 Phoenix ID: CC71644

Project ID: 1840 PARK AVE MANHATTAN  
 Client ID: SB7 (16-18)

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.40	0.40		mg/Kg	1	03/21/19	CPP	SW6010D
Aluminum	5270	40		mg/Kg	10	03/21/19	CPP	SW6010D
Arsenic	1.20	0.80		mg/Kg	1	03/21/19	CPP	SW6010D
Barium	34.0	0.8		mg/Kg	1	03/21/19	CPP	SW6010D
Beryllium	0.38	0.32		mg/Kg	1	03/21/19	CPP	SW6010D
Calcium	1450	4.0		mg/Kg	1	03/21/19	CPP	SW6010D
Cadmium	< 0.40	0.40		mg/Kg	1	03/21/19	CPP	SW6010D
Cobalt	3.48	0.40		mg/Kg	1	03/21/19	CPP	SW6010D
Chromium	20.1	0.40		mg/Kg	1	03/21/19	CPP	SW6010D
Copper	17.0	0.8		mg/kg	1	03/21/19	CPP	SW6010D
Iron	9200	4.0		mg/Kg	1	03/21/19	CPP	SW6010D
Mercury	< 0.03	0.03		mg/Kg	1	03/21/19	RS	SW7471B
Potassium	728	8		mg/Kg	1	03/21/19	CPP	SW6010D
Magnesium	1950	4.0		mg/Kg	1	03/21/19	CPP	SW6010D
Manganese	81.5	0.40		mg/Kg	1	03/21/19	CPP	SW6010D
Sodium	246	8		mg/Kg	1	03/21/19	EK	SW6010D
Nickel	11.1	0.40		mg/Kg	1	03/21/19	CPP	SW6010D
Lead	2.7	0.8		mg/Kg	1	03/21/19	CPP	SW6010D
Antimony	< 4.0	4.0		mg/Kg	1	03/21/19	CPP	SW6010D
Selenium	< 1.6	1.6		mg/Kg	1	03/21/19	CPP	SW6010D
Thallium	< 1.6	1.6		mg/Kg	1	03/21/19	CPP	SW6010D
Vanadium	16.7	0.40		mg/Kg	1	03/21/19	CPP	SW6010D
Zinc	19.7	0.8		mg/Kg	1	03/21/19	CPP	SW6010D
Percent Solid	87			%		03/20/19	ML	SW846-%Solid
Soil Extraction for PCB	Completed					03/21/19	MM/V	SW3545A
Soil Extraction for Pesticides	Completed					03/21/19	MM/V	SW3545A
Soil Extraction for SVOA	Completed					03/21/19	JJ/LV	SW3545A
Mercury Digestion	Completed					03/21/19	W/W	SW7471B

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Total Metals Digest	Completed					03/20/19	S/AG/BF	SW3050B
<b><u>Polychlorinated Biphenyls</u></b>								
PCB-1016	ND	76	76	ug/Kg	2	03/22/19	SC	SW8082A
PCB-1221	ND	76	76	ug/Kg	2	03/22/19	SC	SW8082A
PCB-1232	ND	76	76	ug/Kg	2	03/22/19	SC	SW8082A
PCB-1242	ND	76	76	ug/Kg	2	03/22/19	SC	SW8082A
PCB-1248	ND	76	76	ug/Kg	2	03/22/19	SC	SW8082A
PCB-1254	ND	76	76	ug/Kg	2	03/22/19	SC	SW8082A
PCB-1260	ND	76	76	ug/Kg	2	03/22/19	SC	SW8082A
PCB-1262	ND	76	76	ug/Kg	2	03/22/19	SC	SW8082A
PCB-1268	ND	76	76	ug/Kg	2	03/22/19	SC	SW8082A
<b><u>QA/QC Surrogates</u></b>								
% DCBP	53			%	2	03/22/19	SC	30 - 150 %
% DCBP (Confirmation)	48			%	2	03/22/19	SC	30 - 150 %
% TCMX	61			%	2	03/22/19	SC	30 - 150 %
% TCMX (Confirmation)	59			%	2	03/22/19	SC	30 - 150 %
<b><u>Pesticides - Soil</u></b>								
4,4' -DDD	ND	2.3		ug/Kg	2	03/22/19	CW	SW8081B
4,4' -DDE	ND	2.3		ug/Kg	2	03/22/19	CW	SW8081B
4,4' -DDT	ND	2.3		ug/Kg	2	03/22/19	CW	SW8081B
a-BHC	ND	7.6		ug/Kg	2	03/22/19	CW	SW8081B
a-Chlordane	ND	3.8		ug/Kg	2	03/22/19	CW	SW8081B
Aldrin	ND	3.8		ug/Kg	2	03/22/19	CW	SW8081B
b-BHC	ND	7.6		ug/Kg	2	03/22/19	CW	SW8081B
Chlordane	ND	38		ug/Kg	2	03/22/19	CW	SW8081B
d-BHC	ND	7.6		ug/Kg	2	03/22/19	CW	SW8081B
Dieldrin	ND	3.8		ug/Kg	2	03/22/19	CW	SW8081B
Endosulfan I	ND	7.6		ug/Kg	2	03/22/19	CW	SW8081B
Endosulfan II	ND	7.6		ug/Kg	2	03/22/19	CW	SW8081B
Endosulfan sulfate	ND	7.6		ug/Kg	2	03/22/19	CW	SW8081B
Endrin	ND	7.6		ug/Kg	2	03/22/19	CW	SW8081B
Endrin aldehyde	ND	7.6		ug/Kg	2	03/22/19	CW	SW8081B
Endrin ketone	ND	7.6		ug/Kg	2	03/22/19	CW	SW8081B
g-BHC	ND	1.5		ug/Kg	2	03/22/19	CW	SW8081B
g-Chlordane	ND	3.8		ug/Kg	2	03/22/19	CW	SW8081B
Heptachlor	ND	7.6		ug/Kg	2	03/22/19	CW	SW8081B
Heptachlor epoxide	ND	7.6		ug/Kg	2	03/22/19	CW	SW8081B
Methoxychlor	ND	38		ug/Kg	2	03/22/19	CW	SW8081B
Toxaphene	ND	150		ug/Kg	2	03/22/19	CW	SW8081B
<b><u>QA/QC Surrogates</u></b>								
% DCBP	46			%	2	03/22/19	CW	30 - 150 %
% DCBP (Confirmation)	48			%	2	03/22/19	CW	30 - 150 %
% TCMX	58			%	2	03/22/19	CW	30 - 150 %
% TCMX (Confirmation)	54			%	2	03/22/19	CW	30 - 150 %
<b><u>1,4-dioxane</u></b>								
1,4-dioxane	ND	78		ug/kg	1	03/21/19	JLI	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
<b><u>Volatiles</u></b>								
1,1,1-Trichloroethane	ND	5.2	0.52	ug/Kg	1	03/21/19	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	5.2	1.0	ug/Kg	1	03/21/19	JLI	SW8260C
1,1,2-Trichloroethane	ND	5.2	1.0	ug/Kg	1	03/21/19	JLI	SW8260C
1,1-Dichloroethane	ND	5.2	1.0	ug/Kg	1	03/21/19	JLI	SW8260C
1,1-Dichloroethene	ND	5.2	0.52	ug/Kg	1	03/21/19	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	5.2	1.0	ug/Kg	1	03/21/19	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	5.2	1.0	ug/Kg	1	03/21/19	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	5.2	1.0	ug/Kg	1	03/21/19	JLI	SW8260C
1,2-Dibromoethane	ND	5.2	0.52	ug/Kg	1	03/21/19	JLI	SW8260C
1,2-Dichlorobenzene	ND	5.2	0.52	ug/Kg	1	03/21/19	JLI	SW8260C
1,2-Dichloroethane	ND	5.2	0.52	ug/Kg	1	03/21/19	JLI	SW8260C
1,2-Dichloropropane	ND	5.2	1.0	ug/Kg	1	03/21/19	JLI	SW8260C
1,3-Dichlorobenzene	ND	5.2	0.52	ug/Kg	1	03/21/19	JLI	SW8260C
1,4-Dichlorobenzene	ND	5.2	0.52	ug/Kg	1	03/21/19	JLI	SW8260C
2-Hexanone	ND	26	5.2	ug/Kg	1	03/21/19	JLI	SW8260C
4-Methyl-2-pentanone	ND	26	5.2	ug/Kg	1	03/21/19	JLI	SW8260C
Acetone	12	JS 26	5.2	ug/Kg	1	03/21/19	JLI	SW8260C
Benzene	ND	5.2	0.52	ug/Kg	1	03/21/19	JLI	SW8260C
Bromochloromethane	ND	5.2	0.52	ug/Kg	1	03/21/19	JLI	SW8260C
Bromodichloromethane	ND	5.2	1.0	ug/Kg	1	03/21/19	JLI	SW8260C
Bromoform	ND	5.2	1.0	ug/Kg	1	03/21/19	JLI	SW8260C
Bromomethane	ND	5.2	2.1	ug/Kg	1	03/21/19	JLI	SW8260C
Carbon Disulfide	ND	5.2	1.0	ug/Kg	1	03/21/19	JLI	SW8260C
Carbon tetrachloride	ND	5.2	1.0	ug/Kg	1	03/21/19	JLI	SW8260C
Chlorobenzene	ND	5.2	0.52	ug/Kg	1	03/21/19	JLI	SW8260C
Chloroethane	ND	5.2	0.52	ug/Kg	1	03/21/19	JLI	SW8260C
Chloroform	ND	5.2	0.52	ug/Kg	1	03/21/19	JLI	SW8260C
Chloromethane	ND	5.2	1.0	ug/Kg	1	03/21/19	JLI	SW8260C
cis-1,2-Dichloroethene	ND	5.2	0.52	ug/Kg	1	03/21/19	JLI	SW8260C
cis-1,3-Dichloropropene	ND	5.2	0.52	ug/Kg	1	03/21/19	JLI	SW8260C
Cyclohexane	ND	5.2	1.0	ug/Kg	1	03/21/19	JLI	SW8260C
Dibromochloromethane	ND	5.2	1.0	ug/Kg	1	03/21/19	JLI	SW8260C
Dichlorodifluoromethane	ND	5.2	0.52	ug/Kg	1	03/21/19	JLI	SW8260C
Ethylbenzene	ND	5.2	0.52	ug/Kg	1	03/21/19	JLI	SW8260C
Isopropylbenzene	ND	5.2	0.52	ug/Kg	1	03/21/19	JLI	SW8260C
m&p-Xylene	ND	5.2	1.0	ug/Kg	1	03/21/19	JLI	SW8260C
Methyl ethyl ketone	ND	31	5.2	ug/Kg	1	03/21/19	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	10	1.0	ug/Kg	1	03/21/19	JLI	SW8260C
Methylacetate	ND	5.2	5.2	ug/Kg	1	03/21/19	JLI	SW8260C
Methylcyclohexane	ND	5.2	1.0	ug/Kg	1	03/21/19	JLI	SW8260C
Methylene chloride	ND	5.2	5.2	ug/Kg	1	03/21/19	JLI	SW8260C
o-Xylene	ND	5.2	1.0	ug/Kg	1	03/21/19	JLI	SW8260C
Styrene	ND	5.2	0.52	ug/Kg	1	03/21/19	JLI	SW8260C
Tetrachloroethene	ND	5.2	1.0	ug/Kg	1	03/21/19	JLI	SW8260C
Toluene	ND	5.2	0.52	ug/Kg	1	03/21/19	JLI	SW8260C
Total Xylenes	ND	5.2	5.2	ug/Kg	1	03/21/19	JLI	SW8260C
trans-1,2-Dichloroethene	ND	5.2	0.52	ug/Kg	1	03/21/19	JLI	SW8260C
trans-1,3-Dichloropropene	ND	5.2	0.52	ug/Kg	1	03/21/19	JLI	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Trichloroethene	ND	5.2	0.52	ug/Kg	1	03/21/19	JLI	SW8260C
Trichlorofluoromethane	ND	5.2	1.0	ug/Kg	1	03/21/19	JLI	SW8260C
Trichlorotrifluoroethane	ND	5.2	0.52	ug/Kg	1	03/21/19	JLI	SW8260C
Vinyl chloride	ND	5.2	0.52	ug/Kg	1	03/21/19	JLI	SW8260C
<b><u>QA/QC Surrogates</u></b>								
% 1,2-dichlorobenzene-d4	98			%	1	03/21/19	JLI	70 - 130 %
% Bromofluorobenzene	93			%	1	03/21/19	JLI	70 - 130 %
% Dibromofluoromethane	96			%	1	03/21/19	JLI	70 - 130 %
% Toluene-d8	98			%	1	03/21/19	JLI	70 - 130 %
<b><u>Volatiles</u></b>								
1,1,1,2-Tetrachloroethane	ND	21		ug/Kg	1	03/21/19	JLI	SW8260C
Acrolein	ND	5.2		ug/Kg	1	03/21/19	JLI	SW8260C
Acrylonitrile	ND	21		ug/Kg	1	03/21/19	JLI	SW8260C
Tert-butyl alcohol	ND	100		ug/Kg	1	03/21/19	JLI	SW8260C
Volatile Library Search Top 10	Completed					03/22/19	JLI	
<b><u>Semivolatiles</u></b>								
1,1-Biphenyl	ND	270	120	ug/Kg	1	03/22/19	AW	SW8270D
1,2,4,5-Tetrachlorobenzene	ND	270	130	ug/Kg	1	03/22/19	AW	SW8270D
2,3,4,6-tetrachlorophenol	ND	270	180	ug/Kg	1	03/22/19	AW	SW8270D
2,4,5-Trichlorophenol	ND	270	210	ug/Kg	1	03/22/19	AW	SW8270D
2,4,6-Trichlorophenol	ND	150	120	ug/Kg	1	03/22/19	AW	SW8270D
2,4-Dichlorophenol	ND	150	130	ug/Kg	1	03/22/19	AW	SW8270D
2,4-Dimethylphenol	ND	270	95	ug/Kg	1	03/22/19	AW	SW8270D
2,4-Dinitrophenol	ND	270	270	ug/Kg	1	03/22/19	AW	SW8270D
2,4-Dinitrotoluene	ND	150	150	ug/Kg	1	03/22/19	AW	SW8270D
2,6-Dinitrotoluene	ND	150	120	ug/Kg	1	03/22/19	AW	SW8270D
2-Chloronaphthalene	ND	270	110	ug/Kg	1	03/22/19	AW	SW8270D
2-Chlorophenol	ND	270	110	ug/Kg	1	03/22/19	AW	SW8270D
2-Methylnaphthalene	ND	270	110	ug/Kg	1	03/22/19	AW	SW8270D
2-Methylphenol (o-cresol)	ND	270	180	ug/Kg	1	03/22/19	AW	SW8270D
2-Nitroaniline	ND	270	270	ug/Kg	1	03/22/19	AW	SW8270D
2-Nitrophenol	ND	270	240	ug/Kg	1	03/22/19	AW	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	270	150	ug/Kg	1	03/22/19	AW	SW8270D
3,3'-Dichlorobenzidine	ND	150	150	ug/Kg	1	03/22/19	AW	SW8270D
3-Nitroaniline	ND	760	270	ug/Kg	1	03/22/19	AW	SW8270D
4,6-Dinitro-2-methylphenol	ND	270	270	ug/Kg	1	03/22/19	AW	SW8270D
4-Bromophenyl phenyl ether	ND	270	110	ug/Kg	1	03/22/19	AW	SW8270D
4-Chloro-3-methylphenol	ND	270	130	ug/Kg	1	03/22/19	AW	SW8270D
4-Chloroaniline	ND	760	180	ug/Kg	1	03/22/19	AW	SW8270D
4-Chlorophenyl phenyl ether	ND	270	130	ug/Kg	1	03/22/19	AW	SW8270D
4-Nitroaniline	ND	1900	130	ug/Kg	1	03/22/19	AW	SW8270D
4-Nitrophenol	ND	270	170	ug/Kg	1	03/22/19	AW	SW8270D
Acenaphthene	ND	270	120	ug/Kg	1	03/22/19	AW	SW8270D
Acenaphthylene	ND	150	110	ug/Kg	1	03/22/19	AW	SW8270D
Acetophenone	ND	270	120	ug/Kg	1	03/22/19	AW	SW8270D
Anthracene	ND	270	130	ug/Kg	1	03/22/19	AW	SW8270D
Atrazine	ND	270	99	ug/Kg	1	03/22/19	AW	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Benz(a)anthracene	ND	270	130	ug/Kg	1	03/22/19	AW	SW8270D
Benzaldehyde	ND	270	110	ug/Kg	1	03/22/19	AW	SW8270D
Benzo(a)pyrene	ND	150	120	ug/Kg	1	03/22/19	AW	SW8270D
Benzo(b)fluoranthene	ND	270	130	ug/Kg	1	03/22/19	AW	SW8270D
Benzo(ghi)perylene	ND	270	120	ug/Kg	1	03/22/19	AW	SW8270D
Benzo(k)fluoranthene	ND	270	130	ug/Kg	1	03/22/19	AW	SW8270D
Benzyl butyl phthalate	ND	270	98	ug/Kg	1	03/22/19	AW	SW8270D
Bis(2-chloroethoxy)methane	ND	270	110	ug/Kg	1	03/22/19	AW	SW8270D
Bis(2-chloroethyl)ether	ND	150	100	ug/Kg	1	03/22/19	AW	SW8270D
Bis(2-chloroisopropyl)ether	ND	270	110	ug/Kg	1	03/22/19	AW	SW8270D
Bis(2-ethylhexyl)phthalate	ND	270	110	ug/Kg	1	03/22/19	AW	SW8270D
Caprolactam	ND	270	270	ug/Kg	1	03/22/19	AW	SW8270D
Carbazole	ND	270	190	ug/Kg	1	03/22/19	AW	SW8270D
Chrysene	ND	270	130	ug/Kg	1	03/22/19	AW	SW8270D
Dibenz(a,h)anthracene	ND	150	120	ug/Kg	1	03/22/19	AW	SW8270D
Dibenzofuran	ND	270	110	ug/Kg	1	03/22/19	AW	SW8270D
Diethyl phthalate	ND	270	120	ug/Kg	1	03/22/19	AW	SW8270D
Dimethylphthalate	ND	270	120	ug/Kg	1	03/22/19	AW	SW8270D
Di-n-butylphthalate	ND	270	100	ug/Kg	1	03/22/19	AW	SW8270D
Di-n-octylphthalate	ND	270	98	ug/Kg	1	03/22/19	AW	SW8270D
Fluoranthene	ND	270	120	ug/Kg	1	03/22/19	AW	SW8270D
Fluorene	ND	270	130	ug/Kg	1	03/22/19	AW	SW8270D
Hexachlorobenzene	ND	150	110	ug/Kg	1	03/22/19	AW	SW8270D
Hexachlorobutadiene	ND	270	140	ug/Kg	1	03/22/19	AW	SW8270D
Hexachlorocyclopentadiene	ND	270	120	ug/Kg	1	03/22/19	AW	SW8270D
Hexachloroethane	ND	150	110	ug/Kg	1	03/22/19	AW	SW8270D
Indeno(1,2,3-cd)pyrene	ND	270	130	ug/Kg	1	03/22/19	AW	SW8270D
Isophorone	ND	150	110	ug/Kg	1	03/22/19	AW	SW8270D
Naphthalene	ND	270	110	ug/Kg	1	03/22/19	AW	SW8270D
Nitrobenzene	ND	150	130	ug/Kg	1	03/22/19	AW	SW8270D
N-Nitrosodimethylamine	ND	270	110	ug/Kg	1	03/22/19	AW	SW8270D
N-Nitrosodi-n-propylamine	ND	150	120	ug/Kg	1	03/22/19	AW	SW8270D
N-Nitrosodiphenylamine	ND	150	150	ug/Kg	1	03/22/19	AW	SW8270D
Pentachlorophenol	ND	270	140	ug/Kg	1	03/22/19	AW	SW8270D
Phenanthrene	ND	150	110	ug/Kg	1	03/22/19	AW	SW8270D
Phenol	ND	270	120	ug/Kg	1	03/22/19	AW	SW8270D
Pyrene	ND	270	130	ug/Kg	1	03/22/19	AW	SW8270D
<b>QA/QC Surrogates</b>								
% 2,4,6-Tribromophenol	51			%	1	03/22/19	AW	30 - 130 %
% 2-Fluorobiphenyl	46			%	1	03/22/19	AW	30 - 130 %
% 2-Fluorophenol	42			%	1	03/22/19	AW	30 - 130 %
% Nitrobenzene-d5	41			%	1	03/22/19	AW	30 - 130 %
% Phenol-d5	47			%	1	03/22/19	AW	30 - 130 %
% Terphenyl-d14	46			%	1	03/22/19	AW	30 - 130 %
SVOA Library Search Top 15	Completed					03/22/19	MR	

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
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RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected at RL/PQL  
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 (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

**Comments:**

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**

**April 02, 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

April 02, 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: SW  
 Analyzed by: see "By" below

## Date

03/19/19  
 03/20/19

## Time

16:00

## Laboratory Data

SDG ID: GCC71637  
 Phoenix ID: CC71645

Project ID: 1840 PARK AVE MANHATTAN  
 Client ID: TB HL

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
<b><u>1,4-dioxane</u></b>								
1,4-dioxane	ND	2000		ug/kg	50	03/21/19	JLI	SW8260C
<b><u>Volatiles</u></b>								
1,1,1-Trichloroethane	ND	250	25	ug/Kg	50	03/21/19	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	250	50	ug/Kg	50	03/21/19	JLI	SW8260C
1,1,2-Trichloroethane	ND	250	50	ug/Kg	50	03/21/19	JLI	SW8260C
1,1-Dichloroethane	ND	250	50	ug/Kg	50	03/21/19	JLI	SW8260C
1,1-Dichloroethene	ND	250	25	ug/Kg	50	03/21/19	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	250	50	ug/Kg	50	03/21/19	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	250	50	ug/Kg	50	03/21/19	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	250	50	ug/Kg	50	03/21/19	JLI	SW8260C
1,2-Dibromoethane	ND	250	25	ug/Kg	50	03/21/19	JLI	SW8260C
1,2-Dichlorobenzene	ND	250	25	ug/Kg	50	03/21/19	JLI	SW8260C
1,2-Dichloroethane	ND	25	25	ug/Kg	50	03/21/19	JLI	SW8260C
1,2-Dichloropropane	ND	250	50	ug/Kg	50	03/21/19	JLI	SW8260C
1,3-Dichlorobenzene	ND	250	25	ug/Kg	50	03/21/19	JLI	SW8260C
1,4-Dichlorobenzene	ND	250	25	ug/Kg	50	03/21/19	JLI	SW8260C
2-Hexanone	ND	1300	250	ug/Kg	50	03/21/19	JLI	SW8260C
4-Methyl-2-pentanone	ND	1300	250	ug/Kg	50	03/21/19	JLI	SW8260C
Acetone	ND	250	250	ug/Kg	50	03/21/19	JLI	SW8260C
Benzene	ND	60	25	ug/Kg	50	03/21/19	JLI	SW8260C
Bromochloromethane	ND	250	25	ug/Kg	50	03/21/19	JLI	SW8260C
Bromodichloromethane	ND	250	50	ug/Kg	50	03/21/19	JLI	SW8260C
Bromoform	ND	250	50	ug/Kg	50	03/21/19	JLI	SW8260C
Bromomethane	ND	250	100	ug/Kg	50	03/21/19	JLI	SW8260C
Carbon Disulfide	ND	250	50	ug/Kg	50	03/21/19	JLI	SW8260C

Client ID: TB HL

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Carbon tetrachloride	ND	250	50	ug/Kg	50	03/21/19	JLI	SW8260C
Chlorobenzene	ND	250	25	ug/Kg	50	03/21/19	JLI	SW8260C
Chloroethane	ND	250	25	ug/Kg	50	03/21/19	JLI	SW8260C
Chloroform	ND	250	25	ug/Kg	50	03/21/19	JLI	SW8260C
Chloromethane	ND	250	50	ug/Kg	50	03/21/19	JLI	SW8260C
cis-1,2-Dichloroethene	ND	250	25	ug/Kg	50	03/21/19	JLI	SW8260C
cis-1,3-Dichloropropene	ND	250	25	ug/Kg	50	03/21/19	JLI	SW8260C
Cyclohexane	ND	250	50	ug/Kg	50	03/21/19	JLI	SW8260C
Dibromochloromethane	ND	250	50	ug/Kg	50	03/21/19	JLI	SW8260C
Dichlorodifluoromethane	ND	250	25	ug/Kg	50	03/21/19	JLI	SW8260C
Ethylbenzene	ND	250	25	ug/Kg	50	03/21/19	JLI	SW8260C
Isopropylbenzene	ND	250	25	ug/Kg	50	03/21/19	JLI	SW8260C
m&p-Xylene	ND	250	50	ug/Kg	50	03/21/19	JLI	SW8260C
Methyl ethyl ketone	ND	120	120	ug/Kg	50	03/21/19	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	500	50	ug/Kg	50	03/21/19	JLI	SW8260C
Methylacetate	ND	250	250	ug/Kg	50	03/21/19	JLI	SW8260C
Methylcyclohexane	ND	250	50	ug/Kg	50	03/21/19	JLI	SW8260C
Methylene chloride	ND	100	100	ug/Kg	50	03/21/19	JLI	SW8260C
o-Xylene	ND	250	50	ug/Kg	50	03/21/19	JLI	SW8260C
Styrene	ND	250	25	ug/Kg	50	03/21/19	JLI	SW8260C
Tetrachloroethene	ND	250	50	ug/Kg	50	03/21/19	JLI	SW8260C
Toluene	ND	250	25	ug/Kg	50	03/21/19	JLI	SW8260C
Total Xylenes	ND	250	250	ug/Kg	50	03/21/19	JLI	SW8260C
trans-1,2-Dichloroethene	ND	190	25	ug/Kg	50	03/21/19	JLI	SW8260C
trans-1,3-Dichloropropene	ND	250	25	ug/Kg	50	03/21/19	JLI	SW8260C
Trichloroethene	ND	250	25	ug/Kg	50	03/21/19	JLI	SW8260C
Trichlorofluoromethane	ND	250	50	ug/Kg	50	03/21/19	JLI	SW8260C
Trichlorotrifluoroethane	ND	250	25	ug/Kg	50	03/21/19	JLI	SW8260C
Vinyl chloride	ND	25	25	ug/Kg	50	03/21/19	JLI	SW8260C
<b><u>QA/QC Surrogates</u></b>								
% 1,2-dichlorobenzene-d4 (50x)	100			%	50	03/21/19	JLI	70 - 130 %
% Bromofluorobenzene (50x)	96			%	50	03/21/19	JLI	70 - 130 %
% Dibromofluoromethane (50x)	97			%	50	03/21/19	JLI	70 - 130 %
% Toluene-d8 (50x)	98			%	50	03/21/19	JLI	70 - 130 %
<b><u>Volatiles</u></b>								
1,1,1,2-Tetrachloroethane	ND	1000		ug/Kg	50	03/21/19	JLI	SW8260C
Acrolein	ND	250		ug/Kg	50	03/21/19	JLI	SW8260C
Acrylonitrile	ND	1000		ug/Kg	50	03/21/19	JLI	SW8260C
Tert-butyl alcohol	ND	5000		ug/Kg	50	03/21/19	JLI	SW8260C
Volatile Library Search Top 10	Completed					03/22/19	JLI	

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
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RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected at RL/PQL  
 BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit  
 QA/QC Surrogates: Surrogates are compounds (preceeded 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.

**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**

**April 02, 2019**

**Reviewed and Released by: Phyllis Shiller, Laboratory Director**



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# Analysis Report

April 02, 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: SW  
 Analyzed by: see "By" below

## Date

03/19/19  
 03/20/19

## Time

16:00

## Laboratory Data

SDG ID: GCC71637  
 Phoenix ID: CC71646

Project ID: 1840 PARK AVE MANHATTAN  
 Client ID: TB LL

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
<b><u>1,4-dioxane</u></b>								
1,4-dioxane	ND	75		ug/kg	1	03/21/19	JLI	SW8260C
<b><u>Volatiles</u></b>								
1,1,1-Trichloroethane	ND	5.0	0.50	ug/Kg	1	03/21/19	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	5.0	1.0	ug/Kg	1	03/21/19	JLI	SW8260C
1,1,2-Trichloroethane	ND	5.0	1.0	ug/Kg	1	03/21/19	JLI	SW8260C
1,1-Dichloroethane	ND	5.0	1.0	ug/Kg	1	03/21/19	JLI	SW8260C
1,1-Dichloroethene	ND	5.0	0.50	ug/Kg	1	03/21/19	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	5.0	1.0	ug/Kg	1	03/21/19	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	5.0	1.0	ug/Kg	1	03/21/19	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	5.0	1.0	ug/Kg	1	03/21/19	JLI	SW8260C
1,2-Dibromoethane	ND	5.0	0.50	ug/Kg	1	03/21/19	JLI	SW8260C
1,2-Dichlorobenzene	ND	5.0	0.50	ug/Kg	1	03/21/19	JLI	SW8260C
1,2-Dichloroethane	ND	5.0	0.50	ug/Kg	1	03/21/19	JLI	SW8260C
1,2-Dichloropropane	ND	5.0	1.0	ug/Kg	1	03/21/19	JLI	SW8260C
1,3-Dichlorobenzene	ND	5.0	0.50	ug/Kg	1	03/21/19	JLI	SW8260C
1,4-Dichlorobenzene	ND	5.0	0.50	ug/Kg	1	03/21/19	JLI	SW8260C
2-Hexanone	ND	25	5.0	ug/Kg	1	03/21/19	JLI	SW8260C
4-Methyl-2-pentanone	ND	25	5.0	ug/Kg	1	03/21/19	JLI	SW8260C
Acetone	15	JS 25	5.0	ug/Kg	1	03/21/19	JLI	SW8260C
Benzene	ND	5.0	0.50	ug/Kg	1	03/21/19	JLI	SW8260C
Bromochloromethane	ND	5.0	0.50	ug/Kg	1	03/21/19	JLI	SW8260C
Bromodichloromethane	ND	5.0	1.0	ug/Kg	1	03/21/19	JLI	SW8260C
Bromoform	ND	5.0	1.0	ug/Kg	1	03/21/19	JLI	SW8260C
Bromomethane	ND	5.0	2.0	ug/Kg	1	03/21/19	JLI	SW8260C
Carbon Disulfide	ND	5.0	1.0	ug/Kg	1	03/21/19	JLI	SW8260C

Client ID: TB LL

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Carbon tetrachloride	ND	5.0	1.0	ug/Kg	1	03/21/19	JLI	SW8260C
Chlorobenzene	ND	5.0	0.50	ug/Kg	1	03/21/19	JLI	SW8260C
Chloroethane	ND	5.0	0.50	ug/Kg	1	03/21/19	JLI	SW8260C
Chloroform	ND	5.0	0.50	ug/Kg	1	03/21/19	JLI	SW8260C
Chloromethane	ND	5.0	1.0	ug/Kg	1	03/21/19	JLI	SW8260C
cis-1,2-Dichloroethene	ND	5.0	0.50	ug/Kg	1	03/21/19	JLI	SW8260C
cis-1,3-Dichloropropene	ND	5.0	0.50	ug/Kg	1	03/21/19	JLI	SW8260C
Cyclohexane	ND	5.0	1.0	ug/Kg	1	03/21/19	JLI	SW8260C
Dibromochloromethane	ND	5.0	1.0	ug/Kg	1	03/21/19	JLI	SW8260C
Dichlorodifluoromethane	ND	5.0	0.50	ug/Kg	1	03/21/19	JLI	SW8260C
Ethylbenzene	ND	5.0	0.50	ug/Kg	1	03/21/19	JLI	SW8260C
Isopropylbenzene	ND	5.0	0.50	ug/Kg	1	03/21/19	JLI	SW8260C
m&p-Xylene	ND	5.0	1.0	ug/Kg	1	03/21/19	JLI	SW8260C
Methyl ethyl ketone	ND	30	5.0	ug/Kg	1	03/21/19	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	10	1.0	ug/Kg	1	03/21/19	JLI	SW8260C
Methylacetate	ND	5.0	5.0	ug/Kg	1	03/21/19	JLI	SW8260C
Methylcyclohexane	ND	5.0	1.0	ug/Kg	1	03/21/19	JLI	SW8260C
Methylene chloride	ND	5.0	5.0	ug/Kg	1	03/21/19	JLI	SW8260C
o-Xylene	ND	5.0	1.0	ug/Kg	1	03/21/19	JLI	SW8260C
Styrene	ND	5.0	0.50	ug/Kg	1	03/21/19	JLI	SW8260C
Tetrachloroethene	ND	5.0	1.0	ug/Kg	1	03/21/19	JLI	SW8260C
Toluene	ND	5.0	0.50	ug/Kg	1	03/21/19	JLI	SW8260C
Total Xylenes	ND	5.0	5.0	ug/Kg	1	03/21/19	JLI	SW8260C
trans-1,2-Dichloroethene	ND	5.0	0.50	ug/Kg	1	03/21/19	JLI	SW8260C
trans-1,3-Dichloropropene	ND	5.0	0.50	ug/Kg	1	03/21/19	JLI	SW8260C
Trichloroethene	ND	5.0	0.50	ug/Kg	1	03/21/19	JLI	SW8260C
Trichlorofluoromethane	ND	5.0	1.0	ug/Kg	1	03/21/19	JLI	SW8260C
Trichlorotrifluoroethane	ND	5.0	0.50	ug/Kg	1	03/21/19	JLI	SW8260C
Vinyl chloride	ND	5.0	0.50	ug/Kg	1	03/21/19	JLI	SW8260C
<b><u>QA/QC Surrogates</u></b>								
% 1,2-dichlorobenzene-d4	99			%	1	03/21/19	JLI	70 - 130 %
% Bromofluorobenzene	94			%	1	03/21/19	JLI	70 - 130 %
% Dibromofluoromethane	101			%	1	03/21/19	JLI	70 - 130 %
% Toluene-d8	99			%	1	03/21/19	JLI	70 - 130 %
<b><u>Volatiles</u></b>								
1,1,1,2-Tetrachloroethane	ND	20		ug/Kg	1	03/21/19	JLI	SW8260C
Acrolein	ND	5.0		ug/Kg	1	03/21/19	JLI	SW8260C
Acrylonitrile	ND	20		ug/Kg	1	03/21/19	JLI	SW8260C
Tert-butyl alcohol	ND	100		ug/Kg	1	03/21/19	JLI	SW8260C
Volatile Library Search Top 10	Completed					03/22/19	JLI	

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
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RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected at RL/PQL  
 BRL=Below Reporting Level L=Biased Low J=Estimated Below RL LOD=Limit of Detection MDL=Method Detection Limit  
 QA/QC Surrogates: Surrogates are compounds (preceeded 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.

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**

**April 02, 2019**

**Reviewed and Released by: Phyllis Shiller, Laboratory Director**

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID

CC71637 BLK

Lab Name: Phoenix Environmental Labs

Client: \_\_\_\_\_

Lab Code: Phoenix Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_ SDG No.: \_\_\_\_\_

Matrix:(soil/water) SOIL

Lab Sample ID: CC71637 BLK

Sample wt/vol: 1 (g/mL) g

Lab File ID: 0321\_10.D

Level: (low/med) Low

Date Received: 03/20/19

% Moisture: not dec. 0

Date Analyzed: 03/21/19

GC Column: rtx-vms ID: 0.18 (mm)

Dilution Factor: 1

Soil Extract Volume: 1000 (uL)

Soil Aliquot Vol (uL): 5000

CONCENTRATION UNITS:

Number TICs found: 0

(ug/L or ug/KG) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1E  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID  
SB4 (0-2)

Lab Name: Phoenix Environmental Labs

Client: EBC

Lab Code: Phoenix Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_ SDG No.: GCC71637

Matrix:(soil/water) SOIL

Lab Sample ID: CC71637

Sample wt/vol: 5.7 (g/mL) g

Lab File ID: 0321\_16.D

Level: (low/med) Low

Date Received: 03/20/19

% Moisture: not dec. 9

Date Analyzed: 03/21/19

GC Column: rtx-vms ID: 0.18 (mm)

Dilution Factor: 1

Soil Extract Volume: 5000 (uL)

Soil Aliquot Vol (uL): 5000

Number TICs found: 0 CONCENTRATION UNITS:  
(ug/L or ug/KG) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q



1E  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID

SB4 (16-18)
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Lab Name: Phoenix Environmental Labs

Client: EBC

Lab Code: Phoenix Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_ SDG No.: GCC71637

Matrix:(soil/water) SOIL

Lab Sample ID: CC71638

Sample wt/vol: 6.24 (g/mL) g

Lab File ID: 0321\_17.D

Level: (low/med) Low

Date Received: 03/20/19

% Moisture: not dec. 8

Date Analyzed: 03/21/19

GC Column: rtx-vms ID: 0.18 (mm)

Dilution Factor: 1

Soil Extract Volume: 5000 (uL)

Soil Aliquot Vol (uL): 5000

CONCENTRATION UNITS:

Number TICs found: 0

(ug/L or ug/KG) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1E  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID  
SB5 (0-2)

Lab Name: Phoenix Environmental Labs Client: EBC  
 Lab Code: Phoenix Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: GCC71637  
 Matrix:(soil/water) SOIL Lab Sample ID: CC71639  
 Sample wt/vol: 6.35 (g/mL) g Lab File ID: 0321\_18.D  
 Level: (low/med) Meth Date Received: 03/20/19  
 % Moisture: not dec. 10 Date Analyzed: 03/21/19  
 GC Column: rtx-vms ID: 0.18 (mm) Dilution Factor: 50  
 Soil Extract Volume: 10000 (uL) Soil Aliquot Vol (uL): 100  
 Number TICs found: 17 CONCENTRATION UNITS: (ug/L or ug/KG) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
000111-65-9	Octane	3.849	9100	JN
	unknown	4.504	11000	J
103-65-1	n-Propylbenzene	5.767	16000	Q
000611-14-3	Benzene, 1-ethyl-2-methyl-	5.841	80000	JN
108-67-8	1,3,5-Trimethylbenzene	5.914	47000	Q
	Benzene, 1-ethyl-2-methyl- Isomer	6.056	28000	JN
95-63-6	1,2,4-Trimethylbenzene	6.192	100000	Q
135-98-8	sec-Butylbenzene	6.26	3200	Q
99-87-6	p-Isopropyltoluene	6.36	1700	Q
527-84-4	2-Isopropyltoluene	6.543	410	Q
001074-43-7	Benzene, 1-methyl-3-propyl-	6.607	14000	JN
104-51-8	n-Butylbenzene	6.669	3900	Q
001758-88-9	Benzene, 2-ethyl-1,4-dimethyl-	6.863	16000	JN
000535-77-3	Benzene, 1-methyl-3-(1-methylethyl)-	6.932	20000	JN
000488-23-3	Benzene, 1,2,3,4-tetramethyl-	7.236	12000	JN
000095-93-2	Benzene, 1,2,4,5-tetramethyl-	7.278	21000	JN
000091-57-6	Naphthalene, 2-methyl-	8.782	10000	JN

1E  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID
SB5 (16-18)

Lab Name: Phoenix Environmental Labs Client: EBC

Lab Code: Phoenix Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: GCC71637

Matrix:(soil/water) SOIL Lab Sample ID: CC71640

Sample wt/vol: 4.63 (g/mL) g Lab File ID: 0322L22.D

Level: (low/med) Low Date Received: 03/20/19

% Moisture: not dec. 11 Date Analyzed: 03/22/19

GC Column: rtx-vms ID: 0.18 (mm) Dilution Factor: 1

Soil Extract Volume: 5000 (uL) Soil Aliquot Vol (uL): 5000

Number TICs found: 0 CONCENTRATION UNITS: ug/Kg  
(ug/L or ug/KG)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1E  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID

SB6 (0-2)

Lab Name: Phoenix Environmental Labs

Client: EBC

Lab Code: Phoenix Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: GCC71637

Matrix:(soil/water) SOIL

Lab Sample ID: CC71641

Sample wt/vol: 5.54 (g/mL) g

Lab File ID: 0321\_20.D

Level: (low/med) Low

Date Received: 03/20/19

% Moisture: not dec. 12

Date Analyzed: 03/21/19

GC Column: rtx-vms ID: 0.18 (mm)

Dilution Factor: 1

Soil Extract Volume: 5000 (uL)

Soil Aliquot Vol (uL): 5000

Number TICs found: 15 CONCENTRATION UNITS:  
(ug/L or ug/KG) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
108-67-8	1,3,5-Trimethylbenzene	5.903	18	Q
95-63-6	1,2,4-Trimethylbenzene	6.176	32	Q
135-98-8	sec-Butylbenzene	6.249	6.1	Q
99-87-6	p-Isopropyltoluene	6.36	9.5	Q
001120-21-4	Undecane	6.606	99	JN
104-51-8	n-Butylbenzene	6.664	3	Q
000629-50-5	Tridecane	7.403	200	JN
017301-23-4	Undecane, 2,6-dimethyl-	7.529	51	JN
	unknown	7.938	59	J
002809-64-5	Naphthalene, 1,2,3,4-tetrahydro-5-methyl-	8.321	82	JN
	unknown	8.541	52	J
074645-98-0	Dodecane, 2,7,10-trimethyl-	8.567	54	JN
	unknown	8.641	73	J
000544-76-3	Hexadecane	8.656	100	JN
020027-77-4	Naphthalene, 1,2,3,4-tetrahydro-5,6-dimethyl-	9.055	50	JN

1E  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID

SB6 (16-18)

Lab Name: Phoenix Environmental Labs

Client: EBC

Lab Code: Phoenix Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_ SDG No.: GCC71637

Matrix:(soil/water) SOIL

Lab Sample ID: CC71642

Sample wt/vol: 6.32 (g/mL) g

Lab File ID: 0321\_21.D

Level: (low/med) Low

Date Received: 03/20/19

% Moisture: not dec. 21

Date Analyzed: 03/21/19

GC Column: rtx-vms ID: 0.18 (mm)

Dilution Factor: 1

Soil Extract Volume: 5000 (uL)

Soil Aliquot Vol (uL): 5000

Number TICs found: 0 CONCENTRATION UNITS:  
(ug/L or ug/KG) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1E  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID

SB7 (0-2)

Lab Name: Phoenix Environmental Labs

Client: EBC

Lab Code: Phoenix Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: GCC71637

Matrix:(soil/water)      SOIL

Lab Sample ID: CC71643

Sample wt/vol:      5.73      (g/mL)      g

Lab File ID:      0321\_22.D

Level: (low/med)      Low

Date Received:      03/20/19

% Moisture: not dec.      10

Date Analyzed:      03/21/19

GC Column:      rtx-vms      ID:      0.18 (mm)

Dilution Factor:      \_\_\_\_\_      1

Soil Extract Volume:      5000 (uL)

Soil Aliquot Vol (uL):      \_\_\_\_\_      5000

CONCENTRATION UNITS:  
(ug/L or ug/KG)

Number TICs found:      0

ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1E  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID  
SB7 (16-18)

Lab Name: Phoenix Environmental Labs

Client: EBC

Lab Code: Phoenix Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: GCC71637

Matrix:(soil/water) SOIL

Lab Sample ID: CC71644

Sample wt/vol: 5.47 (g/mL) g

Lab File ID: 0321\_23.D

Level: (low/med) Low

Date Received: 03/20/19

% Moisture: not dec. 13

Date Analyzed: 03/21/19

GC Column: rtx-vms ID: 0.18 (mm)

Dilution Factor: 1

Soil Extract Volume: 5000 (uL)

Soil Aliquot Vol (uL): 5000

Number TICs found: 0

CONCENTRATION UNITS:  
(ug/L or ug/KG) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1E  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID
TB HL

Lab Name: Phoenix Environmental Labs

Client: EBC

Lab Code: Phoenix Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: GCC71637

Matrix:(soil/water) SOIL

Lab Sample ID: CC71645

Sample wt/vol: 10 (g/mL) g

Lab File ID: 0321\_12.D

Level: (low/med) Meth

Date Received: 03/20/19

% Moisture: not dec. 0

Date Analyzed: 03/21/19

GC Column: rtx-vms ID: 0.18 (mm)

Dilution Factor: 50

Soil Extract Volume: 10000 (uL)

Soil Aliquot Vol (uL): 100

CONCENTRATION UNITS:  
(ug/L or ug/KG) ug/Kg

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q



1E  
 VOLATILE ORGANICS ANALYSIS DATA SHEET  
 TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID

TB LL

Lab Name: Phoenix Environmental Labs

Client: EBC

Lab Code: Phoenix Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: GCC71637

Matrix:(soil/water) SOIL

Lab Sample ID: CC71646

Sample wt/vol: 5 (g/mL) g

Lab File ID: 0321\_13.D

Level: (low/med) Low

Date Received: 03/20/19

% Moisture: not dec. 0

Date Analyzed: 03/21/19

GC Column: rtx-vms ID: 0.18 (mm)

Dilution Factor: 1

Soil Extract Volume: 5000 (uL)

Soil Aliquot Vol (uL): 5000

Number TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/KG) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1F  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID

SB4 (0-2)

Lab Name: Phoenix Environmental Labs

Client: EBC

Lab Code: Phoenix Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: GCC7163

Matrix:(soil/water) SOIL

Lab Sample ID: CC71637

Sample wt/vol: 15.03 (g/mL) g

Lab File ID: 0321\_56.D

Level: (low/med) Low

Date Received: 03/20/19

% Moisture: not dec. 9 decanted:(Y/N) NA

Date Extracted: 03/22/19

GPC Cleanup (Y/N): N pH: NA

Date Analyzed: 3/22/2019

Conc. Extract Volume: 1000 (uL)

Dilution Factor 1

Injection Volume: 1 (uL)

Number TICs found: 3 CONCENTRATION UNITS:  
(ug/L or ug/KG) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
000141-79-7	3-Penten-2-one, 4-methyl-	2.643	400	JNA
000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	2.895	12000	JNA
036728-72-0	28-Nor-17.beta.(H)-hopane	16.010	780	JN

FORM I SEMIVOA-TIC

A - Indicates that the tentatively identified compound is a suspected aldol condensation product. Aldol condensation products are produced during the extraction process.

1F  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID  
SB4 (16-18)

Lab Name: Phoenix Environmental Labs

Client: EBC

Lab Code: Phoenix Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: GCC7163

Matrix:(soil/water) SOIL

Lab Sample ID: CC71638

Sample wt/vol: 15.37 (g/mL) g

Lab File ID: 0321\_52.D

Level: (low/med) Low

Date Received: 03/20/19

% Moisture: not dec. 8 decanted:(Y/N) NA

Date Extracted: 03/22/19

GPC Cleanup (Y/N): N pH: NA

Date Analyzed: 3/22/2019

Conc. Extract Volume: 1000 (uL)

Dilution Factor 1

Injection Volume: 1 (uL)

Number TICs found: 1 CONCENTRATION UNITS:  
(ug/L or ug/KG) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	2.901	18000	JNA

FORM I SEMIVOA-TIC

A - Indicates that the tentatively identified compound is a suspected aldol condensation product.  
Aldol condensation products are produced during the extraction process.

1F  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID

SB5 (0-2)
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Lab Name: Phoenix Environmental Labs

Client: EBC

Lab Code: Phoenix Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: GCC7163

Matrix:(soil/water) SOIL

Lab Sample ID: CC71639

Sample wt/vol: 15.41 (g/mL) g

Lab File ID: 0321\_60.D

Level: (low/med) Low

Date Received: 03/20/19

% Moisture: not dec. 10 decanted:(Y/N) NA

Date Extracted: 03/22/19

GPC Cleanup (Y/N): N pH: NA

Date Analyzed: 3/22/2019

Conc. Extract Volume: 1000 (uL)

Dilution Factor 10

Injection Volume: 1 (uL)

CONCENTRATION UNITS:

Number TICs found: 15

(ug/L or ug/KG) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	2.896	7300	JNA
000108-38-3	Benzene, 1,3-dimethyl-	3.248	8900	JN
000526-73-8	Benzene, 1,2,3-trimethyl-	4.053	6000	JN
001074-43-7	Benzene, 1-methyl-3-propyl-	4.200	6600	JN
000934-74-7	Benzene, 1-ethyl-3,5-dimethyl-	4.235	6900	JN
000099-87-6	Benzene, 1-methyl-4-(1-methylethyl	4.370	5400	JN
002531-84-2	Phenanthrene, 2-methyl-	8.336	5800	JN
000203-64-5	4H-Cyclopenta[def]phenanthrene	8.430	12000	JN
000243-17-4	11H-Benzo[b]fluorene	9.694	9700	JN
	11H-Benzo[b]fluorene Isomer	9.776	7200	JN
000243-46-9	Benzo[b]naphtho[2,3-d]thiophene	10.634	4400	JN
025732-74-5	Cyclopenta(cd)pyrene, 3,4-dihydro-	11.315	4600	JN
001705-84-6	Triphenylene, 2-methyl-	11.920	5500	JN
000205-99-2	Benz[e]acephenanthrylene	14.335	36000	JN
	Benz[e]acephenanthrylene Isomer	14.711	12000	JN

FORM I SEMIVOA-TIC

A - Indicates that the tentatively identified compound is a suspected aldol condensation product.  
Aldol condensation products are produced during the extraction process.

1F  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID  
SB5 (16-18)

Lab Name: Phoenix Environmental Labs

Client: EBC

Lab Code: Phoenix Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: GCC7163

Matrix:(soil/water) SOIL

Lab Sample ID: CC71640

Sample wt/vol: 15.46 (g/mL) g

Lab File ID: 0321\_49.D

Level: (low/med) Low

Date Received: 03/20/19

% Moisture: not dec. 11 decanted:(Y/N) NA

Date Extracted: 03/22/19

GPC Cleanup (Y/N): N pH: NA

Date Analyzed: 3/22/2019

Conc. Extract Volume: 1000 (uL)

Dilution Factor 1

Injection Volume: 1 (uL)

Number TICs found: 1

CONCENTRATION UNITS:  
(ug/L or ug/KG) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	2.890	6700	JNA

FORM I SEMIVOA-TIC

A - Indicates that the tentatively identified compound is a suspected aldol condensation product. Aldol condensation products are produced during the extraction process.

1F  
 SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET  
 TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID

SB6 (0-2)
-----------

Lab Name: Phoenix Environmental Labs

Client: EBC

Lab Code: Phoenix Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: GCC7163

Matrix:(soil/water) SOIL

Lab Sample ID: CC71641

Sample wt/vol: 15.42 (g/mL) g

Lab File ID: 0321\_57.D

Level: (low/med) Low

Date Received: 03/20/19

% Moisture: not dec. 12 decanted:(Y/N) NA

Date Extracted: 03/22/19

GPC Cleanup (Y/N): N pH: NA

Date Analyzed: 3/22/2019

Conc. Extract Volume: 1000 (uL)

Dilution Factor 1

Injection Volume: 1 (uL)

CONCENTRATION UNITS:  
 (ug/L or ug/KG) ug/Kg

Number TICs found: 8

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
004914-92-5	2-Pentene, 3,4-dimethyl-, (E)-	2.643	330	JN
000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	2.901	21000	JNA
013065-07-1	Naphthalene, 1,2,3,4-tetrahydro-2,	5.721	320	JN
	Hexadecane Isomer	6.274	400	JN
000829-26-5	Naphthalene, 2,3,6-trimethyl-	6.838	300	JN
000544-76-3	Hexadecane	6.879	430	JN
000629-92-5	Nonadecane	8.054	390	JN
000112-95-8	Eicosane	8.418	790	JN

FORM I SEMIVOA-TIC

A - Indicates that the tentatively identified compound is a suspected aldol condensation product.  
 Aldol condensation products are produced during the extraction process.

1F  
 SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET  
 TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID  
 SB6 (16-18)

Lab Name: Phoenix Environmental Labs

Client: EBC

Lab Code: Phoenix Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: GCC7163

Matrix:(soil/water) SOIL

Lab Sample ID: CC71642

Sample wt/vol: 15.43 (g/mL) g

Lab File ID: 0321\_53.D

Level: (low/med) Low

Date Received: 03/20/19

% Moisture: not dec. 21 decanted:(Y/N) NA

Date Extracted: 03/22/19

GPC Cleanup (Y/N): N pH: NA

Date Analyzed: 3/22/2019

Conc. Extract Volume: 1000 (uL)

Dilution Factor 1

Injection Volume: 1 (uL)

CONCENTRATION UNITS:

Number TICs found: 1 (ug/L or ug/KG) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	2.890	8300	JNA

FORM I SEMIVOA-TIC

A - Indicates that the tentatively identified compound is a suspected aldol condensation product. Aldol condensation products are produced during the extraction process.

1F  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID  
**SB7 (0-2)**

Lab Name: Phoenix Environmental Labs

Client: EBC

Lab Code: Phoenix Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: GCC7163

Matrix:(soil/water) SOIL

Lab Sample ID: CC71643

Sample wt/vol: 15.16 (g/mL) g

Lab File ID: 0321\_62.D

Level: (low/med) Low

Date Received: 03/20/19

% Moisture: not dec. 10 decanted:(Y/N) NA

Date Extracted: 03/22/19

GPC Cleanup (Y/N): N pH: NA

Date Analyzed: 3/22/2019

Conc. Extract Volume: 1000 (uL)

Dilution Factor 1

Injection Volume: 1 (uL)

CONCENTRATION UNITS:  
(ug/L or ug/KG) ug/Kg

Number TICs found: 1

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	2.896	10000	JNA

FORM I SEMIVOA-TIC

A - Indicates that the tentatively identified compound is a suspected aldol condensation product.  
Aldol condensation products are produced during the extraction process.







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



# QA/QC Report

April 02, 2019

## QA/QC Data

SDG I.D.: GCC71637

Parameter	Blank	Blk RL	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 471130 (mg/kg), QC Sample No: CC71244 (CC71637, CC71638, CC71639, CC71640, CC71641, CC71642, CC71643, CC71644)													
Mercury - Soil	BRL	0.02	<0.03	<0.03	NC	113	112	0.9	104	107	2.8	70 - 130	30
Comment:													

Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%. MS acceptance range is 75-125%.

QA/QC Batch 471069 (mg/kg), QC Sample No: CC71720 (CC71637, CC71638, CC71639, CC71640, CC71641, CC71642, CC71643, CC71644)

### ICP Metals - Soil

Aluminum	BRL	4.8	6890	7500	8.50	89.7			NC			75 - 125	30
Antimony	BRL	3.2	<4.0	<4.1	NC	98.5			97.7			75 - 125	30
Arsenic	BRL	0.64	5.30	4.05	NC	86.6			96.7			75 - 125	30
Barium	BRL	0.32	64.1	61.0	5.00	94.7			104			75 - 125	30
Beryllium	BRL	0.26	0.40	0.42	NC	93.4			99.2			75 - 125	30
Cadmium	BRL	0.32	<0.40	<0.41	NC	88.9			99.0			75 - 125	30
Calcium	BRL	4.8	7470	9260	21.4	90.4			NC			75 - 125	30
Chromium	BRL	0.32	12.2	12.2	0	92.8			100			75 - 125	30
Cobalt	BRL	0.32	6.67	6.99	4.70	94.3			97.0			75 - 125	30
Copper	BRL	0.64	32.2	21.4	40.3	92.0			92.4			75 - 125	30 r
Iron	BRL	4.8	14300	20900	37.5	90.7			NC			75 - 125	30 r
Lead	BRL	0.32	154	114	29.9	91.0			124			75 - 125	30
Magnesium	BRL	4.8	2880	3010	4.40	91.5			NC			75 - 125	30
Manganese	BRL	0.32	249	353	34.6	117			124			75 - 125	30 r
Nickel	BRL	0.32	15.0	13.3	12.0	96.6			98.4			75 - 125	30
Potassium	BRL	4.8	1220	1180	3.30	99.2			NC			75 - 125	30
Selenium	BRL	1.3	<1.6	<1.6	NC	82.6			96.8			75 - 125	30
Silver	BRL	0.32	<0.40	<0.41	NC	86.1			98.7			75 - 125	30
Sodium	BRL	4.8	555	423	27.0	101			68.2			75 - 125	30 m
Thallium	BRL	2.9	<1.6	<3.7	NC	92.3			95.2			75 - 125	30
Vanadium	BRL	0.32	17.8	18.0	1.10	78.9			100			75 - 125	30
Zinc	BRL	0.64	57.8	42.2	31.2	86.5			90.5			75 - 125	30 r

m = This parameter is outside laboratory MS/MSD specified recovery limits.

r = This parameter is outside laboratory RPD specified recovery limits.



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# QA/QC Report

April 02, 2019

## QA/QC Data

SDG I.D.: GCC71637

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
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QA/QC Batch 471222 (ug/Kg), QC Sample No: CC72853 2X (CC71637, CC71638, CC71639, CC71640, CC71641, CC71642, CC71643, CC71644)

### Polychlorinated Biphenyls - Soil

PCB-1016	ND	33	76	84	10.0	57	63	10.0	40 - 140	30
PCB-1221	ND	33							40 - 140	30
PCB-1232	ND	33							40 - 140	30
PCB-1242	ND	33							40 - 140	30
PCB-1248	ND	33							40 - 140	30
PCB-1254	ND	33							40 - 140	30
PCB-1260	ND	33	80	88	9.5	69	78	12.2	40 - 140	30
PCB-1262	ND	33							40 - 140	30
PCB-1268	ND	33							40 - 140	30
% DCBP (Surrogate Rec)	82	%	92	102	10.3	70	80	13.3	30 - 150	30
% DCBP (Surrogate Rec) (Confirm)	75	%	84	93	10.2	65	74	12.9	30 - 150	30
% TCMX (Surrogate Rec)	87	%	95	104	9.0	67	77	13.9	30 - 150	30
% TCMX (Surrogate Rec) (Confirm)	84	%	92	102	10.3	66	75	12.8	30 - 150	30

QA/QC Batch 471223 (ug/Kg), QC Sample No: CC72853 2X (CC71637, CC71638, CC71639, CC71640, CC71641, CC71642, CC71643, CC71644)

### Pesticides - Soil

4,4' -DDD	ND	1.7	82	105	24.6	114	103	10.1	40 - 140	30
4,4' -DDE	ND	1.7	68	82	18.7	50	62	21.4	40 - 140	30
4,4' -DDT	ND	1.7	89	106	17.4	61	109	56.5	40 - 140	30 r
a-BHC	ND	1.0	80	92	14.0	50	68	30.5	40 - 140	30
a-Chlordane	ND	3.3	81	94	14.9	NC	NC	NC	40 - 140	30
Aldrin	ND	1.0	79	89	11.9	43	57	28.0	40 - 140	30
b-BHC	ND	1.0	84	94	11.2	50	69	31.9	40 - 140	30 r
Chlordane	ND	3.3	79	91	14.1	36	NC	NC	40 - 140	30
d-BHC	ND	3.3	89	102	13.6	58	78	29.4	40 - 140	30
Dieldrin	ND	1.0	82	96	15.7	70	90	25.0	40 - 140	30
Endosulfan I	ND	3.3	89	102	13.6	67	83	21.3	40 - 140	30
Endosulfan II	ND	3.3	83	104	22.5	67	93	32.5	40 - 140	30 r
Endosulfan sulfate	ND	3.3	125	108	14.6	70	60	15.4	40 - 140	30
Endrin	ND	3.3	85	102	18.2	60	82	31.0	40 - 140	30 r
Endrin aldehyde	ND	3.3	84	103	20.3	62	82	27.8	40 - 140	30
Endrin ketone	ND	3.3	92	108	16.0	64	91	34.8	40 - 140	30 r
g-BHC	ND	1.0	77	89	14.5	47	64	30.6	40 - 140	30 r
g-Chlordane	ND	3.3	79	91	14.1	36	NC	NC	40 - 140	30
Heptachlor	ND	3.3	87	99	12.9	37	80	73.5	40 - 140	30 r
Heptachlor epoxide	ND	3.3	81	94	14.9	64	76	17.1	40 - 140	30
Methoxychlor	ND	3.3	91	117	25.0	67	91	30.4	40 - 140	30
Toxaphene	ND	130	NA	NA	NC	NA	NA	NC	40 - 140	30
% DCBP	67	%	70	80	13.3	50	74	38.7	30 - 150	30 r
% DCBP (Confirmation)	65	%	66	72	8.7	47	59	22.6	30 - 150	30

## QA/QC Data

SDG I.D.: GCC71637

Parameter	Blk		LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
	Blank	RL									
% TCMX	74	%	85	96	12.2	54	70	25.8	30 - 150	30	
% TCMX (Confirmation)	72	%	83	87	4.7	51	65	24.1	30 - 150	30	
QA/QC Batch 471233 (ug/kg), QC Sample No: CC71640 (CC71637, CC71638, CC71639, CC71640, CC71641, CC71642, CC71643, CC71644)											
<b>Semivolatiles - Soil</b>											
1,1-Biphenyl	ND	230	64	64	0.0	65	57	13.1	30 - 130	30	
1,2,4,5-Tetrachlorobenzene	ND	230	63	63	0.0	71	59	18.5	30 - 130	30	
2,3,4,6-tetrachlorophenol	ND	230	71	72	1.4	75	64	15.8	30 - 130	30	
2,4,5-Trichlorophenol	ND	230	76	75	1.3	81	67	18.9	30 - 130	30	
2,4,6-Trichlorophenol	ND	130	75	76	1.3	80	68	16.2	30 - 130	30	
2,4-Dichlorophenol	ND	130	72	74	2.7	85	66	25.2	30 - 130	30	
2,4-Dimethylphenol	ND	230	71	70	1.4	81	64	23.4	30 - 130	30	
2,4-Dinitrophenol	ND	230	16	17	6.1	74	43	53.0	30 - 130	30	l,r
2,4-Dinitrotoluene	ND	130	80	79	1.3	88	72	20.0	30 - 130	30	
2,6-Dinitrotoluene	ND	130	79	79	0.0	86	70	20.5	30 - 130	30	
2-Chloronaphthalene	ND	230	67	66	1.5	69	61	12.3	30 - 130	30	
2-Chlorophenol	ND	230	65	66	1.5	79	60	27.3	30 - 130	30	
2-Methylnaphthalene	ND	230	63	63	0.0	72	58	21.5	30 - 130	30	
2-Methylphenol (o-cresol)	ND	230	68	69	1.5	82	59	32.6	30 - 130	30	r
2-Nitroaniline	ND	330	103	101	2.0	109	89	20.2	30 - 130	30	
2-Nitrophenol	ND	230	68	69	1.5	80	65	20.7	30 - 130	30	
3&4-Methylphenol (m&p-cresol)	ND	230	71	72	1.4	88	63	33.1	30 - 130	30	r
3,3'-Dichlorobenzidine	ND	130	90	87	3.4	114	95	18.2	30 - 130	30	
3-Nitroaniline	ND	330	94	91	3.2	109	86	23.6	30 - 130	30	
4,6-Dinitro-2-methylphenol	ND	230	37	41	10.3	88	60	37.8	30 - 130	30	r
4-Bromophenyl phenyl ether	ND	230	73	74	1.4	76	66	14.1	30 - 130	30	
4-Chloro-3-methylphenol	ND	230	74	74	0.0	91	67	30.4	30 - 130	30	
4-Chloroaniline	ND	230	66	62	6.3	80	62	25.4	30 - 130	30	
4-Chlorophenyl phenyl ether	ND	230	71	71	0.0	74	63	16.1	30 - 130	30	
4-Nitroaniline	ND	230	78	78	0.0	86	69	21.9	30 - 130	30	
4-Nitrophenol	ND	230	76	76	0.0	78	63	21.3	30 - 130	30	
Acenaphthene	ND	230	67	68	1.5	72	62	14.9	30 - 130	30	
Acenaphthylene	ND	130	67	66	1.5	70	60	15.4	30 - 130	30	
Acetophenone	ND	230	58	59	1.7	72	55	26.8	30 - 130	30	
Anthracene	ND	230	72	73	1.4	75	64	15.8	30 - 130	30	
Atrazine	ND	130	60	60	0.0	60	52	14.3	30 - 130	30	
Benz(a)anthracene	ND	230	72	71	1.4	74	64	14.5	30 - 130	30	
Benzaldehyde	ND	230	<10	<10	NC	97	76	24.3	30 - 130	30	l
Benzo(a)pyrene	ND	130	73	71	2.8	74	63	16.1	30 - 130	30	
Benzo(b)fluoranthene	ND	160	73	72	1.4	75	64	15.8	30 - 130	30	
Benzo(ghi)perylene	ND	230	69	68	1.5	68	60	12.5	30 - 130	30	
Benzo(k)fluoranthene	ND	230	73	72	1.4	73	63	14.7	30 - 130	30	
Benzyl butyl phthalate	ND	230	79	79	0.0	83	71	15.6	30 - 130	30	
Bis(2-chloroethoxy)methane	ND	230	65	66	1.5	74	60	20.9	30 - 130	30	
Bis(2-chloroethyl)ether	ND	130	52	54	3.8	64	52	20.7	30 - 130	30	
Bis(2-chloroisopropyl)ether	ND	230	47	49	4.2	57	46	21.4	30 - 130	30	
Bis(2-ethylhexyl)phthalate	ND	230	80	80	0.0	85	72	16.6	30 - 130	30	
Caprolactam	ND	230	76	76	0.0	88	65	30.1	30 - 130	30	
Carbazole	ND	230	74	75	1.3	76	65	15.6	30 - 130	30	
Chrysene	ND	230	73	71	2.8	74	65	12.9	30 - 130	30	
Dibenz(a,h)anthracene	ND	130	76	76	0.0	77	66	15.4	30 - 130	30	
Dibenzofuran	ND	230	69	69	0.0	73	62	16.3	30 - 130	30	

QA/QC Data

SDG I.D.: GCC71637

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
Diethyl phthalate	ND	230	73	72	1.4	75	63	17.4	30 - 130	30
Dimethylphthalate	ND	230	72	72	0.0	77	63	20.0	30 - 130	30
Di-n-butylphthalate	ND	670	80	80	0.0	80	69	14.8	30 - 130	30
Di-n-octylphthalate	ND	230	86	86	0.0	97	78	21.7	30 - 130	30
Fluoranthene	ND	230	73	73	0.0	74	64	14.5	30 - 130	30
Fluorene	ND	230	72	71	1.4	75	63	17.4	30 - 130	30
Hexachlorobenzene	ND	130	67	67	0.0	68	59	14.2	30 - 130	30
Hexachlorobutadiene	ND	230	58	62	6.7	64	57	11.6	30 - 130	30
Hexachlorocyclopentadiene	ND	230	55	58	5.3	59	47	22.6	30 - 130	30
Hexachloroethane	ND	130	49	53	7.8	56	49	13.3	30 - 130	30
Indeno(1,2,3-cd)pyrene	ND	230	78	78	0.0	78	65	18.2	30 - 130	30
Isophorone	ND	130	60	59	1.7	69	55	22.6	30 - 130	30
Naphthalene	ND	230	61	62	1.6	68	58	15.9	30 - 130	30
Nitrobenzene	ND	130	62	62	0.0	76	59	25.2	30 - 130	30
N-Nitrosodimethylamine	ND	230	49	54	9.7	67	52	25.2	30 - 130	30
N-Nitrosodi-n-propylamine	ND	130	64	66	3.1	80	59	30.2	30 - 130	30
N-Nitrosodiphenylamine	ND	130	73	71	2.8	75	63	17.4	30 - 130	30
Pentachlorophenol	ND	230	81	84	3.6	88	72	20.0	30 - 130	30
Phenanthrene	ND	130	71	71	0.0	72	62	14.9	30 - 130	30
Phenol	ND	230	66	69	4.4	82	60	31.0	30 - 130	30
Pyrene	ND	230	76	75	1.3	76	65	15.6	30 - 130	30
% 2,4,6-Tribromophenol	68	%	69	71	2.9	74	61	19.3	30 - 130	30
% 2-Fluorobiphenyl	63	%	64	64	0.0	64	59	8.1	30 - 130	30
% 2-Fluorophenol	58	%	61	64	4.8	77	59	26.5	30 - 130	30
% Nitrobenzene-d5	57	%	60	62	3.3	74	58	24.2	30 - 130	30
% Phenol-d5	63	%	65	66	1.5	81	58	33.1	30 - 130	30
% Terphenyl-d14	67	%	66	65	1.5	67	58	14.4	30 - 130	30

Comment:

Additional 8270 criteria: 20% of compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 15-110%, for soils 30-130%)

QA/QC Batch 471655 (ug/kg), QC Sample No: CC69975 (CC71640, CC71641 (1X, 50X) )

Volatiles - Soil

1,1,1,2-Tetrachloroethane	ND	5.0	86	87	1.2	81	78	3.8	70 - 130	30
1,1,1-Trichloroethane	ND	5.0	89	89	0.0	81	81	0.0	70 - 130	30
1,1,2,2-Tetrachloroethane	ND	3.0	86	88	2.3	83	90	8.1	70 - 130	30
1,1,2-Trichloroethane	ND	5.0	85	86	1.2	83	80	3.7	70 - 130	30
1,1-Dichloroethane	ND	5.0	106	106	0.0	100	99	1.0	70 - 130	30
1,1-Dichloroethene	ND	5.0	91	90	1.1	81	81	0.0	70 - 130	30
1,2,3-Trichlorobenzene	ND	5.0	85	83	2.4	85	96	12.2	70 - 130	30
1,2,4-Trichlorobenzene	ND	5.0	87	84	3.5	89	100	11.6	70 - 130	30
1,2-Dibromo-3-chloropropane	ND	5.0	74	77	4.0	71	79	10.7	70 - 130	30
1,2-Dibromoethane	ND	5.0	85	86	1.2	82	79	3.7	70 - 130	30
1,2-Dichlorobenzene	ND	5.0	89	88	1.1	89	96	7.6	70 - 130	30
1,2-Dichloroethane	ND	5.0	87	88	1.1	83	81	2.4	70 - 130	30
1,2-Dichloropropane	ND	5.0	91	91	0.0	87	85	2.3	70 - 130	30
1,3-Dichlorobenzene	ND	5.0	90	88	2.2	89	97	8.6	70 - 130	30
1,4-Dichlorobenzene	ND	5.0	89	87	2.3	89	96	7.6	70 - 130	30
1,4-dioxane	ND	100	86	83	3.6	87	92	5.6	70 - 130	30
2-Hexanone	ND	25	78	82	5.0	74	73	1.4	70 - 130	30
4-Methyl-2-pentanone	ND	25	83	85	2.4	79	79	0.0	70 - 130	30
Acetone	ND	10	69	72	4.3	62	63	1.6	70 - 130	30
Acrolein	ND	25	83	86	3.6	60	53	12.4	70 - 130	30

QA/QC Data

SDG I.D.: GCC71637

Parameter	Blk		LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
	Blank	RL								
Acrylonitrile	ND	5.0	101	106	4.8	96	96	0.0	70 - 130	30
Benzene	ND	1.0	91	90	1.1	85	84	1.2	70 - 130	30
Bromochloromethane	ND	5.0	91	92	1.1	88	86	2.3	70 - 130	30
Bromodichloromethane	ND	5.0	87	87	0.0	81	79	2.5	70 - 130	30
Bromoform	ND	5.0	79	81	2.5	71	69	2.9	70 - 130	30
Bromomethane	ND	5.0	93	92	1.1	88	87	1.1	70 - 130	30
Carbon Disulfide	ND	5.0	95	94	1.1	82	82	0.0	70 - 130	30
Carbon tetrachloride	ND	5.0	82	95	14.7	72	72	0.0	70 - 130	30
Chlorobenzene	ND	5.0	91	90	1.1	83	79	4.9	70 - 130	30
Chloroethane	ND	5.0	93	89	4.4	82	82	0.0	70 - 130	30
Chloroform	ND	5.0	90	90	0.0	84	83	1.2	70 - 130	30
Chloromethane	ND	5.0	88	89	1.1	79	81	2.5	70 - 130	30
cis-1,2-Dichloroethene	ND	5.0	91	91	0.0	86	85	1.2	70 - 130	30
cis-1,3-Dichloropropene	ND	5.0	86	86	0.0	81	78	3.8	70 - 130	30
Cyclohexane	ND	5.0	87	87	0.0	74	72	2.7	70 - 130	30
Dibromochloromethane	ND	3.0	88	88	0.0	81	80	1.2	70 - 130	30
Dichlorodifluoromethane	ND	5.0	98	96	2.1	86	88	2.3	70 - 130	30
Ethylbenzene	ND	1.0	91	89	2.2	81	78	3.8	70 - 130	30
Isopropylbenzene	ND	1.0	90	89	1.1	88	95	7.7	70 - 130	30
m&p-Xylene	ND	2.0	92	90	2.2	81	77	5.1	70 - 130	30
Methyl ethyl ketone	ND	5.0	82	86	4.8	76	83	8.8	70 - 130	30
Methyl t-butyl ether (MTBE)	ND	1.0	81	83	2.4	78	77	1.3	70 - 130	30
Methylacetate	ND	5.0	89	92	3.3	99	96	3.1	70 - 130	30
Methylcyclohexane	ND	5.0	93	90	3.3	71	67	5.8	70 - 130	30
Methylene chloride	ND	5.0	76	75	1.3	74	72	2.7	70 - 130	30
o-Xylene	ND	2.0	91	90	1.1	82	77	6.3	70 - 130	30
Styrene	ND	5.0	88	87	1.1	78	74	5.3	70 - 130	30
tert-butyl alcohol	ND	100	72	70	2.8	70	73	4.2	70 - 130	30
Tetrachloroethene	ND	5.0	92	89	3.3	79	76	3.9	70 - 130	30
Toluene	ND	1.0	91	90	1.1	83	81	2.4	70 - 130	30
trans-1,2-Dichloroethene	ND	5.0	89	88	1.1	80	78	2.5	70 - 130	30
trans-1,3-Dichloropropene	ND	5.0	82	82	0.0	76	74	2.7	70 - 130	30
Trichloroethene	ND	5.0	92	91	1.1	85	85	0.0	70 - 130	30
Trichlorofluoromethane	ND	5.0	91	90	1.1	79	81	2.5	70 - 130	30
Trichlorotrifluoroethane	ND	5.0	92	91	1.1	81	81	0.0	70 - 130	30
Vinyl chloride	ND	5.0	92	91	1.1	83	85	2.4	70 - 130	30
% 1,2-dichlorobenzene-d4	100	%	100	100	0.0	100	100	0.0	70 - 130	30
% Bromofluorobenzene	97	%	100	100	0.0	99	99	0.0	70 - 130	30
% Dibromofluoromethane	96	%	96	98	2.1	97	98	1.0	70 - 130	30
% Toluene-d8	97	%	100	99	1.0	99	99	0.0	70 - 130	30

Comment:

Additional 8260 criteria: 10% of LCS/LCSD compounds can be outside of acceptance criteria as long as recovery is 40-160%.

QA/QC Batch 471465 (ug/kg), QC Sample No: CC70824 (CC71639 (500X) )

Volatiles - Soil

Ethylbenzene	ND	1.0	106	105	0.9	111	107	3.7	70 - 130	30
Isopropylbenzene	ND	1.0	111	110	0.9	110	105	4.7	70 - 130	30
m&p-Xylene	ND	2.0	106	106	0.0	111	107	3.7	70 - 130	30
o-Xylene	ND	2.0	111	111	0.0	117	113	3.5	70 - 130	30
% 1,2-dichlorobenzene-d4	99	%	99	99	0.0	100	99	1.0	70 - 130	30
% Bromofluorobenzene	95	%	98	98	0.0	100	101	1.0	70 - 130	30
% Dibromofluoromethane	102	%	102	102	0.0	97	99	2.0	70 - 130	30
% Toluene-d8	99	%	100	100	0.0	100	100	0.0	70 - 130	30

## QA/QC Data

SDG I.D.: GCC71637

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
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Comment:

Additional 8260 criteria: 10% of LCS/LCSD compounds can be outside of acceptance criteria as long as recovery is 40-160%.

QA/QC Batch 471477 (ug/kg), QC Sample No: CC71637 (CC71637, CC71638, CC71639 (50X) , CC71641, CC71642, CC71643, CC71644, CC71645 (50X) , CC71646)

### Volatiles - Soil

1,1,1,2-Tetrachloroethane	ND	5.0	98	97	1.0	104	108	3.8	70 - 130	30
1,1,1-Trichloroethane	ND	5.0	97	95	2.1	103	102	1.0	70 - 130	30
1,1,2,2-Tetrachloroethane	ND	3.0	96	97	1.0	109	114	4.5	70 - 130	30
1,1,2-Trichloroethane	ND	5.0	95	95	0.0	112	110	1.8	70 - 130	30
1,1-Dichloroethane	ND	5.0	95	93	2.1	102	103	1.0	70 - 130	30
1,1-Dichloroethene	ND	5.0	97	94	3.1	78	84	7.4	70 - 130	30
1,2,3-Trichlorobenzene	ND	5.0	94	84	11.2	111	111	0.0	70 - 130	30
1,2,4-Trichlorobenzene	ND	5.0	95	81	15.9	115	115	0.0	70 - 130	30
1,2-Dibromo-3-chloropropane	ND	5.0	98	97	1.0	109	109	0.0	70 - 130	30
1,2-Dibromoethane	ND	5.0	95	94	1.1	108	107	0.9	70 - 130	30
1,2-Dichlorobenzene	ND	5.0	94	89	5.5	112	114	1.8	70 - 130	30
1,2-Dichloroethane	ND	5.0	97	95	2.1	109	107	1.9	70 - 130	30
1,2-Dichloropropane	ND	5.0	94	94	0.0	105	106	0.9	70 - 130	30
1,3-Dichlorobenzene	ND	5.0	95	87	8.8	111	113	1.8	70 - 130	30
1,4-Dichlorobenzene	ND	5.0	92	85	7.9	109	112	2.7	70 - 130	30
1,4-dioxane	ND	100	87	89	2.3	111	109	1.8	70 - 130	30
2-Hexanone	ND	25	94	90	4.3	108	105	2.8	70 - 130	30
4-Methyl-2-pentanone	ND	25	93	95	2.1	111	112	0.9	70 - 130	30
Acetone	ND	10	74	73	1.4	67	66	1.5	70 - 130	30
Acrolein	ND	25	89	88	1.1	86	89	3.4	70 - 130	30
Acrylonitrile	ND	5.0	94	92	2.2	107	107	0.0	70 - 130	30
Benzene	ND	1.0	94	93	1.1	105	105	0.0	70 - 130	30
Bromochloromethane	ND	5.0	97	94	3.1	109	106	2.8	70 - 130	30
Bromodichloromethane	ND	5.0	99	100	1.0	104	108	3.8	70 - 130	30
Bromoform	ND	5.0	103	102	1.0	103	109	5.7	70 - 130	30
Bromomethane	ND	5.0	83	82	1.2	82	81	1.2	70 - 130	30
Carbon Disulfide	ND	5.0	95	92	3.2	79	85	7.3	70 - 130	30
Carbon tetrachloride	ND	5.0	95	92	3.2	92	96	4.3	70 - 130	30
Chlorobenzene	ND	5.0	95	92	3.2	109	107	1.9	70 - 130	30
Chloroethane	ND	5.0	99	92	7.3	87	93	6.7	70 - 130	30
Chloroform	ND	5.0	95	92	3.2	104	103	1.0	70 - 130	30
Chloromethane	ND	5.0	77	74	4.0	85	83	2.4	70 - 130	30
cis-1,2-Dichloroethene	ND	5.0	92	90	2.2	104	103	1.0	70 - 130	30
cis-1,3-Dichloropropene	ND	5.0	94	94	0.0	106	107	0.9	70 - 130	30
Cyclohexane	ND	5.0	86	82	4.8	89	90	1.1	70 - 130	30
Dibromochloromethane	ND	3.0	101	102	1.0	104	108	3.8	70 - 130	30
Dichlorodifluoromethane	ND	5.0	73	68	7.1	74	74	0.0	70 - 130	30
Ethylbenzene	ND	1.0	97	91	6.4	107	109	1.9	70 - 130	30
Isopropylbenzene	ND	1.0	97	89	8.6	104	104	0.0	70 - 130	30
m&p-Xylene	ND	2.0	95	88	7.7	106	108	1.9	70 - 130	30
Methyl ethyl ketone	ND	5.0	94	93	1.1	108	106	1.9	70 - 130	30
Methyl t-butyl ether (MTBE)	ND	1.0	92	91	1.1	103	103	0.0	70 - 130	30
Methylacetate	ND	5.0	91	90	1.1	116	114	1.7	70 - 130	30
Methylcyclohexane	ND	5.0	93	86	7.8	101	101	0.0	70 - 130	30
Methylene chloride	ND	5.0	82	79	3.7	92	92	0.0	70 - 130	30
o-Xylene	ND	2.0	97	92	5.3	110	110	0.0	70 - 130	30
Styrene	ND	5.0	96	92	4.3	111	112	0.9	70 - 130	30

QA/QC Data

SDG I.D.: GCC71637

Parameter	Blank	Blk RL	LCS	LCSD	LCS	MS	MSD	MS	%	%
			%	%	RPD	%	%	RPD	Rec	RPD
<hr/>										
tert-butyl alcohol	ND	100	84	84	0.0	87	83	4.7	70 - 130	30
Tetrachloroethene	ND	5.0	97	90	7.5	111	111	0.0	70 - 130	30
Toluene	ND	1.0	94	92	2.2	106	106	0.0	70 - 130	30
trans-1,2-Dichloroethene	ND	5.0	96	94	2.1	106	103	2.9	70 - 130	30
trans-1,3-Dichloropropene	ND	5.0	91	91	0.0	103	104	1.0	70 - 130	30
Trichloroethene	ND	5.0	98	95	3.1	108	108	0.0	70 - 130	30
Trichlorofluoromethane	ND	5.0	91	86	5.6	74	72	2.7	70 - 130	30
Trichlorotrifluoroethane	ND	5.0	89	84	5.8	76	82	7.6	70 - 130	30
Vinyl chloride	ND	5.0	82	78	5.0	94	95	1.1	70 - 130	30
% 1,2-dichlorobenzene-d4	100	%	101	100	1.0	101	101	0.0	70 - 130	30
% Bromofluorobenzene	97	%	101	100	1.0	101	101	0.0	70 - 130	30
% Dibromofluoromethane	99	%	101	102	1.0	103	100	3.0	70 - 130	30
% Toluene-d8	97	%	99	100	1.0	98	100	2.0	70 - 130	30

Comment:

Additional 8260 criteria: 10% of LCS/LCSD compounds can be outside of acceptance criteria as long as recovery is 40-160%.


l = This parameter is outside laboratory LCS/LCSD specified recovery limits.

m = This parameter is outside laboratory MS/MSD specified recovery limits.

r = This parameter is outside laboratory RPD specified recovery limits.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

- RPD - Relative Percent Difference
- LCS - Laboratory Control Sample
- LCSD - Laboratory Control Sample Duplicate
- MS - Matrix Spike
- MS Dup - Matrix Spike Duplicate
- NC - No Criteria
- Intf - Interference

  
 Phyllis Shiller, Laboratory Director  
 April 02, 2019



Tuesday, April 02, 2019

Criteria: NY: 375, 375GWP, 375RRS, 375RS

State: NY

# Sample Criteria Exceedances Report

GCC71637 - EBC

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	Criteria	RL	Analysis Units
CC71637	\$PESTSM_NY	4,4' -DDE	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	4.9	2.2	3.3	3.3	3.3	ug/Kg
CC71637	\$PESTSM_NY	4,4' -DDT	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	33	2.2	3.3	3.3	3.3	ug/Kg
CC71637	CU-SM	Copper	NY / 375-6.8 Metals / Unrestricted Use Soil	63.4	0.6	50	50	50	mg/kg
CC71637	HG-SM	Mercury	NY / 375-6.8 Metals / Unrestricted Use Soil	0.23	0.07	0.18	0.18	0.18	mg/Kg
CC71637	PB-SMDP	Lead	NY / 375-6.8 Metals / Unrestricted Use Soil	152	6.5	63	63	63	mg/Kg
CC71637	ZN-SMDP	Zinc	NY / 375-6.8 Metals / Unrestricted Use Soil	184	6.5	109	109	109	mg/Kg
CC71639	\$DIOX_SMR	1,4-dioxane	NY / 375-6.8 Volatiles / Ground Water Protection	ND	3700	100	100	100	ug/kg
CC71639	\$DIOX_SMR	1,4-dioxane	NY / 375-6.8 Volatiles / Unrestricted Use Soil	ND	3700	100	100	100	ug/kg
CC71639	\$DP8260_TCLS	Total Xylenes	NY / 375-6.8 Volatiles / Ground Water Protection	254000	4700	1600	1600	1600	ug/Kg
CC71639	\$DP8260_TCLS	Total Xylenes	NY / 375-6.8 Volatiles / Residential Restricted	254000	4700	100000	100000	100000	ug/Kg
CC71639	\$DP8260_TCLS	Total Xylenes	NY / 375-6.8 Volatiles / Unrestricted Use Soil	254000	4700	260	260	260	ug/Kg
CC71639	\$DP8260_TCLS	Methyl ethyl ketone	NY / 375-6.8 Volatiles / Ground Water Protection	ND	190	120	120	120	ug/Kg
CC71639	\$DP8260_TCLS	Vinyl chloride	NY / 375-6.8 Volatiles / Ground Water Protection	ND	47	20	20	20	ug/Kg
CC71639	\$DP8260_TCLS	Ethylbenzene	NY / 375-6.8 Volatiles / Ground Water Protection	32000	4700	1000	1000	1000	ug/Kg
CC71639	\$DP8260_TCLS	Toluene	NY / 375-6.8 Volatiles / Ground Water Protection	5900	470	700	700	700	ug/Kg
CC71639	\$DP8260_TCLS	Acetone	NY / 375-6.8 Volatiles / Ground Water Protection	720	470	50	50	50	ug/Kg
CC71639	\$DP8260_TCLS	Methylene chloride	NY / 375-6.8 Volatiles / Ground Water Protection	ND	190	50	50	50	ug/Kg
CC71639	\$DP8260_TCLS	1,2-Dichloroethane	NY / 375-6.8 Volatiles / Ground Water Protection	ND	47	20	20	20	ug/Kg
CC71639	\$DP8260_TCLS	Ethylbenzene	NY / 375-6.8 Volatiles / Residential	32000	4700	30000	30000	30000	ug/Kg
CC71639	\$DP8260_TCLS	Toluene	NY / 375-6.8 Volatiles / Unrestricted Use Soil	5900	470	700	700	700	ug/Kg
CC71639	\$DP8260_TCLS	Vinyl chloride	NY / 375-6.8 Volatiles / Unrestricted Use Soil	ND	47	20	20	20	ug/Kg
CC71639	\$DP8260_TCLS	1,2-Dichloroethane	NY / 375-6.8 Volatiles / Unrestricted Use Soil	ND	47	20	20	20	ug/Kg
CC71639	\$DP8260_TCLS	Methylene chloride	NY / 375-6.8 Volatiles / Unrestricted Use Soil	ND	190	50	50	50	ug/Kg
CC71639	\$DP8260_TCLS	Methyl ethyl ketone	NY / 375-6.8 Volatiles / Unrestricted Use Soil	ND	190	120	120	120	ug/Kg
CC71639	\$DP8260_TCLS	Ethylbenzene	NY / 375-6.8 Volatiles / Unrestricted Use Soil	32000	4700	1000	1000	1000	ug/Kg
CC71639	\$DP8260_TCLS	Acetone	NY / 375-6.8 Volatiles / Unrestricted Use Soil	720	470	50	50	50	ug/Kg
CC71639	\$DP8270_TCL	2-Methylphenol (o-cresol)	NY / 375-6.8 Semivolatiles / Ground Water Protection	ND	720	330	330	330	ug/Kg
CC71639	\$DP8270_TCL	Benzo(k)fluoranthene	NY / 375-6.8 Semivolatiles / Ground Water Protection	39000	2500	1700	1700	1700	ug/Kg
CC71639	\$DP8270_TCL	Benzo(a)pyrene	NY / 375-6.8 Semivolatiles / Ground Water Protection	44000	1400	22000	22000	22000	ug/Kg
CC71639	\$DP8270_TCL	Phenol	NY / 375-6.8 Semivolatiles / Ground Water Protection	ND	720	330	330	330	ug/Kg
CC71639	\$DP8270_TCL	Benz(a)anthracene	NY / 375-6.8 Semivolatiles / Ground Water Protection	66000	2500	1000	1000	1000	ug/Kg
CC71639	\$DP8270_TCL	Indeno(1,2,3-cd)pyrene	NY / 375-6.8 Semivolatiles / Ground Water Protection	21000	2500	8200	8200	8200	ug/Kg
CC71639	\$DP8270_TCL	Benzo(b)fluoranthene	NY / 375-6.8 Semivolatiles / Ground Water Protection	45000	2500	1700	1700	1700	ug/Kg
CC71639	\$DP8270_TCL	Chrysene	NY / 375-6.8 Semivolatiles / Ground Water Protection	58000	2500	1000	1000	1000	ug/Kg
CC71639	\$DP8270_TCL	Benz(a)anthracene	NY / 375-6.8 Semivolatiles / Residential	66000	2500	1000	1000	1000	ug/Kg
CC71639	\$DP8270_TCL	Benzo(a)pyrene	NY / 375-6.8 Semivolatiles / Residential	44000	1400	1000	1000	1000	ug/Kg
CC71639	\$DP8270_TCL	Benzo(b)fluoranthene	NY / 375-6.8 Semivolatiles / Residential	45000	2500	1000	1000	1000	ug/Kg
CC71639	\$DP8270_TCL	Indeno(1,2,3-cd)pyrene	NY / 375-6.8 Semivolatiles / Residential	21000	2500	500	500	500	ug/Kg
CC71639	\$DP8270_TCL	Benzo(k)fluoranthene	NY / 375-6.8 Semivolatiles / Residential	39000	2500	1000	1000	1000	ug/Kg
CC71639	\$DP8270_TCL	Dibenz(a,h)anthracene	NY / 375-6.8 Semivolatiles / Residential	6300	1400	330	330	330	ug/Kg
CC71639	\$DP8270_TCL	Chrysene	NY / 375-6.8 Semivolatiles / Residential	58000	2500	1000	1000	1000	ug/Kg

Tuesday, April 02, 2019

Criteria: NY: 375, 375GWP, 375RRS, 375RS

State: NY

## Sample Criteria Exceedances Report

**GCC71637 - EBC**

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	Criteria	RL	Analysis Units
CC71639	\$DP8270_TCL	Benzo(b)fluoranthene	NY / 375-6.8 Semivolatiles / Residential Restricted	45000	2500	1000	1000	1000	ug/Kg
CC71639	\$DP8270_TCL	Indeno(1,2,3-cd)pyrene	NY / 375-6.8 Semivolatiles / Residential Restricted	21000	2500	500	500	500	ug/Kg
CC71639	\$DP8270_TCL	Dibenz(a,h)anthracene	NY / 375-6.8 Semivolatiles / Residential Restricted	6300	1400	330	330	330	ug/Kg
CC71639	\$DP8270_TCL	Chrysene	NY / 375-6.8 Semivolatiles / Residential Restricted	58000	2500	3900	3900	3900	ug/Kg
CC71639	\$DP8270_TCL	Benzo(a)anthracene	NY / 375-6.8 Semivolatiles / Residential Restricted	66000	2500	1000	1000	1000	ug/Kg
CC71639	\$DP8270_TCL	Benzo(k)fluoranthene	NY / 375-6.8 Semivolatiles / Residential Restricted	39000	2500	3900	3900	3900	ug/Kg
CC71639	\$DP8270_TCL	Benzo(a)pyrene	NY / 375-6.8 Semivolatiles / Residential Restricted	44000	1400	1000	1000	1000	ug/Kg
CC71639	\$DP8270_TCL	Dibenz(a,h)anthracene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	6300	1400	330	330	330	ug/Kg
CC71639	\$DP8270_TCL	2-Methylphenol (o-cresol)	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	ND	720	330	330	330	ug/Kg
CC71639	\$DP8270_TCL	Benzo(a)anthracene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	66000	2500	1000	1000	1000	ug/Kg
CC71639	\$DP8270_TCL	Chrysene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	58000	2500	1000	1000	1000	ug/Kg
CC71639	\$DP8270_TCL	Benzo(k)fluoranthene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	39000	2500	800	800	800	ug/Kg
CC71639	\$DP8270_TCL	Phenol	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	ND	720	330	330	330	ug/Kg
CC71639	\$DP8270_TCL	Indeno(1,2,3-cd)pyrene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	21000	2500	500	500	500	ug/Kg
CC71639	\$DP8270_TCL	Benzo(b)fluoranthene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	45000	2500	1000	1000	1000	ug/Kg
CC71639	\$DP8270_TCL	Benzo(a)pyrene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	44000	1400	1000	1000	1000	ug/Kg
CC71639	\$DP8270_TCL	Hexachlorobenzene	NY / 375-6.8 Volatiles / Residential	ND	720	330	330	330	ug/Kg
CC71639	\$DP8270_TCL	Dibenzofuran	NY / 375-6.8 Volatiles / Unrestricted Use Soil	ND	720	330	330	330	ug/Kg
CC71639	\$PESTSM_NY	Endrin	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	ND	36	14	14	14	ug/Kg
CC71639	\$PESTSM_NY	4,4' -DDD	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	130	22	3.3	3.3	3.3	ug/Kg
CC71639	\$PESTSM_NY	Dieldrin	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	25	15	5	5	5	ug/Kg
CC71639	\$PESTSM_NY	Aldrin	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	ND	15	5	5	5	ug/Kg
CC71639	\$PESTSM_NY	4,4' -DDE	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	ND	22	3.3	3.3	3.3	ug/Kg
CC71639	\$PESTSM_NY	4,4' -DDT	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	53	22	3.3	3.3	3.3	ug/Kg
CC71639	CU-SM	Copper	NY / 375-6.8 Metals / Unrestricted Use Soil	50.4	0.8	50	50	50	mg/kg
CC71639	HG-SM	Mercury	NY / 375-6.8 Metals / Unrestricted Use Soil	0.31	0.07	0.18	0.18	0.18	mg/Kg
CC71641	\$PESTSM_NY	4,4' -DDE	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	5.2	2.3	3.3	3.3	3.3	ug/Kg
CC71641	\$PESTSM_NY	4,4' -DDT	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	4.7	2.3	3.3	3.3	3.3	ug/Kg
CC71641	HG-SM	Mercury	NY / 375-6.8 Metals / Ground Water Protection	0.75	0.08	0.73	0.73	0.73	mg/Kg
CC71641	HG-SM	Mercury	NY / 375-6.8 Metals / Unrestricted Use Soil	0.75	0.08	0.18	0.18	0.18	mg/Kg
CC71643	\$PESTSM_NY	4,4' -DDT	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	7.0	2.2	3.3	3.3	3.3	ug/Kg
CC71643	HG-SM	Mercury	NY / 375-6.8 Metals / Unrestricted Use Soil	0.34	0.07	0.18	0.18	0.18	mg/Kg
CC71643	PB-SMDP	Lead	NY / 375-6.8 Metals / Unrestricted Use Soil	235	6.5	63	63	63	mg/Kg
CC71643	ZN-SMDP	Zinc	NY / 375-6.8 Metals / Unrestricted Use Soil	161	6.5	109	109	109	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.**  
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## Analysis Comments

April 02, 2019

SDG I.D.: GCC71637

The following analysis comments are made regarding exceptions to criteria not already noted in the Analysis Report or QA/QC Report:

### PEST Narration

**AU-ECD35 03/22/19-1:** CC71637, CC71639, CC71640, CC71641, CC71642, CC71643, CC71644

The following Continuing Calibration compounds did not meet % deviation criteria:

Samples: CC71640, CC71641, CC71642, CC71643, CC71644

Preceding CC 322A005 - Endosulfan sulfate 47%H (20%), Methoxychlor 28%H (20%)

Succeeding CC 322A021 - % DCBP 22%L (20%), 4,4'-DDE 43%L (20%), Endosulfan I 26%H (20%)

A low "1A" standard was run after the samples to demonstrate capability to detect any compounds outside of the CC acceptance criteria. All reported samples were ND for the affected compounds.

Samples: CC71637

Preceding CC 322A034 - 4,4'-DDE 34%L (20%), Endosulfan I 23%H (20%), Endosulfan sulfate 27%H (20%)

Succeeding CC 322A045 - 4,4'-DDE 37%L (20%), Endosulfan sulfate 61%H (20%)

A low "1A" standard was run after the samples to demonstrate capability to detect any compounds outside of the CC acceptance criteria. All reported samples were ND for the affected compounds.

Samples: CC71639

Preceding CC 322A045 - 4,4'-DDE 37%L (20%), Endosulfan sulfate 61%H (20%)

Succeeding CC 322A049 - % DCBP 23%L (20%), 4,4'-DDE 31%L (20%), Endosulfan sulfate 61%H (20%)

A low "1A" standard was run after the samples to demonstrate capability to detect any compounds outside of the CC acceptance criteria. All reported samples were ND for the affected compounds.

**AU-ECD35 03/25/19-1:** CC71638

The Endrin and DDT breakdown does not exceed 15% except for the following compounds:

325A005 (CC71638) - Endrin Breakdown (16%)

The Endrin and DDT breakdown does not exceed the maximum of 20% except for the following compounds: None. □

The following Continuing Calibration compounds did not meet % deviation criteria:

Samples: CC71638

Preceding CC 325A006 - Endosulfan sulfate 25%H (20%)

Succeeding CC 325A013 - None.

### SVOA Narration

**CHEM28 03/21/19-3:** CC71637, CC71638, CC71639, CC71640, CC71641, CC71642, CC71643, CC71644

The following Initial Calibration compounds did not meet RSD% criteria: 2,4-Dinitrophenol 25% (20%), 4,6-Dinitro-2-methylphenol 25% (20%), Bis(2-ethylhexyl)phthalate 21% (20%), Di-n-octylphthalate 33% (20%)

The following Initial Calibration compounds did not meet maximum RSD% criteria: None.

The following Initial Calibration compounds did not meet recommended response factors: 2-Nitrophenol 0.048 (0.1)

The following Initial Calibration compounds did not meet minimum response factors: None.

The following Continuing Calibration compounds did not meet recommended response factors: 2-Nitrophenol 0.050 (0.1), Hexachlorobenzene 0.093 (0.1)

The following Continuing Calibration compounds did not meet minimum response factors: None.

Up to eight compounds can be outside of ICAL %RSD criteria and up to sixteen compounds can be outside of CCAL %Dev criteria if less than 40%.

### VOA Narration

**CHEM03 03/22/19-1:** CC71640, CC71641



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## Analysis Comments

April 02, 2019

SDG I.D.: GCC71637

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The following Initial Calibration compounds did not meet RSD% criteria: Chloroethane 32% (20%), Methylene chloride 22% (20%)  
The following Initial Calibration compounds did not meet maximum RSD% criteria: None.  
The following Initial Calibration compounds did not meet recommended response factors: Acetone 0.084 (0.1), Acrolein 0.045 (0.05)  
The following Initial Calibration compounds did not meet minimum response factors: None.

The following Continuing Calibration compounds did not meet recommended response factors: Acrolein 0.035 (0.05)  
The following Continuing Calibration compounds did not meet minimum response factors: None.

Up to eight compounds can be outside of ICAL %RSD criteria and up to sixteen compounds can be outside of CCAL %Dev criteria if less than 40%.

**CHEM31 03/21/19-1:** CC71637, CC71638, CC71639, CC71641, CC71642, CC71643, CC71644, CC71645, CC71646

The following Initial Calibration compounds did not meet RSD% criteria: Acetone 32% (20%), Bromoform 21% (20%), Chloroethane 24% (20%), Methylene chloride 25% (20%)  
The following Initial Calibration compounds did not meet maximum RSD% criteria: None.  
The following Initial Calibration compounds did not meet recommended response factors: Bromoform 0.078 (0.1), Tetrachloroethene 0.159 (0.2)  
The following Initial Calibration compounds did not meet minimum response factors: None.

The following Continuing Calibration compounds did not meet recommended response factors: Bromoform 0.080 (0.1)  
The following Continuing Calibration compounds did not meet minimum response factors: None.

Up to eight compounds can be outside of ICAL %RSD criteria and up to sixteen compounds can be outside of CCAL %Dev criteria if less than 40%.



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# NY Temperature Narration

April 02, 2019

SDG I.D.: GCC71637

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The samples in this delivery group were received at 2.4°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**

Coolant: Yes  No   
 IPK  ICE   
 Temp 2.6 Pg 1 of 1  
 Contact Options:

Fax: \_\_\_\_\_  
 Phone: 631-504-6000  
 Email: JL

Project P.O.:

Project: 1840 PARK AVE, MANHATTAN  
 Report to: Environmental Business Consultants  
 Invoice to: Environmental Business Consultants

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

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

Sampler's Signature: TONY BALADO Date: 3-19-19

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

Analysis Request

TAL Metals 6310 7/27  
TCL VOCs 8250  
TCL VOCs 8270  
TCL VOCs 8270

PHOENIX USE ONLY SAMPLE #	Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled	NY	NJ	Turnaround:	State where samples were collected:
71037	SB4 (0-2)	S	3-19-19	11:40	X	X	1 Day*	NJ
71038	SB4 (16-18)			11:55			2 Days*	NJ
71039	SB5 (0-2)			9:27			3 Days*	NJ
71040	SB5 (16-18)			9:44			5 Days	NJ
71041	SB6 (0-2)			8:50			10 Days	NJ
71042	SB6 (16-18)			9:00			Other	NJ
71043	SB7 (0-2)			11:15			* SURCHARGE APPLIES	NJ
71044	SB7 (16-18)			11:25				NJ
71045	T8 WL							NJ
71046	T8 LL							NJ

Relinquished by: [Signature] Date: 3-20-19 Time: 12:44  
 Accepted by: [Signature] Date: 3-20-19 Time: 10:00

Comments, Special Requirements or Regulations:

Res. Criteria  Non-Res. Criteria  Impact to GW Soil Cleanup Criteria  GW Criteria

NY  NY 375 GWP  NY 375 Unrestricted Use Soil  NY 375 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: NJ



Tuesday, April 02, 2019

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

Project ID: 1840 PARK AVE, MANHATTAN  
SDG ID: GCC71631  
Sample ID#s: CC71631 - CC71636

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 that reads "Phyllis Shiller". The signature is written in a cursive style.

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



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## SDG Comments

April 02, 2019

SDG I.D.: GCC71631

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### 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/ECD method 504 or 8011 to achieve this criteria.

### 8081 Pesticides:

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





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Tel. (860) 645-1102 Fax (860) 645-0823



## Sample Id Cross Reference

April 02, 2019

SDG I.D.: GCC71631

Project ID: 1840 PARK AVE, MANHATTAN

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Client Id	Lab Id	Matrix
MW1	CC71631	GROUND WATER
MW2	CC71632	GROUND WATER
MW3	CC71633	GROUND WATER
MW4	CC71634	GROUND WATER
GW DUPLICATE	CC71635	GROUND WATER
TRIP BLANKS	CC71636	WATER



Environmental Laboratories, Inc.  
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# Analysis Report

April 02, 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

03/19/19  
 03/20/19

## Time

8:35  
 16:00

## Laboratory Data

SDG ID: GCC71631  
 Phoenix ID: CC71631

Project ID: 1840 PARK AVE, MANHATTAN  
 Client ID: MW1

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.005	0.005		mg/L	1	03/22/19	CPP	SW6010D
Aluminum	1.43	0.010		mg/L	1	03/22/19	CPP	SW6010D
Arsenic - LDL	< 0.004	0.004		mg/L	1	03/22/19	CPP	SW6010D
Barium	0.078	0.010		mg/L	1	03/22/19	CPP	SW6010D
Beryllium	< 0.001	0.001		mg/L	1	03/22/19	CPP	SW6010D
Calcium	78.2	0.010		mg/L	1	03/22/19	CPP	SW6010D
Cadmium	< 0.004	0.004		mg/L	1	03/22/19	CPP	SW6010D
Cobalt	< 0.005	0.005		mg/L	1	03/22/19	CPP	SW6010D
Chromium	0.002	0.001		mg/L	1	03/22/19	CPP	SW6010D
Copper	0.007	0.005		mg/L	1	03/22/19	CPP	SW6010D
Silver (Dissolved)	< 0.005	0.005		mg/L	1	03/22/19	CPP	SW6010D
Aluminum (Dissolved)	0.042	0.011		mg/L	1	03/22/19	CPP	SW6010D
Arsenic, (Dissolved)	< 0.003	0.003		mg/L	1	03/22/19	CPP	SW6010D
Barium (Dissolved)	0.046	0.011		mg/L	1	03/22/19	CPP	SW6010D
Beryllium (Dissolved)	< 0.001	0.001		mg/L	1	03/22/19	CPP	SW6010D
Calcium (Dissolved)	80.6	0.01		mg/L	1	03/22/19	CPP	SW6010D
Cadmium (Dissolved)	< 0.004	0.004		mg/L	1	03/22/19	CPP	SW6010D
Cobalt, (Dissolved)	< 0.005	0.005		mg/L	1	03/22/19	CPP	SW6010D
Chromium (Dissolved)	< 0.001	0.001		mg/L	1	03/22/19	CPP	SW6010D
Copper, (Dissolved)	< 0.005	0.005		mg/L	1	03/22/19	CPP	SW6010D
Iron, (Dissolved)	< 0.01	0.01		mg/L	1	03/22/19	CPP	SW6010D
Mercury (Dissolved)	< 0.0002	0.0002		mg/L	1	03/22/19	RS	SW7470A
Potassium (Dissolved)	10.2	0.1		mg/L	1	03/22/19	CPP	SW6010D
Magnesium (Dissolved)	11.3	0.01		mg/L	1	03/22/19	CPP	SW6010D
Manganese, (Dissolved)	0.262	0.005		mg/L	1	03/22/19	CPP	SW6010D
Sodium (Dissolved)	215	1.1		mg/L	10	03/25/19	TH	SW6010D
Nickel, (Dissolved)	< 0.004	0.004		mg/L	1	03/22/19	CPP	SW6010D
Lead (Dissolved)	< 0.002	0.002		mg/L	1	03/22/19	CPP	SW6010D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Antimony (Dissolved)-LDL	< 0.0003	0.0003		mg/L	1	03/21/19	CPP	SW6020B
Selenium (Dissolved)-LDL	< 0.01	0.01		mg/L	5	03/22/19	CPP	SW6020B
Thallium (Dissolved)	< 0.0003	0.0003		mg/L	1	03/21/19	CPP	SW6020B
Vanadium, (Dissolved)	< 0.011	0.011		mg/L	1	03/22/19	CPP	SW6010D
Zinc, (Dissolved)	< 0.011	0.011		mg/L	1	03/22/19	CPP	SW6010D
Iron	1.30	0.01		mg/L	1	03/22/19	CPP	SW6010D
Mercury	< 0.0002	0.0002		mg/L	1	03/21/19	RS	SW7470A
Potassium	10.6	0.1		mg/L	1	03/22/19	CPP	SW6010D
Magnesium	11.3	0.010		mg/L	1	03/22/19	CPP	SW6010D
Manganese	0.335	0.005		mg/L	1	03/22/19	CPP	SW6010D
Sodium	256	10		mg/L	100	03/25/19	TH	SW6010D
Nickel	< 0.004	0.004		mg/L	1	03/22/19	CPP	SW6010D
Lead	< 0.002	0.002		mg/L	1	03/22/19	CPP	SW6010D
Antimony	< 0.0030	0.0030		mg/L	5	03/22/19	CPP	SW6020B
Selenium	< 0.010	0.010		mg/L	5	03/22/19	CPP	SW6020B
Thallium	< 0.0005	0.0005		mg/L	5	03/22/19	CPP	SW6020B
Vanadium	< 0.010	0.010		mg/L	1	03/22/19	CPP	SW6010D
Zinc	< 0.010	0.010		mg/L	1	03/22/19	CPP	SW6010D
Filtration	Completed					03/20/19	AG	0.45um Filter
Dissolved Mercury Digestion	Completed					03/21/19	I/I	SW7470A
Mercury Digestion	Completed					03/21/19	I/I	SW7470A
PCB Extraction (2 Liter)	Completed					03/20/19	E/N	SW3510C
Extraction for Pest (2 Liter)	Completed					03/20/19	E/N	SW3510C
Semi-Volatile Extraction	Completed					03/20/19	P/AK	SW3520C
Dissolved Metals Preparation	Completed					03/20/19	AG	SW3005A
Dissolved Metals Preparation	Completed					03/20/19	AG	SW3005A
Total Metals Digestion	Completed					03/21/19	AG	
Total Metals Digestion MS	Completed					03/21/19	AG	

### Polychlorinated Biphenyls

PCB-1016	ND	0.049		ug/L	1	03/21/19	SC	SW8082A
PCB-1221	ND	0.049		ug/L	1	03/21/19	SC	SW8082A
PCB-1232	ND	0.049		ug/L	1	03/21/19	SC	SW8082A
PCB-1242	ND	0.049		ug/L	1	03/21/19	SC	SW8082A
PCB-1248	ND	0.049		ug/L	1	03/21/19	SC	SW8082A
PCB-1254	ND	0.049		ug/L	1	03/21/19	SC	SW8082A
PCB-1260	ND	0.049		ug/L	1	03/21/19	SC	SW8082A
PCB-1262	ND	0.049		ug/L	1	03/21/19	SC	SW8082A
PCB-1268	ND	0.049		ug/L	1	03/21/19	SC	SW8082A

### QA/QC Surrogates

% DCBP	59			%	1	03/21/19	SC	30 - 150 %
% DCBP (Confirmation)	63			%	1	03/21/19	SC	30 - 150 %
% TCMX	70			%	1	03/21/19	SC	30 - 150 %
% TCMX (Confirmation)	69			%	1	03/21/19	SC	30 - 150 %

### Pesticides

4,4' -DDD	ND	0.010		ug/L	1	03/25/19	CW	SW8081B
4,4' -DDE	ND	0.010		ug/L	1	03/25/19	CW	SW8081B
4,4' -DDT	ND	0.010		ug/L	1	03/25/19	CW	SW8081B
a-BHC	ND	0.005		ug/L	1	03/25/19	CW	SW8081B

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
a-chlordane	ND	0.010		ug/L	1	03/25/19	CW	SW8081B
Alachlor	ND	0.074		ug/L	1	03/25/19	CW	SW8081B
Aldrin	ND	0.002		ug/L	1	03/25/19	CW	SW8081B
b-BHC	ND	0.005		ug/L	1	03/25/19	CW	SW8081B
Chlordane	ND	0.05		ug/L	1	03/25/19	CW	SW8081B
d-BHC	ND	0.005		ug/L	1	03/25/19	CW	SW8081B
Dieldrin	0.011	0.002		ug/L	1	03/25/19	CW	SW8081B
Endosulfan I	ND	0.010		ug/L	1	03/25/19	CW	SW8081B
Endosulfan II	ND	0.010		ug/L	1	03/25/19	CW	SW8081B
Endosulfan Sulfate	ND	0.010		ug/L	1	03/25/19	CW	SW8081B
Endrin	ND	0.010		ug/L	1	03/25/19	CW	SW8081B
Endrin Aldehyde	ND	0.010		ug/L	1	03/25/19	CW	SW8081B
Endrin ketone	ND	0.010		ug/L	1	03/25/19	CW	SW8081B
g-BHC (Lindane)	ND	0.005		ug/L	1	03/25/19	CW	SW8081B
g-chlordane	ND	0.010		ug/L	1	03/25/19	CW	SW8081B
Heptachlor	ND	0.010		ug/L	1	03/25/19	CW	SW8081B
Heptachlor epoxide	ND	0.010		ug/L	1	03/25/19	CW	SW8081B
Methoxychlor	ND	0.098		ug/L	1	03/25/19	CW	SW8081B
Toxaphene	ND	0.25		ug/L	1	03/25/19	CW	SW8081B
<b><u>QA/QC Surrogates</u></b>								
%DCBP (Surrogate Rec)	48			%	1	03/25/19	CW	30 - 150 %
%DCBP (Surrogate Rec) (Confirmation)	53			%	1	03/25/19	CW	30 - 150 %
%TCMX (Surrogate Rec)	56			%	1	03/25/19	CW	30 - 150 %
%TCMX (Surrogate Rec) (Confirmation)	75			%	1	03/25/19	CW	30 - 150 %
<b><u>1,4-dioxane</u></b>								
1,4-dioxane	ND	100		ug/l	1	03/22/19	MH	SW8260C
<b><u>Volatiles</u></b>								
1,1,1-Trichloroethane	ND	2.0	0.25	ug/L	1	03/22/19	MH	SW8260C
1,1,2,2-Tetrachloroethane	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
1,1,2-Trichloroethane	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
1,1-Dichloroethane	ND	2.0	0.25	ug/L	1	03/22/19	MH	SW8260C
1,1-Dichloroethene	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
1,2,3-Trichlorobenzene	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
1,2,4-Trichlorobenzene	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
1,2-Dibromo-3-chloropropane	ND	0.50	0.50	ug/L	1	03/22/19	MH	SW8260C
1,2-Dibromoethane	ND	0.25	0.25	ug/L	1	03/22/19	MH	SW8260C
1,2-Dichlorobenzene	ND	2.0	0.25	ug/L	1	03/22/19	MH	SW8260C
1,2-Dichloroethane	ND	0.60	0.25	ug/L	1	03/22/19	MH	SW8260C
1,2-Dichloropropane	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
1,3-Dichlorobenzene	ND	2.0	0.25	ug/L	1	03/22/19	MH	SW8260C
1,4-Dichlorobenzene	ND	2.0	0.25	ug/L	1	03/22/19	MH	SW8260C
2-Hexanone	ND	2.5	2.5	ug/L	1	03/22/19	MH	SW8260C
4-Methyl-2-pentanone	ND	2.5	2.5	ug/L	1	03/22/19	MH	SW8260C
Acetone	ND	5.0	2.5	ug/L	1	03/22/19	MH	SW8260C
Benzene	ND	0.70	0.25	ug/L	1	03/22/19	MH	SW8260C
Bromochloromethane	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
Bromodichloromethane	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
Bromoform	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Bromomethane	ND	2.0	0.25	ug/L	1	03/22/19	MH	SW8260C
Carbon Disulfide	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
Carbon tetrachloride	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
Chlorobenzene	ND	2.0	0.25	ug/L	1	03/22/19	MH	SW8260C
Chloroethane	ND	2.0	0.25	ug/L	1	03/22/19	MH	SW8260C
Chloroform	3.5	2.0	0.25	ug/L	1	03/22/19	MH	SW8260C
Chloromethane	ND	2.0	0.25	ug/L	1	03/22/19	MH	SW8260C
cis-1,2-Dichloroethene	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
cis-1,3-Dichloropropene	ND	0.40	0.25	ug/L	1	03/22/19	MH	SW8260C
Cyclohexane	ND	5.0	0.50	ug/L	1	03/22/19	MH	SW8260C
Dibromochloromethane	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
Dichlorodifluoromethane	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
Ethylbenzene	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
Isopropylbenzene	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
m&p-Xylene	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
Methyl ethyl ketone	ND	5.0	2.5	ug/L	1	03/22/19	MH	SW8260C
Methyl t-butyl ether (MTBE)	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
Methylacetate	ND	2.5	2.5	ug/L	1	03/22/19	MH	SW8260C
Methylcyclohexane	ND	2.0	0.50	ug/L	1	03/22/19	MH	SW8260C
Methylene chloride	ND	3.0	1.0	ug/L	1	03/22/19	MH	SW8260C
o-Xylene	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
Styrene	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
Tetrachloroethene	5.4	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
Toluene	ND	2.0	0.25	ug/L	1	03/22/19	MH	SW8260C
Total Xylenes	ND	1.0	1.0	ug/L	1	03/22/19	MH	SW8260C
trans-1,2-Dichloroethene	ND	2.0	0.25	ug/L	1	03/22/19	MH	SW8260C
trans-1,3-Dichloropropene	ND	0.40	0.25	ug/L	1	03/22/19	MH	SW8260C
Trichloroethene	1.3	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
Trichlorofluoromethane	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
Trichlorotrifluoroethane	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
Vinyl chloride	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
<b>QA/QC Surrogates</b>								
% 1,2-dichlorobenzene-d4	94			%	1	03/22/19	MH	70 - 130 %
% Bromofluorobenzene	99			%	1	03/22/19	MH	70 - 130 %
% Dibromofluoromethane	89			%	1	03/22/19	MH	70 - 130 %
% Toluene-d8	92			%	1	03/22/19	MH	70 - 130 %
Volatile Library Search Top 10						Completed	03/25/19	MH
<b>Semivolatiles</b>								
1,1-Biphenyl	ND	3.5	3.5	ug/L	1	03/22/19	WB	SW8270D
1,2,4,5-Tetrachlorobenzene	ND	3.5	3.5	ug/L	1	03/22/19	WB	SW8270D
2,3,4,6-tetrachlorophenol	ND	1.0	0.91	ug/L	1	03/22/19	WB	SW8270D
2,4,5-Trichlorophenol	ND	1.0	0.91	ug/L	1	03/22/19	WB	SW8270D
2,4,6-Trichlorophenol	ND	1.0	0.91	ug/L	1	03/22/19	WB	SW8270D
2,4-Dichlorophenol	ND	1.0	0.91	ug/L	1	03/22/19	WB	SW8270D
2,4-Dimethylphenol	ND	1.0	0.91	ug/L	1	03/22/19	WB	SW8270D
2,4-Dinitrophenol	ND	1.0	0.91	ug/L	1	03/22/19	WB	SW8270D
2,4-Dinitrotoluene	ND	5.0	2.0	ug/L	1	03/22/19	WB	SW8270D
2,6-Dinitrotoluene	ND	5.0	1.6	ug/L	1	03/22/19	WB	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
2-Chloronaphthalene	ND	5.1	1.4	ug/L	1	03/22/19	WB	SW8270D
2-Chlorophenol	ND	1.0	0.91	ug/L	1	03/22/19	WB	SW8270D
2-Methylnaphthalene	ND	5.1	1.5	ug/L	1	03/22/19	WB	SW8270D
2-Methylphenol (o-cresol)	ND	1.0	0.91	ug/L	1	03/22/19	WB	SW8270D
2-Nitroaniline	ND	5.0	5.0	ug/L	1	03/22/19	WB	SW8270D
2-Nitrophenol	ND	1.0	0.91	ug/L	1	03/22/19	WB	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	5.1	0.91	ug/L	1	03/22/19	WB	SW8270D
3,3'-Dichlorobenzidine	ND	5.0	2.4	ug/L	1	03/22/19	WB	SW8270D
3-Nitroaniline	ND	5.0	5.0	ug/L	1	03/22/19	WB	SW8270D
4,6-Dinitro-2-methylphenol	ND	1.0	3.5	ug/L	1	03/22/19	WB	SW8270D
4-Bromophenyl phenyl ether	ND	5.1	1.5	ug/L	1	03/22/19	WB	SW8270D
4-Chloro-3-methylphenol	ND	1.0	0.91	ug/L	1	03/22/19	WB	SW8270D
4-Chloroaniline	ND	5.0	2.4	ug/L	1	03/22/19	WB	SW8270D
4-Chlorophenyl phenyl ether	ND	5.1	1.7	ug/L	1	03/22/19	WB	SW8270D
4-Nitroaniline	ND	5.0	1.7	ug/L	1	03/22/19	WB	SW8270D
4-Nitrophenol	ND	1.0	0.91	ug/L	1	03/22/19	WB	SW8270D
Acenaphthene	ND	5.1	1.5	ug/L	1	03/22/19	WB	SW8270D
Acetophenone	ND	5.1	1.6	ug/L	1	03/22/19	WB	SW8270D
Atrazine	ND	1.0	1.0	ug/L	1	03/22/19	WB	SW8270D
Benzaldehyde	ND	5.1	1.5	ug/L	1	03/22/19	WB	SW8270D
Benzyl butyl phthalate	ND	5.1	1.3	ug/L	1	03/22/19	WB	SW8270D
Bis(2-chloroethoxy)methane	ND	5.0	1.4	ug/L	1	03/22/19	WB	SW8270D
Bis(2-chloroisopropyl)ether	ND	5.1	1.4	ug/L	1	03/22/19	WB	SW8270D
Bis(2-ethylhexyl)phthalate	ND	1.0	1.0	ug/L	1	03/22/19	WB	SW8270D
Caprolactam	ND	5.1	9.0	ug/L	1	03/22/19	WB	SW8270D
Carbazole	ND	5.1	3.8	ug/L	1	03/22/19	WB	SW8270D
Dibenzofuran	ND	5.0	1.5	ug/L	1	03/22/19	WB	SW8270D
Diethyl phthalate	4.8	J 5.1	1.6	ug/L	1	03/22/19	WB	SW8270D
Dimethylphthalate	ND	5.1	1.6	ug/L	1	03/22/19	WB	SW8270D
Di-n-butylphthalate	ND	5.1	1.3	ug/L	1	03/22/19	WB	SW8270D
Di-n-octylphthalate	ND	5.1	1.3	ug/L	1	03/22/19	WB	SW8270D
Hexachlorocyclopentadiene	ND	5.0	1.5	ug/L	1	03/22/19	WB	SW8270D
Hexachloroethane	ND	1.0	1.0	ug/L	1	03/22/19	WB	SW8270D
Isophorone	ND	5.1	1.4	ug/L	1	03/22/19	WB	SW8270D
Naphthalene	ND	5.0	1.5	ug/L	1	03/22/19	WB	SW8270D
N-Nitrosodi-n-propylamine	ND	5.1	1.6	ug/L	1	03/22/19	WB	SW8270D
N-Nitrosodiphenylamine	ND	5.1	1.9	ug/L	1	03/22/19	WB	SW8270D
Phenol	ND	1.0	0.91	ug/L	1	03/22/19	WB	SW8270D
<b><u>QA/QC Surrogates</u></b>								
% 2,4,6-Tribromophenol	88			%	1	03/22/19	WB	15 - 110 %
% 2-Fluorobiphenyl	83			%	1	03/22/19	WB	30 - 130 %
% 2-Fluorophenol	65			%	1	03/22/19	WB	15 - 110 %
% Nitrobenzene-d5	77			%	1	03/22/19	WB	30 - 130 %
% Phenol-d5	59			%	1	03/22/19	WB	15 - 110 %
% Terphenyl-d14	89			%	1	03/22/19	WB	30 - 130 %
<b><u>Semivolatiles</u></b>								
Acenaphthylene	ND	0.51	0.51	ug/L	1	03/22/19	WB	SW8270D (SIM)
Anthracene	ND	0.51	0.51	ug/L	1	03/22/19	WB	SW8270D (SIM)
Benz(a)anthracene	ND	0.02	0.02	ug/L	1	03/22/19	WB	SW8270D (SIM)

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Benzo(a)pyrene	ND	0.02	0.02	ug/L	1	03/22/19	WB	SW8270D (SIM)
Benzo(b)fluoranthene	ND	0.02	0.02	ug/L	1	03/22/19	WB	SW8270D (SIM)
Benzo(ghi)perylene	ND	0.51	0.51	ug/L	1	03/22/19	WB	SW8270D (SIM)
Benzo(k)fluoranthene	ND	0.02	0.02	ug/L	1	03/22/19	WB	SW8270D (SIM)
Bis(2-chloroethyl)ether	ND	0.51	0.51	ug/L	1	03/22/19	WB	SW8270D (SIM)
Chrysene	ND	0.02	0.02	ug/L	1	03/22/19	WB	SW8270D (SIM)
Dibenz(a,h)anthracene	ND	0.51	0.51	ug/L	1	03/22/19	WB	SW8270D (SIM)
Fluoranthene	ND	0.51	0.51	ug/L	1	03/22/19	WB	SW8270D (SIM)
Fluorene	ND	0.51	0.51	ug/L	1	03/22/19	WB	SW8270D (SIM)
Hexachlorobenzene	ND	0.04	0.04	ug/L	1	03/22/19	WB	SW8270D (SIM)
Hexachlorobutadiene	ND	0.50	0.50	ug/L	1	03/22/19	WB	SW8270D (SIM)
Hexachlorocyclopentadiene	ND	0.51	0.51	ug/L	1	03/22/19	WB	SW8270D (SIM)
Indeno(1,2,3-cd)pyrene	ND	0.02	0.02	ug/L	1	03/22/19	WB	SW8270D (SIM)
Nitrobenzene	ND	0.40	0.40	ug/L	1	03/22/19	WB	SW8270D (SIM)
N-Nitrosodimethylamine	ND	0.20	0.20	ug/L	1	03/22/19	WB	SW8270D (SIM)
Pentachlorophenol	ND	0.51	0.51	ug/L	1	03/22/19	WB	SW8270D (SIM)
Phenanthrene	ND	0.51	0.51	ug/L	1	03/22/19	WB	SW8270D (SIM)
Pyrene	ND	0.51	0.51	ug/L	1	03/22/19	WB	SW8270D (SIM)
<b>QA/QC Surrogates</b>								
% 2,4,6-Tribromophenol	110			%	1	03/22/19	WB	15 - 110 %
% 2-Fluorobiphenyl	88			%	1	03/22/19	WB	30 - 130 %
% 2-Fluorophenol	78			%	1	03/22/19	WB	15 - 110 %
% Nitrobenzene-d5	101			%	1	03/22/19	WB	30 - 130 %
% Phenol-d5	88			%	1	03/22/19	WB	15 - 110 %
% Terphenyl-d14	89			%	1	03/22/19	WB	30 - 130 %

SVOA Library Search Top 15      Completed      03/25/19      MR

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 at RL/PQL  
 BRL=Below Reporting Level L=Biased Low J=Estimated Below RL LOD=Limit of Detection MDL=Method Detection Limit  
 QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

**Comments:**

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**

**April 02, 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

April 02, 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

03/19/19  
 03/20/19

## Time

10:10  
 16:00

## Laboratory Data

SDG ID: GCC71631  
 Phoenix ID: CC71632

Project ID: 1840 PARK AVE, MANHATTAN  
 Client ID: MW2

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.005	0.005		mg/L	1	03/22/19	CPP	SW6010D
Aluminum	1.99	0.010		mg/L	1	03/22/19	CPP	SW6010D
Arsenic - LDL	< 0.004	0.004		mg/L	1	03/22/19	CPP	SW6010D
Barium	0.070	0.010		mg/L	1	03/22/19	CPP	SW6010D
Beryllium	< 0.001	0.001		mg/L	1	03/22/19	CPP	SW6010D
Calcium	138	0.010		mg/L	1	03/22/19	CPP	SW6010D
Cadmium	< 0.004	0.004		mg/L	1	03/22/19	CPP	SW6010D
Cobalt	< 0.005	0.005		mg/L	1	03/22/19	CPP	SW6010D
Chromium	0.003	0.001		mg/L	1	03/22/19	CPP	SW6010D
Copper	0.012	0.005		mg/L	1	03/22/19	CPP	SW6010D
Silver (Dissolved)	< 0.005	0.005		mg/L	1	03/22/19	CPP	SW6010D
Aluminum (Dissolved)	0.060	0.011		mg/L	1	03/22/19	CPP	SW6010D
Arsenic, (Dissolved)	< 0.003	0.003		mg/L	1	03/22/19	CPP	SW6010D
Barium (Dissolved)	0.039	0.011		mg/L	1	03/22/19	CPP	SW6010D
Beryllium (Dissolved)	< 0.001	0.001		mg/L	1	03/22/19	CPP	SW6010D
Calcium (Dissolved)	137	0.01		mg/L	1	03/22/19	CPP	SW6010D
Cadmium (Dissolved)	< 0.004	0.004		mg/L	1	03/22/19	CPP	SW6010D
Cobalt, (Dissolved)	< 0.005	0.005		mg/L	1	03/22/19	CPP	SW6010D
Chromium (Dissolved)	< 0.001	0.001		mg/L	1	03/22/19	CPP	SW6010D
Copper, (Dissolved)	< 0.005	0.005		mg/L	1	03/22/19	CPP	SW6010D
Iron, (Dissolved)	< 0.01	0.01		mg/L	1	03/22/19	CPP	SW6010D
Mercury (Dissolved)	< 0.0002	0.0002		mg/L	1	03/22/19	RS	SW7470A
Potassium (Dissolved)	12.4	0.1		mg/L	1	03/22/19	CPP	SW6010D
Magnesium (Dissolved)	18.9	0.01		mg/L	1	03/22/19	CPP	SW6010D
Manganese, (Dissolved)	0.890	0.005		mg/L	1	03/22/19	CPP	SW6010D
Sodium (Dissolved)	295	1.1		mg/L	10	03/25/19	TH	SW6010D
Nickel, (Dissolved)	< 0.004	0.004		mg/L	1	03/22/19	CPP	SW6010D
Lead (Dissolved)	< 0.002	0.002		mg/L	1	03/22/19	CPP	SW6010D



Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Antimony (Dissolved)-LDL	< 0.0003	0.0003		mg/L	1	03/21/19	CPP	SW6020B
Selenium (Dissolved)-LDL	< 0.01	0.01		mg/L	5	03/24/19	CPP	SW6020B
Thallium (Dissolved)	< 0.0003	0.0003		mg/L	1	03/21/19	CPP	SW6020B
Vanadium, (Dissolved)	< 0.011	0.011		mg/L	1	03/22/19	CPP	SW6010D
Zinc, (Dissolved)	< 0.011	0.011		mg/L	1	03/22/19	CPP	SW6010D
Iron	2.00	0.01		mg/L	1	03/22/19	CPP	SW6010D
Mercury	< 0.0002	0.0002		mg/L	1	03/21/19	RS	SW7470A
Potassium	12.9	0.1		mg/L	1	03/22/19	CPP	SW6010D
Magnesium	20.4	0.010		mg/L	1	03/22/19	CPP	SW6010D
Manganese	1.01	0.005		mg/L	1	03/22/19	CPP	SW6010D
Sodium	314	10		mg/L	100	03/25/19	TH	SW6010D
Nickel	0.006	0.004		mg/L	1	03/22/19	CPP	SW6010D
Lead	0.003	0.002		mg/L	1	03/22/19	CPP	SW6010D
Antimony	< 0.0030	0.0030		mg/L	5	03/22/19	CPP	SW6020B
Selenium	< 0.010	0.010		mg/L	5	03/22/19	CPP	SW6020B
Thallium	< 0.0005	0.0005		mg/L	5	03/22/19	CPP	SW6020B
Vanadium	< 0.010	0.010		mg/L	1	03/22/19	CPP	SW6010D
Zinc	< 0.010	0.010		mg/L	1	03/22/19	CPP	SW6010D
Filtration	Completed					03/20/19	AG	0.45um Filter
Dissolved Mercury Digestion	Completed					03/21/19	I/I	SW7470A
Mercury Digestion	Completed					03/21/19	I/I	SW7470A
PCB Extraction (2 Liter)	Completed					03/20/19	E/N	SW3510C
Extraction for Pest (2 Liter)	Completed					03/20/19	E/N	SW3510C
Semi-Volatile Extraction	Completed					03/20/19	P/AK	SW3520C
Dissolved Metals Preparation	Completed					03/20/19	AG	SW3005A
Dissolved Metals Preparation	Completed					03/20/19	AG	SW3005A
Total Metals Digestion	Completed					03/21/19	AG	
Total Metals Digestion MS	Completed					03/21/19	AG	

### Polychlorinated Biphenyls

PCB-1016	ND	0.050		ug/L	1	03/21/19	SC	SW8082A
PCB-1221	ND	0.050		ug/L	1	03/21/19	SC	SW8082A
PCB-1232	ND	0.050		ug/L	1	03/21/19	SC	SW8082A
PCB-1242	ND	0.050		ug/L	1	03/21/19	SC	SW8082A
PCB-1248	ND	0.050		ug/L	1	03/21/19	SC	SW8082A
PCB-1254	ND	0.050		ug/L	1	03/21/19	SC	SW8082A
PCB-1260	ND	0.050		ug/L	1	03/21/19	SC	SW8082A
PCB-1262	ND	0.050		ug/L	1	03/21/19	SC	SW8082A
PCB-1268	ND	0.050		ug/L	1	03/21/19	SC	SW8082A

### QA/QC Surrogates

% DCBP	65			%	1	03/21/19	SC	30 - 150 %
% DCBP (Confirmation)	71			%	1	03/21/19	SC	30 - 150 %
% TCMX	69			%	1	03/21/19	SC	30 - 150 %
% TCMX (Confirmation)	73			%	1	03/21/19	SC	30 - 150 %

### Pesticides

4,4' -DDD	ND	0.010		ug/L	1	03/25/19	PS	SW8081B
4,4' -DDE	ND	0.010		ug/L	1	03/25/19	PS	SW8081B
4,4' -DDT	ND	0.010		ug/L	1	03/25/19	PS	SW8081B
a-BHC	ND	0.005		ug/L	1	03/25/19	PS	SW8081B

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
a-chlordane	ND	0.010		ug/L	1	03/25/19	PS	SW8081B
Alachlor	ND	0.075		ug/L	1	03/25/19	PS	SW8081B
Aldrin	ND	0.002		ug/L	1	03/25/19	PS	SW8081B
b-BHC	ND	0.005		ug/L	1	03/25/19	PS	SW8081B
Chlordane	ND	0.050		ug/L	1	03/25/19	PS	SW8081B
d-BHC	ND	0.005		ug/L	1	03/25/19	PS	SW8081B
Dieldrin	0.004	0.002		ug/L	1	03/25/19	PS	SW8081B
Endosulfan I	ND	0.010		ug/L	1	03/25/19	PS	SW8081B
Endosulfan II	ND	0.010		ug/L	1	03/25/19	PS	SW8081B
Endosulfan Sulfate	ND	0.010		ug/L	1	03/25/19	PS	SW8081B
Endrin	ND	0.010		ug/L	1	03/25/19	PS	SW8081B
Endrin Aldehyde	ND	0.010		ug/L	1	03/25/19	PS	SW8081B
Endrin ketone	ND	0.010		ug/L	1	03/25/19	PS	SW8081B
g-BHC (Lindane)	ND	0.005		ug/L	1	03/25/19	PS	SW8081B
g-chlordane	ND	0.010		ug/L	1	03/25/19	PS	SW8081B
Heptachlor	ND	0.010		ug/L	1	03/25/19	PS	SW8081B
Heptachlor epoxide	ND	0.010		ug/L	1	03/25/19	PS	SW8081B
Methoxychlor	ND	0.10		ug/L	1	03/25/19	PS	SW8081B
Toxaphene	ND	0.25		ug/L	1	03/25/19	PS	SW8081B
<b><u>QA/QC Surrogates</u></b>								
%DCBP (Surrogate Rec)	56			%	1	03/25/19	PS	30 - 150 %
%DCBP (Surrogate Rec) (Confirmation)	61			%	1	03/25/19	PS	30 - 150 %
%TCMX (Surrogate Rec)	64			%	1	03/25/19	PS	30 - 150 %
%TCMX (Surrogate Rec) (Confirmation)	79			%	1	03/25/19	PS	30 - 150 %
<b><u>1,4-dioxane</u></b>								
1,4-dioxane	ND	100		ug/l	1	03/22/19	MH	SW8260C
<b><u>Volatiles</u></b>								
1,1,1-Trichloroethane	ND	2.0	0.25	ug/L	1	03/22/19	MH	SW8260C
1,1,2,2-Tetrachloroethane	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
1,1,2-Trichloroethane	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
1,1-Dichloroethane	ND	2.0	0.25	ug/L	1	03/22/19	MH	SW8260C
1,1-Dichloroethene	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
1,2,3-Trichlorobenzene	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
1,2,4-Trichlorobenzene	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
1,2-Dibromo-3-chloropropane	ND	0.50	0.50	ug/L	1	03/22/19	MH	SW8260C
1,2-Dibromoethane	ND	0.25	0.25	ug/L	1	03/22/19	MH	SW8260C
1,2-Dichlorobenzene	ND	2.0	0.25	ug/L	1	03/22/19	MH	SW8260C
1,2-Dichloroethane	ND	0.60	0.25	ug/L	1	03/22/19	MH	SW8260C
1,2-Dichloropropane	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
1,3-Dichlorobenzene	ND	2.0	0.25	ug/L	1	03/22/19	MH	SW8260C
1,4-Dichlorobenzene	ND	2.0	0.25	ug/L	1	03/22/19	MH	SW8260C
2-Hexanone	ND	2.5	2.5	ug/L	1	03/22/19	MH	SW8260C
4-Methyl-2-pentanone	ND	2.5	2.5	ug/L	1	03/22/19	MH	SW8260C
Acetone	ND	5.0	2.5	ug/L	1	03/22/19	MH	SW8260C
Benzene	ND	0.70	0.25	ug/L	1	03/22/19	MH	SW8260C
Bromochloromethane	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
Bromodichloromethane	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
Bromoform	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Bromomethane	ND	2.0	0.25	ug/L	1	03/22/19	MH	SW8260C
Carbon Disulfide	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
Carbon tetrachloride	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
Chlorobenzene	ND	2.0	0.25	ug/L	1	03/22/19	MH	SW8260C
Chloroethane	ND	2.0	0.25	ug/L	1	03/22/19	MH	SW8260C
Chloroform	1.3	J 2.0	0.25	ug/L	1	03/22/19	MH	SW8260C
Chloromethane	ND	2.0	0.25	ug/L	1	03/22/19	MH	SW8260C
cis-1,2-Dichloroethene	0.86	J 1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
cis-1,3-Dichloropropene	ND	0.40	0.25	ug/L	1	03/22/19	MH	SW8260C
Cyclohexane	ND	5.0	0.50	ug/L	1	03/22/19	MH	SW8260C
Dibromochloromethane	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
Dichlorodifluoromethane	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
Ethylbenzene	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
Isopropylbenzene	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
m&p-Xylene	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
Methyl ethyl ketone	ND	5.0	2.5	ug/L	1	03/22/19	MH	SW8260C
Methyl t-butyl ether (MTBE)	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
Methylacetate	ND	2.5	2.5	ug/L	1	03/22/19	MH	SW8260C
Methylcyclohexane	ND	2.0	0.50	ug/L	1	03/22/19	MH	SW8260C
Methylene chloride	ND	3.0	1.0	ug/L	1	03/22/19	MH	SW8260C
o-Xylene	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
Styrene	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
Tetrachloroethene	7.0	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
Toluene	ND	2.0	0.25	ug/L	1	03/22/19	MH	SW8260C
Total Xylenes	ND	1.0	1.0	ug/L	1	03/22/19	MH	SW8260C
trans-1,2-Dichloroethene	ND	2.0	0.25	ug/L	1	03/22/19	MH	SW8260C
trans-1,3-Dichloropropene	ND	0.40	0.25	ug/L	1	03/22/19	MH	SW8260C
Trichloroethene	1.9	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
Trichlorofluoromethane	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
Trichlorotrifluoroethane	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
Vinyl chloride	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
<b>QA/QC Surrogates</b>								
% 1,2-dichlorobenzene-d4	94			%	1	03/22/19	MH	70 - 130 %
% Bromofluorobenzene	102			%	1	03/22/19	MH	70 - 130 %
% Dibromofluoromethane	93			%	1	03/22/19	MH	70 - 130 %
% Toluene-d8	94			%	1	03/22/19	MH	70 - 130 %
Volatile Library Search Top 10						Completed	03/25/19	MH
<b>Semivolatiles</b>								
1,1-Biphenyl	ND	3.4	3.4	ug/L	1	03/22/19	WB	SW8270D
1,2,4,5-Tetrachlorobenzene	ND	3.4	3.4	ug/L	1	03/22/19	WB	SW8270D
2,3,4,6-tetrachlorophenol	ND	1.0	0.88	ug/L	1	03/22/19	WB	SW8270D
2,4,5-Trichlorophenol	ND	1.0	0.88	ug/L	1	03/22/19	WB	SW8270D
2,4,6-Trichlorophenol	ND	1.0	0.88	ug/L	1	03/22/19	WB	SW8270D
2,4-Dichlorophenol	ND	1.0	0.88	ug/L	1	03/22/19	WB	SW8270D
2,4-Dimethylphenol	ND	1.0	0.88	ug/L	1	03/22/19	WB	SW8270D
2,4-Dinitrophenol	ND	1.0	0.88	ug/L	1	03/22/19	WB	SW8270D
2,4-Dinitrotoluene	ND	4.9	1.9	ug/L	1	03/22/19	WB	SW8270D
2,6-Dinitrotoluene	ND	4.9	1.5	ug/L	1	03/22/19	WB	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
2-Chloronaphthalene	ND	4.9	1.4	ug/L	1	03/22/19	WB	SW8270D
2-Chlorophenol	ND	1.0	0.88	ug/L	1	03/22/19	WB	SW8270D
2-Methylnaphthalene	ND	4.9	1.5	ug/L	1	03/22/19	WB	SW8270D
2-Methylphenol (o-cresol)	ND	1.0	0.88	ug/L	1	03/22/19	WB	SW8270D
2-Nitroaniline	ND	4.9	4.9	ug/L	1	03/22/19	WB	SW8270D
2-Nitrophenol	ND	1.0	0.88	ug/L	1	03/22/19	WB	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	4.9	0.88	ug/L	1	03/22/19	WB	SW8270D
3,3'-Dichlorobenzidine	ND	4.9	2.3	ug/L	1	03/22/19	WB	SW8270D
3-Nitroaniline	ND	4.9	11	ug/L	1	03/22/19	WB	SW8270D
4,6-Dinitro-2-methylphenol	ND	1.0	3.4	ug/L	1	03/22/19	WB	SW8270D
4-Bromophenyl phenyl ether	ND	4.9	1.4	ug/L	1	03/22/19	WB	SW8270D
4-Chloro-3-methylphenol	ND	1.0	0.88	ug/L	1	03/22/19	WB	SW8270D
4-Chloroaniline	ND	4.9	2.3	ug/L	1	03/22/19	WB	SW8270D
4-Chlorophenyl phenyl ether	ND	4.9	1.6	ug/L	1	03/22/19	WB	SW8270D
4-Nitroaniline	ND	4.9	1.6	ug/L	1	03/22/19	WB	SW8270D
4-Nitrophenol	ND	1.0	0.88	ug/L	1	03/22/19	WB	SW8270D
Acenaphthene	ND	4.9	1.5	ug/L	1	03/22/19	WB	SW8270D
Acetophenone	ND	4.9	1.5	ug/L	1	03/22/19	WB	SW8270D
Atrazine	ND	0.98	0.98	ug/L	1	03/22/19	WB	SW8270D
Benzaldehyde	ND	4.9	1.5	ug/L	1	03/22/19	WB	SW8270D
Benzyl butyl phthalate	ND	4.9	1.3	ug/L	1	03/22/19	WB	SW8270D
Bis(2-chloroethoxy)methane	ND	4.9	1.4	ug/L	1	03/22/19	WB	SW8270D
Bis(2-chloroisopropyl)ether	ND	4.9	1.4	ug/L	1	03/22/19	WB	SW8270D
Bis(2-ethylhexyl)phthalate	ND	0.98	0.98	ug/L	1	03/22/19	WB	SW8270D
Caprolactam	ND	4.9	8.8	ug/L	1	03/22/19	WB	SW8270D
Carbazole	ND	4.9	3.7	ug/L	1	03/22/19	WB	SW8270D
Dibenzofuran	ND	4.9	1.4	ug/L	1	03/22/19	WB	SW8270D
Diethyl phthalate	ND	4.9	1.5	ug/L	1	03/22/19	WB	SW8270D
Dimethylphthalate	ND	4.9	1.5	ug/L	1	03/22/19	WB	SW8270D
Di-n-butylphthalate	ND	4.9	1.3	ug/L	1	03/22/19	WB	SW8270D
Di-n-octylphthalate	ND	4.9	1.3	ug/L	1	03/22/19	WB	SW8270D
Hexachlorocyclopentadiene	ND	4.9	1.5	ug/L	1	03/22/19	WB	SW8270D
Hexachloroethane	ND	0.98	0.98	ug/L	1	03/22/19	WB	SW8270D
Isophorone	ND	4.9	1.4	ug/L	1	03/22/19	WB	SW8270D
Naphthalene	ND	4.9	1.4	ug/L	1	03/22/19	WB	SW8270D
N-Nitrosodi-n-propylamine	ND	4.9	1.6	ug/L	1	03/22/19	WB	SW8270D
N-Nitrosodiphenylamine	ND	4.9	1.9	ug/L	1	03/22/19	WB	SW8270D
Phenol	ND	1.0	0.88	ug/L	1	03/22/19	WB	SW8270D
<b><u>QA/QC Surrogates</u></b>								
% 2,4,6-Tribromophenol	89			%	1	03/22/19	WB	15 - 110 %
% 2-Fluorobiphenyl	84			%	1	03/22/19	WB	30 - 130 %
% 2-Fluorophenol	59			%	1	03/22/19	WB	15 - 110 %
% Nitrobenzene-d5	74			%	1	03/22/19	WB	30 - 130 %
% Phenol-d5	50			%	1	03/22/19	WB	15 - 110 %
% Terphenyl-d14	88			%	1	03/22/19	WB	30 - 130 %
<b><u>Semivolatiles</u></b>								
Acenaphthylene	ND	0.49	0.49	ug/L	1	03/22/19	WB	SW8270D (SIM)
Anthracene	ND	0.49	0.49	ug/L	1	03/22/19	WB	SW8270D (SIM)
Benz(a)anthracene	ND	0.02	0.02	ug/L	1	03/22/19	WB	SW8270D (SIM)

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Benzo(a)pyrene	ND	0.02	0.02	ug/L	1	03/22/19	WB	SW8270D (SIM)
Benzo(b)fluoranthene	ND	0.02	0.02	ug/L	1	03/22/19	WB	SW8270D (SIM)
Benzo(ghi)perylene	ND	0.49	0.49	ug/L	1	03/22/19	WB	SW8270D (SIM)
Benzo(k)fluoranthene	ND	0.02	0.02	ug/L	1	03/22/19	WB	SW8270D (SIM)
Bis(2-chloroethyl)ether	ND	0.49	0.49	ug/L	1	03/22/19	WB	SW8270D (SIM)
Chrysene	ND	0.02	0.02	ug/L	1	03/22/19	WB	SW8270D (SIM)
Dibenz(a,h)anthracene	ND	0.49	0.49	ug/L	1	03/22/19	WB	SW8270D (SIM)
Fluoranthene	ND	0.49	0.49	ug/L	1	03/22/19	WB	SW8270D (SIM)
Fluorene	ND	0.49	0.49	ug/L	1	03/22/19	WB	SW8270D (SIM)
Hexachlorobenzene	ND	0.04	0.04	ug/L	1	03/22/19	WB	SW8270D (SIM)
Hexachlorobutadiene	ND	0.49	0.49	ug/L	1	03/22/19	WB	SW8270D (SIM)
Hexachlorocyclopentadiene	ND	0.49	0.49	ug/L	1	03/22/19	WB	SW8270D (SIM)
Indeno(1,2,3-cd)pyrene	ND	0.02	0.02	ug/L	1	03/22/19	WB	SW8270D (SIM)
Nitrobenzene	ND	0.39	0.39	ug/L	1	03/22/19	WB	SW8270D (SIM)
N-Nitrosodimethylamine	ND	0.20	0.20	ug/L	1	03/22/19	WB	SW8270D (SIM)
Pentachlorophenol	ND	0.49	0.49	ug/L	1	03/22/19	WB	SW8270D (SIM)
Phenanthrene	ND	0.49	0.49	ug/L	1	03/22/19	WB	SW8270D (SIM)
Pyrene	ND	0.49	0.49	ug/L	1	03/22/19	WB	SW8270D (SIM)
<b>QA/QC Surrogates</b>								
% 2,4,6-Tribromophenol	107			%	1	03/22/19	WB	15 - 110 %
% 2-Fluorobiphenyl	87			%	1	03/22/19	WB	30 - 130 %
% 2-Fluorophenol	72			%	1	03/22/19	WB	15 - 110 %
% Nitrobenzene-d5	97			%	1	03/22/19	WB	30 - 130 %
% Phenol-d5	74			%	1	03/22/19	WB	15 - 110 %
% Terphenyl-d14	81			%	1	03/22/19	WB	30 - 130 %

SVOA Library Search Top 15      Completed      03/25/19      MR

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 at RL/PQL  
 BRL=Below Reporting Level L=Biased Low J=Estimated Below RL LOD=Limit of Detection MDL=Method Detection Limit  
 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:**

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**

**April 02, 2019**

**Reviewed and Released by: Phyllis Shiller, Laboratory Director**



Environmental Laboratories, Inc.  
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# Analysis Report

April 02, 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

03/19/19  
 03/20/19

## Time

10:45  
 16:00

## Laboratory Data

SDG ID: GCC71631  
 Phoenix ID: CC71633

Project ID: 1840 PARK AVE, MANHATTAN  
 Client ID: MW3

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.005	0.005		mg/L	1	03/22/19	CPP	SW6010D
Aluminum	2.80	0.010		mg/L	1	03/22/19	CPP	SW6010D
Arsenic - LDL	< 0.004	0.004		mg/L	1	03/22/19	CPP	SW6010D
Barium	0.076	0.010		mg/L	1	03/22/19	CPP	SW6010D
Beryllium	< 0.001	0.001		mg/L	1	03/22/19	CPP	SW6010D
Calcium	99.4	0.010		mg/L	1	03/22/19	CPP	SW6010D
Cadmium	< 0.004	0.004		mg/L	1	03/22/19	CPP	SW6010D
Cobalt	< 0.005	0.005		mg/L	1	03/22/19	CPP	SW6010D
Chromium	0.004	0.001		mg/L	1	03/22/19	CPP	SW6010D
Copper	0.012	0.005		mg/L	1	03/22/19	CPP	SW6010D
Silver (Dissolved)	< 0.005	0.005		mg/L	1	03/22/19	CPP	SW6010D
Aluminum (Dissolved)	0.048	0.011		mg/L	1	03/22/19	CPP	SW6010D
Arsenic, (Dissolved)	< 0.003	0.003		mg/L	1	03/22/19	CPP	SW6010D
Barium (Dissolved)	0.052	0.011		mg/L	1	03/22/19	CPP	SW6010D
Beryllium (Dissolved)	< 0.001	0.001		mg/L	1	03/22/19	CPP	SW6010D
Calcium (Dissolved)	101	0.01		mg/L	1	03/22/19	CPP	SW6010D
Cadmium (Dissolved)	< 0.004	0.004		mg/L	1	03/22/19	CPP	SW6010D
Cobalt, (Dissolved)	< 0.005	0.005		mg/L	1	03/22/19	CPP	SW6010D
Chromium (Dissolved)	< 0.001	0.001		mg/L	1	03/22/19	CPP	SW6010D
Copper, (Dissolved)	< 0.005	0.005		mg/L	1	03/22/19	CPP	SW6010D
Iron, (Dissolved)	< 0.01	0.01		mg/L	1	03/22/19	CPP	SW6010D
Mercury (Dissolved)	< 0.0002	0.0002		mg/L	1	03/22/19	RS	SW7470A
Potassium (Dissolved)	10.6	0.1		mg/L	1	03/22/19	CPP	SW6010D
Magnesium (Dissolved)	15.4	0.01		mg/L	1	03/22/19	CPP	SW6010D
Manganese, (Dissolved)	1.11	0.005		mg/L	1	03/22/19	CPP	SW6010D
Sodium (Dissolved)	242	1.1		mg/L	10	03/25/19	TH	SW6010D
Nickel, (Dissolved)	< 0.004	0.004		mg/L	1	03/22/19	CPP	SW6010D
Lead (Dissolved)	< 0.002	0.002		mg/L	1	03/22/19	CPP	SW6010D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Antimony (Dissolved)-LDL	< 0.0003	0.0003		mg/L	1	03/21/19	CPP	SW6020B
Selenium (Dissolved)-LDL	< 0.01	0.01		mg/L	5	03/24/19	CPP	SW6020B
Thallium (Dissolved)	< 0.0003	0.0003		mg/L	1	03/21/19	CPP	SW6020B
Vanadium, (Dissolved)	< 0.011	0.011		mg/L	1	03/22/19	CPP	SW6010D
Zinc, (Dissolved)	< 0.011	0.011		mg/L	1	03/22/19	CPP	SW6010D
Iron	3.16	0.01		mg/L	1	03/22/19	CPP	SW6010D
Mercury	< 0.0002	0.0002		mg/L	1	03/21/19	RS	SW7470A
Potassium	11.0	0.1		mg/L	1	03/22/19	CPP	SW6010D
Magnesium	16.4	0.010		mg/L	1	03/22/19	CPP	SW6010D
Manganese	1.31	0.005		mg/L	1	03/22/19	CPP	SW6010D
Sodium	247	10		mg/L	100	03/25/19	TH	SW6010D
Nickel	0.007	0.004		mg/L	1	03/22/19	CPP	SW6010D
Lead	< 0.002	0.002		mg/L	1	03/22/19	CPP	SW6010D
Antimony	< 0.0030	0.0030		mg/L	5	03/22/19	CPP	SW6020B
Selenium	< 0.010	0.010		mg/L	5	03/22/19	CPP	SW6020B
Thallium	< 0.0005	0.0005		mg/L	5	03/22/19	CPP	SW6020B
Vanadium	< 0.010	0.010		mg/L	1	03/22/19	CPP	SW6010D
Zinc	< 0.010	0.010		mg/L	1	03/22/19	CPP	SW6010D
Filtration	Completed					03/20/19	AG	0.45um Filter
Dissolved Mercury Digestion	Completed					03/21/19	I/I	SW7470A
Mercury Digestion	Completed					03/21/19	I/I	SW7470A
PCB Extraction (2 Liter)	Completed					03/20/19	E/N	SW3510C
Extraction for Pest (2 Liter)	Completed					03/20/19	E/N	SW3510C
Semi-Volatile Extraction	Completed					03/20/19	P/AK	SW3520C
Dissolved Metals Preparation	Completed					03/20/19	AG	SW3005A
Dissolved Metals Preparation	Completed					03/20/19	AG	SW3005A
Total Metals Digestion	Completed					03/21/19	AG	
Total Metals Digestion MS	Completed					03/21/19	AG	

**Polychlorinated Biphenyls**

PCB-1016	ND	0.049		ug/L	1	03/21/19	SC	SW8082A
PCB-1221	ND	0.049		ug/L	1	03/21/19	SC	SW8082A
PCB-1232	ND	0.049		ug/L	1	03/21/19	SC	SW8082A
PCB-1242	ND	0.049		ug/L	1	03/21/19	SC	SW8082A
PCB-1248	ND	0.049		ug/L	1	03/21/19	SC	SW8082A
PCB-1254	ND	0.049		ug/L	1	03/21/19	SC	SW8082A
PCB-1260	ND	0.049		ug/L	1	03/21/19	SC	SW8082A
PCB-1262	ND	0.049		ug/L	1	03/21/19	SC	SW8082A
PCB-1268	ND	0.049		ug/L	1	03/21/19	SC	SW8082A

**QA/QC Surrogates**

% DCBP	62			%	1	03/21/19	SC	30 - 150 %
% DCBP (Confirmation)	66			%	1	03/21/19	SC	30 - 150 %
% TCMX	66			%	1	03/21/19	SC	30 - 150 %
% TCMX (Confirmation)	65			%	1	03/21/19	SC	30 - 150 %

**Pesticides**

4,4' -DDD	ND	0.010		ug/L	1	03/25/19	CW	SW8081B
4,4' -DDE	ND	0.010		ug/L	1	03/25/19	CW	SW8081B
4,4' -DDT	ND	0.010		ug/L	1	03/25/19	CW	SW8081B
a-BHC	ND	0.005		ug/L	1	03/25/19	CW	SW8081B

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
a-chlordane	ND	0.010		ug/L	1	03/25/19	CW	SW8081B
Alachlor	ND	0.074		ug/L	1	03/25/19	CW	SW8081B
Aldrin	ND	0.002		ug/L	1	03/25/19	CW	SW8081B
b-BHC	ND	0.005		ug/L	1	03/25/19	CW	SW8081B
Chlordane	ND	0.05		ug/L	1	03/25/19	CW	SW8081B
d-BHC	ND	0.005		ug/L	1	03/25/19	CW	SW8081B
Dieldrin	0.016	0.002		ug/L	1	03/25/19	CW	SW8081B
Endosulfan I	ND	0.010		ug/L	1	03/25/19	CW	SW8081B
Endosulfan II	ND	0.010		ug/L	1	03/25/19	CW	SW8081B
Endosulfan Sulfate	ND	0.010		ug/L	1	03/25/19	CW	SW8081B
Endrin	ND	0.010		ug/L	1	03/25/19	CW	SW8081B
Endrin Aldehyde	ND	0.010		ug/L	1	03/25/19	CW	SW8081B
Endrin ketone	ND	0.010		ug/L	1	03/25/19	CW	SW8081B
g-BHC (Lindane)	ND	0.005		ug/L	1	03/25/19	CW	SW8081B
g-chlordane	ND	0.010		ug/L	1	03/25/19	CW	SW8081B
Heptachlor	ND	0.010		ug/L	1	03/25/19	CW	SW8081B
Heptachlor epoxide	ND	0.010		ug/L	1	03/25/19	CW	SW8081B
Methoxychlor	ND	0.098		ug/L	1	03/25/19	CW	SW8081B
Toxaphene	ND	0.25		ug/L	1	03/25/19	CW	SW8081B
<b><u>QA/QC Surrogates</u></b>								
%DCBP (Surrogate Rec)	56			%	1	03/25/19	CW	30 - 150 %
%DCBP (Surrogate Rec) (Confirmation)	62			%	1	03/25/19	CW	30 - 150 %
%TCMX (Surrogate Rec)	56			%	1	03/25/19	CW	30 - 150 %
%TCMX (Surrogate Rec) (Confirmation)	75			%	1	03/25/19	CW	30 - 150 %
<b><u>1,4-dioxane</u></b>								
1,4-dioxane	ND	100		ug/l	1	03/22/19	MH	SW8260C
<b><u>Volatiles</u></b>								
1,1,1-Trichloroethane	ND	2.0	0.25	ug/L	1	03/22/19	MH	SW8260C
1,1,2,2-Tetrachloroethane	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
1,1,2-Trichloroethane	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
1,1-Dichloroethane	ND	2.0	0.25	ug/L	1	03/22/19	MH	SW8260C
1,1-Dichloroethene	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
1,2,3-Trichlorobenzene	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
1,2,4-Trichlorobenzene	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
1,2-Dibromo-3-chloropropane	ND	0.50	0.50	ug/L	1	03/22/19	MH	SW8260C
1,2-Dibromoethane	ND	0.25	0.25	ug/L	1	03/22/19	MH	SW8260C
1,2-Dichlorobenzene	ND	2.0	0.25	ug/L	1	03/22/19	MH	SW8260C
1,2-Dichloroethane	ND	0.60	0.25	ug/L	1	03/22/19	MH	SW8260C
1,2-Dichloropropane	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
1,3-Dichlorobenzene	ND	2.0	0.25	ug/L	1	03/22/19	MH	SW8260C
1,4-Dichlorobenzene	ND	2.0	0.25	ug/L	1	03/22/19	MH	SW8260C
2-Hexanone	ND	2.5	2.5	ug/L	1	03/22/19	MH	SW8260C
4-Methyl-2-pentanone	ND	2.5	2.5	ug/L	1	03/22/19	MH	SW8260C
Acetone	ND	5.0	2.5	ug/L	1	03/22/19	MH	SW8260C
Benzene	ND	0.70	0.25	ug/L	1	03/22/19	MH	SW8260C
Bromochloromethane	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
Bromodichloromethane	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
Bromoform	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C



Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Bromomethane	ND	2.0	0.25	ug/L	1	03/22/19	MH	SW8260C
Carbon Disulfide	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
Carbon tetrachloride	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
Chlorobenzene	ND	2.0	0.25	ug/L	1	03/22/19	MH	SW8260C
Chloroethane	ND	2.0	0.25	ug/L	1	03/22/19	MH	SW8260C
Chloroform	0.74	J 2.0	0.25	ug/L	1	03/22/19	MH	SW8260C
Chloromethane	ND	2.0	0.25	ug/L	1	03/22/19	MH	SW8260C
cis-1,2-Dichloroethene	0.46	J 1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
cis-1,3-Dichloropropene	ND	0.40	0.25	ug/L	1	03/22/19	MH	SW8260C
Cyclohexane	ND	5.0	0.50	ug/L	1	03/22/19	MH	SW8260C
Dibromochloromethane	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
Dichlorodifluoromethane	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
Ethylbenzene	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
Isopropylbenzene	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
m&p-Xylene	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
Methyl ethyl ketone	ND	5.0	2.5	ug/L	1	03/22/19	MH	SW8260C
Methyl t-butyl ether (MTBE)	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
Methylacetate	ND	2.5	2.5	ug/L	1	03/22/19	MH	SW8260C
Methylcyclohexane	ND	2.0	0.50	ug/L	1	03/22/19	MH	SW8260C
Methylene chloride	ND	3.0	1.0	ug/L	1	03/22/19	MH	SW8260C
o-Xylene	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
Styrene	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
Tetrachloroethene	7.4	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
Toluene	ND	2.0	0.25	ug/L	1	03/22/19	MH	SW8260C
Total Xylenes	ND	1.0	1.0	ug/L	1	03/22/19	MH	SW8260C
trans-1,2-Dichloroethene	ND	2.0	0.25	ug/L	1	03/22/19	MH	SW8260C
trans-1,3-Dichloropropene	ND	0.40	0.25	ug/L	1	03/22/19	MH	SW8260C
Trichloroethene	2.4	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
Trichlorofluoromethane	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
Trichlorotrifluoroethane	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
Vinyl chloride	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
<b>QA/QC Surrogates</b>								
% 1,2-dichlorobenzene-d4	96			%	1	03/22/19	MH	70 - 130 %
% Bromofluorobenzene	96			%	1	03/22/19	MH	70 - 130 %
% Dibromofluoromethane	84			%	1	03/22/19	MH	70 - 130 %
% Toluene-d8	92			%	1	03/22/19	MH	70 - 130 %
Volatile Library Search Top 10						Completed	03/25/19	MH
<b>Semivolatiles</b>								
1,1-Biphenyl	ND	3.5	3.5	ug/L	1	03/22/19	WB	SW8270D
1,2,4,5-Tetrachlorobenzene	ND	3.5	3.5	ug/L	1	03/22/19	WB	SW8270D
2,3,4,6-tetrachlorophenol	ND	1.0	0.89	ug/L	1	03/22/19	WB	SW8270D
2,4,5-Trichlorophenol	ND	1.0	0.89	ug/L	1	03/22/19	WB	SW8270D
2,4,6-Trichlorophenol	ND	1.0	0.89	ug/L	1	03/22/19	WB	SW8270D
2,4-Dichlorophenol	ND	1.0	0.89	ug/L	1	03/22/19	WB	SW8270D
2,4-Dimethylphenol	ND	1.0	0.89	ug/L	1	03/22/19	WB	SW8270D
2,4-Dinitrophenol	ND	1.0	0.89	ug/L	1	03/22/19	WB	SW8270D
2,4-Dinitrotoluene	ND	5.0	2.0	ug/L	1	03/22/19	WB	SW8270D
2,6-Dinitrotoluene	ND	5.0	1.6	ug/L	1	03/22/19	WB	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
2-Chloronaphthalene	ND	5.0	1.4	ug/L	1	03/22/19	WB	SW8270D
2-Chlorophenol	ND	1.0	0.89	ug/L	1	03/22/19	WB	SW8270D
2-Methylnaphthalene	ND	5.0	1.5	ug/L	1	03/22/19	WB	SW8270D
2-Methylphenol (o-cresol)	ND	1.0	0.89	ug/L	1	03/22/19	WB	SW8270D
2-Nitroaniline	ND	5.0	5.0	ug/L	1	03/22/19	WB	SW8270D
2-Nitrophenol	ND	1.0	0.89	ug/L	1	03/22/19	WB	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	5.0	0.89	ug/L	1	03/22/19	WB	SW8270D
3,3'-Dichlorobenzidine	ND	5.0	2.3	ug/L	1	03/22/19	WB	SW8270D
3-Nitroaniline	ND	5.0	11	ug/L	1	03/22/19	WB	SW8270D
4,6-Dinitro-2-methylphenol	ND	1.0	3.5	ug/L	1	03/22/19	WB	SW8270D
4-Bromophenyl phenyl ether	ND	5.0	1.5	ug/L	1	03/22/19	WB	SW8270D
4-Chloro-3-methylphenol	ND	1.0	0.89	ug/L	1	03/22/19	WB	SW8270D
4-Chloroaniline	ND	5.0	2.3	ug/L	1	03/22/19	WB	SW8270D
4-Chlorophenyl phenyl ether	ND	5.0	1.7	ug/L	1	03/22/19	WB	SW8270D
4-Nitroaniline	ND	5.0	1.7	ug/L	1	03/22/19	WB	SW8270D
4-Nitrophenol	ND	1.0	0.89	ug/L	1	03/22/19	WB	SW8270D
Acenaphthene	ND	5.0	1.5	ug/L	1	03/22/19	WB	SW8270D
Acetophenone	ND	5.0	1.5	ug/L	1	03/22/19	WB	SW8270D
Atrazine	ND	0.99	0.99	ug/L	1	03/22/19	WB	SW8270D
Benzaldehyde	ND	5.0	1.5	ug/L	1	03/22/19	WB	SW8270D
Benzyl butyl phthalate	ND	5.0	1.3	ug/L	1	03/22/19	WB	SW8270D
Bis(2-chloroethoxy)methane	ND	5.0	1.4	ug/L	1	03/22/19	WB	SW8270D
Bis(2-chloroisopropyl)ether	ND	5.0	1.4	ug/L	1	03/22/19	WB	SW8270D
Bis(2-ethylhexyl)phthalate	ND	0.99	0.99	ug/L	1	03/22/19	WB	SW8270D
Caprolactam	ND	5.0	8.9	ug/L	1	03/22/19	WB	SW8270D
Carbazole	ND	5.0	3.8	ug/L	1	03/22/19	WB	SW8270D
Dibenzofuran	ND	5.0	1.4	ug/L	1	03/22/19	WB	SW8270D
Diethyl phthalate	1.7	J 5.0	1.6	ug/L	1	03/22/19	WB	SW8270D
Dimethylphthalate	ND	5.0	1.5	ug/L	1	03/22/19	WB	SW8270D
Di-n-butylphthalate	ND	5.0	1.3	ug/L	1	03/22/19	WB	SW8270D
Di-n-octylphthalate	ND	5.0	1.3	ug/L	1	03/22/19	WB	SW8270D
Hexachlorocyclopentadiene	ND	5.0	1.5	ug/L	1	03/22/19	WB	SW8270D
Hexachloroethane	ND	0.99	0.99	ug/L	1	03/22/19	WB	SW8270D
Isophorone	ND	5.0	1.4	ug/L	1	03/22/19	WB	SW8270D
Naphthalene	ND	5.0	1.4	ug/L	1	03/22/19	WB	SW8270D
N-Nitrosodi-n-propylamine	ND	5.0	1.6	ug/L	1	03/22/19	WB	SW8270D
N-Nitrosodiphenylamine	ND	5.0	1.9	ug/L	1	03/22/19	WB	SW8270D
Phenol	ND	1.0	0.89	ug/L	1	03/22/19	WB	SW8270D
<b><u>QA/QC Surrogates</u></b>								
% 2,4,6-Tribromophenol	92			%	1	03/22/19	WB	15 - 110 %
% 2-Fluorobiphenyl	91			%	1	03/22/19	WB	30 - 130 %
% 2-Fluorophenol	66			%	1	03/22/19	WB	15 - 110 %
% Nitrobenzene-d5	79			%	1	03/22/19	WB	30 - 130 %
% Phenol-d5	61			%	1	03/22/19	WB	15 - 110 %
% Terphenyl-d14	93			%	1	03/22/19	WB	30 - 130 %
<b><u>Semivolatiles</u></b>								
Acenaphthylene	ND	0.50	0.50	ug/L	1	03/22/19	WB	SW8270D (SIM)
Anthracene	ND	0.50	0.50	ug/L	1	03/22/19	WB	SW8270D (SIM)
Benz(a)anthracene	ND	0.02	0.02	ug/L	1	03/22/19	WB	SW8270D (SIM)

Client ID: MW3

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference	
Benzo(a)pyrene	ND	0.02	0.02	ug/L	1	03/22/19	WB	SW8270D (SIM)	
Benzo(b)fluoranthene	ND	0.02	0.02	ug/L	1	03/22/19	WB	SW8270D (SIM)	
Benzo(ghi)perylene	ND	0.50	0.50	ug/L	1	03/22/19	WB	SW8270D (SIM)	
Benzo(k)fluoranthene	ND	0.02	0.02	ug/L	1	03/22/19	WB	SW8270D (SIM)	
Bis(2-chloroethyl)ether	ND	0.50	0.50	ug/L	1	03/22/19	WB	SW8270D (SIM)	
Chrysene	ND	0.02	0.02	ug/L	1	03/22/19	WB	SW8270D (SIM)	
Dibenz(a,h)anthracene	ND	0.50	0.50	ug/L	1	03/22/19	WB	SW8270D (SIM)	
Fluoranthene	ND	0.50	0.50	ug/L	1	03/22/19	WB	SW8270D (SIM)	
Fluorene	ND	0.50	0.50	ug/L	1	03/22/19	WB	SW8270D (SIM)	
Hexachlorobenzene	ND	0.04	0.04	ug/L	1	03/22/19	WB	SW8270D (SIM)	
Hexachlorobutadiene	ND	0.50	0.50	ug/L	1	03/22/19	WB	SW8270D (SIM)	
Hexachlorocyclopentadiene	ND	0.50	0.50	ug/L	1	03/22/19	WB	SW8270D (SIM)	
Indeno(1,2,3-cd)pyrene	ND	0.02	0.02	ug/L	1	03/22/19	WB	SW8270D (SIM)	
Nitrobenzene	ND	0.40	0.40	ug/L	1	03/22/19	WB	SW8270D (SIM)	
N-Nitrosodimethylamine	ND	0.20	0.20	ug/L	1	03/22/19	WB	SW8270D (SIM)	
Pentachlorophenol	ND	0.50	0.50	ug/L	1	03/22/19	WB	SW8270D (SIM)	
Phenanthrene	ND	0.50	0.50	ug/L	1	03/22/19	WB	SW8270D (SIM)	
Pyrene	ND	0.50	0.50	ug/L	1	03/22/19	WB	SW8270D (SIM)	
<b><u>QA/QC Surrogates</u></b>									
% 2,4,6-Tribromophenol	112			%	1	03/22/19	WB	15 - 110 %	3
% 2-Fluorobiphenyl	91			%	1	03/22/19	WB	30 - 130 %	
% 2-Fluorophenol	81			%	1	03/22/19	WB	15 - 110 %	
% Nitrobenzene-d5	104			%	1	03/22/19	WB	30 - 130 %	
% Phenol-d5	91			%	1	03/22/19	WB	15 - 110 %	
% Terphenyl-d14	87			%	1	03/22/19	WB	30 - 130 %	
SVOA Library Search Top 15	Completed					03/25/19	MR		

Client ID: MW3

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

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 (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

**Comments:**

Semi-Volatile Comment:

One of the surrogate recoveries was above the upper range due to sample matrix interference. The other surrogates associated with this sample were within QA/QC criteria. No significant bias is 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**

**April 02, 2019**

**Reviewed and Released by: Phyllis Shiller, Laboratory Director**



Environmental Laboratories, Inc.  
 587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045  
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# Analysis Report

April 02, 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

03/19/19  
 03/20/19

## Time

7:45  
 16:00

## Laboratory Data

SDG ID: GCC71631  
 Phoenix ID: CC71634

Project ID: 1840 PARK AVE, MANHATTAN  
 Client ID: MW4

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.005	0.005		mg/L	1	03/22/19	CPP	SW6010D
Aluminum	1.85	0.010		mg/L	1	03/22/19	CPP	SW6010D
Arsenic - LDL	< 0.004	0.004		mg/L	1	03/22/19	CPP	SW6010D
Barium	0.091	0.010		mg/L	1	03/22/19	CPP	SW6010D
Beryllium	< 0.001	0.001		mg/L	1	03/22/19	CPP	SW6010D
Calcium	82.4	0.010		mg/L	1	03/22/19	CPP	SW6010D
Cadmium	< 0.004	0.004		mg/L	1	03/22/19	CPP	SW6010D
Cobalt	< 0.005	0.005		mg/L	1	03/22/19	CPP	SW6010D
Chromium	0.003	0.001		mg/L	1	03/22/19	CPP	SW6010D
Copper	0.007	0.005		mg/L	1	03/22/19	CPP	SW6010D
Silver (Dissolved)	< 0.005	0.005		mg/L	1	03/22/19	CPP	SW6010D
Aluminum (Dissolved)	0.039	0.011		mg/L	1	03/22/19	CPP	SW6010D
Arsenic, (Dissolved)	< 0.003	0.003		mg/L	1	03/22/19	CPP	SW6010D
Barium (Dissolved)	0.072	0.011		mg/L	1	03/22/19	CPP	SW6010D
Beryllium (Dissolved)	< 0.001	0.001		mg/L	1	03/22/19	CPP	SW6010D
Calcium (Dissolved)	80.8	0.01		mg/L	1	03/22/19	CPP	SW6010D
Cadmium (Dissolved)	< 0.004	0.004		mg/L	1	03/22/19	CPP	SW6010D
Cobalt, (Dissolved)	< 0.005	0.005		mg/L	1	03/22/19	CPP	SW6010D
Chromium (Dissolved)	< 0.001	0.001		mg/L	1	03/22/19	CPP	SW6010D
Copper, (Dissolved)	< 0.005	0.005		mg/L	1	03/22/19	CPP	SW6010D
Iron, (Dissolved)	< 0.01	0.01		mg/L	1	03/22/19	CPP	SW6010D
Mercury (Dissolved)	< 0.0002	0.0002		mg/L	1	03/22/19	RS	SW7470A
Potassium (Dissolved)	8.5	0.1		mg/L	1	03/22/19	CPP	SW6010D
Magnesium (Dissolved)	14.1	0.01		mg/L	1	03/22/19	CPP	SW6010D
Manganese, (Dissolved)	0.258	0.005		mg/L	1	03/22/19	CPP	SW6010D
Sodium (Dissolved)	208	1.1		mg/L	10	03/25/19	TH	SW6010D
Nickel, (Dissolved)	< 0.004	0.004		mg/L	1	03/22/19	CPP	SW6010D
Lead (Dissolved)	< 0.002	0.002		mg/L	1	03/22/19	CPP	SW6010D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Antimony (Dissolved)-LDL	< 0.0003	0.0003		mg/L	1	03/21/19	CPP	SW6020B
Selenium (Dissolved)-LDL	< 0.01	0.01		mg/L	5	03/24/19	CPP	SW6020B
Thallium (Dissolved)	< 0.0003	0.0003		mg/L	1	03/21/19	CPP	SW6020B
Vanadium, (Dissolved)	< 0.011	0.011		mg/L	1	03/22/19	CPP	SW6010D
Zinc, (Dissolved)	< 0.011	0.011		mg/L	1	03/22/19	CPP	SW6010D
Iron	2.02	0.01		mg/L	1	03/22/19	CPP	SW6010D
Mercury	< 0.0002	0.0002		mg/L	1	03/21/19	RS	SW7470A
Potassium	8.9	0.1		mg/L	1	03/22/19	CPP	SW6010D
Magnesium	15.0	0.010		mg/L	1	03/22/19	CPP	SW6010D
Manganese	0.332	0.005		mg/L	1	03/22/19	CPP	SW6010D
Sodium	224	1.0		mg/L	10	03/25/19	TH	SW6010D
Nickel	0.005	0.004		mg/L	1	03/22/19	CPP	SW6010D
Lead	< 0.002	0.002		mg/L	1	03/22/19	CPP	SW6010D
Antimony	< 0.0030	0.0030		mg/L	5	03/22/19	CPP	SW6020B
Selenium	< 0.010	0.010		mg/L	5	03/22/19	CPP	SW6020B
Thallium	< 0.0005	0.0005		mg/L	5	03/22/19	CPP	SW6020B
Vanadium	< 0.010	0.010		mg/L	1	03/22/19	CPP	SW6010D
Zinc	< 0.010	0.010		mg/L	1	03/22/19	CPP	SW6010D
Filtration	Completed					03/20/19	AG	0.45um Filter
Dissolved Mercury Digestion	Completed					03/21/19	I/I	SW7470A
Mercury Digestion	Completed					03/21/19	I/I	SW7470A
PCB Extraction (2 Liter)	Completed					03/20/19	E/N	SW3510C
Extraction for Pest (2 Liter)	Completed					03/20/19	E/N	SW3510C
Semi-Volatile Extraction	Completed					03/20/19	P/AK	SW3520C
Dissolved Metals Preparation	Completed					03/20/19	AG	SW3005A
Dissolved Metals Preparation	Completed					03/20/19	AG	SW3005A
Total Metals Digestion	Completed					03/21/19	AG	
Total Metals Digestion MS	Completed					03/21/19	AG	

**Polychlorinated Biphenyls**

PCB-1016	ND	0.047		ug/L	1	03/21/19	SC	SW8082A
PCB-1221	ND	0.047		ug/L	1	03/21/19	SC	SW8082A
PCB-1232	ND	0.047		ug/L	1	03/21/19	SC	SW8082A
PCB-1242	ND	0.047		ug/L	1	03/21/19	SC	SW8082A
PCB-1248	ND	0.047		ug/L	1	03/21/19	SC	SW8082A
PCB-1254	ND	0.047		ug/L	1	03/21/19	SC	SW8082A
PCB-1260	ND	0.047		ug/L	1	03/21/19	SC	SW8082A
PCB-1262	ND	0.047		ug/L	1	03/21/19	SC	SW8082A
PCB-1268	ND	0.047		ug/L	1	03/21/19	SC	SW8082A

**QA/QC Surrogates**

% DCBP	67			%	1	03/21/19	SC	30 - 150 %
% DCBP (Confirmation)	70			%	1	03/21/19	SC	30 - 150 %
% TCMX	72			%	1	03/21/19	SC	30 - 150 %
% TCMX (Confirmation)	70			%	1	03/21/19	SC	30 - 150 %

**Pesticides**

4,4' -DDD	ND	0.009		ug/L	1	03/25/19	CW	SW8081B
4,4' -DDE	ND	0.009		ug/L	1	03/25/19	CW	SW8081B
4,4' -DDT	ND	0.009		ug/L	1	03/25/19	CW	SW8081B
a-BHC	ND	0.005		ug/L	1	03/25/19	CW	SW8081B

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
a-chlordane	ND	0.009		ug/L	1	03/25/19	CW	SW8081B
Alachlor	ND	0.071		ug/L	1	03/25/19	CW	SW8081B
Aldrin	ND	0.001		ug/L	1	03/25/19	CW	SW8081B
b-BHC	ND	0.005		ug/L	1	03/25/19	CW	SW8081B
Chlordane	ND	0.05		ug/L	1	03/25/19	CW	SW8081B
d-BHC	ND	0.005		ug/L	1	03/25/19	CW	SW8081B
Dieldrin	0.010	0.001		ug/L	1	03/25/19	CW	SW8081B
Endosulfan I	ND	0.009		ug/L	1	03/25/19	CW	SW8081B
Endosulfan II	ND	0.009		ug/L	1	03/25/19	CW	SW8081B
Endosulfan Sulfate	ND	0.009		ug/L	1	03/25/19	CW	SW8081B
Endrin	ND	0.009		ug/L	1	03/25/19	CW	SW8081B
Endrin Aldehyde	ND	0.009		ug/L	1	03/25/19	CW	SW8081B
Endrin ketone	ND	0.009		ug/L	1	03/25/19	CW	SW8081B
g-BHC (Lindane)	ND	0.005		ug/L	1	03/25/19	CW	SW8081B
g-chlordane	ND	0.009		ug/L	1	03/25/19	CW	SW8081B
Heptachlor	ND	0.009		ug/L	1	03/25/19	CW	SW8081B
Heptachlor epoxide	ND	0.009		ug/L	1	03/25/19	CW	SW8081B
Methoxychlor	ND	0.094		ug/L	1	03/25/19	CW	SW8081B
Toxaphene	ND	0.24		ug/L	1	03/25/19	CW	SW8081B
<b><u>QA/QC Surrogates</u></b>								
%DCBP (Surrogate Rec)	55			%	1	03/25/19	CW	30 - 150 %
%DCBP (Surrogate Rec) (Confirmation)	64			%	1	03/25/19	CW	30 - 150 %
%TCMX (Surrogate Rec)	66			%	1	03/25/19	CW	30 - 150 %
%TCMX (Surrogate Rec) (Confirmation)	89			%	1	03/25/19	CW	30 - 150 %
<b><u>Volatiles</u></b>								
1,1,1-Trichloroethane	ND	2.0	0.25	ug/L	1	03/22/19	MH	SW8260C
1,1,2,2-Tetrachloroethane	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
1,1,2-Trichloroethane	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
1,1-Dichloroethane	ND	2.0	0.25	ug/L	1	03/22/19	MH	SW8260C
1,1-Dichloroethene	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
1,2,3-Trichlorobenzene	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
1,2,4-Trichlorobenzene	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
1,2-Dibromo-3-chloropropane	ND	0.50	0.50	ug/L	1	03/22/19	MH	SW8260C
1,2-Dibromoethane	ND	0.25	0.25	ug/L	1	03/22/19	MH	SW8260C
1,2-Dichlorobenzene	ND	2.0	0.25	ug/L	1	03/22/19	MH	SW8260C
1,2-Dichloroethane	ND	0.60	0.25	ug/L	1	03/22/19	MH	SW8260C
1,2-Dichloropropane	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
1,3-Dichlorobenzene	ND	2.0	0.25	ug/L	1	03/22/19	MH	SW8260C
1,4-Dichlorobenzene	ND	2.0	0.25	ug/L	1	03/22/19	MH	SW8260C
2-Hexanone	ND	2.5	2.5	ug/L	1	03/22/19	MH	SW8260C
4-Methyl-2-pentanone	ND	2.5	2.5	ug/L	1	03/22/19	MH	SW8260C
Acetone	ND	5.0	2.5	ug/L	1	03/22/19	MH	SW8260C
Benzene	ND	0.70	0.25	ug/L	1	03/22/19	MH	SW8260C
Bromochloromethane	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
Bromodichloromethane	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
Bromoform	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
Bromomethane	ND	2.0	0.25	ug/L	1	03/22/19	MH	SW8260C
Carbon Disulfide	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
Carbon tetrachloride	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference	
Chlorobenzene	ND	2.0	0.25	ug/L	1	03/22/19	MH	SW8260C	
Chloroethane	ND	2.0	0.25	ug/L	1	03/22/19	MH	SW8260C	
Chloroform	1.9	J 2.0	0.25	ug/L	1	03/22/19	MH	SW8260C	
Chloromethane	ND	2.0	0.25	ug/L	1	03/22/19	MH	SW8260C	
cis-1,2-Dichloroethene	0.27	J 1.0	0.25	ug/L	1	03/22/19	MH	SW8260C	
cis-1,3-Dichloropropene	ND	0.40	0.25	ug/L	1	03/22/19	MH	SW8260C	
Cyclohexane	ND	5.0	0.50	ug/L	1	03/22/19	MH	SW8260C	
Dibromochloromethane	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C	
Dichlorodifluoromethane	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C	
Ethylbenzene	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C	
Isopropylbenzene	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C	
m&p-Xylene	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C	
Methyl ethyl ketone	ND	5.0	2.5	ug/L	1	03/22/19	MH	SW8260C	
Methyl t-butyl ether (MTBE)	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C	
Methylacetate	ND	2.5	2.5	ug/L	1	03/22/19	MH	SW8260C	
Methylcyclohexane	ND	2.0	0.50	ug/L	1	03/22/19	MH	SW8260C	
Methylene chloride	ND	3.0	1.0	ug/L	1	03/22/19	MH	SW8260C	
o-Xylene	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C	
Styrene	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C	
Tetrachloroethene	5.2	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C	
Toluene	ND	2.0	0.25	ug/L	1	03/22/19	MH	SW8260C	
Total Xylenes	ND	1.0	1.0	ug/L	1	03/22/19	MH	SW8260C	
trans-1,2-Dichloroethene	ND	2.0	0.25	ug/L	1	03/22/19	MH	SW8260C	
trans-1,3-Dichloropropene	ND	0.40	0.25	ug/L	1	03/22/19	MH	SW8260C	
Trichloroethene	1.7	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C	
Trichlorofluoromethane	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C	
Trichlorotrifluoroethane	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C	
Vinyl chloride	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C	
<b><u>QA/QC Surrogates</u></b>									
% 1,2-dichlorobenzene-d4	93			%	1	03/22/19	MH	70 - 130 %	
% Bromofluorobenzene	99			%	1	03/22/19	MH	70 - 130 %	
% Dibromofluoromethane	92			%	1	03/22/19	MH	70 - 130 %	
% Toluene-d8	94			%	1	03/22/19	MH	70 - 130 %	
Volatile Library Search Top 10						Completed		03/25/19	MH
<b><u>1,4-dioxane</u></b>									
1,4-dioxane	ND	0.20		ug/l	1	03/22/19	LA	SW8270DSIM 1	
<b><u>QA/QC Surrogates</u></b>									
% 1,4-dioxane-d8	97			%	1	03/22/19	LA	30 - 130 %	
<b><u>Semivolatiles</u></b>									
1,1-Biphenyl	ND	3.5	3.5	ug/L	1	03/22/19	WB	SW8270D	
1,2,4,5-Tetrachlorobenzene	ND	3.5	3.5	ug/L	1	03/22/19	WB	SW8270D	
2,3,4,6-tetrachlorophenol	ND	1.0	0.91	ug/L	1	03/22/19	WB	SW8270D	
2,4,5-Trichlorophenol	ND	1.0	0.91	ug/L	1	03/22/19	WB	SW8270D	
2,4,6-Trichlorophenol	ND	1.0	0.91	ug/L	1	03/22/19	WB	SW8270D	
2,4-Dichlorophenol	ND	1.0	0.91	ug/L	1	03/22/19	WB	SW8270D	
2,4-Dimethylphenol	ND	1.0	0.91	ug/L	1	03/22/19	WB	SW8270D	
2,4-Dinitrophenol	ND	1.0	0.91	ug/L	1	03/22/19	WB	SW8270D	



Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
2,4-Dinitrotoluene	ND	5.0	2.0	ug/L	1	03/22/19	WB	SW8270D
2,6-Dinitrotoluene	ND	5.0	1.6	ug/L	1	03/22/19	WB	SW8270D
2-Chloronaphthalene	ND	5.1	1.4	ug/L	1	03/22/19	WB	SW8270D
2-Chlorophenol	ND	1.0	0.91	ug/L	1	03/22/19	WB	SW8270D
2-Methylnaphthalene	ND	5.1	1.5	ug/L	1	03/22/19	WB	SW8270D
2-Methylphenol (o-cresol)	ND	1.0	0.91	ug/L	1	03/22/19	WB	SW8270D
2-Nitroaniline	ND	5.0	5.0	ug/L	1	03/22/19	WB	SW8270D
2-Nitrophenol	ND	1.0	0.91	ug/L	1	03/22/19	WB	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	5.1	0.91	ug/L	1	03/22/19	WB	SW8270D
3,3'-Dichlorobenzidine	ND	5.0	2.4	ug/L	1	03/22/19	WB	SW8270D
3-Nitroaniline	ND	5.0	5.0	ug/L	1	03/22/19	WB	SW8270D
4,6-Dinitro-2-methylphenol	ND	1.0	3.5	ug/L	1	03/22/19	WB	SW8270D
4-Bromophenyl phenyl ether	ND	5.1	1.5	ug/L	1	03/22/19	WB	SW8270D
4-Chloro-3-methylphenol	ND	1.0	0.91	ug/L	1	03/22/19	WB	SW8270D
4-Chloroaniline	ND	5.0	2.4	ug/L	1	03/22/19	WB	SW8270D
4-Chlorophenyl phenyl ether	ND	5.1	1.7	ug/L	1	03/22/19	WB	SW8270D
4-Nitroaniline	ND	5.0	1.7	ug/L	1	03/22/19	WB	SW8270D
4-Nitrophenol	ND	1.0	0.91	ug/L	1	03/22/19	WB	SW8270D
Acenaphthene	ND	5.1	1.5	ug/L	1	03/22/19	WB	SW8270D
Acetophenone	ND	5.1	1.6	ug/L	1	03/22/19	WB	SW8270D
Atrazine	ND	1.0	1.0	ug/L	1	03/22/19	WB	SW8270D
Benzaldehyde	ND	5.1	1.5	ug/L	1	03/22/19	WB	SW8270D
Benzyl butyl phthalate	ND	5.1	1.3	ug/L	1	03/22/19	WB	SW8270D
Bis(2-chloroethoxy)methane	ND	5.0	1.4	ug/L	1	03/22/19	WB	SW8270D
Bis(2-chloroisopropyl)ether	ND	5.1	1.4	ug/L	1	03/22/19	WB	SW8270D
Bis(2-ethylhexyl)phthalate	ND	1.0	1.0	ug/L	1	03/22/19	WB	SW8270D
Caprolactam	ND	5.1	9.0	ug/L	1	03/22/19	WB	SW8270D
Carbazole	ND	5.1	3.8	ug/L	1	03/22/19	WB	SW8270D
Dibenzofuran	ND	5.0	1.5	ug/L	1	03/22/19	WB	SW8270D
Diethyl phthalate	ND	5.1	1.6	ug/L	1	03/22/19	WB	SW8270D
Dimethylphthalate	ND	5.1	1.6	ug/L	1	03/22/19	WB	SW8270D
Di-n-butylphthalate	ND	5.1	1.3	ug/L	1	03/22/19	WB	SW8270D
Di-n-octylphthalate	ND	5.1	1.3	ug/L	1	03/22/19	WB	SW8270D
Hexachlorocyclopentadiene	ND	5.0	1.5	ug/L	1	03/22/19	WB	SW8270D
Hexachloroethane	ND	1.0	1.0	ug/L	1	03/22/19	WB	SW8270D
Isophorone	ND	5.1	1.4	ug/L	1	03/22/19	WB	SW8270D
Naphthalene	ND	5.0	1.5	ug/L	1	03/22/19	WB	SW8270D
N-Nitrosodi-n-propylamine	ND	5.1	1.6	ug/L	1	03/22/19	WB	SW8270D
N-Nitrosodiphenylamine	ND	5.1	1.9	ug/L	1	03/22/19	WB	SW8270D
Phenol	ND	1.0	0.91	ug/L	1	03/22/19	WB	SW8270D
<b><u>QA/QC Surrogates</u></b>								
% 2,4,6-Tribromophenol	95			%	1	03/22/19	WB	15 - 110 %
% 2-Fluorobiphenyl	87			%	1	03/22/19	WB	30 - 130 %
% 2-Fluorophenol	71			%	1	03/22/19	WB	15 - 110 %
% Nitrobenzene-d5	87			%	1	03/22/19	WB	30 - 130 %
% Phenol-d5	71			%	1	03/22/19	WB	15 - 110 %
% Terphenyl-d14	79			%	1	03/22/19	WB	30 - 130 %
<b><u>Semivolatiles</u></b>								
Acenaphthylene	ND	0.51	0.51	ug/L	1	03/22/19	WB	SW8270D (SIM)

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Anthracene	ND	0.51	0.51	ug/L	1	03/22/19	WB	SW8270D (SIM)
Benz(a)anthracene	ND	0.02	0.02	ug/L	1	03/22/19	WB	SW8270D (SIM)
Benzo(a)pyrene	ND	0.02	0.02	ug/L	1	03/22/19	WB	SW8270D (SIM)
Benzo(b)fluoranthene	ND	0.02	0.02	ug/L	1	03/22/19	WB	SW8270D (SIM)
Benzo(ghi)perylene	ND	0.51	0.51	ug/L	1	03/22/19	WB	SW8270D (SIM)
Benzo(k)fluoranthene	ND	0.02	0.02	ug/L	1	03/22/19	WB	SW8270D (SIM)
Bis(2-chloroethyl)ether	ND	0.51	0.51	ug/L	1	03/22/19	WB	SW8270D (SIM)
Chrysene	ND	0.02	0.02	ug/L	1	03/22/19	WB	SW8270D (SIM)
Dibenz(a,h)anthracene	ND	0.51	0.51	ug/L	1	03/22/19	WB	SW8270D (SIM)
Fluoranthene	ND	0.51	0.51	ug/L	1	03/22/19	WB	SW8270D (SIM)
Fluorene	ND	0.51	0.51	ug/L	1	03/22/19	WB	SW8270D (SIM)
Hexachlorobenzene	ND	0.04	0.04	ug/L	1	03/22/19	WB	SW8270D (SIM)
Hexachlorobutadiene	ND	0.50	0.50	ug/L	1	03/22/19	WB	SW8270D (SIM)
Hexachlorocyclopentadiene	ND	0.51	0.51	ug/L	1	03/22/19	WB	SW8270D (SIM)
Indeno(1,2,3-cd)pyrene	ND	0.02	0.02	ug/L	1	03/22/19	WB	SW8270D (SIM)
Nitrobenzene	ND	0.40	0.40	ug/L	1	03/22/19	WB	SW8270D (SIM)
N-Nitrosodimethylamine	ND	0.20	0.20	ug/L	1	03/22/19	WB	SW8270D (SIM)
Pentachlorophenol	ND	0.51	0.51	ug/L	1	03/22/19	WB	SW8270D (SIM)
Phenanthrene	ND	0.51	0.51	ug/L	1	03/22/19	WB	SW8270D (SIM)
Pyrene	ND	0.51	0.51	ug/L	1	03/22/19	WB	SW8270D (SIM)
<b><u>QA/QC Surrogates</u></b>								
% 2,4,6-Tribromophenol	110			%	1	03/22/19	WB	15 - 110 %
% 2-Fluorobiphenyl	86			%	1	03/22/19	WB	30 - 130 %
% 2-Fluorophenol	84			%	1	03/22/19	WB	15 - 110 %
% Nitrobenzene-d5	102			%	1	03/22/19	WB	30 - 130 %
% Phenol-d5	93			%	1	03/22/19	WB	15 - 110 %
% Terphenyl-d14	73			%	1	03/22/19	WB	30 - 130 %
Extraction for 1,4-Dioxane	Completed					03/21/19	S/S	
SVOA Library Search Top 15	Completed					03/25/19	MR	

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.

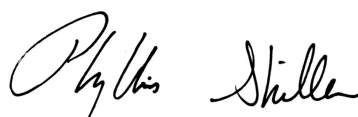
RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected at RL/PQL  
 BRL=Below Reporting Level L=Biased Low J=Estimated Below RL LOD=Limit of Detection MDL=Method Detection Limit  
 QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

**Comments:**

**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**

**April 02, 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

April 02, 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

03/19/19

## Time

16:00

## Laboratory Data

SDG ID: GCC71631  
 Phoenix ID: CC71635

Project ID: 1840 PARK AVE, MANHATTAN  
 Client ID: GW DUPLICATE

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.005	0.005		mg/L	1	03/22/19	CPP	SW6010D
Aluminum	1.80	0.010		mg/L	1	03/22/19	CPP	SW6010D
Arsenic - LDL	< 0.004	0.004		mg/L	1	03/22/19	CPP	SW6010D
Barium	0.089	0.010		mg/L	1	03/22/19	CPP	SW6010D
Beryllium	< 0.001	0.001		mg/L	1	03/22/19	CPP	SW6010D
Calcium	80.1	0.010		mg/L	1	03/22/19	CPP	SW6010D
Cadmium	< 0.004	0.004		mg/L	1	03/22/19	CPP	SW6010D
Cobalt	< 0.005	0.005		mg/L	1	03/22/19	CPP	SW6010D
Chromium	0.002	0.001		mg/L	1	03/22/19	CPP	SW6010D
Copper	0.007	0.005		mg/L	1	03/22/19	CPP	SW6010D
Silver (Dissolved)	< 0.005	0.005		mg/L	1	03/22/19	CPP	SW6010D
Aluminum (Dissolved)	0.041	0.011		mg/L	1	03/22/19	CPP	SW6010D
Arsenic, (Dissolved)	< 0.003	0.003		mg/L	1	03/22/19	CPP	SW6010D
Barium (Dissolved)	0.072	0.011		mg/L	1	03/22/19	CPP	SW6010D
Beryllium (Dissolved)	< 0.001	0.001		mg/L	1	03/22/19	CPP	SW6010D
Calcium (Dissolved)	80.4	0.01		mg/L	1	03/22/19	CPP	SW6010D
Cadmium (Dissolved)	< 0.004	0.004		mg/L	1	03/22/19	CPP	SW6010D
Cobalt, (Dissolved)	< 0.005	0.005		mg/L	1	03/22/19	CPP	SW6010D
Chromium (Dissolved)	< 0.001	0.001		mg/L	1	03/22/19	CPP	SW6010D
Copper, (Dissolved)	< 0.005	0.005		mg/L	1	03/22/19	CPP	SW6010D
Iron, (Dissolved)	< 0.01	0.01		mg/L	1	03/22/19	CPP	SW6010D
Mercury (Dissolved)	< 0.0002	0.0002		mg/L	1	03/22/19	RS	SW7470A
Potassium (Dissolved)	8.5	0.1		mg/L	1	03/22/19	CPP	SW6010D
Magnesium (Dissolved)	13.9	0.01		mg/L	1	03/22/19	CPP	SW6010D
Manganese, (Dissolved)	0.252	0.005		mg/L	1	03/22/19	CPP	SW6010D
Sodium (Dissolved)	201	1.1		mg/L	10	03/25/19	TH	SW6010D
Nickel, (Dissolved)	< 0.004	0.004		mg/L	1	03/22/19	CPP	SW6010D
Lead (Dissolved)	< 0.002	0.002		mg/L	1	03/22/19	CPP	SW6010D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Antimony (Dissolved)-LDL	< 0.0003	0.0003		mg/L	1	03/21/19	CPP	SW6020B
Selenium (Dissolved)-LDL	< 0.01	0.01		mg/L	5	03/24/19	CPP	SW6020B
Thallium (Dissolved)	< 0.0003	0.0003		mg/L	1	03/21/19	CPP	SW6020B
Vanadium, (Dissolved)	< 0.011	0.011		mg/L	1	03/22/19	CPP	SW6010D
Zinc, (Dissolved)	< 0.011	0.011		mg/L	1	03/22/19	CPP	SW6010D
Iron	1.90	0.01		mg/L	1	03/22/19	CPP	SW6010D
Mercury	< 0.0002	0.0002		mg/L	1	03/21/19	RS	SW7470A
Potassium	8.7	0.1		mg/L	1	03/22/19	CPP	SW6010D
Magnesium	14.7	0.010		mg/L	1	03/22/19	CPP	SW6010D
Manganese	0.319	0.005		mg/L	1	03/22/19	CPP	SW6010D
Sodium	232	1.0		mg/L	10	03/25/19	TH	SW6010D
Nickel	0.005	0.004		mg/L	1	03/22/19	CPP	SW6010D
Lead	< 0.002	0.002		mg/L	1	03/22/19	CPP	SW6010D
Antimony	< 0.0030	0.0030		mg/L	5	03/22/19	CPP	SW6020B
Selenium	< 0.010	0.010		mg/L	5	03/22/19	CPP	SW6020B
Thallium	< 0.0005	0.0005		mg/L	5	03/22/19	CPP	SW6020B
Vanadium	< 0.010	0.010		mg/L	1	03/22/19	CPP	SW6010D
Zinc	< 0.010	0.010		mg/L	1	03/22/19	CPP	SW6010D
Filtration	Completed					03/20/19	AG	0.45um Filter
Dissolved Mercury Digestion	Completed					03/21/19	I/I	SW7470A
Mercury Digestion	Completed					03/21/19	I/I	SW7470A
PCB Extraction (2 Liter)	Completed					03/20/19	E/N	SW3510C
Extraction for Pest (2 Liter)	Completed					03/20/19	E/N	SW3510C
Semi-Volatile Extraction	Completed					03/20/19	P/AK	SW3520C
Dissolved Metals Preparation	Completed					03/20/19	AG	SW3005A
Dissolved Metals Preparation	Completed					03/20/19	AG	SW3005A
Total Metals Digestion	Completed					03/21/19	AG	
Total Metals Digestion MS	Completed					03/21/19	AG	

**Polychlorinated Biphenyls**

PCB-1016	ND	0.063		ug/L	1	03/21/19	SC	SW8082A
PCB-1221	ND	0.063		ug/L	1	03/21/19	SC	SW8082A
PCB-1232	ND	0.063		ug/L	1	03/21/19	SC	SW8082A
PCB-1242	ND	0.063		ug/L	1	03/21/19	SC	SW8082A
PCB-1248	ND	0.063		ug/L	1	03/21/19	SC	SW8082A
PCB-1254	ND	0.063		ug/L	1	03/21/19	SC	SW8082A
PCB-1260	ND	0.063		ug/L	1	03/21/19	SC	SW8082A
PCB-1262	ND	0.063		ug/L	1	03/21/19	SC	SW8082A
PCB-1268	ND	0.063		ug/L	1	03/21/19	SC	SW8082A

**QA/QC Surrogates**

% DCBP	71			%	1	03/21/19	SC	30 - 150 %
% DCBP (Confirmation)	76			%	1	03/21/19	SC	30 - 150 %
% TCMX	72			%	1	03/21/19	SC	30 - 150 %
% TCMX (Confirmation)	71			%	1	03/21/19	SC	30 - 150 %

**Pesticides**

4,4' -DDD	ND	0.010		ug/L	1	03/25/19	CW	SW8081B
4,4' -DDE	ND	0.003		ug/L	1	03/25/19	CW	SW8081B
4,4' -DDT	ND	0.003		ug/L	1	03/25/19	CW	SW8081B
a-BHC	ND	0.006		ug/L	1	03/25/19	CW	SW8081B

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
a-chlordane	ND	0.013		ug/L	1	03/25/19	CW	SW8081B
Alachlor	ND	0.094		ug/L	1	03/25/19	CW	SW8081B
Aldrin	ND	0.002		ug/L	1	03/25/19	CW	SW8081B
b-BHC	ND	0.006		ug/L	1	03/25/19	CW	SW8081B
Chlordane	ND	0.050		ug/L	1	03/25/19	CW	SW8081B
d-BHC	ND	0.006		ug/L	1	03/25/19	CW	SW8081B
Dieldrin	0.018	0.002		ug/L	1	03/25/19	CW	SW8081B
Endosulfan I	ND	0.013		ug/L	1	03/25/19	CW	SW8081B
Endosulfan II	ND	0.013		ug/L	1	03/25/19	CW	SW8081B
Endosulfan Sulfate	ND	0.013		ug/L	1	03/25/19	CW	SW8081B
Endrin	ND	0.006		ug/L	1	03/25/19	CW	SW8081B
Endrin Aldehyde	ND	0.013		ug/L	1	03/25/19	CW	SW8081B
Endrin ketone	ND	0.013		ug/L	1	03/25/19	CW	SW8081B
g-BHC (Lindane)	ND	0.006		ug/L	1	03/25/19	CW	SW8081B
g-chlordane	ND	0.013		ug/L	1	03/25/19	CW	SW8081B
Heptachlor	ND	0.006		ug/L	1	03/25/19	CW	SW8081B
Heptachlor epoxide	ND	0.006		ug/L	1	03/25/19	CW	SW8081B
Methoxychlor	ND	0.13		ug/L	1	03/25/19	CW	SW8081B
Toxaphene	ND	0.25		ug/L	1	03/25/19	CW	SW8081B
<b><u>QA/QC Surrogates</u></b>								
%DCBP (Surrogate Rec)	60			%	1	03/25/19	CW	30 - 150 %
%DCBP (Surrogate Rec) (Confirmation)	73			%	1	03/25/19	CW	30 - 150 %
%TCMX (Surrogate Rec)	64			%	1	03/25/19	CW	30 - 150 %
%TCMX (Surrogate Rec) (Confirmation)	91			%	1	03/25/19	CW	30 - 150 %
<b><u>1,4-dioxane</u></b>								
1,4-dioxane	ND	100		ug/l	1	03/22/19	MH	SW8260C
<b><u>Volatiles</u></b>								
1,1,1-Trichloroethane	ND	2.0	0.25	ug/L	1	03/22/19	MH	SW8260C
1,1,2,2-Tetrachloroethane	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
1,1,2-Trichloroethane	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
1,1-Dichloroethane	ND	2.0	0.25	ug/L	1	03/22/19	MH	SW8260C
1,1-Dichloroethene	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
1,2,3-Trichlorobenzene	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
1,2,4-Trichlorobenzene	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
1,2-Dibromo-3-chloropropane	ND	0.50	0.50	ug/L	1	03/22/19	MH	SW8260C
1,2-Dibromoethane	ND	0.25	0.25	ug/L	1	03/22/19	MH	SW8260C
1,2-Dichlorobenzene	ND	2.0	0.25	ug/L	1	03/22/19	MH	SW8260C
1,2-Dichloroethane	ND	0.60	0.25	ug/L	1	03/22/19	MH	SW8260C
1,2-Dichloropropane	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
1,3-Dichlorobenzene	ND	2.0	0.25	ug/L	1	03/22/19	MH	SW8260C
1,4-Dichlorobenzene	ND	2.0	0.25	ug/L	1	03/22/19	MH	SW8260C
2-Hexanone	ND	2.5	2.5	ug/L	1	03/22/19	MH	SW8260C
4-Methyl-2-pentanone	ND	2.5	2.5	ug/L	1	03/22/19	MH	SW8260C
Acetone	ND	5.0	2.5	ug/L	1	03/22/19	MH	SW8260C
Benzene	ND	0.70	0.25	ug/L	1	03/22/19	MH	SW8260C
Bromochloromethane	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
Bromodichloromethane	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
Bromoform	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference	
Bromomethane	ND	2.0	0.25	ug/L	1	03/22/19	MH	SW8260C	
Carbon Disulfide	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C	
Carbon tetrachloride	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C	
Chlorobenzene	ND	2.0	0.25	ug/L	1	03/22/19	MH	SW8260C	
Chloroethane	ND	2.0	0.25	ug/L	1	03/22/19	MH	SW8260C	
Chloroform	1.8	J 2.0	0.25	ug/L	1	03/22/19	MH	SW8260C	
Chloromethane	ND	2.0	0.25	ug/L	1	03/22/19	MH	SW8260C	
cis-1,2-Dichloroethene	0.28	J 1.0	0.25	ug/L	1	03/22/19	MH	SW8260C	
cis-1,3-Dichloropropene	ND	0.40	0.25	ug/L	1	03/22/19	MH	SW8260C	
Cyclohexane	ND	5.0	0.50	ug/L	1	03/22/19	MH	SW8260C	
Dibromochloromethane	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C	
Dichlorodifluoromethane	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C	
Ethylbenzene	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C	
Isopropylbenzene	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C	
m&p-Xylene	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C	
Methyl ethyl ketone	ND	5.0	2.5	ug/L	1	03/22/19	MH	SW8260C	
Methyl t-butyl ether (MTBE)	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C	
Methylacetate	ND	2.5	2.5	ug/L	1	03/22/19	MH	SW8260C	
Methylcyclohexane	ND	2.0	0.50	ug/L	1	03/22/19	MH	SW8260C	
Methylene chloride	ND	3.0	1.0	ug/L	1	03/22/19	MH	SW8260C	
o-Xylene	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C	
Styrene	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C	
Tetrachloroethene	5.1	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C	
Toluene	ND	2.0	0.25	ug/L	1	03/22/19	MH	SW8260C	
Total Xylenes	ND	1.0	1.0	ug/L	1	03/22/19	MH	SW8260C	
trans-1,2-Dichloroethene	ND	2.0	0.25	ug/L	1	03/22/19	MH	SW8260C	
trans-1,3-Dichloropropene	ND	0.40	0.25	ug/L	1	03/22/19	MH	SW8260C	
Trichloroethene	1.7	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C	
Trichlorofluoromethane	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C	
Trichlorotrifluoroethane	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C	
Vinyl chloride	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C	
<b><u>QA/QC Surrogates</u></b>									
% 1,2-dichlorobenzene-d4	94			%	1	03/22/19	MH	70 - 130 %	
% Bromofluorobenzene	98			%	1	03/22/19	MH	70 - 130 %	
% Dibromofluoromethane	86			%	1	03/22/19	MH	70 - 130 %	
% Toluene-d8	91			%	1	03/22/19	MH	70 - 130 %	
Volatile Library Search Top 10						Completed		03/25/19	MH
<b><u>1,4-dioxane</u></b>									
1,4-dioxane	ND	0.20		ug/l	1	03/21/19	LA	SW8270DSIM 1	
<b><u>QA/QC Surrogates</u></b>									
% 1,4-dioxane-d8	83			%	1	03/21/19	LA	30 - 130 %	
<b><u>Semivolatiles</u></b>									
1,1-Biphenyl	ND	3.7	3.7	ug/L	1	03/22/19	WB	SW8270D	
1,2,4,5-Tetrachlorobenzene	ND	3.7	3.7	ug/L	1	03/22/19	WB	SW8270D	
2,3,4,6-tetrachlorophenol	ND	1.0	0.95	ug/L	1	03/22/19	WB	SW8270D	
2,4,5-Trichlorophenol	ND	1.0	0.95	ug/L	1	03/22/19	WB	SW8270D	
2,4,6-Trichlorophenol	ND	1.0	0.95	ug/L	1	03/22/19	WB	SW8270D	

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
2,4-Dichlorophenol	ND	1.0	0.95	ug/L	1	03/22/19	WB	SW8270D
2,4-Dimethylphenol	ND	1.0	0.95	ug/L	1	03/22/19	WB	SW8270D
2,4-Dinitrophenol	ND	1.0	0.95	ug/L	1	03/22/19	WB	SW8270D
2,4-Dinitrotoluene	ND	5.0	2.1	ug/L	1	03/22/19	WB	SW8270D
2,6-Dinitrotoluene	ND	5.0	1.7	ug/L	1	03/22/19	WB	SW8270D
2-Chloronaphthalene	ND	5.3	1.5	ug/L	1	03/22/19	WB	SW8270D
2-Chlorophenol	ND	1.0	0.95	ug/L	1	03/22/19	WB	SW8270D
2-Methylnaphthalene	ND	5.3	1.6	ug/L	1	03/22/19	WB	SW8270D
2-Methylphenol (o-cresol)	ND	1.0	0.95	ug/L	1	03/22/19	WB	SW8270D
2-Nitroaniline	ND	5.0	5.0	ug/L	1	03/22/19	WB	SW8270D
2-Nitrophenol	ND	1.0	0.95	ug/L	1	03/22/19	WB	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	5.3	0.95	ug/L	1	03/22/19	WB	SW8270D
3,3'-Dichlorobenzidine	ND	5.0	2.5	ug/L	1	03/22/19	WB	SW8270D
3-Nitroaniline	ND	5.0	5.0	ug/L	1	03/22/19	WB	SW8270D
4,6-Dinitro-2-methylphenol	ND	1.0	3.7	ug/L	1	03/22/19	WB	SW8270D
4-Bromophenyl phenyl ether	ND	5.3	1.5	ug/L	1	03/22/19	WB	SW8270D
4-Chloro-3-methylphenol	ND	1.0	0.95	ug/L	1	03/22/19	WB	SW8270D
4-Chloroaniline	ND	5.0	2.4	ug/L	1	03/22/19	WB	SW8270D
4-Chlorophenyl phenyl ether	ND	5.3	1.8	ug/L	1	03/22/19	WB	SW8270D
4-Nitroaniline	ND	5.0	1.8	ug/L	1	03/22/19	WB	SW8270D
4-Nitrophenol	ND	1.0	0.95	ug/L	1	03/22/19	WB	SW8270D
Acenaphthene	ND	5.3	1.6	ug/L	1	03/22/19	WB	SW8270D
Acetophenone	ND	5.3	1.6	ug/L	1	03/22/19	WB	SW8270D
Atrazine	ND	1.1	1.1	ug/L	1	03/22/19	WB	SW8270D
Benzaldehyde	ND	5.3	1.6	ug/L	1	03/22/19	WB	SW8270D
Benzyl butyl phthalate	ND	5.3	1.4	ug/L	1	03/22/19	WB	SW8270D
Bis(2-chloroethoxy)methane	ND	5.0	1.4	ug/L	1	03/22/19	WB	SW8270D
Bis(2-chloroisopropyl)ether	ND	5.3	1.5	ug/L	1	03/22/19	WB	SW8270D
Bis(2-ethylhexyl)phthalate	ND	1.1	1.1	ug/L	1	03/22/19	WB	SW8270D
Caprolactam	ND	5.3	9.4	ug/L	1	03/22/19	WB	SW8270D
Carbazole	ND	5.3	4.0	ug/L	1	03/22/19	WB	SW8270D
Dibenzofuran	ND	5.0	1.5	ug/L	1	03/22/19	WB	SW8270D
Diethyl phthalate	ND	5.3	1.7	ug/L	1	03/22/19	WB	SW8270D
Dimethylphthalate	ND	5.3	1.6	ug/L	1	03/22/19	WB	SW8270D
Di-n-butylphthalate	ND	5.3	1.4	ug/L	1	03/22/19	WB	SW8270D
Di-n-octylphthalate	ND	5.3	1.4	ug/L	1	03/22/19	WB	SW8270D
Hexachlorocyclopentadiene	ND	5.0	1.6	ug/L	1	03/22/19	WB	SW8270D
Hexachloroethane	ND	1.1	1.1	ug/L	1	03/22/19	WB	SW8270D
Isophorone	ND	5.3	1.5	ug/L	1	03/22/19	WB	SW8270D
Naphthalene	ND	5.0	1.5	ug/L	1	03/22/19	WB	SW8270D
N-Nitrosodi-n-propylamine	ND	5.3	1.7	ug/L	1	03/22/19	WB	SW8270D
N-Nitrosodiphenylamine	ND	5.3	2.0	ug/L	1	03/22/19	WB	SW8270D
Phenol	ND	1.0	0.95	ug/L	1	03/22/19	WB	SW8270D
<b>QA/QC Surrogates</b>								
% 2,4,6-Tribromophenol	94			%	1	03/22/19	WB	15 - 110 %
% 2-Fluorobiphenyl	84			%	1	03/22/19	WB	30 - 130 %
% 2-Fluorophenol	63			%	1	03/22/19	WB	15 - 110 %
% Nitrobenzene-d5	78			%	1	03/22/19	WB	30 - 130 %
% Phenol-d5	60			%	1	03/22/19	WB	15 - 110 %

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
% Terphenyl-d14	84			%	1	03/22/19	WB	30 - 130 %
<b><u>Semivolatiles</u></b>								
Acenaphthylene	ND	0.53	0.53	ug/L	1	03/22/19	WB	SW8270D (SIM)
Anthracene	ND	0.53	0.53	ug/L	1	03/22/19	WB	SW8270D (SIM)
Benz(a)anthracene	ND	0.02	0.02	ug/L	1	03/22/19	WB	SW8270D (SIM)
Benzo(a)pyrene	ND	0.02	0.02	ug/L	1	03/22/19	WB	SW8270D (SIM)
Benzo(b)fluoranthene	ND	0.02	0.02	ug/L	1	03/22/19	WB	SW8270D (SIM)
Benzo(ghi)perylene	ND	0.53	0.53	ug/L	1	03/22/19	WB	SW8270D (SIM)
Benzo(k)fluoranthene	ND	0.02	0.02	ug/L	1	03/22/19	WB	SW8270D (SIM)
Bis(2-chloroethyl)ether	ND	0.53	0.53	ug/L	1	03/22/19	WB	SW8270D (SIM)
Chrysene	ND	0.02	0.02	ug/L	1	03/22/19	WB	SW8270D (SIM)
Dibenz(a,h)anthracene	ND	0.53	0.53	ug/L	1	03/22/19	WB	SW8270D (SIM)
Fluoranthene	ND	0.53	0.53	ug/L	1	03/22/19	WB	SW8270D (SIM)
Fluorene	ND	0.53	0.53	ug/L	1	03/22/19	WB	SW8270D (SIM)
Hexachlorobenzene	ND	0.04	0.04	ug/L	1	03/22/19	WB	SW8270D (SIM)
Hexachlorobutadiene	ND	0.50	0.50	ug/L	1	03/22/19	WB	SW8270D (SIM)
Hexachlorocyclopentadiene	ND	0.53	0.53	ug/L	1	03/22/19	WB	SW8270D (SIM)
Indeno(1,2,3-cd)pyrene	ND	0.02	0.02	ug/L	1	03/22/19	WB	SW8270D (SIM)
Nitrobenzene	ND	0.40	0.40	ug/L	1	03/22/19	WB	SW8270D (SIM)
N-Nitrosodimethylamine	ND	0.21	0.21	ug/L	1	03/22/19	WB	SW8270D (SIM)
Pentachlorophenol	ND	0.53	0.53	ug/L	1	03/22/19	WB	SW8270D (SIM)
Phenanthrene	ND	0.53	0.53	ug/L	1	03/22/19	WB	SW8270D (SIM)
Pyrene	ND	0.53	0.53	ug/L	1	03/22/19	WB	SW8270D (SIM)
<b><u>QA/QC Surrogates</u></b>								
% 2,4,6-Tribromophenol	109			%	1	03/22/19	WB	15 - 110 %
% 2-Fluorobiphenyl	87			%	1	03/22/19	WB	30 - 130 %
% 2-Fluorophenol	77			%	1	03/22/19	WB	15 - 110 %
% Nitrobenzene-d5	96			%	1	03/22/19	WB	30 - 130 %
% Phenol-d5	85			%	1	03/22/19	WB	15 - 110 %
% Terphenyl-d14	81			%	1	03/22/19	WB	30 - 130 %
Extraction for 1,4-Dioxane	Completed					03/20/19	S/S	
SVOA Library Search Top 15	Completed					03/25/19	MR	



Client ID: GW DUPLICATE

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

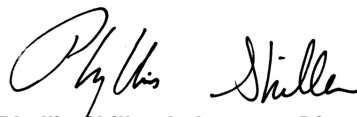
RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected at RL/PQL  
BRL=Below Reporting Level L=Biased Low J=Estimated Below RL LOD=Limit of Detection MDL=Method Detection Limit1  
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

**Comments:**

**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**

**April 02, 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

April 02, 2019

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: CP  
 Analyzed by: see "By" below

## Date

03/19/19

## Time

16:00

## Laboratory Data

SDG ID: GCC71631  
 Phoenix ID: CC71636

Project ID: 1840 PARK AVE, MANHATTAN  
 Client ID: TRIP BLANKS

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
<b><u>1,4-dioxane</u></b>								
1,4-dioxane	ND	100		ug/l	1	03/22/19	MH	SW8260C
<b><u>Volatiles</u></b>								
1,1,1-Trichloroethane	ND	2.0	0.25	ug/L	1	03/22/19	MH	SW8260C
1,1,2,2-Tetrachloroethane	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
1,1,2-Trichloroethane	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
1,1-Dichloroethane	ND	2.0	0.25	ug/L	1	03/22/19	MH	SW8260C
1,1-Dichloroethene	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
1,2,3-Trichlorobenzene	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
1,2,4-Trichlorobenzene	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
1,2-Dibromo-3-chloropropane	ND	0.50	0.50	ug/L	1	03/22/19	MH	SW8260C
1,2-Dibromoethane	ND	0.25	0.25	ug/L	1	03/22/19	MH	SW8260C
1,2-Dichlorobenzene	ND	2.0	0.25	ug/L	1	03/22/19	MH	SW8260C
1,2-Dichloroethane	ND	0.60	0.25	ug/L	1	03/22/19	MH	SW8260C
1,2-Dichloropropane	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
1,3-Dichlorobenzene	ND	2.0	0.25	ug/L	1	03/22/19	MH	SW8260C
1,4-Dichlorobenzene	ND	2.0	0.25	ug/L	1	03/22/19	MH	SW8260C
2-Hexanone	ND	2.5	2.5	ug/L	1	03/22/19	MH	SW8260C
4-Methyl-2-pentanone	ND	2.5	2.5	ug/L	1	03/22/19	MH	SW8260C
Acetone	ND	5.0	2.5	ug/L	1	03/22/19	MH	SW8260C
Benzene	ND	0.70	0.25	ug/L	1	03/22/19	MH	SW8260C
Bromochloromethane	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
Bromodichloromethane	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
Bromoform	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
Bromomethane	ND	2.0	0.25	ug/L	1	03/22/19	MH	SW8260C
Carbon Disulfide	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Carbon tetrachloride	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
Chlorobenzene	ND	2.0	0.25	ug/L	1	03/22/19	MH	SW8260C
Chloroethane	ND	2.0	0.25	ug/L	1	03/22/19	MH	SW8260C
Chloroform	ND	2.0	0.25	ug/L	1	03/22/19	MH	SW8260C
Chloromethane	ND	2.0	0.25	ug/L	1	03/22/19	MH	SW8260C
cis-1,2-Dichloroethene	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
cis-1,3-Dichloropropene	ND	0.40	0.25	ug/L	1	03/22/19	MH	SW8260C
Cyclohexane	ND	5.0	0.50	ug/L	1	03/22/19	MH	SW8260C
Dibromochloromethane	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
Dichlorodifluoromethane	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
Ethylbenzene	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
Isopropylbenzene	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
m&p-Xylene	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
Methyl ethyl ketone	ND	5.0	2.5	ug/L	1	03/22/19	MH	SW8260C
Methyl t-butyl ether (MTBE)	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
Methylacetate	ND	2.5	2.5	ug/L	1	03/22/19	MH	SW8260C
Methylcyclohexane	ND	2.0	0.50	ug/L	1	03/22/19	MH	SW8260C
Methylene chloride	ND	3.0	1.0	ug/L	1	03/22/19	MH	SW8260C
o-Xylene	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
Styrene	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
Tetrachloroethene	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
Toluene	ND	2.0	0.25	ug/L	1	03/22/19	MH	SW8260C
Total Xylenes	ND	1.0	1.0	ug/L	1	03/22/19	MH	SW8260C
trans-1,2-Dichloroethene	ND	2.0	0.25	ug/L	1	03/22/19	MH	SW8260C
trans-1,3-Dichloropropene	ND	0.40	0.25	ug/L	1	03/22/19	MH	SW8260C
Trichloroethene	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
Trichlorofluoromethane	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
Trichlorotrifluoroethane	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
Vinyl chloride	ND	1.0	0.25	ug/L	1	03/22/19	MH	SW8260C
<b><u>QA/QC Surrogates</u></b>								
% 1,2-dichlorobenzene-d4	94			%	1	03/22/19	MH	70 - 130 %
% Bromofluorobenzene	97			%	1	03/22/19	MH	70 - 130 %
% Dibromofluoromethane	90			%	1	03/22/19	MH	70 - 130 %
% Toluene-d8	92			%	1	03/22/19	MH	70 - 130 %
Volatile Library Search Top 10	Completed					03/25/19	MH	

Client ID: TRIP BLANKS

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
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RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected at RL/PQL  
BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit  
QA/QC Surrogates: Surrogates are compounds (preceeded 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**

**April 02, 2019**

**Reviewed and Released by: Phyllis Shiller, Laboratory Director**

1E  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID

MW1

Lab Name: Phoenix Environmental Labs

Client: EBC

Lab Code: Phoenix Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: GCC71631

Matrix:(soil/water) WATER

Lab Sample ID: CC71631

Sample wt/vol: 25 (g/mL) mL

Lab File ID: 0322\_12.D

Level: (low/med) \_\_\_\_\_

Date Received: 03/20/19

% Moisture: not dec. 100

Date Analyzed: 03/22/19

GC Column: rtx-vms ID: 0.18 (mm)

Dilution Factor: 1

Purge Volume 25000 (uL)

Soil Aliquot Vol (uL): n.a.

Number TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/KG) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1E  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID

MW2
-----

Lab Name: Phoenix Environmental Labs

Client: EBC

Lab Code: Phoenix Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_ SDG No.: GCC71631

Matrix:(soil/water) WATER

Lab Sample ID: CC71632

Sample wt/vol: 25 (g/mL) mL

Lab File ID: 0322\_13.D

Level: (low/med) \_\_\_\_\_

Date Received: 03/20/19

% Moisture: not dec. 100

Date Analyzed: 03/22/19

GC Column: rtx-vms ID: 0.18 (mm)

Dilution Factor: 1

Purge Volume 25000 (uL)

Soil Aliquot Vol (uL): n.a.

Number TICs found: 0 CONCENTRATION UNITS:  
(ug/L or ug/KG) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q



1E  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID

MW4

Lab Name: Phoenix Environmental Labs

Client: EBC

Lab Code: Phoenix Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: GCC71631

Matrix:(soil/water) WATER

Lab Sample ID: CC71634

Sample wt/vol: 25 (g/mL) mL

Lab File ID: 0322\_15.D

Level: (low/med) \_\_\_\_\_

Date Received: 03/20/19

% Moisture: not dec. 100

Date Analyzed: 03/22/19

GC Column: rtx-vms ID: 0.18 (mm)

Dilution Factor: 1

Purge Volume 25000 (uL)

Soil Aliquot Vol (uL): n.a.

CONCENTRATION UNITS:

Number TICs found: 0

(ug/L or ug/KG) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q



1E  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID  GW DUPLICATE
-------------------------------

Lab Name: Phoenix Environmental Labs

Client: EBC

Lab Code: Phoenix Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: GCC71631

Matrix:(soil/water) WATER

Lab Sample ID: CC71635

Sample wt/vol: 25 (g/mL) mL

Lab File ID: 0322\_16.D

Level: (low/med) \_\_\_\_\_

Date Received: 03/20/19

% Moisture: not dec. 100

Date Analyzed: 03/22/19

GC Column: rtx-vms ID: 0.18 (mm)

Dilution Factor: 1

Purge Volume 25000 (uL)

Soil Aliquot Vol (uL): n.a.

Number TICs found: 0 CONCENTRATION UNITS:  
(ug/L or ug/KG) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1E  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID

CC71636 BLK

Lab Name: Phoenix Environmental Labs

Client: \_\_\_\_\_

Lab Code: Phoenix Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_ SDG No.: \_\_\_\_\_

Matrix:(soil/water) WATER

Lab Sample ID: CC71636 BLK

Sample wt/vol: 25 (g/mL) mL

Lab File ID: 0322\_07.D

Level: (low/med) Low

Date Received: 03/20/19

% Moisture: not dec. 0

Date Analyzed: 03/22/19

GC Column: rtx-vms ID: 0.18 (mm)

Dilution Factor: 1

Purge Volume 25000 (uL)

Soil Aliquot Vol (uL): n.a.

Number TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/KG) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

FORM I VOA-TIC

1E  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID

TRIP BLANKS

Lab Name: Phoenix Environmental Labs

Client: EBC

Lab Code: Phoenix Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: GCC71631

Matrix:(soil/water) WATER

Lab Sample ID: CC71636

Sample wt/vol: 25 (g/mL) mL

Lab File ID: 0322\_08.D

Level: (low/med) \_\_\_\_\_

Date Received: 03/20/19

% Moisture: not dec. 100

Date Analyzed: 03/22/19

GC Column: rtx-vms ID: 0.18 (mm)

Dilution Factor: \_\_\_\_\_ 1

Purge Volume 25000 (uL)

Soil Aliquot Vol (uL): \_\_\_\_\_ n.a.

Number TICs found: 0 CONCENTRATION UNITS:  
(ug/L or ug/KG) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1F  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID  
MW1

Lab Name: Phoenix Environmental Labs

Client: EBC

Lab Code: Phoenix Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_ SDG No.: GCC7163

Matrix:(soil/water) WATER

Lab Sample ID: CC71631

Sample wt/vol: 990 (g/mL) mL

Lab File ID: 0322\_11.D

Level: (low/med) Low

Date Received: 03/20/19

% Moisture: not dec. 100 decanted:(Y/N) NA

Date Extracted: 03/22/19

GPC Cleanup (Y/N): N pH: NA

Date Analyzed: 3/22/2019

Conc. Extract Volume: 1000 (uL)

Dilution Factor 1

Injection Volume: 1 (uL)

CONCENTRATION UNITS:  
(ug/L or ug/KG) ug/L

Number TICs found: 2

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	2.714	29	JNA
	unknown hydrocarbon	3.179	5	J

FORM I SEMIVOA-TIC

A - Indicates that the tentatively identified compound is a suspected aldol condensation product.  
Aldol condensation products are produced during the extraction process.

1F  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID

MW2

Lab Name: Phoenix Environmental Labs

Client: EBC

Lab Code: Phoenix Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: GCC7163

Matrix:(soil/water) WATER

Lab Sample ID: CC71632

Sample wt/vol: 1020 (g/mL) mL

Lab File ID: 0322\_12.D

Level: (low/med) Low

Date Received: 03/20/19

% Moisture: not dec. 100 decanted:(Y/N) NA

Date Extracted: 03/22/19

GPC Cleanup (Y/N): N pH: NA

Date Analyzed: 3/22/2019

Conc. Extract Volume: 1000 (uL)

Dilution Factor 1

Injection Volume: 1 (uL)

CONCENTRATION UNITS:  
(ug/L or ug/KG) ug/L

Number TICs found: 2

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	2.719	7.1	JNA
	unknown hydrocarbon	3.179	4.9	J

FORM I SEMIVOA-TIC

A - Indicates that the tentatively identified compound is a suspected aldol condensation product.  
Aldol condensation products are produced during the extraction process.

1F  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID

MW3
-----

Lab Name: Phoenix Environmental Labs

Client: EBC

Lab Code: Phoenix Case No.:                     

SAS No.:                                     

SDG No.: GCC7163

Matrix:(soil/water)   WATER  

Lab Sample ID:   CC71633  

Sample wt/vol:   1010   (g/mL)   mL  

Lab File ID:   0322\_13.D  

Level: (low/med)   Low  

Date Received:   03/20/19  

% Moisture: not dec.   100   decanted:(Y/N)   NA  

Date Extracted:   03/22/19  

GPC Cleanup (Y/N):   N   pH:   NA  

Date Analyzed:   3/22/2019  

Conc. Extract Volume:   1000   (uL)

Dilution Factor   1  

Injection Volume:   1   (uL)

CONCENTRATION UNITS:  
(ug/L or ug/KG)   ug/L  

Number TICs found:   2  

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	2.714	25	JNA
	unknown hydrocarbon	3.179	5.4	J

FORM I SEMIVOA-TIC

A - Indicates that the tentatively identified compound is a suspected aldol condensation product.  
Aldol condensation products are produced during the extraction process.

1F  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID
MW4

Lab Name: <u>Phoenix Environmental Labs</u>	Client: <u>EBC</u>
Lab Code: <u>Phoenix</u> Case No.: _____	SAS No.: _____ SDG No.: <u>GCC7163</u>
Matrix:(soil/water) <u>WATER</u>	Lab Sample ID: <u>CC71634</u>
Sample wt/vol: <u>990</u> (g/mL) <u>mL</u>	Lab File ID: <u>0322_14.D</u>
Level: (low/med) <u>Low</u>	Date Received: <u>03/20/19</u>
% Moisture: not dec. <u>100</u> decanted:(Y/N) <u>NA</u>	Date Extracted: <u>03/22/19</u>
GPC Cleanup (Y/N): <u>N</u> pH: <u>NA</u>	Date Analyzed: <u>3/22/2019</u>
Conc. Extract Volume: <u>1000</u> (uL)	Dilution Factor <u>1</u>
Injection Volume: <u>1</u> (uL)	
Number TICs found: <u>2</u>	CONCENTRATION UNITS: (ug/L or ug/KG) <u>ug/L</u>

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	2.719	19	JNA
	unknown hydrocarbon	3.179	6.4	J

FORM I SEMIVOA-TIC

A - Indicates that the tentatively identified compound is a suspected aldol condensation product.  
Aldol condensation products are produced during the extraction process.

1F  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID  
GW DUPLICATE

 Lab Name: Phoenix Environmental Labs

 Client: EBC

 Lab Code: Phoenix Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

 SDG No.: GCC7163

 Matrix:(soil/water) WATER

 Lab Sample ID: CC71635

 Sample wt/vol: 955 (g/mL) mL

 Lab File ID: 0322\_15.D

 Level: (low/med) Low

 Date Received: 03/20/19

 % Moisture: not dec. 100 decanted:(Y/N) NA

 Date Extracted: 03/22/19

 GPC Cleanup (Y/N): N pH: NA

 Date Analyzed: 3/22/2019

 Conc. Extract Volume: 1000 (uL)

 Dilution Factor 1

 Injection Volume: 1 (uL)

 CONCENTRATION UNITS:  
(ug/L or ug/KG) ug/L

 Number TICs found: 2

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	2.714	9.7	JNA
	unknown hydrocarbon	3.179	5.3	J

FORM I SEMIVOA-TIC

A - Indicates that the tentatively identified compound is a suspected aldol condensation product. Aldol condensation products are produced during the extraction process.





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# QA/QC Report

April 02, 2019

## QA/QC Data

SDG I.D.: GCC71631

Parameter	Blank	Blk RL	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
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QA/QC Batch 470939 (mg/L), QC Sample No: CC70658 (CC71631, CC71632, CC71633, CC71634, CC71635)

Mercury - Water	BRL	0.0002	<0.0002	<0.0002	NC	99.1			63.6			80 - 120	20
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Comment:

Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%. MS acceptance range is 75-125%.

QA/QC Batch 471131 (mg/L), QC Sample No: CC70984 (CC71631, CC71632, CC71633, CC71634, CC71635)

Mercury (Dissolved)	BRL	0.0002	<0.0002	<0.0003	NC	85.8			83.1			80 - 120	20
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Comment:

Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%. MS acceptance range is 75-125%.

QA/QC Batch 471237 (mg/L), QC Sample No: CC70233 (CC71631, CC71632, CC71633, CC71634, CC71635)

### ICP Metals - Aqueous

Aluminum	BRL	0.010	0.042	0.034	NC	97.6			99.7			75 - 125	20
Arsenic	BRL	0.004	<0.004	<0.004	NC	96.4			100			75 - 125	20
Barium	BRL	0.002	0.226	0.224	0.90	98.7			99.9			75 - 125	20
Beryllium	BRL	0.001	<0.001	<0.001	NC	105			106			75 - 125	20
Cadmium	BRL	0.001	<0.001	<0.001	NC	99.9			97.1			75 - 125	20
Calcium	BRL	0.010	60.4	60.4	0	99.9			NC			75 - 125	20
Chromium	BRL	0.001	<0.001	<0.001	NC	97.8			98.1			75 - 125	20
Cobalt	BRL	0.002	<0.002	<0.002	NC	97.6			96.8			75 - 125	20
Copper	BRL	0.005	<0.005	<0.005	NC	101			105			75 - 125	20
Iron	BRL	0.010	<0.010	<0.010	NC	99.1			98.6			75 - 125	20
Lead	BRL	0.002	<0.002	<0.002	NC	97.5			98.4			75 - 125	20
Magnesium	BRL	0.010	10.9	10.7	1.90	102			NC			75 - 125	20
Manganese	BRL	0.001	0.002	0.001	NC	97.6			98.4			75 - 125	20
Nickel	BRL	0.001	0.001	0.001	NC	97.7			97.8			75 - 125	20
Potassium	BRL	0.1	1.0	1.0	0	102			101			75 - 125	20
Silver	BRL	0.001	<0.001	<0.001	NC	96.5			101			75 - 125	20
Sodium	BRL	0.10	12.7	12.7	0	102			NC			75 - 125	20
Vanadium	BRL	0.002	<0.002	<0.002	NC	98.7			104			75 - 125	20
Zinc	BRL	0.004	<0.004	<0.004	NC	98.0			97.8			75 - 125	20

QA/QC Batch 471102 (mg/L), QC Sample No: CC71213 (CC71631, CC71632, CC71633, CC71634, CC71635)

### ICP Metals - Dissolved

Aluminum	BRL	0.011	0.121	0.124	2.40	87.1			92.9			75 - 125	20
Arsenic	BRL	0.004	<0.004	<0.004	NC	91.9			92.7			75 - 125	20
Barium	BRL	0.002	0.212	0.212	0	87.3			85.5			75 - 125	20
Beryllium	BRL	0.001	<0.001	<0.001	NC	94.0			93.9			75 - 125	20
Cadmium	BRL	0.001	<0.001	<0.001	NC	94.5			89.8			75 - 125	20
Calcium	BRL	0.01	37.7	37.8	0.30	91.3			NC			75 - 125	20
Chromium	BRL	0.001	<0.001	<0.001	NC	91.9			87.6			75 - 125	20
Cobalt	BRL	0.001	0.002	0.002	NC	92.2			86.9			75 - 125	20
Copper	BRL	0.005	<0.005	<0.005	NC	89.8			93.1			75 - 125	20
Iron	BRL	0.011	0.028	0.028	NC	92.7			87.0			75 - 125	20
Lead	BRL	0.002	<0.002	<0.002	NC	92.9			87.3			75 - 125	20

## QA/QC Data

SDG I.D.: GCC71631

Parameter	Blank	Blk RL	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
Magnesium	BRL	0.01	4.79	4.78	0.20	96.2			83.7			75 - 125	20
Manganese	BRL	0.001	0.935	0.935	0	92.3			87.4			75 - 125	20
Nickel	BRL	0.001	0.006	0.006	0	92.1			86.3			75 - 125	20
Potassium	BRL	0.1	3.9	3.9	0	87.0			92.1			75 - 125	20
Silver	BRL	0.001	<0.001	<0.001	NC	88.6			91.5			75 - 125	20
Sodium	BRL	0.11	517	525	1.50	84.8			NC			75 - 125	20
Vanadium	BRL	0.002	<0.002	0.002	NC	91.4			90.7			75 - 125	20
Zinc	BRL	0.002	0.027	0.027	0	92.4			91.5			75 - 125	20

QA/QC Batch 471236 (mg/L), QC Sample No: CC70914 5X (CC71631, CC71632, CC71633, CC71634, CC71635)

### ICP MS Metals - Aqueous

Antimony	BRL	0.0030	<0.0030	<0.0030	NC	104			103	104	1.0	75 - 125	20
Selenium	BRL	0.010	<0.010	<0.010	NC	123			114	115	0.9	75 - 125	20
Thallium	BRL	0.0005	<0.0005	<0.0005	NC	101			96.2	94.8	1.5	75 - 125	20

QA/QC Batch 471103 (mg/L), QC Sample No: CC71631 (CC71631, CC71632, CC71633, CC71634, CC71635)

### ICP Metals MS - Dissolved

Antimony	BRL	0.0003	<0.0003	<0.0003	NC	93.9			90.6			75 - 125	20
Selenium	BRL	0.002	<0.01	<0.011	NC	93.0			85.1			75 - 125	20
Thallium	BRL	0.0003	<0.0003	<0.0003	NC	96.1			86.6			75 - 125	20

m = This parameter is outside laboratory MS/MSD specified recovery limits.



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# QA/QC Report

April 02, 2019

## QA/QC Data

SDG I.D.: GCC71631

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 471015 (ug/L), QC Sample No: CC71211 (CC71631, CC71632, CC71633, CC71634, CC71635)										
<u>Polychlorinated Biphenyls - Ground Water</u>										
PCB-1016	ND	0.050	94	81	14.9				40 - 140	20
PCB-1221	ND	0.050							40 - 140	20
PCB-1232	ND	0.050							40 - 140	20
PCB-1242	ND	0.050							40 - 140	20
PCB-1248	ND	0.050							40 - 140	20
PCB-1254	ND	0.050							40 - 140	20
PCB-1260	ND	0.050	85	81	4.8				40 - 140	20
PCB-1262	ND	0.050							40 - 140	20
PCB-1268	ND	0.050							40 - 140	20
% DCBP (Surrogate Rec)	106	%	84	76	10.0				30 - 150	20
% DCBP (Surrogate Rec) (Confirm)	105	%	82	78	5.0				30 - 150	20
% TCMX (Surrogate Rec)	93	%	100	87	13.9				30 - 150	20
% TCMX (Surrogate Rec) (Confirm)	91	%	94	83	12.4				30 - 150	20

Comment:

A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.

QA/QC Batch 471085 (ug/L), QC Sample No: CC71213 (CC71631, CC71632, CC71633, CC71634, CC71635)

## Pesticides - Ground Water

4,4' -DDD	ND	0.003	103	126	20.1				40 - 140	20
4,4' -DDE	ND	0.003	82	87	5.9				40 - 140	20
4,4' -DDT	ND	0.003	73	85	15.2				40 - 140	20
a-BHC	ND	0.002	79	94	17.3				40 - 140	20
a-Chlordane	ND	0.005	75	83	10.1				40 - 140	20
Alachlor	ND	0.005	NA	NA	NC				40 - 140	20
Aldrin	ND	0.002	66	68	3.0				40 - 140	20
b-BHC	ND	0.002	90	93	3.3				40 - 140	20
Chlordane	ND	0.050	69	80	14.8				40 - 140	20
d-BHC	ND	0.005	79	97	20.5				40 - 140	20
Dieldrin	ND	0.002	81	80	1.2				40 - 140	20
Endosulfan I	ND	0.005	76	82	7.6				40 - 140	20
Endosulfan II	ND	0.005	99	90	9.5				40 - 140	20
Endosulfan sulfate	ND	0.005	84	83	1.2				40 - 140	20
Endrin	ND	0.005	96	123	24.7				40 - 140	20
Endrin aldehyde	ND	0.005	92	87	5.6				40 - 140	20
Endrin ketone	ND	0.005	74	65	12.9				40 - 140	20
g-BHC	ND	0.002	76	92	19.0				40 - 140	20
g-Chlordane	ND	0.005	69	80	14.8				40 - 140	20
Heptachlor	ND	0.005	81	81	0.0				40 - 140	20
Heptachlor epoxide	ND	0.005	103	91	12.4				40 - 140	20
Methoxychlor	ND	0.005	115	93	21.2				40 - 140	20
Toxaphene	ND	0.20	NA	NA	NC				40 - 140	20

## QA/QC Data

SDG I.D.: GCC71631

Parameter	BIK		LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
	Blank	RL									
% DCBP	73	%	67	65	3.0				30 - 150	20	
% DCBP (Confirmation)	82	%	73	73	0.0				30 - 150	20	
% TCMX	77	%	70	68	2.9				30 - 150	20	
% TCMX (Confirmation)	85	%	84	80	4.9				30 - 150	20	
QA/QC Batch 471049 (ug/L), QC Sample No: CC71745 (CC71631, CC71632, CC71633, CC71634, CC71635)											
<u>Semivolatiles - Ground Water</u>											
1,1-Biphenyl	ND	3.5	85	84	1.2				30 - 130	20	
1,2,4,5-Tetrachlorobenzene	ND	3.5	95	86	9.9				30 - 130	20	
2,3,4,6-tetrachlorophenol	ND	3.5	90	94	4.3				30 - 130	20	
2,4,5-Trichlorophenol	ND	1.0	97	99	2.0				30 - 130	20	
2,4,6-Trichlorophenol	ND	1.0	87	92	5.6				30 - 130	20	
2,4-Dichlorophenol	ND	1.0	96	92	4.3				30 - 130	20	
2,4-Dimethylphenol	ND	1.0	102	90	12.5				30 - 130	20	
2,4-Dinitrophenol	ND	1.0	61	76	21.9				30 - 130	20	r
2,4-Dinitrotoluene	ND	3.5	103	105	1.9				30 - 130	20	
2,6-Dinitrotoluene	ND	3.5	99	100	1.0				30 - 130	20	
2-Chloronaphthalene	ND	3.5	88	88	0.0				30 - 130	20	
2-Chlorophenol	ND	1.0	76	80	5.1				30 - 130	20	
2-Methylnaphthalene	ND	3.5	88	80	9.5				30 - 130	20	
2-Methylphenol (o-cresol)	ND	1.0	85	91	6.8				30 - 130	20	
2-Nitroaniline	ND	3.5	106	152	35.7				30 - 130	20	l,r
2-Nitrophenol	ND	1.0	109	104	4.7				30 - 130	20	
3&4-Methylphenol (m&p-cresol)	ND	1.0	80	90	11.8				30 - 130	20	
3,3'-Dichlorobenzidine	ND	5.0	<10	63	NC				30 - 130	20	l
3-Nitroaniline	ND	5.0	57	113	65.9				30 - 130	20	r
4,6-Dinitro-2-methylphenol	ND	1.0	97	112	14.4				30 - 130	20	
4-Bromophenyl phenyl ether	ND	3.5	89	88	1.1				30 - 130	20	
4-Chloro-3-methylphenol	ND	1.0	99	96	3.1				30 - 130	20	
4-Chloroaniline	ND	3.5	26	91	111.1				30 - 130	20	l,r
4-Chlorophenyl phenyl ether	ND	1.0	93	92	1.1				30 - 130	20	
4-Nitroaniline	ND	5.0	93	99	6.3				30 - 130	20	
4-Nitrophenol	ND	1.0	86	99	14.1				15 - 130	20	
Acenaphthene	ND	1.5	90	89	1.1				30 - 130	20	
Acetophenone	ND	3.5	83	85	2.4				30 - 130	20	
Atrazine	ND	3.5	<10	86	NC				30 - 130	20	l
Benzaldehyde	ND	3.5	122	164	29.4				30 - 130	20	l,r
Benzyl butyl phthalate	ND	1.5	81	90	10.5				30 - 130	20	
Bis(2-chloroethoxy)methane	ND	3.5	33	80	83.2				30 - 130	20	r
Bis(2-chloroisopropyl)ether	ND	1.0	62	64	3.2				30 - 130	20	
Bis(2-ethylhexyl)phthalate	ND	1.5	91	92	1.1				30 - 130	20	
Caprolactam	ND	3.5	89	88	1.1				30 - 130	20	
Carbazole	ND	5.0	37	92	85.3				30 - 130	20	r
Dibenzofuran	ND	3.5	91	90	1.1				30 - 130	20	
Diethyl phthalate	ND	1.5	92	92	0.0				30 - 130	20	
Dimethylphthalate	ND	1.5	91	92	1.1				30 - 130	20	
Di-n-butylphthalate	ND	1.5	92	91	1.1				30 - 130	20	
Di-n-octylphthalate	ND	1.5	95	96	1.0				30 - 130	20	
Hexachlorocyclopentadiene	ND	3.5	58	50	14.8				30 - 130	20	
Hexachloroethane	ND	3.5	79	79	0.0				30 - 130	20	
Isophorone	ND	3.5	84	79	6.1				30 - 130	20	
Naphthalene	ND	1.5	90	81	10.5				30 - 130	20	
N-Nitrosodi-n-propylamine	ND	3.5	84	88	4.7				30 - 130	20	

QA/QC Data

SDG I.D.: GCC71631

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
N-Nitrosodiphenylamine	ND	3.5	39	88	77.2				30 - 130	20
Phenol	ND	1.0	61	86	34.0				15 - 130	20
% 2,4,6-Tribromophenol	71	%	92	96	4.3				15 - 110	20
% 2-Fluorobiphenyl	78	%	87	86	1.2				30 - 130	20
% 2-Fluorophenol	55	%	59	65	9.7				15 - 110	20
% Nitrobenzene-d5	72	%	84	86	2.4				30 - 130	20
% Phenol-d5	58	%	57	72	23.3				15 - 110	20
% Terphenyl-d14	89	%	90	88	2.2				30 - 130	20

Comment:

Additional 8270 criteria: 20% of compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 15-110%, for soils 30-130%)

QA/QC Batch 471046 (ug/l), QC Sample No: CC69571 (CC71635)

1,4dioxane - Ground Water

1,4-dioxane	ND	0.25	98	103	5.0	96			30 - 130	20
% 1,4-dioxane-d8	92	%	98	100	2.0	87			30 - 130	20

QA/QC Batch 471230 (ug/l), QC Sample No: CC71634 (CC71634)

1,4dioxane - Ground Water

1,4-dioxane	ND	0.25	98	101	3.0	98			30 - 130	20
% 1,4-dioxane-d8	101	%	97	97	0.0	93			30 - 130	20

QA/QC Batch 471049 (ug/L), QC Sample No: CC71745 (CC71631, CC71632, CC71633, CC71634, CC71635)

Semivolatiles (SIM) - Ground Water

Acenaphthylene	ND	0.50	88	99	11.8				30 - 130	20
Anthracene	ND	0.50	104	102	1.9				30 - 130	20
Benz(a)anthracene	ND	0.50	100	99	1.0				30 - 130	20
Benzo(a)pyrene	ND	0.50	95	101	6.1				30 - 130	20
Benzo(b)fluoranthene	ND	0.50	115	111	3.5				30 - 130	20
Benzo(ghi)perylene	ND	0.50	101	99	2.0				30 - 130	20
Benzo(k)fluoranthene	ND	0.50	113	110	2.7				30 - 130	20
Bis(2-chloroethyl)ether	ND	0.50	101	99	2.0				30 - 130	20
Chrysene	ND	0.50	106	102	3.8				30 - 130	20
Dibenz(a,h)anthracene	ND	0.50	123	118	4.1				30 - 130	20
Fluoranthene	ND	0.50	113	109	3.6				30 - 130	20
Fluorene	ND	0.50	109	106	2.8				30 - 130	20
Hexachlorobenzene	ND	0.50	103	100	3.0				30 - 130	20
Hexachlorobutadiene	ND	0.50	104	89	15.5				30 - 130	20
Hexachlorocyclopentadiene	ND	0.50	64	50	24.6				30 - 130	20
Indeno(1,2,3-cd)pyrene	ND	0.50	118	115	2.6				30 - 130	20
Nitrobenzene	ND	0.50	130	113	14.0				30 - 130	20
N-Nitrosodimethylamine	ND	0.05	98	100	2.0				30 - 130	20
Pentachlorophenol	ND	0.50	125	124	0.8				30 - 130	20
Phenanthrene	ND	0.50	104	100	3.9				30 - 130	20
Pyrene	ND	0.50	110	109	0.9				30 - 130	20
% 2,4,6-Tribromophenol	92	%	122	120	1.7				15 - 110	20
% 2-Fluorobiphenyl	80	%	101	98	3.0				30 - 130	20
% 2-Fluorophenol	73	%	77	82	6.3				15 - 110	20
% Nitrobenzene-d5	94	%	116	110	5.3				30 - 130	20
% Phenol-d5	83	%	80	96	18.2				15 - 110	20
% Terphenyl-d14	82	%	100	96	4.1				30 - 130	20

Comment:

Additional 8270 criteria: 20% of compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 15-110%, for soils 30-130%)

QA/QC Data

SDG I.D.: GCC71631

Parameter	Blk		LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
	Blank	RL								
QA/QC Batch 471649 (ug/L), QC Sample No: CC71636 (CC71631, CC71632, CC71633, CC71634, CC71635, CC71636)										
<u>Volatiles - Ground Water</u>										
1,1,1-Trichloroethane	ND	1.0	94	94	0.0				70 - 130	30
1,1,2,2-Tetrachloroethane	ND	0.50	109	106	2.8				70 - 130	30
1,1,2-Trichloroethane	ND	1.0	103	99	4.0				70 - 130	30
1,1-Dichloroethane	ND	1.0	92	93	1.1				70 - 130	30
1,1-Dichloroethene	ND	1.0	97	99	2.0				70 - 130	30
1,2,3-Trichlorobenzene	ND	1.0	102	100	2.0				70 - 130	30
1,2,4-Trichlorobenzene	ND	1.0	106	108	1.9				70 - 130	30
1,2-Dibromo-3-chloropropane	ND	1.0	107	109	1.9				70 - 130	30
1,2-Dibromoethane	ND	1.0	102	102	0.0				70 - 130	30
1,2-Dichlorobenzene	ND	1.0	105	105	0.0				70 - 130	30
1,2-Dichloroethane	ND	1.0	100	99	1.0				70 - 130	30
1,2-Dichloropropane	ND	1.0	103	102	1.0				70 - 130	30
1,3-Dichlorobenzene	ND	1.0	107	106	0.9				70 - 130	30
1,4-Dichlorobenzene	ND	1.0	106	104	1.9				70 - 130	30
1,4-dioxane	ND	100	110	106	3.7				70 - 130	30
2-Hexanone	ND	5.0	97	94	3.1				70 - 130	30
4-Methyl-2-pentanone	ND	5.0	96	96	0.0				70 - 130	30
Acetone	ND	5.0	69	76	9.7				70 - 130	30
Benzene	ND	0.70	119	116	2.6				70 - 130	30
Bromochloromethane	ND	1.0	95	93	2.1				70 - 130	30
Bromodichloromethane	ND	0.50	107	106	0.9				70 - 130	30
Bromoform	ND	1.0	113	110	2.7				70 - 130	30
Bromomethane	ND	1.0	98	98	0.0				70 - 130	30
Carbon Disulfide	ND	1.0	97	96	1.0				70 - 130	30
Carbon tetrachloride	ND	1.0	98	99	1.0				70 - 130	30
Chlorobenzene	ND	1.0	106	106	0.0				70 - 130	30
Chloroethane	ND	1.0	96	96	0.0				70 - 130	30
Chloroform	ND	1.0	92	93	1.1				70 - 130	30
Chloromethane	ND	1.0	79	84	6.1				70 - 130	30
cis-1,2-Dichloroethene	ND	1.0	96	95	1.0				70 - 130	30
cis-1,3-Dichloropropene	ND	0.40	108	105	2.8				70 - 130	30
Cyclohexane	ND	5.0	80	80	0.0				70 - 130	30
Dibromochloromethane	ND	0.50	118	119	0.8				70 - 130	30
Dichlorodifluoromethane	ND	1.0	79	79	0.0				70 - 130	30
Ethylbenzene	ND	1.0	103	103	0.0				70 - 130	30
Isopropylbenzene	ND	1.0	106	101	4.8				70 - 130	30
m&p-Xylene	ND	1.0	103	101	2.0				70 - 130	30
Methyl ethyl ketone	ND	5.0	108	95	12.8				70 - 130	30
Methyl t-butyl ether (MTBE)	ND	1.0	89	88	1.1				70 - 130	30
Methylacetate	ND	2.5	87	84	3.5				70 - 130	30
Methylcyclohexane	ND	1.0	100	96	4.1				70 - 130	30
Methylene chloride	ND	1.0	91	89	2.2				70 - 130	30
o-Xylene	ND	1.0	106	105	0.9				70 - 130	30
Styrene	ND	1.0	105	104	1.0				70 - 130	30
Tetrachloroethene	ND	1.0	106	106	0.0				70 - 130	30
Toluene	ND	1.0	105	104	1.0				70 - 130	30
trans-1,2-Dichloroethene	ND	1.0	98	98	0.0				70 - 130	30
trans-1,3-Dichloropropene	ND	0.40	102	101	1.0				70 - 130	30
Trichloroethene	ND	1.0	106	105	0.9				70 - 130	30
Trichlorofluoromethane	ND	1.0	85	88	3.5				70 - 130	30

QA/QC Data

SDG I.D.: GCC71631

Parameter	Blk		LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
	Blank	RL								
Trichlorotrifluoroethane	ND	1.0	98	98	0.0				70 - 130	30
Vinyl chloride	ND	1.0	87	88	1.1				70 - 130	30
% 1,2-dichlorobenzene-d4	96	%	102	99	3.0				70 - 130	30
% Bromofluorobenzene	97	%	98	100	2.0				70 - 130	30
% Dibromofluoromethane	92	%	89	92	3.3				70 - 130	30
% Toluene-d8	92	%	100	100	0.0				70 - 130	30

Comment:

A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.

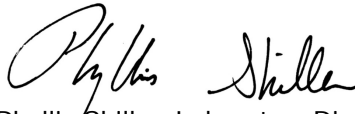
Additional 8260 criteria: 10% of LCS/LCSD compounds can be outside of acceptance criteria as long as recovery is 40-160%.

l = This parameter is outside laboratory LCS/LCSD specified recovery limits.

r = This parameter is outside laboratory RPD specified recovery limits.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

- RPD - Relative Percent Difference
- LCS - Laboratory Control Sample
- LCSD - Laboratory Control Sample Duplicate
- MS - Matrix Spike
- MS Dup - Matrix Spike Duplicate
- NC - No Criteria
- Intf - Interference

  
 Phyllis Shiller, Laboratory Director  
 April 02, 2019

Tuesday, April 02, 2019

Criteria: NY: GW

State: NY

# Sample Criteria Exceedances Report

GCC71631 - EBC

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL	Criteria	Analysis Units
CC71631	\$DP8260_TCL	Tetrachloroethene	NY / TAGM - Volatile Organics / Groundwater Standards	5.4	1.0	5	5	5	ug/L
CC71631	\$DP8260_TCL	1,2-Dibromoethane	NY / TOGS - Water Quality / GA Criteria	ND	0.25	0.0006	0.0006	0.0006	ug/L
CC71631	\$DP8260_TCL	Tetrachloroethene	NY / TOGS - Water Quality / GA Criteria	5.4	1.0	5	5	5	ug/L
CC71631	\$DP8260_TCL	1,2-Dibromo-3-chloropropane	NY / TOGS - Water Quality / GA Criteria	ND	0.50	0.04	0.04	0.04	ug/L
CC71631	\$DPWMSIM_T	Benz(a)anthracene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	0.002	ug/L
CC71631	\$DPWMSIM_T	Benzo(a)pyrene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	0.002	ug/L
CC71631	\$DPWMSIM_T	Benzo(b)fluoranthene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	0.002	ug/L
CC71631	\$DPWMSIM_T	Benzo(k)fluoranthene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	0.002	ug/L
CC71631	\$DPWMSIM_T	Chrysene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	0.002	ug/L
CC71631	\$DPWMSIM_T	Indeno(1,2,3-cd)pyrene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	0.002	ug/L
CC71631	\$DPWMSIM_T	Indeno(1,2,3-cd)pyrene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	0.002	ug/L
CC71631	\$DPWMSIM_T	Benzo(a)anthracene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	0.002	ug/L
CC71631	\$DPWMSIM_T	Benzo(b)fluoranthene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	0.002	ug/L
CC71631	\$DPWMSIM_T	Benzo(k)fluoranthene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	0.002	ug/L
CC71631	\$DPWMSIM_T	Chrysene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	0.002	ug/L
CC71631	\$PEST_GAWN	Dieldrin	NY / TAGM - Pest/Herb/PCBs / Groundwater Standards	0.011	0.002	0.01	0.01	0.01	ug/L
CC71631	\$PEST_GAWN	Dieldrin	NY / TOGS - Water Quality / GA Criteria	0.011	0.002	0.004	0.004	0.004	ug/L
CC71631	\$PEST_GAWN	Toxaphene	NY / TOGS - Water Quality / GA Criteria	ND	0.25	0.06	0.06	0.06	ug/L
CC71631	AL-WM	Aluminum	NY / TOGS - Water Quality / GA Criteria	1.43	0.010	0.1	0.1	0.1	mg/L
CC71631	D-NA	Sodium (Dissolved)	NY / TOGS - Water Quality / GA Criteria	215	1.1	20	20	20	mg/L
CC71631	FE-WMDP	Iron	NY / TOGS - Water Quality / GA Criteria	1.30	0.01	0.3	0.3	0.3	mg/L
CC71631	MN-WMDP	Manganese	NY / TOGS - Water Quality / GA Criteria	0.335	0.005	0.3	0.3	0.3	mg/L
CC71631	NA-WM	Sodium	NY / TOGS - Water Quality / GA Criteria	256	10	20	20	20	mg/L
CC71632	\$DP8260_TCL	Tetrachloroethene	NY / TAGM - Volatile Organics / Groundwater Standards	7.0	1.0	5	5	5	ug/L
CC71632	\$DP8260_TCL	1,2-Dibromo-3-chloropropane	NY / TOGS - Water Quality / GA Criteria	ND	0.50	0.04	0.04	0.04	ug/L
CC71632	\$DP8260_TCL	1,2-Dibromoethane	NY / TOGS - Water Quality / GA Criteria	ND	0.25	0.0006	0.0006	0.0006	ug/L
CC71632	\$DP8260_TCL	Tetrachloroethene	NY / TOGS - Water Quality / GA Criteria	7.0	1.0	5	5	5	ug/L
CC71632	\$DPWMSIM_T	Benzo(k)fluoranthene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	0.002	ug/L
CC71632	\$DPWMSIM_T	Indeno(1,2,3-cd)pyrene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	0.002	ug/L
CC71632	\$DPWMSIM_T	Chrysene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	0.002	ug/L
CC71632	\$DPWMSIM_T	Benzo(a)pyrene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	0.002	ug/L
CC71632	\$DPWMSIM_T	Benzo(a)anthracene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	0.002	ug/L
CC71632	\$DPWMSIM_T	Benzo(b)fluoranthene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	0.002	ug/L
CC71632	\$DPWMSIM_T	Benzo(b)fluoranthene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	0.002	ug/L
CC71632	\$DPWMSIM_T	Benzo(k)fluoranthene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	0.002	ug/L
CC71632	\$DPWMSIM_T	Benzo(a)anthracene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	0.002	ug/L
CC71632	\$DPWMSIM_T	Chrysene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	0.002	ug/L
CC71632	\$DPWMSIM_T	Indeno(1,2,3-cd)pyrene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	0.002	ug/L
CC71632	\$PEST_GAWN	Toxaphene	NY / TOGS - Water Quality / GA Criteria	ND	0.25	0.06	0.06	0.06	ug/L
CC71632	AL-WM	Aluminum	NY / TOGS - Water Quality / GA Criteria	1.99	0.010	0.1	0.1	0.1	mg/L
CC71632	DMN-WMDP	Manganese, (Dissolved)	NY / TOGS - Water Quality / GA Criteria	0.890	0.005	0.3	0.3	0.3	mg/L



Tuesday, April 02, 2019

Criteria: NY: GW

State: NY

# Sample Criteria Exceedances Report

GCC71631 - EBC

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	Criteria	RL	Analysis Units
CC71632	D-NA	Sodium (Dissolved)	NY / TOGS - Water Quality / GA Criteria	295	1.1	20	20		mg/L
CC71632	FE-WMDP	Iron	NY / TOGS - Water Quality / GA Criteria	2.00	0.01	0.3	0.3		mg/L
CC71632	MN-WMDP	Manganese	NY / TOGS - Water Quality / GA Criteria	1.01	0.005	0.3	0.3		mg/L
CC71632	NA-WM	Sodium	NY / TOGS - Water Quality / GA Criteria	314	10	20	20		mg/L
CC71633	\$DP8260_TCL	Tetrachloroethene	NY / TAGM - Volatile Organics / Groundwater Standards	7.4	1.0	5	5		ug/L
CC71633	\$DP8260_TCL	1,2-Dibromo-3-chloropropane	NY / TOGS - Water Quality / GA Criteria	ND	0.50	0.04	0.04		ug/L
CC71633	\$DP8260_TCL	1,2-Dibromoethane	NY / TOGS - Water Quality / GA Criteria	ND	0.25	0.0006	0.0006		ug/L
CC71633	\$DP8260_TCL	Tetrachloroethene	NY / TOGS - Water Quality / GA Criteria	7.4	1.0	5	5		ug/L
CC71633	\$DPWMSIM_T	Chrysene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002		ug/L
CC71633	\$DPWMSIM_T	Benz(a)anthracene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002		ug/L
CC71633	\$DPWMSIM_T	Benzo(a)pyrene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002		ug/L
CC71633	\$DPWMSIM_T	Benzo(b)fluoranthene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002		ug/L
CC71633	\$DPWMSIM_T	Benzo(k)fluoranthene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002		ug/L
CC71633	\$DPWMSIM_T	Indeno(1,2,3-cd)pyrene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002		ug/L
CC71633	\$DPWMSIM_T	Benzo(b)fluoranthene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002		ug/L
CC71633	\$DPWMSIM_T	Indeno(1,2,3-cd)pyrene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002		ug/L
CC71633	\$DPWMSIM_T	Chrysene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002		ug/L
CC71633	\$DPWMSIM_T	Benzo(k)fluoranthene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002		ug/L
CC71633	\$DPWMSIM_T	Benzo(a)anthracene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002		ug/L
CC71633	\$PEST_GAWN	Dieldrin	NY / TAGM - Pest/Herb/PCBs / Groundwater Standards	0.016	0.002	0.01	0.01		ug/L
CC71633	\$PEST_GAWN	Dieldrin	NY / TOGS - Water Quality / GA Criteria	0.016	0.002	0.004	0.004		ug/L
CC71633	\$PEST_GAWN	Toxaphene	NY / TOGS - Water Quality / GA Criteria	ND	0.25	0.06	0.06		ug/L
CC71633	AL-WM	Aluminum	NY / TOGS - Water Quality / GA Criteria	2.80	0.010	0.1	0.1		mg/L
CC71633	DMN-WMDP	Manganese, (Dissolved)	NY / TOGS - Water Quality / GA Criteria	1.11	0.005	0.3	0.3		mg/L
CC71633	D-NA	Sodium (Dissolved)	NY / TOGS - Water Quality / GA Criteria	242	1.1	20	20		mg/L
CC71633	FE-WMDP	Iron	NY / TOGS - Water Quality / GA Criteria	3.16	0.01	0.3	0.3		mg/L
CC71633	MN-WMDP	Manganese	NY / TOGS - Water Quality / GA Criteria	1.31	0.005	0.3	0.3		mg/L
CC71633	NA-WM	Sodium	NY / TOGS - Water Quality / GA Criteria	247	10	20	20		mg/L
CC71634	\$DP8260_TCL	Tetrachloroethene	NY / TAGM - Volatile Organics / Groundwater Standards	5.2	1.0	5	5		ug/L
CC71634	\$DP8260_TCL	Tetrachloroethene	NY / TOGS - Water Quality / GA Criteria	5.2	1.0	5	5		ug/L
CC71634	\$DP8260_TCL	1,2-Dibromo-3-chloropropane	NY / TOGS - Water Quality / GA Criteria	ND	0.50	0.04	0.04		ug/L
CC71634	\$DP8260_TCL	1,2-Dibromoethane	NY / TOGS - Water Quality / GA Criteria	ND	0.25	0.0006	0.0006		ug/L
CC71634	\$DPWMSIM_T	Benz(a)anthracene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002		ug/L
CC71634	\$DPWMSIM_T	Benzo(a)pyrene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002		ug/L
CC71634	\$DPWMSIM_T	Benzo(b)fluoranthene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002		ug/L
CC71634	\$DPWMSIM_T	Benzo(k)fluoranthene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002		ug/L
CC71634	\$DPWMSIM_T	Chrysene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002		ug/L
CC71634	\$DPWMSIM_T	Indeno(1,2,3-cd)pyrene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002		ug/L
CC71634	\$DPWMSIM_T	Benzo(a)anthracene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002		ug/L
CC71634	\$DPWMSIM_T	Benzo(b)fluoranthene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002		ug/L

# Sample Criteria Exceedances Report

GCC71631 - EBC

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	Criteria	RL	Analysis Units
CC71634	\$DPWMSIM_T	Benzo(k)fluoranthene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	0.002	ug/L
CC71634	\$DPWMSIM_T	Chrysene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	0.002	ug/L
CC71634	\$DPWMSIM_T	Indeno(1,2,3-cd)pyrene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	0.002	ug/L
CC71634	\$PEST_GAWN	Dieldrin	NY / TOGS - Water Quality / GA Criteria	0.010	0.001	0.004	0.004	0.004	ug/L
CC71634	\$PEST_GAWN	Toxaphene	NY / TOGS - Water Quality / GA Criteria	ND	0.24	0.06	0.06	0.06	ug/L
CC71634	AL-WM	Aluminum	NY / TOGS - Water Quality / GA Criteria	1.85	0.010	0.1	0.1	0.1	mg/L
CC71634	D-NA	Sodium (Dissolved)	NY / TOGS - Water Quality / GA Criteria	208	1.1	20	20	20	mg/L
CC71634	FE-WMDP	Iron	NY / TOGS - Water Quality / GA Criteria	2.02	0.01	0.3	0.3	0.3	mg/L
CC71634	MN-WMDP	Manganese	NY / TOGS - Water Quality / GA Criteria	0.332	0.005	0.3	0.3	0.3	mg/L
CC71634	NA-WM	Sodium	NY / TOGS - Water Quality / GA Criteria	224	1.0	20	20	20	mg/L
CC71635	\$DP8260_TCL	Tetrachloroethene	NY / TAGM - Volatile Organics / Groundwater Standards	5.1	1.0	5	5	5	ug/L
CC71635	\$DP8260_TCL	Tetrachloroethene	NY / TOGS - Water Quality / GA Criteria	5.1	1.0	5	5	5	ug/L
CC71635	\$DP8260_TCL	1,2-Dibromoethane	NY / TOGS - Water Quality / GA Criteria	ND	0.25	0.0006	0.0006	0.0006	ug/L
CC71635	\$DP8260_TCL	1,2-Dibromo-3-chloropropane	NY / TOGS - Water Quality / GA Criteria	ND	0.50	0.04	0.04	0.04	ug/L
CC71635	\$DPWMSIM_T	Benzo(k)fluoranthene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	0.002	ug/L
CC71635	\$DPWMSIM_T	Chrysene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	0.002	ug/L
CC71635	\$DPWMSIM_T	Indeno(1,2,3-cd)pyrene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	0.002	ug/L
CC71635	\$DPWMSIM_T	Benzo(a)pyrene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	0.002	ug/L
CC71635	\$DPWMSIM_T	Benzo(k)fluoranthene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	0.002	ug/L
CC71635	\$DPWMSIM_T	Benz(a)anthracene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	0.002	ug/L
CC71635	\$DPWMSIM_T	Chrysene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	0.002	ug/L
CC71635	\$DPWMSIM_T	Indeno(1,2,3-cd)pyrene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	0.002	ug/L
CC71635	\$DPWMSIM_T	Benzo(b)fluoranthene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	0.002	ug/L
CC71635	\$DPWMSIM_T	Benz(a)anthracene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	0.002	ug/L
CC71635	\$DPWMSIM_T	Benzo(k)fluoranthene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	0.002	ug/L
CC71635	\$PEST_GAWN	Dieldrin	NY / TAGM - Pest/Herb/PCBs / Groundwater Standards	0.018	0.002	0.01	0.01	0.01	ug/L
CC71635	\$PEST_GAWN	Dieldrin	NY / TOGS - Water Quality / GA Criteria	0.018	0.002	0.004	0.004	0.004	ug/L
CC71635	\$PEST_GAWN	Toxaphene	NY / TOGS - Water Quality / GA Criteria	ND	0.25	0.06	0.06	0.06	ug/L
CC71635	AL-WM	Aluminum	NY / TOGS - Water Quality / GA Criteria	1.80	0.010	0.1	0.1	0.1	mg/L
CC71635	D-NA	Sodium (Dissolved)	NY / TOGS - Water Quality / GA Criteria	201	1.1	20	20	20	mg/L
CC71635	FE-WMDP	Iron	NY / TOGS - Water Quality / GA Criteria	1.90	0.01	0.3	0.3	0.3	mg/L
CC71635	MN-WMDP	Manganese	NY / TOGS - Water Quality / GA Criteria	0.319	0.005	0.3	0.3	0.3	mg/L
CC71635	NA-WM	Sodium	NY / TOGS - Water Quality / GA Criteria	232	1.0	20	20	20	mg/L
CC71636	\$DP8260_TCL	1,2-Dibromoethane	NY / TOGS - Water Quality / GA Criteria	ND	0.25	0.0006	0.0006	0.0006	ug/L
CC71636	\$DP8260_TCL	1,2-Dibromo-3-chloropropane	NY / TOGS - Water Quality / GA Criteria	ND	0.50	0.04	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



## Analysis Comments

April 02, 2019

SDG I.D.: GCC71631

The following analysis comments are made regarding exceptions to criteria not already noted in the Analysis Report or QA/QC Report:

### **PEST Narration**

**AU-ECD7 03/25/19-1:** CC71631, CC71632, CC71633, CC71634, CC71635

The Endrin and DDT breakdown does not exceed 15% except for the following compounds:

325A004 (CC71635) - DDT Breakdown (15%)

The Endrin and DDT breakdown does not exceed the maximum of 20% except for the following compounds: None. □

The following Continuing Calibration compounds did not meet % deviation criteria:

Samples: CC71631, CC71632, CC71633, CC71634, CC71635

Preceding CC 325A005 - 4,4'-DDE 35%H (20%), a-BHC 22%H (20%), Aldrin 30%H (20%), b-BHC 32%H (20%), Endrin 22%H (20%), Endrin aldehyde 41%L (20%), g-Chlordane 23%L (20%), Heptachlor 47%L (20%)

Succeeding CC 325A022 - 4,4'-DDE 40%H (20%), a-BHC 32%H (20%), a-Chlordane 32%H (20%), Aldrin 45%H (20%), b-BHC 36%H (20%), Dieldrin 34%H (20%), Endrin 37%H (20%), Heptachlor 39%L (20%)

A low "1A" standard was run after the samples to demonstrate capability to detect any compounds outside of the CC acceptance criteria. All reported samples were ND for the affected compounds.

Samples: CC71631, CC71632, CC71633, CC71634, CC71635

Preceding CC 325B005 - None.

Succeeding CC 325B022 - Endrin 26%H (20%)

### **SVOA Narration**

**CHEM06 03/22/19-1:** CC71631, CC71632, CC71633, CC71634, CC71635

The following Initial Calibration compounds did not meet RSD% criteria: 4,6-Dinitro-2-methylphenol 27% (20%)

The following Initial Calibration compounds did not meet maximum RSD% criteria: None.

The following Initial Calibration compounds did not meet recommended response factors: 2-Nitrophenol 0.057 (0.1)

The following Initial Calibration compounds did not meet minimum response factors: None.

The following Continuing Calibration compounds did not meet recommended response factors: 2-Nitrophenol 0.067 (0.1)

The following Continuing Calibration compounds did not meet minimum response factors: None.

Up to eight compounds can be outside of ICAL %RSD criteria and up to sixteen compounds can be outside of CCAL %Dev criteria if less than 40%.

### **VOA Narration**

**CHEM17 03/22/19-1:** CC71631, CC71632, CC71633, CC71634, CC71635, CC71636

The following Initial Calibration compounds did not meet RSD% criteria: 1,2-Dibromo-3-chloropropane 23% (20%)

The following Initial Calibration compounds did not meet maximum RSD% criteria: None.

The following Initial Calibration compounds did not meet recommended response factors: 1,2-Dibromo-3-chloropropane 0.036 (0.05), 2-Hexanone 0.065 (0.1), Acetone 0.036 (0.1), Bromoform 0.082 (0.1), Methyl ethyl ketone 0.046 (0.1), Methylacetate 0.084 (0.1)

The following Initial Calibration compounds did not meet minimum response factors: None.

The following Continuing Calibration compounds did not meet % deviation criteria: Dichlorodifluoromethane 35%L (30%)

The following Continuing Calibration compounds did not meet Maximum % deviation criteria: None.

The following Continuing Calibration compounds did not meet recommended response factors: 1,1,2,2-Tetrachloroethane 0.287 (0.3), 1,2-Dibromo-3-chloropropane 0.037 (0.05), Bromoform 0.085 (0.1)

The following Continuing Calibration compounds did not meet minimum response factors: None.

Up to eight compounds can be outside of ICAL %RSD criteria and up to sixteen compounds can be outside of CCAL %Dev criteria if less than 40%.



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Tel. (860) 645-1102 Fax (860) 645-0823



# NY Temperature Narration

April 02, 2019

SDG I.D.: GCC71631

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The samples in this delivery group were received at 2.4°C.  
(Note acceptance criteria for relevant matrices is above freezing up to 6°C)

Coolant: Yes  No   
 IPK  ICE   
 Temp: 4°C Pg 1 of 1

**NY/NJ/PA 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: 1908 Middle Country Road  
 Ridge, NY 11961

Project: 1840 PARK AVE, MANHATTAN  
 Report to: EBC  
 Invoice to: EBC  
 QUOTE # :

Phone:   
 Fax:   
 Email:  File

Project P.O.:  
 This section MUST be completed with Bottle Quantities.

PHOENIX USE ONLY SAMPLE #	Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled	Analysis Request
F11031	Mw1	Gw	3-19-19	8:35	TCL VOCs 8260 TCL VOCs 8230 TCL VOCs 8270 TCL VOCs 8280 TCL VOCs 8290 TCL VOCs 8300 TCL VOCs 8310 TCL VOCs 8320 TCL VOCs 8330 TCL VOCs 8340 TCL VOCs 8350 TCL VOCs 8360 TCL VOCs 8370 TCL VOCs 8380 TCL VOCs 8390 TCL VOCs 8400 TCL VOCs 8410 TCL VOCs 8420 TCL VOCs 8430 TCL VOCs 8440 TCL VOCs 8450 TCL VOCs 8460 TCL VOCs 8470 TCL VOCs 8480 TCL VOCs 8490 TCL VOCs 8500 TCL VOCs 8510 TCL VOCs 8520 TCL VOCs 8530 TCL VOCs 8540 TCL VOCs 8550 TCL VOCs 8560 TCL VOCs 8570 TCL VOCs 8580 TCL VOCs 8590 TCL VOCs 8600 TCL VOCs 8610 TCL VOCs 8620 TCL VOCs 8630 TCL VOCs 8640 TCL VOCs 8650 TCL VOCs 8660 TCL VOCs 8670 TCL VOCs 8680 TCL VOCs 8690 TCL VOCs 8700 TCL VOCs 8710 TCL VOCs 8720 TCL VOCs 8730 TCL VOCs 8740 TCL VOCs 8750 TCL VOCs 8760 TCL VOCs 8770 TCL VOCs 8780 TCL VOCs 8790 TCL VOCs 8800 TCL VOCs 8810 TCL VOCs 8820 TCL VOCs 8830 TCL VOCs 8840 TCL VOCs 8850 TCL VOCs 8860 TCL VOCs 8870 TCL VOCs 8880 TCL VOCs 8890 TCL VOCs 8900 TCL VOCs 8910 TCL VOCs 8920 TCL VOCs 8930 TCL VOCs 8940 TCL VOCs 8950 TCL VOCs 8960 TCL VOCs 8970 TCL VOCs 8980 TCL VOCs 8990 TCL VOCs 9000 TCL VOCs 9010 TCL VOCs 9020 TCL VOCs 9030 TCL VOCs 9040 TCL VOCs 9050 TCL VOCs 9060 TCL VOCs 9070 TCL VOCs 9080 TCL VOCs 9090 TCL VOCs 9100 TCL VOCs 9110 TCL VOCs 9120 TCL VOCs 9130 TCL VOCs 9140 TCL VOCs 9150 TCL VOCs 9160 TCL VOCs 9170 TCL VOCs 9180 TCL VOCs 9190 TCL VOCs 9200 TCL VOCs 9210 TCL VOCs 9220 TCL VOCs 9230 TCL VOCs 9240 TCL VOCs 9250 TCL VOCs 9260 TCL VOCs 9270 TCL VOCs 9280 TCL VOCs 9290 TCL VOCs 9300 TCL VOCs 9310 TCL VOCs 9320 TCL VOCs 9330 TCL VOCs 9340 TCL VOCs 9350 TCL VOCs 9360 TCL VOCs 9370 TCL VOCs 9380 TCL VOCs 9390 TCL VOCs 9400 TCL VOCs 9410 TCL VOCs 9420 TCL VOCs 9430 TCL VOCs 9440 TCL VOCs 9450 TCL VOCs 9460 TCL VOCs 9470 TCL VOCs 9480 TCL VOCs 9490 TCL VOCs 9500 TCL VOCs 9510 TCL VOCs 9520 TCL VOCs 9530 TCL VOCs 9540 TCL VOCs 9550 TCL VOCs 9560 TCL VOCs 9570 TCL VOCs 9580 TCL VOCs 9590 TCL VOCs 9600 TCL VOCs 9610 TCL VOCs 9620 TCL VOCs 9630 TCL VOCs 9640 TCL VOCs 9650 TCL VOCs 9660 TCL VOCs 9670 TCL VOCs 9680 TCL VOCs 9690 TCL VOCs 9700 TCL VOCs 9710 TCL VOCs 9720 TCL VOCs 9730 TCL VOCs 9740 TCL VOCs 9750 TCL VOCs 9760 TCL VOCs 9770 TCL VOCs 9780 TCL VOCs 9790 TCL VOCs 9800 TCL VOCs 9810 TCL VOCs 9820 TCL VOCs 9830 TCL VOCs 9840 TCL VOCs 9850 TCL VOCs 9860 TCL VOCs 9870 TCL VOCs 9880 TCL VOCs 9890 TCL VOCs 9900 TCL VOCs 9910 TCL VOCs 9920 TCL VOCs 9930 TCL VOCs 9940 TCL VOCs 9950 TCL VOCs 9960 TCL VOCs 9970 TCL VOCs 9980 TCL VOCs 9990 TCL VOCs 10000

Relinquished by: [Signature] Accepted by: [Signature]  
 Date: 3-20-19 Time: 12:00  
 Date: 3-20-19 Time: 11:00

Comments, Special Requirements or Regulations:  
 Compare to NY 375 Gwp

Data Format:  
 Phoenix Std Report  EQUIS  
 Excel  NJ Hazsite EDD  
 PDF  NY EZ EDD (ASP)  
 GIS/Key  Other

Turnaround:  
 1 Day\*  
 2 Days\*  
 3 Days\*  
 5 Days  
 10 Days  
 Other  
 \* SURCHARGE

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

Res. Criteria  
 Non-Res. Criteria  
 Impact to GW Soil Cleanup Criteria  
 Impact to GW soil screen Criteria  
 GW Criteria

NY  
 TOGS GW  
 CP-51 SOIL  
 375SCO  
 Unrestricted Soil  
 375SCO  
 Residential Soil  
 375SCO Residential  
 375SCO Commercial Soil  
 375SCO Industrial Soil  
 Subpart 5 DW

PA  
 Clean Fill Limits  
 PA-GW  
 Reg Fill Limits  
 PA Soil Restricted  
 PA Soil non-restricted

State Samples Collected? NY



Tuesday, March 26, 2019

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

Project ID: 1840 PARK AVE MANHATTAN  
SDG ID: GCC71647  
Sample ID#s: CC71647 - CC71652

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 that reads "Phyllis Shiller". The signature is written in a cursive style.

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



## Sample Id Cross Reference

March 26, 2019

SDG I.D.: GCC71647

Project ID: 1840 PARK AVE MANHATTAN

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Client Id	Lab Id	Matrix
SV 2	CC71647	AIR
SV 4	CC71648	AIR
SV 5	CC71649	AIR
SV 6	CC71650	AIR
SV 1	CC71651	AIR
SV 3	CC71652	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

March 26, 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: 28577

## Custody Information

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

## Date

03/20/19  
 03/20/19

## Time

10:22  
 16:00

## Laboratory Data

SDG ID: GCC71647  
 Phoenix ID: CC71647

Project ID: 1840 PARK AVE MANHATTAN  
 Client ID: SV 2

Parameter	ppbv Result	ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By	Dilution	
<b>Volatiles (TO15)</b>								
1,1,1,2-Tetrachloroethane	ND	0.146	ND	1.00	03/21/19	KCA	1	
1,1,1-Trichloroethane	0.583	0.183	3.18	1.00	03/21/19	KCA	1	
1,1,2,2-Tetrachloroethane	ND	0.146	ND	1.00	03/21/19	KCA	1	
1,1,2-Trichloroethane	ND	0.183	ND	1.00	03/21/19	KCA	1	
1,1-Dichloroethane	ND	0.247	ND	1.00	03/21/19	KCA	1	
1,1-Dichloroethene	ND	0.051	ND	0.20	03/21/19	KCA	1	
1,2,4-Trichlorobenzene	0.394	0.135	2.92	1.00	03/21/19	KCA	1	
1,2,4-Trimethylbenzene	0.224	0.204	1.10	1.00	03/21/19	KCA	1	
1,2-Dibromoethane(EDB)	ND	0.130	ND	1.00	03/21/19	KCA	1	
1,2-Dichlorobenzene	ND	0.166	ND	1.00	03/21/19	KCA	1	
1,2-Dichloroethane	ND	0.247	ND	1.00	03/21/19	KCA	1	
1,2-dichloropropane	ND	0.217	ND	1.00	03/21/19	KCA	1	
1,2-Dichlorotetrafluoroethane	1.81	0.143	12.6	1.00	03/21/19	KCA	1	
1,3,5-Trimethylbenzene	ND	0.204	ND	1.00	03/21/19	KCA	1	
1,3-Butadiene	ND	0.452	ND	1.00	03/21/19	KCA	1	
1,3-Dichlorobenzene	0.274	0.166	1.65	1.00	03/21/19	KCA	1	
1,4-Dichlorobenzene	ND	0.166	ND	1.00	03/21/19	KCA	1	
1,4-Dioxane	ND	0.278	ND	1.00	03/21/19	KCA	1	
2-Hexanone(MBK)	ND	0.244	ND	1.00	03/21/19	KCA	1	
4-Ethyltoluene	ND	0.204	ND	1.00	03/21/19	KCA	1	
4-Isopropyltoluene	ND	0.182	ND	1.00	03/21/19	KCA	1	
4-Methyl-2-pentanone(MIBK)	0.291	0.244	1.19	1.00	03/21/19	KCA	1	
Acetone	54.8	2.11	130	5.01	03/21/19	KCA	5	
Acrylonitrile	ND	0.461	ND	1.00	03/21/19	KCA	1	
Benzene	0.663	0.313	2.12	1.00	03/21/19	KCA	1	
Benzyl chloride	ND	0.193	ND	1.00	03/21/19	KCA	1	



Client ID: SV 2

Parameter	ppbv Result	ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By	Dilution
Bromodichloromethane	ND	0.149	ND	1.00	03/21/19	KCA	1
Bromoform	ND	0.097	ND	1.00	03/21/19	KCA	1
Bromomethane	ND	0.258	ND	1.00	03/21/19	KCA	1
Carbon Disulfide	2.59	0.321	8.06	1.00	03/21/19	KCA	1
Carbon Tetrachloride	0.052	0.032	0.33	0.20	03/21/19	KCA	1
Chlorobenzene	ND	0.217	ND	1.00	03/21/19	KCA	1
Chloroethane	ND	0.379	ND	1.00	03/21/19	KCA	1
Chloroform	ND	0.205	ND	1.00	03/21/19	KCA	1
Chloromethane	0.641	0.485	1.32	1.00	03/21/19	KCA	1
Cis-1,2-Dichloroethene	ND	0.051	ND	0.20	03/21/19	KCA	1
cis-1,3-Dichloropropene	ND	0.221	ND	1.00	03/21/19	KCA	1
Cyclohexane	ND	0.291	ND	1.00	03/21/19	KCA	1
Dibromochloromethane	ND	0.118	ND	1.00	03/21/19	KCA	1
Dichlorodifluoromethane	0.619	0.202	3.06	1.00	03/21/19	KCA	1
Ethanol	17.3	0.531	32.6	1.00	03/21/19	KCA	1
Ethyl acetate	2.29	0.278	8.25	1.00	03/21/19	KCA	1
Ethylbenzene	ND	0.230	ND	1.00	03/21/19	KCA	1
Heptane	0.248	0.244	1.02	1.00	03/21/19	KCA	1
Hexachlorobutadiene	ND	0.094	ND	1.00	03/21/19	KCA	1
Hexane	0.448	0.284	1.58	1.00	03/21/19	KCA	1
Isopropylalcohol	0.951	0.407	2.34	1.00	03/21/19	KCA	1
Isopropylbenzene	ND	0.204	ND	1.00	03/21/19	KCA	1
m,p-Xylene	0.730	0.230	3.17	1.00	03/21/19	KCA	1
Methyl Ethyl Ketone	5.06	0.339	14.9	1.00	03/21/19	KCA	1
Methyl tert-butyl ether(MTBE)	ND	0.278	ND	1.00	03/21/19	KCA	1
Methylene Chloride	ND	0.864	ND	3.00	03/21/19	KCA	1
n-Butylbenzene	ND	0.182	ND	1.00	03/21/19	KCA	1
o-Xylene	ND	0.230	ND	1.00	03/21/19	KCA	1
Propylene	5.32	0.581	9.15	1.00	03/21/19	KCA	1
sec-Butylbenzene	ND	0.182	ND	1.00	03/21/19	KCA	1
Styrene	ND	0.235	ND	1.00	03/21/19	KCA	1
Tetrachloroethene	ND	0.037	ND	0.25	03/21/19	KCA	1
Tetrahydrofuran	5.07	0.339	14.9	1.00	03/21/19	KCA	1
Toluene	0.826	0.266	3.11	1.00	03/21/19	KCA	1
Trans-1,2-Dichloroethene	ND	0.252	ND	1.00	03/21/19	KCA	1
trans-1,3-Dichloropropene	ND	0.221	ND	1.00	03/21/19	KCA	1
Trichloroethene	ND	0.037	ND	0.20	03/21/19	KCA	1
Trichlorofluoromethane	1.50	0.178	8.42	1.00	03/21/19	KCA	1
Trichlorotrifluoroethane	ND	0.131	ND	1.00	03/21/19	KCA	1
Vinyl Chloride	ND	0.078	ND	0.20	03/21/19	KCA	1
<b><u>QA/QC Surrogates/Internals</u></b>							
% Bromofluorobenzene	105	%	105	%	03/21/19	KCA	1
% IS-1,4-Difluorobenzene	94	%	94	%	03/21/19	KCA	1
% IS-Bromochloromethane	87	%	87	%	03/21/19	KCA	1
% IS-Chlorobenzene-d5	90	%	90	%	03/21/19	KCA	1
% Bromofluorobenzene (5x)	102	%	102	%	03/21/19	KCA	5
% IS-1,4-Difluorobenzene (5x)	116	%	116	%	03/21/19	KCA	5
% IS-Bromochloromethane (5x)	108	%	108	%	03/21/19	KCA	5
% IS-Chlorobenzene-d5 (5x)	104	%	104	%	03/21/19	KCA	5

Parameter	ppbv Result	ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By	Dilution
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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 at RL/PQL  
BRL=Below Reporting Level L=Biased Low

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**

**March 26, 2019**

**Reviewed and Released by: Rashmi Makol, Project Manager**



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



# Analysis Report

March 26, 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: 28580

## Custody Information

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

## Date

03/20/19  
 03/20/19

## Time

10:32  
 16:00

## Laboratory Data

SDG ID: GCC71647  
 Phoenix ID: CC71648

Project ID: 1840 PARK AVE MANHATTAN  
 Client ID: SV 4

Parameter	ppbv Result	ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By	Dilution	
<b>Volatiles (TO15)</b>								
1,1,1,2-Tetrachloroethane	ND	0.146	ND	1.00	03/21/19	KCA	1	1
1,1,1-Trichloroethane	1.52	0.183	8.29	1.00	03/21/19	KCA	1	
1,1,2,2-Tetrachloroethane	ND	0.146	ND	1.00	03/21/19	KCA	1	
1,1,2-Trichloroethane	ND	0.183	ND	1.00	03/21/19	KCA	1	
1,1-Dichloroethane	ND	0.247	ND	1.00	03/21/19	KCA	1	
1,1-Dichloroethene	ND	0.051	ND	0.20	03/21/19	KCA	1	
1,2,4-Trichlorobenzene	ND	0.135	ND	1.00	03/21/19	KCA	1	
1,2,4-Trimethylbenzene	0.235	0.204	1.15	1.00	03/21/19	KCA	1	
1,2-Dibromoethane(EDB)	ND	0.130	ND	1.00	03/21/19	KCA	1	
1,2-Dichlorobenzene	ND	0.166	ND	1.00	03/21/19	KCA	1	
1,2-Dichloroethane	ND	0.247	ND	1.00	03/21/19	KCA	1	
1,2-dichloropropane	ND	0.217	ND	1.00	03/21/19	KCA	1	
1,2-Dichlorotetrafluoroethane	ND	0.143	ND	1.00	03/21/19	KCA	1	
1,3,5-Trimethylbenzene	ND	0.204	ND	1.00	03/21/19	KCA	1	
1,3-Butadiene	ND	0.452	ND	1.00	03/21/19	KCA	1	
1,3-Dichlorobenzene	ND	0.166	ND	1.00	03/21/19	KCA	1	
1,4-Dichlorobenzene	ND	0.166	ND	1.00	03/21/19	KCA	1	
1,4-Dioxane	ND	0.278	ND	1.00	03/21/19	KCA	1	
2-Hexanone(MBK)	ND	0.244	ND	1.00	03/21/19	KCA	1	1
4-Ethyltoluene	ND	0.204	ND	1.00	03/21/19	KCA	1	1
4-Isopropyltoluene	ND	0.182	ND	1.00	03/21/19	KCA	1	1
4-Methyl-2-pentanone(MIBK)	0.371	0.244	1.52	1.00	03/21/19	KCA	1	
Acetone	110	2.11	261	5.01	03/21/19	KCA	5	
Acrylonitrile	ND	0.461	ND	1.00	03/21/19	KCA	1	
Benzene	0.429	0.313	1.37	1.00	03/21/19	KCA	1	
Benzyl chloride	ND	0.193	ND	1.00	03/21/19	KCA	1	

Client ID: SV 4

Parameter	ppbv Result	ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By	Dilution
Bromodichloromethane	ND	0.149	ND	1.00	03/21/19	KCA	1
Bromoform	ND	0.097	ND	1.00	03/21/19	KCA	1
Bromomethane	ND	0.258	ND	1.00	03/21/19	KCA	1
Carbon Disulfide	ND	0.321	ND	1.00	03/21/19	KCA	1
Carbon Tetrachloride	0.047	0.032	0.30	0.20	03/21/19	KCA	1
Chlorobenzene	ND	0.217	ND	1.00	03/21/19	KCA	1
Chloroethane	ND	0.379	ND	1.00	03/21/19	KCA	1
Chloroform	0.539	0.205	2.63	1.00	03/21/19	KCA	1
Chloromethane	2.19	0.485	4.52	1.00	03/21/19	KCA	1
Cis-1,2-Dichloroethene	0.108	0.051	0.43	0.20	03/21/19	KCA	1
cis-1,3-Dichloropropene	ND	0.221	ND	1.00	03/21/19	KCA	1
Cyclohexane	ND	0.291	ND	1.00	03/21/19	KCA	1
Dibromochloromethane	ND	0.118	ND	1.00	03/21/19	KCA	1
Dichlorodifluoromethane	2.30	0.202	11.4	1.00	03/21/19	KCA	1
Ethanol	33.9	0.531	63.8	1.00	03/21/19	KCA	1
Ethyl acetate	ND	0.278	ND	1.00	03/21/19	KCA	1
Ethylbenzene	0.266	0.230	1.15	1.00	03/21/19	KCA	1
Heptane	0.308	0.244	1.26	1.00	03/21/19	KCA	1
Hexachlorobutadiene	ND	0.094	ND	1.00	03/21/19	KCA	1
Hexane	0.815	0.284	2.87	1.00	03/21/19	KCA	1
Isopropylalcohol	1.95	0.407	4.79	1.00	03/21/19	KCA	1
Isopropylbenzene	ND	0.204	ND	1.00	03/21/19	KCA	1
m,p-Xylene	0.992	0.230	4.30	1.00	03/21/19	KCA	1
Methyl Ethyl Ketone	1.45	0.339	4.27	1.00	03/21/19	KCA	1
Methyl tert-butyl ether(MTBE)	ND	0.278	ND	1.00	03/21/19	KCA	1
Methylene Chloride	ND	0.864	ND	3.00	03/21/19	KCA	1
n-Butylbenzene	ND	0.182	ND	1.00	03/21/19	KCA	1
o-Xylene	0.282	0.230	1.22	1.00	03/21/19	KCA	1
Propylene	6.39	0.581	11.0	1.00	03/21/19	KCA	1
sec-Butylbenzene	ND	0.182	ND	1.00	03/21/19	KCA	1
Styrene	ND	0.235	ND	1.00	03/21/19	KCA	1
Tetrachloroethene	0.095	0.037	0.64	0.25	03/21/19	KCA	1
Tetrahydrofuran	1.01	0.339	2.98	1.00	03/21/19	KCA	1
Toluene	0.939	0.266	3.54	1.00	03/21/19	KCA	1
Trans-1,2-Dichloroethene	ND	0.252	ND	1.00	03/21/19	KCA	1
trans-1,3-Dichloropropene	ND	0.221	ND	1.00	03/21/19	KCA	1
Trichloroethene	0.183	0.037	0.98	0.20	03/21/19	KCA	1
Trichlorofluoromethane	2.62	0.178	14.7	1.00	03/21/19	KCA	1
Trichlorotrifluoroethane	ND	0.131	ND	1.00	03/21/19	KCA	1
Vinyl Chloride	ND	0.078	ND	0.20	03/21/19	KCA	1
<b><u>QA/QC Surrogates/Internals</u></b>							
% Bromofluorobenzene	97	%	97	%	03/21/19	KCA	1
% IS-1,4-Difluorobenzene	99	%	99	%	03/21/19	KCA	1
% IS-Bromochloromethane	97	%	97	%	03/21/19	KCA	1
% IS-Chlorobenzene-d5	103	%	103	%	03/21/19	KCA	1
% Bromofluorobenzene (5x)	101	%	101	%	03/21/19	KCA	5
% IS-1,4-Difluorobenzene (5x)	102	%	102	%	03/21/19	KCA	5
% IS-Bromochloromethane (5x)	99	%	99	%	03/21/19	KCA	5
% IS-Chlorobenzene-d5 (5x)	99	%	99	%	03/21/19	KCA	5

Client ID: SV 4

Parameter	ppbv Result	ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By	Dilution
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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 at RL/PQL  
BRL=Below Reporting Level L=Biased Low

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**

**March 26, 2019**

**Reviewed and Released by: Rashmi Makol, Project Manager**



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



# Analysis Report

March 26, 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: 19931

## Custody Information

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

## Date

03/20/19  
 03/20/19

## Time

10:16  
 16:00

## Laboratory Data

SDG ID: GCC71647  
 Phoenix ID: CC71649

Project ID: 1840 PARK AVE MANHATTAN  
 Client ID: SV 5

Parameter	ppbv Result	ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By	Dilution	
<b>Volatiles (TO15)</b>								
1,1,1,2-Tetrachloroethane	ND	0.146	ND	1.00	03/22/19	KCA	1	
1,1,1-Trichloroethane	0.235	0.183	1.28	1.00	03/22/19	KCA	1	
1,1,2,2-Tetrachloroethane	ND	0.146	ND	1.00	03/22/19	KCA	1	
1,1,2-Trichloroethane	ND	0.183	ND	1.00	03/22/19	KCA	1	
1,1-Dichloroethane	ND	0.247	ND	1.00	03/22/19	KCA	1	
1,1-Dichloroethene	ND	0.051	ND	0.20	03/22/19	KCA	1	
1,2,4-Trichlorobenzene	ND	0.135	ND	1.00	03/22/19	KCA	1	
1,2,4-Trimethylbenzene	ND	0.204	ND	1.00	03/22/19	KCA	1	
1,2-Dibromoethane(EDB)	ND	0.130	ND	1.00	03/22/19	KCA	1	
1,2-Dichlorobenzene	ND	0.166	ND	1.00	03/22/19	KCA	1	
1,2-Dichloroethane	ND	0.247	ND	1.00	03/22/19	KCA	1	
1,2-dichloropropane	ND	0.217	ND	1.00	03/22/19	KCA	1	
1,2-Dichlorotetrafluoroethane	ND	0.143	ND	1.00	03/22/19	KCA	1	
1,3,5-Trimethylbenzene	ND	0.204	ND	1.00	03/22/19	KCA	1	
1,3-Butadiene	0.946	0.452	2.09	1.00	03/22/19	KCA	1	
1,3-Dichlorobenzene	ND	0.166	ND	1.00	03/22/19	KCA	1	
1,4-Dichlorobenzene	ND	0.166	ND	1.00	03/22/19	KCA	1	
1,4-Dioxane	ND	0.278	ND	1.00	03/22/19	KCA	1	
2-Hexanone(MBK)	ND	0.244	ND	1.00	03/22/19	KCA	1	
4-Ethyltoluene	ND	0.204	ND	1.00	03/22/19	KCA	1	
4-Isopropyltoluene	ND	0.182	ND	1.00	03/22/19	KCA	1	
4-Methyl-2-pentanone(MIBK)	0.408	0.244	1.67	1.00	03/22/19	KCA	1	
Acetone	107	2.11	254	5.01	03/21/19	KCA	5	
Acrylonitrile	ND	0.461	ND	1.00	03/22/19	KCA	1	
Benzene	0.613	0.313	1.96	1.00	03/22/19	KCA	1	
Benzyl chloride	ND	0.193	ND	1.00	03/22/19	KCA	1	

Client ID: SV 5

Parameter	ppbv Result	ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By	Dilution
Bromodichloromethane	ND	0.149	ND	1.00	03/22/19	KCA	1
Bromoform	ND	0.097	ND	1.00	03/22/19	KCA	1
Bromomethane	ND	0.258	ND	1.00	03/22/19	KCA	1
Carbon Disulfide	0.562	0.321	1.75	1.00	03/22/19	KCA	1
Carbon Tetrachloride	0.059	0.032	0.37	0.20	03/22/19	KCA	1
Chlorobenzene	ND	0.217	ND	1.00	03/22/19	KCA	1
Chloroethane	ND	0.379	ND	1.00	03/22/19	KCA	1
Chloroform	0.232	0.205	1.13	1.00	03/22/19	KCA	1
Chloromethane	ND	0.485	ND	1.00	03/22/19	KCA	1
Cis-1,2-Dichloroethene	ND	0.051	ND	0.20	03/22/19	KCA	1
cis-1,3-Dichloropropene	ND	0.221	ND	1.00	03/22/19	KCA	1
Cyclohexane	ND	0.291	ND	1.00	03/22/19	KCA	1
Dibromochloromethane	ND	0.118	ND	1.00	03/22/19	KCA	1
Dichlorodifluoromethane	0.819	0.202	4.05	1.00	03/22/19	KCA	1
Ethanol	19.7	0.531	37.1	1.00	03/22/19	KCA	1
Ethyl acetate	ND	0.278	ND	1.00	03/22/19	KCA	1
Ethylbenzene	ND	0.230	ND	1.00	03/22/19	KCA	1
Heptane	ND	0.244	ND	1.00	03/22/19	KCA	1
Hexachlorobutadiene	ND	0.094	ND	1.00	03/22/19	KCA	1
Hexane	0.485	0.284	1.71	1.00	03/22/19	KCA	1
Isopropylalcohol	ND	0.407	ND	1.00	03/22/19	KCA	1
Isopropylbenzene	ND	0.204	ND	1.00	03/22/19	KCA	1
m,p-Xylene	0.777	0.230	3.37	1.00	03/22/19	KCA	1
Methyl Ethyl Ketone	8.67	0.339	25.6	1.00	03/22/19	KCA	1
Methyl tert-butyl ether(MTBE)	ND	0.278	ND	1.00	03/22/19	KCA	1
Methylene Chloride	ND	0.864	ND	3.00	03/22/19	KCA	1
n-Butylbenzene	ND	0.182	ND	1.00	03/22/19	KCA	1
o-Xylene	ND	0.230	ND	1.00	03/22/19	KCA	1
Propylene	16.7	0.581	28.7	1.00	03/22/19	KCA	1
sec-Butylbenzene	ND	0.182	ND	1.00	03/22/19	KCA	1
Styrene	ND	0.235	ND	1.00	03/22/19	KCA	1
Tetrachloroethene	0.098	0.037	0.66	0.25	03/22/19	KCA	1
Tetrahydrofuran	8.96	0.339	26.4	1.00	03/22/19	KCA	1
Toluene	0.923	0.266	3.48	1.00	03/22/19	KCA	1
Trans-1,2-Dichloroethene	ND	0.252	ND	1.00	03/22/19	KCA	1
trans-1,3-Dichloropropene	ND	0.221	ND	1.00	03/22/19	KCA	1
Trichloroethene	ND	0.037	ND	0.20	03/22/19	KCA	1
Trichlorofluoromethane	2.20	0.178	12.4	1.00	03/22/19	KCA	1
Trichlorotrifluoroethane	ND	0.131	ND	1.00	03/22/19	KCA	1
Vinyl Chloride	ND	0.078	ND	0.20	03/22/19	KCA	1
<b><u>QA/QC Surrogates/Internals</u></b>							
% Bromofluorobenzene	103	%	103	%	03/22/19	KCA	1
% IS-1,4-Difluorobenzene	86	%	86	%	03/22/19	KCA	1
% IS-Bromochloromethane	80	%	80	%	03/22/19	KCA	1
% IS-Chlorobenzene-d5	85	%	85	%	03/22/19	KCA	1
% Bromofluorobenzene (5x)	100	%	100	%	03/21/19	KCA	5
% IS-1,4-Difluorobenzene (5x)	103	%	103	%	03/21/19	KCA	5
% IS-Bromochloromethane (5x)	97	%	97	%	03/21/19	KCA	5
% IS-Chlorobenzene-d5 (5x)	96	%	96	%	03/21/19	KCA	5

Client ID: SV 5

Parameter	ppbv Result	ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By	Dilution
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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 at RL/PQL  
BRL=Below Reporting Level L=Biased Low

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**

**March 26, 2019**

**Reviewed and Released by: Rashmi Makol, Project Manager**





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



# Analysis Report

March 26, 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: 21333

## Custody Information

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

Date                      Time  
 03/20/19                    10:18  
 03/20/19                    16:00

## Laboratory Data

SDG ID: GCC71647  
 Phoenix ID: CC71650

Project ID: 1840 PARK AVE MANHATTAN  
 Client ID: SV 6

Parameter	ppbv Result	ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By	Dilution	
<b>Volatiles (TO15)</b>								
1,1,1,2-Tetrachloroethane	ND	0.146	ND	1.00	03/22/19	KCA	1	1
1,1,1-Trichloroethane	0.753	0.183	4.11	1.00	03/22/19	KCA	1	
1,1,2,2-Tetrachloroethane	ND	0.146	ND	1.00	03/22/19	KCA	1	
1,1,2-Trichloroethane	ND	0.183	ND	1.00	03/22/19	KCA	1	
1,1-Dichloroethane	ND	0.247	ND	1.00	03/22/19	KCA	1	
1,1-Dichloroethene	ND	0.051	ND	0.20	03/22/19	KCA	1	
1,2,4-Trichlorobenzene	ND	0.135	ND	1.00	03/22/19	KCA	1	
1,2,4-Trimethylbenzene	ND	0.204	ND	1.00	03/22/19	KCA	1	
1,2-Dibromoethane(EDB)	ND	0.130	ND	1.00	03/22/19	KCA	1	
1,2-Dichlorobenzene	ND	0.166	ND	1.00	03/22/19	KCA	1	
1,2-Dichloroethane	ND	0.247	ND	1.00	03/22/19	KCA	1	
1,2-dichloropropane	ND	0.217	ND	1.00	03/22/19	KCA	1	
1,2-Dichlorotetrafluoroethane	ND	0.143	ND	1.00	03/22/19	KCA	1	
1,3,5-Trimethylbenzene	ND	0.204	ND	1.00	03/22/19	KCA	1	
1,3-Butadiene	ND	0.452	ND	1.00	03/22/19	KCA	1	
1,3-Dichlorobenzene	ND	0.166	ND	1.00	03/22/19	KCA	1	
1,4-Dichlorobenzene	ND	0.166	ND	1.00	03/22/19	KCA	1	
1,4-Dioxane	ND	0.278	ND	1.00	03/22/19	KCA	1	
2-Hexanone(MBK)	ND	0.244	ND	1.00	03/22/19	KCA	1	1
4-Ethyltoluene	ND	0.204	ND	1.00	03/22/19	KCA	1	1
4-Isopropyltoluene	ND	0.182	ND	1.00	03/22/19	KCA	1	1
4-Methyl-2-pentanone(MIBK)	0.431	0.244	1.76	1.00	03/22/19	KCA	1	
Acetone	307	4.21	729	10.0	03/22/19	KCA	10	
Acrylonitrile	ND	0.461	ND	1.00	03/22/19	KCA	1	
Benzene	0.748	0.313	2.39	1.00	03/22/19	KCA	1	
Benzyl chloride	ND	0.193	ND	1.00	03/22/19	KCA	1	

Client ID: SV 6

Parameter	ppbv Result	ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By	Dilution
Bromodichloromethane	ND	0.149	ND	1.00	03/22/19	KCA	1
Bromoform	ND	0.097	ND	1.00	03/22/19	KCA	1
Bromomethane	ND	0.258	ND	1.00	03/22/19	KCA	1
Carbon Disulfide	3.54	0.321	11.0	1.00	03/22/19	KCA	1
Carbon Tetrachloride	0.035	0.032	0.22	0.20	03/22/19	KCA	1
Chlorobenzene	ND	0.217	ND	1.00	03/22/19	KCA	1
Chloroethane	ND	0.379	ND	1.00	03/22/19	KCA	1
Chloroform	ND	0.205	ND	1.00	03/22/19	KCA	1
Chloromethane	4.44	0.485	9.16	1.00	03/22/19	KCA	1
Cis-1,2-Dichloroethene	ND	0.051	ND	0.20	03/22/19	KCA	1
cis-1,3-Dichloropropene	ND	0.221	ND	1.00	03/22/19	KCA	1
Cyclohexane	ND	0.291	ND	1.00	03/22/19	KCA	1
Dibromochloromethane	ND	0.118	ND	1.00	03/22/19	KCA	1
Dichlorodifluoromethane	0.916	0.202	4.53	1.00	03/22/19	KCA	1
Ethanol	15.0	0.531	28.2	1.00	03/22/19	KCA	1
Ethyl acetate	ND	0.278	ND	1.00	03/22/19	KCA	1
Ethylbenzene	ND	0.230	ND	1.00	03/22/19	KCA	1
Heptane	0.498	0.244	2.04	1.00	03/22/19	KCA	1
Hexachlorobutadiene	ND	0.094	ND	1.00	03/22/19	KCA	1
Hexane	0.760	0.284	2.68	1.00	03/22/19	KCA	1
Isopropylalcohol	1.74	0.407	4.27	1.00	03/22/19	KCA	1
Isopropylbenzene	ND	0.204	ND	1.00	03/22/19	KCA	1
m,p-Xylene	0.586	0.230	2.54	1.00	03/22/19	KCA	1
Methyl Ethyl Ketone	9.02	0.339	26.6	1.00	03/22/19	KCA	1
Methyl tert-butyl ether(MTBE)	ND	0.278	ND	1.00	03/22/19	KCA	1
Methylene Chloride	ND	0.864	ND	3.00	03/22/19	KCA	1
n-Butylbenzene	ND	0.182	ND	1.00	03/22/19	KCA	1
o-Xylene	ND	0.230	ND	1.00	03/22/19	KCA	1
Propylene	ND	0.581	ND	1.00	03/22/19	KCA	1
sec-Butylbenzene	ND	0.182	ND	1.00	03/22/19	KCA	1
Styrene	ND	0.235	ND	1.00	03/22/19	KCA	1
Tetrachloroethene	0.103	0.037	0.70	0.25	03/22/19	KCA	1
Tetrahydrofuran	6.61	0.339	19.5	1.00	03/22/19	KCA	1
Toluene	0.895	0.266	3.37	1.00	03/22/19	KCA	1
Trans-1,2-Dichloroethene	ND	0.252	ND	1.00	03/22/19	KCA	1
trans-1,3-Dichloropropene	ND	0.221	ND	1.00	03/22/19	KCA	1
Trichloroethene	0.060	0.037	0.32	0.20	03/22/19	KCA	1
Trichlorofluoromethane	3.45	0.178	19.4	1.00	03/22/19	KCA	1
Trichlorotrifluoroethane	ND	0.131	ND	1.00	03/22/19	KCA	1
Vinyl Chloride	ND	0.078	ND	0.20	03/22/19	KCA	1
<b><u>QA/QC Surrogates/Internals</u></b>							
% Bromofluorobenzene	100	%	100	%	03/22/19	KCA	1
% IS-1,4-Difluorobenzene	86	%	86	%	03/22/19	KCA	1
% IS-Bromochloromethane	85	%	85	%	03/22/19	KCA	1
% IS-Chlorobenzene-d5	94	%	94	%	03/22/19	KCA	1
% Bromofluorobenzene (10x)	93	%	93	%	03/22/19	KCA	10
% IS-1,4-Difluorobenzene (10x)	96	%	96	%	03/22/19	KCA	10
% IS-Bromochloromethane (10x)	90	%	90	%	03/22/19	KCA	10
% IS-Chlorobenzene-d5 (10x)	99	%	99	%	03/22/19	KCA	10

Client ID: SV 6

Parameter	ppbv Result	ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By	Dilution
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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 at RL/PQL  
BRL=Below Reporting Level L=Biased Low

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**

**March 26, 2019**

**Reviewed and Released by: Rashmi Makol, Project Manager**



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



# Analysis Report

March 26, 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: 21363

## Custody Information

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

## Date

03/20/19  
 03/20/19

## Time

10:30  
 16:00

## Laboratory Data

SDG ID: GCC71647  
 Phoenix ID: CC71651

Project ID: 1840 PARK AVE MANHATTAN  
 Client ID: SV 1

Parameter	ppbv Result	ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By	Dilution	
<b>Volatiles (TO15)</b>								
1,1,1,2-Tetrachloroethane	ND	0.146	ND	1.00	03/22/19	KCA	1	
1,1,1-Trichloroethane	10.5	0.183	57.3	1.00	03/22/19	KCA	1	
1,1,2,2-Tetrachloroethane	ND	0.146	ND	1.00	03/22/19	KCA	1	
1,1,2-Trichloroethane	ND	0.183	ND	1.00	03/22/19	KCA	1	
1,1-Dichloroethane	ND	0.247	ND	1.00	03/22/19	KCA	1	
1,1-Dichloroethene	ND	0.051	ND	0.20	03/22/19	KCA	1	
1,2,4-Trichlorobenzene	0.392	0.135	2.91	1.00	03/22/19	KCA	1	
1,2,4-Trimethylbenzene	0.229	0.204	1.13	1.00	03/22/19	KCA	1	
1,2-Dibromoethane(EDB)	ND	0.130	ND	1.00	03/22/19	KCA	1	
1,2-Dichlorobenzene	ND	0.166	ND	1.00	03/22/19	KCA	1	
1,2-Dichloroethane	ND	0.247	ND	1.00	03/22/19	KCA	1	
1,2-dichloropropane	ND	0.217	ND	1.00	03/22/19	KCA	1	
1,2-Dichlorotetrafluoroethane	ND	0.143	ND	1.00	03/22/19	KCA	1	
1,3,5-Trimethylbenzene	ND	0.204	ND	1.00	03/22/19	KCA	1	
1,3-Butadiene	ND	0.452	ND	1.00	03/22/19	KCA	1	
1,3-Dichlorobenzene	0.287	0.166	1.72	1.00	03/22/19	KCA	1	
1,4-Dichlorobenzene	ND	0.166	ND	1.00	03/22/19	KCA	1	
1,4-Dioxane	ND	0.278	ND	1.00	03/22/19	KCA	1	
2-Hexanone(MBK)	ND	0.244	ND	1.00	03/22/19	KCA	1	
4-Ethyltoluene	ND	0.204	ND	1.00	03/22/19	KCA	1	
4-Isopropyltoluene	ND	0.182	ND	1.00	03/22/19	KCA	1	
4-Methyl-2-pentanone(MIBK)	0.273	0.244	1.12	1.00	03/22/19	KCA	1	
Acetone	69.7	2.11	165	5.01	03/21/19	KCA	5	
Acrylonitrile	ND	0.461	ND	1.00	03/22/19	KCA	1	
Benzene	0.406	0.313	1.30	1.00	03/22/19	KCA	1	
Benzyl chloride	ND	0.193	ND	1.00	03/22/19	KCA	1	

Client ID: SV 1

Parameter	ppbv Result	ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By	Dilution
Bromodichloromethane	ND	0.149	ND	1.00	03/22/19	KCA	1
Bromoform	ND	0.097	ND	1.00	03/22/19	KCA	1
Bromomethane	ND	0.258	ND	1.00	03/22/19	KCA	1
Carbon Disulfide	ND	0.321	ND	1.00	03/22/19	KCA	1
Carbon Tetrachloride	0.044	0.032	0.28	0.20	03/22/19	KCA	1
Chlorobenzene	ND	0.217	ND	1.00	03/22/19	KCA	1
Chloroethane	ND	0.379	ND	1.00	03/22/19	KCA	1
Chloroform	0.346	0.205	1.69	1.00	03/22/19	KCA	1
Chloromethane	ND	0.485	ND	1.00	03/22/19	KCA	1
Cis-1,2-Dichloroethene	ND	0.051	ND	0.20	03/22/19	KCA	1
cis-1,3-Dichloropropene	ND	0.221	ND	1.00	03/22/19	KCA	1
Cyclohexane	ND	0.291	ND	1.00	03/22/19	KCA	1
Dibromochloromethane	ND	0.118	ND	1.00	03/22/19	KCA	1
Dichlorodifluoromethane	0.732	0.202	3.62	1.00	03/22/19	KCA	1
Ethanol	17.5	0.531	33.0	1.00	03/22/19	KCA	1
Ethyl acetate	ND	0.278	ND	1.00	03/22/19	KCA	1
Ethylbenzene	ND	0.230	ND	1.00	03/22/19	KCA	1
Heptane	0.247	0.244	1.01	1.00	03/22/19	KCA	1
Hexachlorobutadiene	ND	0.094	ND	1.00	03/22/19	KCA	1
Hexane	0.305	0.284	1.07	1.00	03/22/19	KCA	1
Isopropylalcohol	0.951	0.407	2.34	1.00	03/22/19	KCA	1
Isopropylbenzene	ND	0.204	ND	1.00	03/22/19	KCA	1
m,p-Xylene	0.645	0.230	2.80	1.00	03/22/19	KCA	1
Methyl Ethyl Ketone	3.77	0.339	11.1	1.00	03/22/19	KCA	1
Methyl tert-butyl ether(MTBE)	ND	0.278	ND	1.00	03/22/19	KCA	1
Methylene Chloride	1.28	0.864	4.44	3.00	03/22/19	KCA	1
n-Butylbenzene	ND	0.182	ND	1.00	03/22/19	KCA	1
o-Xylene	ND	0.230	ND	1.00	03/22/19	KCA	1
Propylene	ND	0.581	ND	1.00	03/22/19	KCA	1
sec-Butylbenzene	ND	0.182	ND	1.00	03/22/19	KCA	1
Styrene	ND	0.235	ND	1.00	03/22/19	KCA	1
Tetrachloroethene	0.238	0.037	1.61	0.25	03/22/19	KCA	1
Tetrahydrofuran	3.64	0.339	10.7	1.00	03/22/19	KCA	1
Toluene	0.832	0.266	3.13	1.00	03/22/19	KCA	1
Trans-1,2-Dichloroethene	ND	0.252	ND	1.00	03/22/19	KCA	1
trans-1,3-Dichloropropene	ND	0.221	ND	1.00	03/22/19	KCA	1
Trichloroethene	0.073	0.037	0.39	0.20	03/22/19	KCA	1
Trichlorofluoromethane	1.10	0.178	6.18	1.00	03/22/19	KCA	1
Trichlorotrifluoroethane	ND	0.131	ND	1.00	03/22/19	KCA	1
Vinyl Chloride	ND	0.078	ND	0.20	03/22/19	KCA	1
<b><u>QA/QC Surrogates/Internals</u></b>							
% Bromofluorobenzene	106	%	106	%	03/22/19	KCA	1
% IS-1,4-Difluorobenzene	92	%	92	%	03/22/19	KCA	1
% IS-Bromochloromethane	85	%	85	%	03/22/19	KCA	1
% IS-Chlorobenzene-d5	88	%	88	%	03/22/19	KCA	1
% Bromofluorobenzene (5x)	106	%	106	%	03/21/19	KCA	5
% IS-1,4-Difluorobenzene (5x)	95	%	95	%	03/21/19	KCA	5
% IS-Bromochloromethane (5x)	90	%	90	%	03/21/19	KCA	5
% IS-Chlorobenzene-d5 (5x)	85	%	85	%	03/21/19	KCA	5

Parameter	ppbv Result	ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By	Dilution
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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 at RL/PQL  
BRL=Below Reporting Level L=Biased Low

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:**

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**Phyllis Shiller, Laboratory Director**

**March 26, 2019**

**Reviewed and Released by: Rashmi Makol, Project Manager**



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



# Analysis Report

March 26, 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: 12868

## Custody Information

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

## Date

03/20/19  
 03/20/19

## Time

10:21  
 16:00

## Laboratory Data

SDG ID: GCC71647  
 Phoenix ID: CC71652

Project ID: 1840 PARK AVE MANHATTAN  
 Client ID: SV 3

Parameter	ppbv Result	ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By	Dilution
<b>Volatiles (TO15)</b>							
1,1,1,2-Tetrachloroethane	ND	0.146	ND	1.00	03/22/19	KCA	1
1,1,1-Trichloroethane	0.237	0.183	1.29	1.00	03/22/19	KCA	1
1,1,2,2-Tetrachloroethane	ND	0.146	ND	1.00	03/22/19	KCA	1
1,1,2-Trichloroethane	ND	0.183	ND	1.00	03/22/19	KCA	1
1,1-Dichloroethane	ND	0.247	ND	1.00	03/22/19	KCA	1
1,1-Dichloroethene	ND	0.051	ND	0.20	03/22/19	KCA	1
1,2,4-Trichlorobenzene	0.278	0.135	2.06	1.00	03/22/19	KCA	1
1,2,4-Trimethylbenzene	0.204	0.204	1.00	1.00	03/22/19	KCA	1
1,2-Dibromoethane(EDB)	ND	0.130	ND	1.00	03/22/19	KCA	1
1,2-Dichlorobenzene	ND	0.166	ND	1.00	03/22/19	KCA	1
1,2-Dichloroethane	ND	0.247	ND	1.00	03/22/19	KCA	1
1,2-dichloropropane	ND	0.217	ND	1.00	03/22/19	KCA	1
1,2-Dichlorotetrafluoroethane	ND	0.143	ND	1.00	03/22/19	KCA	1
1,3,5-Trimethylbenzene	ND	0.204	ND	1.00	03/22/19	KCA	1
1,3-Butadiene	ND	0.452	ND	1.00	03/22/19	KCA	1
1,3-Dichlorobenzene	ND	0.166	ND	1.00	03/22/19	KCA	1
1,4-Dichlorobenzene	ND	0.166	ND	1.00	03/22/19	KCA	1
1,4-Dioxane	ND	0.278	ND	1.00	03/22/19	KCA	1
2-Hexanone(MBK)	ND	0.244	ND	1.00	03/22/19	KCA	1
4-Ethyltoluene	ND	0.204	ND	1.00	03/22/19	KCA	1
4-Isopropyltoluene	ND	0.182	ND	1.00	03/22/19	KCA	1
4-Methyl-2-pentanone(MIBK)	ND	0.244	ND	1.00	03/22/19	KCA	1
Acetone	146	2.11	347	5.01	03/21/19	KCA	5
Acrylonitrile	ND	0.461	ND	1.00	03/22/19	KCA	1
Benzene	0.480	0.313	1.53	1.00	03/22/19	KCA	1
Benzyl chloride	ND	0.193	ND	1.00	03/22/19	KCA	1

Client ID: SV 3

Parameter	ppbv Result	ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By	Dilution
Bromodichloromethane	ND	0.149	ND	1.00	03/22/19	KCA	1
Bromoform	ND	0.097	ND	1.00	03/22/19	KCA	1
Bromomethane	ND	0.258	ND	1.00	03/22/19	KCA	1
Carbon Disulfide	ND	0.321	ND	1.00	03/22/19	KCA	1
Carbon Tetrachloride	0.041	0.032	0.26	0.20	03/22/19	KCA	1
Chlorobenzene	ND	0.217	ND	1.00	03/22/19	KCA	1
Chloroethane	ND	0.379	ND	1.00	03/22/19	KCA	1
Chloroform	ND	0.205	ND	1.00	03/22/19	KCA	1
Chloromethane	ND	0.485	ND	1.00	03/22/19	KCA	1
Cis-1,2-Dichloroethene	ND	0.051	ND	0.20	03/22/19	KCA	1
cis-1,3-Dichloropropene	ND	0.221	ND	1.00	03/22/19	KCA	1
Cyclohexane	ND	0.291	ND	1.00	03/22/19	KCA	1
Dibromochloromethane	ND	0.118	ND	1.00	03/22/19	KCA	1
Dichlorodifluoromethane	4.23	0.202	20.9	1.00	03/22/19	KCA	1
Ethanol	14.5	0.531	27.3	1.00	03/22/19	KCA	1
Ethyl acetate	ND	0.278	ND	1.00	03/22/19	KCA	1
Ethylbenzene	ND	0.230	ND	1.00	03/22/19	KCA	1
Heptane	0.259	0.244	1.06	1.00	03/22/19	KCA	1
Hexachlorobutadiene	ND	0.094	ND	1.00	03/22/19	KCA	1
Hexane	ND	0.284	ND	1.00	03/22/19	KCA	1
Isopropylalcohol	1.27	0.407	3.12	1.00	03/22/19	KCA	1
Isopropylbenzene	ND	0.204	ND	1.00	03/22/19	KCA	1
m,p-Xylene	0.593	0.230	2.57	1.00	03/22/19	KCA	1
Methyl Ethyl Ketone	6.88	0.339	20.3	1.00	03/22/19	KCA	1
Methyl tert-butyl ether(MTBE)	ND	0.278	ND	1.00	03/22/19	KCA	1
Methylene Chloride	ND	0.864	ND	3.00	03/22/19	KCA	1
n-Butylbenzene	ND	0.182	ND	1.00	03/22/19	KCA	1
o-Xylene	ND	0.230	ND	1.00	03/22/19	KCA	1
Propylene	3.40	0.581	5.85	1.00	03/22/19	KCA	1
sec-Butylbenzene	ND	0.182	ND	1.00	03/22/19	KCA	1
Styrene	ND	0.235	ND	1.00	03/22/19	KCA	1
Tetrachloroethene	0.152	0.037	1.03	0.25	03/22/19	KCA	1
Tetrahydrofuran	5.30	0.339	15.6	1.00	03/22/19	KCA	1
Toluene	0.880	0.266	3.31	1.00	03/22/19	KCA	1
Trans-1,2-Dichloroethene	ND	0.252	ND	1.00	03/22/19	KCA	1
trans-1,3-Dichloropropene	ND	0.221	ND	1.00	03/22/19	KCA	1
Trichloroethene	ND	0.037	ND	0.20	03/22/19	KCA	1
Trichlorofluoromethane	80.8	0.891	454	5.00	03/21/19	KCA	5
Trichlorotrifluoroethane	ND	0.131	ND	1.00	03/22/19	KCA	1
Vinyl Chloride	ND	0.078	ND	0.20	03/22/19	KCA	1
<b><u>QA/QC Surrogates/Internals</u></b>							
% Bromofluorobenzene	101	%	101	%	03/22/19	KCA	1
% IS-1,4-Difluorobenzene	94	%	94	%	03/22/19	KCA	1
% IS-Bromochloromethane	91	%	91	%	03/22/19	KCA	1
% IS-Chlorobenzene-d5	97	%	97	%	03/22/19	KCA	1
% Bromofluorobenzene (5x)	101	%	101	%	03/21/19	KCA	5
% IS-1,4-Difluorobenzene (5x)	92	%	92	%	03/21/19	KCA	5
% IS-Bromochloromethane (5x)	82	%	82	%	03/21/19	KCA	5
% IS-Chlorobenzene-d5 (5x)	82	%	82	%	03/21/19	KCA	5



Parameter	ppbv Result	ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By	Dilution
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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 at RL/PQL  
BRL=Below Reporting Level L=Biased Low

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**

**March 26, 2019**

**Reviewed and Released by: Rashmi Makol, Project Manager**



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

March 26, 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.: GCC71647

Project ID: 1840 PARK AVE MANHATTAN

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
SV 2	CC71647	28577	6.0L	3409	03/06/19	-30	-4	43	42	2.4	-29	-4	03/20/19 8:23	03/20/19 10:22
SV 4	CC71648	28580	6.0L	3408	03/06/19	-30	-3	43	42	2.4	-30	-5	03/20/19 8:31	03/20/19 10:32
SV 5	CC71649	19931	6.0L	3257	03/06/19	-30	-3	43	44	2.3	-30	-4	03/20/19 8:13	03/20/19 10:16
SV 6	CC71650	21333	6.0L	3220	03/06/19	-30	-2	43	44	2.3	-30	-4	03/20/19 8:17	03/20/19 10:18
SV 1	CC71651	21363	6.0L	5061	03/06/19	-30	-3	43	41	4.8	-30	-5	03/20/19 8:26	03/20/19 10:30
SV 3	CC71652	12868	6.0L	2930	03/06/19	-30	-3	43	43	0.0	-29	-5	03/20/19 8:21	03/20/19 10:21



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



# QA/QC Report

March 26, 2019

## QA/QC Data

SDG I.D.: GCC71647

Parameter	Blk ppbv	Blk RL ppbv	Blk ug/m3	Blk RL ug/m3	LCS %	Sample Result ug/m3	Sample Dup ug/m3	Sample Result ppbv	Sample Dup ppbv	DUP RPD	% Rec Limits	% RPD Limits
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QA/QC Batch 471247 (ppbv), QC Sample No: CC71705 (CC71647 (1X, 5X) , CC71648 (1X, 5X) , CC71649 (1X, 5X) , CC71650 (1X, 10X) , CC71651 (1X, 5X) , CC71652 (1X, 5X) )

### Volatiles

1,1,1,2-Tetrachloroethane	ND	0.150	ND	1.03	92	ND	ND	ND	ND	NC	70 - 130	25
1,1,1-Trichloroethane	ND	0.180	ND	0.98	89	ND	ND	ND	ND	NC	70 - 130	25
1,1,2,2-Tetrachloroethane	ND	0.150	ND	1.03	97	ND	ND	ND	ND	NC	70 - 130	25
1,1,2-Trichloroethane	ND	0.180	ND	0.98	106	ND	ND	ND	ND	NC	70 - 130	25
1,1-Dichloroethane	ND	0.250	ND	1.01	89	ND	ND	ND	ND	NC	70 - 130	25
1,1-Dichloroethene	ND	0.050	ND	0.20	87	ND	ND	ND	ND	NC	70 - 130	25
1,2,4-Trichlorobenzene	ND	0.130	ND	0.96	123	ND	ND	ND	ND	NC	70 - 130	25
1,2,4-Trimethylbenzene	ND	0.200	ND	0.98	112	ND	ND	ND	ND	NC	70 - 130	25
1,2-Dibromoethane(EDB)	ND	0.130	ND	1.00	104	ND	ND	ND	ND	NC	70 - 130	25
1,2-Dichlorobenzene	ND	0.170	ND	1.02	101	ND	ND	ND	ND	NC	70 - 130	25
1,2-Dichloroethane	ND	0.250	ND	1.01	93	ND	ND	ND	ND	NC	70 - 130	25
1,2-dichloropropane	ND	0.220	ND	1.02	107	ND	ND	ND	ND	NC	70 - 130	25
1,2-Dichlorotetrafluoroethane	ND	0.140	ND	0.98	91	ND	ND	ND	ND	NC	70 - 130	25
1,3,5-Trimethylbenzene	ND	0.200	ND	0.98	101	ND	ND	ND	ND	NC	70 - 130	25
1,3-Butadiene	ND	0.450	ND	0.99	93	ND	ND	ND	ND	NC	70 - 130	25
1,3-Dichlorobenzene	ND	0.170	ND	1.02	89	ND	ND	ND	ND	NC	70 - 130	25
1,4-Dichlorobenzene	ND	0.170	ND	1.02	102	ND	ND	ND	ND	NC	70 - 130	25
1,4-Dioxane	ND	0.280	ND	1.01	116	ND	ND	ND	ND	NC	70 - 130	25
2-Hexanone(MBK)	ND	0.240	ND	0.98	109	ND	ND	ND	ND	NC	70 - 130	25
4-Ethyltoluene	ND	0.200	ND	0.98	99	ND	ND	ND	ND	NC	70 - 130	25
4-Isopropyltoluene	ND	0.180	ND	0.99	98	ND	ND	ND	ND	NC	70 - 130	25
4-Methyl-2-pentanone(MIBK)	ND	0.240	ND	0.98	99	ND	ND	ND	ND	NC	70 - 130	25
Acetone	ND	0.420	ND	1.00	87	34.7	34.7	14.6	14.6	0.0	70 - 130	25
Acrylonitrile	ND	0.460	ND	1.00	98	ND	ND	ND	ND	NC	70 - 130	25
Benzene	ND	0.310	ND	0.99	99	ND	ND	ND	ND	NC	70 - 130	25
Benzyl chloride	ND	0.190	ND	0.98	108	ND	ND	ND	ND	NC	70 - 130	25
Bromodichloromethane	ND	0.150	ND	1.00	102	ND	ND	ND	ND	NC	70 - 130	25
Bromoform	ND	0.097	ND	1.00	95	ND	ND	ND	ND	NC	70 - 130	25
Bromomethane	ND	0.260	ND	1.01	88	ND	ND	ND	ND	NC	70 - 130	25
Carbon Disulfide	ND	0.320	ND	1.00	91	ND	ND	ND	ND	NC	70 - 130	25
Carbon Tetrachloride	ND	0.032	ND	0.20	92	0.35	0.35	0.056	0.055	NC	70 - 130	25
Chlorobenzene	ND	0.220	ND	1.01	103	ND	ND	ND	ND	NC	70 - 130	25
Chloroethane	ND	0.380	ND	1.00	91	ND	ND	ND	ND	NC	70 - 130	25
Chloroform	ND	0.200	ND	0.98	98	ND	ND	ND	ND	NC	70 - 130	25
Chloromethane	ND	0.480	ND	0.99	84	1.34	1.45	0.651	0.704	NC	70 - 130	25
Cis-1,2-Dichloroethene	ND	0.256	ND	1.01	97	ND	ND	ND	ND	NC	70 - 130	25
cis-1,3-Dichloropropene	ND	0.220	ND	1.00	117	ND	ND	ND	ND	NC	70 - 130	25
Cyclohexane	ND	0.290	ND	1.00	105	21.2	20.9	6.15	6.07	1.3	70 - 130	25
Dibromochloromethane	ND	0.120	ND	1.02	103	ND	ND	ND	ND	NC	70 - 130	25
Dichlorodifluoromethane	ND	0.200	ND	0.99	93	2.16	2.23	0.438	0.452	NC	70 - 130	25

## QA/QC Data

SDG I.D.: GCC71647

Parameter	Bik ppbv	Bik RL ppbv	Bik ug/m3	Bik RL ug/m3	LCS %	Sample Result ug/m3	Sample Dup ug/m3	Sample Result ppbv	Sample Dup ppbv	DUP RPD	% Rec Limits	% RPD Limits
Ethanol	ND	0.530	ND	1.00	110	23.0	23.5	12.2	12.5	2.4	70 - 130	25
Ethyl acetate	ND	0.280	ND	1.01	85	ND	19.3	ND	5.37	NC	70 - 130	25
Ethylbenzene	ND	0.230	ND	1.00	95	ND	ND	ND	ND	NC	70 - 130	25
Heptane	ND	0.240	ND	0.98	105	16.7	17.4	4.08	4.25	4.1	70 - 130	25
Hexachlorobutadiene	ND	0.094	ND	1.00	98	ND	ND	ND	ND	NC	70 - 130	25
Hexane	ND	0.280	ND	0.99	104	43.3	43.7	12.3	12.4	0.8	70 - 130	25
Isopropylalcohol	ND	0.410	ND	1.01	91	2.10	2.20	0.856	0.894	NC	70 - 130	25
Isopropylbenzene	ND	0.200	ND	0.98	106	ND	ND	ND	ND	NC	70 - 130	25
m,p-Xylene	ND	0.230	ND	1.00	100	1.37	1.23	0.316	0.283	NC	70 - 130	25
Methyl Ethyl Ketone	ND	0.340	ND	1.00	96	67.2	67.5	22.8	22.9	0.4	70 - 130	25
Methyl tert-butyl ether(MTBE)	ND	0.280	ND	1.01	91	ND	ND	ND	ND	NC	70 - 130	25
Methylene Chloride	ND	0.860	ND	2.99	83	8.02	7.95	2.31	2.29	NC	70 - 130	25
n-Butylbenzene	ND	0.180	ND	0.99	102	ND	ND	ND	ND	NC	70 - 130	25
o-Xylene	ND	0.230	ND	1.00	106	ND	ND	ND	ND	NC	70 - 130	25
Propylene	ND	0.580	ND	1.00	101	ND	ND	ND	ND	NC	70 - 130	25
sec-Butylbenzene	ND	0.180	ND	0.99	97	ND	ND	ND	ND	NC	70 - 130	25
Styrene	ND	0.230	ND	0.98	106	ND	ND	ND	ND	NC	70 - 130	25
Tetrachloroethene	ND	0.037	ND	0.25	113	0.36	ND	0.053	ND	NC	70 - 130	25
Tetrahydrofuran	ND	0.340	ND	1.00	94	ND	ND	ND	ND	NC	70 - 130	25
Toluene	ND	0.270	ND	1.02	107	152	155	40.3	41.1	2.0	70 - 130	25
Trans-1,2-Dichloroethene	ND	0.250	ND	0.99	90	ND	ND	ND	ND	NC	70 - 130	25
trans-1,3-Dichloropropene	ND	0.220	ND	1.00	103	ND	ND	ND	ND	NC	70 - 130	25
Trichloroethene	ND	0.037	ND	0.20	108	ND	ND	ND	ND	NC	70 - 130	25
Trichlorofluoromethane	ND	0.180	ND	1.01	78	1.41	1.23	0.252	0.219	NC	70 - 130	25
Trichlorotrifluoroethane	ND	0.130	ND	1.00	82	ND	ND	ND	ND	NC	70 - 130	25
Vinyl Chloride	ND	0.078	ND	0.20	88	ND	ND	ND	ND	NC	70 - 130	25
% Bromofluorobenzene	92	%	92	%	97	103	99	103	99	NC	70 - 130	25
% IS-1,4-Difluorobenzene	127	%	127	%	98	106	109	106	109	NC	60 - 140	25
% IS-Bromochloromethane	124	%	124	%	94	93	95	93	95	NC	60 - 140	25
% IS-Chlorobenzene-d5	114	%	114	%	101	99	103	99	103	NC	60 - 140	25

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference

LCS - Laboratory Control Sample


LCSD - Laboratory Control Sample Duplicate

MS - Matrix Spike

MS Dup - Matrix Spike Duplicate

NC - No Criteria

Intf - Interference

  
Phyllis Shiller, Laboratory Director  
March 26, 2019

Tuesday, March 26, 2019

Criteria: None

State: NY

## Sample Criteria Exceedances Report

GCC71647 - EBC

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units
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\*\*\* 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.



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



## Analysis Comments

March 26, 2019

SDG I.D.: GCC71647

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The following analysis comments are made regarding exceptions to criteria not already noted in the Analysis Report or QA/QC Report: None.



H2504

CHAIN OF CUSTODY RECORD  
AIR ANALYSES

800-827-5426  
email: greg@phoenixlabs.com

P.O. # \_\_\_\_\_ Page \_\_\_\_\_ of \_\_\_\_\_

Data Delivery:  
 Fax #: \_\_\_\_\_  
 Email: Site  
 Phone #: \_\_\_\_\_

Report to: Keith Butler  
Customer: EBC  
Address: \_\_\_\_\_

Invoice to: \_\_\_\_\_

Project Name: 1540 PARK AVE, MANHATTAN  
Requested Deliverable: RCP  ASP CAT B   
MCP  NJ Deliverables

State where samples collected: \_\_\_\_\_

Sampled by: TONY BALABO

Phoenix ID #	Client Sample ID	THIS SECTION FOR LAB USE ONLY										Ambient/Indoor Air	Soil Gas	Grab (G) Composite (C)	TO-14	TO-15	
		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)
71047	SV2	28577	6.0	-30	-4	3409	43	8:23	6:22	3-20-19	-29	-4	X				
71048	SV4	16004				3406		8:31	10:32	3-20-19	-30	-5	X				
71049	SV5	28580			-3	3408		8:13	10:16	3-20-19	-30	-4	X				
71050	SV6	19931			-3	3957		8:17	10:18	3-20-19	-30	-4	X				
71051	SV1	21333			-2	3920		8:26	10:30	3-20-19	-30	-5	X				
71052	SV3	21363			-3	5061		8:21	10:21	3-20-19	-29	-5	X				
		12868			-3	3130											

Relinquished by: [Signature] Date: 3-20-19 Time: 12:15  
 Accepted by: [Signature] Date: 3-20-19 Time: 11:00

Excel  Equis  Other

Turnaround Time: \_\_\_\_\_

SPECIAL INSTRUCTIONS, OC REQUIREMENTS, REGULATORY INFORMATION: \_\_\_\_\_

Requested Criteria: \_\_\_\_\_

Quote Number: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

24 Hour  48 Hour  72 Hour  Standard

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:



## ANALYTICAL REPORT

Lab Number:	L1910899
Client:	Environmental Business Consultants Inc 1808 Middle Country Road Ridge, NY 11961
ATTN:	Keith Butler
Phone:	(631) 504-6000
Project Name:	1840 PARK AVE., MANHATTAN
Project Number:	Not Specified
Report Date:	04/03/19

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

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

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





**Project Name:** 1840 PARK AVE., MANHATTAN  
**Project Number:** Not Specified

**Lab Number:** L1910899  
**Report Date:** 04/03/19

<b>Alpha Sample ID</b>	<b>Client ID</b>	<b>Matrix</b>	<b>Sample Location</b>	<b>Collection Date/Time</b>	<b>Receive Date</b>
L1910899-01	MW4	WATER	1840 PARK AVE., MANHATTAN	03/19/19 07:45	03/20/19

**Project Name:** 1840 PARK AVE., MANHATTAN  
**Project Number:** Not Specified

**Lab Number:** L1910899  
**Report Date:** 04/03/19

### Case Narrative

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

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

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

Please contact Project Management at 800-624-9220 with any questions.

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**Project Name:** 1840 PARK AVE., MANHATTAN  
**Project Number:** Not Specified

**Lab Number:** L1910899  
**Report Date:** 04/03/19

### Case Narrative (continued)

#### Report Submission

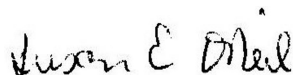
All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

#### Perfluorinated Alkyl Acids by Isotope Dilution

The WG1219540-1 Method Blank, associated with L1910899-01, has a concentration above the reporting limit for 6:2 FTS. Since the sample(s) were non-detect to the RL for this target analyte, no further actions were taken. The results of the original analysis are reported.

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

Authorized Signature:



Susan O'Neil

Title: Technical Director/Representative

Date: 04/03/19

# ORGANICS

# SEMIVOLATILES

**Project Name:** 1840 PARK AVE., MANHATTAN  
**Project Number:** Not Specified

**Lab Number:** L1910899  
**Report Date:** 04/03/19

**SAMPLE RESULTS**

**Lab ID:** L1910899-01  
**Client ID:** MW4  
**Sample Location:** 1840 PARK AVE., MANHATTAN

**Date Collected:** 03/19/19 07:45  
**Date Received:** 03/20/19  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Water  
**Analytical Method:** 122,537(M)  
**Analytical Date:** 03/26/19 17:34  
**Analyst:** JW

**Extraction Method:** EPA 537  
**Extraction Date:** 03/26/19 08:47

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab</b>						
Perfluorobutanoic Acid (PFBA)	19.9		ng/l	1.92	0.357	1
Perfluoropentanoic Acid (PFPeA)	35.2		ng/l	1.92	0.444	1
Perfluorobutanesulfonic Acid (PFBS)	6.67		ng/l	1.92	0.364	1
Perfluorohexanoic Acid (PFHxA)	26.6		ng/l	1.92	0.471	1
Perfluoroheptanoic Acid (PFHpA)	14.1		ng/l	1.92	0.356	1
Perfluorohexanesulfonic Acid (PFHxS)	13.0		ng/l	1.92	0.418	1
Perfluorooctanoic Acid (PFOA)	34.3		ng/l	1.92	0.441	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	1.61	JB	ng/l	1.92	0.186	1
Perfluoroheptanesulfonic Acid (PFHpS)	0.609	J	ng/l	1.92	0.498	1
Perfluorononanoic Acid (PFNA)	3.05		ng/l	1.92	0.418	1
Perfluorooctanesulfonic Acid (PFOS)	55.0		ng/l	1.92	0.536	1
Perfluorodecanoic Acid (PFDA)	1.52	J	ng/l	1.92	0.594	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.92	0.278	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	1.92	0.240	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.92	0.406	1
Perfluorodecanesulfonic Acid (PFDS)	0.391	J	ng/l	1.92	0.370	1
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	1.92	0.532	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	1.92	0.357	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.92	0.567	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	1.92	0.301	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	1.92	0.946	1
PFOA/PFOS, Total	89.3		ng/l	1.92	0.441	1

**Project Name:** 1840 PARK AVE., MANHATTAN**Lab Number:** L1910899**Project Number:** Not Specified**Report Date:** 04/03/19**SAMPLE RESULTS**

Lab ID: L1910899-01

Date Collected: 03/19/19 07:45

Client ID: MW4

Date Received: 03/20/19

Sample Location: 1840 PARK AVE., MANHATTAN

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)	82		16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	94		31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	65		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	73		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	94		47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	78		36-149
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	169		1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	79		34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	91		42-146
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	73		38-144
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	110		7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	51		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	72		40-144
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	7		1-87
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	56		23-146
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	63		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	65		33-143

**Project Name:** 1840 PARK AVE., MANHATTAN  
**Project Number:** Not Specified

**Lab Number:** L1910899  
**Report Date:** 04/03/19

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 122,537(M)  
Analytical Date: 03/26/19 17:17  
Analyst: JW

Extraction Method: EPA 537  
Extraction Date: 03/26/19 08:47

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab for sample(s): 01 Batch: WG1219540-1					
Perfluorobutanoic Acid (PFBA)	ND		ng/l	2.00	0.373
Perfluoropentanoic Acid (PFPeA)	ND		ng/l	2.00	0.464
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/l	2.00	0.380
Perfluorohexanoic Acid (PFHxA)	ND		ng/l	2.00	0.492
Perfluoroheptanoic Acid (PFHpA)	ND		ng/l	2.00	0.372
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	2.00	0.436
Perfluorooctanoic Acid (PFOA)	ND		ng/l	2.00	0.460
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	2.76		ng/l	2.00	0.194
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	2.00	0.520
Perfluorononanoic Acid (PFNA)	ND		ng/l	2.00	0.436
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/l	2.00	0.560
Perfluorodecanoic Acid (PFDA)	ND		ng/l	2.00	0.620
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	2.00	0.291
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	0.592	J	ng/l	2.00	0.250
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	2.00	0.424
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	2.00	0.386
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	2.00	0.556
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	0.532	J	ng/l	2.00	0.373
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	2.00	0.592
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	2.00	0.314
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	2.00	0.988
PFOA/PFOS, Total	ND		ng/l	2.00	0.460



**Project Name:** 1840 PARK AVE., MANHATTAN  
**Project Number:** Not Specified

**Lab Number:** L1910899  
**Report Date:** 04/03/19

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 122,537(M)  
Analytical Date: 03/26/19 17:17  
Analyst: JW

Extraction Method: EPA 537  
Extraction Date: 03/26/19 08:47

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab for sample(s): 01 Batch: WG1219540-1					

Surrogate (Extracted Internal Standard)	%Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	95		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	102		16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	100		31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	94		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	93		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	96		47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	96		36-149
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	87		1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	102		34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	92		42-146
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	91		38-144
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	93		7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	83		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	94		40-144
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	51		1-87
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	91		23-146
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	90		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	107		33-143

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** 1840 PARK AVE., MANHATTAN

**Lab Number:** L1910899

**Project Number:** Not Specified

**Report Date:** 04/03/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 01 Batch: WG1219540-2 WG1219540-3								
Perfluorobutanoic Acid (PFBA)	122		118		67-148	3		30
Perfluoropentanoic Acid (PFPeA)	117		113		63-161	3		30
Perfluorobutanesulfonic Acid (PFBS)	109		104		65-157	5		30
Perfluorohexanoic Acid (PFHxA)	126		118		69-168	7		30
Perfluoroheptanoic Acid (PFHpA)	114		108		58-159	5		30
Perfluorohexanesulfonic Acid (PFHxS)	121		118		69-177	3		30
Perfluorooctanoic Acid (PFOA)	115		111		63-159	4		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	117		123		49-187	5		30
Perfluoroheptanesulfonic Acid (PFHpS)	122		126		61-179	3		30
Perfluorononanoic Acid (PFNA)	122		118		68-171	3		30
Perfluorooctanesulfonic Acid (PFOS)	100		98		52-151	2		30
Perfluorodecanoic Acid (PFDA)	116		114		63-171	2		30
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	140		130		56-173	7		30
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	124		118		60-166	5		30
Perfluoroundecanoic Acid (PFUnA)	108		109		60-153	1		30
Perfluorodecanesulfonic Acid (PFDS)	130		124		38-156	5		30
Perfluorooctanesulfonamide (FOSA)	121		110		46-170	10		30
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	120		114		45-170	5		30
Perfluorododecanoic Acid (PFDoA)	114		108		67-153	5		30
Perfluorotridecanoic Acid (PFTrDA)	108		99		48-158	9		30
Perfluorotetradecanoic Acid (PFTA)	129		122		59-182	6		30

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** 1840 PARK AVE., MANHATTAN

**Lab Number:** L1910899

**Project Number:** Not Specified

**Report Date:** 04/03/19

Parameter	LCS		LCSD		%Recovery		RPD	RPD	
	%Recovery	Qual	%Recovery	Qual	Limits	Qual		Limits	
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 01 Batch: WG1219540-2 WG1219540-3									

Surrogate (Extracted Internal Standard)	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
Perfluoro[13C4]Butanoic Acid (MPFBA)	93		95		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	100		102		16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	93		99		31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	86		91		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	88		92		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	93		94		47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	91		93		36-149
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	79		82		1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	92		97		34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	88		91		42-146
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	83		89		38-144
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	75		91		7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	72		78		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	88		91		40-144
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	37		49		1-87
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	75		77		23-146
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	82		84		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	89		89		33-143

## Matrix Spike Analysis

*Batch Quality Control*

**Project Name:** 1840 PARK AVE., MANHATTAN

**Lab Number:** L1910899

**Project Number:** Not Specified

**Report Date:** 04/03/19

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1219540-4 QC Sample: L1910899-01 Client ID: MW4												
Perfluorobutanoic Acid (PFBA)	19.9	37.4	63.8	117		-	-		67-148	-		30
Perfluoropentanoic Acid (PFPeA)	35.2	37.4	78.3	115		-	-		63-161	-		30
Perfluorobutanesulfonic Acid (PFBS)	6.67	37.4	45.8	104		-	-		65-157	-		30
Perfluorohexanoic Acid (PFHxA)	26.6	37.4	72.0	121		-	-		69-168	-		30
Perfluoroheptanoic Acid (PFHpA)	14.1	37.4	54.6	108		-	-		58-159	-		30
Perfluorohexanesulfonic Acid (PFHxS)	13.0	37.4	57.1	118		-	-		69-177	-		30
Perfluorooctanoic Acid (PFOA)	34.3	37.4	75.4	110		-	-		63-159	-		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	1.61JB	37.4	45.4	121		-	-		49-187	-		30
Perfluoroheptanesulfonic Acid (PFHpS)	0.609J	37.4	46.8	125		-	-		61-179	-		30
Perfluorononanoic Acid (PFNA)	3.05	37.4	47.3	118		-	-		68-171	-		30
Perfluorooctanesulfonic Acid (PFOS)	55.0	37.4	86.8	85		-	-		52-151	-		30
Perfluorodecanoic Acid (PFDA)	1.52J	37.4	44.7	119		-	-		63-171	-		30
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND	37.4	50.2	134		-	-		56-173	-		30
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND	37.4	45.1	120		-	-		60-166	-		30
Perfluoroundecanoic Acid (PFUnA)	ND	37.4	38.7	103		-	-		60-153	-		30
Perfluorodecanesulfonic Acid (PFDS)	0.391J	37.4	42.2	113		-	-		38-156	-		30
Perfluorooctanesulfonamide (FOSA)	ND	37.4	42.7	114		-	-		46-170	-		30
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND	37.4	43.5	116		-	-		45-170	-		30
Perfluorododecanoic Acid (PFDoA)	ND	37.4	40.7	109		-	-		67-153	-		30
Perfluorotridecanoic Acid (PFTrDA)	ND	37.4	35.9	96		-	-		48-158	-		30
Perfluorotetradecanoic Acid (PFTA)	ND	37.4	43.8	117		-	-		59-182	-		30

## Matrix Spike Analysis

*Batch Quality Control*

**Project Name:** 1840 PARK AVE., MANHATTAN

**Lab Number:** L1910899

**Project Number:** Not Specified

**Report Date:** 04/03/19

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>
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Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1219540-4 QC Sample: L1910899-01 Client ID: MW4

<i>Surrogate (Extracted Internal Standard)</i>	<i>MS % Recovery</i>	<i>MS Qualifier</i>	<i>MSD % Recovery</i>	<i>MSD Qualifier</i>	<i>Acceptance Criteria</i>
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	119				7-170
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	182				1-244
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	55				23-146
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	56				1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	75				40-144
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	77				38-144
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	68				21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	78				30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	94				47-153
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	64				24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	67				33-143
Perfluoro[13C4]Butanoic Acid (MPFBA)	83				2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	89				16-173
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	11				1-87
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	94				42-146
Perfluoro[13C8]Octanoic Acid (M8PFOA)	84				36-149
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	85				34-146
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	96				31-159

Project Name: 1840 PARK AVE., MANHATTAN

Project Number: Not Specified

**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**

L1910899-01A    Plastic 250ml unpreserved

L1910899-01B    Plastic 250ml unpreserved

<b>Cooler</b>	<b>Initial pH</b>	<b>Final pH</b>	<b>Temp deg C</b>	<b>Pres</b>	<b>Seal</b>	<b>Frozen Date/Time</b>	<b>Analysis(*)</b>
A	NA		2.0	Y	Absent		A2-NY-537-ISOTOPE(14)
A	NA		2.0	Y	Absent		A2-NY-537-ISOTOPE(14)

**Project Name:** 1840 PARK AVE., MANHATTAN  
**Project Number:** Not Specified

**Lab Number:** L1910899  
**Report Date:** 04/03/19

## GLOSSARY

### Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)  Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

### Footnotes

Report Format: DU Report with 'J' Qualifiers



**Project Name:** 1840 PARK AVE., MANHATTAN  
**Project Number:** Not Specified

**Lab Number:** L1910899  
**Report Date:** 04/03/19

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

### Terms

**Analytical Method:** Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1.8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

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

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

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

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

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

### Data Qualifiers

- A** - Spectra identified as "Aldol Condensation Product".
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.

Report Format: DU Report with 'J' Qualifiers





**Project Name:** 1840 PARK AVE., MANHATTAN  
**Project Number:** Not Specified

**Lab Number:** L1910899  
**Report Date:** 04/03/19

## REFERENCES

- 122 Determination of Selected Perfluorinated Alkyl Acids in Drinking Water by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry (LC/MS/MS). EPA Method 537, EPA/600/R-08/092. Version 1.1, September 2009.

## LIMITATION OF LIABILITIES

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

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



## Certification Information

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

### Westborough Facility

**EPA 624/624.1:** m/p-xylene, o-xylene

**EPA 8260C:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

**EPA 8270D:** NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.

**EPA 6860:** SCM: Perchlorate

**SM4500:** NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

### Mansfield Facility

**SM 2540D:** TSS

**EPA 8082A:** NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.

**EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

**Biological Tissue Matrix:** EPA 3050B

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

### Westborough Facility:

#### Drinking Water

**EPA 300.0:** Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,**

**EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B**

**EPA 332:** Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.

**Microbiology:** **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D.**

#### Non-Potable Water

**SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH:** Ammonia-N and Kjeldahl-N, **EPA 350.1:** Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.

**EPA 624.1:** Volatile Halocarbons & Aromatics,

**EPA 608.3:** Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

**EPA 625.1:** SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.

**Microbiology:** **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.**

### Mansfield Facility:

#### Drinking Water

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

**EPA 522.**

#### Non-Potable Water

**EPA 200.7:** Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.


**EPA 200.8:** Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.

**EPA 245.1** Hg.

**SM2340B**

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

 <b>ALPHA</b> <small>AMERICAN LABS</small>	<b>NEW YORK CHAIN OF CUSTODY</b>	<b>Service Centers</b> Mahwah, NJ 07430: 35 Whitney Rd, Suite 5 Albany, NY 12205: 14 Walker Way Tonawanda, NY 14150: 275 Cooper Ave, Suite 105		<b>Page</b> 1 of 1	<b>Date Rec'd in Lab</b> 3/21/19	<b>ALPHA Job #</b> L1910899
		<b>Westborough, MA 01561</b> 8 Walkup Dr. TEL: 508-898-9220 FAX: 508-898-9193	<b>Mansfield, MA 02048</b> 320 Forbes Blvd TEL: 508-822-9300 FAX: 508-822-3288			
<b>Client Information</b>		<b>Project Information</b>		<b>Deliverables</b>		<b>Billing Information</b>
Client: <b>EBC</b> Address: <b>1808 Middle Country Rd. Ridge, NY 11961</b> Phone: <b>631-504-6000</b> Fax: Email: <b>KButler@EBCINNY.com</b>		Project Name: <b>1840 PARK AVE, Manhattan</b> Project Location: <b>1840 PARK AVE, Manhattan</b> Project # (Use Project name as Project #) <input type="checkbox"/>		<input type="checkbox"/> ASP-A <input type="checkbox"/> ASP-B <input type="checkbox"/> EQUIS (1 File) <input type="checkbox"/> EQUIS (4 File) <input type="checkbox"/> Other		<input type="checkbox"/> Same as Client Info PO #
<b>Turn-Around Time</b>		<b>Regulatory Requirement</b>		<b>Disposal Site Information</b>		
Standard <input type="checkbox"/> Due Date: Rush (only if pre approved) <input type="checkbox"/> # of Days:		<input type="checkbox"/> NY TOGS <input checked="" type="checkbox"/> NY Part 375 <input type="checkbox"/> AWQ Standards <input type="checkbox"/> NY CP-51 <input type="checkbox"/> NY Restricted Use <input type="checkbox"/> Other <input type="checkbox"/> NY Unrestricted Use <input type="checkbox"/> NYC Sewer Discharge		Please identify below location of applicable disposal facilities. Disposal Facility: <input checked="" type="checkbox"/> NJ <input type="checkbox"/> NY <input checked="" type="checkbox"/> Other: <b>PA</b>		
These samples have been previously analyzed by Alpha <input type="checkbox"/>				<b>ANALYSIS</b>		<b>Sample Filtration</b>
Other project specific requirements/comments:  Please specify Metals or TAL.				PFAs 537		<input type="checkbox"/> Done <input type="checkbox"/> Lab to do <b>Preservation</b> <input type="checkbox"/> Lab to do  (Please Specify below)
						<b>Sample Specific Comments</b>
ALPHA Lab ID (Lab Use Only)	Sample ID	Collection		Sample Matrix	Sampler's Initials	Total Bottles
		Date	Time			
10899.01	MW4	3-19-19	7:45	GW	TB	X
<b>Preservative Code:</b> A = None B = HCl C = HNO <sub>3</sub> D = H <sub>2</sub> SO <sub>4</sub> E = NaOH F = MeOH G = NaHSO <sub>4</sub> H = Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> K/E = Zn Ac/NaOH O = Other		<b>Container Code:</b> 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 <b>P</b> Preservative <b>A</b>
Form No: 01-25 HC (rev. 30-Sept-2013)		Relinquished By:		Date/Time	Received By:	Date/Time
		[Signature]		3/20/19 11:50	[Signature]	3/20/19 5:35
		[Signature]		3/20/19 22:15	[Signature]	3/20/19 19:00
		[Signature]		3/21/19 00:00	[Signature]	3/21/19 00:00

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



Wednesday, June 19, 2019

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

Project ID: 1840 PARK AVE, MANHATTAN NY  
SDG ID: GCD30623  
Sample ID#s: CD30623 - CD30632

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 that reads "Phyllis Shiller". The signature is written in a cursive style.

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

June 19, 2019

SDG I.D.: GCD30623

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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.  
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Tel. (860) 645-1102 Fax (860) 645-0823



## Sample Id Cross Reference

June 19, 2019

SDG I.D.: GCD30623

Project ID: 1840 PARK AVE, MANHATTAN NY

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Client Id	Lab Id	Matrix
P1 (0-2`)	CD30623	SOIL
P2 (0-2`)	CD30624	SOIL
P3 (0-2`)	CD30625	SOIL
P4 (0-2`)	CD30626	SOIL
F1 (0-2`)	CD30627	SOIL
F2 (0-2`)	CD30628	SOIL
F3 (0-2`)	CD30629	SOIL
F4 (0-2`)	CD30630	SOIL
TRIP BLANK HIGH	CD30631	SOIL
TRIP BLANK LOW	CD30632	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

June 19, 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: DR  
 Received by: CP  
 Analyzed by: see "By" below

## Date

06/07/19  
 06/10/19

## Time

10:36  
 15:02

## Laboratory Data

SDG ID: GCD30623  
 Phoenix ID: CD30623

Project ID: 1840 PARK AVE, MANHATTAN NY  
 Client ID: P1 (0-2')

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Percent Solid	90			%		06/10/19	ML	SW846-%Solid
Soil Extraction for SVOA	Completed					06/11/19	JJ/EE	SW3545A

## Volatiles

1,1,1,2-Tetrachloroethane	ND	6.2	1.2	ug/Kg	1	06/13/19	JLI	SW8260C
1,1,1-Trichloroethane	ND	6.2	0.62	ug/Kg	1	06/13/19	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	6.2	1.2	ug/Kg	1	06/13/19	JLI	SW8260C
1,1,2-Trichloroethane	ND	6.2	1.2	ug/Kg	1	06/13/19	JLI	SW8260C
1,1-Dichloroethane	ND	6.2	1.2	ug/Kg	1	06/13/19	JLI	SW8260C
1,1-Dichloroethene	ND	6.2	0.62	ug/Kg	1	06/13/19	JLI	SW8260C
1,1-Dichloropropene	ND	6.2	0.62	ug/Kg	1	06/13/19	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	6.2	1.2	ug/Kg	1	06/13/19	JLI	SW8260C
1,2,3-Trichloropropane	ND	6.2	0.62	ug/Kg	1	06/13/19	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	6.2	1.2	ug/Kg	1	06/13/19	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	6.2	0.62	ug/Kg	1	06/13/19	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	6.2	1.2	ug/Kg	1	06/13/19	JLI	SW8260C
1,2-Dibromoethane	ND	6.2	0.62	ug/Kg	1	06/13/19	JLI	SW8260C
1,2-Dichlorobenzene	ND	6.2	0.62	ug/Kg	1	06/13/19	JLI	SW8260C
1,2-Dichloroethane	ND	6.2	0.62	ug/Kg	1	06/13/19	JLI	SW8260C
1,2-Dichloropropane	ND	6.2	1.2	ug/Kg	1	06/13/19	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	6.2	0.62	ug/Kg	1	06/13/19	JLI	SW8260C
1,3-Dichlorobenzene	ND	6.2	0.62	ug/Kg	1	06/13/19	JLI	SW8260C
1,3-Dichloropropane	ND	6.2	1.2	ug/Kg	1	06/13/19	JLI	SW8260C
1,4-Dichlorobenzene	ND	6.2	0.62	ug/Kg	1	06/13/19	JLI	SW8260C
2,2-Dichloropropane	ND	6.2	0.62	ug/Kg	1	06/13/19	JLI	SW8260C
2-Chlorotoluene	ND	6.2	1.2	ug/Kg	1	06/13/19	JLI	SW8260C
2-Hexanone	ND	31	6.2	ug/Kg	1	06/13/19	JLI	SW8260C
2-Isopropyltoluene	ND	6.2	0.62	ug/Kg	1	06/13/19	JLI	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
4-Chlorotoluene	ND	6.2	0.62	ug/Kg	1	06/13/19	JLI	SW8260C
4-Methyl-2-pentanone	ND	31	6.2	ug/Kg	1	06/13/19	JLI	SW8260C
Acetone	47	S 31	6.2	ug/Kg	1	06/13/19	JLI	SW8260C
Acrylonitrile	ND	12	1.2	ug/Kg	1	06/13/19	JLI	SW8260C
Benzene	ND	6.2	0.62	ug/Kg	1	06/13/19	JLI	SW8260C
Bromobenzene	ND	6.2	0.62	ug/Kg	1	06/13/19	JLI	SW8260C
Bromochloromethane	ND	6.2	0.62	ug/Kg	1	06/13/19	JLI	SW8260C
Bromodichloromethane	ND	6.2	1.2	ug/Kg	1	06/13/19	JLI	SW8260C
Bromoform	ND	6.2	1.2	ug/Kg	1	06/13/19	JLI	SW8260C
Bromomethane	ND	6.2	2.5	ug/Kg	1	06/13/19	JLI	SW8260C
Carbon Disulfide	ND	6.2	1.2	ug/Kg	1	06/13/19	JLI	SW8260C
Carbon tetrachloride	ND	6.2	1.2	ug/Kg	1	06/13/19	JLI	SW8260C
Chlorobenzene	ND	6.2	0.62	ug/Kg	1	06/13/19	JLI	SW8260C
Chloroethane	ND	6.2	0.62	ug/Kg	1	06/13/19	JLI	SW8260C
Chloroform	ND	6.2	0.62	ug/Kg	1	06/13/19	JLI	SW8260C
Chloromethane	ND	6.2	1.2	ug/Kg	1	06/13/19	JLI	SW8260C
cis-1,2-Dichloroethene	ND	6.2	0.62	ug/Kg	1	06/13/19	JLI	SW8260C
cis-1,3-Dichloropropene	ND	6.2	0.62	ug/Kg	1	06/13/19	JLI	SW8260C
Dibromochloromethane	ND	6.2	1.2	ug/Kg	1	06/13/19	JLI	SW8260C
Dibromomethane	ND	6.2	1.2	ug/Kg	1	06/13/19	JLI	SW8260C
Dichlorodifluoromethane	ND	6.2	0.62	ug/Kg	1	06/13/19	JLI	SW8260C
Ethylbenzene	ND	6.2	0.62	ug/Kg	1	06/13/19	JLI	SW8260C
Hexachlorobutadiene	ND	6.2	0.62	ug/Kg	1	06/13/19	JLI	SW8260C
Isopropylbenzene	ND	6.2	0.62	ug/Kg	1	06/13/19	JLI	SW8260C
m&p-Xylene	ND	6.2	1.2	ug/Kg	1	06/13/19	JLI	SW8260C
Methyl Ethyl Ketone	9.2	J 37	6.2	ug/Kg	1	06/13/19	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	12	1.2	ug/Kg	1	06/13/19	JLI	SW8260C
Methylene chloride	ND	6.2	6.2	ug/Kg	1	06/13/19	JLI	SW8260C
Naphthalene	3.5	J 6.2	1.2	ug/Kg	1	06/13/19	JLI	SW8260C
n-Butylbenzene	ND	6.2	0.62	ug/Kg	1	06/13/19	JLI	SW8260C
n-Propylbenzene	ND	6.2	1.2	ug/Kg	1	06/13/19	JLI	SW8260C
o-Xylene	ND	6.2	1.2	ug/Kg	1	06/13/19	JLI	SW8260C
p-Isopropyltoluene	ND	6.2	0.62	ug/Kg	1	06/13/19	JLI	SW8260C
sec-Butylbenzene	ND	6.2	0.62	ug/Kg	1	06/13/19	JLI	SW8260C
Styrene	ND	6.2	0.62	ug/Kg	1	06/13/19	JLI	SW8260C
tert-Butylbenzene	ND	6.2	0.62	ug/Kg	1	06/13/19	JLI	SW8260C
Tetrachloroethene	ND	6.2	1.2	ug/Kg	1	06/13/19	JLI	SW8260C
Tetrahydrofuran (THF)	ND	12	3.1	ug/Kg	1	06/13/19	JLI	SW8260C
Toluene	ND	6.2	0.62	ug/Kg	1	06/13/19	JLI	SW8260C
trans-1,2-Dichloroethene	ND	6.2	0.62	ug/Kg	1	06/13/19	JLI	SW8260C
trans-1,3-Dichloropropene	ND	6.2	0.62	ug/Kg	1	06/13/19	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	12	3.1	ug/Kg	1	06/13/19	JLI	SW8260C
Trichloroethene	ND	6.2	0.62	ug/Kg	1	06/13/19	JLI	SW8260C
Trichlorofluoromethane	ND	6.2	1.2	ug/Kg	1	06/13/19	JLI	SW8260C
Trichlorotrifluoroethane	ND	6.2	0.62	ug/Kg	1	06/13/19	JLI	SW8260C
Vinyl chloride	ND	6.2	0.62	ug/Kg	1	06/13/19	JLI	SW8260C
<b>QA/QC Surrogates</b>								
% 1,2-dichlorobenzene-d4	101			%	1	06/13/19	JLI	70 - 130 %
% Bromofluorobenzene	98			%	1	06/13/19	JLI	70 - 130 %



Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
% Dibromofluoromethane	72			%	1	06/13/19	JLI	70 - 130 %
% Toluene-d8	101			%	1	06/13/19	JLI	70 - 130 %
<b><u>1,4-dioxane</u></b>								
1,4-dioxane	ND	93	50	ug/kg	1	06/13/19	JLI	SW8260C
<b><u>QA/QC Surrogates</u></b>								
% 1,2-dichlorobenzene-d4	101			%	1	06/13/19	JLI	70 - 130 %
% Bromofluorobenzene	98			%	1	06/13/19	JLI	70 - 130 %
% Dibromofluoromethane	72			%	1	06/13/19	JLI	70 - 130 %
% Toluene-d8	101			%	1	06/13/19	JLI	70 - 130 %
<b><u>Volatiles</u></b>								
1,1,1,2-Tetrachloroethane	ND	25	1.2	ug/Kg	1	06/13/19	JLI	SW8260C
Acrolein	ND	6.2	1.2	ug/Kg	1	06/13/19	JLI	SW8260C
Acrylonitrile	ND	25	0.62	ug/Kg	1	06/13/19	JLI	SW8260C
Tert-butyl alcohol	ND	120	25	ug/Kg	1	06/13/19	JLI	SW8260C
<b><u>Semivolatiles</u></b>								
1,2,4,5-Tetrachlorobenzene	ND	250	130	ug/Kg	1	06/12/19	WB	SW8270D
1,2,4-Trichlorobenzene	ND	250	110	ug/Kg	1	06/12/19	WB	SW8270D
1,2-Dichlorobenzene	ND	250	100	ug/Kg	1	06/12/19	WB	SW8270D
1,2-Diphenylhydrazine	ND	250	120	ug/Kg	1	06/12/19	WB	SW8270D
1,3-Dichlorobenzene	ND	250	110	ug/Kg	1	06/12/19	WB	SW8270D
1,4-Dichlorobenzene	ND	250	110	ug/Kg	1	06/12/19	WB	SW8270D
2,4,5-Trichlorophenol	ND	250	200	ug/Kg	1	06/12/19	WB	SW8270D
2,4,6-Trichlorophenol	ND	180	120	ug/Kg	1	06/12/19	WB	SW8270D
2,4-Dichlorophenol	ND	180	130	ug/Kg	1	06/12/19	WB	SW8270D
2,4-Dimethylphenol	ND	250	90	ug/Kg	1	06/12/19	WB	SW8270D
2,4-Dinitrophenol	ND	250	250	ug/Kg	1	06/12/19	WB	SW8270D
2,4-Dinitrotoluene	ND	180	140	ug/Kg	1	06/12/19	WB	SW8270D
2,6-Dinitrotoluene	ND	180	120	ug/Kg	1	06/12/19	WB	SW8270D
2-Chloronaphthalene	ND	250	100	ug/Kg	1	06/12/19	WB	SW8270D
2-Chlorophenol	ND	250	100	ug/Kg	1	06/12/19	WB	SW8270D
2-Methylnaphthalene	ND	250	110	ug/Kg	1	06/12/19	WB	SW8270D
2-Methylphenol (o-cresol)	ND	250	170	ug/Kg	1	06/12/19	WB	SW8270D
2-Nitroaniline	ND	250	250	ug/Kg	1	06/12/19	WB	SW8270D
2-Nitrophenol	ND	250	230	ug/Kg	1	06/12/19	WB	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	250	140	ug/Kg	1	06/12/19	WB	SW8270D
3,3'-Dichlorobenzidine	ND	180	170	ug/Kg	1	06/12/19	WB	SW8270D
3-Nitroaniline	ND	360	730	ug/Kg	1	06/12/19	WB	SW8270D
4,6-Dinitro-2-methylphenol	ND	220	73	ug/Kg	1	06/12/19	WB	SW8270D
4-Bromophenyl phenyl ether	ND	250	110	ug/Kg	1	06/12/19	WB	SW8270D
4-Chloro-3-methylphenol	ND	250	130	ug/Kg	1	06/12/19	WB	SW8270D
4-Chloroaniline	ND	290	170	ug/Kg	1	06/12/19	WB	SW8270D
4-Chlorophenyl phenyl ether	ND	250	120	ug/Kg	1	06/12/19	WB	SW8270D
4-Nitroaniline	ND	360	120	ug/Kg	1	06/12/19	WB	SW8270D
4-Nitrophenol	ND	360	160	ug/Kg	1	06/12/19	WB	SW8270D
Acenaphthene	ND	250	110	ug/Kg	1	06/12/19	WB	SW8270D
Acenaphthylene	ND	250	100	ug/Kg	1	06/12/19	WB	SW8270D
Acetophenone	ND	250	110	ug/Kg	1	06/12/19	WB	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Aniline	ND	290	290	ug/Kg	1	06/12/19	WB	SW8270D
Anthracene	ND	250	120	ug/Kg	1	06/12/19	WB	SW8270D
Benz(a)anthracene	170	J 250	120	ug/Kg	1	06/12/19	WB	SW8270D
Benzidine	ND	360	210	ug/Kg	1	06/12/19	WB	SW8270D
Benzo(a)pyrene	190	180	120	ug/Kg	1	06/12/19	WB	SW8270D
Benzo(b)fluoranthene	190	J 250	120	ug/Kg	1	06/12/19	WB	SW8270D
Benzo(ghi)perylene	170	J 250	120	ug/Kg	1	06/12/19	WB	SW8270D
Benzo(k)fluoranthene	170	J 250	120	ug/Kg	1	06/12/19	WB	SW8270D
Benzoic acid	ND	1800	730	ug/Kg	1	06/12/19	WB	SW8270D
Benzyl butyl phthalate	260	250	94	ug/Kg	1	06/12/19	WB	SW8270D
Bis(2-chloroethoxy)methane	ND	250	100	ug/Kg	1	06/12/19	WB	SW8270D
Bis(2-chloroethyl)ether	ND	180	98	ug/Kg	1	06/12/19	WB	SW8270D
Bis(2-chloroisopropyl)ether	ND	250	100	ug/Kg	1	06/12/19	WB	SW8270D
Bis(2-ethylhexyl)phthalate	820	250	100	ug/Kg	1	06/12/19	WB	SW8270D
Carbazole	ND	180	150	ug/Kg	1	06/12/19	WB	SW8270D
Chrysene	190	J 250	120	ug/Kg	1	06/12/19	WB	SW8270D
Dibenz(a,h)anthracene	ND	180	120	ug/Kg	1	06/12/19	WB	SW8270D
Dibenzofuran	ND	250	110	ug/Kg	1	06/12/19	WB	SW8270D
Diethyl phthalate	ND	250	120	ug/Kg	1	06/12/19	WB	SW8270D
Dimethylphthalate	ND	250	110	ug/Kg	1	06/12/19	WB	SW8270D
Di-n-butylphthalate	ND	250	97	ug/Kg	1	06/12/19	WB	SW8270D
Di-n-octylphthalate	ND	250	94	ug/Kg	1	06/12/19	WB	SW8270D
Fluoranthene	310	250	120	ug/Kg	1	06/12/19	WB	SW8270D
Fluorene	ND	250	120	ug/Kg	1	06/12/19	WB	SW8270D
Hexachlorobenzene	ND	180	110	ug/Kg	1	06/12/19	WB	SW8270D
Hexachlorobutadiene	ND	250	130	ug/Kg	1	06/12/19	WB	SW8270D
Hexachlorocyclopentadiene	ND	250	110	ug/Kg	1	06/12/19	WB	SW8270D
Hexachloroethane	ND	180	110	ug/Kg	1	06/12/19	WB	SW8270D
Indeno(1,2,3-cd)pyrene	150	J 250	120	ug/Kg	1	06/12/19	WB	SW8270D
Isophorone	ND	730	730	ug/Kg	1	06/12/19	WB	SW8270D
Naphthalene	ND	250	100	ug/Kg	1	06/12/19	WB	SW8270D
Nitrobenzene	ND	180	130	ug/Kg	1	06/12/19	WB	SW8270D
N-Nitrosodimethylamine	ND	250	100	ug/Kg	1	06/12/19	WB	SW8270D
N-Nitrosodi-n-propylamine	ND	180	120	ug/Kg	1	06/12/19	WB	SW8270D
N-Nitrosodiphenylamine	ND	250	140	ug/Kg	1	06/12/19	WB	SW8270D
Pentachloronitrobenzene	ND	250	140	ug/Kg	1	06/12/19	WB	SW8270D
Pentachlorophenol	ND	220	140	ug/Kg	1	06/12/19	WB	SW8270D
Phenanthrene	160	J 250	100	ug/Kg	1	06/12/19	WB	SW8270D
Phenol	ND	250	120	ug/Kg	1	06/12/19	WB	SW8270D
Pyrene	360	250	130	ug/Kg	1	06/12/19	WB	SW8270D
Pyridine	ND	250	90	ug/Kg	1	06/12/19	WB	SW8270D
<b><u>QA/QC Surrogates</u></b>								
% 2,4,6-Tribromophenol	64			%	1	06/12/19	WB	30 - 130 %
% 2-Fluorobiphenyl	68			%	1	06/12/19	WB	30 - 130 %
% 2-Fluorophenol	55			%	1	06/12/19	WB	30 - 130 %
% Nitrobenzene-d5	78			%	1	06/12/19	WB	30 - 130 %
% Phenol-d5	73			%	1	06/12/19	WB	30 - 130 %
% Terphenyl-d14	72			%	1	06/12/19	WB	30 - 130 %
Field Extraction	Completed					06/07/19		SW5035A

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

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**

**June 19, 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

June 19, 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: DR  
 Received by: CP  
 Analyzed by: see "By" below

## Date

06/07/19  
 06/10/19

## Time

10:45  
 15:02

## Laboratory Data

SDG ID: GCD30623  
 Phoenix ID: CD30624

Project ID: 1840 PARK AVE, MANHATTAN NY  
 Client ID: P2 (0-2')

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Percent Solid	90			%		06/10/19	ML	SW846-%Solid
Soil Extraction for SVOA	Completed					06/11/19	JJ/EE	SW3545A

## Volatiles

1,1,1,2-Tetrachloroethane	ND	5.7	1.1	ug/Kg	1	06/13/19	GL	SW8260C
1,1,1-Trichloroethane	ND	5.7	0.57	ug/Kg	1	06/13/19	GL	SW8260C
1,1,2,2-Tetrachloroethane	ND	5.7	1.1	ug/Kg	1	06/13/19	GL	SW8260C
1,1,2-Trichloroethane	ND	5.7	1.1	ug/Kg	1	06/13/19	GL	SW8260C
1,1-Dichloroethane	ND	5.7	1.1	ug/Kg	1	06/13/19	GL	SW8260C
1,1-Dichloroethene	ND	5.7	0.57	ug/Kg	1	06/13/19	GL	SW8260C
1,1-Dichloropropene	ND	5.7	0.57	ug/Kg	1	06/13/19	GL	SW8260C
1,2,3-Trichlorobenzene	ND	5.7	1.1	ug/Kg	1	06/13/19	GL	SW8260C
1,2,3-Trichloropropane	ND	5.7	0.57	ug/Kg	1	06/13/19	GL	SW8260C
1,2,4-Trichlorobenzene	ND	5.7	1.1	ug/Kg	1	06/13/19	GL	SW8260C
1,2,4-Trimethylbenzene	ND	5.7	0.57	ug/Kg	1	06/13/19	GL	SW8260C
1,2-Dibromo-3-chloropropane	ND	5.7	1.1	ug/Kg	1	06/13/19	GL	SW8260C
1,2-Dibromoethane	ND	5.7	0.57	ug/Kg	1	06/13/19	GL	SW8260C
1,2-Dichlorobenzene	ND	5.7	0.57	ug/Kg	1	06/13/19	GL	SW8260C
1,2-Dichloroethane	ND	5.7	0.57	ug/Kg	1	06/13/19	GL	SW8260C
1,2-Dichloropropane	ND	5.7	1.1	ug/Kg	1	06/13/19	GL	SW8260C
1,3,5-Trimethylbenzene	ND	5.7	0.57	ug/Kg	1	06/13/19	GL	SW8260C
1,3-Dichlorobenzene	ND	5.7	0.57	ug/Kg	1	06/13/19	GL	SW8260C
1,3-Dichloropropane	ND	5.7	1.1	ug/Kg	1	06/13/19	GL	SW8260C
1,4-Dichlorobenzene	ND	5.7	0.57	ug/Kg	1	06/13/19	GL	SW8260C
2,2-Dichloropropane	ND	5.7	0.57	ug/Kg	1	06/13/19	GL	SW8260C
2-Chlorotoluene	ND	5.7	1.1	ug/Kg	1	06/13/19	GL	SW8260C
2-Hexanone	ND	28	5.7	ug/Kg	1	06/13/19	GL	SW8260C
2-Isopropyltoluene	ND	5.7	0.57	ug/Kg	1	06/13/19	GL	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
4-Chlorotoluene	ND	5.7	0.57	ug/Kg	1	06/13/19	GL	SW8260C
4-Methyl-2-pentanone	ND	28	5.7	ug/Kg	1	06/13/19	GL	SW8260C
Acetone	20	JSL 28	5.6	ug/Kg	1	06/15/19	GL	SW8260C
Acrylonitrile	ND	11	1.1	ug/Kg	1	06/13/19	GL	SW8260C
Benzene	ND	5.7	0.57	ug/Kg	1	06/13/19	GL	SW8260C
Bromobenzene	ND	5.7	0.57	ug/Kg	1	06/13/19	GL	SW8260C
Bromochloromethane	ND	5.7	0.57	ug/Kg	1	06/13/19	GL	SW8260C
Bromodichloromethane	ND	5.7	1.1	ug/Kg	1	06/13/19	GL	SW8260C
Bromoform	ND	5.7	1.1	ug/Kg	1	06/13/19	GL	SW8260C
Bromomethane	ND	5.7	2.3	ug/Kg	1	06/13/19	GL	SW8260C
Carbon Disulfide	ND	5.7	1.1	ug/Kg	1	06/13/19	GL	SW8260C
Carbon tetrachloride	ND	5.7	1.1	ug/Kg	1	06/13/19	GL	SW8260C
Chlorobenzene	ND	5.7	0.57	ug/Kg	1	06/13/19	GL	SW8260C
Chloroethane	ND	5.7	0.57	ug/Kg	1	06/13/19	GL	SW8260C
Chloroform	ND	5.7	0.57	ug/Kg	1	06/13/19	GL	SW8260C
Chloromethane	ND	5.7	1.1	ug/Kg	1	06/13/19	GL	SW8260C
cis-1,2-Dichloroethene	ND	5.7	0.57	ug/Kg	1	06/13/19	GL	SW8260C
cis-1,3-Dichloropropene	ND	5.7	0.57	ug/Kg	1	06/13/19	GL	SW8260C
Dibromochloromethane	ND	5.7	1.1	ug/Kg	1	06/13/19	GL	SW8260C
Dibromomethane	ND	5.7	1.1	ug/Kg	1	06/13/19	GL	SW8260C
Dichlorodifluoromethane	ND	5.7	0.57	ug/Kg	1	06/13/19	GL	SW8260C
Ethylbenzene	ND	5.7	0.57	ug/Kg	1	06/13/19	GL	SW8260C
Hexachlorobutadiene	ND	5.7	0.57	ug/Kg	1	06/13/19	GL	SW8260C
Isopropylbenzene	ND	5.7	0.57	ug/Kg	1	06/13/19	GL	SW8260C
m&p-Xylene	ND	5.7	1.1	ug/Kg	1	06/13/19	GL	SW8260C
Methyl Ethyl Ketone	7.9	J 34	5.7	ug/Kg	1	06/13/19	GL	SW8260C
Methyl t-butyl ether (MTBE)	ND	11	1.1	ug/Kg	1	06/13/19	GL	SW8260C
Methylene chloride	ND	5.7	5.7	ug/Kg	1	06/13/19	GL	SW8260C
Naphthalene	ND	5.7	1.1	ug/Kg	1	06/13/19	GL	SW8260C
n-Butylbenzene	ND	5.7	0.57	ug/Kg	1	06/13/19	GL	SW8260C
n-Propylbenzene	ND	5.7	1.1	ug/Kg	1	06/13/19	GL	SW8260C
o-Xylene	ND	5.7	1.1	ug/Kg	1	06/13/19	GL	SW8260C
p-Isopropyltoluene	ND	5.7	0.57	ug/Kg	1	06/13/19	GL	SW8260C
sec-Butylbenzene	ND	5.7	0.57	ug/Kg	1	06/13/19	GL	SW8260C
Styrene	ND	5.7	0.57	ug/Kg	1	06/13/19	GL	SW8260C
tert-Butylbenzene	ND	5.7	0.57	ug/Kg	1	06/13/19	GL	SW8260C
Tetrachloroethene	ND	5.7	1.1	ug/Kg	1	06/13/19	GL	SW8260C
Tetrahydrofuran (THF)	ND	11	2.8	ug/Kg	1	06/13/19	GL	SW8260C
Toluene	ND	5.7	0.57	ug/Kg	1	06/13/19	GL	SW8260C
trans-1,2-Dichloroethene	ND	5.7	0.57	ug/Kg	1	06/13/19	GL	SW8260C
trans-1,3-Dichloropropene	ND	5.7	0.57	ug/Kg	1	06/13/19	GL	SW8260C
trans-1,4-dichloro-2-butene	ND	11	2.8	ug/Kg	1	06/13/19	GL	SW8260C
Trichloroethene	ND	5.7	0.57	ug/Kg	1	06/13/19	GL	SW8260C
Trichlorofluoromethane	ND	5.7	1.1	ug/Kg	1	06/13/19	GL	SW8260C
Trichlorotrifluoroethane	ND	5.7	0.57	ug/Kg	1	06/13/19	GL	SW8260C
Vinyl chloride	ND	5.7	0.57	ug/Kg	1	06/13/19	GL	SW8260C
<b>QA/QC Surrogates</b>								
% 1,2-dichlorobenzene-d4	97			%	1	06/13/19	GL	70 - 130 %
% Bromofluorobenzene	95			%	1	06/13/19	GL	70 - 130 %

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
% Dibromofluoromethane	97			%	1	06/13/19	GL	70 - 130 %
% Toluene-d8	99			%	1	06/13/19	GL	70 - 130 %
<b><u>1,4-dioxane</u></b>								
1,4-dioxane	ND	85	45	ug/kg	1	06/13/19	JLI	SW8260C
<b><u>QA/QC Surrogates</u></b>								
% 1,2-dichlorobenzene-d4	97			%	1	06/13/19	JLI	70 - 130 %
% Bromofluorobenzene	95			%	1	06/13/19	JLI	70 - 130 %
% Dibromofluoromethane	97			%	1	06/13/19	JLI	70 - 130 %
% Toluene-d8	99			%	1	06/13/19	JLI	70 - 130 %
<b><u>Volatiles</u></b>								
1,1,1,2-Tetrachloroethane	ND	23	1.1	ug/Kg	1	06/13/19	JLI	SW8260C
Acrolein	ND	5.7	1.1	ug/Kg	1	06/13/19	JLI	SW8260C
Acrylonitrile	ND	23	0.57	ug/Kg	1	06/13/19	JLI	SW8260C
Tert-butyl alcohol	ND	110	23	ug/Kg	1	06/13/19	JLI	SW8260C
<b><u>Semivolatiles</u></b>								
1,2,4,5-Tetrachlorobenzene	ND	250	130	ug/Kg	1	06/12/19	WB	SW8270D
1,2,4-Trichlorobenzene	ND	250	110	ug/Kg	1	06/12/19	WB	SW8270D
1,2-Dichlorobenzene	ND	250	100	ug/Kg	1	06/12/19	WB	SW8270D
1,2-Diphenylhydrazine	ND	250	120	ug/Kg	1	06/12/19	WB	SW8270D
1,3-Dichlorobenzene	ND	250	110	ug/Kg	1	06/12/19	WB	SW8270D
1,4-Dichlorobenzene	ND	250	110	ug/Kg	1	06/12/19	WB	SW8270D
2,4,5-Trichlorophenol	ND	250	200	ug/Kg	1	06/12/19	WB	SW8270D
2,4,6-Trichlorophenol	ND	180	120	ug/Kg	1	06/12/19	WB	SW8270D
2,4-Dichlorophenol	ND	180	130	ug/Kg	1	06/12/19	WB	SW8270D
2,4-Dimethylphenol	ND	250	89	ug/Kg	1	06/12/19	WB	SW8270D
2,4-Dinitrophenol	ND	250	250	ug/Kg	1	06/12/19	WB	SW8270D
2,4-Dinitrotoluene	ND	180	140	ug/Kg	1	06/12/19	WB	SW8270D
2,6-Dinitrotoluene	ND	180	110	ug/Kg	1	06/12/19	WB	SW8270D
2-Chloronaphthalene	ND	250	100	ug/Kg	1	06/12/19	WB	SW8270D
2-Chlorophenol	ND	250	100	ug/Kg	1	06/12/19	WB	SW8270D
2-Methylnaphthalene	ND	250	110	ug/Kg	1	06/12/19	WB	SW8270D
2-Methylphenol (o-cresol)	ND	250	170	ug/Kg	1	06/12/19	WB	SW8270D
2-Nitroaniline	ND	250	250	ug/Kg	1	06/12/19	WB	SW8270D
2-Nitrophenol	ND	250	230	ug/Kg	1	06/12/19	WB	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	250	140	ug/Kg	1	06/12/19	WB	SW8270D
3,3'-Dichlorobenzidine	ND	180	170	ug/Kg	1	06/12/19	WB	SW8270D
3-Nitroaniline	ND	360	720	ug/Kg	1	06/12/19	WB	SW8270D
4,6-Dinitro-2-methylphenol	ND	220	72	ug/Kg	1	06/12/19	WB	SW8270D
4-Bromophenyl phenyl ether	ND	250	110	ug/Kg	1	06/12/19	WB	SW8270D
4-Chloro-3-methylphenol	ND	250	130	ug/Kg	1	06/12/19	WB	SW8270D
4-Chloroaniline	ND	290	170	ug/Kg	1	06/12/19	WB	SW8270D
4-Chlorophenyl phenyl ether	ND	250	120	ug/Kg	1	06/12/19	WB	SW8270D
4-Nitroaniline	ND	360	120	ug/Kg	1	06/12/19	WB	SW8270D
4-Nitrophenol	ND	360	160	ug/Kg	1	06/12/19	WB	SW8270D
Acenaphthene	ND	250	110	ug/Kg	1	06/12/19	WB	SW8270D
Acenaphthylene	110	J 250	100	ug/Kg	1	06/12/19	WB	SW8270D
Acetophenone	ND	250	110	ug/Kg	1	06/12/19	WB	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Aniline	ND	290	290	ug/Kg	1	06/12/19	WB	SW8270D
Anthracene	150	J 250	120	ug/Kg	1	06/12/19	WB	SW8270D
Benz(a)anthracene	640	250	120	ug/Kg	1	06/12/19	WB	SW8270D
Benzidine	ND	360	210	ug/Kg	1	06/12/19	WB	SW8270D
Benzo(a)pyrene	670	180	120	ug/Kg	1	06/12/19	WB	SW8270D
Benzo(b)fluoranthene	590	250	120	ug/Kg	1	06/12/19	WB	SW8270D
Benzo(ghi)perylene	440	250	120	ug/Kg	1	06/12/19	WB	SW8270D
Benzo(k)fluoranthene	580	250	120	ug/Kg	1	06/12/19	WB	SW8270D
Benzoic acid	ND	1800	720	ug/Kg	1	06/12/19	WB	SW8270D
Benzyl butyl phthalate	780	250	93	ug/Kg	1	06/12/19	WB	SW8270D
Bis(2-chloroethoxy)methane	ND	250	99	ug/Kg	1	06/12/19	WB	SW8270D
Bis(2-chloroethyl)ether	ND	180	97	ug/Kg	1	06/12/19	WB	SW8270D
Bis(2-chloroisopropyl)ether	ND	250	100	ug/Kg	1	06/12/19	WB	SW8270D
Bis(2-ethylhexyl)phthalate	550	250	100	ug/Kg	1	06/12/19	WB	SW8270D
Carbazole	ND	180	140	ug/Kg	1	06/12/19	WB	SW8270D
Chrysene	660	250	120	ug/Kg	1	06/12/19	WB	SW8270D
Dibenz(a,h)anthracene	ND	180	120	ug/Kg	1	06/12/19	WB	SW8270D
Dibenzofuran	ND	250	110	ug/Kg	1	06/12/19	WB	SW8270D
Diethyl phthalate	ND	250	110	ug/Kg	1	06/12/19	WB	SW8270D
Dimethylphthalate	ND	250	110	ug/Kg	1	06/12/19	WB	SW8270D
Di-n-butylphthalate	ND	250	96	ug/Kg	1	06/12/19	WB	SW8270D
Di-n-octylphthalate	ND	250	93	ug/Kg	1	06/12/19	WB	SW8270D
Fluoranthene	1300	250	120	ug/Kg	1	06/12/19	WB	SW8270D
Fluorene	ND	250	120	ug/Kg	1	06/12/19	WB	SW8270D
Hexachlorobenzene	ND	180	110	ug/Kg	1	06/12/19	WB	SW8270D
Hexachlorobutadiene	ND	250	130	ug/Kg	1	06/12/19	WB	SW8270D
Hexachlorocyclopentadiene	ND	250	110	ug/Kg	1	06/12/19	WB	SW8270D
Hexachloroethane	ND	180	110	ug/Kg	1	06/12/19	WB	SW8270D
Indeno(1,2,3-cd)pyrene	490	250	120	ug/Kg	1	06/12/19	WB	SW8270D
Isophorone	ND	180	100	ug/Kg	1	06/12/19	WB	SW8270D
Naphthalene	ND	250	100	ug/Kg	1	06/12/19	WB	SW8270D
Nitrobenzene	ND	180	130	ug/Kg	1	06/12/19	WB	SW8270D
N-Nitrosodimethylamine	ND	250	100	ug/Kg	1	06/12/19	WB	SW8270D
N-Nitrosodi-n-propylamine	ND	180	120	ug/Kg	1	06/12/19	WB	SW8270D
N-Nitrosodiphenylamine	ND	250	140	ug/Kg	1	06/12/19	WB	SW8270D
Pentachloronitrobenzene	ND	250	130	ug/Kg	1	06/12/19	WB	SW8270D
Pentachlorophenol	ND	220	140	ug/Kg	1	06/12/19	WB	SW8270D
Phenanthrene	640	250	100	ug/Kg	1	06/12/19	WB	SW8270D
Phenol	ND	250	120	ug/Kg	1	06/12/19	WB	SW8270D
Pyrene	1300	250	120	ug/Kg	1	06/12/19	WB	SW8270D
Pyridine	ND	250	89	ug/Kg	1	06/12/19	WB	SW8270D
<b><u>QA/QC Surrogates</u></b>								
% 2,4,6-Tribromophenol	85			%	1	06/12/19	WB	30 - 130 %
% 2-Fluorobiphenyl	64			%	1	06/12/19	WB	30 - 130 %
% 2-Fluorophenol	58			%	1	06/12/19	WB	30 - 130 %
% Nitrobenzene-d5	73			%	1	06/12/19	WB	30 - 130 %
% Phenol-d5	74			%	1	06/12/19	WB	30 - 130 %
% Terphenyl-d14	68			%	1	06/12/19	WB	30 - 130 %
Field Extraction	Completed					06/07/19		SW5035A

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

B\* = Present in blank, a bias is possible.

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:**

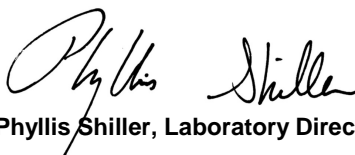
Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.,

L - Acetone is reported from a Phoenix prepared low level. A negative bias is possible.

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**

**June 19, 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

June 19, 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: DR  
 Received by: CP  
 Analyzed by: see "By" below

## Date

06/07/19  
 06/10/19

## Time

11:15  
 15:02

## Laboratory Data

SDG ID: GCD30623  
 Phoenix ID: CD30625

Project ID: 1840 PARK AVE, MANHATTAN NY  
 Client ID: P3 (0-2')

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Percent Solid	92			%		06/10/19	ML	SW846-%Solid
Soil Extraction for SVOA	Completed					06/11/19	JJ/EE	SW3545A

## Volatiles

1,1,1,2-Tetrachloroethane	ND	5.8	1.2	ug/Kg	1	06/14/19	JLI	SW8260C
1,1,1-Trichloroethane	ND	5.8	0.58	ug/Kg	1	06/14/19	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	5.8	1.2	ug/Kg	1	06/14/19	JLI	SW8260C
1,1,2-Trichloroethane	ND	5.8	1.2	ug/Kg	1	06/14/19	JLI	SW8260C
1,1-Dichloroethane	ND	5.8	1.2	ug/Kg	1	06/14/19	JLI	SW8260C
1,1-Dichloroethene	ND	5.8	0.58	ug/Kg	1	06/14/19	JLI	SW8260C
1,1-Dichloropropene	ND	5.8	0.58	ug/Kg	1	06/14/19	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	5.8	1.2	ug/Kg	1	06/14/19	JLI	SW8260C
1,2,3-Trichloropropane	ND	5.8	0.58	ug/Kg	1	06/14/19	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	5.8	1.2	ug/Kg	1	06/14/19	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	5.8	0.58	ug/Kg	1	06/14/19	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	5.8	1.2	ug/Kg	1	06/14/19	JLI	SW8260C
1,2-Dibromoethane	ND	5.8	0.58	ug/Kg	1	06/14/19	JLI	SW8260C
1,2-Dichlorobenzene	ND	5.8	0.58	ug/Kg	1	06/14/19	JLI	SW8260C
1,2-Dichloroethane	ND	5.8	0.58	ug/Kg	1	06/14/19	JLI	SW8260C
1,2-Dichloropropane	ND	5.8	1.2	ug/Kg	1	06/14/19	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	5.8	0.58	ug/Kg	1	06/14/19	JLI	SW8260C
1,3-Dichlorobenzene	ND	5.8	0.58	ug/Kg	1	06/14/19	JLI	SW8260C
1,3-Dichloropropane	ND	5.8	1.2	ug/Kg	1	06/14/19	JLI	SW8260C
1,4-Dichlorobenzene	ND	5.8	0.58	ug/Kg	1	06/14/19	JLI	SW8260C
2,2-Dichloropropane	ND	5.8	0.58	ug/Kg	1	06/14/19	JLI	SW8260C
2-Chlorotoluene	ND	5.8	1.2	ug/Kg	1	06/14/19	JLI	SW8260C
2-Hexanone	ND	29	5.8	ug/Kg	1	06/14/19	JLI	SW8260C
2-Isopropyltoluene	ND	5.8	0.58	ug/Kg	1	06/14/19	JLI	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
4-Chlorotoluene	ND	5.8	0.58	ug/Kg	1	06/14/19	JLI	SW8260C
4-Methyl-2-pentanone	ND	29	5.8	ug/Kg	1	06/14/19	JLI	SW8260C
Acetone	7.7	JS 29	5.8	ug/Kg	1	06/14/19	JLI	SW8260C
Acrylonitrile	ND	12	1.2	ug/Kg	1	06/14/19	JLI	SW8260C
Benzene	ND	5.8	0.58	ug/Kg	1	06/14/19	JLI	SW8260C
Bromobenzene	ND	5.8	0.58	ug/Kg	1	06/14/19	JLI	SW8260C
Bromochloromethane	ND	5.8	0.58	ug/Kg	1	06/14/19	JLI	SW8260C
Bromodichloromethane	ND	5.8	1.2	ug/Kg	1	06/14/19	JLI	SW8260C
Bromoform	ND	5.8	1.2	ug/Kg	1	06/14/19	JLI	SW8260C
Bromomethane	ND	5.8	2.3	ug/Kg	1	06/14/19	JLI	SW8260C
Carbon Disulfide	ND	5.8	1.2	ug/Kg	1	06/14/19	JLI	SW8260C
Carbon tetrachloride	ND	5.8	1.2	ug/Kg	1	06/14/19	JLI	SW8260C
Chlorobenzene	ND	5.8	0.58	ug/Kg	1	06/14/19	JLI	SW8260C
Chloroethane	ND	5.8	0.58	ug/Kg	1	06/14/19	JLI	SW8260C
Chloroform	ND	5.8	0.58	ug/Kg	1	06/14/19	JLI	SW8260C
Chloromethane	ND	5.8	1.2	ug/Kg	1	06/14/19	JLI	SW8260C
cis-1,2-Dichloroethene	ND	5.8	0.58	ug/Kg	1	06/14/19	JLI	SW8260C
cis-1,3-Dichloropropene	ND	5.8	0.58	ug/Kg	1	06/14/19	JLI	SW8260C
Dibromochloromethane	ND	5.8	1.2	ug/Kg	1	06/14/19	JLI	SW8260C
Dibromomethane	ND	5.8	1.2	ug/Kg	1	06/14/19	JLI	SW8260C
Dichlorodifluoromethane	ND	5.8	0.58	ug/Kg	1	06/14/19	JLI	SW8260C
Ethylbenzene	ND	5.8	0.58	ug/Kg	1	06/14/19	JLI	SW8260C
Hexachlorobutadiene	ND	5.8	0.58	ug/Kg	1	06/14/19	JLI	SW8260C
Isopropylbenzene	ND	5.8	0.58	ug/Kg	1	06/14/19	JLI	SW8260C
m&p-Xylene	ND	5.8	1.2	ug/Kg	1	06/14/19	JLI	SW8260C
Methyl Ethyl Ketone	ND	35	5.8	ug/Kg	1	06/14/19	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	12	1.2	ug/Kg	1	06/14/19	JLI	SW8260C
Methylene chloride	ND	5.8	5.8	ug/Kg	1	06/14/19	JLI	SW8260C
Naphthalene	ND	5.8	1.2	ug/Kg	1	06/14/19	JLI	SW8260C
n-Butylbenzene	ND	5.8	0.58	ug/Kg	1	06/14/19	JLI	SW8260C
n-Propylbenzene	ND	5.8	1.2	ug/Kg	1	06/14/19	JLI	SW8260C
o-Xylene	ND	5.8	1.2	ug/Kg	1	06/14/19	JLI	SW8260C
p-Isopropyltoluene	ND	5.8	0.58	ug/Kg	1	06/14/19	JLI	SW8260C
sec-Butylbenzene	ND	5.8	0.58	ug/Kg	1	06/14/19	JLI	SW8260C
Styrene	ND	5.8	0.58	ug/Kg	1	06/14/19	JLI	SW8260C
tert-Butylbenzene	ND	5.8	0.58	ug/Kg	1	06/14/19	JLI	SW8260C
Tetrachloroethene	ND	5.8	1.2	ug/Kg	1	06/14/19	JLI	SW8260C
Tetrahydrofuran (THF)	ND	12	2.9	ug/Kg	1	06/14/19	JLI	SW8260C
Toluene	ND	5.8	0.58	ug/Kg	1	06/14/19	JLI	SW8260C
trans-1,2-Dichloroethene	ND	5.8	0.58	ug/Kg	1	06/14/19	JLI	SW8260C
trans-1,3-Dichloropropene	ND	5.8	0.58	ug/Kg	1	06/14/19	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	12	2.9	ug/Kg	1	06/14/19	JLI	SW8260C
Trichloroethene	ND	5.8	0.58	ug/Kg	1	06/14/19	JLI	SW8260C
Trichlorofluoromethane	ND	5.8	1.2	ug/Kg	1	06/14/19	JLI	SW8260C
Trichlorotrifluoroethane	ND	5.8	0.58	ug/Kg	1	06/14/19	JLI	SW8260C
Vinyl chloride	ND	5.8	0.58	ug/Kg	1	06/14/19	JLI	SW8260C
<b>QA/QC Surrogates</b>								
% 1,2-dichlorobenzene-d4	98			%	1	06/14/19	JLI	70 - 130 %
% Bromofluorobenzene	89			%	1	06/14/19	JLI	70 - 130 %

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
% Dibromofluoromethane	96			%	1	06/14/19	JLI	70 - 130 %
% Toluene-d8	98			%	1	06/14/19	JLI	70 - 130 %
<b><u>1,4-dioxane</u></b>								
1,4-dioxane	ND	86	46	ug/kg	1	06/14/19	JLI	SW8260C
<b><u>QA/QC Surrogates</u></b>								
% 1,2-dichlorobenzene-d4	98			%	1	06/14/19	JLI	70 - 130 %
% Bromofluorobenzene	89			%	1	06/14/19	JLI	70 - 130 %
% Dibromofluoromethane	96			%	1	06/14/19	JLI	70 - 130 %
% Toluene-d8	98			%	1	06/14/19	JLI	70 - 130 %
<b><u>Volatiles</u></b>								
1,1,1,2-Tetrachloroethane	ND	23	1.2	ug/Kg	1	06/14/19	JLI	SW8260C
Acrolein	ND	5.8	1.2	ug/Kg	1	06/14/19	JLI	SW8260C
Acrylonitrile	ND	23	0.58	ug/Kg	1	06/14/19	JLI	SW8260C
Tert-butyl alcohol	ND	120	23	ug/Kg	1	06/14/19	JLI	SW8260C
<b><u>Semivolatiles</u></b>								
1,2,4,5-Tetrachlorobenzene	ND	250	130	ug/Kg	1	06/12/19	WB	SW8270D
1,2,4-Trichlorobenzene	ND	250	110	ug/Kg	1	06/12/19	WB	SW8270D
1,2-Dichlorobenzene	ND	250	100	ug/Kg	1	06/12/19	WB	SW8270D
1,2-Diphenylhydrazine	ND	250	120	ug/Kg	1	06/12/19	WB	SW8270D
1,3-Dichlorobenzene	ND	250	110	ug/Kg	1	06/12/19	WB	SW8270D
1,4-Dichlorobenzene	ND	250	110	ug/Kg	1	06/12/19	WB	SW8270D
2,4,5-Trichlorophenol	ND	250	200	ug/Kg	1	06/12/19	WB	SW8270D
2,4,6-Trichlorophenol	ND	180	110	ug/Kg	1	06/12/19	WB	SW8270D
2,4-Dichlorophenol	ND	180	130	ug/Kg	1	06/12/19	WB	SW8270D
2,4-Dimethylphenol	ND	250	89	ug/Kg	1	06/12/19	WB	SW8270D
2,4-Dinitrophenol	ND	250	250	ug/Kg	1	06/12/19	WB	SW8270D
2,4-Dinitrotoluene	ND	180	140	ug/Kg	1	06/12/19	WB	SW8270D
2,6-Dinitrotoluene	ND	180	110	ug/Kg	1	06/12/19	WB	SW8270D
2-Chloronaphthalene	ND	250	100	ug/Kg	1	06/12/19	WB	SW8270D
2-Chlorophenol	ND	250	100	ug/Kg	1	06/12/19	WB	SW8270D
2-Methylnaphthalene	ND	250	110	ug/Kg	1	06/12/19	WB	SW8270D
2-Methylphenol (o-cresol)	ND	250	170	ug/Kg	1	06/12/19	WB	SW8270D
2-Nitroaniline	ND	250	250	ug/Kg	1	06/12/19	WB	SW8270D
2-Nitrophenol	ND	250	230	ug/Kg	1	06/12/19	WB	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	250	140	ug/Kg	1	06/12/19	WB	SW8270D
3,3'-Dichlorobenzidine	ND	180	170	ug/Kg	1	06/12/19	WB	SW8270D
3-Nitroaniline	ND	360	720	ug/Kg	1	06/12/19	WB	SW8270D
4,6-Dinitro-2-methylphenol	ND	210	72	ug/Kg	1	06/12/19	WB	SW8270D
4-Bromophenyl phenyl ether	ND	250	110	ug/Kg	1	06/12/19	WB	SW8270D
4-Chloro-3-methylphenol	ND	250	130	ug/Kg	1	06/12/19	WB	SW8270D
4-Chloroaniline	ND	290	170	ug/Kg	1	06/12/19	WB	SW8270D
4-Chlorophenyl phenyl ether	ND	250	120	ug/Kg	1	06/12/19	WB	SW8270D
4-Nitroaniline	ND	360	120	ug/Kg	1	06/12/19	WB	SW8270D
4-Nitrophenol	ND	360	160	ug/Kg	1	06/12/19	WB	SW8270D
Acenaphthene	ND	250	110	ug/Kg	1	06/12/19	WB	SW8270D
Acenaphthylene	ND	250	100	ug/Kg	1	06/12/19	WB	SW8270D
Acetophenone	ND	250	110	ug/Kg	1	06/12/19	WB	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Aniline	ND	290	290	ug/Kg	1	06/12/19	WB	SW8270D
Anthracene	ND	250	120	ug/Kg	1	06/12/19	WB	SW8270D
Benz(a)anthracene	130	J 250	120	ug/Kg	1	06/12/19	WB	SW8270D
Benzidine	ND	360	210	ug/Kg	1	06/12/19	WB	SW8270D
Benzo(a)pyrene	160	J 180	120	ug/Kg	1	06/12/19	WB	SW8270D
Benzo(b)fluoranthene	150	J 250	120	ug/Kg	1	06/12/19	WB	SW8270D
Benzo(ghi)perylene	140	J 250	120	ug/Kg	1	06/12/19	WB	SW8270D
Benzo(k)fluoranthene	140	J 250	120	ug/Kg	1	06/12/19	WB	SW8270D
Benzoic acid	ND	1800	720	ug/Kg	1	06/12/19	WB	SW8270D
Benzyl butyl phthalate	180	J 250	92	ug/Kg	1	06/12/19	WB	SW8270D
Bis(2-chloroethoxy)methane	ND	250	99	ug/Kg	1	06/12/19	WB	SW8270D
Bis(2-chloroethyl)ether	ND	180	97	ug/Kg	1	06/12/19	WB	SW8270D
Bis(2-chloroisopropyl)ether	ND	250	100	ug/Kg	1	06/12/19	WB	SW8270D
Bis(2-ethylhexyl)phthalate	110	J 250	100	ug/Kg	1	06/12/19	WB	SW8270D
Carbazole	ND	180	140	ug/Kg	1	06/12/19	WB	SW8270D
Chrysene	180	J 250	120	ug/Kg	1	06/12/19	WB	SW8270D
Dibenz(a,h)anthracene	ND	180	120	ug/Kg	1	06/12/19	WB	SW8270D
Dibenzofuran	ND	250	100	ug/Kg	1	06/12/19	WB	SW8270D
Diethyl phthalate	ND	250	110	ug/Kg	1	06/12/19	WB	SW8270D
Dimethylphthalate	ND	250	110	ug/Kg	1	06/12/19	WB	SW8270D
Di-n-butylphthalate	140	J 250	95	ug/Kg	1	06/12/19	WB	SW8270D
Di-n-octylphthalate	ND	250	92	ug/Kg	1	06/12/19	WB	SW8270D
Fluoranthene	260	250	120	ug/Kg	1	06/12/19	WB	SW8270D
Fluorene	ND	250	120	ug/Kg	1	06/12/19	WB	SW8270D
Hexachlorobenzene	ND	180	100	ug/Kg	1	06/12/19	WB	SW8270D
Hexachlorobutadiene	ND	250	130	ug/Kg	1	06/12/19	WB	SW8270D
Hexachlorocyclopentadiene	ND	250	110	ug/Kg	1	06/12/19	WB	SW8270D
Hexachloroethane	ND	180	110	ug/Kg	1	06/12/19	WB	SW8270D
Indeno(1,2,3-cd)pyrene	140	J 250	120	ug/Kg	1	06/12/19	WB	SW8270D
Isophorone	ND	1100	1100	ug/Kg	1	06/12/19	WB	SW8270D
Naphthalene	ND	250	100	ug/Kg	1	06/12/19	WB	SW8270D
Nitrobenzene	ND	180	130	ug/Kg	1	06/12/19	WB	SW8270D
N-Nitrosodimethylamine	ND	250	100	ug/Kg	1	06/12/19	WB	SW8270D
N-Nitrosodi-n-propylamine	ND	180	120	ug/Kg	1	06/12/19	WB	SW8270D
N-Nitrosodiphenylamine	ND	250	140	ug/Kg	1	06/12/19	WB	SW8270D
Pentachloronitrobenzene	ND	250	130	ug/Kg	1	06/12/19	WB	SW8270D
Pentachlorophenol	ND	210	140	ug/Kg	1	06/12/19	WB	SW8270D
Phenanthrene	ND	250	100	ug/Kg	1	06/12/19	WB	SW8270D
Phenol	ND	250	110	ug/Kg	1	06/12/19	WB	SW8270D
Pyrene	280	250	120	ug/Kg	1	06/12/19	WB	SW8270D
Pyridine	ND	250	88	ug/Kg	1	06/12/19	WB	SW8270D
<b><u>QA/QC Surrogates</u></b>								
% 2,4,6-Tribromophenol	89			%	1	06/12/19	WB	30 - 130 %
% 2-Fluorobiphenyl	60			%	1	06/12/19	WB	30 - 130 %
% 2-Fluorophenol	57			%	1	06/12/19	WB	30 - 130 %
% Nitrobenzene-d5	73			%	1	06/12/19	WB	30 - 130 %
% Phenol-d5	81			%	1	06/12/19	WB	30 - 130 %
% Terphenyl-d14	88			%	1	06/12/19	WB	30 - 130 %
Field Extraction	Completed					06/07/19		SW5035A

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

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**

**June 19, 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

June 19, 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: DR  
 Received by: CP  
 Analyzed by: see "By" below

## Date

06/07/19  
 06/10/19

## Time

11:30  
 15:02

## Laboratory Data

SDG ID: GCD30623  
 Phoenix ID: CD30626

Project ID: 1840 PARK AVE, MANHATTAN NY  
 Client ID: P4 (0-2')

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Percent Solid	92			%		06/10/19	ML	SW846-%Solid
Soil Extraction for SVOA	Completed					06/11/19	JJ/EE	SW3545A

## Volatiles

1,1,1,2-Tetrachloroethane	ND	4.3	0.86	ug/Kg	1	06/14/19	JLI	SW8260C
1,1,1-Trichloroethane	ND	4.3	0.43	ug/Kg	1	06/14/19	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	430	86	ug/Kg	50	06/14/19	JLI	SW8260C
1,1,2-Trichloroethane	ND	4.3	0.86	ug/Kg	1	06/14/19	JLI	SW8260C
1,1-Dichloroethane	ND	4.3	0.86	ug/Kg	1	06/14/19	JLI	SW8260C
1,1-Dichloroethene	ND	4.3	0.43	ug/Kg	1	06/14/19	JLI	SW8260C
1,1-Dichloropropene	ND	4.3	0.43	ug/Kg	1	06/14/19	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	430	86	ug/Kg	50	06/14/19	JLI	SW8260C
1,2,3-Trichloropropane	ND	430	43	ug/Kg	50	06/14/19	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	430	86	ug/Kg	50	06/14/19	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	430	43	ug/Kg	50	06/14/19	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	430	86	ug/Kg	50	06/14/19	JLI	SW8260C
1,2-Dibromoethane	ND	4.3	0.43	ug/Kg	1	06/14/19	JLI	SW8260C
1,2-Dichlorobenzene	ND	430	43	ug/Kg	50	06/14/19	JLI	SW8260C
1,2-Dichloroethane	ND	4.3	0.43	ug/Kg	1	06/14/19	JLI	SW8260C
1,2-Dichloropropane	ND	4.3	0.86	ug/Kg	1	06/14/19	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	430	43	ug/Kg	50	06/14/19	JLI	SW8260C
1,3-Dichlorobenzene	ND	430	43	ug/Kg	50	06/14/19	JLI	SW8260C
1,3-Dichloropropane	ND	4.3	0.86	ug/Kg	1	06/14/19	JLI	SW8260C
1,4-Dichlorobenzene	ND	430	43	ug/Kg	50	06/14/19	JLI	SW8260C
2,2-Dichloropropane	ND	4.3	0.43	ug/Kg	1	06/14/19	JLI	SW8260C
2-Chlorotoluene	ND	430	86	ug/Kg	50	06/14/19	JLI	SW8260C
2-Hexanone	ND	21	4.3	ug/Kg	1	06/14/19	JLI	SW8260C
2-Isopropyltoluene	ND	430	43	ug/Kg	50	06/14/19	JLI	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
4-Chlorotoluene	ND	430	43	ug/Kg	50	06/14/19	JLI	SW8260C
4-Methyl-2-pentanone	ND	21	4.3	ug/Kg	1	06/14/19	JLI	SW8260C
Acetone	ND	21	4.3	ug/Kg	1	06/14/19	JLI	SW8260C
Acrylonitrile	ND	8.6	0.86	ug/Kg	1	06/14/19	JLI	SW8260C
Benzene	ND	4.3	0.43	ug/Kg	1	06/14/19	JLI	SW8260C
Bromobenzene	ND	430	43	ug/Kg	50	06/14/19	JLI	SW8260C
Bromochloromethane	ND	4.3	0.43	ug/Kg	1	06/14/19	JLI	SW8260C
Bromodichloromethane	ND	4.3	0.86	ug/Kg	1	06/14/19	JLI	SW8260C
Bromoform	ND	4.3	0.86	ug/Kg	1	06/14/19	JLI	SW8260C
Bromomethane	ND	4.3	1.7	ug/Kg	1	06/14/19	JLI	SW8260C
Carbon Disulfide	ND	4.3	0.86	ug/Kg	1	06/14/19	JLI	SW8260C
Carbon tetrachloride	ND	4.3	0.86	ug/Kg	1	06/14/19	JLI	SW8260C
Chlorobenzene	ND	4.3	0.43	ug/Kg	1	06/14/19	JLI	SW8260C
Chloroethane	ND	4.3	0.43	ug/Kg	1	06/14/19	JLI	SW8260C
Chloroform	ND	4.3	0.43	ug/Kg	1	06/14/19	JLI	SW8260C
Chloromethane	ND	4.3	0.86	ug/Kg	1	06/14/19	JLI	SW8260C
cis-1,2-Dichloroethene	ND	4.3	0.43	ug/Kg	1	06/14/19	JLI	SW8260C
cis-1,3-Dichloropropene	ND	4.3	0.43	ug/Kg	1	06/14/19	JLI	SW8260C
Dibromochloromethane	ND	4.3	0.86	ug/Kg	1	06/14/19	JLI	SW8260C
Dibromomethane	ND	4.3	0.86	ug/Kg	1	06/14/19	JLI	SW8260C
Dichlorodifluoromethane	ND	4.3	0.43	ug/Kg	1	06/14/19	JLI	SW8260C
Ethylbenzene	ND	4.3	0.43	ug/Kg	1	06/14/19	JLI	SW8260C
Hexachlorobutadiene	ND	430	43	ug/Kg	50	06/14/19	JLI	SW8260C
Isopropylbenzene	ND	430	43	ug/Kg	50	06/14/19	JLI	SW8260C
m&p-Xylene	ND	4.3	0.86	ug/Kg	1	06/14/19	JLI	SW8260C
Methyl Ethyl Ketone	ND	26	4.3	ug/Kg	1	06/14/19	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	8.6	0.86	ug/Kg	1	06/14/19	JLI	SW8260C
Methylene chloride	ND	4.3	4.3	ug/Kg	1	06/14/19	JLI	SW8260C
Naphthalene	ND	430	86	ug/Kg	50	06/14/19	JLI	SW8260C
n-Butylbenzene	ND	430	43	ug/Kg	50	06/14/19	JLI	SW8260C
n-Propylbenzene	ND	430	86	ug/Kg	50	06/14/19	JLI	SW8260C
o-Xylene	ND	4.3	0.86	ug/Kg	1	06/14/19	JLI	SW8260C
p-Isopropyltoluene	ND	430	43	ug/Kg	50	06/14/19	JLI	SW8260C
sec-Butylbenzene	ND	430	43	ug/Kg	50	06/14/19	JLI	SW8260C
Styrene	ND	4.3	0.43	ug/Kg	1	06/14/19	JLI	SW8260C
tert-Butylbenzene	ND	430	43	ug/Kg	50	06/14/19	JLI	SW8260C
Tetrachloroethene	ND	4.3	0.86	ug/Kg	1	06/14/19	JLI	SW8260C
Tetrahydrofuran (THF)	ND	8.6	2.1	ug/Kg	1	06/14/19	JLI	SW8260C
Toluene	ND	4.3	0.43	ug/Kg	1	06/14/19	JLI	SW8260C
trans-1,2-Dichloroethene	ND	4.3	0.43	ug/Kg	1	06/14/19	JLI	SW8260C
trans-1,3-Dichloropropene	ND	4.3	0.43	ug/Kg	1	06/14/19	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	860	220	ug/Kg	50	06/14/19	JLI	SW8260C
Trichloroethene	ND	4.3	0.43	ug/Kg	1	06/14/19	JLI	SW8260C
Trichlorofluoromethane	ND	4.3	0.86	ug/Kg	1	06/14/19	JLI	SW8260C
Trichlorotrifluoroethane	ND	4.3	0.43	ug/Kg	1	06/14/19	JLI	SW8260C
Vinyl chloride	ND	4.3	0.43	ug/Kg	1	06/14/19	JLI	SW8260C
<b>QA/QC Surrogates</b>								
% 1,2-dichlorobenzene-d4	93			%	1	06/14/19	JLI	70 - 130 %
% Bromofluorobenzene	85			%	1	06/14/19	JLI	70 - 130 %

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
% Dibromofluoromethane	95			%	1	06/14/19	JLI	70 - 130 %
% Toluene-d8	95			%	1	06/14/19	JLI	70 - 130 %
% 1,2-dichlorobenzene-d4 (50x)	99			%	50	06/14/19	JLI	70 - 130 %
% Bromofluorobenzene (50x)	101			%	50	06/14/19	JLI	70 - 130 %
% Dibromofluoromethane (50x)	92			%	50	06/14/19	JLI	70 - 130 %
% Toluene-d8 (50x)	100			%	50	06/14/19	JLI	70 - 130 %
<b><u>1,4-dioxane</u></b>								
1,4-dioxane	ND	64	34	ug/kg	1	06/14/19	JLI	SW8260C
<b><u>QA/QC Surrogates</u></b>								
% 1,2-dichlorobenzene-d4	93			%	1	06/14/19	JLI	70 - 130 %
% Bromofluorobenzene	85			%	1	06/14/19	JLI	70 - 130 %
% Dibromofluoromethane	95			%	1	06/14/19	JLI	70 - 130 %
% Toluene-d8	95			%	1	06/14/19	JLI	70 - 130 %
<b><u>Volatiles</u></b>								
1,1,1,2-Tetrachloroethane	ND	17	0.86	ug/Kg	1	06/14/19	JLI	SW8260C
Acrolein	ND	4.3	0.86	ug/Kg	1	06/14/19	JLI	SW8260C
Acrylonitrile	ND	17	0.43	ug/Kg	1	06/14/19	JLI	SW8260C
Tert-butyl alcohol	ND	86	17	ug/Kg	1	06/14/19	JLI	SW8260C
<b><u>Semivolatiles</u></b>								
1,2,4,5-Tetrachlorobenzene	ND	250	130	ug/Kg	1	06/12/19	WB	SW8270D
1,2,4-Trichlorobenzene	ND	250	110	ug/Kg	1	06/12/19	WB	SW8270D
1,2-Dichlorobenzene	ND	250	100	ug/Kg	1	06/12/19	WB	SW8270D
1,2-Diphenylhydrazine	ND	250	120	ug/Kg	1	06/12/19	WB	SW8270D
1,3-Dichlorobenzene	ND	250	110	ug/Kg	1	06/12/19	WB	SW8270D
1,4-Dichlorobenzene	ND	250	110	ug/Kg	1	06/12/19	WB	SW8270D
2,4,5-Trichlorophenol	ND	250	200	ug/Kg	1	06/12/19	WB	SW8270D
2,4,6-Trichlorophenol	ND	180	110	ug/Kg	1	06/12/19	WB	SW8270D
2,4-Dichlorophenol	ND	180	130	ug/Kg	1	06/12/19	WB	SW8270D
2,4-Dimethylphenol	ND	250	89	ug/Kg	1	06/12/19	WB	SW8270D
2,4-Dinitrophenol	ND	250	250	ug/Kg	1	06/12/19	WB	SW8270D
2,4-Dinitrotoluene	ND	180	140	ug/Kg	1	06/12/19	WB	SW8270D
2,6-Dinitrotoluene	ND	180	110	ug/Kg	1	06/12/19	WB	SW8270D
2-Chloronaphthalene	ND	250	100	ug/Kg	1	06/12/19	WB	SW8270D
2-Chlorophenol	ND	250	100	ug/Kg	1	06/12/19	WB	SW8270D
2-Methylnaphthalene	ND	250	110	ug/Kg	1	06/12/19	WB	SW8270D
2-Methylphenol (o-cresol)	ND	250	170	ug/Kg	1	06/12/19	WB	SW8270D
2-Nitroaniline	ND	250	250	ug/Kg	1	06/12/19	WB	SW8270D
2-Nitrophenol	ND	250	230	ug/Kg	1	06/12/19	WB	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	250	140	ug/Kg	1	06/12/19	WB	SW8270D
3,3'-Dichlorobenzidine	ND	180	170	ug/Kg	1	06/12/19	WB	SW8270D
3-Nitroaniline	ND	360	720	ug/Kg	1	06/12/19	WB	SW8270D
4,6-Dinitro-2-methylphenol	ND	210	72	ug/Kg	1	06/12/19	WB	SW8270D
4-Bromophenyl phenyl ether	ND	250	110	ug/Kg	1	06/12/19	WB	SW8270D
4-Chloro-3-methylphenol	ND	250	130	ug/Kg	1	06/12/19	WB	SW8270D
4-Chloroaniline	ND	290	170	ug/Kg	1	06/12/19	WB	SW8270D
4-Chlorophenyl phenyl ether	ND	250	120	ug/Kg	1	06/12/19	WB	SW8270D
4-Nitroaniline	ND	360	120	ug/Kg	1	06/12/19	WB	SW8270D



Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
4-Nitrophenol	ND	360	160	ug/Kg	1	06/12/19	WB	SW8270D
Acenaphthene	ND	250	110	ug/Kg	1	06/12/19	WB	SW8270D
Acenaphthylene	140	J 250	100	ug/Kg	1	06/12/19	WB	SW8270D
Acetophenone	ND	250	110	ug/Kg	1	06/12/19	WB	SW8270D
Aniline	ND	290	290	ug/Kg	1	06/12/19	WB	SW8270D
Anthracene	ND	250	120	ug/Kg	1	06/12/19	WB	SW8270D
Benz(a)anthracene	430	250	120	ug/Kg	1	06/12/19	WB	SW8270D
Benzidine	ND	360	210	ug/Kg	1	06/12/19	WB	SW8270D
Benzo(a)pyrene	420	180	120	ug/Kg	1	06/12/19	WB	SW8270D
Benzo(b)fluoranthene	370	250	120	ug/Kg	1	06/12/19	WB	SW8270D
Benzo(ghi)perylene	250	J 250	120	ug/Kg	1	06/12/19	WB	SW8270D
Benzo(k)fluoranthene	400	250	120	ug/Kg	1	06/12/19	WB	SW8270D
Benzoic acid	ND	1800	720	ug/Kg	1	06/12/19	WB	SW8270D
Benzyl butyl phthalate	500	250	92	ug/Kg	1	06/12/19	WB	SW8270D
Bis(2-chloroethoxy)methane	ND	250	99	ug/Kg	1	06/12/19	WB	SW8270D
Bis(2-chloroethyl)ether	ND	180	97	ug/Kg	1	06/12/19	WB	SW8270D
Bis(2-chloroisopropyl)ether	ND	250	100	ug/Kg	1	06/12/19	WB	SW8270D
Bis(2-ethylhexyl)phthalate	210	J 250	100	ug/Kg	1	06/12/19	WB	SW8270D
Carbazole	ND	180	140	ug/Kg	1	06/12/19	WB	SW8270D
Chrysene	430	250	120	ug/Kg	1	06/12/19	WB	SW8270D
Dibenz(a,h)anthracene	ND	180	120	ug/Kg	1	06/12/19	WB	SW8270D
Dibenzofuran	ND	250	100	ug/Kg	1	06/12/19	WB	SW8270D
Diethyl phthalate	ND	250	110	ug/Kg	1	06/12/19	WB	SW8270D
Dimethylphthalate	ND	250	110	ug/Kg	1	06/12/19	WB	SW8270D
Di-n-butylphthalate	ND	250	95	ug/Kg	1	06/12/19	WB	SW8270D
Di-n-octylphthalate	ND	250	92	ug/Kg	1	06/12/19	WB	SW8270D
Fluoranthene	840	250	120	ug/Kg	1	06/12/19	WB	SW8270D
Fluorene	ND	250	120	ug/Kg	1	06/12/19	WB	SW8270D
Hexachlorobenzene	ND	180	100	ug/Kg	1	06/12/19	WB	SW8270D
Hexachlorobutadiene	ND	250	130	ug/Kg	1	06/12/19	WB	SW8270D
Hexachlorocyclopentadiene	ND	250	110	ug/Kg	1	06/12/19	WB	SW8270D
Hexachloroethane	ND	180	110	ug/Kg	1	06/12/19	WB	SW8270D
Indeno(1,2,3-cd)pyrene	310	250	120	ug/Kg	1	06/12/19	WB	SW8270D
Isophorone	ND	180	100	ug/Kg	1	06/12/19	WB	SW8270D
Naphthalene	ND	250	100	ug/Kg	1	06/12/19	WB	SW8270D
Nitrobenzene	ND	180	130	ug/Kg	1	06/12/19	WB	SW8270D
N-Nitrosodimethylamine	ND	250	100	ug/Kg	1	06/12/19	WB	SW8270D
N-Nitrosodi-n-propylamine	ND	180	120	ug/Kg	1	06/12/19	WB	SW8270D
N-Nitrosodiphenylamine	ND	250	140	ug/Kg	1	06/12/19	WB	SW8270D
Pentachloronitrobenzene	ND	250	130	ug/Kg	1	06/12/19	WB	SW8270D
Pentachlorophenol	ND	210	140	ug/Kg	1	06/12/19	WB	SW8270D
Phenanthrene	310	250	100	ug/Kg	1	06/12/19	WB	SW8270D
Phenol	ND	250	110	ug/Kg	1	06/12/19	WB	SW8270D
Pyrene	760	250	120	ug/Kg	1	06/12/19	WB	SW8270D
Pyridine	ND	250	88	ug/Kg	1	06/12/19	WB	SW8270D
<b>QA/QC Surrogates</b>								
% 2,4,6-Tribromophenol	90			%	1	06/12/19	WB	30 - 130 %
% 2-Fluorobiphenyl	66			%	1	06/12/19	WB	30 - 130 %
% 2-Fluorophenol	65			%	1	06/12/19	WB	30 - 130 %

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
% Nitrobenzene-d5	81			%	1	06/12/19	WB	30 - 130 %
% Phenol-d5	80			%	1	06/12/19	WB	30 - 130 %
% Terphenyl-d14	68			%	1	06/12/19	WB	30 - 130 %
Field Extraction	Completed					06/07/19		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.

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 Limit  
 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:**

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.

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**

**June 19, 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

June 19, 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: DR  
 Received by: CP  
 Analyzed by: see "By" below

## Date

06/07/19  
 06/10/19

## Time

8:45  
 15:02

## Laboratory Data

SDG ID: GCD30623  
 Phoenix ID: CD30627

Project ID: 1840 PARK AVE, MANHATTAN NY  
 Client ID: F1 (0-2')

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Silver	ND	0.37	0.37	mg/Kg	1	06/12/19	EK	SW6010D
Aluminum	7300	37	7.3	mg/Kg	10	06/12/19	EK	SW6010D
Arsenic	4.50	0.73	0.73	mg/Kg	1	06/12/19	EK	SW6010D
Barium	106	0.7	0.37	mg/Kg	1	06/12/19	EK	SW6010D
Beryllium	0.32	0.29	0.15	mg/Kg	1	06/12/19	EK	SW6010D
Calcium	61600	37	34	mg/Kg	10	06/12/19	EK	SW6010D
Cadmium	0.92	0.37	0.37	mg/Kg	1	06/12/19	EK	SW6010D
Cobalt	5.42	0.37	0.37	mg/Kg	1	06/12/19	EK	SW6010D
Chromium	19.2	0.37	0.37	mg/Kg	1	06/12/19	EK	SW6010D
Copper	67.4	0.7	0.37	mg/kg	1	06/12/19	EK	SW6010D
Iron	11200	37	37	mg/Kg	10	06/12/19	EK	SW6010D
Mercury	0.31	0.08	0.05	mg/Kg	5	06/12/19	RS	SW7471B
Potassium	940	7	2.9	mg/Kg	1	06/12/19	EK	SW6010D
Magnesium	5330	3.7	3.7	mg/Kg	1	06/12/19	EK	SW6010D
Manganese	307	3.7	3.7	mg/Kg	10	06/12/19	EK	SW6010D
Sodium	706	7	3.2	mg/Kg	1	06/12/19	EK	SW6010D
Nickel	27.3	0.37	0.37	mg/Kg	1	06/12/19	EK	SW6010D
Lead	168	7.3	3.7	mg/Kg	10	06/12/19	EK	SW6010D
Antimony	ND	3.7	3.7	mg/Kg	1	06/12/19	EK	SW6010D
Selenium	ND	1.5	1.2	mg/Kg	1	06/12/19	EK	SW6010D
Thallium	ND	1.5	1.5	mg/Kg	1	06/12/19	EK	SW6010D
Vanadium	26.6	0.37	0.37	mg/Kg	1	06/12/19	EK	SW6010D
Zinc	194	7.3	3.7	mg/Kg	10	06/12/19	EK	SW6010D
Percent Solid	84			%		06/10/19	ML	SW846-%Solid
Soil Extraction for PCB	Completed					06/13/19	MM	SW3545A
Soil Extraction for Pesticides	Completed					06/13/19	MM/V	SW3545A
Soil Extraction for SVOA	Completed					06/11/19	JJ/EE	SW3545A
Mercury Digestion	Completed					06/12/19	I/LS/I/LS	SW7471B

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Total Metals Digest	Completed					06/10/19	S/AG/BF	SW3050B
<b><u>Polychlorinated Biphenyls</u></b>								
PCB-1016	ND	78	78	ug/Kg	2	06/12/19	SC	SW8082A
PCB-1221	ND	78	78	ug/Kg	2	06/12/19	SC	SW8082A
PCB-1232	ND	78	78	ug/Kg	2	06/12/19	SC	SW8082A
PCB-1242	ND	78	78	ug/Kg	2	06/12/19	SC	SW8082A
PCB-1248	ND	78	78	ug/Kg	2	06/12/19	SC	SW8082A
PCB-1254	ND	78	78	ug/Kg	2	06/12/19	SC	SW8082A
PCB-1260	ND	78	78	ug/Kg	2	06/12/19	SC	SW8082A
PCB-1262	ND	78	78	ug/Kg	2	06/12/19	SC	SW8082A
PCB-1268	ND	78	78	ug/Kg	2	06/12/19	SC	SW8082A
<b><u>QA/QC Surrogates</u></b>								
% DCBP	44			%	2	06/12/19	SC	40 - 140 %
% DCBP (Confirmation)	40			%	2	06/12/19	SC	40 - 140 %
% TCMX	44			%	2	06/12/19	SC	30 - 150 %
% TCMX (Confirmation)	43			%	2	06/12/19	SC	30 - 150 %
<b><u>Pesticides - Soil</u></b>								
4,4' -DDD	12	2.4	2.4	ug/Kg	2	06/14/19	CW	SW8081B
4,4' -DDE	18	2.4	2.4	ug/Kg	2	06/14/19	CW	SW8081B
4,4' -DDT	34	2.4	2.4	ug/Kg	2	06/14/19	CW	SW8081B
a-BHC	ND	7.9	7.9	ug/Kg	2	06/14/19	CW	SW8081B
a-Chlordane	26	4.0	4.0	ug/Kg	2	06/14/19	CW	SW8081B
Aldrin	ND	4.0	4.0	ug/Kg	2	06/14/19	CW	SW8081B
b-BHC	ND	7.9	7.9	ug/Kg	2	06/14/19	CW	SW8081B
Chlordane	110	40	40	ug/Kg	2	06/14/19	CW	SW8081B
d-BHC	ND	7.9	7.9	ug/Kg	2	06/14/19	CW	SW8081B
Dieldrin	7.2	4.0	4.0	ug/Kg	2	06/14/19	CW	SW8081B
Endosulfan I	ND	7.9	7.9	ug/Kg	2	06/14/19	CW	SW8081B
Endosulfan II	ND	7.9	7.9	ug/Kg	2	06/14/19	CW	SW8081B
Endosulfan sulfate	ND	7.9	7.9	ug/Kg	2	06/14/19	CW	SW8081B
Endrin	ND	7.9	7.9	ug/Kg	2	06/14/19	CW	SW8081B
Endrin aldehyde	ND	7.9	7.9	ug/Kg	2	06/14/19	CW	SW8081B
Endrin ketone	ND	7.9	7.9	ug/Kg	2	06/14/19	CW	SW8081B
g-BHC	ND	1.6	1.6	ug/Kg	2	06/14/19	CW	SW8081B
g-Chlordane	23	4.0	4.0	ug/Kg	2	06/14/19	CW	SW8081B
Heptachlor	ND	7.9	7.9	ug/Kg	2	06/14/19	CW	SW8081B
Heptachlor epoxide	ND	7.9	7.9	ug/Kg	2	06/14/19	CW	SW8081B
Methoxychlor	ND	40	40	ug/Kg	2	06/14/19	CW	SW8081B
Toxaphene	ND	160	160	ug/Kg	2	06/14/19	CW	SW8081B
<b><u>QA/QC Surrogates</u></b>								
% DCBP	89			%	2	06/14/19	CW	40 - 140 %
% DCBP (Confirmation)	69			%	2	06/14/19	CW	40 - 140 %
% TCMX	62			%	2	06/14/19	CW	40 - 140 %
% TCMX (Confirmation)	59			%	2	06/14/19	CW	40 - 140 %
<b><u>Volatiles</u></b>								
1,1,1,2-Tetrachloroethane	ND	6.8	1.4	ug/Kg	1	06/14/19	JLI	SW8260C
1,1,1-Trichloroethane	ND	6.8	0.68	ug/Kg	1	06/14/19	JLI	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
1,1,2,2-Tetrachloroethane	ND	6.8	1.4	ug/Kg	1	06/14/19	JLI	SW8260C
1,1,2-Trichloroethane	ND	6.8	1.4	ug/Kg	1	06/14/19	JLI	SW8260C
1,1-Dichloroethane	ND	6.8	1.4	ug/Kg	1	06/14/19	JLI	SW8260C
1,1-Dichloroethene	ND	6.8	0.68	ug/Kg	1	06/14/19	JLI	SW8260C
1,1-Dichloropropene	ND	6.8	0.68	ug/Kg	1	06/14/19	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	6.8	1.4	ug/Kg	1	06/14/19	JLI	SW8260C
1,2,3-Trichloropropane	ND	6.8	0.68	ug/Kg	1	06/14/19	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	6.8	1.4	ug/Kg	1	06/14/19	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	6.8	0.68	ug/Kg	1	06/14/19	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	6.8	1.4	ug/Kg	1	06/14/19	JLI	SW8260C
1,2-Dibromoethane	ND	6.8	0.68	ug/Kg	1	06/14/19	JLI	SW8260C
1,2-Dichlorobenzene	ND	6.8	0.68	ug/Kg	1	06/14/19	JLI	SW8260C
1,2-Dichloroethane	ND	6.8	0.68	ug/Kg	1	06/14/19	JLI	SW8260C
1,2-Dichloropropane	ND	6.8	1.4	ug/Kg	1	06/14/19	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	6.8	0.68	ug/Kg	1	06/14/19	JLI	SW8260C
1,3-Dichlorobenzene	ND	6.8	0.68	ug/Kg	1	06/14/19	JLI	SW8260C
1,3-Dichloropropane	ND	6.8	1.4	ug/Kg	1	06/14/19	JLI	SW8260C
1,4-Dichlorobenzene	ND	6.8	0.68	ug/Kg	1	06/14/19	JLI	SW8260C
2,2-Dichloropropane	ND	6.8	0.68	ug/Kg	1	06/14/19	JLI	SW8260C
2-Chlorotoluene	ND	6.8	1.4	ug/Kg	1	06/14/19	JLI	SW8260C
2-Hexanone	ND	34	6.8	ug/Kg	1	06/14/19	JLI	SW8260C
2-Isopropyltoluene	ND	6.8	0.68	ug/Kg	1	06/14/19	JLI	SW8260C
4-Chlorotoluene	ND	6.8	0.68	ug/Kg	1	06/14/19	JLI	SW8260C
4-Methyl-2-pentanone	ND	34	6.8	ug/Kg	1	06/14/19	JLI	SW8260C
Acetone	13	JS 34	6.8	ug/Kg	1	06/14/19	JLI	SW8260C
Acrylonitrile	ND	14	1.4	ug/Kg	1	06/14/19	JLI	SW8260C
Benzene	ND	6.8	0.68	ug/Kg	1	06/14/19	JLI	SW8260C
Bromobenzene	ND	6.8	0.68	ug/Kg	1	06/14/19	JLI	SW8260C
Bromochloromethane	ND	6.8	0.68	ug/Kg	1	06/14/19	JLI	SW8260C
Bromodichloromethane	ND	6.8	1.4	ug/Kg	1	06/14/19	JLI	SW8260C
Bromoform	ND	6.8	1.4	ug/Kg	1	06/14/19	JLI	SW8260C
Bromomethane	ND	6.8	2.7	ug/Kg	1	06/14/19	JLI	SW8260C
Carbon Disulfide	ND	6.8	1.4	ug/Kg	1	06/14/19	JLI	SW8260C
Carbon tetrachloride	ND	6.8	1.4	ug/Kg	1	06/14/19	JLI	SW8260C
Chlorobenzene	ND	6.8	0.68	ug/Kg	1	06/14/19	JLI	SW8260C
Chloroethane	ND	6.8	0.68	ug/Kg	1	06/14/19	JLI	SW8260C
Chloroform	ND	6.8	0.68	ug/Kg	1	06/14/19	JLI	SW8260C
Chloromethane	ND	6.8	1.4	ug/Kg	1	06/14/19	JLI	SW8260C
cis-1,2-Dichloroethene	ND	6.8	0.68	ug/Kg	1	06/14/19	JLI	SW8260C
cis-1,3-Dichloropropene	ND	6.8	0.68	ug/Kg	1	06/14/19	JLI	SW8260C
Dibromochloromethane	ND	6.8	1.4	ug/Kg	1	06/14/19	JLI	SW8260C
Dibromomethane	ND	6.8	1.4	ug/Kg	1	06/14/19	JLI	SW8260C
Dichlorodifluoromethane	ND	6.8	0.68	ug/Kg	1	06/14/19	JLI	SW8260C
Ethylbenzene	ND	6.8	0.68	ug/Kg	1	06/14/19	JLI	SW8260C
Hexachlorobutadiene	ND	6.8	0.68	ug/Kg	1	06/14/19	JLI	SW8260C
Isopropylbenzene	ND	6.8	0.68	ug/Kg	1	06/14/19	JLI	SW8260C
m&p-Xylene	1.9	J 6.8	1.4	ug/Kg	1	06/14/19	JLI	SW8260C
Methyl Ethyl Ketone	ND	41	6.8	ug/Kg	1	06/14/19	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	14	1.4	ug/Kg	1	06/14/19	JLI	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Methylene chloride	ND	6.8	6.8	ug/Kg	1	06/14/19	JLI	SW8260C
Naphthalene	ND	6.8	1.4	ug/Kg	1	06/14/19	JLI	SW8260C
n-Butylbenzene	ND	6.8	0.68	ug/Kg	1	06/14/19	JLI	SW8260C
n-Propylbenzene	ND	6.8	1.4	ug/Kg	1	06/14/19	JLI	SW8260C
o-Xylene	ND	6.8	1.4	ug/Kg	1	06/14/19	JLI	SW8260C
p-Isopropyltoluene	ND	6.8	0.68	ug/Kg	1	06/14/19	JLI	SW8260C
sec-Butylbenzene	ND	6.8	0.68	ug/Kg	1	06/14/19	JLI	SW8260C
Styrene	ND	6.8	0.68	ug/Kg	1	06/14/19	JLI	SW8260C
tert-Butylbenzene	ND	6.8	0.68	ug/Kg	1	06/14/19	JLI	SW8260C
Tetrachloroethene	ND	6.8	1.4	ug/Kg	1	06/14/19	JLI	SW8260C
Tetrahydrofuran (THF)	ND	14	3.4	ug/Kg	1	06/14/19	JLI	SW8260C
Toluene	ND	6.8	0.68	ug/Kg	1	06/14/19	JLI	SW8260C
trans-1,2-Dichloroethene	ND	6.8	0.68	ug/Kg	1	06/14/19	JLI	SW8260C
trans-1,3-Dichloropropene	ND	6.8	0.68	ug/Kg	1	06/14/19	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	14	3.4	ug/Kg	1	06/14/19	JLI	SW8260C
Trichloroethene	ND	6.8	0.68	ug/Kg	1	06/14/19	JLI	SW8260C
Trichlorofluoromethane	ND	6.8	1.4	ug/Kg	1	06/14/19	JLI	SW8260C
Trichlorotrifluoroethane	ND	6.8	0.68	ug/Kg	1	06/14/19	JLI	SW8260C
Vinyl chloride	ND	6.8	0.68	ug/Kg	1	06/14/19	JLI	SW8260C
<b><u>QA/QC Surrogates</u></b>								
% 1,2-dichlorobenzene-d4	99			%	1	06/14/19	JLI	70 - 130 %
% Bromofluorobenzene	97			%	1	06/14/19	JLI	70 - 130 %
% Dibromofluoromethane	93			%	1	06/14/19	JLI	70 - 130 %
% Toluene-d8	100			%	1	06/14/19	JLI	70 - 130 %
<b><u>1,4-dioxane</u></b>								
1,4-dioxane	ND	100	54	ug/kg	1	06/14/19	JLI	SW8260C
<b><u>QA/QC Surrogates</u></b>								
% 1,2-dichlorobenzene-d4	99			%	1	06/14/19	JLI	70 - 130 %
% Bromofluorobenzene	97			%	1	06/14/19	JLI	70 - 130 %
% Dibromofluoromethane	93			%	1	06/14/19	JLI	70 - 130 %
% Toluene-d8	100			%	1	06/14/19	JLI	70 - 130 %
<b><u>Volatiles</u></b>								
1,1,1,2-Tetrachloroethane	ND	27	1.4	ug/Kg	1	06/14/19	JLI	SW8260C
Acrolein	ND	6.8	1.4	ug/Kg	1	06/14/19	JLI	SW8260C
Acrylonitrile	ND	27	0.68	ug/Kg	1	06/14/19	JLI	SW8260C
Tert-butyl alcohol	ND	140	27	ug/Kg	1	06/14/19	JLI	SW8260C
<b><u>Semivolatiles</u></b>								
1,2,4,5-Tetrachlorobenzene	ND	280	140	ug/Kg	1	06/12/19	WB	SW8270D
1,2,4-Trichlorobenzene	ND	280	120	ug/Kg	1	06/12/19	WB	SW8270D
1,2-Dichlorobenzene	ND	280	110	ug/Kg	1	06/12/19	WB	SW8270D
1,2-Diphenylhydrazine	ND	280	130	ug/Kg	1	06/12/19	WB	SW8270D
1,3-Dichlorobenzene	ND	280	120	ug/Kg	1	06/12/19	WB	SW8270D
1,4-Dichlorobenzene	ND	280	120	ug/Kg	1	06/12/19	WB	SW8270D
2,4,5-Trichlorophenol	ND	280	220	ug/Kg	1	06/12/19	WB	SW8270D
2,4,6-Trichlorophenol	ND	200	130	ug/Kg	1	06/12/19	WB	SW8270D
2,4-Dichlorophenol	ND	200	140	ug/Kg	1	06/12/19	WB	SW8270D
2,4-Dimethylphenol	ND	280	98	ug/Kg	1	06/12/19	WB	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
2,4-Dinitrophenol	ND	280	280	ug/Kg	1	06/12/19	WB	SW8270D
2,4-Dinitrotoluene	ND	200	160	ug/Kg	1	06/12/19	WB	SW8270D
2,6-Dinitrotoluene	ND	200	120	ug/Kg	1	06/12/19	WB	SW8270D
2-Chloronaphthalene	ND	280	110	ug/Kg	1	06/12/19	WB	SW8270D
2-Chlorophenol	ND	280	110	ug/Kg	1	06/12/19	WB	SW8270D
2-Methylnaphthalene	ND	280	120	ug/Kg	1	06/12/19	WB	SW8270D
2-Methylphenol (o-cresol)	ND	280	190	ug/Kg	1	06/12/19	WB	SW8270D
2-Nitroaniline	ND	280	280	ug/Kg	1	06/12/19	WB	SW8270D
2-Nitrophenol	ND	280	250	ug/Kg	1	06/12/19	WB	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	280	160	ug/Kg	1	06/12/19	WB	SW8270D
3,3'-Dichlorobenzidine	ND	200	190	ug/Kg	1	06/12/19	WB	SW8270D
3-Nitroaniline	ND	390	790	ug/Kg	1	06/12/19	WB	SW8270D
4,6-Dinitro-2-methylphenol	ND	240	79	ug/Kg	1	06/12/19	WB	SW8270D
4-Bromophenyl phenyl ether	ND	280	120	ug/Kg	1	06/12/19	WB	SW8270D
4-Chloro-3-methylphenol	ND	280	140	ug/Kg	1	06/12/19	WB	SW8270D
4-Chloroaniline	ND	310	180	ug/Kg	1	06/12/19	WB	SW8270D
4-Chlorophenyl phenyl ether	ND	280	130	ug/Kg	1	06/12/19	WB	SW8270D
4-Nitroaniline	ND	390	130	ug/Kg	1	06/12/19	WB	SW8270D
4-Nitrophenol	ND	390	180	ug/Kg	1	06/12/19	WB	SW8270D
Acenaphthene	ND	280	120	ug/Kg	1	06/12/19	WB	SW8270D
Acenaphthylene	460	280	110	ug/Kg	1	06/12/19	WB	SW8270D
Acetophenone	ND	280	120	ug/Kg	1	06/12/19	WB	SW8270D
Aniline	ND	310	310	ug/Kg	1	06/12/19	WB	SW8270D
Anthracene	390	280	130	ug/Kg	1	06/12/19	WB	SW8270D
Benz(a)anthracene	1900	280	130	ug/Kg	1	06/12/19	WB	SW8270D
Benzidine	ND	390	230	ug/Kg	1	06/12/19	WB	SW8270D
Benzo(a)pyrene	1900	200	130	ug/Kg	1	06/12/19	WB	SW8270D
Benzo(b)fluoranthene	1600	280	130	ug/Kg	1	06/12/19	WB	SW8270D
Benzo(ghi)perylene	980	280	130	ug/Kg	1	06/12/19	WB	SW8270D
Benzo(k)fluoranthene	1700	280	130	ug/Kg	1	06/12/19	WB	SW8270D
Benzoic acid	ND	2000	790	ug/Kg	1	06/12/19	WB	SW8270D
Benzyl butyl phthalate	240	J 280	100	ug/Kg	1	06/12/19	WB	SW8270D
Bis(2-chloroethoxy)methane	ND	280	110	ug/Kg	1	06/12/19	WB	SW8270D
Bis(2-chloroethyl)ether	ND	200	110	ug/Kg	1	06/12/19	WB	SW8270D
Bis(2-chloroisopropyl)ether	ND	280	110	ug/Kg	1	06/12/19	WB	SW8270D
Bis(2-ethylhexyl)phthalate	5200	280	110	ug/Kg	1	06/12/19	WB	SW8270D
Carbazole	ND	200	160	ug/Kg	1	06/12/19	WB	SW8270D
Chrysene	1700	280	130	ug/Kg	1	06/12/19	WB	SW8270D
Dibenz(a,h)anthracene	350	200	130	ug/Kg	1	06/12/19	WB	SW8270D
Dibenzofuran	ND	280	110	ug/Kg	1	06/12/19	WB	SW8270D
Diethyl phthalate	ND	280	120	ug/Kg	1	06/12/19	WB	SW8270D
Dimethylphthalate	ND	280	120	ug/Kg	1	06/12/19	WB	SW8270D
Di-n-butylphthalate	ND	280	100	ug/Kg	1	06/12/19	WB	SW8270D
Di-n-octylphthalate	460	280	100	ug/Kg	1	06/12/19	WB	SW8270D
Fluoranthene	3100	280	130	ug/Kg	1	06/12/19	WB	SW8270D
Fluorene	ND	280	130	ug/Kg	1	06/12/19	WB	SW8270D
Hexachlorobenzene	ND	200	110	ug/Kg	1	06/12/19	WB	SW8270D
Hexachlorobutadiene	ND	280	140	ug/Kg	1	06/12/19	WB	SW8270D
Hexachlorocyclopentadiene	ND	280	120	ug/Kg	1	06/12/19	WB	SW8270D

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Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Hexachloroethane	ND	200	120	ug/Kg	1	06/12/19	WB	SW8270D
Indeno(1,2,3-cd)pyrene	1200	280	130	ug/Kg	1	06/12/19	WB	SW8270D
Isophorone	ND	200	110	ug/Kg	1	06/12/19	WB	SW8270D
Naphthalene	ND	280	110	ug/Kg	1	06/12/19	WB	SW8270D
Nitrobenzene	ND	200	140	ug/Kg	1	06/12/19	WB	SW8270D
N-Nitrosodimethylamine	ND	280	110	ug/Kg	1	06/12/19	WB	SW8270D
N-Nitrosodi-n-propylamine	ND	200	130	ug/Kg	1	06/12/19	WB	SW8270D
N-Nitrosodiphenylamine	ND	280	150	ug/Kg	1	06/12/19	WB	SW8270D
Pentachloronitrobenzene	ND	280	150	ug/Kg	1	06/12/19	WB	SW8270D
Pentachlorophenol	ND	240	150	ug/Kg	1	06/12/19	WB	SW8270D
Phenanthrene	1300	280	110	ug/Kg	1	06/12/19	WB	SW8270D
Phenol	ND	280	130	ug/Kg	1	06/12/19	WB	SW8270D
Pyrene	2800	280	140	ug/Kg	1	06/12/19	WB	SW8270D
Pyridine	ND	280	97	ug/Kg	1	06/12/19	WB	SW8270D
<b>QA/QC Surrogates</b>								
% 2,4,6-Tribromophenol	87			%	1	06/12/19	WB	30 - 130 %
% 2-Fluorobiphenyl	64			%	1	06/12/19	WB	30 - 130 %
% 2-Fluorophenol	58			%	1	06/12/19	WB	30 - 130 %
% Nitrobenzene-d5	69			%	1	06/12/19	WB	30 - 130 %
% Phenol-d5	70			%	1	06/12/19	WB	30 - 130 %
% Terphenyl-d14	66			%	1	06/12/19	WB	30 - 130 %
Field Extraction	Completed					06/07/19		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.

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.

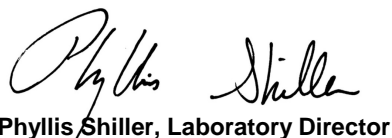
**Volatile Comment:**

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**

**June 19, 2019**

**Reviewed and Released by: Greg Lawrence, Assistant Lab Director**





Environmental Laboratories, Inc.  
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# Analysis Report

June 19, 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: DR  
 Received by: CP  
 Analyzed by: see "By" below

## Date

06/07/19  
 06/10/19

## Time

8:55  
 15:02

## Laboratory Data

SDG ID: GCD30623  
 Phoenix ID: CD30628

Project ID: 1840 PARK AVE, MANHATTAN NY  
 Client ID: F2 (0-2')

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Silver	ND	0.32	0.32	mg/Kg	1	06/12/19	EK	SW6010D
Aluminum	11100	32	6.4	mg/Kg	10	06/12/19	EK	SW6010D
Arsenic	3.63	0.64	0.64	mg/Kg	1	06/12/19	EK	SW6010D
Barium	73.8	0.6	0.32	mg/Kg	1	06/12/19	EK	SW6010D
Beryllium	0.38	0.26	0.13	mg/Kg	1	06/12/19	EK	SW6010D
Calcium	10200	32	29	mg/Kg	10	06/12/19	EK	SW6010D
Cadmium	0.34	0.32	0.32	mg/Kg	1	06/12/19	EK	SW6010D
Cobalt	9.14	0.32	0.32	mg/Kg	1	06/12/19	EK	SW6010D
Chromium	26.3	0.32	0.32	mg/Kg	1	06/12/19	EK	SW6010D
Copper	44.6	0.6	0.32	mg/kg	1	06/12/19	EK	SW6010D
Iron	19400	32	32	mg/Kg	10	06/12/19	EK	SW6010D
Mercury	0.13	0.07	0.04	mg/Kg	5	06/12/19	RS	SW7471B
Potassium	1650	6	2.5	mg/Kg	1	06/12/19	EK	SW6010D
Magnesium	4680	3.2	3.2	mg/Kg	1	06/12/19	EK	SW6010D
Manganese	298	3.2	3.2	mg/Kg	10	06/12/19	EK	SW6010D
Sodium	492	6	2.8	mg/Kg	1	06/12/19	EK	SW6010D
Nickel	19.2	0.32	0.32	mg/Kg	1	06/12/19	EK	SW6010D
Lead	57.8	0.6	0.32	mg/Kg	1	06/12/19	EK	SW6010D
Antimony	ND	3.2	3.2	mg/Kg	1	06/12/19	EK	SW6010D
Selenium	ND	1.3	1.1	mg/Kg	1	06/12/19	EK	SW6010D
Thallium	ND	1.3	1.3	mg/Kg	1	06/12/19	EK	SW6010D
Vanadium	41.5	0.32	0.32	mg/Kg	1	06/12/19	EK	SW6010D
Zinc	70.9	0.6	0.32	mg/Kg	1	06/12/19	EK	SW6010D
Percent Solid	93			%		06/10/19	ML	SW846-%Solid
Soil Extraction for PCB	Completed					06/11/19	MM/V	SW3545A
Soil Extraction for Pesticides	Completed					06/11/19	MM/V	SW3545A
Soil Extraction for SVOA	Completed					06/11/19	JJ/EE	SW3545A
Mercury Digestion	Completed					06/12/19	I/LS/I/LS	SW7471B

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Total Metals Digest	Completed					06/10/19	S/AG/BF	SW3050B
<b><u>Polychlorinated Biphenyls</u></b>								
PCB-1016	ND	71	71	ug/Kg	2	06/12/19	SC	SW8082A
PCB-1221	ND	71	71	ug/Kg	2	06/12/19	SC	SW8082A
PCB-1232	ND	71	71	ug/Kg	2	06/12/19	SC	SW8082A
PCB-1242	ND	71	71	ug/Kg	2	06/12/19	SC	SW8082A
PCB-1248	ND	71	71	ug/Kg	2	06/12/19	SC	SW8082A
PCB-1254	ND	71	71	ug/Kg	2	06/12/19	SC	SW8082A
PCB-1260	ND	71	71	ug/Kg	2	06/12/19	SC	SW8082A
PCB-1262	ND	71	71	ug/Kg	2	06/12/19	SC	SW8082A
PCB-1268	ND	71	71	ug/Kg	2	06/12/19	SC	SW8082A
<b><u>QA/QC Surrogates</u></b>								
% DCBP	77			%	2	06/12/19	SC	40 - 140 %
% DCBP (Confirmation)	65			%	2	06/12/19	SC	40 - 140 %
% TCMX	80			%	2	06/12/19	SC	30 - 150 %
% TCMX (Confirmation)	64			%	2	06/12/19	SC	30 - 150 %
<b><u>Pesticides - Soil</u></b>								
4,4' -DDD	ND	2.1	2.1	ug/Kg	2	06/13/19	CW	SW8081B
4,4' -DDE	ND	3.0	3.0	ug/Kg	2	06/13/19	CW	SW8081B
4,4' -DDT	4.3	2.1	2.1	ug/Kg	2	06/13/19	CW	SW8081B
a-BHC	ND	7.1	7.1	ug/Kg	2	06/13/19	CW	SW8081B
a-Chlordane	12	3.5	3.5	ug/Kg	2	06/13/19	CW	SW8081B
Aldrin	ND	3.5	3.5	ug/Kg	2	06/13/19	CW	SW8081B
b-BHC	ND	7.1	7.1	ug/Kg	2	06/13/19	CW	SW8081B
Chlordane	34	14	14	ug/Kg	2	06/13/19	CW	SW8081B
d-BHC	ND	7.1	7.1	ug/Kg	2	06/13/19	CW	SW8081B
Dieldrin	ND	3.5	3.5	ug/Kg	2	06/13/19	CW	SW8081B
Endosulfan I	ND	7.1	7.1	ug/Kg	2	06/13/19	CW	SW8081B
Endosulfan II	ND	7.1	7.1	ug/Kg	2	06/13/19	CW	SW8081B
Endosulfan sulfate	ND	7.1	7.1	ug/Kg	2	06/13/19	CW	SW8081B
Endrin	ND	7.1	7.1	ug/Kg	2	06/13/19	CW	SW8081B
Endrin aldehyde	ND	7.1	7.1	ug/Kg	2	06/13/19	CW	SW8081B
Endrin ketone	ND	7.1	7.1	ug/Kg	2	06/13/19	CW	SW8081B
g-BHC	ND	1.4	1.4	ug/Kg	2	06/13/19	CW	SW8081B
g-Chlordane	6.2	3.5	3.5	ug/Kg	2	06/13/19	CW	SW8081B
Heptachlor	ND	7.1	7.1	ug/Kg	2	06/13/19	CW	SW8081B
Heptachlor epoxide	ND	7.1	7.1	ug/Kg	2	06/13/19	CW	SW8081B
Methoxychlor	ND	35	35	ug/Kg	2	06/13/19	CW	SW8081B
Toxaphene	ND	140	140	ug/Kg	2	06/13/19	CW	SW8081B
<b><u>QA/QC Surrogates</u></b>								
% DCBP	62			%	2	06/13/19	CW	40 - 140 %
% DCBP (Confirmation)	48			%	2	06/13/19	CW	40 - 140 %
% TCMX	51			%	2	06/13/19	CW	40 - 140 %
% TCMX (Confirmation)	46			%	2	06/13/19	CW	40 - 140 %
<b><u>Volatiles</u></b>								
1,1,1,2-Tetrachloroethane	ND	4.7	0.95	ug/Kg	1	06/14/19	JLI	SW8260C
1,1,1-Trichloroethane	ND	4.7	0.47	ug/Kg	1	06/14/19	JLI	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
1,1,2,2-Tetrachloroethane	ND	4.7	0.95	ug/Kg	1	06/14/19	JLI	SW8260C
1,1,2-Trichloroethane	ND	4.7	0.95	ug/Kg	1	06/14/19	JLI	SW8260C
1,1-Dichloroethane	ND	4.7	0.95	ug/Kg	1	06/14/19	JLI	SW8260C
1,1-Dichloroethene	ND	4.7	0.47	ug/Kg	1	06/14/19	JLI	SW8260C
1,1-Dichloropropene	ND	4.7	0.47	ug/Kg	1	06/14/19	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	4.7	0.95	ug/Kg	1	06/14/19	JLI	SW8260C
1,2,3-Trichloropropane	ND	4.7	0.47	ug/Kg	1	06/14/19	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	4.7	0.95	ug/Kg	1	06/14/19	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	4.7	0.47	ug/Kg	1	06/14/19	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	4.7	0.95	ug/Kg	1	06/14/19	JLI	SW8260C
1,2-Dibromoethane	ND	4.7	0.47	ug/Kg	1	06/14/19	JLI	SW8260C
1,2-Dichlorobenzene	ND	4.7	0.47	ug/Kg	1	06/14/19	JLI	SW8260C
1,2-Dichloroethane	ND	4.7	0.47	ug/Kg	1	06/14/19	JLI	SW8260C
1,2-Dichloropropane	ND	4.7	0.95	ug/Kg	1	06/14/19	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	4.7	0.47	ug/Kg	1	06/14/19	JLI	SW8260C
1,3-Dichlorobenzene	ND	4.7	0.47	ug/Kg	1	06/14/19	JLI	SW8260C
1,3-Dichloropropane	ND	4.7	0.95	ug/Kg	1	06/14/19	JLI	SW8260C
1,4-Dichlorobenzene	ND	4.7	0.47	ug/Kg	1	06/14/19	JLI	SW8260C
2,2-Dichloropropane	ND	4.7	0.47	ug/Kg	1	06/14/19	JLI	SW8260C
2-Chlorotoluene	ND	4.7	0.95	ug/Kg	1	06/14/19	JLI	SW8260C
2-Hexanone	ND	24	4.7	ug/Kg	1	06/14/19	JLI	SW8260C
2-Isopropyltoluene	ND	4.7	0.47	ug/Kg	1	06/14/19	JLI	SW8260C
4-Chlorotoluene	ND	4.7	0.47	ug/Kg	1	06/14/19	JLI	SW8260C
4-Methyl-2-pentanone	ND	24	4.7	ug/Kg	1	06/14/19	JLI	SW8260C
Acetone	10	JS 24	4.7	ug/Kg	1	06/14/19	JLI	SW8260C
Acrylonitrile	ND	9.5	0.95	ug/Kg	1	06/14/19	JLI	SW8260C
Benzene	ND	4.7	0.47	ug/Kg	1	06/14/19	JLI	SW8260C
Bromobenzene	ND	4.7	0.47	ug/Kg	1	06/14/19	JLI	SW8260C
Bromochloromethane	ND	4.7	0.47	ug/Kg	1	06/14/19	JLI	SW8260C
Bromodichloromethane	ND	4.7	0.95	ug/Kg	1	06/14/19	JLI	SW8260C
Bromoform	ND	4.7	0.95	ug/Kg	1	06/14/19	JLI	SW8260C
Bromomethane	ND	4.7	1.9	ug/Kg	1	06/14/19	JLI	SW8260C
Carbon Disulfide	ND	4.7	0.95	ug/Kg	1	06/14/19	JLI	SW8260C
Carbon tetrachloride	ND	4.7	0.95	ug/Kg	1	06/14/19	JLI	SW8260C
Chlorobenzene	ND	4.7	0.47	ug/Kg	1	06/14/19	JLI	SW8260C
Chloroethane	ND	4.7	0.47	ug/Kg	1	06/14/19	JLI	SW8260C
Chloroform	ND	4.7	0.47	ug/Kg	1	06/14/19	JLI	SW8260C
Chloromethane	ND	4.7	0.95	ug/Kg	1	06/14/19	JLI	SW8260C
cis-1,2-Dichloroethene	ND	4.7	0.47	ug/Kg	1	06/14/19	JLI	SW8260C
cis-1,3-Dichloropropene	ND	4.7	0.47	ug/Kg	1	06/14/19	JLI	SW8260C
Dibromochloromethane	ND	4.7	0.95	ug/Kg	1	06/14/19	JLI	SW8260C
Dibromomethane	ND	4.7	0.95	ug/Kg	1	06/14/19	JLI	SW8260C
Dichlorodifluoromethane	ND	4.7	0.47	ug/Kg	1	06/14/19	JLI	SW8260C
Ethylbenzene	ND	4.7	0.47	ug/Kg	1	06/14/19	JLI	SW8260C
Hexachlorobutadiene	ND	4.7	0.47	ug/Kg	1	06/14/19	JLI	SW8260C
Isopropylbenzene	ND	4.7	0.47	ug/Kg	1	06/14/19	JLI	SW8260C
m&p-Xylene	ND	4.7	0.95	ug/Kg	1	06/14/19	JLI	SW8260C
Methyl Ethyl Ketone	ND	28	4.7	ug/Kg	1	06/14/19	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	9.5	0.95	ug/Kg	1	06/14/19	JLI	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Methylene chloride	ND	4.7	4.7	ug/Kg	1	06/14/19	JLI	SW8260C
Naphthalene	1.5	J 4.7	0.95	ug/Kg	1	06/14/19	JLI	SW8260C
n-Butylbenzene	ND	4.7	0.47	ug/Kg	1	06/14/19	JLI	SW8260C
n-Propylbenzene	ND	4.7	0.95	ug/Kg	1	06/14/19	JLI	SW8260C
o-Xylene	ND	4.7	0.95	ug/Kg	1	06/14/19	JLI	SW8260C
p-Isopropyltoluene	ND	4.7	0.47	ug/Kg	1	06/14/19	JLI	SW8260C
sec-Butylbenzene	ND	4.7	0.47	ug/Kg	1	06/14/19	JLI	SW8260C
Styrene	ND	4.7	0.47	ug/Kg	1	06/14/19	JLI	SW8260C
tert-Butylbenzene	ND	4.7	0.47	ug/Kg	1	06/14/19	JLI	SW8260C
Tetrachloroethene	ND	4.7	0.95	ug/Kg	1	06/14/19	JLI	SW8260C
Tetrahydrofuran (THF)	ND	9.5	2.4	ug/Kg	1	06/14/19	JLI	SW8260C
Toluene	ND	4.7	0.47	ug/Kg	1	06/14/19	JLI	SW8260C
trans-1,2-Dichloroethene	ND	4.7	0.47	ug/Kg	1	06/14/19	JLI	SW8260C
trans-1,3-Dichloropropene	ND	4.7	0.47	ug/Kg	1	06/14/19	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	9.5	2.4	ug/Kg	1	06/14/19	JLI	SW8260C
Trichloroethene	ND	4.7	0.47	ug/Kg	1	06/14/19	JLI	SW8260C
Trichlorofluoromethane	ND	4.7	0.95	ug/Kg	1	06/14/19	JLI	SW8260C
Trichlorotrifluoroethane	ND	4.7	0.47	ug/Kg	1	06/14/19	JLI	SW8260C
Vinyl chloride	ND	4.7	0.47	ug/Kg	1	06/14/19	JLI	SW8260C
<b><u>QA/QC Surrogates</u></b>								
% 1,2-dichlorobenzene-d4	100			%	1	06/14/19	JLI	70 - 130 %
% Bromofluorobenzene	90			%	1	06/14/19	JLI	70 - 130 %
% Dibromofluoromethane	95			%	1	06/14/19	JLI	70 - 130 %
% Toluene-d8	98			%	1	06/14/19	JLI	70 - 130 %
<b><u>1,4-dioxane</u></b>								
1,4-dioxane	ND	71	38	ug/kg	1	06/14/19	JLI	SW8260C
<b><u>Volatiles</u></b>								
1,1,1,2-Tetrachloroethane	ND	19	0.95	ug/Kg	1	06/14/19	JLI	SW8260C
Acrolein	ND	4.7	0.95	ug/Kg	1	06/14/19	JLI	SW8260C
Acrylonitrile	ND	19	0.47	ug/Kg	1	06/14/19	JLI	SW8260C
Tert-butyl alcohol	ND	95	19	ug/Kg	1	06/14/19	JLI	SW8260C
<b><u>Semivolatiles</u></b>								
1,2,4,5-Tetrachlorobenzene	ND	250	120	ug/Kg	1	06/12/19	AW	SW8270D
1,2,4-Trichlorobenzene	ND	250	110	ug/Kg	1	06/12/19	AW	SW8270D
1,2-Dichlorobenzene	ND	250	100	ug/Kg	1	06/12/19	AW	SW8270D
1,2-Diphenylhydrazine	ND	250	120	ug/Kg	1	06/12/19	AW	SW8270D
1,3-Dichlorobenzene	ND	250	100	ug/Kg	1	06/12/19	AW	SW8270D
1,4-Dichlorobenzene	ND	250	100	ug/Kg	1	06/12/19	AW	SW8270D
2,4,5-Trichlorophenol	ND	250	190	ug/Kg	1	06/12/19	AW	SW8270D
2,4,6-Trichlorophenol	ND	180	110	ug/Kg	1	06/12/19	AW	SW8270D
2,4-Dichlorophenol	ND	180	120	ug/Kg	1	06/12/19	AW	SW8270D
2,4-Dimethylphenol	ND	250	88	ug/Kg	1	06/12/19	AW	SW8270D
2,4-Dinitrophenol	ND	250	250	ug/Kg	1	06/12/19	AW	SW8270D
2,4-Dinitrotoluene	ND	180	140	ug/Kg	1	06/12/19	AW	SW8270D
2,6-Dinitrotoluene	ND	180	110	ug/Kg	1	06/12/19	AW	SW8270D
2-Chloronaphthalene	ND	250	100	ug/Kg	1	06/12/19	AW	SW8270D
2-Chlorophenol	ND	250	100	ug/Kg	1	06/12/19	AW	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
2-Methylnaphthalene	2500	250	110	ug/Kg	1	06/12/19	AW	SW8270D
2-Methylphenol (o-cresol)	ND	250	170	ug/Kg	1	06/12/19	AW	SW8270D
2-Nitroaniline	ND	250	250	ug/Kg	1	06/12/19	AW	SW8270D
2-Nitrophenol	ND	250	220	ug/Kg	1	06/12/19	AW	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	250	140	ug/Kg	1	06/12/19	AW	SW8270D
3,3'-Dichlorobenzidine	ND	180	170	ug/Kg	1	06/12/19	AW	SW8270D
3-Nitroaniline	ND	350	710	ug/Kg	1	06/12/19	AW	SW8270D
4,6-Dinitro-2-methylphenol	ND	210	71	ug/Kg	1	06/12/19	AW	SW8270D
4-Bromophenyl phenyl ether	ND	250	100	ug/Kg	1	06/12/19	AW	SW8270D
4-Chloro-3-methylphenol	ND	250	120	ug/Kg	1	06/12/19	AW	SW8270D
4-Chloroaniline	ND	280	170	ug/Kg	1	06/12/19	AW	SW8270D
4-Chlorophenyl phenyl ether	ND	250	120	ug/Kg	1	06/12/19	AW	SW8270D
4-Nitroaniline	ND	350	120	ug/Kg	1	06/12/19	AW	SW8270D
4-Nitrophenol	ND	350	160	ug/Kg	1	06/12/19	AW	SW8270D
Acenaphthene	1700	250	110	ug/Kg	1	06/12/19	AW	SW8270D
Acenaphthylene	3300	250	99	ug/Kg	1	06/12/19	AW	SW8270D
Acetophenone	ND	250	110	ug/Kg	1	06/12/19	AW	SW8270D
Aniline	ND	280	280	ug/Kg	1	06/12/19	AW	SW8270D
Anthracene	6800	2500	1200	ug/Kg	10	06/13/19	AW	SW8270D
Benz(a)anthracene	11000	2500	1200	ug/Kg	10	06/13/19	AW	SW8270D
Benzidine	ND	350	210	ug/Kg	1	06/12/19	AW	SW8270D
Benzo(a)pyrene	8700	1800	1200	ug/Kg	10	06/13/19	AW	SW8270D
Benzo(b)fluoranthene	7000	2500	1200	ug/Kg	10	06/13/19	AW	SW8270D
Benzo(ghi)perylene	4300	250	110	ug/Kg	1	06/12/19	AW	SW8270D
Benzo(k)fluoranthene	5900	250	120	ug/Kg	1	06/12/19	AW	SW8270D
Benzoic acid	ND	1800	710	ug/Kg	1	06/12/19	AW	SW8270D
Benzyl butyl phthalate	ND	250	91	ug/Kg	1	06/12/19	AW	SW8270D
Bis(2-chloroethoxy)methane	ND	250	98	ug/Kg	1	06/12/19	AW	SW8270D
Bis(2-chloroethyl)ether	ND	180	96	ug/Kg	1	06/12/19	AW	SW8270D
Bis(2-chloroisopropyl)ether	ND	250	98	ug/Kg	1	06/12/19	AW	SW8270D
Bis(2-ethylhexyl)phthalate	1800	250	100	ug/Kg	1	06/12/19	AW	SW8270D
Carbazole	1500	180	140	ug/Kg	1	06/12/19	AW	SW8270D
Chrysene	9400	2500	1200	ug/Kg	10	06/13/19	AW	SW8270D
Dibenz(a,h)anthracene	1800	180	110	ug/Kg	1	06/12/19	AW	SW8270D
Dibenzofuran	3300	250	100	ug/Kg	1	06/12/19	AW	SW8270D
Diethyl phthalate	ND	250	110	ug/Kg	1	06/12/19	AW	SW8270D
Dimethylphthalate	ND	250	110	ug/Kg	1	06/12/19	AW	SW8270D
Di-n-butylphthalate	ND	250	94	ug/Kg	1	06/12/19	AW	SW8270D
Di-n-octylphthalate	ND	250	91	ug/Kg	1	06/12/19	AW	SW8270D
Fluoranthene	24000	2500	1100	ug/Kg	10	06/13/19	AW	SW8270D
Fluorene	6600	250	120	ug/Kg	1	06/12/19	AW	SW8270D
Hexachlorobenzene	ND	180	100	ug/Kg	1	06/12/19	AW	SW8270D
Hexachlorobutadiene	ND	250	130	ug/Kg	1	06/12/19	AW	SW8270D
Hexachlorocyclopentadiene	ND	250	110	ug/Kg	1	06/12/19	AW	SW8270D
Hexachloroethane	ND	180	110	ug/Kg	1	06/12/19	AW	SW8270D
Indeno(1,2,3-cd)pyrene	5400	250	120	ug/Kg	1	06/12/19	AW	SW8270D
Isophorone	ND	180	99	ug/Kg	1	06/12/19	AW	SW8270D
Naphthalene	2300	250	100	ug/Kg	1	06/12/19	AW	SW8270D
Nitrobenzene	ND	180	120	ug/Kg	1	06/12/19	AW	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
N-Nitrosodimethylamine	ND	250	100	ug/Kg	1	06/12/19	AW	SW8270D
N-Nitrosodi-n-propylamine	ND	180	110	ug/Kg	1	06/12/19	AW	SW8270D
N-Nitrosodiphenylamine	ND	250	140	ug/Kg	1	06/12/19	AW	SW8270D
Pentachloronitrobenzene	ND	250	130	ug/Kg	1	06/12/19	AW	SW8270D
Pentachlorophenol	ND	210	130	ug/Kg	1	06/12/19	AW	SW8270D
Phenanthrene	24000	2500	1000	ug/Kg	10	06/13/19	AW	SW8270D
Phenol	ND	250	110	ug/Kg	1	06/12/19	AW	SW8270D
Pyrene	18000	2500	1200	ug/Kg	10	06/13/19	AW	SW8270D
Pyridine	ND	250	87	ug/Kg	1	06/12/19	AW	SW8270D
<b><u>QA/QC Surrogates</u></b>								
% 2,4,6-Tribromophenol	78			%	1	06/12/19	AW	30 - 130 %
% 2-Fluorobiphenyl	59			%	1	06/12/19	AW	30 - 130 %
% 2-Fluorophenol	59			%	1	06/12/19	AW	30 - 130 %
% Nitrobenzene-d5	78			%	1	06/12/19	AW	30 - 130 %
% Phenol-d5	78			%	1	06/12/19	AW	30 - 130 %
% Terphenyl-d14	81			%	1	06/12/19	AW	30 - 130 %
% 2,4,6-Tribromophenol (10x)	Diluted Out			%	10	06/13/19	AW	30 - 130 %
% 2-Fluorobiphenyl (10x)	Diluted Out			%	10	06/13/19	AW	30 - 130 %
% 2-Fluorophenol (10x)	Diluted Out			%	10	06/13/19	AW	30 - 130 %
% Nitrobenzene-d5 (10x)	Diluted Out			%	10	06/13/19	AW	30 - 130 %
% Phenol-d5 (10x)	Diluted Out			%	10	06/13/19	AW	30 - 130 %
% Terphenyl-d14 (10x)	Diluted Out			%	10	06/13/19	AW	30 - 130 %
Field Extraction	Completed					06/07/19		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**

**June 19, 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

June 19, 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: DR  
 Received by: CP  
 Analyzed by: see "By" below

## Date

06/07/19  
 06/10/19

## Time

9:30  
 15:02

## Laboratory Data

SDG ID: GCD30623  
 Phoenix ID: CD30629

Project ID: 1840 PARK AVE, MANHATTAN NY  
 Client ID: F3 (0-2')

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Silver	ND	0.38	0.38	mg/Kg	1	06/12/19	EK	SW6010D
Aluminum	8460	38	7.6	mg/Kg	10	06/12/19	EK	SW6010D
Arsenic	2.77	0.76	0.76	mg/Kg	1	06/12/19	EK	SW6010D
Barium	447	0.8	0.38	mg/Kg	1	06/12/19	EK	SW6010D
Beryllium	0.37	0.30	0.15	mg/Kg	1	06/12/19	EK	SW6010D
Calcium	13700	38	35	mg/Kg	10	06/12/19	EK	SW6010D
Cadmium	0.47	0.38	0.38	mg/Kg	1	06/13/19	EK	SW6010D
Cobalt	7.86	0.38	0.38	mg/Kg	1	06/12/19	EK	SW6010D
Chromium	23.3	3.8	3.8	mg/Kg	10	06/12/19	EK	SW6010D
Copper	18.3	0.8	0.38	mg/kg	1	06/12/19	EK	SW6010D
Iron	15300	38	38	mg/Kg	10	06/12/19	EK	SW6010D
Mercury	0.12	0.07	0.04	mg/Kg	5	06/12/19	RS	SW7471B
Potassium	1480	8	3.0	mg/Kg	1	06/12/19	EK	SW6010D
Magnesium	2890	3.8	3.8	mg/Kg	1	06/12/19	EK	SW6010D
Manganese	309	3.8	3.8	mg/Kg	10	06/12/19	EK	SW6010D
Sodium	167	8	3.3	mg/Kg	1	06/12/19	EK	SW6010D
Nickel	18.8	0.38	0.38	mg/Kg	1	06/12/19	EK	SW6010D
Lead	102	0.8	0.38	mg/Kg	1	06/12/19	EK	SW6010D
Antimony	ND	3.8	3.8	mg/Kg	1	06/12/19	EK	SW6010D
Selenium	ND	1.5	1.3	mg/Kg	1	06/12/19	EK	SW6010D
Thallium	ND	1.5	1.5	mg/Kg	1	06/12/19	EK	SW6010D
Vanadium	26.3	0.38	0.38	mg/Kg	1	06/12/19	EK	SW6010D
Zinc	241	7.6	3.8	mg/Kg	10	06/12/19	EK	SW6010D
Percent Solid	90			%		06/10/19	ML	SW846-%Solid
Soil Extraction for PCB	Completed					06/11/19	MM/V	SW3545A
Soil Extraction for Pesticides	Completed					06/11/19	MM/V	SW3545A
Soil Extraction for SVOA	Completed					06/11/19	JJ/EE	SW3545A
Mercury Digestion	Completed					06/12/19	I/LS/I/LS	SW7471B

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Total Metals Digest	Completed					06/10/19	S/AG/BF	SW3050B
<b><u>Polychlorinated Biphenyls</u></b>								
PCB-1016	ND	74	74	ug/Kg	2	06/12/19	SC	SW8082A
PCB-1221	ND	74	74	ug/Kg	2	06/12/19	SC	SW8082A
PCB-1232	ND	74	74	ug/Kg	2	06/12/19	SC	SW8082A
PCB-1242	ND	74	74	ug/Kg	2	06/12/19	SC	SW8082A
PCB-1248	ND	74	74	ug/Kg	2	06/12/19	SC	SW8082A
PCB-1254	ND	74	74	ug/Kg	2	06/12/19	SC	SW8082A
PCB-1260	ND	74	74	ug/Kg	2	06/12/19	SC	SW8082A
PCB-1262	ND	74	74	ug/Kg	2	06/12/19	SC	SW8082A
PCB-1268	ND	74	74	ug/Kg	2	06/12/19	SC	SW8082A
<b><u>QA/QC Surrogates</u></b>								
% DCBP	70			%	2	06/12/19	SC	40 - 140 %
% DCBP (Confirmation)	71			%	2	06/12/19	SC	40 - 140 %
% TCMX	78			%	2	06/12/19	SC	30 - 150 %
% TCMX (Confirmation)	76			%	2	06/12/19	SC	30 - 150 %
<b><u>Pesticides - Soil</u></b>								
4,4' -DDD	92	11	11	ug/Kg	10	06/13/19	CW	SW8081B
4,4' -DDE	24	2.2	2.2	ug/Kg	2	06/12/19	CW	SW8081B
4,4' -DDT	ND	2.2	2.2	ug/Kg	2	06/12/19	CW	SW8081B
a-BHC	ND	7.4	7.4	ug/Kg	2	06/12/19	CW	SW8081B
a-Chlordane	24	3.7	3.7	ug/Kg	2	06/12/19	CW	SW8081B
Aldrin	ND	3.7	3.7	ug/Kg	2	06/12/19	CW	SW8081B
b-BHC	ND	7.4	7.4	ug/Kg	2	06/12/19	CW	SW8081B
Chlordane	73	37	37	ug/Kg	2	06/12/19	CW	SW8081B
d-BHC	ND	7.4	7.4	ug/Kg	2	06/12/19	CW	SW8081B
Dieldrin	14	3.7	3.7	ug/Kg	2	06/12/19	CW	SW8081B
Endosulfan I	ND	7.4	7.4	ug/Kg	2	06/12/19	CW	SW8081B
Endosulfan II	ND	7.4	7.4	ug/Kg	2	06/12/19	CW	SW8081B
Endosulfan sulfate	ND	7.4	7.4	ug/Kg	2	06/12/19	CW	SW8081B
Endrin	ND	7.4	7.4	ug/Kg	2	06/12/19	CW	SW8081B
Endrin aldehyde	ND	7.4	7.4	ug/Kg	2	06/12/19	CW	SW8081B
Endrin ketone	ND	7.4	7.4	ug/Kg	2	06/12/19	CW	SW8081B
g-BHC	ND	1.5	1.5	ug/Kg	2	06/12/19	CW	SW8081B
g-Chlordane	14	3.7	3.7	ug/Kg	2	06/12/19	CW	SW8081B
Heptachlor	ND	7.4	7.4	ug/Kg	2	06/12/19	CW	SW8081B
Heptachlor epoxide	ND	7.4	7.4	ug/Kg	2	06/12/19	CW	SW8081B
Methoxychlor	ND	37	37	ug/Kg	2	06/12/19	CW	SW8081B
Toxaphene	ND	150	150	ug/Kg	2	06/12/19	CW	SW8081B
<b><u>QA/QC Surrogates</u></b>								
% DCBP	61			%	2	06/12/19	CW	40 - 140 %
% DCBP (Confirmation)	58			%	2	06/12/19	CW	40 - 140 %
% TCMX	57			%	2	06/12/19	CW	40 - 140 %
% TCMX (Confirmation)	52			%	2	06/12/19	CW	40 - 140 %
<b><u>Volatiles</u></b>								
1,1,1,2-Tetrachloroethane	ND	5.4	1.1	ug/Kg	1	06/14/19	JLI	SW8260C
1,1,1-Trichloroethane	ND	5.4	0.54	ug/Kg	1	06/14/19	JLI	SW8260C



Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
1,1,2,2-Tetrachloroethane	ND	5.4	1.1	ug/Kg	1	06/14/19	JLI	SW8260C
1,1,2-Trichloroethane	ND	5.4	1.1	ug/Kg	1	06/14/19	JLI	SW8260C
1,1-Dichloroethane	ND	5.4	1.1	ug/Kg	1	06/14/19	JLI	SW8260C
1,1-Dichloroethene	ND	5.4	0.54	ug/Kg	1	06/14/19	JLI	SW8260C
1,1-Dichloropropene	ND	5.4	0.54	ug/Kg	1	06/14/19	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	5.4	1.1	ug/Kg	1	06/14/19	JLI	SW8260C
1,2,3-Trichloropropane	ND	5.4	0.54	ug/Kg	1	06/14/19	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	5.4	1.1	ug/Kg	1	06/14/19	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	5.4	0.54	ug/Kg	1	06/14/19	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	5.4	1.1	ug/Kg	1	06/14/19	JLI	SW8260C
1,2-Dibromoethane	ND	5.4	0.54	ug/Kg	1	06/14/19	JLI	SW8260C
1,2-Dichlorobenzene	ND	5.4	0.54	ug/Kg	1	06/14/19	JLI	SW8260C
1,2-Dichloroethane	ND	5.4	0.54	ug/Kg	1	06/14/19	JLI	SW8260C
1,2-Dichloropropane	ND	5.4	1.1	ug/Kg	1	06/14/19	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	5.4	0.54	ug/Kg	1	06/14/19	JLI	SW8260C
1,3-Dichlorobenzene	ND	5.4	0.54	ug/Kg	1	06/14/19	JLI	SW8260C
1,3-Dichloropropane	ND	5.4	1.1	ug/Kg	1	06/14/19	JLI	SW8260C
1,4-Dichlorobenzene	ND	5.4	0.54	ug/Kg	1	06/14/19	JLI	SW8260C
2,2-Dichloropropane	ND	5.4	0.54	ug/Kg	1	06/14/19	JLI	SW8260C
2-Chlorotoluene	ND	5.4	1.1	ug/Kg	1	06/14/19	JLI	SW8260C
2-Hexanone	ND	27	5.4	ug/Kg	1	06/14/19	JLI	SW8260C
2-Isopropyltoluene	ND	5.4	0.54	ug/Kg	1	06/14/19	JLI	SW8260C
4-Chlorotoluene	ND	5.4	0.54	ug/Kg	1	06/14/19	JLI	SW8260C
4-Methyl-2-pentanone	ND	27	5.4	ug/Kg	1	06/14/19	JLI	SW8260C
Acetone	35	S 27	5.4	ug/Kg	1	06/14/19	JLI	SW8260C
Acrylonitrile	ND	11	1.1	ug/Kg	1	06/14/19	JLI	SW8260C
Benzene	ND	5.4	0.54	ug/Kg	1	06/14/19	JLI	SW8260C
Bromobenzene	ND	5.4	0.54	ug/Kg	1	06/14/19	JLI	SW8260C
Bromochloromethane	ND	5.4	0.54	ug/Kg	1	06/14/19	JLI	SW8260C
Bromodichloromethane	ND	5.4	1.1	ug/Kg	1	06/14/19	JLI	SW8260C
Bromoform	ND	5.4	1.1	ug/Kg	1	06/14/19	JLI	SW8260C
Bromomethane	ND	5.4	2.2	ug/Kg	1	06/14/19	JLI	SW8260C
Carbon Disulfide	ND	5.4	1.1	ug/Kg	1	06/14/19	JLI	SW8260C
Carbon tetrachloride	ND	5.4	1.1	ug/Kg	1	06/14/19	JLI	SW8260C
Chlorobenzene	ND	5.4	0.54	ug/Kg	1	06/14/19	JLI	SW8260C
Chloroethane	ND	5.4	0.54	ug/Kg	1	06/14/19	JLI	SW8260C
Chloroform	ND	5.4	0.54	ug/Kg	1	06/14/19	JLI	SW8260C
Chloromethane	ND	5.4	1.1	ug/Kg	1	06/14/19	JLI	SW8260C
cis-1,2-Dichloroethene	ND	5.4	0.54	ug/Kg	1	06/14/19	JLI	SW8260C
cis-1,3-Dichloropropene	ND	5.4	0.54	ug/Kg	1	06/14/19	JLI	SW8260C
Dibromochloromethane	ND	5.4	1.1	ug/Kg	1	06/14/19	JLI	SW8260C
Dibromomethane	ND	5.4	1.1	ug/Kg	1	06/14/19	JLI	SW8260C
Dichlorodifluoromethane	ND	5.4	0.54	ug/Kg	1	06/14/19	JLI	SW8260C
Ethylbenzene	ND	5.4	0.54	ug/Kg	1	06/14/19	JLI	SW8260C
Hexachlorobutadiene	ND	5.4	0.54	ug/Kg	1	06/14/19	JLI	SW8260C
Isopropylbenzene	ND	5.4	0.54	ug/Kg	1	06/14/19	JLI	SW8260C
m&p-Xylene	ND	5.4	1.1	ug/Kg	1	06/14/19	JLI	SW8260C
Methyl Ethyl Ketone	ND	32	5.4	ug/Kg	1	06/14/19	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	11	1.1	ug/Kg	1	06/14/19	JLI	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Methylene chloride	ND	5.4	5.4	ug/Kg	1	06/14/19	JLI	SW8260C
Naphthalene	ND	5.4	1.1	ug/Kg	1	06/14/19	JLI	SW8260C
n-Butylbenzene	ND	5.4	0.54	ug/Kg	1	06/14/19	JLI	SW8260C
n-Propylbenzene	ND	5.4	1.1	ug/Kg	1	06/14/19	JLI	SW8260C
o-Xylene	ND	5.4	1.1	ug/Kg	1	06/14/19	JLI	SW8260C
p-Isopropyltoluene	ND	5.4	0.54	ug/Kg	1	06/14/19	JLI	SW8260C
sec-Butylbenzene	ND	5.4	0.54	ug/Kg	1	06/14/19	JLI	SW8260C
Styrene	ND	5.4	0.54	ug/Kg	1	06/14/19	JLI	SW8260C
tert-Butylbenzene	ND	5.4	0.54	ug/Kg	1	06/14/19	JLI	SW8260C
Tetrachloroethene	ND	5.4	1.1	ug/Kg	1	06/14/19	JLI	SW8260C
Tetrahydrofuran (THF)	ND	11	2.7	ug/Kg	1	06/14/19	JLI	SW8260C
Toluene	ND	5.4	0.54	ug/Kg	1	06/14/19	JLI	SW8260C
trans-1,2-Dichloroethene	ND	5.4	0.54	ug/Kg	1	06/14/19	JLI	SW8260C
trans-1,3-Dichloropropene	ND	5.4	0.54	ug/Kg	1	06/14/19	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	11	2.7	ug/Kg	1	06/14/19	JLI	SW8260C
Trichloroethene	ND	5.4	0.54	ug/Kg	1	06/14/19	JLI	SW8260C
Trichlorofluoromethane	ND	5.4	1.1	ug/Kg	1	06/14/19	JLI	SW8260C
Trichlorotrifluoroethane	ND	5.4	0.54	ug/Kg	1	06/14/19	JLI	SW8260C
Vinyl chloride	ND	5.4	0.54	ug/Kg	1	06/14/19	JLI	SW8260C
<b><u>QA/QC Surrogates</u></b>								
% 1,2-dichlorobenzene-d4	99			%	1	06/14/19	JLI	70 - 130 %
% Bromofluorobenzene	97			%	1	06/14/19	JLI	70 - 130 %
% Dibromofluoromethane	93			%	1	06/14/19	JLI	70 - 130 %
% Toluene-d8	101			%	1	06/14/19	JLI	70 - 130 %
<b><u>1,4-dioxane</u></b>								
1,4-dioxane	ND	81	43	ug/kg	1	06/14/19	JLI	SW8260C
<b><u>QA/QC Surrogates</u></b>								
% 1,2-dichlorobenzene-d4	99			%	1	06/14/19	JLI	70 - 130 %
% Bromofluorobenzene	97			%	1	06/14/19	JLI	70 - 130 %
% Dibromofluoromethane	93			%	1	06/14/19	JLI	70 - 130 %
% Toluene-d8	101			%	1	06/14/19	JLI	70 - 130 %
<b><u>Volatiles</u></b>								
1,1,1,2-Tetrachloroethane	ND	22	1.1	ug/Kg	1	06/14/19	JLI	SW8260C
Acrolein	ND	5.4	1.1	ug/Kg	1	06/14/19	JLI	SW8260C
Acrylonitrile	ND	22	0.54	ug/Kg	1	06/14/19	JLI	SW8260C
Tert-butyl alcohol	ND	110	22	ug/Kg	1	06/14/19	JLI	SW8260C
<b><u>Semivolatiles</u></b>								
1,2,4,5-Tetrachlorobenzene	ND	260	130	ug/Kg	1	06/12/19	WB	SW8270D
1,2,4-Trichlorobenzene	ND	260	110	ug/Kg	1	06/12/19	WB	SW8270D
1,2-Dichlorobenzene	ND	260	100	ug/Kg	1	06/12/19	WB	SW8270D
1,2-Diphenylhydrazine	ND	260	120	ug/Kg	1	06/12/19	WB	SW8270D
1,3-Dichlorobenzene	ND	260	110	ug/Kg	1	06/12/19	WB	SW8270D
1,4-Dichlorobenzene	ND	260	110	ug/Kg	1	06/12/19	WB	SW8270D
2,4,5-Trichlorophenol	ND	260	200	ug/Kg	1	06/12/19	WB	SW8270D
2,4,6-Trichlorophenol	ND	180	120	ug/Kg	1	06/12/19	WB	SW8270D
2,4-Dichlorophenol	ND	180	130	ug/Kg	1	06/12/19	WB	SW8270D
2,4-Dimethylphenol	ND	260	90	ug/Kg	1	06/12/19	WB	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
2,4-Dinitrophenol	ND	260	260	ug/Kg	1	06/12/19	WB	SW8270D
2,4-Dinitrotoluene	ND	180	140	ug/Kg	1	06/12/19	WB	SW8270D
2,6-Dinitrotoluene	ND	180	120	ug/Kg	1	06/12/19	WB	SW8270D
2-Chloronaphthalene	ND	260	100	ug/Kg	1	06/12/19	WB	SW8270D
2-Chlorophenol	ND	260	100	ug/Kg	1	06/12/19	WB	SW8270D
2-Methylnaphthalene	ND	260	110	ug/Kg	1	06/12/19	WB	SW8270D
2-Methylphenol (o-cresol)	ND	260	170	ug/Kg	1	06/12/19	WB	SW8270D
2-Nitroaniline	ND	260	260	ug/Kg	1	06/12/19	WB	SW8270D
2-Nitrophenol	ND	260	230	ug/Kg	1	06/12/19	WB	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	260	140	ug/Kg	1	06/12/19	WB	SW8270D
3,3'-Dichlorobenzidine	ND	180	170	ug/Kg	1	06/12/19	WB	SW8270D
3-Nitroaniline	ND	360	730	ug/Kg	1	06/12/19	WB	SW8270D
4,6-Dinitro-2-methylphenol	ND	220	73	ug/Kg	1	06/12/19	WB	SW8270D
4-Bromophenyl phenyl ether	ND	260	110	ug/Kg	1	06/12/19	WB	SW8270D
4-Chloro-3-methylphenol	ND	260	130	ug/Kg	1	06/12/19	WB	SW8270D
4-Chloroaniline	ND	290	170	ug/Kg	1	06/12/19	WB	SW8270D
4-Chlorophenyl phenyl ether	ND	260	120	ug/Kg	1	06/12/19	WB	SW8270D
4-Nitroaniline	ND	360	120	ug/Kg	1	06/12/19	WB	SW8270D
4-Nitrophenol	ND	360	160	ug/Kg	1	06/12/19	WB	SW8270D
Acenaphthene	ND	260	110	ug/Kg	1	06/12/19	WB	SW8270D
Acenaphthylene	830	260	100	ug/Kg	1	06/12/19	WB	SW8270D
Acetophenone	ND	260	110	ug/Kg	1	06/12/19	WB	SW8270D
Aniline	ND	290	290	ug/Kg	1	06/12/19	WB	SW8270D
Anthracene	410	260	120	ug/Kg	1	06/12/19	WB	SW8270D
Benz(a)anthracene	1800	260	120	ug/Kg	1	06/12/19	WB	SW8270D
Benzidine	ND	360	210	ug/Kg	1	06/12/19	WB	SW8270D
Benzo(a)pyrene	2200	180	120	ug/Kg	1	06/12/19	WB	SW8270D
Benzo(b)fluoranthene	1800	260	120	ug/Kg	1	06/12/19	WB	SW8270D
Benzo(ghi)perylene	1500	260	120	ug/Kg	1	06/12/19	WB	SW8270D
Benzo(k)fluoranthene	1700	260	120	ug/Kg	1	06/12/19	WB	SW8270D
Benzoic acid	ND	1800	730	ug/Kg	1	06/12/19	WB	SW8270D
Benzyl butyl phthalate	120	J 260	94	ug/Kg	1	06/12/19	WB	SW8270D
Bis(2-chloroethoxy)methane	ND	260	100	ug/Kg	1	06/12/19	WB	SW8270D
Bis(2-chloroethyl)ether	ND	180	98	ug/Kg	1	06/12/19	WB	SW8270D
Bis(2-chloroisopropyl)ether	ND	260	100	ug/Kg	1	06/12/19	WB	SW8270D
Bis(2-ethylhexyl)phthalate	320	260	100	ug/Kg	1	06/12/19	WB	SW8270D
Carbazole	ND	180	150	ug/Kg	1	06/12/19	WB	SW8270D
Chrysene	2000	260	120	ug/Kg	1	06/12/19	WB	SW8270D
Dibenz(a,h)anthracene	500	180	120	ug/Kg	1	06/12/19	WB	SW8270D
Dibenzofuran	ND	260	110	ug/Kg	1	06/12/19	WB	SW8270D
Diethyl phthalate	ND	260	120	ug/Kg	1	06/12/19	WB	SW8270D
Dimethylphthalate	ND	260	110	ug/Kg	1	06/12/19	WB	SW8270D
Di-n-butylphthalate	ND	260	97	ug/Kg	1	06/12/19	WB	SW8270D
Di-n-octylphthalate	ND	260	94	ug/Kg	1	06/12/19	WB	SW8270D
Fluoranthene	2600	260	120	ug/Kg	1	06/12/19	WB	SW8270D
Fluorene	ND	260	120	ug/Kg	1	06/12/19	WB	SW8270D
Hexachlorobenzene	ND	180	110	ug/Kg	1	06/12/19	WB	SW8270D
Hexachlorobutadiene	ND	260	130	ug/Kg	1	06/12/19	WB	SW8270D
Hexachlorocyclopentadiene	ND	260	110	ug/Kg	1	06/12/19	WB	SW8270D

1

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Hexachloroethane	ND	180	110	ug/Kg	1	06/12/19	WB	SW8270D
Indeno(1,2,3-cd)pyrene	1700	260	120	ug/Kg	1	06/12/19	WB	SW8270D
Isophorone	ND	180	100	ug/Kg	1	06/12/19	WB	SW8270D
Naphthalene	ND	260	100	ug/Kg	1	06/12/19	WB	SW8270D
Nitrobenzene	ND	180	130	ug/Kg	1	06/12/19	WB	SW8270D
N-Nitrosodimethylamine	ND	260	100	ug/Kg	1	06/12/19	WB	SW8270D
N-Nitrosodi-n-propylamine	ND	180	120	ug/Kg	1	06/12/19	WB	SW8270D
N-Nitrosodiphenylamine	ND	260	140	ug/Kg	1	06/12/19	WB	SW8270D
Pentachloronitrobenzene	ND	260	140	ug/Kg	1	06/12/19	WB	SW8270D
Pentachlorophenol	ND	220	140	ug/Kg	1	06/12/19	WB	SW8270D
Phenanthrene	850	260	100	ug/Kg	1	06/12/19	WB	SW8270D
Phenol	ND	260	120	ug/Kg	1	06/12/19	WB	SW8270D
Pyrene	3000	260	130	ug/Kg	1	06/12/19	WB	SW8270D
Pyridine	ND	260	90	ug/Kg	1	06/12/19	WB	SW8270D
<b>QA/QC Surrogates</b>								
% 2,4,6-Tribromophenol	87			%	1	06/12/19	WB	30 - 130 %
% 2-Fluorobiphenyl	63			%	1	06/12/19	WB	30 - 130 %
% 2-Fluorophenol	60			%	1	06/12/19	WB	30 - 130 %
% Nitrobenzene-d5	71			%	1	06/12/19	WB	30 - 130 %
% Phenol-d5	73			%	1	06/12/19	WB	30 - 130 %
% Terphenyl-d14	66			%	1	06/12/19	WB	30 - 130 %
Field Extraction	Completed					06/07/19		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:**

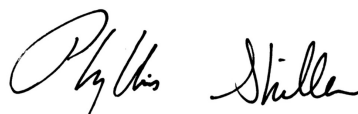
Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

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**

**June 19, 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

June 19, 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: DR  
 Received by: CP  
 Analyzed by: see "By" below

## Date

06/07/19  
 06/10/19

## Time

10:00  
 15:02

## Laboratory Data

SDG ID: GCD30623  
 Phoenix ID: CD30630

Project ID: 1840 PARK AVE, MANHATTAN NY  
 Client ID: F4 (0-2')

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Silver	ND	0.37	0.37	mg/Kg	1	06/12/19	EK	SW6010D
Aluminum	5620	37	7.5	mg/Kg	10	06/12/19	EK	SW6010D
Arsenic	5.78	0.75	0.75	mg/Kg	1	06/12/19	EK	SW6010D
Barium	508	0.7	0.37	mg/Kg	1	06/12/19	EK	SW6010D
Beryllium	0.26	J 0.30	0.15	mg/Kg	1	06/12/19	EK	SW6010D
Calcium	33700	37	34	mg/Kg	10	06/12/19	EK	SW6010D
Cadmium	0.83	0.37	0.37	mg/Kg	1	06/13/19	CPP	SW6010D
Cobalt	4.70	0.37	0.37	mg/Kg	1	06/12/19	EK	SW6010D
Chromium	15.3	0.37	0.37	mg/Kg	1	06/13/19	CPP	SW6010D
Copper	75.7	0.7	0.37	mg/kg	1	06/12/19	EK	SW6010D
Iron	10500	37	37	mg/Kg	10	06/12/19	EK	SW6010D
Mercury	1.58	0.13	0.08	mg/Kg	10	06/12/19	RS	SW7471B
Potassium	1040	7	2.9	mg/Kg	1	06/12/19	EK	SW6010D
Magnesium	5710	37	37	mg/Kg	10	06/12/19	EK	SW6010D
Manganese	173	3.7	3.7	mg/Kg	10	06/12/19	EK	SW6010D
Sodium	239	7	3.2	mg/Kg	1	06/12/19	EK	SW6010D
Nickel	12.2	0.37	0.37	mg/Kg	1	06/12/19	EK	SW6010D
Lead	619	7.5	3.7	mg/Kg	10	06/12/19	EK	SW6010D
Antimony	7.3	3.7	3.7	mg/Kg	1	06/12/19	EK	SW6010D
Selenium	ND	1.5	1.3	mg/Kg	1	06/12/19	EK	SW6010D
Thallium	ND	1.5	1.5	mg/Kg	1	06/12/19	EK	SW6010D
Vanadium	23.2	0.37	0.37	mg/Kg	1	06/12/19	EK	SW6010D
Zinc	290	7.5	3.7	mg/Kg	10	06/12/19	EK	SW6010D
Percent Solid	89			%		06/10/19	ML	SW846-%Solid
Soil Extraction for PCB	Completed					06/11/19	MM/V	SW3545A
Soil Extraction for Pesticides	Completed					06/11/19	MM/V	SW3545A
Soil Extraction for SVOA	Completed					06/11/19	JJ/EE	SW3545A
Mercury Digestion	Completed					06/12/19	I/LS/I/LS	SW7471B

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Total Metals Digest	Completed					06/10/19	S/AG/BF	SW3050B
<b><u>Polychlorinated Biphenyls</u></b>								
PCB-1016	ND	74	74	ug/Kg	2	06/13/19	SC	SW8082A
PCB-1221	ND	74	74	ug/Kg	2	06/13/19	SC	SW8082A
PCB-1232	ND	74	74	ug/Kg	2	06/13/19	SC	SW8082A
PCB-1242	ND	74	74	ug/Kg	2	06/13/19	SC	SW8082A
PCB-1248	ND	74	74	ug/Kg	2	06/13/19	SC	SW8082A
PCB-1254	ND	74	74	ug/Kg	2	06/13/19	SC	SW8082A
PCB-1260	ND	74	74	ug/Kg	2	06/13/19	SC	SW8082A
PCB-1262	ND	74	74	ug/Kg	2	06/13/19	SC	SW8082A
PCB-1268	ND	74	74	ug/Kg	2	06/13/19	SC	SW8082A
<b><u>QA/QC Surrogates</u></b>								
% DCBP	48			%	2	06/13/19	SC	40 - 140 %
% DCBP (Confirmation)	47			%	2	06/13/19	SC	40 - 140 %
% TCMX	55			%	2	06/13/19	SC	30 - 150 %
% TCMX (Confirmation)	51			%	2	06/13/19	SC	30 - 150 %
<b><u>Pesticides - Soil</u></b>								
4,4' -DDD	ND	2.2	2.2	ug/Kg	2	06/12/19	CW	SW8081B
4,4' -DDE	ND	2.2	2.2	ug/Kg	2	06/12/19	CW	SW8081B
4,4' -DDT	ND	2.2	2.2	ug/Kg	2	06/12/19	CW	SW8081B
a-BHC	ND	7.4	7.4	ug/Kg	2	06/12/19	CW	SW8081B
a-Chlordane	ND	3.7	3.7	ug/Kg	2	06/12/19	CW	SW8081B
Aldrin	ND	3.7	3.7	ug/Kg	2	06/12/19	CW	SW8081B
b-BHC	ND	7.4	7.4	ug/Kg	2	06/12/19	CW	SW8081B
Chlordane	ND	37	37	ug/Kg	2	06/12/19	CW	SW8081B
d-BHC	ND	7.4	7.4	ug/Kg	2	06/12/19	CW	SW8081B
Dieldrin	ND	3.7	3.7	ug/Kg	2	06/12/19	CW	SW8081B
Endosulfan I	ND	7.4	7.4	ug/Kg	2	06/12/19	CW	SW8081B
Endosulfan II	ND	7.4	7.4	ug/Kg	2	06/12/19	CW	SW8081B
Endosulfan sulfate	ND	7.4	7.4	ug/Kg	2	06/12/19	CW	SW8081B
Endrin	ND	7.4	7.4	ug/Kg	2	06/12/19	CW	SW8081B
Endrin aldehyde	ND	7.4	7.4	ug/Kg	2	06/12/19	CW	SW8081B
Endrin ketone	ND	7.4	7.4	ug/Kg	2	06/12/19	CW	SW8081B
g-BHC	ND	1.5	1.5	ug/Kg	2	06/12/19	CW	SW8081B
g-Chlordane	ND	3.7	3.7	ug/Kg	2	06/12/19	CW	SW8081B
Heptachlor	ND	7.4	7.4	ug/Kg	2	06/12/19	CW	SW8081B
Heptachlor epoxide	ND	7.4	7.4	ug/Kg	2	06/12/19	CW	SW8081B
Methoxychlor	ND	37	37	ug/Kg	2	06/12/19	CW	SW8081B
Toxaphene	ND	150	150	ug/Kg	2	06/12/19	CW	SW8081B
<b><u>QA/QC Surrogates</u></b>								
% DCBP	44			%	2	06/12/19	CW	40 - 140 %
% DCBP (Confirmation)	48			%	2	06/12/19	CW	40 - 140 %
% TCMX	42			%	2	06/12/19	CW	40 - 140 %
% TCMX (Confirmation)	45			%	2	06/12/19	CW	40 - 140 %
<b><u>Volatiles</u></b>								
1,1,1,2-Tetrachloroethane	ND	5.4	1.1	ug/Kg	1	06/14/19	JLI	SW8260C
1,1,1-Trichloroethane	ND	5.4	0.55	ug/Kg	1	06/14/19	JLI	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
1,1,2,2-Tetrachloroethane	ND	350	70	ug/Kg	50	06/14/19	JLI	SW8260C
1,1,2-Trichloroethane	ND	5.4	1.1	ug/Kg	1	06/14/19	JLI	SW8260C
1,1-Dichloroethane	ND	5.4	1.1	ug/Kg	1	06/14/19	JLI	SW8260C
1,1-Dichloroethene	ND	5.4	0.55	ug/Kg	1	06/14/19	JLI	SW8260C
1,1-Dichloropropene	ND	5.4	0.55	ug/Kg	1	06/14/19	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	350	70	ug/Kg	50	06/14/19	JLI	SW8260C
1,2,3-Trichloropropane	ND	350	35	ug/Kg	50	06/14/19	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	350	70	ug/Kg	50	06/14/19	JLI	SW8260C
1,2,4-Trimethylbenzene	79	J 350	35	ug/Kg	50	06/14/19	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	350	70	ug/Kg	50	06/14/19	JLI	SW8260C
1,2-Dibromoethane	ND	5.4	0.55	ug/Kg	1	06/14/19	JLI	SW8260C
1,2-Dichlorobenzene	ND	350	35	ug/Kg	50	06/14/19	JLI	SW8260C
1,2-Dichloroethane	ND	5.4	0.55	ug/Kg	1	06/14/19	JLI	SW8260C
1,2-Dichloropropane	ND	5.4	1.1	ug/Kg	1	06/14/19	JLI	SW8260C
1,3,5-Trimethylbenzene	56	J 350	35	ug/Kg	50	06/14/19	JLI	SW8260C
1,3-Dichlorobenzene	ND	350	35	ug/Kg	50	06/14/19	JLI	SW8260C
1,3-Dichloropropane	ND	5.4	1.1	ug/Kg	1	06/14/19	JLI	SW8260C
1,4-Dichlorobenzene	ND	350	35	ug/Kg	50	06/14/19	JLI	SW8260C
2,2-Dichloropropane	ND	5.4	0.55	ug/Kg	1	06/14/19	JLI	SW8260C
2-Chlorotoluene	ND	350	70	ug/Kg	50	06/14/19	JLI	SW8260C
2-Hexanone	ND	27	5.4	ug/Kg	1	06/14/19	JLI	SW8260C
2-Isopropyltoluene	ND	350	35	ug/Kg	50	06/14/19	JLI	SW8260C
4-Chlorotoluene	ND	350	35	ug/Kg	50	06/14/19	JLI	SW8260C
4-Methyl-2-pentanone	ND	27	5.4	ug/Kg	1	06/14/19	JLI	SW8260C
Acetone	ND	27	5.4	ug/Kg	1	06/14/19	JLI	SW8260C
Acrylonitrile	ND	11	1.1	ug/Kg	1	06/14/19	JLI	SW8260C
Benzene	ND	5.4	0.55	ug/Kg	1	06/14/19	JLI	SW8260C
Bromobenzene	ND	350	35	ug/Kg	50	06/14/19	JLI	SW8260C
Bromochloromethane	ND	5.4	0.55	ug/Kg	1	06/14/19	JLI	SW8260C
Bromodichloromethane	ND	5.4	1.1	ug/Kg	1	06/14/19	JLI	SW8260C
Bromoform	ND	5.4	1.1	ug/Kg	1	06/14/19	JLI	SW8260C
Bromomethane	ND	5.4	2.2	ug/Kg	1	06/14/19	JLI	SW8260C
Carbon Disulfide	ND	5.4	1.1	ug/Kg	1	06/14/19	JLI	SW8260C
Carbon tetrachloride	ND	5.4	1.1	ug/Kg	1	06/14/19	JLI	SW8260C
Chlorobenzene	ND	5.4	0.55	ug/Kg	1	06/14/19	JLI	SW8260C
Chloroethane	ND	5.4	0.55	ug/Kg	1	06/14/19	JLI	SW8260C
Chloroform	ND	5.4	0.55	ug/Kg	1	06/14/19	JLI	SW8260C
Chloromethane	ND	5.4	1.1	ug/Kg	1	06/14/19	JLI	SW8260C
cis-1,2-Dichloroethene	ND	5.4	0.55	ug/Kg	1	06/14/19	JLI	SW8260C
cis-1,3-Dichloropropene	ND	5.4	0.55	ug/Kg	1	06/14/19	JLI	SW8260C
Dibromochloromethane	ND	5.4	1.1	ug/Kg	1	06/14/19	JLI	SW8260C
Dibromomethane	ND	5.4	1.1	ug/Kg	1	06/14/19	JLI	SW8260C
Dichlorodifluoromethane	ND	5.4	0.55	ug/Kg	1	06/14/19	JLI	SW8260C
Ethylbenzene	ND	5.4	0.55	ug/Kg	1	06/14/19	JLI	SW8260C
Hexachlorobutadiene	ND	350	35	ug/Kg	50	06/14/19	JLI	SW8260C
Isopropylbenzene	ND	350	35	ug/Kg	50	06/14/19	JLI	SW8260C
m&p-Xylene	130	J 350	70	ug/Kg	50	06/14/19	JLI	SW8260C
Methyl Ethyl Ketone	ND	33	5.4	ug/Kg	1	06/14/19	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	11	1.1	ug/Kg	1	06/14/19	JLI	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Methylene chloride	ND	5.4	5.4	ug/Kg	1	06/14/19	JLI	SW8260C
Naphthalene	ND	350	70	ug/Kg	50	06/14/19	JLI	SW8260C
n-Butylbenzene	ND	350	35	ug/Kg	50	06/14/19	JLI	SW8260C
n-Propylbenzene	ND	350	70	ug/Kg	50	06/14/19	JLI	SW8260C
o-Xylene	ND	5.4	1.1	ug/Kg	1	06/14/19	JLI	SW8260C
p-Isopropyltoluene	ND	350	35	ug/Kg	50	06/14/19	JLI	SW8260C
sec-Butylbenzene	ND	350	35	ug/Kg	50	06/14/19	JLI	SW8260C
Styrene	ND	5.4	0.55	ug/Kg	1	06/14/19	JLI	SW8260C
tert-Butylbenzene	ND	350	35	ug/Kg	50	06/14/19	JLI	SW8260C
Tetrachloroethene	84	J 350	70	ug/Kg	50	06/14/19	JLI	SW8260C
Tetrahydrofuran (THF)	ND	11	2.7	ug/Kg	1	06/14/19	JLI	SW8260C
Toluene	120	J 350	35	ug/Kg	50	06/14/19	JLI	SW8260C
trans-1,2-Dichloroethene	ND	5.4	0.55	ug/Kg	1	06/14/19	JLI	SW8260C
trans-1,3-Dichloropropene	ND	5.4	0.55	ug/Kg	1	06/14/19	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	700	180	ug/Kg	50	06/14/19	JLI	SW8260C
Trichloroethene	ND	5.4	0.55	ug/Kg	1	06/14/19	JLI	SW8260C
Trichlorofluoromethane	ND	5.4	1.1	ug/Kg	1	06/14/19	JLI	SW8260C
Trichlorotrifluoroethane	ND	5.4	0.55	ug/Kg	1	06/14/19	JLI	SW8260C
Vinyl chloride	ND	5.4	0.55	ug/Kg	1	06/14/19	JLI	SW8260C
<b><u>QA/QC Surrogates</u></b>								
% 1,2-dichlorobenzene-d4	102			%	1	06/14/19	JLI	70 - 130 %
% Bromofluorobenzene	86			%	1	06/14/19	JLI	70 - 130 %
% Dibromofluoromethane	96			%	1	06/14/19	JLI	70 - 130 %
% Toluene-d8	99			%	1	06/14/19	JLI	70 - 130 %
% 1,2-dichlorobenzene-d4 (50x)	98			%	50	06/14/19	JLI	70 - 130 %
% Bromofluorobenzene (50x)	100			%	50	06/14/19	JLI	70 - 130 %
% Dibromofluoromethane (50x)	92			%	50	06/14/19	JLI	70 - 130 %
% Toluene-d8 (50x)	101			%	50	06/14/19	JLI	70 - 130 %
<b><u>1,4-dioxane</u></b>								
1,4-dioxane	ND	82	44	ug/kg	1	06/14/19	JLI	SW8260C
<b><u>QA/QC Surrogates</u></b>								
% 1,2-dichlorobenzene-d4	102			%	1	06/14/19	JLI	70 - 130 %
% Bromofluorobenzene	86			%	1	06/14/19	JLI	70 - 130 %
% Dibromofluoromethane	96			%	1	06/14/19	JLI	70 - 130 %
% Toluene-d8	99			%	1	06/14/19	JLI	70 - 130 %
<b><u>Volatiles</u></b>								
1,1,1,2-Tetrachloroethane	ND	22	1.1	ug/Kg	1	06/14/19	JLI	SW8260C
Acrolein	ND	5.4	1.1	ug/Kg	1	06/14/19	JLI	SW8260C
Acrylonitrile	ND	22	0.55	ug/Kg	1	06/14/19	JLI	SW8260C
Tert-butyl alcohol	ND	110	22	ug/Kg	1	06/14/19	JLI	SW8260C
<b><u>Semivolatiles</u></b>								
1,2,4,5-Tetrachlorobenzene	ND	260	130	ug/Kg	1	06/12/19	WB	SW8270D
1,2,4-Trichlorobenzene	ND	260	110	ug/Kg	1	06/12/19	WB	SW8270D
1,2-Dichlorobenzene	ND	260	100	ug/Kg	1	06/12/19	WB	SW8270D
1,2-Diphenylhydrazine	ND	260	120	ug/Kg	1	06/12/19	WB	SW8270D
1,3-Dichlorobenzene	ND	260	110	ug/Kg	1	06/12/19	WB	SW8270D
1,4-Dichlorobenzene	ND	260	110	ug/Kg	1	06/12/19	WB	SW8270D



Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
2,4,5-Trichlorophenol	ND	260	200	ug/Kg	1	06/12/19	WB	SW8270D
2,4,6-Trichlorophenol	ND	180	120	ug/Kg	1	06/12/19	WB	SW8270D
2,4-Dichlorophenol	ND	180	130	ug/Kg	1	06/12/19	WB	SW8270D
2,4-Dimethylphenol	ND	260	92	ug/Kg	1	06/12/19	WB	SW8270D
2,4-Dinitrophenol	ND	260	260	ug/Kg	1	06/12/19	WB	SW8270D
2,4-Dinitrotoluene	ND	180	150	ug/Kg	1	06/12/19	WB	SW8270D
2,6-Dinitrotoluene	ND	180	120	ug/Kg	1	06/12/19	WB	SW8270D
2-Chloronaphthalene	ND	260	100	ug/Kg	1	06/12/19	WB	SW8270D
2-Chlorophenol	ND	260	100	ug/Kg	1	06/12/19	WB	SW8270D
2-Methylnaphthalene	180	J 260	110	ug/Kg	1	06/12/19	WB	SW8270D
2-Methylphenol (o-cresol)	ND	260	170	ug/Kg	1	06/12/19	WB	SW8270D
2-Nitroaniline	ND	260	260	ug/Kg	1	06/12/19	WB	SW8270D
2-Nitrophenol	ND	260	230	ug/Kg	1	06/12/19	WB	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	260	150	ug/Kg	1	06/12/19	WB	SW8270D
3,3'-Dichlorobenzidine	ND	180	170	ug/Kg	1	06/12/19	WB	SW8270D
3-Nitroaniline	ND	370	740	ug/Kg	1	06/12/19	WB	SW8270D
4,6-Dinitro-2-methylphenol	ND	220	74	ug/Kg	1	06/12/19	WB	SW8270D
4-Bromophenyl phenyl ether	ND	260	110	ug/Kg	1	06/12/19	WB	SW8270D
4-Chloro-3-methylphenol	ND	260	130	ug/Kg	1	06/12/19	WB	SW8270D
4-Chloroaniline	ND	300	170	ug/Kg	1	06/12/19	WB	SW8270D
4-Chlorophenyl phenyl ether	ND	260	120	ug/Kg	1	06/12/19	WB	SW8270D
4-Nitroaniline	ND	370	120	ug/Kg	1	06/12/19	WB	SW8270D
4-Nitrophenol	ND	370	170	ug/Kg	1	06/12/19	WB	SW8270D
Acenaphthene	ND	260	110	ug/Kg	1	06/12/19	WB	SW8270D
Acenaphthylene	160	J 260	100	ug/Kg	1	06/12/19	WB	SW8270D
Acetophenone	ND	260	120	ug/Kg	1	06/12/19	WB	SW8270D
Aniline	ND	300	300	ug/Kg	1	06/12/19	WB	SW8270D
Anthracene	180	J 260	120	ug/Kg	1	06/12/19	WB	SW8270D
Benz(a)anthracene	930	260	120	ug/Kg	1	06/12/19	WB	SW8270D
Benzidine	ND	370	220	ug/Kg	1	06/12/19	WB	SW8270D
Benzo(a)pyrene	1100	180	120	ug/Kg	1	06/12/19	WB	SW8270D
Benzo(b)fluoranthene	1200	260	130	ug/Kg	1	06/12/19	WB	SW8270D
Benzo(ghi)perylene	1200	260	120	ug/Kg	1	06/12/19	WB	SW8270D
Benzo(k)fluoranthene	1000	260	120	ug/Kg	1	06/12/19	WB	SW8270D
Benzoic acid	ND	1800	740	ug/Kg	1	06/12/19	WB	SW8270D
Benzyl butyl phthalate	ND	260	95	ug/Kg	1	06/12/19	WB	SW8270D
Bis(2-chloroethoxy)methane	ND	260	100	ug/Kg	1	06/12/19	WB	SW8270D
Bis(2-chloroethyl)ether	ND	180	100	ug/Kg	1	06/12/19	WB	SW8270D
Bis(2-chloroisopropyl)ether	ND	260	100	ug/Kg	1	06/12/19	WB	SW8270D
Bis(2-ethylhexyl)phthalate	ND	260	110	ug/Kg	1	06/12/19	WB	SW8270D
Carbazole	ND	180	150	ug/Kg	1	06/12/19	WB	SW8270D
Chrysene	1100	260	120	ug/Kg	1	06/12/19	WB	SW8270D
Dibenz(a,h)anthracene	360	180	120	ug/Kg	1	06/12/19	WB	SW8270D
Dibenzofuran	ND	260	110	ug/Kg	1	06/12/19	WB	SW8270D
Diethyl phthalate	ND	260	120	ug/Kg	1	06/12/19	WB	SW8270D
Dimethylphthalate	ND	260	110	ug/Kg	1	06/12/19	WB	SW8270D
Di-n-butylphthalate	ND	260	98	ug/Kg	1	06/12/19	WB	SW8270D
Di-n-octylphthalate	ND	260	95	ug/Kg	1	06/12/19	WB	SW8270D
Fluoranthene	1700	260	120	ug/Kg	1	06/12/19	WB	SW8270D

1

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Fluorene	ND	260	120	ug/Kg	1	06/12/19	WB	SW8270D
Hexachlorobenzene	ND	180	110	ug/Kg	1	06/12/19	WB	SW8270D
Hexachlorobutadiene	ND	260	130	ug/Kg	1	06/12/19	WB	SW8270D
Hexachlorocyclopentadiene	ND	260	110	ug/Kg	1	06/12/19	WB	SW8270D
Hexachloroethane	ND	180	110	ug/Kg	1	06/12/19	WB	SW8270D
Indeno(1,2,3-cd)pyrene	1200	260	120	ug/Kg	1	06/12/19	WB	SW8270D
Isophorone	ND	180	100	ug/Kg	1	06/12/19	WB	SW8270D
Naphthalene	ND	260	110	ug/Kg	1	06/12/19	WB	SW8270D
Nitrobenzene	ND	180	130	ug/Kg	1	06/12/19	WB	SW8270D
N-Nitrosodimethylamine	ND	260	100	ug/Kg	1	06/12/19	WB	SW8270D
N-Nitrosodi-n-propylamine	ND	180	120	ug/Kg	1	06/12/19	WB	SW8270D
N-Nitrosodiphenylamine	ND	260	140	ug/Kg	1	06/12/19	WB	SW8270D
Pentachloronitrobenzene	ND	260	140	ug/Kg	1	06/12/19	WB	SW8270D
Pentachlorophenol	ND	220	140	ug/Kg	1	06/12/19	WB	SW8270D
Phenanthrene	940	260	110	ug/Kg	1	06/12/19	WB	SW8270D
Phenol	ND	260	120	ug/Kg	1	06/12/19	WB	SW8270D
Pyrene	1600	260	130	ug/Kg	1	06/12/19	WB	SW8270D
Pyridine	ND	260	91	ug/Kg	1	06/12/19	WB	SW8270D
<b><u>QA/QC Surrogates</u></b>								
% 2,4,6-Tribromophenol	78			%	1	06/12/19	WB	30 - 130 %
% 2-Fluorobiphenyl	67			%	1	06/12/19	WB	30 - 130 %
% 2-Fluorophenol	61			%	1	06/12/19	WB	30 - 130 %
% Nitrobenzene-d5	80			%	1	06/12/19	WB	30 - 130 %
% Phenol-d5	82			%	1	06/12/19	WB	30 - 130 %
% Terphenyl-d14	73			%	1	06/12/19	WB	30 - 130 %
Field Extraction	Completed					06/07/19		SW5035A

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

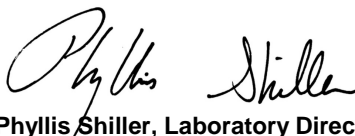
Please be advised that the NY 375 soil criteria for chromium are based on hexavalent chromium and trivalent chromium.

**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.

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**

**June 19, 2019**

**Reviewed and Released by: Greg Lawrence, Assistant Lab Director**



Environmental Laboratories, Inc.  
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# Analysis Report

June 19, 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: DR  
 Received by: CP  
 Analyzed by: see "By" below

## Date

06/07/19  
 06/10/19

## Time

15:02

## Laboratory Data

SDG ID: GCD30623  
 Phoenix ID: CD30631

Project ID: 1840 PARK AVE, MANHATTAN NY  
 Client ID: TRIP BLANK HIGH

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
<b>Volatiles</b>								
1,1,1,2-Tetrachloroethane	ND	250	50	ug/Kg	50	06/14/19	JLI	SW8260C
1,1,1-Trichloroethane	ND	250	25	ug/Kg	50	06/14/19	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	250	50	ug/Kg	50	06/14/19	JLI	SW8260C
1,1,2-Trichloroethane	ND	250	50	ug/Kg	50	06/14/19	JLI	SW8260C
1,1-Dichloroethane	ND	250	50	ug/Kg	50	06/14/19	JLI	SW8260C
1,1-Dichloroethene	ND	250	25	ug/Kg	50	06/14/19	JLI	SW8260C
1,1-Dichloropropene	ND	250	25	ug/Kg	50	06/14/19	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	250	50	ug/Kg	50	06/14/19	JLI	SW8260C
1,2,3-Trichloropropane	ND	250	25	ug/Kg	50	06/14/19	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	250	50	ug/Kg	50	06/14/19	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	250	25	ug/Kg	50	06/14/19	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	250	50	ug/Kg	50	06/14/19	JLI	SW8260C
1,2-Dibromoethane	ND	250	25	ug/Kg	50	06/14/19	JLI	SW8260C
1,2-Dichlorobenzene	ND	250	25	ug/Kg	50	06/14/19	JLI	SW8260C
1,2-Dichloroethane	ND	250	25	ug/Kg	50	06/14/19	JLI	SW8260C
1,2-Dichloropropane	ND	250	50	ug/Kg	50	06/14/19	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	250	25	ug/Kg	50	06/14/19	JLI	SW8260C
1,3-Dichlorobenzene	ND	250	25	ug/Kg	50	06/14/19	JLI	SW8260C
1,3-Dichloropropane	ND	250	50	ug/Kg	50	06/14/19	JLI	SW8260C
1,4-Dichlorobenzene	ND	250	25	ug/Kg	50	06/14/19	JLI	SW8260C
2,2-Dichloropropane	ND	250	25	ug/Kg	50	06/14/19	JLI	SW8260C
2-Chlorotoluene	ND	250	50	ug/Kg	50	06/14/19	JLI	SW8260C
2-Hexanone	ND	1300	250	ug/Kg	50	06/14/19	JLI	SW8260C
2-Isopropyltoluene	ND	250	25	ug/Kg	50	06/14/19	JLI	SW8260C
4-Chlorotoluene	ND	250	25	ug/Kg	50	06/14/19	JLI	SW8260C
4-Methyl-2-pentanone	ND	1300	250	ug/Kg	50	06/14/19	JLI	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Acetone	ND	1300	250	ug/Kg	50	06/14/19	JLI	SW8260C
Acrylonitrile	ND	500	50	ug/Kg	50	06/14/19	JLI	SW8260C
Benzene	ND	250	25	ug/Kg	50	06/14/19	JLI	SW8260C
Bromobenzene	ND	250	25	ug/Kg	50	06/14/19	JLI	SW8260C
Bromochloromethane	ND	250	25	ug/Kg	50	06/14/19	JLI	SW8260C
Bromodichloromethane	ND	250	50	ug/Kg	50	06/14/19	JLI	SW8260C
Bromoform	ND	250	50	ug/Kg	50	06/14/19	JLI	SW8260C
Bromomethane	ND	250	100	ug/Kg	50	06/14/19	JLI	SW8260C
Carbon Disulfide	ND	250	50	ug/Kg	50	06/14/19	JLI	SW8260C
Carbon tetrachloride	ND	250	50	ug/Kg	50	06/14/19	JLI	SW8260C
Chlorobenzene	ND	250	25	ug/Kg	50	06/14/19	JLI	SW8260C
Chloroethane	ND	250	25	ug/Kg	50	06/14/19	JLI	SW8260C
Chloroform	ND	250	25	ug/Kg	50	06/14/19	JLI	SW8260C
Chloromethane	ND	250	50	ug/Kg	50	06/14/19	JLI	SW8260C
cis-1,2-Dichloroethene	ND	250	25	ug/Kg	50	06/14/19	JLI	SW8260C
cis-1,3-Dichloropropene	ND	250	25	ug/Kg	50	06/14/19	JLI	SW8260C
Dibromochloromethane	ND	250	50	ug/Kg	50	06/14/19	JLI	SW8260C
Dibromomethane	ND	250	50	ug/Kg	50	06/14/19	JLI	SW8260C
Dichlorodifluoromethane	ND	250	25	ug/Kg	50	06/14/19	JLI	SW8260C
Ethylbenzene	ND	250	25	ug/Kg	50	06/14/19	JLI	SW8260C
Hexachlorobutadiene	ND	250	25	ug/Kg	50	06/14/19	JLI	SW8260C
Isopropylbenzene	ND	250	25	ug/Kg	50	06/14/19	JLI	SW8260C
m&p-Xylene	ND	250	50	ug/Kg	50	06/14/19	JLI	SW8260C
Methyl Ethyl Ketone	ND	1500	250	ug/Kg	50	06/14/19	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	500	50	ug/Kg	50	06/14/19	JLI	SW8260C
Methylene chloride	ND	250	250	ug/Kg	50	06/14/19	JLI	SW8260C
Naphthalene	ND	250	50	ug/Kg	50	06/14/19	JLI	SW8260C
n-Butylbenzene	ND	250	25	ug/Kg	50	06/14/19	JLI	SW8260C
n-Propylbenzene	ND	250	50	ug/Kg	50	06/14/19	JLI	SW8260C
o-Xylene	ND	250	50	ug/Kg	50	06/14/19	JLI	SW8260C
p-Isopropyltoluene	ND	250	25	ug/Kg	50	06/14/19	JLI	SW8260C
sec-Butylbenzene	ND	250	25	ug/Kg	50	06/14/19	JLI	SW8260C
Styrene	ND	250	25	ug/Kg	50	06/14/19	JLI	SW8260C
tert-Butylbenzene	ND	250	25	ug/Kg	50	06/14/19	JLI	SW8260C
Tetrachloroethene	ND	250	50	ug/Kg	50	06/14/19	JLI	SW8260C
Tetrahydrofuran (THF)	ND	500	130	ug/Kg	50	06/14/19	JLI	SW8260C
Toluene	ND	250	25	ug/Kg	50	06/14/19	JLI	SW8260C
trans-1,2-Dichloroethene	ND	250	25	ug/Kg	50	06/14/19	JLI	SW8260C
trans-1,3-Dichloropropene	ND	250	25	ug/Kg	50	06/14/19	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	500	130	ug/Kg	50	06/14/19	JLI	SW8260C
Trichloroethene	ND	250	25	ug/Kg	50	06/14/19	JLI	SW8260C
Trichlorofluoromethane	ND	250	50	ug/Kg	50	06/14/19	JLI	SW8260C
Trichlorotrifluoroethane	ND	250	25	ug/Kg	50	06/14/19	JLI	SW8260C
Vinyl chloride	ND	250	25	ug/Kg	50	06/14/19	JLI	SW8260C
<b>QA/QC Surrogates</b>								
% 1,2-dichlorobenzene-d4 (50x)	99			%	50	06/14/19	JLI	70 - 130 %
% Bromofluorobenzene (50x)	100			%	50	06/14/19	JLI	70 - 130 %
% Dibromofluoromethane (50x)	93			%	50	06/14/19	JLI	70 - 130 %
% Toluene-d8 (50x)	101			%	50	06/14/19	JLI	70 - 130 %

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
<b><u>1,4-dioxane</u></b>								
1,4-dioxane	ND	3800	2000	ug/kg	50	06/14/19	JLI	SW8260C
<b><u>QA/QC Surrogates</u></b>								
% 1,2-dichlorobenzene-d4 (50x)	99			%	50	06/14/19	JLI	70 - 130 %
% Bromofluorobenzene (50x)	100			%	50	06/14/19	JLI	70 - 130 %
% Dibromofluoromethane (50x)	93			%	50	06/14/19	JLI	70 - 130 %
% Toluene-d8 (50x)	101			%	50	06/14/19	JLI	70 - 130 %
<b><u>Volatiles</u></b>								
1,1,1,2-Tetrachloroethane	ND	1000	50	ug/Kg	50	06/14/19	JLI	SW8260C
Acrolein	ND	250	50	ug/Kg	50	06/14/19	JLI	SW8260C
Acrylonitrile	ND	1000	25	ug/Kg	50	06/14/19	JLI	SW8260C
Tert-butyl alcohol	ND	5000	1000	ug/Kg	50	06/14/19	JLI	SW8260C
Field Extraction	Completed					06/07/19		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 Limit  
 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**

**June 19, 2019**

**Reviewed and Released by: Greg Lawrence, Assistant Lab Director**



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# Analysis Report

June 19, 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: DR  
 Received by: CP  
 Analyzed by: see "By" below

## Date

06/07/19

## Time

15:02

## Laboratory Data

SDG ID: GCD30623  
 Phoenix ID: CD30632

Project ID: 1840 PARK AVE, MANHATTAN NY  
 Client ID: TRIP BLANK LOW

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
<b>Volatiles</b>								
1,1,1,2-Tetrachloroethane	ND	5.0	1.0	ug/Kg	1	06/14/19	JLI	SW8260C
1,1,1-Trichloroethane	ND	5.0	0.50	ug/Kg	1	06/14/19	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	5.0	1.0	ug/Kg	1	06/14/19	JLI	SW8260C
1,1,2-Trichloroethane	ND	5.0	1.0	ug/Kg	1	06/14/19	JLI	SW8260C
1,1-Dichloroethane	ND	5.0	1.0	ug/Kg	1	06/14/19	JLI	SW8260C
1,1-Dichloroethene	ND	5.0	0.50	ug/Kg	1	06/14/19	JLI	SW8260C
1,1-Dichloropropene	ND	5.0	0.50	ug/Kg	1	06/14/19	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	5.0	1.0	ug/Kg	1	06/14/19	JLI	SW8260C
1,2,3-Trichloropropane	ND	5.0	0.50	ug/Kg	1	06/14/19	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	5.0	1.0	ug/Kg	1	06/14/19	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	5.0	0.50	ug/Kg	1	06/14/19	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	5.0	1.0	ug/Kg	1	06/14/19	JLI	SW8260C
1,2-Dibromoethane	ND	5.0	0.50	ug/Kg	1	06/14/19	JLI	SW8260C
1,2-Dichlorobenzene	ND	5.0	0.50	ug/Kg	1	06/14/19	JLI	SW8260C
1,2-Dichloroethane	ND	5.0	0.50	ug/Kg	1	06/14/19	JLI	SW8260C
1,2-Dichloropropane	ND	5.0	1.0	ug/Kg	1	06/14/19	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	5.0	0.50	ug/Kg	1	06/14/19	JLI	SW8260C
1,3-Dichlorobenzene	ND	5.0	0.50	ug/Kg	1	06/14/19	JLI	SW8260C
1,3-Dichloropropane	ND	5.0	1.0	ug/Kg	1	06/14/19	JLI	SW8260C
1,4-Dichlorobenzene	ND	5.0	0.50	ug/Kg	1	06/14/19	JLI	SW8260C
2,2-Dichloropropane	ND	5.0	0.50	ug/Kg	1	06/14/19	JLI	SW8260C
2-Chlorotoluene	ND	5.0	1.0	ug/Kg	1	06/14/19	JLI	SW8260C
2-Hexanone	ND	25	5.0	ug/Kg	1	06/14/19	JLI	SW8260C
2-Isopropyltoluene	ND	5.0	0.50	ug/Kg	1	06/14/19	JLI	SW8260C
4-Chlorotoluene	ND	5.0	0.50	ug/Kg	1	06/14/19	JLI	SW8260C
4-Methyl-2-pentanone	ND	25	5.0	ug/Kg	1	06/14/19	JLI	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference	
Acetone	17	JS 25	5.0	ug/Kg	1	06/14/19	JLI	SW8260C	
Acrylonitrile	ND	10	1.0	ug/Kg	1	06/14/19	JLI	SW8260C	
Benzene	ND	5.0	0.50	ug/Kg	1	06/14/19	JLI	SW8260C	
Bromobenzene	ND	5.0	0.50	ug/Kg	1	06/14/19	JLI	SW8260C	
Bromochloromethane	ND	5.0	0.50	ug/Kg	1	06/14/19	JLI	SW8260C	
Bromodichloromethane	ND	5.0	1.0	ug/Kg	1	06/14/19	JLI	SW8260C	
Bromoform	ND	5.0	1.0	ug/Kg	1	06/14/19	JLI	SW8260C	
Bromomethane	ND	5.0	2.0	ug/Kg	1	06/14/19	JLI	SW8260C	
Carbon Disulfide	ND	5.0	1.0	ug/Kg	1	06/14/19	JLI	SW8260C	
Carbon tetrachloride	ND	5.0	1.0	ug/Kg	1	06/14/19	JLI	SW8260C	
Chlorobenzene	ND	5.0	0.50	ug/Kg	1	06/14/19	JLI	SW8260C	
Chloroethane	ND	5.0	0.50	ug/Kg	1	06/14/19	JLI	SW8260C	
Chloroform	ND	5.0	0.50	ug/Kg	1	06/14/19	JLI	SW8260C	
Chloromethane	ND	5.0	1.0	ug/Kg	1	06/14/19	JLI	SW8260C	
cis-1,2-Dichloroethene	ND	5.0	0.50	ug/Kg	1	06/14/19	JLI	SW8260C	
cis-1,3-Dichloropropene	ND	5.0	0.50	ug/Kg	1	06/14/19	JLI	SW8260C	
Dibromochloromethane	ND	5.0	1.0	ug/Kg	1	06/14/19	JLI	SW8260C	
Dibromomethane	ND	5.0	1.0	ug/Kg	1	06/14/19	JLI	SW8260C	
Dichlorodifluoromethane	ND	5.0	0.50	ug/Kg	1	06/14/19	JLI	SW8260C	
Ethylbenzene	ND	5.0	0.50	ug/Kg	1	06/14/19	JLI	SW8260C	
Hexachlorobutadiene	ND	5.0	0.50	ug/Kg	1	06/14/19	JLI	SW8260C	
Isopropylbenzene	ND	5.0	0.50	ug/Kg	1	06/14/19	JLI	SW8260C	
m&p-Xylene	ND	5.0	1.0	ug/Kg	1	06/14/19	JLI	SW8260C	
Methyl Ethyl Ketone	ND	30	5.0	ug/Kg	1	06/14/19	JLI	SW8260C	
Methyl t-butyl ether (MTBE)	ND	10	1.0	ug/Kg	1	06/14/19	JLI	SW8260C	
Methylene chloride	ND	5.0	5.0	ug/Kg	1	06/14/19	JLI	SW8260C	
Naphthalene	ND	5.0	1.0	ug/Kg	1	06/14/19	JLI	SW8260C	
n-Butylbenzene	ND	5.0	0.50	ug/Kg	1	06/14/19	JLI	SW8260C	
n-Propylbenzene	ND	5.0	1.0	ug/Kg	1	06/14/19	JLI	SW8260C	
o-Xylene	ND	5.0	1.0	ug/Kg	1	06/14/19	JLI	SW8260C	
p-Isopropyltoluene	ND	5.0	0.50	ug/Kg	1	06/14/19	JLI	SW8260C	
sec-Butylbenzene	ND	5.0	0.50	ug/Kg	1	06/14/19	JLI	SW8260C	
Styrene	ND	5.0	0.50	ug/Kg	1	06/14/19	JLI	SW8260C	
tert-Butylbenzene	ND	5.0	0.50	ug/Kg	1	06/14/19	JLI	SW8260C	
Tetrachloroethene	ND	5.0	1.0	ug/Kg	1	06/14/19	JLI	SW8260C	
Tetrahydrofuran (THF)	4.1	J 10	2.5	ug/Kg	1	06/14/19	JLI	SW8260C	
Toluene	ND	5.0	0.50	ug/Kg	1	06/14/19	JLI	SW8260C	
trans-1,2-Dichloroethene	ND	5.0	0.50	ug/Kg	1	06/14/19	JLI	SW8260C	
trans-1,3-Dichloropropene	ND	5.0	0.50	ug/Kg	1	06/14/19	JLI	SW8260C	
trans-1,4-dichloro-2-butene	ND	10	2.5	ug/Kg	1	06/14/19	JLI	SW8260C	
Trichloroethene	ND	5.0	0.50	ug/Kg	1	06/14/19	JLI	SW8260C	
Trichlorofluoromethane	ND	5.0	1.0	ug/Kg	1	06/14/19	JLI	SW8260C	
Trichlorotrifluoroethane	ND	5.0	0.50	ug/Kg	1	06/14/19	JLI	SW8260C	
Vinyl chloride	ND	5.0	0.50	ug/Kg	1	06/14/19	JLI	SW8260C	
<b><u>QA/QC Surrogates</u></b>									
% 1,2-dichlorobenzene-d4	97			%	1	06/14/19	JLI	70 - 130 %	
% Bromofluorobenzene	98			%	1	06/14/19	JLI	70 - 130 %	
% Dibromofluoromethane	91			%	1	06/14/19	JLI	70 - 130 %	
% Toluene-d8	101			%	1	06/14/19	JLI	70 - 130 %	



Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
<b><u>1,4-dioxane</u></b>								
1,4-dioxane	ND	75	40	ug/kg	1	06/14/19	JLI	SW8260C
<b><u>QA/QC Surrogates</u></b>								
% 1,2-dichlorobenzene-d4	97			%	1	06/14/19	JLI	70 - 130 %
% Bromofluorobenzene	98			%	1	06/14/19	JLI	70 - 130 %
% Dibromofluoromethane	91			%	1	06/14/19	JLI	70 - 130 %
% Toluene-d8	101			%	1	06/14/19	JLI	70 - 130 %
<b><u>Volatiles</u></b>								
1,1,1,2-Tetrachloroethane	ND	20	1.0	ug/Kg	1	06/14/19	JLI	SW8260C
Acrolein	ND	5.0	1.0	ug/Kg	1	06/14/19	JLI	SW8260C
Acrylonitrile	ND	20	0.50	ug/Kg	1	06/14/19	JLI	SW8260C
Tert-butyl alcohol	ND	100	20	ug/Kg	1	06/14/19	JLI	SW8260C
Field Extraction	Completed					06/07/19		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 Limit  
 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.

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**

**June 19, 2019**

**Reviewed and Released by: Greg Lawrence, Assistant Lab Director**

# Sample Criteria Exceedances Report

GCD30623 - EBC

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	Criteria	RL	Analysis Units
CD30627	\$8270SMRDP	Benz(a)anthracene	NY / 375-6.8 Semivolatiles / Ground Water Protection	1900	280	1000	1000	1000	ug/Kg
CD30627	\$8270SMRDP	Chrysene	NY / 375-6.8 Semivolatiles / Ground Water Protection	1700	280	1000	1000	1000	ug/Kg
CD30627	\$8270SMRDP	Dibenz(a,h)anthracene	NY / 375-6.8 Semivolatiles / Residential	350	200	330	330	330	ug/Kg
CD30627	\$8270SMRDP	Benz(a)anthracene	NY / 375-6.8 Semivolatiles / Residential	1900	280	1000	1000	1000	ug/Kg
CD30627	\$8270SMRDP	Benzo(a)pyrene	NY / 375-6.8 Semivolatiles / Residential	1900	200	1000	1000	1000	ug/Kg
CD30627	\$8270SMRDP	Indeno(1,2,3-cd)pyrene	NY / 375-6.8 Semivolatiles / Residential	1200	280	500	500	500	ug/Kg
CD30627	\$8270SMRDP	Benzo(b)fluoranthene	NY / 375-6.8 Semivolatiles / Residential	1600	280	1000	1000	1000	ug/Kg
CD30627	\$8270SMRDP	Chrysene	NY / 375-6.8 Semivolatiles / Residential	1700	280	1000	1000	1000	ug/Kg
CD30627	\$8270SMRDP	Benzo(k)fluoranthene	NY / 375-6.8 Semivolatiles / Residential	1700	280	1000	1000	1000	ug/Kg
CD30627	\$8270SMRDP	Indeno(1,2,3-cd)pyrene	NY / 375-6.8 Semivolatiles / Residential Restricted	1200	280	500	500	500	ug/Kg
CD30627	\$8270SMRDP	Dibenz(a,h)anthracene	NY / 375-6.8 Semivolatiles / Residential Restricted	350	200	330	330	330	ug/Kg
CD30627	\$8270SMRDP	Benzo(b)fluoranthene	NY / 375-6.8 Semivolatiles / Residential Restricted	1600	280	1000	1000	1000	ug/Kg
CD30627	\$8270SMRDP	Benz(a)anthracene	NY / 375-6.8 Semivolatiles / Residential Restricted	1900	280	1000	1000	1000	ug/Kg
CD30627	\$8270SMRDP	Benzo(a)pyrene	NY / 375-6.8 Semivolatiles / Residential Restricted	1900	200	1000	1000	1000	ug/Kg
CD30627	\$8270SMRDP	Indeno(1,2,3-cd)pyrene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	1200	280	500	500	500	ug/Kg
CD30627	\$8270SMRDP	Benzo(b)fluoranthene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	1600	280	1000	1000	1000	ug/Kg
CD30627	\$8270SMRDP	Chrysene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	1700	280	1000	1000	1000	ug/Kg
CD30627	\$8270SMRDP	Benzo(a)pyrene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	1900	200	1000	1000	1000	ug/Kg
CD30627	\$8270SMRDP	Benz(a)anthracene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	1900	280	1000	1000	1000	ug/Kg
CD30627	\$8270SMRDP	Benzo(k)fluoranthene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	1700	280	800	800	800	ug/Kg
CD30627	\$8270SMRDP	Dibenz(a,h)anthracene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	350	200	330	330	330	ug/Kg
CD30627	\$PESTSMDPR	Dieldrin	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	7.2	4.0	5	5	5	ug/Kg
CD30627	\$PESTSMDPR	4,4' -DDT	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	34	2.4	3.3	3.3	3.3	ug/Kg
CD30627	\$PESTSMDPR	4,4' -DDD	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	12	2.4	3.3	3.3	3.3	ug/Kg
CD30627	\$PESTSMDPR	4,4' -DDE	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	18	2.4	3.3	3.3	3.3	ug/Kg
CD30627	CU-SM	Copper	NY / 375-6.8 Metals / Unrestricted Use Soil	67.4	0.7	50	50	50	mg/kg
CD30627	HG-SM	Mercury	NY / 375-6.8 Metals / Unrestricted Use Soil	0.31	0.08	0.18	0.18	0.18	mg/Kg
CD30627	PB-SMDP	Lead	NY / 375-6.8 Metals / Unrestricted Use Soil	168	7.3	63	63	63	mg/Kg
CD30627	ZN-SMDP	Zinc	NY / 375-6.8 Metals / Unrestricted Use Soil	194	7.3	109	109	109	mg/Kg
CD30628	\$8270SMRDP	Benzo(b)fluoranthene	NY / 375-6.8 Semivolatiles / Ground Water Protection	7000	2500	1700	1700	1700	ug/Kg
CD30628	\$8270SMRDP	Chrysene	NY / 375-6.8 Semivolatiles / Ground Water Protection	9400	2500	1000	1000	1000	ug/Kg
CD30628	\$8270SMRDP	Benzo(k)fluoranthene	NY / 375-6.8 Semivolatiles / Ground Water Protection	5900	250	1700	1700	1700	ug/Kg
CD30628	\$8270SMRDP	Benz(a)anthracene	NY / 375-6.8 Semivolatiles / Ground Water Protection	11000	2500	1000	1000	1000	ug/Kg
CD30628	\$8270SMRDP	Indeno(1,2,3-cd)pyrene	NY / 375-6.8 Semivolatiles / Residential	5400	250	500	500	500	ug/Kg
CD30628	\$8270SMRDP	Dibenz(a,h)anthracene	NY / 375-6.8 Semivolatiles / Residential	1800	180	330	330	330	ug/Kg
CD30628	\$8270SMRDP	Benz(a)anthracene	NY / 375-6.8 Semivolatiles / Residential	11000	2500	1000	1000	1000	ug/Kg
CD30628	\$8270SMRDP	Chrysene	NY / 375-6.8 Semivolatiles / Residential	9400	2500	1000	1000	1000	ug/Kg
CD30628	\$8270SMRDP	Benzo(k)fluoranthene	NY / 375-6.8 Semivolatiles / Residential	5900	250	1000	1000	1000	ug/Kg
CD30628	\$8270SMRDP	Benzo(a)pyrene	NY / 375-6.8 Semivolatiles / Residential	8700	1800	1000	1000	1000	ug/Kg
CD30628	\$8270SMRDP	Benzo(b)fluoranthene	NY / 375-6.8 Semivolatiles / Residential	7000	2500	1000	1000	1000	ug/Kg
CD30628	\$8270SMRDP	Benzo(a)pyrene	NY / 375-6.8 Semivolatiles / Residential Restricted	8700	1800	1000	1000	1000	ug/Kg

Wednesday, June 19, 2019

Criteria: NY: 375, 375GWP, 375RRS, 375RS

State: NY

# Sample Criteria Exceedances Report

GCD30623 - EBC

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	Criteria	RL	Analysis Units
CD30628	\$8270SMRDP	Indeno(1,2,3-cd)pyrene	NY / 375-6.8 Semivolatiles / Residential Restricted	5400	250	500	500	500	ug/Kg
CD30628	\$8270SMRDP	Chrysene	NY / 375-6.8 Semivolatiles / Residential Restricted	9400	2500	3900	3900	3900	ug/Kg
CD30628	\$8270SMRDP	Dibenz(a,h)anthracene	NY / 375-6.8 Semivolatiles / Residential Restricted	1800	180	330	330	330	ug/Kg
CD30628	\$8270SMRDP	Benzo(b)fluoranthene	NY / 375-6.8 Semivolatiles / Residential Restricted	7000	2500	1000	1000	1000	ug/Kg
CD30628	\$8270SMRDP	Benzo(a)anthracene	NY / 375-6.8 Semivolatiles / Residential Restricted	11000	2500	1000	1000	1000	ug/Kg
CD30628	\$8270SMRDP	Benzo(k)fluoranthene	NY / 375-6.8 Semivolatiles / Residential Restricted	5900	250	3900	3900	3900	ug/Kg
CD30628	\$8270SMRDP	Benzo(a)pyrene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	8700	1800	1000	1000	1000	ug/Kg
CD30628	\$8270SMRDP	Benzo(a)anthracene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	11000	2500	1000	1000	1000	ug/Kg
CD30628	\$8270SMRDP	Benzo(k)fluoranthene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	5900	250	800	800	800	ug/Kg
CD30628	\$8270SMRDP	Dibenz(a,h)anthracene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	1800	180	330	330	330	ug/Kg
CD30628	\$8270SMRDP	Benzo(b)fluoranthene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	7000	2500	1000	1000	1000	ug/Kg
CD30628	\$8270SMRDP	Indeno(1,2,3-cd)pyrene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	5400	250	500	500	500	ug/Kg
CD30628	\$8270SMRDP	Chrysene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	9400	2500	1000	1000	1000	ug/Kg
CD30628	\$8270SMRDP	Dibenzofuran	NY / 375-6.8 Volatiles / Ground Water Protection	3300	250	3200	3200	3200	ug/Kg
CD30628	\$8270SMRDP	Dibenzofuran	NY / 375-6.8 Volatiles / Unrestricted Use Soil	3300	250	330	330	330	ug/Kg
CD30628	\$PESTSMDPR	4,4' -DDT	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	4.3	2.1	3.3	3.3	3.3	ug/Kg
CD30629	\$8270SMRDP	Benzo(a)anthracene	NY / 375-6.8 Semivolatiles / Ground Water Protection	1800	260	1000	1000	1000	ug/Kg
CD30629	\$8270SMRDP	Benzo(b)fluoranthene	NY / 375-6.8 Semivolatiles / Ground Water Protection	1800	260	1700	1700	1700	ug/Kg
CD30629	\$8270SMRDP	Chrysene	NY / 375-6.8 Semivolatiles / Ground Water Protection	2000	260	1000	1000	1000	ug/Kg
CD30629	\$8270SMRDP	Dibenz(a,h)anthracene	NY / 375-6.8 Semivolatiles / Residential	500	180	330	330	330	ug/Kg
CD30629	\$8270SMRDP	Benzo(a)anthracene	NY / 375-6.8 Semivolatiles / Residential	1800	260	1000	1000	1000	ug/Kg
CD30629	\$8270SMRDP	Benzo(a)pyrene	NY / 375-6.8 Semivolatiles / Residential	2200	180	1000	1000	1000	ug/Kg
CD30629	\$8270SMRDP	Indeno(1,2,3-cd)pyrene	NY / 375-6.8 Semivolatiles / Residential	1700	260	500	500	500	ug/Kg
CD30629	\$8270SMRDP	Benzo(b)fluoranthene	NY / 375-6.8 Semivolatiles / Residential	1800	260	1000	1000	1000	ug/Kg
CD30629	\$8270SMRDP	Chrysene	NY / 375-6.8 Semivolatiles / Residential	2000	260	1000	1000	1000	ug/Kg
CD30629	\$8270SMRDP	Benzo(k)fluoranthene	NY / 375-6.8 Semivolatiles / Residential	1700	260	1000	1000	1000	ug/Kg
CD30629	\$8270SMRDP	Indeno(1,2,3-cd)pyrene	NY / 375-6.8 Semivolatiles / Residential Restricted	1700	260	500	500	500	ug/Kg
CD30629	\$8270SMRDP	Dibenz(a,h)anthracene	NY / 375-6.8 Semivolatiles / Residential Restricted	500	180	330	330	330	ug/Kg
CD30629	\$8270SMRDP	Benzo(b)fluoranthene	NY / 375-6.8 Semivolatiles / Residential Restricted	1800	260	1000	1000	1000	ug/Kg
CD30629	\$8270SMRDP	Benzo(a)anthracene	NY / 375-6.8 Semivolatiles / Residential Restricted	1800	260	1000	1000	1000	ug/Kg
CD30629	\$8270SMRDP	Benzo(a)pyrene	NY / 375-6.8 Semivolatiles / Residential Restricted	2200	180	1000	1000	1000	ug/Kg
CD30629	\$8270SMRDP	Benzo(b)fluoranthene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	1800	260	1000	1000	1000	ug/Kg
CD30629	\$8270SMRDP	Chrysene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	2000	260	1000	1000	1000	ug/Kg
CD30629	\$8270SMRDP	Benzo(a)pyrene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	2200	180	1000	1000	1000	ug/Kg
CD30629	\$8270SMRDP	Dibenz(a,h)anthracene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	500	180	330	330	330	ug/Kg
CD30629	\$8270SMRDP	Benzo(a)anthracene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	1800	260	1000	1000	1000	ug/Kg
CD30629	\$8270SMRDP	Indeno(1,2,3-cd)pyrene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	1700	260	500	500	500	ug/Kg
CD30629	\$8270SMRDP	Benzo(k)fluoranthene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	1700	260	800	800	800	ug/Kg
CD30629	\$PESTSMDPR	4,4' -DDD	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	92	11	3.3	3.3	3.3	ug/Kg
CD30629	\$PESTSMDPR	4,4' -DDE	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	24	2.2	3.3	3.3	3.3	ug/Kg
CD30629	\$PESTSMDPR	Dieldrin	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	14	3.7	5	5	5	ug/Kg

# Sample Criteria Exceedances Report

## GCD30623 - EBC

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	Criteria	RL	Analysis Units
CD30629	BA-SMDP	Barium	NY / 375-6.8 Metals / Residential	447	0.8	350	350	350	mg/Kg
CD30629	BA-SMDP	Barium	NY / 375-6.8 Metals / Residential Restricted	447	0.8	400	400	400	mg/Kg
CD30629	BA-SMDP	Barium	NY / 375-6.8 Metals / Unrestricted Use Soil	447	0.8	350	350	350	mg/Kg
CD30629	PB-SMDP	Lead	NY / 375-6.8 Metals / Unrestricted Use Soil	102	0.8	63	63	63	mg/Kg
CD30629	ZN-SMDP	Zinc	NY / 375-6.8 Metals / Unrestricted Use Soil	241	7.6	109	109	109	mg/Kg
CD30630	\$8270SMRDP	Chrysene	NY / 375-6.8 Semivolatiles / Ground Water Protection	1100	260	1000	1000	1000	ug/Kg
CD30630	\$8270SMRDP	Indeno(1,2,3-cd)pyrene	NY / 375-6.8 Semivolatiles / Residential	1200	260	500	500	500	ug/Kg
CD30630	\$8270SMRDP	Dibenz(a,h)anthracene	NY / 375-6.8 Semivolatiles / Residential	360	180	330	330	330	ug/Kg
CD30630	\$8270SMRDP	Chrysene	NY / 375-6.8 Semivolatiles / Residential	1100	260	1000	1000	1000	ug/Kg
CD30630	\$8270SMRDP	Benzo(b)fluoranthene	NY / 375-6.8 Semivolatiles / Residential	1200	260	1000	1000	1000	ug/Kg
CD30630	\$8270SMRDP	Benzo(a)pyrene	NY / 375-6.8 Semivolatiles / Residential	1100	180	1000	1000	1000	ug/Kg
CD30630	\$8270SMRDP	Dibenz(a,h)anthracene	NY / 375-6.8 Semivolatiles / Residential Restricted	360	180	330	330	330	ug/Kg
CD30630	\$8270SMRDP	Benzo(a)pyrene	NY / 375-6.8 Semivolatiles / Residential Restricted	1100	180	1000	1000	1000	ug/Kg
CD30630	\$8270SMRDP	Indeno(1,2,3-cd)pyrene	NY / 375-6.8 Semivolatiles / Residential Restricted	1200	260	500	500	500	ug/Kg
CD30630	\$8270SMRDP	Benzo(b)fluoranthene	NY / 375-6.8 Semivolatiles / Residential Restricted	1200	260	1000	1000	1000	ug/Kg
CD30630	\$8270SMRDP	Indeno(1,2,3-cd)pyrene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	1200	260	500	500	500	ug/Kg
CD30630	\$8270SMRDP	Benzo(b)fluoranthene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	1200	260	1000	1000	1000	ug/Kg
CD30630	\$8270SMRDP	Benzo(k)fluoranthene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	1000	260	800	800	800	ug/Kg
CD30630	\$8270SMRDP	Benzo(a)pyrene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	1100	180	1000	1000	1000	ug/Kg
CD30630	\$8270SMRDP	Chrysene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	1100	260	1000	1000	1000	ug/Kg
CD30630	\$8270SMRDP	Dibenz(a,h)anthracene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	360	180	330	330	330	ug/Kg
CD30630	BA-SMDP	Barium	NY / 375-6.8 Metals / Residential	508	0.7	350	350	350	mg/Kg
CD30630	BA-SMDP	Barium	NY / 375-6.8 Metals / Residential Restricted	508	0.7	400	400	400	mg/Kg
CD30630	BA-SMDP	Barium	NY / 375-6.8 Metals / Unrestricted Use Soil	508	0.7	350	350	350	mg/Kg
CD30630	CU-SM	Copper	NY / 375-6.8 Metals / Unrestricted Use Soil	75.7	0.7	50	50	50	mg/kg
CD30630	HG-SM	Mercury	NY / 375-6.8 Metals / Ground Water Protection	1.58	0.13	0.73	0.73	0.73	mg/Kg
CD30630	HG-SM	Mercury	NY / 375-6.8 Metals / Residential	1.58	0.13	0.81	0.81	0.81	mg/Kg
CD30630	HG-SM	Mercury	NY / 375-6.8 Metals / Residential Restricted	1.58	0.13	0.81	0.81	0.81	mg/Kg
CD30630	HG-SM	Mercury	NY / 375-6.8 Metals / Unrestricted Use Soil	1.58	0.13	0.18	0.18	0.18	mg/Kg
CD30630	PB-SMDP	Lead	NY / 375-6.8 Metals / Ground Water Protection	619	7.5	450	450	450	mg/Kg
CD30630	PB-SMDP	Lead	NY / 375-6.8 Metals / Residential	619	7.5	400	400	400	mg/Kg
CD30630	PB-SMDP	Lead	NY / 375-6.8 Metals / Residential Restricted	619	7.5	400	400	400	mg/Kg
CD30630	PB-SMDP	Lead	NY / 375-6.8 Metals / Unrestricted Use Soil	619	7.5	63	63	63	mg/Kg
CD30630	ZN-SMDP	Zinc	NY / 375-6.8 Metals / Unrestricted Use Soil	290	7.5	109	109	109	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 exceedances. All efforts are made to ensure the accuracy of the data (obtained from appropriate agencies). A lack of exceedance 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

June 19, 2019

SDG I.D.: GCD30623

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The samples in this delivery group were received at 2.3°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: 3°C Pg 1 of 2

**Contact Options:**

Fax: \_\_\_\_\_  
 Phone: 631-504-6000  
 Email: F.I.L.

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

Project: 1840 Park Ave, Manchester, NY  
 Report to: Environmental Business Consultants  
 Invoice to: Environmental Business Consultants

Project P.O.:

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

Sampler's Signature: David Rutki Date: 6-7-19  
 Client Sample - Information - Identification

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	Analysis Request
000023	P1 (0.2')	S	6-7-19	10:30	X
000024	P2 (0.2')			10:45	X
000025	P3 (0.2')			11:15	X
000026	P4 (0.2')			11:30	X
000027	F1 (0.2')			8:45	X
000028	F2 (0.2')			8:55	X
000029	F3 (0.2')			9:30	X
000030	F4 (0.2')			10:00	X
000031	trip blanks HL				
000032	trip blanks LL				

Analysis Request  
 VOC's 826D  
 res. cap / PCB's  
 TAL METALS

Soil VOA Vials (K) methanol (K) H2O	3	1
GL soil container ( ) or 30 ml VOA Vial ( ) as is ( ) HCl	3	1
GL Amber 100ml ( ) as is ( ) HCl	3	1
PL H2SO4 ( ) 250ml ( ) 1500ml	3	1
PL HNO3 250ml ( ) 1500ml	3	1
PL NaOH 250ml ( ) 1500ml	3	1
Bacteria Bottle		

Relinquished by: David Rutki Accepted by: [Signature]  
 Date: 6-10-19 Time: 12:30  
 Date: 6/10/19 Time: 15:00

Comments, Special Requirements or Regulations:

**Turnaround:**  
 1 Day\*  
 2 Days\*  
 3 Days\*  
 5 Days  
 10 Days  
 Other  
 \* SURCHARGE APPLIES

**Res. Criteria**  
 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



Friday, June 21, 2019

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

Project ID: 1840 PARK AVE, MANHATTAN NY  
SDG ID: GCD30633  
Sample ID#s: CD30633 - CD30640

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 that reads "Phyllis Shiller". The signature is written in a cursive style.

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.  
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Tel. (860) 645-1102 Fax (860) 645-0823



## SDG Comments

June 21, 2019

SDG I.D.: GCD30633

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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

June 21, 2019

SDG I.D.: GCD30633

Project ID: 1840 PARK AVE, MANHATTAN NY

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Client Id	Lab Id	Matrix
P1 (8-10`)	CD30633	SOIL
P2 (8-10`)	CD30634	SOIL
P3 (8-10`)	CD30635	SOIL
P4 (8-10`)	CD30636	SOIL
F1 (5-7`)	CD30637	SOIL
F2 (5-7`)	CD30638	SOIL
F3 (5-7`)	CD30639	SOIL
F4 (5-7`)	CD30640	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

June 21, 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: DR  
 Received by: CP  
 Analyzed by: see "By" below

## Date

06/07/19  
 06/10/19

## Time

10:40  
 15:02

## Laboratory Data

SDG ID: GCD30633  
 Phoenix ID: CD30633

Project ID: 1840 PARK AVE, MANHATTAN NY  
 Client ID: P1 (8-10')

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Percent Solid	94			%		06/10/19	ML	SW846-%Solid
Soil Extraction for SVOA	Completed					06/11/19	JJ/LV	SW3545A

## Volatiles

1,1,1,2-Tetrachloroethane	ND	4.6	0.91	ug/Kg	1	06/15/19	JLI	SW8260C
1,1,1-Trichloroethane	ND	4.6	0.46	ug/Kg	1	06/15/19	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	4.6	0.91	ug/Kg	1	06/15/19	JLI	SW8260C
1,1,2-Trichloroethane	ND	4.6	0.91	ug/Kg	1	06/15/19	JLI	SW8260C
1,1-Dichloroethane	ND	4.6	0.91	ug/Kg	1	06/15/19	JLI	SW8260C
1,1-Dichloroethene	ND	4.6	0.46	ug/Kg	1	06/15/19	JLI	SW8260C
1,1-Dichloropropene	ND	4.6	0.46	ug/Kg	1	06/15/19	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	4.6	0.91	ug/Kg	1	06/15/19	JLI	SW8260C
1,2,3-Trichloropropane	ND	4.6	0.46	ug/Kg	1	06/15/19	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	4.6	0.91	ug/Kg	1	06/15/19	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	4.6	0.46	ug/Kg	1	06/15/19	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	4.6	0.91	ug/Kg	1	06/15/19	JLI	SW8260C
1,2-Dibromoethane	ND	4.6	0.46	ug/Kg	1	06/15/19	JLI	SW8260C
1,2-Dichlorobenzene	ND	4.6	0.46	ug/Kg	1	06/15/19	JLI	SW8260C
1,2-Dichloroethane	ND	4.6	0.46	ug/Kg	1	06/15/19	JLI	SW8260C
1,2-Dichloropropane	ND	4.6	0.91	ug/Kg	1	06/15/19	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	4.6	0.46	ug/Kg	1	06/15/19	JLI	SW8260C
1,3-Dichlorobenzene	ND	4.6	0.46	ug/Kg	1	06/15/19	JLI	SW8260C
1,3-Dichloropropane	ND	4.6	0.91	ug/Kg	1	06/15/19	JLI	SW8260C
1,4-Dichlorobenzene	ND	4.6	0.46	ug/Kg	1	06/15/19	JLI	SW8260C
2,2-Dichloropropane	ND	4.6	0.46	ug/Kg	1	06/15/19	JLI	SW8260C
2-Chlorotoluene	ND	4.6	0.91	ug/Kg	1	06/15/19	JLI	SW8260C
2-Hexanone	ND	23	4.6	ug/Kg	1	06/15/19	JLI	SW8260C
2-Isopropyltoluene	ND	4.6	0.46	ug/Kg	1	06/15/19	JLI	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
4-Chlorotoluene	ND	4.6	0.46	ug/Kg	1	06/15/19	JLI	SW8260C
4-Methyl-2-pentanone	ND	23	4.6	ug/Kg	1	06/15/19	JLI	SW8260C
Acetone	4.7	JS 23	4.6	ug/Kg	1	06/15/19	JLI	SW8260C
Acrylonitrile	ND	9.1	0.91	ug/Kg	1	06/15/19	JLI	SW8260C
Benzene	ND	4.6	0.46	ug/Kg	1	06/15/19	JLI	SW8260C
Bromobenzene	ND	4.6	0.46	ug/Kg	1	06/15/19	JLI	SW8260C
Bromochloromethane	ND	4.6	0.46	ug/Kg	1	06/15/19	JLI	SW8260C
Bromodichloromethane	ND	4.6	0.91	ug/Kg	1	06/15/19	JLI	SW8260C
Bromoform	ND	4.6	0.91	ug/Kg	1	06/15/19	JLI	SW8260C
Bromomethane	ND	4.6	1.8	ug/Kg	1	06/15/19	JLI	SW8260C
Carbon Disulfide	ND	4.6	0.91	ug/Kg	1	06/15/19	JLI	SW8260C
Carbon tetrachloride	ND	4.6	0.91	ug/Kg	1	06/15/19	JLI	SW8260C
Chlorobenzene	ND	4.6	0.46	ug/Kg	1	06/15/19	JLI	SW8260C
Chloroethane	ND	4.6	0.46	ug/Kg	1	06/15/19	JLI	SW8260C
Chloroform	ND	4.6	0.46	ug/Kg	1	06/15/19	JLI	SW8260C
Chloromethane	ND	4.6	0.91	ug/Kg	1	06/15/19	JLI	SW8260C
cis-1,2-Dichloroethene	ND	4.6	0.46	ug/Kg	1	06/15/19	JLI	SW8260C
cis-1,3-Dichloropropene	ND	4.6	0.46	ug/Kg	1	06/15/19	JLI	SW8260C
Dibromochloromethane	ND	4.6	0.91	ug/Kg	1	06/15/19	JLI	SW8260C
Dibromomethane	ND	4.6	0.91	ug/Kg	1	06/15/19	JLI	SW8260C
Dichlorodifluoromethane	ND	4.6	0.46	ug/Kg	1	06/15/19	JLI	SW8260C
Ethylbenzene	ND	4.6	0.46	ug/Kg	1	06/15/19	JLI	SW8260C
Hexachlorobutadiene	ND	4.6	0.46	ug/Kg	1	06/15/19	JLI	SW8260C
Isopropylbenzene	ND	4.6	0.46	ug/Kg	1	06/15/19	JLI	SW8260C
m&p-Xylene	ND	4.6	0.91	ug/Kg	1	06/15/19	JLI	SW8260C
Methyl Ethyl Ketone	ND	27	4.6	ug/Kg	1	06/15/19	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	9.1	0.91	ug/Kg	1	06/15/19	JLI	SW8260C
Methylene chloride	ND	4.6	4.6	ug/Kg	1	06/15/19	JLI	SW8260C
Naphthalene	ND	4.6	0.91	ug/Kg	1	06/15/19	JLI	SW8260C
n-Butylbenzene	ND	4.6	0.46	ug/Kg	1	06/15/19	JLI	SW8260C
n-Propylbenzene	ND	4.6	0.91	ug/Kg	1	06/15/19	JLI	SW8260C
o-Xylene	ND	4.6	0.91	ug/Kg	1	06/15/19	JLI	SW8260C
p-Isopropyltoluene	ND	4.6	0.46	ug/Kg	1	06/15/19	JLI	SW8260C
sec-Butylbenzene	ND	4.6	0.46	ug/Kg	1	06/15/19	JLI	SW8260C
Styrene	ND	4.6	0.46	ug/Kg	1	06/15/19	JLI	SW8260C
tert-Butylbenzene	ND	4.6	0.46	ug/Kg	1	06/15/19	JLI	SW8260C
Tetrachloroethene	ND	4.6	0.91	ug/Kg	1	06/15/19	JLI	SW8260C
Tetrahydrofuran (THF)	ND	9.1	2.3	ug/Kg	1	06/15/19	JLI	SW8260C
Toluene	ND	4.6	0.46	ug/Kg	1	06/15/19	JLI	SW8260C
trans-1,2-Dichloroethene	ND	4.6	0.46	ug/Kg	1	06/15/19	JLI	SW8260C
trans-1,3-Dichloropropene	ND	4.6	0.46	ug/Kg	1	06/15/19	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	9.1	2.3	ug/Kg	1	06/15/19	JLI	SW8260C
Trichloroethene	ND	4.6	0.46	ug/Kg	1	06/15/19	JLI	SW8260C
Trichlorofluoromethane	ND	4.6	0.91	ug/Kg	1	06/15/19	JLI	SW8260C
Trichlorotrifluoroethane	ND	4.6	0.46	ug/Kg	1	06/15/19	JLI	SW8260C
Vinyl chloride	ND	4.6	0.46	ug/Kg	1	06/15/19	JLI	SW8260C
<b>QA/QC Surrogates</b>								
% 1,2-dichlorobenzene-d4	99			%	1	06/15/19	JLI	70 - 130 %
% Bromofluorobenzene	100			%	1	06/15/19	JLI	70 - 130 %

1

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
% Dibromofluoromethane	95			%	1	06/15/19	JLI	70 - 130 %
% Toluene-d8	101			%	1	06/15/19	JLI	70 - 130 %
<b><u>1,4-dioxane</u></b>								
1,4-dioxane	ND	69	37	ug/kg	1	06/15/19	JLI	SW8260C
<b><u>Volatiles</u></b>								
1,1,1,2-Tetrachloroethane	ND	18	0.91	ug/Kg	1	06/15/19	JLI	SW8260C
Acrolein	ND	4.6	0.91	ug/Kg	1	06/15/19	JLI	SW8260C
Acrylonitrile	ND	18	0.46	ug/Kg	1	06/15/19	JLI	SW8260C
Tert-butyl alcohol	ND	91	18	ug/Kg	1	06/15/19	JLI	SW8260C
<b><u>Semivolatiles</u></b>								
1,2,4,5-Tetrachlorobenzene	ND	240	120	ug/Kg	1	06/13/19	WB	SW8270D
1,2,4-Trichlorobenzene	ND	240	100	ug/Kg	1	06/13/19	WB	SW8270D
1,2-Dichlorobenzene	ND	240	97	ug/Kg	1	06/13/19	WB	SW8270D
1,2-Diphenylhydrazine	ND	240	110	ug/Kg	1	06/13/19	WB	SW8270D
1,3-Dichlorobenzene	ND	240	100	ug/Kg	1	06/13/19	WB	SW8270D
1,4-Dichlorobenzene	ND	240	100	ug/Kg	1	06/13/19	WB	SW8270D
2,4,5-Trichlorophenol	ND	240	190	ug/Kg	1	06/13/19	WB	SW8270D
2,4,6-Trichlorophenol	ND	170	110	ug/Kg	1	06/13/19	WB	SW8270D
2,4-Dichlorophenol	ND	170	120	ug/Kg	1	06/13/19	WB	SW8270D
2,4-Dimethylphenol	ND	240	85	ug/Kg	1	06/13/19	WB	SW8270D
2,4-Dinitrophenol	ND	240	240	ug/Kg	1	06/13/19	WB	SW8270D
2,4-Dinitrotoluene	ND	170	140	ug/Kg	1	06/13/19	WB	SW8270D
2,6-Dinitrotoluene	ND	170	110	ug/Kg	1	06/13/19	WB	SW8270D
2-Chloronaphthalene	ND	240	98	ug/Kg	1	06/13/19	WB	SW8270D
2-Chlorophenol	ND	240	98	ug/Kg	1	06/13/19	WB	SW8270D
2-Methylnaphthalene	ND	240	100	ug/Kg	1	06/13/19	WB	SW8270D
2-Methylphenol (o-cresol)	ND	240	160	ug/Kg	1	06/13/19	WB	SW8270D
2-Nitroaniline	ND	240	240	ug/Kg	1	06/13/19	WB	SW8270D
2-Nitrophenol	ND	240	220	ug/Kg	1	06/13/19	WB	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	240	140	ug/Kg	1	06/13/19	WB	SW8270D
3,3'-Dichlorobenzidine	ND	170	160	ug/Kg	1	06/13/19	WB	SW8270D
3-Nitroaniline	ND	340	690	ug/Kg	1	06/13/19	WB	SW8270D
4,6-Dinitro-2-methylphenol	ND	210	69	ug/Kg	1	06/13/19	WB	SW8270D
4-Bromophenyl phenyl ether	ND	240	100	ug/Kg	1	06/13/19	WB	SW8270D
4-Chloro-3-methylphenol	ND	240	120	ug/Kg	1	06/13/19	WB	SW8270D
4-Chloroaniline	ND	280	160	ug/Kg	1	06/13/19	WB	SW8270D
4-Chlorophenyl phenyl ether	ND	240	120	ug/Kg	1	06/13/19	WB	SW8270D
4-Nitroaniline	ND	340	110	ug/Kg	1	06/13/19	WB	SW8270D
4-Nitrophenol	ND	340	160	ug/Kg	1	06/13/19	WB	SW8270D
Acenaphthene	ND	240	100	ug/Kg	1	06/13/19	WB	SW8270D
Acenaphthylene	ND	240	96	ug/Kg	1	06/13/19	WB	SW8270D
Acetophenone	ND	240	110	ug/Kg	1	06/13/19	WB	SW8270D
Aniline	ND	280	280	ug/Kg	1	06/13/19	WB	SW8270D
Anthracene	ND	240	110	ug/Kg	1	06/13/19	WB	SW8270D
Benz(a)anthracene	ND	240	120	ug/Kg	1	06/13/19	WB	SW8270D
Benzidine	ND	340	200	ug/Kg	1	06/13/19	WB	SW8270D
Benzo(a)pyrene	130	J 170	110	ug/Kg	1	06/13/19	WB	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Benzo(b)fluoranthene	ND	240	120	ug/Kg	1	06/13/19	WB	SW8270D
Benzo(ghi)perylene	240	240	110	ug/Kg	1	06/13/19	WB	SW8270D
Benzo(k)fluoranthene	ND	240	110	ug/Kg	1	06/13/19	WB	SW8270D
Benzoic acid	ND	1700	690	ug/Kg	1	06/13/19	WB	SW8270D
Benzyl butyl phthalate	ND	240	89	ug/Kg	1	06/13/19	WB	SW8270D
Bis(2-chloroethoxy)methane	ND	240	95	ug/Kg	1	06/13/19	WB	SW8270D
Bis(2-chloroethyl)ether	ND	170	93	ug/Kg	1	06/13/19	WB	SW8270D
Bis(2-chloroisopropyl)ether	ND	240	96	ug/Kg	1	06/13/19	WB	SW8270D
Bis(2-ethylhexyl)phthalate	ND	240	99	ug/Kg	1	06/13/19	WB	SW8270D
Carbazole	ND	170	140	ug/Kg	1	06/13/19	WB	SW8270D
Chrysene	ND	240	120	ug/Kg	1	06/13/19	WB	SW8270D
Dibenz(a,h)anthracene	ND	170	110	ug/Kg	1	06/13/19	WB	SW8270D
Dibenzofuran	ND	240	100	ug/Kg	1	06/13/19	WB	SW8270D
Diethyl phthalate	ND	240	110	ug/Kg	1	06/13/19	WB	SW8270D
Dimethylphthalate	ND	240	110	ug/Kg	1	06/13/19	WB	SW8270D
Di-n-butylphthalate	ND	240	91	ug/Kg	1	06/13/19	WB	SW8270D
Di-n-octylphthalate	ND	240	89	ug/Kg	1	06/13/19	WB	SW8270D
Fluoranthene	ND	240	110	ug/Kg	1	06/13/19	WB	SW8270D
Fluorene	ND	240	110	ug/Kg	1	06/13/19	WB	SW8270D
Hexachlorobenzene	ND	170	100	ug/Kg	1	06/13/19	WB	SW8270D
Hexachlorobutadiene	ND	240	120	ug/Kg	1	06/13/19	WB	SW8270D
Hexachlorocyclopentadiene	ND	240	110	ug/Kg	1	06/13/19	WB	SW8270D
Hexachloroethane	ND	170	100	ug/Kg	1	06/13/19	WB	SW8270D
Indeno(1,2,3-cd)pyrene	260	240	110	ug/Kg	1	06/13/19	WB	SW8270D
Isophorone	ND	170	96	ug/Kg	1	06/13/19	WB	SW8270D
Naphthalene	ND	240	99	ug/Kg	1	06/13/19	WB	SW8270D
Nitrobenzene	ND	170	120	ug/Kg	1	06/13/19	WB	SW8270D
N-Nitrosodimethylamine	ND	240	97	ug/Kg	1	06/13/19	WB	SW8270D
N-Nitrosodi-n-propylamine	ND	170	110	ug/Kg	1	06/13/19	WB	SW8270D
N-Nitrosodiphenylamine	ND	240	130	ug/Kg	1	06/13/19	WB	SW8270D
Pentachloronitrobenzene	ND	240	130	ug/Kg	1	06/13/19	WB	SW8270D
Pentachlorophenol	ND	210	130	ug/Kg	1	06/13/19	WB	SW8270D
Phenanthrene	ND	240	98	ug/Kg	1	06/13/19	WB	SW8270D
Phenol	ND	240	110	ug/Kg	1	06/13/19	WB	SW8270D
Pyrene	ND	240	120	ug/Kg	1	06/13/19	WB	SW8270D
Pyridine	ND	240	85	ug/Kg	1	06/13/19	WB	SW8270D
<b><u>QA/QC Surrogates</u></b>								
% 2,4,6-Tribromophenol	80			%	1	06/13/19	WB	30 - 130 %
% 2-Fluorobiphenyl	66			%	1	06/13/19	WB	30 - 130 %
% 2-Fluorophenol	56			%	1	06/13/19	WB	30 - 130 %
% Nitrobenzene-d5	71			%	1	06/13/19	WB	30 - 130 %
% Phenol-d5	68			%	1	06/13/19	WB	30 - 130 %
% Terphenyl-d14	61			%	1	06/13/19	WB	30 - 130 %
Field Extraction	Completed					06/07/19		SW5035A

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

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**

**June 21, 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

June 21, 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: DR  
 Received by: CP  
 Analyzed by: see "By" below

## Date

06/07/19  
 06/10/19

## Time

10:33  
 15:02

## Laboratory Data

SDG ID: GCD30633  
 Phoenix ID: CD30634

Project ID: 1840 PARK AVE, MANHATTAN NY  
 Client ID: P2 (8-10')

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Percent Solid	85			%		06/10/19	ML	SW846-%Solid
Soil Extraction for SVOA	Completed					06/11/19	JJ/LV	SW3545A

## Volatiles

1,1,1,2-Tetrachloroethane	ND	5.6	1.1	ug/Kg	1	06/15/19	JLI	SW8260C
1,1,1-Trichloroethane	ND	5.6	0.56	ug/Kg	1	06/15/19	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	5.6	1.1	ug/Kg	1	06/15/19	JLI	SW8260C
1,1,2-Trichloroethane	ND	5.6	1.1	ug/Kg	1	06/15/19	JLI	SW8260C
1,1-Dichloroethane	ND	5.6	1.1	ug/Kg	1	06/15/19	JLI	SW8260C
1,1-Dichloroethene	ND	5.6	0.56	ug/Kg	1	06/15/19	JLI	SW8260C
1,1-Dichloropropene	ND	5.6	0.56	ug/Kg	1	06/15/19	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	5.6	1.1	ug/Kg	1	06/15/19	JLI	SW8260C
1,2,3-Trichloropropane	ND	5.6	0.56	ug/Kg	1	06/15/19	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	5.6	1.1	ug/Kg	1	06/15/19	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	5.6	0.56	ug/Kg	1	06/15/19	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	5.6	1.1	ug/Kg	1	06/15/19	JLI	SW8260C
1,2-Dibromoethane	ND	5.6	0.56	ug/Kg	1	06/15/19	JLI	SW8260C
1,2-Dichlorobenzene	ND	5.6	0.56	ug/Kg	1	06/15/19	JLI	SW8260C
1,2-Dichloroethane	ND	5.6	0.56	ug/Kg	1	06/15/19	JLI	SW8260C
1,2-Dichloropropane	ND	5.6	1.1	ug/Kg	1	06/15/19	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	5.6	0.56	ug/Kg	1	06/15/19	JLI	SW8260C
1,3-Dichlorobenzene	ND	5.6	0.56	ug/Kg	1	06/15/19	JLI	SW8260C
1,3-Dichloropropane	ND	5.6	1.1	ug/Kg	1	06/15/19	JLI	SW8260C
1,4-Dichlorobenzene	ND	5.6	0.56	ug/Kg	1	06/15/19	JLI	SW8260C
2,2-Dichloropropane	ND	5.6	0.56	ug/Kg	1	06/15/19	JLI	SW8260C
2-Chlorotoluene	ND	5.6	1.1	ug/Kg	1	06/15/19	JLI	SW8260C
2-Hexanone	ND	28	5.6	ug/Kg	1	06/15/19	JLI	SW8260C
2-Isopropyltoluene	ND	5.6	0.56	ug/Kg	1	06/15/19	JLI	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
4-Chlorotoluene	ND	5.6	0.56	ug/Kg	1	06/15/19	JLI	SW8260C
4-Methyl-2-pentanone	ND	28	5.6	ug/Kg	1	06/15/19	JLI	SW8260C
Acetone	5.9	JS 28	5.6	ug/Kg	1	06/15/19	JLI	SW8260C
Acrylonitrile	ND	11	1.1	ug/Kg	1	06/15/19	JLI	SW8260C
Benzene	ND	5.6	0.56	ug/Kg	1	06/15/19	JLI	SW8260C
Bromobenzene	ND	5.6	0.56	ug/Kg	1	06/15/19	JLI	SW8260C
Bromochloromethane	ND	5.6	0.56	ug/Kg	1	06/15/19	JLI	SW8260C
Bromodichloromethane	ND	5.6	1.1	ug/Kg	1	06/15/19	JLI	SW8260C
Bromoform	ND	5.6	1.1	ug/Kg	1	06/15/19	JLI	SW8260C
Bromomethane	ND	5.6	2.3	ug/Kg	1	06/15/19	JLI	SW8260C
Carbon Disulfide	ND	5.6	1.1	ug/Kg	1	06/15/19	JLI	SW8260C
Carbon tetrachloride	ND	5.6	1.1	ug/Kg	1	06/15/19	JLI	SW8260C
Chlorobenzene	ND	5.6	0.56	ug/Kg	1	06/15/19	JLI	SW8260C
Chloroethane	ND	5.6	0.56	ug/Kg	1	06/15/19	JLI	SW8260C
Chloroform	ND	5.6	0.56	ug/Kg	1	06/15/19	JLI	SW8260C
Chloromethane	ND	5.6	1.1	ug/Kg	1	06/15/19	JLI	SW8260C
cis-1,2-Dichloroethene	ND	5.6	0.56	ug/Kg	1	06/15/19	JLI	SW8260C
cis-1,3-Dichloropropene	ND	5.6	0.56	ug/Kg	1	06/15/19	JLI	SW8260C
Dibromochloromethane	ND	5.6	1.1	ug/Kg	1	06/15/19	JLI	SW8260C
Dibromomethane	ND	5.6	1.1	ug/Kg	1	06/15/19	JLI	SW8260C
Dichlorodifluoromethane	ND	5.6	0.56	ug/Kg	1	06/15/19	JLI	SW8260C
Ethylbenzene	ND	5.6	0.56	ug/Kg	1	06/15/19	JLI	SW8260C
Hexachlorobutadiene	ND	5.6	0.56	ug/Kg	1	06/15/19	JLI	SW8260C
Isopropylbenzene	ND	5.6	0.56	ug/Kg	1	06/15/19	JLI	SW8260C
m&p-Xylene	ND	5.6	1.1	ug/Kg	1	06/15/19	JLI	SW8260C
Methyl Ethyl Ketone	ND	34	5.6	ug/Kg	1	06/15/19	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	11	1.1	ug/Kg	1	06/15/19	JLI	SW8260C
Methylene chloride	ND	5.6	5.6	ug/Kg	1	06/15/19	JLI	SW8260C
Naphthalene	ND	5.6	1.1	ug/Kg	1	06/15/19	JLI	SW8260C
n-Butylbenzene	ND	5.6	0.56	ug/Kg	1	06/15/19	JLI	SW8260C
n-Propylbenzene	ND	5.6	1.1	ug/Kg	1	06/15/19	JLI	SW8260C
o-Xylene	ND	5.6	1.1	ug/Kg	1	06/15/19	JLI	SW8260C
p-Isopropyltoluene	ND	5.6	0.56	ug/Kg	1	06/15/19	JLI	SW8260C
sec-Butylbenzene	ND	5.6	0.56	ug/Kg	1	06/15/19	JLI	SW8260C
Styrene	ND	5.6	0.56	ug/Kg	1	06/15/19	JLI	SW8260C
tert-Butylbenzene	ND	5.6	0.56	ug/Kg	1	06/15/19	JLI	SW8260C
Tetrachloroethene	ND	5.6	1.1	ug/Kg	1	06/15/19	JLI	SW8260C
Tetrahydrofuran (THF)	ND	11	2.8	ug/Kg	1	06/15/19	JLI	SW8260C
Toluene	ND	5.6	0.56	ug/Kg	1	06/15/19	JLI	SW8260C
trans-1,2-Dichloroethene	ND	5.6	0.56	ug/Kg	1	06/15/19	JLI	SW8260C
trans-1,3-Dichloropropene	ND	5.6	0.56	ug/Kg	1	06/15/19	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	11	2.8	ug/Kg	1	06/15/19	JLI	SW8260C
Trichloroethene	ND	5.6	0.56	ug/Kg	1	06/15/19	JLI	SW8260C
Trichlorofluoromethane	ND	5.6	1.1	ug/Kg	1	06/15/19	JLI	SW8260C
Trichlorotrifluoroethane	ND	5.6	0.56	ug/Kg	1	06/15/19	JLI	SW8260C
Vinyl chloride	ND	5.6	0.56	ug/Kg	1	06/15/19	JLI	SW8260C
<b>QA/QC Surrogates</b>								
% 1,2-dichlorobenzene-d4	100			%	1	06/15/19	JLI	70 - 130 %
% Bromofluorobenzene	100			%	1	06/15/19	JLI	70 - 130 %



Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
% Dibromofluoromethane	97			%	1	06/15/19	JLI	70 - 130 %
% Toluene-d8	101			%	1	06/15/19	JLI	70 - 130 %
<b><u>1,4-dioxane</u></b>								
1,4-dioxane	ND	85	45	ug/kg	1	06/15/19	JLI	SW8260C
<b><u>Volatiles</u></b>								
1,1,1,2-Tetrachloroethane	ND	23	1.1	ug/Kg	1	06/15/19	JLI	SW8260C
Acrolein	ND	5.6	1.1	ug/Kg	1	06/15/19	JLI	SW8260C
Acrylonitrile	ND	23	0.56	ug/Kg	1	06/15/19	JLI	SW8260C
Tert-butyl alcohol	ND	110	23	ug/Kg	1	06/15/19	JLI	SW8260C
<b><u>Semivolatiles</u></b>								
1,2,4,5-Tetrachlorobenzene	ND	270	140	ug/Kg	1	06/13/19	WB	SW8270D
1,2,4-Trichlorobenzene	ND	270	120	ug/Kg	1	06/13/19	WB	SW8270D
1,2-Dichlorobenzene	ND	270	110	ug/Kg	1	06/13/19	WB	SW8270D
1,2-Diphenylhydrazine	ND	270	130	ug/Kg	1	06/13/19	WB	SW8270D
1,3-Dichlorobenzene	ND	270	120	ug/Kg	1	06/13/19	WB	SW8270D
1,4-Dichlorobenzene	ND	270	120	ug/Kg	1	06/13/19	WB	SW8270D
2,4,5-Trichlorophenol	ND	270	210	ug/Kg	1	06/13/19	WB	SW8270D
2,4,6-Trichlorophenol	ND	190	120	ug/Kg	1	06/13/19	WB	SW8270D
2,4-Dichlorophenol	ND	190	140	ug/Kg	1	06/13/19	WB	SW8270D
2,4-Dimethylphenol	ND	270	97	ug/Kg	1	06/13/19	WB	SW8270D
2,4-Dinitrophenol	ND	270	270	ug/Kg	1	06/13/19	WB	SW8270D
2,4-Dinitrotoluene	ND	190	150	ug/Kg	1	06/13/19	WB	SW8270D
2,6-Dinitrotoluene	ND	190	120	ug/Kg	1	06/13/19	WB	SW8270D
2-Chloronaphthalene	ND	270	110	ug/Kg	1	06/13/19	WB	SW8270D
2-Chlorophenol	ND	270	110	ug/Kg	1	06/13/19	WB	SW8270D
2-Methylnaphthalene	ND	270	120	ug/Kg	1	06/13/19	WB	SW8270D
2-Methylphenol (o-cresol)	ND	270	180	ug/Kg	1	06/13/19	WB	SW8270D
2-Nitroaniline	ND	270	270	ug/Kg	1	06/13/19	WB	SW8270D
2-Nitrophenol	ND	270	250	ug/Kg	1	06/13/19	WB	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	270	150	ug/Kg	1	06/13/19	WB	SW8270D
3,3'-Dichlorobenzidine	ND	190	180	ug/Kg	1	06/13/19	WB	SW8270D
3-Nitroaniline	ND	390	780	ug/Kg	1	06/13/19	WB	SW8270D
4,6-Dinitro-2-methylphenol	ND	230	78	ug/Kg	1	06/13/19	WB	SW8270D
4-Bromophenyl phenyl ether	ND	270	110	ug/Kg	1	06/13/19	WB	SW8270D
4-Chloro-3-methylphenol	ND	270	140	ug/Kg	1	06/13/19	WB	SW8270D
4-Chloroaniline	ND	310	180	ug/Kg	1	06/13/19	WB	SW8270D
4-Chlorophenyl phenyl ether	ND	270	130	ug/Kg	1	06/13/19	WB	SW8270D
4-Nitroaniline	ND	390	130	ug/Kg	1	06/13/19	WB	SW8270D
4-Nitrophenol	ND	390	180	ug/Kg	1	06/13/19	WB	SW8270D
Acenaphthene	ND	270	120	ug/Kg	1	06/13/19	WB	SW8270D
Acenaphthylene	ND	270	110	ug/Kg	1	06/13/19	WB	SW8270D
Acetophenone	ND	270	120	ug/Kg	1	06/13/19	WB	SW8270D
Aniline	ND	310	310	ug/Kg	1	06/13/19	WB	SW8270D
Anthracene	ND	270	130	ug/Kg	1	06/13/19	WB	SW8270D
Benz(a)anthracene	ND	270	130	ug/Kg	1	06/13/19	WB	SW8270D
Benzidine	ND	390	230	ug/Kg	1	06/13/19	WB	SW8270D
Benzo(a)pyrene	ND	190	130	ug/Kg	1	06/13/19	WB	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Benzo(b)fluoranthene	ND	270	130	ug/Kg	1	06/13/19	WB	SW8270D
Benzo(ghi)perylene	160	J 270	130	ug/Kg	1	06/13/19	WB	SW8270D
Benzo(k)fluoranthene	ND	270	130	ug/Kg	1	06/13/19	WB	SW8270D
Benzoic acid	ND	1900	780	ug/Kg	1	06/13/19	WB	SW8270D
Benzyl butyl phthalate	ND	270	100	ug/Kg	1	06/13/19	WB	SW8270D
Bis(2-chloroethoxy)methane	ND	270	110	ug/Kg	1	06/13/19	WB	SW8270D
Bis(2-chloroethyl)ether	ND	190	110	ug/Kg	1	06/13/19	WB	SW8270D
Bis(2-chloroisopropyl)ether	ND	270	110	ug/Kg	1	06/13/19	WB	SW8270D
Bis(2-ethylhexyl)phthalate	ND	270	110	ug/Kg	1	06/13/19	WB	SW8270D
Carbazole	ND	190	160	ug/Kg	1	06/13/19	WB	SW8270D
Chrysene	ND	270	130	ug/Kg	1	06/13/19	WB	SW8270D
Dibenz(a,h)anthracene	ND	190	130	ug/Kg	1	06/13/19	WB	SW8270D
Dibenzofuran	ND	270	110	ug/Kg	1	06/13/19	WB	SW8270D
Diethyl phthalate	ND	270	120	ug/Kg	1	06/13/19	WB	SW8270D
Dimethylphthalate	ND	270	120	ug/Kg	1	06/13/19	WB	SW8270D
Di-n-butylphthalate	ND	270	100	ug/Kg	1	06/13/19	WB	SW8270D
Di-n-octylphthalate	ND	270	100	ug/Kg	1	06/13/19	WB	SW8270D
Fluoranthene	ND	270	130	ug/Kg	1	06/13/19	WB	SW8270D
Fluorene	ND	270	130	ug/Kg	1	06/13/19	WB	SW8270D
Hexachlorobenzene	ND	190	110	ug/Kg	1	06/13/19	WB	SW8270D
Hexachlorobutadiene	ND	270	140	ug/Kg	1	06/13/19	WB	SW8270D
Hexachlorocyclopentadiene	ND	270	120	ug/Kg	1	06/13/19	WB	SW8270D
Hexachloroethane	ND	190	120	ug/Kg	1	06/13/19	WB	SW8270D
Indeno(1,2,3-cd)pyrene	150	J 270	130	ug/Kg	1	06/13/19	WB	SW8270D
Isophorone	ND	190	110	ug/Kg	1	06/13/19	WB	SW8270D
Naphthalene	ND	270	110	ug/Kg	1	06/13/19	WB	SW8270D
Nitrobenzene	ND	190	140	ug/Kg	1	06/13/19	WB	SW8270D
N-Nitrosodimethylamine	ND	270	110	ug/Kg	1	06/13/19	WB	SW8270D
N-Nitrosodi-n-propylamine	ND	190	130	ug/Kg	1	06/13/19	WB	SW8270D
N-Nitrosodiphenylamine	ND	270	150	ug/Kg	1	06/13/19	WB	SW8270D
Pentachloronitrobenzene	ND	270	150	ug/Kg	1	06/13/19	WB	SW8270D
Pentachlorophenol	ND	230	150	ug/Kg	1	06/13/19	WB	SW8270D
Phenanthrene	ND	270	110	ug/Kg	1	06/13/19	WB	SW8270D
Phenol	ND	270	120	ug/Kg	1	06/13/19	WB	SW8270D
Pyrene	ND	270	130	ug/Kg	1	06/13/19	WB	SW8270D
Pyridine	ND	270	96	ug/Kg	1	06/13/19	WB	SW8270D
<b><u>QA/QC Surrogates</u></b>								
% 2,4,6-Tribromophenol	68			%	1	06/13/19	WB	30 - 130 %
% 2-Fluorobiphenyl	47			%	1	06/13/19	WB	30 - 130 %
% 2-Fluorophenol	43			%	1	06/13/19	WB	30 - 130 %
% Nitrobenzene-d5	51			%	1	06/13/19	WB	30 - 130 %
% Phenol-d5	49			%	1	06/13/19	WB	30 - 130 %
% Terphenyl-d14	51			%	1	06/13/19	WB	30 - 130 %
Field Extraction	Completed					06/07/19		SW5035A

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

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**

**June 21, 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

June 21, 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: DR  
 Received by: CP  
 Analyzed by: see "By" below

## Date

06/07/19  
 06/10/19

## Time

11:20  
 15:02

## Laboratory Data

SDG ID: GCD30633  
 Phoenix ID: CD30635

Project ID: 1840 PARK AVE, MANHATTAN NY  
 Client ID: P3 (8-10')

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Percent Solid	95			%		06/10/19	ML	SW846-%Solid
Soil Extraction for SVOA	Completed					06/11/19	JJ/LV	SW3545A

## Volatiles

1,1,1,2-Tetrachloroethane	ND	6.2	1.2	ug/Kg	1	06/15/19	JLI	SW8260C
1,1,1-Trichloroethane	ND	6.2	0.62	ug/Kg	1	06/15/19	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	6.2	1.2	ug/Kg	1	06/15/19	JLI	SW8260C
1,1,2-Trichloroethane	ND	6.2	1.2	ug/Kg	1	06/15/19	JLI	SW8260C
1,1-Dichloroethane	ND	6.2	1.2	ug/Kg	1	06/15/19	JLI	SW8260C
1,1-Dichloroethene	ND	6.2	0.62	ug/Kg	1	06/15/19	JLI	SW8260C
1,1-Dichloropropene	ND	6.2	0.62	ug/Kg	1	06/15/19	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	6.2	1.2	ug/Kg	1	06/15/19	JLI	SW8260C
1,2,3-Trichloropropane	ND	6.2	0.62	ug/Kg	1	06/15/19	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	6.2	1.2	ug/Kg	1	06/15/19	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	6.2	0.62	ug/Kg	1	06/15/19	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	6.2	1.2	ug/Kg	1	06/15/19	JLI	SW8260C
1,2-Dibromoethane	ND	6.2	0.62	ug/Kg	1	06/15/19	JLI	SW8260C
1,2-Dichlorobenzene	ND	6.2	0.62	ug/Kg	1	06/15/19	JLI	SW8260C
1,2-Dichloroethane	ND	6.2	0.62	ug/Kg	1	06/15/19	JLI	SW8260C
1,2-Dichloropropane	ND	6.2	1.2	ug/Kg	1	06/15/19	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	6.2	0.62	ug/Kg	1	06/15/19	JLI	SW8260C
1,3-Dichlorobenzene	ND	6.2	0.62	ug/Kg	1	06/15/19	JLI	SW8260C
1,3-Dichloropropane	ND	6.2	1.2	ug/Kg	1	06/15/19	JLI	SW8260C
1,4-Dichlorobenzene	ND	6.2	0.62	ug/Kg	1	06/15/19	JLI	SW8260C
2,2-Dichloropropane	ND	6.2	0.62	ug/Kg	1	06/15/19	JLI	SW8260C
2-Chlorotoluene	ND	6.2	1.2	ug/Kg	1	06/15/19	JLI	SW8260C
2-Hexanone	ND	31	6.2	ug/Kg	1	06/15/19	JLI	SW8260C
2-Isopropyltoluene	ND	6.2	0.62	ug/Kg	1	06/15/19	JLI	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
4-Chlorotoluene	ND	6.2	0.62	ug/Kg	1	06/15/19	JLI	SW8260C
4-Methyl-2-pentanone	ND	31	6.2	ug/Kg	1	06/15/19	JLI	SW8260C
Acetone	12	JS 31	6.2	ug/Kg	1	06/15/19	JLI	SW8260C
Acrylonitrile	ND	12	1.2	ug/Kg	1	06/15/19	JLI	SW8260C
Benzene	ND	6.2	0.62	ug/Kg	1	06/15/19	JLI	SW8260C
Bromobenzene	ND	6.2	0.62	ug/Kg	1	06/15/19	JLI	SW8260C
Bromochloromethane	ND	6.2	0.62	ug/Kg	1	06/15/19	JLI	SW8260C
Bromodichloromethane	ND	6.2	1.2	ug/Kg	1	06/15/19	JLI	SW8260C
Bromoform	ND	6.2	1.2	ug/Kg	1	06/15/19	JLI	SW8260C
Bromomethane	ND	6.2	2.5	ug/Kg	1	06/15/19	JLI	SW8260C
Carbon Disulfide	ND	6.2	1.2	ug/Kg	1	06/15/19	JLI	SW8260C
Carbon tetrachloride	ND	6.2	1.2	ug/Kg	1	06/15/19	JLI	SW8260C
Chlorobenzene	ND	6.2	0.62	ug/Kg	1	06/15/19	JLI	SW8260C
Chloroethane	ND	6.2	0.62	ug/Kg	1	06/15/19	JLI	SW8260C
Chloroform	ND	6.2	0.62	ug/Kg	1	06/15/19	JLI	SW8260C
Chloromethane	ND	6.2	1.2	ug/Kg	1	06/15/19	JLI	SW8260C
cis-1,2-Dichloroethene	ND	6.2	0.62	ug/Kg	1	06/15/19	JLI	SW8260C
cis-1,3-Dichloropropene	ND	6.2	0.62	ug/Kg	1	06/15/19	JLI	SW8260C
Dibromochloromethane	ND	6.2	1.2	ug/Kg	1	06/15/19	JLI	SW8260C
Dibromomethane	ND	6.2	1.2	ug/Kg	1	06/15/19	JLI	SW8260C
Dichlorodifluoromethane	ND	6.2	0.62	ug/Kg	1	06/15/19	JLI	SW8260C
Ethylbenzene	ND	6.2	0.62	ug/Kg	1	06/15/19	JLI	SW8260C
Hexachlorobutadiene	ND	6.2	0.62	ug/Kg	1	06/15/19	JLI	SW8260C
Isopropylbenzene	ND	6.2	0.62	ug/Kg	1	06/15/19	JLI	SW8260C
m&p-Xylene	ND	6.2	1.2	ug/Kg	1	06/15/19	JLI	SW8260C
Methyl Ethyl Ketone	ND	37	6.2	ug/Kg	1	06/15/19	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	12	1.2	ug/Kg	1	06/15/19	JLI	SW8260C
Methylene chloride	ND	6.2	6.2	ug/Kg	1	06/15/19	JLI	SW8260C
Naphthalene	ND	6.2	1.2	ug/Kg	1	06/15/19	JLI	SW8260C
n-Butylbenzene	ND	6.2	0.62	ug/Kg	1	06/15/19	JLI	SW8260C
n-Propylbenzene	ND	6.2	1.2	ug/Kg	1	06/15/19	JLI	SW8260C
o-Xylene	ND	6.2	1.2	ug/Kg	1	06/15/19	JLI	SW8260C
p-Isopropyltoluene	ND	6.2	0.62	ug/Kg	1	06/15/19	JLI	SW8260C
sec-Butylbenzene	ND	6.2	0.62	ug/Kg	1	06/15/19	JLI	SW8260C
Styrene	ND	6.2	0.62	ug/Kg	1	06/15/19	JLI	SW8260C
tert-Butylbenzene	ND	6.2	0.62	ug/Kg	1	06/15/19	JLI	SW8260C
Tetrachloroethene	ND	6.2	1.2	ug/Kg	1	06/15/19	JLI	SW8260C
Tetrahydrofuran (THF)	ND	12	3.1	ug/Kg	1	06/15/19	JLI	SW8260C
Toluene	ND	6.2	0.62	ug/Kg	1	06/15/19	JLI	SW8260C
trans-1,2-Dichloroethene	ND	6.2	0.62	ug/Kg	1	06/15/19	JLI	SW8260C
trans-1,3-Dichloropropene	ND	6.2	0.62	ug/Kg	1	06/15/19	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	12	3.1	ug/Kg	1	06/15/19	JLI	SW8260C
Trichloroethene	ND	6.2	0.62	ug/Kg	1	06/15/19	JLI	SW8260C
Trichlorofluoromethane	ND	6.2	1.2	ug/Kg	1	06/15/19	JLI	SW8260C
Trichlorotrifluoroethane	ND	6.2	0.62	ug/Kg	1	06/15/19	JLI	SW8260C
Vinyl chloride	ND	6.2	0.62	ug/Kg	1	06/15/19	JLI	SW8260C
<b>QA/QC Surrogates</b>								
% 1,2-dichlorobenzene-d4	100			%	1	06/15/19	JLI	70 - 130 %
% Bromofluorobenzene	100			%	1	06/15/19	JLI	70 - 130 %

1

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
% Dibromofluoromethane	94			%	1	06/15/19	JLI	70 - 130 %
% Toluene-d8	101			%	1	06/15/19	JLI	70 - 130 %
<b><u>1,4-dioxane</u></b>								
1,4-dioxane	ND	93	50	ug/kg	1	06/15/19	JLI	SW8260C
<b><u>Volatiles</u></b>								
1,1,1,2-Tetrachloroethane	ND	25	1.2	ug/Kg	1	06/15/19	JLI	SW8260C
Acrolein	ND	6.2	1.2	ug/Kg	1	06/15/19	JLI	SW8260C
Acrylonitrile	ND	25	0.62	ug/Kg	1	06/15/19	JLI	SW8260C
Tert-butyl alcohol	ND	120	25	ug/Kg	1	06/15/19	JLI	SW8260C
<b><u>Semivolatiles</u></b>								
1,2,4,5-Tetrachlorobenzene	ND	240	120	ug/Kg	1	06/13/19	WB	SW8270D
1,2,4-Trichlorobenzene	ND	240	100	ug/Kg	1	06/13/19	WB	SW8270D
1,2-Dichlorobenzene	ND	240	97	ug/Kg	1	06/13/19	WB	SW8270D
1,2-Diphenylhydrazine	ND	240	110	ug/Kg	1	06/13/19	WB	SW8270D
1,3-Dichlorobenzene	ND	240	100	ug/Kg	1	06/13/19	WB	SW8270D
1,4-Dichlorobenzene	ND	240	100	ug/Kg	1	06/13/19	WB	SW8270D
2,4,5-Trichlorophenol	ND	240	190	ug/Kg	1	06/13/19	WB	SW8270D
2,4,6-Trichlorophenol	ND	170	110	ug/Kg	1	06/13/19	WB	SW8270D
2,4-Dichlorophenol	ND	170	120	ug/Kg	1	06/13/19	WB	SW8270D
2,4-Dimethylphenol	ND	240	85	ug/Kg	1	06/13/19	WB	SW8270D
2,4-Dinitrophenol	ND	240	240	ug/Kg	1	06/13/19	WB	SW8270D
2,4-Dinitrotoluene	ND	170	140	ug/Kg	1	06/13/19	WB	SW8270D
2,6-Dinitrotoluene	ND	170	110	ug/Kg	1	06/13/19	WB	SW8270D
2-Chloronaphthalene	ND	240	97	ug/Kg	1	06/13/19	WB	SW8270D
2-Chlorophenol	ND	240	97	ug/Kg	1	06/13/19	WB	SW8270D
2-Methylnaphthalene	ND	240	100	ug/Kg	1	06/13/19	WB	SW8270D
2-Methylphenol (o-cresol)	ND	240	160	ug/Kg	1	06/13/19	WB	SW8270D
2-Nitroaniline	ND	240	240	ug/Kg	1	06/13/19	WB	SW8270D
2-Nitrophenol	ND	240	220	ug/Kg	1	06/13/19	WB	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	240	140	ug/Kg	1	06/13/19	WB	SW8270D
3,3'-Dichlorobenzidine	ND	170	160	ug/Kg	1	06/13/19	WB	SW8270D
3-Nitroaniline	ND	340	690	ug/Kg	1	06/13/19	WB	SW8270D
4,6-Dinitro-2-methylphenol	ND	210	69	ug/Kg	1	06/13/19	WB	SW8270D
4-Bromophenyl phenyl ether	ND	240	100	ug/Kg	1	06/13/19	WB	SW8270D
4-Chloro-3-methylphenol	ND	240	120	ug/Kg	1	06/13/19	WB	SW8270D
4-Chloroaniline	ND	270	160	ug/Kg	1	06/13/19	WB	SW8270D
4-Chlorophenyl phenyl ether	ND	240	120	ug/Kg	1	06/13/19	WB	SW8270D
4-Nitroaniline	ND	340	110	ug/Kg	1	06/13/19	WB	SW8270D
4-Nitrophenol	ND	340	160	ug/Kg	1	06/13/19	WB	SW8270D
Acenaphthene	ND	240	100	ug/Kg	1	06/13/19	WB	SW8270D
Acenaphthylene	ND	240	96	ug/Kg	1	06/13/19	WB	SW8270D
Acetophenone	ND	240	110	ug/Kg	1	06/13/19	WB	SW8270D
Aniline	ND	270	270	ug/Kg	1	06/13/19	WB	SW8270D
Anthracene	ND	240	110	ug/Kg	1	06/13/19	WB	SW8270D
Benz(a)anthracene	ND	240	120	ug/Kg	1	06/13/19	WB	SW8270D
Benzidine	ND	340	200	ug/Kg	1	06/13/19	WB	SW8270D
Benzo(a)pyrene	ND	170	110	ug/Kg	1	06/13/19	WB	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Benzo(b)fluoranthene	ND	240	120	ug/Kg	1	06/13/19	WB	SW8270D
Benzo(ghi)perylene	ND	240	110	ug/Kg	1	06/13/19	WB	SW8270D
Benzo(k)fluoranthene	ND	240	110	ug/Kg	1	06/13/19	WB	SW8270D
Benzoic acid	ND	1700	690	ug/Kg	1	06/13/19	WB	SW8270D
Benzyl butyl phthalate	ND	240	89	ug/Kg	1	06/13/19	WB	SW8270D
Bis(2-chloroethoxy)methane	ND	240	95	ug/Kg	1	06/13/19	WB	SW8270D
Bis(2-chloroethyl)ether	ND	170	93	ug/Kg	1	06/13/19	WB	SW8270D
Bis(2-chloroisopropyl)ether	ND	240	95	ug/Kg	1	06/13/19	WB	SW8270D
Bis(2-ethylhexyl)phthalate	ND	240	99	ug/Kg	1	06/13/19	WB	SW8270D
Carbazole	ND	170	140	ug/Kg	1	06/13/19	WB	SW8270D
Chrysene	ND	240	120	ug/Kg	1	06/13/19	WB	SW8270D
Dibenz(a,h)anthracene	ND	170	110	ug/Kg	1	06/13/19	WB	SW8270D
Dibenzofuran	ND	240	100	ug/Kg	1	06/13/19	WB	SW8270D
Diethyl phthalate	ND	240	110	ug/Kg	1	06/13/19	WB	SW8270D
Dimethylphthalate	ND	240	110	ug/Kg	1	06/13/19	WB	SW8270D
Di-n-butylphthalate	ND	240	91	ug/Kg	1	06/13/19	WB	SW8270D
Di-n-octylphthalate	ND	240	89	ug/Kg	1	06/13/19	WB	SW8270D
Fluoranthene	ND	240	110	ug/Kg	1	06/13/19	WB	SW8270D
Fluorene	ND	240	110	ug/Kg	1	06/13/19	WB	SW8270D
Hexachlorobenzene	ND	170	100	ug/Kg	1	06/13/19	WB	SW8270D
Hexachlorobutadiene	ND	240	120	ug/Kg	1	06/13/19	WB	SW8270D
Hexachlorocyclopentadiene	ND	240	100	ug/Kg	1	06/13/19	WB	SW8270D
Hexachloroethane	ND	170	100	ug/Kg	1	06/13/19	WB	SW8270D
Indeno(1,2,3-cd)pyrene	ND	240	110	ug/Kg	1	06/13/19	WB	SW8270D
Isophorone	ND	170	96	ug/Kg	1	06/13/19	WB	SW8270D
Naphthalene	ND	240	99	ug/Kg	1	06/13/19	WB	SW8270D
Nitrobenzene	ND	170	120	ug/Kg	1	06/13/19	WB	SW8270D
N-Nitrosodimethylamine	ND	240	97	ug/Kg	1	06/13/19	WB	SW8270D
N-Nitrosodi-n-propylamine	ND	170	110	ug/Kg	1	06/13/19	WB	SW8270D
N-Nitrosodiphenylamine	ND	240	130	ug/Kg	1	06/13/19	WB	SW8270D
Pentachloronitrobenzene	ND	240	130	ug/Kg	1	06/13/19	WB	SW8270D
Pentachlorophenol	ND	210	130	ug/Kg	1	06/13/19	WB	SW8270D
Phenanthrene	ND	240	98	ug/Kg	1	06/13/19	WB	SW8270D
Phenol	ND	240	110	ug/Kg	1	06/13/19	WB	SW8270D
Pyrene	ND	240	120	ug/Kg	1	06/13/19	WB	SW8270D
Pyridine	ND	240	84	ug/Kg	1	06/13/19	WB	SW8270D
<b><u>QA/QC Surrogates</u></b>								
% 2,4,6-Tribromophenol	73			%	1	06/13/19	WB	30 - 130 %
% 2-Fluorobiphenyl	58			%	1	06/13/19	WB	30 - 130 %
% 2-Fluorophenol	49			%	1	06/13/19	WB	30 - 130 %
% Nitrobenzene-d5	63			%	1	06/13/19	WB	30 - 130 %
% Phenol-d5	59			%	1	06/13/19	WB	30 - 130 %
% Terphenyl-d14	59			%	1	06/13/19	WB	30 - 130 %
Field Extraction	Completed					06/07/19		SW5035A

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

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**

**June 21, 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

June 21, 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: DR  
 Received by: CP  
 Analyzed by: see "By" below

## Date

06/07/19  
 06/10/19

## Time

11:45  
 15:02

## Laboratory Data

SDG ID: GCD30633  
 Phoenix ID: CD30636

Project ID: 1840 PARK AVE, MANHATTAN NY  
 Client ID: P4 (8-10')

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Percent Solid	92			%		06/10/19	ML	SW846-%Solid
Soil Extraction for SVOA	Completed					06/11/19	JJ/EE	SW3545A

## Volatiles

1,1,1,2-Tetrachloroethane	ND	4.9	0.99	ug/Kg	1	06/15/19	JLI	SW8260C
1,1,1-Trichloroethane	ND	4.9	0.49	ug/Kg	1	06/15/19	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	4.9	0.99	ug/Kg	1	06/15/19	JLI	SW8260C
1,1,2-Trichloroethane	ND	4.9	0.99	ug/Kg	1	06/15/19	JLI	SW8260C
1,1-Dichloroethane	ND	4.9	0.99	ug/Kg	1	06/15/19	JLI	SW8260C
1,1-Dichloroethene	ND	4.9	0.49	ug/Kg	1	06/15/19	JLI	SW8260C
1,1-Dichloropropene	ND	4.9	0.49	ug/Kg	1	06/15/19	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	4.9	0.99	ug/Kg	1	06/15/19	JLI	SW8260C
1,2,3-Trichloropropane	ND	4.9	0.49	ug/Kg	1	06/15/19	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	4.9	0.99	ug/Kg	1	06/15/19	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	4.9	0.49	ug/Kg	1	06/15/19	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	4.9	0.99	ug/Kg	1	06/15/19	JLI	SW8260C
1,2-Dibromoethane	ND	4.9	0.49	ug/Kg	1	06/15/19	JLI	SW8260C
1,2-Dichlorobenzene	ND	4.9	0.49	ug/Kg	1	06/15/19	JLI	SW8260C
1,2-Dichloroethane	ND	4.9	0.49	ug/Kg	1	06/15/19	JLI	SW8260C
1,2-Dichloropropane	ND	4.9	0.99	ug/Kg	1	06/15/19	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	4.9	0.49	ug/Kg	1	06/15/19	JLI	SW8260C
1,3-Dichlorobenzene	ND	4.9	0.49	ug/Kg	1	06/15/19	JLI	SW8260C
1,3-Dichloropropane	ND	4.9	0.99	ug/Kg	1	06/15/19	JLI	SW8260C
1,4-Dichlorobenzene	ND	4.9	0.49	ug/Kg	1	06/15/19	JLI	SW8260C
2,2-Dichloropropane	ND	4.9	0.49	ug/Kg	1	06/15/19	JLI	SW8260C
2-Chlorotoluene	ND	4.9	0.99	ug/Kg	1	06/15/19	JLI	SW8260C
2-Hexanone	ND	25	4.9	ug/Kg	1	06/15/19	JLI	SW8260C
2-Isopropyltoluene	ND	4.9	0.49	ug/Kg	1	06/15/19	JLI	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
4-Chlorotoluene	ND	4.9	0.49	ug/Kg	1	06/15/19	JLI	SW8260C
4-Methyl-2-pentanone	ND	25	4.9	ug/Kg	1	06/15/19	JLI	SW8260C
Acetone	6.6	JS 25	4.9	ug/Kg	1	06/15/19	JLI	SW8260C
Acrylonitrile	ND	9.9	0.99	ug/Kg	1	06/15/19	JLI	SW8260C
Benzene	ND	4.9	0.49	ug/Kg	1	06/15/19	JLI	SW8260C
Bromobenzene	ND	4.9	0.49	ug/Kg	1	06/15/19	JLI	SW8260C
Bromochloromethane	ND	4.9	0.49	ug/Kg	1	06/15/19	JLI	SW8260C
Bromodichloromethane	ND	4.9	0.99	ug/Kg	1	06/15/19	JLI	SW8260C
Bromoform	ND	4.9	0.99	ug/Kg	1	06/15/19	JLI	SW8260C
Bromomethane	ND	4.9	2.0	ug/Kg	1	06/15/19	JLI	SW8260C
Carbon Disulfide	ND	4.9	0.99	ug/Kg	1	06/15/19	JLI	SW8260C
Carbon tetrachloride	ND	4.9	0.99	ug/Kg	1	06/15/19	JLI	SW8260C
Chlorobenzene	ND	4.9	0.49	ug/Kg	1	06/15/19	JLI	SW8260C
Chloroethane	ND	4.9	0.49	ug/Kg	1	06/15/19	JLI	SW8260C
Chloroform	ND	4.9	0.49	ug/Kg	1	06/15/19	JLI	SW8260C
Chloromethane	ND	4.9	0.99	ug/Kg	1	06/15/19	JLI	SW8260C
cis-1,2-Dichloroethene	ND	4.9	0.49	ug/Kg	1	06/15/19	JLI	SW8260C
cis-1,3-Dichloropropene	ND	4.9	0.49	ug/Kg	1	06/15/19	JLI	SW8260C
Dibromochloromethane	ND	4.9	0.99	ug/Kg	1	06/15/19	JLI	SW8260C
Dibromomethane	ND	4.9	0.99	ug/Kg	1	06/15/19	JLI	SW8260C
Dichlorodifluoromethane	ND	4.9	0.49	ug/Kg	1	06/15/19	JLI	SW8260C
Ethylbenzene	ND	4.9	0.49	ug/Kg	1	06/15/19	JLI	SW8260C
Hexachlorobutadiene	ND	4.9	0.49	ug/Kg	1	06/15/19	JLI	SW8260C
Isopropylbenzene	ND	4.9	0.49	ug/Kg	1	06/15/19	JLI	SW8260C
m&p-Xylene	ND	4.9	0.99	ug/Kg	1	06/15/19	JLI	SW8260C
Methyl Ethyl Ketone	ND	30	4.9	ug/Kg	1	06/15/19	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	9.9	0.99	ug/Kg	1	06/15/19	JLI	SW8260C
Methylene chloride	12	S 4.9	4.9	ug/Kg	1	06/15/19	JLI	SW8260C
Naphthalene	ND	4.9	0.99	ug/Kg	1	06/15/19	JLI	SW8260C
n-Butylbenzene	ND	4.9	0.49	ug/Kg	1	06/15/19	JLI	SW8260C
n-Propylbenzene	ND	4.9	0.99	ug/Kg	1	06/15/19	JLI	SW8260C
o-Xylene	ND	4.9	0.99	ug/Kg	1	06/15/19	JLI	SW8260C
p-Isopropyltoluene	ND	4.9	0.49	ug/Kg	1	06/15/19	JLI	SW8260C
sec-Butylbenzene	ND	4.9	0.49	ug/Kg	1	06/15/19	JLI	SW8260C
Styrene	ND	4.9	0.49	ug/Kg	1	06/15/19	JLI	SW8260C
tert-Butylbenzene	ND	4.9	0.49	ug/Kg	1	06/15/19	JLI	SW8260C
Tetrachloroethene	ND	4.9	0.99	ug/Kg	1	06/15/19	JLI	SW8260C
Tetrahydrofuran (THF)	ND	9.9	2.5	ug/Kg	1	06/15/19	JLI	SW8260C
Toluene	ND	4.9	0.49	ug/Kg	1	06/15/19	JLI	SW8260C
trans-1,2-Dichloroethene	ND	4.9	0.49	ug/Kg	1	06/15/19	JLI	SW8260C
trans-1,3-Dichloropropene	ND	4.9	0.49	ug/Kg	1	06/15/19	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	9.9	2.5	ug/Kg	1	06/15/19	JLI	SW8260C
Trichloroethene	ND	4.9	0.49	ug/Kg	1	06/15/19	JLI	SW8260C
Trichlorofluoromethane	ND	4.9	0.99	ug/Kg	1	06/15/19	JLI	SW8260C
Trichlorotrifluoroethane	ND	4.9	0.49	ug/Kg	1	06/15/19	JLI	SW8260C
Vinyl chloride	ND	4.9	0.49	ug/Kg	1	06/15/19	JLI	SW8260C
<b>QA/QC Surrogates</b>								
% 1,2-dichlorobenzene-d4	99			%	1	06/15/19	JLI	70 - 130 %
% Bromofluorobenzene	100			%	1	06/15/19	JLI	70 - 130 %

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
% Dibromofluoromethane	93			%	1	06/15/19	JLI	70 - 130 %
% Toluene-d8	101			%	1	06/15/19	JLI	70 - 130 %
<b><u>1,4-dioxane</u></b>								
1,4-dioxane	ND	74	40	ug/kg	1	06/15/19	JLI	SW8260C
<b><u>Volatiles</u></b>								
1,1,1,2-Tetrachloroethane	ND	20	0.99	ug/Kg	1	06/15/19	JLI	SW8260C
Acrolein	ND	4.9	0.99	ug/Kg	1	06/15/19	JLI	SW8260C
Acrylonitrile	ND	20	0.49	ug/Kg	1	06/15/19	JLI	SW8260C
Tert-butyl alcohol	ND	99	20	ug/Kg	1	06/15/19	JLI	SW8260C
<b><u>Semivolatiles</u></b>								
1,2,4,5-Tetrachlorobenzene	ND	250	120	ug/Kg	1	06/12/19	WB	SW8270D
1,2,4-Trichlorobenzene	ND	250	110	ug/Kg	1	06/12/19	WB	SW8270D
1,2-Dichlorobenzene	ND	250	99	ug/Kg	1	06/12/19	WB	SW8270D
1,2-Diphenylhydrazine	ND	250	110	ug/Kg	1	06/12/19	WB	SW8270D
1,3-Dichlorobenzene	ND	250	100	ug/Kg	1	06/12/19	WB	SW8270D
1,4-Dichlorobenzene	ND	250	100	ug/Kg	1	06/12/19	WB	SW8270D
2,4,5-Trichlorophenol	ND	250	190	ug/Kg	1	06/12/19	WB	SW8270D
2,4,6-Trichlorophenol	ND	180	110	ug/Kg	1	06/12/19	WB	SW8270D
2,4-Dichlorophenol	ND	180	120	ug/Kg	1	06/12/19	WB	SW8270D
2,4-Dimethylphenol	ND	250	87	ug/Kg	1	06/12/19	WB	SW8270D
2,4-Dinitrophenol	ND	250	250	ug/Kg	1	06/12/19	WB	SW8270D
2,4-Dinitrotoluene	ND	180	140	ug/Kg	1	06/12/19	WB	SW8270D
2,6-Dinitrotoluene	ND	180	110	ug/Kg	1	06/12/19	WB	SW8270D
2-Chloronaphthalene	ND	250	100	ug/Kg	1	06/12/19	WB	SW8270D
2-Chlorophenol	ND	250	100	ug/Kg	1	06/12/19	WB	SW8270D
2-Methylnaphthalene	ND	250	100	ug/Kg	1	06/12/19	WB	SW8270D
2-Methylphenol (o-cresol)	ND	250	170	ug/Kg	1	06/12/19	WB	SW8270D
2-Nitroaniline	ND	250	250	ug/Kg	1	06/12/19	WB	SW8270D
2-Nitrophenol	ND	250	220	ug/Kg	1	06/12/19	WB	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	250	140	ug/Kg	1	06/12/19	WB	SW8270D
3,3'-Dichlorobenzidine	ND	180	170	ug/Kg	1	06/12/19	WB	SW8270D
3-Nitroaniline	ND	350	700	ug/Kg	1	06/12/19	WB	SW8270D
4,6-Dinitro-2-methylphenol	ND	210	70	ug/Kg	1	06/12/19	WB	SW8270D
4-Bromophenyl phenyl ether	ND	250	100	ug/Kg	1	06/12/19	WB	SW8270D
4-Chloro-3-methylphenol	ND	250	120	ug/Kg	1	06/12/19	WB	SW8270D
4-Chloroaniline	ND	280	160	ug/Kg	1	06/12/19	WB	SW8270D
4-Chlorophenyl phenyl ether	ND	250	120	ug/Kg	1	06/12/19	WB	SW8270D
4-Nitroaniline	ND	350	120	ug/Kg	1	06/12/19	WB	SW8270D
4-Nitrophenol	ND	350	160	ug/Kg	1	06/12/19	WB	SW8270D
Acenaphthene	ND	250	110	ug/Kg	1	06/12/19	WB	SW8270D
Acenaphthylene	ND	250	98	ug/Kg	1	06/12/19	WB	SW8270D
Acetophenone	ND	250	110	ug/Kg	1	06/12/19	WB	SW8270D
Aniline	ND	280	280	ug/Kg	1	06/12/19	WB	SW8270D
Anthracene	ND	250	120	ug/Kg	1	06/12/19	WB	SW8270D
Benz(a)anthracene	ND	250	120	ug/Kg	1	06/12/19	WB	SW8270D
Benzidine	ND	350	210	ug/Kg	1	06/12/19	WB	SW8270D
Benzo(a)pyrene	ND	180	110	ug/Kg	1	06/12/19	WB	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Benzo(b)fluoranthene	ND	250	120	ug/Kg	1	06/12/19	WB	SW8270D
Benzo(ghi)perylene	ND	250	110	ug/Kg	1	06/12/19	WB	SW8270D
Benzo(k)fluoranthene	ND	250	120	ug/Kg	1	06/12/19	WB	SW8270D
Benzoic acid	ND	1800	700	ug/Kg	1	06/12/19	WB	SW8270D
Benzyl butyl phthalate	ND	250	91	ug/Kg	1	06/12/19	WB	SW8270D
Bis(2-chloroethoxy)methane	ND	250	97	ug/Kg	1	06/12/19	WB	SW8270D
Bis(2-chloroethyl)ether	ND	180	95	ug/Kg	1	06/12/19	WB	SW8270D
Bis(2-chloroisopropyl)ether	ND	250	98	ug/Kg	1	06/12/19	WB	SW8270D
Bis(2-ethylhexyl)phthalate	ND	250	100	ug/Kg	1	06/12/19	WB	SW8270D
Carbazole	ND	180	140	ug/Kg	1	06/12/19	WB	SW8270D
Chrysene	ND	250	120	ug/Kg	1	06/12/19	WB	SW8270D
Dibenz(a,h)anthracene	ND	180	110	ug/Kg	1	06/12/19	WB	SW8270D
Dibenzofuran	ND	250	100	ug/Kg	1	06/12/19	WB	SW8270D
Diethyl phthalate	ND	250	110	ug/Kg	1	06/12/19	WB	SW8270D
Dimethylphthalate	ND	250	110	ug/Kg	1	06/12/19	WB	SW8270D
Di-n-butylphthalate	ND	250	94	ug/Kg	1	06/12/19	WB	SW8270D
Di-n-octylphthalate	ND	250	91	ug/Kg	1	06/12/19	WB	SW8270D
Fluoranthene	ND	250	110	ug/Kg	1	06/12/19	WB	SW8270D
Fluorene	ND	250	120	ug/Kg	1	06/12/19	WB	SW8270D
Hexachlorobenzene	ND	180	100	ug/Kg	1	06/12/19	WB	SW8270D
Hexachlorobutadiene	ND	250	130	ug/Kg	1	06/12/19	WB	SW8270D
Hexachlorocyclopentadiene	ND	250	110	ug/Kg	1	06/12/19	WB	SW8270D
Hexachloroethane	ND	180	110	ug/Kg	1	06/12/19	WB	SW8270D
Indeno(1,2,3-cd)pyrene	ND	250	120	ug/Kg	1	06/12/19	WB	SW8270D
Isophorone	ND	180	98	ug/Kg	1	06/12/19	WB	SW8270D
Naphthalene	ND	250	100	ug/Kg	1	06/12/19	WB	SW8270D
Nitrobenzene	ND	180	120	ug/Kg	1	06/12/19	WB	SW8270D
N-Nitrosodimethylamine	ND	250	99	ug/Kg	1	06/12/19	WB	SW8270D
N-Nitrosodi-n-propylamine	ND	180	110	ug/Kg	1	06/12/19	WB	SW8270D
N-Nitrosodiphenylamine	ND	250	130	ug/Kg	1	06/12/19	WB	SW8270D
Pentachloronitrobenzene	ND	250	130	ug/Kg	1	06/12/19	WB	SW8270D
Pentachlorophenol	ND	210	130	ug/Kg	1	06/12/19	WB	SW8270D
Phenanthrene	ND	250	100	ug/Kg	1	06/12/19	WB	SW8270D
Phenol	ND	250	110	ug/Kg	1	06/12/19	WB	SW8270D
Pyrene	ND	250	120	ug/Kg	1	06/12/19	WB	SW8270D
Pyridine	ND	250	86	ug/Kg	1	06/12/19	WB	SW8270D
<b><u>QA/QC Surrogates</u></b>								
% 2,4,6-Tribromophenol	79			%	1	06/12/19	WB	30 - 130 %
% 2-Fluorobiphenyl	53			%	1	06/12/19	WB	30 - 130 %
% 2-Fluorophenol	51			%	1	06/12/19	WB	30 - 130 %
% Nitrobenzene-d5	57			%	1	06/12/19	WB	30 - 130 %
% Phenol-d5	60			%	1	06/12/19	WB	30 - 130 %
% Terphenyl-d14	67			%	1	06/12/19	WB	30 - 130 %
Field Extraction	Completed					06/07/19		SW5035A

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

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**

**June 21, 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

June 21, 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: DR  
 Received by: CP  
 Analyzed by: see "By" below

## Date

06/07/19  
 06/10/19

## Time

9:00  
 15:02

## Laboratory Data

SDG ID: GCD30633  
 Phoenix ID: CD30637

Project ID: 1840 PARK AVE, MANHATTAN NY  
 Client ID: F1 (5-7')

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Silver	ND	0.35	0.35	mg/Kg	1	06/12/19	EK	SW6010D
Aluminum	7210	35	6.9	mg/Kg	10	06/12/19	EK	SW6010D
Arsenic	2.67	0.69	0.69	mg/Kg	1	06/12/19	EK	SW6010D
Barium	74.2	0.7	0.35	mg/Kg	1	06/12/19	EK	SW6010D
Beryllium	0.29	0.28	0.14	mg/Kg	1	06/12/19	EK	SW6010D
Calcium	22100	35	32	mg/Kg	10	06/12/19	EK	SW6010D
Cadmium	ND	0.35	0.35	mg/Kg	1	06/13/19	CPP	SW6010D
Cobalt	5.68	0.35	0.35	mg/Kg	1	06/12/19	EK	SW6010D
Chromium	14.1	0.35	0.35	mg/Kg	1	06/13/19	CPP	SW6010D
Copper	21.3	0.7	0.35	mg/kg	1	06/12/19	EK	SW6010D
Iron	14600	35	35	mg/Kg	10	06/12/19	EK	SW6010D
Mercury	0.29	0.15	0.09	mg/Kg	10	06/12/19	RS	SW7471B
Potassium	1140	7	2.7	mg/Kg	1	06/12/19	EK	SW6010D
Magnesium	3260	3.5	3.5	mg/Kg	1	06/12/19	EK	SW6010D
Manganese	324	3.5	3.5	mg/Kg	10	06/12/19	EK	SW6010D
Sodium	195	7	3.0	mg/Kg	1	06/12/19	EK	SW6010D
Nickel	11.2	0.35	0.35	mg/Kg	1	06/12/19	EK	SW6010D
Lead	103	0.7	0.35	mg/Kg	1	06/12/19	EK	SW6010D
Antimony	ND	3.5	3.5	mg/Kg	1	06/12/19	EK	SW6010D
Selenium	ND	1.4	1.2	mg/Kg	1	06/12/19	EK	SW6010D
Thallium	ND	1.4	1.4	mg/Kg	1	06/12/19	EK	SW6010D
Vanadium	15.2	0.35	0.35	mg/Kg	1	06/12/19	EK	SW6010D
Zinc	76.2	0.7	0.35	mg/Kg	1	06/12/19	EK	SW6010D
Percent Solid	87			%		06/10/19	ML	SW846-%Solid
Soil Extraction for PCB	Completed					06/11/19	MM/V	SW3545A
Soil Extraction for Pesticides	Completed					06/11/19	MM/V	SW3545A
Soil Extraction for SVOA	Completed					06/11/19	JJ/LV	SW3545A
Mercury Digestion	Completed					06/12/19	I/LS/I/LS	SW7471B

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Total Metals Digest	Completed					06/10/19	S/AG/BF	SW3050B
<b><u>Polychlorinated Biphenyls</u></b>								
PCB-1016	ND	76	76	ug/Kg	2	06/13/19	SC	SW8082A
PCB-1221	ND	76	76	ug/Kg	2	06/13/19	SC	SW8082A
PCB-1232	ND	76	76	ug/Kg	2	06/13/19	SC	SW8082A
PCB-1242	ND	76	76	ug/Kg	2	06/13/19	SC	SW8082A
PCB-1248	ND	76	76	ug/Kg	2	06/13/19	SC	SW8082A
PCB-1254	ND	76	76	ug/Kg	2	06/13/19	SC	SW8082A
PCB-1260	ND	76	76	ug/Kg	2	06/13/19	SC	SW8082A
PCB-1262	ND	76	76	ug/Kg	2	06/13/19	SC	SW8082A
PCB-1268	ND	76	76	ug/Kg	2	06/13/19	SC	SW8082A
<b><u>QA/QC Surrogates</u></b>								
% DCBP	73			%	2	06/13/19	SC	40 - 140 %
% DCBP (Confirmation)	82			%	2	06/13/19	SC	40 - 140 %
% TCMX	63			%	2	06/13/19	SC	30 - 150 %
% TCMX (Confirmation)	68			%	2	06/13/19	SC	30 - 150 %
<b><u>Pesticides - Soil</u></b>								
4,4' -DDD	18	2.3	2.3	ug/Kg	2	06/12/19	CW	SW8081B
4,4' -DDE	110	23	23	ug/Kg	20	06/13/19	CW	SW8081B
4,4' -DDT	210	23	23	ug/Kg	20	06/13/19	CW	SW8081B
a-BHC	ND	7.6	7.6	ug/Kg	2	06/12/19	CW	SW8081B
a-Chlordane	54	3.8	3.8	ug/Kg	2	06/12/19	CW	SW8081B
Aldrin	ND	3.8	3.8	ug/Kg	2	06/12/19	CW	SW8081B
b-BHC	ND	7.6	7.6	ug/Kg	2	06/12/19	CW	SW8081B
Chlordane	190	38	38	ug/Kg	2	06/12/19	CW	SW8081B
d-BHC	ND	7.6	7.6	ug/Kg	2	06/12/19	CW	SW8081B
Dieldrin	16	3.8	3.8	ug/Kg	2	06/12/19	CW	SW8081B
Endosulfan I	ND	7.6	7.6	ug/Kg	2	06/12/19	CW	SW8081B
Endosulfan II	ND	7.6	7.6	ug/Kg	2	06/12/19	CW	SW8081B
Endosulfan sulfate	ND	7.6	7.6	ug/Kg	2	06/12/19	CW	SW8081B
Endrin	ND	7.6	7.6	ug/Kg	2	06/12/19	CW	SW8081B
Endrin aldehyde	ND	7.6	7.6	ug/Kg	2	06/12/19	CW	SW8081B
Endrin ketone	ND	7.6	7.6	ug/Kg	2	06/12/19	CW	SW8081B
g-BHC	ND	1.5	1.5	ug/Kg	2	06/12/19	CW	SW8081B
g-Chlordane	31	3.8	3.8	ug/Kg	2	06/12/19	CW	SW8081B
Heptachlor	ND	7.6	7.6	ug/Kg	2	06/12/19	CW	SW8081B
Heptachlor epoxide	9.1	7.6	7.6	ug/Kg	2	06/12/19	CW	SW8081B
Methoxychlor	ND	38	38	ug/Kg	2	06/12/19	CW	SW8081B
Toxaphene	ND	150	150	ug/Kg	2	06/12/19	CW	SW8081B
<b><u>QA/QC Surrogates</u></b>								
% DCBP	66			%	2	06/12/19	CW	40 - 140 %
% DCBP (Confirmation)	62			%	2	06/12/19	CW	40 - 140 %
% TCMX	65			%	2	06/12/19	CW	40 - 140 %
% TCMX (Confirmation)	62			%	2	06/12/19	CW	40 - 140 %
<b><u>Volatiles</u></b>								
1,1,1,2-Tetrachloroethane	ND	5.3	1.1	ug/Kg	1	06/15/19	JLI	SW8260C
1,1,1-Trichloroethane	ND	5.3	0.53	ug/Kg	1	06/15/19	JLI	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
1,1,2,2-Tetrachloroethane	ND	5.3	1.1	ug/Kg	1	06/15/19	JLI	SW8260C
1,1,2-Trichloroethane	ND	5.3	1.1	ug/Kg	1	06/15/19	JLI	SW8260C
1,1-Dichloroethane	ND	5.3	1.1	ug/Kg	1	06/15/19	JLI	SW8260C
1,1-Dichloroethene	ND	5.3	0.53	ug/Kg	1	06/15/19	JLI	SW8260C
1,1-Dichloropropene	ND	5.3	0.53	ug/Kg	1	06/15/19	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	5.3	1.1	ug/Kg	1	06/15/19	JLI	SW8260C
1,2,3-Trichloropropane	ND	5.3	0.53	ug/Kg	1	06/15/19	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	5.3	1.1	ug/Kg	1	06/15/19	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	5.3	0.53	ug/Kg	1	06/15/19	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	5.3	1.1	ug/Kg	1	06/15/19	JLI	SW8260C
1,2-Dibromoethane	ND	5.3	0.53	ug/Kg	1	06/15/19	JLI	SW8260C
1,2-Dichlorobenzene	ND	5.3	0.53	ug/Kg	1	06/15/19	JLI	SW8260C
1,2-Dichloroethane	ND	5.3	0.53	ug/Kg	1	06/15/19	JLI	SW8260C
1,2-Dichloropropane	ND	5.3	1.1	ug/Kg	1	06/15/19	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	5.3	0.53	ug/Kg	1	06/15/19	JLI	SW8260C
1,3-Dichlorobenzene	ND	5.3	0.53	ug/Kg	1	06/15/19	JLI	SW8260C
1,3-Dichloropropane	ND	5.3	1.1	ug/Kg	1	06/15/19	JLI	SW8260C
1,4-Dichlorobenzene	ND	5.3	0.53	ug/Kg	1	06/15/19	JLI	SW8260C
2,2-Dichloropropane	ND	5.3	0.53	ug/Kg	1	06/15/19	JLI	SW8260C
2-Chlorotoluene	ND	5.3	1.1	ug/Kg	1	06/15/19	JLI	SW8260C
2-Hexanone	ND	26	5.3	ug/Kg	1	06/15/19	JLI	SW8260C
2-Isopropyltoluene	ND	5.3	0.53	ug/Kg	1	06/15/19	JLI	SW8260C
4-Chlorotoluene	ND	5.3	0.53	ug/Kg	1	06/15/19	JLI	SW8260C
4-Methyl-2-pentanone	ND	26	5.3	ug/Kg	1	06/15/19	JLI	SW8260C
Acetone	ND	26	5.3	ug/Kg	1	06/15/19	JLI	SW8260C
Acrylonitrile	ND	11	1.1	ug/Kg	1	06/15/19	JLI	SW8260C
Benzene	ND	5.3	0.53	ug/Kg	1	06/15/19	JLI	SW8260C
Bromobenzene	ND	5.3	0.53	ug/Kg	1	06/15/19	JLI	SW8260C
Bromochloromethane	ND	5.3	0.53	ug/Kg	1	06/15/19	JLI	SW8260C
Bromodichloromethane	ND	5.3	1.1	ug/Kg	1	06/15/19	JLI	SW8260C
Bromoform	ND	5.3	1.1	ug/Kg	1	06/15/19	JLI	SW8260C
Bromomethane	ND	5.3	2.1	ug/Kg	1	06/15/19	JLI	SW8260C
Carbon Disulfide	ND	5.3	1.1	ug/Kg	1	06/15/19	JLI	SW8260C
Carbon tetrachloride	ND	5.3	1.1	ug/Kg	1	06/15/19	JLI	SW8260C
Chlorobenzene	ND	5.3	0.53	ug/Kg	1	06/15/19	JLI	SW8260C
Chloroethane	ND	5.3	0.53	ug/Kg	1	06/15/19	JLI	SW8260C
Chloroform	ND	5.3	0.53	ug/Kg	1	06/15/19	JLI	SW8260C
Chloromethane	ND	5.3	1.1	ug/Kg	1	06/15/19	JLI	SW8260C
cis-1,2-Dichloroethene	ND	5.3	0.53	ug/Kg	1	06/15/19	JLI	SW8260C
cis-1,3-Dichloropropene	ND	5.3	0.53	ug/Kg	1	06/15/19	JLI	SW8260C
Dibromochloromethane	ND	5.3	1.1	ug/Kg	1	06/15/19	JLI	SW8260C
Dibromomethane	ND	5.3	1.1	ug/Kg	1	06/15/19	JLI	SW8260C
Dichlorodifluoromethane	ND	5.3	0.53	ug/Kg	1	06/15/19	JLI	SW8260C
Ethylbenzene	ND	5.3	0.53	ug/Kg	1	06/15/19	JLI	SW8260C
Hexachlorobutadiene	ND	5.3	0.53	ug/Kg	1	06/15/19	JLI	SW8260C
Isopropylbenzene	ND	5.3	0.53	ug/Kg	1	06/15/19	JLI	SW8260C
m&p-Xylene	ND	5.3	1.1	ug/Kg	1	06/15/19	JLI	SW8260C
Methyl Ethyl Ketone	ND	32	5.3	ug/Kg	1	06/15/19	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	11	1.1	ug/Kg	1	06/15/19	JLI	SW8260C



Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Methylene chloride	ND	5.3	5.3	ug/Kg	1	06/15/19	JLI	SW8260C
Naphthalene	ND	5.3	1.1	ug/Kg	1	06/15/19	JLI	SW8260C
n-Butylbenzene	ND	5.3	0.53	ug/Kg	1	06/15/19	JLI	SW8260C
n-Propylbenzene	ND	5.3	1.1	ug/Kg	1	06/15/19	JLI	SW8260C
o-Xylene	ND	5.3	1.1	ug/Kg	1	06/15/19	JLI	SW8260C
p-Isopropyltoluene	ND	5.3	0.53	ug/Kg	1	06/15/19	JLI	SW8260C
sec-Butylbenzene	ND	5.3	0.53	ug/Kg	1	06/15/19	JLI	SW8260C
Styrene	ND	5.3	0.53	ug/Kg	1	06/15/19	JLI	SW8260C
tert-Butylbenzene	ND	5.3	0.53	ug/Kg	1	06/15/19	JLI	SW8260C
Tetrachloroethene	ND	5.3	1.1	ug/Kg	1	06/15/19	JLI	SW8260C
Tetrahydrofuran (THF)	ND	11	2.6	ug/Kg	1	06/15/19	JLI	SW8260C
Toluene	ND	5.3	0.53	ug/Kg	1	06/15/19	JLI	SW8260C
trans-1,2-Dichloroethene	ND	5.3	0.53	ug/Kg	1	06/15/19	JLI	SW8260C
trans-1,3-Dichloropropene	ND	5.3	0.53	ug/Kg	1	06/15/19	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	11	2.6	ug/Kg	1	06/15/19	JLI	SW8260C
Trichloroethene	ND	5.3	0.53	ug/Kg	1	06/15/19	JLI	SW8260C
Trichlorofluoromethane	ND	5.3	1.1	ug/Kg	1	06/15/19	JLI	SW8260C
Trichlorotrifluoroethane	ND	5.3	0.53	ug/Kg	1	06/15/19	JLI	SW8260C
Vinyl chloride	ND	5.3	0.53	ug/Kg	1	06/15/19	JLI	SW8260C
<b><u>QA/QC Surrogates</u></b>								
% 1,2-dichlorobenzene-d4	97			%	1	06/15/19	JLI	70 - 130 %
% Bromofluorobenzene	94			%	1	06/15/19	JLI	70 - 130 %
% Dibromofluoromethane	95			%	1	06/15/19	JLI	70 - 130 %
% Toluene-d8	100			%	1	06/15/19	JLI	70 - 130 %
<b><u>1,4-dioxane</u></b>								
1,4-dioxane	ND	79	42	ug/kg	1	06/15/19	JLI	SW8260C
<b><u>Volatiles</u></b>								
1,1,1,2-Tetrachloroethane	ND	21	1.1	ug/Kg	1	06/15/19	JLI	SW8260C
Acrolein	ND	5.3	1.1	ug/Kg	1	06/15/19	JLI	SW8260C
Acrylonitrile	ND	21	0.53	ug/Kg	1	06/15/19	JLI	SW8260C
Tert-butyl alcohol	ND	110	21	ug/Kg	1	06/15/19	JLI	SW8260C
<b><u>Semivolatiles</u></b>								
1,2,4,5-Tetrachlorobenzene	ND	270	130	ug/Kg	1	06/13/19	WB	SW8270D
1,2,4-Trichlorobenzene	ND	270	110	ug/Kg	1	06/13/19	WB	SW8270D
1,2-Dichlorobenzene	ND	270	110	ug/Kg	1	06/13/19	WB	SW8270D
1,2-Diphenylhydrazine	ND	270	120	ug/Kg	1	06/13/19	WB	SW8270D
1,3-Dichlorobenzene	ND	270	110	ug/Kg	1	06/13/19	WB	SW8270D
1,4-Dichlorobenzene	ND	270	110	ug/Kg	1	06/13/19	WB	SW8270D
2,4,5-Trichlorophenol	ND	270	210	ug/Kg	1	06/13/19	WB	SW8270D
2,4,6-Trichlorophenol	ND	190	120	ug/Kg	1	06/13/19	WB	SW8270D
2,4-Dichlorophenol	ND	190	130	ug/Kg	1	06/13/19	WB	SW8270D
2,4-Dimethylphenol	ND	270	94	ug/Kg	1	06/13/19	WB	SW8270D
2,4-Dinitrophenol	ND	270	270	ug/Kg	1	06/13/19	WB	SW8270D
2,4-Dinitrotoluene	ND	190	150	ug/Kg	1	06/13/19	WB	SW8270D
2,6-Dinitrotoluene	ND	190	120	ug/Kg	1	06/13/19	WB	SW8270D
2-Chloronaphthalene	ND	270	110	ug/Kg	1	06/13/19	WB	SW8270D
2-Chlorophenol	ND	270	110	ug/Kg	1	06/13/19	WB	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
2-Methylnaphthalene	ND	270	110	ug/Kg	1	06/13/19	WB	SW8270D
2-Methylphenol (o-cresol)	ND	270	180	ug/Kg	1	06/13/19	WB	SW8270D
2-Nitroaniline	ND	270	270	ug/Kg	1	06/13/19	WB	SW8270D
2-Nitrophenol	ND	270	240	ug/Kg	1	06/13/19	WB	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	270	150	ug/Kg	1	06/13/19	WB	SW8270D
3,3'-Dichlorobenzidine	ND	190	180	ug/Kg	1	06/13/19	WB	SW8270D
3-Nitroaniline	ND	380	760	ug/Kg	1	06/13/19	WB	SW8270D
4,6-Dinitro-2-methylphenol	ND	230	76	ug/Kg	1	06/13/19	WB	SW8270D
4-Bromophenyl phenyl ether	ND	270	110	ug/Kg	1	06/13/19	WB	SW8270D
4-Chloro-3-methylphenol	ND	270	130	ug/Kg	1	06/13/19	WB	SW8270D
4-Chloroaniline	ND	300	180	ug/Kg	1	06/13/19	WB	SW8270D
4-Chlorophenyl phenyl ether	ND	270	130	ug/Kg	1	06/13/19	WB	SW8270D
4-Nitroaniline	ND	380	130	ug/Kg	1	06/13/19	WB	SW8270D
4-Nitrophenol	ND	380	170	ug/Kg	1	06/13/19	WB	SW8270D
Acenaphthene	ND	270	120	ug/Kg	1	06/13/19	WB	SW8270D
Acenaphthylene	ND	270	110	ug/Kg	1	06/13/19	WB	SW8270D
Acetophenone	ND	270	120	ug/Kg	1	06/13/19	WB	SW8270D
Aniline	ND	300	300	ug/Kg	1	06/13/19	WB	SW8270D
Anthracene	ND	270	120	ug/Kg	1	06/13/19	WB	SW8270D
Benz(a)anthracene	170	J 270	130	ug/Kg	1	06/13/19	WB	SW8270D
Benzidine	ND	380	220	ug/Kg	1	06/13/19	WB	SW8270D
Benzo(a)pyrene	170	J 190	120	ug/Kg	1	06/13/19	WB	SW8270D
Benzo(b)fluoranthene	160	J 270	130	ug/Kg	1	06/13/19	WB	SW8270D
Benzo(ghi)perylene	150	J 270	120	ug/Kg	1	06/13/19	WB	SW8270D
Benzo(k)fluoranthene	170	J 270	130	ug/Kg	1	06/13/19	WB	SW8270D
Benzoic acid	ND	1900	760	ug/Kg	1	06/13/19	WB	SW8270D
Benzyl butyl phthalate	ND	270	98	ug/Kg	1	06/13/19	WB	SW8270D
Bis(2-chloroethoxy)methane	ND	270	100	ug/Kg	1	06/13/19	WB	SW8270D
Bis(2-chloroethyl)ether	ND	190	100	ug/Kg	1	06/13/19	WB	SW8270D
Bis(2-chloroisopropyl)ether	ND	270	110	ug/Kg	1	06/13/19	WB	SW8270D
Bis(2-ethylhexyl)phthalate	ND	270	110	ug/Kg	1	06/13/19	WB	SW8270D
Carbazole	ND	190	150	ug/Kg	1	06/13/19	WB	SW8270D
Chrysene	170	J 270	130	ug/Kg	1	06/13/19	WB	SW8270D
Dibenz(a,h)anthracene	ND	190	120	ug/Kg	1	06/13/19	WB	SW8270D
Dibenzofuran	ND	270	110	ug/Kg	1	06/13/19	WB	SW8270D
Diethyl phthalate	ND	270	120	ug/Kg	1	06/13/19	WB	SW8270D
Dimethylphthalate	ND	270	120	ug/Kg	1	06/13/19	WB	SW8270D
Di-n-butylphthalate	ND	270	100	ug/Kg	1	06/13/19	WB	SW8270D
Di-n-octylphthalate	ND	270	98	ug/Kg	1	06/13/19	WB	SW8270D
Fluoranthene	260	J 270	120	ug/Kg	1	06/13/19	WB	SW8270D
Fluorene	ND	270	130	ug/Kg	1	06/13/19	WB	SW8270D
Hexachlorobenzene	ND	190	110	ug/Kg	1	06/13/19	WB	SW8270D
Hexachlorobutadiene	ND	270	140	ug/Kg	1	06/13/19	WB	SW8270D
Hexachlorocyclopentadiene	ND	270	120	ug/Kg	1	06/13/19	WB	SW8270D
Hexachloroethane	ND	190	110	ug/Kg	1	06/13/19	WB	SW8270D
Indeno(1,2,3-cd)pyrene	150	J 270	130	ug/Kg	1	06/13/19	WB	SW8270D
Isophorone	ND	190	110	ug/Kg	1	06/13/19	WB	SW8270D
Naphthalene	ND	270	110	ug/Kg	1	06/13/19	WB	SW8270D
Nitrobenzene	ND	190	130	ug/Kg	1	06/13/19	WB	SW8270D

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Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
N-Nitrosodimethylamine	ND	270	110	ug/Kg	1	06/13/19	WB	SW8270D
N-Nitrosodi-n-propylamine	ND	190	120	ug/Kg	1	06/13/19	WB	SW8270D
N-Nitrosodiphenylamine	ND	270	150	ug/Kg	1	06/13/19	WB	SW8270D
Pentachloronitrobenzene	ND	270	140	ug/Kg	1	06/13/19	WB	SW8270D
Pentachlorophenol	ND	230	140	ug/Kg	1	06/13/19	WB	SW8270D
Phenanthrene	140	J 270	110	ug/Kg	1	06/13/19	WB	SW8270D
Phenol	ND	270	120	ug/Kg	1	06/13/19	WB	SW8270D
Pyrene	220	J 270	130	ug/Kg	1	06/13/19	WB	SW8270D
Pyridine	ND	270	93	ug/Kg	1	06/13/19	WB	SW8270D
<b><u>QA/QC Surrogates</u></b>								
% 2,4,6-Tribromophenol	47			%	1	06/13/19	WB	30 - 130 %
% 2-Fluorobiphenyl	37			%	1	06/13/19	WB	30 - 130 %
% 2-Fluorophenol	25			%	1	06/13/19	WB	30 - 130 %
% Nitrobenzene-d5	39			%	1	06/13/19	WB	30 - 130 %
% Phenol-d5	34			%	1	06/13/19	WB	30 - 130 %
% Terphenyl-d14	33			%	1	06/13/19	WB	30 - 130 %
Field Extraction	Completed					06/07/19		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 (preceeded 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.

**Pesticide Comment:**

Sample was evaluated against an external standard.

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**

**June 21, 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

June 21, 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: DR  
 Received by: CP  
 Analyzed by: see "By" below

## Date

06/07/19  
 06/10/19

## Time

9:15  
 15:02

## Laboratory Data

SDG ID: GCD30633  
 Phoenix ID: CD30638

Project ID: 1840 PARK AVE, MANHATTAN NY  
 Client ID: F2 (5-7')

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Silver	ND	0.32	0.32	mg/Kg	1	06/12/19	EK	SW6010D
Aluminum	4640	32	6.3	mg/Kg	10	06/12/19	EK	SW6010D
Arsenic	1.09	0.63	0.63	mg/Kg	1	06/12/19	EK	SW6010D
Barium	17.6	0.6	0.32	mg/Kg	1	06/12/19	EK	SW6010D
Beryllium	0.21	J 0.25	0.13	mg/Kg	1	06/12/19	EK	SW6010D
Calcium	1550	3.2	2.9	mg/Kg	1	06/12/19	EK	SW6010D
Cadmium	ND	0.32	0.32	mg/Kg	1	06/13/19	CPP	SW6010D
Cobalt	3.59	0.32	0.32	mg/Kg	1	06/12/19	EK	SW6010D
Chromium	9.22	0.32	0.32	mg/Kg	1	06/13/19	CPP	SW6010D
Copper	5.9	0.6	0.32	mg/kg	1	06/12/19	EK	SW6010D
Iron	7250	3.2	3.2	mg/Kg	1	06/12/19	EK	SW6010D
Mercury	ND	0.03	0.02	mg/Kg	2	06/12/19	RS	SW7471B
Potassium	592	6	2.5	mg/Kg	1	06/12/19	EK	SW6010D
Magnesium	1910	3.2	3.2	mg/Kg	1	06/12/19	EK	SW6010D
Manganese	169	3.2	3.2	mg/Kg	10	06/12/19	EK	SW6010D
Sodium	84	6	2.7	mg/Kg	1	06/12/19	EK	SW6010D
Nickel	8.92	0.32	0.32	mg/Kg	1	06/12/19	EK	SW6010D
Lead	2.5	0.6	0.32	mg/Kg	1	06/12/19	EK	SW6010D
Antimony	ND	3.2	3.2	mg/Kg	1	06/12/19	EK	SW6010D
Selenium	ND	1.3	1.1	mg/Kg	1	06/12/19	EK	SW6010D
Thallium	ND	1.3	1.3	mg/Kg	1	06/12/19	EK	SW6010D
Vanadium	10.7	0.32	0.32	mg/Kg	1	06/12/19	EK	SW6010D
Zinc	14.5	0.6	0.32	mg/Kg	1	06/12/19	EK	SW6010D
Percent Solid	94			%		06/10/19	ML	SW846-%Solid
Soil Extraction for PCB	Completed					06/11/19	MM/V	SW3545A
Soil Extraction for Pesticides	Completed					06/11/19	MM/V	SW3545A
Soil Extraction for SVOA	Completed					06/11/19	JJ/EE	SW3545A
Mercury Digestion	Completed					06/12/19	I/LS/I/LS	SW7471B

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Total Metals Digest	Completed					06/10/19	S/AG/BF	SW3050B
<b><u>Polychlorinated Biphenyls</u></b>								
PCB-1016	ND	70	70	ug/Kg	2	06/13/19	SC	SW8082A
PCB-1221	ND	70	70	ug/Kg	2	06/13/19	SC	SW8082A
PCB-1232	ND	70	70	ug/Kg	2	06/13/19	SC	SW8082A
PCB-1242	ND	70	70	ug/Kg	2	06/13/19	SC	SW8082A
PCB-1248	ND	70	70	ug/Kg	2	06/13/19	SC	SW8082A
PCB-1254	ND	70	70	ug/Kg	2	06/13/19	SC	SW8082A
PCB-1260	ND	70	70	ug/Kg	2	06/13/19	SC	SW8082A
PCB-1262	ND	70	70	ug/Kg	2	06/13/19	SC	SW8082A
PCB-1268	ND	70	70	ug/Kg	2	06/13/19	SC	SW8082A
<b><u>QA/QC Surrogates</u></b>								
% DCBP	58			%	2	06/13/19	SC	40 - 140 %
% DCBP (Confirmation)	57			%	2	06/13/19	SC	40 - 140 %
% TCMX	70			%	2	06/13/19	SC	30 - 150 %
% TCMX (Confirmation)	68			%	2	06/13/19	SC	30 - 150 %
<b><u>Pesticides - Soil</u></b>								
4,4' -DDD	ND	2.1	2.1	ug/Kg	2	06/12/19	CW	SW8081B
4,4' -DDE	ND	2.1	2.1	ug/Kg	2	06/12/19	CW	SW8081B
4,4' -DDT	ND	2.1	2.1	ug/Kg	2	06/12/19	CW	SW8081B
a-BHC	ND	7.0	7.0	ug/Kg	2	06/12/19	CW	SW8081B
a-Chlordane	ND	3.5	3.5	ug/Kg	2	06/12/19	CW	SW8081B
Aldrin	ND	3.5	3.5	ug/Kg	2	06/12/19	CW	SW8081B
b-BHC	ND	7.0	7.0	ug/Kg	2	06/12/19	CW	SW8081B
Chlordane	ND	35	35	ug/Kg	2	06/12/19	CW	SW8081B
d-BHC	ND	7.0	7.0	ug/Kg	2	06/12/19	CW	SW8081B
Dieldrin	ND	3.5	3.5	ug/Kg	2	06/12/19	CW	SW8081B
Endosulfan I	ND	7.0	7.0	ug/Kg	2	06/12/19	CW	SW8081B
Endosulfan II	ND	7.0	7.0	ug/Kg	2	06/12/19	CW	SW8081B
Endosulfan sulfate	ND	7.0	7.0	ug/Kg	2	06/12/19	CW	SW8081B
Endrin	ND	7.0	7.0	ug/Kg	2	06/12/19	CW	SW8081B
Endrin aldehyde	ND	7.0	7.0	ug/Kg	2	06/12/19	CW	SW8081B
Endrin ketone	ND	7.0	7.0	ug/Kg	2	06/12/19	CW	SW8081B
g-BHC	ND	1.4	1.4	ug/Kg	2	06/12/19	CW	SW8081B
g-Chlordane	ND	3.5	3.5	ug/Kg	2	06/12/19	CW	SW8081B
Heptachlor	ND	7.0	7.0	ug/Kg	2	06/12/19	CW	SW8081B
Heptachlor epoxide	ND	7.0	7.0	ug/Kg	2	06/12/19	CW	SW8081B
Methoxychlor	ND	35	35	ug/Kg	2	06/12/19	CW	SW8081B
Toxaphene	ND	140	140	ug/Kg	2	06/12/19	CW	SW8081B
<b><u>QA/QC Surrogates</u></b>								
% DCBP	48			%	2	06/12/19	CW	40 - 140 %
% DCBP (Confirmation)	39			%	2	06/12/19	CW	40 - 140 %
% TCMX	54			%	2	06/12/19	CW	40 - 140 %
% TCMX (Confirmation)	26			%	2	06/12/19	CW	40 - 140 %
<b><u>Volatiles</u></b>								
1,1,1,2-Tetrachloroethane	ND	5.5	1.1	ug/Kg	1	06/15/19	JLI	SW8260C
1,1,1-Trichloroethane	ND	5.5	0.55	ug/Kg	1	06/15/19	JLI	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
1,1,2,2-Tetrachloroethane	ND	5.5	1.1	ug/Kg	1	06/15/19	JLI	SW8260C
1,1,2-Trichloroethane	ND	5.5	1.1	ug/Kg	1	06/15/19	JLI	SW8260C
1,1-Dichloroethane	ND	5.5	1.1	ug/Kg	1	06/15/19	JLI	SW8260C
1,1-Dichloroethene	ND	5.5	0.55	ug/Kg	1	06/15/19	JLI	SW8260C
1,1-Dichloropropene	ND	5.5	0.55	ug/Kg	1	06/15/19	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	5.5	1.1	ug/Kg	1	06/15/19	JLI	SW8260C
1,2,3-Trichloropropane	ND	5.5	0.55	ug/Kg	1	06/15/19	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	5.5	1.1	ug/Kg	1	06/15/19	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	5.5	0.55	ug/Kg	1	06/15/19	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	5.5	1.1	ug/Kg	1	06/15/19	JLI	SW8260C
1,2-Dibromoethane	ND	5.5	0.55	ug/Kg	1	06/15/19	JLI	SW8260C
1,2-Dichlorobenzene	ND	5.5	0.55	ug/Kg	1	06/15/19	JLI	SW8260C
1,2-Dichloroethane	ND	5.5	0.55	ug/Kg	1	06/15/19	JLI	SW8260C
1,2-Dichloropropane	ND	5.5	1.1	ug/Kg	1	06/15/19	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	5.5	0.55	ug/Kg	1	06/15/19	JLI	SW8260C
1,3-Dichlorobenzene	ND	5.5	0.55	ug/Kg	1	06/15/19	JLI	SW8260C
1,3-Dichloropropane	ND	5.5	1.1	ug/Kg	1	06/15/19	JLI	SW8260C
1,4-Dichlorobenzene	ND	5.5	0.55	ug/Kg	1	06/15/19	JLI	SW8260C
2,2-Dichloropropane	ND	5.5	0.55	ug/Kg	1	06/15/19	JLI	SW8260C
2-Chlorotoluene	ND	5.5	1.1	ug/Kg	1	06/15/19	JLI	SW8260C
2-Hexanone	ND	27	5.5	ug/Kg	1	06/15/19	JLI	SW8260C
2-Isopropyltoluene	ND	5.5	0.55	ug/Kg	1	06/15/19	JLI	SW8260C
4-Chlorotoluene	ND	5.5	0.55	ug/Kg	1	06/15/19	JLI	SW8260C
4-Methyl-2-pentanone	ND	27	5.5	ug/Kg	1	06/15/19	JLI	SW8260C
Acetone	15	JS 27	5.5	ug/Kg	1	06/15/19	JLI	SW8260C
Acrylonitrile	ND	11	1.1	ug/Kg	1	06/15/19	JLI	SW8260C
Benzene	ND	5.5	0.55	ug/Kg	1	06/15/19	JLI	SW8260C
Bromobenzene	ND	5.5	0.55	ug/Kg	1	06/15/19	JLI	SW8260C
Bromochloromethane	ND	5.5	0.55	ug/Kg	1	06/15/19	JLI	SW8260C
Bromodichloromethane	ND	5.5	1.1	ug/Kg	1	06/15/19	JLI	SW8260C
Bromoform	ND	5.5	1.1	ug/Kg	1	06/15/19	JLI	SW8260C
Bromomethane	ND	5.5	2.2	ug/Kg	1	06/15/19	JLI	SW8260C
Carbon Disulfide	ND	5.5	1.1	ug/Kg	1	06/15/19	JLI	SW8260C
Carbon tetrachloride	ND	5.5	1.1	ug/Kg	1	06/15/19	JLI	SW8260C
Chlorobenzene	ND	5.5	0.55	ug/Kg	1	06/15/19	JLI	SW8260C
Chloroethane	ND	5.5	0.55	ug/Kg	1	06/15/19	JLI	SW8260C
Chloroform	ND	5.5	0.55	ug/Kg	1	06/15/19	JLI	SW8260C
Chloromethane	ND	5.5	1.1	ug/Kg	1	06/15/19	JLI	SW8260C
cis-1,2-Dichloroethene	ND	5.5	0.55	ug/Kg	1	06/15/19	JLI	SW8260C
cis-1,3-Dichloropropene	ND	5.5	0.55	ug/Kg	1	06/15/19	JLI	SW8260C
Dibromochloromethane	ND	5.5	1.1	ug/Kg	1	06/15/19	JLI	SW8260C
Dibromomethane	ND	5.5	1.1	ug/Kg	1	06/15/19	JLI	SW8260C
Dichlorodifluoromethane	ND	5.5	0.55	ug/Kg	1	06/15/19	JLI	SW8260C
Ethylbenzene	ND	5.5	0.55	ug/Kg	1	06/15/19	JLI	SW8260C
Hexachlorobutadiene	ND	5.5	0.55	ug/Kg	1	06/15/19	JLI	SW8260C
Isopropylbenzene	ND	5.5	0.55	ug/Kg	1	06/15/19	JLI	SW8260C
m&p-Xylene	ND	5.5	1.1	ug/Kg	1	06/15/19	JLI	SW8260C
Methyl Ethyl Ketone	ND	33	5.5	ug/Kg	1	06/15/19	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	11	1.1	ug/Kg	1	06/15/19	JLI	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Methylene chloride	ND	5.5	5.5	ug/Kg	1	06/15/19	JLI	SW8260C
Naphthalene	ND	5.5	1.1	ug/Kg	1	06/15/19	JLI	SW8260C
n-Butylbenzene	ND	5.5	0.55	ug/Kg	1	06/15/19	JLI	SW8260C
n-Propylbenzene	ND	5.5	1.1	ug/Kg	1	06/15/19	JLI	SW8260C
o-Xylene	ND	5.5	1.1	ug/Kg	1	06/15/19	JLI	SW8260C
p-Isopropyltoluene	ND	5.5	0.55	ug/Kg	1	06/15/19	JLI	SW8260C
sec-Butylbenzene	ND	5.5	0.55	ug/Kg	1	06/15/19	JLI	SW8260C
Styrene	ND	5.5	0.55	ug/Kg	1	06/15/19	JLI	SW8260C
tert-Butylbenzene	ND	5.5	0.55	ug/Kg	1	06/15/19	JLI	SW8260C
Tetrachloroethene	ND	5.5	1.1	ug/Kg	1	06/15/19	JLI	SW8260C
Tetrahydrofuran (THF)	ND	11	2.7	ug/Kg	1	06/15/19	JLI	SW8260C
Toluene	ND	5.5	0.55	ug/Kg	1	06/15/19	JLI	SW8260C
trans-1,2-Dichloroethene	ND	5.5	0.55	ug/Kg	1	06/15/19	JLI	SW8260C
trans-1,3-Dichloropropene	ND	5.5	0.55	ug/Kg	1	06/15/19	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	11	2.7	ug/Kg	1	06/15/19	JLI	SW8260C
Trichloroethene	ND	5.5	0.55	ug/Kg	1	06/15/19	JLI	SW8260C
Trichlorofluoromethane	ND	5.5	1.1	ug/Kg	1	06/15/19	JLI	SW8260C
Trichlorotrifluoroethane	ND	5.5	0.55	ug/Kg	1	06/15/19	JLI	SW8260C
Vinyl chloride	ND	5.5	0.55	ug/Kg	1	06/15/19	JLI	SW8260C
<b><u>QA/QC Surrogates</u></b>								
% 1,2-dichlorobenzene-d4	102			%	1	06/15/19	JLI	70 - 130 %
% Bromofluorobenzene	94			%	1	06/15/19	JLI	70 - 130 %
% Dibromofluoromethane	97			%	1	06/15/19	JLI	70 - 130 %
% Toluene-d8	100			%	1	06/15/19	JLI	70 - 130 %
<b><u>1,4-dioxane</u></b>								
1,4-dioxane	ND	82	44	ug/kg	1	06/15/19	JLI	SW8260C
<b><u>Volatiles</u></b>								
1,1,1,2-Tetrachloroethane	ND	22	1.1	ug/Kg	1	06/15/19	JLI	SW8260C
Acrolein	ND	5.5	1.1	ug/Kg	1	06/15/19	JLI	SW8260C
Acrylonitrile	ND	22	0.55	ug/Kg	1	06/15/19	JLI	SW8260C
Tert-butyl alcohol	ND	110	22	ug/Kg	1	06/15/19	JLI	SW8260C
<b><u>Semivolatiles</u></b>								
1,2,4,5-Tetrachlorobenzene	ND	240	120	ug/Kg	1	06/12/19	WB	SW8270D
1,2,4-Trichlorobenzene	ND	240	100	ug/Kg	1	06/12/19	WB	SW8270D
1,2-Dichlorobenzene	ND	240	98	ug/Kg	1	06/12/19	WB	SW8270D
1,2-Diphenylhydrazine	ND	240	110	ug/Kg	1	06/12/19	WB	SW8270D
1,3-Dichlorobenzene	ND	240	100	ug/Kg	1	06/12/19	WB	SW8270D
1,4-Dichlorobenzene	ND	240	100	ug/Kg	1	06/12/19	WB	SW8270D
2,4,5-Trichlorophenol	ND	240	190	ug/Kg	1	06/12/19	WB	SW8270D
2,4,6-Trichlorophenol	ND	170	110	ug/Kg	1	06/12/19	WB	SW8270D
2,4-Dichlorophenol	ND	170	120	ug/Kg	1	06/12/19	WB	SW8270D
2,4-Dimethylphenol	ND	240	86	ug/Kg	1	06/12/19	WB	SW8270D
2,4-Dinitrophenol	ND	240	240	ug/Kg	1	06/12/19	WB	SW8270D
2,4-Dinitrotoluene	ND	170	140	ug/Kg	1	06/12/19	WB	SW8270D
2,6-Dinitrotoluene	ND	170	110	ug/Kg	1	06/12/19	WB	SW8270D
2-Chloronaphthalene	ND	240	98	ug/Kg	1	06/12/19	WB	SW8270D
2-Chlorophenol	ND	240	98	ug/Kg	1	06/12/19	WB	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
2-Methylnaphthalene	ND	240	100	ug/Kg	1	06/12/19	WB	SW8270D
2-Methylphenol (o-cresol)	ND	240	160	ug/Kg	1	06/12/19	WB	SW8270D
2-Nitroaniline	ND	240	240	ug/Kg	1	06/12/19	WB	SW8270D
2-Nitrophenol	ND	240	220	ug/Kg	1	06/12/19	WB	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	240	140	ug/Kg	1	06/12/19	WB	SW8270D
3,3'-Dichlorobenzidine	ND	170	160	ug/Kg	1	06/12/19	WB	SW8270D
3-Nitroaniline	ND	350	690	ug/Kg	1	06/12/19	WB	SW8270D
4,6-Dinitro-2-methylphenol	ND	210	69	ug/Kg	1	06/12/19	WB	SW8270D
4-Bromophenyl phenyl ether	ND	240	100	ug/Kg	1	06/12/19	WB	SW8270D
4-Chloro-3-methylphenol	ND	240	120	ug/Kg	1	06/12/19	WB	SW8270D
4-Chloroaniline	ND	280	160	ug/Kg	1	06/12/19	WB	SW8270D
4-Chlorophenyl phenyl ether	ND	240	120	ug/Kg	1	06/12/19	WB	SW8270D
4-Nitroaniline	ND	350	120	ug/Kg	1	06/12/19	WB	SW8270D
4-Nitrophenol	ND	350	160	ug/Kg	1	06/12/19	WB	SW8270D
Acenaphthene	ND	240	110	ug/Kg	1	06/12/19	WB	SW8270D
Acenaphthylene	ND	240	97	ug/Kg	1	06/12/19	WB	SW8270D
Acetophenone	ND	240	110	ug/Kg	1	06/12/19	WB	SW8270D
Aniline	ND	280	280	ug/Kg	1	06/12/19	WB	SW8270D
Anthracene	ND	240	110	ug/Kg	1	06/12/19	WB	SW8270D
Benz(a)anthracene	120	J 240	120	ug/Kg	1	06/12/19	WB	SW8270D
Benzidine	ND	350	200	ug/Kg	1	06/12/19	WB	SW8270D
Benzo(a)pyrene	130	J 170	110	ug/Kg	1	06/12/19	WB	SW8270D
Benzo(b)fluoranthene	130	J 240	120	ug/Kg	1	06/12/19	WB	SW8270D
Benzo(ghi)perylene	120	J 240	110	ug/Kg	1	06/12/19	WB	SW8270D
Benzo(k)fluoranthene	ND	240	110	ug/Kg	1	06/12/19	WB	SW8270D
Benzoic acid	ND	1700	690	ug/Kg	1	06/12/19	WB	SW8270D
Benzyl butyl phthalate	ND	240	89	ug/Kg	1	06/12/19	WB	SW8270D
Bis(2-chloroethoxy)methane	ND	240	96	ug/Kg	1	06/12/19	WB	SW8270D
Bis(2-chloroethyl)ether	ND	170	94	ug/Kg	1	06/12/19	WB	SW8270D
Bis(2-chloroisopropyl)ether	ND	240	96	ug/Kg	1	06/12/19	WB	SW8270D
Bis(2-ethylhexyl)phthalate	ND	240	100	ug/Kg	1	06/12/19	WB	SW8270D
Carbazole	ND	170	140	ug/Kg	1	06/12/19	WB	SW8270D
Chrysene	160	J 240	120	ug/Kg	1	06/12/19	WB	SW8270D
Dibenz(a,h)anthracene	ND	170	110	ug/Kg	1	06/12/19	WB	SW8270D
Dibenzofuran	ND	240	100	ug/Kg	1	06/12/19	WB	SW8270D
Diethyl phthalate	ND	240	110	ug/Kg	1	06/12/19	WB	SW8270D
Dimethylphthalate	ND	240	110	ug/Kg	1	06/12/19	WB	SW8270D
Di-n-butylphthalate	ND	240	92	ug/Kg	1	06/12/19	WB	SW8270D
Di-n-octylphthalate	ND	240	89	ug/Kg	1	06/12/19	WB	SW8270D
Fluoranthene	180	J 240	110	ug/Kg	1	06/12/19	WB	SW8270D
Fluorene	ND	240	110	ug/Kg	1	06/12/19	WB	SW8270D
Hexachlorobenzene	ND	170	100	ug/Kg	1	06/12/19	WB	SW8270D
Hexachlorobutadiene	ND	240	130	ug/Kg	1	06/12/19	WB	SW8270D
Hexachlorocyclopentadiene	ND	240	110	ug/Kg	1	06/12/19	WB	SW8270D
Hexachloroethane	ND	170	100	ug/Kg	1	06/12/19	WB	SW8270D
Indeno(1,2,3-cd)pyrene	ND	240	110	ug/Kg	1	06/12/19	WB	SW8270D
Isophorone	ND	170	97	ug/Kg	1	06/12/19	WB	SW8270D
Naphthalene	ND	240	100	ug/Kg	1	06/12/19	WB	SW8270D
Nitrobenzene	ND	170	120	ug/Kg	1	06/12/19	WB	SW8270D

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Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
N-Nitrosodimethylamine	ND	240	98	ug/Kg	1	06/12/19	WB	SW8270D
N-Nitrosodi-n-propylamine	ND	170	110	ug/Kg	1	06/12/19	WB	SW8270D
N-Nitrosodiphenylamine	ND	240	130	ug/Kg	1	06/12/19	WB	SW8270D
Pentachloronitrobenzene	ND	240	130	ug/Kg	1	06/12/19	WB	SW8270D
Pentachlorophenol	ND	210	130	ug/Kg	1	06/12/19	WB	SW8270D
Phenanthrene	ND	240	99	ug/Kg	1	06/12/19	WB	SW8270D
Phenol	ND	240	110	ug/Kg	1	06/12/19	WB	SW8270D
Pyrene	170	J 240	120	ug/Kg	1	06/12/19	WB	SW8270D
Pyridine	ND	240	85	ug/Kg	1	06/12/19	WB	SW8270D
<b><u>QA/QC Surrogates</u></b>								
% 2,4,6-Tribromophenol	71			%	1	06/12/19	WB	30 - 130 %
% 2-Fluorobiphenyl	69			%	1	06/12/19	WB	30 - 130 %
% 2-Fluorophenol	63			%	1	06/12/19	WB	30 - 130 %
% Nitrobenzene-d5	71			%	1	06/12/19	WB	30 - 130 %
% Phenol-d5	74			%	1	06/12/19	WB	30 - 130 %
% Terphenyl-d14	66			%	1	06/12/19	WB	30 - 130 %
Field Extraction	Completed					06/07/19		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.

B = Present in blank, no bias suspected.

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 (preceeded 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**

**June 21, 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

June 21, 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: DR  
 Received by: CP  
 Analyzed by: see "By" below

## Date

06/07/19  
 06/10/19

## Time

9:39  
 15:02

## Laboratory Data

SDG ID: GCD30633  
 Phoenix ID: CD30639

Project ID: 1840 PARK AVE, MANHATTAN NY  
 Client ID: F3 (5-7')

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Silver	ND	0.43	0.43	mg/Kg	1	06/12/19	EK	SW6010D
Aluminum	4750	43	8.6	mg/Kg	10	06/12/19	EK	SW6010D
Arsenic	2.70	0.86	0.86	mg/Kg	1	06/12/19	EK	SW6010D
Barium	995	0.9	0.43	mg/Kg	1	06/12/19	EK	SW6010D
Beryllium	0.20	J 0.34	0.17	mg/Kg	1	06/12/19	EK	SW6010D
Calcium	85200	43	39	mg/Kg	10	06/12/19	EK	SW6010D
Cadmium	4.05	0.43	0.43	mg/Kg	1	06/13/19	EK	SW6010D
Cobalt	7.05	0.43	0.43	mg/Kg	1	06/12/19	EK	SW6010D
Chromium	36.4	0.43	0.43	mg/Kg	1	06/13/19	EK	SW6010D
Copper	24.0	0.9	0.43	mg/kg	1	06/12/19	EK	SW6010D
Iron	12800	43	43	mg/Kg	10	06/12/19	EK	SW6010D
Mercury	1.21	0.08	0.05	mg/Kg	5	06/12/19	RS	SW7471B
Potassium	1240	9	3.3	mg/Kg	1	06/12/19	EK	SW6010D
Magnesium	4700	4.3	4.3	mg/Kg	1	06/12/19	EK	SW6010D
Manganese	264	4.3	4.3	mg/Kg	10	06/12/19	EK	SW6010D
Sodium	487	9	3.7	mg/Kg	1	06/12/19	EK	SW6010D
Nickel	9.30	0.43	0.43	mg/Kg	1	06/12/19	EK	SW6010D
Lead	653	8.6	4.3	mg/Kg	10	06/12/19	EK	SW6010D
Antimony	7.0	4.3	4.3	mg/Kg	1	06/12/19	EK	SW6010D
Selenium	ND	1.7	1.5	mg/Kg	1	06/12/19	EK	SW6010D
Thallium	ND	1.7	1.7	mg/Kg	1	06/12/19	EK	SW6010D
Vanadium	19.2	0.43	0.43	mg/Kg	1	06/12/19	EK	SW6010D
Zinc	911	8.6	4.3	mg/Kg	10	06/12/19	EK	SW6010D
Percent Solid	80			%		06/10/19	ML	SW846-%Solid
Soil Extraction for PCB	Completed					06/11/19	MM/V	SW3545A
Soil Extraction for Pesticides	Completed					06/11/19	MM/V	SW3545A
Soil Extraction for SVOA	Completed					06/11/19	JJ/EE	SW3545A
Mercury Digestion	Completed					06/12/19	I/LS/I/LS	SW7471B

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Total Metals Digest	Completed					06/10/19	S/AG/BF	SW3050B
<b><u>Polychlorinated Biphenyls</u></b>								
PCB-1016	ND	83	83	ug/Kg	2	06/13/19	AW	SW8082A
PCB-1221	ND	83	83	ug/Kg	2	06/13/19	AW	SW8082A
PCB-1232	ND	83	83	ug/Kg	2	06/13/19	AW	SW8082A
PCB-1242	ND	83	83	ug/Kg	2	06/13/19	AW	SW8082A
PCB-1248	ND	83	83	ug/Kg	2	06/13/19	AW	SW8082A
PCB-1254	ND	83	83	ug/Kg	2	06/13/19	AW	SW8082A
PCB-1260	ND	83	83	ug/Kg	2	06/13/19	AW	SW8082A
PCB-1262	ND	83	83	ug/Kg	2	06/13/19	AW	SW8082A
PCB-1268	ND	83	83	ug/Kg	2	06/13/19	AW	SW8082A
<b><u>QA/QC Surrogates</u></b>								
% DCBP	68			%	2	06/13/19	AW	40 - 140 %
% DCBP (Confirmation)	68			%	2	06/13/19	AW	40 - 140 %
% TCMX	61			%	2	06/13/19	AW	30 - 150 %
% TCMX (Confirmation)	56			%	2	06/13/19	AW	30 - 150 %
<b><u>Pesticides - Soil</u></b>								
4,4' -DDD	200	12	12	ug/Kg	10	06/12/19	CW	SW8081B
4,4' -DDE	130	12	12	ug/Kg	10	06/12/19	CW	SW8081B
4,4' -DDT	ND	8.3	8.3	ug/Kg	10	06/12/19	CW	SW8081B
a-BHC	ND	8.3	8.3	ug/Kg	10	06/12/19	CW	SW8081B
a-Chlordane	98	21	21	ug/Kg	10	06/12/19	CW	SW8081B
Aldrin	ND	8.3	8.3	ug/Kg	10	06/12/19	CW	SW8081B
b-BHC	ND	8.3	8.3	ug/Kg	10	06/12/19	CW	SW8081B
Chlordane	330	210	210	ug/Kg	10	06/12/19	CW	SW8081B
d-BHC	ND	8.3	8.3	ug/Kg	10	06/12/19	CW	SW8081B
Dieldrin	250	21	21	ug/Kg	10	06/12/19	CW	SW8081B
Endosulfan I	ND	42	42	ug/Kg	10	06/12/19	CW	SW8081B
Endosulfan II	ND	42	42	ug/Kg	10	06/12/19	CW	SW8081B
Endosulfan sulfate	ND	42	42	ug/Kg	10	06/12/19	CW	SW8081B
Endrin	ND	21	21	ug/Kg	10	06/12/19	CW	SW8081B
Endrin aldehyde	ND	42	42	ug/Kg	10	06/12/19	CW	SW8081B
Endrin ketone	ND	42	42	ug/Kg	10	06/12/19	CW	SW8081B
g-BHC	ND	8.3	8.3	ug/Kg	10	06/12/19	CW	SW8081B
g-Chlordane	70	21	21	ug/Kg	10	06/12/19	CW	SW8081B
Heptachlor	ND	42	42	ug/Kg	10	06/12/19	CW	SW8081B
Heptachlor epoxide	ND	42	42	ug/Kg	10	06/12/19	CW	SW8081B
Methoxychlor	ND	210	210	ug/Kg	10	06/12/19	CW	SW8081B
Toxaphene	ND	830	830	ug/Kg	10	06/12/19	CW	SW8081B
<b><u>QA/QC Surrogates</u></b>								
% DCBP	Diluted Out			%	10	06/12/19	CW	40 - 140 %
% DCBP (Confirmation)	Diluted Out			%	10	06/12/19	CW	40 - 140 %
% TCMX	Diluted Out			%	10	06/12/19	CW	40 - 140 %
% TCMX (Confirmation)	Diluted Out			%	10	06/12/19	CW	40 - 140 %
<b><u>Volatiles</u></b>								
1,1,1,2-Tetrachloroethane	ND	8.1	1.6	ug/Kg	1	06/15/19	GL	SW8260C
1,1,1-Trichloroethane	ND	8.1	0.81	ug/Kg	1	06/15/19	GL	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
1,1,2,2-Tetrachloroethane	ND	8.1	1.6	ug/Kg	1	06/15/19	GL	SW8260C
1,1,2-Trichloroethane	ND	8.1	1.6	ug/Kg	1	06/15/19	GL	SW8260C
1,1-Dichloroethane	ND	8.1	1.6	ug/Kg	1	06/15/19	GL	SW8260C
1,1-Dichloroethene	ND	8.1	0.81	ug/Kg	1	06/15/19	GL	SW8260C
1,1-Dichloropropene	ND	8.1	0.81	ug/Kg	1	06/15/19	GL	SW8260C
1,2,3-Trichlorobenzene	ND	8.1	1.6	ug/Kg	1	06/15/19	GL	SW8260C
1,2,3-Trichloropropane	ND	8.1	0.81	ug/Kg	1	06/15/19	GL	SW8260C
1,2,4-Trichlorobenzene	ND	8.1	1.6	ug/Kg	1	06/15/19	GL	SW8260C
1,2,4-Trimethylbenzene	96	J 470	47	ug/Kg	50	06/17/19	GL	SW8260C
1,2-Dibromo-3-chloropropane	ND	8.1	1.6	ug/Kg	1	06/15/19	GL	SW8260C
1,2-Dibromoethane	ND	8.1	0.81	ug/Kg	1	06/15/19	GL	SW8260C
1,2-Dichlorobenzene	ND	8.1	0.81	ug/Kg	1	06/15/19	GL	SW8260C
1,2-Dichloroethane	ND	8.1	0.81	ug/Kg	1	06/15/19	GL	SW8260C
1,2-Dichloropropane	ND	8.1	1.6	ug/Kg	1	06/15/19	GL	SW8260C
1,3,5-Trimethylbenzene	70	J 470	47	ug/Kg	50	06/17/19	GL	SW8260C
1,3-Dichlorobenzene	ND	8.1	0.81	ug/Kg	1	06/15/19	GL	SW8260C
1,3-Dichloropropane	ND	8.1	1.6	ug/Kg	1	06/15/19	GL	SW8260C
1,4-Dichlorobenzene	ND	8.1	0.81	ug/Kg	1	06/15/19	GL	SW8260C
2,2-Dichloropropane	ND	8.1	0.81	ug/Kg	1	06/15/19	GL	SW8260C
2-Chlorotoluene	ND	8.1	1.6	ug/Kg	1	06/15/19	GL	SW8260C
2-Hexanone	ND	41	8.1	ug/Kg	1	06/15/19	GL	SW8260C
2-Isopropyltoluene	29	8.1	0.81	ug/Kg	1	06/15/19	GL	SW8260C
4-Chlorotoluene	ND	8.1	0.81	ug/Kg	1	06/15/19	GL	SW8260C
4-Methyl-2-pentanone	ND	41	8.1	ug/Kg	1	06/15/19	GL	SW8260C
Acetone	ND	L 31	6.2	ug/Kg	1	06/17/19	GL	SW8260C
Acrylonitrile	ND	16	1.6	ug/Kg	1	06/15/19	GL	SW8260C
Benzene	ND	8.1	0.81	ug/Kg	1	06/15/19	GL	SW8260C
Bromobenzene	ND	8.1	0.81	ug/Kg	1	06/15/19	GL	SW8260C
Bromochloromethane	ND	8.1	0.81	ug/Kg	1	06/15/19	GL	SW8260C
Bromodichloromethane	ND	8.1	1.6	ug/Kg	1	06/15/19	GL	SW8260C
Bromoform	ND	8.1	1.6	ug/Kg	1	06/15/19	GL	SW8260C
Bromomethane	ND	8.1	3.3	ug/Kg	1	06/15/19	GL	SW8260C
Carbon Disulfide	9.9	8.1	1.6	ug/Kg	1	06/15/19	GL	SW8260C
Carbon tetrachloride	ND	8.1	1.6	ug/Kg	1	06/15/19	GL	SW8260C
Chlorobenzene	ND	8.1	0.81	ug/Kg	1	06/15/19	GL	SW8260C
Chloroethane	ND	8.1	0.81	ug/Kg	1	06/15/19	GL	SW8260C
Chloroform	ND	8.1	0.81	ug/Kg	1	06/15/19	GL	SW8260C
Chloromethane	ND	8.1	1.6	ug/Kg	1	06/15/19	GL	SW8260C
cis-1,2-Dichloroethene	ND	8.1	0.81	ug/Kg	1	06/15/19	GL	SW8260C
cis-1,3-Dichloropropene	ND	8.1	0.81	ug/Kg	1	06/15/19	GL	SW8260C
Dibromochloromethane	ND	8.1	1.6	ug/Kg	1	06/15/19	GL	SW8260C
Dibromomethane	ND	8.1	1.6	ug/Kg	1	06/15/19	GL	SW8260C
Dichlorodifluoromethane	ND	8.1	0.81	ug/Kg	1	06/15/19	GL	SW8260C
Ethylbenzene	5.2	J 8.1	0.81	ug/Kg	1	06/15/19	GL	SW8260C
Hexachlorobutadiene	ND	8.1	0.81	ug/Kg	1	06/15/19	GL	SW8260C
Isopropylbenzene	11	8.1	0.81	ug/Kg	1	06/15/19	GL	SW8260C
m&p-Xylene	ND	8.1	1.6	ug/Kg	1	06/15/19	GL	SW8260C
Methyl Ethyl Ketone	ND	49	8.1	ug/Kg	1	06/15/19	GL	SW8260C
Methyl t-butyl ether (MTBE)	ND	16	1.6	ug/Kg	1	06/15/19	GL	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Methylene chloride	ND	8.1	8.1	ug/Kg	1	06/15/19	GL	SW8260C
Naphthalene	700	470	94	ug/Kg	50	06/17/19	GL	SW8260C
n-Butylbenzene	360	280	47	ug/Kg	50	06/17/19	GL	SW8260C
n-Propylbenzene	29	8.1	1.6	ug/Kg	1	06/15/19	GL	SW8260C
o-Xylene	2.0	J 8.1	1.6	ug/Kg	1	06/15/19	GL	SW8260C
p-Isopropyltoluene	330	280	47	ug/Kg	50	06/17/19	GL	SW8260C
sec-Butylbenzene	360	280	47	ug/Kg	50	06/17/19	GL	SW8260C
Styrene	ND	8.1	0.81	ug/Kg	1	06/15/19	GL	SW8260C
tert-Butylbenzene	5.5	J 8.1	0.81	ug/Kg	1	06/15/19	GL	SW8260C
Tetrachloroethene	ND	8.1	1.6	ug/Kg	1	06/15/19	GL	SW8260C
Tetrahydrofuran (THF)	ND	16	4.1	ug/Kg	1	06/15/19	GL	SW8260C
Toluene	1.1	J 8.1	0.81	ug/Kg	1	06/15/19	GL	SW8260C
trans-1,2-Dichloroethene	ND	8.1	0.81	ug/Kg	1	06/15/19	GL	SW8260C
trans-1,3-Dichloropropene	ND	8.1	0.81	ug/Kg	1	06/15/19	GL	SW8260C
trans-1,4-dichloro-2-butene	ND	16	4.1	ug/Kg	1	06/15/19	GL	SW8260C
Trichloroethene	ND	8.1	0.81	ug/Kg	1	06/15/19	GL	SW8260C
Trichlorofluoromethane	ND	8.1	1.6	ug/Kg	1	06/15/19	GL	SW8260C
Trichlorotrifluoroethane	ND	8.1	0.81	ug/Kg	1	06/15/19	GL	SW8260C
Vinyl chloride	ND	8.1	0.81	ug/Kg	1	06/15/19	GL	SW8260C
<b><u>QA/QC Surrogates</u></b>								
% 1,2-dichlorobenzene-d4	96			%	1	06/15/19	GL	70 - 130 %
% Bromofluorobenzene	99			%	1	06/15/19	GL	70 - 130 %
% Dibromofluoromethane	96			%	1	06/15/19	GL	70 - 130 %
% Toluene-d8	99			%	1	06/15/19	GL	70 - 130 %
% 1,2-dichlorobenzene-d4 (50x)	102			%	50	06/17/19	GL	70 - 130 %
% Bromofluorobenzene (50x)	111			%	50	06/17/19	GL	70 - 130 %
% Dibromofluoromethane (50x)	98			%	50	06/17/19	GL	70 - 130 %
% Toluene-d8 (50x)	94			%	50	06/17/19	GL	70 - 130 %
<b><u>1,4-dioxane</u></b>								
1,4-dioxane	ND	100	65	ug/kg	1	06/15/19	JLI	SW8260C
<b><u>Volatiles</u></b>								
1,1,1,2-Tetrachloroethane	ND	33	1.6	ug/Kg	1	06/15/19	JLI	SW8260C
Acrolein	ND	8.1	1.6	ug/Kg	1	06/15/19	JLI	SW8260C
Acrylonitrile	ND	33	0.81	ug/Kg	1	06/15/19	JLI	SW8260C
Tert-butyl alcohol	ND	160	33	ug/Kg	1	06/15/19	JLI	SW8260C
<b><u>Semivolatiles</u></b>								
1,2,4,5-Tetrachlorobenzene	ND	290	150	ug/Kg	1	06/12/19	WB	SW8270D
1,2,4-Trichlorobenzene	ND	290	130	ug/Kg	1	06/12/19	WB	SW8270D
1,2-Dichlorobenzene	ND	290	120	ug/Kg	1	06/12/19	WB	SW8270D
1,2-Diphenylhydrazine	ND	290	140	ug/Kg	1	06/12/19	WB	SW8270D
1,3-Dichlorobenzene	ND	290	120	ug/Kg	1	06/12/19	WB	SW8270D
1,4-Dichlorobenzene	ND	290	120	ug/Kg	1	06/12/19	WB	SW8270D
2,4,5-Trichlorophenol	ND	290	230	ug/Kg	1	06/12/19	WB	SW8270D
2,4,6-Trichlorophenol	ND	210	130	ug/Kg	1	06/12/19	WB	SW8270D
2,4-Dichlorophenol	ND	210	150	ug/Kg	1	06/12/19	WB	SW8270D
2,4-Dimethylphenol	ND	290	100	ug/Kg	1	06/12/19	WB	SW8270D
2,4-Dinitrophenol	ND	290	290	ug/Kg	1	06/12/19	WB	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
2,4-Dinitrotoluene	ND	210	160	ug/Kg	1	06/12/19	WB	SW8270D
2,6-Dinitrotoluene	ND	210	130	ug/Kg	1	06/12/19	WB	SW8270D
2-Chloronaphthalene	ND	290	120	ug/Kg	1	06/12/19	WB	SW8270D
2-Chlorophenol	ND	290	120	ug/Kg	1	06/12/19	WB	SW8270D
2-Methylnaphthalene	420	290	120	ug/Kg	1	06/12/19	WB	SW8270D
2-Methylphenol (o-cresol)	ND	290	200	ug/Kg	1	06/12/19	WB	SW8270D
2-Nitroaniline	ND	290	290	ug/Kg	1	06/12/19	WB	SW8270D
2-Nitrophenol	ND	290	260	ug/Kg	1	06/12/19	WB	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	290	160	ug/Kg	1	06/12/19	WB	SW8270D
3,3'-Dichlorobenzidine	ND	210	200	ug/Kg	1	06/12/19	WB	SW8270D
3-Nitroaniline	ND	420	830	ug/Kg	1	06/12/19	WB	SW8270D
4,6-Dinitro-2-methylphenol	ND	250	83	ug/Kg	1	06/12/19	WB	SW8270D
4-Bromophenyl phenyl ether	ND	290	120	ug/Kg	1	06/12/19	WB	SW8270D
4-Chloro-3-methylphenol	ND	290	150	ug/Kg	1	06/12/19	WB	SW8270D
4-Chloroaniline	ND	330	190	ug/Kg	1	06/12/19	WB	SW8270D
4-Chlorophenyl phenyl ether	ND	290	140	ug/Kg	1	06/12/19	WB	SW8270D
4-Nitroaniline	ND	420	140	ug/Kg	1	06/12/19	WB	SW8270D
4-Nitrophenol	ND	420	190	ug/Kg	1	06/12/19	WB	SW8270D
Acenaphthene	240	J 290	130	ug/Kg	1	06/12/19	WB	SW8270D
Acenaphthylene	490	290	120	ug/Kg	1	06/12/19	WB	SW8270D
Acetophenone	ND	290	130	ug/Kg	1	06/12/19	WB	SW8270D
Aniline	ND	330	330	ug/Kg	1	06/12/19	WB	SW8270D
Anthracene	380	290	140	ug/Kg	1	06/12/19	WB	SW8270D
Benz(a)anthracene	1000	290	140	ug/Kg	1	06/12/19	WB	SW8270D
Benzidine	ND	420	240	ug/Kg	1	06/12/19	WB	SW8270D
Benzo(a)pyrene	1100	210	140	ug/Kg	1	06/12/19	WB	SW8270D
Benzo(b)fluoranthene	1500	290	140	ug/Kg	1	06/12/19	WB	SW8270D
Benzo(ghi)perylene	930	290	130	ug/Kg	1	06/12/19	WB	SW8270D
Benzo(k)fluoranthene	1300	290	140	ug/Kg	1	06/12/19	WB	SW8270D
Benzoic acid	ND	2100	830	ug/Kg	1	06/12/19	WB	SW8270D
Benzyl butyl phthalate	ND	290	110	ug/Kg	1	06/12/19	WB	SW8270D
Bis(2-chloroethoxy)methane	ND	290	110	ug/Kg	1	06/12/19	WB	SW8270D
Bis(2-chloroethyl)ether	ND	210	110	ug/Kg	1	06/12/19	WB	SW8270D
Bis(2-chloroisopropyl)ether	ND	290	120	ug/Kg	1	06/12/19	WB	SW8270D
Bis(2-ethylhexyl)phthalate	ND	290	120	ug/Kg	1	06/12/19	WB	SW8270D
Carbazole	530	210	170	ug/Kg	1	06/12/19	WB	SW8270D
Chrysene	1600	290	140	ug/Kg	1	06/12/19	WB	SW8270D
Dibenz(a,h)anthracene	290	210	130	ug/Kg	1	06/12/19	WB	SW8270D
Dibenzofuran	ND	290	120	ug/Kg	1	06/12/19	WB	SW8270D
Diethyl phthalate	ND	290	130	ug/Kg	1	06/12/19	WB	SW8270D
Dimethylphthalate	ND	290	130	ug/Kg	1	06/12/19	WB	SW8270D
Di-n-butylphthalate	ND	290	110	ug/Kg	1	06/12/19	WB	SW8270D
Di-n-octylphthalate	ND	290	110	ug/Kg	1	06/12/19	WB	SW8270D
Fluoranthene	2500	290	130	ug/Kg	1	06/12/19	WB	SW8270D
Fluorene	830	290	140	ug/Kg	1	06/12/19	WB	SW8270D
Hexachlorobenzene	ND	210	120	ug/Kg	1	06/12/19	WB	SW8270D
Hexachlorobutadiene	ND	290	150	ug/Kg	1	06/12/19	WB	SW8270D
Hexachlorocyclopentadiene	ND	290	130	ug/Kg	1	06/12/19	WB	SW8270D
Hexachloroethane	ND	210	120	ug/Kg	1	06/12/19	WB	SW8270D

1

B

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Indeno(1,2,3-cd)pyrene	1000	290	140	ug/Kg	1	06/12/19	WB	SW8270D
Isophorone	ND	210	120	ug/Kg	1	06/12/19	WB	SW8270D
Naphthalene	340	290	120	ug/Kg	1	06/12/19	WB	SW8270D
Nitrobenzene	ND	210	150	ug/Kg	1	06/12/19	WB	SW8270D
N-Nitrosodimethylamine	ND	290	120	ug/Kg	1	06/12/19	WB	SW8270D
N-Nitrosodi-n-propylamine	ND	210	130	ug/Kg	1	06/12/19	WB	SW8270D
N-Nitrosodiphenylamine	ND	290	160	ug/Kg	1	06/12/19	WB	SW8270D
Pentachloronitrobenzene	ND	290	150	ug/Kg	1	06/12/19	WB	SW8270D
Pentachlorophenol	ND	250	160	ug/Kg	1	06/12/19	WB	SW8270D
Phenanthrene	2500	290	120	ug/Kg	1	06/12/19	WB	SW8270D
Phenol	ND	290	130	ug/Kg	1	06/12/19	WB	SW8270D
Pyrene	2400	290	140	ug/Kg	1	06/12/19	WB	SW8270D
Pyridine	ND	290	100	ug/Kg	1	06/12/19	WB	SW8270D
<b><u>QA/QC Surrogates</u></b>								
% 2,4,6-Tribromophenol	73			%	1	06/12/19	WB	30 - 130 %
% 2-Fluorobiphenyl	69			%	1	06/12/19	WB	30 - 130 %
% 2-Fluorophenol	62			%	1	06/12/19	WB	30 - 130 %
% Nitrobenzene-d5	66			%	1	06/12/19	WB	30 - 130 %
% Phenol-d5	73			%	1	06/12/19	WB	30 - 130 %
% Terphenyl-d14	78			%	1	06/12/19	WB	30 - 130 %
Field Extraction	Completed					06/07/19		SW5035A

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

B = Present in blank, no bias suspected.

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.

**Pesticide Comment:**

Due to the presence of Chlordane in the sample, an elevated RL was reported.

**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.,

L - Acetone is reported from a Phoenix prepared low level. A negative bias is possible.

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**

**June 21, 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

June 21, 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: DR  
 Received by: CP  
 Analyzed by: see "By" below

## Date

06/07/19  
 06/10/19

## Time

10:10  
 15:02

## Laboratory Data

SDG ID: GCD30633  
 Phoenix ID: CD30640

Project ID: 1840 PARK AVE, MANHATTAN NY  
 Client ID: F4 (5-7')

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Silver	ND	0.39	0.39	mg/Kg	1	06/12/19	EK	SW6010D
Aluminum	10600	39	7.8	mg/Kg	10	06/12/19	EK	SW6010D
Arsenic	3.25	0.78	0.78	mg/Kg	1	06/12/19	EK	SW6010D
Barium	24.9	0.8	0.39	mg/Kg	1	06/12/19	EK	SW6010D
Beryllium	0.30	J 0.31	0.16	mg/Kg	1	06/12/19	EK	SW6010D
Calcium	753	3.9	3.6	mg/Kg	1	06/12/19	EK	SW6010D
Cadmium	ND	0.39	0.39	mg/Kg	1	06/13/19	CPP	SW6010D
Cobalt	7.13	0.39	0.39	mg/Kg	1	06/12/19	EK	SW6010D
Chromium	15.5	0.39	0.39	mg/Kg	1	06/13/19	CPP	SW6010D
Copper	11.9	0.8	0.39	mg/kg	1	06/12/19	EK	SW6010D
Iron	14100	39	39	mg/Kg	10	06/12/19	EK	SW6010D
Mercury	ND	0.07	0.04	mg/Kg	5	06/12/19	RS	SW7471B
Potassium	875	8	3.0	mg/Kg	1	06/12/19	EK	SW6010D
Magnesium	2420	3.9	3.9	mg/Kg	1	06/12/19	EK	SW6010D
Manganese	335	3.9	3.9	mg/Kg	10	06/12/19	EK	SW6010D
Sodium	154	8	3.4	mg/Kg	1	06/12/19	EK	SW6010D
Nickel	12.7	0.39	0.39	mg/Kg	1	06/12/19	EK	SW6010D
Lead	6.3	0.8	0.39	mg/Kg	1	06/12/19	EK	SW6010D
Antimony	ND	3.9	3.9	mg/Kg	1	06/12/19	EK	SW6010D
Selenium	ND	1.6	1.3	mg/Kg	1	06/12/19	EK	SW6010D
Thallium	ND	1.6	1.6	mg/Kg	1	06/12/19	EK	SW6010D
Vanadium	20.7	0.39	0.39	mg/Kg	1	06/12/19	EK	SW6010D
Zinc	26.5	0.8	0.39	mg/Kg	1	06/12/19	EK	SW6010D
Percent Solid	89			%		06/10/19	ML	SW846-%Solid
Soil Extraction for PCB	Completed					06/11/19	MM/V	SW3545A
Soil Extraction for Pesticides	Completed					06/11/19	MM/V	SW3545A
Soil Extraction for SVOA	Completed					06/11/19	JJ/EE	SW3545A
Mercury Digestion	Completed					06/12/19	I/LS/I/LS	SW7471B

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Total Metals Digest	Completed					06/10/19	S/AG/BF	SW3050B
<b><u>Polychlorinated Biphenyls</u></b>								
PCB-1016	ND	74	74	ug/Kg	2	06/13/19	SC	SW8082A
PCB-1221	ND	74	74	ug/Kg	2	06/13/19	SC	SW8082A
PCB-1232	ND	74	74	ug/Kg	2	06/13/19	SC	SW8082A
PCB-1242	ND	74	74	ug/Kg	2	06/13/19	SC	SW8082A
PCB-1248	ND	74	74	ug/Kg	2	06/13/19	SC	SW8082A
PCB-1254	ND	74	74	ug/Kg	2	06/13/19	SC	SW8082A
PCB-1260	ND	74	74	ug/Kg	2	06/13/19	SC	SW8082A
PCB-1262	ND	74	74	ug/Kg	2	06/13/19	SC	SW8082A
PCB-1268	ND	74	74	ug/Kg	2	06/13/19	SC	SW8082A
<b><u>QA/QC Surrogates</u></b>								
% DCBP	60			%	2	06/13/19	SC	40 - 140 %
% DCBP (Confirmation)	59			%	2	06/13/19	SC	40 - 140 %
% TCMX	60			%	2	06/13/19	SC	30 - 150 %
% TCMX (Confirmation)	61			%	2	06/13/19	SC	30 - 150 %
<b><u>Pesticides - Soil</u></b>								
4,4' -DDD	ND	2.2	2.2	ug/Kg	2	06/12/19	CW	SW8081B
4,4' -DDE	ND	2.2	2.2	ug/Kg	2	06/12/19	CW	SW8081B
4,4' -DDT	ND	2.2	2.2	ug/Kg	2	06/12/19	CW	SW8081B
a-BHC	ND	7.4	7.4	ug/Kg	2	06/12/19	CW	SW8081B
a-Chlordane	ND	3.7	3.7	ug/Kg	2	06/12/19	CW	SW8081B
Aldrin	ND	3.7	3.7	ug/Kg	2	06/12/19	CW	SW8081B
b-BHC	ND	7.4	7.4	ug/Kg	2	06/12/19	CW	SW8081B
Chlordane	ND	37	37	ug/Kg	2	06/12/19	CW	SW8081B
d-BHC	ND	7.4	7.4	ug/Kg	2	06/12/19	CW	SW8081B
Dieldrin	ND	3.7	3.7	ug/Kg	2	06/12/19	CW	SW8081B
Endosulfan I	ND	7.4	7.4	ug/Kg	2	06/12/19	CW	SW8081B
Endosulfan II	ND	7.4	7.4	ug/Kg	2	06/12/19	CW	SW8081B
Endosulfan sulfate	ND	7.4	7.4	ug/Kg	2	06/12/19	CW	SW8081B
Endrin	ND	7.4	7.4	ug/Kg	2	06/12/19	CW	SW8081B
Endrin aldehyde	ND	7.4	7.4	ug/Kg	2	06/12/19	CW	SW8081B
Endrin ketone	ND	7.4	7.4	ug/Kg	2	06/12/19	CW	SW8081B
g-BHC	ND	1.5	1.5	ug/Kg	2	06/12/19	CW	SW8081B
g-Chlordane	ND	3.7	3.7	ug/Kg	2	06/12/19	CW	SW8081B
Heptachlor	ND	7.4	7.4	ug/Kg	2	06/12/19	CW	SW8081B
Heptachlor epoxide	ND	7.4	7.4	ug/Kg	2	06/12/19	CW	SW8081B
Methoxychlor	ND	37	37	ug/Kg	2	06/12/19	CW	SW8081B
Toxaphene	ND	150	150	ug/Kg	2	06/12/19	CW	SW8081B
<b><u>QA/QC Surrogates</u></b>								
% DCBP	42			%	2	06/12/19	CW	40 - 140 %
% DCBP (Confirmation)	44			%	2	06/12/19	CW	40 - 140 %
% TCMX	44			%	2	06/12/19	CW	40 - 140 %
% TCMX (Confirmation)	43			%	2	06/12/19	CW	40 - 140 %
<b><u>Volatiles</u></b>								
1,1,1,2-Tetrachloroethane	ND	4.7	0.93	ug/Kg	1	06/15/19	JLI	SW8260C
1,1,1-Trichloroethane	ND	4.7	0.47	ug/Kg	1	06/15/19	JLI	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
1,1,2,2-Tetrachloroethane	ND	4.7	0.93	ug/Kg	1	06/15/19	JLI	SW8260C
1,1,2-Trichloroethane	ND	4.7	0.93	ug/Kg	1	06/15/19	JLI	SW8260C
1,1-Dichloroethane	ND	4.7	0.93	ug/Kg	1	06/15/19	JLI	SW8260C
1,1-Dichloroethene	ND	4.7	0.47	ug/Kg	1	06/15/19	JLI	SW8260C
1,1-Dichloropropene	ND	4.7	0.47	ug/Kg	1	06/15/19	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	4.7	0.93	ug/Kg	1	06/15/19	JLI	SW8260C
1,2,3-Trichloropropane	ND	4.7	0.47	ug/Kg	1	06/15/19	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	4.7	0.93	ug/Kg	1	06/15/19	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	4.7	0.47	ug/Kg	1	06/15/19	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	4.7	0.93	ug/Kg	1	06/15/19	JLI	SW8260C
1,2-Dibromoethane	ND	4.7	0.47	ug/Kg	1	06/15/19	JLI	SW8260C
1,2-Dichlorobenzene	ND	4.7	0.47	ug/Kg	1	06/15/19	JLI	SW8260C
1,2-Dichloroethane	ND	4.7	0.47	ug/Kg	1	06/15/19	JLI	SW8260C
1,2-Dichloropropane	ND	4.7	0.93	ug/Kg	1	06/15/19	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	4.7	0.47	ug/Kg	1	06/15/19	JLI	SW8260C
1,3-Dichlorobenzene	ND	4.7	0.47	ug/Kg	1	06/15/19	JLI	SW8260C
1,3-Dichloropropane	ND	4.7	0.93	ug/Kg	1	06/15/19	JLI	SW8260C
1,4-Dichlorobenzene	ND	4.7	0.47	ug/Kg	1	06/15/19	JLI	SW8260C
2,2-Dichloropropane	ND	4.7	0.47	ug/Kg	1	06/15/19	JLI	SW8260C
2-Chlorotoluene	ND	4.7	0.93	ug/Kg	1	06/15/19	JLI	SW8260C
2-Hexanone	ND	23	4.7	ug/Kg	1	06/15/19	JLI	SW8260C
2-Isopropyltoluene	ND	4.7	0.47	ug/Kg	1	06/15/19	JLI	SW8260C
4-Chlorotoluene	ND	4.7	0.47	ug/Kg	1	06/15/19	JLI	SW8260C
4-Methyl-2-pentanone	ND	23	4.7	ug/Kg	1	06/15/19	JLI	SW8260C
Acetone	ND	23	4.7	ug/Kg	1	06/15/19	JLI	SW8260C
Acrylonitrile	ND	9.3	0.93	ug/Kg	1	06/15/19	JLI	SW8260C
Benzene	ND	4.7	0.47	ug/Kg	1	06/15/19	JLI	SW8260C
Bromobenzene	ND	4.7	0.47	ug/Kg	1	06/15/19	JLI	SW8260C
Bromochloromethane	ND	4.7	0.47	ug/Kg	1	06/15/19	JLI	SW8260C
Bromodichloromethane	ND	4.7	0.93	ug/Kg	1	06/15/19	JLI	SW8260C
Bromoform	ND	4.7	0.93	ug/Kg	1	06/15/19	JLI	SW8260C
Bromomethane	ND	4.7	1.9	ug/Kg	1	06/15/19	JLI	SW8260C
Carbon Disulfide	ND	4.7	0.93	ug/Kg	1	06/15/19	JLI	SW8260C
Carbon tetrachloride	ND	4.7	0.93	ug/Kg	1	06/15/19	JLI	SW8260C
Chlorobenzene	ND	4.7	0.47	ug/Kg	1	06/15/19	JLI	SW8260C
Chloroethane	ND	4.7	0.47	ug/Kg	1	06/15/19	JLI	SW8260C
Chloroform	ND	4.7	0.47	ug/Kg	1	06/15/19	JLI	SW8260C
Chloromethane	ND	4.7	0.93	ug/Kg	1	06/15/19	JLI	SW8260C
cis-1,2-Dichloroethene	ND	4.7	0.47	ug/Kg	1	06/15/19	JLI	SW8260C
cis-1,3-Dichloropropene	ND	4.7	0.47	ug/Kg	1	06/15/19	JLI	SW8260C
Dibromochloromethane	ND	4.7	0.93	ug/Kg	1	06/15/19	JLI	SW8260C
Dibromomethane	ND	4.7	0.93	ug/Kg	1	06/15/19	JLI	SW8260C
Dichlorodifluoromethane	ND	4.7	0.47	ug/Kg	1	06/15/19	JLI	SW8260C
Ethylbenzene	ND	4.7	0.47	ug/Kg	1	06/15/19	JLI	SW8260C
Hexachlorobutadiene	ND	4.7	0.47	ug/Kg	1	06/15/19	JLI	SW8260C
Isopropylbenzene	ND	4.7	0.47	ug/Kg	1	06/15/19	JLI	SW8260C
m&p-Xylene	ND	4.7	0.93	ug/Kg	1	06/15/19	JLI	SW8260C
Methyl Ethyl Ketone	ND	28	4.7	ug/Kg	1	06/15/19	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	9.3	0.93	ug/Kg	1	06/15/19	JLI	SW8260C

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Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Methylene chloride	ND	4.7	4.7	ug/Kg	1	06/15/19	JLI	SW8260C
Naphthalene	ND	4.7	0.93	ug/Kg	1	06/15/19	JLI	SW8260C
n-Butylbenzene	ND	4.7	0.47	ug/Kg	1	06/15/19	JLI	SW8260C
n-Propylbenzene	ND	4.7	0.93	ug/Kg	1	06/15/19	JLI	SW8260C
o-Xylene	ND	4.7	0.93	ug/Kg	1	06/15/19	JLI	SW8260C
p-Isopropyltoluene	ND	4.7	0.47	ug/Kg	1	06/15/19	JLI	SW8260C
sec-Butylbenzene	ND	4.7	0.47	ug/Kg	1	06/15/19	JLI	SW8260C
Styrene	ND	4.7	0.47	ug/Kg	1	06/15/19	JLI	SW8260C
tert-Butylbenzene	ND	4.7	0.47	ug/Kg	1	06/15/19	JLI	SW8260C
Tetrachloroethene	ND	4.7	0.93	ug/Kg	1	06/15/19	JLI	SW8260C
Tetrahydrofuran (THF)	ND	9.3	2.3	ug/Kg	1	06/15/19	JLI	SW8260C
Toluene	ND	4.7	0.47	ug/Kg	1	06/15/19	JLI	SW8260C
trans-1,2-Dichloroethene	ND	4.7	0.47	ug/Kg	1	06/15/19	JLI	SW8260C
trans-1,3-Dichloropropene	ND	4.7	0.47	ug/Kg	1	06/15/19	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	9.3	2.3	ug/Kg	1	06/15/19	JLI	SW8260C
Trichloroethene	ND	4.7	0.47	ug/Kg	1	06/15/19	JLI	SW8260C
Trichlorofluoromethane	ND	4.7	0.93	ug/Kg	1	06/15/19	JLI	SW8260C
Trichlorotrifluoroethane	ND	4.7	0.47	ug/Kg	1	06/15/19	JLI	SW8260C
Vinyl chloride	ND	4.7	0.47	ug/Kg	1	06/15/19	JLI	SW8260C
<b><u>QA/QC Surrogates</u></b>								
% 1,2-dichlorobenzene-d4	100			%	1	06/15/19	JLI	70 - 130 %
% Bromofluorobenzene	100			%	1	06/15/19	JLI	70 - 130 %
% Dibromofluoromethane	96			%	1	06/15/19	JLI	70 - 130 %
% Toluene-d8	101			%	1	06/15/19	JLI	70 - 130 %
<b><u>1,4-dioxane</u></b>								
1,4-dioxane	ND	70	37	ug/kg	1	06/15/19	JLI	SW8260C
<b><u>QA/QC Surrogates</u></b>								
% 1,2-dichlorobenzene-d4	100			%	1	06/15/19	JLI	70 - 130 %
% Bromofluorobenzene	100			%	1	06/15/19	JLI	70 - 130 %
% Dibromofluoromethane	96			%	1	06/15/19	JLI	70 - 130 %
% Toluene-d8	101			%	1	06/15/19	JLI	70 - 130 %
<b><u>Volatiles</u></b>								
1,1,1,2-Tetrachloroethane	ND	19	0.93	ug/Kg	1	06/15/19	JLI	SW8260C
Acrolein	ND	4.7	0.93	ug/Kg	1	06/15/19	JLI	SW8260C
Acrylonitrile	ND	19	0.47	ug/Kg	1	06/15/19	JLI	SW8260C
Tert-butyl alcohol	ND	93	19	ug/Kg	1	06/15/19	JLI	SW8260C
<b><u>Semivolatiles</u></b>								
1,2,4,5-Tetrachlorobenzene	ND	260	130	ug/Kg	1	06/12/19	WB	SW8270D
1,2,4-Trichlorobenzene	ND	260	110	ug/Kg	1	06/12/19	WB	SW8270D
1,2-Dichlorobenzene	ND	260	100	ug/Kg	1	06/12/19	WB	SW8270D
1,2-Diphenylhydrazine	ND	260	120	ug/Kg	1	06/12/19	WB	SW8270D
1,3-Dichlorobenzene	ND	260	110	ug/Kg	1	06/12/19	WB	SW8270D
1,4-Dichlorobenzene	ND	260	110	ug/Kg	1	06/12/19	WB	SW8270D
2,4,5-Trichlorophenol	ND	260	200	ug/Kg	1	06/12/19	WB	SW8270D
2,4,6-Trichlorophenol	ND	180	120	ug/Kg	1	06/12/19	WB	SW8270D
2,4-Dichlorophenol	ND	180	130	ug/Kg	1	06/12/19	WB	SW8270D
2,4-Dimethylphenol	ND	260	91	ug/Kg	1	06/12/19	WB	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
2,4-Dinitrophenol	ND	260	260	ug/Kg	1	06/12/19	WB	SW8270D
2,4-Dinitrotoluene	ND	180	140	ug/Kg	1	06/12/19	WB	SW8270D
2,6-Dinitrotoluene	ND	180	120	ug/Kg	1	06/12/19	WB	SW8270D
2-Chloronaphthalene	ND	260	100	ug/Kg	1	06/12/19	WB	SW8270D
2-Chlorophenol	ND	260	100	ug/Kg	1	06/12/19	WB	SW8270D
2-Methylnaphthalene	ND	260	110	ug/Kg	1	06/12/19	WB	SW8270D
2-Methylphenol (o-cresol)	ND	260	170	ug/Kg	1	06/12/19	WB	SW8270D
2-Nitroaniline	ND	260	260	ug/Kg	1	06/12/19	WB	SW8270D
2-Nitrophenol	ND	260	230	ug/Kg	1	06/12/19	WB	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	260	140	ug/Kg	1	06/12/19	WB	SW8270D
3,3'-Dichlorobenzidine	ND	180	170	ug/Kg	1	06/12/19	WB	SW8270D
3-Nitroaniline	ND	370	730	ug/Kg	1	06/12/19	WB	SW8270D
4,6-Dinitro-2-methylphenol	ND	220	73	ug/Kg	1	06/12/19	WB	SW8270D
4-Bromophenyl phenyl ether	ND	260	110	ug/Kg	1	06/12/19	WB	SW8270D
4-Chloro-3-methylphenol	ND	260	130	ug/Kg	1	06/12/19	WB	SW8270D
4-Chloroaniline	ND	290	170	ug/Kg	1	06/12/19	WB	SW8270D
4-Chlorophenyl phenyl ether	ND	260	120	ug/Kg	1	06/12/19	WB	SW8270D
4-Nitroaniline	ND	370	120	ug/Kg	1	06/12/19	WB	SW8270D
4-Nitrophenol	ND	370	170	ug/Kg	1	06/12/19	WB	SW8270D
Acenaphthene	ND	260	110	ug/Kg	1	06/12/19	WB	SW8270D
Acenaphthylene	ND	260	100	ug/Kg	1	06/12/19	WB	SW8270D
Acetophenone	ND	260	110	ug/Kg	1	06/12/19	WB	SW8270D
Aniline	ND	290	290	ug/Kg	1	06/12/19	WB	SW8270D
Anthracene	ND	260	120	ug/Kg	1	06/12/19	WB	SW8270D
Benz(a)anthracene	ND	260	120	ug/Kg	1	06/12/19	WB	SW8270D
Benzidine	ND	370	220	ug/Kg	1	06/12/19	WB	SW8270D
Benzo(a)pyrene	ND	180	120	ug/Kg	1	06/12/19	WB	SW8270D
Benzo(b)fluoranthene	ND	260	130	ug/Kg	1	06/12/19	WB	SW8270D
Benzo(ghi)perylene	ND	260	120	ug/Kg	1	06/12/19	WB	SW8270D
Benzo(k)fluoranthene	ND	260	120	ug/Kg	1	06/12/19	WB	SW8270D
Benzoic acid	ND	1800	730	ug/Kg	1	06/12/19	WB	SW8270D
Benzyl butyl phthalate	ND	260	94	ug/Kg	1	06/12/19	WB	SW8270D
Bis(2-chloroethoxy)methane	ND	260	100	ug/Kg	1	06/12/19	WB	SW8270D
Bis(2-chloroethyl)ether	ND	180	99	ug/Kg	1	06/12/19	WB	SW8270D
Bis(2-chloroisopropyl)ether	ND	260	100	ug/Kg	1	06/12/19	WB	SW8270D
Bis(2-ethylhexyl)phthalate	ND	260	110	ug/Kg	1	06/12/19	WB	SW8270D
Carbazole	ND	180	150	ug/Kg	1	06/12/19	WB	SW8270D
Chrysene	ND	260	120	ug/Kg	1	06/12/19	WB	SW8270D
Dibenz(a,h)anthracene	ND	180	120	ug/Kg	1	06/12/19	WB	SW8270D
Dibenzofuran	ND	260	110	ug/Kg	1	06/12/19	WB	SW8270D
Diethyl phthalate	ND	260	120	ug/Kg	1	06/12/19	WB	SW8270D
Dimethylphthalate	ND	260	110	ug/Kg	1	06/12/19	WB	SW8270D
Di-n-butylphthalate	ND	260	97	ug/Kg	1	06/12/19	WB	SW8270D
Di-n-octylphthalate	ND	260	94	ug/Kg	1	06/12/19	WB	SW8270D
Fluoranthene	ND	260	120	ug/Kg	1	06/12/19	WB	SW8270D
Fluorene	ND	260	120	ug/Kg	1	06/12/19	WB	SW8270D
Hexachlorobenzene	ND	180	110	ug/Kg	1	06/12/19	WB	SW8270D
Hexachlorobutadiene	ND	260	130	ug/Kg	1	06/12/19	WB	SW8270D
Hexachlorocyclopentadiene	ND	260	110	ug/Kg	1	06/12/19	WB	SW8270D

1

B

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Hexachloroethane	ND	180	110	ug/Kg	1	06/12/19	WB	SW8270D
Indeno(1,2,3-cd)pyrene	ND	260	120	ug/Kg	1	06/12/19	WB	SW8270D
Isophorone	ND	180	100	ug/Kg	1	06/12/19	WB	SW8270D
Naphthalene	ND	260	110	ug/Kg	1	06/12/19	WB	SW8270D
Nitrobenzene	ND	180	130	ug/Kg	1	06/12/19	WB	SW8270D
N-Nitrosodimethylamine	ND	260	100	ug/Kg	1	06/12/19	WB	SW8270D
N-Nitrosodi-n-propylamine	ND	180	120	ug/Kg	1	06/12/19	WB	SW8270D
N-Nitrosodiphenylamine	ND	260	140	ug/Kg	1	06/12/19	WB	SW8270D
Pentachloronitrobenzene	ND	260	140	ug/Kg	1	06/12/19	WB	SW8270D
Pentachlorophenol	ND	220	140	ug/Kg	1	06/12/19	WB	SW8270D
Phenanthrene	ND	260	100	ug/Kg	1	06/12/19	WB	SW8270D
Phenol	ND	260	120	ug/Kg	1	06/12/19	WB	SW8270D
Pyrene	ND	260	130	ug/Kg	1	06/12/19	WB	SW8270D
Pyridine	ND	260	90	ug/Kg	1	06/12/19	WB	SW8270D
<b>QA/QC Surrogates</b>								
% 2,4,6-Tribromophenol	71			%	1	06/12/19	WB	30 - 130 %
% 2-Fluorobiphenyl	58			%	1	06/12/19	WB	30 - 130 %
% 2-Fluorophenol	48			%	1	06/12/19	WB	30 - 130 %
% Nitrobenzene-d5	51			%	1	06/12/19	WB	30 - 130 %
% Phenol-d5	57			%	1	06/12/19	WB	30 - 130 %
% Terphenyl-d14	63			%	1	06/12/19	WB	30 - 130 %
Field Extraction	Completed					06/07/19		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.

B = Present in blank, no bias suspected.

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.

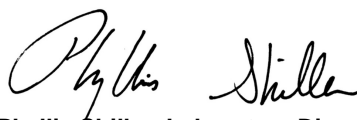
**Comments:**

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**

**June 21, 2019**

**Reviewed and Released by: Phyllis Shiller, Laboratory Director**

Friday, June 21, 2019

Criteria: NY: 375, 375GWP, 375RRS, 375RS

State: NY

# Sample Criteria Exceedances Report

GCD30633 - EBC

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	Criteria	RL	Analysis Units
CD30637	\$PESTSMDPR	4,4' -DDE	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	110	23	3.3	3.3	3.3	ug/Kg
CD30637	\$PESTSMDPR	4,4' -DDT	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	210	23	3.3	3.3	3.3	ug/Kg
CD30637	\$PESTSMDPR	Dieldrin	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	16	3.8	5	5	5	ug/Kg
CD30637	\$PESTSMDPR	4,4' -DDD	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	18	2.3	3.3	3.3	3.3	ug/Kg
CD30637	HG-SM	Mercury	NY / 375-6.8 Metals / Unrestricted Use Soil	0.29	0.15	0.18	0.18	0.18	mg/Kg
CD30637	PB-SMDP	Lead	NY / 375-6.8 Metals / Unrestricted Use Soil	103	0.7	63	63	63	mg/Kg
CD30639	\$8270SMRDP	Chrysene	NY / 375-6.8 Semivolatiles / Ground Water Protection	1600	290	1000	1000	1000	ug/Kg
CD30639	\$8270SMRDP	Benzo(b)fluoranthene	NY / 375-6.8 Semivolatiles / Residential	1500	290	1000	1000	1000	ug/Kg
CD30639	\$8270SMRDP	Benzo(a)pyrene	NY / 375-6.8 Semivolatiles / Residential	1100	210	1000	1000	1000	ug/Kg
CD30639	\$8270SMRDP	Benzo(k)fluoranthene	NY / 375-6.8 Semivolatiles / Residential	1300	290	1000	1000	1000	ug/Kg
CD30639	\$8270SMRDP	Chrysene	NY / 375-6.8 Semivolatiles / Residential	1600	290	1000	1000	1000	ug/Kg
CD30639	\$8270SMRDP	Indeno(1,2,3-cd)pyrene	NY / 375-6.8 Semivolatiles / Residential	1000	290	500	500	500	ug/Kg
CD30639	\$8270SMRDP	Indeno(1,2,3-cd)pyrene	NY / 375-6.8 Semivolatiles / Residential Restricted	1000	290	500	500	500	ug/Kg
CD30639	\$8270SMRDP	Benzo(b)fluoranthene	NY / 375-6.8 Semivolatiles / Residential Restricted	1500	290	1000	1000	1000	ug/Kg
CD30639	\$8270SMRDP	Benzo(a)pyrene	NY / 375-6.8 Semivolatiles / Residential Restricted	1100	210	1000	1000	1000	ug/Kg
CD30639	\$8270SMRDP	Indeno(1,2,3-cd)pyrene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	1000	290	500	500	500	ug/Kg
CD30639	\$8270SMRDP	Chrysene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	1600	290	1000	1000	1000	ug/Kg
CD30639	\$8270SMRDP	Benzo(b)fluoranthene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	1500	290	1000	1000	1000	ug/Kg
CD30639	\$8270SMRDP	Benzo(a)pyrene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	1100	210	1000	1000	1000	ug/Kg
CD30639	\$8270SMRDP	Benzo(k)fluoranthene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	1300	290	800	800	800	ug/Kg
CD30639	\$PESTSMDPR	Dieldrin	NY / 375-6.8 PCBs/Pesticides / Ground Water Protection	250	21	100	100	100	ug/Kg
CD30639	\$PESTSMDPR	Dieldrin	NY / 375-6.8 PCBs/Pesticides / Residential	250	21	39	39	39	ug/Kg
CD30639	\$PESTSMDPR	Dieldrin	NY / 375-6.8 PCBs/Pesticides / Residential Restricted	250	21	200	200	200	ug/Kg
CD30639	\$PESTSMDPR	a-Chlordane	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	98	21	94	94	94	ug/Kg
CD30639	\$PESTSMDPR	4,4' -DDD	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	200	12	3.3	3.3	3.3	ug/Kg
CD30639	\$PESTSMDPR	4,4' -DDE	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	130	12	3.3	3.3	3.3	ug/Kg
CD30639	\$PESTSMDPR	Aldrin	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	ND	8.3	5	5	5	ug/Kg
CD30639	\$PESTSMDPR	Dieldrin	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	250	21	5	5	5	ug/Kg
CD30639	\$PESTSMDPR	Endrin	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	ND	21	14	14	14	ug/Kg
CD30639	\$PESTSMDPR	4,4' -DDT	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	ND	8.3	3.3	3.3	3.3	ug/Kg
CD30639	BA-SMDP	Barium	NY / 375-6.8 Metals / Ground Water Protection	995	0.9	820	820	820	mg/Kg
CD30639	BA-SMDP	Barium	NY / 375-6.8 Metals / Residential	995	0.9	350	350	350	mg/Kg
CD30639	BA-SMDP	Barium	NY / 375-6.8 Metals / Residential Restricted	995	0.9	400	400	400	mg/Kg
CD30639	BA-SMDP	Barium	NY / 375-6.8 Metals / Unrestricted Use Soil	995	0.9	350	350	350	mg/Kg
CD30639	CD-SM	Cadmium	NY / 375-6.8 Metals / Residential	4.05	0.43	2.5	2.5	2.5	mg/Kg
CD30639	CD-SM	Cadmium	NY / 375-6.8 Metals / Unrestricted Use Soil	4.05	0.43	2.5	2.5	2.5	mg/Kg
CD30639	CR-SM	Chromium	NY / 375-6.8 Metals / Unrestricted Use Soil	36.4	0.43	30			mg/Kg
CD30639	HG-SM	Mercury	NY / 375-6.8 Metals / Ground Water Protection	1.21	0.08	0.73	0.73	0.73	mg/Kg
CD30639	HG-SM	Mercury	NY / 375-6.8 Metals / Residential	1.21	0.08	0.81	0.81	0.81	mg/Kg
CD30639	HG-SM	Mercury	NY / 375-6.8 Metals / Residential Restricted	1.21	0.08	0.81	0.81	0.81	mg/Kg
CD30639	HG-SM	Mercury	NY / 375-6.8 Metals / Unrestricted Use Soil	1.21	0.08	0.18	0.18	0.18	mg/Kg

Friday, June 21, 2019

Criteria: NY: 375, 375GWP, 375RRS, 375RS

State: NY

## Sample Criteria Exceedances Report

GCD30633 - EBC

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units
CD30639	PB-SMDP	Lead	NY / 375-6.8 Metals / Ground Water Protection	653	8.6	450	450	mg/Kg
CD30639	PB-SMDP	Lead	NY / 375-6.8 Metals / Residential	653	8.6	400	400	mg/Kg
CD30639	PB-SMDP	Lead	NY / 375-6.8 Metals / Residential Restricted	653	8.6	400	400	mg/Kg
CD30639	PB-SMDP	Lead	NY / 375-6.8 Metals / Unrestricted Use Soil	653	8.6	63	63	mg/Kg
CD30639	ZN-SMDP	Zinc	NY / 375-6.8 Metals / Unrestricted Use Soil	911	8.6	109	109	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

June 21, 2019

SDG I.D.: GCD30633

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The samples in this delivery group were received at 2.3°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**

Coolant: Yes  No   
 IPK  ICE   
 Temp: 23°C Pg 2 of 2

**Contact Options:**

Fax: \_\_\_\_\_  
 Phone: 631-504-6000  
 Email: F.L.P.

Project P.O.: 1840 Park Ave, Manhattan, NY  
 Report to: Environmental Business Consultants  
 Invoice to: Environmental Business Consultants

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

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

Sampler's Signature: David Ruff Date: \_\_\_\_\_

Client Sample - Information - Identification  
David Ruff

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

Analysis Request  
VOCs, BAPC, Pesticides, TAL Metals

PHOENIX USE ONLY SAMPLE #	Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled	Analysis Request
000033	P1 (8-10')	S	6-7-19	10:40	X X
000034	P2 (8-10')			10:58	X X
000035	P3 (8-10')			11:20	X X
000036	P4 (8-10')			11:45	X X
000037	F1 (5-7')			9:00	X X
000038	F2 (5-7')			9:15	X X
000039	F3 (6-8')			9:35	X X
000040	F4 (5-7')	↓		10:10	X X

GL VOA Vials	GL Soil container	GL Amber 100ml	PL H2SO4	PL HNO3	PL NaOH	Bacteria Bottle
3	1	1	1	1	1	1
3	1	1	1	1	1	1
3	1	1	1	1	1	1
3	1	1	1	1	1	1
3	1	1	1	1	1	1
3	1	1	1	1	1	1
3	1	1	1	1	1	1

Relinquished by: David Ruff Accepted by: Kyle [Signature]

Date: 6-10-19 Time: 12:30

Date: 6/10/19 Time: 15:00

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

Comments, Special Requirements or Regulations:

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**APPENDIX - F**  
***DUSR***