PHASE II
ENVIRONMENTAL SITE ASSESSMENT

6122 Lancaster Avenue, Philadelphia, PA 19151

PERFORMED FOR:

OVERBROOK ENVIRONMENTAL EDUCATION CENTER
JASTECH DEVELOPMENT SERVICES INC.
6134 LANCASTER AVENUE
PHILADELPHIA, PA 19151

PERFORMED BY:

WESTCHESTER ENVIRONMENTAL, LLC
1248 WRIGHTS LANE
WEST CHESTER, PA 19380

JUNE, 2019

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6122 LANCASTER AVEUNE, PHILADELPHIA, PA 19151

1.0. EXECUTIVE SUMMARY

The Phase II Environmental Site Assessment (ESAII) for 6122 Lancaster Avenue, Philadelphia, PA 19151 was carried out by Westchester Environmental, LLC, (WCE) as per the request of Jerome Shabazz, JASTECH Development Services Inc. The property is referred to herein as the "Site".

The property under assessment, Parcel No / Tax ID: 070N070095 is 1.0 acres parcel of commercial real estate (6122 Lancaster Avenue, Philadelphia, PA 19151), in a mix-use neighborhood.

WCE's scope of services included: a geophysical survey, soil borings, and soil sampling and analysis. These services were completed in response to the findings presented in the 6122 Lancaster Avenue, Philadelphia, PA Phase I Environmental Site Assessment (ESA) Report completed by WCE.

The following Areas of Concern (AOCs) were identified in the ESA Report:

AOC 1: Suspect area on the northern boundary of the Site located behind the commercial laundromat and associated parking lot, adjacent to a former BROWNFIELD site.

AOC 2: Suspect area associated with previous AST location located adjacent to the east facing wall belonging to the one-story garage on the Site.

The Phase II consisted of a geophysical survey in an effort to determine the presence of underground storage tanks (USTs) and buried utilities on the Site. Soil borings were advanced using a Geoprobe® drilling rig to investigate the AOCs, characterized subsurface conditions, and to collect soil samples for laboratory analysis.

Limiting conditions encountered during this Phase II were test boring locations were dictated by the accessibility for the drilling rig, and identification of potential subsurface obstructions by the geophysical survey.

The Phase II investigation indicated:

- No indications of buried objects, such as fuel tanks, were detected during the geophysical survey. Utilities such as water and sewer lines were marked.
- Six borings were done, SB1 through SB6. The depth to drilling refusal in borings SB1, SB2, SB3, SB4 and SB5 ranged from 5.5 ft. to 7.5 ft. below ground. Boring SB6 ended at approximately 20 ft. below ground.
- The subsurface materials generally consisted of silt, sand and gravel and fill.
- Groundwater was not encountered in any of the borings
- Two soil samples were collected from each boring. The soil samples were analyzed by a Pennsylvania-licensed laboratory for volatile organic compounds (VOCS), semi-volatile organic compounds (SVOCs) and lead. All sample results were compared against the maximum concentration levels (MCLs) established by the Pennsylvania Department of Environmental Protection (PADEP) for direct contact non-residential soils.
- No VOCs were detected in any of the twelve soil samples.
- SVOCs were detected in four of the soil samples, SB2-0-4, SB2-5.5-6.5, SB3-0-4 and SB5-0-4. None of the detected SVOCs exceeded the maximum concentration levels (MCLs) established by the Pennsylvania Department of Environmental Protection (PADEP) for direct contact non-residential soils.
- None of the lead results exceeded the maximum concentration levels (MCLs) established by the Pennsylvania Department of Environmental Protection (PADEP) for direct contact non-residential soils.

Based on the results of the Phase II investigation, WCE does not recommend further

investigation of the AOCs at this time.

-END OF SECTION-

2.0. INTRODUCTION

2.1. Purpose

WCE has performed the Phase II ESA in response to findings, presented in WCEs Phase I ESA, indicating that historical uses of the Site such as an auto repair shop and auto storage facility, as well as possible impact on the Site from the Lancaster Avenue BROWNFIELD site located adjacent to the north of the site may be of environmental concern.

The Phase II ESA Site was performed on May15 and 16, 2019.

2.2. Detailed Scope-of-Services

WCE defined the scope of services and contract provisions for work completed on this Phase II ESA agreement with the client, Jerome Shabazz, JASTECH Development Services Inc. Our scope of work was limited to those items specifically identified in the Environmental Services Agreement. Environmental issues not specifically addressed in the Environmental Services Agreement or this report are beyond the scope of our evaluation.

Phase I Environmental Site Assessment Process, Westchester Environmental, LLC performed the following activities as part of the assessment:

- **Site Reconnaissance:** Prior to initiating any on-site work, WCE will conduct a site reconnaissance to determine access for equipment and to mark drilling/sampling locations.

- **Geophysical Survey:** Geophysical methods including ground penetrating radar, metal detectors and electromagnetic detection instrumentation to survey proposed sampling locations so as to determine if underground obstacles may be present.

- **Soil Sampling:** Soiling Borings at approximately six locations was done with a track-mounted Geoprobe® drilling rig with continuous Macrocore sampling to describe the materials encountered and to provide soil samples for the laboratory analysis.

    - Boreholes were drilled by driving a 2-inch ID, 4 foot long Macrocore sampler with an acetate sleeve to the target depth

    - Two soil samples were collected from each boring. Soil samples were analyzed for PADEP short list of organic and inorganic parameters for leaded/ unleaded gasoline diesel/No.2 heating oil and used motor oil parameters.

- **Phase II ESA Report:** Report preparation, stating findings and conclusions.

2.3. Limitations and Exceptions

WCE's Phase II ESA activities were conducted in an attempt to determine conditions at Specific AOCs. WCE was not retained to investigate environmental conditions elsewhere on the Site. Phase II ESAs are not comprehensive and are unlikely to identify all environmental problems or eliminate all risk. No warranty, expressed or implied is made by WCE. WCE works with our clients to identify the level of investigation needed to provide them with an acceptable level of risk.

This report is intended for the exclusive use of the Client and those corporations, partnerships, or other entities represented by the Client that are formed to acquire or hold title to the Site discussed in this report and may not be relied upon by other parties.

WCE must be contacted by any entity other than the Client who wishes to use this report.

Non-compliance with any of these requirements by the Client or any other entity will release WCE from any liability resulting from the use of this report by any unauthorized party and the Client agrees to defend, indemnify, and hold harmless WCE from any claim or liability associated with such unauthorized use or non-compliance.

2.4. Special Terms and Conditions

The Site owner is solely responsible for notifications in accordance with federal, state, and local laws of the existence, release, treatment or disposal of any hazardous substances or petroleum products at the Site. WCE assumes no responsibility or liability whatsoever for any claim, loss of property value, damage, or injury that results from the pre-existing hazardous substances and petroleum products encountered or present on the Site, or from the discovery of such hazardous materials.

-END OF SECTION-

3.0. SITE DESCRIPTION

3.1. Location and Legal Description

As per EDR Report, the Site, 6122 Lancaster Avenue, Philadelphia, PA 19151, is located at (North): 39.9828940 - 39° 58' 58.14" and Longitude (West): 75.2443860 -75° 14' 39.78", at an elevation of 204 feet above sea level.

The Legal Description of the property, normally contained in the Title Deed, was not provided for review.

3.2. Site and Vicinity General Characterization

The property under assessment consists of a one acre vacant lot with a single one story vacant garage.

The Site is accessed through a driveway that extends from Lancaster Avenue past a Laundromat that abuts the property to the north. The Site is abutted by residential row housing to the east and south and southwest. To the north of the property are most of the commercial adjoining properties which are located off of Lancaster Avenue. Properties include a KFC, D.J. Laundromat, and Hunan's Palace Chinese Food Place.

In the northeast corner of the Site a Large concrete slab can be found adjacent to the alleyway bordering the residential row houses. It is assumed this slab had something to do with the previous purposes of the site.

3.3. Current Use of the Property

The Site is currently a vacant property, with a one story garage.

3.4. Site History

A records review identified historical uses of the Site with the potential to have impacted the subsurface as a filling station before it became a motorcycle repair facility. According to an Environmental Site Assessment from July 2009 conducted by Pennoni Associates Inc., surface soil and floor staining was observed in numerous locations. These stains were associated with motor oil, transmission fluid and oil throughout the property and concluded that "adverse impacts to the surface and subsurface soils and/or groundwater may exist." Pennoni also stated that the presence of the Lancaster Avenue BROWNFIELD site located to the north of the Site. This BROWNFIELD site was remediated in May of 2006 but adverse impact on the Site was possible based on the distance and direction to the Site.

3.5. Physical Setting

3.5.1. Geology

The Site is underlain by urban land consisting of silty sand, and gravel with brick fragments, glass and wood.

3.5.2. Hydrogeology

Groundwater was not encountered beneath the Site.

-END OF SECTION-

4.0. FIELD INVESTIGATION ACTIVITIES

4.1. Preparation for Fieldwork

Several tasks were performed prior to field activities:

- Proposed soil borings were marked on the Site.
- Prior to any field activities, as required by Pennsylvania law, the PA "One Call" underground utilities locating coordinator was contacted. Additionally, TPI, Inc. performed geophysical surveys on the site to screen proposed soil boring locations for safety issues such as avoiding underground obstructions.
- Laboratory analysis methods and required detection limits were established with the analytical laboratory (TestAmerica) for the sampling program. Pennsylvania Act 2 Land Recycling Program lab methods and detection limits were selected to meet project objectives.

4.2. Areas of Concern

WCE's field investigation activities focused on the following AOCs:

AOC 1: Suspect area on the northern boundary of the Site located behind the commercial laundromat and associated parking lot, adjacent to a former BROWNFIELD site.

AOC 2: Suspect area associated with previous AST location located adjacent to the east facing wall belonging to the one-story garage on the Site.

4.3. Geophysical Survey

The geophysical survey was carried out on May 15, 2019 by Westchester Environmental LLC's (WCE) contractor using ground penetrating radar (GPR) and metal detectors. No indications of buried large objects, such as fuel tanks, were detected. Utilities such as water and sewer lines were marked. A copy of the geophysical survey report is included in Appendix A.

4.4. Soil Boring Investigation

On May 16, 2019 WCE and its' contractor conducted soil borings in order to determine the type of subsurface materials present, the depth to drilling refusal (such as bedrock) and depth to ground water if present. Six borings were done, SB1 through SB6. The depth to drilling refusal in borings SB1, SB2, SB3, SB4 and SB5 ranged from 5.5 ft. to 7.5 ft. below ground. Boring SB6 ended at approximately 20 ft. below ground.

The subsurface materials generally consisted of silt, sand and gravel l

ikely fill material labeled Urban Land.

Groundwater was not encountered in any of the borings.

4.4.1. Soil Sampling

WCE recorded field observations of soil composition, olfactory and visual observations, and photoionization detector (PID) responses to total Volatile Organic Compounds (VOCs) concentrations at approximately six-inch intervals and at horizons of suspected impacts.

The observations were recorded in the field logbook entries and soil boring logs, copies of which are included in Appendix B. Boring depths

ranged from 5.5 fbgs (SB-5) to 20 fbgs (SB-6). Breathing space organic vapor background concentrations ranged from zero to 1.5 parts per million (ppm) on the PID. The highest PID readings were detected in soil boring SB-3 (see Figure 1: *Soil Borings Locations*), with a maximum reading of 257 ppm in the zero to four fbgs interval.

Samples were biased to intervals with the greatest likelihood of contamination based on PID readings and field observations. Each soil sample was collected using disposable nitrile gloves in laboratory supplied bottle-ware. To reduce potential cross-contamination, new nitrile gloves were used for each sampling point. WCE labeled the samples in the field, chilled the samples in a cooler with ice to approximately four degrees centigrade, and transported the samples to TestAmerica Laboratories, Inc. (PA ID#46-00505) in King of Prussia, Pennsylvania.

Soil samples SB-1 through SB-6 were analyzed for VOCs via USEPA Method 8260B, Semi-volatile Organic Compounds (SVOCs) via USEPA Method 8270D, and for lead via USEPA Method 6010.

-END OF SECTION-

5.0. FINDINGS AND CONCLUSIONS

5.1. Findings

WCE conducted Phase II investigation for the two reported AOCs on the Site:

AOC 1: Suspect area on the northern boundary of the Site located behind the commercial laundromat and associated parking lot, adjacent to a former BROWNFIELD site.

AOC 2: Suspect area associated with previous AST location located adjacent to the east facing wall belonging to the one-story garage on the Site.

A surface geophysical survey found no indications of large buried objects, such as fuel tanks. Utilities such as water and sewer lines were marked.

Six borings were conducted on the Site and two soil samples were collected from each boring. Samples were collected from soil horizons with the greatest likelihood of contamination based on field observations and PID readings. One sample was collected from the 0-4ft. depth. The second sample from each boring was collected near the bottom of the boring.

The soil samples were analyzed by a Pennsylvania-licensed laboratory for volatile organic compounds (VOCS), semi-volatile organic compounds (SVOCs) and lead. All sample results were compared against the maximum concentration levels (MCLs) established by the Pennsylvania Department of Environmental Protection (PADEP) for direct contact non-residential soils.

No VOCs were detected in any of the twelve soil samples.

SVOCs were detected in four of the soil samples, SB2-0-4, SB2-5.5-6.5, SB3-0-4 and SB5-0-4. The SVOCs detected were hydrocarbon-related compounds:

- Benzo[a]anthracene
- Benzo[a]pyrene
- Benzo[b]fluoranthene
- Benzo[g,h,i]perylene Chrysene
- Indeno[1,2,3-cd]pyrene
- Pyrene

None of the detected SVOCs exceeded the maximum concentration levels (MCLs), listed in Act 2 Land Recycling Program Medium-Specific Concentration Statewide Health Standards, established by the Pennsylvania Department of Environmental Protection (PADEP) for direct contact non-residential soils.

None of the lead concentrations exceeded the maximum concentration levels (MCLs) established by the Pennsylvania Department of Environmental Protection (PADEP) for direct contact non-residential soils. The laboratory analytical report is provided in Appendix C.

5.2. Conclusion

Analysis of the twelve soils samples indicated that there were no exceedances of PADEP-established MCLs for direct contact non-residential soils.

No groundwater was encountered at the Site.

Based on the results of the Phase II investigation, WCE does not recommend further investigation of the AOCs at this time.

-END OF SECTION-

Westchester Environmental

6.0. DISCLAIMER

SIGNATURE OF ENVIRONMENTAL PROFESSIONAL

I declare that, to the best of my knowledge and belief, I meet the definition of *environmental professional* as defined in §312.10 of 40 CFR 312 and I have the specific qualifications based on education, training, and experience to asses a *property* of the nature, history, and setting of the Site.

Joseph S. Tomalavage, P.G.
PA License No. PG001410G

7.0. REFERENCES

1. Phase I Environmental Site Assessment: 6122 Lancaster Avenue, Philadelphia, PA 19151

2. Environmental Data Resources, Inc. EDR). Report, “Target Site: 6122 Lancaster Avenue, Philadelphia, PA 19151” compiled March 2019.

3. Pennsylvania Geologic Survey; Atlas of Preliminary Geologic Quadrangle Maps of PA. Available at: http://www.gis.dcnr.state.pa.us/maps/index.html?geology; accessed March 2019.

-END OF REPORT-

Westchester Environmental

6.0. DISCLAIMER

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Joseph S. Tomalavage, P.G.
PA License No. PG001410G

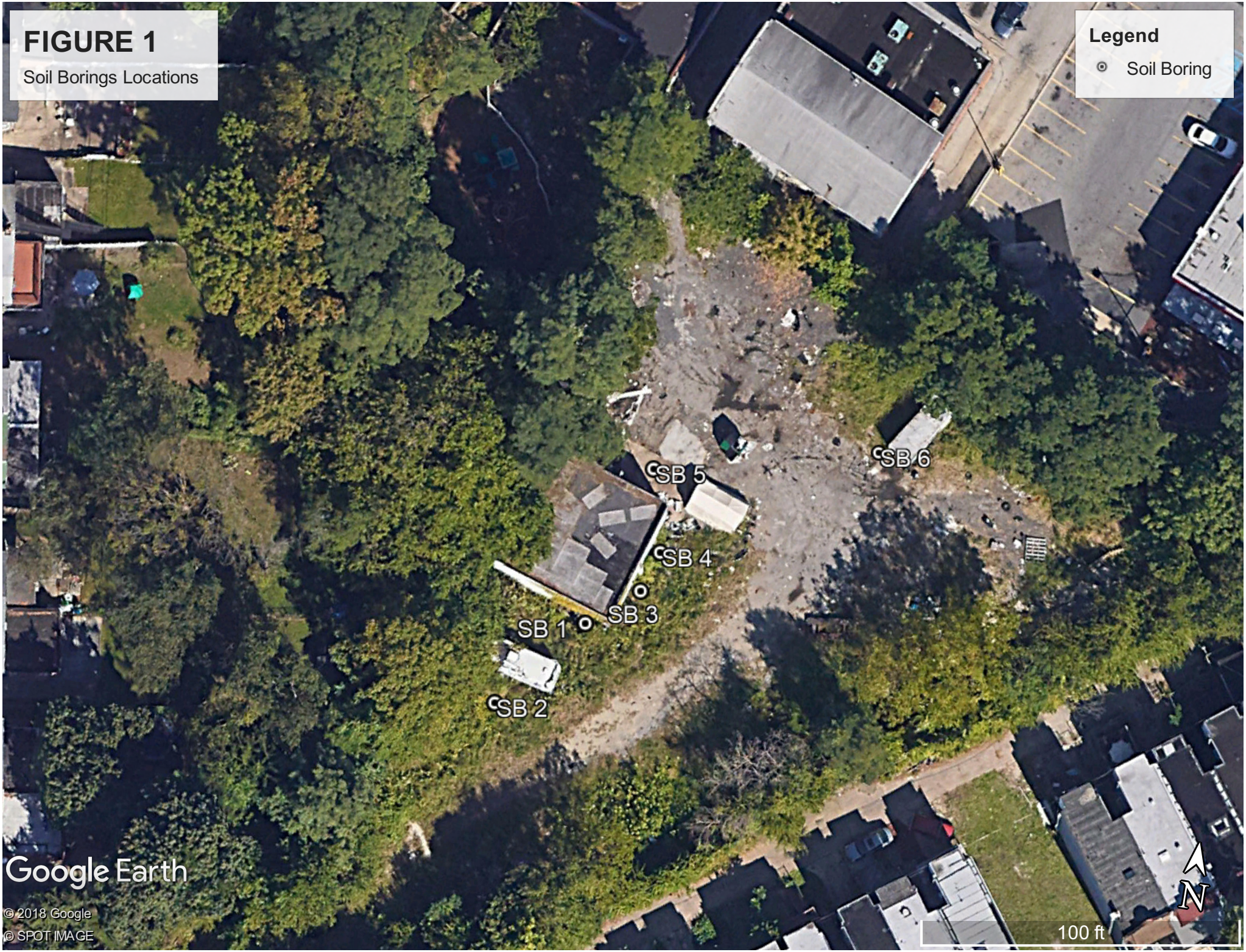
Westchester Environmental

FIGURE 1:

SOIL BORINGS LOCATIONS

FIGURE 1

Soil Borings Locations



Westchester Environmental

APPENDIX A

GEOPHYSICAL SURVEY REPORT

May 30, 2019

Joe Tomalavage
Westchester Environmental LLC
301 North Walnut Street
West Chester PA 19380

Project: Geophysical Survey – 6122 Lancaster Avenue, Philadelphia, PA

Dear Joe;

The following is a brief letter report detailing the results of the geophysical survey performed at the above referenced site. Site maps and/or pertinent ground penetrating radar (GPR) transects are contained in the report and Appendix A. It would be helpful to review Appendix A and the site maps when reading this report. TPI's standard practice is to indicate the results of the geophysical survey by marking all identified utility lines, tanks, and GPR anomalies etc. with chalk, paint or flags. It should be noted that this report is a means of transferring data and results of data interpretation, which was performed during the time allotted for the fieldwork.

Project Scope and Visual Site Inspection

TPI Environmental, Inc. (TPI) was contracted by Westchester Environmental LLC (client) to clear soil boring locations and to locate private utilities within the immediate vicinity of the borings. Additionally, TPI was tasked with scanning for possible underground storage tanks (USTs) and other significant metallic structures. The site consists of an abandoned building and surrounding gravel lot located at the above address and as indicated in Figure 1. Upon arrival to the site on May 15, 2019, TPI reviewed the site history with the client and performed a site walk to search for evidence of USTs. During the site walk the following areas of interest were noted;

- TPI noted no visual evidence of USTs in the survey area.
- Utilities to be investigated during this survey include water.

Methodology

Geophysical surveys are typically accomplished by employing the following techniques; GPR, Fisher TW6 electromagnetic metal detection (TW6 EM), a Geonics EM61-MK2 Time – Domain Electromagnetic Detector unit (EM61), radio frequency line locating (RF), and magnetics. The EM61 is a high power, high sensitivity metal detector capable of detecting both ferrous and non-ferrous metal. The TW6 EM unit sounds an audible alarm in the presence of a large mass of metal such as an UST. A description and discussion of these geophysical methods as well as TPI's standard procedures for performing geophysical surveys is found in Appendix A. In general, "blind surveys" are typically performed by initially scanning the site with a TW6 EM unit and/or an EM61 unit and noting areas of relatively high EM response. Then locations with a high EM response are further investigated with GPR. Known utilities are typically traced with the RF unit, GPR, and the TW6 EM unit depending on the size, matrix and conductive properties of the line. EM units are typically not effective and practical

in areas underlain with reinforced concrete and/or the presence of ubiquitous metallic objects.

Geophysical Survey Results

The geophysical survey at this site was accomplished with the TW6 EM, RF, and GPR units. The EM survey was performed throughout the EM Scan Area (See Figure 1) and within a five-foot radius of each proposed soil boring location, with the exception of areas within five feet of metallic objects (reinforced concrete slabs, metal fences, metal doors etc.). Known utilities were traced with RF and confirmed with GPR. Proposed soil borings were cleared with a combination of RF and GPR. Results of the geophysical survey were marked on the ground with paint. A map of the survey results is contained in this report. Results of the geophysical survey are as follows;

- Results of the geophysical survey indicate that no significant metallic EM/GPR anomalies were detected in the areas surveyed.
- Water utilities, in addition to linear pipe-style anomalies, were located and marked with paint.
- Six soil boring locations were scanned, moved as needed, and marked with white paint.

TPI completes non-intrusive geophysical surveys using equipment and techniques representing best available technology. TPI does not accept responsibility for survey limitations due to inherent technological limitations or unforeseen and varying site-specific conditions such as metal-reinforced concrete. In practical terms, TPI serves to reduce the risk of encountering subsurface utilities during excavation operations or greatly increase the chance of locating man made subsurface objects depending on the goal of the project. The results of this investigation should only be used as a tool and should not be considered a guarantee regarding the presence or absence of USTs or piping.

If you should have any questions or concerns, please do not hesitate to contact us.

Your Project Team at TPI:

Frank Fendler, M.S., P.G.
President
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Mike Robbins, M.S.
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Geologist/P.M.
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TPI environmental	6122 Lancaster Avenue, Philadelphia, PA		Figure 1
	Client: Westchester Environmental LLC	Date: 05/15/19	Geophysical Survey Results

Appendix A

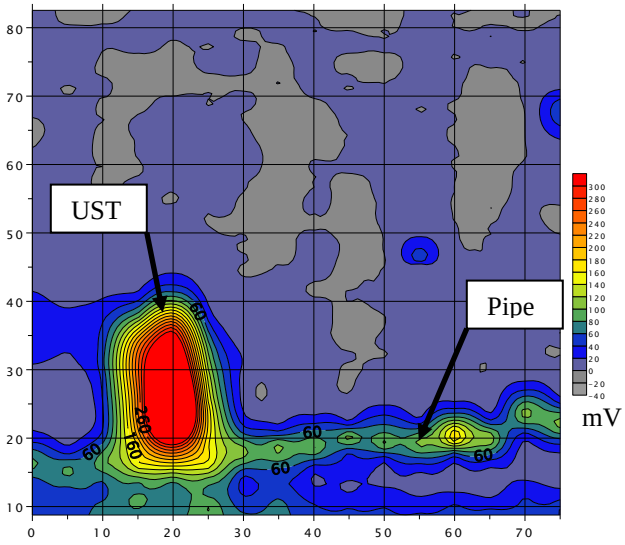
Survey Methods

Attachment A
TPI's Geophysical Survey Equipment & Methods

Geonics EM61-MK2

The EM61 is a high resolution time-domain metal detector which is used to detect ferrous and non-ferrous metallic objects. It consists of a powerful transmitter that generates a pulsed primary magnetic field, which induces eddy currents in nearby metallic objects. The decay of these currents is measured by two receiver coils mounted on the coil assembly. The responses are recorded and displayed by an integrated computer based digital data logger with real time numeric and graphic display. Two ports on the logger allows simultaneous collection of EM and GPS data. For further processing and interpretation data can be transferred to a laptop computer in the field and a color contoured map of the EM61 reponse is prepared (see below).

EM61 Color Contoured Map



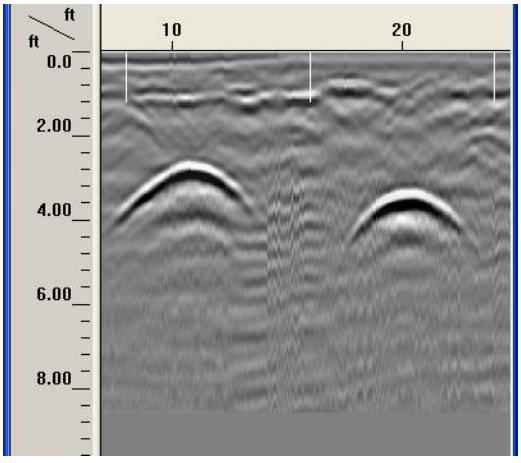
The EM61-MK2 detects a single 55 gallon drum at a depth of over 10-feet beneath the instrument, yet it is relatively insentsitive to interference from nearby surface metal such as fences, buildings, cars, etc. By making the measurement at a relatively long time after termination of the primary pulse, the response is practically independent of the electrical conductivity of the ground.

Due to its unique coil arrangements, the response curve is a single well defined positive peak greatly facilitating quick and accurate location of the target, the depth of which can usually be estimated from the width of the response and/or from relative response from each of the two receiver coils.

GPR

This method is one of the most powerful and cost effective methods of locating man made objects and stratigraphic layers in the subsurface. It is an active method that transmits electromagnetic pulses into the ground, the radar pulses are reflected from materials or layers of differing dielectric and electrical conductive properties. The GPR computer measures the elapsed time in billionths of a second (nanoseconds) from when the pulses are sent and when they are received back at the surface that can then be converted to depth. Results of the radar scan are displayed as a continuous cross-section of the subsurface on the computer screen in real time. Metallic materials such as tanks, pipes, conduits, rebar etc. have vastly different dielectric properties then soils so there reflections are striking and relatively easy to identify. Pipes and tanks constructed of PVC, concrete, and terracotta also produce distinct reflections, however, these reflections are typically not as striking as metallic materials. A typical radar image of two metallic underground storage tanks is found below.

GPR Image of Two Metallic USTs



GPR surveys are conducted with the most advanced GPR equipment currently available

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including a Geophysical Survey Systems (GSSI) SIR-3000 subsurface radar unit with a 400 MHz antenna. The 400 MHz antenna has a depth range of approximately 20-feet and other antennas may be employed with the system depending on specific site conditions and objectives of the survey. The GPR transect data may be saved on the internal hard drive and transferred to a PC for storage, printing, and post processing. GSSI is the world leader in the development of GPR systems and was the first company to commercialize GPR in 1970. GPR hardware and software has improved dramatically over the last several years allowing for relatively rapid and economical GPR surveys. With 3-dimensional capabilities, the latest GPR software takes data processing a step farther then the former 2-dimensional viewing method. Three-dimensional visualization helps you to see the whole picture, giving you a powerful tool to interpret complex utility layouts and identify subtle linear features that may have otherwise been missed.

GPR surveys are typically conducted by searching for GPR hyperbolas indicative of subsurface pipes or tanks signatures in the vicinity of known entities. Theses signatures are marked on the ground and areas progressively further from the known entity are scanned and marked. This process is continued until the GPR operator performed enough scans to determine and mark the subsurface pipe, tank or anomaly. During this process the GPR data is typically not saved due to the immense size of the data files. After this phase of the GPR survey is completed, representative GPR transects or grids are performed and saved for the report and post processing. Some of the factors that may negatively affect GPR results include clay soils, rebar in concrete, high moisture content, depth of the target, and the integrity, size, and material of the target.

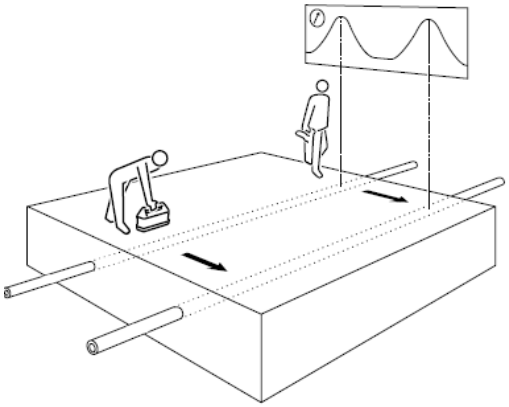
TW-6 EM Unit

TPI routinely employs a Fisher TW-6 electromagnetic metal detector when performing GPR surveys. The TW-6 creates an electromagnetic field with a transmitting coil and measures the strength of that field with a receiving coil. As the TW-6 passes over electrically conductive materials such as metal tanks or drums the field is distorted and the instrument produces an audible alarm based on the degree of the distortion. The TW-6 can detect conductive materials the size of drums or small tanks to depths of 10-feet. The instrument is actually a relatively poor metal detector which makes it ideal for locating large conductive materials such as metal drums, medium to large metal pipes, reinforced concrete pipes, and metal tanks. A more sensitive metal detector would produce "false positives" on small pieces of metal that are typically found in fill and throughout developed sites. If the survey area is underlain by reinforced concrete or cars and other large surficial metallic features are within 10-feet, the TW-6 will not be useful.

Line Locating

Line locating is performed with a Radiodetection RD400 PXL-2 line locator with a 433 HCTX-2 transmitter. The transmitter emits a specific radio or electromagnetic signal which is indirectly induced or directly conducted onto the metallic line. The transmitter is capable of producing frequencies of 512 Hz, 8 kHz, or 33 kHz and the receiver is configured for the specific transmitted frequency. The induced signal is coupled with the line by either using an induction clamp which surrounds an exposed line or placing the transmitter above a buried line and transmitting the signal to it. The receiver may also be used in a passive locate mode (power) to identify the presence of current carrying lines. Nonmetallic lines may also be located by snaking a sonde down accessible lines with push rods. A sonde is a small transmitter that emits a specific electromagnetic frequency which can be detected by the receiver at depths of 12 to 16-feet.

Inductive Sweep With Transmitter/Receiver



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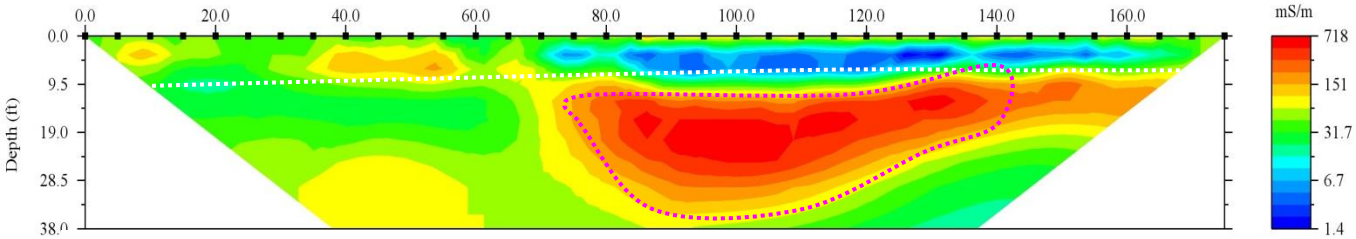
Attachment A
TPI's Geophysical Survey Equipment & Methods

Resistivity

TPI conducts subsurface resistivity surveys using the AGI SuperSting R8 IP Earth Resistivity and IP Meter. The SuperSting unit measures the voltage drop of an induced electrical current across numerous electrodes as it travels through the electrically heterogenous subsurface. Multiple survey profiles are completed in this manner based upon the specific conditions of the field area in order to assemble a complete characterization of the ground resistivity properties. The resistivity data is then processed and examined for evidence of significant subsurface features including bedrock surfaces, perched groundwater tables, cavities/sinkholes, or potential contaminant plumes.

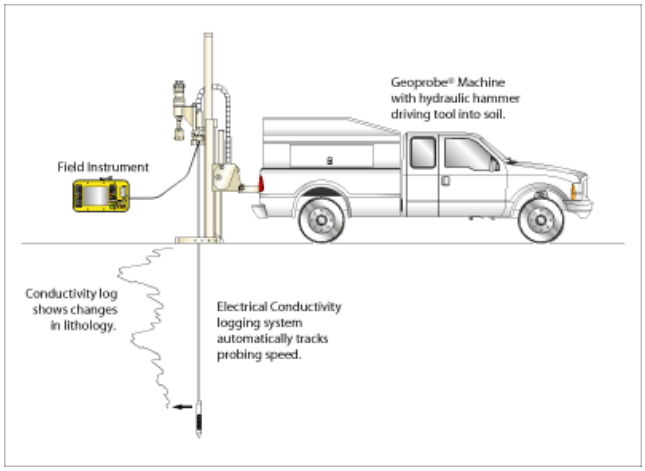
AGI SuperSting R8 IP Earth Resistivity and IP Meter assembly.



Resistivity pseudosection across a backfilled canal. Approximately 10' of high resistivity/low conductivity surficial fill (blue) over low resistivity/high conductivity canal backfill (orange-red).

Down-hole Conductivity

TPI is also able to collect down-hole soil conductivity data with an electric conductivity probe. The EC probe is driven into the subsurface by a direct push unit. A current is induced in the native soil between two contacts at opposite ends of the probe. The soil conductivity is then calculated based upon the ratio of induced current to resultant voltage across the probe. Down-hole EC profiling is particularly useful in the efficient determination of soil grain size (permeable sands vs impermeable clays), water content, and metal content.



Electrical conductivity probe

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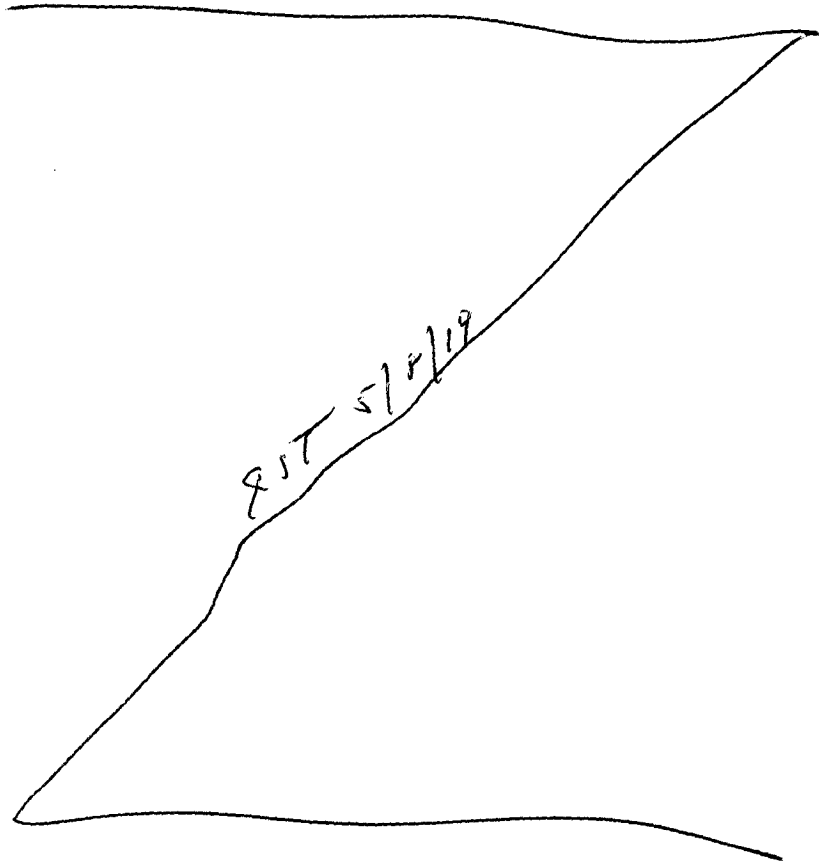
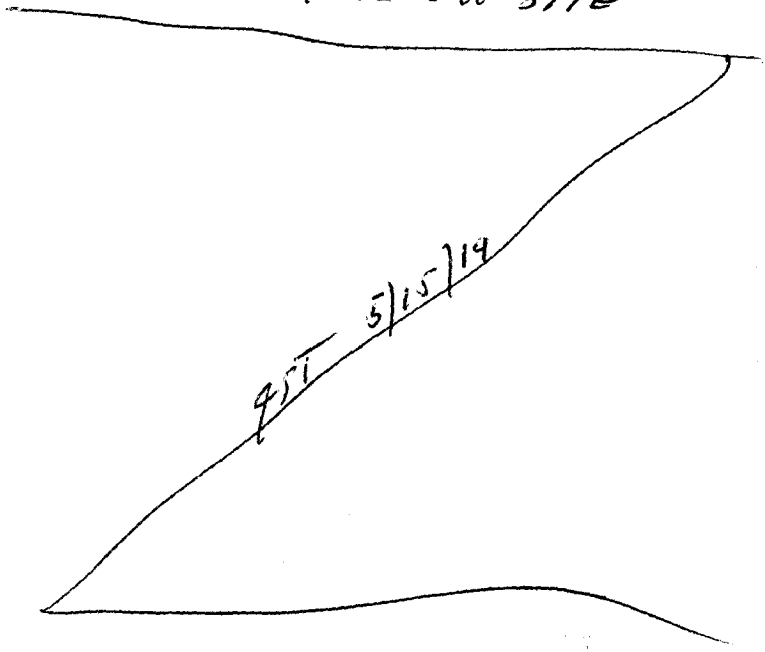
APPENDIX B

FIELD NOTES AND SOIL BORING LOGS

0905 6122 LANCASTER AVE 5/8/19
JT & CP ON SITE WEATHER:
OVERCAST, SOME DRIZZLE
RECON SITE: NO TANKS, DRUMS OR
CONTAINERS. SOLID CONCRETE FLOOR IN
SIDE BLDG. ACTIVE WATER LINE INSIDE
BLDG, NO INDICATION OF TOILET FACILITY.
0940 OFF SITE BACK TO OFFICE



6122 LANCASTER AVE 5/15/19
0722 JT & CP ON SITE, WEATHER
SUNNY & WARM
0735 CP WEED WACKING
0755 TPI ON SITE: DAN RUTH
0927 NOTIFIED MR SHABAZZ THAT WE
ON SITE
1040 TPI GEPKING Soil BORING SITES
ANOMALIES MARKED (WATER & SEWER?)
NO ANOMALIES SUGGESTIVE OF USTS
OR DRUMS
1113 DONE GEOPHYS. SURVEY
1145 JT, CP & TPI OFF SITE

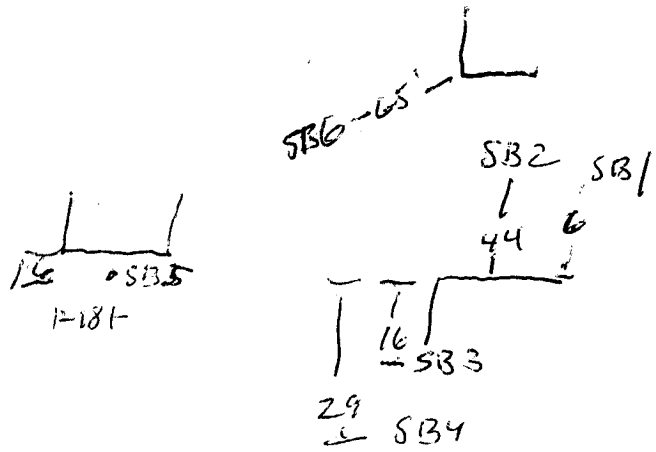


6122 LANCASTER AVE · 5/16/19

0725 JT & CP & TPI ON SITE
WEATHER OVCAST 60s
TPI: BRIAN MORIARTY
GEOPROBE MODEL 54DT
0743 STARTING SB1
0750 SB1 REFUSAL @ ~6' BGS IN SAPROLITE
0800 SAMPLE SB1-0-4 0-4' BGS PID = 0
0810 SAMPLE SB1 5-6 5-6' BGS
STARTING SB2 PID BACK. 1.5 PPM
SB2 REFUSAL @ 6.5' BGS PID = 2.4 PPM
0820 ~~REFUSAL~~/SAMPLE SB2-0-4
0830 SAMPLE SB2-5.5-6.5
0838 STARTING SB3
0845 SB3-0-4, REFUSAL @ 4 DGS, ODOR PID ~250 PPM SAMPLE SB3-0-4 MOVED BORING ~6' S of SB3 2nd REFUSAL @ 5.5 BGS
0855 SAMPLE ~~SB3-0-4~~ SB3-5-6
0900 STARTING SB4 PID 0-4 = 17.8 PPM
0910 ~~SB REFUSAL~~/SAMPLE SB4-0-4
0913 SB4 REFUSAL @ ~7.25' BGS PID = 16.7 PPM
0920 SAMPLE SB4-6-7.5'

6122 LANCASTER AVE 5/16/19

0928 STARTED SB5 0-4' PID = 0.0
0935 SAMPLE SB5-0-4
0940 SB5 REFUSAL @ 5.5' BGS PID = 3.3 PPM
0950 SAMPLE SB5-4.5-5.5
0955 START SB6
1005 SAMPLE SB6-0-4 PID = 0.0
1008 EOB @ ~20' BGS PID = 0.0
1025 SAMPLE SB6-11-12



1045 BRIFED MR. SHABAZZ
1050 JT, CP & TPI OFF SITE

9JT 5/16/19

SOIL BORING LOG

Boring ID **SB-1**

PROJECT NUMBER

PROJECT NAME

SITE LOCATION 6122 Lancaster Ave, Philadelphia

GEOLOGIST C. Piccininni

DATE May 16, 2019

DRILLER(s) Brian Moriarty

DRILLING CO. TPI

METHOD Direct Push

DRILL RIG Geoprobe 54 DT

BORING DIAMETER 2 inches

BORING DEPTH 6 fbgs

Depth	Water Level	PID	Lithologic Description	Blows/ft (n)	Well Installation Diagram	Drilling/Construction Details
0		0	Top Soil, dark brown and black in color			Background PID reading was 0.0
			Brown sandy silt with some fine to medium grain weathered schist			
2.5		0	Light Gray sandy silt with medium grain weathered schist			
			Gray sandy silt with a light gray medium grain weatherd schist			
5		0	Gray sandy silt with a light gray coarse grain weatherd schist			
			REFUSAL			Refusal was hit at 6 feet below surface
						Refusal Time = 09:13
7.5		0				
40						
50						
60						

SOIL BORING LOG

Boring ID **SB-2**

PROJECT NUMBER

PROJECT NAME

SITE LOCATION 6122 Lancaster Ave, Philadelphia

GEOLOGIST C. Piccininni

DRILLER(s) Brian Moriarty

DRILLING CO. TPI

METHOD Direct Push

DRILL RIG Geoprobe 54 DT

DATE May 16, 2019

BORING DIAMETER 2 inches

BORING DEPTH 6.5 fbgs

Depth	Water Level	PID	Lithologic Description	Blows/ft (n)	Well Installation Diagram	Drilling/Construction Details
0		2	Top Soil with dark brown silty clay			Background PID was 1.5
			Light Gray weathered schist fine to medium grain			Minor amount of visible Mica patterns
2.5			Historic Fill; contained brick and asphalt chuncks as well as concrete and sections of paper			Background PID was 1.5
		2.4				
5			Historic Fill; section contains more brick as well as glass and wood debris. Some moisture observed between 5.5 and 6 fbgs.			Moisture observed from 5.5 to 6 fbgs
			Light Gray with light brown colorations of weathered schist fine to medium grain			
			REFUSAL			Refusal at 6.5 feet below surface; easy to drill to 6 feet then a struggle between 6 and 6.5
7.5		0				Refusal Time = 08:25
40						
50						
60						

SOIL BORING LOG

Boring ID **SB-3**

PROJECT NUMBER

PROJECT NAME

SITE LOCATION 6122 Lancaster Ave, Philadelphia

GEOLOGIST C. Piccininni

DRILLER(s) Brian Moriarty

DRILLING CO. TPI

METHOD Direct Push

DRILL RIG Geoprobe 54 DT

DATE May 16, 2019

BORING DIAMETER 2 inches

BORING DEPTH 6.5 fbgs

Depth	Water Level	PID	Lithologic Description	Blows/ft (n)	Well Installation Diagram	Drilling/Construction Details
0		257	Top Soil with strong odor underneath			Background PID was 0.0
			Dark sandy silt with glass shards; no moisture			
2.5			Light Gray and white weathered schist fine to coarse grain; no moisture			
		33.1				
5			Dark Gray weathered schist fine to coarse grain			
			Light Gray and white weathered schist fine to coarse grain; no moisture			
			REFUSAL			Refusal at 6.5fbgs
7.5		0				Refusal Time = 09:53
40						
50						
60						

SOIL BORING LOG

Boring ID **SB-4**

PROJECT NUMBER

PROJECT NAME

SITE LOCATION 6122 Lancaster Ave, Philadelphia

GEOLOGIST C. Piccininni

DRILLER(s) Brian Moriarty

DRILLING CO. TPI

METHOD Direct Push

DRILL RIG Geoprobe 54 DT

DATE May 16, 2019

BORING DIAMETER 2 inches

BORING DEPTH 7.75 fbgs

Depth	Water Level	PID	Lithologic Description	Blows/ft (n)	Well Installation Diagram	Drilling/Construction Details
0		17.8	Top Soil with mixed in Asphalt			Background PID was 0.1
			Brown to Gray course sand			
2.5			Gray weathered Schist coarse to fine grain; no moisture			
		16.7	Gray coarse to fine grain weathered Schist with some moisture			
5						
			Gray coarse to fine grain weathered Schist; no moisture			
7.5			Green colored weathered rock; sandy silt texture REFUSAL			Refusal Depth = 7.75 Feet
						Refusal Time = 09:13
40						
50						
60						

SOIL BORING LOG

Boring ID **SB-5**

PROJECT NUMBER

PROJECT NAME

SITE LOCATION 6122 Lancaster Ave, Philadelphia

GEOLOGIST C. Piccininni

DRILLER(s) Brian Moriarty

DRILLING CO. TPI

METHOD Direct Push

DRILL RIG Geoprobe 54 DT

DATE May 16, 2019

BORING DIAMETER 2 inches

BORING DEPTH fbgs

Depth	Water Level	PID	Lithologic Description	Blows/ft (n)	Well Installation Diagram	Drilling/Construction Details
0		0	Black to Dark Brown medium to fine grain; some moisture			Background PID = 0.0
			Dark Gray medium to fine grain grain weathered rock; sandy silt composition with slight moisture			
2.5			Light Gray to Gray weathered rock with mica; coarse to fine grain; no moisture			
		3.3				
5			Gray with light and dark gray streaks; coarse to fine grain weathered rock; no moisture			
			REFUSAL			Refusal Depth = 5.5
						Refusal Time = 09:39
7.5		0				
40						
50						
60						

SOIL BORING LOG

Boring ID **SB-6**

PROJECT NUMBER

PROJECT NAME

SITE LOCATION 6122 Lancaster Ave, Philadelphia

GEOLOGIST C. Piccininni

DATE May 16, 2019

DRILLER(s) Brian Moriarty

DRILLING CO. TPI

METHOD Direct Push

DRILL RIG Geoprobe 54 DT

BORING DIAMETER 2 inches

BORING DEPTH fbgs

Depth	Water Level	PID	Lithologic Description	Blows/ft (n)	Well Installation Diagram	Drilling/Construction Details
0		0	Dark Brown top soil; medium grain and small rocks with some brick debris			Background PID = 0.0
			Dark Gray coarse to fine grain weathered rock; slight moisture			
		1.5	Brown sandy silt; medium to fine grain with some rocks; some moisture			
5						
		2.3	Dark Gray sandy silt with some mica indications; slight moisture			
10						
		0.7				
			Light Brown silty sandl micaceous and damp			
15						
		0	Light Brown silty sand micaceous and damp; additional black colorations			
			Gray sandy silt; coarse to fine grain			
20			END OF BORING			Stopped at 20 feet; did not hit refusal but boring was beginning to slow down
						End of Boring Time = 10:08
60						

APPENDIX C

LABORATORY ANALYTICAL RESULTS PACKAGE

eurofins | Environment Testing TestAmerica

ANALYTICAL REPORT

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238
Tel: (412)963-7058

Laboratory Job ID: 180-90221-1
Client Project/Site: 6122 Lancaster Avenue

For:
Westchester Environmental LLC
1248 Wrights Lane
West Chester, Pennsylvania 19380

Attn: Joe Tomalavage

Authorized for release by:
5/31/2019 11:09:46 AM

David Dunlap, Senior Project Manager
(412)963-2432
david.dunlap@testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

PA Lab ID: 02-00416

Table of Contents

Job ID: 180-90221-1

Laboratory: Eurofins TestAmerica, Pittsburgh

Narrative

Job Narrative
180-90221-1

Receipt
The samples were received on 5/17/2019 9:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 3.3º C and 3.5º C.

GC/MS VOA
Method(s) 8260C: Several samples had surrogate recoveries above the control limits. As the surrogate recoveries were high and there were no target analytes detected in the samples, the results were reported.

Method(s) 8260C: The method blank for analysis batch 180-279636 had the recovery of surrogate 4-bromofluorobenzene above the control limits. A second method blank was analyzed at the end of the analytical sequence which had all surrogate recoveries within the control limits. Results of both have been reported.

Method(s) 8260C: The laboratory control sample duplicate (LCSD) for analysis batch 180-279636 had the recovery of surrogate toluene-d8 below the control limits. All target analyte recoveries were within the control limits.

Method(s) 8260C: The continuing calibration verification (CCV) analyzed in batch 180-279518 was below criteria for the following analyte: naphthalene. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte is considered estimated.

Method(s) 8260C: The continuing calibration verification (CCV) analyzed in batch 180-279636 was below criteria for the following analyte: naphthalene. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte is considered estimated.

GC/MS Semi VOA
Method(s) 8270D: The following sample was diluted due to the nature of the sample matrix: SB2-5.5-6.5 (180-90221-4). Elevated reporting limits (RLs) are provided.

Method(s) 8270D: The recovery of surrogate nitrobenzene-d5 was slightly above the control limits for the following sample: SB3-0-4 (180-90221-5). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method(s) 8270D: An incorrect volume of surrogate spiking solution was inadvertently added the following samples: SB2-0-4 (180-90221-3). Percent recoveries are based on the amount spiked.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Definitions/Glossary

Client: Westchester Environmental LLC
Project/Site: 6122 Lancaster Avenue

Job ID: 180-90221-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits

GC/MS Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
X	Surrogate is outside control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Accreditation/Certification Summary

Client: Westchester Environmental LLC
Job ID: 180-90221-1
Project/Site: 6122 Lancaster Avenue

Laboratory: Eurofins TestAmerica, Pittsburgh

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
Pennsylvania	NELAP	3	02-00416	04-30-20

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte

Sample Summary

Client: Westchester Environmental LLC
Project/Site: 6122 Lancaster Avenue

Job ID: 180-90221-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
180-90221-1	SB1-0-4	Solid	05/16/19 08:00	05/17/19 09:00	
180-90221-2	SB1-5-6	Solid	05/16/19 08:10	05/17/19 09:00	
180-90221-3	SB2-0-4	Solid	05/16/19 08:20	05/17/19 09:00	
180-90221-4	SB2-5.5-6.5	Solid	05/16/19 08:30	05/17/19 09:00	
180-90221-5	SB3-0-4	Solid	05/16/19 08:45	05/17/19 09:00	
180-90221-6	SB3-5-6	Solid	05/16/19 08:55	05/17/19 09:00	
180-90221-7	SB4-0-4	Solid	05/16/19 09:10	05/17/19 09:00	
180-90221-8	SB4-6-7.5	Solid	05/16/19 09:20	05/17/19 09:00	
180-90221-9	SB5-0-4	Solid	05/16/19 09:35	05/17/19 09:00	
180-90221-10	SB5-4.5-5	Solid	05/16/19 09:50	05/17/19 09:00	
180-90221-11	SB6-0-4	Solid	05/16/19 10:05	05/17/19 09:00	
180-90221-12	SB6-11-12	Solid	05/16/19 10:25	05/17/19 09:00	

Method Summary

Client: Westchester Environmental LLC
Project/Site: 6122 Lancaster Avenue

Job ID: 180-90221-1

Method	Method Description	Protocol	Laboratory
EPA 8260C	Volatile Organic Compounds by GC/MS	SW846	TAL PIT
EPA 8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL PIT
EPA 6010C	Metals (ICP)	SW846	TAL PIT
2540G	SM 2540G	SM22	TAL PIT
3050B	Preparation, Metals	SW846	TAL PIT
3541	Automated Soxhlet Extraction	SW846	TAL PIT
5035	Closed System Purge and Trap	SW846	TAL PIT

Protocol References:

SM22 = Standard Methods For The Examination Of Water And Wastewater, 22nd Edition

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL PIT = Eurofins TestAmerica, Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Lab Chronicle

Client: Westchester Environmental LLC
Project/Site: 6122 Lancaster Avenue

Job ID: 180-90221-1

Client Sample ID: SB1-0-4
Date Collected: 05/16/19 08:00
Date Received: 05/17/19 09:00

Lab Sample ID: 180-90221-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			279318	05/21/19 12:47	RJP	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: SB1-0-4
Date Collected: 05/16/19 08:00
Date Received: 05/17/19 09:00

Lab Sample ID: 180-90221-1
Matrix: Solid
Percent Solids: 85.4

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.5939 g	5 mL	279587	05/23/19 06:04	PJJ	TAL PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	279518	05/23/19 20:19	PJJ	TAL PIT
	Instrument ID: CHHP11									
Total/NA	Prep	3541			15.3 g	5.0 mL	279826	05/28/19 04:40	BAP	TAL PIT
Total/NA	Analysis	EPA 8270D		1	1 mL	1 mL	279994	05/29/19 19:21	DLF	TAL PIT
	Instrument ID: CH71									
Total/NA	Prep	3050B			0.96 g	100 mL	279358	05/21/19 16:29	KAK	TAL PIT
Total/NA	Analysis	EPA 6010C		1			279637	05/23/19 10:50	RJG	TAL PIT
	Instrument ID: C									

Client Sample ID: SB1-5-6
Date Collected: 05/16/19 08:10
Date Received: 05/17/19 09:00

Lab Sample ID: 180-90221-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			279318	05/21/19 12:47	RJP	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: SB1-5-6
Date Collected: 05/16/19 08:10
Date Received: 05/17/19 09:00

Lab Sample ID: 180-90221-2
Matrix: Solid
Percent Solids: 95.0

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.1129 g	5 mL	279587	05/23/19 06:04	PJJ	TAL PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	279636	05/24/19 11:46	PJJ	TAL PIT
	Instrument ID: CHHP11									
Total/NA	Prep	3541			15.3 g	5.0 mL	279826	05/28/19 04:40	BAP	TAL PIT
Total/NA	Analysis	EPA 8270D		1	1 mL	1 mL	279994	05/29/19 19:48	DLF	TAL PIT
	Instrument ID: CH71									
Total/NA	Prep	3050B			1.00 g	100 mL	279358	05/21/19 16:29	KAK	TAL PIT
Total/NA	Analysis	EPA 6010C		1			279637	05/23/19 10:55	RJG	TAL PIT
	Instrument ID: C									

Lab Chronicle

Client: Westchester Environmental LLC
Project/Site: 6122 Lancaster Avenue

Job ID: 180-90221-1

Client Sample ID: SB2-0-4
Date Collected: 05/16/19 08:20
Date Received: 05/17/19 09:00

Lab Sample ID: 180-90221-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			279318	05/21/19 12:47	RJP	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: SB2-0-4
Date Collected: 05/16/19 08:20
Date Received: 05/17/19 09:00

Lab Sample ID: 180-90221-3
Matrix: Solid
Percent Solids: 81.8

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.8018 g	5 mL	279587	05/23/19 06:04	PJJ	TAL PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	279636	05/24/19 11:19	PJJ	TAL PIT
	Instrument ID: CHHP11									
Total/NA	Prep	3541			15.3 g	5.0 mL	279826	05/28/19 04:40	BAP	TAL PIT
Total/NA	Analysis	EPA 8270D		1	1 mL	1 mL	280164	05/30/19 14:40	DLF	TAL PIT
	Instrument ID: CH71									
Total/NA	Prep	3050B			1.02 g	100 mL	279358	05/21/19 16:29	KAK	TAL PIT
Total/NA	Analysis	EPA 6010C		1			279637	05/23/19 11:01	RJG	TAL PIT
	Instrument ID: C									

Client Sample ID: SB2-5.5-6.5
Date Collected: 05/16/19 08:30
Date Received: 05/17/19 09:00

Lab Sample ID: 180-90221-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			279318	05/21/19 12:47	RJP	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: SB2-5.5-6.5
Date Collected: 05/16/19 08:30
Date Received: 05/17/19 09:00

Lab Sample ID: 180-90221-4
Matrix: Solid
Percent Solids: 79.1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.0076 g	5 mL	279587	05/23/19 06:04	PJJ	TAL PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	279636	05/24/19 10:52	PJJ	TAL PIT
	Instrument ID: CHHP11									
Total/NA	Prep	3541			15.1 g	5.0 mL	279826	05/28/19 04:40	BAP	TAL PIT
Total/NA	Analysis	EPA 8270D		10	1 mL	1 mL	279994	05/29/19 20:42	DLF	TAL PIT
	Instrument ID: CH71									
Total/NA	Prep	3050B			1.00 g	100 mL	279358	05/21/19 16:29	KAK	TAL PIT
Total/NA	Analysis	EPA 6010C		1			279637	05/23/19 11:06	RJG	TAL PIT
	Instrument ID: C									

Lab Chronicle

Client: Westchester Environmental LLC
Project/Site: 6122 Lancaster Avenue

Job ID: 180-90221-1

Client Sample ID: SB3-0-4
Date Collected: 05/16/19 08:45
Date Received: 05/17/19 09:00

Lab Sample ID: 180-90221-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			279318	05/21/19 12:47	RJP	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: SB3-0-4
Date Collected: 05/16/19 08:45
Date Received: 05/17/19 09:00

Lab Sample ID: 180-90221-5
Matrix: Solid
Percent Solids: 83.5

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.9618 g	5 mL	279587	05/23/19 06:04	PJJ	TAL PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	279636	05/24/19 14:07	PJJ	TAL PIT
	Instrument ID: CHHP11									
Total/NA	Prep	3541			15.4 g	5.0 mL	279826	05/28/19 04:40	BAP	TAL PIT
Total/NA	Analysis	EPA 8270D		1	1 mL	1 mL	279994	05/29/19 21:09	DLF	TAL PIT
	Instrument ID: CH71									
Total/NA	Prep	3050B			1.03 g	100 mL	279358	05/21/19 16:29	KAK	TAL PIT
Total/NA	Analysis	EPA 6010C		1			279637	05/23/19 11:11	RJG	TAL PIT
	Instrument ID: C									

Client Sample ID: SB3-5-6
Date Collected: 05/16/19 08:55
Date Received: 05/17/19 09:00

Lab Sample ID: 180-90221-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			279318	05/21/19 12:47	RJP	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: SB3-5-6
Date Collected: 05/16/19 08:55
Date Received: 05/17/19 09:00

Lab Sample ID: 180-90221-6
Matrix: Solid
Percent Solids: 95.6

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.4797 g	5 mL	279587	05/23/19 06:04	PJJ	TAL PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	279636	05/24/19 14:33	PJJ	TAL PIT
	Instrument ID: CHHP11									
Total/NA	Prep	3541			15.0 g	5.0 mL	279826	05/28/19 04:40	BAP	TAL PIT
Total/NA	Analysis	EPA 8270D		1	1 mL	1 mL	279994	05/29/19 21:37	DLF	TAL PIT
	Instrument ID: CH71									
Total/NA	Prep	3050B			1.05 g	100 mL	279610	05/23/19 16:06	KAK	TAL PIT
Total/NA	Analysis	EPA 6010C		1			279953	05/28/19 17:57	RJG	TAL PIT
	Instrument ID: C									

Client Sample ID: SB4-0-4
Date Collected: 05/16/19 09:10
Date Received: 05/17/19 09:00

Lab Sample ID: 180-90221-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			279318	05/21/19 12:47	RJP	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: SB4-0-4
Date Collected: 05/16/19 09:10
Date Received: 05/17/19 09:00

Lab Sample ID: 180-90221-7
Matrix: Solid
Percent Solids: 85.0

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.5574 g	5 mL	279587	05/23/19 06:04	PJJ	TAL PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	279636	05/24/19 15:00	PJJ	TAL PIT
	Instrument ID: CHHP11									
Total/NA	Prep	3541			15.4 g	5.0 mL	279826	05/28/19 04:40	BAP	TAL PIT
Total/NA	Analysis	EPA 8270D		1	1 mL	1 mL	280164	05/30/19 15:07	DLF	TAL PIT
	Instrument ID: CH71									
Total/NA	Prep	3050B			1.00 g	100 mL	279610	05/23/19 16:06	KAK	TAL PIT
Total/NA	Analysis	EPA 6010C		1			279953	05/28/19 18:02	RJG	TAL PIT
	Instrument ID: C									

Client Sample ID: SB4-6-7.5
Date Collected: 05/16/19 09:20
Date Received: 05/17/19 09:00

Lab Sample ID: 180-90221-8
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			279318	05/21/19 12:47	RJP	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: SB4-6-7.5
Date Collected: 05/16/19 09:20
Date Received: 05/17/19 09:00

Lab Sample ID: 180-90221-8
Matrix: Solid
Percent Solids: 86.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.3614 g	5 mL	279587	05/23/19 06:04	PJJ	TAL PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	279636	05/24/19 15:27	PJJ	TAL PIT
	Instrument ID: CHHP11									
Total/NA	Prep	3541			15.5 g	5.0 mL	279826	05/28/19 04:40	BAP	TAL PIT
Total/NA	Analysis	EPA 8270D		1	1 mL	1 mL	280164	05/30/19 15:35	DLF	TAL PIT
	Instrument ID: CH71									
Total/NA	Prep	3050B			0.97 g	100 mL	279610	05/23/19 16:06	KAK	TAL PIT
Total/NA	Analysis	EPA 6010C		1			279953	05/28/19 18:07	RJG	TAL PIT
	Instrument ID: C									

Lab Chronicle

Client: Westchester Environmental LLC
Project/Site: 6122 Lancaster Avenue

Job ID: 180-90221-1

Client Sample ID: SB5-0-4
Date Collected: 05/16/19 09:35
Date Received: 05/17/19 09:00

Lab Sample ID: 180-90221-9
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			279318	05/21/19 12:47	RJP	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: SB5-0-4
Date Collected: 05/16/19 09:35
Date Received: 05/17/19 09:00

Lab Sample ID: 180-90221-9
Matrix: Solid
Percent Solids: 76.3

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.3535 g	5 mL	279587	05/23/19 06:04	PJJ	TAL PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	279636	05/24/19 15:54	PJJ	TAL PIT
	Instrument ID: CHHP11									
Total/NA	Prep	3541			15.1 g	5.0 mL	279826	05/28/19 04:40	BAP	TAL PIT
Total/NA	Analysis	EPA 8270D		1	1 mL	1 mL	280164	05/30/19 16:02	DLF	TAL PIT
	Instrument ID: CH71									
Total/NA	Prep	3050B			1.06 g	100 mL	279610	05/23/19 16:06	KAK	TAL PIT
Total/NA	Analysis	EPA 6010C		1			279953	05/28/19 18:13	RJG	TAL PIT
	Instrument ID: C									

Client Sample ID: SB5-4.5-5
Date Collected: 05/16/19 09:50
Date Received: 05/17/19 09:00

Lab Sample ID: 180-90221-10
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			279318	05/21/19 12:47	RJP	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: SB5-4.5-5
Date Collected: 05/16/19 09:50
Date Received: 05/17/19 09:00

Lab Sample ID: 180-90221-10
Matrix: Solid
Percent Solids: 93.8

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.2374 g	5 mL	279587	05/23/19 06:04	PJJ	TAL PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	279636	05/24/19 16:21	PJJ	TAL PIT
	Instrument ID: CHHP11									
Total/NA	Prep	3541			15.0 g	5.0 mL	279826	05/28/19 04:40	BAP	TAL PIT
Total/NA	Analysis	EPA 8270D		1	1 mL	1 mL	280164	05/30/19 16:29	DLF	TAL PIT
	Instrument ID: CH71									
Total/NA	Prep	3050B			0.95 g	100 mL	279610	05/23/19 16:06	KAK	TAL PIT
Total/NA	Analysis	EPA 6010C		1			279953	05/28/19 18:18	RJG	TAL PIT
	Instrument ID: C									

Lab Chronicle

Client: Westchester Environmental LLC
Project/Site: 6122 Lancaster Avenue

Job ID: 180-90221-1

Client Sample ID: SB6-0-4
Date Collected: 05/16/19 10:05
Date Received: 05/17/19 09:00

Lab Sample ID: 180-90221-11
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			279440	05/22/19 11:29	RJP	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: SB6-0-4
Date Collected: 05/16/19 10:05
Date Received: 05/17/19 09:00

Lab Sample ID: 180-90221-11
Matrix: Solid
Percent Solids: 84.0

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.8516 g	5 mL	279411	05/22/19 16:46	PJJ	TAL PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	279388	05/22/19 18:35	PJJ	TAL PIT
	Instrument ID: CHHP11									
Total/NA	Prep	3541			15.2 g	5.0 mL	279947	05/29/19 04:00	BAP	TAL PIT
Total/NA	Analysis	EPA 8270D		1	1 mL	1 mL	280164	05/30/19 16:56	DLF	TAL PIT
	Instrument ID: CH71									
Total/NA	Prep	3050B			1.01 g	100 mL	279610	05/23/19 16:06	KAK	TAL PIT
Total/NA	Analysis	EPA 6010C		1			279953	05/28/19 18:23	RJG	TAL PIT
	Instrument ID: C									

Client Sample ID: SB6-11-12
Date Collected: 05/16/19 10:25
Date Received: 05/17/19 09:00

Lab Sample ID: 180-90221-12
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			279440	05/22/19 11:29	RJP	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: SB6-11-12
Date Collected: 05/16/19 10:25
Date Received: 05/17/19 09:00

Lab Sample ID: 180-90221-12
Matrix: Solid
Percent Solids: 87.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.4739 g	5 mL	279411	05/22/19 16:45	PJJ	TAL PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	279518	05/23/19 12:25	PJJ	TAL PIT
	Instrument ID: CHHP11									
Total/NA	Prep	3541			15.3 g	5.0 mL	279947	05/29/19 04:00	BAP	TAL PIT
Total/NA	Analysis	EPA 8270D		1	1 mL	1 mL	280164	05/30/19 17:24	DLF	TAL PIT
	Instrument ID: CH71									
Total/NA	Prep	3050B			1.02 g	100 mL	279610	05/23/19 16:06	KAK	TAL PIT
Total/NA	Analysis	EPA 6010C		1			279953	05/28/19 18:29	RJG	TAL PIT
	Instrument ID: C									

Laboratory References:
TAL PIT = Eurofins TestAmerica, Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Lab Chronicle

Client: Westchester Environmental LLC
Project/Site: 6122 Lancaster Avenue

Job ID: 180-90221-1

Analyst References:

Lab: TAL PIT

Batch Type: Prep

BAP = Brian Pino
KAK = Kayla Kalamasz
PJJ = Patrick Journet

Batch Type: Analysis

DLF = Donald Ferguson
PJJ = Patrick Journet
RJG = Rob Good
RJP = Rockwell Pokrant

Client Sample ID: SB1-0-4

Date Collected: 05/16/19 08:00
Date Received: 05/17/19 09:00

Lab Sample ID: 180-90221-1

Matrix: Solid
Percent Solids: 85.4

Method: EPA 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		5.2	2.1	ug/Kg	☼	05/23/19 06:04	05/23/19 20:19	1
1,2-Dibromoethane	ND		5.2	2.9	ug/Kg	☼	05/23/19 06:04	05/23/19 20:19	1
1,2-Dichloroethane	ND		5.2	1.5	ug/Kg	☼	05/23/19 06:04	05/23/19 20:19	1
Ethylbenzene	ND		5.2	2.3	ug/Kg	☼	05/23/19 06:04	05/23/19 20:19	1
Isopropylbenzene	ND		5.2	2.4	ug/Kg	☼	05/23/19 06:04	05/23/19 20:19	1
Methyl tert-butyl ether	ND		5.2	3.9	ug/Kg	☼	05/23/19 06:04	05/23/19 20:19	1
Naphthalene	ND		5.2	4.1	ug/Kg	☼	05/23/19 06:04	05/23/19 20:19	1
Toluene	ND		5.2	1.8	ug/Kg	☼	05/23/19 06:04	05/23/19 20:19	1
1,2,4-Trimethylbenzene	ND		5.2	1.4	ug/Kg	☼	05/23/19 06:04	05/23/19 20:19	1
1,3,5-Trimethylbenzene	ND		5.2	1.8	ug/Kg	☼	05/23/19 06:04	05/23/19 20:19	1
Xylenes, Total	ND		10	4.5	ug/Kg	☼	05/23/19 06:04	05/23/19 20:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*74 - 114*	*05/23/19 06:04*	*05/23/19 20:19*	*1*
Dibromofluoromethane (Surr)	*122*	*X*	*76 - 116*	*05/23/19 06:04*	*05/23/19 20:19*	*1*
1,2-Dichloroethane-d4 (Surr)	*120*	*X*	*71 - 114*	*05/23/19 06:04*	*05/23/19 20:19*	*1*
Toluene-d8 (Surr)	*109*		*85 - 125*	*05/23/19 06:04*	*05/23/19 20:19*	*1*

Method: EPA 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	ND		77	14	ug/Kg	☼	05/28/19 04:40	05/29/19 19:21	1
Benzo[a]pyrene	ND		77	17	ug/Kg	☼	05/28/19 04:40	05/29/19 19:21	1
Benzo[b]fluoranthene	ND		77	19	ug/Kg	☼	05/28/19 04:40	05/29/19 19:21	1
Benzo[g,h,i]perylene	ND		77	17	ug/Kg	☼	05/28/19 04:40	05/29/19 19:21	1
Chrysene	ND		77	15	ug/Kg	☼	05/28/19 04:40	05/29/19 19:21	1
Indeno[1,2,3-cd]pyrene	ND		77	16	ug/Kg	☼	05/28/19 04:40	05/29/19 19:21	1
Pyrene	ND		77	18	ug/Kg	☼	05/28/19 04:40	05/29/19 19:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*73*		*47 - 105*	*05/28/19 04:40*	*05/29/19 19:21*	*1*
Nitrobenzene-d5 (Surr)	*73*		*47 - 105*	*05/28/19 04:40*	*05/29/19 19:21*	*1*
Terphenyl-d14 (Surr)	*65*		*42 - 105*	*05/28/19 04:40*	*05/29/19 19:21*	*1*

Method: EPA 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead, Total	**12**		1.2	0.62	mg/Kg	☼	05/21/19 16:29	05/23/19 10:50	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**14.6**		0.1	0.1	%			05/21/19 12:47	1
Percent Solids	**85.4**		0.1	0.1	%			05/21/19 12:47	1

Client Sample ID: SB1-5-6

Date Collected: 05/16/19 08:10
Date Received: 05/17/19 09:00

Lab Sample ID: 180-90221-2

Matrix: Solid
Percent Solids: 95.0

Method: EPA 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		4.3	1.7	ug/Kg	☼	05/23/19 06:04	05/24/19 11:46	1
1,2-Dibromoethane	ND		4.3	2.4	ug/Kg	☼	05/23/19 06:04	05/24/19 11:46	1
1,2-Dichloroethane	ND		4.3	1.3	ug/Kg	☼	05/23/19 06:04	05/24/19 11:46	1

Client Sample ID: SB1-5-6

Date Collected: 05/16/19 08:10
Date Received: 05/17/19 09:00

Lab Sample ID: 180-90221-2

Matrix: Solid
Percent Solids: 95.0

Method: EPA 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		4.3	1.9	ug/Kg	☼	05/23/19 06:04	05/24/19 11:46	1
Isopropylbenzene	ND		4.3	2.0	ug/Kg	☼	05/23/19 06:04	05/24/19 11:46	1
Methyl tert-butyl ether	ND		4.3	3.2	ug/Kg	☼	05/23/19 06:04	05/24/19 11:46	1
Naphthalene	ND		4.3	3.4	ug/Kg	☼	05/23/19 06:04	05/24/19 11:46	1
Toluene	ND		4.3	1.5	ug/Kg	☼	05/23/19 06:04	05/24/19 11:46	1
1,2,4-Trimethylbenzene	ND		4.3	1.2	ug/Kg	☼	05/23/19 06:04	05/24/19 11:46	1
1,3,5-Trimethylbenzene	ND		4.3	1.5	ug/Kg	☼	05/23/19 06:04	05/24/19 11:46	1
Xylenes, Total	ND		8.6	3.7	ug/Kg	☼	05/23/19 06:04	05/24/19 11:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*118*	*X*	*74 - 114*	*05/23/19 06:04*	*05/24/19 11:46*	*1*
Dibromofluoromethane (Surr)	*101*		*76 - 116*	*05/23/19 06:04*	*05/24/19 11:46*	*1*
1,2-Dichloroethane-d4 (Surr)	*109*		*71 - 114*	*05/23/19 06:04*	*05/24/19 11:46*	*1*
Toluene-d8 (Surr)	*92*		*85 - 125*	*05/23/19 06:04*	*05/24/19 11:46*	*1*

Method: EPA 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	ND		69	13	ug/Kg	☼	05/28/19 04:40	05/29/19 19:48	1
Benzo[a]pyrene	ND		69	15	ug/Kg	☼	05/28/19 04:40	05/29/19 19:48	1
Benzo[b]fluoranthene	ND		69	17	ug/Kg	☼	05/28/19 04:40	05/29/19 19:48	1
Benzo[g,h,i]perylene	ND		69	15	ug/Kg	☼	05/28/19 04:40	05/29/19 19:48	1
Chrysene	ND		69	14	ug/Kg	☼	05/28/19 04:40	05/29/19 19:48	1
Indeno[1,2,3-cd]pyrene	ND		69	14	ug/Kg	☼	05/28/19 04:40	05/29/19 19:48	1
Pyrene	ND		69	16	ug/Kg	☼	05/28/19 04:40	05/29/19 19:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*75*		*47 - 105*	*05/28/19 04:40*	*05/29/19 19:48*	*1*
Nitrobenzene-d5 (Surr)	*76*		*47 - 105*	*05/28/19 04:40*	*05/29/19 19:48*	*1*
Terphenyl-d14 (Surr)	*69*		*42 - 105*	*05/28/19 04:40*	*05/29/19 19:48*	*1*

Method: EPA 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead, Total	**7.3**		1.1	0.54	mg/Kg	☼	05/21/19 16:29	05/23/19 10:55	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**5.0**		0.1	0.1	%			05/21/19 12:47	1
Percent Solids	**95.0**		0.1	0.1	%			05/21/19 12:47	1

Client Sample ID: SB2-0-4

Date Collected: 05/16/19 08:20
Date Received: 05/17/19 09:00

Lab Sample ID: 180-90221-3

Matrix: Solid
Percent Solids: 81.8

Method: EPA 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		5.3	2.1	ug/Kg	☼	05/23/19 06:04	05/24/19 11:19	1
1,2-Dibromoethane	ND		5.3	2.9	ug/Kg	☼	05/23/19 06:04	05/24/19 11:19	1
1,2-Dichloroethane	ND		5.3	1.5	ug/Kg	☼	05/23/19 06:04	05/24/19 11:19	1
Ethylbenzene	ND		5.3	2.3	ug/Kg	☼	05/23/19 06:04	05/24/19 11:19	1
Isopropylbenzene	ND		5.3	2.4	ug/Kg	☼	05/23/19 06:04	05/24/19 11:19	1
Methyl tert-butyl ether	ND		5.3	3.9	ug/Kg	☼	05/23/19 06:04	05/24/19 11:19	1

Client Sample ID: SB2-0-4

Date Collected: 05/16/19 08:20
Date Received: 05/17/19 09:00

Lab Sample ID: 180-90221-3

Matrix: Solid
Percent Solids: 81.8

Method: EPA 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		5.3	4.1	ug/Kg	☼	05/23/19 06:04	05/24/19 11:19	1
Toluene	ND		5.3	1.8	ug/Kg	☼	05/23/19 06:04	05/24/19 11:19	1
1,2,4-Trimethylbenzene	ND		5.3	1.4	ug/Kg	☼	05/23/19 06:04	05/24/19 11:19	1
1,3,5-Trimethylbenzene	ND		5.3	1.8	ug/Kg	☼	05/23/19 06:04	05/24/19 11:19	1
Xylenes, Total	ND		11	4.5	ug/Kg	☼	05/23/19 06:04	05/24/19 11:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*122*	*X*	*74 - 114*	*05/23/19 06:04*	*05/24/19 11:19*	*1*
Dibromofluoromethane (Surr)	*107*		*76 - 116*	*05/23/19 06:04*	*05/24/19 11:19*	*1*
1,2-Dichloroethane-d4 (Surr)	*114*		*71 - 114*	*05/23/19 06:04*	*05/24/19 11:19*	*1*
Toluene-d8 (Surr)	*101*		*85 - 125*	*05/23/19 06:04*	*05/24/19 11:19*	*1*

Method: EPA 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	**35**	**J**	80	15	ug/Kg	☼	05/28/19 04:40	05/30/19 14:40	1
Benzo[a]pyrene	**37**	**J**	80	17	ug/Kg	☼	05/28/19 04:40	05/30/19 14:40	1
Benzo[b]fluoranthene	**38**	**J**	80	20	ug/Kg	☼	05/28/19 04:40	05/30/19 14:40	1
Benzo[g,h,i]perylene	**33**	**J**	80	17	ug/Kg	☼	05/28/19 04:40	05/30/19 14:40	1
Chrysene	**34**	**J**	80	16	ug/Kg	☼	05/28/19 04:40	05/30/19 14:40	1
Indeno[1,2,3-cd]pyrene	**27**	**J**	80	16	ug/Kg	☼	05/28/19 04:40	05/30/19 14:40	1
Pyrene	**46**	**J**	80	19	ug/Kg	☼	05/28/19 04:40	05/30/19 14:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*72*		*47 - 105*	*05/28/19 04:40*	*05/30/19 14:40*	*1*
Nitrobenzene-d5 (Surr)	*71*		*47 - 105*	*05/28/19 04:40*	*05/30/19 14:40*	*1*
Terphenyl-d14 (Surr)	*65*		*42 - 105*	*05/28/19 04:40*	*05/30/19 14:40*	*1*

Method: EPA 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead, Total	**36**		1.2	0.61	mg/Kg	☼	05/21/19 16:29	05/23/19 11:01	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**18.2**		0.1	0.1	%			05/21/19 12:47	1
Percent Solids	**81.8**		0.1	0.1	%			05/21/19 12:47	1

Client Sample ID: SB2-5.5-6.5

Date Collected: 05/16/19 08:30
Date Received: 05/17/19 09:00

Lab Sample ID: 180-90221-4

Matrix: Solid
Percent Solids: 79.1

Method: EPA 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		5.3	2.1	ug/Kg	☼	05/23/19 06:04	05/24/19 10:52	1
1,2-Dibromoethane	ND		5.3	2.9	ug/Kg	☼	05/23/19 06:04	05/24/19 10:52	1
1,2-Dichloroethane	ND		5.3	1.5	ug/Kg	☼	05/23/19 06:04	05/24/19 10:52	1
Ethylbenzene	ND		5.3	2.3	ug/Kg	☼	05/23/19 06:04	05/24/19 10:52	1
Isopropylbenzene	ND		5.3	2.4	ug/Kg	☼	05/23/19 06:04	05/24/19 10:52	1
Methyl tert-butyl ether	ND		5.3	3.9	ug/Kg	☼	05/23/19 06:04	05/24/19 10:52	1
Naphthalene	ND		5.3	4.1	ug/Kg	☼	05/23/19 06:04	05/24/19 10:52	1
Toluene	ND		5.3	1.8	ug/Kg	☼	05/23/19 06:04	05/24/19 10:52	1
1,2,4-Trimethylbenzene	ND		5.3	1.4	ug/Kg	☼	05/23/19 06:04	05/24/19 10:52	1

Client Sample ID: SB2-5.5-6.5

Date Collected: 05/16/19 08:30
Date Received: 05/17/19 09:00

Lab Sample ID: 180-90221-4

Matrix: Solid
Percent Solids: 79.1

Method: EPA 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		5.3	1.8	ug/Kg	☼	05/23/19 06:04	05/24/19 10:52	1
Xylenes, Total	ND		11	4.5	ug/Kg	☼	05/23/19 06:04	05/24/19 10:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*118*	*X*	*74 - 114*	*05/23/19 06:04*	*05/24/19 10:52*	*1*
Dibromofluoromethane (Surr)	*110*		*76 - 116*	*05/23/19 06:04*	*05/24/19 10:52*	*1*
1,2-Dichloroethane-d4 (Surr)	*118*	*X*	*71 - 114*	*05/23/19 06:04*	*05/24/19 10:52*	*1*
Toluene-d8 (Surr)	*106*		*85 - 125*	*05/23/19 06:04*	*05/24/19 10:52*	*1*

Method: EPA 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	**760**	**J**	840	160	ug/Kg	☼	05/28/19 04:40	05/29/19 20:42	10
Benzo[a]pyrene	**930**		840	180	ug/Kg	☼	05/28/19 04:40	05/29/19 20:42	10
Benzo[b]fluoranthene	**1000**		840	210	ug/Kg	☼	05/28/19 04:40	05/29/19 20:42	10
Benzo[g,h,i]perylene	**1200**		840	180	ug/Kg	☼	05/28/19 04:40	05/29/19 20:42	10
Chrysene	**760**	**J**	840	160	ug/Kg	☼	05/28/19 04:40	05/29/19 20:42	10
Indeno[1,2,3-cd]pyrene	**670**	**J**	840	170	ug/Kg	☼	05/28/19 04:40	05/29/19 20:42	10
Pyrene	**1100**		840	200	ug/Kg	☼	05/28/19 04:40	05/29/19 20:42	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*63*		*47 - 105*	*05/28/19 04:40*	*05/29/19 20:42*	*10*
Nitrobenzene-d5 (Surr)	*57*		*47 - 105*	*05/28/19 04:40*	*05/29/19 20:42*	*10*
Terphenyl-d14 (Surr)	*57*		*42 - 105*	*05/28/19 04:40*	*05/29/19 20:42*	*10*

Method: EPA 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead, Total	**25**		1.3	0.65	mg/Kg	☼	05/21/19 16:29	05/23/19 11:06	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**20.9**		0.1	0.1	%			05/21/19 12:47	1
Percent Solids	**79.1**		0.1	0.1	%			05/21/19 12:47	1

Client Sample ID: SB3-0-4

Date Collected: 05/16/19 08:45
Date Received: 05/17/19 09:00

Lab Sample ID: 180-90221-5

Matrix: Solid
Percent Solids: 83.5

Method: EPA 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		5.0	2.0	ug/Kg	☼	05/23/19 06:04	05/24/19 14:07	1
1,2-Dibromoethane	ND		5.0	2.7	ug/Kg	☼	05/23/19 06:04	05/24/19 14:07	1
1,2-Dichloroethane	ND		5.0	1.5	ug/Kg	☼	05/23/19 06:04	05/24/19 14:07	1
Ethylbenzene	ND		5.0	2.2	ug/Kg	☼	05/23/19 06:04	05/24/19 14:07	1
Isopropylbenzene	ND		5.0	2.3	ug/Kg	☼	05/23/19 06:04	05/24/19 14:07	1
Methyl tert-butyl ether	ND		5.0	3.7	ug/Kg	☼	05/23/19 06:04	05/24/19 14:07	1
Naphthalene	ND		5.0	3.9	ug/Kg	☼	05/23/19 06:04	05/24/19 14:07	1
Toluene	ND		5.0	1.7	ug/Kg	☼	05/23/19 06:04	05/24/19 14:07	1
1,2,4-Trimethylbenzene	ND		5.0	1.4	ug/Kg	☼	05/23/19 06:04	05/24/19 14:07	1
1,3,5-Trimethylbenzene	ND		5.0	1.7	ug/Kg	☼	05/23/19 06:04	05/24/19 14:07	1
Xylenes, Total	ND		10	4.3	ug/Kg	☼	05/23/19 06:04	05/24/19 14:07	1

Client Sample ID: SB3-0-4

Date Collected: 05/16/19 08:45
Date Received: 05/17/19 09:00

Lab Sample ID: 180-90221-5

Matrix: Solid
Percent Solids: 83.5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*111*		*74 - 114*	*05/23/19 06:04*	*05/24/19 14:07*	*1*
Dibromofluoromethane (Surr)	*101*		*76 - 116*	*05/23/19 06:04*	*05/24/19 14:07*	*1*
1,2-Dichloroethane-d4 (Surr)	*104*		*71 - 114*	*05/23/19 06:04*	*05/24/19 14:07*	*1*
Toluene-d8 (Surr)	*95*		*85 - 125*	*05/23/19 06:04*	*05/24/19 14:07*	*1*

Method: EPA 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	**160**		78	15	ug/Kg	☼	05/28/19 04:40	05/29/19 21:09	1
Benzo[a]pyrene	**68**	**J**	78	17	ug/Kg	☼	05/28/19 04:40	05/29/19 21:09	1
Benzo[b]fluoranthene	**110**		78	19	ug/Kg	☼	05/28/19 04:40	05/29/19 21:09	1
Benzo[g,h,i]perylene	**51**	**J**	78	17	ug/Kg	☼	05/28/19 04:40	05/29/19 21:09	1
Chrysene	**230**		78	15	ug/Kg	☼	05/28/19 04:40	05/29/19 21:09	1
Indeno[1,2,3-cd]pyrene	**48**	**J**	78	16	ug/Kg	☼	05/28/19 04:40	05/29/19 21:09	1
Pyrene	**2700**		78	18	ug/Kg	☼	05/28/19 04:40	05/29/19 21:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*56*		*47 - 105*	*05/28/19 04:40*	*05/29/19 21:09*	*1*
Nitrobenzene-d5 (Surr)	*107*	*X*	*47 - 105*	*05/28/19 04:40*	*05/29/19 21:09*	*1*
Terphenyl-d14 (Surr)	*74*		*42 - 105*	*05/28/19 04:40*	*05/29/19 21:09*	*1*

Method: EPA 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead, Total	**16**		1.2	0.59	mg/Kg	☼	05/21/19 16:29	05/23/19 11:11	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**16.5**		0.1	0.1	%			05/21/19 12:47	1
Percent Solids	**83.5**		0.1	0.1	%			05/21/19 12:47	1

Client Sample ID: SB3-5-6

Date Collected: 05/16/19 08:55
Date Received: 05/17/19 09:00

Lab Sample ID: 180-90221-6

Matrix: Solid
Percent Solids: 95.6

Method: EPA 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		4.8	1.9	ug/Kg	☼	05/23/19 06:04	05/24/19 14:33	1
1,2-Dibromoethane	ND		4.8	2.6	ug/Kg	☼	05/23/19 06:04	05/24/19 14:33	1
1,2-Dichloroethane	ND		4.8	1.4	ug/Kg	☼	05/23/19 06:04	05/24/19 14:33	1
Ethylbenzene	ND		4.8	2.1	ug/Kg	☼	05/23/19 06:04	05/24/19 14:33	1
Isopropylbenzene	ND		4.8	2.2	ug/Kg	☼	05/23/19 06:04	05/24/19 14:33	1
Methyl tert-butyl ether	ND		4.8	3.5	ug/Kg	☼	05/23/19 06:04	05/24/19 14:33	1
Naphthalene	ND		4.8	3.7	ug/Kg	☼	05/23/19 06:04	05/24/19 14:33	1
Toluene	ND		4.8	1.6	ug/Kg	☼	05/23/19 06:04	05/24/19 14:33	1
1,2,4-Trimethylbenzene	ND		4.8	1.3	ug/Kg	☼	05/23/19 06:04	05/24/19 14:33	1
1,3,5-Trimethylbenzene	ND		4.8	1.6	ug/Kg	☼	05/23/19 06:04	05/24/19 14:33	1
Xylenes, Total	ND		9.5	4.1	ug/Kg	☼	05/23/19 06:04	05/24/19 14:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*74 - 114*	*05/23/19 06:04*	*05/24/19 14:33*	*1*
Dibromofluoromethane (Surr)	*108*		*76 - 116*	*05/23/19 06:04*	*05/24/19 14:33*	*1*
1,2-Dichloroethane-d4 (Surr)	*104*		*71 - 114*	*05/23/19 06:04*	*05/24/19 14:33*	*1*
Toluene-d8 (Surr)	*107*		*85 - 125*	*05/23/19 06:04*	*05/24/19 14:33*	*1*

Client Sample ID: SB3-5-6

Date Collected: 05/16/19 08:55
Date Received: 05/17/19 09:00

Lab Sample ID: 180-90221-6

Matrix: Solid
Percent Solids: 95.6

Method: EPA 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	ND		70	13	ug/Kg	☼	05/28/19 04:40	05/29/19 21:37	1
Benzo[a]pyrene	ND		70	15	ug/Kg	☼	05/28/19 04:40	05/29/19 21:37	1
Benzo[b]fluoranthene	ND		70	17	ug/Kg	☼	05/28/19 04:40	05/29/19 21:37	1
Benzo[g,h,i]perylene	ND		70	15	ug/Kg	☼	05/28/19 04:40	05/29/19 21:37	1
Chrysene	ND		70	14	ug/Kg	☼	05/28/19 04:40	05/29/19 21:37	1
Indeno[1,2,3-cd]pyrene	ND		70	14	ug/Kg	☼	05/28/19 04:40	05/29/19 21:37	1
Pyrene	ND		70	17	ug/Kg	☼	05/28/19 04:40	05/29/19 21:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*73*		*47 - 105*	*05/28/19 04:40*	*05/29/19 21:37*	*1*
Nitrobenzene-d5 (Surr)	*73*		*47 - 105*	*05/28/19 04:40*	*05/29/19 21:37*	*1*
Terphenyl-d14 (Surr)	*67*		*42 - 105*	*05/28/19 04:40*	*05/29/19 21:37*	*1*

Method: EPA 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead, Total	**16**		1.0	0.51	mg/Kg	☼	05/23/19 16:06	05/28/19 17:57	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**4.4**		0.1	0.1	%			05/21/19 12:47	1
Percent Solids	**95.6**		0.1	0.1	%			05/21/19 12:47	1

Client Sample ID: SB4-0-4

Date Collected: 05/16/19 09:10
Date Received: 05/17/19 09:00

Lab Sample ID: 180-90221-7

Matrix: Solid
Percent Solids: 85.0

Method: EPA 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		5.3	2.1	ug/Kg	☼	05/23/19 06:04	05/24/19 15:00	1
1,2-Dibromoethane	ND		5.3	2.9	ug/Kg	☼	05/23/19 06:04	05/24/19 15:00	1
1,2-Dichloroethane	ND		5.3	1.5	ug/Kg	☼	05/23/19 06:04	05/24/19 15:00	1
Ethylbenzene	ND		5.3	2.3	ug/Kg	☼	05/23/19 06:04	05/24/19 15:00	1
Isopropylbenzene	ND		5.3	2.5	ug/Kg	☼	05/23/19 06:04	05/24/19 15:00	1
Methyl tert-butyl ether	ND		5.3	3.9	ug/Kg	☼	05/23/19 06:04	05/24/19 15:00	1
Naphthalene	ND		5.3	4.1	ug/Kg	☼	05/23/19 06:04	05/24/19 15:00	1
Toluene	ND		5.3	1.8	ug/Kg	☼	05/23/19 06:04	05/24/19 15:00	1
1,2,4-Trimethylbenzene	ND		5.3	1.4	ug/Kg	☼	05/23/19 06:04	05/24/19 15:00	1
1,3,5-Trimethylbenzene	ND		5.3	1.8	ug/Kg	☼	05/23/19 06:04	05/24/19 15:00	1
Xylenes, Total	ND		11	4.6	ug/Kg	☼	05/23/19 06:04	05/24/19 15:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*74 - 114*	*05/23/19 06:04*	*05/24/19 15:00*	*1*
Dibromofluoromethane (Surr)	*104*		*76 - 116*	*05/23/19 06:04*	*05/24/19 15:00*	*1*
1,2-Dichloroethane-d4 (Surr)	*111*		*71 - 114*	*05/23/19 06:04*	*05/24/19 15:00*	*1*
Toluene-d8 (Surr)	*99*		*85 - 125*	*05/23/19 06:04*	*05/24/19 15:00*	*1*

Method: EPA 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	ND		77	14	ug/Kg	☼	05/28/19 04:40	05/30/19 15:07	1
Benzo[a]pyrene	ND		77	17	ug/Kg	☼	05/28/19 04:40	05/30/19 15:07	1
Benzo[b]fluoranthene	ND		77	19	ug/Kg	☼	05/28/19 04:40	05/30/19 15:07	1

Client Sample ID: SB4-0-4

Date Collected: 05/16/19 09:10
Date Received: 05/17/19 09:00

Lab Sample ID: 180-90221-7

Matrix: Solid
Percent Solids: 85.0

Method: EPA 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[g,h,i]perylene	ND		77	17	ug/Kg	☼	05/28/19 04:40	05/30/19 15:07	1
Chrysene	ND		77	15	ug/Kg	☼	05/28/19 04:40	05/30/19 15:07	1
Indeno[1,2,3-cd]pyrene	ND		77	15	ug/Kg	☼	05/28/19 04:40	05/30/19 15:07	1
Pyrene	ND		77	18	ug/Kg	☼	05/28/19 04:40	05/30/19 15:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*87*		*47 - 105*	*05/28/19 04:40*	*05/30/19 15:07*	*1*
Nitrobenzene-d5 (Surr)	*86*		*47 - 105*	*05/28/19 04:40*	*05/30/19 15:07*	*1*
Terphenyl-d14 (Surr)	*78*		*42 - 105*	*05/28/19 04:40*	*05/30/19 15:07*	*1*

Method: EPA 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead, Total	**12**		1.2	0.60	mg/Kg	☼	05/23/19 16:06	05/28/19 18:02	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**15.0**		0.1	0.1	%			05/21/19 12:47	1
Percent Solids	**85.0**		0.1	0.1	%			05/21/19 12:47	1

Client Sample ID: SB4-6-7.5

Date Collected: 05/16/19 09:20
Date Received: 05/17/19 09:00

Lab Sample ID: 180-90221-8

Matrix: Solid
Percent Solids: 86.7

Method: EPA 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		5.4	2.1	ug/Kg	☼	05/23/19 06:04	05/24/19 15:27	1
1,2-Dibromoethane	ND		5.4	2.9	ug/Kg	☼	05/23/19 06:04	05/24/19 15:27	1
1,2-Dichloroethane	ND		5.4	1.6	ug/Kg	☼	05/23/19 06:04	05/24/19 15:27	1
Ethylbenzene	ND		5.4	2.3	ug/Kg	☼	05/23/19 06:04	05/24/19 15:27	1
Isopropylbenzene	ND		5.4	2.5	ug/Kg	☼	05/23/19 06:04	05/24/19 15:27	1
Methyl tert-butyl ether	ND		5.4	4.0	ug/Kg	☼	05/23/19 06:04	05/24/19 15:27	1
Naphthalene	ND		5.4	4.2	ug/Kg	☼	05/23/19 06:04	05/24/19 15:27	1
Toluene	ND		5.4	1.8	ug/Kg	☼	05/23/19 06:04	05/24/19 15:27	1
1,2,4-Trimethylbenzene	ND		5.4	1.5	ug/Kg	☼	05/23/19 06:04	05/24/19 15:27	1
1,3,5-Trimethylbenzene	ND		5.4	1.9	ug/Kg	☼	05/23/19 06:04	05/24/19 15:27	1
Xylenes, Total	ND		11	4.6	ug/Kg	☼	05/23/19 06:04	05/24/19 15:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*74 - 114*	*05/23/19 06:04*	*05/24/19 15:27*	*1*
Dibromofluoromethane (Surr)	*100*		*76 - 116*	*05/23/19 06:04*	*05/24/19 15:27*	*1*
1,2-Dichloroethane-d4 (Surr)	*115*	*X*	*71 - 114*	*05/23/19 06:04*	*05/24/19 15:27*	*1*
Toluene-d8 (Surr)	*87*		*85 - 125*	*05/23/19 06:04*	*05/24/19 15:27*	*1*

Method: EPA 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	ND		75	14	ug/Kg	☼	05/28/19 04:40	05/30/19 15:35	1
Benzo[a]pyrene	ND		75	16	ug/Kg	☼	05/28/19 04:40	05/30/19 15:35	1
Benzo[b]fluoranthene	ND		75	18	ug/Kg	☼	05/28/19 04:40	05/30/19 15:35	1
Benzo[g,h,i]perylene	ND		75	16	ug/Kg	☼	05/28/19 04:40	05/30/19 15:35	1
Chrysene	ND		75	15	ug/Kg	☼	05/28/19 04:40	05/30/19 15:35	1
Indeno[1,2,3-cd]pyrene	ND		75	15	ug/Kg	☼	05/28/19 04:40	05/30/19 15:35	1

Client Sample ID: SB4-6-7.5

Date Collected: 05/16/19 09:20
Date Received: 05/17/19 09:00

Lab Sample ID: 180-90221-8

Matrix: Solid
Percent Solids: 86.7

Method: EPA 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyrene	ND		75	18	ug/Kg	☼	05/28/19 04:40	05/30/19 15:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*88*		*47 - 105*	*05/28/19 04:40*	*05/30/19 15:35*	*1*
Nitrobenzene-d5 (Surr)	*85*		*47 - 105*	*05/28/19 04:40*	*05/30/19 15:35*	*1*
Terphenyl-d14 (Surr)	*79*		*42 - 105*	*05/28/19 04:40*	*05/30/19 15:35*	*1*

Method: EPA 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead, Total	**23**		1.2	0.61	mg/Kg	☼	05/23/19 16:06	05/28/19 18:07	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**13.3**		0.1	0.1	%			05/21/19 12:47	1
Percent Solids	**86.7**		0.1	0.1	%			05/21/19 12:47	1

Client Sample ID: SB5-0-4

Date Collected: 05/16/19 09:35
Date Received: 05/17/19 09:00

Lab Sample ID: 180-90221-9

Matrix: Solid
Percent Solids: 76.3

Method: EPA 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		5.2	2.0	ug/Kg	☼	05/23/19 06:04	05/24/19 15:54	1
1,2-Dibromoethane	ND		5.2	2.8	ug/Kg	☼	05/23/19 06:04	05/24/19 15:54	1
1,2-Dichloroethane	ND		5.2	1.5	ug/Kg	☼	05/23/19 06:04	05/24/19 15:54	1
Ethylbenzene	ND		5.2	2.2	ug/Kg	☼	05/23/19 06:04	05/24/19 15:54	1
Isopropylbenzene	ND		5.2	2.4	ug/Kg	☼	05/23/19 06:04	05/24/19 15:54	1
Methyl tert-butyl ether	ND		5.2	3.8	ug/Kg	☼	05/23/19 06:04	05/24/19 15:54	1
Naphthalene	ND		5.2	4.0	ug/Kg	☼	05/23/19 06:04	05/24/19 15:54	1
Toluene	ND		5.2	1.7	ug/Kg	☼	05/23/19 06:04	05/24/19 15:54	1
1,2,4-Trimethylbenzene	ND		5.2	1.4	ug/Kg	☼	05/23/19 06:04	05/24/19 15:54	1
1,3,5-Trimethylbenzene	ND		5.2	1.8	ug/Kg	☼	05/23/19 06:04	05/24/19 15:54	1
Xylenes, Total	ND		10	4.4	ug/Kg	☼	05/23/19 06:04	05/24/19 15:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*74 - 114*	*05/23/19 06:04*	*05/24/19 15:54*	*1*
Dibromofluoromethane (Surr)	*103*		*76 - 116*	*05/23/19 06:04*	*05/24/19 15:54*	*1*
1,2-Dichloroethane-d4 (Surr)	*111*		*71 - 114*	*05/23/19 06:04*	*05/24/19 15:54*	*1*
Toluene-d8 (Surr)	*92*		*85 - 125*	*05/23/19 06:04*	*05/24/19 15:54*	*1*

Method: EPA 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	**37**	**J**	87	16	ug/Kg	☼	05/28/19 04:40	05/30/19 16:02	1
Benzo[a]pyrene	**27**	**J**	87	19	ug/Kg	☼	05/28/19 04:40	05/30/19 16:02	1
Benzo[b]fluoranthene	**32**	**J**	87	21	ug/Kg	☼	05/28/19 04:40	05/30/19 16:02	1
Benzo[g,h,i]perylene	**20**	**J**	87	19	ug/Kg	☼	05/28/19 04:40	05/30/19 16:02	1
Chrysene	**28**	**J**	87	17	ug/Kg	☼	05/28/19 04:40	05/30/19 16:02	1
Indeno[1,2,3-cd]pyrene	ND		87	18	ug/Kg	☼	05/28/19 04:40	05/30/19 16:02	1
Pyrene	**41**	**J**	87	21	ug/Kg	☼	05/28/19 04:40	05/30/19 16:02	1

Client Sample ID: SB5-0-4

Date Collected: 05/16/19 09:35
Date Received: 05/17/19 09:00

Lab Sample ID: 180-90221-9

Matrix: Solid
Percent Solids: 76.3

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*79*		*47 - 105*	*05/28/19 04:40*	*05/30/19 16:02*	*1*
Nitrobenzene-d5 (Surr)	*78*		*47 - 105*	*05/28/19 04:40*	*05/30/19 16:02*	*1*
Terphenyl-d14 (Surr)	*71*		*42 - 105*	*05/28/19 04:40*	*05/30/19 16:02*	*1*

Method: EPA 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead, Total	**530**		1.2	0.63	mg/Kg	☼	05/23/19 16:06	05/28/19 18:13	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**23.7**		0.1	0.1	%			05/21/19 12:47	1
Percent Solids	**76.3**		0.1	0.1	%			05/21/19 12:47	1

Client Sample ID: SB5-4.5-5

Date Collected: 05/16/19 09:50
Date Received: 05/17/19 09:00

Lab Sample ID: 180-90221-10

Matrix: Solid
Percent Solids: 93.8

Method: EPA 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		5.1	2.0	ug/Kg	☼	05/23/19 06:04	05/24/19 16:21	1
1,2-Dibromoethane	ND		5.1	2.8	ug/Kg	☼	05/23/19 06:04	05/24/19 16:21	1
1,2-Dichloroethane	ND		5.1	1.5	ug/Kg	☼	05/23/19 06:04	05/24/19 16:21	1
Ethylbenzene	ND		5.1	2.2	ug/Kg	☼	05/23/19 06:04	05/24/19 16:21	1
Isopropylbenzene	ND		5.1	2.4	ug/Kg	☼	05/23/19 06:04	05/24/19 16:21	1
Methyl tert-butyl ether	ND		5.1	3.7	ug/Kg	☼	05/23/19 06:04	05/24/19 16:21	1
Naphthalene	ND		5.1	4.0	ug/Kg	☼	05/23/19 06:04	05/24/19 16:21	1
Toluene	ND		5.1	1.7	ug/Kg	☼	05/23/19 06:04	05/24/19 16:21	1
1,2,4-Trimethylbenzene	ND		5.1	1.4	ug/Kg	☼	05/23/19 06:04	05/24/19 16:21	1
1,3,5-Trimethylbenzene	ND		5.1	1.8	ug/Kg	☼	05/23/19 06:04	05/24/19 16:21	1
Xylenes, Total	ND		10	4.4	ug/Kg	☼	05/23/19 06:04	05/24/19 16:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*74 - 114*	*05/23/19 06:04*	*05/24/19 16:21*	*1*
Dibromofluoromethane (Surr)	*103*		*76 - 116*	*05/23/19 06:04*	*05/24/19 16:21*	*1*
1,2-Dichloroethane-d4 (Surr)	*111*		*71 - 114*	*05/23/19 06:04*	*05/24/19 16:21*	*1*
Toluene-d8 (Surr)	*87*		*85 - 125*	*05/23/19 06:04*	*05/24/19 16:21*	*1*

Method: EPA 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	ND		71	13	ug/Kg	☼	05/28/19 04:40	05/30/19 16:29	1
Benzo[a]pyrene	ND		71	15	ug/Kg	☼	05/28/19 04:40	05/30/19 16:29	1
Benzo[b]fluoranthene	ND		71	17	ug/Kg	☼	05/28/19 04:40	05/30/19 16:29	1
Benzo[g,h,i]perylene	ND		71	15	ug/Kg	☼	05/28/19 04:40	05/30/19 16:29	1
Chrysene	ND		71	14	ug/Kg	☼	05/28/19 04:40	05/30/19 16:29	1
Indeno[1,2,3-cd]pyrene	ND		71	14	ug/Kg	☼	05/28/19 04:40	05/30/19 16:29	1
Pyrene	ND		71	17	ug/Kg	☼	05/28/19 04:40	05/30/19 16:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*74*		*47 - 105*	*05/28/19 04:40*	*05/30/19 16:29*	*1*
Nitrobenzene-d5 (Surr)	*71*		*47 - 105*	*05/28/19 04:40*	*05/30/19 16:29*	*1*
Terphenyl-d14 (Surr)	*75*		*42 - 105*	*05/28/19 04:40*	*05/30/19 16:29*	*1*

Client Sample ID: SB5-4.5-5

Lab Sample ID: 180-90221-10
Date Collected: 05/16/19 09:50
Matrix: Solid
Date Received: 05/17/19 09:00
Percent Solids: 93.8

Method: EPA 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead, Total	2.9		1.1	0.57	mg/Kg	☼	05/23/19 16:06	05/28/19 18:18	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	6.2		0.1	0.1	%			05/21/19 12:47	1
Percent Solids	93.8		0.1	0.1	%			05/21/19 12:47	1

Client Sample ID: SB6-0-4

Lab Sample ID: 180-90221-11
Date Collected: 05/16/19 10:05
Matrix: Solid
Date Received: 05/17/19 09:00
Percent Solids: 84.0

Method: EPA 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		5.1	2.0	ug/Kg	☼	05/22/19 16:46	05/22/19 18:35	1
1,2-Dibromoethane	ND		5.1	2.8	ug/Kg	☼	05/22/19 16:46	05/22/19 18:35	1
1,2-Dichloroethane	ND		5.1	1.5	ug/Kg	☼	05/22/19 16:46	05/22/19 18:35	1
Ethylbenzene	ND		5.1	2.2	ug/Kg	☼	05/22/19 16:46	05/22/19 18:35	1
Isopropylbenzene	ND		5.1	2.4	ug/Kg	☼	05/22/19 16:46	05/22/19 18:35	1
Methyl tert-butyl ether	ND		5.1	3.7	ug/Kg	☼	05/22/19 16:46	05/22/19 18:35	1
Naphthalene	ND		5.1	4.0	ug/Kg	☼	05/22/19 16:46	05/22/19 18:35	1
Toluene	ND		5.1	1.7	ug/Kg	☼	05/22/19 16:46	05/22/19 18:35	1
1,2,4-Trimethylbenzene	ND		5.1	1.4	ug/Kg	☼	05/22/19 16:46	05/22/19 18:35	1
1,3,5-Trimethylbenzene	ND		5.1	1.8	ug/Kg	☼	05/22/19 16:46	05/22/19 18:35	1
Xylenes, Total	ND		10	4.4	ug/Kg	☼	05/22/19 16:46	05/22/19 18:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*74 - 114*	*05/22/19 16:46*	*05/22/19 18:35*	*1*
Dibromofluoromethane (Surr)	*101*		*76 - 116*	*05/22/19 16:46*	*05/22/19 18:35*	*1*
1,2-Dichloroethane-d4 (Surr)	*105*		*71 - 114*	*05/22/19 16:46*	*05/22/19 18:35*	*1*
Toluene-d8 (Surr)	*95*		*85 - 125*	*05/22/19 16:46*	*05/22/19 18:35*	*1*

Method: EPA 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	82		79	15	ug/Kg	☼	05/29/19 04:00	05/30/19 16:56	1
Benzo[a]pyrene	75	J	79	17	ug/Kg	☼	05/29/19 04:00	05/30/19 16:56	1
Benzo[b]fluoranthene	100		79	19	ug/Kg	☼	05/29/19 04:00	05/30/19 16:56	1
Benzo[g,h,i]perylene	62	J	79	17	ug/Kg	☼	05/29/19 04:00	05/30/19 16:56	1
Chrysene	83		79	15	ug/Kg	☼	05/29/19 04:00	05/30/19 16:56	1
Indeno[1,2,3-cd]pyrene	57	J	79	16	ug/Kg	☼	05/29/19 04:00	05/30/19 16:56	1
Pyrene	120		79	19	ug/Kg	☼	05/29/19 04:00	05/30/19 16:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*86*		*47 - 105*	*05/29/19 04:00*	*05/30/19 16:56*	*1*
Nitrobenzene-d5 (Surr)	*88*		*47 - 105*	*05/29/19 04:00*	*05/30/19 16:56*	*1*
Terphenyl-d14 (Surr)	*69*		*42 - 105*	*05/29/19 04:00*	*05/30/19 16:56*	*1*

Method: EPA 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead, Total	37		1.2	0.60	mg/Kg	☼	05/23/19 16:06	05/28/19 18:23	1

Client Sample ID: SB6-0-4

Date Collected: 05/16/19 10:05
Date Received: 05/17/19 09:00

Lab Sample ID: 180-90221-11

Matrix: Solid
Percent Solids: 84.0

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	16.0		0.1	0.1	%			05/22/19 11:29	1
Percent Solids	84.0		0.1	0.1	%			05/22/19 11:29	1

Client Sample ID: SB6-11-12

Date Collected: 05/16/19 10:25
Date Received: 05/17/19 09:00

Lab Sample ID: 180-90221-12

Matrix: Solid
Percent Solids: 87.7

Method: EPA 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		5.2	2.0	ug/Kg	☼	05/22/19 16:45	05/23/19 12:25	1
1,2-Dibromoethane	ND		5.2	2.8	ug/Kg	☼	05/22/19 16:45	05/23/19 12:25	1
1,2-Dichloroethane	ND		5.2	1.5	ug/Kg	☼	05/22/19 16:45	05/23/19 12:25	1
Ethylbenzene	ND		5.2	2.2	ug/Kg	☼	05/22/19 16:45	05/23/19 12:25	1
Isopropylbenzene	ND		5.2	2.4	ug/Kg	☼	05/22/19 16:45	05/23/19 12:25	1
Methyl tert-butyl ether	ND		5.2	3.8	ug/Kg	☼	05/22/19 16:45	05/23/19 12:25	1
Naphthalene	ND		5.2	4.1	ug/Kg	☼	05/22/19 16:45	05/23/19 12:25	1
Toluene	ND		5.2	1.8	ug/Kg	☼	05/22/19 16:45	05/23/19 12:25	1
1,2,4-Trimethylbenzene	ND		5.2	1.4	ug/Kg	☼	05/22/19 16:45	05/23/19 12:25	1
1,3,5-Trimethylbenzene	ND		5.2	1.8	ug/Kg	☼	05/22/19 16:45	05/23/19 12:25	1
Xylenes, Total	ND		10	4.5	ug/Kg	☼	05/22/19 16:45	05/23/19 12:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*74 - 114*	*05/22/19 16:45*	*05/23/19 12:25*	*1*
Dibromofluoromethane (Surr)	*99*		*76 - 116*	*05/22/19 16:45*	*05/23/19 12:25*	*1*
1,2-Dichloroethane-d4 (Surr)	*108*		*71 - 114*	*05/22/19 16:45*	*05/23/19 12:25*	*1*
Toluene-d8 (Surr)	*93*		*85 - 125*	*05/22/19 16:45*	*05/23/19 12:25*	*1*

Method: EPA 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	ND		75	14	ug/Kg	☼	05/29/19 04:00	05/30/19 17:24	1
Benzo[a]pyrene	ND		75	16	ug/Kg	☼	05/29/19 04:00	05/30/19 17:24	1
Benzo[b]fluoranthene	ND		75	18	ug/Kg	☼	05/29/19 04:00	05/30/19 17:24	1
Benzo[g,h,i]perylene	ND		75	16	ug/Kg	☼	05/29/19 04:00	05/30/19 17:24	1
Chrysene	ND		75	15	ug/Kg	☼	05/29/19 04:00	05/30/19 17:24	1
Indeno[1,2,3-cd]pyrene	ND		75	15	ug/Kg	☼	05/29/19 04:00	05/30/19 17:24	1
Pyrene	ND		75	18	ug/Kg	☼	05/29/19 04:00	05/30/19 17:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*78*		*47 - 105*	*05/29/19 04:00*	*05/30/19 17:24*	*1*
Nitrobenzene-d5 (Surr)	*81*		*47 - 105*	*05/29/19 04:00*	*05/30/19 17:24*	*1*
Terphenyl-d14 (Surr)	*67*		*42 - 105*	*05/29/19 04:00*	*05/30/19 17:24*	*1*

Method: EPA 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead, Total	6.6		1.1	0.57	mg/Kg	☼	05/23/19 16:06	05/28/19 18:29	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	12.3		0.1	0.1	%			05/22/19 11:29	1
Percent Solids	87.7		0.1	0.1	%			05/22/19 11:29	1

Method: EPA 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 180-279388/8
Matrix: Solid
Analysis Batch: 279388

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		5.0	2.0	ug/Kg			05/22/19 09:59	1
1,2-Dibromoethane	ND		5.0	2.7	ug/Kg			05/22/19 09:59	1
1,2-Dichloroethane	ND		5.0	1.5	ug/Kg			05/22/19 09:59	1
Ethylbenzene	ND		5.0	2.2	ug/Kg			05/22/19 09:59	1
Isopropylbenzene	ND		5.0	2.3	ug/Kg			05/22/19 09:59	1
Methyl tert-butyl ether	ND		5.0	3.7	ug/Kg			05/22/19 09:59	1
Naphthalene	ND		5.0	3.9	ug/Kg			05/22/19 09:59	1
Toluene	ND		5.0	1.7	ug/Kg			05/22/19 09:59	1
1,2,4-Trimethylbenzene	ND		5.0	1.3	ug/Kg			05/22/19 09:59	1
1,3,5-Trimethylbenzene	ND		5.0	1.7	ug/Kg			05/22/19 09:59	1
Xylenes, Total	ND		10	4.3	ug/Kg			05/22/19 09:59	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*74 - 114*		*05/22/19 09:59*	*1*
Dibromofluoromethane (Surr)	*101*		*76 - 116*		*05/22/19 09:59*	*1*
1,2-Dichloroethane-d4 (Surr)	*110*		*71 - 114*		*05/22/19 09:59*	*1*
Toluene-d8 (Surr)	*99*		*85 - 125*		*05/22/19 09:59*	*1*

Lab Sample ID: LCS 180-279388/6
Matrix: Solid
Analysis Batch: 279388

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	40.0	38.0		ug/Kg		95	75 - 121
1,2-Dibromoethane	40.0	38.8		ug/Kg		97	74 - 114
1,2-Dichloroethane	40.0	40.0		ug/Kg		100	73 - 126
Ethylbenzene	40.0	36.5		ug/Kg		91	79 - 120
Isopropylbenzene	40.0	40.0		ug/Kg		100	81 - 121
Methyl tert-butyl ether	40.0	37.7		ug/Kg		94	65 - 128
Naphthalene	40.0	27.8		ug/Kg		69	44 - 142
Toluene	40.0	36.3		ug/Kg		91	79 - 123
1,2,4-Trimethylbenzene	40.0	33.4		ug/Kg		83	71 - 128
1,3,5-Trimethylbenzene	40.0	32.7		ug/Kg		82	69 - 131
Xylenes, Total	80.0	74.8		ug/Kg		93	79 - 119

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*74 - 114*
Dibromofluoromethane (Surr)	*107*		*76 - 116*
1,2-Dichloroethane-d4 (Surr)	*113*		*71 - 114*
Toluene-d8 (Surr)	*97*		*85 - 125*

Lab Sample ID: MB 180-279518/12
Matrix: Solid
Analysis Batch: 279518

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		5.0	2.0	ug/Kg			05/23/19 11:58	1
1,2-Dibromoethane	ND		5.0	2.7	ug/Kg			05/23/19 11:58	1

Method: EPA 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 180-279518/12
Matrix: Solid
Analysis Batch: 279518

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	ND		5.0	1.5	ug/Kg			05/23/19 11:58	1
Ethylbenzene	ND		5.0	2.2	ug/Kg			05/23/19 11:58	1
Isopropylbenzene	ND		5.0	2.3	ug/Kg			05/23/19 11:58	1
Methyl tert-butyl ether	ND		5.0	3.7	ug/Kg			05/23/19 11:58	1
Naphthalene	ND		5.0	3.9	ug/Kg			05/23/19 11:58	1
Toluene	ND		5.0	1.7	ug/Kg			05/23/19 11:58	1
1,2,4-Trimethylbenzene	ND		5.0	1.3	ug/Kg			05/23/19 11:58	1
1,3,5-Trimethylbenzene	ND		5.0	1.7	ug/Kg			05/23/19 11:58	1
Xylenes, Total	ND		10	4.3	ug/Kg			05/23/19 11:58	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*85*		*74 - 114*		*05/23/19 11:58*	*1*
Dibromofluoromethane (Surr)	*94*		*76 - 116*		*05/23/19 11:58*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*71 - 114*		*05/23/19 11:58*	*1*
Toluene-d8 (Surr)	*91*		*85 - 125*		*05/23/19 11:58*	*1*

Lab Sample ID: LCS 180-279518/21
Matrix: Solid
Analysis Batch: 279518

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	40.0	35.3		ug/Kg		88	75 - 121
1,2-Dibromoethane	40.0	35.0		ug/Kg		88	74 - 114
1,2-Dichloroethane	40.0	34.7		ug/Kg		87	73 - 126
Ethylbenzene	40.0	35.4		ug/Kg		88	79 - 120
Isopropylbenzene	40.0	36.6		ug/Kg		92	81 - 121
Methyl tert-butyl ether	40.0	32.7		ug/Kg		82	65 - 128
Naphthalene	40.0	25.7		ug/Kg		64	44 - 142
Toluene	40.0	33.9		ug/Kg		85	79 - 123
1,2,4-Trimethylbenzene	40.0	32.1		ug/Kg		80	71 - 128
1,3,5-Trimethylbenzene	40.0	30.4		ug/Kg		76	69 - 131
Xylenes, Total	80.0	71.6		ug/Kg		89	79 - 119

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*95*		*74 - 114*
Dibromofluoromethane (Surr)	*91*		*76 - 116*
1,2-Dichloroethane-d4 (Surr)	*94*		*71 - 114*
Toluene-d8 (Surr)	*88*		*85 - 125*

Lab Sample ID: MB 180-279636/7
Matrix: Solid
Analysis Batch: 279636

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		5.0	2.0	ug/Kg			05/24/19 10:25	1
1,2-Dibromoethane	ND		5.0	2.7	ug/Kg			05/24/19 10:25	1
1,2-Dichloroethane	ND		5.0	1.5	ug/Kg			05/24/19 10:25	1
Ethylbenzene	ND		5.0	2.2	ug/Kg			05/24/19 10:25	1

Method: EPA 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 180-279636/7
Matrix: Solid
Analysis Batch: 279636

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	ND		5.0	2.3	ug/Kg			05/24/19 10:25	1
Methyl tert-butyl ether	ND		5.0	3.7	ug/Kg			05/24/19 10:25	1
Naphthalene	ND		5.0	3.9	ug/Kg			05/24/19 10:25	1
Toluene	ND		5.0	1.7	ug/Kg			05/24/19 10:25	1
1,2,4-Trimethylbenzene	ND		5.0	1.3	ug/Kg			05/24/19 10:25	1
1,3,5-Trimethylbenzene	ND		5.0	1.7	ug/Kg			05/24/19 10:25	1
Xylenes, Total	ND		10	4.3	ug/Kg			05/24/19 10:25	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*118*	*X*	*74 - 114*		*05/24/19 10:25*	*1*
Dibromofluoromethane (Surr)	*103*		*76 - 116*		*05/24/19 10:25*	*1*
1,2-Dichloroethane-d4 (Surr)	*110*		*71 - 114*		*05/24/19 10:25*	*1*
Toluene-d8 (Surr)	*101*		*85 - 125*		*05/24/19 10:25*	*1*

Lab Sample ID: LCS 180-279636/5
Matrix: Solid
Analysis Batch: 279636

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	40.0	35.7		ug/Kg		89	75 - 121
1,2-Dibromoethane	40.0	40.2		ug/Kg		101	74 - 114
1,2-Dichloroethane	40.0	37.6		ug/Kg		94	73 - 126
Ethylbenzene	40.0	36.9		ug/Kg		92	79 - 120
Isopropylbenzene	40.0	37.8		ug/Kg		94	81 - 121
Methyl tert-butyl ether	40.0	35.5		ug/Kg		89	65 - 128
Naphthalene	40.0	31.2		ug/Kg		78	44 - 142
Toluene	40.0	35.6		ug/Kg		89	79 - 123
1,2,4-Trimethylbenzene	40.0	34.1		ug/Kg		85	71 - 128
1,3,5-Trimethylbenzene	40.0	33.0		ug/Kg		82	69 - 131
Xylenes, Total	80.0	74.0		ug/Kg		92	79 - 119

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*74 - 114*
Dibromofluoromethane (Surr)	*94*		*76 - 116*
1,2-Dichloroethane-d4 (Surr)	*95*		*71 - 114*
Toluene-d8 (Surr)	*86*		*85 - 125*

Lab Sample ID: LCSD 180-279636/14
Matrix: Solid
Analysis Batch: 279636

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	40.0	34.4		ug/Kg		86	75 - 121	4	20
1,2-Dibromoethane	40.0	41.9		ug/Kg		105	74 - 114	4	20
1,2-Dichloroethane	40.0	39.3		ug/Kg		98	73 - 126	5	20
Ethylbenzene	40.0	36.3		ug/Kg		91	79 - 120	2	20
Isopropylbenzene	40.0	36.9		ug/Kg		92	81 - 121	2	20
Methyl tert-butyl ether	40.0	37.7		ug/Kg		94	65 - 128	6	20

Method: EPA 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 180-279636/14
Matrix: Solid
Analysis Batch: 279636

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Naphthalene			40.0	32.7		ug/Kg		82	44 - 142	5	20
Toluene			40.0	32.8		ug/Kg		82	79 - 123	8	20
1,2,4-Trimethylbenzene			40.0	32.7		ug/Kg		82	71 - 128	4	20
1,3,5-Trimethylbenzene			40.0	30.4		ug/Kg		76	69 - 131	8	20
Xylenes, Total			80.0	73.6		ug/Kg		92	79 - 119	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*97*		*74 - 114*
Dibromofluoromethane (Surr)	*86*		*76 - 116*
1,2-Dichloroethane-d4 (Surr)	*95*		*71 - 114*
Toluene-d8 (Surr)	*74*	*X*	*85 - 125*

Method: EPA 8260C - Volatile Organic Compounds by GC/MS - RA

Lab Sample ID: MB 180-279636/25
Matrix: Solid
Analysis Batch: 279636

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene - RA	ND		5.0	2.0	ug/Kg			05/24/19 18:37	1
1,2-Dibromoethane - RA	ND		5.0	2.7	ug/Kg			05/24/19 18:37	1
1,2-Dichloroethane - RA	ND		5.0	1.5	ug/Kg			05/24/19 18:37	1
Ethylbenzene - RA	ND		5.0	2.2	ug/Kg			05/24/19 18:37	1
Isopropylbenzene - RA	ND		5.0	2.3	ug/Kg			05/24/19 18:37	1
Methyl tert-butyl ether - RA	ND		5.0	3.7	ug/Kg			05/24/19 18:37	1
Naphthalene - RA	ND		5.0	3.9	ug/Kg			05/24/19 18:37	1
Toluene - RA	ND		5.0	1.7	ug/Kg			05/24/19 18:37	1
1,2,4-Trimethylbenzene - RA	ND		5.0	1.3	ug/Kg			05/24/19 18:37	1
1,3,5-Trimethylbenzene - RA	ND		5.0	1.7	ug/Kg			05/24/19 18:37	1
Xylenes, Total - RA	ND		10	4.3	ug/Kg			05/24/19 18:37	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr) - RA	*94*		*74 - 114*		*05/24/19 18:37*	*1*
Dibromofluoromethane (Surr) - RA	*100*		*76 - 116*		*05/24/19 18:37*	*1*
1,2-Dichloroethane-d4 (Surr) - RA	*107*		*71 - 114*		*05/24/19 18:37*	*1*
Toluene-d8 (Surr) - RA	*92*		*85 - 125*		*05/24/19 18:37*	*1*

Method: EPA 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 180-279826/1-A
Matrix: Solid
Analysis Batch: 279994

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 279826

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	ND		67	13	ug/Kg		05/28/19 04:40	05/29/19 12:07	1
Benzo[a]pyrene	ND		67	15	ug/Kg		05/28/19 04:40	05/29/19 12:07	1
Benzo[b]fluoranthene	ND		67	16	ug/Kg		05/28/19 04:40	05/29/19 12:07	1
Benzo[g,h,i]perylene	ND		67	14	ug/Kg		05/28/19 04:40	05/29/19 12:07	1
Chrysene	ND		67	13	ug/Kg		05/28/19 04:40	05/29/19 12:07	1

Method: EPA 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 180-279826/1-A
Matrix: Solid
Analysis Batch: 279994

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 279826

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	ND		67	14	ug/Kg		05/28/19 04:40	05/29/19 12:07	1
Pyrene	ND		67	16	ug/Kg		05/28/19 04:40	05/29/19 12:07	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*83*		*47 - 105*	*05/28/19 04:40*	*05/29/19 12:07*	*1*
Nitrobenzene-d5 (Surr)	*82*		*47 - 105*	*05/28/19 04:40*	*05/29/19 12:07*	*1*
Terphenyl-d14 (Surr)	*77*		*42 - 105*	*05/28/19 04:40*	*05/29/19 12:07*	*1*

Lab Sample ID: LCS 180-279826/2-A
Matrix: Solid
Analysis Batch: 279994

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 279826

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzo[a]anthracene	6670	5360		ug/Kg		80	45 - 105
Benzo[a]pyrene	6670	5640		ug/Kg		85	48 - 100
Benzo[b]fluoranthene	6670	5240		ug/Kg		79	42 - 102
Benzo[g,h,i]perylene	6670	5810		ug/Kg		87	46 - 104
Chrysene	6670	5020		ug/Kg		75	46 - 100
Indeno[1,2,3-cd]pyrene	6670	6110		ug/Kg		92	46 - 107
Pyrene	6670	5240		ug/Kg		79	43 - 107

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*78*		*47 - 105*
Nitrobenzene-d5 (Surr)	*75*		*47 - 105*
Terphenyl-d14 (Surr)	*71*		*42 - 105*

Lab Sample ID: MB 180-279947/1-A
Matrix: Solid
Analysis Batch: 280164

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 279947

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	ND		67	13	ug/Kg		05/29/19 04:00	05/30/19 12:23	1
Benzo[a]pyrene	ND		67	15	ug/Kg		05/29/19 04:00	05/30/19 12:23	1
Benzo[b]fluoranthene	ND		67	16	ug/Kg		05/29/19 04:00	05/30/19 12:23	1
Benzo[g,h,i]perylene	ND		67	14	ug/Kg		05/29/19 04:00	05/30/19 12:23	1
Chrysene	ND		67	13	ug/Kg		05/29/19 04:00	05/30/19 12:23	1
Indeno[1,2,3-cd]pyrene	ND		67	14	ug/Kg		05/29/19 04:00	05/30/19 12:23	1
Pyrene	ND		67	16	ug/Kg		05/29/19 04:00	05/30/19 12:23	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*90*		*47 - 105*	*05/29/19 04:00*	*05/30/19 12:23*	*1*
Nitrobenzene-d5 (Surr)	*87*		*47 - 105*	*05/29/19 04:00*	*05/30/19 12:23*	*1*
Terphenyl-d14 (Surr)	*85*		*42 - 105*	*05/29/19 04:00*	*05/30/19 12:23*	*1*

Method: EPA 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 180-279947/2-A
Matrix: Solid
Analysis Batch: 280164

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 279947

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzo[a]anthracene			6670	5490		ug/Kg		82	45 - 105		
Benzo[a]pyrene			6670	5600		ug/Kg		84	48 - 100		
Benzo[b]fluoranthene			6670	5320		ug/Kg		80	42 - 102		
Benzo[g,h,i]perylene			6670	5850		ug/Kg		88	46 - 104		
Chrysene			6670	5030		ug/Kg		75	46 - 100		
Indeno[1,2,3-cd]pyrene			6670	6140		ug/Kg		92	46 - 107		
Pyrene			6670	5270		ug/Kg		79	43 - 107		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*80*		*47 - 105*
Nitrobenzene-d5 (Surr)	*82*		*47 - 105*
Terphenyl-d14 (Surr)	*76*		*42 - 105*

Method: EPA 6010C - Metals (ICP)

Lab Sample ID: MB 180-279358/1-A
Matrix: Solid
Analysis Batch: 279637

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 279358

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead, Total	ND		1.0	0.51	mg/Kg		05/21/19 16:29	05/23/19 08:37	1

Lab Sample ID: LCS 180-279358/2-A
Matrix: Solid
Analysis Batch: 279637

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 279358

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Lead, Total			50.0	48.3		mg/Kg		97	80 - 120		

Lab Sample ID: MB 180-279610/1-A
Matrix: Solid
Analysis Batch: 279953

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 279610

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead, Total	ND		1.0	0.51	mg/Kg		05/23/19 16:06	05/28/19 15:54	1

Lab Sample ID: LCS 180-279610/2-A
Matrix: Solid
Analysis Batch: 279953

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 279610

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Lead, Total			50.0	46.9		mg/Kg		94	80 - 120		

GC/MS VOA

Analysis Batch: 279388

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-90221-11	SB6-0-4	Total/NA	Solid	EPA 8260C	279411
MB 180-279388/8	Method Blank	Total/NA	Solid	EPA 8260C	
LCS 180-279388/6	Lab Control Sample	Total/NA	Solid	EPA 8260C	

Prep Batch: 279411

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-90221-11	SB6-0-4	Total/NA	Solid	5035	
180-90221-12	SB6-11-12	Total/NA	Solid	5035	

Analysis Batch: 279518

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-90221-1	SB1-0-4	Total/NA	Solid	EPA 8260C	279587
180-90221-12	SB6-11-12	Total/NA	Solid	EPA 8260C	279411
MB 180-279518/12	Method Blank	Total/NA	Solid	EPA 8260C	
LCS 180-279518/21	Lab Control Sample	Total/NA	Solid	EPA 8260C	

Prep Batch: 279587

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-90221-1	SB1-0-4	Total/NA	Solid	5035	
180-90221-2	SB1-5-6	Total/NA	Solid	5035	
180-90221-3	SB2-0-4	Total/NA	Solid	5035	
180-90221-4	SB2-5.5-6.5	Total/NA	Solid	5035	
180-90221-5	SB3-0-4	Total/NA	Solid	5035	
180-90221-6	SB3-5-6	Total/NA	Solid	5035	
180-90221-7	SB4-0-4	Total/NA	Solid	5035	
180-90221-8	SB4-6-7.5	Total/NA	Solid	5035	
180-90221-9	SB5-0-4	Total/NA	Solid	5035	
180-90221-10	SB5-4.5-5	Total/NA	Solid	5035	

Analysis Batch: 279636

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-90221-2	SB1-5-6	Total/NA	Solid	EPA 8260C	279587
180-90221-3	SB2-0-4	Total/NA	Solid	EPA 8260C	279587
180-90221-4	SB2-5.5-6.5	Total/NA	Solid	EPA 8260C	279587
180-90221-5	SB3-0-4	Total/NA	Solid	EPA 8260C	279587
180-90221-6	SB3-5-6	Total/NA	Solid	EPA 8260C	279587
180-90221-7	SB4-0-4	Total/NA	Solid	EPA 8260C	279587
180-90221-8	SB4-6-7.5	Total/NA	Solid	EPA 8260C	279587
180-90221-9	SB5-0-4	Total/NA	Solid	EPA 8260C	279587
180-90221-10	SB5-4.5-5	Total/NA	Solid	EPA 8260C	279587
MB 180-279636/25 - RA	Method Blank	Total/NA	Solid	EPA 8260C	
MB 180-279636/7	Method Blank	Total/NA	Solid	EPA 8260C	
LCS 180-279636/5	Lab Control Sample	Total/NA	Solid	EPA 8260C	
LCSD 180-279636/14	Lab Control Sample Dup	Total/NA	Solid	EPA 8260C	

GC/MS Semi VOA

Prep Batch: 279826

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-90221-1	SB1-0-4	Total/NA	Solid	3541	
180-90221-2	SB1-5-6	Total/NA	Solid	3541	

GC/MS Semi VOA (Continued)

Prep Batch: 279826 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-90221-3	SB2-0-4	Total/NA	Solid	3541	
180-90221-4	SB2-5.5-6.5	Total/NA	Solid	3541	
180-90221-5	SB3-0-4	Total/NA	Solid	3541	
180-90221-6	SB3-5-6	Total/NA	Solid	3541	
180-90221-7	SB4-0-4	Total/NA	Solid	3541	
180-90221-8	SB4-6-7.5	Total/NA	Solid	3541	
180-90221-9	SB5-0-4	Total/NA	Solid	3541	
180-90221-10	SB5-4.5-5	Total/NA	Solid	3541	
MB 180-279826/1-A	Method Blank	Total/NA	Solid	3541	
LCS 180-279826/2-A	Lab Control Sample	Total/NA	Solid	3541	

Prep Batch: 279947

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-90221-11	SB6-0-4	Total/NA	Solid	3541	
180-90221-12	SB6-11-12	Total/NA	Solid	3541	
MB 180-279947/1-A	Method Blank	Total/NA	Solid	3541	
LCS 180-279947/2-A	Lab Control Sample	Total/NA	Solid	3541	

Analysis Batch: 279994

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-90221-1	SB1-0-4	Total/NA	Solid	EPA 8270D	279826
180-90221-2	SB1-5-6	Total/NA	Solid	EPA 8270D	279826
180-90221-4	SB2-5.5-6.5	Total/NA	Solid	EPA 8270D	279826
180-90221-5	SB3-0-4	Total/NA	Solid	EPA 8270D	279826
180-90221-6	SB3-5-6	Total/NA	Solid	EPA 8270D	279826
MB 180-279826/1-A	Method Blank	Total/NA	Solid	EPA 8270D	279826
LCS 180-279826/2-A	Lab Control Sample	Total/NA	Solid	EPA 8270D	279826

Analysis Batch: 280164

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-90221-3	SB2-0-4	Total/NA	Solid	EPA 8270D	279826
180-90221-7	SB4-0-4	Total/NA	Solid	EPA 8270D	279826
180-90221-8	SB4-6-7.5	Total/NA	Solid	EPA 8270D	279826
180-90221-9	SB5-0-4	Total/NA	Solid	EPA 8270D	279826
180-90221-10	SB5-4.5-5	Total/NA	Solid	EPA 8270D	279826
180-90221-11	SB6-0-4	Total/NA	Solid	EPA 8270D	279947
180-90221-12	SB6-11-12	Total/NA	Solid	EPA 8270D	279947
MB 180-279947/1-A	Method Blank	Total/NA	Solid	EPA 8270D	279947
LCS 180-279947/2-A	Lab Control Sample	Total/NA	Solid	EPA 8270D	279947

Metals

Prep Batch: 279358

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-90221-1	SB1-0-4	Total/NA	Solid	3050B	
180-90221-2	SB1-5-6	Total/NA	Solid	3050B	
180-90221-3	SB2-0-4	Total/NA	Solid	3050B	
180-90221-4	SB2-5.5-6.5	Total/NA	Solid	3050B	
180-90221-5	SB3-0-4	Total/NA	Solid	3050B	
MB 180-279358/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 180-279358/2-A	Lab Control Sample	Total/NA	Solid	3050B	

QC Association Summary

Client: Westchester Environmental LLC
Project/Site: 6122 Lancaster Avenue

Job ID: 180-90221-1

Metals

Prep Batch: 279610

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-90221-6	SB3-5-6	Total/NA	Solid	3050B	
180-90221-7	SB4-0-4	Total/NA	Solid	3050B	
180-90221-8	SB4-6-7.5	Total/NA	Solid	3050B	
180-90221-9	SB5-0-4	Total/NA	Solid	3050B	
180-90221-10	SB5-4.5-5	Total/NA	Solid	3050B	
180-90221-11	SB6-0-4	Total/NA	Solid	3050B	
180-90221-12	SB6-11-12	Total/NA	Solid	3050B	
MB 180-279610/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 180-279610/2-A	Lab Control Sample	Total/NA	Solid	3050B	

Analysis Batch: 279637

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-90221-1	SB1-0-4	Total/NA	Solid	EPA 6010C	279358
180-90221-2	SB1-5-6	Total/NA	Solid	EPA 6010C	279358
180-90221-3	SB2-0-4	Total/NA	Solid	EPA 6010C	279358
180-90221-4	SB2-5.5-6.5	Total/NA	Solid	EPA 6010C	279358
180-90221-5	SB3-0-4	Total/NA	Solid	EPA 6010C	279358
MB 180-279358/1-A	Method Blank	Total/NA	Solid	EPA 6010C	279358
LCS 180-279358/2-A	Lab Control Sample	Total/NA	Solid	EPA 6010C	279358

Analysis Batch: 279953

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-90221-6	SB3-5-6	Total/NA	Solid	EPA 6010C	279610
180-90221-7	SB4-0-4	Total/NA	Solid	EPA 6010C	279610
180-90221-8	SB4-6-7.5	Total/NA	Solid	EPA 6010C	279610
180-90221-9	SB5-0-4	Total/NA	Solid	EPA 6010C	279610
180-90221-10	SB5-4.5-5	Total/NA	Solid	EPA 6010C	279610
180-90221-11	SB6-0-4	Total/NA	Solid	EPA 6010C	279610
180-90221-12	SB6-11-12	Total/NA	Solid	EPA 6010C	279610
MB 180-279610/1-A	Method Blank	Total/NA	Solid	EPA 6010C	279610
LCS 180-279610/2-A	Lab Control Sample	Total/NA	Solid	EPA 6010C	279610

General Chemistry

Analysis Batch: 279318

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-90221-1	SB1-0-4	Total/NA	Solid	2540G	
180-90221-2	SB1-5-6	Total/NA	Solid	2540G	
180-90221-3	SB2-0-4	Total/NA	Solid	2540G	
180-90221-4	SB2-5.5-6.5	Total/NA	Solid	2540G	
180-90221-5	SB3-0-4	Total/NA	Solid	2540G	
180-90221-6	SB3-5-6	Total/NA	Solid	2540G	
180-90221-7	SB4-0-4	Total/NA	Solid	2540G	
180-90221-8	SB4-6-7.5	Total/NA	Solid	2540G	
180-90221-9	SB5-0-4	Total/NA	Solid	2540G	
180-90221-10	SB5-4.5-5	Total/NA	Solid	2540G	

Analysis Batch: 279440

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-90221-11	SB6-0-4	Total/NA	Solid	2540G	
180-90221-12	SB6-11-12	Total/NA	Solid	2540G	

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone (412) 963-7058 Fax (412) 963-2468

Chain of Custody Record

450-KOP

eurofins | Environment Testing TestAmerica

Client Information	Sampler: UST & CP	Lab PM: Dunlap, David A	Carrier Tracking No(s):	COC No: 180-51642-10832.2
Client Contact: Matthew Abraham	Phone: 610-306-5664	E-Mail: david.dunlap@testamericainc.com		Page: Page 2 of 2
Company: Westchester Environmental LLC				Job #:
Address: 1248 Wrights Lane	Due Date Requested: 5/30/19			
City: West Chester	TAT Requested (days): STANDARD 10			
State, Zip: PA, 19380				
Phone: 610-306-5664(Tel)	PO #: Purchase Order Requested			
Email: mabraham@westchesterenvironmental.com	WO #:			
Project Name: 6122 Lancaster Avenue	Project #: 18020478			
Site: 6122 LANCASTER AVE	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL; B - NaOH; C - Zn Acetate; D - Nitric Acid; E - NaHSO4; F - MeOH; G - Amchlor; H - Ascorbic Acid; I - Ice; J - DI Water; K - EDTA; L - EDA; M - Hexane; N - None; O - AsNaO2; P - Na2O4S; Q - Na2SO3; R - Na2S2O3; S - H2SO4; T - TSP Dodecahydrate; U - Acetone; V - MCAA; W - pH 4-5; Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C - PA UST - VOA Parameters-low terracore	8270D - PA Used Motor Oil - PAHs	6010C - Lead, Total	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N		
SB1-0-4	5/16/19	0800	G	Solid			X	X	X		
SB1-5-6		0810									
SB2-0-4		0820									
SB2-5.5-6.5		0830									
SB3-0-4		0845									
SB3-5-6		0855									
SB4-0-4		0910									
SB4-6-7.5		0920									
SB5-0-4		0935									
SB5-4.5-5.5		0950									
SB6-0-4		1005									

180-90221 Chain of Custody

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	GS Tompkins/AMAGE	5/16/19 1125			5/16/19 1125	TA-KOP
2		5/16/19 1204	TA-KOP		5/17/19 0900	TA-KOP
3		Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks:

Ver: 01/16/2019

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone (412) 963-7058 Fax (412) 963-2468

Chain of Custody Record

450-KOP

eurofins | Environment Testing TestAmerica

Client Information	Sampler: JT & CP	Lab PM: Dunlap, David A	Carrier Tracking No(s):	COC No: 180-51642-10832.1
Client Contact: Matthew Abraham	Phone: 610-306-5664	E-Mail: david.dunlap@testamericainc.com		Page: Page 1 of 2
Company: Westchester Environmental LLC				Job #:
Address: 1248 Wrights Lane	Due Date Requested: 5/30/19			
City: West Chester	TAT Requested (days): STANDARD 10			
State, Zip: PA, 19380				
Phone: 610-306-5664(Tel)	PO #: Purchase Order Requested			
Email: mabraham@westchesterenvironmental.com	WO #:			
Project Name: 6122 Lancaster Avenue	Project #: 18020478			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C - PA UST - VOA Parameters-low terracore	8270D - PA Used Motor Oil - PAHs	6010C - Lead, Total	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N		
SB6-11-12	5/16/19	1025	G	Solid			X	X	X		
				Solid							
				Solid							
				Solid							
				Solid							
				Solid							
				Solid							
				Solid							
				Solid							
				Solid							
				Solid							
				Solid							

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by: JS Tomlinson	Date/Time: 5/16/19 11:25	Company	Received by:	Date/Time: 5/16/19 1125	Company TA-KOP
Relinquished by:	Date/Time: 5/16/19 1204	Company TA-KOP	Received by:	Date/Time: 5/17/19 0900	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 01/16/2019

Login Sample Receipt Checklist

Client: Westchester Environmental LLC

Job Number: 180-90221-1

Login Number: 90221
List Number: 1
Creator: Neri, Tom

List Source: Eurofins TestAmerica, Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	