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Limited Phase II Subsurface Investigation

For

Betances Houses - Garage
400 East 147th Street
Bronx, NY 10455

NYSDEC Spill # 98-13188

Prepared for:

New York City Housing Authority
Technical Services Department
Fuel Oil Remediation and Heating Unit
23-02 49th Avenue, 3rd Floor
Long Island City, NY 11101

American Environmental Project 17-0150-II

December 8th, 2017

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1.0 EXECUTIVE SUMMARY

American Environmental Assessment and Solutions, Inc. (American Environmental) has performed a Limited Phase II Subsurface Investigation at the property located at 400 East 147th Street, Bronx (Bronx County), New York (the "Site" or "Subject Property"). The Limited Phase II Subsurface Investigation was performed in general accordance with the scope and limitations of the American Society for Testing and Materials (ASTM) Standards E 1903-97; the NYSDEC Remedial Program for Soil Cleanup, Subpart 375-6; and the contract between American Environmental and the New York City Housing Authority (NYCHA).

The purpose of the Limited Phase II Subsurface Investigation was to access and determine the extent of subsurface contaminants associated with soil contamination discovered during Loyal Construction Co. construction activities at the Site in October 1998 and to address the NYSDEC Spill number **98-13188**. The activities of this Limited Phase II Subsurface Investigation was performed according to instructions provided by the New York State Department of Environmental Conservation (NYSDEC), and a Work Plan (WP) prepared by P.W. Grosser Consulting, Inc., dated March 2009. All field activities of the Limited Phase II Subsurface Investigation were performed within the L-shaped garage of the one story commercial building, identified as the area of concern (AOC).

The Subject Property is identified as Betances Houses garage, part of the NYC housing complex, known as Betances Houses VI, located at 400 East 147th Street in the Mott Haven section of Bronx. The Area of Concern (AOC) was identified within the garage area of the one story commercial building. The garage is L-shaped located in the eastern portion of the one story building. The garage slopes down from the Street level to approximately nine feet towards the north, and extends beneath the one story building in the northern area. The total area of the one story building is approximately 9,843 square feet and contains a furniture store and a former deli. The one story commercial building is bordered by East 146th Street to the south, Willis Avenue to the west, five story residential buildings that are part of Betances VI complex to the south, and west.

Field activities consisted of a Ground Penetrating Radar Survey, the installation and sampling of three (3) soil borings, the installation of three (3) groundwater monitoring wells, development of the newly installed wells, sampling of a total of three (3) monitoring wells, gauging of the three (3) new monitoring wells. Select soil samples were obtained from each soil boring. The soil and groundwater samples were submitted to a New York State certified (ELAP #11301) laboratory and analyzed for common petroleum constituents in accordance with EPA Method 8260B, and 8270C.

All field activities were performed on October 19th, November 16th, & 21st, 2017. The results of the investigation are contained in this report.

Field Investigation Findings:

- Ground Penetrating Radar (GPR) Survey:
  - No significant anomaly indicative of other/unknown tanks, drums or buried objects were identified during the GPR survey at the Subject Property.

    In addition all utilities were marked out in the vicinity of the work area.

    All proposed boring locations were cleared as well and marked prior to field activities.

- Soil Quality:
  - One *VOC* was identified in the soil sample obtained from **SB-2** (depth of 6-8 feet bgs), above its respective Unrestricted Use SCOs Part 375-6.8(a) (Track 1). The VOC was identified as Naphthalene at a level of 1,600 µg/kg exceeding Track 1. Acetone a laboratory contaminant was identified in SB-1 (depth of 2-5 feet) at a level of 36 µg/kg and in SB-2 (depth of 1-4 feet) at a level of 22 µg/kg.

  - *SVOCs* were identified in the soil sample obtained from **SB-2** (depth of 6-8 feet bgs), above their respective Restricted Use Residential and Track 1. Both Benzo (a) Pyrene and Indeno (1,2,3-cd) Pyrene were identified at a maximum of 1,900 µg/kg exceeding their respective Restricted Use Residential and Track 1 standards. Benzo (g,h,i) Perylene was identified in SB-2 (depth of 6-8 feet bgs) but below regulatory standards.

    SVOCs were identified in the soil samples obtained from SB-2 (depth of 6-8 feet bgs), and in SB-3 (depth of 1-5 feet bgs) but at levels well below regulatory standards.

    The soil samples obtained from SB-2 was the only soil boring identified with contaminants above standards. SB-2 was observed to be impacted (discoloration and odor) and exhibited the highest PID readings during the field screening of the samples. SB-2 was installed between SB-1 and SB-3.

- Groundwater Quality:

  Soil boring SB-1 through SB-3 were converted into a permanent monitoring wells designated as MW-1 through MW-3 for the collection of groundwater. Groundwater samples were obtained from monitoring wells MW-1 through MW-3 for VOCs and SVOCs analysis.

- One *VOC* was detected in the groundwater samples obtained from monitoring wells ***MW-2*** and ***MW-3*** exceeding their respective NYSDEC Ambient Groundwater Quality Standards (GQS). Naphthalene (detected at 32 µg/L) was identified in **MW-2** (detected at 32 µg/L) and MW-3 (detected at 32 µg/L) at levels above its respective GQS. Tetrachloroethene was identified in MW-3 at a level of 1.4 µg/L below its GQS of 5 µg/L.

- **SVOCs** were identified in the groundwater samples obtained from **MW-1** through **MW-3** exceeding their respective GQS. Seven SVOCs were identified in MW-1 and five SVOCs were identified in MW-2 and MW3 exceeding their respective GQS.

  SVOCs identified in monitoring wells MW-2 and MW-3 included the following: Benzo (a) Anthracene (identified at 0.08 µg/L in MW-2 and 0.04 µg/L in MW-3), Benzo (a) Pyrene (identified at 0.05 µg/L in MW-2 and 0.02 µg/L in MW-3), Benzo (b) Fluoranthene (identified at 0.05 µg/L in MW-2 and 0.03 µg/L in MW-3, Benzo (k) Fluoranthene (identified at 0.04 µg/L in MW-2 to 0.03 µg/L in MW-3), and Chrysene (identified at 0.08 µg/L in MW-2 and 0.03 µg/L in MW-3),

  SVOCs identified in monitoring wells MW-1 included Benzo (a) Anthracene (identified at 0.20 µg/L), Benzo (a) Pyrene (identified at 0.13 µg/L), Benzo (b) Fluoranthene (identified at 0.14 µg/L), Benzo (k) Fluoranthene (identified at 0.14 µg/L), Bis (2-ethylhexyl) Phthalate (identified at 5.30 µg/L), Chrysene (identified at 0.18 µg/L), and lndeno (1,2,3-cd) Pyrene (identified at 0.07 µg/L in MW-1)

Additional SVOCs were identified in all of the groundwater samples but below regulatory standards. Based upon the laboratory results it appears the monitoring well MW-1 contains the highest level of SVOCs. Soil samples obtained from SB-1 /MW-1 did not identify any VOCs or SVOCs.

Information obtained from a FOIL request indicated that the garage was excavated and backfilled. The contaminants identified could be "hotspot" areas that remained after backfilling the property.

1.1 ENVIRONMENTAL PROFESSIONAL DECLARATIONS

Ms. Antoinette Ollivierre, Senior Geologist, gathered and compiled information contained in this report. Ms. Ollivierre performed all fieldwork for the Phase II field Investigation.

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Antoinette Ollivierre, CEC, CEI
Principal, Senior Geologist

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

This summary does not contain all of the information presented in the full report. The report should be read in its entirety to obtain a more complete understanding of the information provided and to aid in any decisions made or actions taken based on this information.

No effort has been made to perform any investigation beyond what is included in this report. The observations included herein summarize the results of the environmental activities up to the date of the fieldwork and the date of this report.

The following sections provide the details and specific information pertaining to the various components of the Phase II Subsurface Investigation.

2.0 INTRODUCTION

American Environmental Assessment & Solutions, Inc. (American Environmental) has prepared this Limited Phase II Subsurface Investigation report on behalf of the New York City Housing Authority (NYCHA). The Limited Phase II Subsurface Investigation was performed at the property located at 400 East 147th Street, Bronx, New York (the Site). The Limited Phase II Subsurface Investigation report was prepared to document all environmental activities performed at the Site on October 19th, November 16th, & 21st, 2017 by American Environmental and to determine the extent of the soil and groundwater contamination in the vicinity of the AOC.

2.1 Site Location and Current Usage

Summary	
Project Name	Betances Houses Garage
Property Address **Property Address (Alternate)**	400 East 147th Street, Bronx Various
City, County, State, ZIP Code	Bronx, Bronx County, NY 10455
Site Area (acres)	0.226 (1 story building area)
No. Buildings/Units/Stories	1 story brick commercial building
Area (sf)	9,843
Occupied Subgrade Spaces?	Garage below building in the northern area
Year(s), First Developed for Current Use	Approximately 1973

The Subject Property is identified as Betances Houses garage, part of the NYC housing complex, known as Betances Houses VI, located at 400 East 147th Street in the Mott Haven section of Bronx. The Area of Concern (AOC) was identified within the garage area of the one story commercial building. The garage is L-shaped located in the eastern portion of the one story building. The garage slopes down from the Street level to approximately nine feet towards the north, and extends beneath the one story building in the northern area. The total area of the one story building is approximately 9,843 square feet and contains a furniture store and a former deli. The one story commercial building is bordered by East 146th Street to the south, Willis Avenue to the west, five story residential buildings that are part of Betances VI complex to the south, and west.

The area of concern (AOC) specified for this investigation is located in the northern area of the L-shape garage. Access to the garage was via a roll-up door located in the southeastern portion of the building. The northern portion of the garage is located beneath the one story commercial building and is approximately nine feet below street level.

Figure 1 provides a Site Location Map.

2.2 Site Background

Information obtained from a NYSDEC correspondence dated August 13th, 1999 indicated that contaminated soil was encountered by Loyal Construction Co., in October 1998 during the demolition of the collapsed parking garage. Preliminary investigation suggested that two tanks filled with waste oil were the source of the contamination. Maximum Mechanical Corp. was contracted to remove the tanks. On July 28th, 1999, Maximum Mechanical Corp. reported to that there were no tanks at the location. A steel tank ring was used as an opening to a large drywell (vault) framed with railroad ties was discovered instead. The oil was believed to have been dumped in the vault and allowed to saturate the soil.

Information obtained from the NYCDOB under job application # 200500779, approved on 2/18/1998 revealed the scope of work at the property was "removal of the garage roof and backfill to the ground surface".

A work permit dated 9/5/1998 issued to Muhammad Khan of Loyal Construction Co. by the NYCDOB indicated that the work performed at the Site included "shoring for the roof of the parking garage and to provide and install new CMU wall to isolate the accident area". The start date for the work was listed as 10/14/1997.

In addition information obtained from NYCHA employees indicated that the garage roof collapsed around 1998.

A review of the internet based NYSDEC PBS database identified PBS # 2-473065 (closed), 2-473073 (active) and 2-473200 (closed) assigned to Betances Houses Complex. A copy of the PBS database search results is attached to this report.

A review of the internet based NYSDEC Spill Incidents Database identified the following NYSDEC spill numbers attached to Langston Hughes Houses:

Address	Spill #	Spill Date	Cause	Material	Close Date
400 East 147th Street	99-05066	07/28/1999	unknown	#2 fuel oil	11/19/2015
	98-13188	01/27/1999	unknown	Motor oil	Open

2.2 Freedom of Information Law (FOIL)

A FOIL request was submitted to the NYSDEC. FOIL request number W027923-101117 was assigned to the request by NYSDEC on October 11th, 2017.

Information obtained from the NYSDEC spill report form dated 7/28/1999 for spill number 9905066 stated that while removing a fuel oil tank, soil contamination was discovered. The spill number was then identified as related to Betances Garage incident and was consolidated with 9813188.

Information obtained from a NYSDEC correspondence dated August 13th, 1999 indicated that contaminated soil was encountered by Loyal Construction Co., in October 1998 during the demolition of the collapsed parking garage. Preliminary investigation suggested that two tanks filled with waste oil were the source of the contamination. Maximum Mechanical Corp. was contracted to remove the tanks. On July 28th, 1999, Maximum Mechanical Corp. reported to that there were no tanks at the location. A steel tank ring was used as an opening to a large drywell (vault) framed with railroad ties was discovered instead. The oil was believed to have been dumped in the vault and allowed to saturate the soil.

A NYCHA letter dated September 10th, 1999 was received with the FOIL response. The NYCHA letter acknowledges the NYSDEC August 13th, 1999 correspondence and agrees to perform Site investigation upon completion of contract award process.

No additional information for the Site or open spill number was provided for review. Any additional information obtained will be provided as soon as it has been received and evaluated.

2.3 Previous Investigation(s)

Information provided in the WP indicated that no previous environmental investigations were performed at the Site. The following information is a summary of the information obtained from the WP:

- P.W. Grosser Consulting, Inc. – Site Specific Investigation Work Plan, dated March 2009.

Information listed in the WP identified the AOC as a former UST located at 455 East 146th Street. The WP stated that a walk through was performed on December 29th, 2008, however no evidence of impact was identified and the UST location could not be determined. The scope of work listed in the WP specified a GPR survey, five borings and four monitoring wells to be installed in the vicinity of the former UST. The collection of two soil samples per boring and one groundwater sample from each monitoring well to be analyzed for VOCs and SVOCs.

No other report or environmental information was provided to American environmental for review.

2.4 Summary or Proposed Redevelopment Plan

Redevelopment activities are proposed for the Site. Proposed redevelopment of the property include construction of a new fifteen story residential building with a cellar. The footprint of the new building will be approximately 9,850 square feet, covering the footprint of the existing building. The building will contain 101 residential units and commercial on the first floor that is intended to be occupied by healthcare providers.

3.0 PURPOSE AND SCOPE

The purpose of the Limited Phase II Subsurface Investigation was to assess and determine the extent of impacts to soil, relating to NYSDEC Spill Number *98-13188*.

The general scope of the Phase II Subsurface investigation consisted of the following:

- Historical research;
- A geophysical survey;
- Advancing of three borings;
- Installation of three monitoring well;
- Collection of two soil samples from each boring for laboratory analysis;
- Collection of one groundwater sample from each monitoring well for analysis.
- Gauging and surveying of all monitoring wells.
- Preparation of a Limited Phase II Subsurface Investigation Report documenting all work, assessment, conclusion of findings, and recommendations.

All related portions of the fieldwork were performed, at a minimum in accordance with acceptable industry standards. These acceptable industry standards include, but not limited to, the ASTM Standard Guide for Phase II Environmental Site Assessments (E 1903-97), the New York State Department of Environmental Conservation Remedial Program for Soil; Subpart 375-6, the New York State Department of Environmental Conservation Bureau of Spill Prevention & Response Sampling Guidelines and Protocols, March 1991 and the Draft DER-10 Technical Guidance for Site Investigation and Remediation, December 2002.

4.0 FIELDWORK

The purpose of this section is to document the details and protocols that were utilized to accomplish the project goals. Field investigation and sampling activities were conducted on October 19th, November 16th, & 21st, 2017 under the supervision of Ms. Antoinette Ollivierre, Senior Geologist for American Environmental. Prior to the field investigation, utilities were marked out by the respective utility companies where they entered or were located adjacent to the Site.

4.1 Geophysical Investigation

Prior to drilling activities, a geophysical survey was performed at the Site on October 19th, 2017. The geophysical survey was performed to determine the presence or absence of buried containers such as drums and mark out all on-Site utilities in the vicinity and surrounding the proposed drilling location.

The geophysical survey was performed across the entire work area prior to investigative borings using ground penetrating radar (GPR). The GPR survey was performed utilizing a Mala, model; easy locator. A series of GPR profiles were completed along selected lines using a Control Unit. The survey was performed across the Site over a grid pattern. The GPR operator wheeled the antenna over the predetermined grid. The GPR equipment takes a "scan" per set unit. The numbers of scans per unit is based upon the estimated size of targets. As each scan is performed, the antenna emits specific radar amplitude into the subsurface. The amplitude of the radar reflected back to the antenna is based upon the differences in the dielectric constants of the subsurface materials. The difference in amplitude obtained during each scan is graphical displayed at the Control Unit, which was then interpreted by the GPR operator at the time of the survey.

The GPR survey did not identify any anomaly consistent with buried containers such as tanks or drums. All utility lines in the vicinity of the work area were mark-out. Proposed boring locations were cleared for drilling activities.

4.2 Soil Investigation

The following environmental field activities were performed at the Site:

Soil

- Three (3) borings were completed at the site to assess soil contaminants identified during site construction activities, associated with the contaminated soil encountered during the demolition of the parking garage, and to determine the extent of the impact to address the NYSDEC Spill number *98-13188*

4.3 Protocol and Sampling locations

Soil samples were collected to assess and determine the extent of soil and groundwater impact in the subsurface at the Site.

A total of three (3) soil borings by direct-push technology were installed at the Site. The soil borings were designated SB-1 through SB-3. All borings were hand cleared by hand auger to a depth of five feet. A remote access Geoprobe® was utilized to install borings SB-1 through SB-3. Soil samples were collected in all borings at 5-foot intervals utilizing a 5-foot Macro Core sampler fitted with dedicated acetate liners. The Macro sampler allows for the collection of both continuous and discrete soil samples. Each sampler was installed with 1 ½ -inch diameter drill rods. Two soil samples were obtained from SB-1 through SB-3 for analysis. Groundwater was encountered at 4.57 to 6.77 feet below grade of the parking garage. The parking garage in the northern area is located approximately 9 feet below street level.

The following provides the locations of soil borings SB-1 through SB-3, and sample intervals:

Soil Borings Locations				
Soil Boring	**Location(s) Installed**	**Total Depth (ft bgs)**	**Sample Interval Depth (ft bgs)**	**PID Readings (ppm)**
SB-1	Northwestern portion of garage	15	2-5	0.0
			6-10	1.5
SB-2	Northern portion of garage	15	1-4	13.4
			6-8	399.0
SB-3	Eastern portion of garage	15	1-5	42.2
			8-12	0.0

Upon completion of the investigation, borings were filled with soil cuttings and clean soil to ground surface.

Figure 3 provides a Sampling Location Map

4.4 Field Characterization

An American Environmental geologist onsite characterized each soil sample in the field. The soil characterization consisted of determining the soil classification utilizing the Unified Soil Classification System; screening for organic vapors utilizing a Photoionization Detector (PID); and evaluation for visual and olfactory indications of environmental impacts. Headspace analyses were conducted on each sample by partially filling the zip lock bag and sealing it, thereby creating a void. This void is referred to as

the sample headspace. To facilitate the detection of any hydrocarbons contained within the headspace, the container was agitated for a period of 30 seconds. Each sample was then screened for organic vapors utilizing a Photoionization Detector (PID)

A PID makes use of the principle of photoionization for the detection and qualitative measurement of organic vapors. A PID does not respond to all compounds similarly, rather, each compound has its own response factor relative to its calibration. For this investigation, the PID was calibrated to the compound isobutylene, which is published by the manufacturer. The PID has a minimum detection limit of 0.1 parts per million (ppm). This meter measures the hydrocarbon concentrations in isolated portions of the secured samples.

Organic vapors were detected with the PID during the field screening of all the soil samples. Odors and discoloration of the soil obtained from SB-2 was observed during the field screening. The soil samples were placed into 8-ounce jars and appropriately labeled. The general soil type beneath the Site consisted of fine grained silty soil with rocks.

Additional information for each sample field screened is provided in the Boring Logs.

Appendix C provides copies of the Soil Boring Logs

Based upon the requirements set forth in the scope of work, two select soil sample from each boring was containerized and placed in a cooler filled with ice maintained at a maximum 4 degrees Celsius to be transmitted under proper chain of custody to a State-certified laboratory.

4.5 Groundwater Investigation

Soil boring SB-1 through SB-3 were converted monitoring wells, designated as MW-1 through MW-3. The monitoring well locations are depicted on the sampling location map.

4.5.1 Installation of Monitoring Wells

The monitoring wells were installed at a depth up to 20 feet below grade. Each well was completed with a 2-inch inner diameter, with flush-threaded polyvinyl chloride (PVC) 0.010-inch slotted screen, solid PVC riser, and a flush-mounted protective cover. In general, screen lengths of 10 feet was placed at the bottom of the borehole, and the annular space between the well screen, the borehole wall, and approximately 2 feet above the screen will be backfilled with a uniform silica sand filter pack. Approximately 1- to 3-foot bentonite clay seal was placed above the sand pack in each monitoring well. The

remaining annular space will be filled to grade with cement-bentonite grout slurry. The following table provides a summary of the monitoring well construction data.

Summary of Well Construction Data				
Well	**Location(s) Installed**	**Casing Diameter (inches)**	**Total Well Depth**	**Screen (feet)**
MW-1	Northwestern portion of garage	2	20	10
MW-2	Northern portion of garage	2	20	10
MW-3	Eastern portion of garage	2	10	10

Well Purging:

Prior to sample collection, static water levels were measured. The well was purged using USEPA low flow purge techniques until physical water quality parameters had stabilized. The well purging consisted of removing three to five well volumes of water from the well prior to sampling. Groundwater samples were collected using a peristaltic pump and dedicated tubing.

The purged groundwater was stored in 55-gallon drums labeled appropriately. The drums were picked up and disposed of at an approved wastewater facility. A copy of the waste manifest for the groundwater disposal is attached to this report.

Groundwater Elevation:

A complete round of groundwater depth measurements was conducted using an oil/water interface probe. The oil/water interface probe contains a sensor attached to a measuring tape that is lowered down into the well until water is encountered. A buzzer sounds when the probe reaches groundwater and the depth is recorded.

The depth to groundwater obtained for each monitoring well and groundwater elevation are presented below:

Well	Topographic Elevation	Depth to Groundwater	Groundwater Elevation	Product (ft.)
MW-1	25	4.57	20.43	0
MW-2	25	6.40	18.6	0
MW-3	25	6.77	18.23	0

The groundwater elevation data was used to generate a groundwater contour map. The apparent groundwater flow direction is to the southwest towards the Harlem River.

4.6 Decontamination

Each piece of sampling or other down hole equipment was decontaminated prior to each use in order to ensure that cross-contamination between sampling locations does not occur. The following procedure was utilized in the decontamination process:

- Wipe clean and wash with Alconox®
- Potable water rinse
- Methanol rinse
- Deionized water rinse
- Air dry

All decontamination procedures were performed in an area segregated from any sampling areas. Any rinsate from the decontamination areas is contained and removed from the Site.

4.7 Laboratory Analytical

All samples were properly handled and placed into appropriate labeled laboratory supplied containers. The samples were placed in a cooler filled with ice and maintained at a maximum 4 degrees Celsius. All samples were transmitted under proper chain of custody procedures to a State-certified (ELAP No. 11301) laboratory for confirmatory laboratory analyses.

- Volatile Organic Compounds by EPA Method 8260;
- Semi-volatile organic compounds by EPA Method 8270;

All holding times were met. The laboratory did not report any irregularities with respect to their internal Quality Assurance / Quality Control.

5.0 ANALYTICAL RESULTS

5.1 Results of Soil Samples

Table 1 through 2 provides the analytical results for the Volatile Organic Compounds (VOCs) and Semi-Volatile Organic Compounds (SVOCs) detected in soil samples SB-01 through SB-04. **Table 1 through 2** also provides a comparison of the analytical results to the Recommended Soil Cleanup Objectives (SCO) from the 6 NYCRR Part 375.6(b) Restricted Use Residential and Unrestricted Use Soil Cleanup Objectives (Track 1). The SCOs represent the concentration of a contaminant in soil which when achieved at the Site will require no use restrictions on the Site for the protection of public health, groundwater and ecological resources due to the presence of contaminants in soil.

- Soil Quality:
  - One *VOC* was identified in the soil sample obtained from **SB-2** (depth of 6-8 feet bgs), above its respective Unrestricted Use SCOs Part 375-6.8(a) (Track 1). The VOC was identified as Naphthalene at a level of 1,600 µg/kg exceeding Track 1. Acetone a laboratory contaminant was identified in SB-1 (depth of 2-5 feet) at a level of 36 µg/kg and in SB-2 (depth of 1-4 feet) at a level of 22 µg/kg.

    The following table is a summary of the VOCs above their respective SCOs, the complete table is attached to this report.

Soil Sample Analytical Results
Betances Houses Garage - 400 East 147th Street, Bronx, NY

Sample Identification	SB-1	SB-2		**Track 1** Unrestricted Use Soil Cleanup Objectives Part 375-6.8(a)	**Restricted Use** Soil Cleanup Objectives Part 375-6.8(b) **Residential** (µg/kg)	**Restricted Use** Soil Cleanup Objectives Part 375-6.8(b) **Commercial** (µg/kg)
Boring Number	1	2				
Sample Depth	2' - 5'	1' - 4'	6' - 8'			
Sample Date	11/21/2017					
Sample Matrix	Soil					
Units	µg/kg					
Volatile Organic Compounds (µg/kg)						
Acetone	36 S	22 S	ND	NS	NS	NS
Naphthalene	ND	ND	**1,600**	12,000	100,000	500,000

NS…No Standard *ND...Not Detected*

Shaded & bold values represent concentration exceeding the Restricted Use SCOs Residential & Track 1

  - *SVOCs* were identified in the soil sample obtained from **SB-2** (depth of 6-8 feet bgs), above their respective Restricted Use Residential and Track 1. Both Benzo (a) Pyrene and Indeno (1,2,3-cd) Pyrene were identified at a maximum of 1,900 µg/kg exceeding their respective Restricted Use Residential and Track 1 standards. Benzo (g,h,i) Perylene was identified in SB-2 (depth of 6-8 feet bgs) but below regulatory standards.

Soil Sample Analytical Results
Betances Houses Garage - 400 East 147th Street, Bronx, NY

Sample Identification	SB-2		SB-3	**Track 1** Unrestricted Use Soil Cleanup Objectives Part 375-6.8(a)	**Restricted Use** Soil Cleanup Objectives Part 375-6.8(b) **Residential** (µg/kg)	**Restricted Use** Soil Cleanup Objectives Part 375-6.8(b) **Commercial** (µg/kg)
Boring Number	2		3			
Sample Depth	1' - 4'	6' - 8'	1' - 5'			
Sample Date	11/21/2017					
Sample Matrix	Soil					
Units	µg/kg					
Semi-Volatile Organic Compounds (µg/kg)						
Acenaphthene	460	ND	ND	20,000	100,000	500,000
Benzo (a) Anthracene	310	ND	ND	1,000	1,000	5,600
Benzo (a) Pyrene	350	**1,900**	370	1,000	1,000	1,000
Benzo (b) Fluoranthene	330	ND	350	1,000	1,000	5,600
Benzo (g,h,I) Perylene	260	1,800	ND	100,000	100,000	500,000
Benzo (k) Fluoranthene	320	ND	350	800	1,000	56,000
Chrysene	370	ND	ND	1,000	1,000	56,000
Fluoranthene	1,100	ND	ND	100,000	100,000	500,000
Fluorene	400	ND	ND	30,000	100,000	500,000
Indeno (1,2,3-cd) Pyrene	290	**1,900**	290	500	500	56,000
Phenanthrene	490	ND	ND	100,000	100,000	500,000
Pyrene	830	ND	ND	100,000	100,000	500,000
Total SVOCs	5,510	5,600	1,360	100,000	100,000	500,000

NS…No Standard *ND...Not Detected*
Shaded & bold values represent concentration exceeding the Restricted Use SCOs Residential & Track 1

SVOCs were identified in the soil samples obtained from SB-2 (depth of 6-8 feet bgs), and in SB-3 (depth of 1-5 feet bgs) but a levels well below regulatory standards.

The soil samples obtained from SB-2 was the only soil boring identified with contaminants above standards. SB-2 was visually impacted and exhibited the highest PID readings during the field screening of the samples. SB-2 was installed between SB-1 and SB-3.

5.2 Results of Groundwater Samples

Table 3 through 4 provides the analytical results for the Volatile Organic Compounds (VOCs) and Semi-Volatile Organic Compounds (SVOCs) detected in the groundwater sample obtained from monitoring well MW-1 through MW-3. **Table 3 through 4** also provides a comparison of the analytical results to the NYSDEC TOGS Ambient Groundwater Quality Standards.

- Groundwater Quality:
  Soil boring SB-1 through SB-3 were converted into a permanent monitoring wells designated as MW-1 through MW-3 for the collection of groundwater. Groundwater samples were obtained from the three new monitoring wells for VOCs and SVOCs analysis.

  ➢ One *VOC* was detected in the groundwater samples obtained from monitoring wells ***MW-2*** and ***MW-3*** exceeding their respective NYSDEC Ambient Groundwater Quality Standards (GQS). Naphthalene (detected at 32 µg/L) was identified in **MW-2** (detected at 32 µg/L) and MW-3 (detected at 32 µg/L) at levels above its respective GQS. Tetrachloroethene was identified in MW-3 at a level of 32 µg/L below its GQS of 5 µg/L.

Groundwater Samples Analytical Results
Betances Houses Garage - 400 East 147th Street, Bronx, NY

Sample Identification	MW-1	MW-2	MW-3	NYSDEC Ambient Groundwater Quality Standards (µg/L)
Boring Number	SB-1	SB-2	SB-3	
Depth to Groundwater	4.57'	6.40'	6.77'	
Sample Date	11/21/2017	11/21/2017	11/21/2017	
Sample Matrix	GW	GW	GW	
Units	µg/L	µg/L	µg/L	
Volatile Organic Compounds (µg/L)				
Naphthalene	ND	4.5	2.4	NS
Tetrachloroethene	ND	ND	1.4	5

NS…No Standard *ND...Not Detected*

➢ **SVOCs** were identified in the groundwater samples obtained from **MW-1** through **MW-3** exceeding their respective GQS. Seven SVOCs were identified in MW-1 and five SVOCs were identified in MW-2 and MW3 exceeding their respective GQS.

SVOCs identified in monitoring wells MW-2 and MW-3 included Benzo (a) Anthracene (identified at 0.08 µg/L in MW-2 and 0.04 µg/L in MW-3), Benzo (a) Pyrene (identified at 0.05 µg/L in MW-2 and 0.02 µg/L in MW-3), Benzo (b) Fluoranthene (identified at 0.05 µg/L in MW-2 and 0.03 µg/L in MW-3, Benzo (k) Fluoranthene (identified at 0.04 µg/L in MW-2 to 0.03 µg/L in MW-3), and Chrysene (identified at 0.08 µg/L in MW-2 and 0.03 µg/L in MW-3),

SVOCs identified in monitoring wells MW-1 included Benzo (a) Anthracene (identified at 0.20 µg/L), Benzo (a) Pyrene (identified at 0.13 µg/L), Benzo (b) Fluoranthene (identified at 0.14 µg/L), Benzo (k) Fluoranthene (identified at 0.14 µg/L), Bis (2-ethylhexyl) Phthalate (identified at 5.30 µg/L), Chrysene (identified at 0.18 µg/L), and lndeno (1,2,3-cd) Pyrene (identified at 0.07 µg/L in MW-1)

Additional SVOCs were identified in all of the groundwater samples but below regulatory standards. Based upon the laboratory results it appears the monitoring well MW-1 contains the highest level of SVOCs. Soil samples obtained from SB-1 /MW-1 did not identify any VOCs or SVOCs.

The following table is a summary of the **SVOCs** exceeding their GQS, the complete table is attached to this report.

Groundwater Samples Analytical Results
Betances Houses Garage - 400 East 147th Street, Bronx, NY

Sample Identification	MW-1	MW-2	MW-3	NYSDEC Ambient Groundwater Quality Standards (µg/L)
Boring Number	SB-1	SB-2	SB-3	
Depth to Groundwater	4.57'	6.40'	6.77'	
Sample Date	11/21/2017	11/21/2017	11/21/2017	
Sample Matrix	GW	GW	GW	
Units	µg/L	µg/L	µg/L	
Semi-Volatile Organic Compounds (µg/L)				
Anthracene	0.12	0.68	0.1	50
Fluoranthene	0.98	0.35	0.26	50
Fluorene	0.17	1.1	0.58	50
Naphthalene	ND	1.9	1.3	10
Pyrene	0.69	0.82	0.62	50
Acenaphthene	0.90	1.0	6.1	20
Acenaphthylene	ND	ND	0.11	NS
Benz (a) Anthracene	**0.20**	**0.08**	**0.04**	0.002
Benzo (a) Pyrene	**0.13**	**0.05**	**0.02**	0.002
Benzo (b) Fluoranthene	**0.14**	**0.05**	**0.03**	0.002
Benzo (k) Fluoranthene	**0.14**	**0.04**	**0.03**	0.002
Bis (2-ethylhexyl) Phthalate	**5.30**	2.9	1.6	5
Chrysene	**0.18**	**0.08**	**0.03**	0.002
Dibenz(a,h) Anthracene	0.03	ND	ND	50
lndeno (1,2,3-cd) Pyrene	**0.07**	ND	ND	0.002
Phenanthrene	0.19	1.2	0.16	50

NS…No Standard ND…Not Detected
Shaded & bold values represent concentration exceeding the NYSDEC Ambient Groundwater Quality Standards

Table 1 through 4 are attached to this report

Appendix C provides a copy of the soil and groundwater samples laboratory results

5.3 Quality Assurance/Quality Control Procedures

QA/QC procedures was used to provide performance information with regard to accuracy, precision, sensitivity, representation, completeness, and comparability associated with the sampling and analysis for this investigation. Field QA/QC procedures was used (1) to document that samples are representative of actual conditions at the Site and (2) identify possible cross-contamination from field activities or sample transit. Laboratory QA/QC procedures and analyses was used to demonstrate whether analytical results have been biased either by interfering compounds in the sample matrix, or by laboratory techniques that may have introduced systematic or random errors to the analytical process. A summary of the field and laboratory QA/QC procedures are provided in the appendices.

6.0 CONCLUSIONS

American Environmental Assessment & Solutions, Inc. (American Environmental) has performed a Limited Phase II Field Investigation at the property located at 400 East 147th Street, Bronx, NY. Based upon the findings of the Limited Phase II Subsurface Investigation, the following conclusions are provided.

- The field portion of American Environmental investigation consisted of a Ground Penetrating Radar (GPR) survey to determine the presence or absence of any buried containers and to locate and mark out on-Site utilities, the installation and sampling of three (3) soil borings, the installation of three (3) groundwater monitoring wells, development of the newly installed wells, sampling of a total of three (3) monitoring wells, and gauging of all the monitoring wells. All fieldwork was performed in accordance with all applicable federal, state and local regulations. Select soil samples were collected and infield screened in the according with instructions provided by the New York State Department of Environmental Conservation (NYSDEC), and a Work Plan (WP) prepared by P.W. Grosser Consulting, Inc., dated March 2009, and analyzed at a New York State-Certified (ELAP #11301) laboratory for common petroleum constituents in accordance with EPA Method 8260B, and 8270C.

- Ground Penetrating Radar (GPR) Survey:
  - No significant anomaly indicative of other/unknown tanks, drums or buried objects were identified during the GPR survey at the Subject Property.

    In addition all utilities were marked out in the vicinity of the work area.

    All proposed boring locations were cleared as well and marked prior to field activities.

- Soil Quality:
  - One *VOC* was identified in the soil sample obtained from **SB-2** (depth of 6-8 feet bgs), above its respective Unrestricted Use SCOs Part 375-6.8(a) (Track 1). The VOC was identified as Naphthalene at a level of 1,600 µg/kg exceeding Track 1. Acetone a laboratory contaminant was identified in SB-1 (depth of 2-5 feet) at a level of 36 µg/kg and in SB-2 (depth of 1-4 feet) at a level of 22 µg/kg.

  - *SVOCs* were identified in the soil sample obtained from **SB-2** (depth of 6-8 feet bgs), above their respective Restricted Use Residential and Track 1. Both Benzo (a) Pyrene and Indeno (1,2,3-cd) Pyrene were identified at a maximum of 1,900 µg/kg exceeding their respective Restricted Use Residential and Track 1 standards. Benzo

(g,h,i) Perylene was identified in SB-2 (depth of 6-8 feet bgs) but below regulatory standards.

SVOCs were identified in the soil samples obtained from SB-2 (depth of 6-8 feet bgs), and in SB-3 (depth of 1-5 feet bgs) but at levels well below regulatory standards.

The soil samples obtained from SB-2 was the only soil boring identified with contaminants above standards. SB-2 was observed to be impacted (discoloration and odor) and exhibited the highest PID readings during the field screening of the samples. SB-2 was installed between SB-1 and SB-3.

- Groundwater Quality:

Soil boring SB-1 through SB-3 were converted into a permanent monitoring wells designated as MW-1 through MW-3 for the collection of groundwater. Groundwater samples were obtained from monitoring wells MW-1 through MW-3 for VOCs and SVOCs analysis.

- One *VOC* was detected in the groundwater samples obtained from monitoring wells ***MW-2*** and ***MW-3*** exceeding their respective NYSDEC Ambient Groundwater Quality Standards (GQS). Naphthalene (detected at 32 µg/L) was identified in **MW-2** (detected at 32 µg/L) and MW-3 (detected at 32 µg/L) at levels above its respective GQS. Tetrachloroethene was identified in MW-3 at a level of 1.4 µg/L below its GQS of 5 µg/L.

- **SVOCs** were identified in the groundwater samples obtained from **MW-1** through **MW-3** exceeding their respective GQS. Seven SVOCs were identified in MW-1 and five SVOCs were identified in MW-2 and MW3 exceeding their respective GQS.

  SVOCs identified in monitoring wells MW-2 and MW-3 included the following: Benzo (a) Anthracene (identified at 0.08 µg/L in MW-2 and 0.04 µg/L in MW-3), Benzo (a) Pyrene (identified at 0.05 µg/L in MW-2 and 0.02 µg/L in MW-3), Benzo (b) Fluoranthene (identified at 0.05 µg/L in MW-2 and 0.03 µg/L in MW-3, Benzo (k) Fluoranthene (identified at 0.04 µg/L in MW-2 to 0.03 µg/L in MW-3), and Chrysene (identified at 0.08 µg/L in MW-2 and 0.03 µg/L in MW-3),

  SVOCs identified in monitoring wells MW-1 included Benzo (a) Anthracene (identified at 0.20 µg/L), Benzo (a) Pyrene (identified at 0.13 µg/L), Benzo (b) Fluoranthene (identified at 0.14 µg/L), Benzo (k) Fluoranthene (identified at 0.14 µg/L), Bis (2-ethylhexyl) Phthalate (identified at 5.30 µg/L), Chrysene (identified at 0.18 µg/L), and lndeno (1,2,3-cd) Pyrene (identified at 0.07 µg/L in MW-1)

Additional SVOCs were identified in all of the groundwater samples but below regulatory standards. Based upon the laboratory results it appears the monitoring well MW-1 contains the highest level of SVOCs. Soil samples obtained from SB-1 /MW-1 did not identify any VOCs or SVOCs.

Information obtained from a FOIL request indicated that the garage was excavated and backfilled. The contaminants identified could be "hotspot" areas that remained on the property.

7.0 RECOMMENDATIONS

Based upon the findings of the Limited Phase II Subsurface investigation presented above, American Environmental provides the following recommendations:

- The NYSDEC Case Manger assigned to the Site should be provided with a copy of this Limited Phase II Subsurface Investigation report for review and comment.

- In addition, Remedial Action Work Plan (RAWP) should be prepared and implemented during construction activities of the proposed new 15-story residential building to address the hot spots areas. The RAWP should be submitted to the NYSDEC for approval prior to implementation.

8.0 References

The information sources that American Environmental used, including published material, material obtained from commercial sources, from other sources, or provided to us through questionnaires is cited as that information is presented in the report. Some of this information or excerpts thereof are listed below:

1. Standard Practice for Environmental Site Assessments: Phase II Environmental Site Assessment Process, ASTM E 1903-97, American Society for Testing and Materials, West Conshohocken, PA.
2. Principals of Groundwater Engineering, William C. Walton, Lewis Publishers, Inc., 1991.
3. Soil Survey of Suffolk County, New York, Soil Conservation Service, United States Department of Agriculture in cooperation with Cornell University Agricultural Experiment Station, February 1987.
4. The Long Island Ground Water Pollution Study, New York State Department of Environmental Conservation, 1972.
5. *Geochemical traverse across Cameron's Line, Boro Hall Park, Bronx, New York*, Cadmus, D., Hodgson, R., Gatto, L.M., and Puffer, J.H., Geology Department, Rutgers University, Newark, NJ.
6. *Drainage History of the New York City Region*, Sanders, John E., Geology Department, Hofstra University.
7. NYSDEC DER-10 Technical Guidance for Site Investigation and Remediation, December 2010.
8. U.S. Geological Survey 7.5 Minute Series Topographical Map, Bronx, NY, dated 2013.
9. New York State Department of Environmental Conservation Technical and Administrative Guidance Memorandum #4046, Determination of Soil Cleanup Objectives and Cleanup Levels, January 24th, 1994.
10. P.W. Grosser Consulting, Inc., Work Plan, dated March 2009.

9.0 Warranty

American Environmental warrants that the findings and conclusions reported herein were conducted in general accordance with ASTM Standard E 1903-97 protocol. These methodologies are described by the standard guide as representing good commercial and customary practice for conducting Phase II Environmental Site Assessment of a parcel of property for the purpose of evaluating recognized environmental conditions. However, these findings and conclusions contain all of the limitations inherent in these methodologies which are referred to in the standard guide and some of which are more specifically set forth below.

The Phase II Environmental Site Assessment has been developed to provide the client with information regarding apparent indications of recognized environmental conditions relating to the Subject Property. It is necessarily limited to the conditions observed and to the information available at the time of the work. The assessment and conclusions presented herein were based upon the subjective evaluation of limit data. They may not represent all conditions at the Subject Property as they reflect the information gathered from specific locations. American Environmental warrants that the findings and conclusions contained herein have been promulgated in accordance with generally accepted environmental investigation methodology and only for the Site described in this report.

Due to the limited nature of the work, there is a possibility that there may exist conditions which could not be identified within the scope of the assessment or which were not apparent at the time of the report preparation. It is also possible that the testing methods employ at the time of the report may later be superseded by other methods. The description, type and composition of what are commonly referred to as "hazardous materials or conditions" can also change over time. American Environmental does not accept responsibility for changes in the state of the art, nor for changes in the scope of various lists of hazardous materials or conditions. American Environmental believes that the findings and conclusions provided in this report are reasonable. However, no other warranties are implied or expressed.

FIGURES

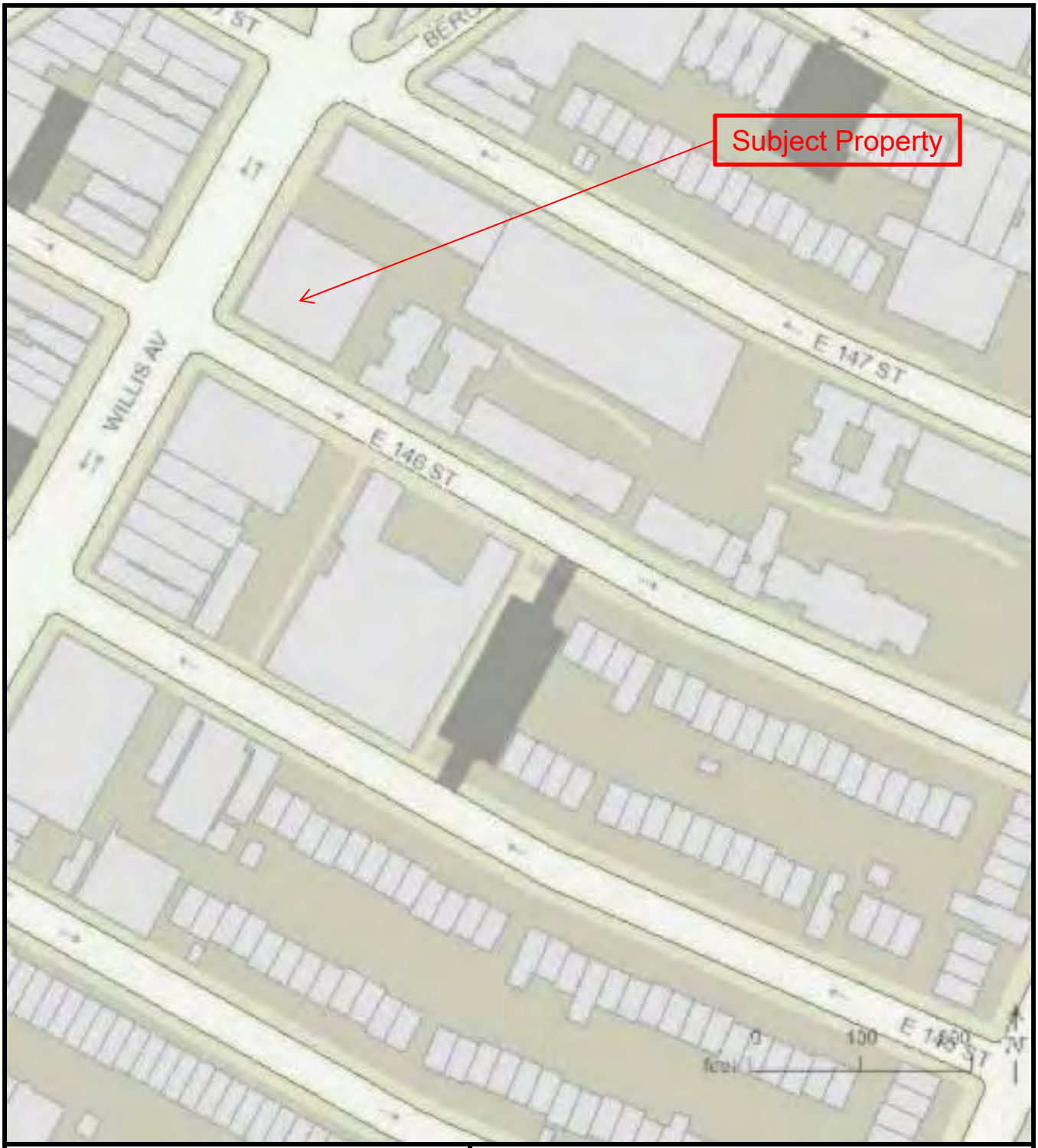


FIGURE 1: SITE LOCATION MAP

Site Name: BETANCES HOUSES Garage

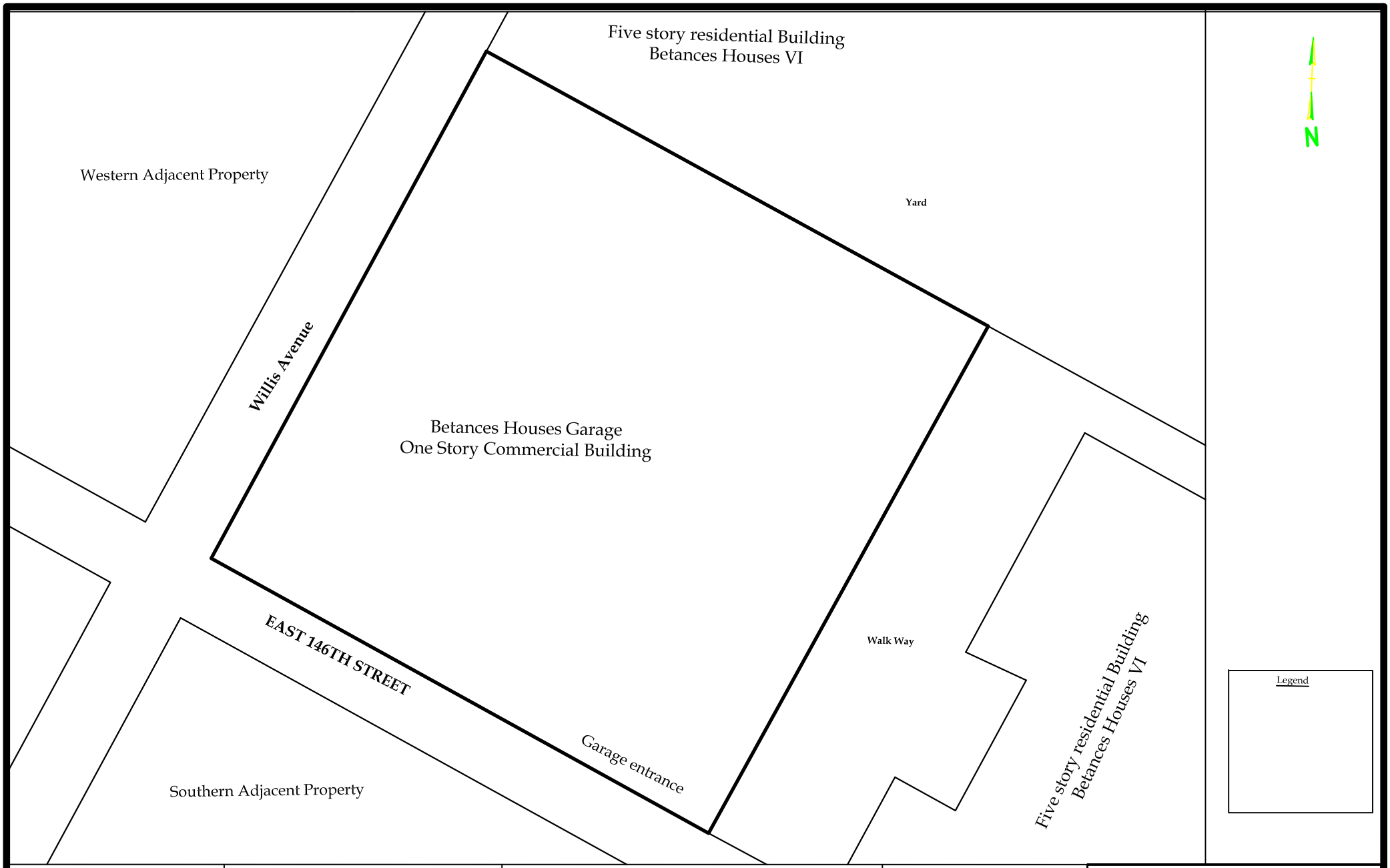
Address: 400 East 147th Street
Bronx, NY 10455

Project No.: 17-0150-II

American Environmental Assessment & Solutions, Inc.

679 Lafayette Avenue, 3rd Floor
Brooklyn, NY 11216
Tel: 718-209-0653/Fax: 718-906-4090
www.AEASinc.com

N



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www.AEASinc.com

Betances Houses
401-403 E 146th Street
Bronx, NY 10455

Source: Field Notes

Sheet Title: FIGURE 1
Site Sketch

DATE:	12/08/17
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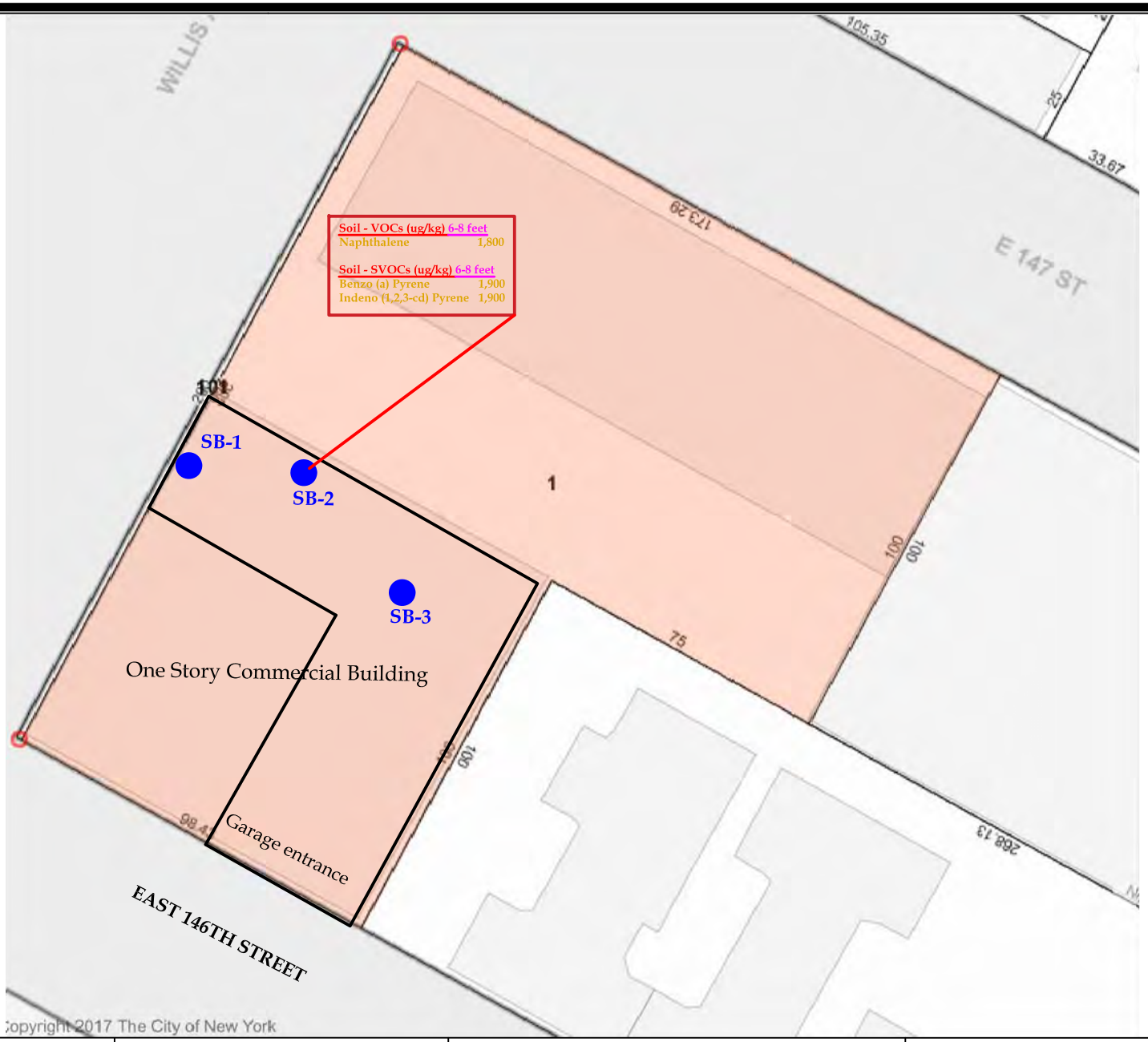
PROJ NO:	17-0150-WP
DRAWN BY:	ACO
APP'D BY:	DBO
SCALE	NA



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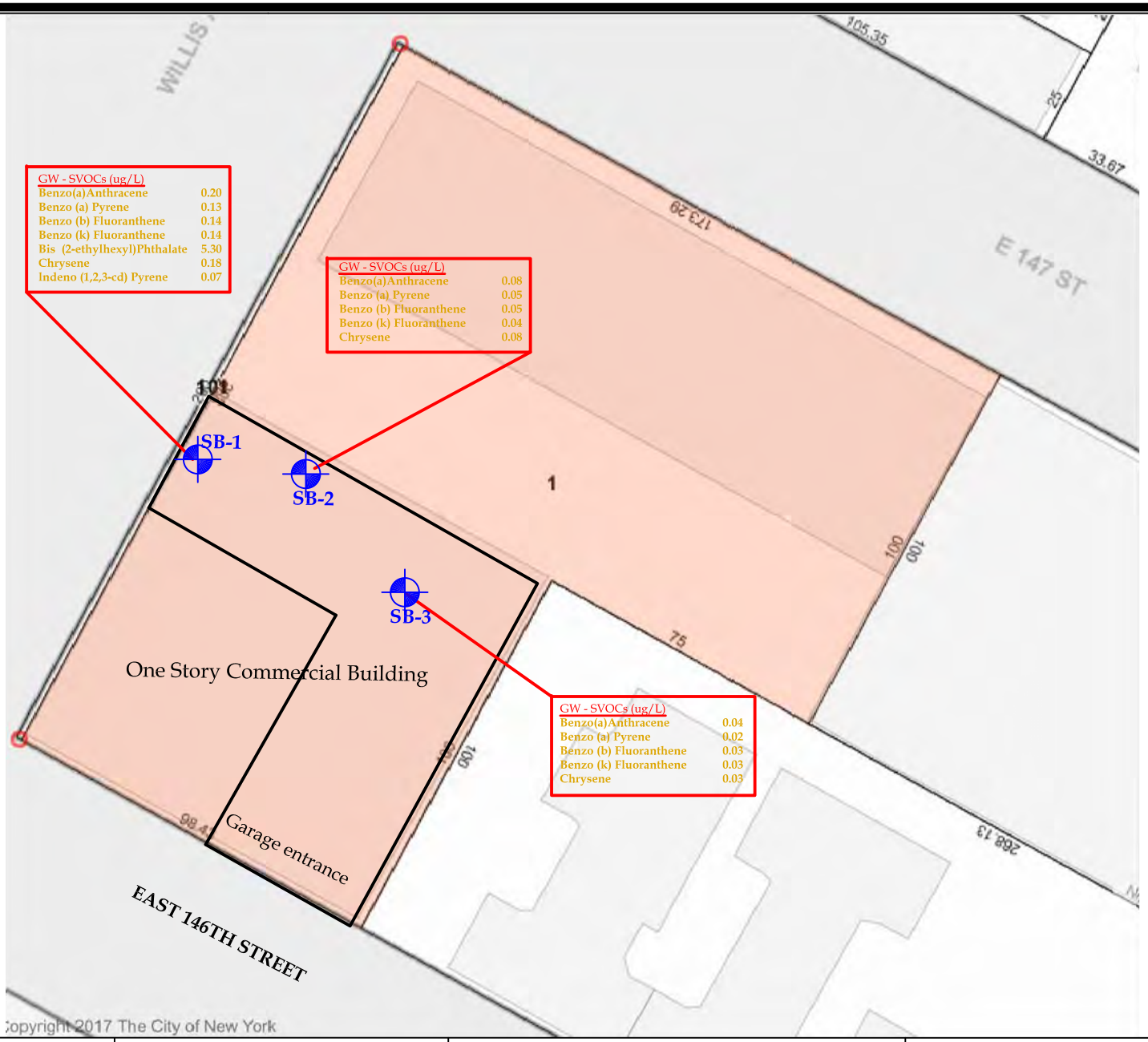
Betances Houses
401-403 E 146th Street
Bronx, NY 10455

Source: Field Notes

Sheet Title: FIGURE 3
Sample Location Map

DATE:	10/27/17
DRAWING #:	1
PROJ NO:	17-0150-WP
DRAWN BY:	ACO
APP'D BY:	DBO
SCALE	NA



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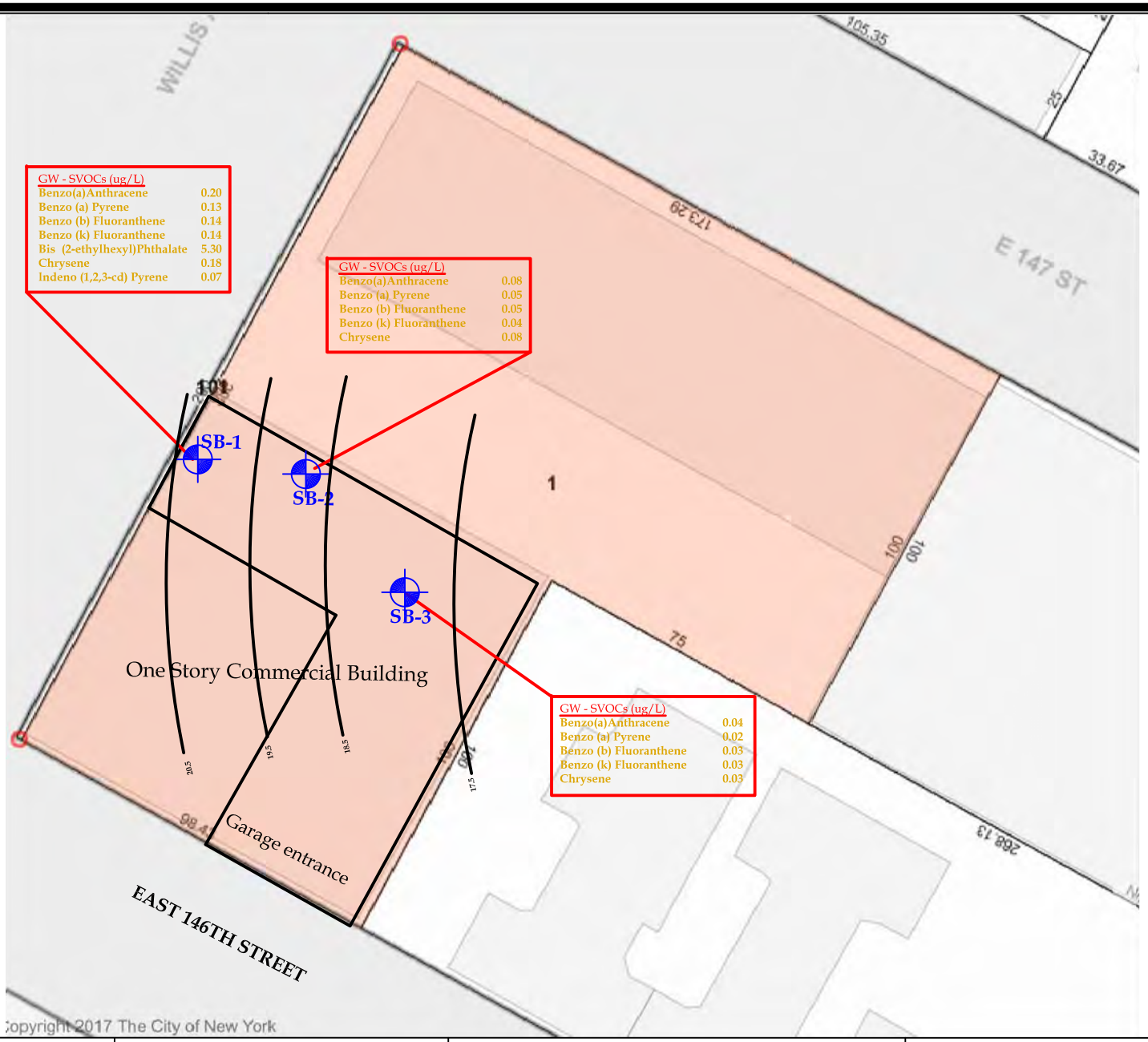
Betances Houses
401-403 E 146th Street
Bronx, NY 10455

Source: Field Notes

Sheet Title: FIGURE 4
Groundwater Contamination Map

DATE:	12/08/17
DRAWING #:	1
PROJ NO:	17-0150-II
DRAWN BY:	ACO
APP'D BY:	DBO
SCALE	NA



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Betances Houses
401-403 E 146th Street
Bronx, NY 10455

Source: Field Notes

Sheet Title: FIGURE 5
Groundwater Contour Map

DATE:	12/08/17
DRAWING #:	1
PROJ NO:	17-0150-II
DRAWN BY:	ACO
APP'D BY:	DBO
SCALE	NA

SOIL ANALYTICAL RESULTS

Table 1
Soil Sample Analytical Results
Betances Houses Garage - 400 East 147th Street, Bronx, NY

Sample Identification	SB-1		SB-2		SB-3		**Track 1** Unrestricted Use Soil Cleanup Objectives Part 375-6.8(a)	**Restricted Use** Soil Cleanup Objectives Part 375-6.8(b) **Residential** (µg/kg)	**Restricted Use** Soil Cleanup Objectives Part 375-6.8(b) **Commercial** (µg/kg)
Boring Number	1		2		3				
Sample Depth	2' - 5'	6' - 10'	1' - 4'	6' - 8'	1' - 5'	8' - 12'			
Sample Date	11/21/2017	11/21/2017	11/21/2017	11/21/2017	11/21/2017	11/21/2017			
Sample Matrix	Soil	Soil	Soil	Soil	Soil	Soil			
Units	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg			
Volatile Organic Compounds (µg/kg)									
1,1,1,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	NS	NS	NS
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	680	100,000	500,000
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	NS	NS	NS
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	NS	NS	NS
1,1-Dichloroethane	ND	ND	ND	ND	ND	ND	270	19,000	240,000
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	330	100,000	500,000
1,1-Dichloropropene	ND	ND	ND	ND	ND	ND	NS	NS	NS
1,2,3-Trichlorobenzene	ND	ND	ND	ND	ND	ND	NS	NS	NS
1,2,3-Trichloropropane	ND	ND	ND	ND	ND	ND	NS	NS	NS
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	ND	NS	NS	NS
1,2,4-Trimethylbenzene	ND	ND	ND	ND	ND	ND	3,600	47,000	190,000
1,2-Dibromo-3-chloropropane	ND	ND	ND	ND	ND	ND	NS	NS	NS
1,2-Dibromoethane	ND	ND	ND	ND	ND	ND	NS	NS	NS
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	ND	1,100	100,000	500,000
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	20	2,300	300,000
1,2-Dichloropropane	ND	ND	ND	ND	ND	ND	NS	NS	NS
1,3,5-Trimethylbenzene	ND	ND	ND	ND	ND	ND	8,400	47,000	190,000
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	ND	2,400	17,000	280,000
1,3-Dichloropropane	ND	ND	ND	ND	ND	ND	NS	NS	NS
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	ND	1,800	9,800	130,000
2,2-Dichloropropane	ND	ND	ND	ND	ND	ND	NS	NS	NS
2-Chlorotoluene	ND	ND	ND	ND	ND	ND	NS	NS	NS
2-Hexanone	ND	ND	ND	ND	ND	ND	NS	NS	NS
2-Isopropyltoluene	ND	ND	ND	ND	ND	ND	NS	NS	NS
4-Chlorotoluene	ND	ND	ND	ND	ND	ND	NS	NS	NS
4-Methyl-2-pentanone	ND	ND	ND	ND	ND	ND	NS	NS	NS
Acetone	36 S	ND	22 S	ND	ND	ND	NS	NS	NS
Acrylonitrile	ND	ND	ND	ND	ND	ND	NS	NS	NS
Benzene	ND	ND	ND	ND	ND	ND	60	2,900	44,000
Bromobenzene	ND	ND	ND	ND	ND	ND	NS	NS	NS
Bromochloromethane	ND	ND	ND	ND	ND	ND	NS	NS	NS
Bromodichloromethane	ND	ND	ND	ND	ND	ND	NS	NS	NS
Bromoform	ND	ND	ND	ND	ND	ND	NS	NS	NS
Bromomethane	ND	ND	ND	ND	ND	ND	NS	NS	NS
Carbon Disulfide	ND	ND	ND	ND	ND	ND	NS	NS	NS

NS…No Standard

ND..Not Detected

Table 1 ***Continued…. ….***

Soil Sample Analytical Results

Betances Houses Garage - 400 East 147th Street, Bronx, NY

Sample Identification	SB-1		SB-2		SB-3		**Track 1** Unrestricted Use Soil Cleanup Objectives Part 375-6.8(a)	**Restricted Use** Soil Cleanup Objectives Part 375-6.8(b) **Residential** (µg/kg)	**Restricted Use** Soil Cleanup Objectives Part 375-6.8(b) **Commercial** (µg/kg)
Boring Number	1		2		3				
Sample Depth	2' - 5'	6' - 10'	1' - 4'	6' - 8'	1' - 5'	8' - 12'			
Sample Date	11/21/2017	11/21/2017	11/21/2017	11/21/2017	11/21/2017	11/21/2017			
Sample Matrix	Soil	Soil	Soil	Soil	Soil	Soil			
Units	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg			
Volatile Organic Compounds (µg/kg)									
Carbon tetrachloride	ND	ND	ND	ND	ND	ND	760	1,400	22,000
Chlorobenzene	ND	ND	ND	ND	ND	ND	1,100	100,000	500,000
Chloroethane	ND	ND	ND	ND	ND	ND	NS	NS	NS
Chloroform	ND	ND	ND	ND	ND	ND	370	10,000	350,000
Chloromethane	ND	ND	ND	ND	ND	ND	NS	NS	NS
cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	250	59,000	500,000
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	NS	NS	NS
Dibromochloromethane	ND	ND	ND	ND	ND	ND	NS	NS	NS
Dibromomethane	ND	ND	ND	ND	ND	ND	NS	NS	NS
Dichlorodifluoromethane	ND	ND	ND	ND	ND	ND	NS	NS	NS
Ethylbenzene	ND	ND	ND	ND	ND	ND	1,000	30,000	390,000
Hexachlorobutadiene	ND	ND	ND	ND	ND	ND	NS	NS	NS
Isopropylbenzene	ND	ND	ND	ND	ND	ND	NS	NS	NS
m + p-Xylene	ND	ND	ND	ND	ND	ND	260	100,000	500,000
Methyl Ethyl Ketone	ND	ND	ND	ND	ND	ND	120	100,000	500,000
Methyl-Tert-Butyl-Ether (MTBE)	ND	ND	ND	ND	ND	ND	930	6200	500,000
Methylene chloride	ND	ND	ND	ND	ND	ND	50	51000	500,000
Naphthalene	ND	ND	ND	**1,600**	ND	ND	12,000	100,000	500,000
n-Butylbenzene	ND	ND	ND	ND	ND	ND	12,000	100,000	500,000
n-Propylbenzene	ND	ND	ND	ND	ND	ND	3,900	100,000	500,000
o-Xylene	ND	ND	ND	ND	ND	ND	260	100,000	500,000
p-Isopropyltoluene	ND	ND	ND	ND	ND	ND	NS	NS	NS
sec-Butylbenzene	ND	ND	ND	ND	ND	ND	11,000	100,000	500,000
Styrene	ND	ND	ND	ND	ND	ND	NS	NS	NS
tert-Butylbenzene	ND	ND	ND	ND	ND	ND	5,900	100,000	500,000
Tetrachloroethene	ND	ND	ND	ND	ND	ND	1,300	10,000	150,000
Tetrahydrofuran (THF)	ND	ND	ND	ND	ND	ND	NS	NS	NS
Toluene	ND	ND	ND	ND	ND	ND	700	100,000	500,000
Total Xylenes	ND	ND	ND	ND	ND	ND	NS	NS	NS
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	190	100,000	500,000
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	NS	NS	NS
trans-1,4-dichloro-2-butene	ND	ND	ND	ND	ND	ND	NS	NS	NS
Trichloroethene	ND	ND	ND	ND	ND	ND	470	10,000	200,000
Trichlorofluoromethane	ND	ND	ND	ND	ND	ND	NS	NS	NS
Trichlorotrifluoroethane	ND	ND	ND	ND	ND	ND	NS	NS	NS
Vinyl chloride	ND	ND	ND	ND	ND	ND	20	210	1,300

NS…No Standard *ND..Not Detected*

Shaded & bold values represent concentration exceeding Track 1

Table 2
Soil Sample Analytical Results
Betances Houses Garage - 400 East 147th Street, Bronx, NY

Sample Identification	SB-1		SB-2		SB-3		**Track 1** Unrestricted Use Soil Cleanup Objectives Part 375-6.8(a)	**Restricted Use** Soil Cleanup Objectives Part 375-6.8(b) **Residential** (µg/kg)	**Restricted Use** Soil Cleanup Objectives Part 375-6.8(b) **Commercial** (µg/kg)
Boring Number	1		2		3				
Sample Depth	2' - 5'	6' - 10'	1' - 4'	6' - 8'	1' - 5'	8' - 12'			
Sample Date	11/21/2017	11/21/2017	11/21/2017	11/21/2017	11/21/2017	11/21/2017			
Sample Matrix	Soil	Soil	Soil	Soil	Soil	Soil			
Units	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg			
Semi-Volatile Organic Compounds (µg/kg)									
2-Methylnaphthalene	ND	ND	ND	ND	ND	ND	NS	NS	NS
Acenaphthene	ND	ND	460	ND	ND	ND	20,000	100,000	500,000
Acenaphthylene	ND	ND	ND	ND	ND	ND	100,000	100,000	500,000
Anthracene	ND	ND	ND	ND	ND	ND	100,000	100,000	500,000
Benzo (a) Anthracene	ND	ND	310	ND	ND	ND	1,000	1,000	5,600
Benzo (a) Pyrene	ND	ND	350	**1,900**	370	ND	1,000	1,000	1,000
Benzo (b) Fluoranthene	ND	ND	330	ND	350	ND	1,000	1,000	5,600
Benzo (g,h,I) Perylene	ND	ND	260	1,800	ND	ND	100,000	100,000	500,000
Benzo (k) Fluoranthene	ND	ND	320	ND	350	ND	800	1,000	56,000
Chrysene	ND	ND	370	ND	ND	ND	1,000	1,000	56,000
Dibenzo(a,h)anthracene	ND	ND	ND	ND	ND	ND	330	330	560
Fluoranthene	ND	ND	1,100	ND	ND	ND	100,000	100,000	500,000
Fluorene	ND	ND	400	ND	ND	ND	30,000	100,000	500,000
Indeno (1,2,3-cd) Pyrene	ND	ND	290	**1,900**	290	ND	500	500	56,000
Naphthalene	ND	ND	ND	ND	ND	ND	12,000	100,000	500,000
Phenanthrene	ND	ND	490	ND	ND	ND	100,000	100,000	500,000
Pyrene	ND	ND	830	ND	ND	ND	100,000	100,000	500,000
Total SVOCs	ND	ND	5,510	5,600	1,360	ND	100,000	100,000	500,000

NS…No Standard *ND..Not Detected*

Shaded & bold values represent concentration exceeding the Restricted Use SCOs Residential & Track 1

GROUNDWATER ANALYTICAL RESULTS

Table 3
Groundwater Samples Analytical Results
Betances Houses Garage - 400 East 147th Street, Bronx, NY

Sample Identification	MW-1	MW-2	MW-3	NYSDEC Ambient Groundwater Quality Standards (µg/L)
Boring Number	SB-1	SB-2	SB-3	
Depth to Groundwater	4.57'	6.40'	6.77'	
Sample Date	11/21/2017	11/21/2017	11/21/2017	
Sample Matrix	GW	GW	GW	
Units	µg/L	µg/L	µg/L	
Volatile Organic Compounds (µg/L)				
1,1,1,2-Tetrachloroethane	ND	ND	ND	NS
1,1,1-Trichloroethane	ND	ND	ND	NS
1,1,2,2-Tetrachloroethane	ND	ND	ND	NS
1,1,2-Trichloroethane	ND	ND	ND	NS
1,1-Dichloroethane	ND	ND	ND	NS
1,1-Dichloroethene	ND	ND	ND	NS
1,1-Dichloropropene	ND	ND	ND	NS
1,2,3-Trichlorobenzene	ND	ND	ND	NS
1,2,3-Trichloropropane	ND	ND	ND	NS
1,2,4-Trichlorobenzene	ND	ND	ND	NS
1,2,4-Trimethylbenzene	ND	ND	ND	5
1,2-Dibromo-3-chloropropane	ND	ND	ND	NS
1,2-Dibromoethane	ND	ND	ND	NS
1,2-Dichlorobenzene	ND	ND	ND	NS
1,2-Dichloroethane	ND	ND	ND	NS
1,2-Dichloropropane	ND	ND	ND	NS
1,3,5-Trimethylbenzene	ND	ND	ND	5
1,3-Dichlorobenzene	ND	ND	ND	NS
1,3-Dichloropropane	ND	ND	ND	NS
1,4-Dichlorobenzene	ND	ND	ND	NS
2,2-Dichloropropane	ND	ND	ND	NS
2-Chlorotoluene	ND	ND	ND	NS
2-Hexanone	ND	ND	ND	NS
2-Isopropyltoluene	ND	ND	ND	NS
4-Chlorotoluene	ND	ND	ND	NS
4-Methyl-2-pentanone	ND	ND	ND	NS
Acetone	ND	ND	ND	50
Acrylonitrile	ND	ND	ND	NS
Benzene	ND	ND	ND	1
Bromobenzene	ND	ND	ND	NS
Bromochloromethane	ND	ND	ND	NS
Bromodichloromethane	ND	ND	ND	NS
Bromoform	ND	ND	ND	NS
Bromomethane	ND	ND	ND	NS
Carbon Disulfide	ND	ND	ND	NS
Carbon tetrachloride	ND	ND	ND	NS
Chlorobenzene	ND	ND	ND	5
Chloroethane	ND	ND	ND	5
Chloroform	ND	ND	ND	7
Chloromethane	ND	ND	ND	NS
cis-1,2-Dichloroethene	ND	ND	ND	NS
cis-1,3-Dichloropropene	ND	ND	ND	NS
Dibromochloromethane	ND	ND	ND	NS
Dibromomethane	ND	ND	ND	NS
Dichlorodifluoromethane	ND	ND	ND	NS
Ethylbenzene	ND	ND	ND	5
Hexachlorobutadiene	ND	ND	ND	NS
Isopropylbenzene	ND	ND	ND	5
m + p-Xylene	ND	ND	ND	5
Methyl Ethyl Ketone	ND	ND	ND	NS
Methyl-Tert-Butyl-Ether (MTBE)	ND	ND	ND	10
Methylene chloride	ND	ND	ND	5
Naphthalene	ND	4.5	2.4	NS
n-Butylbenzene	ND	ND	ND	5
n-Propylbenzene	ND	ND	ND	5
o-Xylene	ND	ND	ND	5
p-Isopropyltoluene	ND	ND	ND	5
sec-Butylbenzene	ND	ND	ND	5
Styrene	ND	ND	ND	NS
tert-Butylbenzene	ND	ND	ND	5
Tetrachloroethene	ND	ND	1.4	5
Tetrahydrofuran (THF)	ND	ND	ND	NS
Toluene	ND	ND	ND	5
Total Xylenes	ND	ND	ND	5
trans-1,2-Dichloroethene	ND	ND	ND	NS
trans-1,3-Dichloropropene	ND	ND	ND	NS
trans-1,4-dichloro-2-butene	ND	ND	ND	NS
Trichloroethene	ND	ND	ND	5
Trichlorofluoromethane	ND	ND	ND	NS
Trichlorotrifluoroethane	ND	ND	ND	NS
Vinyl chloride	ND	ND	ND	2

NS…No Standard *ND…Not Detected*

Table 4

Groundwater Samples Analytical Results

Betances Houses Garage - 400 East 147th Street, Bronx, NY

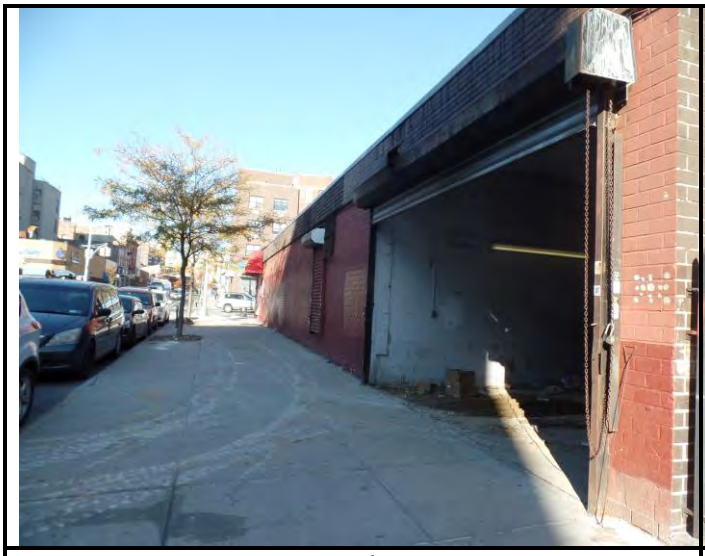
Sample Identification	MW-1	MW-2	MW-3	NYSDEC Ambient Groundwater Quality Standards (µg/L)
Boring Number	SB-1	SB-2	SB-3	
Depth to Groundwater	4.57'	6.40'	6.77'	
Sample Date	11/21/2017	11/21/2017	11/21/2017	
Sample Matrix	GW	GW	GW	
Units	µg/L	µg/L	µg/L	
Semi-Volatile Organic Compounds (µg/L)				
1,2,4-Trichlorobenzene	ND	ND	ND	NS
1,2-Dichlorobenzene	ND	ND	ND	NS
1,2-Diphenylhydrazine	ND	ND	ND	NS
1,3-Dichlorobenzene	ND	ND	ND	NS
1,4-Dichlorobenzene	ND	ND	ND	NS
2,4,5-Trichlorophenol	ND	ND	ND	NS
2,4,6-Trichlorophenol	ND	ND	ND	NS
2,4-Dichlorophenol	ND	ND	ND	NS
2,4-Dimethylphenol	ND	ND	ND	NS
2,4-Dinitrophenol	ND	ND	ND	NS
2,4-Dinitrotoluene	ND	ND	ND	NS
2,6-Dinitrotoluene	ND	ND	ND	NS
2-Chloronaphthalene	ND	ND	ND	NS
2-Chlorophenol	ND	ND	ND	NS
2-Methylnaphthalene	ND	ND	ND	NS
2-Methylphenol (o-cresol)	ND	ND	ND	NS
2-Nitroaniline	ND	ND	ND	NS
2-Nitrophenol	ND	ND	ND	NS
3&4-Methylphenol (m&p-cresol)	ND	ND	ND	NS
3,3'-Dichlorobenzidine	ND	ND	ND	NS
3-Nitroaniline	ND	ND	ND	NS
4,6-Dinitro-2-methylphenol	ND	ND	ND	NS
4-Bromophenyl phenyl ether	ND	ND	ND	NS
4-Chloro-3-methylphenol	ND	ND	ND	NS
4-Chloroaniline	ND	ND	ND	NS
4-Chlorophenyl phenyl ether	ND	ND	ND	NS
4-Nitroaniline	ND	ND	ND	NS
4-Nitrophenol	ND	ND	ND	NS
Acetophenone	ND	ND	ND	20
Aniline	ND	ND	ND	NS
Anthracene	0.12	0.68	0.1	50
Benzidine	ND	ND	ND	NS
Benzoic acid	ND	ND	ND	NS
Benzyl butyl phthalate	ND	ND	ND	50
Bis(2-chloroethoxy)methane	ND	ND	ND	NS
Bis(2-chloroethyl)ether	ND	ND	ND	NS
Bis(2-chloroisopropyl)ether	ND	ND	ND	1
Carbazole	ND	ND	ND	NS
Dibenzofuran	ND	ND	ND	NS
Diethyl phthalate	ND	ND	ND	50
Dimethylphthalate	ND	ND	ND	50
Di-n-butylphthalate	ND	ND	ND	50
Di-n-octylphthalate	ND	ND	ND	NS
Fluoranthene	0.98	0.35	0.26	50
Fluorene	0.17	1.1	0.58	50
Hexachlorobutadiene	ND	ND	ND	NS
Hexachlorocyclopentadiene	ND	ND	ND	5
Isophorone	ND	ND	ND	50
Naphthalene	ND	1.9	1.3	10
Nitrobenzene	ND	ND	ND	0.4
N-Nitrosodimethylamine	ND	ND	ND	NS
N-Nitrosodi-n-propylamine	ND	ND	ND	NS
N-Nitrosodiphenylamine	ND	ND	ND	NS
Phenol	ND	ND	ND	1
Pyrene	0.69	0.82	0.62	50
1,2,4,5-Tetrachlorobenzene	ND	ND	ND	NS
Acenaphthene	0.90	1.0	6.1	20
Acenaphthylene	ND	ND	0.11	NS
Benz (a) Anthracene	**0.20**	**0.08**	**0.04**	0.002
Benzo (a) Pyrene	**0.13**	**0.05**	**0.02**	0.002
Benzo (b) Fluoranthene	**0.14**	**0.05**	**0.03**	0.002
Benzo (g,h,I) Perylene	ND	ND	ND	5
Benzo (k) Fluoranthene	**0.14**	**0.04**	**0.03**	0.002
Bis (2-ethylhexyl) Phthalate	**5.30**	2.9	1.6	5
Chrysene	**0.18**	**0.08**	**0.03**	0.002
Dibenz(a,h) Anthracene	0.03	ND	ND	50
Hexachlorobenzene	ND	ND	ND	0.04
Hexachloroethane	ND	ND	ND	0.5
Indeno (1,2,3-cd) Pyrene	**0.07**	ND	ND	0.002
Pentachloronitrobenzene	ND	ND	ND	NS
Pentachlorophenol	ND	ND	ND	1
Phenanthrene	0.19	1.2	0.16	50
Pyridine	ND	ND	ND	50

NS…No Standard *ND…Not Detected*

Shaded & bold values represent concentration exceeding the NYSDEC Ambient Groundwater Quality Standards

PHOTOGRAPHS

Area of Concern –Betances Houses Garage (1 story building)



Entrance of Garage

Eastern Portion of Garage

Northern Area of Garage

Installation of SB-1 / MW-1

SB-2

SB-3

REGULATORY AGENCY DOCUMENTS

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

Spill Incidents Database Search Details

Spill Record

Administrative Information

DEC Region: 2
Spill Number: 9813188

Spill Date/Time

Spill Date: 01/27/1999 **Spill Time:** 01:00:00 PM
Call Received Date: 01/27/1999 **Call Received Time:** 02:42:00 PM

Location

Spill Name: BETANCES GARAGE -NYCHA
Address: 400 E147 TH ST
City: BRONX **County:** Bronx

Spill Description

Material Spilled	Amount Spilled	Resource Affected
motor oil	10 Gal.	Soil

Cause: Unknown
Source: Commercial/Industrial
Waterbody:

Record Close

Date Spill Closed: Not closed

If you have questions about this reported incident, please contact the Regional Office where the incident occurred.

Refine This Search

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

Spill Incidents Database Search Details

Spill Record

Administrative Information

DEC Region: 2
Spill Number: 9905066

Spill Date/Time

Spill Date: 07/28/1999 **Spill Time:** 10:15:00 AM
Call Received Date: 07/28/1999 **Call Received Time:** 10:29:00 AM

Location

Spill Name: BETANCES VI HOUSES -NYCHA
Address: 400 E 147TH ST
City: BRONX **County:** Bronx

Spill Description

Material Spilled	Amount Spilled	Resource Affected
#2 fuel oil	UNKNOWN	Soil

Cause: Other
Source: Private Dwelling
Waterbody:

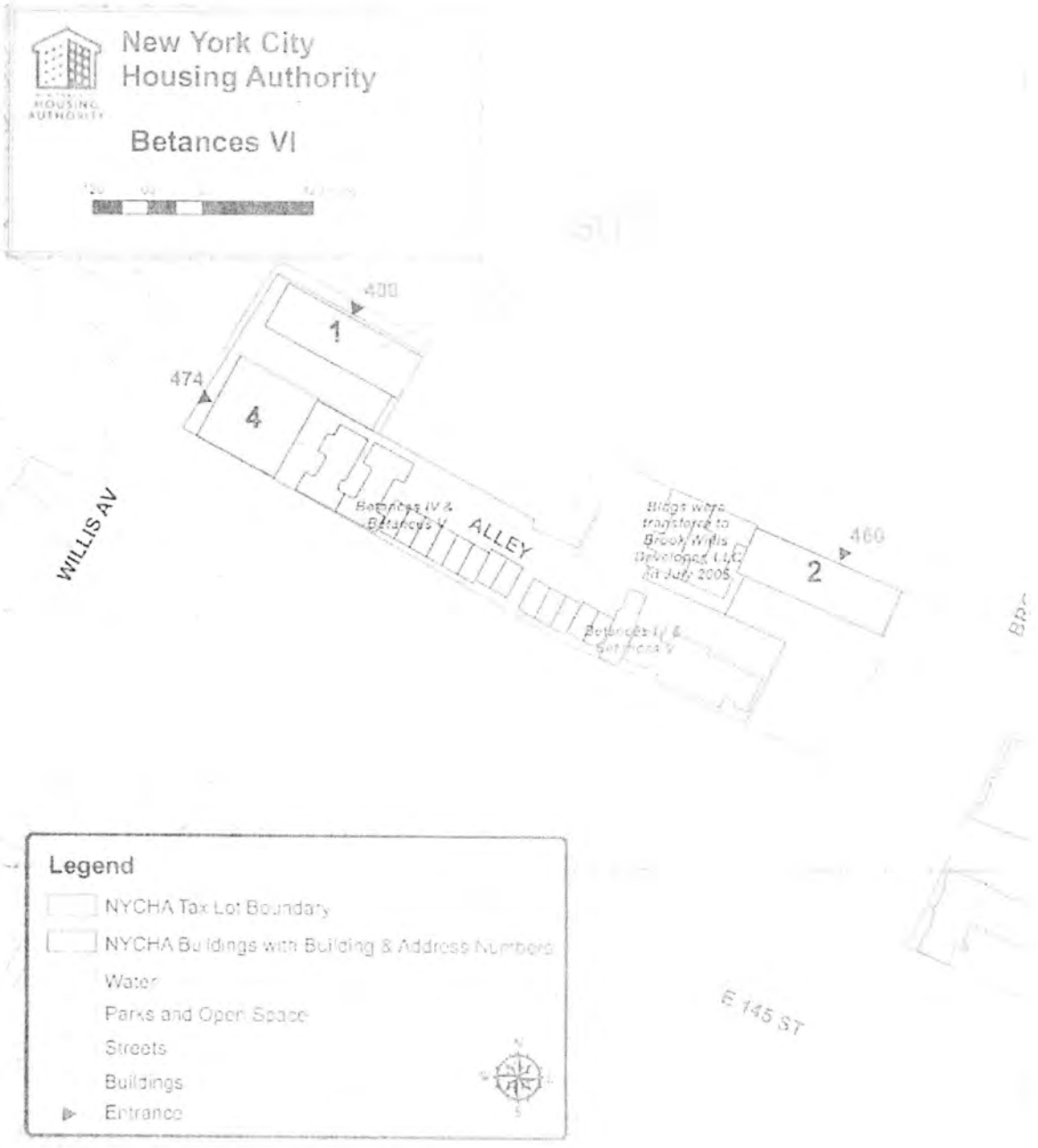
Record Close

Date Spill Closed: 11/19/2015

"Date Spill Closed" means the date the spill case was closed by the case manager in the Department of Environmental Conservation (the Department). The spill case was closed because either; a) the records and data submitted indicate that the necessary cleanup and removal actions have been completed and no further remedial activities are necessary, or b) the case was closed for administrative reasons (e.g., multiple reports of a single spill consolidated into a single spill number). The Department however reserves the right to require additional remedial work in relation to the spill, if in the future it determines that further action is necessary.

If you have questions about this reported incident, please contact the Regional Office where the incident occurred.

Refine This Search



Pardus Env. Consulting, Ltd.
223 Jay St., Suite 305
Brooklyn, NY 11201

UST Subsurface Investigation Work Plan

NYCHA Betances VI
400 E. 147th St., Bronx, NY
Spill Case 9905066

Vicinity Map

Figure 1

UST Subsurface Investigation
Work Plan

NYCHA Betances VI
[redacted] E. 156th St, Bronx, NY
Spill Case 9905066

Sampling Plan

Figure 2

Tkach, Yelena

From: Kann, Jennifer K (DEC) <jennifer.kann@dec.ny.gov>
Sent: Wednesday, December 16, 2015 1:10 PM
To: Tkach, Yelena
Subject: RE: Betances VI 9813188 and 9905066

Thank you for the information on Betances.

Unfortunately since we do not have any endpoint analytical data for this spill excavation, NYCHA will need to investigate the spill area. A minimum of three borings should be advanced and a minimum of 3 soil samples collected and submitted for 8260/8270 laboratory analysis.

Jennifer Kann
Environmental Engineer, Division of Environmental Remediation

New York State Department of Environmental Conservation
47-40 21st Street, Long Island City, NY 11101
P: (718) 482-4977 | F: (718) 482-4098 | jennifer.kann@dec.ny.gov
www.dec.ny.gov |

From: Tkach, Yelena [mailto:YTkach@nycha.nyc.gov]
Sent: Wednesday, November 25, 2015 10:29 AM
To: Kann, Jennifer K (DEC)
Subject: RE: Betances VI 9813188 and 9905066

Good Morning Jennifer,
Address for the garage area is 400 East 147 Street, Bronx.
Also, please see attached documentation that we just received from archive.
Thank you

Yelena Tkach
Deputy Coordinator
Technical Services Department
23-02 49th Ave, Long Island City, NY 11101
Tel.(718)707-5806
Cel.(917)579-2327
Fax (718)707-5266
New York City Housing Authority

From: Kann, Jennifer K (DEC) [mailto:jennifer.kann@dec.ny.gov]
Sent: Thursday, November 19, 2015 12:15 PM
To: Tkach, Yelena
Subject: Betances VI 9813188 and 9905066

Yelena –

I looked through my file for the referenced site and found the attached letters. Apparently 9813188 and 9905066 are related spills. I will be consolidating the spills and 9813188 will remain open. According to the file, NYCHA was going to investigate the area of the spill in 1999/2000. Please check your files for any reports related to this spill, as the Department does not

have any results of the investigation in our file. If a report is not found, field work will be required at this site.

In addition, please provide me with the exact address of the garages that were demolished back in 1999. Betances Houses has many addresses and I need to correctly identify this spill location.

Jennifer Kann
Environmental Engineer, Division of Environmental Remediation

New York State Department of Environmental Conservation
47-40 21st Street, Long Island City, NY 11101
P: (718) 482-4977 | F: (718) 482-4098 | jennifer.kann@dec.ny.gov
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New York State Department of Environmental Conservation
Division of Environmental Remediation
Bureau of Spill Prevention and Response
47-40 21st Street, Long Island City, NY 11101
(718) 482-6364 fax (718) 482-6390

John P. Cahill
Commissioner

August 13, 1999

Mr. Robert Podmore
Director
Technical Services 16th Floor
New York City Housing Authority
250 Broadway
New York, NY 10007

RE: NYSDEC Spill Report Nos. 9813188 and 9905066 for the discovery of contaminated soil at NYCHA's Betances Houses VI

Dear Mr. Podmore:

On January 27, 1999 the NYCHA reported the discovery of motor oil contaminated soil to the DEC, Spill No. 9813188. A Housing Authority contractor who was demolishing the collapsed parking garage discovered the spill in October of 1998. The contractor, Mohammed Kahn of Loyal Construction Co., said that he immediately reported the spill to the Housing Authority Construction Department. He also said that the Construction Dept. wanted him to submit a proposal for the additional cost to remove the contaminated material. After the Construction Dept. realized that the contractor would not able to address the spill, they informed the remediation section who immediately reported the spill to the DEC.

The preliminary spill investigation suggested that two underground storage tanks filled with waste oil were the source of the contamination. The Housing Authority contracted Maximum Mechanical Corp. to remove the tanks and contaminated soil. The contractor was also supposed to conduct a site assessment, which would assist the DEC in determining if any other action would be required.

On July 28, 1999, Maximum Mechanical reported there were no underground tanks at this location. The contractor had excavated the area and found that a steel tank ring was used as an opening to a large dry well (actually a vault) framed with railroad ties. The oil was dumped in this vault and allowed to soak up into the ground. The DEC inspected the site with Frank Ocello from the NYCHA Remediation Section, and Kris Kay from Maximum Mechanical Corp. The inspector from the Construction Dept. was not in attendance and did not answer respond to our pages.

As a result of our inspection, it is apparent that the contamination extends beyond the area, which the contractor was supposed to excavate. The contamination also appears to extend below the foundation of the adjacent building, which is owned by the Housing Authority. Therefore the NYCHA must conduct a subsurface site investigation to delineate the extent of the contamination. The NYCHA must submit a site specific work plan for the investigation to the DEC for review and approval within 45 days from the caption date of this letter.

With regards to the NYCHA's failure to report the spill to the DEC when it was first discovered, the NYCHA must officially apprise all its departments of NYSDEC spill reporting requirement. Failure to notify the DEC will not be tolerated. The DEC would like a copy of the document that is distributed to Housing Authority departments putting them on notice of the DEC spill reporting requirements. Please be advised that the NYCHA may be subject to penalties of up to $25,000 per day for failure to report a spill to the DEC.

If you have any questions or concerns, please contact me at 718-482-6364

Sincerely,

Steven P. Saccacio
Environmental Engineer

cc: A. Sigona - NYSDEC Spill Prevention and Response
J. Nehila – NYSDEC Legal Affairs
M. Abruzzo, F. Ocello – NYCHA Remediation Section
Narsi Patel – NYCHA Construction Department

NEW YORK CITY HOUSING AUTHORITY
250 BROADWAY
NEW YORK, N.Y. 10007
(212) 306-3000

September 10, 1999

Mr. Stephen Saccacio
Department of Environmental Conservation
30-20 Thompson Ave.
Long Island City, NY, 11101

Re: Betances Houses VI
Spill # 9813188
9905066

Dear Mr. Saccacio,

This will acknowledge receipt of your letter dated August 13, 1999. The Housing Authority concurs with your recommendations. The Authority's Design Department is currently awarding a contract for a consultant to perform site assessments at designated Developments. Betances VI has been given first priority. Site investigation will commence upon completion of the contract award process.

Additionally, I have attached a memorandum sent out to the Directors of: CAD, Asset Management, Construction, Design and the Borough Management offices, that references the attached Standard Procedure.

If you require any further information, please feel free to contact me at (212) 306-8059.

Sincerely,

Robert Podmore
Director
Technical Services

New York State Department of Environmental Conservation
Division of Environmental Remediation
Bureau of Spill Prevention and Response
47-40 21st Street, Long Island City, NY 11101
(718) 482-6364 fax (718) 482-6390

John P. Cahill
Commissioner

August 13, 1999

Mr. Robert Podmore
Director
Technical Services 16th Floor
New York City Housing Authority
250 Broadway
New York, NY 10007

RE: NYSDEC Spill Report Nos. 9813188 and 9905066 for the discovery of contaminated soil at NYCHA's Betances Houses VI

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If you have any questions or concerns, please contact me at 718-482-6364

Sincerely,

Steven P. Saccacio
Environmental Engineer

cc: A. Sigona - NYSDEC Spill Prevention and Response
J. Nehila – NYSDEC Legal Affairs
M. Abruzzo, F. Ocello – NYCHA Remediation Section
Narsi Patel – NYCHA Construction Department

Subject: FOIL Request :: W027923-101117

From: "New York DEC Support" <newyorkdec@mycusthelp.net>

To: nollivierre@aeasinc.com

11 Oct 2017 15:59:19 -0500

Dear Antoinette :

Thank you for your Freedom of Information Law (FOIL) request. Your request has been received and is being processed. Your request was received in this office on 10/11/2017 and given the reference number FOIL #W027923-101117 for tracking purposes. You may expect the Department's response to your request no later than **11/8/2017**.

Record Requested: **Status and description of any reported petroleum spills or tanks; Copies of any records of decision regarding investigation or clean up of the site; Notification of the lead agency that is primarily responsible for any cleanup of the site; Notification of any legal action involving the site; Detailed reports, monitoring data, regulatory non-compliance notices, documents or studies regarding any pollution problems at this site, and how I may obtain copies of them or review them in person.**

You can monitor the progress of your request at the link below and you'll receive an email when your request has been completed. Again, thank you for using the FOIL Center.

https://mycusthelp.com/NEWYORKDEC/_rs/RequestLogin.aspx

New York State Department of Environmental Conservation, Record Access Office

---

Track the issue status and respond at: https://mycusthelp.com/NEWYORKDEC//_rs/RequestEdit.aspx?rid=27923

CLICK HERE TO SIGN UP FOR BUILDINGS NEWS

NYC Department of Buildings

Work Permit Data

Premises: 472 WILLIS AVENUE BRONX **Filed At: 400 EAST 147 STREET BRONX**

BIN: 2091069 Block: 2291 Lot: 1 **Job Type: A3 - ALTERATION TYPE 3**

View Permit History

Job No:	200438561			**Fee:**	EXEMPT
Permit No:	200438561-01-AL	**Issued:**	09/15/1998	**Expires:**	02/21/1999
Seq. No.:	02	**Filing Date:**	09/15/1998 RENEWAL	**Status:**	ISSUED
Work:		**Proposed Job Start:**	10/14/1997	**Work Approved:**	10/06/1997

ALTERATION TYPE 3 - CONST.
THE SCOPE OF WORK INCLUDES :(1)INSTALL S HORING FOR THE ROOF OF THE PARK
NG GARAGE.(2)PROVIDE AND INSTALL NEW CMU WALL TO ISOLATE THE ACCIDENT AREA.(3)
INSTALL NEW MEANS OF TEMPORARY EGRESS.

Use: B-2 - STORAGE (LOW HAZARD) **Landmark:** NO **Stories:** 0

Review is requested under Building Code: 1968

Issued to: MUHAMMAD KHAN

GENERAL CONTRACTOR: GC 004069

Business: LOYAL CONSTRUCTION CO.
2239 60TH STREET BROOKLYN NY 11204

Phone: 718-232-1671

If you have any questions please review these Frequently Asked Questions, the Glossary, or call the 311 Citizen Service Center by dialing 311 or (212) NEW YORK outside of New York City.

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NYC Department of Buildings

Document Overview

Premises: 472 WILLIS AVENUE BRONX **Job No: 200500779**

BIN: 2091069 Block: 2291 Lot: 1 **Num. of Documents: 1** **Job Type: A2 - ALTERATION TYPE 2**

DOC NO	WORK TYPE(S) / STATUS / JOB DESCRIPTION
01	REMOVAL OF GARAGE ROOF AND BACKFILL GARA GE TO THE GROUND LEVEL

Status: P - PLAN EXAM - APPROVED **Status Date:** 02/18/1998

Plans Page Count: Not Provided

Directive 14: Y **Applicant Name:** MCNEVIN DOUGLAS **Pre-Filing Date:** 02/18/1998

TYPE	STATUS DATE	STATUS
A2 - ALTERATION TYPE 2	02/18/1998	P: PLAN EXAM - APPROVED
EQ - CONSTRUCTION EQUIPMENT	02/18/1998	P: PLAN EXAM - APPROVED
OT - CONST.	02/18/1998	P: PLAN EXAM - APPROVED

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NYC Department of Buildings

Application Details

The below information does not include work types submitted in DOB NOW; use the DOB NOW Public Portal to access DOB NOW records.

Premises: 472 WILLIS AVENUE BRONX **Job No: 200500779**
BIN: 2091069 Block: 2291 Lot: 1 **Document: 01 OF 1**
Job Type: A2 - ALTERATION TYPE 2

Document Overview	Items Required	Virtual Job Folder	All Permits		Schedule B
Fees Paid	Forms Received		All Comments		Plumbing Inspections
Crane Information	Plan Examination				
After Hours Variance Permits					

This job is not subject to the Department's Development Challenge Process. For any issues, please contact the relevant borough office.

Last Action: PLAN EXAM - APPROVED 02/18/1998 (P)
Application approved on: 02/18/1998

Pre-Filed: 02/18/1998 **Building Type:** Other **Estimated Total Cost:** $250,000.00
Date Filed: 02/18/1998 **Electronically Filed:** No
Fee Structure: EXEMPT
Review is requested under Building Code: 1968

Job Description Comments

1 Location Information (Filed At)

House No(s): 400 **Street Name:** EAST 147 STREET
Borough: Bronx **Block:** 2291 **Lot:** 1 **BIN:** 2091069 **CB No:** 201
Work on Floor(s): CEL **Apt/Condo No(s):** **Zip Code:** 10455

2 Applicant of Record Information

Name: DOUGLAS A MCNEVIN
Business Name: NYCHA, CONSTRUCTION DEPT **Business Phone:** 212-306-4320
Business Address: 123 WILLIAM ST, 9TH FLR NY NY 10038 **Business Fax:**
E-Mail: **Mobile Telephone:**
License Number: 051875
Applicant Type: ☒ P.E. ☐ R.A ☐ Sign Hanger ☐ R.L.A. ☐ Other

Directive 14 Applicant

Name: DOUGLAS MCNEVIN
Business Name: NYCHA, CONSTRUCTION DEPT **Business Phone:** 212-306-4320
Business Address: 123 WILLIAM ST, 9TH FLR NY NY 10038 **Business Fax:**
E-Mail: **Mobile Telephone:**
Applicant Type: PE **License Number:** 051875

Previous Applicant of Record

Not Applicable

3 Filing Representative

None

4 Filing Status

Click Here to View

5 Job Types

☐ **Alteration Type 1 or Alteration Type 1 required to meet New Building requirements (28-101.4.5)**

☐ **Alteration Type 1, OT "No Work"**	☐ **New Building**
☒ **Alteration Type 2**	☐ **Full Demolition**
☐ **Alteration Type 3**	☐ **Subdivision: Improved**
☐ **Sign**	☐ **Subdivision: Condo**

Directive 14 acceptance requested? ☒ Yes ☐ No

6 Work Types

☐ **BL - Boiler**	☐ **FA - Fire Alarm**	☐ **FB - Fuel Burning**	☐ **FS - Fuel Storage**
☐ **FP - Fire Suppression**	☐ **MH - Mechanical**	☐ **PL - Plumbing**	☐ **SD - Standpipe**
☐ **SP - Sprinkler**	☒ **EQ - Construction Equipment**	☐ **CC - Curb Cut**	

☒ **OT -** CONST.

7 Plans/Construction Documents Submitted

Plans Page Count: Not Provided

8 Additional Information

Enlargement proposed?

☒ No ☐ Yes ☐ Horizontal ☐ Vertical

9 Additional Considerations, Limitations or Restrictions

Yes	No		Yes	No	
☐	☐	**Alt. required to meet New Building req's (28-101.4.5)**	☐	☐	**Alteration is a major change to exits**
			☐	☐	**Change in number of dwelling units**
			☐	☐	**Change in Occupancy / Use**
			☐	☐	**Change is inconsistent with current certificate of occupancy**
			☐	☐	**Change in number of stories**

☐	☐	**Facade Alteration**	☐	☒	**Infill Zoning**
☐	☐	**Adult Establishment**	☐	☒	**Loft Board**
☐	☐	**Compensated Development (Inclusionary Housing)**	☐	☒	**Quality Housing**
☐	☐	**Low Income Housing (Inclusionary Housing)**	☐	☒	**Site Safety Job / Project**
☐	☒	**Single Room Occupancy (SRO) Multiple Dwelling**	☐	☐	**Included in LMCCC**
☐	☐	**Filing includes Lot Merger / Reapportionment**	**Work Includes:**		
			☐	☐	**Prefab wood I-joists**
			☐	☐	**Structural cold-formed steel**
			☐	☐	**Open-web steel joists**

☐	☒	**Landmark**
☐	☒	**Environmental Restrictions (Little E or RD)**
☐	☐	**Unmapped/CCO Street**
☐	☐	**Legalization**
☐	☒	**Other, Specify:**
☐	☒	**Filed to Comply with Local Law**
☐	☐	**Restrictive Declaration / Easement**
☐	☐	**Zoning Exhibit Record (I,II,III,etc)**
☐	☐	**Filed to Address Violation(s)**

☐ ☐ **Work includes lighting fixture and/or controls, installation or replacement. [ECC §404 and §505]**
☐ ☐ **Work includes modular construction under New York State jurisdiction**
☐ ☐ **Work includes modular construction under New York City jurisdiction**
☐ ☐ **Structural peer review required per BC §1627** **Peer Reviewer License No.(P.E.):**
☐ ☐ **Work includes permanent removal of standpipe, sprinkler or fire suppression related systems**
☐ ☐ **Work includes partial demolition as defined in AC §28-101.5, or the raising/moving of a building**
☐ ☒ **Structural Stability affected by proposed work**

BSA Calendar No.(s):
CPC Calendar No.(s):

10 NYCECC Compliance *New York City Energy Conservation Code* (Applicant Statement)

Not Provided

11 Job Description

REMOVAL OF GARAGE ROOF AND BACKFILL GARA GE TO THE GROUND LEVEL
Related BIS Job Numbers:
Primary application Job Number:

12 Zoning Characteristics

District(s): NONE
Overlay(s):
Special District(s):
Map No.: **Street legal width (ft.):** **Street status:** ☐ Public ☐ Private
Zoning lot includes the following tax lots: Not Provided

13 Building Characteristics

		2014/2008 Code Designations?
Occupancy Classification: Existing:		☐ Yes ☐ No
Proposed:		☐ Yes ☐ No
Construction Classification: Existing:		☐ Yes ☐ No
Proposed:		☐ Yes ☐ No
Multiple Dwelling Classification: Existing:		
Proposed:		
Building Height (ft.): Existing:		
Proposed:		
Building Stories: Existing:		
Proposed:		
Dwelling Units: Existing:		
Proposed:		

Mixed use building? ☐ Yes ☐ No

14 Fill

☐ **Not Applicable** ☐ **Off-Site** ☐ **On-Site** ☐ **Under 300 cubic yards**

15 Construction Equipment

☐ **Chute** ☐ **Sidewalk Shed** **Construction Material:** WOOD
☒ **Fence** **Size:** linear ft. **BSA/MEA Approval No.:**
☐ **Supported Scaffold** ☐ **Other**

16 Curb Cut Description

Not Applicable

17 Tax Lot Characteristics

Not Provided

18 Fire Protection Equipment

Not Applicable

19 Open Spaces

20 Site Characteristics

Not Provided

21 Demolition Details

Not Applicable

22 Asbestos Abatement Compliance

23 Signs

Not Applicable

24 Comments

25 Applicant's Statements and Signatures (See paper form or check Forms Received)

Yes	No	
☐	☐	**For New Building and Alteration 1 applications filed under the 2008 or 2014 NYC Building Code only: does this building qualify for high-rise designation?**
☐	☐	**Directive 14 applications only: I certify that the construction documents submitted and all construction documents related to this application do not require a new or amended Certificate of Occupancy as there is no change in use, exits, or occupancy.**

26 Owner's Information

Name: ROBERT YAUCH

Relationship to Owner:

Business Name: NYCHA **Business Phone:** 212-306-4335

Business Address: 123 WILLIAM ST, 9TH FLR NY NY 10038 **Business Fax:**

E-Mail: **Owner Type:** OTHER

Non Profit: ☒ Yes ☐ No

Yes	No	
☐	☐	**Owner's Certification Regarding Occupied Housing (Remain Occupied)**
☐	☒	**Owner's Certification Regarding Occupied Housing (Rent Control / Stabilization)**
☐	☒	**Owner DHCR Notification**
☐	☐	**Owner's Certification for Adult Establishment**
☐	☐	**Owner's Certification for Directive 14 (if applicable)**

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NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

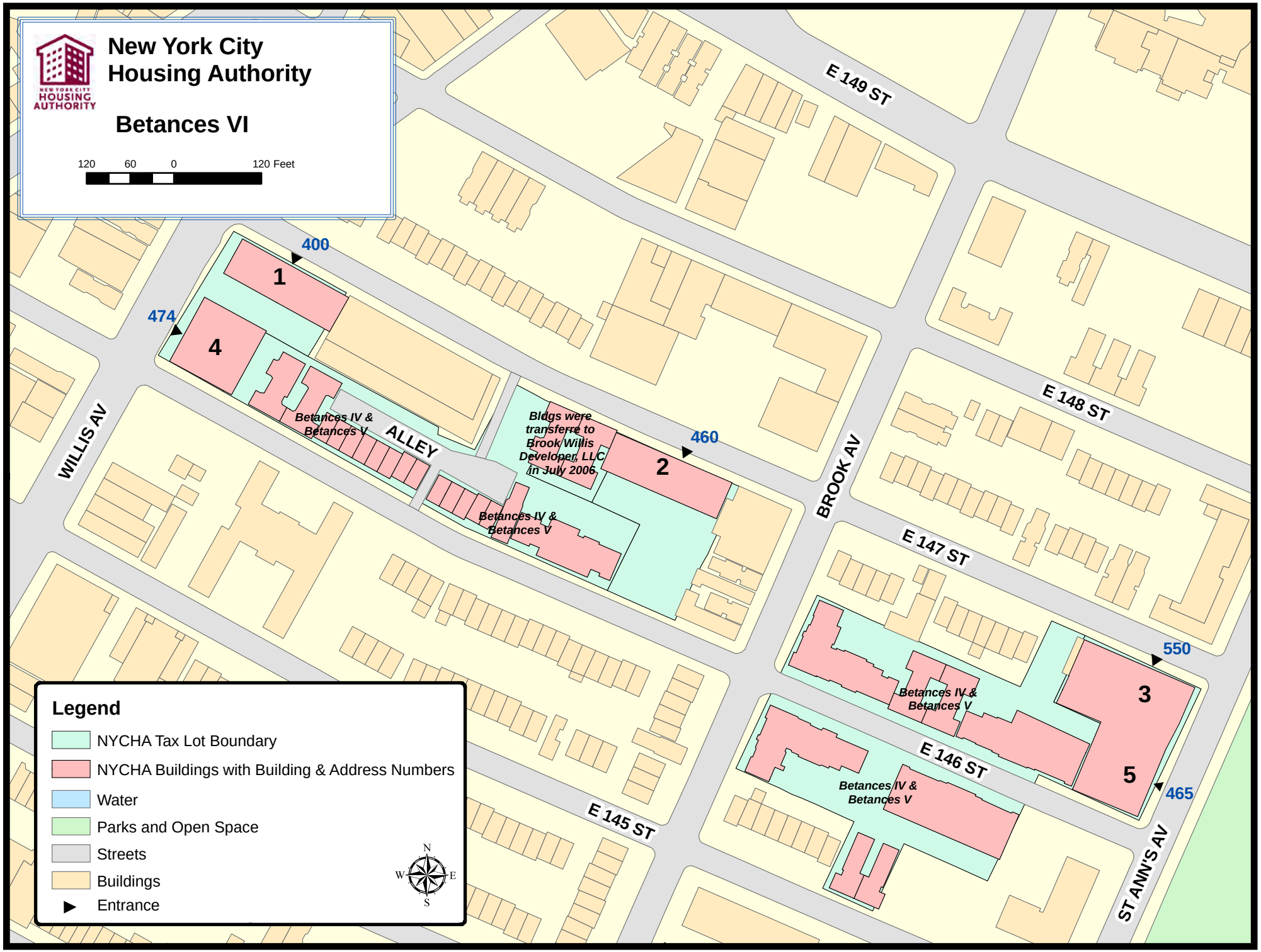
Bulk Storage Database SearchResults

Record Count: 5 Rows: 1 to 5

Export XLS | Export CSV | Export KML

Site Number	Site Type	Facility Name	County	Locality	Site Address	ZipCode	Facility Status	Expiration Date
2-473049	PBS	BETANCES HOUSES	BRONX	BRONX	427 ST. ANN'S AVENUE	10455	UNREGULATED/CLOSED	
2-473057	PBS	DR. RAMON EMETERIO BETANCES HOUSES	BRONX	BRONX	509 EAST 144TH STREET	10455	UNREGULATED/CLOSED	
2-473065	PBS	BETANCES HOUSES	BRONX	BRONX	510 EAST 146TH STREET	10455	UNREGULATED/CLOSED	
2-473073	PBS	BETANCES I HOUSES	BRONX	BRONX	400 BROOK AVENUE	10455	ACTIVE	
2-473197	PBS	DR. RAMON EMETERIO BETANCES HOUSES	BRONX	BRONX	480 EAST 143RD STREET	10455	UNREGULATED/CLOSED	

Refine This Search


New York City Housing Authority
Betances VI
120 60 0 120 Feet
400
474
460
550
465
1
2
3
4
5
E 149 ST
E 148 ST
E 147 ST
E 146 ST
E 145 ST
WILLIS AV
BROOK AV
ST ANN'S AV
ALLEY
Betances IV & Betances V
Bldgs were transferre to Brook Willis Developer, LLC in July 2006
Legend
NYCHA Tax Lot Boundary
NYCHA Buildings with Building & Address Numbers
Water
Parks and Open Space
Streets
Buildings
Entrance
N
W
E
S

BETANCES VI

BLDG#	BIN #	M	SH#	ADDRESS	ZIP CODE	BLOCK	LOT	AMP#	FACILITY
						2291	101	NY005012110	DEVELOPMENT GROUNDS
1	2109608	M	061	400 EAST 147TH STREET	10455	2291	1	NY005012110	BOILER
2	2000508	M	062	460 EAST 147TH STREET	10455	2291	30	NY005012110	BOILER
3	2093910	M	063	550 EAST 147TH STREET	10455	2272	119	NY005012110	BOILER
4	2091069		064	474 WILLIS AVENUE	10455	2291	1	NY005012110	COMMERCIAL SPACE (STORES #1, 2, 3)
5	2093910		065	465 SAINT ANNS AVENUE	10455	2272	119	NY005012110	COMMUNITY CENTER/ BOILER

NOTE:
BLDG# = Building #
SH# = Stairhall # (Account # for FHA)
M = Residential Mailing Address
BIN# = Building Identification Number
AMP# = Abbreviation for Asset Management Project (AMP) Numbers

Revised as of 03/31/2011

LABORATORY ANALYTICAL REPORT

PHOENIX
Environmental Laboratories, Inc.

Thursday, December 14, 2017

Attn: Ms. Antoinette Ollivierre
American Env. Assessment & Solutions Inc
679 Lafayette Ave.
3rd Floor
Brooklyn, NY 11216

Project ID: BETANCES HOUSES GARAGE
Sample ID#s: BZ46284 - BZ46292

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.

Enclosed are revised Analysis Report pages. Please replace and discard the original pages. If you have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext. 200.

Sincerely yours,

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
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

NY # 11301

SDG Comments

December 14, 2017

SDG I.D.: GBZ46284

Version 2:
Added Library search and chromatogram for sample BZ46287.

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

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

December 14, 2017

FOR: Attn: Ms. Antoinette Ollivierre
American Env. Assessment & Solutions Inc
679 Lafayette Ave.
3rd Floor
Brooklyn, NY 11216

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		11/21/17	9:30
Location Code:	AEAS-INC	Received by:	SW	11/22/17	16:19
Rush Request:	72 Hour	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBZ46284
Phoenix ID: BZ46284

Project ID: BETANCES HOUSES GARAGE
Client ID: SB-1 (2-5 FT)

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Percent Solid	84		%		11/22/17	Q	SW846-%Solid
Soil Extraction for SVOA	Completed				11/22/17	JJ/CKV	SW3545A
Volatiles							
1,1,1,2-Tetrachloroethane	ND	4.5	ug/Kg	1	11/28/17	JLI	SW8260C
1,1,1-Trichloroethane	ND	4.5	ug/Kg	1	11/28/17	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	4.5	ug/Kg	1	11/28/17	JLI	SW8260C
1,1,2-Trichloroethane	ND	4.5	ug/Kg	1	11/28/17	JLI	SW8260C
1,1-Dichloroethane	ND	4.5	ug/Kg	1	11/28/17	JLI	SW8260C
1,1-Dichloroethene	ND	4.5	ug/Kg	1	11/28/17	JLI	SW8260C
1,1-Dichloropropene	ND	4.5	ug/Kg	1	11/28/17	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	4.5	ug/Kg	1	11/28/17	JLI	SW8260C
1,2,3-Trichloropropane	ND	4.5	ug/Kg	1	11/28/17	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	4.5	ug/Kg	1	11/28/17	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	4.5	ug/Kg	1	11/28/17	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	4.5	ug/Kg	1	11/28/17	JLI	SW8260C
1,2-Dibromoethane	ND	4.5	ug/Kg	1	11/28/17	JLI	SW8260C
1,2-Dichlorobenzene	ND	4.5	ug/Kg	1	11/28/17	JLI	SW8260C
1,2-Dichloroethane	ND	4.5	ug/Kg	1	11/28/17	JLI	SW8260C
1,2-Dichloropropane	ND	4.5	ug/Kg	1	11/28/17	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	4.5	ug/Kg	1	11/28/17	JLI	SW8260C
1,3-Dichlorobenzene	ND	4.5	ug/Kg	1	11/28/17	JLI	SW8260C
1,3-Dichloropropane	ND	4.5	ug/Kg	1	11/28/17	JLI	SW8260C
1,4-Dichlorobenzene	ND	4.5	ug/Kg	1	11/28/17	JLI	SW8260C
2,2-Dichloropropane	ND	4.5	ug/Kg	1	11/28/17	JLI	SW8260C
2-Chlorotoluene	ND	4.5	ug/Kg	1	11/28/17	JLI	SW8260C
2-Hexanone	ND	23	ug/Kg	1	11/28/17	JLI	SW8260C
2-Isopropyltoluene	ND	4.5	ug/Kg	1	11/28/17	JLI	SW8260C

1

Project ID: BETANCES HOUSES GARAGE
Client ID: SB-1 (2-5 FT)

Phoenix I.D.: BZ46284

Parameter	Result		RL/ PQL	Units	Dilution	Date/Time	By	Reference	
4-Chlorotoluene	ND		4.5	ug/Kg	1	11/28/17	JLI	SW8260C	
4-Methyl-2-pentanone	ND		23	ug/Kg	1	11/28/17	JLI	SW8260C	
Acetone	36	S	23	ug/Kg	1	11/28/17	JLI	SW8260C	
Acrylonitrile	ND		9.0	ug/Kg	1	11/28/17	JLI	SW8260C	
Benzene	ND		4.5	ug/Kg	1	11/28/17	JLI	SW8260C	
Bromobenzene	ND		4.5	ug/Kg	1	11/28/17	JLI	SW8260C	
Bromochloromethane	ND		4.5	ug/Kg	1	11/28/17	JLI	SW8260C	
Bromodichloromethane	ND		4.5	ug/Kg	1	11/28/17	JLI	SW8260C	
Bromoform	ND		4.5	ug/Kg	1	11/28/17	JLI	SW8260C	
Bromomethane	ND		4.5	ug/Kg	1	11/28/17	JLI	SW8260C	
Carbon Disulfide	ND		4.5	ug/Kg	1	11/28/17	JLI	SW8260C	
Carbon tetrachloride	ND		4.5	ug/Kg	1	11/28/17	JLI	SW8260C	
Chlorobenzene	ND		4.5	ug/Kg	1	11/28/17	JLI	SW8260C	
Chloroethane	ND		4.5	ug/Kg	1	11/28/17	JLI	SW8260C	
Chloroform	ND		4.5	ug/Kg	1	11/28/17	JLI	SW8260C	
Chloromethane	ND		4.5	ug/Kg	1	11/28/17	JLI	SW8260C	
cis-1,2-Dichloroethene	ND		4.5	ug/Kg	1	11/28/17	JLI	SW8260C	
cis-1,3-Dichloropropene	ND		4.5	ug/Kg	1	11/28/17	JLI	SW8260C	
Dibromochloromethane	ND		4.5	ug/Kg	1	11/28/17	JLI	SW8260C	
Dibromomethane	ND		4.5	ug/Kg	1	11/28/17	JLI	SW8260C	
Dichlorodifluoromethane	ND		4.5	ug/Kg	1	11/28/17	JLI	SW8260C	
Ethylbenzene	ND		4.5	ug/Kg	1	11/28/17	JLI	SW8260C	
Hexachlorobutadiene	ND		4.5	ug/Kg	1	11/28/17	JLI	SW8260C	
Isopropylbenzene	ND		4.5	ug/Kg	1	11/28/17	JLI	SW8260C	
m&p-Xylene	ND		4.5	ug/Kg	1	11/28/17	JLI	SW8260C	
Methyl Ethyl Ketone	ND		23	ug/Kg	1	11/28/17	JLI	SW8260C	
Methyl t-butyl ether (MTBE)	ND		9.0	ug/Kg	1	11/28/17	JLI	SW8260C	
Methylene chloride	ND		9.0	ug/Kg	1	11/28/17	JLI	SW8260C	
Naphthalene	ND		4.5	ug/Kg	1	11/28/17	JLI	SW8260C	
n-Butylbenzene	ND		4.5	ug/Kg	1	11/28/17	JLI	SW8260C	
n-Propylbenzene	ND		4.5	ug/Kg	1	11/28/17	JLI	SW8260C	
o-Xylene	ND		4.5	ug/Kg	1	11/28/17	JLI	SW8260C	
p-Isopropyltoluene	ND		4.5	ug/Kg	1	11/28/17	JLI	SW8260C	
sec-Butylbenzene	ND		4.5	ug/Kg	1	11/28/17	JLI	SW8260C	
Styrene	ND		4.5	ug/Kg	1	11/28/17	JLI	SW8260C	
tert-Butylbenzene	ND		4.5	ug/Kg	1	11/28/17	JLI	SW8260C	
Tetrachloroethene	ND		4.5	ug/Kg	1	11/28/17	JLI	SW8260C	
Tetrahydrofuran (THF)	ND		9.0	ug/Kg	1	11/28/17	JLI	SW8260C	1
Toluene	ND		4.5	ug/Kg	1	11/28/17	JLI	SW8260C	
Total Xylenes	ND		4.5	ug/Kg	1	11/28/17	JLI	SW8260C	
trans-1,2-Dichloroethene	ND		4.5	ug/Kg	1	11/28/17	JLI	SW8260C	
trans-1,3-Dichloropropene	ND		4.5	ug/Kg	1	11/28/17	JLI	SW8260C	
trans-1,4-dichloro-2-butene	ND		9.0	ug/Kg	1	11/28/17	JLI	SW8260C	
Trichloroethene	ND		4.5	ug/Kg	1	11/28/17	JLI	SW8260C	
Trichlorofluoromethane	ND		4.5	ug/Kg	1	11/28/17	JLI	SW8260C	
Trichlorotrifluoroethane	ND		4.5	ug/Kg	1	11/28/17	JLI	SW8260C	
Vinyl chloride	ND		4.5	ug/Kg	1	11/28/17	JLI	SW8260C	
QA/QC Surrogates									
% 1,2-dichlorobenzene-d4	102			%	1	11/28/17	JLI	70 - 130 %	

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
% Bromofluorobenzene	105		%	1	11/28/17	JLI	70 - 130 %
% Dibromofluoromethane	97		%	1	11/28/17	JLI	70 - 130 %
% Toluene-d8	104		%	1	11/28/17	JLI	70 - 130 %

Semivolatiles

1,2,4,5-Tetrachlorobenzene	ND	270	ug/Kg	1	11/23/17	DD	SW8270D
1,2,4-Trichlorobenzene	ND	270	ug/Kg	1	11/23/17	DD	SW8270D
1,2-Dichlorobenzene	ND	270	ug/Kg	1	11/23/17	DD	SW8270D
1,2-Diphenylhydrazine	ND	390	ug/Kg	1	11/23/17	DD	SW8270D
1,3-Dichlorobenzene	ND	270	ug/Kg	1	11/23/17	DD	SW8270D
1,4-Dichlorobenzene	ND	270	ug/Kg	1	11/23/17	DD	SW8270D
2,4,5-Trichlorophenol	ND	270	ug/Kg	1	11/23/17	DD	SW8270D
2,4,6-Trichlorophenol	ND	270	ug/Kg	1	11/23/17	DD	SW8270D
2,4-Dichlorophenol	ND	270	ug/Kg	1	11/23/17	DD	SW8270D
2,4-Dimethylphenol	ND	270	ug/Kg	1	11/23/17	DD	SW8270D
2,4-Dinitrophenol	ND	390	ug/Kg	1	11/23/17	DD	SW8270D
2,4-Dinitrotoluene	ND	270	ug/Kg	1	11/23/17	DD	SW8270D
2,6-Dinitrotoluene	ND	270	ug/Kg	1	11/23/17	DD	SW8270D
2-Chloronaphthalene	ND	270	ug/Kg	1	11/23/17	DD	SW8270D
2-Chlorophenol	ND	270	ug/Kg	1	11/23/17	DD	SW8270D
2-Methylnaphthalene	ND	270	ug/Kg	1	11/23/17	DD	SW8270D
2-Methylphenol (o-cresol)	ND	270	ug/Kg	1	11/23/17	DD	SW8270D
2-Nitroaniline	ND	390	ug/Kg	1	11/23/17	DD	SW8270D
2-Nitrophenol	ND	270	ug/Kg	1	11/23/17	DD	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	390	ug/Kg	1	11/23/17	DD	SW8270D
3,3'-Dichlorobenzidine	ND	270	ug/Kg	1	11/23/17	DD	SW8270D
3-Nitroaniline	ND	390	ug/Kg	1	11/23/17	DD	SW8270D
4,6-Dinitro-2-methylphenol	ND	390	ug/Kg	1	11/23/17	DD	SW8270D
4-Bromophenyl phenyl ether	ND	390	ug/Kg	1	11/23/17	DD	SW8270D
4-Chloro-3-methylphenol	ND	270	ug/Kg	1	11/23/17	DD	SW8270D
4-Chloroaniline	ND	270	ug/Kg	1	11/23/17	DD	SW8270D
4-Chlorophenyl phenyl ether	ND	270	ug/Kg	1	11/23/17	DD	SW8270D
4-Nitroaniline	ND	620	ug/Kg	1	11/23/17	DD	SW8270D
4-Nitrophenol	ND	270	ug/Kg	1	11/23/17	DD	SW8270D
Acenaphthene	ND	270	ug/Kg	1	11/23/17	DD	SW8270D
Acenaphthylene	ND	270	ug/Kg	1	11/23/17	DD	SW8270D
Acetophenone	ND	270	ug/Kg	1	11/23/17	DD	SW8270D
Aniline	ND	390	ug/Kg	1	11/23/17	DD	SW8270D
Anthracene	ND	270	ug/Kg	1	11/23/17	DD	SW8270D
Benz(a)anthracene	ND	270	ug/Kg	1	11/23/17	DD	SW8270D
Benzidine	ND	270	ug/Kg	1	11/23/17	DD	SW8270D
Benzo(a)pyrene	ND	270	ug/Kg	1	11/23/17	DD	SW8270D
Benzo(b)fluoranthene	ND	270	ug/Kg	1	11/23/17	DD	SW8270D
Benzo(ghi)perylene	ND	270	ug/Kg	1	11/23/17	DD	SW8270D
Benzo(k)fluoranthene	ND	270	ug/Kg	1	11/23/17	DD	SW8270D
Benzoic acid	ND	770	ug/Kg	1	11/23/17	DD	SW8270D
Benzyl butyl phthalate	ND	270	ug/Kg	1	11/23/17	DD	SW8270D
Bis(2-chloroethoxy)methane	ND	270	ug/Kg	1	11/23/17	DD	SW8270D
Bis(2-chloroethyl)ether	ND	390	ug/Kg	1	11/23/17	DD	SW8270D
Bis(2-chloroisopropyl)ether	ND	270	ug/Kg	1	11/23/17	DD	SW8270D

Project ID: BETANCES HOUSES GARAGE
Client ID: SB-1 (2-5 FT)

Phoenix I.D.: BZ46284

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference	
Bis(2-ethylhexyl)phthalate	ND	270	ug/Kg	1	11/23/17	DD	SW8270D	
Carbazole	ND	390	ug/Kg	1	11/23/17	DD	SW8270D	
Chrysene	ND	270	ug/Kg	1	11/23/17	DD	SW8270D	
Dibenz(a,h)anthracene	ND	270	ug/Kg	1	11/23/17	DD	SW8270D	
Dibenzofuran	ND	270	ug/Kg	1	11/23/17	DD	SW8270D	
Diethyl phthalate	ND	270	ug/Kg	1	11/23/17	DD	SW8270D	
Dimethylphthalate	ND	270	ug/Kg	1	11/23/17	DD	SW8270D	
Di-n-butylphthalate	ND	770	ug/Kg	1	11/23/17	DD	SW8270D	
Di-n-octylphthalate	ND	270	ug/Kg	1	11/23/17	DD	SW8270D	
Fluoranthene	ND	270	ug/Kg	1	11/23/17	DD	SW8270D	
Fluorene	ND	270	ug/Kg	1	11/23/17	DD	SW8270D	
Hexachlorobenzene	ND	270	ug/Kg	1	11/23/17	DD	SW8270D	
Hexachlorobutadiene	ND	270	ug/Kg	1	11/23/17	DD	SW8270D	
Hexachlorocyclopentadiene	ND	270	ug/Kg	1	11/23/17	DD	SW8270D	
Hexachloroethane	ND	270	ug/Kg	1	11/23/17	DD	SW8270D	
Indeno(1,2,3-cd)pyrene	ND	270	ug/Kg	1	11/23/17	DD	SW8270D	
Isophorone	ND	270	ug/Kg	1	11/23/17	DD	SW8270D	
Naphthalene	ND	270	ug/Kg	1	11/23/17	DD	SW8270D	
Nitrobenzene	ND	270	ug/Kg	1	11/23/17	DD	SW8270D	
N-Nitrosodimethylamine	ND	390	ug/Kg	1	11/23/17	DD	SW8270D	
N-Nitrosodi-n-propylamine	ND	270	ug/Kg	1	11/23/17	DD	SW8270D	
N-Nitrosodiphenylamine	ND	390	ug/Kg	1	11/23/17	DD	SW8270D	
Pentachloronitrobenzene	ND	390	ug/Kg	1	11/23/17	DD	SW8270D	
Pentachlorophenol	ND	390	ug/Kg	1	11/23/17	DD	SW8270D	
Phenanthrene	ND	270	ug/Kg	1	11/23/17	DD	SW8270D	
Phenol	ND	270	ug/Kg	1	11/23/17	DD	SW8270D	
Pyrene	ND	270	ug/Kg	1	11/23/17	DD	SW8270D	
Pyridine	ND	390	ug/Kg	1	11/23/17	DD	SW8270D	
QA/QC Surrogates								
% 2,4,6-Tribromophenol	65		%	1	11/23/17	DD	30 - 130 %	
% 2-Fluorobiphenyl	84		%	1	11/23/17	DD	30 - 130 %	
% 2-Fluorophenol	60		%	1	11/23/17	DD	30 - 130 %	
% Nitrobenzene-d5	67		%	1	11/23/17	DD	30 - 130 %	
% Phenol-d5	66		%	1	11/23/17	DD	30 - 130 %	
% Terphenyl-d14	78		%	1	11/23/17	DD	30 - 130 %	
Field Extraction	Completed				11/21/17		SW5035A	1

Project ID: BETANCES HOUSES GARAGE
Client ID: SB-1 (2-5 FT)

Phoenix I.D.: BZ46284

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

1 = This parameter is not certified by 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 (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.

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 there are any questions regarding this data, please call Phoenix Client Services.

Phyllis Shiller, Laboratory Director
December 14, 2017
Reviewed and Released by: Bobbi Aloisa, Vice President

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

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

December 14, 2017

FOR: Attn: Ms. Antoinette Ollivierre
American Env. Assessment & Solutions Inc
679 Lafayette Ave.
3rd Floor
Brooklyn, NY 11216

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		11/21/17	9:40
Location Code:	AEAS-INC	Received by:	SW	11/22/17	16:19
Rush Request:	72 Hour	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBZ46284
Phoenix ID: BZ46285

Project ID: BETANCES HOUSES GARAGE
Client ID: SB-1 (6-10 FT)

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Percent Solid	84		%		11/22/17	Q	SW846-%Solid
Soil Extraction for SVOA	Completed				11/22/17	JJ/CKV	SW3545A
Volatiles							
1,1,1,2-Tetrachloroethane	ND	4.4	ug/Kg	1	11/23/17	JLI	SW8260C
1,1,1-Trichloroethane	ND	4.4	ug/Kg	1	11/23/17	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	4.4	ug/Kg	1	11/23/17	JLI	SW8260C
1,1,2-Trichloroethane	ND	4.4	ug/Kg	1	11/23/17	JLI	SW8260C
1,1-Dichloroethane	ND	4.4	ug/Kg	1	11/23/17	JLI	SW8260C
1,1-Dichloroethene	ND	4.4	ug/Kg	1	11/23/17	JLI	SW8260C
1,1-Dichloropropene	ND	4.4	ug/Kg	1	11/23/17	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	4.4	ug/Kg	1	11/23/17	JLI	SW8260C
1,2,3-Trichloropropane	ND	4.4	ug/Kg	1	11/23/17	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	4.4	ug/Kg	1	11/23/17	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	4.4	ug/Kg	1	11/23/17	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	4.4	ug/Kg	1	11/23/17	JLI	SW8260C
1,2-Dibromoethane	ND	4.4	ug/Kg	1	11/23/17	JLI	SW8260C
1,2-Dichlorobenzene	ND	4.4	ug/Kg	1	11/23/17	JLI	SW8260C
1,2-Dichloroethane	ND	4.4	ug/Kg	1	11/23/17	JLI	SW8260C
1,2-Dichloropropane	ND	4.4	ug/Kg	1	11/23/17	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	4.4	ug/Kg	1	11/23/17	JLI	SW8260C
1,3-Dichlorobenzene	ND	4.4	ug/Kg	1	11/23/17	JLI	SW8260C
1,3-Dichloropropane	ND	4.4	ug/Kg	1	11/23/17	JLI	SW8260C
1,4-Dichlorobenzene	ND	4.4	ug/Kg	1	11/23/17	JLI	SW8260C
2,2-Dichloropropane	ND	4.4	ug/Kg	1	11/23/17	JLI	SW8260C
2-Chlorotoluene	ND	4.4	ug/Kg	1	11/23/17	JLI	SW8260C
2-Hexanone	ND	22	ug/Kg	1	11/23/17	JLI	SW8260C
2-Isopropyltoluene	ND	4.4	ug/Kg	1	11/23/17	JLI	SW8260C

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Project ID: BETANCES HOUSES GARAGE
Client ID: SB-1 (6-10 FT)

Phoenix I.D.: BZ46285

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference	
4-Chlorotoluene	ND	4.4	ug/Kg	1	11/23/17	JLI	SW8260C	
4-Methyl-2-pentanone	ND	22	ug/Kg	1	11/23/17	JLI	SW8260C	
Acetone	ND	22	ug/Kg	1	11/23/17	JLI	SW8260C	
Acrylonitrile	ND	8.8	ug/Kg	1	11/23/17	JLI	SW8260C	
Benzene	ND	4.4	ug/Kg	1	11/23/17	JLI	SW8260C	
Bromobenzene	ND	4.4	ug/Kg	1	11/23/17	JLI	SW8260C	
Bromochloromethane	ND	4.4	ug/Kg	1	11/23/17	JLI	SW8260C	
Bromodichloromethane	ND	4.4	ug/Kg	1	11/23/17	JLI	SW8260C	
Bromoform	ND	4.4	ug/Kg	1	11/23/17	JLI	SW8260C	
Bromomethane	ND	4.4	ug/Kg	1	11/23/17	JLI	SW8260C	
Carbon Disulfide	ND	4.4	ug/Kg	1	11/23/17	JLI	SW8260C	
Carbon tetrachloride	ND	4.4	ug/Kg	1	11/23/17	JLI	SW8260C	
Chlorobenzene	ND	4.4	ug/Kg	1	11/23/17	JLI	SW8260C	
Chloroethane	ND	4.4	ug/Kg	1	11/23/17	JLI	SW8260C	
Chloroform	ND	4.4	ug/Kg	1	11/23/17	JLI	SW8260C	
Chloromethane	ND	4.4	ug/Kg	1	11/23/17	JLI	SW8260C	
cis-1,2-Dichloroethene	ND	4.4	ug/Kg	1	11/23/17	JLI	SW8260C	
cis-1,3-Dichloropropene	ND	4.4	ug/Kg	1	11/23/17	JLI	SW8260C	
Dibromochloromethane	ND	4.4	ug/Kg	1	11/23/17	JLI	SW8260C	
Dibromomethane	ND	4.4	ug/Kg	1	11/23/17	JLI	SW8260C	
Dichlorodifluoromethane	ND	4.4	ug/Kg	1	11/23/17	JLI	SW8260C	
Ethylbenzene	ND	4.4	ug/Kg	1	11/23/17	JLI	SW8260C	
Hexachlorobutadiene	ND	4.4	ug/Kg	1	11/23/17	JLI	SW8260C	
Isopropylbenzene	ND	4.4	ug/Kg	1	11/23/17	JLI	SW8260C	
m&p-Xylene	ND	4.4	ug/Kg	1	11/23/17	JLI	SW8260C	
Methyl Ethyl Ketone	ND	22	ug/Kg	1	11/23/17	JLI	SW8260C	
Methyl t-butyl ether (MTBE)	ND	8.8	ug/Kg	1	11/23/17	JLI	SW8260C	
Methylene chloride	ND	8.8	ug/Kg	1	11/23/17	JLI	SW8260C	
Naphthalene	ND	4.4	ug/Kg	1	11/23/17	JLI	SW8260C	
n-Butylbenzene	ND	4.4	ug/Kg	1	11/23/17	JLI	SW8260C	
n-Propylbenzene	ND	4.4	ug/Kg	1	11/23/17	JLI	SW8260C	
o-Xylene	ND	4.4	ug/Kg	1	11/23/17	JLI	SW8260C	
p-Isopropyltoluene	ND	4.4	ug/Kg	1	11/23/17	JLI	SW8260C	
sec-Butylbenzene	ND	4.4	ug/Kg	1	11/23/17	JLI	SW8260C	
Styrene	ND	4.4	ug/Kg	1	11/23/17	JLI	SW8260C	
tert-Butylbenzene	ND	4.4	ug/Kg	1	11/23/17	JLI	SW8260C	
Tetrachloroethene	ND	4.4	ug/Kg	1	11/23/17	JLI	SW8260C	
Tetrahydrofuran (THF)	ND	8.8	ug/Kg	1	11/23/17	JLI	SW8260C	1
Toluene	ND	4.4	ug/Kg	1	11/23/17	JLI	SW8260C	
Total Xylenes	ND	4.4	ug/Kg	1	11/23/17	JLI	SW8260C	
trans-1,2-Dichloroethene	ND	4.4	ug/Kg	1	11/23/17	JLI	SW8260C	
trans-1,3-Dichloropropene	ND	4.4	ug/Kg	1	11/23/17	JLI	SW8260C	
trans-1,4-dichloro-2-butene	ND	8.8	ug/Kg	1	11/23/17	JLI	SW8260C	
Trichloroethene	ND	4.4	ug/Kg	1	11/23/17	JLI	SW8260C	
Trichlorofluoromethane	ND	4.4	ug/Kg	1	11/23/17	JLI	SW8260C	
Trichlorotrifluoroethane	ND	4.4	ug/Kg	1	11/23/17	JLI	SW8260C	
Vinyl chloride	ND	4.4	ug/Kg	1	11/23/17	JLI	SW8260C	
QA/QC Surrogates								
% 1,2-dichlorobenzene-d4	103		%	1	11/23/17	JLI	70 - 130 %	

Ver 3

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
% Bromofluorobenzene	94		%	1	11/23/17	JLI	70 - 130 %
% Dibromofluoromethane	98		%	1	11/23/17	JLI	70 - 130 %
% Toluene-d8	100		%	1	11/23/17	JLI	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	270	ug/Kg	1	11/23/17	DD	SW8270D
1,2,4-Trichlorobenzene	ND	270	ug/Kg	1	11/23/17	DD	SW8270D
1,2-Dichlorobenzene	ND	270	ug/Kg	1	11/23/17	DD	SW8270D
1,2-Diphenylhydrazine	ND	390	ug/Kg	1	11/23/17	DD	SW8270D
1,3-Dichlorobenzene	ND	270	ug/Kg	1	11/23/17	DD	SW8270D
1,4-Dichlorobenzene	ND	270	ug/Kg	1	11/23/17	DD	SW8270D
2,4,5-Trichlorophenol	ND	270	ug/Kg	1	11/23/17	DD	SW8270D
2,4,6-Trichlorophenol	ND	270	ug/Kg	1	11/23/17	DD	SW8270D
2,4-Dichlorophenol	ND	270	ug/Kg	1	11/23/17	DD	SW8270D
2,4-Dimethylphenol	ND	270	ug/Kg	1	11/23/17	DD	SW8270D
2,4-Dinitrophenol	ND	390	ug/Kg	1	11/23/17	DD	SW8270D
2,4-Dinitrotoluene	ND	270	ug/Kg	1	11/23/17	DD	SW8270D
2,6-Dinitrotoluene	ND	270	ug/Kg	1	11/23/17	DD	SW8270D
2-Chloronaphthalene	ND	270	ug/Kg	1	11/23/17	DD	SW8270D
2-Chlorophenol	ND	270	ug/Kg	1	11/23/17	DD	SW8270D
2-Methylnaphthalene	ND	270	ug/Kg	1	11/23/17	DD	SW8270D
2-Methylphenol (o-cresol)	ND	270	ug/Kg	1	11/23/17	DD	SW8270D
2-Nitroaniline	ND	390	ug/Kg	1	11/23/17	DD	SW8270D
2-Nitrophenol	ND	270	ug/Kg	1	11/23/17	DD	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	390	ug/Kg	1	11/23/17	DD	SW8270D
3,3'-Dichlorobenzidine	ND	270	ug/Kg	1	11/23/17	DD	SW8270D
3-Nitroaniline	ND	390	ug/Kg	1	11/23/17	DD	SW8270D
4,6-Dinitro-2-methylphenol	ND	390	ug/Kg	1	11/23/17	DD	SW8270D
4-Bromophenyl phenyl ether	ND	390	ug/Kg	1	11/23/17	DD	SW8270D
4-Chloro-3-methylphenol	ND	270	ug/Kg	1	11/23/17	DD	SW8270D
4-Chloroaniline	ND	270	ug/Kg	1	11/23/17	DD	SW8270D
4-Chlorophenyl phenyl ether	ND	270	ug/Kg	1	11/23/17	DD	SW8270D
4-Nitroaniline	ND	630	ug/Kg	1	11/23/17	DD	SW8270D
4-Nitrophenol	ND	270	ug/Kg	1	11/23/17	DD	SW8270D
Acenaphthene	ND	270	ug/Kg	1	11/23/17	DD	SW8270D
Acenaphthylene	ND	270	ug/Kg	1	11/23/17	DD	SW8270D
Acetophenone	ND	270	ug/Kg	1	11/23/17	DD	SW8270D
Aniline	ND	390	ug/Kg	1	11/23/17	DD	SW8270D
Anthracene	ND	270	ug/Kg	1	11/23/17	DD	SW8270D
Benz(a)anthracene	ND	270	ug/Kg	1	11/23/17	DD	SW8270D
Benzidine	ND	270	ug/Kg	1	11/23/17	DD	SW8270D
Benzo(a)pyrene	ND	270	ug/Kg	1	11/23/17	DD	SW8270D
Benzo(b)fluoranthene	ND	270	ug/Kg	1	11/23/17	DD	SW8270D
Benzo(ghi)perylene	ND	270	ug/Kg	1	11/23/17	DD	SW8270D
Benzo(k)fluoranthene	ND	270	ug/Kg	1	11/23/17	DD	SW8270D
Benzoic acid	ND	780	ug/Kg	1	11/23/17	DD	SW8270D
Benzyl butyl phthalate	ND	270	ug/Kg	1	11/23/17	DD	SW8270D
Bis(2-chloroethoxy)methane	ND	270	ug/Kg	1	11/23/17	DD	SW8270D
Bis(2-chloroethyl)ether	ND	390	ug/Kg	1	11/23/17	DD	SW8270D
Bis(2-chloroisopropyl)ether	ND	270	ug/Kg	1	11/23/17	DD	SW8270D

Project ID: BETANCES HOUSES GARAGE
Client ID: SB-1 (6-10 FT)

Phoenix I.D.: BZ46285

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference	
Bis(2-ethylhexyl)phthalate	ND	270	ug/Kg	1	11/23/17	DD	SW8270D	
Carbazole	ND	390	ug/Kg	1	11/23/17	DD	SW8270D	
Chrysene	ND	270	ug/Kg	1	11/23/17	DD	SW8270D	
Dibenz(a,h)anthracene	ND	270	ug/Kg	1	11/23/17	DD	SW8270D	
Dibenzofuran	ND	270	ug/Kg	1	11/23/17	DD	SW8270D	
Diethyl phthalate	ND	270	ug/Kg	1	11/23/17	DD	SW8270D	
Dimethylphthalate	ND	270	ug/Kg	1	11/23/17	DD	SW8270D	
Di-n-butylphthalate	ND	780	ug/Kg	1	11/23/17	DD	SW8270D	
Di-n-octylphthalate	ND	270	ug/Kg	1	11/23/17	DD	SW8270D	
Fluoranthene	ND	270	ug/Kg	1	11/23/17	DD	SW8270D	
Fluorene	ND	270	ug/Kg	1	11/23/17	DD	SW8270D	
Hexachlorobenzene	ND	270	ug/Kg	1	11/23/17	DD	SW8270D	
Hexachlorobutadiene	ND	270	ug/Kg	1	11/23/17	DD	SW8270D	
Hexachlorocyclopentadiene	ND	270	ug/Kg	1	11/23/17	DD	SW8270D	
Hexachloroethane	ND	270	ug/Kg	1	11/23/17	DD	SW8270D	
Indeno(1,2,3-cd)pyrene	ND	270	ug/Kg	1	11/23/17	DD	SW8270D	
Isophorone	ND	270	ug/Kg	1	11/23/17	DD	SW8270D	
Naphthalene	ND	270	ug/Kg	1	11/23/17	DD	SW8270D	
Nitrobenzene	ND	270	ug/Kg	1	11/23/17	DD	SW8270D	
N-Nitrosodimethylamine	ND	390	ug/Kg	1	11/23/17	DD	SW8270D	
N-Nitrosodi-n-propylamine	ND	270	ug/Kg	1	11/23/17	DD	SW8270D	
N-Nitrosodiphenylamine	ND	390	ug/Kg	1	11/23/17	DD	SW8270D	
Pentachloronitrobenzene	ND	390	ug/Kg	1	11/23/17	DD	SW8270D	
Pentachlorophenol	ND	390	ug/Kg	1	11/23/17	DD	SW8270D	
Phenanthrene	ND	270	ug/Kg	1	11/23/17	DD	SW8270D	
Phenol	ND	270	ug/Kg	1	11/23/17	DD	SW8270D	
Pyrene	ND	270	ug/Kg	1	11/23/17	DD	SW8270D	
Pyridine	ND	390	ug/Kg	1	11/23/17	DD	SW8270D	
QA/QC Surrogates								
% 2,4,6-Tribromophenol	60		%	1	11/23/17	DD	30 - 130 %	
% 2-Fluorobiphenyl	78		%	1	11/23/17	DD	30 - 130 %	
% 2-Fluorophenol	58		%	1	11/23/17	DD	30 - 130 %	
% Nitrobenzene-d5	65		%	1	11/23/17	DD	30 - 130 %	
% Phenol-d5	63		%	1	11/23/17	DD	30 - 130 %	
% Terphenyl-d14	72		%	1	11/23/17	DD	30 - 130 %	
Field Extraction	Completed				11/21/17		SW5035A	1

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

1 = This parameter is not certified by 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 (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.

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

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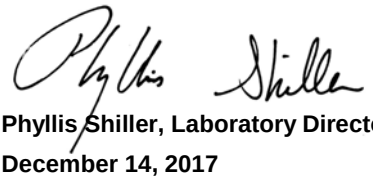


Phyllis Shiller, Laboratory Director
December 14, 2017
Reviewed and Released by: Bobbi Aloisa, Vice President

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

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

December 14, 2017

FOR: Attn: Ms. Antoinette Ollivierre
American Env. Assessment & Solutions Inc
679 Lafayette Ave.
3rd Floor
Brooklyn, NY 11216

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		11/21/17	10:30
Location Code:	AEAS-INC	Received by:	SW	11/22/17	16:19
Rush Request:	72 Hour	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBZ46284
Phoenix ID: BZ46286

Project ID: BETANCES HOUSES GARAGE
Client ID: SB-2 (1-4 FT)

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Percent Solid	87		%		11/22/17	Q	SW846-%Solid
Soil Extraction for SVOA	Completed				11/22/17	JJ/CKV	SW3545A
Volatiles							
1,1,1,2-Tetrachloroethane	ND	3.3	ug/Kg	1	11/28/17	JLI	SW8260C
1,1,1-Trichloroethane	ND	3.3	ug/Kg	1	11/28/17	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	3.3	ug/Kg	1	11/28/17	JLI	SW8260C
1,1,2-Trichloroethane	ND	3.3	ug/Kg	1	11/28/17	JLI	SW8260C
1,1-Dichloroethane	ND	3.3	ug/Kg	1	11/28/17	JLI	SW8260C
1,1-Dichloroethene	ND	3.3	ug/Kg	1	11/28/17	JLI	SW8260C
1,1-Dichloropropene	ND	3.3	ug/Kg	1	11/28/17	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	3.3	ug/Kg	1	11/28/17	JLI	SW8260C
1,2,3-Trichloropropane	ND	3.3	ug/Kg	1	11/28/17	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	3.3	ug/Kg	1	11/28/17	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	3.3	ug/Kg	1	11/28/17	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	3.3	ug/Kg	1	11/28/17	JLI	SW8260C
1,2-Dibromoethane	ND	3.3	ug/Kg	1	11/28/17	JLI	SW8260C
1,2-Dichlorobenzene	ND	3.3	ug/Kg	1	11/28/17	JLI	SW8260C
1,2-Dichloroethane	ND	3.3	ug/Kg	1	11/28/17	JLI	SW8260C
1,2-Dichloropropane	ND	3.3	ug/Kg	1	11/28/17	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	3.3	ug/Kg	1	11/28/17	JLI	SW8260C
1,3-Dichlorobenzene	ND	3.3	ug/Kg	1	11/28/17	JLI	SW8260C
1,3-Dichloropropane	ND	3.3	ug/Kg	1	11/28/17	JLI	SW8260C
1,4-Dichlorobenzene	ND	3.3	ug/Kg	1	11/28/17	JLI	SW8260C
2,2-Dichloropropane	ND	3.3	ug/Kg	1	11/28/17	JLI	SW8260C
2-Chlorotoluene	ND	3.3	ug/Kg	1	11/28/17	JLI	SW8260C
2-Hexanone	ND	17	ug/Kg	1	11/28/17	JLI	SW8260C
2-Isopropyltoluene	ND	3.3	ug/Kg	1	11/28/17	JLI	SW8260C

1

Project ID: BETANCES HOUSES GARAGE
Client ID: SB-2 (1-4 FT)

Phoenix I.D.: BZ46286

Parameter	Result		RL/ PQL	Units	Dilution	Date/Time	By	Reference	
4-Chlorotoluene	ND		3.3	ug/Kg	1	11/28/17	JLI	SW8260C	
4-Methyl-2-pentanone	ND		17	ug/Kg	1	11/28/17	JLI	SW8260C	
Acetone	22	S	17	ug/Kg	1	11/28/17	JLI	SW8260C	
Acrylonitrile	ND		6.7	ug/Kg	1	11/28/17	JLI	SW8260C	
Benzene	ND		3.3	ug/Kg	1	11/28/17	JLI	SW8260C	
Bromobenzene	ND		3.3	ug/Kg	1	11/28/17	JLI	SW8260C	
Bromochloromethane	ND		3.3	ug/Kg	1	11/28/17	JLI	SW8260C	
Bromodichloromethane	ND		3.3	ug/Kg	1	11/28/17	JLI	SW8260C	
Bromoform	ND		3.3	ug/Kg	1	11/28/17	JLI	SW8260C	
Bromomethane	ND		3.3	ug/Kg	1	11/28/17	JLI	SW8260C	
Carbon Disulfide	ND		3.3	ug/Kg	1	11/28/17	JLI	SW8260C	
Carbon tetrachloride	ND		3.3	ug/Kg	1	11/28/17	JLI	SW8260C	
Chlorobenzene	ND		3.3	ug/Kg	1	11/28/17	JLI	SW8260C	
Chloroethane	ND		3.3	ug/Kg	1	11/28/17	JLI	SW8260C	
Chloroform	ND		3.3	ug/Kg	1	11/28/17	JLI	SW8260C	
Chloromethane	ND		3.3	ug/Kg	1	11/28/17	JLI	SW8260C	
cis-1,2-Dichloroethene	ND		3.3	ug/Kg	1	11/28/17	JLI	SW8260C	
cis-1,3-Dichloropropene	ND		3.3	ug/Kg	1	11/28/17	JLI	SW8260C	
Dibromochloromethane	ND		3.3	ug/Kg	1	11/28/17	JLI	SW8260C	
Dibromomethane	ND		3.3	ug/Kg	1	11/28/17	JLI	SW8260C	
Dichlorodifluoromethane	ND		3.3	ug/Kg	1	11/28/17	JLI	SW8260C	
Ethylbenzene	ND		3.3	ug/Kg	1	11/28/17	JLI	SW8260C	
Hexachlorobutadiene	ND		3.3	ug/Kg	1	11/28/17	JLI	SW8260C	
Isopropylbenzene	ND		3.3	ug/Kg	1	11/28/17	JLI	SW8260C	
m&p-Xylene	ND		3.3	ug/Kg	1	11/28/17	JLI	SW8260C	
Methyl Ethyl Ketone	ND		17	ug/Kg	1	11/28/17	JLI	SW8260C	
Methyl t-butyl ether (MTBE)	ND		6.7	ug/Kg	1	11/28/17	JLI	SW8260C	
Methylene chloride	ND		6.7	ug/Kg	1	11/28/17	JLI	SW8260C	
Naphthalene	ND		3.3	ug/Kg	1	11/28/17	JLI	SW8260C	
n-Butylbenzene	ND		3.3	ug/Kg	1	11/28/17	JLI	SW8260C	
n-Propylbenzene	ND		3.3	ug/Kg	1	11/28/17	JLI	SW8260C	
o-Xylene	ND		3.3	ug/Kg	1	11/28/17	JLI	SW8260C	
p-Isopropyltoluene	ND		3.3	ug/Kg	1	11/28/17	JLI	SW8260C	
sec-Butylbenzene	ND		3.3	ug/Kg	1	11/28/17	JLI	SW8260C	
Styrene	ND		3.3	ug/Kg	1	11/28/17	JLI	SW8260C	
tert-Butylbenzene	ND		3.3	ug/Kg	1	11/28/17	JLI	SW8260C	
Tetrachloroethene	ND		3.3	ug/Kg	1	11/28/17	JLI	SW8260C	
Tetrahydrofuran (THF)	ND		6.7	ug/Kg	1	11/28/17	JLI	SW8260C	1
Toluene	ND		3.3	ug/Kg	1	11/28/17	JLI	SW8260C	
Total Xylenes	ND		3.3	ug/Kg	1	11/28/17	JLI	SW8260C	
trans-1,2-Dichloroethene	ND		3.3	ug/Kg	1	11/28/17	JLI	SW8260C	
trans-1,3-Dichloropropene	ND		3.3	ug/Kg	1	11/28/17	JLI	SW8260C	
trans-1,4-dichloro-2-butene	ND		6.7	ug/Kg	1	11/28/17	JLI	SW8260C	
Trichloroethene	ND		3.3	ug/Kg	1	11/28/17	JLI	SW8260C	
Trichlorofluoromethane	ND		3.3	ug/Kg	1	11/28/17	JLI	SW8260C	
Trichlorotrifluoroethane	ND		3.3	ug/Kg	1	11/28/17	JLI	SW8260C	
Vinyl chloride	ND		3.3	ug/Kg	1	11/28/17	JLI	SW8260C	
QA/QC Surrogates									
% 1,2-dichlorobenzene-d4	101			%	1	11/28/17	JLI	70 - 130 %	

Project ID: BETANCES HOUSES GARAGE
Client ID: SB-2 (1-4 FT)

Phoenix I.D.: BZ46286

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
% Bromofluorobenzene	103		%	1	11/28/17	JLI	70 - 130 %
% Dibromofluoromethane	98		%	1	11/28/17	JLI	70 - 130 %
% Toluene-d8	102		%	1	11/28/17	JLI	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	260	ug/Kg	1	11/23/17	DD	SW8270D
1,2,4-Trichlorobenzene	ND	260	ug/Kg	1	11/23/17	DD	SW8270D
1,2-Dichlorobenzene	ND	260	ug/Kg	1	11/23/17	DD	SW8270D
1,2-Diphenylhydrazine	ND	370	ug/Kg	1	11/23/17	DD	SW8270D
1,3-Dichlorobenzene	ND	260	ug/Kg	1	11/23/17	DD	SW8270D
1,4-Dichlorobenzene	ND	260	ug/Kg	1	11/23/17	DD	SW8270D
2,4,5-Trichlorophenol	ND	260	ug/Kg	1	11/23/17	DD	SW8270D
2,4,6-Trichlorophenol	ND	260	ug/Kg	1	11/23/17	DD	SW8270D
2,4-Dichlorophenol	ND	260	ug/Kg	1	11/23/17	DD	SW8270D
2,4-Dimethylphenol	ND	260	ug/Kg	1	11/23/17	DD	SW8270D
2,4-Dinitrophenol	ND	370	ug/Kg	1	11/23/17	DD	SW8270D
2,4-Dinitrotoluene	ND	260	ug/Kg	1	11/23/17	DD	SW8270D
2,6-Dinitrotoluene	ND	260	ug/Kg	1	11/23/17	DD	SW8270D
2-Chloronaphthalene	ND	260	ug/Kg	1	11/23/17	DD	SW8270D
2-Chlorophenol	ND	260	ug/Kg	1	11/23/17	DD	SW8270D
2-Methylnaphthalene	ND	260	ug/Kg	1	11/23/17	DD	SW8270D
2-Methylphenol (o-cresol)	ND	260	ug/Kg	1	11/23/17	DD	SW8270D
2-Nitroaniline	ND	370	ug/Kg	1	11/23/17	DD	SW8270D
2-Nitrophenol	ND	260	ug/Kg	1	11/23/17	DD	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	370	ug/Kg	1	11/23/17	DD	SW8270D
3,3'-Dichlorobenzidine	ND	260	ug/Kg	1	11/23/17	DD	SW8270D
3-Nitroaniline	ND	370	ug/Kg	1	11/23/17	DD	SW8270D
4,6-Dinitro-2-methylphenol	ND	370	ug/Kg	1	11/23/17	DD	SW8270D
4-Bromophenyl phenyl ether	ND	370	ug/Kg	1	11/23/17	DD	SW8270D
4-Chloro-3-methylphenol	ND	260	ug/Kg	1	11/23/17	DD	SW8270D
4-Chloroaniline	ND	260	ug/Kg	1	11/23/17	DD	SW8270D
4-Chlorophenyl phenyl ether	ND	260	ug/Kg	1	11/23/17	DD	SW8270D
4-Nitroaniline	ND	600	ug/Kg	1	11/23/17	DD	SW8270D
4-Nitrophenol	ND	260	ug/Kg	1	11/23/17	DD	SW8270D
Acenaphthene	460	260	ug/Kg	1	11/23/17	DD	SW8270D
Acenaphthylene	ND	260	ug/Kg	1	11/23/17	DD	SW8270D
Acetophenone	ND	260	ug/Kg	1	11/23/17	DD	SW8270D
Aniline	ND	370	ug/Kg	1	11/23/17	DD	SW8270D
Anthracene	ND	260	ug/Kg	1	11/23/17	DD	SW8270D
Benz(a)anthracene	310	260	ug/Kg	1	11/23/17	DD	SW8270D
Benzidine	ND	260	ug/Kg	1	11/23/17	DD	SW8270D
Benzo(a)pyrene	350	260	ug/Kg	1	11/23/17	DD	SW8270D
Benzo(b)fluoranthene	330	260	ug/Kg	1	11/23/17	DD	SW8270D
Benzo(ghi)perylene	260	260	ug/Kg	1	11/23/17	DD	SW8270D
Benzo(k)fluoranthene	320	260	ug/Kg	1	11/23/17	DD	SW8270D
Benzoic acid	ND	750	ug/Kg	1	11/23/17	DD	SW8270D
Benzyl butyl phthalate	ND	260	ug/Kg	1	11/23/17	DD	SW8270D
Bis(2-chloroethoxy)methane	ND	260	ug/Kg	1	11/23/17	DD	SW8270D
Bis(2-chloroethyl)ether	ND	370	ug/Kg	1	11/23/17	DD	SW8270D
Bis(2-chloroisopropyl)ether	ND	260	ug/Kg	1	11/23/17	DD	SW8270D

Project ID: BETANCES HOUSES GARAGE
Client ID: SB-2 (1-4 FT)

Phoenix I.D.: BZ46286

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference	
Bis(2-ethylhexyl)phthalate	ND	260	ug/Kg	1	11/23/17	DD	SW8270D	
Carbazole	ND	370	ug/Kg	1	11/23/17	DD	SW8270D	
Chrysene	370	260	ug/Kg	1	11/23/17	DD	SW8270D	
Dibenz(a,h)anthracene	ND	260	ug/Kg	1	11/23/17	DD	SW8270D	
Dibenzofuran	ND	260	ug/Kg	1	11/23/17	DD	SW8270D	
Diethyl phthalate	ND	260	ug/Kg	1	11/23/17	DD	SW8270D	
Dimethylphthalate	ND	260	ug/Kg	1	11/23/17	DD	SW8270D	
Di-n-butylphthalate	ND	750	ug/Kg	1	11/23/17	DD	SW8270D	
Di-n-octylphthalate	ND	260	ug/Kg	1	11/23/17	DD	SW8270D	
Fluoranthene	1100	260	ug/Kg	1	11/23/17	DD	SW8270D	
Fluorene	400	260	ug/Kg	1	11/23/17	DD	SW8270D	
Hexachlorobenzene	ND	260	ug/Kg	1	11/23/17	DD	SW8270D	
Hexachlorobutadiene	ND	260	ug/Kg	1	11/23/17	DD	SW8270D	
Hexachlorocyclopentadiene	ND	260	ug/Kg	1	11/23/17	DD	SW8270D	
Hexachloroethane	ND	260	ug/Kg	1	11/23/17	DD	SW8270D	
Indeno(1,2,3-cd)pyrene	290	260	ug/Kg	1	11/23/17	DD	SW8270D	
Isophorone	ND	260	ug/Kg	1	11/23/17	DD	SW8270D	
Naphthalene	ND	260	ug/Kg	1	11/23/17	DD	SW8270D	
Nitrobenzene	ND	260	ug/Kg	1	11/23/17	DD	SW8270D	
N-Nitrosodimethylamine	ND	370	ug/Kg	1	11/23/17	DD	SW8270D	
N-Nitrosodi-n-propylamine	ND	260	ug/Kg	1	11/23/17	DD	SW8270D	
N-Nitrosodiphenylamine	ND	370	ug/Kg	1	11/23/17	DD	SW8270D	
Pentachloronitrobenzene	ND	370	ug/Kg	1	11/23/17	DD	SW8270D	
Pentachlorophenol	ND	370	ug/Kg	1	11/23/17	DD	SW8270D	
Phenanthrene	490	260	ug/Kg	1	11/23/17	DD	SW8270D	
Phenol	ND	260	ug/Kg	1	11/23/17	DD	SW8270D	
Pyrene	830	260	ug/Kg	1	11/23/17	DD	SW8270D	
Pyridine	ND	370	ug/Kg	1	11/23/17	DD	SW8270D	
QA/QC Surrogates								
% 2,4,6-Tribromophenol	64		%	1	11/23/17	DD	30 - 130 %	
% 2-Fluorobiphenyl	80		%	1	11/23/17	DD	30 - 130 %	
% 2-Fluorophenol	57		%	1	11/23/17	DD	30 - 130 %	
% Nitrobenzene-d5	63		%	1	11/23/17	DD	30 - 130 %	
% Phenol-d5	63		%	1	11/23/17	DD	30 - 130 %	
% Terphenyl-d14	70		%	1	11/23/17	DD	30 - 130 %	
Field Extraction	Completed				11/21/17		SW5035A	1

Project ID: BETANCES HOUSES GARAGE
Client ID: SB-2 (1-4 FT)

Phoenix I.D.: BZ46286

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

1 = This parameter is not certified by 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 (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.

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 there are any questions regarding this data, please call Phoenix Client Services.

Phyllis Shiller, Laboratory Director
December 14, 2017
Reviewed and Released by: Bobbi Aloisa, Vice President

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

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

December 14, 2017

FOR: Attn: Ms. Antoinette Ollivierre
American Env. Assessment & Solutions Inc
679 Lafayette Ave.
3rd Floor
Brooklyn, NY 11216

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		11/21/17	10:45
Location Code:	AEAS-INC	Received by:	SW	11/22/17	16:19
Rush Request:	72 Hour	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBZ46284
Phoenix ID: BZ46287

Project ID: BETANCES HOUSES GARAGE
Client ID: SB-2 (6-8 FT)

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Percent Solid	86		%		11/22/17	Q	SW846-%Solid
Soil Extraction for SVOA	Completed				11/22/17	JJ/CKV	SW3545A
Volatiles							
1,1,1,2-Tetrachloroethane	ND	350	ug/Kg	50	11/28/17	JLI	SW8260C
1,1,1-Trichloroethane	ND	350	ug/Kg	50	11/28/17	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	350	ug/Kg	50	11/28/17	JLI	SW8260C
1,1,2-Trichloroethane	ND	350	ug/Kg	50	11/28/17	JLI	SW8260C
1,1-Dichloroethane	ND	350	ug/Kg	50	11/28/17	JLI	SW8260C
1,1-Dichloroethene	ND	350	ug/Kg	50	11/28/17	JLI	SW8260C
1,1-Dichloropropene	ND	350	ug/Kg	50	11/28/17	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	350	ug/Kg	50	11/28/17	JLI	SW8260C
1,2,3-Trichloropropane	ND	350	ug/Kg	50	11/28/17	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	350	ug/Kg	50	11/28/17	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	350	ug/Kg	50	11/28/17	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	350	ug/Kg	50	11/28/17	JLI	SW8260C
1,2-Dibromoethane	ND	350	ug/Kg	50	11/28/17	JLI	SW8260C
1,2-Dichlorobenzene	ND	350	ug/Kg	50	11/28/17	JLI	SW8260C
1,2-Dichloroethane	ND	350	ug/Kg	50	11/28/17	JLI	SW8260C
1,2-Dichloropropane	ND	350	ug/Kg	50	11/28/17	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	350	ug/Kg	50	11/28/17	JLI	SW8260C
1,3-Dichlorobenzene	ND	350	ug/Kg	50	11/28/17	JLI	SW8260C
1,3-Dichloropropane	ND	350	ug/Kg	50	11/28/17	JLI	SW8260C
1,4-Dichlorobenzene	ND	350	ug/Kg	50	11/28/17	JLI	SW8260C
2,2-Dichloropropane	ND	350	ug/Kg	50	11/28/17	JLI	SW8260C
2-Chlorotoluene	ND	350	ug/Kg	50	11/28/17	JLI	SW8260C
2-Hexanone	ND	1800	ug/Kg	50	11/28/17	JLI	SW8260C
2-Isopropyltoluene	ND	350	ug/Kg	50	11/28/17	JLI	SW8260C

1

Project ID: BETANCES HOUSES GARAGE
Client ID: SB-2 (6-8 FT)

Phoenix I.D.: BZ46287

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference	
4-Chlorotoluene	ND	350	ug/Kg	50	11/28/17	JLI	SW8260C	
4-Methyl-2-pentanone	ND	1800	ug/Kg	50	11/28/17	JLI	SW8260C	
Acetone	ND	1800	ug/Kg	50	11/28/17	JLI	SW8260C	
Acrylonitrile	ND	700	ug/Kg	50	11/28/17	JLI	SW8260C	
Benzene	ND	350	ug/Kg	50	11/28/17	JLI	SW8260C	
Bromobenzene	ND	350	ug/Kg	50	11/28/17	JLI	SW8260C	
Bromochloromethane	ND	350	ug/Kg	50	11/28/17	JLI	SW8260C	
Bromodichloromethane	ND	350	ug/Kg	50	11/28/17	JLI	SW8260C	
Bromoform	ND	350	ug/Kg	50	11/28/17	JLI	SW8260C	
Bromomethane	ND	350	ug/Kg	50	11/28/17	JLI	SW8260C	
Carbon Disulfide	ND	350	ug/Kg	50	11/28/17	JLI	SW8260C	
Carbon tetrachloride	ND	350	ug/Kg	50	11/28/17	JLI	SW8260C	
Chlorobenzene	ND	350	ug/Kg	50	11/28/17	JLI	SW8260C	
Chloroethane	ND	350	ug/Kg	50	11/28/17	JLI	SW8260C	
Chloroform	ND	350	ug/Kg	50	11/28/17	JLI	SW8260C	
Chloromethane	ND	350	ug/Kg	50	11/28/17	JLI	SW8260C	
cis-1,2-Dichloroethene	ND	350	ug/Kg	50	11/28/17	JLI	SW8260C	
cis-1,3-Dichloropropene	ND	350	ug/Kg	50	11/28/17	JLI	SW8260C	
Dibromochloromethane	ND	350	ug/Kg	50	11/28/17	JLI	SW8260C	
Dibromomethane	ND	350	ug/Kg	50	11/28/17	JLI	SW8260C	
Dichlorodifluoromethane	ND	350	ug/Kg	50	11/28/17	JLI	SW8260C	
Ethylbenzene	ND	350	ug/Kg	50	11/28/17	JLI	SW8260C	
Hexachlorobutadiene	ND	350	ug/Kg	50	11/28/17	JLI	SW8260C	
Isopropylbenzene	ND	350	ug/Kg	50	11/28/17	JLI	SW8260C	
m&p-Xylene	ND	350	ug/Kg	50	11/28/17	JLI	SW8260C	
Methyl Ethyl Ketone	ND	1800	ug/Kg	50	11/28/17	JLI	SW8260C	
Methyl t-butyl ether (MTBE)	ND	700	ug/Kg	50	11/28/17	JLI	SW8260C	
Methylene chloride	ND	700	ug/Kg	50	11/28/17	JLI	SW8260C	
Naphthalene	1600	350	ug/Kg	50	11/28/17	JLI	SW8260C	
n-Butylbenzene	ND	350	ug/Kg	50	11/28/17	JLI	SW8260C	
n-Propylbenzene	ND	350	ug/Kg	50	11/28/17	JLI	SW8260C	
o-Xylene	ND	350	ug/Kg	50	11/28/17	JLI	SW8260C	
p-Isopropyltoluene	ND	350	ug/Kg	50	11/28/17	JLI	SW8260C	
sec-Butylbenzene	ND	350	ug/Kg	50	11/28/17	JLI	SW8260C	
Styrene	ND	350	ug/Kg	50	11/28/17	JLI	SW8260C	
tert-Butylbenzene	ND	350	ug/Kg	50	11/28/17	JLI	SW8260C	
Tetrachloroethene	ND	350	ug/Kg	50	11/28/17	JLI	SW8260C	
Tetrahydrofuran (THF)	ND	700	ug/Kg	50	11/28/17	JLI	SW8260C	1
Toluene	ND	350	ug/Kg	50	11/28/17	JLI	SW8260C	
Total Xylenes	ND	350	ug/Kg	50	11/28/17	JLI	SW8260C	
trans-1,2-Dichloroethene	ND	350	ug/Kg	50	11/28/17	JLI	SW8260C	
trans-1,3-Dichloropropene	ND	350	ug/Kg	50	11/28/17	JLI	SW8260C	
trans-1,4-dichloro-2-butene	ND	700	ug/Kg	50	11/28/17	JLI	SW8260C	
Trichloroethene	ND	350	ug/Kg	50	11/28/17	JLI	SW8260C	
Trichlorofluoromethane	ND	350	ug/Kg	50	11/28/17	JLI	SW8260C	
Trichlorotrifluoroethane	ND	350	ug/Kg	50	11/28/17	JLI	SW8260C	
Vinyl chloride	ND	350	ug/Kg	50	11/28/17	JLI	SW8260C	
QA/QC Surrogates								
% 1,2-dichlorobenzene-d4	99		%	50	11/28/17	JLI	70 - 130 %	

Project ID: BETANCES HOUSES GARAGE
Client ID: SB-2 (6-8 FT)

Phoenix I.D.: BZ46287

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
% Bromofluorobenzene	113		%	50	11/28/17	JLI	70 - 130 %
% Dibromofluoromethane	93		%	50	11/28/17	JLI	70 - 130 %
% Toluene-d8	102		%	50	11/28/17	JLI	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	5400	ug/Kg	20	11/28/17	PS	SW8270D
1,2,4-Trichlorobenzene	ND	5400	ug/Kg	20	11/28/17	PS	SW8270D
1,2-Dichlorobenzene	ND	5400	ug/Kg	20	11/28/17	PS	SW8270D
1,2-Diphenylhydrazine	ND	7700	ug/Kg	20	11/28/17	PS	SW8270D
1,3-Dichlorobenzene	ND	5400	ug/Kg	20	11/28/17	PS	SW8270D
1,4-Dichlorobenzene	ND	5400	ug/Kg	20	11/28/17	PS	SW8270D
2,4,5-Trichlorophenol	ND	5400	ug/Kg	20	11/28/17	PS	SW8270D
2,4,6-Trichlorophenol	ND	5400	ug/Kg	20	11/28/17	PS	SW8270D
2,4-Dichlorophenol	ND	5400	ug/Kg	20	11/28/17	PS	SW8270D
2,4-Dimethylphenol	ND	5400	ug/Kg	20	11/28/17	PS	SW8270D
2,4-Dinitrophenol	ND	7700	ug/Kg	20	11/28/17	PS	SW8270D
2,4-Dinitrotoluene	ND	5400	ug/Kg	20	11/28/17	PS	SW8270D
2,6-Dinitrotoluene	ND	5400	ug/Kg	20	11/28/17	PS	SW8270D
2-Chloronaphthalene	ND	5400	ug/Kg	20	11/28/17	PS	SW8270D
2-Chlorophenol	ND	5400	ug/Kg	20	11/28/17	PS	SW8270D
2-Methylnaphthalene	ND	5400	ug/Kg	20	11/28/17	PS	SW8270D
2-Methylphenol (o-cresol)	ND	5400	ug/Kg	20	11/28/17	PS	SW8270D
2-Nitroaniline	ND	7700	ug/Kg	20	11/28/17	PS	SW8270D
2-Nitrophenol	ND	5400	ug/Kg	20	11/28/17	PS	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	7700	ug/Kg	20	11/28/17	PS	SW8270D
3,3'-Dichlorobenzidine	ND	5400	ug/Kg	20	11/28/17	PS	SW8270D
3-Nitroaniline	ND	7700	ug/Kg	20	11/28/17	PS	SW8270D
4,6-Dinitro-2-methylphenol	ND	7700	ug/Kg	20	11/28/17	PS	SW8270D
4-Bromophenyl phenyl ether	ND	7700	ug/Kg	20	11/28/17	PS	SW8270D
4-Chloro-3-methylphenol	ND	5400	ug/Kg	20	11/28/17	PS	SW8270D
4-Chloroaniline	ND	5400	ug/Kg	20	11/28/17	PS	SW8270D
4-Chlorophenyl phenyl ether	ND	5400	ug/Kg	20	11/28/17	PS	SW8270D
4-Nitroaniline	ND	12000	ug/Kg	20	11/28/17	PS	SW8270D
4-Nitrophenol	ND	5400	ug/Kg	20	11/28/17	PS	SW8270D
Acenaphthene	ND	5400	ug/Kg	20	11/28/17	PS	SW8270D
Acenaphthylene	ND	5400	ug/Kg	20	11/28/17	PS	SW8270D
Acetophenone	ND	5400	ug/Kg	20	11/28/17	PS	SW8270D
Aniline	ND	7700	ug/Kg	20	11/28/17	PS	SW8270D
Anthracene	ND	5400	ug/Kg	20	11/28/17	PS	SW8270D
Benz(a)anthracene	ND	5400	ug/Kg	20	11/28/17	PS	SW8270D
Benzidine	ND	5400	ug/Kg	20	11/28/17	PS	SW8270D
Benzo(a)pyrene	1900	1500	ug/Kg	20	11/28/17	PS	SW8270D
Benzo(b)fluoranthene	ND	5400	ug/Kg	20	11/28/17	PS	SW8270D
Benzo(ghi)perylene	1800	1500	ug/Kg	20	11/28/17	PS	SW8270D
Benzo(k)fluoranthene	ND	5400	ug/Kg	20	11/28/17	PS	SW8270D
Benzoic acid	ND	15000	ug/Kg	20	11/28/17	PS	SW8270D
Benzyl butyl phthalate	ND	5400	ug/Kg	20	11/28/17	PS	SW8270D
Bis(2-chloroethoxy)methane	ND	5400	ug/Kg	20	11/28/17	PS	SW8270D
Bis(2-chloroethyl)ether	ND	7700	ug/Kg	20	11/28/17	PS	SW8270D
Bis(2-chloroisopropyl)ether	ND	5400	ug/Kg	20	11/28/17	PS	SW8270D

Project ID: BETANCES HOUSES GARAGE
Client ID: SB-2 (6-8 FT)

Phoenix I.D.: BZ46287

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference	
Bis(2-ethylhexyl)phthalate	ND	54000	ug/Kg	200	11/28/17	PS	SW8270D	
Carbazole	ND	7700	ug/Kg	20	11/28/17	PS	SW8270D	
Chrysene	ND	5400	ug/Kg	20	11/28/17	PS	SW8270D	
Dibenz(a,h)anthracene	ND	5400	ug/Kg	20	11/28/17	PS	SW8270D	
Dibenzofuran	ND	5400	ug/Kg	20	11/28/17	PS	SW8270D	
Diethyl phthalate	ND	5400	ug/Kg	20	11/28/17	PS	SW8270D	
Dimethylphthalate	ND	5400	ug/Kg	20	11/28/17	PS	SW8270D	
Di-n-butylphthalate	ND	15000	ug/Kg	20	11/28/17	PS	SW8270D	
Di-n-octylphthalate	ND	5400	ug/Kg	20	11/28/17	PS	SW8270D	
Fluoranthene	ND	5400	ug/Kg	20	11/28/17	PS	SW8270D	
Fluorene	ND	5400	ug/Kg	20	11/28/17	PS	SW8270D	
Hexachlorobenzene	ND	5400	ug/Kg	20	11/28/17	PS	SW8270D	
Hexachlorobutadiene	ND	5400	ug/Kg	20	11/28/17	PS	SW8270D	
Hexachlorocyclopentadiene	ND	5400	ug/Kg	20	11/28/17	PS	SW8270D	
Hexachloroethane	ND	5400	ug/Kg	20	11/28/17	PS	SW8270D	
Indeno(1,2,3-cd)pyrene	1900	1500	ug/Kg	20	11/28/17	PS	SW8270D	
Isophorone	ND	5400	ug/Kg	20	11/28/17	PS	SW8270D	
Naphthalene	ND	5400	ug/Kg	20	11/28/17	PS	SW8270D	
Nitrobenzene	ND	5400	ug/Kg	20	11/28/17	PS	SW8270D	
N-Nitrosodimethylamine	ND	7700	ug/Kg	20	11/28/17	PS	SW8270D	
N-Nitrosodi-n-propylamine	ND	5400	ug/Kg	20	11/28/17	PS	SW8270D	
N-Nitrosodiphenylamine	ND	7700	ug/Kg	20	11/28/17	PS	SW8270D	
Pentachloronitrobenzene	ND	7700	ug/Kg	20	11/28/17	PS	SW8270D	
Pentachlorophenol	ND	7700	ug/Kg	20	11/28/17	PS	SW8270D	
Phenanthrene	ND	5400	ug/Kg	20	11/28/17	PS	SW8270D	
Phenol	ND	5400	ug/Kg	20	11/28/17	PS	SW8270D	
Pyrene	ND	5400	ug/Kg	20	11/28/17	PS	SW8270D	
Pyridine	ND	7700	ug/Kg	20	11/28/17	PS	SW8270D	
QA/QC Surrogates								
% 2,4,6-Tribromophenol	68		%	20	11/28/17	PS	30 - 130 %	
% 2-Fluorobiphenyl	73		%	20	11/28/17	PS	30 - 130 %	
% 2-Fluorophenol	58		%	20	11/28/17	PS	30 - 130 %	
% Nitrobenzene-d5	72		%	20	11/28/17	PS	30 - 130 %	
% Phenol-d5	61		%	20	11/28/17	PS	30 - 130 %	
% Terphenyl-d14	63		%	20	11/28/17	PS	30 - 130 %	
Semivolatile Library Search	Completed				12/13/17	DD		1
Field Extraction	Completed				11/21/17		SW5035A	1

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

1 = This parameter is not certified by 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 (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

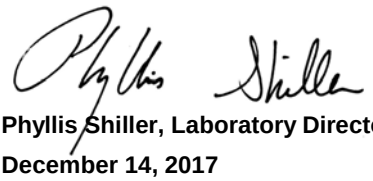
Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

Semi-Volatile Comment:
Due to a matrix interference and/or the presence of a large amount of non-target material in the sample, a dilution was required resulting in an elevated RL for the semivolatile analysis.

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

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

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



Phyllis Shiller, Laboratory Director

December 14, 2017

Reviewed and Released by: Bobbi Aloisa, Vice President

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

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

December 14, 2017

FOR: Attn: Ms. Antoinette Ollivierre
American Env. Assessment & Solutions Inc
679 Lafayette Ave.
3rd Floor
Brooklyn, NY 11216

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		11/21/17	11:40
Location Code:	AEAS-INC	Received by:	SW	11/22/17	16:19
Rush Request:	72 Hour	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBZ46284
Phoenix ID: BZ46288

Project ID: BETANCES HOUSES GARAGE
Client ID: SB-3 (1-5 FT)

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Percent Solid	88		%		11/22/17	Q	SW846-%Solid
Soil Extraction for SVOA	Completed				11/22/17	JJ/CKV	SW3545A
Volatiles							
1,1,1,2-Tetrachloroethane	ND	4.9	ug/Kg	1	11/28/17	JLI	SW8260C
1,1,1-Trichloroethane	ND	4.9	ug/Kg	1	11/28/17	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	4.9	ug/Kg	1	11/28/17	JLI	SW8260C
1,1,2-Trichloroethane	ND	4.9	ug/Kg	1	11/28/17	JLI	SW8260C
1,1-Dichloroethane	ND	4.9	ug/Kg	1	11/28/17	JLI	SW8260C
1,1-Dichloroethene	ND	4.9	ug/Kg	1	11/28/17	JLI	SW8260C
1,1-Dichloropropene	ND	4.9	ug/Kg	1	11/28/17	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	4.9	ug/Kg	1	11/28/17	JLI	SW8260C
1,2,3-Trichloropropane	ND	4.9	ug/Kg	1	11/28/17	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	4.9	ug/Kg	1	11/28/17	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	4.9	ug/Kg	1	11/28/17	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	4.9	ug/Kg	1	11/28/17	JLI	SW8260C
1,2-Dibromoethane	ND	4.9	ug/Kg	1	11/28/17	JLI	SW8260C
1,2-Dichlorobenzene	ND	4.9	ug/Kg	1	11/28/17	JLI	SW8260C
1,2-Dichloroethane	ND	4.9	ug/Kg	1	11/28/17	JLI	SW8260C
1,2-Dichloropropane	ND	4.9	ug/Kg	1	11/28/17	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	4.9	ug/Kg	1	11/28/17	JLI	SW8260C
1,3-Dichlorobenzene	ND	4.9	ug/Kg	1	11/28/17	JLI	SW8260C
1,3-Dichloropropane	ND	4.9	ug/Kg	1	11/28/17	JLI	SW8260C
1,4-Dichlorobenzene	ND	4.9	ug/Kg	1	11/28/17	JLI	SW8260C
2,2-Dichloropropane	ND	4.9	ug/Kg	1	11/28/17	JLI	SW8260C
2-Chlorotoluene	ND	4.9	ug/Kg	1	11/28/17	JLI	SW8260C
2-Hexanone	ND	24	ug/Kg	1	11/28/17	JLI	SW8260C
2-Isopropyltoluene	ND	4.9	ug/Kg	1	11/28/17	JLI	SW8260C

1

Project ID: BETANCES HOUSES GARAGE
Client ID: SB-3 (1-5 FT)

Phoenix I.D.: BZ46288

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference	
4-Chlorotoluene	ND	4.9	ug/Kg	1	11/28/17	JLI	SW8260C	
4-Methyl-2-pentanone	ND	24	ug/Kg	1	11/28/17	JLI	SW8260C	
Acetone	ND	24	ug/Kg	1	11/28/17	JLI	SW8260C	
Acrylonitrile	ND	9.8	ug/Kg	1	11/28/17	JLI	SW8260C	
Benzene	ND	4.9	ug/Kg	1	11/28/17	JLI	SW8260C	
Bromobenzene	ND	4.9	ug/Kg	1	11/28/17	JLI	SW8260C	
Bromochloromethane	ND	4.9	ug/Kg	1	11/28/17	JLI	SW8260C	
Bromodichloromethane	ND	4.9	ug/Kg	1	11/28/17	JLI	SW8260C	
Bromoform	ND	4.9	ug/Kg	1	11/28/17	JLI	SW8260C	
Bromomethane	ND	4.9	ug/Kg	1	11/28/17	JLI	SW8260C	
Carbon Disulfide	ND	4.9	ug/Kg	1	11/28/17	JLI	SW8260C	
Carbon tetrachloride	ND	4.9	ug/Kg	1	11/28/17	JLI	SW8260C	
Chlorobenzene	ND	4.9	ug/Kg	1	11/28/17	JLI	SW8260C	
Chloroethane	ND	4.9	ug/Kg	1	11/28/17	JLI	SW8260C	
Chloroform	ND	4.9	ug/Kg	1	11/28/17	JLI	SW8260C	
Chloromethane	ND	4.9	ug/Kg	1	11/28/17	JLI	SW8260C	
cis-1,2-Dichloroethene	ND	4.9	ug/Kg	1	11/28/17	JLI	SW8260C	
cis-1,3-Dichloropropene	ND	4.9	ug/Kg	1	11/28/17	JLI	SW8260C	
Dibromochloromethane	ND	4.9	ug/Kg	1	11/28/17	JLI	SW8260C	
Dibromomethane	ND	4.9	ug/Kg	1	11/28/17	JLI	SW8260C	
Dichlorodifluoromethane	ND	4.9	ug/Kg	1	11/28/17	JLI	SW8260C	
Ethylbenzene	ND	4.9	ug/Kg	1	11/28/17	JLI	SW8260C	
Hexachlorobutadiene	ND	4.9	ug/Kg	1	11/28/17	JLI	SW8260C	
Isopropylbenzene	ND	4.9	ug/Kg	1	11/28/17	JLI	SW8260C	
m&p-Xylene	ND	4.9	ug/Kg	1	11/28/17	JLI	SW8260C	
Methyl Ethyl Ketone	ND	24	ug/Kg	1	11/28/17	JLI	SW8260C	
Methyl t-butyl ether (MTBE)	ND	9.8	ug/Kg	1	11/28/17	JLI	SW8260C	
Methylene chloride	ND	9.8	ug/Kg	1	11/28/17	JLI	SW8260C	
Naphthalene	ND	4.9	ug/Kg	1	11/28/17	JLI	SW8260C	
n-Butylbenzene	ND	4.9	ug/Kg	1	11/28/17	JLI	SW8260C	
n-Propylbenzene	ND	4.9	ug/Kg	1	11/28/17	JLI	SW8260C	
o-Xylene	ND	4.9	ug/Kg	1	11/28/17	JLI	SW8260C	
p-Isopropyltoluene	ND	4.9	ug/Kg	1	11/28/17	JLI	SW8260C	
sec-Butylbenzene	ND	4.9	ug/Kg	1	11/28/17	JLI	SW8260C	
Styrene	ND	4.9	ug/Kg	1	11/28/17	JLI	SW8260C	
tert-Butylbenzene	ND	4.9	ug/Kg	1	11/28/17	JLI	SW8260C	
Tetrachloroethene	ND	4.9	ug/Kg	1	11/28/17	JLI	SW8260C	
Tetrahydrofuran (THF)	ND	9.8	ug/Kg	1	11/28/17	JLI	SW8260C	1
Toluene	ND	4.9	ug/Kg	1	11/28/17	JLI	SW8260C	
Total Xylenes	ND	4.9	ug/Kg	1	11/28/17	JLI	SW8260C	
trans-1,2-Dichloroethene	ND	4.9	ug/Kg	1	11/28/17	JLI	SW8260C	
trans-1,3-Dichloropropene	ND	4.9	ug/Kg	1	11/28/17	JLI	SW8260C	
trans-1,4-dichloro-2-butene	ND	9.8	ug/Kg	1	11/28/17	JLI	SW8260C	
Trichloroethene	ND	4.9	ug/Kg	1	11/28/17	JLI	SW8260C	
Trichlorofluoromethane	ND	4.9	ug/Kg	1	11/28/17	JLI	SW8260C	
Trichlorotrifluoroethane	ND	4.9	ug/Kg	1	11/28/17	JLI	SW8260C	
Vinyl chloride	ND	4.9	ug/Kg	1	11/28/17	JLI	SW8260C	
QA/QC Surrogates								
% 1,2-dichlorobenzene-d4	101		%	1	11/28/17	JLI	70 - 130 %	

Project ID: BETANCES HOUSES GARAGE
Client ID: SB-3 (1-5 FT)

Phoenix I.D.: BZ46288

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
% Bromofluorobenzene	99		%	1	11/28/17	JLI	70 - 130 %
% Dibromofluoromethane	101		%	1	11/28/17	JLI	70 - 130 %
% Toluene-d8	100		%	1	11/28/17	JLI	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	260	ug/Kg	1	11/23/17	DD	SW8270D
1,2,4-Trichlorobenzene	ND	260	ug/Kg	1	11/23/17	DD	SW8270D
1,2-Dichlorobenzene	ND	260	ug/Kg	1	11/23/17	DD	SW8270D
1,2-Diphenylhydrazine	ND	380	ug/Kg	1	11/23/17	DD	SW8270D
1,3-Dichlorobenzene	ND	260	ug/Kg	1	11/23/17	DD	SW8270D
1,4-Dichlorobenzene	ND	260	ug/Kg	1	11/23/17	DD	SW8270D
2,4,5-Trichlorophenol	ND	260	ug/Kg	1	11/23/17	DD	SW8270D
2,4,6-Trichlorophenol	ND	260	ug/Kg	1	11/23/17	DD	SW8270D
2,4-Dichlorophenol	ND	260	ug/Kg	1	11/23/17	DD	SW8270D
2,4-Dimethylphenol	ND	260	ug/Kg	1	11/23/17	DD	SW8270D
2,4-Dinitrophenol	ND	380	ug/Kg	1	11/23/17	DD	SW8270D
2,4-Dinitrotoluene	ND	260	ug/Kg	1	11/23/17	DD	SW8270D
2,6-Dinitrotoluene	ND	260	ug/Kg	1	11/23/17	DD	SW8270D
2-Chloronaphthalene	ND	260	ug/Kg	1	11/23/17	DD	SW8270D
2-Chlorophenol	ND	260	ug/Kg	1	11/23/17	DD	SW8270D
2-Methylnaphthalene	ND	260	ug/Kg	1	11/23/17	DD	SW8270D
2-Methylphenol (o-cresol)	ND	260	ug/Kg	1	11/23/17	DD	SW8270D
2-Nitroaniline	ND	380	ug/Kg	1	11/23/17	DD	SW8270D
2-Nitrophenol	ND	260	ug/Kg	1	11/23/17	DD	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	380	ug/Kg	1	11/23/17	DD	SW8270D
3,3'-Dichlorobenzidine	ND	260	ug/Kg	1	11/23/17	DD	SW8270D
3-Nitroaniline	ND	380	ug/Kg	1	11/23/17	DD	SW8270D
4,6-Dinitro-2-methylphenol	ND	380	ug/Kg	1	11/23/17	DD	SW8270D
4-Bromophenyl phenyl ether	ND	380	ug/Kg	1	11/23/17	DD	SW8270D
4-Chloro-3-methylphenol	ND	260	ug/Kg	1	11/23/17	DD	SW8270D
4-Chloroaniline	ND	260	ug/Kg	1	11/23/17	DD	SW8270D
4-Chlorophenyl phenyl ether	ND	260	ug/Kg	1	11/23/17	DD	SW8270D
4-Nitroaniline	ND	610	ug/Kg	1	11/23/17	DD	SW8270D
4-Nitrophenol	ND	260	ug/Kg	1	11/23/17	DD	SW8270D
Acenaphthene	ND	260	ug/Kg	1	11/23/17	DD	SW8270D
Acenaphthylene	ND	260	ug/Kg	1	11/23/17	DD	SW8270D
Acetophenone	ND	260	ug/Kg	1	11/23/17	DD	SW8270D
Aniline	ND	380	ug/Kg	1	11/23/17	DD	SW8270D
Anthracene	ND	260	ug/Kg	1	11/23/17	DD	SW8270D
Benz(a)anthracene	ND	260	ug/Kg	1	11/23/17	DD	SW8270D
Benzidine	ND	260	ug/Kg	1	11/23/17	DD	SW8270D
Benzo(a)pyrene	370	260	ug/Kg	1	11/23/17	DD	SW8270D
Benzo(b)fluoranthene	350	260	ug/Kg	1	11/23/17	DD	SW8270D
Benzo(ghi)perylene	ND	260	ug/Kg	1	11/23/17	DD	SW8270D
Benzo(k)fluoranthene	350	260	ug/Kg	1	11/23/17	DD	SW8270D
Benzoic acid	ND	760	ug/Kg	1	11/23/17	DD	SW8270D
Benzyl butyl phthalate	ND	260	ug/Kg	1	11/23/17	DD	SW8270D
Bis(2-chloroethoxy)methane	ND	260	ug/Kg	1	11/23/17	DD	SW8270D
Bis(2-chloroethyl)ether	ND	380	ug/Kg	1	11/23/17	DD	SW8270D
Bis(2-chloroisopropyl)ether	ND	260	ug/Kg	1	11/23/17	DD	SW8270D

Project ID: BETANCES HOUSES GARAGE
Client ID: SB-3 (1-5 FT)

Phoenix I.D.: BZ46288

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference	
Bis(2-ethylhexyl)phthalate	ND	260	ug/Kg	1	11/23/17	DD	SW8270D	
Carbazole	ND	380	ug/Kg	1	11/23/17	DD	SW8270D	
Chrysene	ND	260	ug/Kg	1	11/23/17	DD	SW8270D	
Dibenz(a,h)anthracene	ND	260	ug/Kg	1	11/23/17	DD	SW8270D	
Dibenzofuran	ND	260	ug/Kg	1	11/23/17	DD	SW8270D	
Diethyl phthalate	ND	260	ug/Kg	1	11/23/17	DD	SW8270D	
Dimethylphthalate	ND	260	ug/Kg	1	11/23/17	DD	SW8270D	
Di-n-butylphthalate	ND	760	ug/Kg	1	11/23/17	DD	SW8270D	
Di-n-octylphthalate	ND	260	ug/Kg	1	11/23/17	DD	SW8270D	
Fluoranthene	ND	260	ug/Kg	1	11/23/17	DD	SW8270D	
Fluorene	ND	260	ug/Kg	1	11/23/17	DD	SW8270D	
Hexachlorobenzene	ND	260	ug/Kg	1	11/23/17	DD	SW8270D	
Hexachlorobutadiene	ND	260	ug/Kg	1	11/23/17	DD	SW8270D	
Hexachlorocyclopentadiene	ND	260	ug/Kg	1	11/23/17	DD	SW8270D	
Hexachloroethane	ND	260	ug/Kg	1	11/23/17	DD	SW8270D	
Indeno(1,2,3-cd)pyrene	290	260	ug/Kg	1	11/23/17	DD	SW8270D	
Isophorone	ND	260	ug/Kg	1	11/23/17	DD	SW8270D	
Naphthalene	ND	260	ug/Kg	1	11/23/17	DD	SW8270D	
Nitrobenzene	ND	260	ug/Kg	1	11/23/17	DD	SW8270D	
N-Nitrosodimethylamine	ND	380	ug/Kg	1	11/23/17	DD	SW8270D	
N-Nitrosodi-n-propylamine	ND	260	ug/Kg	1	11/23/17	DD	SW8270D	
N-Nitrosodiphenylamine	ND	380	ug/Kg	1	11/23/17	DD	SW8270D	
Pentachloronitrobenzene	ND	380	ug/Kg	1	11/23/17	DD	SW8270D	
Pentachlorophenol	ND	380	ug/Kg	1	11/23/17	DD	SW8270D	
Phenanthrene	ND	260	ug/Kg	1	11/23/17	DD	SW8270D	
Phenol	ND	260	ug/Kg	1	11/23/17	DD	SW8270D	
Pyrene	ND	260	ug/Kg	1	11/23/17	DD	SW8270D	
Pyridine	ND	380	ug/Kg	1	11/23/17	DD	SW8270D	
QA/QC Surrogates								
% 2,4,6-Tribromophenol	58		%	1	11/23/17	DD	30 - 130 %	
% 2-Fluorobiphenyl	76		%	1	11/23/17	DD	30 - 130 %	
% 2-Fluorophenol	54		%	1	11/23/17	DD	30 - 130 %	
% Nitrobenzene-d5	63		%	1	11/23/17	DD	30 - 130 %	
% Phenol-d5	60		%	1	11/23/17	DD	30 - 130 %	
% Terphenyl-d14	72		%	1	11/23/17	DD	30 - 130 %	
Field Extraction	Completed				11/21/17		SW5035A	1

Project ID: BETANCES HOUSES GARAGE
Client ID: SB-3 (1-5 FT)

Phoenix I.D.: BZ46288

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

1 = This parameter is not certified by 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 (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.

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

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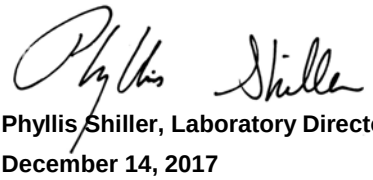


Phyllis Shiller, Laboratory Director
December 14, 2017
Reviewed and Released by: Bobbi Aloisa, Vice President

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

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

December 14, 2017

FOR: Attn: Ms. Antoinette Ollivierre
American Env. Assessment & Solutions Inc
679 Lafayette Ave.
3rd Floor
Brooklyn, NY 11216

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		11/21/17	12:00
Location Code:	AEAS-INC	Received by:	SW	11/22/17	16:19
Rush Request:	72 Hour	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBZ46284
Phoenix ID: BZ46289

Project ID: BETANCES HOUSES GARAGE
Client ID: SB-3 (8-12 FT)

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Percent Solid	88		%		11/22/17	Q	SW846-%Solid
Soil Extraction for SVOA	Completed				11/22/17	JJ/CKV	SW3545A
Volatiles							
1,1,1,2-Tetrachloroethane	ND	4.1	ug/Kg	1	11/28/17	JLI	SW8260C
1,1,1-Trichloroethane	ND	4.1	ug/Kg	1	11/28/17	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	4.1	ug/Kg	1	11/28/17	JLI	SW8260C
1,1,2-Trichloroethane	ND	4.1	ug/Kg	1	11/28/17	JLI	SW8260C
1,1-Dichloroethane	ND	4.1	ug/Kg	1	11/28/17	JLI	SW8260C
1,1-Dichloroethene	ND	4.1	ug/Kg	1	11/28/17	JLI	SW8260C
1,1-Dichloropropene	ND	4.1	ug/Kg	1	11/28/17	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	4.1	ug/Kg	1	11/28/17	JLI	SW8260C
1,2,3-Trichloropropane	ND	4.1	ug/Kg	1	11/28/17	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	4.1	ug/Kg	1	11/28/17	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	4.1	ug/Kg	1	11/28/17	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	4.1	ug/Kg	1	11/28/17	JLI	SW8260C
1,2-Dibromoethane	ND	4.1	ug/Kg	1	11/28/17	JLI	SW8260C
1,2-Dichlorobenzene	ND	4.1	ug/Kg	1	11/28/17	JLI	SW8260C
1,2-Dichloroethane	ND	4.1	ug/Kg	1	11/28/17	JLI	SW8260C
1,2-Dichloropropane	ND	4.1	ug/Kg	1	11/28/17	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	4.1	ug/Kg	1	11/28/17	JLI	SW8260C
1,3-Dichlorobenzene	ND	4.1	ug/Kg	1	11/28/17	JLI	SW8260C
1,3-Dichloropropane	ND	4.1	ug/Kg	1	11/28/17	JLI	SW8260C
1,4-Dichlorobenzene	ND	4.1	ug/Kg	1	11/28/17	JLI	SW8260C
2,2-Dichloropropane	ND	4.1	ug/Kg	1	11/28/17	JLI	SW8260C
2-Chlorotoluene	ND	4.1	ug/Kg	1	11/28/17	JLI	SW8260C
2-Hexanone	ND	20	ug/Kg	1	11/28/17	JLI	SW8260C
2-Isopropyltoluene	ND	4.1	ug/Kg	1	11/28/17	JLI	SW8260C

1

Project ID: BETANCES HOUSES GARAGE
Client ID: SB-3 (8-12 FT)

Phoenix I.D.: BZ46289

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference	
4-Chlorotoluene	ND	4.1	ug/Kg	1	11/28/17	JLI	SW8260C	
4-Methyl-2-pentanone	ND	20	ug/Kg	1	11/28/17	JLI	SW8260C	
Acetone	ND	20	ug/Kg	1	11/28/17	JLI	SW8260C	
Acrylonitrile	ND	8.2	ug/Kg	1	11/28/17	JLI	SW8260C	
Benzene	ND	4.1	ug/Kg	1	11/28/17	JLI	SW8260C	
Bromobenzene	ND	4.1	ug/Kg	1	11/28/17	JLI	SW8260C	
Bromochloromethane	ND	4.1	ug/Kg	1	11/28/17	JLI	SW8260C	
Bromodichloromethane	ND	4.1	ug/Kg	1	11/28/17	JLI	SW8260C	
Bromoform	ND	4.1	ug/Kg	1	11/28/17	JLI	SW8260C	
Bromomethane	ND	4.1	ug/Kg	1	11/28/17	JLI	SW8260C	
Carbon Disulfide	ND	4.1	ug/Kg	1	11/28/17	JLI	SW8260C	
Carbon tetrachloride	ND	4.1	ug/Kg	1	11/28/17	JLI	SW8260C	
Chlorobenzene	ND	4.1	ug/Kg	1	11/28/17	JLI	SW8260C	
Chloroethane	ND	4.1	ug/Kg	1	11/28/17	JLI	SW8260C	
Chloroform	ND	4.1	ug/Kg	1	11/28/17	JLI	SW8260C	
Chloromethane	ND	4.1	ug/Kg	1	11/28/17	JLI	SW8260C	
cis-1,2-Dichloroethene	ND	4.1	ug/Kg	1	11/28/17	JLI	SW8260C	
cis-1,3-Dichloropropene	ND	4.1	ug/Kg	1	11/28/17	JLI	SW8260C	
Dibromochloromethane	ND	4.1	ug/Kg	1	11/28/17	JLI	SW8260C	
Dibromomethane	ND	4.1	ug/Kg	1	11/28/17	JLI	SW8260C	
Dichlorodifluoromethane	ND	4.1	ug/Kg	1	11/28/17	JLI	SW8260C	
Ethylbenzene	ND	4.1	ug/Kg	1	11/28/17	JLI	SW8260C	
Hexachlorobutadiene	ND	4.1	ug/Kg	1	11/28/17	JLI	SW8260C	
Isopropylbenzene	ND	4.1	ug/Kg	1	11/28/17	JLI	SW8260C	
m&p-Xylene	ND	4.1	ug/Kg	1	11/28/17	JLI	SW8260C	
Methyl Ethyl Ketone	ND	20	ug/Kg	1	11/28/17	JLI	SW8260C	
Methyl t-butyl ether (MTBE)	ND	8.2	ug/Kg	1	11/28/17	JLI	SW8260C	
Methylene chloride	ND	8.2	ug/Kg	1	11/28/17	JLI	SW8260C	
Naphthalene	ND	4.1	ug/Kg	1	11/28/17	JLI	SW8260C	
n-Butylbenzene	ND	4.1	ug/Kg	1	11/28/17	JLI	SW8260C	
n-Propylbenzene	ND	4.1	ug/Kg	1	11/28/17	JLI	SW8260C	
o-Xylene	ND	4.1	ug/Kg	1	11/28/17	JLI	SW8260C	
p-Isopropyltoluene	ND	4.1	ug/Kg	1	11/28/17	JLI	SW8260C	
sec-Butylbenzene	ND	4.1	ug/Kg	1	11/28/17	JLI	SW8260C	
Styrene	ND	4.1	ug/Kg	1	11/28/17	JLI	SW8260C	
tert-Butylbenzene	ND	4.1	ug/Kg	1	11/28/17	JLI	SW8260C	
Tetrachloroethene	ND	4.1	ug/Kg	1	11/28/17	JLI	SW8260C	
Tetrahydrofuran (THF)	ND	8.2	ug/Kg	1	11/28/17	JLI	SW8260C	1
Toluene	ND	4.1	ug/Kg	1	11/28/17	JLI	SW8260C	
Total Xylenes	ND	4.1	ug/Kg	1	11/28/17	JLI	SW8260C	
trans-1,2-Dichloroethene	ND	4.1	ug/Kg	1	11/28/17	JLI	SW8260C	
trans-1,3-Dichloropropene	ND	4.1	ug/Kg	1	11/28/17	JLI	SW8260C	
trans-1,4-dichloro-2-butene	ND	8.2	ug/Kg	1	11/28/17	JLI	SW8260C	
Trichloroethene	ND	4.1	ug/Kg	1	11/28/17	JLI	SW8260C	
Trichlorofluoromethane	ND	4.1	ug/Kg	1	11/28/17	JLI	SW8260C	
Trichlorotrifluoroethane	ND	4.1	ug/Kg	1	11/28/17	JLI	SW8260C	
Vinyl chloride	ND	4.1	ug/Kg	1	11/28/17	JLI	SW8260C	
QA/QC Surrogates								
% 1,2-dichlorobenzene-d4	101		%	1	11/28/17	JLI	70 - 130 %	

Ver 3

Project ID: BETANCES HOUSES GARAGE
Client ID: SB-3 (8-12 FT)

Phoenix I.D.: BZ46289

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
% Bromofluorobenzene	99		%	1	11/28/17	JLI	70 - 130 %
% Dibromofluoromethane	97		%	1	11/28/17	JLI	70 - 130 %
% Toluene-d8	104		%	1	11/28/17	JLI	70 - 130 %
Semivolatiles							
1,2,4,5-Tetrachlorobenzene	ND	260	ug/Kg	1	11/23/17	DD	SW8270D
1,2,4-Trichlorobenzene	ND	260	ug/Kg	1	11/23/17	DD	SW8270D
1,2-Dichlorobenzene	ND	260	ug/Kg	1	11/23/17	DD	SW8270D
1,2-Diphenylhydrazine	ND	370	ug/Kg	1	11/23/17	DD	SW8270D
1,3-Dichlorobenzene	ND	260	ug/Kg	1	11/23/17	DD	SW8270D
1,4-Dichlorobenzene	ND	260	ug/Kg	1	11/23/17	DD	SW8270D
2,4,5-Trichlorophenol	ND	260	ug/Kg	1	11/23/17	DD	SW8270D
2,4,6-Trichlorophenol	ND	260	ug/Kg	1	11/23/17	DD	SW8270D
2,4-Dichlorophenol	ND	260	ug/Kg	1	11/23/17	DD	SW8270D
2,4-Dimethylphenol	ND	260	ug/Kg	1	11/23/17	DD	SW8270D
2,4-Dinitrophenol	ND	370	ug/Kg	1	11/23/17	DD	SW8270D
2,4-Dinitrotoluene	ND	260	ug/Kg	1	11/23/17	DD	SW8270D
2,6-Dinitrotoluene	ND	260	ug/Kg	1	11/23/17	DD	SW8270D
2-Chloronaphthalene	ND	260	ug/Kg	1	11/23/17	DD	SW8270D
2-Chlorophenol	ND	260	ug/Kg	1	11/23/17	DD	SW8270D
2-Methylnaphthalene	ND	260	ug/Kg	1	11/23/17	DD	SW8270D
2-Methylphenol (o-cresol)	ND	260	ug/Kg	1	11/23/17	DD	SW8270D
2-Nitroaniline	ND	370	ug/Kg	1	11/23/17	DD	SW8270D
2-Nitrophenol	ND	260	ug/Kg	1	11/23/17	DD	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	370	ug/Kg	1	11/23/17	DD	SW8270D
3,3'-Dichlorobenzidine	ND	260	ug/Kg	1	11/23/17	DD	SW8270D
3-Nitroaniline	ND	370	ug/Kg	1	11/23/17	DD	SW8270D
4,6-Dinitro-2-methylphenol	ND	370	ug/Kg	1	11/23/17	DD	SW8270D
4-Bromophenyl phenyl ether	ND	370	ug/Kg	1	11/23/17	DD	SW8270D
4-Chloro-3-methylphenol	ND	260	ug/Kg	1	11/23/17	DD	SW8270D
4-Chloroaniline	ND	260	ug/Kg	1	11/23/17	DD	SW8270D
4-Chlorophenyl phenyl ether	ND	260	ug/Kg	1	11/23/17	DD	SW8270D
4-Nitroaniline	ND	600	ug/Kg	1	11/23/17	DD	SW8270D
4-Nitrophenol	ND	260	ug/Kg	1	11/23/17	DD	SW8270D
Acenaphthene	ND	260	ug/Kg	1	11/23/17	DD	SW8270D
Acenaphthylene	ND	260	ug/Kg	1	11/23/17	DD	SW8270D
Acetophenone	ND	260	ug/Kg	1	11/23/17	DD	SW8270D
Aniline	ND	370	ug/Kg	1	11/23/17	DD	SW8270D
Anthracene	ND	260	ug/Kg	1	11/23/17	DD	SW8270D
Benz(a)anthracene	ND	260	ug/Kg	1	11/23/17	DD	SW8270D
Benzidine	ND	260	ug/Kg	1	11/23/17	DD	SW8270D
Benzo(a)pyrene	ND	260	ug/Kg	1	11/23/17	DD	SW8270D
Benzo(b)fluoranthene	ND	260	ug/Kg	1	11/23/17	DD	SW8270D
Benzo(ghi)perylene	ND	260	ug/Kg	1	11/23/17	DD	SW8270D
Benzo(k)fluoranthene	ND	260	ug/Kg	1	11/23/17	DD	SW8270D
Benzoic acid	ND	750	ug/Kg	1	11/23/17	DD	SW8270D
Benzyl butyl phthalate	ND	260	ug/Kg	1	11/23/17	DD	SW8270D
Bis(2-chloroethoxy)methane	ND	260	ug/Kg	1	11/23/17	DD	SW8270D
Bis(2-chloroethyl)ether	ND	370	ug/Kg	1	11/23/17	DD	SW8270D
Bis(2-chloroisopropyl)ether	ND	260	ug/Kg	1	11/23/17	DD	SW8270D

Project ID: BETANCES HOUSES GARAGE
Client ID: SB-3 (8-12 FT)

Phoenix I.D.: BZ46289

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference	
Bis(2-ethylhexyl)phthalate	ND	260	ug/Kg	1	11/23/17	DD	SW8270D	
Carbazole	ND	370	ug/Kg	1	11/23/17	DD	SW8270D	
Chrysene	ND	260	ug/Kg	1	11/23/17	DD	SW8270D	
Dibenz(a,h)anthracene	ND	260	ug/Kg	1	11/23/17	DD	SW8270D	
Dibenzofuran	ND	260	ug/Kg	1	11/23/17	DD	SW8270D	
Diethyl phthalate	ND	260	ug/Kg	1	11/23/17	DD	SW8270D	
Dimethylphthalate	ND	260	ug/Kg	1	11/23/17	DD	SW8270D	
Di-n-butylphthalate	ND	750	ug/Kg	1	11/23/17	DD	SW8270D	
Di-n-octylphthalate	ND	260	ug/Kg	1	11/23/17	DD	SW8270D	
Fluoranthene	ND	260	ug/Kg	1	11/23/17	DD	SW8270D	
Fluorene	ND	260	ug/Kg	1	11/23/17	DD	SW8270D	
Hexachlorobenzene	ND	260	ug/Kg	1	11/23/17	DD	SW8270D	
Hexachlorobutadiene	ND	260	ug/Kg	1	11/23/17	DD	SW8270D	
Hexachlorocyclopentadiene	ND	260	ug/Kg	1	11/23/17	DD	SW8270D	
Hexachloroethane	ND	260	ug/Kg	1	11/23/17	DD	SW8270D	
Indeno(1,2,3-cd)pyrene	ND	260	ug/Kg	1	11/23/17	DD	SW8270D	
Isophorone	ND	260	ug/Kg	1	11/23/17	DD	SW8270D	
Naphthalene	ND	260	ug/Kg	1	11/23/17	DD	SW8270D	
Nitrobenzene	ND	260	ug/Kg	1	11/23/17	DD	SW8270D	
N-Nitrosodimethylamine	ND	370	ug/Kg	1	11/23/17	DD	SW8270D	
N-Nitrosodi-n-propylamine	ND	260	ug/Kg	1	11/23/17	DD	SW8270D	
N-Nitrosodiphenylamine	ND	370	ug/Kg	1	11/23/17	DD	SW8270D	
Pentachloronitrobenzene	ND	370	ug/Kg	1	11/23/17	DD	SW8270D	
Pentachlorophenol	ND	370	ug/Kg	1	11/23/17	DD	SW8270D	
Phenanthrene	ND	260	ug/Kg	1	11/23/17	DD	SW8270D	
Phenol	ND	260	ug/Kg	1	11/23/17	DD	SW8270D	
Pyrene	ND	260	ug/Kg	1	11/23/17	DD	SW8270D	
Pyridine	ND	370	ug/Kg	1	11/23/17	DD	SW8270D	
QA/QC Surrogates								
% 2,4,6-Tribromophenol	81		%	1	11/23/17	DD	30 - 130 %	
% 2-Fluorobiphenyl	75		%	1	11/23/17	DD	30 - 130 %	
% 2-Fluorophenol	66		%	1	11/23/17	DD	30 - 130 %	
% Nitrobenzene-d5	70		%	1	11/23/17	DD	30 - 130 %	
% Phenol-d5	69		%	1	11/23/17	DD	30 - 130 %	
% Terphenyl-d14	78		%	1	11/23/17	DD	30 - 130 %	
Field Extraction	Completed				11/21/17		SW5035A	1

Project ID: BETANCES HOUSES GARAGE
Client ID: SB-3 (8-12 FT)

Phoenix I.D.: BZ46289

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

1 = This parameter is not certified by NY NELAC for this matrix. NY NELAC does not offer certification for all parameters at this time.

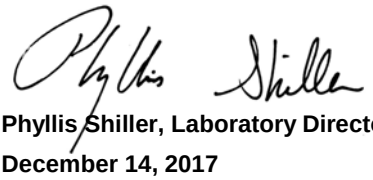
RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected at RL/PQL
BRL=Below Reporting Level L=Biased Low
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed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

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

If there are any questions regarding this data, please call Phoenix Client Services.
This report must not be reproduced except in full as defined by the attached chain of custody.



Phyllis Shiller, Laboratory Director
December 14, 2017
Reviewed and Released by: Bobbi Aloisa, Vice President

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

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

December 14, 2017

FOR: Attn: Ms. Antoinette Ollivierre
American Env. Assessment & Solutions Inc
679 Lafayette Ave.
3rd Floor
Brooklyn, NY 11216

Sample Information		Custody Information		Date	Time
Matrix:	GROUND WATER	Collected by:		11/21/17	13:00
Location Code:	AEAS-INC	Received by:	SW	11/22/17	16:19
Rush Request:	72 Hour	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBZ46284
Phoenix ID: BZ46290

Project ID: BETANCES HOUSES GARAGE
Client ID: MW-1

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Semi-Volatile Extraction	Completed				11/22/17	P/IR	SW3520C
Volatiles							
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	1	11/22/17	MH	SW8260C
1,1,1-Trichloroethane	ND	1.0	ug/L	1	11/22/17	MH	SW8260C
1,1,2,2-Tetrachloroethane	ND	0.50	ug/L	1	11/22/17	MH	SW8260C
1,1,2-Trichloroethane	ND	1.0	ug/L	1	11/22/17	MH	SW8260C
1,1-Dichloroethane	ND	1.0	ug/L	1	11/22/17	MH	SW8260C
1,1-Dichloroethene	ND	1.0	ug/L	1	11/22/17	MH	SW8260C
1,1-Dichloropropene	ND	1.0	ug/L	1	11/22/17	MH	SW8260C
1,2,3-Trichlorobenzene	ND	1.0	ug/L	1	11/22/17	MH	SW8260C
1,2,3-Trichloropropane	ND	1.0	ug/L	1	11/22/17	MH	SW8260C
1,2,4-Trichlorobenzene	ND	1.0	ug/L	1	11/22/17	MH	SW8260C
1,2,4-Trimethylbenzene	ND	1.0	ug/L	1	11/22/17	MH	SW8260C
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	1	11/22/17	MH	SW8260C
1,2-Dibromoethane	ND	1.0	ug/L	1	11/22/17	MH	SW8260C
1,2-Dichlorobenzene	ND	1.0	ug/L	1	11/22/17	MH	SW8260C
1,2-Dichloroethane	ND	0.60	ug/L	1	11/22/17	MH	SW8260C
1,2-Dichloropropane	ND	1.0	ug/L	1	11/22/17	MH	SW8260C
1,3,5-Trimethylbenzene	ND	1.0	ug/L	1	11/22/17	MH	SW8260C
1,3-Dichlorobenzene	ND	1.0	ug/L	1	11/22/17	MH	SW8260C
1,3-Dichloropropane	ND	1.0	ug/L	1	11/22/17	MH	SW8260C
1,4-Dichlorobenzene	ND	1.0	ug/L	1	11/22/17	MH	SW8260C
2,2-Dichloropropane	ND	1.0	ug/L	1	11/22/17	MH	SW8260C
2-Chlorotoluene	ND	1.0	ug/L	1	11/22/17	MH	SW8260C
2-Hexanone	ND	5.0	ug/L	1	11/22/17	MH	SW8260C
2-Isopropyltoluene	ND	1.0	ug/L	1	11/22/17	MH	SW8260C 1
4-Chlorotoluene	ND	1.0	ug/L	1	11/22/17	MH	SW8260C

Project ID: BETANCES HOUSES GARAGE
Client ID: MW-1

Phoenix I.D.: BZ46290

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference	
4-Methyl-2-pentanone	ND	5.0	ug/L	1	11/22/17	MH	SW8260C	
Acetone	ND	25	ug/L	1	11/22/17	MH	SW8260C	
Acrylonitrile	ND	5.0	ug/L	1	11/22/17	MH	SW8260C	
Benzene	ND	0.70	ug/L	1	11/22/17	MH	SW8260C	
Bromobenzene	ND	1.0	ug/L	1	11/22/17	MH	SW8260C	
Bromochloromethane	ND	1.0	ug/L	1	11/22/17	MH	SW8260C	
Bromodichloromethane	ND	0.50	ug/L	1	11/22/17	MH	SW8260C	
Bromoform	ND	1.0	ug/L	1	11/22/17	MH	SW8260C	
Bromomethane	ND	1.0	ug/L	1	11/22/17	MH	SW8260C	
Carbon Disulfide	ND	5.0	ug/L	1	11/22/17	MH	SW8260C	
Carbon tetrachloride	ND	1.0	ug/L	1	11/22/17	MH	SW8260C	
Chlorobenzene	ND	1.0	ug/L	1	11/22/17	MH	SW8260C	
Chloroethane	ND	1.0	ug/L	1	11/22/17	MH	SW8260C	
Chloroform	ND	1.0	ug/L	1	11/22/17	MH	SW8260C	
Chloromethane	ND	1.0	ug/L	1	11/22/17	MH	SW8260C	
cis-1,2-Dichloroethene	ND	1.0	ug/L	1	11/22/17	MH	SW8260C	
cis-1,3-Dichloropropene	ND	0.40	ug/L	1	11/22/17	MH	SW8260C	
Dibromochloromethane	ND	0.50	ug/L	1	11/22/17	MH	SW8260C	
Dibromomethane	ND	1.0	ug/L	1	11/22/17	MH	SW8260C	
Dichlorodifluoromethane	ND	1.0	ug/L	1	11/22/17	MH	SW8260C	
Ethylbenzene	ND	1.0	ug/L	1	11/22/17	MH	SW8260C	
Hexachlorobutadiene	ND	0.40	ug/L	1	11/22/17	MH	SW8260C	
Isopropylbenzene	ND	1.0	ug/L	1	11/22/17	MH	SW8260C	
m&p-Xylene	ND	1.0	ug/L	1	11/22/17	MH	SW8260C	
Methyl ethyl ketone	ND	5.0	ug/L	1	11/22/17	MH	SW8260C	
Methyl t-butyl ether (MTBE)	ND	1.0	ug/L	1	11/22/17	MH	SW8260C	
Methylene chloride	ND	1.0	ug/L	1	11/22/17	MH	SW8260C	
Naphthalene	ND	1.0	ug/L	1	11/22/17	MH	SW8260C	
n-Butylbenzene	ND	1.0	ug/L	1	11/22/17	MH	SW8260C	
n-Propylbenzene	ND	1.0	ug/L	1	11/22/17	MH	SW8260C	
o-Xylene	ND	1.0	ug/L	1	11/22/17	MH	SW8260C	
p-Isopropyltoluene	ND	1.0	ug/L	1	11/22/17	MH	SW8260C	
sec-Butylbenzene	ND	1.0	ug/L	1	11/22/17	MH	SW8260C	
Styrene	ND	1.0	ug/L	1	11/22/17	MH	SW8260C	
tert-Butylbenzene	ND	1.0	ug/L	1	11/22/17	MH	SW8260C	
Tetrachloroethene	ND	1.0	ug/L	1	11/22/17	MH	SW8260C	
Tetrahydrofuran (THF)	ND	2.5	ug/L	1	11/22/17	MH	SW8260C	1
Toluene	ND	1.0	ug/L	1	11/22/17	MH	SW8260C	
Total Xylenes	ND	1.0	ug/L	1	11/22/17	MH	SW8260C	
trans-1,2-Dichloroethene	ND	1.0	ug/L	1	11/22/17	MH	SW8260C	
trans-1,3-Dichloropropene	ND	0.40	ug/L	1	11/22/17	MH	SW8260C	
trans-1,4-dichloro-2-butene	ND	5.0	ug/L	1	11/22/17	MH	SW8260C	
Trichloroethene	ND	1.0	ug/L	1	11/22/17	MH	SW8260C	
Trichlorofluoromethane	ND	1.0	ug/L	1	11/22/17	MH	SW8260C	
Trichlorotrifluoroethane	ND	1.0	ug/L	1	11/22/17	MH	SW8260C	
Vinyl chloride	ND	1.0	ug/L	1	11/22/17	MH	SW8260C	
QA/QC Surrogates								
% 1,2-dichlorobenzene-d4	101		%	1	11/22/17	MH	70 - 130 %	
% Bromofluorobenzene	104		%	1	11/22/17	MH	70 - 130 %	

Ver 3

Project ID: BETANCES HOUSES GARAGE
Client ID: MW-1

Phoenix I.D.: BZ46290

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
% Dibromofluoromethane	97		%	1	11/22/17	MH	70 - 130 %
% Toluene-d8	108		%	1	11/22/17	MH	70 - 130 %
Semivolatiles							
1,2,4-Trichlorobenzene	ND	4.7	ug/L	1	11/29/17	DD	SW8270D
1,2-Dichlorobenzene	ND	2.3	ug/L	1	11/29/17	DD	SW8270D
1,2-Diphenylhydrazine	ND	4.7	ug/L	1	11/29/17	DD	SW8270D
1,3-Dichlorobenzene	ND	2.3	ug/L	1	11/29/17	DD	SW8270D
1,4-Dichlorobenzene	ND	2.3	ug/L	1	11/29/17	DD	SW8270D
2,4,5-Trichlorophenol	ND	0.94	ug/L	1	11/29/17	DD	SW8270D
2,4,6-Trichlorophenol	ND	0.94	ug/L	1	11/29/17	DD	SW8270D
2,4-Dichlorophenol	ND	0.94	ug/L	1	11/29/17	DD	SW8270D
2,4-Dimethylphenol	ND	0.94	ug/L	1	11/29/17	DD	SW8270D
2,4-Dinitrophenol	ND	0.94	ug/L	1	11/29/17	DD	SW8270D
2,4-Dinitrotoluene	ND	4.7	ug/L	1	11/29/17	DD	SW8270D
2,6-Dinitrotoluene	ND	4.7	ug/L	1	11/29/17	DD	SW8270D
2-Chloronaphthalene	ND	4.7	ug/L	1	11/29/17	DD	SW8270D
2-Chlorophenol	ND	0.94	ug/L	1	11/29/17	DD	SW8270D
2-Methylphenol (o-cresol)	ND	0.94	ug/L	1	11/29/17	DD	SW8270D
2-Nitroaniline	ND	4.7	ug/L	1	11/29/17	DD	SW8270D
2-Nitrophenol	ND	0.94	ug/L	1	11/29/17	DD	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	9.4	ug/L	1	11/29/17	DD	SW8270D
3,3'-Dichlorobenzidine	ND	4.7	ug/L	1	11/29/17	DD	SW8270D
3-Nitroaniline	ND	4.7	ug/L	1	11/29/17	DD	SW8270D
4,6-Dinitro-2-methylphenol	ND	0.94	ug/L	1	11/29/17	DD	SW8270D
4-Bromophenyl phenyl ether	ND	4.7	ug/L	1	11/29/17	DD	SW8270D
4-Chloro-3-methylphenol	ND	0.94	ug/L	1	11/29/17	DD	SW8270D
4-Chloroaniline	ND	4.7	ug/L	1	11/29/17	DD	SW8270D
4-Chlorophenyl phenyl ether	ND	0.94	ug/L	1	11/29/17	DD	SW8270D
4-Nitroaniline	ND	4.7	ug/L	1	11/29/17	DD	SW8270D
4-Nitrophenol	ND	0.94	ug/L	1	11/29/17	DD	SW8270D
Acetophenone	ND	4.7	ug/L	1	11/29/17	DD	SW8270D
Aniline	ND	4.7	ug/L	1	11/29/17	DD	SW8270D
Benzidine	ND	4.7	ug/L	1	11/29/17	DD	SW8270D
Benzoic acid	ND	47	ug/L	1	11/29/17	DD	SW8270D
Benzyl butyl phthalate	ND	4.7	ug/L	1	11/29/17	DD	SW8270D
Bis(2-chloroethoxy)methane	ND	4.7	ug/L	1	11/29/17	DD	SW8270D
Bis(2-chloroethyl)ether	ND	0.94	ug/L	1	11/29/17	DD	SW8270D
Bis(2-chloroisopropyl)ether	ND	4.7	ug/L	1	11/29/17	DD	SW8270D
Carbazole	ND	4.7	ug/L	1	11/29/17	DD	SW8270D
Dibenzofuran	ND	4.7	ug/L	1	11/29/17	DD	SW8270D
Diethyl phthalate	ND	4.7	ug/L	1	11/29/17	DD	SW8270D
Dimethylphthalate	ND	4.7	ug/L	1	11/29/17	DD	SW8270D
Di-n-butylphthalate	ND	4.7	ug/L	1	11/29/17	DD	SW8270D
Di-n-octylphthalate	ND	4.7	ug/L	1	11/29/17	DD	SW8270D
Hexachlorocyclopentadiene	ND	4.7	ug/L	1	11/29/17	DD	SW8270D
Isophorone	ND	4.7	ug/L	1	11/29/17	DD	SW8270D
N-Nitrosodi-n-propylamine	ND	4.7	ug/L	1	11/29/17	DD	SW8270D
N-Nitrosodiphenylamine	ND	4.7	ug/L	1	11/29/17	DD	SW8270D
Phenol	ND	0.94	ug/L	1	11/29/17	DD	SW8270D

Project ID: BETANCES HOUSES GARAGE
Client ID: MW-1

Phoenix I.D.: BZ46290

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
QA/QC Surrogates							
% 2,4,6-Tribromophenol	98		%	1	11/29/17	DD	15 - 110 %
% 2-Fluorobiphenyl	74		%	1	11/29/17	DD	30 - 130 %
% 2-Fluorophenol	48		%	1	11/29/17	DD	15 - 110 %
% Nitrobenzene-d5	69		%	1	11/29/17	DD	30 - 130 %
% Phenol-d5	54		%	1	11/29/17	DD	15 - 110 %
% Terphenyl-d14	84		%	1	11/29/17	DD	30 - 130 %
Semivolatiles (SIM)							
1,2,4,5-Tetrachlorobenzene	ND	0.47	ug/L	1	11/28/17	DD	SW8270D (SIM)
2-Methylnaphthalene	ND	0.94	ug/L	1	11/28/17	DD	SW8270D (SIM)
Acenaphthene	0.90	0.05	ug/L	1	11/28/17	DD	SW8270D (SIM)
Acenaphthylene	ND	0.05	ug/L	1	11/28/17	DD	SW8270D (SIM)
Anthracene	0.12	0.02	ug/L	1	11/28/17	DD	SW8270D (SIM)
Benz(a)anthracene	0.20	0.02	ug/L	1	11/28/17	DD	SW8270D (SIM)
Benzo(a)pyrene	0.13	0.02	ug/L	1	11/28/17	DD	SW8270D (SIM)
Benzo(b)fluoranthene	0.14	0.02	ug/L	1	11/28/17	DD	SW8270D (SIM)
Benzo(ghi)perylene	ND	0.47	ug/L	1	11/28/17	DD	SW8270D (SIM)
Benzo(k)fluoranthene	0.14	0.02	ug/L	1	11/28/17	DD	SW8270D (SIM)
Bis(2-ethylhexyl)phthalate	5.3	0.47	ug/L	1	11/28/17	DD	SW8270D (SIM)
Chrysene	0.18	0.02	ug/L	1	11/28/17	DD	SW8270D (SIM)
Dibenz(a,h)anthracene	0.03	0.02	ug/L	1	11/28/17	DD	SW8270D (SIM)
Fluoranthene	0.98	0.04	ug/L	1	11/28/17	DD	SW8270D (SIM)
Fluorene	0.17	0.09	ug/L	1	11/28/17	DD	SW8270D (SIM)
Hexachlorobenzene	ND	0.04	ug/L	1	11/28/17	DD	SW8270D (SIM)
Hexachlorobutadiene	ND	0.47	ug/L	1	11/28/17	DD	SW8270D (SIM)
Hexachloroethane	ND	0.47	ug/L	1	11/28/17	DD	SW8270D (SIM)
Indeno(1,2,3-cd)pyrene	0.07	0.02	ug/L	1	11/28/17	DD	SW8270D (SIM)
Naphthalene	ND	0.09	ug/L	1	11/28/17	DD	SW8270D (SIM)
Nitrobenzene	ND	0.09	ug/L	1	11/28/17	DD	SW8270D (SIM)
N-Nitrosodimethylamine	ND	0.47	ug/L	1	11/28/17	DD	SW8270D (SIM)
Pentachloronitrobenzene	ND	0.09	ug/L	1	11/28/17	DD	SW8270D (SIM)
Pentachlorophenol	ND	0.75	ug/L	1	11/28/17	DD	SW8270D (SIM)
Phenanthrene	0.19	0.05	ug/L	1	11/28/17	DD	SW8270D (SIM)
Pyrene	0.69	0.02	ug/L	1	11/28/17	DD	SW8270D (SIM)
Pyridine	ND	0.47	ug/L	1	11/28/17	DD	SW8270D (SIM)
QA/QC Surrogates							
% 2,4,6-Tribromophenol	98		%	1	11/28/17	DD	15 - 110 %
% 2-Fluorobiphenyl	74		%	1	11/28/17	DD	30 - 130 %
% 2-Fluorophenol	48		%	1	11/28/17	DD	15 - 110 %
% Nitrobenzene-d5	69		%	1	11/28/17	DD	30 - 130 %
% Phenol-d5	54		%	1	11/28/17	DD	15 - 110 %
% Terphenyl-d14	84		%	1	11/28/17	DD	30 - 130 %

Project ID: BETANCES HOUSES GARAGE
Client ID: MW-1

Phoenix I.D.: BZ46290

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

1 = This parameter is not certified by 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 (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.

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

Phyllis Shiller, Laboratory Director
December 14, 2017
Reviewed and Released by: Bobbi Aloisa, Vice President

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

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

December 14, 2017

FOR: Attn: Ms. Antoinette Ollivierre
American Env. Assessment & Solutions Inc
679 Lafayette Ave.
3rd Floor
Brooklyn, NY 11216

Sample Information		Custody Information		Date	Time
Matrix:	GROUND WATER	Collected by:		11/21/17	13:30
Location Code:	AEAS-INC	Received by:	SW	11/22/17	16:19
Rush Request:	72 Hour	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBZ46284
Phoenix ID: BZ46291

Project ID: BETANCES HOUSES GARAGE
Client ID: MW-2

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Semi-Volatile Extraction	Completed				11/22/17	P/IR	SW3520C
Volatiles							
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	1	11/26/17	MH	SW8260C
1,1,1-Trichloroethane	ND	1.0	ug/L	1	11/26/17	MH	SW8260C
1,1,2,2-Tetrachloroethane	ND	0.50	ug/L	1	11/26/17	MH	SW8260C
1,1,2-Trichloroethane	ND	1.0	ug/L	1	11/26/17	MH	SW8260C
1,1-Dichloroethane	ND	1.0	ug/L	1	11/26/17	MH	SW8260C
1,1-Dichloroethene	ND	1.0	ug/L	1	11/26/17	MH	SW8260C
1,1-Dichloropropene	ND	1.0	ug/L	1	11/26/17	MH	SW8260C
1,2,3-Trichlorobenzene	ND	1.0	ug/L	1	11/26/17	MH	SW8260C
1,2,3-Trichloropropane	ND	1.0	ug/L	1	11/26/17	MH	SW8260C
1,2,4-Trichlorobenzene	ND	1.0	ug/L	1	11/26/17	MH	SW8260C
1,2,4-Trimethylbenzene	ND	1.0	ug/L	1	11/26/17	MH	SW8260C
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	1	11/26/17	MH	SW8260C
1,2-Dibromoethane	ND	1.0	ug/L	1	11/26/17	MH	SW8260C
1,2-Dichlorobenzene	ND	1.0	ug/L	1	11/26/17	MH	SW8260C
1,2-Dichloroethane	ND	0.60	ug/L	1	11/26/17	MH	SW8260C
1,2-Dichloropropane	ND	1.0	ug/L	1	11/26/17	MH	SW8260C
1,3,5-Trimethylbenzene	ND	1.0	ug/L	1	11/26/17	MH	SW8260C
1,3-Dichlorobenzene	ND	1.0	ug/L	1	11/26/17	MH	SW8260C
1,3-Dichloropropane	ND	1.0	ug/L	1	11/26/17	MH	SW8260C
1,4-Dichlorobenzene	ND	1.0	ug/L	1	11/26/17	MH	SW8260C
2,2-Dichloropropane	ND	1.0	ug/L	1	11/26/17	MH	SW8260C
2-Chlorotoluene	ND	1.0	ug/L	1	11/26/17	MH	SW8260C
2-Hexanone	ND	5.0	ug/L	1	11/26/17	MH	SW8260C
2-Isopropyltoluene	ND	1.0	ug/L	1	11/26/17	MH	SW8260C 1
4-Chlorotoluene	ND	1.0	ug/L	1	11/26/17	MH	SW8260C

Project ID: BETANCES HOUSES GARAGE
Client ID: MW-2

Phoenix I.D.: BZ46291

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference	
4-Methyl-2-pentanone	ND	5.0	ug/L	1	11/26/17	MH	SW8260C	
Acetone	ND	25	ug/L	1	11/26/17	MH	SW8260C	
Acrylonitrile	ND	5.0	ug/L	1	11/26/17	MH	SW8260C	
Benzene	ND	0.70	ug/L	1	11/26/17	MH	SW8260C	
Bromobenzene	ND	1.0	ug/L	1	11/26/17	MH	SW8260C	
Bromochloromethane	ND	1.0	ug/L	1	11/26/17	MH	SW8260C	
Bromodichloromethane	ND	0.50	ug/L	1	11/26/17	MH	SW8260C	
Bromoform	ND	1.0	ug/L	1	11/26/17	MH	SW8260C	
Bromomethane	ND	1.0	ug/L	1	11/26/17	MH	SW8260C	
Carbon Disulfide	ND	5.0	ug/L	1	11/26/17	MH	SW8260C	
Carbon tetrachloride	ND	1.0	ug/L	1	11/26/17	MH	SW8260C	
Chlorobenzene	ND	1.0	ug/L	1	11/26/17	MH	SW8260C	
Chloroethane	ND	1.0	ug/L	1	11/26/17	MH	SW8260C	
Chloroform	ND	1.0	ug/L	1	11/26/17	MH	SW8260C	
Chloromethane	ND	1.0	ug/L	1	11/26/17	MH	SW8260C	
cis-1,2-Dichloroethene	ND	1.0	ug/L	1	11/26/17	MH	SW8260C	
cis-1,3-Dichloropropene	ND	0.40	ug/L	1	11/26/17	MH	SW8260C	
Dibromochloromethane	ND	0.50	ug/L	1	11/26/17	MH	SW8260C	
Dibromomethane	ND	1.0	ug/L	1	11/26/17	MH	SW8260C	
Dichlorodifluoromethane	ND	1.0	ug/L	1	11/26/17	MH	SW8260C	
Ethylbenzene	ND	1.0	ug/L	1	11/26/17	MH	SW8260C	
Hexachlorobutadiene	ND	0.40	ug/L	1	11/26/17	MH	SW8260C	
Isopropylbenzene	ND	1.0	ug/L	1	11/26/17	MH	SW8260C	
m&p-Xylene	ND	1.0	ug/L	1	11/26/17	MH	SW8260C	
Methyl ethyl ketone	ND	5.0	ug/L	1	11/26/17	MH	SW8260C	
Methyl t-butyl ether (MTBE)	ND	1.0	ug/L	1	11/26/17	MH	SW8260C	
Methylene chloride	ND	1.0	ug/L	1	11/26/17	MH	SW8260C	
Naphthalene	4.5	1.0	ug/L	1	11/26/17	MH	SW8260C	
n-Butylbenzene	ND	1.0	ug/L	1	11/26/17	MH	SW8260C	
n-Propylbenzene	ND	1.0	ug/L	1	11/26/17	MH	SW8260C	
o-Xylene	ND	1.0	ug/L	1	11/26/17	MH	SW8260C	
p-Isopropyltoluene	ND	1.0	ug/L	1	11/26/17	MH	SW8260C	
sec-Butylbenzene	ND	1.0	ug/L	1	11/26/17	MH	SW8260C	
Styrene	ND	1.0	ug/L	1	11/26/17	MH	SW8260C	
tert-Butylbenzene	ND	1.0	ug/L	1	11/26/17	MH	SW8260C	
Tetrachloroethene	ND	1.0	ug/L	1	11/26/17	MH	SW8260C	
Tetrahydrofuran (THF)	ND	2.5	ug/L	1	11/26/17	MH	SW8260C	1
Toluene	ND	1.0	ug/L	1	11/26/17	MH	SW8260C	
Total Xylenes	ND	1.0	ug/L	1	11/26/17	MH	SW8260C	
trans-1,2-Dichloroethene	ND	1.0	ug/L	1	11/26/17	MH	SW8260C	
trans-1,3-Dichloropropene	ND	0.40	ug/L	1	11/26/17	MH	SW8260C	
trans-1,4-dichloro-2-butene	ND	5.0	ug/L	1	11/26/17	MH	SW8260C	
Trichloroethene	ND	1.0	ug/L	1	11/26/17	MH	SW8260C	
Trichlorofluoromethane	ND	1.0	ug/L	1	11/26/17	MH	SW8260C	
Trichlorotrifluoroethane	ND	1.0	ug/L	1	11/26/17	MH	SW8260C	
Vinyl chloride	ND	1.0	ug/L	1	11/26/17	MH	SW8260C	
QA/QC Surrogates								
% 1,2-dichlorobenzene-d4	108		%	1	11/26/17	MH	70 - 130 %	
% Bromofluorobenzene	104		%	1	11/26/17	MH	70 - 130 %	

Ver 3

Project ID: BETANCES HOUSES GARAGE
Client ID: MW-2

Phoenix I.D.: BZ46291

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
% Dibromofluoromethane	108		%	1	11/26/17	MH	70 - 130 %
% Toluene-d8	102		%	1	11/26/17	MH	70 - 130 %
Semivolatiles							
1,2,4-Trichlorobenzene	ND	4.7	ug/L	1	11/29/17	DD	SW8270D
1,2-Dichlorobenzene	ND	2.3	ug/L	1	11/29/17	DD	SW8270D
1,2-Diphenylhydrazine	ND	4.7	ug/L	1	11/29/17	DD	SW8270D
1,3-Dichlorobenzene	ND	2.3	ug/L	1	11/29/17	DD	SW8270D
1,4-Dichlorobenzene	ND	2.3	ug/L	1	11/29/17	DD	SW8270D
2,4,5-Trichlorophenol	ND	0.94	ug/L	1	11/29/17	DD	SW8270D
2,4,6-Trichlorophenol	ND	0.94	ug/L	1	11/29/17	DD	SW8270D
2,4-Dichlorophenol	ND	0.94	ug/L	1	11/29/17	DD	SW8270D
2,4-Dimethylphenol	ND	0.94	ug/L	1	11/29/17	DD	SW8270D
2,4-Dinitrophenol	ND	0.94	ug/L	1	11/29/17	DD	SW8270D
2,4-Dinitrotoluene	ND	4.7	ug/L	1	11/29/17	DD	SW8270D
2,6-Dinitrotoluene	ND	4.7	ug/L	1	11/29/17	DD	SW8270D
2-Chloronaphthalene	ND	4.7	ug/L	1	11/29/17	DD	SW8270D
2-Chlorophenol	ND	0.94	ug/L	1	11/29/17	DD	SW8270D
2-Methylphenol (o-cresol)	ND	0.94	ug/L	1	11/29/17	DD	SW8270D
2-Nitroaniline	ND	4.7	ug/L	1	11/29/17	DD	SW8270D
2-Nitrophenol	ND	0.94	ug/L	1	11/29/17	DD	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	9.4	ug/L	1	11/29/17	DD	SW8270D
3,3'-Dichlorobenzidine	ND	4.7	ug/L	1	11/29/17	DD	SW8270D
3-Nitroaniline	ND	4.7	ug/L	1	11/29/17	DD	SW8270D
4,6-Dinitro-2-methylphenol	ND	0.94	ug/L	1	11/29/17	DD	SW8270D
4-Bromophenyl phenyl ether	ND	4.7	ug/L	1	11/29/17	DD	SW8270D
4-Chloro-3-methylphenol	ND	0.94	ug/L	1	11/29/17	DD	SW8270D
4-Chloroaniline	ND	4.7	ug/L	1	11/29/17	DD	SW8270D
4-Chlorophenyl phenyl ether	ND	0.94	ug/L	1	11/29/17	DD	SW8270D
4-Nitroaniline	ND	4.7	ug/L	1	11/29/17	DD	SW8270D
4-Nitrophenol	ND	0.94	ug/L	1	11/29/17	DD	SW8270D
Acetophenone	ND	4.7	ug/L	1	11/29/17	DD	SW8270D
Aniline	ND	4.7	ug/L	1	11/29/17	DD	SW8270D
Benzidine	ND	4.7	ug/L	1	11/29/17	DD	SW8270D
Benzoic acid	ND	47	ug/L	1	11/29/17	DD	SW8270D
Benzyl butyl phthalate	ND	4.7	ug/L	1	11/29/17	DD	SW8270D
Bis(2-chloroethoxy)methane	ND	4.7	ug/L	1	11/29/17	DD	SW8270D
Bis(2-chloroethyl)ether	ND	0.94	ug/L	1	11/29/17	DD	SW8270D
Bis(2-chloroisopropyl)ether	ND	4.7	ug/L	1	11/29/17	DD	SW8270D
Carbazole	ND	4.7	ug/L	1	11/29/17	DD	SW8270D
Dibenzofuran	ND	4.7	ug/L	1	11/29/17	DD	SW8270D
Diethyl phthalate	ND	4.7	ug/L	1	11/29/17	DD	SW8270D
Dimethylphthalate	ND	4.7	ug/L	1	11/29/17	DD	SW8270D
Di-n-butylphthalate	ND	4.7	ug/L	1	11/29/17	DD	SW8270D
Di-n-octylphthalate	ND	4.7	ug/L	1	11/29/17	DD	SW8270D
Hexachlorocyclopentadiene	ND	4.7	ug/L	1	11/29/17	DD	SW8270D
Isophorone	ND	4.7	ug/L	1	11/29/17	DD	SW8270D
N-Nitrosodi-n-propylamine	ND	4.7	ug/L	1	11/29/17	DD	SW8270D
N-Nitrosodiphenylamine	ND	4.7	ug/L	1	11/29/17	DD	SW8270D
Phenol	ND	0.94	ug/L	1	11/29/17	DD	SW8270D

Project ID: BETANCES HOUSES GARAGE
Client ID: MW-2

Phoenix I.D.: BZ46291

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
QA/QC Surrogates							
% 2,4,6-Tribromophenol	95		%	1	11/29/17	DD	15 - 110 %
% 2-Fluorobiphenyl	72		%	1	11/29/17	DD	30 - 130 %
% 2-Fluorophenol	51		%	1	11/29/17	DD	15 - 110 %
% Nitrobenzene-d5	82		%	1	11/29/17	DD	30 - 130 %
% Phenol-d5	52		%	1	11/29/17	DD	15 - 110 %
% Terphenyl-d14	126		%	1	11/29/17	DD	30 - 130 %
Semivolatiles (SIM)							
1,2,4,5-Tetrachlorobenzene	ND	0.47	ug/L	1	11/28/17	DD	SW8270D (SIM)
2-Methylnaphthalene	ND	0.94	ug/L	1	11/28/17	DD	SW8270D (SIM)
Acenaphthene	1.0	0.05	ug/L	1	11/28/17	DD	SW8270D (SIM)
Acenaphthylene	ND	0.05	ug/L	1	11/28/17	DD	SW8270D (SIM)
Anthracene	0.68	0.02	ug/L	1	11/28/17	DD	SW8270D (SIM)
Benz(a)anthracene	0.08	0.02	ug/L	1	11/28/17	DD	SW8270D (SIM)
Benzo(a)pyrene	0.05	0.02	ug/L	1	11/28/17	DD	SW8270D (SIM)
Benzo(b)fluoranthene	0.05	0.02	ug/L	1	11/28/17	DD	SW8270D (SIM)
Benzo(ghi)perylene	ND	0.47	ug/L	1	11/28/17	DD	SW8270D (SIM)
Benzo(k)fluoranthene	0.04	0.02	ug/L	1	11/28/17	DD	SW8270D (SIM)
Bis(2-ethylhexyl)phthalate	2.9	0.47	ug/L	1	11/28/17	DD	SW8270D (SIM)
Chrysene	0.08	0.02	ug/L	1	11/28/17	DD	SW8270D (SIM)
Dibenz(a,h)anthracene	ND	0.02	ug/L	1	11/28/17	DD	SW8270D (SIM)
Fluoranthene	0.35	0.04	ug/L	1	11/28/17	DD	SW8270D (SIM)
Fluorene	1.1	0.09	ug/L	1	11/28/17	DD	SW8270D (SIM)
Hexachlorobenzene	ND	0.04	ug/L	1	11/28/17	DD	SW8270D (SIM)
Hexachlorobutadiene	ND	0.47	ug/L	1	11/28/17	DD	SW8270D (SIM)
Hexachloroethane	ND	0.47	ug/L	1	11/28/17	DD	SW8270D (SIM)
Indeno(1,2,3-cd)pyrene	ND	0.02	ug/L	1	11/28/17	DD	SW8270D (SIM)
Naphthalene	1.9	0.09	ug/L	1	11/28/17	DD	SW8270D (SIM)
Nitrobenzene	ND	0.09	ug/L	1	11/28/17	DD	SW8270D (SIM)
N-Nitrosodimethylamine	ND	0.47	ug/L	1	11/28/17	DD	SW8270D (SIM)
Pentachloronitrobenzene	ND	0.09	ug/L	1	11/28/17	DD	SW8270D (SIM)
Pentachlorophenol	ND	0.75	ug/L	1	11/28/17	DD	SW8270D (SIM)
Phenanthrene	1.2	0.05	ug/L	1	11/28/17	DD	SW8270D (SIM)
Pyrene	0.82	0.02	ug/L	1	11/28/17	DD	SW8270D (SIM)
Pyridine	ND	0.47	ug/L	1	11/28/17	DD	SW8270D (SIM)
QA/QC Surrogates							
% 2,4,6-Tribromophenol	95		%	1	11/28/17	DD	15 - 110 %
% 2-Fluorobiphenyl	72		%	1	11/28/17	DD	30 - 130 %
% 2-Fluorophenol	51		%	1	11/28/17	DD	15 - 110 %
% Nitrobenzene-d5	82		%	1	11/28/17	DD	30 - 130 %
% Phenol-d5	52		%	1	11/28/17	DD	15 - 110 %
% Terphenyl-d14	126		%	1	11/28/17	DD	30 - 130 %

Project ID: BETANCES HOUSES GARAGE
Client ID: MW-2

Phoenix I.D.: BZ46291

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

1 = This parameter is not certified by 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 (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.

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

Phyllis Shiller, Laboratory Director
December 14, 2017
Reviewed and Released by: Bobbi Aloisa, Vice President

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

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

December 14, 2017

FOR: Attn: Ms. Antoinette Ollivierre
American Env. Assessment & Solutions Inc
679 Lafayette Ave.
3rd Floor
Brooklyn, NY 11216

Sample Information		Custody Information		Date	Time
Matrix:	GROUND WATER	Collected by:		11/21/17	14:15
Location Code:	AEAS-INC	Received by:	SW	11/22/17	16:19
Rush Request:	72 Hour	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBZ46284
Phoenix ID: BZ46292

Project ID: BETANCES HOUSES GARAGE
Client ID: MW-3

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference	
Semi-Volatile Extraction	Completed				11/22/17	P/IR	SW3520C	
Volatiles								
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	1	11/22/17	MH	SW8260C	
1,1,1-Trichloroethane	ND	1.0	ug/L	1	11/22/17	MH	SW8260C	
1,1,2,2-Tetrachloroethane	ND	0.50	ug/L	1	11/22/17	MH	SW8260C	
1,1,2-Trichloroethane	ND	1.0	ug/L	1	11/22/17	MH	SW8260C	
1,1-Dichloroethane	ND	1.0	ug/L	1	11/22/17	MH	SW8260C	
1,1-Dichloroethene	ND	1.0	ug/L	1	11/22/17	MH	SW8260C	
1,1-Dichloropropene	ND	1.0	ug/L	1	11/22/17	MH	SW8260C	
1,2,3-Trichlorobenzene	ND	1.0	ug/L	1	11/22/17	MH	SW8260C	
1,2,3-Trichloropropane	ND	1.0	ug/L	1	11/22/17	MH	SW8260C	
1,2,4-Trichlorobenzene	ND	1.0	ug/L	1	11/22/17	MH	SW8260C	
1,2,4-Trimethylbenzene	ND	1.0	ug/L	1	11/22/17	MH	SW8260C	
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	1	11/22/17	MH	SW8260C	
1,2-Dibromoethane	ND	1.0	ug/L	1	11/22/17	MH	SW8260C	
1,2-Dichlorobenzene	ND	1.0	ug/L	1	11/22/17	MH	SW8260C	
1,2-Dichloroethane	ND	0.60	ug/L	1	11/22/17	MH	SW8260C	
1,2-Dichloropropane	ND	1.0	ug/L	1	11/22/17	MH	SW8260C	
1,3,5-Trimethylbenzene	ND	1.0	ug/L	1	11/22/17	MH	SW8260C	
1,3-Dichlorobenzene	ND	1.0	ug/L	1	11/22/17	MH	SW8260C	
1,3-Dichloropropane	ND	1.0	ug/L	1	11/22/17	MH	SW8260C	
1,4-Dichlorobenzene	ND	1.0	ug/L	1	11/22/17	MH	SW8260C	
2,2-Dichloropropane	ND	1.0	ug/L	1	11/22/17	MH	SW8260C	
2-Chlorotoluene	ND	1.0	ug/L	1	11/22/17	MH	SW8260C	
2-Hexanone	ND	5.0	ug/L	1	11/22/17	MH	SW8260C	
2-Isopropyltoluene	ND	1.0	ug/L	1	11/22/17	MH	SW8260C	1
4-Chlorotoluene	ND	1.0	ug/L	1	11/22/17	MH	SW8260C	

Project ID: BETANCES HOUSES GARAGE
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Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference	
4-Methyl-2-pentanone	ND	5.0	ug/L	1	11/22/17	MH	SW8260C	
Acetone	ND	25	ug/L	1	11/22/17	MH	SW8260C	
Acrylonitrile	ND	5.0	ug/L	1	11/22/17	MH	SW8260C	
Benzene	ND	0.70	ug/L	1	11/22/17	MH	SW8260C	
Bromobenzene	ND	1.0	ug/L	1	11/22/17	MH	SW8260C	
Bromochloromethane	ND	1.0	ug/L	1	11/22/17	MH	SW8260C	
Bromodichloromethane	ND	0.50	ug/L	1	11/22/17	MH	SW8260C	
Bromoform	ND	1.0	ug/L	1	11/22/17	MH	SW8260C	
Bromomethane	ND	1.0	ug/L	1	11/22/17	MH	SW8260C	
Carbon Disulfide	ND	5.0	ug/L	1	11/22/17	MH	SW8260C	
Carbon tetrachloride	ND	1.0	ug/L	1	11/22/17	MH	SW8260C	
Chlorobenzene	ND	1.0	ug/L	1	11/22/17	MH	SW8260C	
Chloroethane	ND	1.0	ug/L	1	11/22/17	MH	SW8260C	
Chloroform	ND	1.0	ug/L	1	11/22/17	MH	SW8260C	
Chloromethane	ND	1.0	ug/L	1	11/22/17	MH	SW8260C	
cis-1,2-Dichloroethene	ND	1.0	ug/L	1	11/22/17	MH	SW8260C	
cis-1,3-Dichloropropene	ND	0.40	ug/L	1	11/22/17	MH	SW8260C	
Dibromochloromethane	ND	0.50	ug/L	1	11/22/17	MH	SW8260C	
Dibromomethane	ND	1.0	ug/L	1	11/22/17	MH	SW8260C	
Dichlorodifluoromethane	ND	1.0	ug/L	1	11/22/17	MH	SW8260C	
Ethylbenzene	ND	1.0	ug/L	1	11/22/17	MH	SW8260C	
Hexachlorobutadiene	ND	0.40	ug/L	1	11/22/17	MH	SW8260C	
Isopropylbenzene	ND	1.0	ug/L	1	11/22/17	MH	SW8260C	
m&p-Xylene	ND	1.0	ug/L	1	11/22/17	MH	SW8260C	
Methyl ethyl ketone	ND	5.0	ug/L	1	11/22/17	MH	SW8260C	
Methyl t-butyl ether (MTBE)	ND	1.0	ug/L	1	11/22/17	MH	SW8260C	
Methylene chloride	ND	1.0	ug/L	1	11/22/17	MH	SW8260C	
Naphthalene	2.4	1.0	ug/L	1	11/22/17	MH	SW8260C	
n-Butylbenzene	ND	1.0	ug/L	1	11/22/17	MH	SW8260C	
n-Propylbenzene	ND	1.0	ug/L	1	11/22/17	MH	SW8260C	
o-Xylene	ND	1.0	ug/L	1	11/22/17	MH	SW8260C	
p-Isopropyltoluene	ND	1.0	ug/L	1	11/22/17	MH	SW8260C	
sec-Butylbenzene	ND	1.0	ug/L	1	11/22/17	MH	SW8260C	
Styrene	ND	1.0	ug/L	1	11/22/17	MH	SW8260C	
tert-Butylbenzene	ND	1.0	ug/L	1	11/22/17	MH	SW8260C	
Tetrachloroethene	1.4	1.0	ug/L	1	11/22/17	MH	SW8260C	
Tetrahydrofuran (THF)	ND	2.5	ug/L	1	11/22/17	MH	SW8260C	1
Toluene	ND	1.0	ug/L	1	11/22/17	MH	SW8260C	
Total Xylenes	ND	1.0	ug/L	1	11/22/17	MH	SW8260C	
trans-1,2-Dichloroethene	ND	1.0	ug/L	1	11/22/17	MH	SW8260C	
trans-1,3-Dichloropropene	ND	0.40	ug/L	1	11/22/17	MH	SW8260C	
trans-1,4-dichloro-2-butene	ND	5.0	ug/L	1	11/22/17	MH	SW8260C	
Trichloroethene	ND	1.0	ug/L	1	11/22/17	MH	SW8260C	
Trichlorofluoromethane	ND	1.0	ug/L	1	11/22/17	MH	SW8260C	
Trichlorotrifluoroethane	ND	1.0	ug/L	1	11/22/17	MH	SW8260C	
Vinyl chloride	ND	1.0	ug/L	1	11/22/17	MH	SW8260C	
QA/QC Surrogates								
% 1,2-dichlorobenzene-d4	102		%	1	11/22/17	MH	70 - 130 %	
% Bromofluorobenzene	105		%	1	11/22/17	MH	70 - 130 %	

Ver 3

Project ID: BETANCES HOUSES GARAGE
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Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
% Dibromofluoromethane	99		%	1	11/22/17	MH	70 - 130 %
% Toluene-d8	108		%	1	11/22/17	MH	70 - 130 %
Semivolatiles							
1,2,4-Trichlorobenzene	ND	4.7	ug/L	1	11/29/17	DD	SW8270D
1,2-Dichlorobenzene	ND	2.3	ug/L	1	11/29/17	DD	SW8270D
1,2-Diphenylhydrazine	ND	4.7	ug/L	1	11/29/17	DD	SW8270D
1,3-Dichlorobenzene	ND	2.3	ug/L	1	11/29/17	DD	SW8270D
1,4-Dichlorobenzene	ND	2.3	ug/L	1	11/29/17	DD	SW8270D
2,4,5-Trichlorophenol	ND	0.94	ug/L	1	11/29/17	DD	SW8270D
2,4,6-Trichlorophenol	ND	0.94	ug/L	1	11/29/17	DD	SW8270D
2,4-Dichlorophenol	ND	0.94	ug/L	1	11/29/17	DD	SW8270D
2,4-Dimethylphenol	ND	0.94	ug/L	1	11/29/17	DD	SW8270D
2,4-Dinitrophenol	ND	0.94	ug/L	1	11/29/17	DD	SW8270D
2,4-Dinitrotoluene	ND	4.7	ug/L	1	11/29/17	DD	SW8270D
2,6-Dinitrotoluene	ND	4.7	ug/L	1	11/29/17	DD	SW8270D
2-Chloronaphthalene	ND	4.7	ug/L	1	11/29/17	DD	SW8270D
2-Chlorophenol	ND	0.94	ug/L	1	11/29/17	DD	SW8270D
2-Methylphenol (o-cresol)	ND	0.94	ug/L	1	11/29/17	DD	SW8270D
2-Nitroaniline	ND	4.7	ug/L	1	11/29/17	DD	SW8270D
2-Nitrophenol	ND	0.94	ug/L	1	11/29/17	DD	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	9.4	ug/L	1	11/29/17	DD	SW8270D
3,3'-Dichlorobenzidine	ND	4.7	ug/L	1	11/29/17	DD	SW8270D
3-Nitroaniline	ND	4.7	ug/L	1	11/29/17	DD	SW8270D
4,6-Dinitro-2-methylphenol	ND	0.94	ug/L	1	11/29/17	DD	SW8270D
4-Bromophenyl phenyl ether	ND	4.7	ug/L	1	11/29/17	DD	SW8270D
4-Chloro-3-methylphenol	ND	0.94	ug/L	1	11/29/17	DD	SW8270D
4-Chloroaniline	ND	4.7	ug/L	1	11/29/17	DD	SW8270D
4-Chlorophenyl phenyl ether	ND	0.94	ug/L	1	11/29/17	DD	SW8270D
4-Nitroaniline	ND	4.7	ug/L	1	11/29/17	DD	SW8270D
4-Nitrophenol	ND	0.94	ug/L	1	11/29/17	DD	SW8270D
Acetophenone	ND	4.7	ug/L	1	11/29/17	DD	SW8270D
Aniline	ND	4.7	ug/L	1	11/29/17	DD	SW8270D
Benzidine	ND	4.7	ug/L	1	11/29/17	DD	SW8270D
Benzoic acid	ND	47	ug/L	1	11/29/17	DD	SW8270D
Benzyl butyl phthalate	ND	4.7	ug/L	1	11/29/17	DD	SW8270D
Bis(2-chloroethoxy)methane	ND	4.7	ug/L	1	11/29/17	DD	SW8270D
Bis(2-chloroethyl)ether	ND	0.94	ug/L	1	11/29/17	DD	SW8270D
Bis(2-chloroisopropyl)ether	ND	4.7	ug/L	1	11/29/17	DD	SW8270D
Carbazole	ND	4.7	ug/L	1	11/29/17	DD	SW8270D
Dibenzofuran	ND	4.7	ug/L	1	11/29/17	DD	SW8270D
Diethyl phthalate	ND	4.7	ug/L	1	11/29/17	DD	SW8270D
Dimethylphthalate	ND	4.7	ug/L	1	11/29/17	DD	SW8270D
Di-n-butylphthalate	ND	4.7	ug/L	1	11/29/17	DD	SW8270D
Di-n-octylphthalate	ND	4.7	ug/L	1	11/29/17	DD	SW8270D
Hexachlorocyclopentadiene	ND	4.7	ug/L	1	11/29/17	DD	SW8270D
Isophorone	ND	4.7	ug/L	1	11/29/17	DD	SW8270D
N-Nitrosodi-n-propylamine	ND	4.7	ug/L	1	11/29/17	DD	SW8270D
N-Nitrosodiphenylamine	ND	4.7	ug/L	1	11/29/17	DD	SW8270D
Phenol	ND	0.94	ug/L	1	11/29/17	DD	SW8270D

Project ID: BETANCES HOUSES GARAGE
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Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
QA/QC Surrogates							
% 2,4,6-Tribromophenol	101		%	1	11/29/17	DD	15 - 110 %
% 2-Fluorobiphenyl	73		%	1	11/29/17	DD	30 - 130 %
% 2-Fluorophenol	55		%	1	11/29/17	DD	15 - 110 %
% Nitrobenzene-d5	75		%	1	11/29/17	DD	30 - 130 %
% Phenol-d5	64		%	1	11/29/17	DD	15 - 110 %
% Terphenyl-d14	106		%	1	11/29/17	DD	30 - 130 %
Semivolatiles (SIM)							
1,2,4,5-Tetrachlorobenzene	ND	0.47	ug/L	1	11/28/17	DD	SW8270D (SIM)
2-Methylnaphthalene	ND	0.94	ug/L	1	11/28/17	DD	SW8270D (SIM)
Acenaphthene	6.1	0.05	ug/L	1	11/28/17	DD	SW8270D (SIM)
Acenaphthylene	0.11	0.05	ug/L	1	11/28/17	DD	SW8270D (SIM)
Anthracene	0.10	0.02	ug/L	1	11/28/17	DD	SW8270D (SIM)
Benz(a)anthracene	0.04	0.02	ug/L	1	11/28/17	DD	SW8270D (SIM)
Benzo(a)pyrene	0.02	0.02	ug/L	1	11/28/17	DD	SW8270D (SIM)
Benzo(b)fluoranthene	0.03	0.02	ug/L	1	11/28/17	DD	SW8270D (SIM)
Benzo(ghi)perylene	ND	0.47	ug/L	1	11/28/17	DD	SW8270D (SIM)
Benzo(k)fluoranthene	0.03	0.02	ug/L	1	11/28/17	DD	SW8270D (SIM)
Bis(2-ethylhexyl)phthalate	1.6	0.47	ug/L	1	11/28/17	DD	SW8270D (SIM)
Chrysene	0.03	0.02	ug/L	1	11/28/17	DD	SW8270D (SIM)
Dibenz(a,h)anthracene	ND	0.02	ug/L	1	11/28/17	DD	SW8270D (SIM)
Fluoranthene	0.26	0.04	ug/L	1	11/28/17	DD	SW8270D (SIM)
Fluorene	0.58	0.09	ug/L	1	11/28/17	DD	SW8270D (SIM)
Hexachlorobenzene	ND	0.04	ug/L	1	11/28/17	DD	SW8270D (SIM)
Hexachlorobutadiene	ND	0.47	ug/L	1	11/28/17	DD	SW8270D (SIM)
Hexachloroethane	ND	0.47	ug/L	1	11/28/17	DD	SW8270D (SIM)
Indeno(1,2,3-cd)pyrene	ND	0.02	ug/L	1	11/28/17	DD	SW8270D (SIM)
Naphthalene	1.3	0.09	ug/L	1	11/28/17	DD	SW8270D (SIM)
Nitrobenzene	ND	0.09	ug/L	1	11/28/17	DD	SW8270D (SIM)
N-Nitrosodimethylamine	ND	0.47	ug/L	1	11/28/17	DD	SW8270D (SIM)
Pentachloronitrobenzene	ND	0.09	ug/L	1	11/28/17	DD	SW8270D (SIM)
Pentachlorophenol	ND	0.75	ug/L	1	11/28/17	DD	SW8270D (SIM)
Phenanthrene	0.16	0.05	ug/L	1	11/28/17	DD	SW8270D (SIM)
Pyrene	0.62	0.02	ug/L	1	11/28/17	DD	SW8270D (SIM)
Pyridine	ND	0.47	ug/L	1	11/28/17	DD	SW8270D (SIM)
QA/QC Surrogates							
% 2,4,6-Tribromophenol	101		%	1	11/28/17	DD	15 - 110 %
% 2-Fluorobiphenyl	73		%	1	11/28/17	DD	30 - 130 %
% 2-Fluorophenol	55		%	1	11/28/17	DD	15 - 110 %
% Nitrobenzene-d5	75		%	1	11/28/17	DD	30 - 130 %
% Phenol-d5	64		%	1	11/28/17	DD	15 - 110 %
% Terphenyl-d14	106		%	1	11/28/17	DD	30 - 130 %

Project ID: BETANCES HOUSES GARAGE
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Phoenix I.D.: BZ46292

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

1 = This parameter is not certified by 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 (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.

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

Phyllis Shiller, Laboratory Director
December 14, 2017
Reviewed and Released by: Bobbi Aloisa, Vice President

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID: SB-2 (6-8 FT)

Lab Name: Phoenix Environmental Labs Client: AEAS-INC

Lab Code: Phoenix Case No.: SAS No.: SDG No.: GBZ46284

Matrix:(soil/water) SOIL Lab Sample ID: BZ46287

Sample wt/vol: 15.1 (g/mL) g Lab File ID: 1122_49.D

Level: (low/med) Low Date Received: 11/22/17

% Moisture: not dec. 14 decanted:(Y/N) NA Date Extracted: 11/23/17

GPC Cleanup (Y/N): N pH: NA Date Analyzed: 11/23/2017

Conc. Extract Volume: 1000 (uL) Dilution Factor 1

Injection Volume: 2 (uL)

Number TICs found: 16 CONCENTRATION UNITS: (ug/L or ug/KG) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
	unknown hydrocarbon	2.100	22000	J
004485-13-6	3-Heptene, 4-propyl-	2.987	370	JN
071186-27-1	1-Ethyl-2,2,6-trimethylcyclohexane	3.296	1800	JN
001120-21-4	Undecane	3.644	13000	JN
017312-54-8	Decane, 3,7-dimethyl-	3.702	13000	JN
	unknown hydrocarbon	3.734	2700	J
054676-39-0	Cyclohexane, 2-butyl-1,1,3-trimeth	4.285	11000	JN
001618-22-0	Naphthalene, decahydro-2,6-dimethy	4.317	10000	JN
001678-92-8	Cyclohexane, propyl-	4.349	7400	JN
000295-17-0	Cyclotetradecane	4.413	8500	JN
105-60-2	Caprolactam	4.482	9900	Q
005617-41-4	Heptylcyclohexane	4.878	1300	JN
001921-70-6	Pentadecane, 2,6,10,14-tetramethyl	6.448	4600	JN
001576-69-8	Phenanthrene, 2,7-dimethyl-	7.779	1100	JN
003674-66-6	Phenanthrene, 2,5-dimethyl-	7.859	970	JN
003674-73-5	Phenanthrene, 2,3,5-trimethyl-	8.233	1500	JN

Tentatively identified compounds do not include the unresolved hump - refer to attached chromatogram

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.

PHOENIX

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

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

QA/QC Report

December 14, 2017

QA/QC Data

SDG I.D.: GBZ46284

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
QA/QC Batch 410841 (ug/L), QC Sample No: BZ45753 (BZ46291)											
Volatiles - Ground Water											
1,1,1,2-Tetrachloroethane	ND	1.0	107	111	3.7				70 - 130	30	
1,1,1-Trichloroethane	ND	1.0	94	96	2.1				70 - 130	30	
1,1,2,2-Tetrachloroethane	ND	0.50	103	107	3.8				70 - 130	30	
1,1,2-Trichloroethane	ND	1.0	99	108	8.7				70 - 130	30	
1,1-Dichloroethane	ND	1.0	90	92	2.2				70 - 130	30	
1,1-Dichloroethene	ND	1.0	107	107	0.0				70 - 130	30	
1,1-Dichloropropene	ND	1.0	96	98	2.1				70 - 130	30	
1,2,3-Trichlorobenzene	ND	1.0	130	145	10.9				70 - 130	30	I
1,2,3-Trichloropropane	ND	1.0	89	94	5.5				70 - 130	30	
1,2,4-Trichlorobenzene	ND	1.0	117	123	5.0				70 - 130	30	
1,2,4-Trimethylbenzene	ND	1.0	94	93	1.1				70 - 130	30	
1,2-Dibromo-3-chloropropane	ND	1.0	131	141	7.4				70 - 130	30	I
1,2-Dibromoethane	ND	1.0	101	109	7.6				70 - 130	30	
1,2-Dichlorobenzene	ND	1.0	103	106	2.9				70 - 130	30	
1,2-Dichloroethane	ND	1.0	87	94	7.7				70 - 130	30	
1,2-Dichloropropane	ND	1.0	91	97	6.4				70 - 130	30	
1,3,5-Trimethylbenzene	ND	1.0	95	93	2.1				70 - 130	30	
1,3-Dichlorobenzene	ND	1.0	103	105	1.9				70 - 130	30	
1,3-Dichloropropane	ND	1.0	94	100	6.2				70 - 130	30	
1,4-Dichlorobenzene	ND	1.0	102	104	1.9				70 - 130	30	
2,2-Dichloropropane	ND	1.0	86	86	0.0				70 - 130	30	
2-Chlorotoluene	ND	1.0	97	95	2.1				70 - 130	30	
2-Hexanone	ND	5.0	79	88	10.8				70 - 130	30	
2-Isopropyltoluene	ND	1.0	93	92	1.1				70 - 130	30	
4-Chlorotoluene	ND	1.0	99	98	1.0				70 - 130	30	
4-Methyl-2-pentanone	ND	5.0	81	88	8.3				70 - 130	30	
Acetone	ND	5.0	80	89	10.7				70 - 130	30	
Acrylonitrile	ND	5.0	88	98	10.8				70 - 130	30	
Benzene	ND	0.70	97	99	2.0				70 - 130	30	
Bromobenzene	ND	1.0	102	102	0.0				70 - 130	30	
Bromochloromethane	ND	1.0	101	107	5.8				70 - 130	30	
Bromodichloromethane	ND	0.50	99	104	4.9				70 - 130	30	
Bromoform	ND	1.0	135	143	5.8				70 - 130	30	I
Bromomethane	ND	1.0	119	115	3.4				70 - 130	30	
Carbon Disulfide	ND	1.0	103	102	1.0				70 - 130	30	
Carbon tetrachloride	ND	1.0	101	102	1.0				70 - 130	30	
Chlorobenzene	ND	1.0	99	102	3.0				70 - 130	30	
Chloroethane	ND	1.0	80	80	0.0				70 - 130	30	
Chloroform	ND	1.0	92	94	2.2				70 - 130	30	
Chloromethane	ND	1.0	78	79	1.3				70 - 130	30	
cis-1,2-Dichloroethene	ND	1.0	96	102	6.1				70 - 130	30	

QA/QC Data

SDG I.D.: GBZ46284

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
cis-1,3-Dichloropropene	ND	0.40	96	102	6.1				70 - 130	30
Dibromochloromethane	ND	0.50	115	121	5.1				70 - 130	30
Dibromomethane	ND	1.0	100	106	5.8				70 - 130	30
Dichlorodifluoromethane	ND	1.0	66	67	1.5				70 - 130	30
Ethylbenzene	ND	1.0	98	99	1.0				70 - 130	30
Hexachlorobutadiene	ND	0.40	116	114	1.7				70 - 130	30
Isopropylbenzene	ND	1.0	96	94	2.1				70 - 130	30
m&p-Xylene	ND	1.0	102	104	1.9				70 - 130	30
Methyl ethyl ketone	ND	5.0	84	91	8.0				70 - 130	30
Methyl t-butyl ether (MTBE)	ND	1.0	80	86	7.2				70 - 130	30
Methylene chloride	ND	1.0	95	97	2.1				70 - 130	30
Naphthalene	ND	1.0	118	132	11.2				70 - 130	30
n-Butylbenzene	ND	1.0	102	98	4.0				70 - 130	30
n-Propylbenzene	ND	1.0	98	96	2.1				70 - 130	30
o-Xylene	ND	1.0	98	101	3.0				70 - 130	30
p-Isopropyltoluene	ND	1.0	99	97	2.0				70 - 130	30
sec-Butylbenzene	ND	1.0	103	100	3.0				70 - 130	30
Styrene	ND	1.0	102	106	3.8				70 - 130	30
tert-Butylbenzene	ND	1.0	96	94	2.1				70 - 130	30
Tetrachloroethene	ND	1.0	107	107	0.0				70 - 130	30
Tetrahydrofuran (THF)	ND	2.5	80	89	10.7				70 - 130	30
Toluene	ND	1.0	98	101	3.0				70 - 130	30
trans-1,2-Dichloroethene	ND	1.0	97	99	2.0				70 - 130	30
trans-1,3-Dichloropropene	ND	0.40	90	97	7.5				70 - 130	30
trans-1,4-dichloro-2-butene	ND	5.0	84	90	6.9				70 - 130	30
Trichloroethene	ND	1.0	103	105	1.9				70 - 130	30
Trichlorofluoromethane	ND	1.0	81	81	0.0				70 - 130	30
Trichlorotrifluoroethane	ND	1.0	105	104	1.0				70 - 130	30
Vinyl chloride	ND	1.0	72	74	2.7				70 - 130	30
% 1,2-dichlorobenzene-d4	100	%	101	101	0.0				70 - 130	30
% Bromofluorobenzene	95	%	94	94	0.0				70 - 130	30
% Dibromofluoromethane	102	%	107	110	2.8				70 - 130	30
% Toluene-d8	101	%	96	97	1.0				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%.

QA/QC Batch 410803 (ug/kg), QC Sample No: BZ46020 (BZ46285)

Volatiles - Soil

1,1,1,2-Tetrachloroethane	ND	5.0	104	100	3.9	106	106	0.0	70 - 130	30
1,1,1-Trichloroethane	ND	5.0	99	108	8.7	104	106	1.9	70 - 130	30
1,1,2,2-Tetrachloroethane	ND	3.0	110	123	11.2	107	108	0.9	70 - 130	30
1,1,2-Trichloroethane	ND	5.0	105	107	1.9	100	99	1.0	70 - 130	30
1,1-Dichloroethane	ND	5.0	97	117	18.7	125	104	18.3	70 - 130	30
1,1-Dichloroethene	ND	5.0	90	105	15.4	93	92	1.1	70 - 130	30
1,1-Dichloropropene	ND	5.0	105	108	2.8	115	116	0.9	70 - 130	30
1,2,3-Trichlorobenzene	ND	5.0	109	115	5.4	116	111	4.4	70 - 130	30
1,2,3-Trichloropropane	ND	5.0	103	103	0.0	97	98	1.0	70 - 130	30
1,2,4-Trichlorobenzene	ND	5.0	111	116	4.4	122	114	6.8	70 - 130	30
1,2,4-Trimethylbenzene	ND	1.0	107	111	3.7	115	114	0.9	70 - 130	30
1,2-Dibromo-3-chloropropane	ND	5.0	108	110	1.8	99	98	1.0	70 - 130	30
1,2-Dibromoethane	ND	5.0	103	102	1.0	97	97	0.0	70 - 130	30
1,2-Dichlorobenzene	ND	5.0	104	107	2.8	111	110	0.9	70 - 130	30

QA/QC Data

SDG I.D.: GBZ46284

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
1,2-Dichloroethane	ND	5.0	96	99	3.1	92	94	2.2	70 - 130	30	
1,2-Dichloropropane	ND	5.0	112	126	11.8	115	116	0.9	70 - 130	30	
1,3,5-Trimethylbenzene	ND	1.0	109	113	3.6	121	119	1.7	70 - 130	30	
1,3-Dichlorobenzene	ND	5.0	106	110	3.7	117	114	2.6	70 - 130	30	
1,3-Dichloropropane	ND	5.0	105	111	5.6	105	104	1.0	70 - 130	30	
1,4-Dichlorobenzene	ND	5.0	103	107	3.8	113	111	1.8	70 - 130	30	
2,2-Dichloropropane	ND	5.0	105	119	12.5	104	107	2.8	70 - 130	30	
2-Chlorotoluene	ND	5.0	112	116	3.5	123	123	0.0	70 - 130	30	
2-Hexanone	ND	25	99	115	15.0	92	94	2.2	70 - 130	30	
2-Isopropyltoluene	ND	5.0	103	106	2.9	115	114	0.9	70 - 130	30	
4-Chlorotoluene	ND	5.0	110	113	2.7	120	118	1.7	70 - 130	30	
4-Methyl-2-pentanone	ND	25	100	122	19.8	90	93	3.3	70 - 130	30	
Acetone	ND	10	71	69	2.9	54	61	12.2	70 - 130	30	l,m
Acrylonitrile	ND	5.0	87	110	23.4	104	81	24.9	70 - 130	30	
Benzene	ND	1.0	103	112	8.4	112	112	0.0	70 - 130	30	
Bromobenzene	ND	5.0	106	123	14.8	112	112	0.0	70 - 130	30	
Bromochloromethane	ND	5.0	104	117	11.8	102	103	1.0	70 - 130	30	
Bromodichloromethane	ND	5.0	101	104	2.9	99	99	0.0	70 - 130	30	
Bromoform	ND	5.0	100	97	3.0	91	92	1.1	70 - 130	30	
Bromomethane	ND	5.0	75	79	5.2	76	62	20.3	70 - 130	30	m
Carbon Disulfide	ND	5.0	93	110	16.7	88	90	2.2	70 - 130	30	
Carbon tetrachloride	ND	5.0	100	105	4.9	100	101	1.0	70 - 130	30	
Chlorobenzene	ND	5.0	103	109	5.7	112	112	0.0	70 - 130	30	
Chloroethane	ND	5.0	78	78	0.0	88	75	16.0	70 - 130	30	
Chloroform	ND	5.0	98	112	13.3	101	103	2.0	70 - 130	30	
Chloromethane	ND	5.0	105	101	3.9	113	100	12.2	70 - 130	30	
cis-1,2-Dichloroethene	ND	5.0	100	116	14.8	105	110	4.7	70 - 130	30	
cis-1,3-Dichloropropene	ND	5.0	114	120	5.1	108	109	0.9	70 - 130	30	
Dibromochloromethane	ND	3.0	105	98	6.9	100	101	1.0	70 - 130	30	
Dibromomethane	ND	5.0	101	106	4.8	97	98	1.0	70 - 130	30	
Dichlorodifluoromethane	ND	5.0	93	91	2.2	93	83	11.4	70 - 130	30	
Ethylbenzene	ND	1.0	106	111	4.6	116	118	1.7	70 - 130	30	
Hexachlorobutadiene	ND	5.0	106	108	1.9	120	120	0.0	70 - 130	30	
Isopropylbenzene	ND	1.0	117	146	22.1	109	80	30.7	70 - 130	30	l,r
m&p-Xylene	ND	2.0	104	112	7.4	112	113	0.9	70 - 130	30	
Methyl ethyl ketone	ND	5.0	92	123	28.8	83	78	6.2	70 - 130	30	
Methyl t-butyl ether (MTBE)	ND	1.0	90	95	5.4	84	84	0.0	70 - 130	30	
Methylene chloride	ND	5.0	84	91	8.0	83	85	2.4	70 - 130	30	
Naphthalene	ND	5.0	121	127	4.8	115	113	1.8	70 - 130	30	
n-Butylbenzene	ND	1.0	110	113	2.7	124	123	0.8	70 - 130	30	
n-Propylbenzene	ND	1.0	109	128	16.0	123	123	0.0	70 - 130	30	
o-Xylene	ND	2.0	112	118	5.2	118	119	0.8	70 - 130	30	
p-Isopropyltoluene	ND	1.0	112	115	2.6	125	124	0.8	70 - 130	30	
sec-Butylbenzene	ND	1.0	113	117	3.5	128	129	0.8	70 - 130	30	
Styrene	ND	5.0	110	117	6.2	117	119	1.7	70 - 130	30	
tert-Butylbenzene	ND	1.0	112	115	2.6	125	126	0.8	70 - 130	30	
Tetrachloroethene	ND	5.0	104	100	3.9	115	115	0.0	70 - 130	30	
Tetrahydrofuran (THF)	ND	5.0	92	126	31.2	84	85	1.2	70 - 130	30	r
Toluene	ND	1.0	106	115	8.1	113	115	1.8	70 - 130	30	
trans-1,2-Dichloroethene	ND	5.0	97	104	7.0	98	103	5.0	70 - 130	30	
trans-1,3-Dichloropropene	ND	5.0	104	110	5.6	96	96	0.0	70 - 130	30	
trans-1,4-dichloro-2-butene	ND	5.0	106	111	4.6	91	90	1.1	70 - 130	30	
Trichloroethene	ND	5.0	107	108	0.9	116	118	1.7	70 - 130	30	

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
Trichlorofluoromethane	ND	5.0	71	72	1.4	75	64	15.8	70 - 130	30	m
Trichlorotrifluoroethane	ND	5.0	83	89	7.0	85	80	6.1	70 - 130	30	
Vinyl chloride	ND	5.0	121	125	3.3	134	124	7.8	70 - 130	30	m
% 1,2-dichlorobenzene-d4	102	%	100	99	1.0	99	98	1.0	70 - 130	30	
% Bromofluorobenzene	93	%	96	96	0.0	95	96	1.0	70 - 130	30	
% Dibromofluoromethane	98	%	95	89	6.5	89	89	0.0	70 - 130	30	
% Toluene-d8	100	%	101	104	2.9	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 410678 (ug/L), QC Sample No: BZ46276 (BZ46290, BZ46291, BZ46292)

Semivolatiles (SIM) - Ground Water

1,2,4,5-Tetrachlorobenzene	ND	0.50	63						30 - 130	20	
2-Methylnaphthalene	ND	0.02	64						30 - 130	20	
Acenaphthene	ND	0.02	84						30 - 130	20	
Acenaphthylene	ND	0.02	83						30 - 130	20	
Anthracene	ND	0.02	95						30 - 130	20	
Benz(a)anthracene	ND	0.02	90						30 - 130	20	
Benzo(a)pyrene	ND	0.02	91						30 - 130	20	
Benzo(b)fluoranthene	ND	0.02	102						30 - 130	20	
Benzo(ghi)perylene	ND	0.02	88						30 - 130	20	
Benzo(k)fluoranthene	ND	0.02	95						30 - 130	20	
Bis(2-ethylhexyl)phthalate	ND	0.15	111						30 - 130	20	
Chrysene	ND	0.02	84						30 - 130	20	
Dibenz(a,h)anthracene	ND	0.01	99						30 - 130	20	
Fluoranthene	ND	0.02	94						30 - 130	20	
Fluorene	ND	0.02	87						30 - 130	20	
Hexachlorobenzene	ND	0.02	84						30 - 130	20	
Hexachlorobutadiene	ND	0.05	47						30 - 130	20	
Hexachloroethane	ND	0.05	46						30 - 130	20	
Indeno(1,2,3-cd)pyrene	ND	0.02	94						30 - 130	20	
Naphthalene	ND	0.02	54						30 - 130	20	
Nitrobenzene	ND	0.05	58						30 - 130	20	
N-Nitrosodimethylamine	ND	0.05	49						30 - 130	20	
Pentachloronitrobenzene	ND	0.10	98						30 - 130	20	
Pentachlorophenol	ND	0.20	92						30 - 130	20	
Phenanthrene	ND	0.02	83						30 - 130	20	
Pyrene	ND	0.02	99						30 - 130	20	
Pyridine	ND	0.50	41						30 - 130	20	
% 2,4,6-Tribromophenol	88	%	94						15 - 110	20	
% 2-Fluorobiphenyl	69	%	77						30 - 130	20	
% 2-Fluorophenol	44	%	35						15 - 110	20	
% Nitrobenzene-d5	55	%	61						30 - 130	20	
% Phenol-d5	46	%	38						15 - 110	20	
% Terphenyl-d14	90	%	97						30 - 130	20	

Comment:

LCSD not reported for this batch.

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 410678 (ug/L), QC Sample No: BZ46276 (BZ46290, BZ46291, BZ46292)

Semivolatiles - Ground Water

1,2,4-Trichlorobenzene	ND	3.5	55						30 - 130	20	

QA/QC Data

SDG I.D.: GBZ46284

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
1,2-Dichlorobenzene	ND	1.0	48						30 - 130	20
1,2-Diphenylhydrazine	ND	1.6	71						30 - 130	20
1,3-Dichlorobenzene	ND	1.0	45						30 - 130	20
1,4-Dichlorobenzene	ND	1.0	49						30 - 130	20
2,4,5-Trichlorophenol	ND	1.0	72						30 - 130	20
2,4,6-Trichlorophenol	ND	1.0	69						30 - 130	20
2,4-Dichlorophenol	ND	1.0	63						30 - 130	20
2,4-Dimethylphenol	ND	1.0	70						30 - 130	20
2,4-Dinitrophenol	ND	1.0	76						30 - 130	20
2,4-Dinitrotoluene	ND	3.5	81						30 - 130	20
2,6-Dinitrotoluene	ND	3.5	70						30 - 130	20
2-Chloronaphthalene	ND	3.5	72						30 - 130	20
2-Chlorophenol	ND	1.0	44						30 - 130	20
2-Methylphenol (o-cresol)	ND	1.0	55						30 - 130	20
2-Nitroaniline	ND	3.5	108						30 - 130	20
2-Nitrophenol	ND	1.0	64						30 - 130	20
3&4-Methylphenol (m&p-cresol)	ND	1.0	55						30 - 130	20
3,3'-Dichlorobenzidine	ND	5.0	54						30 - 130	20
3-Nitroaniline	ND	5.0	96						30 - 130	20
4,6-Dinitro-2-methylphenol	ND	1.0	80						30 - 130	20
4-Bromophenyl phenyl ether	ND	3.5	84						30 - 130	20
4-Chloro-3-methylphenol	ND	1.0	78						30 - 130	20
4-Chloroaniline	ND	3.5	80						30 - 130	20
4-Chlorophenyl phenyl ether	ND	1.0	79						30 - 130	20
4-Nitroaniline	ND	5.0	77						30 - 130	20
4-Nitrophenol	ND	1.0	66						15 - 130	20
Acetophenone	ND	3.5	58						30 - 130	20
Aniline	ND	3.5	52						30 - 130	20
Benzidine	ND	4.5	69						30 - 130	20
Benzoic acid	ND	10	45						30 - 130	20
Benzyl butyl phthalate	ND	1.5	91						30 - 130	20
Bis(2-chloroethoxy)methane	ND	3.5	67						30 - 130	20
Bis(2-chloroethyl)ether	ND	1.0	49						30 - 130	20
Bis(2-chloroisopropyl)ether	ND	1.0	43						30 - 130	20
Carbazole	ND	5.0	94						30 - 130	20
Dibenzofuran	ND	3.5	80						30 - 130	20
Diethyl phthalate	ND	1.5	84						30 - 130	20
Dimethylphthalate	ND	1.5	80						30 - 130	20
Di-n-butylphthalate	ND	1.5	92						30 - 130	20
Di-n-octylphthalate	ND	1.5	87						30 - 130	20
Hexachlorocyclopentadiene	ND	3.5	35						30 - 130	20
Isophorone	ND	3.5	67						30 - 130	20
N-Nitrosodi-n-propylamine	ND	3.5	68						30 - 130	20
N-Nitrosodiphenylamine	ND	3.5	72						30 - 130	20
Phenol	ND	1.0	39						15 - 130	20
% 2,4,6-Tribromophenol	68	%	88						15 - 110	20
% 2-Fluorobiphenyl	61	%	74						30 - 130	20
% 2-Fluorophenol	31	%	32						15 - 110	20
% Nitrobenzene-d5	49	%	57						30 - 130	20
% Phenol-d5	35	%	37						15 - 110	20
% Terphenyl-d14	68	%	95						30 - 130	20

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits

Comment:

LCSD not reported for this batch.

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 410819 (ug/L), QC Sample No: BZ46277 (BZ46290, BZ46292)

Volatiles - Ground Water

1,1,1,2-Tetrachloroethane	ND	1.0	90	96	6.5				70 - 130	30
1,1,1-Trichloroethane	ND	1.0	95	99	4.1				70 - 130	30
1,1,2,2-Tetrachloroethane	ND	0.50	102	108	5.7				70 - 130	30
1,1,2-Trichloroethane	ND	1.0	99	104	4.9				70 - 130	30
1,1-Dichloroethane	ND	1.0	98	103	5.0				70 - 130	30
1,1-Dichloroethene	ND	1.0	106	109	2.8				70 - 130	30
1,1-Dichloropropene	ND	1.0	97	101	4.0				70 - 130	30
1,2,3-Trichlorobenzene	ND	1.0	72	93	25.5				70 - 130	30
1,2,3-Trichloropropane	ND	1.0	101	107	5.8				70 - 130	30
1,2,4-Trichlorobenzene	ND	1.0	78	89	13.2				70 - 130	30
1,2,4-Trimethylbenzene	ND	1.0	87	92	5.6				70 - 130	30
1,2-Dibromo-3-chloropropane	ND	1.0	98	105	6.9				70 - 130	30
1,2-Dibromoethane	ND	1.0	97	103	6.0				70 - 130	30
1,2-Dichlorobenzene	ND	1.0	92	98	6.3				70 - 130	30
1,2-Dichloroethane	ND	1.0	105	108	2.8				70 - 130	30
1,2-Dichloropropane	ND	1.0	98	104	5.9				70 - 130	30
1,3,5-Trimethylbenzene	ND	1.0	89	94	5.5				70 - 130	30
1,3-Dichlorobenzene	ND	1.0	90	95	5.4				70 - 130	30
1,3-Dichloropropane	ND	1.0	100	103	3.0				70 - 130	30
1,4-Dichlorobenzene	ND	1.0	91	97	6.4				70 - 130	30
2,2-Dichloropropane	ND	1.0	101	105	3.9				70 - 130	30
2-Chlorotoluene	ND	1.0	88	92	4.4				70 - 130	30
2-Hexanone	ND	5.0	110	118	7.0				70 - 130	30
2-Isopropyltoluene	ND	1.0	91	97	6.4				70 - 130	30
4-Chlorotoluene	ND	1.0	87	91	4.5				70 - 130	30
4-Methyl-2-pentanone	ND	5.0	112	117	4.4				70 - 130	30
Acetone	ND	5.0	108	112	3.6				70 - 130	30
Acrylonitrile	ND	5.0	121	122	0.8				70 - 130	30
Benzene	ND	0.70	93	97	4.2				70 - 130	30
Bromobenzene	ND	1.0	90	95	5.4				70 - 130	30
Bromochloromethane	ND	1.0	101	105	3.9				70 - 130	30
Bromodichloromethane	ND	0.50	95	100	5.1				70 - 130	30
Bromoform	ND	1.0	82	87	5.9				70 - 130	30
Bromomethane	ND	1.0	85	94	10.1				70 - 130	30
Carbon Disulfide	ND	1.0	110	114	3.6				70 - 130	30
Carbon tetrachloride	ND	1.0	92	98	6.3				70 - 130	30
Chlorobenzene	ND	1.0	93	97	4.2				70 - 130	30
Chloroethane	ND	1.0	107	110	2.8				70 - 130	30
Chloroform	ND	1.0	95	100	5.1				70 - 130	30
Chloromethane	ND	1.0	96	102	6.1				70 - 130	30
cis-1,2-Dichloroethene	ND	1.0	91	100	9.4				70 - 130	30
cis-1,3-Dichloropropene	ND	0.40	100	103	3.0				70 - 130	30
Dibromochloromethane	ND	0.50	92	98	6.3				70 - 130	30
Dibromomethane	ND	1.0	102	104	1.9				70 - 130	30
Dichlorodifluoromethane	ND	1.0	113	117	3.5				70 - 130	30
Ethylbenzene	ND	1.0	90	95	5.4				70 - 130	30

QA/QC Data

SDG I.D.: GBZ46284

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
Hexachlorobutadiene	ND	0.40	82	89	8.2				70 - 130	30	
Isopropylbenzene	ND	1.0	87	92	5.6				70 - 130	30	
m&p-Xylene	ND	1.0	96	101	5.1				70 - 130	30	
Methyl ethyl ketone	ND	5.0	122	131	7.1				70 - 130	30	l
Methyl t-butyl ether (MTBE)	ND	1.0	114	121	6.0				70 - 130	30	
Methylene chloride	ND	1.0	94	100	6.2				70 - 130	30	
Naphthalene	ND	1.0	85	101	17.2				70 - 130	30	
n-Butylbenzene	ND	1.0	90	94	4.3				70 - 130	30	
n-Propylbenzene	ND	1.0	87	92	5.6				70 - 130	30	
o-Xylene	ND	1.0	92	97	5.3				70 - 130	30	
p-Isopropyltoluene	ND	1.0	89	94	5.5				70 - 130	30	
sec-Butylbenzene	ND	1.0	93	97	4.2				70 - 130	30	
Styrene	ND	1.0	93	99	6.3				70 - 130	30	
tert-Butylbenzene	ND	1.0	88	92	4.4				70 - 130	30	
Tetrachloroethene	ND	1.0	90	95	5.4				70 - 130	30	
Tetrahydrofuran (THF)	ND	2.5	113	118	4.3				70 - 130	30	
Toluene	ND	1.0	92	97	5.3				70 - 130	30	
trans-1,2-Dichloroethene	ND	1.0	92	97	5.3				70 - 130	30	
trans-1,3-Dichloropropene	ND	0.40	98	102	4.0				70 - 130	30	
trans-1,4-dichloro-2-butene	ND	5.0	86	92	6.7				70 - 130	30	
Trichloroethene	ND	1.0	92	97	5.3				70 - 130	30	
Trichlorofluoromethane	ND	1.0	114	115	0.9				70 - 130	30	
Trichlorotrifluoroethane	ND	1.0	122	125	2.4				70 - 130	30	
Vinyl chloride	ND	1.0	107	110	2.8				70 - 130	30	
% 1,2-dichlorobenzene-d4	100	%	101	101	0.0				70 - 130	30	
% Bromofluorobenzene	102	%	102	101	1.0				70 - 130	30	
% Dibromofluoromethane	95	%	102	102	0.0				70 - 130	30	
% Toluene-d8	107	%	104	103	1.0				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%.

QA/QC Batch 410662 (ug/kg), QC Sample No: BZ46288 (BZ46284, BZ46285, BZ46286, BZ46287, BZ46288, BZ46289)

Semivolatiles - Soil

1,2,4,5-Tetrachlorobenzene	ND	230	40	64	46.2	58	68	15.9	30 - 130	30	r
1,2,4-Trichlorobenzene	ND	230	30	58	63.6	56	66	16.4	30 - 130	30	r
1,2-Dichlorobenzene	ND	180	23	53	78.9	53	64	18.8	30 - 130	30	l,r
1,2-Diphenylhydrazine	ND	230	51	59	14.5	52	58	10.9	30 - 130	30	
1,3-Dichlorobenzene	ND	230	16	50	103.0	48	57	17.1	30 - 130	30	l,r
1,4-Dichlorobenzene	ND	230	18	52	97.1	52	62	17.5	30 - 130	30	l,r
2,4,5-Trichlorophenol	ND	230	58	67	14.4	66	72	8.7	30 - 130	30	
2,4,6-Trichlorophenol	ND	130	58	66	12.9	62	67	7.8	30 - 130	30	
2,4-Dichlorophenol	ND	130	57	66	14.6	60	69	14.0	30 - 130	30	
2,4-Dimethylphenol	ND	230	59	65	9.7	58	67	14.4	30 - 130	30	
2,4-Dinitrophenol	ND	230	16	<10	NC	10	11	9.5	30 - 130	30	l,m
2,4-Dinitrotoluene	ND	130	62	71	13.5	65	70	7.4	30 - 130	30	
2,6-Dinitrotoluene	ND	130	57	66	14.6	61	65	6.3	30 - 130	30	
2-Chloronaphthalene	ND	230	48	63	27.0	58	66	12.9	30 - 130	30	
2-Chlorophenol	ND	230	51	57	11.1	52	65	22.2	30 - 130	30	
2-Methylnaphthalene	ND	230	43	62	36.2	56	66	16.4	30 - 130	30	r
2-Methylphenol (o-cresol)	ND	230	56	63	11.8	57	70	20.5	30 - 130	30	
2-Nitroaniline	ND	330	77	82	6.3	75	82	8.9	30 - 130	30	
2-Nitrophenol	ND	230	47	56	17.5	49	59	18.5	30 - 130	30	

QA/QC Data

SDG I.D.: GBZ46284

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
3&4-Methylphenol (m&p-cresol)	ND	230	50	57	13.1	50	60	18.2	30 - 130	30	
3,3'-Dichlorobenzidine	ND	130	79	82	3.7	51	72	34.1	30 - 130	30	r
3-Nitroaniline	ND	330	73	81	10.4	72	81	11.8	30 - 130	30	
4,6-Dinitro-2-methylphenol	ND	230	39	13	100.0	18	20	10.5	30 - 130	30	l,m,r
4-Bromophenyl phenyl ether	ND	230	52	66	23.7	60	67	11.0	30 - 130	30	
4-Chloro-3-methylphenol	ND	230	59	68	14.2	62	70	12.1	30 - 130	30	
4-Chloroaniline	ND	230	56	62	10.2	53	61	14.0	30 - 130	30	
4-Chlorophenyl phenyl ether	ND	230	54	69	24.4	62	69	10.7	30 - 130	30	
4-Nitroaniline	ND	230	57	64	11.6	58	64	9.8	30 - 130	30	
4-Nitrophenol	ND	230	58	65	11.4	59	63	6.6	30 - 130	30	
Acenaphthene	ND	230	57	72	23.3	67	75	11.3	30 - 130	30	
Acenaphthylene	ND	130	52	65	22.2	59	66	11.2	30 - 130	30	
Acetophenone	ND	230	47	53	12.0	49	61	21.8	30 - 130	30	
Aniline	ND	330	55	56	1.8	52	56	7.4	30 - 130	30	
Anthracene	ND	230	56	71	23.6	65	73	11.6	30 - 130	30	
Benz(a)anthracene	ND	230	56	72	25.0	61	69	12.3	30 - 130	30	
Benzidine	ND	330	69	40	53.2	<10	21	NC	30 - 130	30	m,r
Benzo(a)pyrene	ND	130	54	68	23.0	43	54	22.7	30 - 130	30	
Benzo(b)fluoranthene	ND	160	55	72	26.8	45	58	25.2	30 - 130	30	
Benzo(ghi)perylene	ND	230	55	66	18.2	39	47	18.6	30 - 130	30	
Benzo(k)fluoranthene	ND	230	58	68	15.9	52	61	15.9	30 - 130	30	
Benzoic Acid	ND	330	<10	<10	NC	40	35	13.3	30 - 130	30	l
Benzyl butyl phthalate	ND	230	57	72	23.3	64	68	6.1	30 - 130	30	
Bis(2-chloroethoxy)methane	ND	230	55	64	15.1	58	69	17.3	30 - 130	30	
Bis(2-chloroethyl)ether	ND	130	37	51	31.8	45	52	14.4	30 - 130	30	r
Bis(2-chloroisopropyl)ether	ND	230	32	46	35.9	41	51	21.7	30 - 130	30	r
Bis(2-ethylhexyl)phthalate	ND	230	55	70	24.0	62	69	10.7	30 - 130	30	
Carbazole	ND	230	62	73	16.3	68	75	9.8	30 - 130	30	
Chrysene	ND	230	58	73	22.9	67	75	11.3	30 - 130	30	
Dibenz(a,h)anthracene	ND	130	59	73	21.2	43	53	20.8	30 - 130	30	
Dibenzofuran	ND	230	57	71	21.9	66	73	10.1	30 - 130	30	
Diethyl phthalate	ND	230	57	67	16.1	61	66	7.9	30 - 130	30	
Dimethylphthalate	ND	230	59	67	12.7	60	65	8.0	30 - 130	30	
Di-n-butylphthalate	ND	670	55	69	22.6	59	66	11.2	30 - 130	30	
Di-n-octylphthalate	ND	230	55	71	25.4	49	60	20.2	30 - 130	30	
Fluoranthene	ND	230	56	71	23.6	62	71	13.5	30 - 130	30	
Fluorene	ND	230	57	70	20.5	64	71	10.4	30 - 130	30	
Hexachlorobenzene	ND	130	51	64	22.6	56	64	13.3	30 - 130	30	
Hexachlorobutadiene	ND	230	19	56	98.7	53	62	15.7	30 - 130	30	l,r
Hexachlorocyclopentadiene	ND	230	26	54	70.0	<10	<10	NC	30 - 130	30	l,m,r
Hexachloroethane	ND	130	12	46	117.2	26	29	10.9	30 - 130	30	l,m,r
Indeno(1,2,3-cd)pyrene	ND	230	56	69	20.8	40	48	18.2	30 - 130	30	
Isophorone	ND	130	51	57	11.1	52	61	15.9	30 - 130	30	
Naphthalene	ND	230	41	61	39.2	58	70	18.8	30 - 130	30	r
Nitrobenzene	ND	130	45	55	20.0	50	62	21.4	30 - 130	30	
N-Nitrosodimethylamine	ND	230	48	49	2.1	48	59	20.6	30 - 130	30	
N-Nitrosodi-n-propylamine	ND	130	53	59	10.7	53	65	20.3	30 - 130	30	
N-Nitrosodiphenylamine	ND	130	59	71	18.5	67	72	7.2	30 - 130	30	
Pentachloronitrobenzene	ND	230	52	66	23.7	57	63	10.0	30 - 130	30	
Pentachlorophenol	ND	230	12	11	8.7	38	46	19.0	30 - 130	30	l
Phenanthrene	ND	130	57	70	20.5	66	73	10.1	30 - 130	30	
Phenol	ND	230	52	60	14.3	52	63	19.1	30 - 130	30	
Pyrene	ND	230	55	70	24.0	64	74	14.5	30 - 130	30	

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
Pyridine	ND	230	34	36	5.7	39	51	26.7	30 - 130	30	
% 2,4,6-Tribromophenol	52	%	47	54	13.9	52	56	7.4	30 - 130	30	
% 2-Fluorobiphenyl	69	%	51	67	27.1	65	72	10.2	30 - 130	30	
% 2-Fluorophenol	47	%	48	53	9.9	49	58	16.8	30 - 130	30	
% Nitrobenzene-d5	55	%	45	55	20.0	51	64	22.6	30 - 130	30	
% Phenol-d5	53	%	53	61	14.0	54	65	18.5	30 - 130	30	
% Terphenyl-d14	77	%	56	70	22.2	66	75	12.8	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 411147 (ug/kg), QC Sample No: BZ46289 (BZ46284, BZ46286, BZ46287 (50X) , BZ46288, BZ46289)

Volatiles - Soil

1,1,1,2-Tetrachloroethane	ND	5.0	112	104	7.4	100	104	3.9	70 - 130	30	
1,1,1-Trichloroethane	ND	5.0	112	115	2.6	102	115	12.0	70 - 130	30	
1,1,2,2-Tetrachloroethane	ND	3.0	117	113	3.5	91	94	3.2	70 - 130	30	
1,1,2-Trichloroethane	ND	5.0	113	108	4.5	101	107	5.8	70 - 130	30	
1,1-Dichloroethane	ND	5.0	110	113	2.7	102	112	9.3	70 - 130	30	
1,1-Dichloroethene	ND	5.0	116	125	7.5	104	122	15.9	70 - 130	30	
1,1-Dichloropropene	ND	5.0	122	119	2.5	110	117	6.2	70 - 130	30	
1,2,3-Trichlorobenzene	ND	5.0	126	119	5.7	97	101	4.0	70 - 130	30	
1,2,3-Trichloropropane	ND	5.0	113	109	3.6	99	110	10.5	70 - 130	30	
1,2,4-Trichlorobenzene	ND	5.0	127	122	4.0	95	97	2.1	70 - 130	30	
1,2,4-Trimethylbenzene	ND	1.0	120	114	5.1	103	109	5.7	70 - 130	30	
1,2-Dibromo-3-chloropropane	ND	5.0	122	116	5.0	98	103	5.0	70 - 130	30	
1,2-Dibromoethane	ND	5.0	117	106	9.9	101	106	4.8	70 - 130	30	
1,2-Dichlorobenzene	ND	5.0	113	108	4.5	97	102	5.0	70 - 130	30	
1,2-Dichloroethane	ND	5.0	111	111	0.0	98	115	16.0	70 - 130	30	
1,2-Dichloropropane	ND	5.0	114	111	2.7	106	110	3.7	70 - 130	30	
1,3,5-Trimethylbenzene	ND	1.0	121	115	5.1	105	112	6.5	70 - 130	30	
1,3-Dichlorobenzene	ND	5.0	117	111	5.3	98	101	3.0	70 - 130	30	
1,3-Dichloropropane	ND	5.0	113	105	7.3	102	107	4.8	70 - 130	30	
1,4-Dichlorobenzene	ND	5.0	114	108	5.4	92	93	1.1	70 - 130	30	
2,2-Dichloropropane	ND	5.0	122	126	3.2	97	111	13.5	70 - 130	30	
2-Chlorotoluene	ND	5.0	119	114	4.3	104	106	1.9	70 - 130	30	
2-Hexanone	ND	25	106	104	1.9	90	105	15.4	70 - 130	30	
2-Isopropyltoluene	ND	5.0	113	107	5.5	98	104	5.9	70 - 130	30	
4-Chlorotoluene	ND	5.0	117	112	4.4	100	101	1.0	70 - 130	30	
4-Methyl-2-pentanone	ND	25	109	114	4.5	94	114	19.2	70 - 130	30	
Acetone	ND	10	79	84	6.1	52	76	37.5	70 - 130	30	m,r
Acrylonitrile	ND	5.0	102	104	1.9	85	101	17.2	70 - 130	30	
Benzene	ND	1.0	114	110	3.6	106	108	1.9	70 - 130	30	
Bromobenzene	ND	5.0	115	109	5.4	92	81	12.7	70 - 130	30	
Bromochloromethane	ND	5.0	111	109	1.8	104	109	4.7	70 - 130	30	
Bromodichloromethane	ND	5.0	111	108	2.7	99	108	8.7	70 - 130	30	
Bromoform	ND	5.0	111	103	7.5	92	98	6.3	70 - 130	30	
Bromomethane	ND	5.0	119	127	6.5	111	129	15.0	70 - 130	30	
Carbon Disulfide	ND	5.0	115	125	8.3	103	120	15.2	70 - 130	30	
Carbon tetrachloride	ND	5.0	111	112	0.9	98	111	12.4	70 - 130	30	
Chlorobenzene	ND	5.0	112	107	4.6	95	91	4.3	70 - 130	30	
Chloroethane	ND	5.0	103	110	6.6	96	111	14.5	70 - 130	30	
Chloroform	ND	5.0	106	109	2.8	98	109	10.6	70 - 130	30	
Chloromethane	ND	5.0	102	104	1.9	85	95	11.1	70 - 130	30	

QA/QC Data

SDG I.D.: GBZ46284

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
cis-1,2-Dichloroethene	ND	5.0	113	111	1.8	106	112	5.5	70 - 130	30	
cis-1,3-Dichloropropene	ND	5.0	121	116	4.2	106	113	6.4	70 - 130	30	
Dibromochloromethane	ND	3.0	119	106	11.6	103	107	3.8	70 - 130	30	
Dibromomethane	ND	5.0	113	107	5.5	99	108	8.7	70 - 130	30	
Dichlorodifluoromethane	ND	5.0	124	128	3.2	98	111	12.4	70 - 130	30	
Ethylbenzene	ND	1.0	117	110	6.2	99	97	2.0	70 - 130	30	
Hexachlorobutadiene	ND	5.0	125	116	7.5	80	87	8.4	70 - 130	30	
Isopropylbenzene	ND	1.0	124	119	4.1	111	113	1.8	70 - 130	30	
m&p-Xylene	ND	2.0	118	110	7.0	103	110	6.6	70 - 130	30	
Methyl ethyl ketone	ND	5.0	95	103	8.1	79	100	23.5	70 - 130	30	
Methyl t-butyl ether (MTBE)	ND	1.0	102	110	7.5	94	114	19.2	70 - 130	30	
Methylene chloride	ND	5.0	100	108	7.7	101	103	2.0	70 - 130	30	
Naphthalene	ND	5.0	139	133	4.4	117	121	3.4	70 - 130	30	l
n-Butylbenzene	ND	1.0	124	117	5.8	94	103	9.1	70 - 130	30	
n-Propylbenzene	ND	1.0	119	113	5.2	100	101	1.0	70 - 130	30	
o-Xylene	ND	2.0	126	117	7.4	113	116	2.6	70 - 130	30	
p-Isopropyltoluene	ND	1.0	126	120	4.9	106	111	4.6	70 - 130	30	
sec-Butylbenzene	ND	1.0	127	120	5.7	108	114	5.4	70 - 130	30	
Styrene	ND	5.0	122	114	6.8	100	94	6.2	70 - 130	30	
tert-Butylbenzene	ND	1.0	123	118	4.1	110	114	3.6	70 - 130	30	
Tetrachloroethene	ND	5.0	120	111	7.8	104	104	0.0	70 - 130	30	
Tetrahydrofuran (THF)	ND	5.0	105	113	7.3	90	109	19.1	70 - 130	30	
Toluene	ND	1.0	114	112	1.8	101	100	1.0	70 - 130	30	
trans-1,2-Dichloroethene	ND	5.0	112	120	6.9	101	119	16.4	70 - 130	30	
trans-1,3-Dichloropropene	ND	5.0	117	114	2.6	98	109	10.6	70 - 130	30	
trans-1,4-dichloro-2-butene	ND	5.0	114	110	3.6	85	94	10.1	70 - 130	30	
Trichloroethene	ND	5.0	116	111	4.4	114	120	5.1	70 - 130	30	
Trichlorofluoromethane	ND	5.0	100	107	6.8	84	99	16.4	70 - 130	30	
Trichlorotrifluoroethane	ND	5.0	107	114	6.3	90	105	15.4	70 - 130	30	
Vinyl chloride	ND	5.0	110	116	5.3	96	112	15.4	70 - 130	30	
% 1,2-dichlorobenzene-d4	103	%	100	100	0.0	98	100	2.0	70 - 130	30	
% Bromofluorobenzene	96	%	101	99	2.0	99	101	2.0	70 - 130	30	
% Dibromofluoromethane	102	%	98	97	1.0	98	96	2.1	70 - 130	30	
% Toluene-d8	101	%	101	102	1.0	101	103	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
December 14, 2017

Thursday, December 14, 2017

Criteria: None

State: NY

Sample Criteria Exceedances Report

GBZ46284 - AEAS-INC

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

*** No Data to Display ***

Phoenix Laboratories does not assume responsibility for the data contained in this 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.

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ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Comments

December 14, 2017 SDG I.D.: GBZ46284

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

SVOA Narration

CHEM05 11/22/17-1: BZ46289

The following Initial Calibration compounds did not meet RSD% criteria: 2-Nitroaniline 21% (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 0.078 (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 0.070 (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%.

CHEM27 11/29/17-1: BZ46290, BZ46291, BZ46292

The following Initial Calibration compounds did not meet recommended response factors: Bis(2-chloroethoxy)methane 0.267 (0.3)
The following Initial Calibration compounds did not meet minimum response factors: None.

The following Continuing Calibration compounds did not meet % deviation criteria: 2-Nitroaniline 32%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 0.096 (0.1), Bis(2-chloroethoxy)methane 0.237 (0.3)
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%.

CHEM29 11/22/17-2: BZ46284, BZ46285, BZ46286, BZ46288

The following Initial Calibration compounds did not meet RSD% criteria: 2-Nitroaniline 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: 2-Nitrophenol 0.094 (0.1)
The following Initial Calibration compounds did not meet minimum response factors: None.

The following Continuing Calibration compounds did not meet % deviation criteria: 3,3'-Dichlorobenzidine 45%L (30%), Pentachlorophenol 74%L (30%)
The following Continuing Calibration compounds did not meet Maximum % deviation criteria: 3,3'-Dichlorobenzidine 45%L (40%), Pentachlorophenol 74%L (40%)
The following Continuing Calibration compounds did not meet recommended response factors: 2-Nitrophenol 0.083 (0.1), Acenaphthene 0.881 (0.9), Hexachlorobenzene 0.092 (0.1), Pentachlorophenol 0.039 (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%.

CHEM29 11/27/17-2: BZ46287

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Analysis Comments

December 14, 2017 SDG I.D.: GBZ46284

The following Initial Calibration compounds did not meet RSD% criteria: 2-Nitroaniline 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: 2-Nitrophenol 0.094 (0.1)
The following Initial Calibration compounds did not meet minimum response factors: None.

The following Continuing Calibration compounds did not meet % deviation criteria: Pentachlorophenol 61%L (30%)
The following Continuing Calibration compounds did not meet Maximum % deviation criteria: Pentachlorophenol 61%L (40%)
The following Continuing Calibration compounds did not meet recommended response factors: 2-Nitrophenol 0.093 (0.1), Acenaphthene 0.871 (0.9), 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%.

SVOASIM Narration

CHEM07 11/28/17-2: BZ46290, BZ46291, Bz46292

The following Initial Calibration compounds did not meet RSD% criteria: Chrysene 30% (20%)
The following Initial Calibration compounds did not meet maximum RSD% criteria: None.

VOA Narration

CHEM02 11/22/17-2: BZ46290, BZ46292

The following Initial Calibration compounds did not meet RSD% criteria: 1,2-Dibromo-3-chloropropane 37% (20%), Acrylonitrile 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 0.020 (0.05), 2-Hexanone 0.048 (0.1), 4-Methyl-2-pentanone 0.070 (0.1), Acetone 0.032 (0.1), Acrylonitrile 0.034 (0.05), Bromoform 0.080 (0.1), Methyl ethyl ketone 0.045 (0.1), Tetrahydrofuran (THF) 0.032 (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: 1,1,2,2-Tetrachloroethane 0.215 (0.3), 1,2-Dibromo-3-chloropropane 0.019 (0.05), Acrylonitrile 0.042 (0.05), Bromoform 0.063 (0.1), Tetrahydrofuran (THF) 0.037 (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%.

CHEM02 11/26/17-2: BZ46291

The following Initial Calibration compounds did not meet RSD% criteria: 1,2-Dibromo-3-chloropropane 30% (20%), Chloromethane 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: 1,2,4-Trichlorobenzene 0.199 (0.2), 1,2-Dibromo-3-chloropropane 0.016 (0.05), 2-Hexanone 0.049 (0.1), 4-Methyl-2-pentanone 0.076 (0.1), Acetone 0.034 (0.1), Acrylonitrile 0.038 (0.05), Bromoform 0.066 (0.1), Methyl ethyl ketone 0.050 (0.1), Tetrahydrofuran (THF) 0.035 (0.05)
The following Initial Calibration compounds did not meet minimum response factors: None.

The following Continuing Calibration compounds did not meet % deviation criteria: Bromomethane 38%H (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 0.192 (0.3), 1,2-Dibromo-3-chloropropane 0.018 (0.05), Acrylonitrile 0.033 (0.05), Bromoform 0.081 (0.1), Tetrahydrofuran (THF) 0.028 (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%.

CHEM26 11/22/17-2: BZ46285

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

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Comments

December 14, 2017 SDG I.D.: GBZ46284

The following Initial Calibration compounds did not meet RSD% criteria: Acetone 22% (20%), Acrylonitrile 30% (20%), Methylene chloride 27% (20%)
The following Initial Calibration compounds did not meet maximum RSD% 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%.

CHEM26 11/28/17-1: BZ46284, BZ46286, BZ46287, BZ46288, BZ46289

The following Initial Calibration compounds did not meet RSD% criteria: Acetone 30% (20%), Chloroethane 21% (20%), Naphthalene 21% (20%)
The following Initial Calibration compounds did not meet maximum RSD% criteria: None.

The following Continuing Calibration compounds did not meet % deviation criteria: Dichlorodifluoromethane 33%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

December 14, 2017

SDG I.D.: GBZ46284

The samples in this delivery group were received at 2.4°C.
(Note acceptance criteria is above freezing up to 6°C)

Cooler: Yes ☒ No ☐
Coolant: IPK ☒ ICE ☐ No ☐
Temp 4 °C Pg of

NY/NJ CHAIN OF CUSTODY RECORD

PHOENIX *Environmental Laboratories, Inc.*

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

Contact Options:
☒ Fax: 718-906-4090
☒ Phone: 718-209-0653
☒ Email: info@aeasinc.com

Customer: American Environmental Assessment & Solutions, Inc.
Address: 679 Lafayette Avenue, 3rd Floor
Brooklyn, NY 11216

Project: Betances Houses (Garage)
Report to: Antoinette
Invoice to: American Environmental
Project P.O.:

This section MUST be completed with Bottle Quantities.

Client Sample - Information - Identification
Sampler's Signature: Antoinette Olli... Date: 11/21/17

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: EPA Method 8260B; EPA Method 8270C

PHOENIX USE ONLY SAMPLE #	Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled	EPA Method 8260B	EPA Method 8270C	Soil VOA Vials (✓ methanol ✓ H2O)	GL Soil container (8 oz)	GL Soil container ( ) oz	40 ml VOA Vial [ ] As is [✓] HCl	GL Amber 1000ml [✓] As is [ ] H2SO4	PL As is [ ] 250ml [ ] 500ml [ ] 1000ml	PL H2SO4 [ ] 250ml [ ] 500ml	PL HNO3 250ml	PL NaOH 250ml	Bacteria Bottle
46284	SB-1 (2'-5')	S	11/21/17	9:30	→	→	2	1								
46285	SB-1 (6'-10')	S	11/21/17	9:40	→	→	2	1								
46286	SB-2 (1'-4')	S	11/21/17	10:30	→	→	2	1								
46287	SB-2 (6'-8')	S	11/21/17	10:45	→	→	2	1								
46288	SB-3 (1'-5')	S	11/21/17	11:40	→	→	2	1								
46289	SB-3 (8'-12')	S	11/21/17	12:00	→	→	2	1								
46290	MW-1	GW	11/21/17	1:00	→	→				2	2					
46291	MW-2	GW	11/21/17	1:30	→	→				2	2					
46290	MW-3	GW	11/21/17	2:15	→	→				2	2					

Relinquished by:	Accepted by:	Date:	Time:
Antoinette Olli...	[signature]	11/22/17	11:30am
[signature]	[signature] B.	11-22-17	10:19

Comments, Special Requirements or Regulations:

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

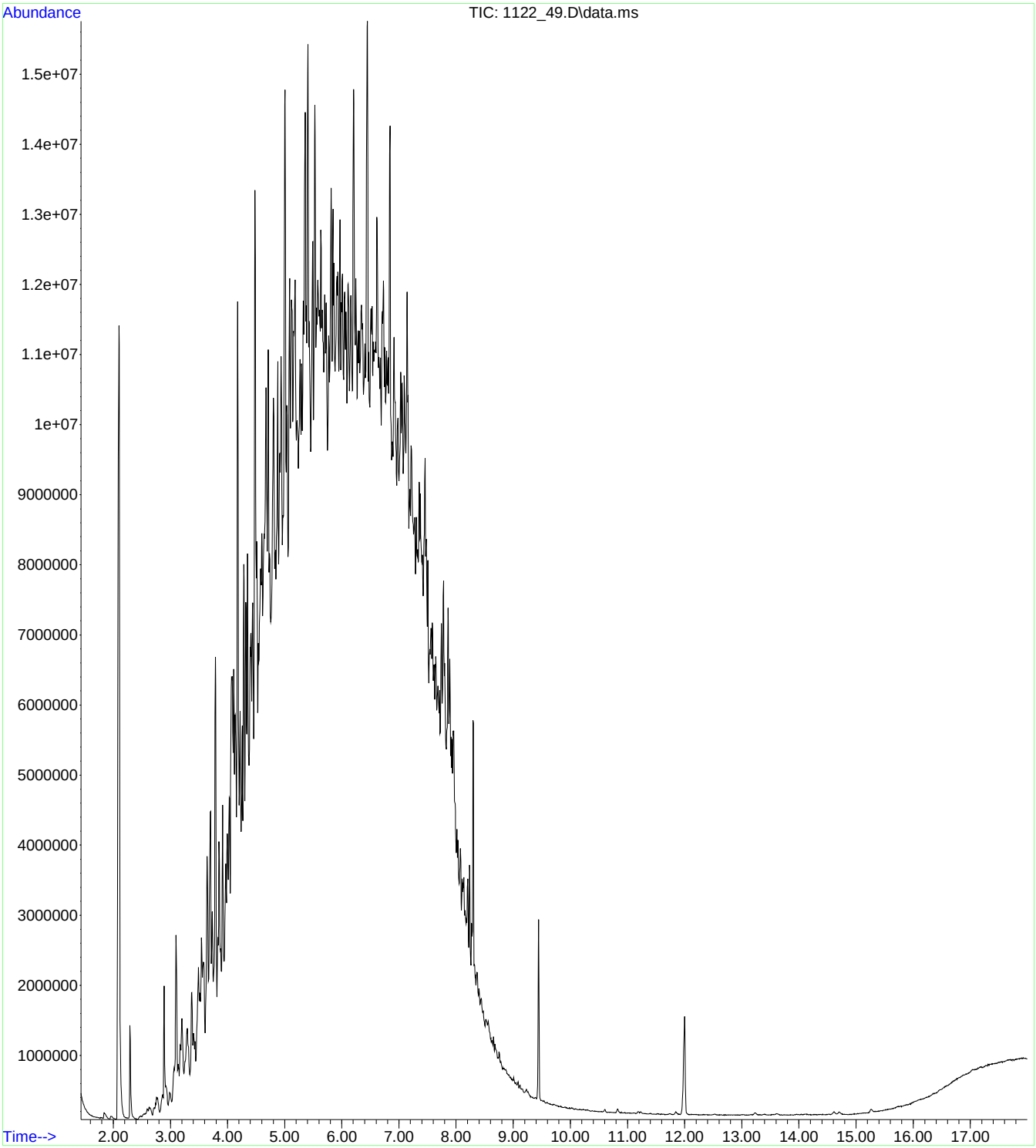
NY
☐ TAGM 4046 GW
☐ TAGM 4046 SOIL
☐ NY375 Unrestricted Use Soil
☐ NY375 Residential Soil
☐ Restricted/Residential
☐ Commercial
☐ Industrial

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

File :H:\SV2017\CHEM29\11NOV\22\1122_49.D
Operator :
Acquired : 23 Nov 2017 3:27 am using AcqMethod RESTEK.M
Instrument : GCMS05
Sample Name: 46287 A SV 11/22
Misc Info :
Vial Number: 18



SOIL BORING LOGS

American Environmental Assessment & Solutions, Inc.

Mailing:
PO Box 6376
North Babylon, NY 11703

Business:
679 Lafayette Avenue, 3rd Floor
Brooklyn, NY 11216

Telephone: (718) 209-0653 ♦ Fax: (718) 906-4090
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www.AEASinc.com

SOIL BORING LOG

JOB #:	17-0150-II	PAGE:	1 of 3
LOCATION:	400 East 147th Street Bronx, NY 10455	DATE: SAMPLING INTERVAL:	11/21/2017 5 Feet
BORING #:	SB-1	SAMPLING METHOD:	Split Spoon
DRILLING METHOD:	Geoprobe	DRILLER:	Ephase 2
TOTAL DEPTH (ft):		DEPTH TO WATER (ft):	4.57

USCS SYMBOLS

GW - Well Graded Gravel	SW - Well Graded Sand	CH - Inorganic Clay, High Plastic
GP - Poorly Graded Gravel	SP - Poorly Graded Sand	OH - Organic Silt / Clay
GM - Silty Gravel	SM - Silty Sand	PT - Peat / High Organics
GC - Clayey Gravel	SC - Clayey Sand	

DEPTH BELOW GRADE AND LITHOLOGY	PID READING (ppm)	USCS	SOIL DESCRIPTION
0			
-2	0.0	Conc	Approx. 6 inches of concrete
-4		SM	Brown fine grained silty soil, moist @ 4-5 feet
-6			
-8	1.5	SM	Brown fine grained silty soil, wet
-10			
-12	3.1	SM	Brown fine grained silty soil, wet
-14			
-16			End of boring
-18			
-20			
-22			
-24			
-26			
-28			
-30			
-32			
-34			
-36			
-38			
-40			

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SOIL BORING LOG

JOB #:	17-0150-II	PAGE:	2 of 3
LOCATION:	400 East 147th Street	DATE:	11/21/2017
	Bronx, NY 10455	SAMPLING INTERVAL:	5 Feet
BORING #:	SB-2	SAMPLING METHOD:	Split Spoon
DRILLING METHOD:	Geoprobe	DRILLER:	Ephase 2
TOTAL DEPTH (ft):	20	DEPTH TO WATER (ft):	6.4

USCS SYMBOLS

GW - Well Graded Gravel	SW - Well Graded Sand	CH - Inorganic Clay, High Plastic
GP - Poorly Graded Gravel	SP - Poorly Graded Sand	OH - Organic Silt / Clay
GM - Silty Gravel	SM - Silty Sand	PT - Peat / High Organics
GC - Clayey Gravel	SC - Clayey Sand	

DEPTH BELOW GRADE AND LITHOLOGY	PID READING (ppm)	USCS	SOIL DESCRIPTION
0			
-2	13.4	Conc SM	Approx. 6 inches of concrete Brown fine grained silty soil with greyish discoloration at approx. 4-5 feet, moist
-4			
-6			
-8	399.0	SM	Greyish to black fine grained silty soil, petroleum odor, wet
-10			
-12			
-14	397.1	SM	Greyish to brown fine grained silty soil, petroleum odor, wet
-16			End of boring
-18			
-20			
-22			
-24			
-26			
-28			
-30			
-32			
-34			
-36			
-38			
-40			

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SOIL BORING LOG

JOB #:	17-0150-II	PAGE:	3 of 3
LOCATION:	400 East 147th Street	DATE:	11/21/2017
	Bronx, NY 10455	SAMPLING INTERVAL:	5 Feet
BORING #:	SB-3	SAMPLING METHOD:	Split Spoon
DRILLING METHOD:	Geoprobe	DRILLER:	Ephase 2
TOTAL DEPTH (ft):	20	DEPTH TO WATER (ft):	6.77

USCS SYMBOLS

GW - Well Graded Gravel	SW - Well Graded Sand	CH - Inorganic Clay, High Plastic
GP - Poorly Graded Gravel	SP - Poorly Graded Sand	OH - Organic Silt / Clay
GM - Silty Gravel	SM - Silty Sand	PT - Peat / High Organics
GC - Clayey Gravel	SC - Clayey Sand	

DEPTH BELOW GRADE AND LITHOLOGY	PID READING (ppm)	USCS	SOIL DESCRIPTION
0			
-2 to -4	42.2	SM	Approx. 6 inches of concrete Brown fine grained silty sand with gravel, moist
-6 to -10	1.5	SM	Light brown to brown fine grained silty sand, wet
-12 to -14	0.0	SM	Light brown fine grained silty sand, wet
-16 to -20			End of boring
-22 to -40			