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REMEDIAL INVESTIGATION WORK PLAN

157 Great Arrow Avenue Site Buffalo, New York 14207

June 4, 2018 File No. 21.0056831.20



PREPARED FOR:

Great Arrow Estates, LLC Buffalo, New York

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1.0 INTRODUCTION

1.1 PURPOSE AND OBJECTIVE

The 157 Great Arrow Avenue Site (Site) is a brownfield site with known contamination of on-site soil and groundwater. The Site is planned to be redeveloped into residential apartments. The Site is part of the former heavy manufacturing facility known as the Former Pierce Arrow Manufacturing Facility. The on-Site soil and groundwater contamination will require further investigation and remediation prior to Site redevelopment. The cost of environmental investigation and remediation of the site is prohibitive to Site redevelopment. With intention to make the redevelopment project financially viable, the Site owner has applied to participate in the New York State Department of Environmental Conservation (NYSDECs) Brownfield Cleanup Program (BCP) for the tax credit and liability relief incentives offered by the program.

The nature, extent, and impact of the environmental contamination is not yet sufficiently defined, thus further environmental investigation work must be completed to provide information necessary to evaluate and select remedial measures. This Remedial Investigation Work Plan (RIWP) provides descriptions of the investigation procedures to be implemented to characterize the environmental conditions of the Site. This RIWP has been prepared in general accordance with the NYSDEC Division of Environmental Remediation's Technical Guidance for Site Investigation and Remediation (DER-10). Data collected through the RI will be used to define the nature and extent of environmental contamination and the related risks to human health, if any. Potential remedial alternatives will then be identified and assessed in a Remedial Alternatives Analysis (RAA). Recommended remedial actions will then be presented a Remedial Work Plan (RWP).

1.2 SITE DESCRIPTION

The Site address is 157 Great Arrow Avenue, Buffalo, New York, 14207. The Site is land-locked with no road frontage. Rather, it is an internal portion of the larger former Pierce Arrow motor car manufacturing facility with an access easement extending northward from Great Arrow Avenue (see Figures 1 and 2).

Located in an urban setting, the site is bounded as follows:

- North: by Conrail railroad property;
- East: by the Tapestry Charter School which is undergoing expansion;
- South: by Building I of the former Pierce Arrow Manufacturing facility;
- West: by Building C of the former Pierce Arrow Manufacturing facility.

The single prominent site feature is a long four-story building known as Building D of the former Pierce Arrow manufacturing facility. Building D is approximately 410 feet long (east/west) and 60 feet wide (north/south). Building D is currently vacant.

Large, open areas located north and south of Building D are mostly covered with weathered asphalt pavement. A raised berm of soil/fill is present along the entire northern wooded site boundary. A second on-Site building, approximately 40' X 20' in size, is present near the northwest corner of the property. This single-story building is constructed of cement block is build slab on grade.

A long narrow north to south oriented "arm" of the site projects southward from the western end of Building D and occupies an asphalt covered corridor between Buildings C and E.



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The total parcel size is 4.36 acres, with approximately 0.65 acres covered by Building D and the remaining 3.71 acres consisting of open space.

1.3 SITE HISTORY

The Site is part of the former Pierce Arrow manufacturing facility at which automobiles were manufactured from approximately 1906 to 1938. The subject site contains one large building, Building D, and one small building. The one-story building reportedly was most recently used for automotive repairs. Several smaller storage buildings historically occupied areas to the north and south of Building D, however have since been removed, leaving just Building D and the small cement block building on the present 4.36-acre Site.

Building D was built in 1916 and has four stories, and was reportedly used for the following purposes:

First Floor: warehousing, shipping, and receiving;

Second Floor: machine shop;Third Floor: machine shop; and

Fourth Floor: tin shop.

Building D was constructed as slab-on-grade with no basement, however a raised loading dock adjoins the entire northern and eastern exterior walls of the building. The loading dock is known to be hollow. Several railroad sidings or spurs were present to the north and south of Building D. Some, if not all, of these steel rails are anticipated to remain on the site and covered by asphalt pavement) (see Figure 2).

1.4 SITE GEOLOGY AND HYDROGEOLOGY

The following description of site geology and hydrogeology was based on the findings from 33 environmental soil borings (20 by LCS Inc. and 13 by GZA) advanced on Site to date. Borings were completed to depths of 8 feet below grade at most locations. Three borings located near the former location of a boiler fuel tank along the east side of Building C, were advanced to depths of 12 feet.

Weathered asphalt pavement covers a majority of the Site exterior of Building D. Beneath this asphalt pavement a layer of urban fill material was encountered at all drilling locations. The fill layer is described as sand and gravel with traces of anthropogenic material including wood, brick, glass, and ash. Evidence of slag was not noted at any of the 33 on-Site boring locations. Thickness of the fill ranged from 0.5 feet to 13 feet, with most borings encountering fill at thicknesses ranging between 0.5 and 5.0 feet. Fill material was not observed beneath Building D.

Beneath the fill layer at all drilling locations, a native silty clay soil was encountered and was described as brown silty clay with traces of gravel and sand. The silty clay was reported directly beneath the Building D concrete floor. The silty clay was the deepest geologic layer observed at the boring locations which attained a maximum depth of 16 feet bgs. Bedrock was not encountered during previous investigations although is reportedly at depths greater than 50 feet in areas proximate to this Site.

Groundwater was encountered in eight of 33 borings drilled on the Site. Where encountered groundwater was present in the relatively more porous urban fill material above the native clay. The depth to groundwater ranged from 1.5 and 12 feet bgs with most showings of water at the 4.0 to 6.0-foot depth range. The discontinuous presence of groundwater indicates that, where present, it is perched and not indicative of an area-wide groundwater aquifer.



2.0 SUMMARY OF ENVIRONMENTAL CONDITIONS

2.1 ENVIRONMENTAL REPORTS

There are three known environmental reports that include the subject site, these are:

- Phase I Environmental Site Assessment, May 2004, GZA GeoEnvironmental of New York;
- Limited and Focused Subsurface Soil Investigation, September 20014, LCS Inc.; and
- Subsurface Investigation Report, July 2017, GZA GeoEnvironmental of New York.

The first two studies listed above included the entire approximate 16-acre former Pierce Arrow facility. The third listed study included just the current 4.36-acre subject Site. Copies of the referenced previous environmental reports are provided (electronically) in **Appendix A.** A brief summary of each of these reports follows.

2.1.1 2004 – GZA Phase I Environmental Site Assessment Report

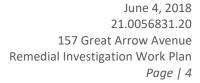
The Phase I ESA completed by GZA in 2004 identified many potential sources of environmental contamination. Those identified on the 4.36-acre subject site in include:

- Long history of heavy manufacturing;
- On-site Rail Road use;
- Coal fueled heating and coal storage;
- Underground fuel oil tank in support of a boiler on the east side of Building C
- Soil/fill berm along the northern site boundary
- Existing UST with oily sludge on the ground surface north of Building D
- approximately 20 drums stored on the ground outside and south of the Building D western loading dock. Drums labels included "used oil", "good oil", and "used lathe oil". Heavy staining was observed on the ground surface near these drums.
- Records of a 15,000-gallon No. 6 fuel oil UST and a 6,000-gallon UST installed exterior of Building C.

2.1.2 2004 – LCS Limited and Focused Subsurface Soil Investigation

LCS conducted a focused subsurface soil investigation in 2004 to characterize the potential sources of contamination identified by GZA in the Phase I ESA report. LCS advanced soil borings at 56 locations (BH1 through BH56) across the greater Pierce Arrow facility. Samples were collected of the subsurface soil and fill from the borings and submitted for chemical analyses. Of the 56 drilling locations, 20 were located on the subject BCP Site, these include borings identified as BH21 to BH28 and BH36 to 47. The 20 borings were clustered in four locations, each targeting a specific potential source of contamination, see **Figure 3.** The four targeted contaminant sources were as follows:

- The Southwestern loading dock area of Building D where drum storage and stained ground was noted (BH27 and BH28);
- The former coal pile location (BH36, BH37, and BH38);
- The historic UST location to the east of Building C boiler room (BH45, BH46, and BH47); and





Historical operations to the south of Building D (BH21 to BH26 and BH39 to BH44).
 Approximately half of the borings sampled by LCS on the subject BCP site yielded samples containing contaminants at concentrations greater than their respective restricted residential soil cleanup objective (RSCO). These contaminants were mostly semi-volatile organic compounds (SVOCs) and metals, see Figure

 LCS did not sample in other areas of the subject site nor did they sample other media such as groundwater or air as part of their study.

2.1.3 2017 – GZA Subsurface Investigation Report

To further characterize the subject BCP Site, GZA advanced soil borings at 13 locations inside and outside of Building D. Samples were collected from the urban fill at each location and of groundwater at the only two locations at which groundwater was encountered. GZA also collected samples of the near surface (6-inch depth) soil/fill from the raised berm along the northern property boundary, see Figure 3. Similar to the findings of the LCS report, GZA confirmed further distribution of SVOC and metals contamination several sampling locations exterior of the building. One location (SP-13) contained trichlorethylene (TCE) above the RSCO in the urban fill as well as in groundwater.

2.2 IDENTIFIED ENVIRONMENTAL CONTAMINATION

Soil Impacts:

Volatile organic compounds (VOCs), SVOCs and metals were detected at concentrations greater than restricted residential, commercial, and in some cases industrial SCOs throughout the site. **Figure 3** provides a summary of soil impacts with sample locations, analytes detected, and analyte concentrations shaded were exceeding the various SCOs.

Groundwater Impacts:

Water, believed to be perched groundwater, was encountered at eight of the 33 soil boring locations. LCS did not sample water from the six locations where encountered in 2004. GZA collected samples of groundwater at both locations at which water was encountered in 2017. Both groundwater samples contained SVOCs at concentrations greater than the NYSDEC Class GA groundwater standards. One of the two samples also contained trichloroethene (TCE) at a concentration greater than the standard. **Figure 4** provides a map summarizing the groundwater impacts at the Site.

3.0 REMEDIAL INVESTIGATION

3.1 OBJECTIVES

The objectives of the RI are as follow:

- To environmentally characterize those areas and media not yet characterized;
- To define the nature and extent of environmental contamination throughout the Site;
- To provide a conceptual site model in support of the qualitative risk assessment;



3.2 REMEDIAL INVESTIGATION WORK TASKS

3.2.1 Environmental Characterization of Berm

A large, apparent earthen berm is located along the entire, approximately 600 feet, northern property boundary. The berm is estimated to be approximately 40 feet wide (north/south) and having a maximum height of eight feet. It appears to be composed mostly of soil materials although was observed to include various solid waste debris including; rock, concrete, brick, and glass. The berm is heavily vegetated and supports various brush and mature trees.

Four near-surface soil samples (identified as SS-1 through SS-4) were collected from the 6-inch depth along the berm in July 2017. These samples contained several SVOCs and metals at concentrations above SCOs, see Figure 3. Further evaluation of the physical and chemical composition of the berm will be performed during the RI. The NYSDEC Project Manager will be given prior notice of test pitting activity and will be consulted prior to backfilling the test pits. A visual assessment of the entire length of the berm will be conducted to assess the surface composition and to assess for potential sources of contamination such as containers of liquids or specific solid wastes. Following the visual assessment, an excavator will be used to breach the surface of the berm at a minimum of six locations along its length to characterize the internal composition and obtain environmental samples of the internal material. Four samples of soil from the berm are planned for further characterization of the berm material. Sample depths will be determined in the field based on observations of the berm internal composition and targeting depths with greatest evidence of potential contamination and unique fill types. If no evidence of potential contamination nor distinct fill types are observed in the berm excavations, then samples will be collected from variable depths at each location to characterize the full vertical depth of the berm. In this case the proposed depths of the four samples would be 0-2 feet, 2-4 feet, 4-6 feet, and 6-8 feet. Depending on the analytical results of the berm soil samples and planned fate of the berm soil, additional characterization of the berm soil may be required.

3.2.1.1 Berm Soil Sampling Analyte List

- TCL Volatile Organic Compounds (VOCs);
- TCL Semi-Volatile Organic Compounds (SVOCs);
- TCL Pesticides and Herbicides;
- TCL Polychlorinated Biphenyls (PCBs);
- TAL Metals; and
- Tics
- and
- Waste Characterization Samples (2) for:
- TCLP: VOCs, SVOCs, pesticides, herbicides, and metals
- PCBs
- Reactivity
- Corrosivity
- Ignitability



3.2.2 Surficial Soil Sampling

If Grossly Contaminated Soil (GCS), as defined in 6NYCRR Part 375-1.2(u), is encountered on the ground surface it will be documented and may be sampled as appropriate. GCS is soil that contains substantial quantities of mobile Non-Aqueous Phase Liquid (NAPL) that is identifiable visually, and/or by it strong odor, and/or by elevated readings on an organic vapor meter.

Most of the Site is covered by pavement and buildings. The planned site redevelopment retains most of the current cover materials including Building D, the paved area to the north of Building D (future parking), and the corridor between buildings C and D, Site entryway. Currently, the only exposed on-Site soil is the northern earthen berm, the upper 6-inches of which has been characterized. The interior of the berm is planned for characterization, as discussed in Section 3.2.1.

The large, approximately 250 feet by 250 feet, open area located to the south of Building D is currently covered with severely weathered asphalt pavement. As part of the Site redevelopment plan, this area will be converted to greenspace. Greenspace construction may involve the removal of the current weathered pavement cover. As requested by the New York State Department of Health (NYDOH), the upper two feet of surface soil/fill will be characterized at three separate vertical depths as follows:

- The uppermost 0 to 2 inches directly beneath the asphalt pavement and subbase, if present;
- The 2 to 12-inch interval; and
- The 12 to 24-inch interval.

The three depth intervals will be sampled at five locations within the proposed greenspace area to the south of the building. The samples will be collected using decontaminated, stainless steel spoons, hand trowels and/or using the direct-push drilling rig. Sample locations have been selected to spatially represent the area, See **Figure 6**.

3.2.2.1 Surface Soil Sampling Analyte List

- TCL VOCs
- TCL SVOCs
- TCL Pesticides and herbicides
- Polychlorinated Biphenyls (PCBs)
- TAL Metals
- TICs

3.2.3 <u>Site-Wide Soil Boring Program</u>

The purpose of the general site-wide soil boring exploration is to address the lateral and vertical extent of the fill unit, identify the potential for contamination, and determine the presence of groundwater. Approximately 40 soil borings will be distributed to provide spatial distribution and characterization of the entire site, including inside of Building D, as follows:





- Southern Paved Lot 20 Soil Borings;
- Northern Paved Lot and Loading Dock 14 Soil Borings;
- Former Southwest Loading Dock 1 Soil Boring;
- Western interior of Building D 3 Soil Borings
- Corridor between Buildings C and D − 2 Soil Borings

3.2.3.1 Subsurface Soil Characterization (Urban Fill & Native Soils

Soil borings will be completed throughout the site to delineate the vertical and lateral extent of the fill layer as well as the physical and chemical composition of the fill layer and the underlying native silty clay soil. This will involve the advancement of approximately 40 soil borings through the fill and into the native soil unit.

Based on the 33 borings advanced at the site to date, the thickness of the fill layer is not more than two feet in most areas south and west of Building D. The fill thickness is greater to the north of Building D, ranging from 3.0 to 5.0 feet in most areas and up to 13 feet at one location to the northeast of the building.

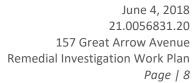
Direct push technology (i.e. Geoprobe Systems®) will be utilized to complete the soil borings. Macrocore barrel samplers with disposable acetate liners will be continuously advanced in 4-foot sample intervals for characterizing the subsurface materials. The macrocore barrels will penetrate through the fill layer and extend into the underlying native soils a minimum vertical distance of 4-feet. Anticipated boring depth is 8-feet at most locations and will vary depending on subsurface stratigraphy observations and evidence of contamination, if encountered. To avoid cross contamination, new and dedicated acetate liners will be used and non-disposable sampling equipment such as spatula or spoons will be decontaminated between sampling runs and each soil boring.

Extracted soil cores from each four-foot run, will be screened in the field for volatile organic vapors in 2-foot increments with a calibrated photo-ionization detector (PID) with a 10.6 electron volt (eV) or equivalent probe for the qualitative detection of VOCs. Soils samples will be logged by a qualified GZA field Geologist using the Burmeister soil classification method. If evidence of potential contamination (elevated PID measurements, odors, visible staining, or the presence of suspicious fill material) is encountered, a grab sample will be collected. The following are the proposed sampling depth intervals for the remedial investigation:

Upper Fill Unit No. 1: from the surface of fill to base of fill (maximum 24.0 inches); For example, if fill unit is 18-inches thick, the sample will be from 0 to 18 inches vertical composite. If fill is 30 inches thick, upper sample will be from 0 to 24-inches vertical composite, with fill beneath the 24-inch depth characterized with additional samples.

Additional Fill Unit Samples: at locations where the fill thickness is greater than 24-inches, samples will be collected beginning at 24-inch depth to base of fill unit, not exceeding 24 inches in any one sample—extending to the base of fill unit, total sample count dependent upon total thickness of fill. For example, if the fill is a total of 7 feet thick, there would be three samples collected after the upper fill sample. The three additional fill samples would be collected from 2' to 4', from 4' to 6', and from 6' to 7'.

Native Unit Characterization (12 – inch intervals) – Two samples will be collected from the upper two feet of the native soil unit. The upper 12-inches and the next underlying 12-inches. Analysis of the second 12-inches will be





contingent upon the results of the upper 12-inches. If the sample of upper sample of native soil exceeds SCOs, the second sample will be analyzed for only those parameters that exceeded SCOs in the upper sample.

The above-described soil sampling depths may be adjusted based on field conditions encountered during sampling. Samples of native soils will not be homogenized with material from the fill unit. Soil boring logs will be completed and include soil descriptions, PID readings, etc. The boring logs will be included in the RI report.

Also, as required by NYSDEC, at five of the six boring locations at which groundwater monitoring wells are proposed a subsurface soil sample will be collected at the 15-feet depth for laboratory analyses.

3.2.3.2 Characterization of AOIs

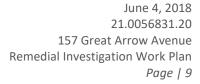
Directly after completion of the Site-wide boring program, a focused site soil boring exploration will occur in areas of interest (AOIs) where previous investigations have identified contamination. At a minimum three soil borings will be completed at each AOI to further delineate the area of impact. Additional borings may be warranted dependent upon visual-manual classification of extracted soil cores and PID screening measurements. The three AOIs identified at the time of the writing of this RIWP are:

- Former UST Excavation site along the eastern side of Building C by the former boiler room;
- GZA SP-13 (TCE detected in the fill and groundwater)
- GZA SP-9 (Thick fill and groundwater unit encountered, PAHs and metals present above criteria)

The collected field samples will then be evaluated for submittal to the analytical laboratory. Evaluation will include sample depth and location, relative position to known or suspected sources of contamination, physical composition, PID reading. An estimated total of 27 field samples of the urban fill material and 12 of the native soil will be submitted for laboratory characterization analyses. These sample counts include those of both the site-wide work and the three AOIs.

Additional AOIs may be identified in the course of performing the RI and may warrant further characterization sampling. If GCS, as defined in 6NYCRR Part 375-1.2(u), is encountered in the subsurface, it will be documented and may be sampled as appropriate. Soil samples will be collected from the soil borings will include the following:

- TCL VOCs
- TCL SVOCs
- TCL Pesticides and herbicides
- Polychlorinated Biphenyls (PCBs)
- TAL Metals
- TICs
- Waste Characterization Samples (4 urban fill and 2 native soil) for:
- TCLP: VOCs, SVOCs, pesticides, herbicides, and metals
- PCBs
- Reactivity
- Corrosivity
- ignitability





3.2.4 Groundwater Characterization

Groundwater was encountered at 10 of the 33 previous on-Site boring locations. These occurrences of groundwater appear to be perched and coincident with areas of relatively thick fill material. Beneath the fill, the silty clay native soil does not yield water on its own to the maximum depth drilled to date (16-feet). This tight silty clay appears to be an aquitard that likely greatly limits water, and contaminant, transport. The thickness of this tight silty clay is reportedly greater than 50-feet at the Site. Based on the current understanding of the hydrogeologic conditions of the Site, exploration greater than 16 feet below grade at the site is not warranted and could create a vertical contaminant migration pathway through the confining layer.

To further characterize the hydrogeologic conditions on-site and groundwater quality, installation and sampling of up to six groundwater monitoring wells will be attempted, subject to the presence of water. The groundwater monitoring wells will be installed after and based on the subsurface soil characterization program. Up to six wells will be installed at locations that exhibited the presence of groundwater in the overburden across the Site and will include one location in the northeastern corner of the site, the presumed upgradient location and one located in the southwestern corner of the Site, the presumed down-gradient location., see **Figure 6.** The total depth of the wells is assumed to be 16 feet bgs.

Monitoring wells will be constructed to intersect either the groundwater table or the surface of the perched groundwater in the fill unit, whichever is encountered first. Monitoring wells will be constructed of 2-inch inner diameter (ID) Schedule 40 Poly Vinyl Chloride (PVC), and each well will be completed with 5 to 10 feet of 0.010-slot well screen, dependent upon subsurface stratigraphy. The monitoring well annulus space will be backfilled with a quartz sand filter pack extending from total depth up to one to two feet above the top of well screen, followed by one to two feet of bentonite chips above the sand pack. The remainder of the annulus will be either backfilled with bentonite chips or grouted to the surface. Actual monitoring well construction and depths will be determined in the field by the GZA environmental Geologist based on subsurface conditions encountered and actual presence of groundwater. Monitoring wells will be completed either as a flush mount or protective stick-up, dependent upon location and the monitoring wells impact on planned site use and traffic.

Not sooner than 24 hours following installation, the monitoring wells will be developed through the removal of up to ten well volumes of water, or until dry-like conditions, whichever occurs first, using either decontaminated PVC bailers, a peristaltic or submersible pump with new dedicated high-density polyethylene (HDPE) tubing. Water quality parameters including temperature, pH, conductivity, dissolved oxygen (DO), oxidation reduction potential (ORP), and turbidity will be measured throughout the development process to document progress and stabilization of water quality.

Not sooner than one week following monitoring well development, site groundwater characterization sampling will commence; groundwater samples will be collected either using dedicated and decontaminated PVC bailers or low-flow purging and sampling techniques using HDPE tubing. Actual method of groundwater sampling will be determined by a qualified environmental professional after a review of the soil boring logs, monitoring well construction reports, and well development reports. Prior to purging any monitoring wells, a sitewide round of synoptic water levels will be measured using an electric water level meter. Decontamination of reusable sampling equipment is required after each well is sampled to reduce the likelihood of cross contamination.





Groundwater sampling equipment calibration records, monitoring well development and sampling records, and static water level measurements will be recorded in a project field log book, and are to be provided in the RI Report.

The groundwater samples from all monitoring wells will be analyzed for the following analyte list:

- TCL Volatile Organic Compounds EPA Method 8260C;
- TCL Semi-Volatile Organic Compounds EPA Method 8270D;
- TAL Metals EPA Method 6010C;
- TCL Polychlorinated Biphenyls (PCBs) EPA Method 8082A;
- TCL Pesticides EPA Method 8081B; and
- Herbicides EPA Method 8151A.

In addition, three of the monitoring wells will also be sampled for emerging contaminants as required by NYSDEC in the letter to Great Arrow dated March 26, 2018, including:

- Full NYSDEC list of 21 PFAS Target Analytes using USEPA Method 537
- 1,4-Dioxane

As monitoring wells have not yet been installed at the Site, the selection of the three wells to be sampled will be determined once the wells have been installed, developed, and water levels mapped to determine horizontal gradient. The selection of wells to be sampled for emerging contaminants will target one upgradient, one on-site, and one downgradient well, the sampling of which will take place only with prior concurrence of the NYSDEC Project Manager.

SAMPLING GROUNDWATER FOR PFAS AND 1,4-DIOXANE:

Sampling protocols as outlined in NYSDEC's March 26, 2018 letter and attachments will be followed (Appendix B). Because PFAS compounds are widely used in many products and because the analytical detection limits are minute (in units of parts per trillion), extreme care must be taken during sampling to minimize the probability of false positive detections of PFAS. Specifically, care will be taken to use sampling equipment and supplies made of currently acceptable materials including stainless steel, high density polyethylene (HDPE), Polyvinyl chloride (PVC), silicone, acetate, and polypropylene. Sampling equipment that encounters groundwater will be decontaminated between uses using a two-step process using Alconox powered soap and water solution followed by a triple rinse of laboratory provided PFAS-free water. Sampling equipment shall not be composed of nor samples encounter; aluminum foil, low density polyethylene (LDPE), glass, or polytetrafluoroethylene (PTFE or Teflon).

Sampling personnel shall:

- wear only old cotton clothing (no water proof materials such as Gortex) that has been laundered many times and most recently rinsed without detergent or fabric softener and lined dried;
- wear leather belt and steel-toed shoes or boots;
- no use of cosmetics or personal care items the day of sampling;
- no use of insect repellent or sunscreens;
- no fast-food consumption for 48-hours prior to sampling;
- Field notes will be kept on traditional paper, not water proof paper;





- Ball point pens, not marking pens, shall be used to take notes and label sample containers;
- Regular water ice will be used to chill samples, not dry ice;
- New Nitrile gloves will be used and changed as follows:
- Before handling containers;
- After purging each well, before sampling;
- After sampling, prior to collection of field/sampler blank samples.

3.2.5 <u>Investigation-Derived Waste</u>

Anticipated Investigation-Derived-Waste (IDW) water includes water used for decontamination of drilling rig and excavator, monitoring well development water, and purge water generated during pre-sample purging of wells. These IDW water will be observed and screened for evidence of organic contamination including presence of NAPL, sheen, odor, and/or elevated PID (>10 PPM above background) readings. If no evidence of contamination is observed, the IDW water will be allowed to infiltrate the on-site ground surface near the site of generation. If the IDW water exhibits evidence of organic contamination then the IDW water will be containerized in NYSDOT-approved 55-gallon steel drums, characterized, and properly disposed off-site at a NYSDEC-permitted and approved disposal facility.

Similarly, for soil IDW generated from the soil probes and monitoring well drilling, if no evidence of petroleum contamination is observed, the IDW soil will be placed on the soil berm for eventual removal or covering during site remediation. If the IDW soil yields evidence of petroleum contamination it will be containerized in NYSDOT-approved 55-gallon steel drums, characterized, and properly disposed off-site at a NYSDEC-permitted and approved disposal facility.

3.2.6 Soil Vapor Intrusion Survey

Building D has approximate dimensions of 410-feet by 60-feet; occupying a foundational area of approximately 25,000 ft². Five sub-slab soil vapor samples and five companion indoor air samples will be co-located and collected concurrently from within the Building D (**Figure 6**). One outdoor air sample will be collected concurrently with the sub-slab vapor and indoor air samples from an upwind location exterior to Building D. Samples will be collected using dedicated, pre-cleaned, laboratory-supplied 1 or 6-liter sample canisters over a 24-hour duration in accordance with NYSDOH guidance. The air samples will be submitted to a NELAP certified laboratory for analyses of VOCs via USEPA Method TO-15.

Each sub-slab vapor sample will be collected from under the slab-on-grade floor through an approximate ½-inch diameter hole drilled in a competent portion of the concrete floor away from cracks, sumps, or drains. Clean, dedicated tubing will be placed into the drilled hole to the bottom of the concrete slab and sealed at the floor surface with modeling clay. A leak check of the sampling system will be performed by releasing a tracer gas (e.g., helium) under an enclosure placed over the top of the sealed sample tubing setup to check for surface infiltration of the tracer gas into the subsurface vapor space. A helium detector (i.e., Mark Model 9822 Helium Detector or equivalent) will be used to determine if helium gas from inside the enclosure is being drawn into the subsurface. Once it is determined that the sampling system is sealed and there is no infiltration into the subsurface, the sub-slab tubing will be connected to the sample canister and regulator. New York State Department of Health (NYSDOH) Guidance allows for up to 10 percent helium to be detected within the sub-slab sampling system and still be considered acceptable for sampling.

During the indoor air sampling event, observations of chemicals and chemical products stored/staged in the areas of the sampling will be listed and photographed. In addition, a PID with an 11.7 eV bulb will be used to screen each



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indoor and outdoor air sampling point and individual product containers observed, and will be used to quantify background levels of total organic vapors in the general area of the sampling locations.

The analytical results for all characterization samples collected during the RI will include an ASP Level B report and a NYSDEC EQuIS EDD. Following receipt of the analytical results, the results will be forwarded to a third-party for independent data validation and preparation of a Data Usability Summary Report (DUSR).

3.2.7 Site Survey

Horizontal location of soil probes, sampling points, and monitoring wells will be measured in the field using a combination of geographic positioning system (GPS) technology and measuring tape/wheel to locate them for placement on the existing property survey map. An elevation survey will be conducted by the environmental consultant using surveyors level to tie in existing special and topographic data provided by a licensed surveyor, for mapping groundwater elevations.

4.0 REPORTING

Upon completion of the RI, the RI Report will be prepared and will include a summary of the RI work completed along with presentation, summary, and interpretation of the physical and chemical data collected. Analytical results will be presented in table form highlighting exceedances of applicable chemical criteria. Maps depicting the locations of contamination, thickness of fill, groundwater surface contours are also planned in the RI report. The RI Report also will include presentation of a conceptual site model and a qualitative risk assessment in support of the Remedial Alternatives Analysis (RAA) and Remedial Work Plan (RWP).



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5.0 SCHEDULE

The preliminary anticipated schedule if milestones of the BCP project is as follows:

Milestone:	Anticipated Date:
Submittal of BCP Application with RIWP NYSDEC and public review and finalization of BCP App and RIWP Execution of the Brownfield Cleanup Agreement (BCA) Implementation of the RI Preparation of RI Report/Alternatives Analysis Report/	October 2017 Nov. 2017 – June 2018 April 2018 June - August 2018
Remedial Work Plan	August -October 2018
Public and NYSDEC Review and approval of RWP Environmental Site Remediation* (* dependent upon the findings of RI)	November 2018 April to July 2019
Completion and approval of Final Engineering Report (FER) And Site Management Plan (SMP) if applicable	August 2019
Completion of remainder of Site Redevelopment work	September 2019
Receipt of Certificate of Completion	October 2019

6.0 QUALITY ASSURANCE PROJECT PLAN

The Quality Assurance Project Plan (QAPP) to be used for this project provided as **Attachment C**. The QAPP presents the sampling procedures, analytical methods and QA/QC procedures associated with the activities planned for BCP Site. Protocols for sample collection, sample handling and storage, Chain of Custody procedures, and laboratory and field analyses are described or specifically referenced to related investigation documents.

7.0 HEALTH AND SAFETY PLAN

The health and safety protocols to be used for the 157 Great Arrow RI activities are provided in the Health and Safety Plan (HASP) in **Appendix D**. The HASP presents the specific health and safety protocols associated with the activities planned for BCP Site, including a Community Air Monitoring Plan (CAMP).



TABLES

SUMMARY OF REMEDIAL INVESTIGATION SAMPLING PROGRAM

Sample Type	Matrix			Summary of Es	tiamted Number of Sample:	S	
Sample Type	IVIALITA	Field	Field Duplicate°°	Matrix Spike°°	Matrix Spike Duplicate°°	Rinsate Blank°°	Trip Blank°°
Urban Fill Soil*	Soil	27	2	2	2	2	5
Native Soil*	Soil	17	1	1	1	1	1
Surfical Soil*	Soil	15	1	1	1	1	1
Berm Fill Soil*	Soil	4	1	1	1	1	1
Groundwater**	Water	6	1	1	1	1	1
Soil Vapor & Indoor Air***	Air	11	1	1	1	NA	1

Total 80 7 7 7 6 10

TCL Volatile Organic Compounds (EPA Methods 8260);

TCL Semi-Voatile Organic Compounds (EPA Method 8270);

TAL Metals (EPA Method 6010);

Pesticides/herbicides (EPA Method 8081);

Poly-Chlorinated Biphenyls (EPA Method 8082); including Tentatively Identified Compounds.

TCL Volatile Organic Compounds (EPA Methods 8260);

TCL Semi-Voatile Organic Compounds (EPA Method 8270);

TAL Metals (EPA Method 6010);

Pesticides/Herbicides (EPA Method 8081);

Poly-Chlorinated Biphenyls (EPA Method 8082);

including Tentatively Identified Compounds Three wells to be also sampled for 1,4

Dioxane, and NYSDEC list PFAS.

Volatile Organic Compounds (EPA Method TO-15)

NA - Not Applicable

^{*} Soil samples are to be analyzed for the follwing parameters:

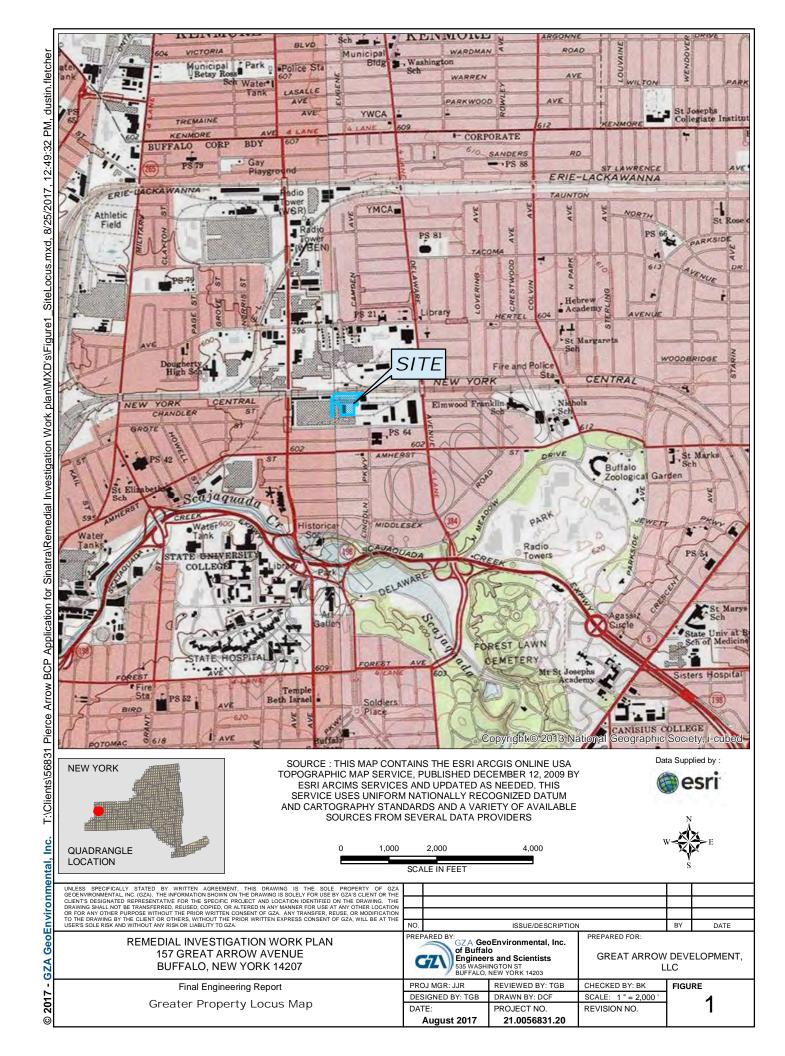
^{**} Water samples are to be analyzed using USEPA SW-846 methodology for:

 $[\]ensuremath{^{***}}$ Air samples are to be analyzed for the following parameters:

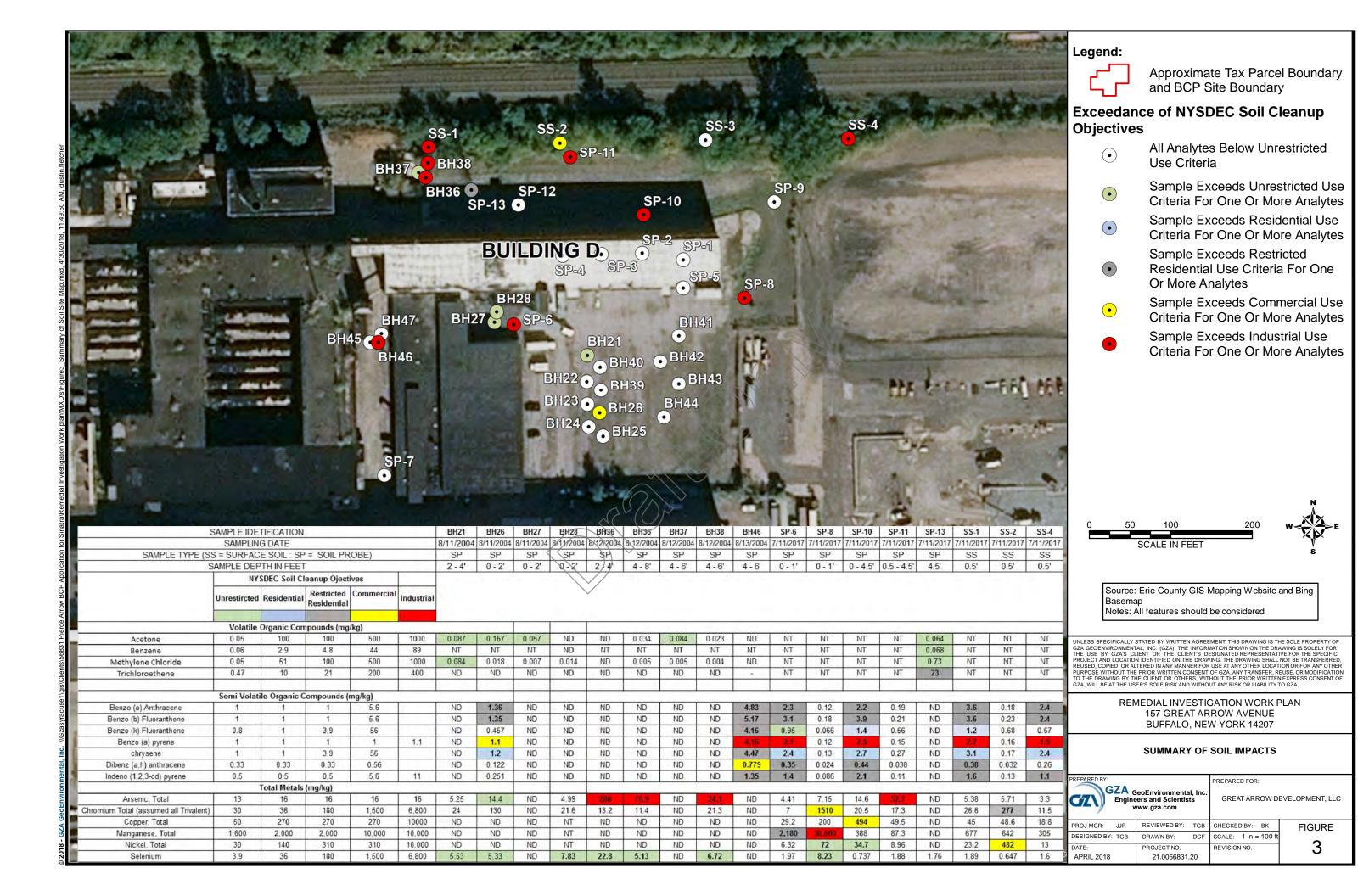
^{°°} Quality Assurance & Quality Control Samples

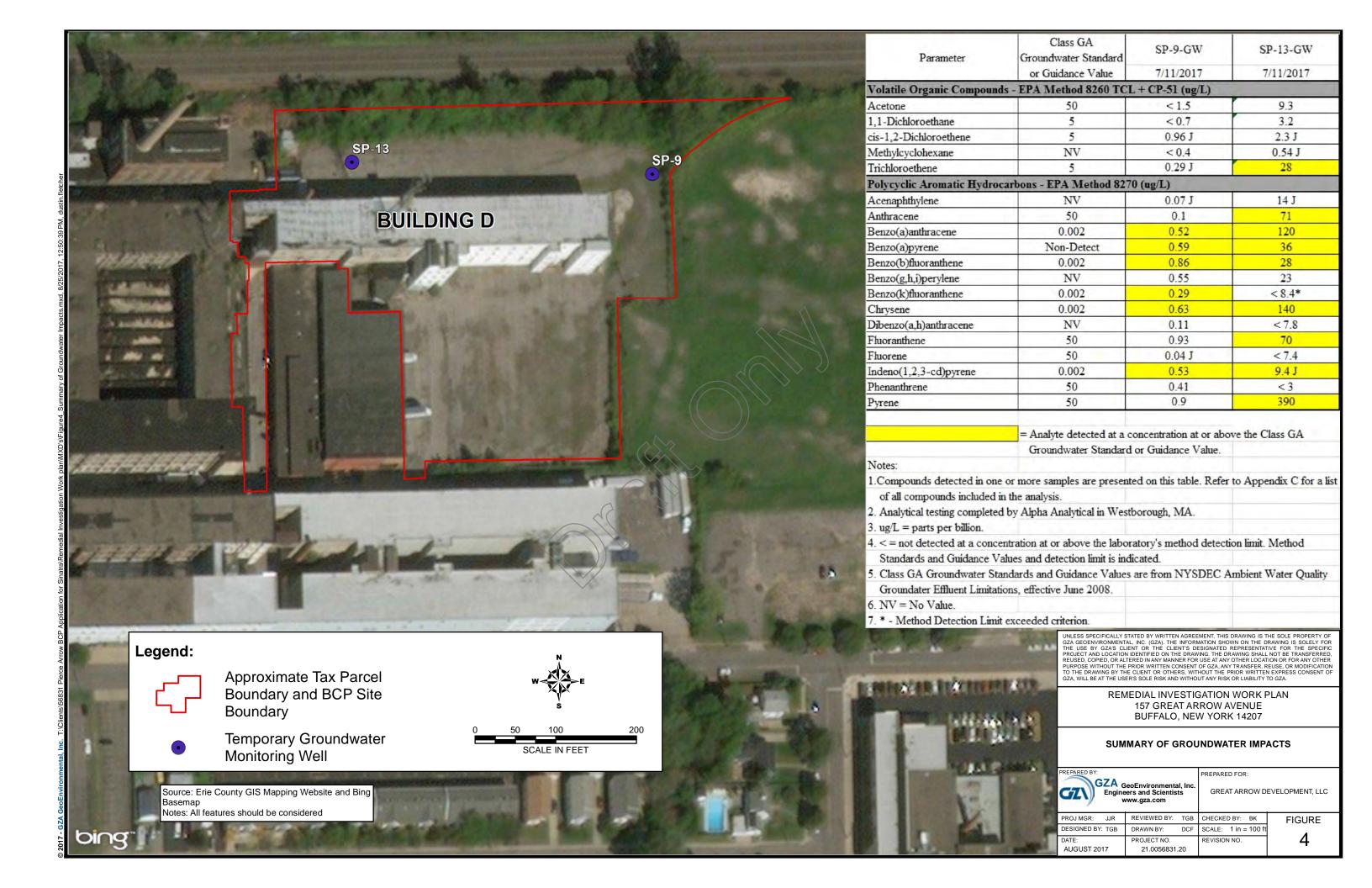


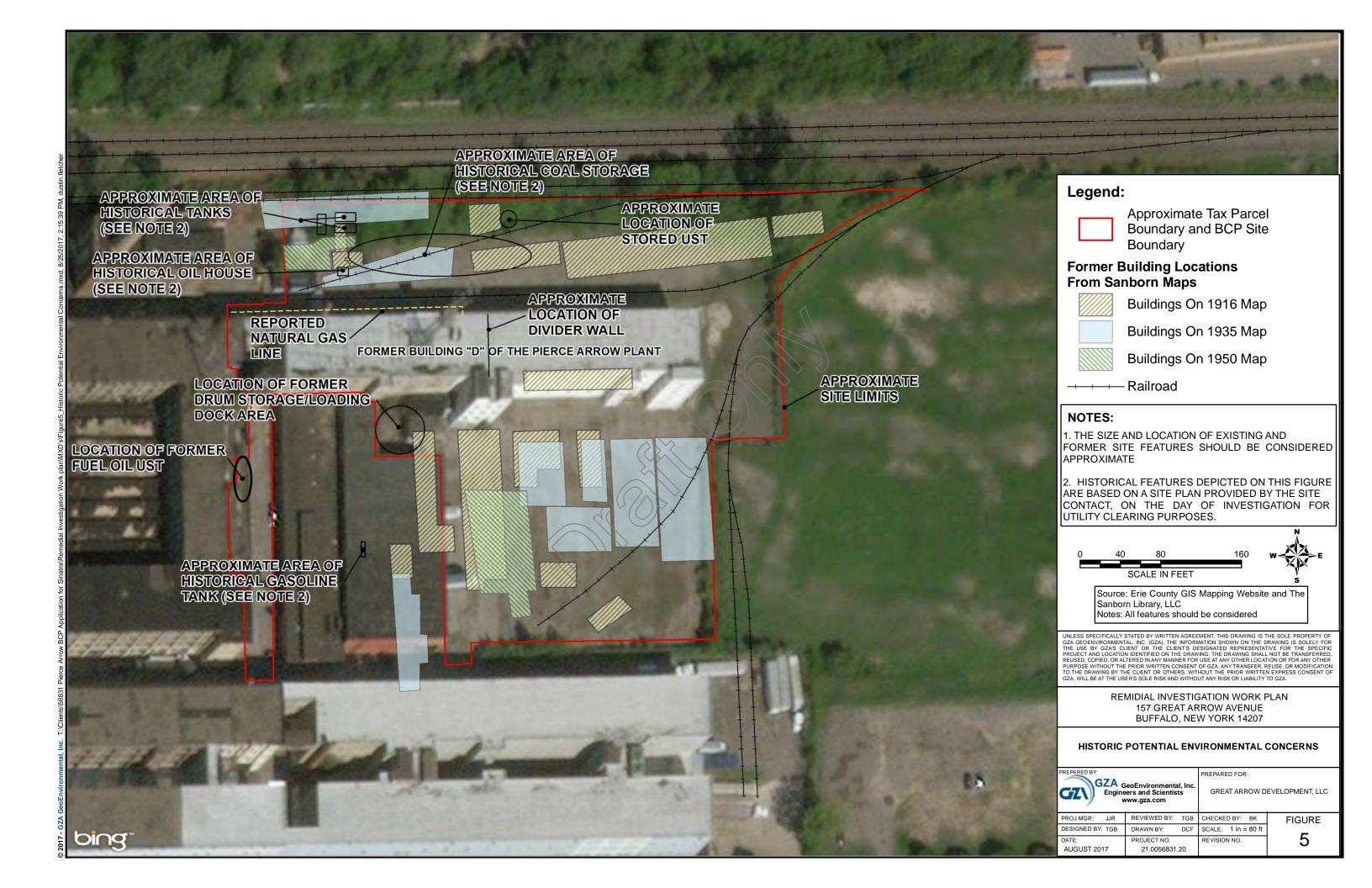
FIGURES

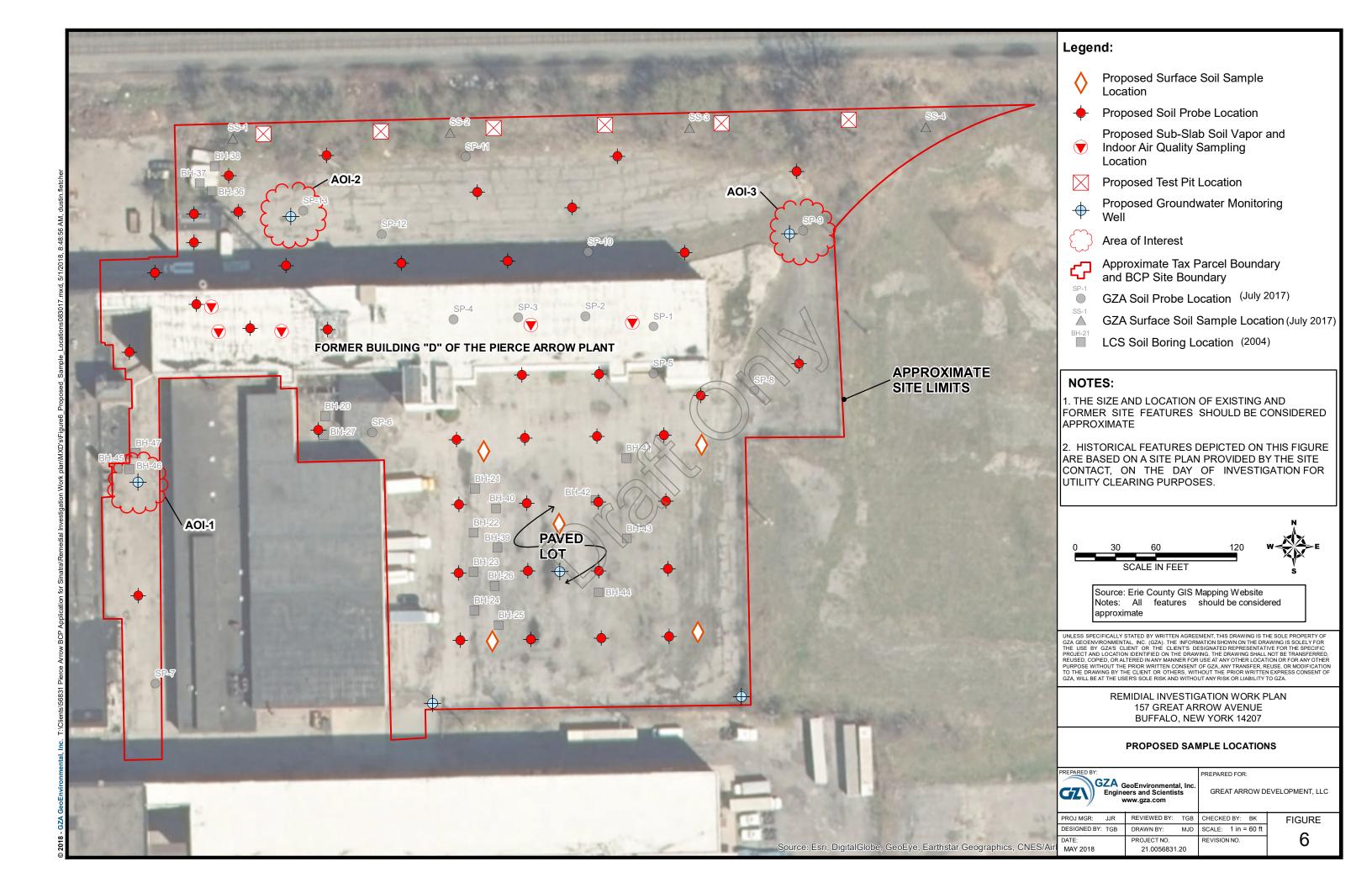














APPENDIX A

PREVIOUS ENVIRONMENTAL REPORTS (On CD for hard copy)



CORPORATE OFFICE P.O. Box 406 Buffalo, New York 14205 716-845-6145 1-800-474-6802 FAX 716-845-6164 mail@lenderconsulting.com

September 8, 2004

Mr. Gerald Stay
FourthofAugust, LLC
D-175 Great Arrow, Inc.
KVell, Inc.
GTS Trust
C/O Nesper, Ferber and DiGiacomo, LLP
One Town Centre – Suite 300
501 John James Audubon Parkway
Amherst, NY 14228

Re:

Limited and Focused Subsurface Soil Investigation 177 & 255 Great Arrow Avenue Buffalo, New York LCS Project #04B1552.22 NYSDEC Spill No. 04-05957

Dear Mr. Stay:

At your request, Lender Consulting Services, Inc. (LCS) performed a limited and focused subsurface soil investigation at 177 & 255 Great Arrow Avenue, Buffalo, New York (See Figure 1) between August 9, 2004 and August 16, 2004.

This investigation was recommended based LCS' review of a Phase I Environmental Site Assessment prepared by GZA Geo Environmental (GZA) dated May 2004. Through that study, the subject property was identified as historically being utilized for various industrial and commercial uses, notably including an automobile manufacturing operation. Several potential areas of concern were identified on-site which warranted further intrusive study.

The purpose of this intrusive study was to better assess the likelihood that soils in the suspected areas of concern (AOC) noted above had been impacted by volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), metals and/or PCBs, typically associated with the historic on-site operations. Soil samples were collected for stratigraphic characterization and field monitoring with selected samples submitted for laboratory analysis. The scope was not intended to assess the extent of any soil impact or to assess groundwater quality.

Due to the discovery of petroleum-impacted soils on-site, as required by law, the NYSDEC was notified and spill #04-05957 was assigned to the site. Mr. Michael Franks of the NYSDEC is the Spill Investigator assigned to the subject property

The following is a summary of the methods and results of the investigation.



Mr. Gerald Stay. - Page 2 September 8, 2004

Methods of Investigation

The sample locations were generally located in the AOC as identified within GZA's Phase I study report. The following table summarizes the AOCs and the test borings completed in those areas.

Sample Locations	Area of Concern
BH1-BH4, BH11-BH16	Gasoline USTs - south of Building H
BH5-BH6	Oil staining/Drum Storage north of Building A
BH7-BH8	Suspect fill ports – west and north Building A
BH9-BH10, BH17-BH19	USTs – south of Building B
BH20, BH27	Drum storage – south of Building D
BH21-BH26, BH39-BH44	Historic operations/former RR - south of Building D
BH28-BH35	Historic use - accessible interior areas - Building B
BH36-BH38	Coal Pile- north of Building D
BH45-BH47	Suspect vent pipe / Suspect UST location - east of Building C
BH48-BH50	Historic Cyanide room – interior Building A
BH51-BH56	Historic use - accessible interior areas - Building A
Inaccessible*	Suspect UST – between Buildings G and H.

^{*} This area was not accessible to the drilling equipment. As such this AOC could not be included with the intrusive study. As discussed later within this report, LCS confirmed the presence of an approximate 1,000 gallon UST in that area.

A truck-mounted percussion and hydraulically driven drive system was used to advance an approximate 1.5-inch diameter, approximate 48 inch long macro-core sampler into the soil for each of the boreholes.

Boreholes BH1 through BH56 were completed between August 9, 2004 and August 16, 2004 (See Figure 2). Soil samples were generally collected within each borehole continuously from the ground surface until the target depth of approximately 8 to 12 feet below the ground surface (ft. bgs) was reached or equipment refusal was encountered.

LCS personnel examined each of the samples collected for characterization of the surficial geology in the area of the investigation. Where applicable, another new sampling device was inserted in the borehole and advanced to the next desired depth, retracted, and another sample retrieved. Any down-hole equipment was decontaminated with an Alconox and tap water wash and tap water rinse between boreholes. The cutting shoes were decontaminated in a similar manner between collection of each sample.

The physical characteristics of all soil samples were classified using the Unified Soil Classification System (USCS) (Visual-Manual Method) and placed in separate sealable containers to allow any vapors to accumulate in the headspace. After several minutes, the container was opened slightly and total VOC concentrations in air within the sample container were measured using a photoionization detector (PID). (The PID is designed to detect VOCs, such as those associated with petroleum and some solvents.) The results of this screening are included in the attached boring logs. Based on the field observations and/or screening results, soils were selected for analysis (see below).

Sample Analysis

Following labeling of the laboratory-supplied sample containers, selected soils were placed on ice. The samples were then submitted, under standard chain-of-custody, to a New York State Department of Health (NYSDOH) approved laboratory for analysis in accordance with United States Environmental Protection Agency (USEPA) SW-846 methods as summarized below.



Ms. Gerald Stay - Page 3 September 8, 2004

The following table summarizes the specific analytical testing performed and their respective sample locations.

Areas of Concern	Analytical Testing Performed
Gasoline USTs - south of Building H	
BH1 (2-4 ft. bgs)	8260 STARS List + 10 TICs
BH2 (4-6 ft. bgs)	8260 STARS List + 10 TICs
BH3 (4-6 ft. bgs)	8260 STARS List + 10 TICs
BH11 (4-6 ft. bgs)	8260 STARS List + 10 TICs
BH12 (2-4 ft. bgs)	8260 STARS List + 10 TICs
BH13 (6-8 ft. bgs)	8260 STARS List + 10 TICs
BH15 (4-6 ft. bgs)	8260 STARS List + 10 TICs
BH16 (4-6 ft. bgs)	8260 STARS List + 10 TICs
Oil Staining - north of Building A	
BH5 (0-4 ft. bgs)	8260 TCL,8270 TCL,6010/7000
BH6 (4-6 ft. bgs)	8260 TCL,8270 TCL,6010/7000
	ilding A
BH7 (4-6 ft. bgs)	8260 STARS List + 10 TICs, 8270 STARS List + 20 TICs
BH8 (0-4 ft. bgs)	8260 STARS List + 10 TICs, 8270 STARS List + 20 TICs
USTs - Building B	//
BH9 (4-6 ft. bgs)	8260 STARS List + 10 TICs
BH10 (2-4 ft. bgs) BH17 (6-8 ft. bgs)	8260 STARS List + 10 TICs, 8270 STARS List + 20 TICs
BH17 (6-8 π. bgs) BH19 (8-10 ft. bgs)	8260 STARS List + 10 TICs, 8270 STARS List + 20 TICs
Drum Storage - South of Building D	8260 STARS List + 10 TICs
BH20 (2-4 ft. bgs)	8260 TCL 8270 TCL
BH27 (2-4 ft. bgs)	8260 TCL, 8270 TCL 8260 TCL, 8270 TCL, 6010/7000, 8082
Historic Operations/Former RR - south	of Building D
BH21 (2-4 ft. bgs)	
	8260 TCL, 8270 TCL, 6010/7000, 8082
BH22 (6-8 ft. bgs)	8260 TCL, 8270 TCL, 6010/7000, 8082
BH23 (0-2 ft. bgs)	8260 TCL, 8270 TCL, 6010/7000, 8082
BH24 (0-2 ft. bgs)	8260 TCL, 8270 TCL, 6010/7000, 8082
BH25 (2-4 ft. bgs) BH26 (0-2 ft. bgs)	8260 TCL, 8270 TCL, 6010/7000, 8082
BH42 (2-4 ft. bgs)	8260 TCL, 8270 TCL, 6010/7000, 8082
BH43 (2-4 ft. bgs)	8260 TCL, 8270 TCL, 6010/7000, 8082 8260 TCL, 8270 TCL, 6010/7000, 8082
Historic Use - accessible interior areas	- Building B
BH28 (0-2 ft. bgs)	8260 TCL, 8270 TCL, 6010/7000, 8082
BH29 (0-2 ft. bgs)	8260 TCL, 8270 TCL, 6010/7000, 8082
BH33 (0-2 ft. bgs)	8260 TCL, 8270 TCL, 6010/7000, 8082
BH35 (2-4 ft. bgs)	8260 TCL, 8270 TCL, 6010/7000, 8082
Coal Pile-north of Building D	1 0200 FCL, 0270 FCL, 00 10/7000, 8002
BH36 (2-4 ft. bgs)	6010/7000, 8082
BH36 (4-8 ft. bgs)	8260 TCL, 8270 TCL
BH37 (4-6 ft. bgs)	8260 TCL, 8270 TCL
BH38 (4-6 ft. bgs)	8260 TCL, 8270 TCL
Suspect Vent Pipe - east of Building C	0200,701,0210700
BH45 (10-12 ft. bgs)	8260 STARS List + 10 TICs, 8270 STARS List + 20 TICs
BH46 (0-2 ft. bgs)	8260 STARS List + 10 TICs, 8270 STARS List + 20 TICs
BH46 (4-6 ft. bgs)	8260 STARS List + 10 TICs, 8270 STARS List + 20 TICs
Historic Cyanide Room - Interior Buildin	ng A
BH48 (2-4 ft. bgs)	8260 TCL, 8270 TCL, 6010/7000, 8082
BH49 (0-2 ft. bgs)	8260 TCL, 8270 TCL, 6010/7000, 8082
Historic Use - Accessible Interior Areas	
BH51 (0-2 ft. bgs)	8260 TCL, 8270 TCL, 6010/7000, 8082
BH52 (0-2 ft. bgs)	8260 TCL, 8270 TCL, 6010/7000, 8082
BH53 (0-2 ft. bgs)	8260 TCL, 8270 TCL, 6010/7000, 8082
BH54 (1-3 ft. bgs)	8260 TCL, 8270 TCL, 6010/7000, 8082
BH55 (0-2 ft. bgs)	8260 TCL, 8270 TCL, 6010/7000, 8082
BH56 (0-2 ft. bgs)	8260 TCL, 8270 TCL, 6010/7000, 8082
D. 104 / D. Z. 11. 120/	1 0200 102, 0210 102, 0010/1000, 0002



Mr. Gerald Stay - Page 4 September 8, 2004

Results of Field Investigation

Fifty-six boreholes (BH1 through BH56) were completed in accessible areas inside and outside of the subject structures between August 9, 2004 and August 16, 2004 (See Figure 2). A total of 245 soil samples were collected for geologic description. The boreholes generally encountered miscellaneous wood, sandy gravel, silty sand, and gravelly sand fill materials to depths of approximately 6.5 ft. bgs. Apparent native soils consisting of lean or silty clay were generally noted beneath the fill material. Groundwater was encountered in 12 of the 56 test borings between approximately 1.5 and 10 ft. bgs. Equipment refusal was encountered in BH35 (4 ft. bgs), BH36 (3 ft. bgs) and BH54 (8 ft. bgs). The cause(s) of the equipment refusal could not be determined.

PID measurements were above total ambient air background VOC measurements (i.e., 0.0 parts per million, ppm) in 230 of the 245 samples collected. These elevated concentrations ranged from 0.7 parts per million (ppm) to 668 ppm (BH10, 2-4 ft. bgs). Petroleum-type odors were detected in BH3 (~3-5 ft. bgs), BH10 (~2-4 ft. bgs), BH13 (~2-6 ft. bgs), BH17 (~5-8 ft. bgs), BH19 (~5-8 ft. bgs), BH45 (~0.5-12 ft. bgs), and BH46 (~0-12 ft. bgs). In LCS experience, the PID measurements and field observations suggest some petroleum impact.

As discussed above, due to limited access to an area between Building G and Building H, test borings proximate to a suspected UST was not possible. However, LCS did confirm that one approximate 1,000 gallon UST is present. According to personnel at the subject property, the UST is out-of-service.

Refer to the attached subsurface logs for soil classification for each sample interval, field observations and PID measurements.

Analytical Testing Results

The soil samples collected and analyzed detected the analytes listed on the analytical summary tables attached to this report. The respective concentrations as well as applicable regulatory guidance values are also listed for comparison. Analytes not detected are not shown.



Mr. Gerald Stay - Page 5 September 8, 2004

Conclusion

Based on the results of the investigation completed, impacted soils (i.e., soils exhibiting petroleum-type odors and/or resulted in elevated analytical results for specific analytes) were discovered in various locations on-site, as summarized below.

Boreholes	Petroleum-type odors	Analytical Testing Performed	Analytical Results above STARS	Analytical Results above TAGM
ВН3	~3-5 ft. bgs	VOCs	None	None
BH5	None	VOCs, SVOCs, RCRA Metals	None	SVOCS, RCRA Metals
вн6	None	VOCs, SVOCs, RCRA Metals	None	SVOCs, RCRA Metals
BH10	~2-4 ft. bgs	VOCs, SVOCs	SVOCs	None
BH13	~2-6 ft. bgs	VOCs	None	None
BH17	~5-8 ft. bgs	VOCs, SVOCs	ŞVOCs	None
BH19	~5-8 ft. bgs	VOCs	None	None
BH21	None	VOCs, SVOCs, RCRA Metals, PCBs	None	RCRA Metals
BH22	None	VOCs, SVOCs, RCRA Metals, PCBs	None	RCRA Metals
BH23	None	VOCs, SVOCs, RCRA Metals, PCBs	None	RCRA Metals
BH24	None	VOCs, SVOCs, RCRA Metals, PCBs	None	SVOCs, RCRA Metals
BH25	None	VOCs, SVOCs, RCRA Metals, PCBs	None	SVOCs, RCRA Metals
BH26	None	VOCs, SVOCs, RCRA Metals, PCBs	None	SVOCs, RCRA Metals
BH27	None	VOCs, SVOCs, RCRA Metals	None	SVOCs
BH28	None	VOCs, SVOCs, RCRA Metals, PCBs	None	RCRA Metals
BH29	None	VOCs, SVOCs, RCRA Metals, PCBs	None	RCRA Metals
BH30	None	VOCs, SVOCs, RCRA Metals, PCBs	None	RCRA Metals
BH33	None	VOCs, SVOCs, RCRA Metals, PCBs	None	SVOCs, RCRA Metals
BH35	None	VOCs, SVOCs, RCRA Metals, PCBs	SVOCs	SVOCs
BH45	-0.5-12	VOCs, SVOCs	None	None
BH46	~0-12 ft. bgs	VOCs, SVOCs	VOCs, SVOCs	None
BH49	None	VOCs, SVOCs, RCRA Metals, PCBs	None	SVOCs, RCRA Metals
BH51	None	VOCs, SVOCs, RCRA Metals, PCBs	None	RCRA Metals
BH53	None	VOCs, SVOCs, RCRA Metals, PCBs	None	RCRA Metals
BH55	None	VOCs, SVOCs, RCRA Metals, PCBs	None	SVOCs
BH56	None	VOCs, SVOCs, RCRA Metals, PCBs	None	SVOCs
BH57	None	VOCs, SVOCs, RCRA Metals, PCBs	None	RCRA Metals

With the exception of apparent petroleum-impact identified proximate to former UST locations, most of the impact identified cannot be linked to specific sources of contamination. Rather it appears that historic operations resulted in what are likely localized areas of impact. Such impact is common for industrial properties with similar historical uses.

This study is subject to the limitations located within the appendix.



Mr. Gerald Stay - Page 6 September 8, 2004

Recommendations

The UST located between Building G and Building H should be properly removed or closed-in-place and appropriate remedial action completed if impacted soils are encountered. In addition, a copy of this report should be provided to the NYSDEC for their review. If further investigation or remediation is required by the NYSDEC, LCS can provide a cost estimate to provide that work.

As with any property, if impacted soils are encountered during intrusive work (i.e., site redevelopment, utility work, etc.), such should be handled properly.

Thank you for allowing LCS to service your environmental needs. If you have any questions or require additional information, please do not hesitate to call our office.

Sincerely,

Jeffrey M. Rowley

Geologist

Reviewed by:

Douglas B. Reid

VP, Environmental Services Environmental Scientist

Attachments

Environmental and Real Estate Consultants

ANALYTICAL RESULTS SUMMARY TABLES

Soil Results-STARS SVOCs Great Arrow Complex 177-255 Great Arrow Drive Buffalo, New York

	or Solicy rec. Soli Cleditup Objectives NYSDEC STARS Memo #1 Guidance Values Guide	UGIKG						MDL 0.04							-			non'i		0001		חתם
		44	· · · · · · · · · · · · · · · · · · ·	1.080		DOU'DE DOC'T		4,830 224 or MDI		4,160 220 or MD			e se	920	· ·		-		10 100			
PHZE (0.2) PHZE	011211001	10/2004 0		2	357	, t	0.7	- - - - -	- 1	0.77	348	S 500 F		8	40	2,070	169	299	1.610	1 730	1077.0	۵,115
BH17 (6-8) BH45 (10-12) B	8/13/2004	1		2	S	2	9 9	2 2	9 9	₹	2	C) 5	2 5	2	2	2	Q	2	Ş	235.1	2007
	8/9/2004	t no zion		2	S	Ş		376	200	ಿತ್ರಗಳ	291	299	422	377	00	636	Q	220	261	601	20.5	20.0
BH10 (2-4	8/9/2004		,	385	388	286	MUZA.	Š			948	4990	TRAD		ב ב	2,610	243	799	1.540	3.030	22,322.1	
BH8 (0-4)	8/9/2004		4.	2	2	QN	Ş	2	2	2	<u>0</u>	2	C	2	2 !	2	2	2	2	Q	S	
BH7 (4-6)	8/9/2004		A.F.D.	2	2	Q.	S	S	Ş	2 :	2	S	S	2	9 9	2	2	2	2	2	Q	
Sample ID: BH7 (4-6) BH8 (0-4) BH10 (2-4)	Sample Date: 8/9/2004		02001	20/20	UG/KG	UG/KG	UG/KG	UG/KG	IIC/KG		CGAGG	ng/kg	UG/KG	IIG/KG	0 0 0	28/20	newe	UG/KG	UGIKG	ne/ke	UG/KG	THE PERSON NAMED IN COLUMN TWO IS NOT THE OWNER.
		SVOCs-STARS	Nanthalana		Anthracene	Acenaphthene	Benzo (a) anthracene	Benzo (b) fluoranthene	Benzo (k) fluoranthene	Donate (a. b. 3)	perizo (g,n,i) perylene	Benzo (a) pyrene	chrysene	Dibenz (a.h) anthracene	Buoraphoon		nuorene	Indeno (1,2,3-cd) pyrene	phenanthrene	pyrene	TICS	

Shading indicates analytes that were detected above the New York Stae Department of Environmental Conservation (NYSDEC) Recommended Soil Cleanup Guide Bold indicates analytes that were detected above the NYSDEC STARS Memo Guide TICS = Tentatively Identified Compounds

NL = Not Listed

***As per TAGM 4046 individual and sum of VOCs not listed (tentatively identified compounds (TICs)) must be less than or equal to 10,000 ug/kg J = This value is estimated NL = Not Listed

Soil Results- RCRA Metals Great Arrow Complex 177-255 Great Arrow Avenue Buffalo, New York

						Charles and the Committee of the Committ			THE REAL PROPERTY AND PERSONS ASSESSMENT							
	Sample ID:	BH5 (0-4)	BH6 (4-6)	BH21 (2-4)	BH22 (6-8)	BH23 (0-2)	BH24 (0-2)	BH25 (2-4)		BH28 (0-2)	RH29 (0-2)		RH35 (0.2)	טאשפ נט עו	Esctorn 110A	Docommond
	Sample Date:	A0001018	A0001010	10001110	0744 10004	, , , , , , , ,			1	1 2 2		(3-0) 00:10	(3-0) 00:10	_	במפונים: ספט	lioc papuauliuopau
	comple Date.	10000	1007/00		0/11/2004	8/11/2004	8/11/2004			8/11/2004	8/11/2004		8/11/2004	B/12/2004	Backoround Levels	Clashin Chiactives
Metals	Unils										1		1000		See Store Care	cicarian Colectives
111111111111111111111111111111111111111		3000 DT 4700/2507				S 100 100 100 100 100 100 100 100 100 10		A Company of the contract of								
Mercury	mg/kg	9304	0.181	0.039	2	0.056	0.142	0.147	AUE O	0.033	S	0.025	0.055	2900	0.000.0	**
Silver	and the	_	Ş	9	-		500000000000000000000000000000000000000				?	2	3	2000	2.001-0.2	- -
	mg/kg	2	5	2	2	2	2	2	2	2	2	2	2	S	٩N	300
Arsenic	mg/kg	o:	17.8	5.25	4 42	4 33		40.0		20.7	,			Contract and the second		
- C	,				1	3		2		£6.4	7.10	4.74	٠. د.	797	3-12	7.5 or SB
ממומונו	mg/kg	701	282	106	120	134	144	137	30	163	201	158	78.5	55.7	45.600	200 2000
Cadmirim	o Nom	Ş	ç	Ş	2	2				! !		3	2	3	200-5	900 00 000
	fulfilm	2	2	2	2	2	2	2	2	2	2	2	2	- 505	0.1-1	40.70
Chromium	mg/kg	32.8	7.1	23.9	23.5	28.5	48.8	20.0	6 78	24.6	25.0			•		
7000	1 1	5		- COLLEGE CONTRACTOR							3	2.0	-	7.0	-04-c-l	10 01 28
רפמת	Dx/Su	074	383	12.3	10.6	17.1	378	617	422	13.3	2	146	14.2	4	:	::00
Selenina	morke	Ş	S	cu u							The second second	CANAL CONTRACTOR		Manager of the Control of the Contro		3
	200			20.0		3.00	0.00	0.11 L	200		6.93	6.94	2.64	22.8	0.1-3.9	2 or SB
Bold indicates analytes above New York State Department of Environmental Conservation Guidance Value	ork State Depart	nent of Environn	nental Conservati	on Guidance Val	, e			SANGER OF SHARE STREET, SANGER	makai ma	manuscum minusian di dalam						

Shaded indicates analytes above Eastern USA Background Concentrations

THE REAL PROPERTY AND PERSONS ASSESSED.	Charles and the second						S. Santonian Communication of the Communication of	COMPANY CONTRACTOR COMPANY CONTRACTOR								
	Sample ID:	H36 (4-8)	-	BH38 (4-6)	BH42 (2-4)	BH43 (2-4)	BH48 (2-4)	BH49 (0-2)	BH51 (0-2)	BH52 (0-2)	BH53 (0-2)	BH54 (1-3)	BH55 (0-2)	BH56 (0-2)	Eastern USA	Recommended
	Sample Date: {	8/12/2004	8/12/2004	8/12/2004	8/12/2004	8/12/2004	8/13/2004	8/13/2004	8/16/2004	8/16/2004	8/16/2004	8/16/2004	8/16/2004		Rackoround Lavele	Clean Object
Metals	Units										100				cased punctions	oleanup Object
Mercury	mg/kg	0,141	0.036	0.024	0.041	0.029	0.017	0.017	S	Q	0.084	0.056	0.051	QN	0.001-0.2	0.1
Silver	mg/kg	Q	2		2	2	2	õ	1.58	2.07	0.608	S	1.43	2	NA N	SS
Arsenic	mg/kg	70.9	5.07	24.1	2.51	2.92	5.2	4.5	2	2.5	4.89	4.55	2.47	3.46	3-12*	7.5 or SB
Barium	mg/kg	30.1	100	94.7	7.97	92	99.3	125	278	106	259	115	169	55.4	15-600	300 or SB
Cadmium	mg/kg	Q	Q	욷	Q	2	S	Q.	Q.	2	Q	ð	Q	S	0.1-1	1 or SB
Chromium	mg/kg	11.4	21.3	19.9	17.3	19.4	20	8.65	6.79	7.64	19.7	8.12	11.6	ž	1.5-40	10 or SB
Lead	mg/kg	1	111	22.5	13.6	12.5	10.9	176	g	14.8	30.4	17.5	18.3	32.4	:	SB:
Seleņium	mg/kg	5.13	4.44	6,72	3,26	3.28	3.02	4.91	3,86	2.01	4.51	3.55	3.34	2	0.1-3.9	2 or SB

Bold indicates analytes above Easten USA Background Concentrations

- Shaded indicates analytes above Easten USA Background Concentrations

- New York State Background

- Background levels for lead vary widely. Average levels in undeveloped, rural areas may range from 4-61 ppm. Average background levels for lead vary widely. Average levels in undeveloped, rural areas may range from 4-61 ppm. Average background levels for lead vary widely.

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SITE LOCATION MAP

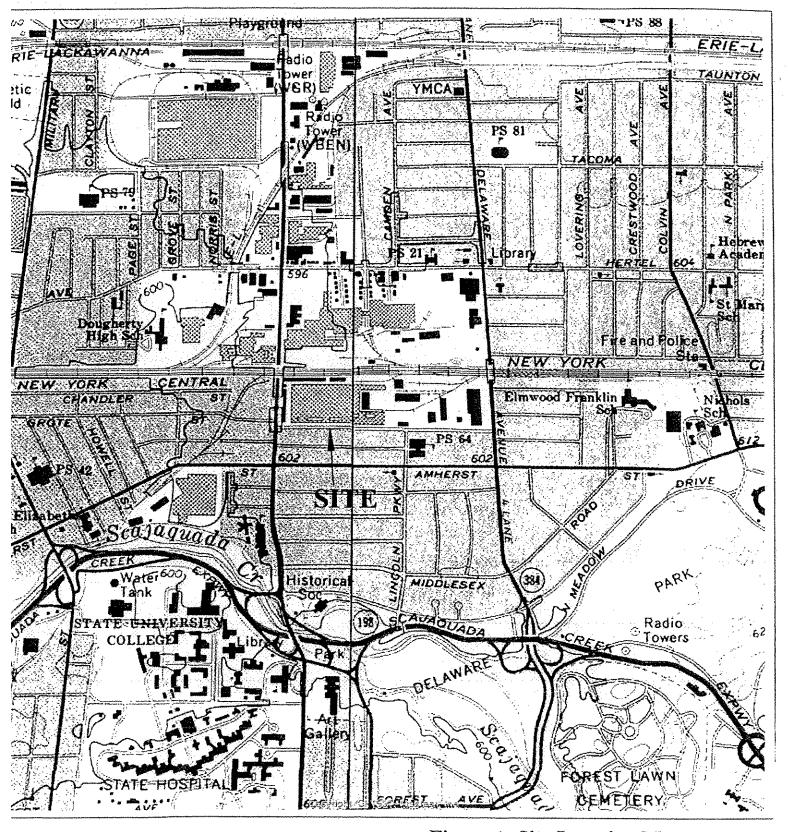




Figure 1- Site Location Map Great Arrow Complex 177-255 Great Arrow Avenue Buffalo, New York LCS Project No. 04B1552.22 Environmental and Real Estate Consultants

SUBSURFACE INVESTIGATION MAP

Soil Results- RCRA Metals Great Arrow Complex 177-255 Great Arrow Avenue Buffalo, New York

ND 0.056 0.742 ND ND ND ND 124 120 134 124 120 134 144 ND ND 146 17.1 378 5.14 5.06 3.20 0.017 ND ND N	8/11/2004 8/11/2004	2) BH28 (0-2) 4 8/11/2004	BH29 (0-2) BH	8H33 (0-2) BH3	BH35 (0-2) BH3 8/11/2004 8/1	BH36 (2-4) Eastern USA		Recommended Soil
ND 0.056 0.142 4.42 4.33 12.4 120 1.34 144 120 1.34 144 10.6 1.34 144 10.6 1.71 3.78 3.14 5.06 6.06(-4) 142(2-4) BH43 (2-4) BH48 (2-4) 143(2-4) BH43 (2-4) BH43 (2-4) BH43 (2-4) 143(2-4) BH43 (2-4) BH43 (2-4	-	and the second			н			Ciedalup Objectives
120 134 124 144 150 150 150 150 150 150 150 150 150 150	0.147 0.308	0.033	Q			0.063 0.001-0.	0,2	0.1
120 134 144 ND ND ND ND 23.5 26.5 16.6 10.6 17.1 378 57.4 57.68 8.13.2004 0.041 0.029 0.017 ND N	100	2	2					SB
ND ND ND 174 174 174 174 175 175 175 175 175 175 175 175 175 175	10.0	4.99	2.18	*******	4.3		•	7.5 or SB
23.5 26.5 16.6 17.1 378 378 378 378 378 378 378 378 378 378		762	ę i	158		55.7 15-600	 2	300 or SB
10.6 17.1 378 \$14	- 6	2	2			350 350		1 or SB
5.14 5.06 6.006 H42 (2-4) BH43 (2-4) BH48 (2-4) H722004 B112/2004 B13/2004 0.041 0.029 0.017 ND ND ND 2.51 2.92 5.2 76.7 95 99.3 ND ND ND ND ND ND 17.3 19.4 5.2 14.6 10.9 3.26 3.28 3.28			6.03 	33 万 克) (1) (2) (3)	***	÷.	10 or SB
H42 (2-4) BH43 (2-4) BH48 (2-4) Y12/2004 B112/2004 B13/2004 0.041 0.029 0.017 ND ND ND 2.51 2.92 5.2 76.7 95 99.3 ND ND ND ND ND ND 17.3 19.4 20.0 17.3 19.4 20.0 17.3 19.4 20.0 17.3 19.4 20.0 17.3 19.4 20.0 17.3 19.4 20.0	1.	2.5	2	46	14.2	:		SB
142 (2-4) BH43 (2-4) BH48 (2-4) BH48 (2-4) BH42 (2-4) BH43 (2-4) B						0.1-3.9	6,0	2 or SB
142 (2-4) BH43 (2-4) B							***************************************	***************************************
0.041 0.029 0.017 ND	_	2) BH52 (0-2)	<u> </u>	BH54 (1-3) BH5	BH55 (0-2) BH5	BH56 (0-2) Eastern USA	l	Recommended Soil
0.041 0.029 0.017 ND ND ND 2.51 2.92 5.2 5.2 76.7 95 99.3 ND	8/13/2004 8/16/2004	4 8/16/2004	8/16/2004 8/	8/16/2004 8/16	8/16/2004 8/16	8/16/2004 Background Levels		Cleanup Objectives
0.041 0.029 0.017 0.029 0.017 0.029 0.017 0.029 0.017 0.029 0.017 0.029								
ND N		8	0.084	0.056	0.051	CV CV	6.5	, U
2.51 2.92 5.2 76.7 95 99.3 77.3 NO ND		2.07	0.608			CN	4	5 5
76.7 95 99.3 ND ND ND 17.3 19.4 20. 13.6 12.5 10.8 3.26 3.28 3.02	4,5 ND	2.5	4.89	4.55	2.47		•	7.5 or SB
ND ND ND 17.3 19.4 20. 12.6 10.9 3.26 3.26 3.26		106	259			55,4 15-600	 8	300 or SB
17.3 19.4 20 13.6 12.5 10.9 3.76 3.28 3.02		2	2	Š				1 or SB
3.26 12.5 10.9		7.64	19.7	50° 5		1,5-40	0	10.or SB
3.26 3.28 3.02	176 M	4.8	30.4	17.5				: :::::::::::::::::::::::::::::::::::::
1000 Hithelps analyse New York Carle Department of Franciscommunical Construction Construction Construction		2.01	4.51			ND 0,1-3,9	o,	2 or \$B
Shaded indicates analytes above Eastern USA Background Centerfraints								
= New York State Background								
"EBatkground lavels for lead vary wideb. Average levels in unideveloped, man are may range from 4.61 nm. Automose Assistance in minimal launch in minimal la								

Environmental and Real Estate Consultants

PROJEC	CT/ LOCATI	ON:	177.8	255 Great Arr	ow Ave	nue, Buffalo, l	New York	PROJECT N	0.	04B1552.22			
CLIENT:			Nes	er, Ferber & D	iGiacon	no, LLP		WELL/BORIN	NG No.	BH1			
DATE S	TARTED:	8/9	0/04	DATE COM	MPLETE	D:	8/9/04	RECORDED	BY:	JMR			
GROUN	DWATER D	EPTH WH	IILE DR	ILLING:		NA Linux	AFTER COM	PLETION:		NA NA			
							DRILLER:			ii ii			
DRILL S	ZE/TYPE:		Macr	o-core	_ SAM	PLE HAMME	R: WEIGHT	NA	FALL	NA			
	T 	1	F			1	<u></u>						
Sample No.	PID/HNu Reading (ppm)	Depth (Feet)	Туре	Blows/6"	N	Recovery (Inches)		Material Classif Soil Classification		escription ual Manual Method)			
1	16.2	. 0-2	υ	4	-	12	0-0.4ft: Concr	ete					
2	19.8	2-4	U	- .	_	12	0.4-3ft: Brown sandy clayey silt (low plasticity, moist)						
3	19.1	4-6	U	-	-	20	3-10ft: Brown silty clay (low plasticity, stiff, moist)						
					-				,,	,			
4	14.9	6-8	U	-	-	20] 10-12ft: Brown	n clay (high plast	ticity, soft, mo	oist)			
5	16.5	8-10	U	*	-	24	<u> </u>			271.00			
6	19.7	10-12	U	-	•	24	<u> </u>		•				
				···									
									••				
							ļ						

										THE PROPERTY OF THE PROPERTY O			
NOTES	NA = Not Ar	policable					Fill to ~3 ft. bgs						
	ft. bgs = fee		und surfac	ce			No suspect odd						
		*SS - SI	PLIT-SPO	ON SAMPLE	U - UN	DISTURBED	TUBE P-PI	STON TUBE	C - CORE				

	L	CS I	nc.			SU	JBSURFACE LOG
PROJEC	CT/ LOCATI	ON:	· 177 8	& 255 Great Ar	row Ave	nue, Buffalo,	New York PROJECT No. 04B1552:22
łi							WELL/BORING No. BH2
DATE S	TARTED:	8/	9/04	DATE CO	MPLET	ED:	8/9/04 RECORDED BY: JMR
GROUN	DWATER D	EPTH W	HILE DE	RILLING:		NA	AFTER COMPLETION: NA NA
WEATH	ER:	~70F, Sur	nny	DRILL RIG:	(Geoprobe	DRILLER: BMS Drilling
DRILL S	IZE/TYPE:		Macı	ro-core	SAM	IPLE HAMME	ER: WEIGHT NA FALL NA
Sample No.	PID/HNu Reading (ppm)	Depth (Feet)	Type	Blows/6"	N	Recovery (Inches)	Material Classification and Description (Unified Soil Classification System-Visual Manual Method)
1	22.9	0-2	U	-	-	12	0-0.4ft: Concrete
2	25.6	2-4	U	-	-	12	0.4-3ft: Brown gravelly sand (coarse, medium, fine, medium dense, moist)
3	33.8	4-6	U	-	-	12	
							3-4ft: Gray gravelly sand (coarse, medium, fine, medium dense,
4	6.7	6-8	U			12	moist)
5	7.2	8-10	U	-	-	24	4-6ft: Brown silty clayey sand (fine, medium dense, moist)
6	9.7	10-12	U	*	-	24	6-12ft: Brown silty clay (moderate plasticity, soft, moist)

Fill to -3 ft. bgs

ft. bgs = feet below ground surface

No suspect odors detected

*SS - SPLIT-SPOON SAMPLE

U - UNDISTURBED TUBE

P - PISTON TUBE

404-10-119-126	_			
And was in the city	ı		١	4 0
Capital page 125 cm.	-			11.
CERMINE TO A		/ 3	,	1.

PROJE	CT/ LOCATI	ON: - <u></u>	-177 8	k 255 Great Arr	ow Aver	nue, Buffalo, I	New York 🕟 🔄	PROJECT N	Oa ()	04B1552.22		
CLIENT	·		Nes	per, Ferber & D	iGiacom	no, LLP		WELL/BORII	NG No.	ВН3		
				DATE COM				in the second second	Maria Colonia	The state of the s		
GROUN	IDWATER D	EPTH WI	HILE DR	RILLING:		NA	AFTER COM	PLETION:		NA .		
				DRILL RIG:								
				o-core						NA		
	T	<u> </u>	T			I	T					
Sample No.	PID/HNu Reading (ppm)	Depth (Feet)	Type	Blows/6"	N	Recovery (Inches)	(Unified S	Material Classii Soil Classificatio		Description sual Manual Method)		
1	7.1	0-4	U	-	-	10	0-0.4ft: Concre	ete				
	<u> </u>						-					
2	26.9	4-6	U	-		12	2 0.4-3ft: Brown gravelly sand (coarse, medium, fine, med moist)					
3	16.8	6-8	U	_		12	Illoist)					
					clay (moderate	plasticity, so	ft, moist)					
4	18.1	8-10	Ų	-	-	20			, ,,			
				·						-		
5	6.8	10-12	U	-	-	20						
								÷				
								,				
						·····						
						, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,						
NOTES	NA = Not Ap	plicable					Fill to -3 ft. bgs					
	ft. bgs = feet	below grou	und surfa	ce			Petroleum-type	odors detected	@ ~3-5 ft. b	gs		
	······································	*SS - SE	PLIT-SPC	OON SAMPLE	11-110	DISTURBED.	TURE P.PS	STON TURE	C - CORE			

		<u> </u>								
		CS I	nc.			SU	BSUR	FACI	ELO	G
PŖOJE	CT/ LOCAT	ION:	177 8	§ 255 Great An	row Ave	nue, Buffalo,	New York	PROJECT N	No. a sa sa	04B1552.22
CLIENT:			Nes	per, Ferber & D	OiGiacor	no, LLP		WELL/BOR	NG.No.	BH4
										JMR
										NA .
WEATH	ER:	~70F, Su	ппу	DRILL RIG:	(Geoprobe	DRILLER:		BMS E	Drilling
							R: WEIGHT			
			T							
Sample No.	PID/HNu Reading	Depth (Feet)	Туре	Blows/6"	N	Recovery	(1.25.14	Material Class		
	(ppm)		<u> </u>			(Inches)	(Unified 8	Soil Classification	on System-Vi	sual Manual Method)
1	13.1	0-4	U		-	10	0-0.4ft: Concr	ete		
		ļ			ļ					
2	11.0	4-6	U	•	<u> </u>	12	0.4-3ft: Light b	rown gravelly s	and (coarse,	medium, fine, medium
			ļ.,,		<u> </u>		dense, moist)	•		
3	7.1	6-8	U	-	-	12	1050 50			
4	7.9	8-10	U	<i>"</i>		20	3-ort: Black gr	avelly sand (co	arse, mediun	n dense, moist)
						20	5-12ft: Brown	silty clay (mode	erate to bigh r	plasticity, stiff to soft,
5	8.5	10-12	U	-	-	20	moist)		rate to riigir,	sociality, can to sort
							-			
						·				

Fill to ~3 ft. bgs

ft. bgs = feet below ground surface

No suspect odors detected

*SS - SPLIT-SPOON SAMPLE

U - UNDISTURBED TUBE

P - PISTON TUBE

LCS Inc. SUBSURFACE LOG PROJECT/ LOCATION: 177 & 255 Great Arrow Avenue, Buffald, New York PROJECT No. 04B1552.22 CLIENT: Nesper, Ferber & DiGiacomo, LLP WELL/BORING No. BH5 DATE STARTED: 8/9/04 DATE COMPLETED: 8/9/04 RECORDED BY: JMR GROUNDWATER DEPTH WHILE DRILLING: ~5 ft. bgs AFTER COMPLETION: WEATHER: ~70F, Sunny DRILL RIG: Geoprobe DRILLER: BMS Drilling DRILL SIZE/TYPE: Macro-core SAMPLE HAMMER: WEIGHT NA FALL Depth PID/HNu Type Blows/6" N Sample Recovery Material Classification and Description No. Reading (Feet) (Unified Soil Classification System-Visual Manual Method) (Inches) (ppm) 0-4 16.5 0-2ft: Brown gravelly sand (coarse, medium, fine, medium dense, 1 moist) 4-6 12.2 2-6ft: Gray gravelly silty clay (high plasticity, soft, moist to wet) 7.0 6-8 10 6-8ft: Brown silty clay (moderate plasticity, stiff, wet) 3

NOTES NA = Not Applicable

Fill to ~2 ft. bgs

ft. bgs = feet below ground surface

No suspect odors detected

*SS - SPLIT-SPOON SAMPLE U - UNDISTURBED TUBE P - PISTON TUBE C - CORE

												
PROJE	CT/LOCATI	ION:	177 8	3 255 Great Arr	row Ave	nue, Buffalo,	ew York PROJECT No.	04B1552.22				
						•	WELL/BORING No.					
1							3/9/04 RECORDED BY:					
GROUN	NDWATER C	EPTH W	HILE DF	RILLING:	~5	ft. bgs	AFTER COMPLETION:	NA NA				
WEATH	IER:	~70F, Sur	าทy	DRILL RIG:	G	Seoprobe	DRILLER: BM					
l							: WEIGHT NA FALL					
; ;**		Т	T	T	T	T						
Sample No.	PID/HNu Reading (ppm)	Depth (Feet)	Туре	Blows/6"	N	Recovery (Inches)	Material Classification a (Unified Soil Classification System					
1	7.0	0-4	U	-	<u> </u>	10	0-2ft: Brown gravelly sand (coarse, me	dium, fine, medium dense,				
					ļ		moist)					
2	7.5	4-6	U	-	-	12	2-4ft: Brown gravelly sand (fine, mediu	m dense, moist)				
3	6.2	6-8	U		-	12	to wet) 6-7ft: Black sandy gravel (coarse, angular, loose, wet)					
				:								
·						·						
							7-8ft: Brown silty clay (high plasticity, s	oft, wet)				
						<u>unus</u>						
								:				
NOTES	NA = Not App	plicable					Fill to -4 ft. bgs					
	ft. bgs = feet	below grou	nd surfac	Эе			lo suspect odors detected					
		*SS - SP	LIT-SPO	ON SAMPLE	U - UN	DISTURBED T	JBE P - PISTON TUBE C - COI	RE				

Color Strategical	T	CS	In	c
ACCES, ASS, (ACCESS) 1.				•

ł						*. **	New York		to topic to the			
							8/9/04					
							AFTER COM					
							DRILLER:			illing		
	***************************************						- PKIZZZKI R: WEIGHT			NA NA		
Dr.ii.ee c	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1					T				, 17.		
Sample No.	PID/HNu Reading (ppm)	Depth (Feet)	Туре	Blows/6"	N	Recovery (Inches)	1	Material Class		escription ual Manual Method)		
1	4.8	0-2	U	-	-	12	0-0.4ft: Aspha	lt				
2	9.5	2-4	U		_	12	0.4-1ft: Black	sandy gravel (c	oarse, angular	, loose, moist)		
3	9.0	4-6	U	-	-	20	1-4ft: Brown silty gravelly sand (coarse, medium, fine, medium dense, moist)					
4	4.9	6-8	U	-		20	4-12ft: Brown clay (low plasticity, stiff, moist)					
5	4.0	8-10	U	-		24						
6 ·	1.2	10-12	U		•	24						
							The state of the s					
						·						
						· · · · · · · · · · · · · · · · · · ·						
							·					
							<u> </u>					
NOTES	NA = Not Ap	•					Fill to ~4 ft. bgs					
	ft. bgs = feet	below grou	ınd surfa	ce			No suspect odo	rs detected				
		*SS - SF	LIT-SPC	OON SAMPLE	U - UN	DISTURBED 1	TUBE P - PIS	STON TUBE	C - CORE			

LCS Inc. SUBSURFACE LOG PROJECT/ LOCATION: 177 & 255 Great Arrow Avenue, Buffalo, New York PROJECT No. 04B1552.22 CLIENT: Nesper, Ferber & DiGiacomo, LLP WELL/BORING No. BH8 DATE STARTED: 8/9/04 DATE COMPLETED: 8/9/04 RECORDED BY: JMR GROUNDWATER DEPTH WHILE DRILLING: NA AFTER COMPLETION: WEATHER: ~70F, Sunny DRILL RIG: Geoprobe DRILLER: BMS Drilling DRILL SIZE/TYPE: Macro-core SAMPLE HAMMER: WEIGHT NA FALL . Sample PID/HNu Depth Type Blows/6" Ν Recovery Material Classification and Description No. (Feet) Reading (Unified Soil Classification System-Visual Manual Method) (Inches) (ppm) 25.2 0-4 0-0.4ft: Asphalt 1.3 12 0.4-1ft: Black sandy gravel (coarse, angular, loose, moist) 3 2.0 12 1-4ft: Brown silty gravelly sand (coarse, medium, fine, medium dense, moist) (red brick) 8-10 1.3 24 4-12ft: Brown clay (low plasticity, stiff, moist) 5 2.1 10-12 24

NOTES NA = Not Applicable

Fill to -4 ft. bgs

ft. bgs = feet below ground surface

No suspect odors detected

*SS - SPLIT-SPOON SAMPLE

U - UNDISTURBED TUBE P - PISTON TUBE

<u> </u>				LL CONFIDENCE CONTRACTOR						
PROJÉC	T/ LOCATI	ON:	177 &	255 Great Arri	ow Aver	nue, Buffalo, N	lew York	PROJECT N	lo, , <u></u>	04B1552,22
CLIENT:			Nesp	er, Ferber & D	iGiacom	ю, LLP		WELL/BORI	NG No.	вн9
DATE S	TARTED:	8/9	9/04	DATE CON	<i>I</i> PLETE	D:	8/9/04	RECORDE) BY:	JMR
GROUN	DWATER D	EPTH W	HILE DR	ILLING:		NA	AFTER COM	PLETION:	· · · · · · · · · · · · · · · · · · ·	NA
WEATH	ER:	-70F, Sur	nny	DRILL RIG:	G	Seoprobe	DRILLER:		BMS Dril	ling
DRILL S	IZE/TYPE:		Macro	o-core	SAM	PLE HAMMEI	R: WEIGHT	NA	FALL	NA
	1	T	1				1	<u></u>		
Sample No.	PID/HNu Reading	Depth (Feet)	Туре	Blows/6"	N	Recovery (Inches)	(Unified		ification and De	scription al Manual Method)
1	(ppm) 3.4	0-2	U		-	10	0-2ft: Black or	ravelly sand (co	arse, medium, i	îne, medium dense,
***************************************	0.4						moist)			·····
2	2.0	2-4	U		-	10	1	own sand (fine,	medium dense	moist)
<u></u>				***************************************						
3	3.2	4-6	U	_	-	12	3-12ft: Brown	clay (low plasti	city, stiff, moist)	
4	1.3	6-8	U	_		12				
4	1.3	0-0				15				
5	2.3	8-10	U	-	-	20				
6	1.9	10-12	U	<u>.</u>	-	20				
				· .						
							Y			
	,									
 										
······································										
NOTES	NA = Not A	oplicable					Fill to ~3 ft. bg	\$		
	ft. bgs = fee		und surfa	ice			No suspect od	ors detected		
		*SS - S	PLIT-SPO	DON SAMPLE	U - Ui	NDISTURBED	TUBE P-P	ISTON TUBE	C - CORE	

PROJEC	CT/ LOCATI	ON:	177 8	255 Great Arr	ow Aver	iue, Buffalo, N	New York	PROJECT N	lo.	04B1552.22
CLIENT:			Nesp	oer, Ferber & D	iGiacon	o, LLP		WELL/BORI	NG No.	BH10
DATE S	TARTED:	8/9	9/04	DATE COM	MPLETE	D:	8/9/04	RECORDED	BY:	JMR
GROUN	DWATER D	EPTH WI	TILE DR	RILLING:	~6	ft. bgs	AFTER COM	IPLETION:		NA
WEATH	ER:	-75F, Sur	iny	DRILL RIG:	G	eoprobe	DRILLER:		BMS D	rilling
DRILL S	IZE/TYPE:		Macr	o-core	SAM	PLE HAMME	R: WEIGHT	NA	FALL _	. NA
	T	ī —	T		T					
Sample No.	PID/HNu Reading (ppm)	Depth (Feet)	Туре	Blows/6"	N	Recovery (Inches)	(Unified (Material Classi Soil Classificatio		escription ual Manual Method)
11	5.2	0-2	U	*	-	20	0-2ft: Black gi	ravelly sand (co	arse, medium	, fine, medium dense,
							moist)			
2	668	2-4	U	*		20	2-4ft: Brown/g	gray sand (fine, i	medium dens	e, moist)
3	13.1	4-8	U			10	1-8ft: Gray sa	ndy orayel (coa	ree angular l	oose, moist to wet)
3	13,1	4-0				10	4-Git. Olay 3a	ridy graver (coa	ise, angular, i	oose, moist to wet)
4	7.4	8-10	U	<u></u>	-	24	8-12ft: Brown	silty clay (high	plasticity, soft	, moist)
							1			
5	4.3	10-12	U	-	-	24				
<u>,</u>										
					·					
					:					
							errene			
							·			
							очет по			
							Account of the control of the contro			
NOTES	NA = Not Ap	plicable					Fill to ~4 ft. bg	S		
	ft. bgs = fee	t below gro	und surfa	ice			Strong petroleu	m-type odors d	etected @ ~2	-4 ft. bgs
***************************************		*SS - SI	PLIT-SP	OON SAMPLE	U - U	DISTURBED	TUBE P-PI	STON TUBE	C - CORE	

PROJEC	CT/ LOCATI	ON:	177-8	255 Great Arr	ow Aver	nue, Buffalo, I	New York	PROJECT N	۱٥ _. .	04B1552.22	
CLIENT	•	1.445.134	Nesr	er, Ferber & D	iGiacon	no, LLP	·	WELL/BORI	NG No.	BH11	
DATE S	TARTED:	8/1	0/04	DATE COM	APLETE	:D:	8/10/04	RECORDE	BY:	JMR	
GROUN	DWATER D	EPTH W	HILE DR	ILLING:		NA	AFTER COM	PLETION:		NA	
WEATH	ER:	-75F, Sur	nny	DRILL RIG:	G	Seoprobe	DRILLER:		BMS Di	illing	
DRILL S	IZE/TYPE:		Macr	o-core	SAM	PLE HAMME	R: WEIGHT	NA	FALL	. NA	
	I	T	1		<u> </u>	1	T	<u> </u>			
Sample No.	PID/HNu Reading (ppm)	Depth (Feet)	Туре	Blows/6"	N	Recovery (Inches)		Material Class		escription ual Manual Method)	
1	19.2	0-2	U		-	12	0-0.4ft: Concre	ete			
2											
	70.0	4.0	U				moist)	449e b	(1 		
3 70.8 4-6 U 20 1-4ft: Brown sandy silty clay (no plasticity, stiff, moist)											
4	45.6	6-8	U	vi	-	20	4-12ft: Brown	silty clay (high	plasticity, soft,	moist)	
5	30.8	8-10	U	_	-	20	000				
6	20.8	10-12	υ	-	-	20			•		
				.		-					
			-	-		***************************************	-				
		<u>_</u> <u>_</u>			1			· · · · · · · · · · · · · · · · · · ·			
NOTES	NA = Not Ap ft. bgs = feet		ind surfa	· ·			Fill to ~4 ft. bgs No suspect odo				
	n. bys – reet				······································						
		*SS - SF	LIT-SPC	ON SAMPLE	U - UN	IDISTURBED	TUBE P-PI	STON TUBE	C - CORE		

PROJEC	CT/ LOCATI	ON:	177.8	255 Great Arr	ow Aver	iue, Buffalo, I	New York	PROJECT I	Vo. ::	04B1	552.22
CLIENT:		· 1 1.1 : 1	Nesr	er, Ferber & D	iGiacom	io, LLP 🔣	F 4 20	WELL/BOR	ING No.		BH12
DATE S	TARTED:						8/10/04				IMR
GROUN	DWATER D	EPTH W	HILE DR	ILLING:	1 1	NA	AFTER COM	PLETION:		, NA	L .
WEATH	ER:	-75F, Sur	ıny	DRILL RIG:	Geoprobe DRILLER:			, .	BMS D	Orilling	
DRILL S	IZE/TYPE:		Macr	o-core	SAMI	PLE HAMME	R: WEIGHT	NA	FALL	and t	NA
	T	T	$\overline{\Gamma}$		T	l	T				
Sample No.	PID/HNu Reading (ppm)	Depth (Feet)	Туре	Blows/6°	N	Recovery (Inches)					
1	9.2	0-2	U		-	12	0-0.4ft: Concre	ete			
2	40.9	2-4	U	-	-	12	0.4-1ft: Gray g	gravelly sand (d	coarse, mediu	m, fine, m	edium dense,
3	25.2	4-6	U	-		20	1-4ft: Brown s	andy silty clay	(no plasticity,	stiff, mois	it)
4	28.3	6-8	U		-	20	4-12ft: Brown	silty clay (high	plasticity, sof	t, moist)	
5	20.8	8-10	U	-	1	20					
6	22.1	10-12	U	-	-	20					
		:					The state of the s				
****						·					
							THE PROPERTY OF THE PROPERTY O				
NOTES	NA = Not Ap		manusa h		L		Fill to ~4 ft. bgs				
	ft. bgs = feel	below grou	und surfa	ce		·	No suspect odo	rs detected			
		*SS - SI	PLIT-SPC	OON SAMPLE	U - UN	IDISTURBED	TUBE P-PI	STON TUBE	C - CORE		

		-							`	04B1552.22
						***************************************	8/10/04		·	
				_				PLETION: NA		
					Geoprobe DRILLER:					
DRILL S	IZE/TYPE:		Macr	o-core	_ SAM	PLE HAMME	R: WEIGHT	NA NA	_ FALL	. NA
Sample No.	PID/HNu Reading (ppm)	Depth (Feet)	Туре	Blows/6"	N	Recovery (Inches)	-	Material Classif		Description sual Manual Method)
1	24.2	0-2	U	-	-	12	0-0.4ft: Concr	ete		
										
2	15.7	2-4	U	-	-	12	0-4-2ft: Brown	clayey silty san	d (fine, med	lium dense, moist)
3	19.3	4-6	U	_	_	20	2-12ft: Brown	silty clay (high p	lasticity sof	t moist)
	10.0	-, 0				20	Z IZK. BIOWIT	only day (ingit p	noodony, sol	, moisty
4	24.9	6-8	U	-	-	20				
5	21.6	8-10	U	*	-	20				·
	12.0	10-12	U		_	20				
6	12.0	10-12			_	20	and the same of th			
]			
								•		
							-			
	-									
NOTES	NA = Not Ap ft. bgs = feet		und surfa	ce			Fill to ~2 ft. bgs Moderate petrol		: @ ~2-8 ff	has
	12 090 1001			OON SAMPLE	11 = 118	IDISTURBED		STON TUBE	C - CORE	

<u></u>				····	-						
PROJEC	PROJECT/ LOCATION: 177 & 255 Great Arrow Avenue, Buffalo, New York PROJECT No. 04B1552.22										
CLIENT:			Nesp	oer, Ferber & D	iGiacom	o, LLP		WELL/BORI	NG No.	BH14	
DATE S	TARTED:	8/1	0/04	DATE CON	<i>I</i> PLETE	D:	8/10/04	RECORDE	BY:	JMR	
GROUN	DWATER D	EPTH W	HILE DR	RILLING:		NA , , ,	AFTER COM	PLETION:		NA	
WEATH	ER: <u>-</u>	-75F, Sur	ıny	DRILL RIG:	Geoprobe DRILLER:			BMS Drilling			
DRILL S	IZE/TYPE:		Macr	o-core	SAM	PLE HAMME	R: WEIGHT	NA	FALL	NA	
	1	r 	1	1	T	<u> </u>	T 				
Sample No.	PID/HNu Reading	Depth (Feet)	Type	Blows/6"	N	Recovery		Material Class			
140.	(ppm)	(1 001)				(Inches)	(Unified s	Soil Classification	on System-Vi	sual Manual Method)	
1	6.8	0-4	U	-	-	10	0-0.4ft: Concr	ete			
2 11.2 4-6 U 12 0.4-3ft: Brown gravelly sand (coarse, medium, fine, medium									um, fine, medium dense,		
	10.0		.,		·		moist)				
3	13.0	6-8	U	*	-	20	3-dff: Gray or:	avelly sand (co	orea madium	, fine, medium dense,	
4	7,4	8-10	υ		-	24	moist)	averry serie (cor	arse, mediani	, mie, median dense,	
5	24.9	10-12	U		-	24	4-6ft: Brown s	silty clayey sand	d (fine, mediu	m dense, moist)	
				·			6-12ft: Brown	silty clay (mod	erate plasticit	y, soft, moist)	
				·····			1				
							+				

					··						
							1				
							_				
							1				
NOTES	NA = Not Ap	plicable					Fill to -4 ft. bgs	s .			
	ft. bgs = fee	t below gro	und surfa	ice			No suspect odd	ors detected			
	*SS - SPLIT-SPOON SAMPLE U - UNDISTURBED TUBE P - PISTON TUBE C - CORE										

PROJEC	T/ LOCATIO		177 &	255 Great Arr	ow Aver	rue, Buffalo, I	New York PROJECT No. 04B1552.22
CLIENT:) Branch	Nesp	er, Ferber & D	iGiacom	no, LLP	WELL/BORING No. BH15
DATE ST	rarted:	8/1	0/04	DATE CON	IPLETE	:D:	B/10/04 RECORDED BY: JMR
GROUNI	DWATER D	EPTH W	ILE DR	ILLING:		NA	AFTER COMPLETION: NA
WEATH	ER:	-75F, Sur	iny	DRILL RIG:	G	Seoprobe	DRILLER: BMS Drilling
DRILL S	IZE/TYPE:		Маст	o-core	SAM	PLE HAMME	R: WEIGHT NA FALL NA
		I	T		1	<u> </u>	
Sample No.	PID/HNu Reading (ppm)	Depth (Feet)	Туре	Blows/6"	N	Recovery (Inches)	Material Classification and Description (Unified Soil Classification System-Visual Manual Method)
1	25.2	0-2	U			10	0-0.4ft: Concrete
2	13.0	2-4	U	-	4	10	0.4-1ft: Gray gravelly sand (coarse, medium, fine, medium dense, moist)
3	15.8	4-6	U		*	20	1-4ft: Brown sandy silty clay (no plasticity, very stiff, moist)
4	13.8	6-8	U	-	<u>.</u>	20	4-12ft: Brown silty clay (high plasticity, soft, moist)
5	10.5	8-10	U		-	24	
6	13.4	10-12	U	•	-	24	
<u></u>						<u>,,</u>	
<u></u>							
NOTES	NA = Not A			<u> </u>		<u> </u>	Fill to ~4 ft. bgs
	ft. bgs = fee	t below gro	und surfa	ce			No suspect odors detected
		*SS - S	PLIT-SPO	OON SAMPLE	U - Ul	NDISTURBED	TUBE P - PISTON TUBE C - CORE

									 	
PROJEC	T/ LÖCATI	ON:	177 8	255 Great Arr	ow Aver	iue, Buffalo, I	New York	PROJECT N	lo.: <u>-: </u>	04B1552.22
CLIENT:	-		Nesr	er, Ferber & D	iGiacom	o, LLP		WELLIBORI	NG No. 🕒	BH16
DATE S	TARTED:	8/1	0/04	DATE COM	APLETE	D:8	3/10/04	RECORDED	BY:	JMR
GROUN	DWATER D	EPTH WH	HLE DR	ILLING:		NA .	AFTER COMF	PLETION:		NA
WEATH	ER:	-75F, Sun	iny	DRILL RIG:	Geoprobe DRILLER:			··········	BMS [Drilling
DRILL S	IZE/TYPE:	<u></u>	Macr	o-core	SAMI	PLE HAMMEI	R: WEIGHT	NA	FALL	, NA
	<u> </u>	i .	1		1		1			
Sample No.	PID/HNu Reading	Depth (Feet)	Type	Blows/6"	N	Recovery (Inches)	1	Material Class		Description sual Manual Method)
······································	(ppm)					(***				
1	14.7	0-2	U	-	-	20	0-0.4ft: Concre	te		
					-	20				
2	10.5	2-4	U	-	0-4-1ft: Gray sa	andy gravel (co	oarse, angula	ar, loose, moist)		
3	18.4	4-6	U	-	_	20	1-3ft Black/bro	wa sandy oray	iel (coarse s	angular, loose, moist)
3	10.4	4-0				20	1-016. Diack/bit	Mir Salidy gra	rci (608/36, e	ingular, 10036, moist)
4	17.7	6-8	U	-	÷	20	3-8ft: Brown cla	ayey siit (low p	lasticity, moi	st)
								w we a	-	,
5	11.7	8-10	U	-	-	24	8-12ft: Reddish	n brown clay (h	igh plasticity	, soft, moist)
							and the state of t			
6	10.1	10-12	U	-	-	24		•		
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,										
						 	-			
						,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				
						 				
NOTES	NA = Not Ap	antionblo				1	Fill to ~3 ft. bgs			
NOTES	ft. bgs = fee	-	und surfa	ace			No suspect odo			
<u> </u>	<u> </u>			OON SAMPLE	1111	IDISTURBED	***************************************	STON TUBE	C - CORE	

4 0% 90.00 00	-	:			.*		
Anna Burg COT.				1 2	3 /	n.	3
Andrew Schools of		1	1 . 17	- 1 1	11		

P - PISTON TUBE

C - CORE

								PROJECT No. 04B1552.22	~			
CLIENT:							· · · · · · · · · · · · · · · · · · ·					
							8/10/04					
GROUN	DWATER D	EPTH W	HILE DR	RILLING:		NA	AFTER COM	MPLETION: 19 10 10 NA NA				
WEATH	ER:	~75F, Sur	iny	DRILL RIG:	G	eoprobe	DRILLER:	BMS Drilling				
DRILL S	IZE/TYPE:		Macr	o-core	SAM	PLE HAMME	R: WEIGHT	NA FALL NA				
	T	T	T	i i	T	<u> </u>	T					
Sample No.	PID/HNu Reading (ppm)	Depth (Feet)	Туре	Blows/6"	N	Recovery (Inches)	(Unified	Material Classification and Description Soil Classification System-Visual Manual Method)				
1	21.7	0-2	U	•	-	10	0-0.5ft: Brown	n silty sand (fine, medium dense, moist)				
2	22.3	2-4	U	-	-	10	0.5-2ft: Brown	n gravelly sand (coarse, medium, fine, medium dense	,			
							moist)					
3	. 20.3	4-6	U	+	-	20	2-3ft: Brown s	sandy gravel (coarse, angular, loose, moist)				
4	373	6-8	U	-		20	3-6ft: Brown/gray silty gravelly sand (fine, medium dense, moist)					
5	14.1	8-10	U	-	-	20	6-12ft: Brown	silty clay (low plasticity, stiff, moist)				
							-					
6	6.4	10-12	<u>U</u>	*	-	20	4					
							1					
·····						· · · · · · · · · · · · · · · · · · ·						
						· · · · · · · · · · · · · · · · · · ·						
							1					

NOTES	NA = Not Ap	plicable					Fill to +3 ft. bgs	S				
	ft. bgs = feet	below grou	ınd surfa	ce			Moderate petro	oleum-type odors detected @ ~5-8 ft. bgs				

U - UNDISTURBED TUBE

*SS - SPLIT-SPOON SAMPLE

Andrews of the second of the s	ICC	Inc.
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PROJE	CT/ FOCATI	IONE (477	2 255 Croot Ar	A	D # 1				
CLIENT	·	iOiv	Noe	oor Forbor 9 F	OW Ave	nue, Βυπαίο,	New York			04B1552.22
				DATE CO				<u>-</u>	_	
								RECORDE) BY:	JMR
WEATH							_ AFTER COM	IPLETION:		NA NA
				DRILL RIG:	***************************************		_ DRILLER:			Drilling :
DRILL	SIZE/TYPE:		Macı	o-core	_ SAM	PLE HAMME	R: WEIGHT	NA	FALL	NA
Sample No.	PID/HNu Reading (ppm)	Depth (Feet)	Type	Blows/6"	N	Recovery (Inches)	ı	Material Class Soil Classification		Description isual Manual Method)
1	11.2	0-2	U	_		12	0-1.5ft: Black/	gray sandy gra	/el (coarse,	angular, loose, moist)
										<u>-</u>
2	13.5	2-4	U	-	-	12	1.5-3ft: Black	sandy gravel (c	oarse, sub-a	ngular, loose, moist)
							-			
3 12.2 4-6 U							3-8ft: Brown s	ilty clay (moder	ate plasticity	, stiff, moist)
4	18.2	6-8	U	*	-	20	8-12ft: Reddis	h brown clay (h	gh plasticity	, soft, moist)
5	13.3	8-10	U	-	-	20				
6	10.2	10-12	U	*		20	.			
									•	
						····				
						· · · · · · · · · · · · · · · · · · ·				
						· · · · · · · · · · · · · · · · · · ·				
NOTES	NA = Not App	olicable					Fill to 2.5 t			
- · • • • • • • • • • • • • • • • • • •	ft. bgs = feet		nd surfac	:e			Fill to ~3 ft. bgs No suspect odor	s detected		
	*SS - SPLIT-SPOON SAMPLE HI-HINDISTLIBBED TUBE D DISTON TUBE O COSE									

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CONTRACTOR OF SECTION		ino
and the measurement of the	LUU	THU.

										
PROJE	CT/ LOCAT	ION:	177.8	255 Great Arr	ow Ave	nue, Buffalo,	New York :	PROJECT No.		04B1552.22
CLIEN	Γ:		Nes	oer, Ferber & D	iGiacon	no, LLP		WELL/BORING	No.	BH19
DATE	STARTED:	8/1	10/04	DATE CO	MPLETE	:D:	8/10/04	RECORDED BY	:	JMR
GROUI	NDWATER [EPTH W	HILE DR	RILLING:	1	0 ft. bgs	AFTER COM	IPLETION:		NA .
WEAT	HER:	~75F, Sur	nny	DRILL RIG:	G	Seoprobe	DRILLER:		BMS Drilli	ng
DRILL:	SIZE/TYPE:		Macr	o-core	SAM	PLE HAMME	R: WEIGHT	NA F	ALL	NA
	T	T	T		<u> </u>					
Sample No.	PID/HNu Reading (ppm)	Depth (Feet)	Туре	Blows/6"	N	Recovery (Inches)	(Unified \$	Material Classificati		•
1 - 0-4 U 0-4ft: No Recovery										
2	9.2	4-6	U	-	4-6ft: Black/br	own sandy gravel (c	oarse, angul	ar, loose, moist)		
3	13.4	6-8	U	-	_	24	6-9ft: Brown s	ilty sand (fine, medic	ım dense, m	oist)
										:
4	27.0	8-10	U	-	-	24	9-11ft: Light b	rown sandy silt (low	plasticity, mo	pist to wet)
5	12.0	10-12	U	-	-	24	11-12ft: Reddi	sh brown clay (high	plasticity, so	ft, wet)
······································					·					
····										
NOTES	NA = Not App	olicable					Fill to -3 ft. bgs			
* * *	ft. bgs = feet	below grou	nd surfac	e			Moderate petrole	eum-type odors dete	cted @ ~5-8	ß ft. bgs
	-	*SS - SP	LIT-SPO	ON SAMPLE	II - IINI	NISTI IDBED T	TIRE P DIG	TON TURE C	~~~	

	The second secon	CS I	nc.			SU	BSUR	FACE LC)G			
PROJEC	CT/ LOCAT	ION:	· 177.	& 255 Great Ar	row Ave	enue, Buffalo,	New York	PROJECT No.	04B1552.22			
CLIENT	· .		Nes	per, Ferber & [DiGiaco	mo, LLP						
DATE S	TARTED:	8/1	10/04	DATE CO	MPLET	ED:	8/10/04	RECORDED BY:				
GROUN	DWATER E	DEPTH W	HILE DI	RILLING:	-	8 ft. bgs	AFTER COM	MPLETION:	. NA			
				DRILL RIG:				BMS				
DRILL S	DRILL SIZE/TYPE: Macro-core SAMPLE HAMM							NA FALL	. NA			
Sample No.	PID/HNu Reading (ppm)	Depth (Feet)	Type	Blows/6"	N	Recovery (Inches)	(Unified	Material Classification and Soil Classification System-\	l Description			
1	10.8	0-2	<u> </u>	-	-	20	0-0.3ft: Aspha	alt				
2	10.3	2-4	U		-	20	0.3-1ft: Gray :	sandy gravel (coarse, angul	ar, loose, moist)			
3	6.8	4-6	U	-	_	20	1-1.5ft: Black	sandy gravel (coarse, sub-	angular, loose, moist)			
4	4.0	6-8	U	-	-	20	1.5-3ft: Brown dense, moist)	silty gravelly sand (coarse	, medium, fine, medium			
							3-6ft: Brown o	layey silt (no plasticity, moi	st)			
							6-12ft: Reddis	h brown clay (high plasticit	y, soft, moist to wet)			
					 							
								•				
	1	[1		`					

Fill to ~3 ft, bgs

ft. bgs = feet below ground surface

No suspect odors detected

*SS - SPLIT-SPOON SAMPLE

U - UNDISTURBED TUBE

P - PISTON TUBE

ACTIVITIES AND ACTIVI	T	CS	Inc	
EG. BOSKEL, C. 45-	1	ハンレフ		

PRO IE	CT/LOCAT	IONI:	177 1	2 255 C A		- D (f)	li V				
								PROJECT No.			
								WELL/BORING No.			
DATE	STARTEU:	8/	11/04	DATE CO!	MPLETE	ED:	8/11/04	RECORDED BY:	JMR		
GROUI	NUWATERL	DEPTH W	HILE DF	RILLING: -	~{	3 ft. bgs	AFTER COM	IPLETION:	NA		
								ВМ			
DRILL	SIZE/TYPE:		Macr	o-core	_ SAM	PLE HAMME	R: WEIGHT	NA FALL	NA		
		T			<u> </u>						
Sample No.	PID/HNu Reading (ppm)	Depth (Feet)	Туре	Blows/6"	N	Recovery (Inches)					
1	5.2	0-2	U	-	-	20	0-0.3ft: Aspha	it			
2	6,1	2-4	U	-		20	0.3-1ft: Brown	sandy gravel (coarse, an	gular, loose, moist) (wood		
·	-						chips)				
3	6.4	4-6	U	-	-	22	•				
							1-5ft: Gray/Bla	ack sandy clayey silt (low	plasticity, moist)		
4	2.1	6-8	U	_		22					
· · · · · · · · · · · · · · · · · · ·							5-8ft: Brown si	ilty clay (low plasticity, so	ft, moist to wet)		
						·					
						······································					
*******					1	 					
						· , , , , , , , , , , , , , , , , , , ,					
							· · · · · · · · · · · · · · · · · · ·				
NOTES	NA = Not Ap						Fill to ~1 ft. bgs				
	ft. bgs = feet	below grou	nd surfac	e			No suspect odors detected				
	*SS - SPLIT-SPOON SAMPLE U - UNDISTURBED TUBE P - PISTON TUBE C - CORE										

	LCS Inc. SUBSURFACE LOG											
	Stock of action of the control of th		nc.	H		SU	BSUR	FAC.	E LO	G		
PROJEC	CT/ LOCAT	ION:	177	& 255 Great Ar	row Ave	enue, Buffalo,	New York	PROJECT	No.	04B1552.22		
CLIENT	·		Nes	per, Ferber & I	DiGiaco	mo, LLP		WELL/BOR	4 4			
!!							8/11/04	T	· · · · · · · · · · · · · · · · · · ·	JMR		
GROUŅ	DWATER [DEPTH W	HILE D	RILLING:		NA .	_ AFTER COM	IPLETION:		NA		
WEATH	ER:	~75F, Sur	nny	DRILL RIG:		Geoprobe	_ DRILLER:		BMS [)rilling		
DRILL S	IZE/TYPE:		Мас	ro-core	SAN	ИРЬЕ НАММЕ	R: WEIGHT	NA	FALL	NA		
Sample No.	PID/HNu Reading (ppm)	Depth (Feet)	Туре	Blows/6"	N	Recovery (Inches)	Material Classification and Description (Unified Soil Classification System-Visual Manual Method)					
1	4.5	0-2	U_	-		12	0-0.3ft: Aspha	ilt				
2	4.7	2-4	U		_	12	0.3-1ft: Brown	sandy gravel (coarse, angul	ar, loose, moist)		
3	6.4	4-6	U	-	-	24	1-5.5ft: Gray/E	Black sandy cla	yey silt (low p	lasticity, moist)		
4	6.5	6-8	U		-	24	1	vn sandy grave	l (coarse, ang	ular, medium dense,		
							moist)					
					<u> </u>		6.5-8ft: Brown	sity clay (low	plasticity, stiff	, moist)		
							-					
								•				
									,			

Fill to ~6.5 ft. bgs

ft. bgs = feet below ground surface

No suspect odors detected

*SS - SPLIT-SPOON SAMPLE

U - UNDISTURBED TUBE

P - PISTON TUBE

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DDO IE	CTU OCAT	ION.	477 (255.0						
										04B1552.22
							8/11/04		BY:	JMR
GROUN	NDWATER E	DEPTH W	HILE DF	RILLING:		NA .	_ AFTER COM	IPLETION:		
WEATH	IER:	~75F, Sur	nny	DRILL RIG:		Geoprobe	_ DRILLER:		BMS D	rilling
DRILL S	SIZE/TYPE:		Macr	o-core	_ SAN	IPLE HAMME	R: WEIGHT	NA	_ FALL _	NA NA
	T	1	T		1					· · · · · · · · · · · · · · · · · · ·
Sample No.	PID/HNu Reading	Depth (Feet)	Type	Blows/6"	N	Recovery	1	Material Classif		•
	(ppm)		ļ		<u> </u>	(Inches)	(Unitied :	Soil Classification	n System-Vis	ual Manual Method)
1	14.6	0-2	U	-	-	20	0-0.3ft: Aspha	ılt		
2	7.2	2-4	U		-	20	0.3-1ft: Brown	sandy gravel (c	oarse, angula	ar, loose, moist)
3	8.4	4-6	U	-	<u> </u>	24	1-5.5ft: Gray/E	Black sandy clay	ey silt (low pl	asticity, moist)
4	7.0		,,							
4	7.2	6-8	U		-	24		vn sandy gravel ((coarse, angi	ılar, medium dense,
							moist)			
							6.5-8ft: Brown	silty clay (low pl	asticity, stiff,	moist)
							r.`		-	
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				•						
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										me and company of the

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							٠			
)
NOTES	NA = Not App		m of a,				Fill to ~6.5 ft. bgs			
	ft. bgs = feet	neiow Groui	nd sunac	· E	No suspect odor	s detected				
		*SS - SP	LIT-SPO	ON SAMPLE	U - UN	DISTURBED T	UBE P-PIS	STON TUBE	C - CORE	ı

									<u> </u>
·	ENCHANGE CONTE	CS I	nc.			SU	BSUR	FACE LC)G
PROJE	CT/ LOCAT	ION:	177	& 255 Great Ar	row Ave	enue, Buffalo,	New York	PROJECT No.	04B1552.22
CLIENT	:		Nes	per, Ferber & [DiGiaco	mo, LLP		WELL/BORING No.	BH24
DATE S	TARTED:	8/	11/04	DATE CO	MPLET	ED:	8/11/04	RECORDED BY:	JMR
GROUN	IDWATER [DEPTH W	HILE DI	RILLING:		NA	_ AFTER COM	IPLETION:	NA
WEATH	ER:	~75F, Su	ппу	DRILL RIG:		Geoprobe	DRILLER:	BMS	Drilling
DRILL S	IZE/TYPE:	 	Мас	ro-core	SAN	IPLE HAMME	R: WEIGHT	NA FALL	, NA
	<u> </u>		T		T.		T		
Sample No.	PID/HNu Reading (ppm)	Depth (Feet)	Туре	Biows/6*	N	Recovery (Inches)	(Unified	Material Classification and Soil Classification System-V	
1	5.7	0-2	υ	-	-	20	0-0.3ft: Aspha	ilt	
2	4.3	2-4	U	-	<u> </u>	20	0.3-1ft: Brown	sandy gravel (coarse, angu	ular, loose, moist) (wood
			<u> </u>				chips)		
3	4.8	4-6	U	-	-	24			
4	4.1	6-8	υ				1-5ft: Gray/Bla	ack sandy clayey silt (low pla	asticity, moist)
	4.1	0-6	U	*	-	24	F 0.5 F	***	
							5-8II: Brown s	ilty clay (low plasticity, soft,	moist)
				**					

ft. bgs = feet below ground surface

Fill to ~5 ft. bgs

No suspect odors detected

*SS - SPLIT-SPOON SAMPLE

U - UNDISTURBED TUBE

P - PISTON TUBE

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sees which the second	1	$I \cup I \cup I$	

PROJEC	CT/ LOCATI	ON:	177 8	& 255 Great Ar	row Ave	nue, Buffalo,	New York	PROJECT N	o. <u>-</u>	04B1552.22
CLIENT:			Nes	per, Ferber & D	DiGiacon	no, LLP		WELL/BORI	NG No.	BH25
DATE S	TARTED:	8/1	1/04	DATE CO	MPLETE	ED:	8/11/04	RECORDED	BY:	JMR
GROUN	DWATER D	EPTH W	HILE DE	RILLING:		NA	AFTER COM	IPLETION:		NA
WEATH	ER:	~75F, Sur	nny	DRILL RIG:		Seoprobe		BMS	Drilling	
DRILL S	IZE/TYPE:	-	Mac	ro-core	_ SAM	PLE HAMME	R: WEIGHT	- NA	_ FALL	. NA
Sample No.	PID/HŃu Reading (ppm)	Depth (Feet)	Туре	Blows/6"	N	Recovery (Inches)				
1	7.6	0-2	U	-	-	20	0-0.3ft: Aspha	alt	-	
2	7.6	2-4	U	_	-	20	0.3-2ft: Black moist)	gravelly sand (o	oarse, medi	um, fine, medium dense,
3	3 2.5 4-6 U 24							ndy clayey silt (l	ow plasticity	v, moist)
4	3.2	6-8	U	-	<u>-</u>	24	4-8ft: Reddish	brown clay (no	plasticity, v	ery stiff, moist)
									, ,	
-										
			1							. Minuses statement
NOTES	NA = Not Ap	plicable					Fill to ~4 ft. bgs			
	ft. bgs = feet	below grou	ınd surfa	ce			No suspect odo			
		*SS - SP	LIT-SPC	OON SAMPLE	U - UN	DISTURBED :	TUBE P-PIS	STON TUBE	C - CORE	

	Section of the sectio	CS I	nc.	:		SU	BSUR	FACE LO)G		
PROJEC	ET/ LOCATI	ON: <u>-</u>	. 177.	& 255 Great Ar	row Ave	nue, Buffalo,	New York	PROJECT No.	04B1552:22		
							**	WELL/BORING No.			
}								RECORDED BY:			
								PLETION:			
								BMS			
								NA FALL			
Sample No.	PID/HNu Reading (ppm)	Depth (Feet)	Type	Blows/6"	N	Recovery (Inches)					
11	3.0	0-2	U	-	-	10	0-0.3ft: Aspha	lt			
2	2.5	2-4	Ų	-		10	0.3-2ft: Black moist)	gravelly sand (coarse, me	dium, fine, medium dense,		
3	3.3	4-6	U			20	2-4ft: Gray sar	ndy clayey silt (low plastic	ty, moist)		
4	2.2	6-8	U	*	•	20	4-8ft: Reddish	brown clay (no plasticity,	stiff, moist)		
		·									

ft. bgs = feet below ground surface

Fill to ~4 ft. bgs

No suspect odors detected

*SS - SPLIT-SPOON SAMPLE

U - UNDISTURBED TUBE

P - PISTON TUBE

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Properties of a	L	ر 🐧	\mathbf{L}		t.

PROJECT/ LOCATION:			177.8	& 255 Great Ar	row Ave	nue, Buffalo, I	New York	PROJECT N	lo. <u> </u>	04B1552.22
CLIENT			Nes	per, Ferber & D	DiGiacon	no, LLP		WELL/BORI	NG No.	BH27
DATE S	TARTED:	8/	11/04	DATE CO	MPLETE	ED:	8/11/04	RECORDED	BY:	JMR
GROUN	DWATER D	EPTH W	/HILE DF	RILLING:		NA	AFTER COM	PLETION:	***************************************	NA
WEATH	ER:	~75F, S∟	ınny	DRILL RIG:		Geoprobe DRILLER:		······································	BMS D	rilling
DRILL S	IZE/TYPE:		Macı	го-соге	_ SAM	SAMPLE HAMMER: WEIGHT			FALL _	. NA
			T							
Sample No.	PID/HNu Reading (ppm)	Depth (Feet)	Туре	Blows/6"	N	Recovery (Inches)	1	Material Class		Description ual Manual Method)
1	6.4	0-2	U	-	-	10	0-0.3ft: Aspha	lt		-
2	6.2	2-4	U	+	-	10	0.3-2ft: Black	gravelly sand (d	coarse, mediu	m, fine, medium dense,
							moist)			
3	4.0	4-6	U	-	-	20	2-4ft: Gray sar	ndy clayey sitt (low plasticity,	moist)
<u> </u>	r.4	-	<u> </u>							
44	5.1	6-8	<u> </u>	-	-	20	4-8ft: Reddish	brown clay (no	plasticity, stif	f, moist)
		,			 					
					<u> </u>					
							1			
				•						
			<u> </u>						. *	
			-							
		· · · · · · · · · · · · · · · · · · ·						•		
NOTES	NA = Not Ap	plicable					Fill to ~4 ft. bgs			
	ft. bgs = feet	below gro	ound surfa	ce			No suspect odors detected			
		*SS - S	SPLIT-SPC	OON SAMPLE	U - UN	DISTURBED	TUBE P-PIS	STON TUBE	C - CORE	

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PROJEC	CT/ LOCATI	ON:	177.8	255 Great Arr	ow Ave	nue, Buffalo,	New York	PROJECT	lo.	04B1552.22	
CLIENT			Nes	per; Ferber & D		WELL/BORI	NG No.	BH28			
DATE S	TARTED:	8/1	1/04	DATE COM	MPLETE	ED:	8/11/04	RECORDED	BY:	JMR	
GROUN	DWATER D	EPTH W	HILE DF	RILLING:		NA	AFTER COM	IPLETION:		NA	
WEATH	ER:	~75F, Sur	nny	DRILL RIG:		Seoprobe	DRILLER:		BMS	Drilling	
DRILL S	IZE/TYPE:		Macr	o-core	SAM	PLE HAMME	R: WEIGHT	NA	FALL	NA	
	1	T	T	T	T .	1	T				
Sample No.	PID/HNu Reading (ppm)	Depth (Feet)	Туре	Blows/6"	N	Recovery (Inches)	· ·				
1	26.4	0-2	U	-	-	22	0-1.5ft: Brown	ı graveliy sand (coarse, loos	e, moist)	
2	6.2	2-4	U	_	-	22	1.5-4.5ft: Gray	y/black clayey s	ilt (low plasti	city, moist)	
3	5.2	4-6	U	**	-	24	4.5-8ft: Reddi	sh brown clay (1	ow plasticity	, stiff, moist)	
							-				
4	5.5	6-8	U	*	-	24					
							-				
							1				
											
na <u>k</u> ranini i						****					
						·					
											
							areasan maga ara ara ara ara ara ara ara ara ara				
										•	
			1			·					
NOTES	NA = Not Ap	plicable	-			TOTAL CONTRACTOR OF THE PROPERTY OF THE PROPER	Fill to ~4.5 ft. b	gs			
	ft. bgs = feet	below grou	und surfa	ce			No suspect odd	ors detected			
*SS - SPLIT-SPOON SAMPLE U - UNDISTURBED TUBE P - PISTON TUBE C - CORE											

	Market Contact Section Contact	CS I	nc.			SU	BSUR	FACE	LC)G
PROJEC	CT/ LOCAT	ION:	177	& 255 Great Ar	row Ave	enue, Buffalo,	New York	PROJECT No) <u>,</u>	04B1552.22
CLIENT					ž.		BH29			
DATE S								RECORDED I		JMR
id								•	***************************************	· NA ! · ·
WEATH										
DRILL S	IZE/TYPE:						- R: WEIGHT	NA		
	 	1	T	T	T		T			
Sample No.	PID/HNu Reading (ppm)	Depth (Feet)	Туре	Blows/6"	N	Recovery (Inches)	(Unified S	Material Classific		l Description /isual Manual Method)
11	8.0	0-2	U		-	20	0-2ft: Brown g	ravelly sand (coa	rse, medi	um dense, moist)
										,
2	4.7	2-4	U	_		20	2-4ft: Gray/bla	ick sandy silt (low	plasticity	, moist)
			ļ							
3	4.0	4-6	U	-		24	4-6ft: Gray/bla	ick sandy silty cla	y (high pla	asticity, soft, moist)
			<u> </u>							
4	4.5	6-8	U	-	-	24	6-8ft: Reddish	brown clay (low p	olasticity,	stiff, moist)
										•

Fill to ~4 ft. bgs

ft. bgs = feét below ground surface

No suspect odors detected

*SS - SPLIT-SPOON SAMPLE

U - UNDISTURBED TUBE

P - PISTON TUBE

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,	And Andrews An	CS I	nc.		BSUR	FACI	E LO	G				
PROJEC	T/LOCATI	ON: <u> </u>	177 8	& 255 Great Arr	New York PROJECT No.		lo.	04B1552.22				
CLIENT: Nesper, Ferber & DiGiacomo, LLP								WELL/BORI	NG No.	BH30		
DATE S	TARTED:	8/	11/04	DATE CON	MPLETE	ED:	8/11/04			JMR		
GROUN	DWATER D	EPTH W	HILE DF	RILLING:		NA	AFTER COM			NA		
WEATH	ER:	~75F, Sui	nny	DRILL RIG:		Seoprobe	DRILLER:		BMS (Drilling		
ŧ							R: WEIGHT					
Sample No.	PID/HNu Reading (ppm)	Depth (Feet)	Туре	Blows/6"	N	Recovery (Inches)						
1	4.1	0-4	U	-	•	10	0-1.5ft: Brown	gravelly sand (coarse, medi	ium, fine, loose, moist)		
2	5.9	4-6	U	•	•	20	1.5-3ft: Brown	/gray silty sand	(fine, mediur	m dense, moist)		
3	4.3	6-8	U	-	-	20	3-5ft: Gray/black sandy silt (low plasticity, moist)					
							5-8ft: Reddish	brown silty clay	(low plastici	ity, stiff, moist)		
								•				
		`										

Fill to ~5 ft. bgs

U - UNDISTURBED TUBE

No suspect odors detected

P - PISTON TUBE

C - CORE

NOTES

NA = Not Applicable

ft. bgs = feet below ground surface

*SS - SPLIT-SPOON SAMPLE

	LCS Inc. SUBSURFACE LOG											
PROJE	CT/ LOCAT	ION:	177 8	& 255 Great Arr	row Ave	nue, Buffalo,	New York	PROJECT No.	04B1552.22			
CLIEN	Γ;	<u>j</u> wysta	Nes	per, Ferber & D	DiGiacon	no, LLP		 _ WELL/BORING No	p. BH31			
DATE S	STARTED:	8/	1/04	DATE CO	MPLETE	ED:	8/11/04	RECORDED BY:	JMR			
GROU	NDWATER D	EPTH W	HILE DF	RILLING:		NA	AFTER COM	IPLETION:	. NA			
WEATH	IER:	~75F, Sur	nny	DRILL RIG:		Geoprobe	DRILLER:	E	MS Drilling			
DRILL:	SIZE/TYPE:		Macı	o-core	_ SAM	PLE HAMME	R: WEIGHT	NA FA	LL NA			
Sample No.	PID/HNu Reading (ppm)	Depth (Feet)	Туре	Blows/6"	N	Recovery (Inches)	1	Material Classification Soil Classification Syst	n and Description em-Visual Manual Method)			
11	6.2	0-2	U			12	0-1.5ft: Brown	n gravelly sand (coarse	, medium, fine, loose, moist)			
2	6.6	2-4	U	-	<u>.</u>	12	1.5-3ft: Brown	n/gray silty sand (fine, n	nedium dense, moist)			
3	5.5	4-6	U	-	-	24	3-5ft: Gray/bla	ack sandy silt (low plas	ticity, moist)			
4	7.2	6-8	U		44	24	5-8ft: Reddish	i brown silty clay (low p	lasticity, stiff, moist)			
NOTES	NA m Not A											
NOTES	NA = Not App		nd surfac	е	-		Fill to ~3 ft. bgs No suspect odor	s detected	,			
		*SS - SPI	LIT-SPO	ON SAMPLE	U - UNE	DISTURBED T	UBE P-PIS	STON TUBE C - CC	DRE			

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PROJE	CT/ LOCATI	ON:	177	& 255 Great An	New York	PROJECT N	lo	04B1552.22			
CLIENT			Nes	per, Ferber & D	DiGiacor	no, LLP		WELL/BORI	NG No.	BH32	
DATE S				DATE CO						JMR	
GROUN	IDWATER D	EPTH W	HILE DI	RILLING:		NA	AFTER COM	PLETION:		NA	
WEATH	ER:	~75F, Sur	าทy	DRILL RIG:		Geoprobe	DRILLER:		BMS D	rilling	
DRILL S	SIZE/TYPE:	·	Мас	ro-core	SAM	PLE HAMME	R: WEIGHT	NA	FALL	. NA	
	T		T	T CONTRACTOR	T	7	T				
Sample No.	PID/HNu Reading (ppm)	Depth (Feet)	Туре	Blows/6"	N	Recovery (Inches)	(Unified S	Material Classi Soil Classificatio		escription ual Manual Method)	
1	6.0	0-2	U	-	-	12	0-1.5ft; Brown	/light brown gra	velly sand (co	arse, medium, fine,	
							medium dense	, moist)			
2	6.8	2-4	U	-	-	12	1.5-4.5ft: Gray	sandy silty clay	y (high plastic	ity, very soft, moist)	
3	4.0	4-6	U		<u> </u>	00	4 6 6 60. 1			40.	
	7.0	1	<u> </u>		<u> </u>	22	4.5-5.51t; Light	t brown/brown s	andy clayey s	ilt (no plasticity, moist)	
4	3.0	6-8	U	-	_	22	5.5-8ft: Reddis	sh brown clay (k	ow plasticity,	very stiff, moist)	
										,	
										·	
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							i				
	·									1	
~											
NOTES	NA = Not Ap	olicable	<u> </u>	<u></u> <u></u>	I		Fill to =4 5 ft h-				
	8		ınd surfa	ce			Fill to ~4.5 ft. bgs No suspect odors detected				
	ft. bgs = feet below ground surface No suspect odors detected *SS - SPLIT-SPOON SAMPLE U - UNDISTURBED TUBE P - PISTON TUBE C - CORE										

LCS Inc.

PROJE	CT/ LOCATION	ON: <u></u>	177 8	k 255 Great Ar	row Ave	nue, Buffalo,	New York	PROJECT N	o	04B1552.22
CLIENT	•		Nes	oer, Ferber & D	DiGiaçor	no, LLP 🕒		WELL/BORII	NG No.	BH33
DATE S	TARTED:	8/1	1/04	DATE CO	MPLETI	ED:	8/11/04	RECORDED	BY:	JMR
GROUN	DWATER D	EPTH W	HILE DF	RILLING:		NA	AFTER COM	PLETION:		NA
WEATH	ER:	-75F, Sur	ıny	DRILL RIG:	(Geoprobe	_ DRILLER:		BMS D	rilling
DRILL S	IZE/TYPE:		Macı	o-core	SAMPLE HAMMER: WEIGHT			NA	_ FALL _	NA
*************************************	<u> </u>					1				
Sample No.	PID/HNu Reading (ppm)	Depth (Feet)	Туре	Blows/6"	N	Recovery (Inches)	(Unified S	Material Classi Soil Classificatio		Description sual Manual Method)
1	9.6	0-2	U	-	-	10	0-2ft: Gravelly sand (coarse, loose, moist)			
2	5.9	2-4	U		-	10	2-4ft: Light bro	own sandy silt (l	ow plasticity,	moist)
3	8.3	4-6	U	-		22	4-5ft: Light bro	own sandy silt (r	no plasticity, r	noist)
4	5.3	6-8	U			22	5-8ft: Reddish	brown clay (no	plasticity, ver	ry stiff, moist)
					<u> </u>		-			
<u></u>										

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	<u> </u>									
NOTES	NA = Not Ap	plicable	<u>_</u>			· · · · · · · · · · · · · · · · · · ·	Fill to ~4 ft. bgs			
			and surfa	ce .			-			
	ft. bgs = feet below ground surface No suspect odors detected *SS - SPLIT-SPOON SAMPLE U - UNDISTURBED TUBE P - PISTON TUBE C - CORE									

Parameter Cont.	T	CC	In	0
employees and a complete				4 "
200. (ACCORDANCES) .000	1	/K .LT	6 6 8	

PROJECT No. 04B1	PROJECT	Vew York	nue, Buffalo,	row Ave	255 Great Ar	177 &	ON:	T/ LOCATIO	PROJEC				
WELL/BORING No.	WELL/BOF		no, LLP	DiGiacon	oer, Ferber & [Nesp		CLIENT: DATE STARTED:					
RECORDED BY:	RECORDE	8/11/04	D:	MPLETE	DATE CO	1/04	8/1	TARTED:	DATE ST				
OMPLETION: NA	MPLETION:	AFTER CO	NA		ILLING:	HILE DR	EPTH W	DWATER D	GROUNI				
t: BMS Drilling	,	Geoprobe DRILLER:			DRILL RIG:	nny	-75F, Sur	ER:	WEATH				
T NA FALL	NA	R: WEIGHT	PLE HAMME	SAM	o-core	Macr		IZE/TYPE:	DRILL S				
Material Classification and Description in the Classification System-Visual Manual Man		(Unifie	Recovery (Inches)	N	Biows/6"	Type	Depth (Feet)	PID/HNu Reading (ppm)	Sample No.				
velly sand (coarse, loose, moist)	elly sand (coarse	0-2ft: Grave	15	1 5.0 0-2 U 15					1				
nt brown sandy silt (low plasticity, moist)	brown sandy silt	2-4ft: Light	15	2 7.5 2-4 U 15									
nt brown sandy silt (no plasticity, moist)	brown sandy sill	4-5ft: Light	24	-	-	U	4-6	3.5	3				
ldish brown clay (no plasticity, very stiff, m	ish brown clay (ı	4 5,8 6-8 U 24 5-8ft: Reddish brown											
		The state of the s											
		errete manage production opening management of the production of t											

. bgs t odors detected		Fill to -4 ft.		•	ace	ound surfa			NOTES				
	odors detected	No suspect	NDISTURBED	U - U	ace OON SAMPLE		ft. bgs = feet below grou						

escope y usulate and usulat hadis inclu- urulat his nesson had el nessonaturamentor i	T	CC	Inc
w.cocusences.v.	L		III.

			^	00				550.505.		
		***************************************					New York	•	***************************************	
CLIENT	2		Nesp	er, Ferber & D	iGiacon	10, LLP		WELL/BORI	ING No.	BH35
DATE S	TARTED:	8/1	1/04	DATE COM	MPLETE	iD:	8/11/04	RECORDE	D BY:	JMR
GROUN	IDWATER C	EPTH WI	HILE DR	ILLING:	NA AFTER COM			PLETION:		NA
WEATH	ER:	~75F, Sur	ıny	DRILL RIG:	Geoprobe DRILLER:			BMS Drilling		
DRILL S	SIZE/TYPE:		Macr	о-соге	SAM	PLE HAMME	R: WEIGHT	NA	FALL _	NA NA
	T	T	T .		T	Ī	<u> </u>			
Sample No.	PID/HNu Reading (ppm)	Depth (Feet)	Туре	Blows/6"	N	Recovery (Inches)	1	Material Class		escription ual Manual Method)
1	7.6	0-2	U		-	10	0-2ft, Light bro	wn sandy grave	el (coarse, ang	ular, loose, moist)
2	8.5	2-4	U	-	-	10	2-2.5ft: Brown	gravelly sand	(coarse, mediu	m, fine, dense, moist)
							2.5-4ft: Gray o	layey silt (low p	plasticity, mois	()
							Refusal @ ~4 t	ft. bgs		
							4		•	
···										
						· · · · · · · · · · · · · · · · · · ·				
,,, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,										
NOTES	NA = Not Ap	plicable			<u></u>		Fill to ~4 ft. bgs			
	ft. bgs = fee		und surfac	ce			No suspect odo			
<u> </u>		*SS - SF	PLIT-SPC	ON SAMPLE	U - UN	DISTURBED	TUBE P-PI	STON TUBE	C - CORE	

telephone LCS Inc.

PROJEC	T/ LOCATIO	ON:	177 &	255 Great Arr	ow Aven	ue, Buffalo,	New York	PROJECT No.	04B1552.22
PROJECT/ LOCATION: 177 & 255 Great Arrow Avenue CLIENT: Nesper, Ferber & DiGiacomo, I DATE STARTED: 8/12/04 DATE COMPLETED:								WELL/BORING N	lo. BH36
DATE ST	ARTED:	8/1	2/04	DATE CON	/PLETE	D:	8/12/04	RECORDED BY:	JMR
GROUNI	OWATER D	EPTH WI	IILE DR	ILLING:	~4	ft. bgs	AFTER COM	IPLETION:	NA
WEATHE	ER: ^	-75F, Sur	пу	DRILL RIG:	G	Geoprobe DRILLER: BMS Dr			BMS Drilling
DRILL SI	ZE/TYPE:		Macr	o-core	_ SAMI	PLE HAMME	R: WEIGHT	NA F	ALL NA
	·	<u> </u>	T		Ī				
Sample No.	PID/HNu Reading (ppm)	Depth (Feet)	Type *	Blows/6"	N	Recovery (Inches)	(Unified	Material Classification Soil Classification Sys	on and Description stem-Visual Manual Method)
1	1.3	0-2	U	-	-	10	0-1ft: Brown :	silty sand (medium, fir	ne, loose, moist)
2	2 2.5 2-4 U					10	1-2ft: Black s	andy gravel (coarse, f	îne, sub-angular, loose, moist)
3	3 3.5 4-8 U						2-4ft: Brown/l	black gravelly sand (c	oarse, medium, fine, dense,
							7	ray gravelly sand (fine	e, medium dense, wet)
							Refusal @ ~8	ft. bgs	

							-		
							Accountings of the control of the co		
						-	-		71. di 1977.
							-		·
							_		
							_		
NOTES	NA = Not A						Fill to ~4 ft. bo		
	ft. bgs = fee	t below gro	ound surfa	ace			No suspect or	dors detected	
		*SS - S	PLIT-SP	OON SAMPLE	U - U	NDISTURBED	TUBE P-F	PISTON TUBE C	- CORE

Augusta, com region. Contra 1000 de 1000 de 1000 de 1000 de 1000 de Maria Maria de 1000 de Granda de 1000 de 1000 de Granda de 1000 de	T	C	S	In	C.
Professional Contract	_	$I \sim$	LJ.		•

										04B1552.22	
CLIENT			Nes	oer, Ferber & D	DiGiacon	no, LLP	· .	WELL/BORI	NG No.	BH37	
							8/12/04				
GROUN	IDWATER D	EPTH W	HILE DF	RILLING:	NA AFTER COMI			PLETION:		NA .	
WEATH	ER:	-75F, Sur	nny	DRILL RIG:	Geoprobe DRILLER:						
DRILL S	IZE/TYPE:		Macr	o-core	_ SAM	PLE HAMME	R: WEIGHT	NA	FALL _	. NA	
			1		<u> </u>	Ī	i i	71	Y T 		
Sample No.	PID/HNu Reading (ppm)	Depth (Feet)	Туре	Blows/6"	N	Recovery (Inches)	Material Classification and Description (Unified Soil Classification System-Visual Manual Method)				
1	4.4	0-2	U	-	-	10	0-1.5ft: Black	sandy gravel (c	oarse, fine, ar	ngular, loose, moist)	
2	5.3	2-4	U	_	-	10	1.5-4ft: Brown.	/black sandy gr	avel (coarse,	fine, angular, loose,	
3	9.9	4-6	U		-	20	4-7ft: Gray cla	yey silt (low pla	sticity, moist)		
							-				
4	2.9	6-8	U		-	20	7-8ft: Reddish	brown clay (lov	v plasticity, st	iff, moist)	
							-				
							-				
										The state of the s	
NOTES	NA = Not Ap	olicable			Fill to ~4 ft. bgs						
	ft. bgs = feet	below grou	nd surfac	ce	No suspect odors detected						
	ft. bgs = feet below ground surface No suspect odors detected *SS - SPLIT-SPOON SAMPLE U - UNDISTURBED TUBE P - PISTON TUBE C - CORE										

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griest marks contious.	-	/ No. 1 T		

PROJEC	T/ LOCATION	ON:	177 &	255 Great Am	ow Aver	nue, Buffalo, i	New York	PROJECT N	o	04B1552.22
CLIENT:			Nesp	er, Ferber & D	iGiacon	no, LLP		WELL/BORII	NG No.	BH38
DATE S	TARTED:	8/1	2/04	DATE COM	IPLETE	:D: :	8/12/04	RECORDED	BY:	JMR
3ROUN	DWATER D	EPTH W	ILE DR	ILLING:	~6	ft. bgs	AFTER COM	PLETION:		NA
NEATH	ER:	-75F, Sun	ıny	DRILL RIG:		Geoprobe	DRILLER:		BMS D	rilling
ORILL S	IZE/TYPE:		Macro	o-core	_ SAM	PLE HAMME	R: WEIGHT	NA	FALL _	NA
	T	r	T		T	T	 			
Sample No.	PID/HNu Reading (ppm)	Depth (Feet)	Туре	Blows/6"	N	Recovery (Inches)	(Unified S	Material Classi Soil Classificatio		Description sual Manual Method)
1	1.5	0-2	U	•	-	10	0-1,5ft: Black	gravelly sand (c	oarse, loose,	moist)
2	7.8	2-4	U	<u>-</u>	-	10	1	wn/black sandy (gravel (coars	e, fine, angular, loose,
3	10.7	4-6	U	_	-	20	moist)	sandy silt (low pl	lasticity mois	t to wet)
	10.7	4-0		·		20	4.5 010. 0103	saisay ant (ion pi	idodoky, mole	it to troty
4	2.3	6-8	U		_	20	6-8ft: Reddish	brown clay (no	plasticity, ve	ry stiff, moist)
				······································						
······································										
				······································						
										
 										
*						· · · · · · · · · · · · · · · · · · ·				
10TES			und over	ce				_	4	
	it. bgs = tee									
NOTES	NA = Not Ap	t below gro		ce DON SAMPLE	U - UI	NDISTURBED	Fill to ~4.5 ft. b No suspect odd	_	C - CORE	

COMMITTEENS CONT.	~	00	T	
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\$660,6565,3600,000.				
Manager equations!				

PROJEC	T/ LOCATION	ON:	177 &	255 Great Arr	ow Aveг	nue, Buffalo, I	New York	PROJECT No.		04B1552.22
CLIENT:			Nesp	er, Ferber & D	iGiacom	ю, LLP		WELLIBORING	No	BH39
DATE S	rarted:	8/1	2/04	_ DATE COM	MPLETED: 8/12/04			RECORDED BY	*	JMR
GROUN	DWATER D	EPTH W	HILE DR	ILLING:	NA AFTER COM			PLETION:		NA .
WEATH	ER:	-75F, Sur	ny	DRILL RIG:	Geoprobe DRILLER:				BMS Dri	lling
DRILL S	IZE/TYPE:		Macro	o-core	SAM	PLE HAMME	R: WEIGHT	NA F	ALL	, NA
	1	Ī			I					
Sample No.	PID/HNu Reading (ppm)	Depth (Feet)	Type	Blows/6*	N	Recovery (Inches)	(Unified S	Material Classifical		escription nal Manual Method)
1	5.1	0-24	υ	-	-	10	0-0.4ft: Aspha	alt		
2	2 4.0 4-6 U -					20	0.4-2ft: Black	sandy gravel (coars	e, angular,	, loose, moist0
3	2.8	6-8	U	÷	-	20	2-6ft: Reddish	brown clay (no pla:	sticity, stiff,	, moist)
							6-7.5ft: Gray	clayey silt (low plast	icity, moist	:)
							7.5-8ft: Reddi	sh brown clay (no p	lasticity, st	iff, moist)
										
										
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·				· · · · · · · · · · · · · · · · · · ·			_			
NOTES	NA = Not A	pplicable		<u> </u>	· · · · ·		Fill to ~2 ft. bg	s		
	ft. bgs = fee		und surfa	ice			No suspect ode	ors detected		
		*\$\$ - \$	PLIT-SP(OON SAMPLE	U - UI	NDISTURBED	TUBE P-P	ISTON TUBE C	- CORE	

LCS Inc.

PROJEC	T/ LOCATIO	ON:	177 8	255 Great Arr	ow Aver	nue, Buffalo, I	PROJECT N	lo	04B1552.22			
CLIENT:			Nesp	er, Ferber & D	iGiacom	io, LLP	. :	WELL/BORI	NG No.	BH40		
DATE ST	TARTED:	8/1	2/04	DATE COM	APLETE	D:	3/12/04	RECORDE	BY:	JMR		
GROUNI	OWATER D	EPTH W	IILE DR	ILLING:		NA ·	AFTER COM	PLETION:		NA		
WEATHE	ER:	-75F, Sun	iny	DRILL RIG:	G	Seoprobe	DRILLER:		BMS Dr	illing		
DRILL SI	ZE/TYPE:		Macr	o-core	SAM	PLE HAMME	R: WEIGHT	NA	_ FALL _	NA NA		
			T									
Sample No.	PID/HNu Reading	Depth (Feet)	Туре	Blows/6"	N	Recovery (Inches)	1	Material Class		escription al Manual Method)		
	(ppm)											
1	10.5	0-2	U		-	15	0-0.4ft: Asphal	it		,		
2	10.8	2-4	U	-	· •	15	0.4-2ft: Black s	sandy gravel (c	oarse, angular	, loose, moist)		
3	7.9	4-6	U	_	-	20	2-6ft: Reddish	brown clay (no	plasticity, stiff	, moist)		
4	3.3	6-8	U	-	-	20	6-7.5ft: Gray clayey silt (low plasticity, moist)					
							7.5-8ft: Reddis	sh brown clay (no plasticity, st	iff, moist)		
						:						
,				-		······································						
		·										
<u> </u>												
NOTES	NA = Na+ A-	plicable				2000-1-1	Fill to ~2 ft. bgs					
NOTES	NA = Not Ap ft. bgs = feet		und surfa	ce			No suspect odo					
· · · · · · · · · · · · · · · · · · ·	-			DON SAMPLE	U - U	DISTURBED		STON TUBE	C - CORE			

LCS Inc.

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PROJEC	PROJECT/ LOCATION: 177 & 255 Great Arrow Avenue, Buffalo, New York PROJECT No. 04B1552.22									
CLIENT:	:		Nesr	oer, Ferber & D	iGiacom	10, LLP		WELL/BORING No.	BH41	
DATE S	TARTED:	8/1	2/04	DATE CON	VPLETE	:D:	8/12/04	RECORDED BY:	JMR	
GROUN	DWATER D	EPTH WH	HILE DR	RILLING:	5	ift. bgs	AFTER COM	PLETION:	NA:	
WEATH	ER:	-75F, Sun	าทง	DRILL RIG:	G	Seoprobe	DRILLER:	BMS D	i	
DRILL S	IZE/TYPE:		Macr	o-core	_ SAM	PLE HAMME	R: WEIGHT	NA FALL	. NA	
	T	ī	T	T	T	Ī				
Sample	PID/HNu	Depth	Туре	Blows/6"	N	Recovery		Material Classification and I	Description	
No.	Reading	(Feet)	*	!		(Inches)	1	Soil Classification System-Vis	1	
	(ppm)		ļ.,.							
1	3.9	0-4	U	-	-	10 -	0-0.4ft: Aspha	lt .		
	40.5	4-6	U	_		20	A 25 Black/	brown sandy gravel (coarse,	engular lacco moint)	
2	12.5	4-0		-		20	0.4-211. Diaumi	orown sandy graver (coarse,	angular, loose, moistj	
3	11.3	6-8	U	-	_	20	- 2-6ft: Gray sar	ndy clayey silt (low plasticity	. moist to wet)	
									,	
							6-8ft: Reddish	brown clay (low plasticity, s	tiff, moist)	
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	<u> </u>						<u> </u>			
NOTES	NA = Not Ap						Fill to ~2 ft. bgs	ı		
	ft. bgs = feet	below grou	und surfa	ice			No suspect odo	rs detected		
		*SS - SF	PLIT-SP(OON SAMPLE	U - UN	NDISTURBED	TUBE P - PI	STON TUBE C - CORE		

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PROJECT/ LOCATION: 177 & 255 Great Arrow Avenue, Buffalo, New York PROJECT No. 04B1552.22											
CLIENT			Nes	per, Ferber & D	iGiacor	no, LLP		V		BH42	
13				DATE CO				-	BY:	JMR	
GROUN	NDWATER D	DEPTH W	HILE DF	RILLING:	~- <u>;</u>	5 ft. bgs	AFTER COM	IPLETION:		, NA ,	
WEATH	IER:	~75F, Sur	nny	DRILL RIG:	(Geoprobe	DRILLER:		BMS C	rilling	
DRILL	SIZE/TYPE:		Macı	ro-core	SAM	IPLE HAMME	R: WEIGHT	NA	FALL	. NA	
	T			T	7						
Sample No.	PID/HNu Reading (ppm)	Depth (Feet)	Type *	Blows/6"	N	Recovery (Inches)	Material Classification and Description (Unified Soil Classification System-Visual Manual Method)				
1	1.3	0-2	U	-	-	10	0-0.4ft: Aspha	alt			
2	4.2	2-4	U	-	-	10	0.4-2ft: Black/	/brown sandy gra	ivel (coarse,	angular, loose, moist)	
3	1.5	4-6	U	_	_	22	2-6ft: Gray sa	ndy clayey silt (k	ow plasticity.	moist to wet)	
						, , ,	. ,				
4	0.7	6-8	U	-	-	22	6-8ft: Reddish	ı brown clay (low	plasticity, st	iff, moist)	
							_				
								·	-		

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NOTES	NA = Not Ap	nlicable					F. 10. A				
1101E3			ind surfar	ce			Fill to ~2 ft. bgs				
	ft. bgs = feet below ground surface No suspect odors detected										
	*SS - SPLIT-SPOON SAMPLE U - UNDISTURBED TUBE P - PISTON TUBE C - CORE										

r												
		CS I	nc.			SU	BSUR	FACE LOG				
PROJEC	CT/ LOCATI	ON:	177	& 255 Great Ar	row Ave	enue, Buffalo, l	New York	PROJECT No. 04B1552.22				
CLIENT:				per, Ferber & D		44						
DATE S								RECORDED BY: JMR				
H				RILLING:				**************************************				
1						Geoprobe DRILLER: BMS Drilling						
DRILL SIZE/TYPE: Macro-core					SAM	IPLE HAMME						
Sample No.	PID/HNu Reading (ppm)	Depth (Feet)	Туре	Blows/6"	N	Recovery (Inches)	(Unified	Material Classification and Description Soil Classification System-Visual Manual Method)				
1	1.2	0-2	U	-		10	0-0.3ft: Aspha	elt				
			<u> </u>									
2	1.6	2-4	u	-	-	10	0.3-3ft: Black	gravelly sand (coarse, dense, moist)				
3	0.8	4-6	U		-	24	3-6ft: Gray cla	yey sandy silt (no plasticity, moist)				
4	0.7	6-8	U	7	-	24	6-8ft: Reddish	brown clay (no plasticity, very stiff, moist)				

NOTES NA = Not Applicable

Fill to -3 ft. bgs

ft. bgs = feet below ground surface

No suspect odors detected

*SS - SPLIT-SPOON SAMPLE

U - UNDISTURBED TUBE

P - PISTON TUBE

C - CORE

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PROJEC	PROJECT/ LOCATION: 177 & 255 Great Arrow Avenue, Buffalo, New York PROJECT No. 04B1552.22									
CLIENT:	•	*	Nes	oer, Ferber & D	iGiacon	10, LLP		WELL/BORI	NG No.	BH44
DATE S	TARTED:	8/1	2/04	DATE COM	MPLETE	D:	8/12/04	RECORDED	BY:	JMR
GROUN	DWATER D	EPTH WI	HILE DF	RILLING:		: NA	AFTER COM	PLETION:		NA
WEATH	ER:	-75F, Sur	าทy	DRILL RIG:	G	Seoprobe	DRILLER:		BMS D	rilling
DRILL S	IZE/TYPE:		Macr	o-core	_ SAMI	PLE HAMME	R: WEIGHT	NA	FALL _	NA
	1		T			1				
Sample No.	PID/HNu Reading (ppm)	Depth (Feet)	Type *	Blows/6"	N	Recovery (Inches)	Material Classification and Description (Unified Soil Classification System-Visual Manual Method)			
1	1.2	0-2	U	-	-	12	0-0.3ft: Aspha	lt		
										į
2	1.0	2-4	U	-		12	0.3-2.5ft: Blac	k gravelly sand	(coarse, dens	e, moist) (red brick)
3	0.6	4-6	U	_	•	24	2.5-5ft: Gray s	andy silt (low p	lasticity, mois	i)
4	0.4	6-8	U	-	-	24	5-8ft: Reddish	brown clay (lov	v plasticity, ve	ry stiff, moist)
						· · · · · · · · · · · · · · · · · · ·				
NOTES	NA = Not Ap	plicable					Fill to ~2.5 ft. bo	ns		
	ft. bgs = feet		ind surfac	ce			No suspect odo			
	*SS - SPLIT-SPOON SAMPLE U - UNDISTURBED TUBE P - PISTON TUBE C - CORE									

LCS Inc.

PROJE	CT/LOCATI	ON:	177.8	. 255 Great Arr	ow Ave	nue, Buffalo,	New York	PROJECT N	1o	04B1552.22
CLIENT	• •		Nest	oer, Ferber & D	iGiacon	no, LLP		WELL/BORING No. BH45		
DATE S	TARTED:	8/1	3/04	DATE CO	MPLETE	ED:	8/13/04	RECORDE	RECORDED BY: BFB	
GROUN	DWATER D	EPTH WI	HILE DE	RILLING:		NA	AFTER COM	PLETION:	-	. NA
WEATH	ER:	~65F, Sur	ากy	DRILL RIG:	Geoprobe DRILLER:			BMS Drilling		
DRILL S	SIZE/TYPE:		Macr	o-core	_ SAM	PLE HAMME	R: WEIGHT	NA NA	FALL _	NA NA
	Ī	1	l		Ţ					
Sample No.	PID/HNu Reading (ppm)	Depth (Feet)	Туре	Blows/6"	N	Recovery (Inches)	1	Material Class	•	escription ual Manual Method)
1	118	0-2	U	<u> </u>	<u> -</u>	20	0-0.3ft: Asphali	t		
2	2.5	2-4	U	-	-	20	0.3-0.5ft: Gray	gravelly sand	(fine, medium,	moist)
3	15,1	4-6	U	· <u>-</u>	-	22	0.5-12ft: Brow	n/gray silty clay	(low plasticity	, medium stiff to stiff,
	7.0	6-8	U	· · · · · · · · · · · · · · · · · · ·			moist)			
4	7.6	0-0	U	•	-	22				
5	8.1	8-10	U	*	-	20				
6	8.8	10-12	U	_	-	20				
<u>,</u>										
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,										
···· · · · · · · · · · · · · · · · · ·								-		
				,						·
	<u> </u>									
NOTES	NA = Not Ap		und surfa	ce			Fill to ~0.5 ft. bg Moderate petrol		s @ ~0 5_12 #	bas
	330		······································		11	INIOTH INNOTES				. vyv
		33 - 31	-LII-5P(OON SAMPLE	U - UN	IDISTURBED	IUBE P-PIS	STON TUBE	C - CORE	

LCS Inc.

DBU IE	CT/LOCATI	∩N:		255 Great Arr			New York PROJECT No. 04B1552.22			
					-		WELL/BORING No. BH46			
							8/13/04 RECORDED BY: BFB			
							AFTER COMPLETION: NA			
							DRILLER: BMS Drilling			
							ER: WEIGHT NA FALL . NA			
	······································		111001		_		IN VEIGHT NA TALL . NA			
Sample No.	PID/HNu Reading (ppm)	Depth (Feet)	Type *	Blows/6"	N	Recovery (Inches)				
1	170	0-2	U	-	_	12	0-0.3ft: Asphalt			
2	70.6	2-4	Ü		*	12	0.3-0.5ft: Gray gravelly sand (fine, medium, moist)			
3 54.4 4-6 U 20 0.5-12ft: Brown/gray silty clay (low plasticity, medium moist)										
4	19.2	6-8	U	-	-	20				
5	. 19,2	8-10	U	-	-	20				
6	18.8	10-12	U	_	-	20				
<u> </u>										
NOTES	NA = Not Ap		und surfa	ce	<u>-</u>		Fill to ~0.5 ft. bgs Strong to medium petroleum-type odors @ ~0-12 ft. bgs			
· · · · · · · · · · · · · · · · · · ·		*SS - SF	PLIT-SPC	ON SAMPLE	U - UN	DISTURBED				

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64040000000000000000000000000000000000	•		111/
SMORRE WARREN			
VEX HOTEL TRANSPORTER OF			

PROJEC	CT/ LOCATI	ON:	177 8	k 255 Great An	ow Ave	nue, Buffalo, l	New York	PROJECT N); . <u></u>	04B1552.22									
CLIENT:			Nes	oer, Ferber & D	iGiacon	no, LLP	3	WELL/BORIN	IG No.	BH47									
DATE S	TARTED:	. 8/1	3/04	DATE COI	MPLETE	:D:	8/13/04	RECORDED	BY:	BFB									
GROUN	DWATER D	EPTH WI	ILE DE	RILLING:		NA .	AFTER COM	IPLETION:	**************************************	. NA									
WEATH	ER:	-65F, Sur	iny	DRILL RIG:		Seoprobe	DRILLER:		BMS D	rilling									
DRILL S	IZE/TYPE:	<u></u>	Macr	o-core	_ SAMPLE HAMMER: WEIGHT			NA	_ FALL _	NA									
									· · · · · · · · · · · · · · · · · · ·										
Sample No.	PID/HNu Reading (ppm)	Depth (Feet)	Туре	Blows/6"	N	Recovery (Inches)	(Unified	Material Classif		escription ual Manual Method)									
1	0.6	0-2	U	_	<u>.</u> .	12	0-0.3ft: Aspha	lt											
2 0.3 2-4 U 12 0.3-2ft: Gray gravelly sand (coarse, dense,									,										
3	0.2	4-6	U	-	-	24	1	/gray silty clay (k	ow plasticity,	medium stiff to stiff,									
. 4	0.0	6-8	U		_	24	moist)												
- **		0-0	Ü			24		→		***									
5	0.0	8-10	U	-	-	24													
									é										
6	0.0	10-12	U	-	-	24													
				· · · · · · · · · · · · · · · · · · ·			No.												
							·												
						····													
								· · · · · · · · · · · · · · · · · · ·											
NOTES	NA = Not Ap						Fill to -0.5 ft. b												
	ft. bgs = feet	below grou	ınd surfa	ce			No suspect odd	ors detected											
		*SS - SF	PLIT-SPC	OON SAMPLE	U - UN	IDISTURBED	TUBE P - PI	STON TUBE	C - CORE	*SS - SPLIT-SPOON SAMPLE U - UNDISTURBED TUBE P - PISTON TUBE C - CORE									

LCS Inc.

PROJEC	CT/ LOCATION	ON:	177 8	255 Great Arr	ow Avei	nue, Buffalo: I	New York	PROJECT N	O	04B1552.22		
			- ,		·····			the state of the state of				
							8/13/04			4		
GROUN	DWATER D	EPTH W	HILE DR	ILLING:		NA .	AFTER COM	PLETION:		NA .		
WEATH	ER:	-65F, Sun	ıny	DRILL RIG:	Geoprobe DRILLER:				BMS Dril			
DRILL S	IZE/TYPE:		Macr	o-core	SAM	PLE HAMME	R: WEIGHT	NA	_ FALL	NA		
	Ī		T		T	T						
Sample No.	PID/HNu Reading (ppm)	Depth (Feet)	Туре	Blows/6"	N	Recovery (Inches)	Material Classification and Description (Unified Soil Classification System-Visual Manual Method)					
1	0.0	0-2	U			18	0-1.5ft: Wood					
2	0.0	2-4	U	-		18	1	prown silty clay	(high to low pla	sticity, soft to stiff,		
<u> </u>	0.0	4-6	U	_		24	moist)					
3 0.0 4-6 U 24												
4	0.0	6-8	U			24				,		
<u></u>												
												
							-					
A												
								·				
				-								
NOTES	NA - N-1 -						Fill to -1 5 ft h		in			
NOTES	NA = Not Ap		und surfa	ice			Fill to ~1.5 ft. b					
	ft. bgs = feet below ground surface *SS - SPLIT-SPOON SAMPLE U - UNDISTURBED TUBE P - PISTON TUBE C - CORE											

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44 7070 930 900	~
64-FLC0867************************************	•
SOOT COMMITTEES IN THE STATE OF	

PROJEC	T/ LOCATION	ON:	177 8	255 Great Arr	ow Aver	nue, Buffalo, N	lew York	PROJECT No.	04B1552.22
CLIENT:		.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Nes	oer, Ferber & D	iGiacom	io, LLP		WELL/BORING	No. BH49
DATE ST	TARTED:	8/1	3/04	DATE CO	MPLETE	D:8	3/13/04	RECORDED BY	: BFB
GROUN	OWATER D	EPTH WI	IILE DR	RILLING:		NA	AFTER COM	PLETION:	NA NA
WEATHE	ER:	-65F, Sun	iny	DRILL RIG:	Geoprobe		DRILLER:		BMS Drilling
DRILL SI	ZE/TYPE:		Macr	o-core	_ SAMI	PLE HAMMEI	R: WEIGHT	NA I	ALL NA
Sample No.	PID/HNu Reading (ppm)	Depth (Feet)	Туре	Blows/6"	N	Recovery (Inches)		•	tion and Description ystem-Visual Manual Method)
1	0.0	0-2	U	-	-	18	0-0.5ft: Wood		
2	0.0	2-4	U	7	-	18	0.5-8ft: Gray/b	rown silty clay (higł	n to low plasticity, soft to stiff,
3	0.0	4-6	υ	_	-	24		•	
4	0.0	6-8	U		-	24			
······································				<u></u>					
									•

NOTES	NA = Not Ap	unlicabia]			Fill to ~0.5 ft. bg	ne .	**************************************
NOTES	ft. bgs = feet		und surfa	асе			No suspect odo		
		<u></u>	,	OON SAMPLE	- U	IDISTURBED			- CORE

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Section Control (Selfs.	I	/L . L J .		

PROJEC	T/ LOCATION	N:	177 &	255 Great Arre	ow Aver	nue, Buffalo, I	New York 🕥	PROJECT NO	o	04B1552.22
CLIENT:			Nesp	er, Ferber & D	iGiacom	io, LLP		WELL/BORIN	NG No.	BH50
DATE ST	rarted:	8/1	3/04	DATE CON	IPLETE	D:	B/13/04	RECORDED	BY:	BFB
GROUN	OWATER D	EPTH WH	HILE DR	ILLING:	· ·	NA:	AFTER COM	PLETION:		NA
WEATHE	ER:	-65F, Sun	iny	DRILL RIG:	G	Seoprobe	DRILLER:		BMS D	rilling
DRILL SI	ZE/TYPE:	<u></u>	Macro	о-соге	SAM	PLE HAMME	R: WEIGHT	NA	_ FALL	NA
			<u> </u>		<u> </u>		1			
Sample No.	PID/HNu Reading (ppm)	Depth (Feet)	Type *	Blows/6*	N	Recovery (Inches)	(Unified S	Material Classif		Description Sual Manual Method)
1	0.0	0-2	U		_	18	0-1.5ft: Wood			
2	0.0	2-4	U	_	_	18	1.5-8ft: Gray/t	prown silty clay (high to low p	lasticity, soft to stiff,
3	0.0	4-6	Ŭ		-	24				
	0.0	6-8	U			24				
4	0.0	0-8		**************************************	-	24				
			·							
NOTES	NIA NI-+ 4	anlianhia					Fill to ~1.5 ft. b	ne	· · · · · · · · · · · · · · · · · · ·	
NOTES	NA = Not Ap		und surfa	ce			No suspect odd			
	~			OON SAMPLE	1Ų - U	DISTURBED		STON TUBE	C - CORE	

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4.0000 1 (20.22)	-		~~	_		
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Advanturates unitality		-	•			
844 45 Page 150 170 PM						_
	-		<i></i>		 _	

										
PROJEC	T/ LOCATION							PROJECT No.		· · · · · · · · · · · · · · · · · · ·
CLIENT:		1- 1	Nesp	er, Ferber & D	iGiacom	10, LLP		WELL/BORING	G No	BH51
DATE ST	rarted:	8/1	6/04	DATE CON	NPLETE	ED:	8/16/04	RECORDED B	3Y:	JMR .
3ROUNI	DWATER D	EPTH W	HILE DR	ILLING:		NA .	AFTER COM	IPLETION:	<u></u>	NA
NEATH	ER:	-80F, Sur	าทy	DRILL RIG:		3eoprobe	_ DRILLER:	<u></u>	BMS D	illing
								NA		. NA
	T	T		T	T	T	1			· · · · · · · · · · · · · · · · · · ·
Sample No.	PID/HNu Reading (ppm)	Depth (Feet)	Туре	Blows/6"	N	Recovery (Inches)	(Unified	Material Classific		escription ual Manual Method)
1	14.4	0-2	U	-	-	18	0-0.4ft: Conc	rete		
2	13.1	2-4	U	-	-	18	0.4-2ft: Brown	n sandy gravel (co	arse, angula	ar, loose, moist) (slag)
3	11.8	4-6.	U		_	20	2-5ft: Brown	silty sand (fine, me	edium dense	e, moist)
4	11.7	6-8	U	-	-	20	5-8ft: Reddis	h brown clay (low)	plasticity, sti	iff, moist)
							-			
····			-			<u> </u>	-			
			 					•		
							4			
						<u> </u>	-			
							1			
							1			
							_			
								ч		
							_			
						<u> </u>				
NOTES	NA = Not A	pplicable					Fill to ~2 ft. bg	gs		
	ft. bgs = fee	et below gro	ound surfa	ice			No suspect od	lors detected		
<u></u>	•	*\$\$ - \$	PLIT-SP(OON SAMPLE	U - U	NDISTURBED	TUBE P-F	PISTON TUBE	C - CORE	

LCS Inc.

PROJEC										04B1552.22
CLIENT:		i ve	Nesp	er, Ferber & D	iGiacon	10, LLP		WELL/BORI	NG No.	BH52
DATE S							8/16/04			BFB
3ROUN	DWATER D	EPTH W	HILE DR	ILLING:		NA	AFTER COM	PLETION:	····	NA
VEATH	ER:	-80F, Sur	าทy	DRILL RIG:		Seoprobe	DRILLER:		BMS D	rilling
ORILL S	DRILL SIZE/TYPE: Macro-core		SAM	PLE HAMME	R: WEIGHT	NA	FALL	NA		
					T		T			
Sample No.	PID/HNu Reading (ppm)	Depth (Feet)	Туре	Blows/6"	N	Recovery (Inches)	l .	Material Class		Description sual Manual Method)
1	15.4	0-2	U	-	-	18	0-0.4ft: Concre	ete		
2	15.0	2-4	U	_	-	18	0.4-2ft: Brown	sandy gravel (coarse, angul	ar, loose, moist) (slag)
3	14.3	4-6	U	•	-	20	2-5ft: Brown si	ilty sand (fine, i	medium dens	e, moist)
4	9.0	6-8	U	-	-	20	5-8ft: Reddish	brown clay (lo	w plasticity, s	tiff, moist)
					* * * * * * * * * * * * * * * * * * * *		-			
						······································				
1OTES	NA = Not Ap	plicable					Fill to ~2 ft. bgs			
	ft. bgs = fee		und surfa	ce			No suspect odo			
		*SS - S	PLIT-SPC	OON SAMPLE	4U - U	DISTURBED	TUBE P-PI	STON TUBE	C - CORE	

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PROJEC	CT/LOCATI	ON:	177	& 255 Great Ari	enue, Buffalo, I	New York	PROJECT No.	04B1552.22		
CLIENT	CLIENT: Nesper, Ferber & DiGiacomo, LLP							WELL/BORING No.	BH53	
DATE S	TARTED:	8/1	16/04	DATE CO	MPLET	ED:	8/16/04	RECORDED BY:	BFB	
GROUN	DWATER D	EPTH W	HILE D	RILLING:		NA	AFTER COM	PLETION:	NA	
WEATH	ER:	-80F, Sur	nny	DRILL RIG:		Geoprobe	DRILLER:	BM	IS Drilling	
DRILL S	IZE/TYPE:		Mac	ro-core	_ SAM	IPLE HAMME	R: WEIGHT	NA FALI	. NA	
		l			T				·	
Sample No.	PID/HNu Reading (ppm)	Depth (Feet)	Type	Blows/6"	N	Recovery (Inches)	(Unified s	Material Classification a Soil Classification Systen	nd Description n-Visual Manual Method)	
1	6.7	0-2	U	-	_	20	0-0.4ft: Concr	ete		
· · · · · · · · · · · · · · · · · · ·										
2	· 8.2	2-4	U		-	20	0.4-1ft: Brown	sandy gravel (coarse, a	ngular, loose, moist) (slag)	
3	7.1	4-6	U	_	_	20	1-7ft: Brown s	ilty sand (fine, medium d	ense, moist)	
4	4.5	6-8	U			20	7.04. 0-44-1-1	hanson start for our trackets		
4	4.5	0-8	U	-	-	20	j /-811: Redaish	brown clay (low plasticit	y, stiff, moist)	
							energy production and the second			
									·	
i										
								i		
·					-					
NOTES	NA = Not Ap	olicable					Fill to ~1 ft, bgs	**************************************		
			and surfa	ce			No suspect odo			
	ft. bgs = feet below ground surface No suspect odors detected *SS - SPLIT-SPOON SAMPLE U - UNDISTURBED TUBE P - PISTON TUBE C - CORE									

Consequence (1864) Contact (1874)	Y	MO	Y	
end electricities applied			n	$\boldsymbol{\alpha}$
44.2 (004.43000) \$109.00%				1
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WEATHER: ~80F, Sunny DRILL RIG: Geoprobe DRILLER: BMS Drilling	
DATE STARTED: 8/16/04 DATE COMPLETED: 8/16/04 RECORDED BY: BFB GROUNDWATER DEPTH WHILE DRILLING: NA AFTER COMPLETION: NA WEATHER: ~80F, Sunny DRILL RIG: Geoprobe DRILLER: BMS Drilling DRILL SIZE/TYPE: Macro-core SAMPLE HAMMER: WEIGHT NA FALL NA Sample No. Reading (ppm) 1 33.2 0-3 U 12 0-0.3ft: Concrete 0.3-1ft: Gray gravelly sand (fine, medium dense, moist)	F
WEATHER: ~80F, Sunny DRILL RIG: Geoprobe DRILLER: BMS Drilling DRILL SIZE/TYPE: Macro-core SAMPLE HAMMER: WEIGHT NA FALL NA Sample No. PID/HNu Reading (ppm) 1 33.2 0-3 U - 12 0-0.3ft: Concrete 0.3-1ft: Gray gravelly sand (fine, medium dense, moist)	
DRILL SIZE/TYPE: Macro-core SAMPLE HAMMER: WEIGHT NA FALL NA Sample No. PID/HNu Reading (Feet) * Depth (Feet) * N Recovery (Inches) (Unified Soil Classification System-Visual Manual Me (ppm) 1 33.2 0-3 U - 12 0-0.3ft: Concrete 0.3-1ft: Gray gravelly sand (fine, medium dense, moist)	
Sample No. Reading (ppm) 1 33.2 0-3 U 12 0-0.3ft: Concrete 0.3-1ft: Gray gravelly sand (fine, medium dense, moist)	
No. Reading (Feet) * (Inches) (Unified Soil Classification System-Visual Manual Me 1 33.2 0-3 U 12 0-0.3ft: Concrete 0.3-1ft: Gray gravelly sand (fine, medium dense, moist)	
No. Reading (Feet) * (Inches) (Unified Soil Classification System-Visual Manual Me 1 33.2 0-3 U 12 0-0.3ft: Concrete 0.3-1ft: Gray gravelly sand (fine, medium dense, moist)	***************************************
0.3-1ft: Gray gravelly sand (fine, medium dense, moist)	thod)
	it)
Refusal @ ~3 ft, bgs	
NOTES NA = Not Applicable Fill to ~3 ft. bgs ft. bgs = feet below ground surface No suspect odors detected	
*SS - SPLIT-SPOON SAMPLE U - UNDISTURBED TUBE P - PISTON TUBE C - CORE	

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PROJEC	T/ LOCATION	ON:	177 8	. 255 Great Arr	ow Ave	nue, Buffalo, I	Vew York	PROJECT N	o. <u></u>	04B1552.22
CLIENT:			Nesp	er, Ferber & D	iGiacon	no, LLP		WELL/BORII	NG No.	BH55
DATE S	TARTED:	8/1	6/04	DATE COM	MPLETE	D:	8/16/04	RECORDED	BY:	BFB
GROUN	DWATER D	EPTH W	ILE DR	ILLING:		NA	AFTER COM	PLETION:	*	NA
WEATH	ER:	-80F, Sur	iny	DRILL RIG:		Seoprobe	DRILLER:	**************************************	BMS D	rilling
DRILL S	IZE/TYPE:		Macr	o-core	_ SAM	PLE HAMME	R: WEIGHT	NA	_ FALL _	NA
****	<u> </u>		Ī	<u> </u>	T		1			
Sample No.	PID/HNu Reading (ppm)	Depth (Feet)	Type	Blows/6"	N	Recovery (Inches)	1	Material Classi		escription ual Manual Method)
11	7.3	0-2	U		-	15	0-0.4ft: Concr	ete		
2	7.5	2-4	U	-	-	15	0.4-3.5ft: Brov	vn sandy gravel	(coarse, ange	ular, loose, moist) (slag)
3	5.1	4-6	U	<u>.</u>	<u>.</u>	15	3.5-5ft: Brown	silty sand (fine,	medium den	se, moist)
4	4.9	6-8	U	*	-	15	5-8ft: Reddish	brown clay (lov	∕ plasticity, st	iff, moist)
		· · · · · · · · · · · · · · · · · · ·					3 8 9 1 1 1 1			
							<u> </u>			
······										,
				<u> </u>						
					····					
NOTES	NA = Not Ap	oplicable		<u> </u>			Fill to ~3.5 ft. b	gs		
	ft. bgs = fee		und surfa	се			No suspect odd			
		*SS - S	PLIT-SP(OON SAMPLE	1U - U	NDISTURBED	TUBE P-PI	STON TUBE	C - CORE	

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money electrons -	-			1 J			

									lo	04B1552.22
CLIENT	*	1. 1.	Nesp	er; Ferber & D	iGiacon	no, LLP		WELL/BORI	NG No.	BH56
DATE S	TARTED:	8/1	6/04	DATE COI	MPLETE	:D:	8/16/04	RECORDE	BY:	BFB
GROUN	IDWATER D	EPTH W	HILE DR	ILLING:	·	NA	AFTER COM	PLETION:		NA
WEATH	ER:	-80F, Sur	nny	DRILL RIG:		Seoprobe	DRILLER:	BMS Drilling		
DRILL S	SIZE/TYPE:		Macro	o-core	SAM	PLE HAMME	R: WEIGHT	NA	FALL _	, NA
*******				WL	T					
Sample No.	PID/HNu Reading (ppm)	Depth (Feet)	Туре	Blows/6"	N	Recovery (Inches)		Material Class		escription ual Manual Method)
1	16.8	0-2	U	-	-	10	0-0.4ft: Concre	ete		
2	16.2	2-4	U	•		10	0.4-2ft: Brown	gravelly sand (coarse, loose	, moist)
3	9.7	4-8	U	-	-	15	2-5ft: Brown s	ilty sand (fine, r	medium dense	e, moist)
							5-8ft: Reddish	brown clay (lov	w plasticity, sti	ff, moist)
										
······································										
· · · · · · · · · · · · · · · · · · ·										
										
VOTES	NIA - NIGHAS	nlicable	L	<u> </u>	<u> </u>		Eill to . O. #			
1U1E3	NA = Not Ap ft. bgs = feet		and surfac	:e			Fill to -2 ft. bgs No suspect odo			
<u></u>				ON SAMPLE	U - UN	DISTURBED T		STON TUBE	C - CORE	



ANALYTICAL RESULTS

WASTE STREAM TECHNOLOGY, INC.

302 Grote Street Buffalo, NY 14207 (716) 876-5290

Analytical Data Report

Report Date: 08/13/04 Work Order Number: 4H09008

Prepared For

Doug Reid

Lender Consulting Service

P.O. Box 406

Buffalo, NY 14205

Fax: (716) 845-6164

Site: Lender Consulting Service - 04B1552.22

closed are the results of analyses for samples received by the laboratory on 08/09/04. If you have any estions concerning this report, please feel free to contact me.

icerely.

niel W. Vollmer, Laboratory QA/QC Officer

ENVIRONMENTAL LABORATORY ACCREDITATION CERTIFICATION NUMBERS
NYSDOH ELAP #11179 NJDEPE #73977 PADEP #68757





P.O. Box 406 Buffalo NY, 14205 Project: New York State Projects

Project Number: Lender Consulting Service - 04B1552.22

Project Manager: Doug Reid

Reported: 08/18/04 16:44

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
BH1 (2-4)	4H09008-01	Soil	08/09/04 00:00	08/09/04 16:45
BH2 (4-6)	4H09008-02	Soil	08/09/04 00:00	08/09/04 16:45
BH3 (4-6)	4H09008-03	Soil	08/09/04 00:00	08/09/04 16:45
BH5 (0-4)	4H09008-04	Soil	08/09/04 00:00	08/09/04 16:45
BH6 (4-6)	4H09008-05	Soil	08/09/04 00:00	08/09/04 16:45
BH7 (4-6)	4H09008-06	Soil	08/09/04 00:00	08/09/04 16:45
BH8 (0-4)	4H09008-07	Soil	08/09/04 00:00	08/09/04 16:45
BH9 (4-6)	4H09008-08	Soil	08/09/04 00:00	08/09/04 16:45
BH10 (2-4)	4H09008-09	Soil	08/09/04 00:00	08/09/04 16:45

P.O. Box 406 Buffalo NY, 14205 Project: New York State Projects

Project Number: Lender Consulting Service - 04B1552.22

Project Manager: Doug Reid

Reported: 08/13/04 15:59

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	Sampled: 08/09/04 00:00	Received	: 08/09/04 1	6:45					
Methyl tert-butyl ether	ND	10	ug/kg dry	ļ	AH41007	08/10/04	08/10/04	8260	
benzene	ND	10	11	п	H	н	n	4	
toluene	ND	10	I I	•	n	В	*	19	•
ethylbenzene	ND	10	tı	21	ม	Ħ	в	jı .	į
m.p-xylene	ND	20	Ħ	EF.	rt .	n	ft	R	ì
o-xylene	ND	10	н	н	0	Ħ	19	11	(
sopropylbenzene	ND	10	"	ts	ir	н	tr	11	l l
n-propylbenzene	ND	10	н	71	ŧŧ	1)	11	41	į
1,3,5-trimethylbenzene	ND	10	37	j#	H	ŧŧ	н	Ħ	į
ert-butylbenzene	ND	10	**	n	н	Ħ	n	11	Į
.2,4-trimethylbenzene	ND.	10	ty	и	n	**	n	17	t i
ec-butylbenzene	ND	10	n	Ħ	н	"	n	14	1
-isopropyltoluene	ND	10	rt	‡3 .	Ħ	19	H	Ħ	į,
ı-butylbenzene	ND	10	#1	H	31	Ħ	и	11	1
aphthalene	ND	10	ft	**	11	"	P		t.
Surrogate: 1,2-Dichloroethane-d		103 %	69-13	ž			"	#	Ç
Surrogate: Toluene-d8		98.7 %	81-12		"	"	H	н	
urrogate: Bromofluorobenzene		104%	83-12		16	lr .	,,	,,	
3H2 (4-6) (4H09008-02) Soil S	Sampled: 08/09/04 00:00	Received:	08/09/04 14	5-4 5					
			00/07/04 10						
1ethyl tert-butyl ether	ND		ug/kg dry		AH41007	08/10/04	ΑΨΛΑΛΙΑ	9377	
Aethyl tert-butyl ether enzene	ND		ug/kg dry	1 "	AH41007	08/10/04	08/10/04	8260	(1
•	ND ND	9		1				v	U
enzene	ND	9 9	29	1 ,	n	It	h		U
enzene oluene	ND ND ND ND	9 9 9 9	37	1	n	11	в а .	v	U U
enzene oluene thylbenzene	ND ND ND	9 9 9	u u	1	21 17	1t 1t	в а .	v	U U U
enzene oluene thylbenzene 1.p-xylene	ND ND ND ND ND	9 9 9 9 18	11 11	1 17 17 18	21 17 17	1t 1t	в а .	v	U U U
enzene bluene thylbenzene 1.p-xylene -xylene	ND ND ND ND ND ND	9 9 9 9 18 9	27 (1 25 47] 17 17 18 18	13 10 10	11 11 11 11	в а .	v	U U U
enzene oluene thylbenzene 1.p-xylene -xylene opropylbenzene	ND ND ND ND ND ND	9 9 9 9 18 9	29 11 21 21	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	10 10 10 11	11 11 11 11	в а .	v	t) () t) t)
enzene oluene thylbenzene n.p-xylene -xylene opropylbenzene -propylbenzene	ND ND ND ND ND ND 14 35	9 9 9 9 18 9 9	11 H	1 5 77 78 78 78 78 78 78 78 78 78 78 78 78	21 12 12 13 14 14	11 11 11 11 11 11	в а .	v	U U U U
enzene bluene thylbenzene n.p-xylene -xylene opropylbenzene -propylbenzene 3,5-trimethylbenzene rt-butylbenzene	ND ND ND ND ND ND 14 35 ND	9 9 9 9 18 9 9	0 0 0 0 0 0 0 0 0	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	21 D D D D D D D D D D D D D D D D D D D	11 11 11 11 11 11 11 11	в а .	v	t) () t) t)
enzene bluene thylbenzene n.p-xylene -xylene opropylbenzene -propylbenzene 3,5-trimethylbenzene	ND ND ND ND ND ND 14 35 ND	9 9 9 9 18 9 9 9	0 0 0 0 0 0 0 0 0	1 17 17 17 17 17 17 17 17 17 17 17 17 17	21 D D D D D D D D D D D D D D D D D D D	11 11 11 11 11 11 11 11 11 11 11 11 11	в а .	v	U U U U U
enzene bluene thylbenzene a.p-xylene -xylene opropylbenzene -propylbenzene 3.5-trimethylbenzene 2,4-trimethylbenzene	ND ND ND ND ND 14 35 ND ND	9 9 9 9 18 9 9 9	0 0 0 0 0 0 0 0 0 0	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	11 12 12 12 12 12 12 12 12 12 12 12 12 1	11 11 11 11 11 11 11 11 11 11 11 11 11	в а .	v	U U U U U
enzene oluene thylbenzene n.p-xylene -xylene opropylbenzene -propylbenzene 3.5-trimethylbenzene 2,4-trimethylbenzene	ND ND ND ND ND 14 35 ND ND 22 ND	9 9 9 9 18 9 9 9 9	9 0 0 0 0 0 0 0	1 15 17 18 10 19 19 18 18 18	11 12 12 12 12 12 12 12 12 12 12 12 12 1	11 11 11 11 11 11 11 11 11 11 11 11 11	в а .	v	U U U U U
enzene bluene thylbenzene n.p-xylene -xylene opropylbenzene -propylbenzene 3.5-trimethylbenzene rt-butylbenzene 2,4-trimethylbenzene isopropyltoluene	ND ND ND ND ND 14 35 ND ND 22	9 9 9 18 9 9 9 9	11 11 11 11 11 11 11 11 11 11 11 11 11	1 15 17 18 18 18 18 18 18 18 18 18 18	11 12 12 12 12 12 12 12 12 12 12 12 12 1	11 11 11 11 11 11 11 11 11 11 11 11 11	в а .	v	U U U U U
enzene bluene thylbenzene n.p-xylene -xylene opropylbenzene -propylbenzene 3,5-trimethylbenzene rt-butylbenzene 2,4-trimethylbenzene isopropyltoluene butylbenzene uphthalene	ND ND ND ND ND 14 35 ND ND 22 ND ND	9 9 9 18 9 9 9 9 9	11 11 11 11 11 11 11 11 11 11 11 11 11	1 to 10 to 1	11 12 12 12 12 12 12 12 12 12 12 12 12 1	11 11 11 11 11 11 11 11 11 11 11 11 11	в а .	v	U U U U U
enzene bluene thylbenzene n.p-xylene -xylene opropylbenzene -propylbenzene 3.5-trimethylbenzene rt-butylbenzene 2.4-trimethylbenzene isopropyltoluene butylbenzene	ND ND ND ND ND 14 35 ND ND 22 ND ND	9 9 9 18 9 9 9 9 9	10 11 11 11 11 11 11 11 11 11 11 11 11 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	10 10 10 10 10 10 10 10 10 10 10 10 10 1	11 11 11 11 11 11 11 11 11 11 11 11 11	в а .	v	U U U U U

P.O. Box 406

Buffalo NY, 14205

Project: New York State Projects

Project Number: Lender Consulting Service - 04B1552.22

Project Manager: Doug Reid

Reported: 08/13/04 15:59

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BH3 (4-6) (4H09008-03) Soil	Sampled: 08/09/04 00:00	Received	: 08/09/04 1	6:45					
Methyl tert-butyl ether	ND		ug/kg dry	1	AH41007	08/10/04	08/10/04	8260	
benzene	ND	10	11	19	"	**	00/10/04	8260	1
toluene	ND	10	я	u	н	ŧı	и		1
ethylbenzene	ND	10	**	"	ti	B.	ıı		Į
m,p-xylene	ND	20	U	n	l†	н :	4	**	1
o-xylene	ND	10	я	**	n	u	,,	.,	l
sopropylbenzene	ND	10	*	15	lt.	п	**		į
n-propylbenzene	ND	10		11	11	u			Ų
1.3,5-trimethylbenzene	ND	10	Ħ	**	tr	**	ıt	**	l
ert-butylbenzene	ND	10	D	31	ţı	31	**	**	Į
.2.4-trimethylbenzene	ND	10	Ħ	**	t y	IX	0	· · · · · · · · · · · · · · · · · · ·	Į
ec-butyIbenzene	ND	10	n	n		Ħ		,,	Į
p-isopropyltoluene	ND	10	54	n	n	9		. 11	ţ
ı-butylbenzene	ND	10	n	11	16	н		•	(
aphthalene	ND	10	11	"	**	11		>>	l
iurrogate: 1,2-Dichloroethane-a		104 %	69-13	-g			11	41	Į
Surrogate: Toluene-d8	•	102 %				"	н	**	
urrogate: Bromofluorobenzene		102 %	81-12 83-12		0	,,	s s	"	
3H5 (0-4) (4H09008-04) Soil S	Sampled: 08/09/04 00:00								
lethyl tert-butyl ether	ND		ug/kg dry		AH41007 >	08/10/04	AD CLASA.		
enzene	ND	9	# "By # G 11.3	11	AII+1007	# # #	08/10/04	8260	U
oluene	ND	ý	D)	H	/,	ĸ			()
hylbenzene	ND	9	n	" /		**	,,	#1	U
.p-xylene	ND	17	* ^	**	li .			μ	()
xylene	ND	9		/,	řī.	te te		+3	Į
opropylbenzene	ND	9		H	,			1)	11
propylbenzene	ND	ρ Α		и	"		**	14	U
3.5-trimethylbenzene	ND	(0)	1 / _"	11	**	*1	"	¥1.	()
rt-butylbenzene	ND	M	U _"	h		,	19	**	U
2.4-trimethylbenzene	ND	\mathcal{N}_{0}	H		··	.,	Ħ	1+	U
c-butylbenzene	ND /	9	tŧ	**	tr		,,	**	U
isopropyltoluene	ND /	9	n		.,		ŧr	si	Į I
butylbenzene	NO	9			tę	0 B	39	8g	ſı
phthalene	15	9	**	rs be	14 H		FF .	11	[]
rrogate: 1,2-Dichloroethane-d4		-		** **		#	11	II.	
rrogate: Toluene-d8		114%	69-132		"	"	"	и	
rrogate: Pottene-uo rrogate: Bromofluorobenzene		101%	81-121		"	t t	н	n	
· · · · saic. Di villojilloi vvenzene		119%	83-121		er	н	11	4+	

Project: New York State Projects

³.O. Box 406 3uffalo NY, 14205 Project Number: Lender Consulting Service - 04B1552.22

Project Manager: Doug Reid

Reported: 08/13/04 15:59

1alyte	Result	Reporting Limit	Units	Dilutio	n Batch	Prepared	Analyzed	Method	Notes
16 (4-6) (4H09008-05) Soil	Sampled: 08/09/04 00:00	Received	: 08/09/04	16:45					
ethyl tert-butyl ether	ND	8	ug/kg dry	1	AH41007	08/10/04	08/10/04	8260	U
nzene	ND	8	pt	44	" /	"	tt	**	[]
uene	ND	8	11	†I	в/	tı	н	11	Ü
ıylbenzene	ND	8	**	ŧ	/"	ŧ	ţi.	*1	U
p-xylene	ND	17	" ()	"/	/ N	ţi.	н	n	1.3
cylene	ND	8	," \	1	И	H	**	17	į;
propylbenzene	ND	8	- 1\r \ \	P	H	Ħ	ŧı	ij	IJ
propylbenzene	ND	8	1	11	Ħ	n	ŧı	11	IJ
5-trimethylbenzene	ND	B		19	Ħ	11	**	u	Ų
t-butylbenzene	ND		V ,	60	Ħ	Ħ	u	**	U
.,4-trimethylbenzene	ND	/ 🖞	31	tt	Ħ	31	#	75	U
:-butylbenzene	ND /	8	Ħ	19	Ħ	ŧŧ.	21	н	Ü
sopropyltoluene	MD	8	17	11	,,	76	15	15	U
outylbenzene	ND	8	#	п	, ,,	н	64	15	[]
ohthalene	ND	8	ņ	н	ti .	и	н	11	()
rogate: 1,2-Dichloroethane-	d4	103 %	69-	Ī32	"		"	n	
rogate: Toluene-d8		92.7%	81-	121	"	"	"	n	
rogate: Bromofluorobenzene		105 %	83-	121	"	"	P	"	
17 (4-6) (4H09008-06) Soil	Sampled: 08/00/04 00:00	Dansiyadı	. 00/00/04	16.45					
:thyl tert-butyl ether	ND	10	ug/kg dry	10.43	AH41007	08/10/04	08/10/04	8260	
izene	ND	10	"	11	11141001	W 10704	00/10/04	0200	ť.
uene	ND	10	**	41	n	11	· ·	n	U
ylbenzene	ND	10	**	0	H	U	3)	Ħ	U
n-xylene	ND	20	#	. 11	**	U	11	**	U.
ylene	. ND	10	п	,,	##	"	u	**	U
propylbenzene	ND	10	н	b	IJ	Q	11	Ħ	U
ropylbenzene	ND	10	U	11	u	fi	31	Ħ	U
.5-trimethylbenzene	ND	10	'n	n	n		10	P	Ü
:-butylbenzene	ND	10	"		**	н		24	ſ,
.4-trimethylbenzene	ND	10	*1	11	**	Ħ	19	н	į,
-butylbenzene	ND	10	38	· n	ti.	ų	**	tt.	Ù
sopropyltoluene	ND	10	ut	n	11	te	Ħ	**	U
utylbenzene	ND	10	"	**	**	"	н	**	()
hthalene	ND	10	II.	71	п	0	В	н	(1
rogate: 1,2-Dichloroethane-c		708 %	69-	137	n	#	и	n	
rogate: Toluene-d8	• •	101 %	81-		"	н	FF	,,,	
rogate: Bromofluorobenzene		101 %	83		,,	"	"	n	
roguie, promojinorobenzene		107 70	03*.	1 4 1				•	

P.O. Box 406 Buffalo NY, 14205 Project: New York State Projects

Project Number: Lender Consulting Service - 04B1552.22

Project Manager: Doug Reid

Reported: 08/13/04 15:59

\nalyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
H8 (0-4) (4H09008-07) Soil	Sampled: 08/09/04 00:00	Received:	08/09/04	16:45					
lethyl tert-butyl ether	ND	10	ug/kg dry	l	AH41007	08/10/04	08/10/04	8260	U
enzene	ND	10	**	ų	f+ .	n	и .	79	1
oluene	ND	10	3\$	ii.	st	Ħ	n	Ħ	Ü
hylbenzene	ND	10	75	u	#	71	ti	η	U
ı,p-xylene	ND ·	20	н	11	26	11	tı	и	Ų
-xylene	ND	10	n	н	Ħ	Ħ	я	pt	Į:
opropylbenzene	ND	10	lt	lŧ	а	11	Ħ.	н	Į:
-propylbenzene	ND	10	н	11	и	Ħ	h	•	1
.3.5-trimethylbenzene	ND	10	#	Ħ	n	ti	NT.	**	Ų
rt-butylbenzene	ND	10	87	н	n	Ef	n	н	1.
.2.4-trimethylbenzene	ND	10	11	Ħ	ti	. н	IF	11	1.
e-butylbenzene	· ND	10	75	li	si .	н	н	н	l
-isopropyltoluene	ND	10	**	12	**	и	u	н	l.
-butylbenzene	ND	10	"	It	71	ħ	u	и	ι
aphthalene	ND	10	"	н	ti	н	11	Ħ	ι
urrogate: 1,2-Dichloroethane-	d4	116%	69-	132		<i>n</i> -	"	**	
urrogate: Toluene-d8		98.0 %	81-	121	"	<i>a</i> .	"	n	
urrogate: Bromofluorobenzene		113 %	83-	121	"	"	**	"	
H9 (4-6) (4H09008-08) Soil	Sampled: 08/09/04 00:00	Received:	08/09/04	16:45					
lethyl tert-butyl ether	ND	10	ug/kg dry	Į.	AH41007	08/10/04	08/10/04	8260	Į.
enzene	ND	10	#1	N	н	и	PT:	n	
luene	ND	10	H	fi.	e	н	ŧr	u	Į
hylbenzene	ND	10	38	ti	Ħ	п	n n	(i	l.
.p-xylene	ND	20	u	11	н	#1	**	11	Į.
xylene	ND	10	n	**	ti ti	41	u	u	(
opropylbenzene	ND	10	н	O	n	11	0	11	l,
propylbenzene	ND	10	**	11	Ħ	Ħ	Ħ	74	l
3.5-trimethylbenzene	ND	10	н	11	n	19	. "	tt	Į
rt-butylbenzene	ND	10	11	44	r	**	11	Ħ	Į
2.4-trimethylbenzene	ND	10	ff .	ft	31	11	и	Ħ	į
c-butylbenzene	ND	10	II .	e	н	#1	76	If	ŧ.
isopropyltoluene	ND	10	н	ч	н	н	tt.	ч	ι
butylbenzene	ND	10	u	и	н	n	А	"	l.
•	ND	10	U	Ħ	n	Ir	O.	st	Į
iphthalene	ND	10							
		113 %	69-1	32		·	**	n	
urrogate: 1,2-Dichloroethane-a urrogate: Toluene-d8			69-1 81-1		n	,	H H	"	

Project: New York State Projects

.O. Box 406 uffalo NY, 14205 Project Number: Lender Consulting Service - 04B1552.22

Project Manager: Doug Reid

Reported: 08/13/04 15:59

···		Reporting							• •
ıalyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
110 (2-4) (4H09008-09) Soil	Sampled: 08/09/04 00:00	Receive	1: 08/09/04	16:45					· · · · · · · · · · · · · · · · · · ·
thyl tert-butyl ether	ND	10	ug/kg dry	l	AH41007	08/10/04	08/10/04	8260	ļ
izene	ND	10	я	u	11	t	н	n	l.
jene	ND	10	Ħ	и	11	in	**	ы	l
ylbenzene	35	10	п	н .	e	н	h	e e	
o-xylene	ND	20	31	h	1)	H	It	Ħ	l
ylene	ND	10	,1	n	0	11	11	n	l
propylbenzene	46	10	lf .	"	11	fi	11	n	
ropylbenzene	322	10	p	п	89	**	16	19	
.5-trimethylbenzene	26	10	**	ts	P	ŧi	п.	31	
-butylbenzene	ND	10	#	n	IF	#1	**	n	ŧ
.4-trimethylbenzene	ND	10	11	n	tr	11	IF	и	l
-butylbenzene	75	10	žf .	н	it	es	at	IT	
sopropyltoluene	11	10	Ħ	U	ħ	!!	31	31	
utylbenzene	222	10	u	н	N	tr .	st	u	
ohthalene	98	10	"	U	U	11	34	я	
rogate: 1,2-Dichloroethane-a	14	109%	69-1	32	······································	n	"	**	
rogate: Toluene-d8		98.0 %	81-1	21	n	"	n	\boldsymbol{n}	
rogate: Bromofluorobenzene		110%	83-1	21	"	"	"	11	

P.O. Box 406 Buffalo NY, 14205 Project: New York State Projects

Project Number: Lender Consulting Service - 04B1552.22

Project Manager: Doug Reid

Reported: 08/13/04 15:59

Semivolatile Organic Compounds by EPA Method 8270C Waste Stream Technology Inc.

nalyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	, Method	Notes
H7 (4-6) (4H09008-06) Soil	Sampled: 08/09/04 00:00	Received	: 08/09/04	16:45					
aphthalene	ND	67	ug/kg dry	1	AH41105	08/11/04	08/11/04	8270	U
nthracene	ND	67	Ħ	11	11	Ħ	u	fr .	Į J
enaphthene	ND	67	31	ŧ !	н	İş	Ħ	***	[]
cenaphthylene	ND	67	**	н	#1	n	н	н	(i
enzo (a) anthracene	ND	67	21	a	n	п	ti	u	[]
enzo (b) fluoranthene	ND	67	11	14	17	n	. "	41	[]
enzo (k) fluoranthene	ND	67	l#	19	н	li .	##	н	(1
enzo (g.h.i) perylene	ND	67	U	#	IJ	ii	,,	H	()
enzo (a) pyrene	ND	67	'n	u u	n	Ħ	71	"	U
hrysene	ND	67	11	11	H	II.	er	н	[]
libenz (a,h) anthracene	ND	67	ķι	Ħ	Ħ	U	11	ų	U
uoranthene	ND	67	н	h	11	Ħ	ы	f1	()
uorene	ND	67	**	"	ıŧ	IŦ	"	Ħ	ŢŢ
ideno (1,2,3-cd) pyrene	ND	67	11	'n	"	"	11	н	U
henanthrene	ND	67	Ð	**	tt	11	14	**	()
yrene	ND	67	n .	ff	n	ıt	н	II	[1
urrogate: Nitrobenzene-d5	AND DEC	82.2 %	48-	122		, H	n	"	
urrogate: 2-Fluorobiphenyl		91.9%	50-	121	**	rr	"	"	
urrogate: Terphenyl-d14		106 %	<i>36</i>	134	"	n	77	н	
H8 (0-4) (4H09008-07) Soil	Sampled: 08/09/04 00:00	Received	: 08/09/04	16:45					
aphthalene	ND	67	ug/kg dry	1	AH41105		08/11/04	8270	{
nthracene	ND	67	11	**	ŦŦ	17	ŧi	n	U
cenaphthene	ND	67	u	11	ti	u	н	17	(i
cenaphthylene	ND	67	71	31	n	11	e	n	U
lenzo (a) anthracene	ND	67	11	**	19	41	н	11	11
lenzo (b) fluoranthene	ND	67	*t	ít	şt	"	я	12	U
lenzo (k) fluoranthene	ND	67	tt	IJ	H	18	tt.	. 11	()
lenzo (g.h,i) perylene	ND	67	R	п	Ħ	11	a)	17	Ų
lenzo (a) pyrene	ND	67	я	R	**	IJ	H	H	Į:
hrysene	ND	67	11	,,	n	"	**	**	(
libenz (a.h) anthracene	ND	67	Ŧŧ	*1	ū	Ħ	71	H	1
luoranthene	ND	67	17	11	ŧI	n	н	n	Į.
luorene	ND	67	н	**	**	**	u	U	l
ndeno (1,2,3-cd) pyrene	ND	67	. 11	31	10	11	(1	††	ţ
henanthrene	ND	67	ti	Ħ	Ħ	н	М	R	ŧ.
yrene	ND	67	n	h	þ	15	85	11	Į
'urrogate: Nitrobenzene-d5		81.3 %	48-	122		rt .	"	"	-
urrogate: 2-Fluorobiphenyl		84.5 %	50-	121	#	**	**	n	
urrogate: Terphenyl-d14		100 %	36-	134	#	я	n	n	

Waste Stream Technology Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

P.O. Box 406 Buffalo NY, 14205 Project: New York State Projects

Project Number: Lender Consulting Service - 04B1552.22

Project Manager: Doug Reid

Reported: 08/13/04 15:59

		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
H10 (2-4) (4H09008-09) Soil	Sampled: 08/09/04 00:00	Receive	d: 08/09/0	4 16:45					
aphthalene	385	67	ug/kg dry	1	AH41105	08/11/04	08/12/04	8270	
nthracene	388	67	4	H	**	n	81	11	
cenaphthene	286	67)1	Ħ	8	R	#1	2)	
cenaphthylene	ND	67	10	"	11	n	**	"	{1
enzo (a) anthracene	1700	67	tj	11	**	II .	4	fr .	
enzo (b) fluoranthene	2520	67	15	īŧ	P	ti	11	n	
enzo (k) fluoranthene	2140	67	If	ų.	71	pt	ħ	15	
enzo (g,h,î) perylene	948	67	н	B	**	и.	n	R	
enzo (a) pyrene	1990	67	*1	H	n	н	ts	4,	
ırysene	1660	67	. 11	H	q	н	**	P	
ibenz (a,h) anthracene	ND	67	H	п	tı.	н	1\$	n	IJ
uoranthene	2610	67	lt.	11	Ħ	Ħ		37	-
uorene	243	67	H	н	11		le .	ęt.	
ideno (1,2,3-cd) pyrene	799	67	· н	11	11	ii.	н	11	
nenanthrene	1540	67	11	11	в	D	14	41	
yrene	3030	67	ŧ	н	н	u	t7	11	
ırrogate: Nitrobenzene-d5		90.8%	48-1	22	'n	<i>n</i>	"	"	
urogate: 2-Fluorobiphenyl		97.9%	50-1		n	"	"	11	
urrogate: Terphenyl-d14		143 %	36-1	134	n	11	"	n	5-04

P.O. Box 406 Buffalo NY, 14205 Project: New York State Projects

Project Number: Lender Consulting Service - 04B1552.22

Project Manager: Doug Reid

Reported: 08/18/04 16:44

RCRA Metals by EPA 6000/7000 Series Methods Waste Stream Technology Inc.

nalyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
H5 (0-4) (4H09008-04) Soil	Sampled: 08/09/04 00:00	Received	: 08/09/04	16:45					
ercury	0.304	0.014	mg/kg dry	l	AH41216	08/12/04	08/12/04	EPA 7471A	
lver	ND	2.50	32	5	AH41001	08/10/04	08/13/04	EPA 6010B	
rsenic	11.9	8.50	Ħ	31	17	ij	08/13/04	tt	
ırium	261	5.00	н	71	#	11	08/13/04	11	
ıdmium	ND	5.00	ti	Ħ	п	н	08/13/04	tt	
hromium	32.8	5.00	U	ŋ	Ħ	sı '	ь	19	
ead	426	20.5	н	н	11	н	31	Ħ	
lenium	ND	7.00	H.	Ħ	h	**	"	н	
16 (4-6) (4H09008-05) Soil	Sampled: 08/09/04 00:00	Received	: 08/09/04	16:45					
ercury	0.181	0.014	mg/kg dry	1	AH41216	08/12/04	08/12/04	EPA 7471A	
Iver	ND	2.50	н	5	AH41001	08/10/04	08/13/04	EPA 6010B	
-senic	17.8	8.50	u	h	T)	. "		at .	
ırium	195	5.00	n	ts	ti	π	11	51	
ıdmium	ND	5.00	n	n	n	11	9	u	
ıromium	174	5.00	19	tt	н	+1	n	. 11	
ad	393	20.5	**	n	,,	h	11	М	
lenium	ND	7.00	t*	0	l+	Ħ	"	н	

Project: New York State Projects

².O. Box 406 3uffalo NY, 14205

Project Number: Lender Consulting Service - 04B1552.22 Project Manager: Doug Reid

Reported: 08/18/04 16:44

Polychlorinated Biphenyls by EPA Method 8082

Waste Stream Technology Inc.

nalyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
H5 (0-4) (4H09008-04) Soil	Sampled: 08/09/04 00:00	Received	: 08/09/04	16:45					
oclor 1016	ND	3.30	ug/kg dry	1	AH41014	08/10/04	08/12/04	8082	U
roclor 1221	ND	3.30	н	59	ft	lt.	н	71	U
oclor 1232	ND	3.30	Ħ	Ħ	0	lt	19	Ħ	Ė
oclor 1242	ND	3.30	п	11	11	Ħ	**	It	(J
oclor 1248	ND	3.30	11	u	n	n)×	. 0	U
oclor 1254	ND	3.30	11	n	Ħ	Ħ	17	. и	£ .
oclor 1260	113	3.30	B	H	u	. Р	E#	rı	
rrogate: Tetrachloro-meta-xylene		94.0 %	74-	122		77	" "	**	
rrogate: Decachlorobiphenyl		86.1 %	64-	127	n	" .	"	"	
16 (4-6) (4H09008-05) Soil	Sampled: 08/09/04 00:00	Received	: 08/09/04	16:45					
oclor 1016	ND	3.30	ug/kg dry	l	AH41014	08/10/04	08/12/04	8082	U
oclor 1221	ND	3.30	H	11	н	н	н	11	U
oclor 1232	ND	*, 3.30	"	. 11	ч	n	17	n	U
oclor 1242	ND:	3.30	IJ	ü	н	Ħ	Ħ	at .	IJ
oclor 1248	ND	3.30	n	п	Ħ	ų	В	EF .	()
oclor 1254	ND	3.30	l)	u	**	"	u	H	U
oclor 1260	ND	3.30	**	17	n	u	23	D	U
rrogate: Tetrachloro-meta-xylene		88.2 %	74-122		н	· ii	**	n	
rrogate: Decachlorobiphenyl		%	64-1	127	n	n	п	ø	S-04

Project: New York State Projects

².O. Box 406 3uffalo NY, 14205 Project Number: Lender Consulting Service - 04B1552.22

Project Manager: Doug Reid

Reported: 08/18/04 16:44

nalyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
15 (0-4) (4H09008-04) Soil	Sampled: 08/09/04 00:00	Received	: 08/09/04	16:45		······································			
loromethane	ND	43	ug/kg dry]	AH41007	08/10/04	08/10/04	8260	()
1yl chloride	ND	43	n	11	"	**	n .	н	IJ
omomethane	ND	43	##	ŧŧ	žŧ	¥1	11	i jr	()
loroethane ·	ND	43	şì	p	Ą	Ħ	u	в	U
l-dichloroethene	ND	9	ti	n	ü	ü	11	"	U
etone	ND	43	ft	ıı	n	tr	"	+1	U
bon disulfide	ND	9	11	*	+	t?	я	11	U
thylene chloride	ND	9	ŧi	Ħ	н	n	19	P\$	U
ns-1,2-dichloroethene	ND	9	н	75	II	It	**	М	(I
-dichloroethane	ND	9	D	Ħ	11	D.	29	Ħ	Į.
ıyl acetate	ND	43	н	ts	#	r.	29	er	Į,
outanone	ND	43	Ħ	u	t y	n	tŧ	R	Ù
-1,2-dichloroethene	ND	9	u	n	41	п	n	ш	U
oroform	ND	9	ŧŧ	11	71	41	tı	11	Ü
.1-trichloroethane	ND	9	tı	ıt	"	"	n	16	()
bon tetrachloride	ND	9	lt	Ħ	ii .	ţŧ	и	n	
ızene	ND	9	Ħ	11	U	şı	tt.	n	U
-dichloroethane	ND	9	Ħ	Ħ	11	11	u ,	#	U
chloroethene	ND	9	н	Ħ	n	H	u	n	 []
:-dichloropropane	ND	9	D.	ź	μ	b	(1	Ħ	Ù
modichloromethane	ND	9	IŦ	Ħ	U	11	н		U
Aethyl-2-pentanone (MIBK)	ND	43	B	н	15	#E	**	n	U
-1.3-dichloropropene	ND	9	τŧ	ti	и	**	"	U	į,
uene	ND	9	21	tt	u	11	*	u,	U
ns-1,3-dichloropropene	ND	9	re	15	#1	Ð	33	В	U
.2-trichloroethane	ND	9	R	5 *	et e	В	n	И	Ü
exanone	ND	43	n	41		n	п	н	(J
achloroethene	ND	9	31	ti	**	(t	11	В	U
romochloromethane	ND	9	ęi .	п	ti	tt	_D	n	U
orobenzene	ND	9	n	H	Þ	ĸ	u	11	U
ylbenzene	ND	9	11	n	q	ŧį		l)	U
>-xylene	ND	17	++	R	u	r r	n	D	U
ylene	ND	9	fl	н	**	\$1	31		()
rene	ND	9	n,	71	H	Ħ	ft	11	[]
moform	ND	ý	"	ч	11	в	110	11	(,
.2.2-tetrachloroethane	ND	9	It	31	u	и	et	н	U.
rogate: 1,2-Dichloroethane-		114%	69-1	27	* **** ***** ******* *****************	***************************************	n	n	ζ,
rogate: Toluene-d8	мт	101%	81-1		Ħ	"	rr rr	,,	
rogate: Bromofluorobenzene		119%	83-1		11	,,	,,	n	
roguie: promojiuoropenzene	i e e e e e e e e e e e e e e e e e e e	117 70	03-1	£ 1		.,	**		

Project: New York State Projects

P.O. Box 406 Buffalo NY, 14205

Project Number: Lender Consulting Service - 04B1552.22 Project Manager: Doug Reid

Reported: 08/18/04 16:44

Volatile Organic Compounds by EPA Method 8260B

Waste Stream Technology Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
H6 (4-6) (4H09008-05) Soil	Sampled: 08/09/04 00:00	Received	: 08/09/04	16:45					
hloromethane	ND	42	ug/kg dry	l	AH41007	08/10/04	08/10/04	8260	U
inyl chloride	ND	42	Ħ	н	#1	n	ŧ	U	U
romomethane	ND	42	ħ	H	14	Ħ	58	ห	Ü
hloroethane	ND	42	IR	If	11	ŦI	31	स	Ü
,1-dichloroethene	ND	8	н	n	R	34	38	n	U
cetone	ND	42	#1	Ħ	Ħ	tt.	ti	н	U
arbon disulfide	ND	8	ę,	H	51	н	я	71	Ū
nethylene chloride	ND	8	13	U	Ħ	и	Ħ	19	Ü
ans-1,2-dichloroethene	ND	8	, #	11	н	11	**	\$1	Ü
.1-dichloroethane	ND	8	R	Ħ	n	11	**	R.	Ū
inyl acetate	ND	42	ţ1	Ħ	н	0	11	54	Ū
-butanone	ND	42	n	ÀT	n	It	н	It	U
s-1,2-dichloroethene	ND	8	ı,		н	н	u	n	U
ıloroform	ND	8	H	n	11	11	"	н	U
.1,1-trichloroethane	ND	8	Ħ	n	U.	н	11	Ð	U
arbon tetrachloride	ND	8	#1	o	B	IJ	H	n	Ü
enzene	ND	8	Ħ	o o	D	tt .	u	11	Ü
2-dichloroethane	ND	8	**	P	#	H	n	**	U
ichloroethene	ND	8	к	tr	75	ш	11	n	Ü
2-dichloropropane	ND	8	P	n	R	н	íi .	н	U
omodichloromethane	ND	8	H	#	85	37	ti	Is	Ü
Methyl-2-pentanone (MIBK)	ND	42	,,	et	н	21	11	n	U
s-1,3-dichloropropene	ND	8	14	ti	H	34	Ħ	n	U
luene	ND	. 8	a	Ħ	łŧ	11	‡ı	H	IJ
ans-1,3-dichloropropene	ND	8	Ħ	51	ŧŧ	je	\$1	н	f)
1,2-trichloroethane	ND	8	2)	tr.	11	¥T	t+	u u	U
hexanone	ND	42	**	11	78	н	11	H	t)
trachloroethene	ND	8	11	H	#	ŧį	D	n	()
bromochloromethane	ND	8	\$ 7	p	Ħ	**	u	tr	U
llorobenzene	ND	8	##	† †	‡ ‡	17	n	ч	Ü
hylbenzene	ND	8	н	#1	rt-	11	H	n	U
,p-xylene	ND	17	н	*1	Ħ	ft	n	31	()
xylene	ND	8	n	tr	Ħ	IJ	1)	#	()
vrene	ND	8	Ji	u	Ħ	IF.	Ħ	14	()
omoform	ND	8	n	11	0	n	**	R	U
1.2.2-tetrachloroethane	ND	8	tt	tt.	н	н	11	e	(,)
rrogate: 1,2-Dichloroethane-		103 %	69-1	25	· · · · · · · · · · · · · · · · · · ·		ii.	. "	
urrogate: Toluene-d8	u+	92.7 %	69-1 81-1		n	,,	,,	,,	
		92.7 % 105 %			,,	"	. "	,,	
vrogate: Bromofluorobenzene		1113 %	83-1	∠1	**	.,	. "	"	

P.O. Box 406 Buffalo NY, 14205 Project: New York State Projects

Project Number: Lender Consulting Service - 04B1552.22

Project Manager: Doug Reid

Reported: 08/18/04 16:44

Semivolatile Organic Compounds by EPA Method 8270C Waste Stream Technology Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
3H5 (0-4) (4H09008-04) Soil	Sampled: 08/09/04 00:00	Received	: 08/09/04	16:45					
N-Nitrosodimethylamine	ND	335	ug/kg dry	5	AH41105	08/11/04	08/18/04	8270	(I
is(2-chloroethyl)ether	ND	335	15	n	ŧį	ti	п	#	Ų
henol	ND	650	Ħ	11	Ħ	71	11	n	Ü
:-chlorophenol	ND	650	\$ \$	ti	Ħ	13	P	**	U
,3-dichlorobenzene	ND	335	14	a	u	H	17	н	U
,4-dichlorobenzene	ND	335	łτ	11	Ħ	It	11	п	U
,2-dichlorobenzene	ND	335	11	Ħ	Ħ	ч	H	В	U
enzyl alcohol	ND	335	н	u	39	п	H	11	U
is(2-chloroisopropyl)ether	ND	335	Ħ	"	39	n	Ħ	"	U
:-methylphenol	ND	335	н	9	#	н	n	*	U
exachloroethane	ND	335	0	n	\$E	Ħ	H	В	t.
N-Nitrosodî-n-propylamine	ND	335	11	Ħ	u		11	11	Ę,
& 4-methylphenol	ND	650	19	Ħ	žt	#	11	и	Į.
itrobenzene	ND	335	tt	Ħ	, ja	11	Fŧ	t:	ι
sophorone	ND	335	#1	14	n	11	1)	11	Į.
-nitrophenol	ND	650	13	1#	11	n	q	Ħ	Į
.4-dimethylphenol	ND	650	27	tr	II.	и	**	"	L
3is(2-chloroethoxy)methane	ND	335	\$\$	ıı	**	n	11	11	l
enzoic acid	ND	1650	\$1	H	н	11	tř	34	l
4-dichlorophenol	ND	650	37	ŧŧ	н	Ħ	n	ts	Į
,2,4-trichlorobenzene	ND	335	**	Ħ	Ħ	n	п	"	l
iaphthalene	ND	335	Ψť	71		U	n	tı	l
-chloroaniline	ND	335	??	11	Ħ	If	11	Ħ	ι
exachlorobutadiene	ND	335	Ħ	79	II	ŧŧ	11	eş	Į
-chloro-3-methylphenol	ND	650	19	Ħ	tı	#1	11	17	Į,
!-methyInaphthalene	ND	335	н	17	H	я	**	11	l
exachlorocyclopentadiene	ND	650	75	87	11	В	17	u	Į
.4.6-trichlorophenol	ND	650	Ħ	Ħ	**	It	B	Ħ	Į
1,4,5-trichlorophenol	ИD	335	11	Ħ	н	lt .	ti	11	į
:-chloronaphthalene	ND	335	++	ti	ŧı	ti.	n	v	t
!-nitroaniline	ND	335	н	B	44	e e	*1	n	ŧ
cenaphthylene	ND	335	,ši	(F	t)	11	16	ŢI	ţ
Dimethyl phthalate	ND	335	11	v	ы	ч	R	Ħ	Į
.6-dinitrotoluene	ND	335	u	**	19	μ	u	#1	Į.
cenaphthene	522	335	ti	IJ	P		13	11	
-nitroaniline	ND	335	Ħ	Ħ	В	n	11	H	ı
.4-dinitrophenol	ND	650	н	11	н	11	ŧŧ	ŧ	Ų
libenzofuran	458	335	11	51	n	și și	n	#1	
4-dinitrotoluene	ND	335	,11	n	tf	n	"	SP.	ι
-nitrophenol	ND	650	11	lt	12	te .	п	ŧs	Ę
luorene	576	335	31	Ħ	iŧ.	n	Ħ	76	
-Chlorophenyl phenyl ether	ND	335		H	H	31	19	સ	i

Waste Stream Technology Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Project: New York State Projects

².O. Box 406 3uffalo NY, 14205 Project Number: Lender Consulting Service - 04B1552.22

Project Manager: Doug Reid

Reported: 08/18/04 16:44

tethyl phthalate nitroaniline ND ND ND ND ND ND ND ND ND ND ND ND ND	nalyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Initroaniline	H5 (0-4) (4H09008-04) Soil	Sampled: 08/09/04 00:00	Received	: 08/09/04	16:45	·····				
introaniline	iethyl phthalate	ND	335	ug/kg dry	5	AH41105	08/11/04	08/18/04	8270	ţ,
6-Dinitro-2-methylphenol	nitroaniline	ND	335	н	n	11	n	11	я	U
nitrosodiphenylamine ND 335 " " " " " " " " " " " " " " " " " "	6-Dinitro-2-methylphenol	ЙD	650	ft	I)	U	н	st	. #	Į j
hromophenylphenylether ND 335 " " " " " " " " " " " " " " " " " "		ND	335	If	Ħ	11	u	н	h	{}
xachlorobenzene ND 335 "	bromophenylphenylether	ND	335	В	†I	н	u	H	b	U
tetracene 1240 335 " " " " " " " " " " " " " " " " " "	xachlorobenzene	ND	335	It	n	II .	tt	н	H	U
thracene rbazole 542 335 " " " " " " " " " " " " " " " " " "	ntachlorophenol	ND	650	R	31	ij	и	ii .	\$1 ⁻	U
rbazole	ienanthrene	5370	335	N	n	H	#1	Ħ	11	
-n-butyl phthalate 149000 3350 " 50 " " " "	thracene	1240	335	11	11	н	Ħ	11	n	
nzidine	rbazole	542	335	P	#1	"	n	Ħ	и	
trene 10100 335 " " " " " " " " " " " " " " " " " "	-n-butyl phthalate	149000	3350	31	50	¥#	Ħ	o	41	
rene 10100 335 " " " " " " " " " " " " " " " " " "	nzidine	ND	1650	я	5	fi	Ð	H	TF.	U
Angle Angl	ioranthene	6460	335	и	,,	h	11	U	ti.	
33-Dichlorobenzidine ND ND ND ND ND ND ND ND ND ND ND ND ND	rene	10100	335	tı	n	n	Ħ	u	+4	
Serio (a) anthracene 3350 335 " " " " " " " " "	ityl benzyl phthalate	ND	335	91	19	ti	Ħ	v	h	IJ
rrogate: Phenol-d6 rrogate: Phenol-d6 rrogate: 2-Fluorophenol	3'-Dichlorobenzidine	ND	335	Ħ	H	ü	H	н	Tr.	()
1220 335 "	enzo (a) anthracene	3350	335	31	· •	n	11	N	n	
-n-octyl phthalate 3520 335 " " " " " " " " " " " " " " " " " "	rysene	3520	335	u	11	"	11	er	H	
-n-outy phthatate	s(2-ethylhexyl)phthalate	1220	335	ţţ	P	H	11	11	.0	
### ### ### ### ### ### ### ### ### ##	-n-octyl phthalate	3520	335	tt	11	75	II	ti .	19	
Parzo (a) pyrene 4040 335 " " " " " " " " " " " " "	enzo (b) fluoranthene	8510	335	Ħ	31	19	19	19	H	
deno (1,2,3-cd) pyrene 2000 335 " " " " " " " " " " " " " " " " " " "	:nzo (k) fluoranthene	2840	335	Ħ	η	II .	*1	u	W	
benz (a,h) anthracene 759 335 " " " " " " " " " " " " " " " " " " "	:nzo (a) pyrene	4040	335	u	11	н	н	n	u u	
Inzo (g,h,i) perylene 1930 335 " " " " " " " " " " " " " " " " " " "	deno (1,2,3-cd) pyrene	2000	335	žs.	II.	н	o	u	71	
rrogate: 2-Fluorophenol 49.1 % 50-112 " " " " " rrogate: Phenol-d6 54.0 % 52-117 " " " " " rrogate: Nitrobenzene-d5 70.1 % 48-122 " " " " " rrogate: 2-Fluorobiphenyl 65.3 % 50-121 " " " " " rrogate: 2,4,6-Tribromophenol 75.7 % 50-132 " " " " "	benz (a,h) anthracene	759	335	ji	33	0	B	n	Ħ	
rrogate: Phenol-d6 54.0 % 52-117 " " " " " " " " " " " " " " " " " "	nzo (g,h,i) perylene	1930	335	ŧf	u	41	U	11	н	
rrogate: Nitrobenzene-d5 70.1 % 48-122 " " " " " " rrogate: 2-Fluorobiphenyl 65.3 % 50-121 " " " " " rrogate: 2,4,6-Tribromophenol 75.7 % 50-132 " " " " " "	rrogate: 2-Fluorophenol		49.1%	<u> 50-</u> ,	112	11	<i>ii</i>	н	"	
rrogate: Nitrobenzene-d5 70.1 % 48-122 " " " " " " rrogate: 2-Fluorobiphenyl 65.3 % 50-121 " " " " " rrogate: 2,4,6-Tribromophenol 75.7 % 50-132 " " " " " "	rrogate: Phenol-d6		54.0 %	52-1	117	"	u	"	tt	
rrogate: 2-Fluorobiphenyl 65.3 % 50-121 " " " " " " rrogate: 2,4,6-Tribromophenol 75.7 % 50-132 " " " " "	rrogate: Nitrobenzene-d5		70.1 %	48-1	122	n	"	#	ıt	
rrogate: 2,4,6-Tribromophenol 75.7 % 50-132 " " " " "	rrogate: 2-Fluorobiphenyl		65.3 %	50-1	121	"	u	**	н	
· ·		ol	75.7 %	50-1	132	n	н	"	**	
	rrogate: Terphenyl-d14		128 %	36-1	134	н	ir .	AT.	"	

P.O. Box 406 Buffalo NY, 14205 Project: New York State Projects

Project Number: Lender Consulting Service - 04B1552.22

Project Manager: Doug Reid

Reported: 08/18/04 16:44

Semivolatile Organic Compounds by EPA Method 8270C Waste Stream Technology Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	, Method	Notes
H6 (4-6) (4H09008-05) Soil	Sampled: 08/09/04 00:00	Received	: 08/09/04	16:45					
I-Nitrosodimethylamine	ND	67	ug/kg dry	l	AH41105	08/11/04	08/18/04	8270	L)
is(2-chloroethyl)ether	ND	67	n	ŧ	n	n,	u	**	U
henol	ND	130	n	11	n	Ħ	11	n	(1
-chlorophenol	ND	130	#	tł	41	**	**	u	()
,3-dichlorobenzene	ND	67	ti .	11	tt.	tt	**	n	U
.4-dichlorobenzene	ND	67	U	н	11	ŧı	12	μ	1)
,2-dichlorobenzene	ND	67	H	11	н	Ħ	#1	н	U
is(2-chloroisopropyl)ether	ND	67	n	ţı	15	H	23-	н	U
enzyl alcohol	ND	67	#1	11	**	H	81	н	U
-methylphenol	ND	67	šī	Ħ	SÈ	11	19	ч	()
exachloroethane	ND	67	**	tf	tt.	n	If	ŧi	U
-Nitrosodi-n-propylamine	ND	67	34	H	33	31	n	#	Ü
& 4-methylphenol	ND	130	11	н .	11	¥	n	10	U)
trobenzene	ND	67	l+	tr	51	tį.	11	n	Ü
ophorone	ND	67	я	В	35	91	II.	##	Ü
nitrophenol	ND	130	Ħ	Ħ	11	n	н	11	U
4-dimethylphenol	ND	130	н	B.	**	**	a	jø.	U
is(2-chloroethoxy)methane	ND	67	н	н	11	"	н	н	U
enzoic acid	ND	330	स	н	Æ	н	Ħ	11	U
4-dichlorophenol	ND	130	IJ	н	**	н	ŧı	ŧŧ	U
2.4-trichlorobenzene	ND	67	**	и	ŧŧ	**	н	п	Ü
iphthalene	ND	67			11	15	II:	71	U
chloroaniline	ND	67	н	н	lt.	14	B	R	Ü
exachlorobutadiene	ND	67	н	н	15	"	#E	#	U
chloro-3-methylphenol	ND	130	н	h	77	t t	H	50	()
methylnaphthalene	88	67	п	n	71	ti	11	11	
exachlorocyclopentadiene	ND	130	**	*1	n	**	41:	#	U
4,6-trichlorophenol	ND	130	It	11	21	н	11	H	U
4,5-trichlorophenol	ND	67	H	в	tr	Ħ	19	. 13	
chloronaphthalene	ND	67	и	31	71	*1	R	H	Ų
nitroaniline	ND	67	ţe .	st	t+	н	lt.	12	U
enaphthylene	ND	67	н	91	ft	11	tf.	11	U
imethyl phthalate	ND	67	#I	it	(t	#1	II.	11	U
6-dinitrotoluene	ND	67	#	n	jt	и	n		()
enaphthene	ND	67	+3	H	\$5	ય	u	п	()
nitroaniline	ND	67	11	B	Ħ	11	Ħ	u	Ų
4-dinitrophenol	ND	130	It	e	ŧŧ	lt	Ħ	21	()
benzofuran	ND	67	14	"	**	17	n	ħ	(1
4-dinitrotoluene	ND	67	n	п	**	ly .	pe	**	()
nitrophenol	ND ND	130	н	μ	Ħ	п	R	H	U
torene	ND	67	п	н	**	#	19	'n	i Ij
Chlorophenyl phenyl ether	ND	67	11	h	н	ti	n		U
amorobitous chiens criter	NU	07							ι

Vaste Stream Technology Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

'.O. Box 406 Juffalo NY, 14205 Project: New York State Projects

Project Number: Lender Consulting Service - 04B1552.22

Project Manager: Doug Reid

Reported: 08/18/04 16:44

nalyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
16 (4-6) (4H09008-05) Soil	Sampled: 08/09/04 00:00	Received	: 08/09/04	16:45				······································	
ethyl phthalate	ND	67	ug/kg dry	Benefit	AH41105	08/11/04	08/18/04	8270	U
titroaniline	ND	67	ţ¥	l†	n	Ħ	n	п	Į J
-Dinitro-2-methylphenol	ND	130	ţı	17	n	н	st.	н	(1
itrosodiphenylamine	МD	67	If	11	11	4	se	**	1,1
romophenylphenylether	ND	67	"	"	0	ti	TT	11	U
cachlorobenzene	ND	67	#1	11	n	Ħ	Ħ	п	Ų
ntachlorophenol	ND	130	37	n	п	н	а	n	į j
enanthrene	766	67	**	н	н	Ħ	ч	Ħ	
thracene	142	67	11	В	н	ti	U		
bazole	ND	67	н	н	n	H	18	15	()
n-butyl phthalate	ND	67	E#	н	в	Ħ	21	#	Į į
ızidine	ND	330	п	EF	п	Ħ	P#	n n	U
oranthene	796	- 67	и)±	II .	ч	15	n	
rene	1880	67	71	tf	B	Ħ	25		
tyl benzyl phthalate	ND	67	#1	Ħ	ÞΣ	E9	H	и	Ü
'-Dichlorobenzidine	ND	67	ti	tı	17	B	IF	#1	U
nzo (a) anthracene	709	67	n	п	74	p	tı	**	
rysene	706	67	II .	11	19	n	11	1 1	
(2-ethylhexyl)phthalate	645	67	11	#	Ħ	Ħ	н	14	
n-octyl phthalate	ND	67	P)	n	Ħ	Ħ	19	. #	IJ
nzo (b) fluoranthene	<u>785</u>	67	47	n		"	H	P	
nzo (k) fluoranthene	259	67	ŧf	n	l 1	ít	**	"	
nzo (a) pyrene	473	67	R	tı	Ħ	it	н	В	
ieno (1,2,3-cd) pyrene	189	67	II .	B	ĸ	я	п	11	
enz (a.h) anthracene	ND	67	11	It	11	u	tr.	11	IJ
nzo (g,h,i) perylene	233	67	11	11	11	**	"	"	
rogate: 2-Fluorophenol		73.6 %	50-1	12			,	"	
rogate: Phenol-d6		79.7 %	52-1		n	n	**	"	
rogate: Nitrobenzene-d5		83.7 %	48-1		n	n	"	"	
rogate: 2-Fluorobiphenyl		101 %	50-1	21	>>	"	"	u	
rogate: 2,4,6-Tribromophen	ol	107 %	50-1	32	tt	rt	n	"	
rogate: Terphenyl-dl4		206 %	36-1		tt.	n	и	tı	S-04

Buffalo NY, 14205

P.O. Box 406

Project: New York State Projects

Project Number: Lender Consulting Service - 04B1552.22

Reported: 08/18/04 16:44

Project Manager: Doug Reid

Conventional Chemistry Parameters by APHA/EPA Methods Waste Stream Technology Inc.

		Reporting						1	
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
H1 (2-4) (4H09008-01) Soil	Sampled: 08/09/04 00:00	Received:	08/09/04	16:45					
6 Solids	80.6	0.1	%	1	AH41101	08/10/04	08/11/04	% calculation	
H2 (4-6) (4H09008-02) Soil	Sampled: 08/09/04 00:00	Received:	08/09/04	16:45					
6 Solids	77.4	0.1	%	1	AH41101	08/10/04	08/11/04	% calculation	
H3 (4-6) (4H09008-03) Soil	Sampled: 08/09/04 00:00	Received:	08/09/04	16:45					
6 Solids	75.5	0.1	°/0	1	AH41101	08/10/04	08/11/04	% calculation	
H5 (0-4) (4H09008-04) Soil	Sampled: 08/09/04 00:00	Received:	08/09/04	16:45					
6 Solids	83.0	0.1	%	1	AH41101	08/10/04	08/11/04	% calculation	· · · · · · · · · · · · · · · · · · ·
H6 (4-6) (4H09008-05) Soil	Sampled: 08/09/04 00:00	Received:	08/09/04	16:45					
6 Solids	75.3	0.1	%	1	AH41101	08/10/04	08/11/04	% calculation	
H7 (4-6) (4H09008-06) Soil	Sampled: 08/09/04 00:00	Received:	08/09/04	16:45					
Solids	75.0	0.1	%	l	AH41101	08/10/04	08/11/04	% calculation	
H8 (0-4) (4H09008-07) Soil	Sampled: 08/09/04 00:00	Received:	08/09/04	16:45					
Solids	80.8	0.1	%	1	AH41101	08/10/04	08/11/04	% calculation	
H9 (4-6) (4H09008-08) Soil	Sampled: 08/09/04 00:00	Received:	08/09/04	16:45					
Solids	82.7	0.1	%	I	AH41101	08/10/04	08/11/04	% calculation	
H10 (2-4) (4H09008-09) Soil	Sampled: 08/09/04 00:00	Received:	08/09/0	4 16:45					
, Solids	87.4	0.1	%	I	AH41101	08/10/04	08/11/04	% calculation	

Project: New York State Projects

P.O. Box 406 Buffalo NY, 14205

Project Number: Lender Consulting Service - 04B1552.22

Project Manager: Doug Reid

Reported: 08/18/04 16:44

Notes and Definitions

Analyte included in the analysis, but not detected U

The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect. S-04

DET Analyte DETECTED

Analyte NOT DETECTED at or above the reporting limit

Not Reported NR

ND

Sample results reported on a dry weight basis dry

Relative Percent Difference RPD

SAMPLE NO

AH41007-BI K1

										1	
Lab Name: Waste	Stre	eam Technolog	JY			Contra	act:	LCS	1.		
Project No.: 04B1	552.2	2	8	Site: _				Locatio	n <u>:</u>	Group	: 4H09008
Matrix: (soil/water) .	soil	_						Sample ID:		
Sample wt/vol:	_	1.00	- (g/mL)	g				Lab File ID:		
Level: (low/med)	low	•	·		<u> </u>			e Received:		
% Moisture: not d	•		-							4	-
GC Column:		Rtx 502.2	-	iD.	0.40				e Analyzed:		-
•			•	IU	V.10	_ (mm)			tion Factor:		_
Soil Extract Volum	e: _	na na	(uL)				5	Soil Aliqu	ot Volume:	<u>na</u>	_ (uL)
Number TICs found	i:	1				Concentr (ug/L c			_µg/Kg		
Г	CAS	Number		С	ompou	nd Name		RT	Est. Conc.	T Q	1
į	1.	000075-09-2	Methy				\dashv	3.45) (4 J	1
	2.										
-	3. 4.					·	_]
	5.						- -			<u> </u>	
	6.					<u> </u>				<u> </u>	
	7.						\dashv			<u> </u>	
	8.										
_	9.		······································								
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	16.										
	17.						\perp				à
	18. 19.						-		· · · · · · · · · · · · · · · · · · ·		
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	24.	-									
	25. 26.		······································			*******					
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L	28.										
	29.										
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SAMPLE NO.

BH1(2-4)

					AII COIAD	3	DU.	1(2-4)
Lab Name: Wast	e Strear	n Technolog	Эу	Contract:	LCS		<u> </u>	
Project No.: 04B1	<u>552.2</u> 2		Site:	***	Locatio	n <u>:</u>	Group:	4H09008
Matrix: (soil/wate	r)	soil	_		Lab	Sample ID:		
Sample wt/vol:		1.05	_(g/mL)g			Lab File ID		
Level: (low/med	d)	low				e Received:		·
% Moisture: not	dec.	19.4	-			e Analyzed:		
GC Column:	=w	Rtx 502.2	ID:0.18	(mm)		•		
Soil Extract Volum		na	-	•		tion Factor:		
CON EXHACT VOIGH	<u>. </u>	iia .	(uL)		Soil Aliqu	uot Volume:	<u>na</u>	(uL)
Number TICs foun	od:	1		Concentration (ug/L or u		µg/Кg		
	CAS Nu		Compoun	d Name	RT	Est. Conc.	Q I	
	1. 0	00075-09-2	Methylene Chloride		3.45		J, B	
	2.					l .		
	3.							
	4.							
	5.		· · · · · · · · · · · · · · · · · · ·					
	6.							
·	7. 8.							
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Ī	14.							
	15.		· · · · · · · · · · · · · · · · · · ·		**			
	16.							
	17.					· ·		ı
L	18.							•
Ĺ	19.							
L	20.							
ĺ	21.							

22. 23. 24. 25. 26. 27. 28. 29.

SAMPLE NO.

BH2(4-6)

Lab Name: Waste Stre	eam Technolo	ду	<u> </u>	Contract:	LCS	
Project No.: 04B1552.2	2	Site:			Location:	Group: 4H09008
Matrix: (soil/water)	soil	_			Lab Sample ID:	
Sample wt/vol:	1.13	_(g/mL)	g		Lab File ID:	0024279
Level: (low/med)	low			,	Date Received:	08/09/04
% Moisture: not dec.	22.6	_			Date Analyzed:	08/10/04
GC Column:	Rtx 502.2	_ ID:	0.18 (mm)	Dilution Factor:	na
Soil Extract Volume:	<u>na</u>	_(uL)		;	Soil Aliquot Volume:	na (uL)
	•		C	:oncentratio	n l Inite:	

Number Tipe form	.d. do	Concentration Units:					
Number TICs foun		_ (ug/L or u	g/Kg)	µg/Kg			
	CAS Number	Compound Name	RT	Est. Conc.	Q		
	1.	Cyclopentane, 1,2-dimethyl isor	r 6.94	231	J		
	2.	Substituted Cyclopentane	8.01	139	J		
	3.	Cyclopentane, 1,2,4-trimethyl is	c 8.55	121	J		
	4.	Substituted Hydrocarbon	8.88	120	J		
	5.	Unknown	10.14	138	J		
	6.	Cyclohexane, dimethyl isomer	10.94	121	J		
	7.	Cyclohexane, trimethyl isomer	12.20	169	J		
	8.	Benzene, diethyl Isomer	19.88		J		
	9.	Benzene, methyl-propyl isomer	20.47	120	j		
	10.	Benzene, tetramethyl isomer	21.84	140	J		
1	11.						
1	12.						
1	13.						
	14.						
	15.						
	16.						
	17.						
	18.						
	19.						
	20.		· · · · · · · · · · · · · · · · · · ·	······································			
	21.						
	22.						
	23.						
Γ	24.						
	25.						
	26.						
	27.						
	28.						
	29.						
T;	30.						
b		~					

SAMPLE NO.
BH3(4-6)
17110(4-0)

TENTATIVELY IDENTIFIED COMPOUNDS							
echnology		Contract:	LCS				
	Site:	•	Location):	Group:	4H09008	
soil			Lab	Sample ID:	4H09008-0	3	
1.02 (g/mL) <u>g</u>		· I	_ab File ID:	0024280		
low				•			
24.5				•	,		
502.2	ID: 0.18	(mm)		•			
na (uL)		· •		•		(uL)	
10	(µg/Kg_			
per	Compound	Name	RT	Est. Conc.	Q		
079-29-8 Butan	e, 2,3-dimethy	I	3.23	49	J		
			3.47	32	J, B		
			3.92	20	J		
Unkno	wn Hydrocarbo	on	10.95	29	J		
Benze	ne, diethyl iso	mer	19.88	44	J		
	soil 1.02 (g/mL low 24.5 3 502.2 na (uL) 10 Der 079-29-8 Butan 075-09-2 Methy 110-54-3 Hexan Unkno	Site:	Site: Soli	Contract: LCS	Site: Location: Soil Lab Sample ID:	Site: Location: Group:	

				U.2.U		, ,
	2.		Methylene Chloride	3.47	32	J, B
	3.	000110-54-3		3.92	20	J
	4.		Unknown Hydrocarbon	10.95		J
	5.		Benzene, diethyl isomer	19.88	44	J
	6.		Benzene, methyl-propyl isomer		<u></u>	J
, -	7.		Unknown Hydrocarbon	21.41	62	J.
Ī	8.	-	Benzene, tetramethyl isomer	21.84	47	J
-	9.		Unknown Hydrocarbon	22.67	44	J
	10.		Unknown	23.10	33	J
١	11.					
	12.					
	13.					
1	14.					
1	15.					
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L	17.					
	18.					
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Γ	29.					
Γ	30.					
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SAMPLE NO

BH7(4-6)

									()
Lab Name: Wast	e Stre	eam Technolog) y		_ Contract:	LCS		<u></u>	
Project No.: 04B1	552.2	2	Site	•		Location	1:	Group:	4H09008
Matrix: (soil/wate	r)	soil	_			Lab	Sample ID:	4H09008-0	6
Sample wt/vol:		1.01	_(g/mL)	g	_	l	ab File ID:	0024283	
Level: (low/med	i)	low	_			Date	Received:	08/09/04	
% Moisture: not o	dec.	25.0	-				: Analyzed:		
GC Column:	•	Rtx 502.2	ID:	0.18	(mm)		tion Factor:		
Soil Extract Volum			-		_ `		ot Volume:		(uL)
	•		• •		·		•		()
		_			Concentrati				
Number TICs foun	id:	8			(ug/L or ι	ıg/Kg)	µg/Kg		
	CAS	Number		Compour	nd Name	RT	Est. Conc.	Q	
-		000075-09-2	Methylen			3.46		J, B	
		000110-54-3		e Onionae		3.92			
¥ .	3.	***************************************		:				J	
	4.				O delen odbid	7.34		J	
						7.99		J	
	5.	·····				8.31	31	J	
	6.				ethyl isomer			J	
	7.			hydrocart		9.63	·····	J	
	8,		Cyclohex	ane, dime	thyl isomer	10.95	26	J	
	9.		····						
	10.			***************************************					
	11.				W-W-W-W-W-W-W-W-W-W-W-W-W-W-W-W-W-W-W-				
	12.								#
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SAMPLE NO.

BH8(0-4)

Lab Name: Waste	e Stre	am Technolog	ıy	Contract:	LCS	ı		
				`		_		
Project No.: 04B1			Site:		Location		•	4H09008
Matrix: (soil/water) .	soil			Lab	Sample ID:	4H09008-0	7
Sample wt/vol:	-	1.05	_(g/mL) <u>g</u>		l	_ab File ID:	0024284	
Level: (low/med) .	low	_		Date	Received:	08/09/04	
% Moisture: not o	iec.	19.2	<u>-</u>		Date	Analyzed:	08/10/04	
GC Column:	<u></u>	Rtx 502.2	ID: 0.18	(mm)	Dilui	tion Factor:	na	
Soil Extract Volum	ie: _	na	(uL)		Soil Aliqu	ot Volume:	na	(uL)
Number TICs foun	d: _	10	·	Concentration (ug/L or u	on Units:	μg/Kg		
	CAS	Number	Compound	d Name	RT	Est. Conc.	Q	
	1.		Methylene Chloride		3.46	36	J, B	
	2.				3.91		J	
	3.	000064-19-7			7.57	24	J	
	4.		Unknown		7.99	29	J	
	<u>5.</u> 6.		Unknown Cyclobovens dimet	bul icomor	9,60		J	
	7.		Cyclohexane, dimet Cyclohexane, dimet		10.14 10.93	68 50	J J	
	8.		Cyclohexane, dimet		11.22		J	
İ	9.		Unknown hydrocarbo		12.20	30	j	
Ī	10.	001678-91-7	Cyclohexane, ethyl-		12.28	24	J	
	11.		-					
<u> </u>	12.							*
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}	24. 25.							
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<u>1</u>	27.							
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	29.		W					
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SAMPLE NO.

BH9(4-6)

Lab Name: `Wast	e Stre	am Technolog	īV		Contract	LCS		L	
Project No.: 04B1				e:	-	Location	3.	Crauni	41100000
Matrix: (soil/water		 soil	·	· ·			······································		4H09008
_			•			Lad	Sample ID:	4H09008-0	J8
Sample wt/vol:		1.00	(g/mL)	<u> </u>		1	Lab File ID:	0024285	
Level: (low/med	l) _	low	-			Date	Received:	08/09/04	
% Moisture: not o	dec.	17.3				Date	e Analyzed:	08/10/04	_
GC Column:		Rtx 502.2	ID	: <u>0.18</u>	_(mm)	Dilu	tion Factor:	na	
Soil Extract Volum	ie:	na	(uL)		_	Soil Aliqu	ot Volume:	na	(uL.)
	***		, ,			•			. (/
Number TICs foun	d·	2			Concentrati		ua/Và		
ranion from tour	_						µg/Kg	,	
•	1.	Number	Mothydon		nd Name	RT	Est. Conc.	Q	
:	2.	000075-09-2 000079-01-6	Trichloro	ethylene	3	3.46 8.20		J, B J	
	3.	000010-01-0	THOMOTO	caryiene		0.20	30	J	
	4.								
	5.								
	6.								
	7.	· · · · · · · · · · · · · · · · · · ·	.,				v.e		
	8. 9.								
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	12.								
	13.								*
	14.								
	15.								
	16.		· · · · · · · · · · · · · · · · · · ·	··-···································					
	17.								ŧ
-	18. 19.								
ŀ	20.	•							
	21.								
	22.								
	23.								
	24.								
<u> </u>	25.						,		
1	26.								
-	27.		***************************************						
-	28. 29.			······································	······································				
	29. 30.		······································	W. C					
· · · · · · · · · · · · · · · · · · ·	~					. 1			i e

SAMPLE NO.

BH10(2-4)

							į.	• ,	
_ab Name: <u>Was</u> t	e Stre	eam Technolog	ıy	_ Contract:	LCS	····	J 		*****
Project No.: <u>04B1</u>	552.2	2	Site:	···	Location	1:	Group:	4H0900	3
Matrix: (soil/wate	r)	soil	-		Lab	Sample ID:	4H09008-0	9	
Sample wt/vol:	;	1.08	(g/mL) g		· I	_ab File ID:	0024286		
_evel: (low/med			-	-		Received:			_
% Moisture: not			-			Analyzed:			
			ID: <u>0.18</u>	(mm)		tion Factor:			
Soil Extract Volun	ne:	<u>na</u>	(ur)		Soil Aliqu	ot Volume:	<u>na</u>	(uL)	
Number TICs four	nd:	10		Concentration (ug/L or u		μg/Kg			
	CAS	Number	Compou	nd Name	RT	Est. Conc.	Q		
	1.	000107-83-5	Pentane, 2-methyl	-	3.24	847	J		
			Pentane, 3-methyl		3,56	602	J		
		*	Hexane, 2-methyl-	·	5.78	1030	J		
			Hexane, 3-methyl-		6.12		J		
			Hexane, 2,4-dimet		8.01		J		
	6.		Substituted Alkane		9.07		J		
	7.		Substituted Alkane		9.26		j		
-			Heptane, 3-methyl		9.50		J		
	9.		Cyclohexane, dim				J		
	10.		Benzene, ethyl-dir				J		
	11.					3,0			
	12.		:						
	13.							**	
	14.								
	15.								
	16.								
	17.								
	18.				***************************************			a	
	19.								
	20.				·····				
	21.								
	22.								
	23.		•						
	24.								
	25.								
	26.								
Ì	27.								
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<u>}</u>									

SAMPLE NO.	
i	

Lab Name: WASTE ST	REAM TECH	HNOLOGY		Contract:	· ·	
Project No.: LCS		Site:	······································	Location:	BH7 (4-6)	Group: 4H09008
Matrix: (soil/water)	SOIL			•	Lab Sample ID;	4H09008-06
Sample wt/vol:	30.0	_(g/mL)]		Lab File ID:	0017224.D
Level: (low/med)	LOW	_			Date Received:	8/9/2004
% Moisture: 25		decanted:	(Y/N)_	N	Date Extracted:	8/11/2004
Concentrated Extract Vo	lume:	1(ML))		Date Analyzed:	8/11/2004
Injection Volume:	1.0	_(uL)			Dilution Factor:	1.0
GPC Cleanup: (Y/N)	N		pH:_	NA		
Number TiCo found:	n		Co	ncentration		

CAS Number	Compound Name	RT	Est. Conc.	Q
1.	.			
2.				
3.	`			
4.				
5.				
6.			•	
7.				
8.				
9.				
10.				
11.				-
12.				
13.				
14.			·	
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22.				
23.				
24.				
25.				•
26.				
27.				
28.				
29.				
30.				

		TENTATI	VELY IDENTI	FIED COMP	OUNDS	
Lab Name: WASTE	E STREAM TECH	HNOLOGY	<u> </u>	Contract:		
Project No.: LCS		_ Sit	e:	Location:	BH8 (0-4)	Group: 4H09008
Matrix: (soil/water)	SOIL				Lab Sample ID:	4H09008-07
Sample wt/vol:	30.1	_ (g/mL)	g		Lab File ID:	0017222.D
Level: (low/med)	LOW				Date Received:	8/9/2004
% Moisture: 19.2		deca	anted: (Y/N)_	N	Date Extracted:	8/11/2004
Concentrated Extract	t Volume:	1	(ML)		Date Analyzed:	8/11/2004
Injection Volume:	1.0	_(uL)			Dilution Factor:	1.0
GPC Cleanup: (Y/N)	N	····	pH:_	NA		
			Co	ncentration	Units:	

Number TICs found:

0

CAS Number	Compound Name	RT	Est. Conc.	
1.	Compound Name	I KI	ESL CONC.	Q
7				
3.				
4.				
5.				
6.				
7.		-		
8.				
9,		 		
10.				
11.		 		***************************************
12.				
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21.				
22.		•		
23.				
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28.				
29.				
30.			i - I	

(ug/L or ug/Kg)

_ug/Kg

SAMPLE NO.

	SAMPLE	NO.
1		
1		,

Lab Name: WASTE S	TREAM TEC	HNOLOGY	<u> </u>	Contract:		
Project No.: LCS		Site	ə: <u> </u>	Location:	BH10 (2-116)	Group: 4H09008
Matrix: (soil/water)	SOIL			-	Lab Sample ID:	4H09008-09
Sample wt/vol:	30.1	(g/mL)	<u>g</u>		Lab File ID:	0018431.D
Level: (low/med)	LOW				Date Received:	8/9/2004
% Moisture: 12.6	-	deca	inted: (Y/N)_	N	Date Extracted:	8/11/2004
Concentrated Extract Vo	lume:	1	(ML)		Date Analyzed:	8/12/2004
Injection Volume:	1.0	_ (uL)			Dilution Factor:	1.0
GPC Cleanup: (Y/N)	N	Marria	pH:_	NA		
Number TiCo found	20		С	oncentration		

CAS Number	Compound Name	RT	Est. Conc.	Q
1.	UNKNOWN	3.11	6250	J
2.	BENZENE, DIETHYL ISOMER	3.39	1520	J
3.	BENZENE, 1,2,4,5- TETRAMETH	3.72	357	J
4.	UNKNOWN	3.80	381	J
5.	UNKNOWN	3.85	344	J
6.	UNKNOWN AROMATIC	3.90	411	J
7.	UNKNOWN	4.31	571	J
8.	UNKNOWN	4.56	271	j
9.	UNKNOWN	4.46	462	J
10.	UNKNOWN	4.77	508	J
11.	UNKNOWN	5.18	301	J
12.	NAPHTHALENE, DIMETHYL ISO	5.24	607	J
13.	NAPHTHALENE, DIMETHYL ISO	5.33	1510	J
14.	NAPHTHALENE, TRIMETHYL IS	5.88	530	J
15.	NAPHTHALENE, TRIMETHYL IS	6.03	291	7
16.	UNKNOWN PAH	8.01	296	J
17.	UNKNOWN	8.39	5630	J
18.	UNKNOWN PAH	16.84	1390	J
19.	UNKNOWN	18.28	343	J
20.	UNKNOWN	20.76	349	J
21.				
22.				
23.				
24.				
25.				
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27.				
28.				
29.				
30.			İ	

Ê	КЕРОКТ ТО: ((******	TECHNOLOGY Waste Stream Technology Inc.	Team Team	FECHNOLO TECHNOLO Team Techno	O G Y	<u>5</u>	<u> </u>	GROUP # 4409(00)8			×				
1 1		8 E	302 Grote Street, Buffalo, NY 14207 (716) 876-5290 • FAX (716) 876-2412	Street, 5290 •	Buffalc FAX (7	16) 876	-2412		DUE DATE	TURN	TURN AROUND TIME:) TIME:		ARE SPECIAL DETECTION LIMITS REQUIRED: YES (NO. SIT) If was please affach recordiophens	ECTION LIMITS	
CONT.	CONTACT (STACE (C.) PH.#() SCOTE (C.) C.				000>0	W DRIN	DW DRINKING WATER GW GROUND WATER SW SURFACE WATER WW WASTE WATER O OIL	SL SLUDGE SO SOIL S SOLID W WIPE OTHER	Э С	QUOT	QUOTATION NUMBER:	UMBER:	I I	Is a QC Package required YES NO YES No If yes please attach requirements		1
₹ 1	BILL TO: L.C.S. (0) (64					ERS		ANALYSES TO BE PERFORMED	SES TO I	3E PERF	ORMED					•
PO#	PO# () IV P. F. S. J. S. S. S. S. S. S. S. S. S. S. S. S. S.	UH II		5N/7dm	730	OF CONTAIN	यः महत्वस्य संस्थानहरू	777 P								
SAN	SIGNA	AMAS STAG	AS 90 FIMIT	SAMPLE TY	ON JATOT	378	15 07 00 1870 - 1870 - 1870 - 1870 - 1870 - 1870 - 1870 - 1870 - 1870 - 1870 - 1870 - 1870 - 1870 - 1870 - 1870 - 1870 -	े हैं जिस्से ज					A PACE	TYPE OF CONTAINER/ COMMENTS:	OFFICE USE ONLY	
-	SAMPLE I.D.	25			1.7	3 >			-			_			wst. l.b.	
- ~		<u>.</u>		<u> </u>		↓ ×	-								3 6	····
က	842 (4-6)					, ,							, cs		69	
₹	BH5 (0 1)	w / mm- #7.			43.	·×	×	<u> </u>					<i>i</i>	8 22	かめ	
Ŋ	18H6 (456)				3.2	 シ	. λ ×	×) h (C	8,00	ر ان	·····
ဖ	BH7 (4-6)				(72	`	<i>,</i>)		CALO	
^	CHK (O-C)				<u></u>	, , ,									1.87	
80	C3.14 (11 - (6)	and group t				į,×									0.8	
6	SHO COND	19%S			- €‡	. X	×						7 8		50	
10		7 1											``.			
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REMARKS:

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TIME: RECEIVED BY:	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
	1 10/ p

WASTE STREAM TECHNOLOGY, INC.

302 Grote Street Buffalo, NY 14207 (716) 876-5290

Analytical Data Report

Report Date: 08/24/04 Work Order Number: 4H11024

Prepared For

Doug Reid

Lender Consulting Service

P.O. Box 406

Buffalo, NY 14205

Fax: (716) 845-6164

Site: 177 & 255 Great Arrow - 04B1552.22

Enclosed are the results of analyses for samples received by the laboratory on 08/11/04. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Brian S. Schepart, Ph.D., Laboratory Director

ENVIRONMENTAL LABORATORY ACCREDITATION CERTIFICATION NUMBERS
NYSDOH ELAP #11179 NJDEPE #73977 PADEP #68757





Project: New York State Projects

P.O. Box 406 Buffalo NY, 14205 Project Number: 177 & 255 Great Arrow - 04B1552.22

Project Manager: Doug Reid

Reported: 08/24/04 15:37

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
BH11 (4-6)	4H11024-01	Soil	08/09/04 00:00	08/11/04 15:20
BH12 (2-4)	4H11024-02	Soil	08/09/04 00:00	08/11/04 15:20
BH13 (6-8)	4H11024-03	Soil	08/09/04 00:00	08/11/04 15:20
BH15 (4-6)	4H11024-04	Soil	08/09/04 00:00	08/11/04 15:20
BH16 (4-6)	4H11024-05	Soil	08/09/04 00:00	08/11/04 15:20
BH17 (6-8)	4H11024-06	Soil	08/09/04 00:00	08/11/04 15:20
BH19 (8-10)	4H11024-07	Soil	08/09/04 00:00	08/11/04 15:20

Project: New York State Projects

P.O. Box 406 Buffalo NY, 14205 Project Number: 177 & 255 Great Arrow - 04B1552.22

Project Manager: Doug Reid

Reported: 08/24/04 15:37

Volatile Organic Compounds by EPA Method 8260B Waste Stream Technology Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
H11 (4-6) (4H11024-01) Soil	Sampled: 08/09/04 00:00	Receive	d: 08/11/04	15:20					
lethyl tert-butyl ether	ND	10	ug/kg dry	1	AH41703	08/13/04	08/17/04	8260	į j
enzene	ND	. 10	Ħ	н	H	Ħ	N	41	[i
oluene	ND	10	n	в	ţţ	н	н	11	Į:
thylbenzene	ND	10	11	н	tt.	11	11	Ir	Į J
ı,p-xylene	ND	20	u	e	н	н	D	11	U
-xylene	ND	10	ď	15	Ω	u	u	*1	U!
sopropylbenzene	ND	10	*	R	a	Œ	**	11	Į!
-propylbenzene	ND	10	'n	I+	u	н	н	**	{}
,3.5-trimethylbenzene	ND	10	н	lt.	ų	51	. "	. tf	{
ert-butylbenzene	ND	10	H	SP .	#1	tł	àr	н	U
.2.4-trimethylbenzene	ND	10	n	35	#	IF	11	11	[]
ec-butylbenzene	ND	10	#1	łt	ŧŧ	n	n	15	()
-isopropyltoluene	ND	10	**	fi.	O	Ħ	н	9	[]
-butylbenzene	ND	10	υ	Ħ	0	19	11	U	(
aphthalene	ND	10	31	tı	ji	1)	41	11	Į.
urrogate: 1,2-Dichloroethane-d-	4	80.0%	69-1	32		. "	"	"	
urrogate: Toluene-d8		80.7%	81-1	21	n	,"	11	"	
urrogate: Bromofluorobenzene		88.3 %	83-1	21	u	**	71	ii.	
H12 (2-4) (4H11024-02) Soil	Sampled: 08/09/04 00:00	Received	d: 08/11/04	15:20	•				
4ethyl tert-butyl ether	ND	10	ug/kg dry	1	AH41703	08/13/04	08/17/04		Į.
				,				8260	Ų.
enzene	ND	10	и	59	11	u	12	8260 "	t.
	ND ND	10 10			a a	11			
oluene			n	59			14	u	ŧ.
oluene thylbenzene	ND	10	n	59	u	и	11:	u	ŧ.
oluene thylbenzene np-xylene	ND ND	10 10	R H	53 51	Ħ	н) t t)	11 71 71	t. •
oluene thylbenzene np-xylene -xylene	ND ND ND	10 10 20	H H H	14 21 21	11 11	11 11	11 11 21	11 11 11	t. t
oluene thylbenzene 1.p-xylene -xylene copropylbenzene	ND ND ND ND	10 10 20 10	12 19 18	19 11 21	11 14 15	11 H H	11 11 11	11 11 11 12	t. • • • • • • • • • • • • • • • • • • •
oluene thylbenzene t.p-xylene -xylene copropylbenzene -propylbenzene	ND ND ND ND ND ND	10 10 20 10	n n n n	19 11 21	11 11 15	11 11 11	11 10 11 11	11 11 11 12	t, t t t
oluene thylbenzene n.p-xylene -xylene sopropylbenzene -propylbenzene .3.5-trimethylbenzene	ND ND ND ND ND ND ND	10 10 20 10 10	12 19 19 18 19 19	99 97 91 94 94	9 11 15 17	11 11 11 11 11 11	11 11 11 11	11 11 11 12	t, t t t
oluene thylbenzene n.p-xylene -xylene sopropylbenzene -propylbenzene .3.5-trimethylbenzene ert-butylbenzene	ND ND ND ND ND ND	10 10 20 10 10 10	11 11 11 11 11 11 11 11 11 11 11 11 11	99 97 97 98 98 98	0 11 15 15 17 18	11 11 11 11 11 11 11	11 11 11 11 11	0 10 10 10 10 11	t. t t t t
oluene thylbenzene n.p-xylene -xylene sopropylbenzene -propylbenzene .3.5-trimethylbenzene ert-butylbenzene .2.4-trimethylbenzene	ND ND ND ND ND ND ND	10 10 20 10 10 10 10	# # # # # # # # # # # # # # # # # # #	99 99 99 99 99 99 99 99 99 99 99 99 99	0 11 15 15 16 16	11	11 11 11 11 11 11	0 10 10 10 10 11	t. t t t t
oluene thylbenzene n.p-xylene -xylene sopropylbenzene -propylbenzene .3.5-trimethylbenzene ert-butylbenzene .2.4-trimethylbenzene ec-butylbenzene	ND ND ND ND ND ND ND ND	10 10 20 10 10 10 10	# # # # # # # # # # # # # # # # # # #	99 99 99 99 99 99 99 99 99 99 99 99 99	0 11 15 15 16 16	11	11 11 11 11 11 11 11 11 11 11 11	0 10 10 10 10 11	t. t t t t
enzene bluene thylbenzene i.p-xylene -xylene opropylbenzene -propylbenzene .3,5-trimethylbenzene ert-butylbenzene .2.4-trimethylbenzene ec-butylbenzene -isopropyltoluene -butylbenzene	ND ND ND ND ND ND ND ND ND ND ND ND ND N	10 10 20 10 10 10 10 10	11 11 11 11 11 11 11 11 11 11 11 11 11	9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	0 11 25 41 11 14 14	11	11 12 13 14 14 14 17 18 18 18 18 18 18 18 18 18 18 18 18 18	11 11 12 12 14 14 14 14 14 14 14 14 14 14 14 14 14	f. l l l l t t
oluene thylbenzene n.p-xylene -xylene copropylbenzene -propylbenzene 3.5-trimethylbenzene ext-butylbenzene 2.4-trimethylbenzene ec-butylbenzene -isopropyltoluene -butylbenzene	ND ND ND ND ND ND ND ND ND ND ND ND ND N	10 10 20 10 10 10 10 10 10	# # # # # # # # # # # # # # # # # # #	9 17 17 18 18 18 18 18 18 19 19 19 19 19 19 19 19 19 19 19 19 19	0 11 22 41 41 41 41 41 41 41		11 11 11 11 11 11 11 11 11 11 11 11 11	11 11 12 13 14 14 14 14 14 14 14 14 14 14 14 14 14	t. t t t t t
oluene thylbenzene n.p-xylene -xylene copropylbenzene -propylbenzene 3.5-trimethylbenzene crt-butylbenzene 2.4-trimethylbenzene -isopropyltoluene -butylbenzene aphthalene	ND ND ND ND ND ND ND ND ND ND ND ND ND N	10 10 20 10 10 10 10 10 10 10		17 17 18 18 18 19 19 19 19 19 19 19 19 19 19 19 19 19	0 11 15 15 17 17 17 17 17 17 17 17 17 17 17 17 17		11 11 11 11 11 11 11 11 11 11 11 11 11	11 12 13 14 14 14 14 14 14 14 14 14 14 14 14 14	[,
oluene thylbenzene up-xylene -xylene copropylbenzene -propylbenzene .3.5-trimethylbenzene ert-butylbenzene .2.4-trimethylbenzene sc-butylbenzene	ND ND ND ND ND ND ND ND ND ND ND ND ND N	10 10 20 10 10 10 10 10 10		11 11 11 11 11 11 11 11 11 11 11 11 11	0 11 15 15 17 17 17 17 17 17 17 17 17 17 17 17 17			# # # # # # # # # # # # # # # # # # #	[,

Waste Stream Technology Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

P.O. Box 406 Buffalo NY, 14205 Project: New York State Projects

Project Number: 177 & 255 Great Arrow - 04B1552.22

Project Manager: Doug Reid

Reported: 08/24/04 15:37

malyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
H13 (6-8) (4H11024-03) Soil	Sampled: 08/09/04 00:00	Received	d: 08/11/04	15:20					
lethyl tert-butyl ether	ND	9	ug/kg dry	I	AH41703	08/13/04	08/17/04	8260	U
enzene	ИD	9	0	п	fl	B.	ti.	В	()
luene	ND	9	Ħ	11	tl	\$1	ч	*1	[]
hylbenzene	ND	9	и	27	11	и	н	H	13
.p-xylene	ND	18	н	71	13	er .	"	tı	(1
-xylene	ND	9	n	1)	u	**	u	н	ţi
opropylbenzene	ND	9	11	H	*1	tt	a	ŧ	U
-propylbenzene	ND	9	"	**	н	P	H	u	į į
3.5-trimethylbenzene	ND	9	n	Ħ	H)	0	0	11	Ų
rt-butylbenzene	ND	9	Ħ	н	п	#1	H	p	Į i
.2.4-trimethylbenzene	ND	9	11	n	8	н	n	II.	U
ec-butylbenzene	ND	9	It	**	11	н	n	TI.	()
-isopropyltoluene	ND	9	· n	Ð	n	†1	If	**	ſ,
butylbenzene	ND	9	Ħ.,	R	\$1	11	BÎ	7	(i
aphthalene	ND	9	Ħ	u	H	11	11	я	ţ
urrogate: 1,2-Dichloroethane-d	4	98.7 %	69-1.	32	"		"	47	
urrogate: Toluene-d8		103 %	81-12	21	n	"	,,	n	
urrogate: Bromofluorobenzene		105 %	83-12	21	**	, <i>n</i>	17	н	
H15 (4-6) (4H11024-04) Soil	Sampled: 08/09/04 00:00	Receive	d: 08/11/04	15:20			4		
lethyl tert-butyl ether	ND	10	ug/kg dry	1	AH41703	08/13/04	08/17/04	8260	l
enzene	ND	10		H	0	12	**	#1	Į
oluene	ND	10	**	n	н	II.	n	н	ι
hylbenzene	ND	10	n	Ħ	н	n	lt	ls .	ţ
i.p-xylene	ND	20	н	U	n	,,	,,	#1	Į
-xylene	ND	10	ji	н	u	u	н	R	1
opropylbenzene	ND	10	я	?t	81	17	Ħ	н	Į
-propylbenzene	ND	10	p	**	It	н	ž(#	1
.3.5-trimethylbenzene	ND	10	17	"	. "	n	Ħ	'n	' ι
ert-butylbenzene	ND	10	H	jı.	. "	4*	N	u	Ę
.2.4-trimethylbenzene	ND	10	u	Ħ	9	n	н .	ar	(
2c-butylbenzene	ND	10	n	51	IP.	11	11	n	ι
-isopropyltoluene	ND	10	*1	11	n	t)	"	31	Į
-butylbenzene	ND	10	77	ч	я	"	n	71	Į
aphthalene	ND	10	18	**	н	Ħ	15	п	ţ
		109 %	69-1	37			"	- н	-
urrogate: 1,2-Dichloroethane-d	'	106 %	81-1		,,	"	"	,,	
urrogate: Toluene-d8		100 %	83-1		"	n	"	"	
urrogate: Bromofluorobenzene		101 70	03-1	41					

P.O. Box 406 Buffalo NY, 14205 Project: New York State Projects

Project Number: 177 & 255 Great Arrow - 04B1552.22

Project Manager: Doug Reid

Reported: 08/24/04 15:37

unalyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
H16 (4-6) (4H11024-05) Soil	Sampled: 08/09/04 00:00	Receive	d: 08/11/04	15:20					
lethyl tert-butyl ether	ND	10	ug/kg dry	1	AH41703	08/13/04	08/17/04	8260	ξ:
enzene	ND	10	FP .	Ħ	н	ŧi	41	, u	ţi
luene	ND	10	Ħ	Ħ	н	н	rt .	11	f;
hylbenzene	ND	10	я	11	н	17	U	n	U
.p-xylene	ND	20	n	11	34	##	11	B	()
xylene	ND	10	н	#\$	\$ \$	79	ŧΙ	п	ſ;
opropylbenzene	, ND	10	11	#1	pt	*11	TP	<i>a</i> ,	U.
propylbenzene	ND	10)!	**	R	н	H	"	(1
3.5-trimethylbenzene	ND	10	Ħ	11	Ħ	и	It	**	Ų!
rt-butylbenzene	ND	10	p	H	n	भ	tt.	If	1)
2.4-trimethylbenzene	ND	10	n	11	lt.	**	0	r r	()
c-butylbenzene	ND	10	n	н	**	n	71	ħ	[]
isopropyltoluene	ND	10	Ħ	tı	Ħ	H .	R	н	U
butylbenzene	ND	10	a	ŧŧ.	Ħ	u	B	u	Į i
1phthalene	ND	10	ţi .	я	EŽ	#1	0	O.	()
irrogate: 1,2-Dichloroethane-d-	4	110%	69-1.	32		"	"	11	
rrogate: Toluene-d8		103 %	81-12	21	"	"	"	"	
urogate: Bromofluorobenzene		100 %	83-1.	21	**	3 0	и	n	
	Sampled: 08/09/04 00:00	Receive		15:20	····			-	
lethyl tert-butyl ether	ND	10	ug/kg dry	š	AH41703	08/13/04	08/17/04	8260	Į
enzene	ND	10	Ħ	n	j3	H	र्मु	11	ſ.
luene	ND	10	31	H	Ħ	11	**	Ħ	ι
hylbenzene	59	10	tt	н	n	ři.	и	O	
.p-xylene	ND	20	31	11	u	11	h	#	Ĺ
xylene	ND	10	18	ti	u	19	н	31	₹,
opropylbenzene	26	10	11	Ħ	ti	¥f	н	Ħ	
propylbenzene	110	10	ě†	**	16	by	71	þr	
3,5-trimethylbenzene	75	10	*	tt	Ħ	"	te .	n	
rt-butylbenzene	ND	10	tf	₹₹	n	U	н	u	Į
2,4-trimethylbenzene	233	10	31	17	Ð	Ħ	(i	n	
c-butylbenzene	28	10	U	11	"	#T	tt	26	
isopropyltoluene	13	10	u	Ħ	**	"	н	н	
butylbenzene	80	10	tı	**	Ħ	u	ы	tr	
1phthalene	36	10	***	n	H	ч	19	41	
irrogate: 1,2-Dichloroethane-de	<i>I</i>	93.7%	69-1.		n	n	11	0	
vrogate: Toluene-d8		91.0 %	81-1.		u	"	"	*	
urrogate: Bromofluorobenzene		101 %	83-1.	21	#	"	16	**	

'.O. Box 406 Juffalo NY, 14205 Project: New York State Projects

Project Number: 177 & 255 Great Arrow - 04B1552.22

Project Manager: Doug Reid

Reported: 08/24/04 15:37

nalyte	R Result	eporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
119 (8-10) (4H11024-07) Soil	Sampled: 08/09/04 00:00	Receive	ed: 08/11/0	04 15:20					
ethyl tert-butyl ether	Ø ND	10	ug/kg dry	1	AH41703	08/13/04	08/17/04	8260	11
nzene	ND ND	10	н	п)3	11		11	Ü
luene	™ ND	10	şı	14	Ħ	ŧ,	et	17	[1
nylbenzene	ND	10	н	н	ŧ	11	н	31	l i
.p-xylene	ND	20	O	† 7	e	14	13)ŧ	f)
	ND	10	žį	**	**	ų	11	#	f1
xylene opropylbenzene	ND	10	Jt.	н	If	ıs	ıs	n	1.3
opropy to enzene	ND	10	**	h	n	я	п .	Ħ	Į!
propylbenzene	ND	10	*1	n	п	lt .	n	U	U
3,5-trimethylbenzene	ND	10	n	n	11	21	н	79	L!
rt-butylbenzene	ND	10	9\$	βŧ	**	14	n	¥	U
2,4-trimethylbenzene	ND	10	21	п	ų.	н	₹\$	ii	1.3
c-butylbenzene		10	Is	,,	þz	11	u	14	U
isopropyltoluene	ND	10	п	uí	U	n	**	• 11	IJ
butylbenzene	ND		11	n	91	31	**	я	()
iphthalene	ND	10					n		
irrogate: 1,2-Dichloroethane-d-	4	92.3 %		132		,,	,,	,,	
ırrogate: Toluene-d8		83.7 %		121	"			,,	
urrogate: Bromofluorobenzene		101 %	83-	121	"	"	"	,	

Project: New York State Projects

P.O. Box 406 Buffalo NY, 14205 Project Number: 177 & 255 Great Arrow - 04B1552.22

Project Manager: Doug Reid

Reported: 08/24/04 15:37

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BH17 (6-8) (4H11024-06) Soil	Sampled: 08/09/04 00:00	Receive	d: 08/11/0	4 15:20					
naphthalene	ND	67	ug/kg dry	1	AH41727	08/17/04	08/18/04	8270	f i
anthracene	ND	67	bs	E†	н	1*	ĸ	n	f;
acenaphthene	ND	67	gh	н	Ħ	II.	18	n	ŧ)
Acenaphthylene	ND	67	IŢ.	#1	ti	11	ь	ti	C ¹
Benzo (a) anthracene	306	67	u	te	**	Ħ	Ħ	11	
	276	67	n	11	В	"	B	31	
Benzo (b) fluoranthene	308	67	Ħ	19	0	**	**	н	
Benzo (k) fluoranthene	291	67	ıı	H	n	tt	li?	tt	
Benzo (g,h,i) perylene		67	н	11	n	Ħ	n	n	
Benzo (a) pyrene	299	67	**	,,	a	0		п	
chrysene	322		"	**	*	14	u	17	
Dibenz (a,h) anthracene	83	67		" H	31	tr .)+	11	
fluoranthene	636	67	11				19	11	U
fluorene	ND	67	14	16	18		31	ır	t)
Indeno (1,2,3-cd) pyrene	220	67	"	**	(1	9)			
phenanthrene	261	67	IJ	#1	#	14	u	**	
pyrene	601	67	ŧ	ч	11	В		#1	
Surrogate: Nitrobenzene-d5		89.6%	48-	122		. ~ = · · · · · ·	n	H	
Surrogate: 2-Fluorobiphenyl		92.9 %		121	,,	n	"	***	
Surrogate: 7-ruoroophenyi Surrogate: Terphenyl-d14		108 %		134	"	"	**	n	•

Project: New York State Projects

P.O. Box 406 Buffalo NY, 14205

Project Number: 177 & 255 Great Arrow - 04B1552.22

Project Manager: Doug Reid

Reported: 08/24/04 15:37

Conventional Chemistry Parameters by APHA/EPA Methods Waste Stream Technology Inc.

	I Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
inalyte	Kesun	PHH	Omts	Differen	2 4.011	I			
H11 (4-6) (4H11024-01) Soil	Sampled: 08/09/04 00:00	Received	: 08/11/0)4 15:20					
Solids	79.2	0.1	%	l	AH41805	08/17/04	08/18/04	% calculation	
H12 (2-4) (4H11024-02) Soil	Sampled: 08/09/04 00:00	Received	: 08/11/0)4 15:20					
Solids	81.2	0.1	%	l	AH41805	08/17/04	08/18/04	% calculation	
H13 (6-8) (4H11024-03) Soil	Sampled: 08/09/04 00:00	Received	: 08/11/0	04 15:20					
6 Solids	82.9	0.1	%	1	AH41805	08/17/04	08/18/04	% calculation	
H15 (4-6) (4H11024-04) Soil	Sampled: 08/09/04 00:00	Received	: 08/11/	04 15:20				<u></u>	
6 Solids	88.7	0.1	%	1	AH41805	08/17/04	08/18/04	% calculation	
H16 (4-6) (4H11024-05) Soil	Sampled: 08/09/04 00:00	Received	: 08/11/	04 15:20					<u></u>
6 Solids	79.5	0.1	%	1	AH41805	08/17/04	08/18/04	% calculation	
H17 (6-8) (4H11024-06) Soil	Sampled: 08/09/04 00:00	Received	1: 08/11/	04 15:20					
6 Solids	83.3	0.1	%	1	AH41805	08/17/04	08/18/04	% calculation	
:H19 (8-10) (4H11024-07) Soil	Sampled: 08/09/04 00:00) Receive	:d: 08/11	/04 15:20					
6 Solids	84.2	0.1	%	ļ	AH41805	08/17/04	08/18/04	% calculation	
							16		

Project: New York State Projects

P.O. Box 406

Project Number: 177 & 255 Great Arrow - 04B1552.22

Buffalo NY, 14205

Project Manager: Doug Reid

Reported: 08/24/04 15:37

Notes and Definitions

U Analyte included in the analysis, but not detected

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

SAMPLE NO.

AH41703-BLK1

Lab Name: Waste Stre	eam Technolog	gyContrac	t <u>LCS</u>	
Project No.: 04B15522.	22	Site: Great Arrow	Location:	Group: 4H11024
Matrix: (soil/water)	soil		Lab Sample II	D: AH41703-BLK1
Sample wt/vol:	1.00	(g/mL)g	Lab File II	D: 0024350
Level: (low/med)	low		Date Receive	d: na
% Moisture: not dec.	na	_	Date Analyze	d: <u>08/17/04</u>
GC Column:	Rtx 502.2	ID: <u>0.18</u> (mm)	Dilution Facto	or: na
Soil Extract Volume:	na	_(uL)	Soil Aliquot Volum	e: <u>na</u> (uL)
Number TICs found:	4		ation Units: r ug/Kg) <u>µg/Kg</u>	_

d: _	4	(ug/L or uç	<i>3</i> /1\9/	pgrky	
CAS	Number	Compound Name	RT	Est. Conc.	Q
1.	000075-09-2	Methylene Chloride	3.43	49	J
2.	000110-54-3	Hexane	3.90		J
3.	000629-59-4		24.17	27	J
4.		Unknown Alkane	24.69	21	J
5.					
6.					
7.					
8.					
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SAMPLE NO.

BH11 (4-6)

Lab Name: Waste Stre	eam Technolog	y	Contract:	LCS		, .
Project No.: 04B15522.22 Site: Great			w	Location:	Group: 4H11024	
Matrix: (soil/water)	soil			Lab Sample ID:	4H11024-01	
Sample wt/vol:	1.02	(g/mL) <u></u>		Lab File ID:	0024353	
Level: (low/med)	low			Date Received:	08/11/04	
% Moisture: not dec.	20.8	_		Date Analyzed:	08/17/04	
GC Column:	Rtx 502.2	ID: <u>0.18</u> (mm)	Dilution Factor:	na	
Soil Extract Volume:	na	_(uL)		Soil Aliquot Volume:	<u>na</u> (uL)	
Number TICs found:	10		Concentration (ug/L or u			

(ug/L	or ug/Kg)	μg/Kg
٠٠		

u	10	(49.20.0	<i>\(\begin{array}{c} \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\</i>		
CAS	Number	Compound Name	RT	Est. Conc.	Q
1.		Methylene Chloride	3.44	<u> </u>	J, B
2.	000110-54-3		3.89		J
3.		Substituted Alkane	6.42		J
4.		Substituted Hexane	7.98		J
5.		Substituted Hexane	8.76		J
6.		Unknown Aromatic	22.42		J
7.		Unknown Alkane	22.83		J
8.		Unknown	23.52		J
9.		Substituted Benzene	23.96		J
10.		Unknown Alkane	24.73	33	J
11.					
12.					
13.					
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SAMPLE NO.

BH12 (2-4)

Lab Name: Waste Strea	am Technolog	У	Contract:	LCS	
Project No.: 04B15522.2	Site: Great	Arrow	Location:	Group: 4H11024	
Matrix: (soil/water)	soil			Lab Sample ID:	4H11024-02
Sample wt/vol:	1.09	- (g/mL) g		Lab File ID:	0024354
Level: (low/med)	low			Date Received:	08/11/04
% Moisture: not dec.	18.8	-		Date Analyzed:	08/17/04_
GC Column:	Rtx 502.2	- ID: <u>0.1</u>	8 (mm)	Dilution Factor:	<u>na</u>
Soil Extract Volume:	na	_(uL)		Soil Aliquot Volume:	<u>na</u> (uL)
Number TICs found:	10		Concentrati (ug/L or ι		

CAS Number Compound Name RT Est. Cor 1. 000075-09-2 Methylene Chloride 3.44 60 2. Substituted Alkane 6.42 89 3. 000592-13-2 Hexane, 2,5-dimethyl- 7.88 5- 4. 000565-75-3 Pentane, 2,3,4-trimethyl- 8.77 6 5. Heptane, dimethyl- isomer 11.59 44 6. Substituted Aromatic 22.98 4 7. Substituted Aromatic 23.06 4	0 J, B 9 J 4 J
1. 000075-09-2 Methylene Chloride 3.44 66 2. Substituted Alkane 6.42 89 3. 000592-13-2 Hexane, 2,5-dimethyl- 7.88 56 4. 000565-75-3 Pentane, 2,3,4-trimethyl- 8.77 6 5. Heptane, dimethyl- isomer 11.59 44 6. Substituted Aromatic 22.98 4 7. Substituted Aromatic 23.06 4	9 J 4 J
2. Substituted Alkane 6.42 89 3. 000592-13-2 Hexane, 2,5-dimethyl- 7.88 5- 4. 000565-75-3 Pentane, 2,3,4-trimethyl- 8.77 6 5. Heptane, dimethyl- isomer 11.59 44 6. Substituted Aromatic 22.98 4 7. Substituted Aromatic 23.06 4	4 J
3. 000592-13-2 Hexane, 2,5-dimethyl- 7.88 5- 4. 000565-75-3 Pentane, 2,3,4-trimethyl- 8.77 6 5. Heptane, dimethyl- isomer 11.59 4- 6. Substituted Aromatic 22.98 4- 7. Substituted Aromatic 23.06 4-	
4. 000565-75-3 Pentane, 2,3,4-trimethyl- 8.77 6 5. Heptane, dimethyl- isomer 11.59 4 6. Substituted Aromatic 22.98 4 7. Substituted Aromatic 23.06 4	4 l l
5. Heptane, dimethyl- isomer 11.59 4 6. Substituted Aromatic 22.98 4 7. Substituted Aromatic 23.06 4	
6. Substituted Aromatic 22.98 4 7. Substituted Aromatic 23.06 4	
7. Substituted Aromatic 23.06 4	
O. Oubstituted / Notificatio	3 J
g.	9 J
10. Substituted Aromatic 23.93 5	7 J
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BH13 (6-8)

			EHIMIT	F-E 1676-13	111 125 55	• • •	ĺ		` '
Lab Name: Waste	Stre	am Technolog	<u>/</u>		Contract:	LCS	L		
Project No.: 04B15	522.2	22	Site:	Great Arr	<u>o</u> w -	Location		Group: 4	4H11024
Matrix: (soil/water)	· _	soil	, .			Lab	Sample ID:	4H11024-0	3
Sample wt/vol:	_	1.13	(g/mL)	g	_	.]	Lab File ID:	0024355	
Level: (low/med)	ı _	low				Date	Received:	08/11/04	
% Moisture: not d		17.1				Date	e Analyzed:	08/17/04	
		Rtx 502.2	ID:	0.18	(mm)	Dilu	tion Factor:	na	
Soil Extract Volume	ə :	na	(uL)			Soil Aliqu	iot Volume:	<u>na</u>	(uL)
Number TICs found	-	1			Concentration	g/Kg)	μg/Kg		
	CAS	Number		Compour	nd Name	RT	Est. Conc.	Q	
	1.	000075-09-2	Methylen	e Chloride		3.44	55	J, B	
ĺ	2.								
	3.								
	4.								
	5.					<u> </u>			
	6. 7.								
	8.					<u> </u>			
	9.					<u> </u>			
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28. 29. 30.

SAMPLE NO.

BH15 (4-6)

Lab Name: Waste Stre	eam Technolog	ly .	Contrac	t <u>LCS</u>		
Project No.: 04B15522.			: Great Arrow	Location:	Group: <u>4</u>	H11024
Matrix: (soil/water)	soil	_		Lab Sample II	D: <u>4H11024-04</u>	
Sample wt/vol:	1.06	(g/mL)	g	Lab File II	D: <u>0024356</u>	
Level: (low/med)	low	-		Date Receive	d: <u>08/11/04</u>	
% Moisture: not dec.	11.3			Date Analyze	d: <u>08/17/04</u>	
GC Column:	Rtx 502.2	_ ID): <u>0.18</u> (mm)	Dilution Facto	or: <u>na</u>	
Soil Extract Volume:	na	_(uL)		Soil Aliquot Volum	e: <u>na</u>	(uL)
				ation Units:		
Number TICs found:	1		(ug/L o	rug/Kg) <u>µg/Kg</u>		

d: _	7	- (ug/L of ug/Ng) <u>pg/Ng</u>						
CASI	Number	Compound Name	RT	Est. Conc.	Q			
1.	000075-09-2	Methylene Chloride	3.44	55	J, B			
2.								
3.								
4.								
5.								
6.								
7.								
8.				<u> </u>				
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22.				 				
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SAMPLE NO.

BH16 (4-6)

	Τ,	ENTATIVELY IDENTIFIED C	JOMI	POUNDS	İ	DITIO	(4-0)
Lab Name: Waste Stre	eam Technology	/ Contra	act:	LCS	<u> </u>		
Project No.: 04B15522.				Location:		Group:	4H11024
Matrix: (soil/water)	soil			Lab S	ample ID:	4H11024-0	5
Sample wt/vol:	1.02	(g/mL) g		. L	ab File ID:	0024357	
Level: (low/med)	low			Date	Received:	08/11/04	
% Moisture: not dec.	20.5			Date	Analyzed:	08/17/04	
GC Column:	Rtx 502.2	ID: 0.18 (mm)		Diluti	on Factor:	<u>na</u>	
,	na	(uL)		Soil Alique	ot Volume:	<u>na</u>	(uL)
Number TICs found:	2			on Units: g/Kg)	µg/Kg		
ICAS	3 Number	Compound Name	• 1	RT	Est. Conc.	Q	
		Unknown		3.07	19	· J	
2		Methylene Chloride		3.44	78	J, B	
3					,		
4							
5							
6							
7						<u> </u>	-
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9						<u> </u>	4
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11							-{
12							1
13						 	4
14				<u> </u>			1
15							1
16							1
17							
10	•	I		4	 		1

19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29.

SAMPLE NO.

BH17 (6-8)

| Lab Name: Waste Stre | eam Technolog | JY | Contract: | LCS | |
|-----------------------|---------------|-------------------|--------------------------|----------------------|----------------|
| Project No.: 04B15522 | 22 | Site: Great Arrow | | Location: | Group: 4H11024 |
| Matrix: (soil/water) | · soil | | _ | Lab Sample ID: | 4H11024-06 |
| Sample wt/vol: | 1.02 | _
(g/mL) | | Lab File ID: | 0024358 |
| Level: (low/med) | low | | | Date Received: | 08/11/04 |
| % Moisture: not dec. | 16.7 | _ | | Date Analyzed: | 08/17/04 |
| GC Column: | Rtx 502.2 | ID: 0.18 | (mm) | Dilution Factor: | na |
| Soil Extract Volume: | na | _(uL) | | Soil Aliquot Volume: | na (uL) |
| Number TICs found: | 10 | _ | Concentration (ug/L or u | | |

(ug/L or ug/Kg) Compound Name RT Est. Conc. Q

| CAS Number | Compound Name | RI | ESt. Conc. | CZ. |
|----------------|----------------------------------|----------|--------------|-------------|
| 1. 000589-34-4 | Hexane, 3-methyl- | 6,10 | 158 | J |
| | Heptane, 3-methyl- | 9.48 | | J |
| | Octane, 4-methyl- | 12.59 | | J |
| 4. 002216-33-3 | Octane, 3-methyl- | 12.87 | 287 | J |
| 5. | Substituted Alkane | 15.74 | 188 | J |
| 6. | Substituted Benzene | 17.95 | | J |
| 7. | Benzene, methyl-propyl isomer | 19.85 | | J |
| 8. | Benzene, methyl-(methylethyl) is | 20.97 | | J |
| 9. | Benzene, tetramethyl isomer | 21.95 | | J |
| 10. | 1H-Indene, dihydro-methyl isom | € 22.66 | 185 | J |
| 11. | | | | |
| 12. | | | | |
| 13. | | | | |
| 14. | | | | |
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1E VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

| SAMPLE | NO. |
|--------|--------|
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| DILLA | 10 40) |

| • | . 7 | ENTATIVELY | IDENTIFIED CO | MPOUNDS | | BH19 | (8-10) |
|----------------------|------------------|--------------|-----------------------|-----------------------|--------------|-----------|---------|
| Lab Name: Waste | Stream Technolog | <u> </u> | Contract | LCS | | | |
| Project No.: 04B15 | 522.22 | Site: Gr | eat Arrow | Location | :
! | Group: 4 | 4H11024 |
| Matrix: (soil/water) | | | | Lab 9 | Sample ID: | 4H11024-0 | 7 |
| Sample wt/vol: | 1.09 | (g/mL) | g | L | .ab File ID: | 0024359 | |
| Level: (low/med) | low | | • | Date | Received: | 08/11/04 | |
| % Moisture: not d | | | | Date | Analyzed: | 08/17/04 | |
| GC Column: | Rtx 502.2 | ID: | 0.18 (mm) | Dilut | ion Factor: | <u>na</u> | |
| Soil Extract Volume | e: <u>na</u> | (uL) | | · Soil Aliqu | ot Volume: | <u>na</u> | (uL) |
| Number TICs found | d: 1 | | Concentra
(ug/L or | tion Units:
ug/Kg) | μg/Kg | | |
| 1 | CAS Number | Co | mpound Name | RT | Est. Conc. | Q | |
| | 1. 0000075-09-2 | Methylene C | hloride | 3.45 | 74 | J, B | |
| | 2. | | | | | | |
| | 3. | | | | | | |
| | 4. | | | | | | |
| | 5.
6. | | | | | <u> </u> | |
| | 7. | | | | | | |
| - | | | | | | 1 | 1 |

1F SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

| • 1 * . | |
|----------------|----------------|
| | |
| | Group: 4H11024 |
| ple ID: | 4H11024-06 |
| File ID: | 18468 |
| ceived: | 8/11/2004 |

SAMPLE NO.

| Lab Name: WASTE ST | TREAM TECH | INOLOGY | Contract: | | |
|-------------------------|------------|----------------|---------------------------|-----------------|--------------|
| Project No.: LCS | | Site: | Location: | BH17 (6-8) | Group: 4H110 |
| Matrix: (soil/water) | SOIL | | | Lab Sample ID: | 4H11024-06 |
| Sample wt/vol: | 30.2 | | | Lab File ID: | 18468 |
| Level: (low/med) | LOW | | | Date Received: | : 8/11/2004 |
| % Moisture: 5.7 | | decanted: (Y/N |)N | Date Extracted | 8/17/2004 |
| Concentrated Extract Vo | lume: | 1(ML) | | Date Analyzed | : 8/18/2004 |
| Injection Volume: | 1.0 | _(uL) | | Dilution Factor | :1.0 |
| GPC Cleanup: (Y/N) | N | _ pH | : <u>NA</u> | | |
| Number TICs found: | 1 | | Concentration (ug/L or ug | | |

| CAS Number | Compound Name | | Est. Conc. | Q |
|------------|---------------|-------|------------|--------------|
| 1. | UNKNOWN PAH | 16.88 | 201 | J |
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|---|--|---|---|--------------------------|--|---------------------------------|----------|-------------|--------------|---------------|-----------------------------|----------------------------|----------------|----|--------|----------|--|
| OF / | CTION LIMIT | requirements. | quired: | | | OFFICE USE
ONLY
WST, I.D. | 100 | 2 | 63 | 17V) | $\mathcal{F}^{\mathcal{D}}$ | | 17
17
17 |) | | | |
| PAGE | ARE SPECIAL DETECTION LIMITS REQUIRED: | YES NO // / // If yes please attach requirements. | Is a QC Package, required | | | TYPE OF CONTAINER/
COMMENTS: | | | | | | Par
Par | | | | | |
| 700 | Approach to the control of the contr | TURN AROUND TIME: | QUOTATION NUMBER: | окмер | | | | | | - | • | 7 | 1, 1 | | | | |
| OFFICE USE ONLY GROUP # 4 H 1 | DUE DATE | | S SOLID QUOTA'S SOLID QUOTA'S SOLID QUOTA'S SOLID QUOTA'S WIPE | ANALYSES TO BE PERFORMED | The same of the sa | 7077
1774 | X | | , | | | | X | | | | |
| , SO C | logy Inc.
NY 14207 |) 876-2412 | DKINKING WATER
GROUND WATER
SURFACE WATER
WASTE WATER
OIL | 11 | 14 July 1997 | 200
200
2008 | V. | | \\ | M× | | | > <u>></u> | | | | |
| 7 7 0 N N N N N N N N N N N N N N N N N | Technol
Buffalo, I | | | | NO. OF CONTAIN | TOTAL | <u> </u> | | | | | ch | | | | | |
| TECH | Waste Stream Technology Inc.
302 Grote Street, Buffalo, NY 14207 | (716) 876-5290 • FAX (71 | | | E IXDE | TIME O | 50 | | | | | | ÷ | | | | |
| 3 | Wast
302 G | (716) 8 | | | AMPLED | | **** | 3 | | , | | Approximate to the page of | ZZ. | | | | |
| CHAIN OF CUSTODY | | | PH.#() \$ 1/5 (0.115) | BILLTO: / C | | PLE LO. | | 2 RHLL TOUR | 3 3413 (600) | 4 pust(0.5.0) | 5 (3) (6, (6) | 6 RH17 (Con X) | 7 (844 (8-10) | 88 |
10 | REMARKS: | |

| REMARKS: | | | |
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| THE THE STATE OF T | 1 1 10 100 11 20 | | |
| RELINGUISHED BY: | DATE: ' TIME: ' | RECEIVED BY: | DATE: |
| | 1X1/104 1:30 | | TO THE STATE OF THE |
| | ÷ | | |

WASTE STREAM TECHNOLOGY, INC.

302 Grote Street Buffalo, NY 14207 (716) 876-5290

Analytical Data Report

Report Date: 08/25/04 Work Order Number: 4H12020

Prepared For

Doug Reid

Lender Consulting Service

P.O. Box 406

Buffalo, NY 14205

Fax: (716) 845-6164

Site: 177 & 255 Great Arrow

Enclosed are the results of analyses for samples received by the laboratory on 08/12/04. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Brian S. Schepart, PhyD., Laboratory Director

ENVIRONMENTAL LABORATORY ACCREDITATION CERTIFICATION NUMBERS
NYSDOH ELAP #11179 NJDEPE #73977 PADEP #68757





P.O. Box 406

Buffalo NY, 14205

Project: LCS Price List

Project Number: 177 & 255 Great Arrow

Project Manager: Doug Reid

Reported: 08/25/04 15:13

ANALYTICAL REPORT FOR SAMPLES

| Sample ID | Laboratory ID | Matrix | Date Sampled | Date Received |
|------------|---------------|--------|-----------------|----------------|
| BH20 (2-4) | 4H12020-01 | Soil | 08/11/04 00:00 | 08/12/04 15:54 |
| BH21 (2-4) | 4H12020-02 | Soil | .08/11/04 00:00 | 08/12/04 15:54 |
| BH22 (6-8) | 4H12020-03 | Soil | 08/11/04 00:00 | 08/12/04 15:54 |
| BH23 (0-2) | 4H12020-04 | Soil | 08/11/04 00:00 | 08/12/04 15:54 |
| BH24 (0-2) | 4H12020-05 | Soil | 08/11/04 00:00 | 08/12/04 15:54 |
| BH25 (2-4) | 4H12020-06 | Soil | 08/11/04 00:00 | 08/12/04 15:54 |
| BH26 (0-2) | 4H12020-07 | Soil | 08/11/04 00:00 | 08/12/04 15:54 |
| BH27 (2-4) | 4H12020-08 | Soil | 08/11/04 00:00 | 08/12/04 15:54 |
| BH28 (0-2) | 4H12020-09 | Soil | 08/11/04 00:00 | 08/12/04 15:54 |
| BH29 (0-2) | 4H12020-10 | Soil - | 08/11/04 00:00 | 08/12/04 15:54 |
| BH33 (0-2) | 4H12020-11 | Soil | 08/11/04 00:00 | 08/12/04 15:54 |
| BH35 (0-2) | 4H12020-12 | Soil | 08/11/04 00:00 | 08/12/04 15:54 |
| BH36 (2-4) | 4H12020-13 | Soil | 08/12/04 00:00 | 08/12/04 15:54 |
| BH37 (4-6) | 4H12020-14 | Soil | 08/12/04 00:00 | 08/12/04 15:54 |
| BH38 (4-6) | 4H12020-15 | Soil | 08/12/04 00:00 | 08/12/04 15:54 |
| BH42 (2-4) | 4H12020-16 | Soil | 08/12/04 00:00 | 08/12/04 15:54 |
| BH43 (2-4) | 4H12020-17 | Soil | 08/12/04 00:00 | 08/12/04 15:54 |
| BH36 (4-8) | 4H12020-18 | Soil | 08/12/04 00:00 | 08/12/04 15:54 |
| | | | | |

P.O. Box 406 Buffalo NY, 14205 Project: LCS Price List

Project Number: 177 & 255 Great Arrow

Project Manager: Doug Reid

Reported: 08/25/04 15:13

RCRA Metals by EPA 6000/7000 Series Methods Waste Stream Technology Inc.

| Analyte | Result | Reporting
Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|------------------------------|-------------------------|--------------------|-------------|----------|-----------|----------|----------|-----------|--|
| BH21 (2-4) (4H12020-02) Seil | Sampled: 08/11/04 00:00 | Receive | d: 08/12/04 | 15:54 | | | | | ······································ |
| Mercury | 0.039 | 0.014 | mg/kg dry | 1 | AH42309 | 08/23/04 | 08/23/04 | EPA 7471A | |
| Silver | ND | 0.500 | Ħ | | AH41617 | 08/16/04 | 08/17/04 | EPA 6010B | |
| Arsenic | 5.25 | 1.70 | п | 11 | te | 17 | 08/17/04 | al | ÷ |
| Barium | 106 | 1.00 | II. | 11 | ąż | tt | 08/17/04 | ii . | |
| Cadmium | ND | 1.00 | n | TI TI | 51 | tt | 08/17/04 | u | |
| Chromium | 23.9 | 1.00 | ** | 0 | п | ii . | 08/17/04 | н | |
| Lead | 12.3 | 4.10 | н | U | ** | tì | 08/17/04 | ts | |
| Selenium | 5.53 | 1.40 | ţi. | tr | Ħ | 11 | и | ŧŧ | |
| BH22 (6-8) (4H12020-03) Soil | Sampled: 08/11/04 00:00 | Receive | d: 08/12/04 | 15:54 | | | | | |
| Mercury | ND | 0.016 | mg/kg dry | I | AH42309 | 08/23/04 | 08/23/04 | EPA 7471A | |
| Silver | ND | 0.500 | f# | TH | AH41617 | 08/16/04 | 08/17/04 | EPA 6010B | |
| Arsenic | 4.42 | 1.70 | H | Ħ | n | 11 | н | II. | |
| Barium | 120 | 1.00 | ts | n | ti | 1) | n | 16 | |
| Cadmium | ND | 1.00 | 11 | н | 11 | п | Ħ | n | |
| Chromium | 23.5 | 1.00 | 10 | Ħ | Ħ | н | ** | te | |
| Lead | 10.6 | 4.10 | 11 | ii | ti. | Ħ | H | ‡Ŧ | |
| Selenium | 5.14 | 1.40 | Ħ | #1 | 11 | Ħ | R | ** | |
| BH23 (0-2) (4H12020-04) Soil | Sampled: 08/11/04 00:00 | Receive | d: 08/12/04 | 15:54 | | | | | |
| Mercury | 0.056 | 0.014 | mg/kg dry | 1 | AH42309 | 08/23/04 | 08/23/04 | EPA 7471A | , |
| Silver | ND | 0.500 | н | н | AH41617 | 08/16/04 | 08/17/04 | EPA 6010B | |
| Arsenic | 4,33 | 1.70 | ** | п | н | tr | 0 | n | |
| Barium | 134 | 1.00 | Ħ | n | п | n | я | tt | |
| Cadmium | ND | 1.00 | 31 | n | n | fi | ** | #P | |
| Chromium | 26.5 | 1.00 | u | ** | n n | 33 | 41 | ** | |
| Lead | 77.1 | 4.10 | U | u | ŗı | , įi | я | ** | |
| Selenium | 5.08 | 1.40 | u | 11 | tt | H | и | н | |

P.O. Box 406

Buffalo NY, 14205

Project: LCS Price List

Project Number: 177 & 255 Great Arrow

Project Manager: Doug Reid

Reported: 08/25/04 15:13

RCRA Metals by EPA 6000/7000 Series Methods

| Analyte | Result | Reporting
Limit | Units | Dilution | Batch | Prepared | Analyzed | ,
Method | Notes |
|------------------------------|-------------------------|--------------------|-------------|----------|---------|----------------|----------|---------------------------------------|--|
| 3H24 (0-2) (4H12020-05) Soil | Sampled: 08/11/04 00:00 | Receive | d: 08/12/04 | 15:54 | | | | · · · · · · · · · · · · · · · · · · · | |
| Aercury | 0.142 | 0.012 | mg/kg dry | i | AH42309 | 08/23/04 | 08/23/04 | EPA 7471A | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, |
| ilver | ND | 0.500 | ti | Ħ | AH41617 | 08/16/04 | 08/17/04 | EPA 6010B | |
| rrsenic | 12.1 | 1.70 | ti | n | H | *1 | 08/17/04 | , | |
| Barium | 144 | 1.00 | tt | " | n | " | 08/17/04 | . 6 | |
| Sadmium | ND | 1.00 | 11 | Ħ | n | Ħ | u 🗥 | 11 | |
| Chromium | 18.6 | 1.00 | щ | 0 | ft | H | 08/17/04 | B | |
| ,ead | 378 | 4.10 | 71 | n | D | ti | 08/17/04 | , R | |
| elenium | 6.06 | 1.40 | 11 | 11 | u . | ti | 08/17/04 | п | |
| H25 (2-4) (4H12020-06) Soil | Sampled: 08/11/04 00:00 | Receive | d: 08/12/04 | 15:54 | | | | | |
| 1ercury | 0.147 | 0.014 | mg/kg dry | 1 | AH42410 | 08/24/04 | 08/24/04 | EPA 7471A | |
| ilver | ND | 0.500 | 10 | и | AH41617 | 08/16/04 | 08/17/04 | EPA 6010B | |
| rsenic | 10.6 | 1.70 | в | n | 11 | 10 | 71 | н | |
| larium | 137 | 1.00 | es | It | u | N | Ħ | н | |
| admium | ND | 1.00 | *1 | Ħ | 9 | tt | ts | n | |
| Thromium | 20.2 | 1.00 | tt | 79 | н | n |)t | 17 | |
| æad | 617 | 4.10 | 0 | Ħ | 41 | n | D | II . | |
| elenium | 3.72 | 1.40 | 31 | 11 | я | 11 | æ | II . | |
| H26 (0-2) (4H12020-07) Soil | Sampled: 08/11/04 00:00 | Receive | d: 08/12/04 | 15:54 | | | | | |
| lercury | 0.306 | 0.014 | mg/kg dry | 1 | AH42410 | 08/24/04 | 08/24/04 | EPA 7471A | |
| ilver | ND | 0.500 | | 18 | AH41617 | 08/16/04 | 08/17/04 | EPA 6010B | |
| rsenic | 14.4 | 1.70 | н | # | Ħ | ŧŧ | н. | a | |
| arium | 130 | 1.00 | 11 | ħ | Ħ | t y | ** | u | |
| admium | ND | 1.00 | n | ,, | n | н | ** | ** | |
| thromium | 34,2 | 1.00 | 71 | 11 | 11 | н | 19 | я | |
| ead | 422 | 4.10 | 11 | h | ţı. | 11 | #1 | и | |
| elenium | 5.33 | 1.40 | 'n | n | я | ** | η | Ħ | |

P.O. Box 406 Buffalo NY, 14205 Project: LCS Price List

Project Number: 177 & 255 Great Arrow

Project Manager: Doug Reid

Reported: 08/25/04 15:13

RCRA Metals by EPA 6000/7000 Series Methods Waste Stream Technology Inc.

| Analyte | Result | Reporting
Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|------------------------------|-------------------------|--------------------|----------------|----------|---------|----------|--|-----------|-------|
| BH28 (0-2) (4H12020-09) Soil | Sampled: 08/11/04 00:00 | Receive | d: 08/12/04 | 15:54 | | | ······································ | | |
| Mercury | 0.033 | 0.014 | mg/kg dry | 1 | AH42410 | 08/24/04 | 08/24/04 | EPA 7471A | |
| Silver | ND | 0.500 | n | ** | AH41617 | 08/16/04 | 08/17/04 | EPA 6010B | |
| Arsenic | 4.99 | 1.70 | 71 | n | 15 | U | ** | Ħ | |
| Barium | 162 | 1.00 | jt. | | 12 | 11 | Iţ | H | |
| Cadmium | NĎ | 1.00 | jt. | Ħ | ** | ** | ь | · n | |
| Chromium | 21.6 | 1.00 | " | ti. | er | н | H | 10 | |
| Lead | 13.3 | 4.10 | ij | 12 | Ħ | u | в | u | |
| Selenium | 7.83 | 1.40 | 1) | ft | ts | 31 | ŧŧ | F | |
| 3H29 (0-2) (4H12020-10) Soil | Sampled: 08/11/04 00:00 | Receive | d: 08/12/04 | 15:54 | | | | | |
| Mercury | ND | 0.017 | mg/kg dry | t | AH42410 | 08/24/04 | 08/24/04 | EPA 7471A | |
| Silver | ND | 0.500 | l y | ü | AH41617 | 08/16/04 | 08/17/04 | EPA 6010B | |
| Arsenic | 2.18 | 1.70 | U | fl | Ħ | #1 | 08/17/04 | n | |
| 3arium | 201 | 1.00 | 17 | 11 | 71 | 11 | 08/17/04 | 11 | |
| Cadmium | ND | 1.00 | tt . | " | ** | 11 | 08/17/04 | 11 | |
| Chromium | 8.65 | 1.00 | į į | ц | ŧŧ | Ħ | 34 | Ħ | |
| _ead | ND | 4.10 | R | u | tt | #1 | 11 | ft | |
| elenium | 8.93 | 1.40 | H | 0 | Ħ | n | tı | a | |
| 3H33 (0-2) (4H12020-11) Soil | Sampled: 08/11/04 00:00 | Receive | d: 08/12/04 | 15:54 | | | | | |
| Aercury | 0.025 | 0.014 | mg/kg dry | 1 | AH42410 | 08/24/04 | 08/24/04 | EPA 7471A | |
| lilver | ND | 0.500 | n | 11 | AH41617 | 08/16/04 | 08/17/04 | EPA 6010B | |
| Arsenic | 4.74 | 1.70 | ** | # | Ħ | ** | +1 | 47 | |
| 3arium | 158 | 1.00 | ét | 19 | 11 | н | # | Ħ | |
| ladmium | ND | 1.00 | H | ** | п | 11 | H | Ħ | |
| Chromium | 16.9 | 1.00 | 51 | ts. | п | \$1 | 1) | н | |
| ead | 146 | 4.10 | n | 4 | 11 | n | " | tt | |
| elenium | 6.94 | 1.40 | н | B | ** | 11 | · p | it | |

P.O. Box 406 Buffalo NY, 14205 Project: LCS Price List

Project Number: 177 & 255 Great Arrow

Project Manager: Doug Reid

Reported: 08/25/04 15:13

RCRA Metals by EPA 6000/7000 Series Methods

| Analyte | Result | Reporting
Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|------------------------------|-------------------------|--------------------|-------------|-----------|---------|------------|------------|------------|-------|
| BH35 (0-2) (4H12020-12) Soil | Sampled: 08/11/04 00:00 | Receive | d: 08/12/04 | 15:54 | | | • | | |
| Mercury | 0.055 | 0.016 | mg/kg dry | 1 | AH42410 | 08/24/04 | 08/24/04 | EPA 7471A | |
| Silver | ND | 0.500 | H | a | AH41617 | 08/16/04 | 08/17/04 | EPA 6010B | |
| Arsenic | 4.30 | 1.70 | H | a | 47 | 11 | 08/17/04 | v | |
| Barium | 78.5 | 1.00 | ıı | †3 | U | n | 08/17/04 | 11 | |
| admium | ND | 1.00 | a | It | Ħ | ** | 08/17/04 | H | |
| Chromium | 19.6 | 1.00 | 29 | p | n | ** | 11 | D. | |
| Lead | 14.2 | 4.10 | 11 | u | 11 | n | ŧ2 | ** | |
| Selenium | 2.84 | 1.40 | Ħ | Ħ | tt | | R | H | |
| BH36 (2-4) (4H12020-13) Soil | Sampled: 08/12/04 00:00 | Receive | d: 08/12/04 | 15:54 | | | | | |
| Mercury | 0.063 | 0.014 | mg/kg dry | 1 | AH42410 | 08/24/04 | 08/24/04 | EPA 7471A | |
| Silver | ND | 0.500 | n | u | AH41617 | 08/16/04 | 08/17/04 | EPA 6010B | |
| Arsenic | 280 | 1.70 | tı. | ii . | Ŧſ | Ħ | 11 | It | |
| Barium | 55.7 | 1.00 | ** | n | 119 | Ħ | \$3 | (1 | |
| Cadmium | 1.05 | 1.00 | 21 | n | " | tt | n | 11 | |
| Chromium | 13.2 | 1.00 | Pf | и | H | ł | Ħ | u | |
| Lead | 16.0 | 4.10 | n | 11 | Ħ | н | Ħ | at | |
| Selenium | 22.8 | 1,40 | tt | H | H | u | ti. | tj. | |
| BH37 (4-6) (4H12020-14) Soil | Sampled: 08/12/04 00:00 | Receive | d: 08/12/04 | 1 15:54 | | | | | |
| Mercury | 0.036 | 0.016 | mg/kg dry | 1 | AH42410 | 08/24/04 | 08/24/04 | EPA 7471A | |
| Silver | ND | 0.500 | 11 | 11 | AH41617 | 08/16/04 | 08/17/04 | EPA 6010B | |
| Arsenic | 5.07 | 1.70 | n | u. | n | U | 11 | 11 | |
| Barium | 100 | 1.00 | ** | *1 | U | ** | 11 | *1 | |
| Cadmium | ND | 1.00 | 47 | a | n | tt | #t | † 1 | |
| Chromium | 21.3 | 1.00 | 11 | Ħ | 71 | Ħ | a | 1f | • |
| Lead | 111 | 4.10 | н | 11 | H | ŧŧ | F# | Ħ | |
| Selenium | 4.44 | 1.40 | H | u | н | s 1 | U | μ | |

P.O. Box 406 Buffalo NY, 14205 Project: LCS Price List

Project Number: 177 & 255 Great Arrow

Project Manager: Doug Reid

Reported: 08/25/04 15:13

RCRA Metals by EPA 6000/7000 Series Methods Waste Stream Technology Inc.

| | I | Reporting | | | | | | | |
|-----------------------------|-------------------------|-----------|-------------|----------------|---------|----------|----------|-----------|-------|
| inalyte | Result | Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
| H38 (4-6) (4H12020-15) Soil | Sampled: 08/12/04 00:00 | Receive | d: 08/12/04 | 15:54 | | | | | |
| Iercury | 0.024 | 0.017 | mg/kg dry | 1 | AH42410 | 08/24/04 | 08/24/04 | EPA 7471A | |
| ilver | ND | 0.500 | #1 | 89 | AH41617 | 08/16/04 | 08/17/04 | EPA 6010B | |
| rsenic | 24.1 | 1.70 | H | ŧI | Ħ | ** | π | μ | |
| arium | 94.7 | 1.00 | It | н | H | В | 14 | n | |
| admium | ND | 1.00 | " | Ħ | 11 | n | tr. | ħ | |
| hromium | 19.9 | 1.00 | u | К | 11 | н | Ħ | 10 | |
| ead | 22.5 | 4.10 | TP . | ft. | н | lit | 44 | u | |
| elenium | 6.72 | 1.40 | 11 | æ | н | ŧi | ti | 31 | |
| H42 (2-4) (4H12020-16) Soil | Sampled: 08/12/04 00:00 | Receive | d: 08/12/04 | 15:54 | | | | <u>-</u> | |
| lercury | 0.041 | 0.016 | mg/kg dry | *** | AH42410 | 08/24/04 | 08/24/04 | EPA 7471A | |
| ilver | ND | 0.500 | II | н | AH41617 | 08/16/04 | 08/17/04 | EPA 6010B | |
| rsenic | 2.51 | 1.70 | 11 | 11 | Ħ | If | 8 | Ħ | |
| arium | 76.7 | 1.00 | 11 | 11 | ** | 11 | 11 | II. | |
| admium | ND | 1.00 | n | 11 | 11 | - 11 | n | ч | |
| Thromium | 17.3 | 1.00 | U | н | 11 | H | h | 11 | |
| ead | 13.6 | 4.10 | 11 | ii | Ħ | 11 | 19 | ji | |
| elenium | 3.26 | 1.40 | et et | ŧı | H | n | n | 41 | |
| H43 (2-4) (4H12020-17) Soil | Sampled: 08/12/04 00:00 | Receive | d: 08/12/04 | 1 15:54 | | | | | |
| lercury | 0.029 | | mg/kg dry | 1 | AH42410 | 08/24/04 | 08/24/04 | EPA 7471A | |
| ilver | ND | 0.500 | u | U | AH41617 | 08/16/04 | 08/17/04 | EPA 6010B | |
| rsenic | 2.92 | 1.70 | 11 | ** | 31 | ** | 35 | 11 | |
| arium | 95.0 | 1.00 | . 11 | 19 | n | 19 | *1 | R | |
| admium | ND | 1.00 | Ħ | łr | H | H | ft | a a | |
| hromium | 19.4 | 1.00 | 11 | Ħ | 77 | 19 | н | 11 | |
| ead | 12.5 | 4.10 | 81 | £\$ | Ħ | 11 | ii | ıı | |
| elenium | 3.28 | 1.40 | H | # | H | 11 | μ | n | |

'.O. Box 406 3uffalo NY, 14205 Project: LCS Price List

Project Number: 177 & 255 Great Arrow

Project Manager: Doug Reid

Reported: 08/25/04 15:13

RCRA Metals by EPA 6000/7000 Series Methods

| palyte | l
Result | Reporting
Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|-----------------------------|-------------------------|--------------------|-------------|----------|---------|----------|----------|-----------|-------|
| 136 (4-8) (4H12020-18) Soil | Sampled: 08/12/04 00:00 | Receive | d: 08/12/04 | 15:54 | | | | | |
| ercury | 0.141 | | mg/kg dry | 1 | AH42410 | 08/24/04 | 08/24/04 | EPA 7471A | |
| ver | ND | 0.500 | e e | Ħ | AH41617 | 08/16/04 | 08/17/04 | EPA 6010B | |
| senic | 70.9 | 1.70 | п | n | #1 | *1 | и | н | |
| rium | 30.1 | 1.00 | b | *1 | 71 | Ħ | я | n | |
| dmium | ND | 1.00 | н | #1 | t# | R) | tr | • | |
| iromium | 11.4 | 1.00 | IJ | Ħ | # | н | ** | и | |
| :ađ | 11.0 | 4,10 | я | Ħ | H | n | ti | B | |
| lenium | 5.13 | 1.40 | Ħ | n | 14 | u | h | B | |

Project: LCS Price List

P.O. Box 406 Buffalo NY, 14205 Project Number: 177 & 255 Great Arrow

Project Manager: Doug Reid

Reported: 08/25/04 15:13

| Analyte | Result | Reporting
Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---------------------------------|-------------------------|--------------------|------------|----------|---------|----------|----------|---------------------------------------|-------|
| H21 (2-4) (4H12020-02) Soil | Sampled: 08/11/04 00:00 | Receive | d: 08/12/0 | 1 15:54 | | | | | |
| roclor 1016 | ND | 3.30 | ug/kg dry | 1 | AH42005 | 08/20/04 | 08/21/04 | 8082 | U |
| roclor 1221 | ND | 3.30 | н | н | l# | п | ** | ļt | U |
| roclor 1232 | ND | 3.30 | 11 | tt | и | H | 10 | B | U |
| roelor 1242 | ND | 3.30 | er | u | H | ti | н | t+ | U |
| roclor 1248 | ND | 3.30 | If | n | ir | 17 | n | ų | Ţ |
| roclor 1254 | ND | 3.30 | lt | n | ıı | 27 | +1 | n | Į.j |
| roclor 1260 | ND | 3.30 | И | н | n | *t | 11 | ti | U |
| urrogate: Tetrachloro-meta-xyl | ene | 85.0 % | 74-1 | 22 | 17 | <i>p</i> | | · · · · · · · · · · · · · · · · · · · | |
| urrogate: Decachlorobiphenyl | | 78.2 % | 64-1 | 27 | и | n | п | ,, | |
| H22 (6-8) (4H12020-03) Soil | Sampled: 08/11/04 00:00 | Receive | d: 08/12/0 | 15:54 | | | | | |
| roclor 1016 | ND | 3.30 | ug/kg dry | 1 | AH42005 | 08/20/04 | 08/21/04 | 8082 | U |
| roclor 1221 | ND | 3.30 | ** | tj | ŧI | 18 | ù | Ħ | () |
| roclor 1232 | ND | 3.30 | 31 | n | 11 | \$f | 11 | B | Į |
| roclor 1242 | ND | 3.30 | n | " | fi | n | 24 | 10 | Į. |
| roclor 1248 | ND | 3.30 | 11 | er. | н | n. | н | н | Į. |
| roctor 1254 | ND | 3.30 | 11 | # | Ħ | Ħ | fr . | я | . (|
| .roclor 1260 | ND | 3.30 | н | 11 | н | æ | þį | 11 | t. |
| urrogate: Tetrachloro-meta-xyli | ene | 93.5 % | 74- | 122 | 1, | <i>H</i> | ~ · " | · · · | |
| urrogate: Decachlorobiphenyl | | 78.9 % | 64-1 | 127 | ıı | " | " | o | |
| H23 (0-2) (4H12020-04) Soil | Sampled: 08/11/04 00:00 | Receive | d: 08/12/0 | 15:54 | | | | | |
| roclor 1016 | ND | 3.30 | ug/kg dry | ı | AH42005 | 08/20/04 | 08/21/04 | 8082 | Į. |
| roclor 1221 | ND | 3.30 | # | Ħ | 31 | ** | n | Ħ | t. |
| roclor 1232 | ND | 3.30 | н | я | 31 | B. | a | # | ţ |
| roclor 1242 | ND | 3.30 | И | ħ | #1 | tr | н | Ħ | ι |
| roclor 1248 | ND | 3.30 | 11 | • | 11 | n | н | II | į |
| roclor 1254 | ND | 3.30 |)¥ | 11 | ** | II | 17 | tt | į |
| roclor 1260 | ND | 3.30 | Pt . | J# | it | Ħ | B | н | t |
| urrogate: Tetrachloro-meta-xyle | ene | 85.5 % | 74-, | 22 | ····· | | o | " | |
| urrogate: Decachlorobiphenyl | | 80.0 % | 64- | 27 | " | " | " | " | • |

³.O. Box 406 3uffalo NY, 14205 Project: LCS Price List

Project Number: 177 & 255 Great Arrow

Project Manager: Doug Reid

Reported: 08/25/04 15:13

| nalyte | Result | Reporting
Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|--------------------------------|-------------------------|--------------------|-------------|----------|--------------|----------|----------|--------|------------|
| H24 (0-2) (4H12020-05) Soil | Sampled: 08/11/04 00:00 | Receive | d: 08/12/0 | 1 15:54 | | | | | |
| oclor 1016 | ND | 3.30 | ug/kg dry | ì | AH42005 | 08/20/04 | 08/21/04 | 8082 | ſ; |
| rector 1221 | ND | 3.30 | tt. | H | Ħ | I\$ | 11 | H | U |
| octor 1232 | ND | 3.30 | ## | н | *11 | 11 | ** | tı | IJ |
| roclor 1242 | ND | 3.30 | 11 | 11 | 19 | H | н | 11 | (1 |
| roclor 1248 | ND | 3.30 | f? | 0 | h | н | 19 | н | [1 |
| oclor 1254 | ND | 3.30 | 11 | 11 | u | н | 314 | Ð | f! |
| octor 1260 | ND | 3.30 | 41 | " | u | 11 | n | U | Ĺì |
| rrogate: Tetrachloro-meta-xyl | ene | 83.1 % | 74-1 | 22 | *17 | # | и | " | |
| rrogate: Decachlorobiphenyl | | 77.8 % | 64-1 | 127 | H | n | · # | " | |
| H25 (2-4) (4H12020-06) Soil | Sampled: 08/11/04 00:00 | Receive | d: 08/12/04 | 1 15:54 | | | | | |
| oclor 1016 | ND | 33.0 | ug/kg dry | 10 | AH42005 | 08/20/04 | 08/23/04 | 8082 | (1 |
| oclor 1221 | ND | 33.0 | n | D | 10 | ŧi | . В | н | U |
| oclor 1232 | ND | 33.0 | 11 | Ħ | . t Ŧ | 89 | u · | В | į: |
| roclor 1242 | ND | 33.0 | n | 77 | 11 | 12 | 11 | 11 | U |
| roclor 1248 | ND | 33.0 | It | п | n | u | н | 11 | () |
| roclor 1254 | ND | 33.0 | 11 | 11 | ti | 21 | 11 | n | Į: |
| octor 1260 | ND | 33.0 | п | u | 11 | 11 | n | II. | U |
| rrogate: Tetrachloro-meta-xyl | ene | 91.7% | 74- | 122 | " | ,, | • • | " | |
| rrogate: Decachlorobiphenyl | | 84.3 % | 64- | 127 | re | н | " | n | |
| H26 (0-2) (4H12020-07) Soil | Sampled: 08/11/04 00:00 | Receive | d: 08/12/0 | 4 15:54 | | | | | |
| oclor 1016 | ND | 165 | ug/kg dry | 50 | AH42005 | 08/20/04 | 08/23/04 | 8082 | Į |
| oclor 1221 | ND | 165 | # | #1 | h | 14 | n | и | Į. |
| oclor 1232 | ND | 165 | 41 | H | u | 19 | 31 | ¥F | l. |
| roclor 1242 | ND | 165 | 51 | 11 | Ħ | н | π | 13 | ι |
| oclor 1248 | ND | 165 | Я | H | n | U | tı | 11 | t. |
| oclor 1254 | ND | 165 | u | | er er | ** | If | и | l |
| roclor 1260 | ND | 165 | Ħ | н | Iŧ | H | u | В | i |
| vrogate: Tetrachloro-meta-xyli | ene | % | 74- | 122 | | h - | te | и | 5-01 |
| rrogate: Decachlorobiphenyl | | % | 64 | 127 | " | ** | " | " | S-01 |

².O. Box 406 3uffalo NY, 14205 Project: LCS Price List

Project Number: 177 & 255 Great Arrow

Project Manager: Doug Reid

Reported: 08/25/04 15:13

| nalyte | Result | Reporting
Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---------------------------------|-------------------------|--------------------|-------------|----------|---------|----------|----------|--------|-------|
| H28 (0-2) (4H12020-09) Soil | Sampled: 08/11/04 00:00 | Receive | d: 08/12/04 | 15:54 | | | | | |
| roclor 1016 | ND | 3.30 | ug/kg dry | 1 | AH42005 | 08/20/04 | 08/22/04 | 8082 | Ĺl |
| roclor 1221 | ND | 3.30 | 17 | ** | ** | " | ** | # | U |
| roclor 1232 | ND | 3.30 | H | ¥ŧ | # | *1 | A | . 11 | U |
| roclor 1242 | ND | 3.30 | н | н | n | ** | я | н | U |
| rocior 1248 | ND | 3.30 | . 0 | " | u | 17 | H | В | Ü |
| roclor 1254 | ND | 3.30 | " | f1 | 11 | ч | U | 11 | (I |
| roclor 1260 | ND | 3.30 | ŧŧ | н | tř | ** | η | ti | l l |
| urrogate: Tetrachloro-meta-xyle | ene . | 86.6 % | 74- | 122 | 11 | | | n | |
| ırrogate: Decachlorobiphenyl | | 80.6 % | 64- | 127 | n | tr | ** | в | |
| H29 (0-2) (4H12020-10) Soil | Sampled: 08/11/04 00:00 | Receive | d: 08/12/0 | 4 15:54 | | | | | |
| roclor 1016 | ND | 33.0 | ug/kg dry | 10 | AH42005 | 08/20/04 | 08/22/04 | 8082 | U |
| roclor 1221 | ND | 33.0 | Ħ | Ħ | 11 | If | 17 | n | ŀΙ |
| roclor 1232 | ND | 33.0 | Ħ | н | 18 | n | 44 | ţ1 | U |
| roclor 1242 | ND | 33.0 | rt | 71 | *** | #1 | 11 | #1 | U |
| roclor 1248 | ND | 33.0 | Ħ | R . | 59 | If | ĸ | Ħ | Į.) |
| roclor 1254 | ND | 33.0 | В | 11 | ß | Ħ | u | Ħ | Į. |
| roclor 1260 | ND | 33.0 | 11 | Ħ | 17 | ** | 11 | Ħ | U |
| urrogate: Tetrachloro-meta-xyle | ene | 100 % | 74- | 122 | H | | " | 'n | • |
| urrogate: Decachlorobiphenyl | | 69.0 % | 64- | 127 | # | # | " | p | |
| H33 (0-2) (4H12020-11) Soil | Sampled: 08/11/04 00:00 | Receive | d: 08/12/0 | 4 15:54 | | | | | |
| roclor 1016 | ND | 3.30 | ug/kg dry | 1 | AH42005 | 08/20/04 | 08/22/04 | 8082 | (. |
| roctor 1221 | ND | 3.30 | " | н | ıı | H | п | B | Ę |
| roclor 1232 | · ND | 3.30 | at | В | U | н | N | £1 | ι |
| roclor 1242 | ND | 3.30 | ŢI | ti | 58 | 14 | 12 | Ħ | (|
| roclor 1248 | ND | 3.30 | н | 11 | н | u | n | R | Ę |
| roclor 1254 | ND | 3.30 | I# | Ħ | n | 27 | 19 | 11 | ι |
| roclor 1260 | ND | 3.30 | tt | R | 11 | If | ŧŧ | 15 | Į |
| urrogate: Tetrachloro-meta-xyli | ene | 90.4 % | 74- | 122 | ,, | n ···· | " | " | A. n |
| urrogate: Decachlorobiphenyl | | 91.3 % | 64- | 127 | n | " | " | " | |

P.O. Box 406 Buffalo NY, 14205 Project: LCS Price List

Project Number: 177 & 255 Great Arrow

Project Manager: Doug Reid

Reported: 08/25/04 15:13

| Analyte | Result | Reporting
Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---------------------------------|-------------------------|--------------------|------------|----------|--|----------|-----------|--------|-------|
| 3H35 (0-2) (4H12020-12) Soil | Sampled: 08/11/04 00:00 | Receive | d: 08/12/0 | 4 15:54 | | | | | |
| Aroclor 1016 | ND | 3.30 | ug/kg dry | - | AH42005 | 08/20/04 | 08/22/04 | 8082 | Ļ |
| Aroclor 1221 | ND | 3.30 | ** | 17 | ¥ | șŧ. | ŧŧ | u | U |
| Aroclor 1232 | ND | 3.30 | ** | tt . | н | 15 | łŧ | ti | 13 |
| Aroclor 1242 | ND | 3.30 | tr | 11 | n | ** | 25 | ** | U |
| troclor 1248 | ND | 3.30 | ** | 31 | 13 | u | н | 14 | . U |
| Aroclor 1254 | ND | 3.30 | н | 14 | n | 17 | 11 | н | U |
| Aroclor 1260 | ND | 3.30 | н | ** | u u | H | , # | p | Į. |
| 'urrogate: Tetrachloro-meta-xyl | lene | 74.2 % | 74 | 122 | ff | f5 | Ħ | 11 | |
| urrogate: Decachlorobiphenyl | + | 99.5 % | 64 | 127 | Ħ | " | и | ** | |
| 3H42 (2-4) (4H12020-16) Soil | Sampled: 08/12/04 00:00 | Receive | d: 08/12/0 | 4 15:54 | | | | | |
| vroclor 1016 | ND | 16.5 | ug/kg dry | 5 | AH42005 | 08/20/04 | 08/23/04 | 8082 | Ų |
| vroclor 1221 | ND | 16.5 | n | ŧı | 9 | * | n | Ħ | Ţ |
| vroclor 1232 | ND | 16.5 | Tt. | Ħ | В | - # | şŧ | Ħ | . (1) |
| vroclor 1242 | ND | 16.5 | 11 | я | 11 | #ž | n | н | U |
| croclor 1248 | ND | 16.5 | et . | , fr | 51 | 75 | ** | 16 | Ų |
| vrocior 1254 | ND | 16.5 | n | 79 | 7) | н | 71 | ĸ | Ų |
| roclor 1260 | ND | 16.5 | 17 | ti | 11 | Ħ | R | н | t: |
| urrogate: Tetrachloro-meta-xyl | ene | 105 % | 74- | 122 | ······································ | " | " | " | |
| wrogate: Decachlorobiphenyl | | 103 % | 64- | | " | " | n | tr | |
| H43 (2-4) (4H12020-17) Soil | Sampled: 08/12/04 00:00 | Receive | d: 08/12/0 | 4 15:54 | | | | | |
| roclor 1016 | ND . | 3.30 | ug/kg dry | Ī | AH42005 | 08/20/04 | 08/22/04 | 8082 | Į |
| roclor 1221 | ND | 3.30 | n | n | Ħ | *1 | 39 | If | U |
| roctor 1232 | ND | 3.30 | Ħ | Ħ | 11 | н | IŞ | 11 | L. |
| roclor 1242 | ND | 3.30 | н | n | 11 | Н | \$9 | в | ţ |
| roclor 1248 | ND | 3.30 | n | n | H | н | n | n | Į. |
| roclor 1254 | ND | 3.30 | n | n | 11 | n | В | \$1 | t. |
| roclor 1260 | ND | 3.30 | ŧ | n | В | ŧŧ. | В | Ħ | ι |
| urrogate: Tetrachloro-meta-xylo | ene | 92.9 % | 74- | 122 | | , | ** | " | |
| urrogate: Decachlorobiphenyl | | 93.4 % | 64- | | " | " | " | " | |

Project: LCS Price List

P.O. Box 406 Buffalo NY, 14205 Project Number: 177 & 255 Great Arrow

Project Manager: Doug Reid

Reported: 08/25/04 15:13

| ınalyte | Result | Reporting
Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|--------------------------------|-------------------------|--------------------|-------------|----------|---------|----------|---|--------|---------|
| H36 (4-8) (4H12020-18) Soil | Sampled: 08/12/04 00:00 | Receive | d: 08/12/04 | 15:54 | | | | | ······· |
| roclor 1016 | ND | 16.5 | ug/kg dry | 5 | AH42005 | 08/20/04 | 08/23/04 | 8082 | 1) |
| roclor 1221 | ND | 16.5 | я | п | ji. | Ħ | н | н | U |
| roclor 1232 | ND | 16.5 | tt | 19 | Ħ | n | _ tt | 19 | U |
| roclor 1242 | ND | 16.5 | π | H | н | ¥I | Tf. | . н | IJ |
| roclor 1248 | ND | 16.5 | IJ | ** | н | 51 | 11 | 16 | U |
| roclor 1254 | ND | 16.5 | u | 11 | 11 | #1 | n | н | U |
| scion 1260 | ND | 16.5 | Ħ | yı . | 17 | 11 | 16 | 8 | 11 |
| urrogate: Tetrachloro-meta-xyl | ene | 80.1% | 74-7 | 22 | и | | · • • • • • • • • • • • • • • • • • • • | n | |
| irrogate: Decachlorobiphenyl | | 101 % | 64-1 | 27 | " | n | " | " | |

P.O. Box 406 Buffalo NY, 14205 Project: LCS Price List

Project Number: 177 & 255 Great Arrow

Project Manager: Doug Reid

Reported: 08/25/04 15:13

Volatile Organic Compounds by EPA Method 8260B

| analyte | Result | Reporting
Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|-------------------------------|-------------------------|--------------------|------------|-----------|---------|----------|-------------|--------|------------|
| H20 (2-4) (4H12020-01) Soil | Sampled: 08/11/04 00:00 | Receive | d: 08/12/0 | 15:54 | | | | | |
| iloromethane | ND | 10 | ug/kg dry | 1 | AH41808 | 08/18/04 | 08/18/04 | 8260 | [1 |
| nyl chloride | ND | 10 | н | ļi | 16 | IT | н | 0 | (i |
| romomethane | ND · | 10 | H | Ħ | 17 | п | I* . | | t) |
| ıloroethane | ND | 10 | 11 | 11 | n | п | H | " | Į j |
| 1-dichloroethene | ND | 2 | Ħ | 11 | ** | 0 | U | 11 | [] |
| etone | 51 | 10 | u | U | 71 | В | U | п | |
| ırbon disulfide | ND | 2 | n | H | u | Į3 | п | ** | U |
| ethylene chloride | 10 | 2 | 14 | " | ** | ış | U | rC | |
| ans-1,2-dichloroethene | ND | 2 | n | н | ti . | t† | U | ** | U |
| 1-dichloroethane | ND | 2 | It | Ħ | Ħ | 44 | 11 | В | [] |
| nyl acetate | ND | 10 | 11 | Þ | h | n | я | н | U |
| butanone | ND | 10 | υ | H | н | н | н | js. | U |
| s-1.2-dichloroethene | ND | .2 | II | я | Ħ | n , | it | P) | ŧ1 |
| doroform | ND | 2 | íi . | Ð | η | н . | # | u | U |
| 1-trichloroethane | ND | 2 | . н | ŧI | 31 | n | b | 15 | [[|
| bon tetrachloride | ND | 2 | M | # | ń | ti . | Ħ | ** | U |
| inzene | ND | 2 | P | U | ti | 91 | H | ** | U |
| 2-dichloroethane | ND | 2 | 10 | ti | н | 10 | н | 11 | U |
| chloroethene | ND | 2 | 11 | . 11 | II | #1 | U | Ħ | 11 |
| 2-dichloropropane | ND | 2 | u | æ | Ħ | tı | 31 | n | 11 |
| omodichloromethane | ND | 2 | Ħ | u. | п | n | ŧt. | 11 | U |
| Methyl-2-pentanone (MIBK) | ND | 10 | " | H | н | Ħ | Ħ | Ħ | 1.3 |
| s-1,3-dichloropropene | ND | 2 | 11 | ıţ | 31 | 45 | н | н | Li |
| luene | ND | 2 | н |)f | ŧı | It | Ħ | H | U |
| ıns-1,3-dichloropropene | ND | 2 | ,, | 11 | H | n | Ħ | 4 | U |
| 1.2-trichloroethane | ND | 2 | Ħ | 11 | u | ıt | Ħ | n | U |
| hexanone | ND | 01 | 11 | н | и | I# | fe | If | U |
| rachloroethene | ND | 2 | 10 | 11 | " | * | ls . | h | U |
| bromochloromethane | ND | 2 | п | и | ŗı | lę. | 11 | H | U |
| lorobenzene | ND | 2 | " | 11 | II . | It | n | u | U |
| ıylbenzene | ND | 2 | А | 41 | ti | и | n | н | t) |
| p-xylene | ND | 4 | H | #1 | H | U | 19 | 11 | L! |
| xylene | ND | 2 | e | 11 | tr . | tı | н | " | 11 |
| /rene | ND | 2 | fx | 11 | u | я | o o | 71 | U |
| omoform | ND | 2 | ff | " | n | 11 | ** | 79 | U |
| 1,2.2-tetrachloroethane | ND | 2 | 44 | 0 | u | u | 11 | It | U |
| rrogate: 1,2-Dichloroethane-d | 4 | 103 % | 69-1 | <i>32</i> | " | | n | tı | |
| rrogate: Toluene-d8 | | 105 % | 81-1 | | # | ır | re | ,, | |
| rrogate: Bromofluorobenzene | | 112 % | 83-1 | 21 | " | 19 | e e | H | |

O. Box 406 luffalo NY, 14205 Project: LCS Price List

Project Number: 177 & 255 Great Arrow

Project Manager: Doug Reid

Reported: 08/25/04 15:13

| nalyte : | Result | Reporting
Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|-------------------------------|-------------------------|--------------------|-------------|-----------|---|-------------------------|----------|--------|-------|
| 121 (2-4) (4H12020-02) Soil | Sampled: 08/11/04 00:00 | Received | 1: 08/12/04 | 15:54 | | | | | |
| loromethane | ND | 10 | ug/kg dry | 1 | AH41808 | 08/18/04 | 08/18/04 | 8260 | (! |
| ıyl chloride | ND | 10 | rī. | 11 | tr . | II | स | n . | į į |
| omomethane | ND | 10 | tr | n | tr | " | H | 14 | U |
| loroethane | ND | 10 | TF. | н | 11 | n | U | п | U |
| -dichloroethene | ND | 2 | н | fi | †I | 17 | tı | n | U |
| etone | 87 | 10 | If | 'n | 21 | n . | 11 | rı | |
| bon disulfide | ND | 2 | FF | 57 | ** | ts | 41 | ŧI | 1 |
| thylene chloride | 84 | 2 | n | 38 | # | u | n | 11 | |
| ns-1,2-dichloroethene | ND | 2 | It | 10 | 17 | 41 | 11 | ħ | U |
| -dichloroethane | ND | 2 | 55 | н | n | н | Ħ | ti | l. |
| ıyl acetate | ND | 10 | tr | H | ħ | H | li | н | l. |
| outanone | 13 | 10 | ţı | п | t* | 17 | " | 11 | |
| -1.2-dichloroethene | ND | 2 | Ħ | *1 | " | я | Ħ | 11 | ι |
| loroform | ND | 2 | \$I | n | n | #1 | н | 11 | Į |
| ,1-trichloroethane | ND | 2 | 19 | ħ | a | Ŋ | n | p | Į |
| bon tetrachloride | ND | 2 | 13 | ** | 1* | h | н | ft. | ŧ |
| nzene | ND | 2 | | ft | 11 | 17 | le . | ** | ι |
| !-dichloroethane | ND | 2 | # | 18 | H | ŧŧ | n | # | Į |
| chloroethene | ND | 2 | " | () | U | 11 | tt. | İŧ | l |
| !-dichloropropane | ND | 2 | H | n n | 11 | 11 | н | H | į |
| omodichloromethane | ND | 2 | 10 | *1 | 58 | ** | n | 21 | ί |
| Methyl-2-pentanone (MIBK) | ND | 10 | eș | 11 | ** | ŧ | U | 11 | ŧ |
| -1.3-dichloropropene | ND | 2 | n, | *1 | н | п | n | и | ŧ |
| uene | ND | 2 | B | h | u | (I | 11 | Ħ | ţ |
| ns-1.3-dichloropropene | ND | 2 | 14 | и | Ħ | at | 11 | ** | Į |
| .2-trichloroethane | ND | 2 | Ħ | 19 | n | 11 | n | n | Į |
| nexanone | ND | 10 | It | н | 69 | ø | H | Ħ | ι |
| rachloroethene | ND | 2 | н | н | H | Ħ | n | 24 | Į |
| promochloromethane | ND | 2 | r | n | н | ** | | H | Į |
| orobenzene | ND | 2 | tr . | • | u | p | н . | u | l |
| ıylbenzene | ND | 2 | н | tl | Ħ | tt | 15 | я | Į |
| p-xylene | ND | 4 | tf. | 11 | Ħ | tı | 18 | fl | l |
| cylene | ND | 2 | tt | Ħ | 17 | fi | 11 | # | Į |
| rene | ND | 2 | п | R | n | 17 | ŧ | " | Į |
| əmoform | ND | 2 | и | 18 | Ħ | 14 | EP . | n | Į |
| .2,2-tetrachloroethane | ND | 2 | # | н | ħ | Ħ | t t | Ħ | į |
| rrogate: 1,2-Dichloroethane-d | | 103 % | 69-1 | 132 | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | | 'n | . , | |
| rrogate: Toluene-d8 | | 105 % | 81-1 | | " | " | ** | " | |
| rrogate: Bromofluorobenzene | | 113% | 83-1 | | n | ** | и | ft | |

P.O. Box 406 Buffalo NY, 14205 Project: LCS Price List

Project Number: 177 & 255 Great Arrow

Project Manager: Doug Reid

Reported: 08/25/04 15:13

Volatile Organic Compounds by EPA Method 8260B

| Analyte | Result | Reporting
Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---------------------------------|-------------------------|--------------------|-------------|----------|---------------|---------------------|------------|--|-------|
| H22 (6-8) (4H12020-03) Soil | Sampled: 08/11/04 00:00 | Receive | d: 08/12/04 | 15:54 | | | | | |
| hloromethane | ND | 10 | ug/kg dry | 1 | AH41808 | 08/18/04 | 08/18/04 | 8260 | (i |
| inyl chloride | ND | 10 | n | tr | ţŧ | я | п | я | (1 |
| romomethane | ND | 10 | n n | " | n | ,#I | " | 51 | 11 |
| hloroethane | ND | 10 | H | н | п | ft | u | 13 | 1: |
| .1-dichloroethene | ND | 2 | H | " | tt | Ħ | n | 11 | { |
| cetone | ND | 10 | Ħ | 11 | ŧı | 11 | п | Ħ | Ü |
| urbon disulfide | ND | 2 | ŧ1 | ## | Ħ | 77 | 51 | н | U |
| iethylene chloride | 15 | 2 | (I | 76 | tı | tt | n | R | |
| ans-1,2-dichloroethene | ND | 2 | U | ** | n | tr | и | 16 | () |
| . I -dichloroethane | ND | 2 | 0 | \$+ | ti | 27 | Ħ | Ft | U |
| inyl acetate | ND | 10 | 13 | q | n | Ħ | tt | B | () |
| -butanone | ND | 10 | 14 | u | и. | I# | ** | 0 | [1 |
| s-1,2-dichloroethene | ND | 2 | ** | e | (1 | ti . | n n | şi | (! |
| ıloroform | ND | 2 | iż | 11 | Ħ | ų. | п | ŧı | Li |
| 1.1-trichloroethane | ND | 2 | я | 11 | 31 | n | u | †3 | U |
| irbon tetrachloride | ND | 2 | U | R | U | u | u | ** | U |
| enzene | ND | 2 | a | tr | " | 'n | н | н | Į i |
| 2-dichloroethane | ND | 2 | U | п | u | 0 | u | $A_{\parallel}^{\mathbf{j}\mathbf{k}}$ | U |
| ichloroethene | ND | 2 | It | н | (1 | ч | 5 4 | lt | U |
| 2-dichloropropane | ND | 2 | u | н | 11 | ** | 7.0 | h | IJ |
| omodichloromethane | ND | 2 | tt. | Ħ | tı | 11 | 11 | n. | U |
| -Methyl-2-pentanone (MIBK) | ND | 10 | 11 | IJ | tř | н | 11 | *1 | [] |
| s-1.3-dichloropropene | ND | 2 | si · | и | п | #1 | H | n | U |
| luene | ND | 2 | tt | ъ. | 41 | *1 | n | *1 | U |
| ans-1.3-dichloropropene | ND | 2 | u | ** | u | 11 | n | 71 | () |
| 1.2-trichloroethane | ND | . 2 | t) | 15 | н | ÷i. | 11 | Ħ | (: |
| hexanone | ND | 10 | н | Ħ | н | p | u | h | ţi |
| trachloroethene | ND | 2 | n | 13 | н | P | ŧf | H | [] |
| bromochloromethane | ND | 2 |) tr | 77 | ** | n | ** | tt. | U |
| ilorobenzene | ND | 2 | * | ft | D | 71 | b# · | ış | 1) |
| hylbenzene | ND | 2 | n | Ħ | ri | i+ | н | ıı | 1,1 |
| .p-xylene | ND | 4 | п | u | Ħ | n | 11 | H | () |
| xylene | ND | 2 | н | " | n | " | 0 | n | () |
| yrene | ND | 2 | н | ** | tt | 11 | ** | 11 | Ù |
| romoform | ND | 2 | н | ц | n | н | u | п | (1 |
| 1.2.2-tetrachloroethane | ND | 2 | 14 | 31 | u | п | ts . | tı | (1 |
| urrogate: 1,2-Dichloroethane-d- | | 108 % | 69-1 | 32 | - | , · · · | " | ,, | |
| urrogate: Toluene-d8 | | 107% | 81-1 | | " | " | " | . 0 | |
| irrogate: Bromofluorobenzene | | 116% | 83-1 | | n | n | n | п | |

³.O. Box 406 3uffalo NY, 14205 Project: LCS Price List

Project Number: 177 & 255 Great Arrow

Project Manager: Doug Reid

Reported: 08/25/04 15:13

| nalyte | Result | Reporting
Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|-------------------------------|-------------------------|--------------------|----------------|----------|------------|----------|----------------|--------|-------|
| H23 (0-2) (4H12020-04) Soil | Sampled: 08/11/04 00:00 | Receive | d: 08/12/04 | 15:54 | | | | | |
| loromethane | ND | 10 | ug/kg dry | l | AH41808 | 08/18/04 | 08/18/04 | 8260 | (1 |
| nyl chloride | ND | 10 | n | H | ŧ | U. | FF. | н | υ |
| omomethane | ND | 10 | н | н | 41 | Ħ | 11 | U | U |
| loroethane | ND · | 10 | Ħ | ļ1 | 11 | н | 11 | #1 | ŧJ |
| I-dichloroethene | ND | 2 | н | u | 11 | 41 | u | ** | IJ |
| etone | ND | 10 |) ? | 11 | lt. | ti | u | 33 | IJ |
| rbon disulfide | ND | 2 | 11 | H | 11 | Ħ | , н | 71: | Į. |
| ethylene chloride | 22 | 2 | *1 | n | II . | # | ti | 11 | |
| ins-1,2-dichloroethene | ND | 2 | ŧį | Iş | 11 | t# | н | 11 | () |
| 1-dichloroethane | ND | 2 | н | н | u | R | ŧŧ | ıt | Į, |
| nyl acetate | ND | 10 | п | ti. | н | n | н | n | 1 |
| butanone | ND | 10 | Ħ | н | 14 | n | n | 11 | ţi |
| :-1,2-dichloroethene | ND | 2 | n | ** | 15 | ** | 11 | 19 | U |
| loroform | ND | 2 | Ħ | 33 | ** | ** | ft | В | t) |
| 1,1-trichloroethane | ND | 2 | ŧ1 | #\$ | 11 | 11 | n | U | U |
| rbon tetrachloride | ND | 2 | H | H | †1 | h | į4 | e e | U |
| nzene | ND | 2 | 71 | br | 11 | η | U | H | U |
| 2-dichloroethane | ND | 2 | п | If | 11 | 79 | Ħ | fi | Ų |
| chloroethene | ND | 2 | ŧı | В | н | Ħ | 71 | kr | () |
| 2-dichloropropane | ND | 2 | 'n | b | Ħ | H | Ħ | · · | U |
| omodichloromethane | ND | 2 | ti | ** | 11 | U | n | 11 | Į. |
| Methyl-2-pentanone (MIBK) | ND | 10 | Ħ | U | п | 11 | 11 | ti . | Ę |
| :-1,3-dichloropropene | ND | 2 | Ħ | u | n | 11 | u | 11 | U |
| uene | ND | 2 | n | я | u | 71 | 44 | P | Į. |
| ns-1.3-dichloropropene | ND | 2 | ** | *1 | н | B | # | н | 1. |
| 1.2-trichloroethane | ND | 2 | В | u | ** | н | ts . | в | Ų |
| iexanone | ND | 10 | ti. | и | 31 | It | t r | н | ti |
| rachloroethene | ND | 2 | ŧi | Ħ | ff | u | U | p | Į, |
| promochloromethane | ND | 2 | lt. | Ħ | \$2 | ti | 11 | 11 | U |
| lorobenzene | ND | 2 | u | 11 | H | Ħ | u | ti | Ų |
| nylbenzene | ND | 2 | н | # | н | 81 | н | Ħ | ŧ: |
| p-xylene | ND | 4 | B | n | " | н | 11 | 11 | Į. |
| cylene | ND | 2 | II . | н | u | 11 | " | R | ι. |
| rene | ND | 2 | ıř | " | ft | tr | át | " | l. |
| omoform | ND | 2 | tf. | 11 | Ħ | ** | 19 | P | Į |
| .2.2-tetrachloroethane | ND | 2 | lī | 11 | it | и | 31 | 11 | · { |
| rrogate: 1,2-Dichloroethane-d | 4 | 110% | 69- | 132 | | | | ,, | |
| rrogate: Toluene-d8 | | 104% | 81-1 | | " | " | " | " | |
| rrogate: Bromofluorobenzene | | 135 % | 83-1 | | н | tt | n | # | S-0, |

².O. Box 406 3uffalo NY, 14205 Project: LCS Price List

Project Number: 177 & 255 Great Arrow

Project Manager: Doug Reid

Reported: 08/25/04 15:13

| nalyte | Result | Reporting
Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|------------------------------|-------------------------|--------------------|-------------|------------|----------|----------|----------|--------|-------|
| 124 (0-2) (4H12020-05) Soil | Sampled: 08/11/04 00:00 | Receive | d: 08/12/04 | 115:54 | | | | | |
| loromethane | ND | 10 | ug/kg dry | 1 | AH41808 | 08/18/04 | 08/18/04 | 8260 | [] |
| yl chloride | ND | 10 | ** | и | It | 11 | P | 0 | { } |
| emomethane | ND | 10 | n | Ħ | n | ly . | 11 | . # | [] |
| : woethane | NĎ | 10 | H | 11 | н | ŀŢ | | Đ | į ! |
| t-dichloroethene | ND | 2 | žt | 11 | b | tf | 11 | n | {} |
| etone | 26 | 10 | н | н | n | 1) | н | Jt. | |
| rbon disulfide | ND | 2 | 11 | U | tr | 11 | | n | () |
| ethylene chloride | 21 | 2 | 31 | u | 17 | u | Ħ | u | |
| ns-1,2-dichloroethene | . ND | 2 | н | n | IS | ft | н | n | Ų |
| l-dichloroethane | ND | 2 | | U | U | u | Ħ | u | U |
| ıyl acetate | ND | 10 | tt. | н | II. | н | It | n | U |
| outanone | ND | 10 | H | n | u u | Ħ | U | Ħ | Į. |
| -1,2-dichloroethene | ND . | 2 |) t | ** | Ħ | · n | 11 | n | [|
| loroform | ND | 2 | n | 11 | tr | H | Ħ | | ţ |
| 1.1-trichloroethane | ND | 2 | u | Ħ | ** | n | H | | Į. |
| :bon tetrachloride | ND | 2 | u | It | R | 11 | H | п | L: |
| nzene | ND | 2 | 31 | jt | 11 | (1 | 11 | ET | l. |
| 1-dichloroethane | ND | 2 | n | 13 | 11 | 11 | n | 41 | l: |
| chloroethene | ND | 2 | b | Ħ | 11 | 15 | u | 11 | l: |
| !-dichloropropane | ND | 2 | " | Ħ | n | ч | н | н | Į: |
| omodichloromethane | ND | 2 | 0 | Ħ | U | II. | 21 | k | Ų. |
| Methyl-2-pentanone (MIBK) | ND | 10 | H | н | H | Ŋ | 8 | U | Į, |
| -1,3-dichloropropene | ND | 2 | 11 | Ð | n | п | 31 | и | υ |
| иепе | 3 | 2 | ** | Ħ | n | 91 | и | u | |
| ns-1,3-dichloropropene | ND | 2 | ŧţ | 19 | Ħ | H | u | 11 | l, |
| ,2-trichloroethane | ND | 2 | Ħ | Ħ | # | В | U | *1 | . 1. |
| iexanone | ND | 10 | † ‡ | f 9 | #1 | 11 | 41 . | Dt. | Į |
| rachloroethene | ND | 2 | 21 | 11 | tt | н | 12 | н | l |
| romochloromethane | ND | 2 | 28 | ** | h | u | H | JE . | l |
| orobenzene | ND | 2 | 25 | n | #1 | н | H | H | l. |
| ylbenzene | ND | 2 | Ħ | 11 | H | н | 19 | II | l |
| p-xylene | ND | 4 | ti | ** | 38 | Ħ | н | H | l |
| tylene | ND | 2 | Ħ | n | 17 | ** | # | н | ι |
| rene | ND | 2 | Ħ | n | U | # | łŧ | п | Į |
| omoform | ND | 2 | н | n | n | ** | 11 | 11 | t. |
| .2.2-tetrachloroethane | ND | 2 | Ħ | ,11 | я | 17 | 11 | n | ι |
| rogate: 1,2-Dichloroethane-d | | 121% | 69-1 | 32 | | | " | ü | |
| rogate: Toluene-d8 | | 86.3 % | 81-1 | | # | н | " | u | |
| rogate: Bromofluorobenzene | | 179% | 83-1 | | 74 | ** | " | 17 | S-0- |

³.O. Box 406 3uffalo NY, 14205 Project: LCS Price List

Project Number: 177 & 255 Great Arrow

Project Manager: Doug Reid

Reported: 08/25/04 15:13

Volatile Organic Compounds by EPA Method 8260B Waste Stream Technology Inc.

| nalyte | Result | Reporting
Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|--------------------------------|----------------------|--------------------|------------|-----------|---------|----------|-------------|--------|-------|
| 125 (2-4) (4H12020-06RE1) Soil | Sampled: 08/11/04 00 | D:00 Red | eived: 08/ | 12/04 15: | 54 | | | | |
| loromethane | ND | 10 | ug/kg đry | 1 | AH41902 | 08/19/04 | 08/19/04 | 8260 | Ţ |
| ıyl chloride | ND | 10 | ı, | n | н | ,p | a a | ŢĬ | Į į |
| omomethane | ND | 10 | tt . | ** | ** | H | 39 | *1 | U |
| loroethane | ND | 10 | If | ** | u | ít. | 11 | ы | Ü |
| I-dichloroethene | ND | 2 | # | H | n | H | Ħ | n | U |
| etone | 111 | 10 | ži | п | *1 | н | \$1 | n | |
| rbon disulfide | ND | 2 | н | n | 0 | U | 24 | R | U |
| ethylene chloride | 9 | 2 | ** | н | 0 | tı. | Ħ | B | • |
| ns-1,2-dichloroethene | ND | 2 | f? | 19 | н | H | -{r | H | U |
| I-dichloroethane | ND | 2 | н , | 11 | n | В | 11 | в | U |
| ıvl acetate | ND | 10 | н | 10 | n | It | 19 | n | Ü |
| outanone | 16 | 10 | 19 | 17 | п | u | ŀτ | ** | |
| -1,2-dichloroethene | ND | 2 | н | # | н | ¥ | IT | R | U |
| loroform | ND | 2 | ŧI | Ħ | п | IJ | lt | п | U |
| .1-trichloroethane | ND | 2 | 19 | ŧŧ | U | a | н | п | Ų |
| bon tetrachloride | ND | 2 | и | ** | н | u | 11 | и | [1 |
| nzene | ND | 2 | +1 | # | u | Ħ | п | 19 | ſ) |
| !-dichloroethane | ND | 2 | 11 | 14 | н | ŧı | u | u | Į, |
| chloroethene | ND | 2 | 11 | 24 | 11 | п | a | 31 | U |
| !-dichloropropane | ND | 2 | Pt . | ** | 71 | 11 | 10 | ** | IJ |
| modichloromethane | ND | . 2 | Ħ | 79 | # | 11 | a | ** | () |
| Vethyl-2-pentanone (MIBK) | ND | 10 | Ħ | 21 | ## | Ħ | ft | #1 | () |
| -1.3-dichloropropene | ND | 2 | 31 | п | 11 | ŧs | 11 | Ħ | () |
| uene | 3 | 2 | 11 | н | и | ft | n . | n' | · |
| ns-1,3-dichloropropene | ND | 2 | St | tr | n | ч | ** | 15 | U |
| ,2-trichloroethane | ND | 2 | 57 | н | u | 11 | 31 | n | (1 |
| нехапопе | ND | 10 | 12 | 11 | ii . | a | 31 | и | Ù |
| rachloroethene | ND | 2 | H | п | u | 13 | \$ † | ti | Ü |
| romochloromethane | ND | 2 | 11 | n | н | п | 16 | n | Ü |
| orobenzene | ND | 2 | 11 | н | н | ti. | Ŧŧ | lf . | Ü |
| ylbenzene | ND | 2 | N | # | u | B | н | n n | Ü |
| o-xylene | ND | 4 | II. | 17 | n | Ħ | 71 | II. | Ü |
| (ylene) | ND | 2 | U | 77 | n | | I+ | n | ·U |
| rene | ND | 2 | 51 | 11 | H | В | # | 0 | Ū |
| moform | ND | 2 | IP | #4 | Ħ | # | £\$ | п | U |
| .2.2-tetrachloroethane | ND | 2 | и | 11 | H | It | # | n | U |
| rogate: 1,2-Dichloroethane-d4 | | 94.3 % | 69-1 | 32 | | | , | ,, | • |
| rogate: Toluene-d8 | | 87.0 % | 81-1 | | ıı. | " | ** | ø | |
| rogate: Bromofluorobenzene | | 121 % | 83-1 | | n | н | tr | n | |

aste Stream Technology Inc.

P.O. Box 406 Buffalo NY, 14205 Project: LCS Price List

Project Number: 177 & 255 Great Arrow

Project Manager: Doug Reid

Reported: 08/25/04 15:13

Volatile Organic Compounds by EPA Method 8260B

Waste Stream Technology Inc.

Reporting

| Analyte | Result | Reporting
Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---------------------------------|-------------------------|--------------------|-------------|----------|-----------|----------|----------|-----------|-------|
| BH26 (0-2) (4H12020-07) Soil | Sampled: 08/11/04 00:00 | Receive | d: 08/12/04 | 15:54 | | | | | |
| hloromethane | ND | 10 | ug/kg dry | 1 | AH41808 | 08/18/04 | 08/18/04 | 8260 | Ū |
| /inyl chloride | ND | 10 | n | ŧ, | н | ŧi | p# | 518 | Ü |
| romomethane | ND | 10 | n | n | ŧ | н | a | ** | · Ü |
| hloroethane | ND | 10 | Ħ | It | n | и | 11 | rt | Ü |
| .1-dichloroethene | ND | 2 | n | IT | Ħ | jŧ | n | н | Ü |
| icetone | 167 | 10 | a. | 11 | 14 | В | 8 | н | |
| arbon disulfide | ND | 2 | Ħ | 11 | | Ħ | 34 | u u | U |
| nethylene chloride | 18 | 2 | n | Ħ | 41 | ff | II | п | C |
| rans-1,2-dichloroethene | ND | 2 | H | 14 | 18 | Ħ | 13 | ŧŧ | 11 |
| .1-dichloroethane | ND | 2 | 11 | i e | 11 | 11 | t# | 11 | Ü |
| rinyl acetate | ND | 10 | и | ŧı | IF. | н | и | n | U |
| -butanone | 33 | 10 | n | ft | n | II. | ** | ** | C |
| is-1,2-dichloroethene | ND | 2 | H | H | 18 | 11 | н | n n | U |
| hloroform | ND | 2 | #1 | ķŧ | n | 11 | я | н | Ü |
| ,1,1-trichloroethane | ND | 2 | U | 19 | 31 | Iŧ | 11 | ŧŧ | Ü |
| arbon tetrachloride | ND | 2 | a | 11 | n | H | 31 | 95 | ti. |
| enzene | ND | 2 | " | н | ti. | 11 | n | ** | U |
| ,2-dichloroethane | ND | 2 | 17 | Ħ | в | Ħ | В | ‡7 | U |
| nehloroethene | ND | 2 | н | n | и | Ħ | Iş. | P | U |
| .2-dichloropropane | ND | 2 | *11 | ţI. | Ð | н | e e | u | () |
| romodichloromethane | ND | 2 | | • | н | н | n | tr . | Ü |
| -Methyl-2-pentanone (MIBK) | ND | 10 | 11 | u | II . | н | H | 16 | Ü |
| is-1,3-dichloropropene | ND | 2 | н | H | 17 | Ħ | ß | II . | U |
| bluene | ND | 2 | . 11 | ŝŧ | 11 | n · | н | u | U |
| ans-1,3-dichloropropene | ND | 2 | er | " | 41 | " | ** | 11 | U |
| .1.2-trichloroethane | ND | 2 | p | 17 | я | 11 | н | н | l) |
| -hexanone | ND | 10 | В | Ħ | Ħ | н | ħ | ** | U |
| trachloroethene | ND | 2 | Ff | 45 | n | ft | ы | 14 | t) |
| ibromochloromethane | ND | 2 | н | n | H | h | 71 | 11 | Ü |
| alorobenzene | ND | 2 | 71 | 11 | tt | 11 | o o | ** | U |
| hylbenzene | ND | 2 | tt | IE | ** | 11 | 'n | f4 | Ü |
| Lp-xylene | ND | 4 | n | Ħ | a | 11 | Œ | ** | U |
| xylene | ND | 2 | 1) | Ħ | 34 | 31 | I.E | n | Ü |
| yrene | ND | 2 | 14 | " | ** | ** | ,, | 18 | U |
| omoform | ND | 2 | er | u | it | y. | В | 11 | U |
| 1.2.2-tetrachloroethane | ND | 2 | ri | Ħ | н | 31 | n | 14 | U |
| urrogate: 1,2-Dichloroethane-d4 | | 118% | 69-1. | 32 | | " | ,, | ,, | |
| urrogate: Toluene-d8 | • | 101% | 81-12 | | ** | ,, | , | ,, | |
| urrogate: Bromofluorobenzene | | 127% | 83-12 | | " | n | er | | v a c |
| Care Di omojimoi operizene | | 12: 20 | 05-12 | - 1 | | | | | S-04 |

Vaste Stream Technology Inc.

P.O. Box 406 Buffalo NY, 14205 Project: LCS Price List

Project Number: 177 & 255 Great Arrow

Project Manager: Doug Reid

Reported: 08/25/04 15:13

Volatile Organic Compounds by EPA Method 8260B Waste Stream Technology Inc.

| ınalyte | Result | Reporting
Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---------------------------------|---------------------|--------------------|------------|------------|---------|------------|----------|----------------|-------|
| H27 (2-4) (4H12020-08RE1) Soil | Sampled: 08/11/04 0 | 0:00 Red | eived: 08/ | 12/04 15:: | 54 | | | | |
| loromethane | ND | 10 | ug/kg dry | 1 | AH41902 | 08/19/04 | 08/19/04 | 8260 | Į |
| .nyl chloride | ND | 10 | u u | ŧi | ** | IT | n | н | l |
| romomethane | ND | 10 | ri . | ** | 11 | u | 11 | 26 | Į |
| iloroethane | ND | 10 | Ħ | ş# | I) | 11 | IC | 61 | 1 |
| 1-dichloroethene | ND | 2 | 11 | n | н | . 1 | II | n n | ι |
| cetone | 57 | 10 | 31 | Ħ | n | 11 | 1) | u u | |
| rbon disulfide | ND | 2 | ,1 | н | н | " | 76 | ** | t |
| ethylene chloride | 7 | 2 | ** | n | ** | 'n | N | n | |
| ans-1,2-dichloroethene | ND | 2 | π | n | ŧŧ | 11 | Ħ | В | i |
| 1-dichloroethane | ND | 2 | 71 | II. | Ħ | 11 | 19 | ц | ι |
| nyl acetate | ND | 10 | 11 | н | p | \$1 | u | Ħ | Į |
| butanone | ND | 10 | 39 | п | U | 11 | 11 | 31 | Į. |
| s-1,2-dichloroethene | ND | 2 | er | Ħ | ¥f | н | н | н | Į |
| loroform | ND | 2 | łŧ | ff. | 78 | 21 | я | 34 | l |
| 1.1-trichloroethane | ND | 2 | 11 | tr | n | 11 | 11 | ti | ţ |
| abon tetrachloride | ND | 2 | 16 | 0 | U | jt. | п |)+ | ı |
| inzene | ND | 2 | U | Ħ | 11 | ii. | n | \$1 | Į |
| 2-dichloroethane | ND | 2 | u | Ħ | # | સ | 11 | It | (|
| ichloroethene | ND | 2 | 34 | #1 | l‡ | 11 | н | ft | (|
| 2-dichloropropane | ND | 2 | ** | 13 | н | u | ** | н | ı |
| comodichloromethane | ND | 2 | Ħ | n. | 28 | п | 11 | ы | 1 |
| -Methyl-2-pentanone (MIBK) | ND | 10 | 19 | н | st | B | Ħ | 11 | 1 |
| s-1,3-dichloropropene | ND | 2 | н | sı | ь | ti | rs | n | 1 |
| luene | ND | 2 | * | ţŦ | U | н | 11 |) | |
| ans-1.3-dichloropropene | ND | 2 | Ħ | 79 | ti. | *1 | ŧi | 17 | |
| 1.2-trichloroethane | ND | 2 | P | В | Ħ | 19 | н | ¥J | 1 |
| -hexanone | ND | 10 | #P | 11 | # | • | B | # | + |
| trachloroethene | ND ND | 2 | 15 | " | н | 4) | 11 | B | I |
| bromochloromethane | ND | 2 | H | н |)1 | п | tt | R | 1 |
| oromocino omethane | ND | 2 | H | tf | u | 41 | ŧj | u | 1 |
| | ND | 2 | н | *1 | ¥I | It | н | St. | |
| hylbenzene | ND | 4 | lt . | ** | 11 | 31 | н | 15 | |
| .p-xylene | ND | 2 | 11 | н | 11 | #1 | | u | |
| xylene | ND
ND | 2 | U | 11 | 11 | н | re | н | |
| yrene | ND
ND | 2 | 11 | u | Ħ | Ħ | į# | 1 1 | |
| comoform | ND
ND | 2 | 31 | л | 11 | H | ø | n | |
| 1,2,2-tetrachloroethane | ND | | | 7.33 | | | | ni. | |
| urrogate: 1,2-Dichloroethane-d4 | | 98.7% | 69- | | " | ** | ,, | | |
| urrogate: Toluene-d8 | | 91.3 % | 81- | | n | " | ,, | ,, | |
| urrogate: Bromofluorobenzene | | 108 % | 83 | 121 | " | 12 | ** | " | |

Waste Stream Technology Inc.

³.O. Box 406 3uffalo NY, 14205 Project: LCS Price List

Project Number: 177 & 255 Great Arrow

Project Manager: Doug Reid

Reported: 08/25/04 15:13

Volatile Organic Compounds by EPA Method 8260B Waste Stream Technology Inc.

| nalyte | Result | Reporting
Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|-------------------------------|-------------------------|--------------------|-------------|----------|---------|------------|----------|--------|------------|
| H28 (0-2) (4H12020-09) Soil | Sampled: 08/11/04 00:00 | Receive | d: 08/12/04 | 15:54 | | | | | |
| loromethane | ND | . 10 | ug/kg dry | 1 | AH41808 | 08/18/04 | 08/18/04 | 8260 | Į i |
| nyl chloride | ND | 10 | Ħ | n | H. | n | н | В | 11 |
| omomethane | ND | 10 | R | n | Ħ | n n | " | U | U |
| loroethane | ND | 10 | * | ** | #1 |)+ | н | 51 | () |
| 1-dichloroethene | ND | 2 | 19 | 75 | н | *1 | F2 | 74 | { } |
| etone | ND | 10 | В | ** | 12 | Ħ | В | 11 | U |
| rbon disulfide | ND | 2 | н | ## | H | 15 | n | 4F | () |
| ethylene chloride | 14 | 2 | 11 | 11 | H | ** | *1 | ** | |
| ins-1,2-dichloroethene | ND | 2 | H | 14 | n | II | 11 | n | (t |
| 1-dichloroethane | ND | 2 | n | u | Ħ | Ħ | н | Ħ | Į |
| nyl acetate | ND | 10 | п | rt | 11 | Ħ | 11 | н | J |
| butanone | ND | 10 | U | Ħ | 11 | n | ff | 11 | U |
| 3-1,2-dichloroethene | ND | 2 | п | II. | tı | ** | | n | l |
| loroform | ND | 2 | н | n | Ħ | Ħ | u · | ** | ι |
| 1,1-trichloroethane | ND | 2 | #1 | u | R | н | 75 | n | ţ |
| rbon tetrachloride | ND | 2 | ** | н | и | 31 | р | 11 | Į, |
| nzene | ND | 2 | 17 | 11 | 11 | 11 | а | " | l, |
| 2-dichloroethane | ND | 2 | 19 | ŧt | 51 | ti | 81 | n | Į |
| chloroethene | ND | 2 | 11 | 11 | н | 0 | N . | ti . | (|
| 2-dichloropropane | ND | 2 | 14 | Ħ | H | 71 | n | tt | Į |
| omodichloromethane | ND | 2 | n | f† | ti . | l† | u | ρ | Į |
| Methyl-2-pentanone (MIBK) | ND | 10 | Ħ | 31 | 79 | ti. | н | ęł. | į |
| s-1,3-dichloropropene | ND | 2 | н | ## | 15 | н | 11 | 21 | ŧ. |
| luene | ND | 2 | Ħ | 11 | 16 | # # | fi | H | Į |
| ns-1,3-dichloropropene | ND | 2 | h | | н | R | 13 | t) | Ę |
| 1,2-trichloroethane | ND | 2 | н | п | ti | ** | It | Ħ | l |
| hexanone | ND | 10 | Ħ | 22 | 31 | н | , fi | E5 | Į |
| rachloroethene | ND | 2 | Ħ | 11 | III | It | t+ | Ħ | ŧ |
| bromochloromethane | ND | 2 | ŝŧ | 11 | 19 | ,11 | 10 | Ħ | Į |
| lorobenzene | ND | 2 | 11 | 11 | H | H | įt. | . 11 | (|
| nylbenzene | ND | 2 | 715 | II | Ħ | ** | Ħ | tı | ł |
| .p-xylene | ND | 4 | n | н | Ħ | u | н | Ħ | |
| xylene | ND | 2 | 1) | 97 | n | ķı | u | 0 | Į |
| /rene | ND | 2 | U | ** | tt | ** | ti . | n | Į |
| omoform | ND | 2 | ч | u | п | tŧ | 15 | ч | Į |
| 1,2,2-tetrachloroethane | ND | 2 | H | u | H | at | Þ£ | н | l |
| rrogate: 1,2-Dichloroethane-d | | 122 % | 69-1 | 32 | " | <i>"</i> | , ,, | · . | |
| rrogate: Toluene-d8 | • | 107 % | 81-1. | | н | . # | • | " | |
| rrogate: Bromofluorobenzene | | 123 % | 83-I. | | n | n | " | " | S-1) |

Vaste Stream Technology Inc.

P.O. Box 406 Buffalo NY, 14205 Project: LCS Price List

Project Number: 177 & 255 Great Arrow

Project Manager: Doug Reid

Reported: 08/25/04 15:13

Volatile Organic Compounds by EPA Method 8260B

| Informethane | nalyte | Result | Reporting
Limit | Units | Dilution | Batch | Prepared | Analyzed | ,
Method | Notes |
|--|------------------------------|-------------------------|--------------------|-------------|----------|-------|----------------|----------|-------------|-------|
| nyl chloride | H29 (0-2) (4H12020-10) Soil | Sampled: 08/11/04 00:00 | Received | d: 08/12/04 | 15:54 | | | | | |
| Second S | iloromethane | | 10 | ug/kg dry | 1 | | 08/18/04 | 08/18/04 | 8260 | l) |
| Section Sect | nyl chloride | | 10 | Ħ | ŧş | # | 1 1 | tı | и | Į ſ |
| - dichloroethene | omomethane | | 10 | Ħ | 14 | n | n | ti | Ħ | U |
| rbon disulfide | aroethane | | 10 | If | ** | et | 11 | # | н | U |
| rbon disulfide | 1-dichloroethene | ND | 2 | ŧř | #1 | ts | +9 | Ħ. | ** | U |
| ethylene chloride | tetone | 13 | 10 | 11 | ŧ | B | ž5 | 19 | i+ | |
| Ans-1,2-dichloroethane | rbon disulfide | | 2 | Ħ | 11 | 18 | n | n | IT | 15 |
| I-dichloroethane | ethylene chloride | 17 | 2 | H | ** | 12 | 11 | 14 | Ħ | |
| ND 10 10 10 10 10 10 10 1 | ans-1,2-dichloroethene | ND | 2 | U | п | # | ja | " | D | ŧ. |
| Dutanone | I-dichloroethane | ND | 2 | u | 11 | n | h | 11 | u | |
| buttanone ND 10 " <t< td=""><td>nyl acetate</td><td>ND</td><td>10</td><td>lş.</td><td>U</td><td>19</td><td>н</td><td>Ħ</td><td>91</td><td>IJ</td></t<> | nyl acetate | ND | 10 | lş. | U | 19 | н | Ħ | 91 | IJ |
| 1,1-trichloroethane | butanone | ND | 10 | lt. | n | | n | Ŧ1 | 11 | U |
| Introduction ND 2 | s-1.2-dichloroethene | ND | 2 | I) | 71 | 11 | 71 | ** | и | U |
| 1,1-trichloroethane | | ND | 2 | H | ft | D | # | Ħ | II. | U |
| rbon tetrachloride | | ND | 2 | t+ | u | 11 | н ' | n | Ω | () |
| Section ND 2 | | ND | 2 | н | tt | Ħ | n | U | ** | U |
| 2-dichloroethane | | ND | 2 | ft | 11 | 12 | ** | a | Ħ | U |
| Comparison ND 2 | | ND | 2 | n | ** | 77 | n | Ħ | ь | U |
| 2-dichloropropane | | ND | 2 | #1 | u | H | ŧ | В | U | U |
| omodichloromethane ND 2 " | | ND | 2 | ŧ1 | 11 | 11 | 17 | D | \$t | Ų |
| Methyl-2-pentanone (MIBK) ND 10 """""""""""""""""""""""""""""""""""" | • • | ND | 2 | H | " | 11 | Iŧ | 44 | 24 | Į. |
| Set | | ND | 10 | u | 81 · | n | 91 | н | 15 | Ų |
| luene 4 2 " <td></td> <td>ND</td> <td>2</td> <td>D</td> <td>31</td> <td>п</td> <td>n</td> <td>sı</td> <td>Ħ</td> <td>Ų</td> | | ND | 2 | D | 31 | п | n | sı | Ħ | Ų |
| Ans-1,3-dichloropropene | | 4 | 2 | II | Ŧŧ | If | Ħ | B | If | |
| 1.2-trichloroethane | | ND | 2 | It | l; | IC. | H | 15 | n | U |
| hexanone | | ND | 2 | F† | u | tt | 11 | ь | n | Ų |
| trachloroethene | | ND | 10 | 34 | ы | н | 71 | в | Ħ | Į. |
| ND 2 | trachloroethene | ND | 2 | Ħ | 11 | ** | Ħ | 11 | Ħ | U |
| ND 2 | | ND | 2 | 51 | ** | ** | 1+ | Ħ | 11 | () |
| ND 2 | | | | 11 | 11 | 18 | 1) | Ħ | 12 | U |
| Aplene | | ND | | 11 | 1) | Ħ | lt | Ħ | u | |
| Aylene 3 2 " " " " " " " " " " " " " " " " " " " | , | 6 | 4 | " | 11 | Ħ | II. | P | Ħ | |
| vrene ND 2 " <td></td> <td></td> <td>2</td> <td>11</td> <td>u</td> <td>Ħ</td> <td>17</td> <td>"</td> <td>Ħ</td> <td></td> | | | 2 | 11 | u | Ħ | 17 | " | Ħ | |
| ND 2 | - - | | | II | 11 | " | ** | 11 | 13 | l |
| 1.2.2-tetrachloroethane ND 2 " " " " " " " urrogate: I,2-Dichloroethane-d4 125 % 69-132 " | 1 | | | 15 | n | B | ft | 11 | H | 1, |
| rrogate: 1,2-Dichloroethane-d4 125 % 69-132 " " " " " " " " " " " " " " " " " " " | | | | ıs | 11 | п | n | H | u | |
| urrogate: Toluene-d8 98.0 % 81-121 " " " " " | | | | KQ_1 | 32 | · n | " " | | in - | |
| | | • | | | | # | " | " | u | |
| | urrogate: Bromofluorobenzene | | 144 % | | | 11 | 21 | u | # | S-0- |

P.O. Box 406 Buffalo NY, 14205 Project: LCS Price List

Project Number: 177 & 255 Great Arrow

Project Manager: Doug Reid

Reported: 08/25/04 15:13

Volatile Organic Compounds by EPA Method 8260B Waste Stream Technology Inc.

| nalyte | Result | Reporting
Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|--------------------------------|-------------------------|--------------------|------------|-----------|----------------|-----------|----------|--|--------|
| H33 (0-2) (4H12020-11) Soil | Sampled: 08/11/04 00:00 | | | 1 15:54 | | | | ************************************** | |
| loromethane | ND | | ug/kg dry | l | AH41808 | 08/18/04 | 08/18/04 | 8260 | U |
| nyl chloride | ND | 10 | Ħ | ti | "1 | Ħ | н | rt | U |
| omomethane | ND | 10 | If | " | ** | 11 | ** | н | U |
| lloroethane | ND | 10 | B | h | If | н | 17 | t t | () |
| I-dichloroethene | ND | 2 | Ħ | P | I ļ | If | 11 | н | U |
| etone | ND | 10 | B | Ħ | н | n | 71 | II | U |
| rbon disulfide | ND | 2 | n | ır | n | t1 | ** | tı | U |
| ethylene chloride | 18 | 2 | H | U | 11 | I+ | U | # . | |
| ans-1.2-dichloroethene | ND | 2 | Ħ | u | #1 | le . | n | U | U |
| 1-dichloroethane | ND | 2 | H | * . | 13 | n | ¥f. | ū | U |
| nyl acetate | ND | 10 | II . | 31 | 11 | 11 | n | t? | U |
| butanone | ND | 10 | U | n | 8 | lt. | 11 | II. | 1. |
| s-1.2-dichloroethene | ND | 2 | Ħ |) f | į t | Ü | 11 | 11 | Ų |
| lloroform | ND. | 2 | a | 11 | H | 11 | 11 | н | 1 |
| 1.1-trichloroethane | ND | 2 | \$3 | # | н | Ħ | u | 11 | 1 |
| rbon tetrachloride | ND | 2 | 47 | rt | 61 | ** | . н | 71 | l |
| nzene | ND | 2 | IŦ | ij | ft. | n | b | 14 | Ų. |
| 2-dichloroethane | ND | 2 | 17 | Ħ | Ħ | n | н | я | Į |
| ichloroethene | ND | 2 | ri | # | 19 | P | н | π | Į |
| 2-dichloropropane | ND | 2 | D | H | ıı | n | н | п | ŧ. |
| omodichloromethane | ND | 2 | n | 31 | *1 | *1 | U | n | l |
| Methyl-2-pentanone (MIBK) | ND | 10 | ţí | a | 18 | by | #1 | Ħ | { |
| s-1,3-dichloropropene | ND | 2 | Ħ | 9 | Ħ | В | Ħ | 15 | į |
| luene | ND | 2 | н | Ħ | It | u | 11 | If | l |
| ans-1,3-dichloropropene | ND | 2 | 38 | н | *1 | ** | ,, | u | l |
| 1,2-trichloroethane | ND | 2 | 51 | lt. | ŧı | h | Ħ | п | ŧ |
| hexanone | ND | 10 | 11 | н | Ħ | I† | н | łs. | (|
| trachloroethene | ND | 2 | īr | 4 | FF. | н | þt | H | 1 |
| bromochloromethane | ND | 2 | ** | 0 | U | п | 91 | u | ι |
| lorobenzene | ND | 2 | # | ii | н | št | 71 | st | ι |
| hylbenzene | ND · | 2 | ## | ħ | 38 | B | II. | 13 | ι |
| ,p-xylene | 6 | 4 | 19 | Ħ | ŧs | l1 | 11 | н | |
| | ND | 2 | 11 | п | H | Ţĺ | н | ** | i |
| xylene
yrene | ND | 2 | 11 | D | u | 81 | н | н | ŧ. |
| omoform | ND | 2 | 11 | tr | 11 | II | n | ŋ | į |
| 1,2,2-tetrachloroethane | ND | 2 | II | e, | 11 | U | 11 | п | Į |
| | | 136% | 69- | 733 | | | . , | ,, | S-0- |
| irrogate: 1,2-Dichloroethane-a | 14 | 130 % | 81- | | н | # | 12 | ,, | 4,1-17 |
| irrogate: Toluene-d8 | | 141% | 81-
83- | | ĸ | u | " | n | S-0- |
| ırrogate: Bromofluorobenzene | | 141 70 | 0.5~ | 121 | | - | | | 5.40 |

Vaste Stream Technology Inc.

'.O. Box 406 3uffalo NY, 14205 Project: LCS Price List

Project Number: 177 & 255 Great Arrow

Project Manager: Doug Reid

Reported: 08/25/04 15:13

| nalyte | Result | Reporting
Limit | Units | Dilution | Batch | Prepared | Analyzed | ,
Method | Notes |
|------------------------------|-------------------------|--------------------|-------------|----------------|-----------|---------------------------------------|----------|-------------|-------|
| H35 (0-2) (4H12020-12) Soil | Sampled: 08/11/04 00:00 | Receive | d: 08/12/04 | 15:54 | | | | · | |
| loromethane | ND | 10 | ug/kg dry | 1 | AH41808 | 08/18/04 | 08/18/04 | 8260 | Ţ, |
| ıyl chloride | 15 | 10 | 11 | ** | ti | et | IF. | n | |
| omomethane | ND | 10 | # | п | H | . #I | 17 | ,, | ξí |
| loroethane | ND | 10 | 99 | н | 11 | 71 | O | ** | U |
| I-dichloroethene | ND | 2 | fi | 11 | v | tt | u | ù | (1 |
| etone | ND | 10 | H | n | H | | u | Ħ | () |
| rbon disulfide | ND | 2 | n | ŭ | H | Ħ | 1) | tt . | U |
| thylene chloride | 13 | 2 | 31 | н | U | u | u | lt. | |
| ins-1,2-dichloroethene | 24 | 2 | 11 | II | H | n | 11 | 19 | |
| -dichloroethane | . ND | 2 | н | 11 | jt. | ņ | e | н | Į; |
| ıyl acetate | ND | 10 | ŧţ | n | # | Ħ | 11 | в | 11 |
| putanone | ND | 10 | n | 11 | 18 | n | 16 | n | [] |
| -1,2-dichloroethene | 32 | 2 | \$7 | H | H | 11 | 67 | ** | |
| loroform | ND | 2 | \$1 | n | 13 | HF | н | п | U |
| .1-trichloroethane | ND | 2 | Ħ | n | 11 | FF | 51 | ıı . | IJ |
| con tetrachloride | ND | 2 | п | 11 | Ħ | н | P | 11 | U |
| izene | ND | 2 | ** | n | 32 | H | 19 | ** | U |
| !-dichloroethane | ND | 2 | н | u | 11 | 12 | ft | н | U |
| chloroethene | 10 | 2 | н | It | n | н | ħ | н | |
| !-dichloropropane | ND | 2 | u | If | н | · · · · · · · · · · · · · · · · · · · | tr | 11 | 11 |
| modichloromethane | ND | 2 | Ji . | 11 | tt | 17 | ** | u | U |
| Methyl-2-pentanone (MIBK) | ND | 10 | n | 11 | If | n | u | Ħ | (j |
| -1,3-dichloropropene | ND | 2 | l† | 14 | u | ķi | Ħ | ţi | (1 |
| uene | ND | 2 | H | Iŧ | 17 | ti | n | ** | U |
| ns-1,3-dichloropropene | ND | 2 | H | н | n | п | п | ts | () |
| ,2-trichloroethane | ND | 2 | tr | H | н | U | н | † ‡ | IJ |
| iexanone | ND | 10 | 25 | Ħ | 11 | Ħ | В | íŧ. | [] |
| rachloroethene | ND | 2 | Ħ | Iţ | н | 31 | н | n | U |
| romochloromethane | ND | 2 | ** | n | Ħ | 11 | . 0 | 11 | U |
| orobenzene | ND | 2 | Ħ | 11 | U | я | 0 | н | U |
| ylbenzene | ND | 2 | H | ** | tt | # | u | Ħ | [] |
| p-xylene | ND | 4 | Ħ | н | u | a | n | а | 11 |
| ylene | ND | 2 | н | 1 1 | ī |)3 | n | 11 | U |
| rene | ND | 2 | u | u | 11 | | ** | н | U |
| moform | ND | 2 | n | FF | b | ** | ** | ** | 11 |
| ,2,2-tetrachloroethane | ND | 2 | U | Ef | FI | ŧŧ. | п | #1 | U |
| rogate: 1,2-Dichloroethane-d | 4 | 114% | 69-1 | 32 | n | | tf | " | |
| rogate: Toluene-d8 | | 98.3 % | 81-1 | | " | " | " | " | |
| rogate: Bromofluorobenzene | | 115% | 83-1 | | u | n | н | n | |

P.O. Box 406 Buffalo NY, 14205 Project: LCS Price List

Project Number: 177 & 255 Great Arrow

Project Manager: Doug Reid

Reported: 08/25/04 15:13

| ınalyte | Result | Reporting
Limit | Units | Dilution | Batch | Prepared | Analyzed | ,
Method | Notes |
|---------------------------------|-------------------------|--------------------|-------------|----------------|---------|------------|---------------------------------------|-------------|-------|
| H36 (4-8) (4H12020-18) Soil | Sampled: 08/12/04 00:00 | Received | 1: 08/12/04 | 1 15:54 | | | | | |
| nloromethane | ND | 10- | ug/kg dry | 1 | AH41902 | 08/19/04 | 08/19/04 | 8260 | IJ |
| nyl chloride | ND | 10 | ti | H | Ħ | 16 | ir | ži | () |
| romomethane | ND | 10 | н | If | Ħ | ** | u · | 19 | Į.j |
| iloroethane | ND | 10 | Ħ | Ħ | Ħ | U | 21 | ¥† | 11 |
| I-dichloroethene | ND | 2 | " | В | Ħ | ti | TÉ . | EF | U |
| cetone | 34 | 10 | н | H | şi | Ħ | 15 | n | |
| irbon disulfide | ND | 2 | n | н | at . | 51 | и . | n | U |
| ethylene chloride | 5 | 2 | Ħ | l i | Ħ | 17 | H | 81 | |
| ans-1,2-dichloroethene | ND | 2 | n | If | н | k | n | H | U |
| 1-dichloroethane | ND | 2 | 11 | 55 | If | 0 | Ħ | If | U |
| nyl acetate | ND | 10 | 11 | l7 | H | 19 | н | ** | Į1 |
| -butanone | ND | 10 | ŧ | 11 | u | 14 | *** | 19 | υ |
| s-1,2-dichloroethene | ND | 2 | 23 | ŧ | 11 | 11 | Ħ | H | U |
| nloroform | ND | 2 | Ħ | n | 11 | н | н | ŧi | Į. |
| 1-trichloroethane | ND | 2 | 11 | şı | tt | 11 | lt. | Ħ | U |
| non tetrachloride | ND | 2 | ** | и | 17 | 17 | u | It | U |
| enzène | ND | 2 | # | Ħ | ŧi | н | н | н | Ų |
| 2-dichloroethane | ND | 2 | Ħ | Ħ | п | π | Ħ | ti. | U |
| ichloroethene | ND | 2 | 31 | В | 19 | u , | b | il | ŢJ |
| 2-dichloropropane | ND | 2 | n | ĸ | tr | rt | 11 | н | U |
| omodichloromethane | . ND | 2 | Ħ | n | H | t t | 31 | ч | U |
| -Methyl-2-pentanone (MIBK) | ND | 10 | н | н | þį | R | Ħ | Ħ | U |
| s-1.3-dichloropropene | ND | 2 | п | " | n | R | Ħ | 11 | U |
| luene | 10 | 2 | * | n | *1 | Ħ | 11 | ŧı | |
| ans-1.3-dichloropropene | ND | 2 | # | Ħ | 29 | 11 | 49 | п | Į. |
| 1,2-trichloroethane | ND | 2 | pi | a | H | 13 | u | er . | Į. |
| hexanone | ND | 10 | H | ä | li. | # | ţı. | tt | U |
| trachloroethene | ND | 2 | * | Ħ | H | ŧ | " | 31 | t. |
| bromochloromethane | ND | 2 | 11 | * | n | R | ** | 55 | ŧ |
| ilorobenzene | ND | 2 | ŧı | В | n | 91 | н | н | Į. |
| hylbenzene | ND | 2 | p | н | ŧ | Ħ | 11 | I# | į |
| .p-xylene | ND | 4 | ** | " | 'n | 11 | 11 | e | ĺ |
| | ND | 2 | | " | 11 | 11 | н | q | 1 |
| xylene | ND | 2 | 11 | ji. | ŧ\$ | 11 | u | н | ί |
| yrene | ND | 2 | स | п | it. | fI | e | k | i, |
| omoform | ND | 2 | ij | ţi. | п | ŧţ | 19 | 17 | ì |
| 1.2.2-tetrachloroethane | | 103 % | 69-1 | 127 | | | · · · · · · · · · · · · · · · · · · · | . н | |
| irrogate: 1,2-Dichloroethane-d- | 4 | 88.7 % | | | " | 7/ | 31 | n | |
| urrogate: Toluene-d8 | | | 81-1 | | e. | ,, | n | " | S-0- |
| urrogate: Bromofluorobenzene | | 126 % | 83-1 | 121 | ** | ** | - | ** | 2-0- |

P.O. Box 406 Buffalo NY, 14205 Project: LCS Price List

Project Number: 177 & 255 Great Arrow

Project Manager: Doug Reid

Reported: 08/25/04 15:13

Volatile Organic Compounds by EPA Method 8260B

| Analyte | Result | Reporting
Limit | Units | Dilution | Batch | Prepared | Analyzed | ,
Method | Notes |
|--------------------------------|-------------------------|--------------------|------------|-----------|---|----------|----------|-------------|-------|
| H37 (4-6) (4H12020-14) Soil | Sampled: 08/12/04 00:00 | Receive | d: 08/12/0 | 1 15:54 | | | | | |
| hloromethane | ND | 10 | ug/kg dry | ı | AH41902 | 08/19/04 | 08/19/04 | 8260 | 11 |
| inyl chloride | ND | 10 | ** | и | n | # | Ħ | B | Ū, |
| romomethane | ND | 10 | ı) | R | н | Ħ | 11 | ** | Ü. |
| Horoethane | ND | 10 | п | 11 | đ ợ | н | " | ** | Ü |
| .i-dichloroethene | ND | 2 | 11 | н | 29 | n | n | п | Į) |
| cetone | 84 | 10 | п | Ħ | H | В | 11 | ħ | |
| arbon disulfide | ND | 2 | ** | 11 | t i | Ħ | *** | n | 11 |
| iethylene chloride | 5 | 2 | H | a | n | И | ¥1. | 11 | • |
| ans-1,2-dichloroethene | ND | 2 | Ħ | tr. | 5 † | Ħ. | • | н | U |
| ,1-dichloroethane | 9 | 2 | γı | н | ti | н | п | R | · · |
| inyl acetate | ND | 10 | U | 10 | 17 | ti. | н | н | U |
| -butanone | ND | 10 | 11 | u | Ħ | u | и | | U |
| s-1,2-dichloroethene | ND | 2 | 11 | u | 18 | 9 | ır | • | [] |
| ıloroform | ND | 2 | H | IF | 21 | tt | n | п | U |
| 1,1-trichloroethane | 11 | 2 | 11 | 11 | я | H | н | п | |
| ırbon tetrachloride | ND | 2 | P | п | 11 | Ħ | 14 | 44 | {i |
| enzene | ND | 2 | n | 11 | II. | ±t | " | н | () |
| 2-dichloroethane | ND | 2 | ti | +3 | bş | 11 | 29 | Ð | U |
| ehloroethene | ND | 2 | 75 | 3# | 33 | н | 39 | ¥ | U |
| 2-dichloropropane | ND | 2 | Ħ | Ħ | ** | 11 | rr rr | | U |
| omodichloromethane | ND | 2 | (I | U | 9 | п | 0 | tr | IJ |
| Methyl-2-pentanone (MIBK) | ND | 10 | 11 | 1) | 18 | 11 | tt | ts . | U |
| s-1.3-dichloropropene | ND | 2 | 12 | 17 | 17 | łs | æ | Ħ | U |
| luene | ND | 2 | 11 | 31 | st. | Ħ | n | fa . | IJ |
| uns-1.3-dichloropropene | ND | 2 | # 5 | ** | н | u | n | 11 | U |
| 1,2-trichloroethane | ND | 2 | H | 11 | lą. | U | ** | ų | (-) |
| hexanone | ND | 10 | 10 | ч | n | n | 11 | н | U |
| rachloroethene | ND | 2 | tt | n | н | 18 | ** | p | L) |
| bromochloromethane | ND | 2 | ** | 11 | n | 11 | ** | 11 | U. |
| lorobenzene | ND | 2 | н | ** | ** | ** | ,, | 18 | U |
| ıylbenzene | ND | 2 | \$1 | #1 | it | 11 | te · | # | U. |
| p-xylene | ND | 4 | n | u . | FE | ji . | п | Ħ | (1 |
| kylene | ND | 2 | н | 11 | ŧr | · R | 11- | T) | () |
| rene | ND | 2 | ** | п | fi | ıı | ** | ** | U |
| əmoform | ND | 2 | tt | 17 | u | Ħ | tr. | 11 | () |
| 1,2.2-tetrachloroethane | ND | 2 | ti | ¥ | B | 7# | o o | | () |
| rrogate: 1,2-Dichloroethane-d4 | | 102 % | 69-1. | ₹2 | - · · · · · · · · · · · · · · · · · · · | | 41 | ,, | U |
| rrogate: Toluene-d8 | | 89.7 % | 81-12 | | " | ,, | " | " | |
| rrogate: Bromofluorobenzene | | 113% | 83-12 | | # | tr | | ,, | |
| TOSHE, DIOMOJIKOTOVERLERIE | | 113 70 | 05-12 | 4.1 | | | | pr | |

².O. Box 406 3uffalo NY, 14205 Project: LCS Price List

Project Number: 177 & 255 Great Arrow

Project Manager: Doug Reid

Reported: 08/25/04 15:13

Volatile Organic Compounds by EPA Method 8260B

Waste Stream Technology Inc.

| nalyte | Result | Reporting
Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|------------------------------|-------------------------|--------------------|-------------|----------|-----------|----------|----------|--------|-------|
| 138 (4-6) (4H12020-15) Soil | Sampled: 08/12/04 00:00 | Receive | d: 08/12/04 | 1 15:54 | | | | | |
| loromethane | ND | 10 | ug/kg dry | 1 | AH41902 | 08/19/04 | 08/19/04 | 8260 | [] |
| ıyl chloride | ND | 10 | Ħ | 71 | FE | 11: | # | झ | () |
| omomethane | ND | 10 | Ħ | 11 | 31 | 17 | It | 11 | U |
| loroethane | ND | 10 | * | 11 | ŧ | H | n | H | Ų |
| -dichloroethene | ND | 2 | 11 | II . | Ħ | Ħ | | ** | Ų |
| etone | 23 | 10 | ч | R | #) | Ħ | u | 31 | |
| bon disulfide | ND | 2 | n | 11 | 11 | 81 | я | B | () |
| thylene chloride | 4 | 2 | n | 11 | 11 | 57 | tf | H | |
| ns-1,2-dichloroethene | ND | 2 | II . | 11 | 11 | 38 | 11 | fr. | U |
| -dichloroethane | ND | 2 | U | n | Ħ | łŧ | . H | 11 | U |
| ıyl acetate | ND | 10 | p | n | н | B | | 41 | Ų |
| outanone | ND | 10 | n | n | \$1 | Ħ | 71 | 11 | Į. |
| -1,2-dichloroethene | ND | 2 | n | ** | 15 | n | n | U | l. |
| loroform | ND | 2 | п | ji | Ħ | ti | D | u | ŧ |
| ,1-trichloroethane | 3 | 2 | H | p | H | н | u | n | |
| pon tetrachloride | ND | 2 | " | ŧŧ | # | ** | n | 21 | Ĺ |
| nzene | ND | 2 | U | 76 | * | n | ** | 11 | Į |
| !-dichloroethane | ND | 2 | н | #1 | Ħ | ч | #t | 33 | (|
| chloroethene | ND | 2 | H | ** | n | Ħ | п | iı | Ę |
| !-dichloropropane | ND | 2 | " | 11 | • | 11 | 24 | 11 | ŧ |
| omodichloromethane | ND | 2 | D. | 77 | 11 | Ħ | " | и | l |
| Methyl-2-pentanone (MIBK) | ND | 10 | u | 11 | ** | н | н | U | Į |
| -1.3-dichloropropene | ND | 2 | ĸ | H | n | l\$ | н | ti | ŧ |
| uene | ND | 2 | Ħ | R | 11 | H | 11 | н | į |
| ns-1.3-dichloropropene | ND | 2 | tτ | *1 | 17 | H | ** | н | ι |
| .2-trichloroethane | ND | 2 | 11 | н | 44 | 16 | н | II; | l |
| nexanone | ND | 10 | 31 | 41 | 15 | H | IJ | U | Ę |
| rachloroethene | ND | 2 | ** | н | n | n | u | Ħ | į |
| romochloromethane | ND | 2 | 91 | 11 | " , | н | 11 | . 11 | ţ |
| orobenzene | ND | 2 | 31 | j# | н | 11 | 75 | 11 | l |
| ylbenzene | ND | 2 | 0 | u | n | Ħ | н | 14 | Į |
| p-xylene | ND | 4 | Ħ | la . | 1) | Ħ | 11 | ti | Į |
| tylene | ND | 2 | II . | H | n | It | H | Ħ | Į |
| rene | ND | 2 | " | u | 31 | 11 | 21 | н | { |
| omoform | ND | 2 | lt . | н | {I | n | 31 | y\$ | 1 |
| .2.2-tetrachloroethane | ND | 2 | H | п | Ħ | H | n . | ft | ţ |
| rogate: 1,2-Dichloroethane-d | 4 | 102 % | 69-1 | 32 | | " | | " | |
| rogate: Toluene-d8 | | 88.3 % | 81-1 | | " | . " | " | ** | |
| rogate: Bromofluorobenzene | | 121 % | 83-1 | 21 | # | п | a | ** | |

'aste Stream Technology Inc.

Project: LCS Price List

².O. Box 406 3uffalo NY, 14205 Project Number: 177 & 255 Great Arrow

Project Manager: Doug Reid

Reported: 08/25/04 15:13

| nalyte - | Result | Reporting
Limit | Units | Dilution | Batch | Prepared | Analyzed | ,
Method | Notes |
|-------------------------------|-------------------------|--------------------|------------|----------|---------|---------------------------------------|------------|---------------------------------------|-------|
| H42 (2-4) (4H12020-16) Soil | Sampled: 08/12/04 00:00 | Receive | d: 08/12/0 | 4 15:54 | | | | · · · · · · · · · · · · · · · · · · · | |
| loromethane | ND | 10 | | 1 | AH41902 | 08/19/04 | 08/19/04 | 8260 | (1 |
| nyl chloride | ND | 10 | 11 | 11 | " | n | 16 | v | [1 |
| omomethane | ND | 10 | 11 | v | 17 . | ** | n . | ** | į |
| loroethane | ND | 10 | ij | 11 | n | и | U | u | 1) |
| 1-dichloroethene | ND | 2 | 11 | U | п | ų | 11 | it | Į. |
| etone | 204 | 10 | 11 | ji | n | 31 | 79 | tf | |
| rbon disulfide | ND | 2 | 11 | u | u | n | π | n | U |
| ethylene chloride | 7 | 2 | 11 | 'n | tr | н | n | 0 | |
| ıns-1,2-dichloroethene | ND | 2 | Ω | ш | Ħ | fl | 'n | U | U |
| I-dichloroethane | ND | 2 | 11 | и | # | 19 | u · | 27 | U |
| nyl acetate | ND | 10 | ** | a | 41 | 19 | ** | В | Į. |
| butanone | 40 | 10 | 41 | f‡ | 69 | Ħ | н | u | |
| 3-1,2-dichloroethene | ND | 2 | ū | n | Ħ | tt | 41 | Ħ | t |
| loroform | ND | 2 | 31 | 11 | ** | n | 41 | н | į, |
| 1.1-trichloroethane | ND | 2 | o o | 11 | ** | It | n | ** | Į. |
| tion tetrachloride | ND | 2 | 19 | 1) | н | ** | " | 11 | į, |
| nzene | ND | 2 | ч | 31 | ij | н | u | н | Į. |
| 2-dichloroethane | ND | 2 | 11 | π | Ħ | 11 | ** | b | l |
| chloroethene | ND | 2 | 11 | ŧI | 97 | | ,, | v | (|
| 2-dichloropropane | ND | 2 | IJ | 11 | Ħ | o o | F 1 | ff | į |
| omodichloromethane | ND | 2 | H | EF | și. | н | 16 | # | Į |
| Methyl-2-pentanone (MIBK) | ND | 10 | Ħ | 11 | tt | н | ts | n | Į. |
| 3-1,3-dichloropropene | ND | 2 | 14 | 11 | 11 | 8 | 15 | | Į |
| luene | 3 | 2 | 77 | a | Ħ | п | 11 | я | |
| ıns-1.3-dichloropropene | ND | 2 | ŧ | a | ** | 11 | u | Ħ | ŧ |
| 1,2-trichloroethane | ND | 2 | B | Ħ | Ħ | 11 | h | Ð | Į |
| hexanone | ND | 10 | \$₹ | η | H | 11 | 17 | u | ι |
| rachloroethene | ND | 2 | 10 | 11 | н | h | ** | ** | l |
| bromochloromethane | ND | 2 | 58 | ŧŧ | 舒 | IÌ | 11 | 1# | ŧ |
| lorobenzene | ND | 2 | Ħ | 11 | 8 | Ħ | н | Ħ | į |
| ıylbenzene | ND | 2 | 17 | н | 11 | ŧi | ** | " | Į |
| p-xylene | ND | 4 | 11 | n | A | TI | ** | п | Į |
| xylene | ND | 2 | ħ | 11 | 21 | н | н | 27 | Ų |
| /rene | ND | 2 | U | а | ŧı | lt | PF | н | ţ |
| omoform | ND | 2 | n | п | ¥ | 1F | 24 | fi | l |
| 1.2.2-tetrachloroethane | ND | 2 | n | 11 | U | H | 11 | PT | Ţ |
| rrogate: 1,2-Dichloroethane-a | | 105% | 69- | Ī32 | | · · · · · · · · · · · · · · · · · · · | . /1 | ü | |
| rrogate: Toluene-d8 | T | 90.0 % | 81~. | | 7.6 | 75 | P. | θ | |
| rrogate: Bromofluorobenzene | | 108 % | 83- | | " | ,, | re | <i>11</i> | |
| rrogate: promojiuorovenzene | | 11/0 /0 | 03- | 121 | | | | | |

P.O. Box 406 Buffalo NY, 14205 Project: LCS Price List

Project Number: 177 & 255 Great Arrow

Project Manager: Doug Reid

Reported: 08/25/04 15:13

| chloromethane vinyl chloride bromomethane chloroethane 1.1-dichloroethene acetone carbon disulfide methylene chloride rans-1,2-dichloroethene 1.1-dichloroethane vinyl acetate 2-butanone cis-1,2-dichloroethene chloroform 1.1.1-trichloroethane | npled: 08/12/04 00:00
ND
ND | | eived: 08/1 | 2/04 15:5 | 4 | | | | |
|---|-----------------------------------|-----|------------------|-----------|---------|-------------|-----------|------------|----------|
| vinyl chloride bromomethane chloroethane 1.1-dichloroethene acetone carbon disulfide methylene chloride rans-1,2-dichloroethene 1.1-dichloroethane vinyl acetate 2-butanone cis-1,2-dichloroethene chloroform 1.1.1-trichloroethane | ND | 10 | | | -4 | | | | |
| bromomethane chloroethane 1,1-dichloroethene acetone carbon disulfide methylene chloride rans-1,2-dichloroethene 1,1-dichloroethane vinyl acetate 2-butanone cis-1,2-dichloroethene chloroform 1,1-trichloroethane | · · | | ug/kg dry | 1 | AH42302 | 08/19/04 | 08/23/04 | 8260 | [|
| chloroethane I.I-dichloroethene acetone carbon disulfide methylene chloride rans-1,2-dichloroethene I.I-dichloroethane vinyl acetate 2-butanone cis-1,2-dichloroethene chloroform I.I.I-trichloroethane | | 10 | # | II. | n | н | pt | н | ţ |
| I.1-dichloroethene acetone carbon disulfide methylene chloride trans-1,2-dichloroethene I.1-dichloroethane vinyl acetate 2-butanone cis-1,2-dichloroethene chloroform I.1.1-trichloroethane | ND | 10 | н | 11 | 11 | Ħ | ** | 14 | Į. |
| acetone carbon disulfide nethylene chloride trans-1,2-dichloroethene 1,1-dichloroethane vinyl acetate 2-butanone cis-1,2-dichloroethene chloroform 1,1-trichloroethane | ND | 10 | 11 | 11 | #f | | tı | Ħ | (|
| carbon disulfide nethylene chloride trans-1,2-dichloroethene 1,1-dichloroethane vinyl acetate 2-butanone sis-1,2-dichloroethene thloroform 1,1-trichloroethane | ND | 2 | н | II. | II . | H | ŢI | 26 | į |
| nethylene chloride rans-1,2-dichloroethene 1,1-dichloroethane /inyl acetate 2-butanone :is-1,2-dichloroethene :hloroform 1,1-trichloroethane | 148 | 10 | H | #1 | 35 | ŧι | Ħ | Ħ | |
| rans-1,2-dichloroethene 1,1-dichloroethane /inyl acetate 2-butanone sis-1,2-dichloroethene shloroform 1,1,1-trichloroethane | ND | 2 | tr | n | tt | H | н | n | l. |
| I.1-dichloroethane vinyl acetate I-butanone sis-1,2-dichloroethene shloroform I.1.1-trichloroethane | ND | 2 | H | 11 | ** | n | н | н | ŧ, |
| is-1,2-dichloroethene thloroform 1,1,1-trichloroethane | ND | 2 | 15 | Ħ | 18 | Ħ | 1I | τi | Į, |
| 2-butanone
sis-1,2-dichloroethene
shloroform
1,1,1-trichloroethane | ND | 2 | n | 9 | 31 | 11 | 14 | ŧŧ | Ü |
| 2-butanone :is-1,2-dichloroethene :hloroform :1,1-trichloroethane :arbon tetrachloride | ND | 10 | k | Ħ | 0 | 11 | ** | Ht. | Ų |
| :hloroform
.1.1-trichloroethane | 32 | 10 | n | " | n | tf | * | 17 | |
| .1,1-trichloroethane | ND | 2 | 11 | n | ń, | н | 11 | <i>t</i> + | U |
| | ND | 2 | н | D | # | Ħ | n | # | Ü |
| arbon tetrachloride | ND | 2 | и | TÎ | Ħ | 31 | 15 | n | į. |
| | ND | 2 | u | 11 | 0 | 11 | n | " | () |
| enzene | ND | 2 | ** | 11 | ** | Ħ | 11 | н | (J |
| ,2-dichloroethane | ND | 2 | lf | 11 | ** | #1 | al. | 38 | U |
| richloroethene | ND | 2 | Ħ | 0 | 0 | н | H | н | U |
| .2-dichloropropane | ND | 2 | er . | tŧ | 17 | 15 | tr | | U |
| romodichloromethane | ND | 2 | H | 31 | 19 | В | 11 | H | U |
| -Methyl-2-pentanone (MIBK) | ND | 10 | n | ti | ti | H | н | n | U |
| is-1.3-dichloropropene | ND | 2 | H | 39 | It | īI . | n | и | U |
| oluene | ND | 2 | 11 | 11 | at. | 59 | U | 11 | U |
| ans-1,3-dichloropropene | ND | 2 | n | 1) | T1 | e | 11 | n | U
U |
| .1.2-trichloroethane | ND | 2 | tı | Ħ | л. | It | н | 11 | (,
() |
| -hexanone | ND | 10 | и | ** | ti . | Ħ | . 16 | *5 | IJ |
| etrachloroethene | ND | 2 | D | ír . | 11 | H | (P | 11 | U |
| ibromochloromethane | ND | 2 | 21 | 11 | a | Ħ | u | ,, | U |
| hlorobenzene | ND | 2 | н | n | N | н | o | 14 | U |
| thylbenzene | ND | 2 | f + | h | an a | B | FF . | н | U |
| ı.p-xylene | ND | 4 | Ħ | n | Ħ | Ħ | #1 | ы | U |
| -xylene | ND | 2 | H | н | ** | " | n | ** | U |
| yrene | ND | 2 | н | n | H | 11 | II. | tf | i, |
| romoform | ND | 2 | ,,, | ts | ēf | IE | 11 | н | U |
| 1,2,2-tetrachloroethane | ND | 2 | n | 24 | ** | 11 | н | 11 | 11 |
| urrogate: 1,2-Dichloroethane-d4 | | *** | | | | | | | |
| urrogate: Toluene-d8 | Total | | 60 12 | | | | " | ,, | 1, |
| urogate: Promofluorobenzene | 100
92. | 6% | 69-13.
81-12. | | n | | " | es
20 | () |

P.O. Box 406 Buffalo NY, 14205 Project: LCS Price List

Project Number: 177 & 255 Great Arrow

Project Manager: Doug Reid

Reported: 08/25/04 15:13

Semivolatile Organic Compounds by EPA Method 8270C Waste Stream Technology Inc.

| nalyte | Result | Reporting
Limit | Units | Dilution | Batch | Prepared | Analyzed | ,
Method | Notes |
|-----------------------------|-------------------------|--------------------|-------------|----------|---------|-----------|----------|-------------|-------|
| H20 (2-4) (4H12020-01) Soil | Sampled: 08/11/04 00:00 | Receive | d: 08/12/04 | 4 15:54 | | | | | |
| -Nitrosodimethylamine | ND | 67 | ug/kg dry | l | AH41727 | 08/17/04 | 08/20/04 | 8270 | |
| s(2-chloroethyl)ether | ND | 67 | N | u | Ħ | Ħ | n | u | U |
| ienol | ND | 130 | IJ | n | 16 | It | n · | #1 | U |
| unlorophenol | ND | 130 | , s | н | " | n | 27 | 19 | U |
| dichlorobenzene | ND | 67 | ti | 11 | н | 11 | D | tf. | Ų1 |
| 4-dichlorobenzene | ND | 67 | 9 | *1 | В | 11 | n | tt | . 0 |
| 2-dichlorobenzene | ND | 67 | n | n | i. | Ð | μ | Ħ | Į į |
| s(2-chloroisopropyl)ether | ND | 67 | н | ** | 11 | h | e | ч | Li |
| enzyl alcohol | ND | 67 | Ħ | 11 | n | 17 | H | H | Į i |
| methylphenol | ND | 67 | †I | 15 | #1 | lt . | 32 | # | H |
| xachloroethane | ND | 67 | ¥F | r) | at | p | 11 | 11 | () |
| -Nitrosodi-n-propylamine | ND | 67 | 11 | U | n | 11 | a | ** | U |
| & 4-methylphenol | ND | 130 | 11 | Ħ | u | 16 | P | В | U |
| trobenzene | ND | 67 | R | . н | u . | Ħ | 11 | u | U |
| ophorone | ND | 67 | tł | И | el | I\$ | 11 | ŧ1 | Ü |
| nitrophenol | ND - | 130 | It | P | " | n | q | #1 | U |
| 4-dimethylphenol | ND | 130 | 17 | 0 | H | 11 | в | 17 | Ü |
| is(2-chloroethoxy)methane | ND | 67 | a | U | If | 15 | Ħ | a | U |
| whic acid | ND | 330 | fi | 31 | 11 | n | H | ш | Ü |
| 4-dichlorophenol | ND | 130 | 11 | н | 11 | n | H | ** | ü |
| 2,4-trichlorobenzene | ND | 67 | ** | 76 | ţı | n | n | o | 11 |
| iphthalene | ND | 67 | # | ŦŤ | # | Ħ | It | ff | U |
| chloroaniline | ND | 67 | я | H | R | 材 | ш | 31 | U |
| xachlorobutadiene | ND ND | 67 | #1 | h | Ŋ | 14 | Ħ | Ħ | Ü |
| | ND | 130 | tt | h | 11 | 0 | 11 | # | u U |
| chloro-3-methylphenol | ND
ND | 67 | п | D | i f | u | i+ | 91 | U |
| methylnaphthalene | ND
ND | 130 | ** | 11 | ** | tt | It | я | |
| xachlorocyclopentadiene | | | ıı | 15 | H | į+ | п | н | [1 |
| 4,6-trichlorophenol | ND | 130 | B | и | | | n . | H | U |
| 4,5-trichlorophenol | ND | 67 | u
u | 11 | |
17 | 16 | | U |
| chloronaphthalene | ND | 67 | n
H | n | | | н . | 11 | [] |
| nitroaniline | ND | 67 | 15 | 11 | 71 | ** | u | | Į. |
| enaphthylene | ND | 67 | u | U | # | . " | 47 | ,.
H | U |
| unethyl phthalate | ND | 67 | | | †* | . " | ** | , | U |
| 6-dinitrotoluene | ND | 67 | " | 16 | | | " | , | 4 |
| enaphthene | ND | 67 | 11 | 15 | в | | | n | () |
| nitroaniline | ND | 67 | n | 15 | " | | " | | 1 |
| 4-dinitrophenol | ND | 130 | 11 | U | †ı | н | 11 | 11 | 1) |
| benzofuran | ND | 67 | 11 | " | H | n | " | 7+ | U |
| 4-dinitrotoluene | ND | 67 | Ħ | u | Ħ | n | " | 11 | U |
| nitrophenol | ND | 130 | 'n | 41 | If | 17 | . " | บ | IJ |
| iorene | ND | 67 | н | " | ı; | 11 | \$F | " | U |
| Chlorophenyl phenyl ether | ND | 67 | e | " | 11 | 11 | " | 15 | 4] |

Vaste Stream Technology Inc.

'.O. Box 406 Suffalo NY, 14205 Project: LCS Price List

Project Number: 177 & 255 Great Arrow

Project Manager: Doug Reid

Reported: 08/25/04 15:13

Semivolatile Organic Compounds by EPA Method 8270C

| ıalyte | Result | Reporting
Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|-----------------------------|-------------------------|--------------------|-------------|------------|------------|----------|----------|--------|-------|
| 120 (2-4) (4H12020-01) Soil | Sampled: 08/11/04 00:00 | Receive | d: 08/12/04 | 15:54 | | | | | |
| ethyl phthalate | ND | 67 | ug/kg dry | 1 | AH41727 | 08/17/04 | 08/20/04 | 8270 | [] |
| nitroaniline | ND | 67 | n | н | n | Ħ | Ħ | B | U |
| -Dinitro-2-methylphenol | ND | 130 | H | ** | Ħ | Ħ | 12 | ls. | () |
| nitrosodiphenylamine | ND | 67 | н | " | 11 | H | n | p | { } |
| promophenylphenylether | ND | 67 | II | 11 | n | н | It. | н | U |
| kachlorobenzene | ND | 67 | n | n | n | ц | п | u | U |
| ntachlorophenol | ND | 130 | II . | 41 | n | ff ff | , n | 11 | U |
| enanthrene | 106 | 67 | Ħ | 56 | н | η | n | 11 | |
| thracene | ND | 67 | К | Ħ | Ħ | 11 | 21 | 12 | U |
| bazole | ND | 67 | н | Ħ | # | U | H | D | U |
| -n-butyl phthalate | ND | 67 | tt | II | 31 | Ħ | 11 | 11 | U |
| nzidine | ND | 330 | fi . | ts | ŧŧ | п | te | tt | U |
| oranthene | ND | 67 | Ħ | н | n | н | 31 | tt | () |
| rene | ND | 67 | Ħ | n | ţI | В | ¥ | н | U |
| tyl benzyl phthalate | ND | 67 | " | н | Ħ | n | н | u | Ų |
| -Dichlorobenzidine | ND | 67 | ħ | ŧ | n | n | n. T | 11 | U |
| (a) anthracene | ND | 67 | ħ | н | I I | Ħ | It | в | U |
| ysene | ND | 67 | H | 49 | В | н | tr | 17 | U |
| (2-ethylhexyl)phthalate | ND | 67 | Ħ | Ħ | Ħ | ĸ | n | u | U |
| -n-octyl phthalate | NĎ | 67 | H | ii. | ti . | 11 | 11 | 27 | () |
| nzo (b) fluoranthene | ND | 67 | " | \$1 | ** | ** | H | 11 | (1 |
| nzo (k) fluoranthene | ND | 67 | В | 3 t | ţi | ţI | ii | н | Ų |
| nzo (a) pyrene | ND | 67 | H | 11 | 11 | Ħ | IZ | ü | U |
| ieno (1,2,3-cd) pyrene | ND | 67 | 11 | ** | 19 | IF | ti | ŦŦ | Į. |
| benz (a,h) anthracene | ND | 67 | Ħ | ** | ti . | " | п | 11 | U |
| nzo (g.h,i) perylene | ND | 67 | tř | ft | H | tt | 10 | σ | U |
| rogate: 2-Fluorophenol | | 82.2 % | 50-1 | 112 | tr | 11 | ** | 'n | |
| rogate: Phenol-d6 | • | 77.5 % | 52-1 | 117 | ** | H | " | " | |
| rrogate: Nitrobenzene-d5 | | 82.1 % | 48-1 | 122 | n | " | " | " | |
| rrogate: 2-Fluorobiphenyl | | 87.5 % | 50-1 | 121 | # | | " | " | |
| rogate: 2,4,6-Tribromopheno | il | 105 % | 50-1 | 132 | tt . | " | " | ** | |
| rrogate: Terphenyl-d14 | | 112 % | 36-1 | 134 | " | н | n | n | |

2.O. Box 406 3uffalo NY, 14205 Project: LCS Price List

Project Number: 177 & 255 Great Arrow

Project Manager: Doug Reid

Reported: 08/25/04 15:13

Semivolatile Organic Compounds by EPA Method 8270C Waste Stream Technology Inc.

| nalyte | Resuit | Reporting
Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|-----------------------------|-------------------------|--------------------|--------------------------|----------|-----------|----------|----------|--------|-------|
| H21 (2-4) (4H12020-02) Soil | Sampled: 08/11/04 00:00 | Receive | Received: 08/12/04 15:54 | | | | | | |
| -Nitrosodimethylamine | ND | 67 | ug/kg dry | ı | AH41727 | 08/17/04 | 08/20/04 | 8270 | U |
| s(2-chloroethyl)ether | ND | 67 | Ħ | #1 | ŧs | į3 | je . | II | U |
| ienol | ND | 130 | п | 11 | ŧŧ | 11 | Ħ | н | U |
| chlorophenol | ND | 130 | n | h | 11 | Ħ | ** | H | Į į |
| 3-dichlorobenzene | ND | 67 | n | Ħ | н | н | н | *** | U |
| 4-dichlorobenzene | ND | 67 | p | Ħ | U | Ħ | ts | II. | 1) |
| 2-dichlorobenzene | ND | 67 | II | Ef | n | 18 | θ . | н | U |
| s(2-chloroisopropyl)ether | ND | 67 | lt . | 11 | н | ıı | n | #1 | U |
| nzyl alcohol | ND | 67 | n | 11 | H | * | н | н | () |
| methylphenol | ND | 67 | H | n | ** | H | Ħ | ii | [] |
| xachloroethane | . ND | 67 | ** | 77 | ** | 11 | Ħ | II | U |
| -Nitrosodi-n-propylamine | ND | 67 | n | 11 | 11 | ** | 47 | și și | () |
| & 4-methylphenol | ND | 130 | v | n | U |) j | n | 11 | U |
| trobenzene | ND | 67 | н | It | II | 11 | ** | п | U |
| ophorone | ND | 67 | ? 5 | D | u | Ħ | Ħ | ıi | U |
| nitrophenol | ND | 130 | ** | IJ | ĮI. | 211 | н | п | Į. |
| !-dimethylphenol | ND | 130 | þŧ | U | ** | 11 | " | IT | Ų |
| 2-chloroethoxy)methane | ND | 67 | n | 11 | 11 | н | п | n | t i |
| nzoic acid | ND | 330 | ŧŧ | 11 | 11 | 0 | †1 | íi . | [] |
| 4-dichlorophenol | ND | 130 | Ħ | U | Ð | 11 | н | u | { |
| 2,4-trichlorobenzene | ND | 67 | 11 | 11 | 0 | \$1 | | # | U |
| phthalene | ND | 67 | ŧs. | *1 | 11 | 11 | ** |)I | Į. |
| chloroaniline | ND | 67 | Ħ | Ħ | Ħ | Ħ | †I | 17 | Į. |
| xachlorobutadiene | ND | 67 | 91 | n | Ħ | H | fl | u | U |
| chloro-3-methylphenol | ND | 130 | н | 71 | 57 | н | " | Ħ | U |
| methylnaphthalene | ND | 67 | п | *1 | zf | ti | 76 | 71 | ł. |
| xachlorocyclopentadiene | . ND | 130 | \$1 | n | #1 | Ħ | H | 76 | U |
| 4,6-trichlorophenol | ND | 130 | н | R | 0 | þ | 11 | В | U |
| 4.5-trichtorophenol | ND | 67 | н |) F | H | 11 | n | н | Ų |
| chloronaphthalene | ND | 67 | n | It | Ħ | it | В | U | U |
| nitroaniline | ND | 67 | н | IF | Ħ | U | tr | ** | ₹, |
| enaphthylene | ND | 67 | н | If | Ħ | Ħ | U | ** | l, |
| methyl phthalate | ND | 67 | u | 14 | Ħ | 11 | 11 | 19 | Į |
| 5-dinitrotoluene | ND | 67 | U | 11 | रेर् | и | 1f | D. | ŧ. |
| enaphthene | ND | 67 | If | tt | tF | H | 75 | 11 | 1. |
| nitroaniline | ND | 67 | į! | . н | Ħ | II. | 18 | Ħ | Į. |
| 4-dinitrophenol | ND | 130 | u | | ù | Ħ | n | 34 | l. |
| benzofuran | ND | 67 | n | *1 | U | ** | 19 | 11 | l. |
| 4-dinitrotoluene | ND | 67 | II | Ħ | 0 | 31 | ,, | P | l. |
| nitrophenol | ND | 130 | Û | Ħ | н | и | ħ | rt . | l. |
| iorene | ND | 67 | II | tı | Ħ | ir | II. | 11 | ţ |
| Chlorophenyl phenyl ether | ND | 67 | " | ** | н | 11 | ** | ıt | ţ |

Vaste Stream Technology Inc.

.O. Box 406 uffalo NY, 14205 Project: LCS Price List

Project Number: 177 & 255 Great Arrow

Project Manager: Doug Reid

Reported: 08/25/04 15:13

| nalyte | Result | Reporting
Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|------------------------------|-------------------------|--------------------|-------------|------------|---------|-----------|------------|--------|---|
| 121 (2-4) (4H12020-02) Soil | Sampled: 08/11/04 00:00 | Received | 1: 08/12/04 | 15:54 | | | | | *************************************** |
| ethyl phthalate | ND | | ug/kg dry | 1 | AH41727 | 08/17/04 | 08/20/04 | 8270 | IJ |
| itroaniline | ND | 67 | fl | 11 | ** | ñ | 11 | Ħ | U |
| -Dinitro-2-methylphenol | ND | 130 | η | Ħ | . ** | 11 | 11 | P | U |
| itrosodiphenylamine | ND | 67 | 17 | ę r | u | " | н | 11 | U |
| romophenylphenylether | ND | 67 | Ħ | 37 | U | В | 11 | | () |
| cachlorobenzene | ND | 67 | n | 17 | rı | Ħ | Ħ | H | U |
| ıtachlorophenol | ND | 130 | 19 | n | H | 11 | 11 | н | U |
| enanthrene | ND | 67 | 10 | h | 11 | 11 | , | ** | U |
| thracene | ND | 67 | Ħ | н | n | n | (i | Ħ | U |
| bazole | ND | 67 | Ħ | п | 19 | Ħ | 71 | В | () |
| -n-butyl phthalate | ND | 67 | ŧŧ | н | и | Ħ | R | n | {} |
| ızidine | ND | 330 | u(| 11 | 11 | н | l4 | Ţ1 | U |
| oranthene | ND ' | 67 | н | ff | \$1 | p | f# | 1# | U |
| rene | ND | 67 | B | 11 | 11 | li | Ft | 31 | IJ |
| tvi benzyl phthalate | ND | 67 | ŧı | и | tr | 11 | В | 11 | IJ |
| -Dichlorobenzidine | ND | 67 | It | u | n | ¥ | 11 | н | () |
| 1120 (a) anthracene | ND | 67 | В | H | Ħ | ()
: | 17 | 11 | U |
| vsene | ND | 67 | В | H | ti | H | п | н | l. |
| (2-ethylhexyl)phthalate | ND | 67 | н | ## | H | Ħ | n | ц | Ų |
| -n-octyl phthalate | ND | 67 | 11 | ty | tr | u | Ħ | a | Į. |
| nzo (b) fluoranthene | ND | 67 | tı | " | Ħ | 17 | n | 11 | ι |
| nzo (k) fluoranthene | ND | 67 | ij | ti | Ħ | Ħ | *1 | H | l. |
| nzo (a) pyrene | ND | 67 | n | H | ** | D | 71 | 0 | ι |
| leno (1,2,3-cd) pyrene | ND | 67 | я | п | 15 | U | ίτ | Ð | Ĺ |
| benz (a,h) anthracene | ND | 67 | # | ** | U | ** | #1 | # | i |
| nzo (g,h,i) perylene | ND | 67 | 11 | 1.F | ti | 57 | π | в | ι |
| rogate: 2-Fluorophenol | | 78.5 % | 50-1 | 1/2 | н | · · · · · | Ħ | ű | |
| rrogate: Phenol-d6 | | 76.1% | 52-1 | | 16 | " | ,, | " | |
| rrogate: Nitrobenzene-d5 | | 82.6 % | 48-1 | 122 | rt . | " | ** | · " | |
| rogate: 2-Fluorobiphenyl | | 86.9 % | 50-1 | | " | n | " | н | |
| rrogate: 2,4,6-Tribromopheno | d | 97.6% | 50-1 | | ,, | f F | ** | " | |
| rogate: Terphenyl-d14 | • | 100 % | 36-1 | | u | " | <i>n</i> · | " | |

P.O. Box 406 Buffalo NY, 14205 Project: LCS Price List

Project Number: 177 & 255 Great Arrow

Project Manager: Doug Reid

Reported: 08/25/04 15:13

Semivolatile Organic Compounds by EPA Method 8270C

Waste Stream Technology Inc.

| ınalyte | Result | Reporting
Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|-----------------------------|-------------------------|--------------------|------------|----------|---------|----------|--------------|--------|----------|
| H22 (6-8) (4H12020-03) Soil | Sampled: 08/11/04 00:00 | Receive | d: 08/12/0 | 4 15:54 | | | | | |
| -Nitrosodimethylamine | ND | 67 | ug/kg dry | 1 | AH41727 | 08/17/04 | 08/20/04 | 8270 | () |
| s(2-chloroethyl)ether | ND | 67 | # | n | ** | 13 | tf | | () |
| renol | ND | 130 | 11 | Ħ | 11 | н | II. | ** | 11 |
| chlorophenol | ND | 130 | 15 | | H | h | ži. | . " | U |
| 3-dichlorobenzene | ND | 67 | B | pt | н | 11 | Ħ | ft | U |
| 4-dichlorobenzene | ND | 67 | II | я | II | 75 | ਜ਼ | 1+ | U |
| 2-dichlorobenzene | ND | 67 | н | 24 | п | ** | n | h | U |
| s(2-chloroisopropyl)ether | ND | 67 | Ħ | #4 | H | ρ | u | ft | U |
| enzyl alcohol | ND | 67 | н | Ħ | 54 | н | Ħ | u | (1 |
| methylphenol | ND | 67 | II | Ħ | 11 | Tr. | Ħ | п | U |
| exachloroethane | ND | 67 | Ħ | If | н | n | u | H | U |
| -Nitrosodi-n-propylamine | ND | 67 | 17 | n | н | п | н | H | Ų |
| 분 4-methylphenol | ND | 130 | U | Ħ | \$t | T# | Ħ | #1 | U |
| obenzene | ND | 67 | II | și. | * | n | \$ 1 | Ħ | Į. |
| ophorone | ND | 67. | (t | 11 | ** | 11 | в | R | U |
| nitrophenol | ND | 130 | п | 11 | 1) | H | 4 | н | Ų |
| 4-dimethylphenol | ND | 130 | ıı | ŧ | f† | ět | R | и | l |
| is(2-chloroethoxy)methane | ND | 67 | 0 | Ħ | Ħ | R | tt . | Ħ | ţ. |
| enzoic acid | ND | 330 | ıı. | ន | ** | h | 19 | ti. | Į |
| 4-dichlorophenol | ND | 130 | 11 | н | 11 | н | я | 1) | ł. |
| 2.4-trichlorobenzene | ND | 67 | 11 | Ħ | n | 11 | и | ** | Į, |
| iphthalene | ND | 67 | 1) | н | н | n | e | H | ί |
| chloroaniline | ND | 67 | н | If | Ħ | Q. | 1# | li. | į |
| exachlorobutadiene | ND | 67 | 11 | tr | ** | Ħ | n | 11 | Ĺ |
| chloro-3-methylphenol | ND | 130 | ** | ŧr | 11 | Ħ | 11 | 8 | l |
| methylnaphthalene | ND | 67 | 91 | # | 11 | b | ti | н | l |
| | ND | 130 | şı | н | 1) | 11 | B | 17 | i, |
| exachlorocyclopentadiene | ND | 130 | *1 | 11 | Ħ | н | 11 | Ħ | į, |
| 4,6-trichlorophenol | ND | 67 | *1 | 11 | Ħ | ** | 58 | 31 | ì |
| 4.5-trichlorophenol | ND | 67 | я | H | 13 | D. | it | tt | l |
| chloronaphthalene | ND
ND | 67 | 81 | 11 | H | Ħ | n" | It | l |
| nitroaniline | ND | 67 | н | Þ | II | 31 | ŧi | н | , |
| enaphthylene | ND
ND | 67
67 | # | | ·· | ** | n | 11- | , |
| imethyl phthalate | | | ;i | в | 11 | 11 | n | ÞF | (|
| 6-dinitrotoluene | ND
ND | 67 | it . | в | Ħ | IJ | h | н | į |
| enaphthene | | 67
67 | "
H | " | H | pa | 38 | #1 | į |
| nitroaniline | ND | 67 | 17 | ·· | " | . 11 | | j# | |
| 4-dinitrophenol | ND | 130 | ti | | | u | | ,, | · (|
| benzofuran | ND | 67 | | 11 | #
| ** | ** | " | <u> </u> |
| 4-dinitrotoluene | ND | 67 | ta. | | ** | В | п | и | (|
| nitrophenol | ND | 130 | n
 | | | " | 1 1 | ** | , |
| Jorene | ND | 67 | n | H | | | | | Į. |
| Chlorophenyl phenyl ether | ND | 67 | tt | " | . " | 11 | 11 | " | 1 |

Vaste Stream Technology Inc.

P.O. Box 406 Buffalo NY, 14205 Project: LCS Price List

Project Number: 177 & 255 Great Arrow

Project Manager: Doug Reid

Reported: 08/25/04 15:13

Semivolatile Organic Compounds by EPA Method 8270C

Waste Stream Technology Inc.

| analyte | Result | Reporting
Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|-------------------------------|-------------------------|--------------------|-------------|----------|----------|----------|----------|--------|-------|
| H22 (6-8) (4H12020-03) Soil | Sampled: 08/11/04 00:00 | Receive | d: 08/12/04 | 15:54 | | | | | |
| iethyl phthalate | ND | 67 | ug/kg dry | 1 | AH41727 | 08/17/04 | 08/20/04 | 8270 | Ų |
| nitroaniline | ND | 67 | tt | н | H | n | n | n | U |
| 6-Dinitro-2-methylphenol | ND | 130 | 11 | #1 | н | tt | ħ | 91 | Į į |
| nurosodiphenylamine | ND | 67 | 17 | #1 | 11 | 16 | n | Ħ | Ų |
| bromophenylphenylether | ND | 67 | 19 | 31 | н | п | 19 | 19 | 1, |
| exachlorobenzene | ND | 67 | Ħ | u | Ħ | В | ıı · | *\$ | 1) |
| entachlorophenol | , ND | 130 | u | It | *1 | н | n | 34 | () |
| nenanthrene | ND | 67 | 11 | ** | ti | 11 | r. | н | {} |
| ithracene | ND | 67 | я | 11 | ŧs | U | u | H | (|
| ırbazole | ND | 67 | Ħ | fl | я | п | lt | Ħ | Į |
| i-n-butyl phthalate | ND | 67 | 11 | ŧı | u | н | 15 | fŦ | U |
| enzidine | ND | 330 | 4 | Ħ | н | 11 | ti | D | U |
| aoranthene | ND | 67 | ø | 11 | Ħ | 36 | H | n | 11 |
| /rene | ND | 67 | Ħ | п | н | tt. | 11 | n | 1 |
| utyl benzyl phthalate | ND | 67 | H | It. | U | tr. | 31 | tt. | U |
| :-Dichlorobenzidine | ND | 67 | 11 | R | ti | ** | tı | u | (1 |
| · (a) anthracene | ND | 67 | 0 | P | ti | ‡ŧ | Ħ | u | 1, |
| . sone | ND | 67 | PŦ | И | ú | 77 | μ. | şı | U |
| s(2-ethylhexyl)phthalate | ND | 67 | n | n | 11 | ŝŧ | п | п | Į, |
| i-n-octyl phthalate | ND | 67 | Ħ | u | 17 | 11 | 'n | 28 | 11 |
| enzo (b) fluoranthene | ND | 67 | #1 | 59 | *1 | 11 | 13 | tt . | U |
| enzo (k) fluoranthene | ND | 67 | n | U | n | #1 | It | 1\$ | |
| enzo (a) pyrene | ND | 67 | д | H | v | U | H | h | Ü |
| deno (1.2,3-cd) pyrene | ND | 67 | įŧ | u | 11 | п | 11 | и . | U |
| ibenz (a,h) anthracene | ND | 67 | #1 | D | R | rı | 41 | H | U |
| enzo (g,h,i) perylene | ND | 67 | α | Ħ | It | п | п | 11 | { } |
| rrogate: 2-Fluorophenol | | 62.5 % | 50-1 | 12 | <i>n</i> | · - | н . | r | - |
| rrogate: Phenol-d6 | | 61.7% | 52-1 | | " | ** | " | • | |
| errogate: Nitrobenzene-d5 | · | 69.2 % | 48-1 | | " | ** | " | " | |
| rrogate: 2-Fluorobiphenyl | | 73.7 % | 50-1 | | IJ | n | ,, | н | |
| erogate: 2,4,6-Tribromophenol | | 92.7 % | 50-1 | | 17 | " | " | ,, | |
| rrogate: Terphenyl-d14 | | 101% | 36-1 | | " | " | ,, | ,, | |

.O. Box 406 uffalo NY, 14205 Project: LCS Price List

Project Number: 177 & 255 Great Arrow

Project Manager: Doug Reid

Reported: 08/25/04 15:13

Semivolatile Organic Compounds by EPA Method 8270C

Waste Stream Technology Inc.

| ialyte | Result | Reporting
Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|-----------------------------|-------------------------|--------------------|-------------|----------|---------|-----------|----------|--------|-------|
| I23 (0-2) (4H12020-04) Soil | Sampled: 08/11/04 00:00 | Receive | d: 08/12/04 | 1 15:54 | | | | | |
| Nitrosodimethylamine | ND | 67 | ug/kg dry | 1 | AH41727 | 08/17/04 | 08/20/04 | 8270 | į j |
| (2-chloroethyl)ether | ND | 67 | ħ | 11 | к | ŧI | U | 21 | U |
| enol | · ND | 130 | п | ti | н | n | n | ti | U |
| hlorophenol | ND | 130 | r) | н | ų | 17 | n | n | (J |
| -dichlorobenzene | ND | 67 | II. | 11 | 41 | # | # | 17 | () |
| -dichlorobenzene | ND | 67 | 11 | ŧı | 11 | n | н | H | () |
| -dichlorobenzene | ND | 67 | н | *1 | Ð | 11 | R | 17 | [J |
| (2-chloroisopropyl)ether | ND | 67 | 11 | 11 | u | n | ii . | a | {} |
| nzyl alcohol | ND | 67 | Ħ | n | 11 | U | U | 31 | [] |
| nethylphenol | ND | 67 | IT | n | tı | 91 | 11 | Ħ | į, |
| cachloroethane | ND | 67 | 71 | 31 | 11 | Ħ | 71 | tf | U |
| Nitrosodi-n-propylamine | ND | 67 | 12 | 31 | \$# | 1t | н | и | U |
| ¿ 4-methylphenol | ND | 130 | ıt | 11 | It | II . | 19 | н | 11 |
| robenzene | ND | 67 | 18 | H | IŦ | n | H | 81 | . U |
| phorone | ND | 67 | в | н | IF | h | e | Ħ | U |
| itrophenol | ND | 130 | 11 | Ħ | 71 | ** | īţ | 18 | U |
| -dimethylphenol | ND | 130 | 11 | n | 31 | " | ** | 11 | t) |
| 42-chloroethoxy)methane | ND | 67 | *1 | 11 | ŧ | ti | н | Ħ | (1 |
| rone acid | ND | 330 | н | U | 11 | п | н | н | 1 |
| -dichlorophenol | ИD | 130 | 11 | n | 15 | n | H | и | [] |
| .4-trichlorobenzene | ND | 67 | * | 11 | # | ** | ** | 11 | U |
| hthalene | ND | 67 | u | 11 | ıt |)t | ** | II . | Ų |
| hloroaniline | ND | 67 | н | n | B | žt. | 91 | U | t, |
| cachlorobutadiene | ND | 67 | н | n | IF | 17 | 77 | и | U |
| hloro-3-methylphenol | ND | 130 | 11 | " | II . | " | 71 | tt | U |
| nethylnaphthalene | ND | 67 | # | n | 11 | н | ц | tt | () |
| tachlorocyclopentadiene | ND | 130 | Pt | †1 | tj | †1 | R. | Ħ | Ų |
| ,6-trichlorophenol | ND | 130 | ** | Ħ | #1 | 71 | tt | H | U |
| .5-trichlorophenol | ND | 67 | 1 t | ** | 11 | 11 | Ħ | II . | U |
| hloronaphthalene | ИD | 67 | ## | n | н | 11 | PF. | Ħ | U |
| itroaniline | ND | 67 | 11 | Ħ | Ħ | п | 11 | Ħ | U |
| naphthylene | ND | 67 | n | h | ŧŧ | н | Ħ | 11 | Į |
| nethyl phthalate | ND | 67 | 11 | 1¢ | 15 | 11 | 19 | 17 | Į, |
| -dinitrotoluene | ND | 67 | R | n | H | It | н | н | Į: |
| naphthene | ND | 67 | Ħ | H | 11 | B | н | U | Į. |
| itroaniline | ND | 67 | ıs | n | 11 | lt. | Ħ | п | Ţ., |
| -dinitrophenol | ND | 130 | 11 | 11 | U | u | Ð | н | i. |
| enzofuran | ND | 67 | P | ų | Ħ | ** | ä | 11 | i |
| -dinitrotoluene | ND | 67 | 11 | u | Ħ | sf | स | н | l |
| itrophenol | ND | 130 | H | 30 | ŧı | Ħ | н | 11 | Į |
| orene | ND | 67 | ıı | 0 | B | U | 35 | 11 | ŧ |
| 'hlorophenyl phenyl ether | ND | 67 | u | n | 16 | u | 11 | tt | ι |

aste Stream Technology Inc.

P.O. Box 406 Buffalo NY, 14205 Project: LCS Price List

Project Number: 177 & 255 Great Arrow

Project Manager: Doug Reid

Reported: 08/25/04 15:13

Semivolatile Organic Compounds by EPA Method 8270C

Waste Stream Technology Inc.

| Analyte | Result | Reporting
Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|-------------------------------|-------------------------|--------------------|-------------|------------|---------|----------------|----------|--|-------|
| H23 (0-2) (4H12020-04) Soil | Sampled: 08/11/04 00:00 | Received | 1: 08/12/04 | 15:54 | | | | ······································ | |
| liethyl phthalate | DM | 67 | ug/kg dry | 1 | AH41727 | 08/17/04 | 08/20/04 | 8270 | () |
| -nitroaniline | ND | 67 | b y | н | h | 11 | Ð | F# | U |
| .6-Dinitro-2-methylphenol | ND | 130 | IT | Ħ | Ħ | Ħ | н | 11 | - 11 |
| -mtrosodiphenylamine | ND | 67 | н | 19 | 17 | ય | ". | 14 | 11 |
| -bromophenylphenylether | ND | 67 | u | 13 | | ** | P | n | Ų |
| exachlorobenzene | ND | 67 | 0 | # | 31 | n | ir | н | Ų |
| entachlorophenol | ND | 130 | If | IJ | 33 | ft. | 41 | *1 | l) |
| henanthrene | ND | 67 | 11 | u | 31 | t : | # | e | U |
| ithracene | ND | 67 | 11 | ļ1 | a | 11 | n | 11 | U |
| ırbazole | ND | 67 | e e | ** | н | m | # | 11 | į i |
| i-n-butyl phthalate | ND | 67 | br . | 13 | ij | Ħ | н | o | į, |
| enzidine | ND | 330 | н | u | Ħ | H | н | 11 | U |
| uoranthene | ND | 67 | н | *1 | ø | ij | 11 | n | U |
| /rene | ND | 67 | п | IJ | b | fr | н | zi | Ų |
| utyl benzyl phthalate | ND | 67 | Jf. | It | u | tt | 25 | 45 | Ų |
| 3'-Dichlorobenzidine | ND | 67 | | hs | " | Ħ | ** | ,, | U |
| enzo (a) anthracene | ND | 67 | u | н | 11 | ŧτ | · tt | " | U |
| irvsene | ND | 67 | и | 77 | 11 | H | tt | ** | Į. |
| `ahylhexyl)phthalate | ND | 67 | н | †\$ | Ħ | ļī | Ω | b | U |
| octyl phthalate | ND | 67 | n | η | et | ц | n . | 97 | Ü |
| enzo (b) fluoranthene | ND | 67 | U | n | 11 | t+ | 11 | 17 | U |
| enzo (k) fluoranthene | ND | 67 | 17 | tı | н | н | 71 | " | () |
| enzo (a) pyrene | ND | 67 | Ħ | ņ | Ħ | It | ft | 11 | Ü |
| deno (1,2,3-cd) pyrene | ND | 67 | ü | н | Ħ | Ħ | ŧı | I# | U |
| ibenz (a,h) anthracene | ND | 67 | н | 11 | #f | u | 21 | ps. | U |
| enzo (g.h,i) perylene | ND | 67 | н | ** | 11 | н | " | ** | U |
| rrogate: 2-Fluorophenol | | 76.5 % | 50-1 | <u> 72</u> | tt | <u>î</u> , | • | " | |
| rrogate: Phenol-d6 | | 74.0 % | 52-1 | | tt | " | " | " | |
| rrogate: Nitrobenzene-d5 | | 78.0 % | 48-1 | | " | ** | a · | " | |
| rrogate: 2-Fluorobiphenyl | | 88.9 % | 50-1 | | " | t / | " | ** | |
| rrogate: 2,4,6-Tribromophenol | | 101% | 50-1. | | " | ** | 14 | " | |
| rrogate: Terphenyl-d14 | | 103 % | 36-1 | | ** | u | ,, | н | |

.O. Box 406 uffalo NY, 14205 Project: LCS Price List

Project Number: 177 & 255 Great Arrow

Project Manager: Doug Reid

Reported: 08/25/04 15:13

Semivolatile Organic Compounds by EPA Method 8270C Waste Stream Technology Inc.

| alyte | Result | Reporting
Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|-----------------------------|-------------------------|--------------------|----------------|------------|---------|-------------|----------|--------|------------|
| 124 (0-2) (4H12020-05) Soil | Sampled: 08/11/04 00:00 | Receive | d: 08/12/04 | 15:54 | | | | | |
| Vitrosodimethylamine | ND | 67 | ug/kg dry | 1 | AH41727 | 08/17/04 | 08/21/04 | 8270 | U |
| (2-chloroethyl)ether | ND | 67 | H | n | H | et e | . 4 | 11 | U |
| lone | ND | 130 | B | Ħ | D. | К | IL | н | U |
| hlorophenol | ND | 130 | þ | Ħ | u | 11 | n | ** | U |
| -dichlorobenzene | ND | 67 | t# | н | u | et | . n | pt. | [] |
| -dichlorobenzene | ND | 67 | n | п | tt | ft | 11 | Ħ | U |
| -dichlorobenzene | ND | 67 | Ħ | ŧ | n | 11 | 19 | PF | U |
| (2-chloroisopropyl)ether | ND. | 67 | n | 'n | 31 | Ħ | и | п | U |
| izyl alcohol | ND | 67 | n | Ħ | н | ** | ti | ,, | U |
| nethylphenol | ND | 67 | n | ŧt | n | 71 | н | a | U |
| achloroethane | ND | 67 | Ħ | Ħ | 10 | h | If | н | U |
| Vitrosodi-n-propylamine | ND | 67 | Ħ | ‡I | 11 | ij | u | ij | U |
| : 4-methylphenol | ND | 130 | и | " | 16 | ıı | 11 | u | U |
| obenzene | ND | 67 | н | n | 11 | " | н | 11 | U |
| phorone | ND | 67 | 13 | u | h | u | н | и | U |
| itrophenol | ND | 130 | Ħ | n | 11 | rt | II. | li | Į.J |
| -dimethylphenol | ND | 130 | IT | u | Ħ | " | 11 | Ħ | U |
| (2-chloroethoxy)methane | ND | 67 | н | u | ** | " | tı | Ħ | U |
| ane acid | ND | 330 | ŦŤ | н | | ţı . | н | н | { } |
| -dichlorophenol | ND | 130 | Ħ | ¥1 | 18 | 15 | н | ,, | U |
| ,4-trichlorobenzene | ND | 67 | Ħ | ** | n | n | n | 11 | Į) |
| hthalene | ND | 67 | 11 | 11 | n | ** | ** | (1 | Ų, |
| hloroaniline | ND | 67 | Ħ | 11 | H | п | n | τŧ | Į. |
| achlorobutadiene | ND | 67 | н. | В | ŧ | b | n | Ħ | U |
| hloro-3-methylphenol | ND | 130 | н | н | 28 | n | ef | 15 | U |
| nethylnaphthalene | ND | 67 | H | it | 51 | ** | ** | 11 | υ |
| achlorocyclopentadiene | ND | 130 | · н | 17 | 74 | n | | ** | t 1 |
| .6-trichlorophenol | ND | 130 | ŧ | н | Iŧ | Ħ | u | н | () |
| ,5-trichlorophenol | ND | 67 | #1 | n | l1 | ы | n | ţt. | U |
| hloronaphthalene | ND | 67 | н | H | n | н | 11 | Ħ | () |
| itroaniline | ND | 67 | Ħ | ti | н | 0 | р | IE | U |
| naphthylene | ND | 67 | Ŧ1 | #1 | · u | н | II. | u | 1 |
| nethyl phthalate | ND | 67 | n | Ħ | Ħ | ŧ | 1) | 11 | U |
| -dinitrotoluene | ND | 67 | ** | n | tt. | tf | 11 | 11 | (1 |
| naphthene | ND | 67 | 11 | #1 | #1 | Ħ | 11 | 14 | ()
[] |
| itroaniline | ND | 67 | 31 | ŧţ | n | " | ŧŧ | II | U |
| -dinitrophenol | ND | 130 | н | H | U | n | 11 | ti. | Ü |
| enzofuran | ND | 67 | 29 | 11 | ** | 11 | 31 | 24 | Į. |
| -dinitrotoluene | ND | 67 | 19 | 71 | 11 | Ħ | tt | H | l: |
| itrophenol | ND | 130 | t t | †I | 41 | 11 | n | 9 | į. |
| rene | ND | 67 | Ħ | ş i | 18 | ħ | н | n | į. |
| hlorophenyl phenyl ether | ND | 67 |) s | ls. | н | \$ † | u | 21 | l. |

aste Stream Technology Inc.

².O. Box 406 3uffalo NY, 14205 Project: LCS Price List

Project Number: 177 & 255 Great Arrow

Project Manager: Doug Reid

Reported: 08/25/04 15:13

Semivolatile Organic Compounds by EPA Method 8270C

Waste Stream Technology Inc.

| 124 (0-2) (4H12020-05) Soil | | | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---|-------------------------|---------|-------------|-----------|-------------|----------|-----------|--------|-------|
| | Sampled: 08/11/04 00:00 | Receive | d: 08/12/04 | 15:54 | | | | | |
| ethyl phthalate | ND | | ug/kg dry | 1 | AH41727 | 08/17/04 | 08/21/04 | 8270 | () |
| nitroaniline | ND | 67 | Ħ | ŧŦ | 11 | . и | II . | #1 | () |
| -Dinitro-2-methylphenol | ND | 130 | ff ff | 17 |)1 | Ħ | u | ** | U. |
| nitrosodiphenylamine | ND | 67 | t | 11 | n | *1 | 14 | II . | U |
| promophenylphenylether | ND | 67 | tí | " | н |)? | Ħ | " | [] |
| xachlorobenzene | ND | 67 | U | n | Ħ | 11 | н | 21 | () |
| ntachlorophenol | ND | 130 | n | D. | 51 | b | 11 | H | () |
| enanthrene | 300 | 67 | u | R | ч | н | ft. | II. | |
| thracene | ND | 67 | ** | ** | Ħ | n | н | ** | U |
| rbazole | ND | 67 | н | 0 | Ħ | #1 | # | fa fa | ŢŢ |
| -n-butyl phthalate | 182 | 67 | n | 91 | H | Ηt | n | Ħ | |
| nzidine | ND | 330 | M | u | Ħ | H | н | " | 1 |
| oranthene | 690 | 67 | \$1 | tř | 0 | " | tr | ** | |
| rene | 1100 | 67 | 11 | # | u | ŧę | ** | н | |
| itvl benzyl phthalate | ND | 67 | k | * | ų | Ħ | 11 | ŋ | Ų |
| -Dichlorobenzidine | ND | 67 | H | 11 | Ħ | 11 | II . | u | t |
| nzo (a) anthracene | 589 | 67 | II . | 19 | 11 | n n | 61 | o | |
| rysene | 560 | 67 | h | 11 | Ħ | tı | н | Ħ | |
| s(2-ethylhexyl)phthalate | 100 | 67 | 11 | n | # | 11 | 31- | н | |
| -n-octyl phthalate | ND | 67 | II. | n | н | H | n | ŧŢ | į |
| nzo (b) fluoranthene | 859 | 67 | n | и | n | 11 | ti | 11 | |
| nzo (k) fluoranthene | 271 | 67 | μ | U | Ħ | 10 | ps. | ŧ | |
| enzo (a) pyrene | (552) | 67 | p | n | FÍ | я | It | н | |
| deno (1,2,3-cd) pyrene | 174 | 67 | 11 | tı | # | 79 | Ħ | II: | |
| benz (a,h) anthracene | 102 | 67 | н | 56 | 11 | n | ** | Ħ | |
| nzo (g,h,i) perylene | 159 | 67 | н | 51 | 111 | tt | ij | н | |
| rrogate: 2-Fluorophenol | | 78.4 % | 50-1 | 77 | | # | u | n | |
| rrogate: 2-rtuorophenot
rrogate: Phenol-d6 | | 75.5 % | 52-1 | | " | p | # | n | |
| rrogute: r nenot-ao
rrogate: Nitrobenzene-d5 | | 80.4 % | 48-12 | | " | " | " | " | |
| rrogate: Nurovenzene-us
rrogate: 2-Fluorobiphenyl | | 88.6 % | 50-12 | | n | ** | n . | 11 | |
| rrogate: 2-Fittorooiphenyt
rrogate: 2,4,6-Tribromophenol | • | 97.2 % | 50-13 | | " | " | " | " | |
| rrogate: 2,4,6-11wromophenol
rrogate: Terphenyl-d14 | • | 145 % | 36-13 | | ıı | n | 17 | n | S-0- |

.O. Box 406 luffalo NY, 14205 Project: LCS Price List

Project Number: 177 & 255 Great Arrow

Project Manager: Doug Reid

Reported: 08/25/04 15:13

Semivolatile Organic Compounds by EPA Method 8270C Waste Stream Technology Inc.

| 1. | Result | Reporting
Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|-----------------------------|--------|--------------------|------------|----------|------------|----------------------|----------|----------|---|
| nalyte . | | | | | | | | | |
| 125 (2-4) (4H12020-06) Soil | | | | | | | | 0250 | , <u>, , , , , , , , , , , , , , , , , </u> |
| Nitrosodimethylamine | ND | 67 | ug/kg dry | l I | AH41727 | 08/17/04 | 08/20/04 | 8270 | (1 |
| (2-chloroethyl)ether | ND | 67 | я | | | | " | st | () |
| enol | ND | 130 | Ħ | P | | 2 1
13 | | ,, | U |
| chlorophenol | ND | 130 | h | U | | " | 91
82 | " | U |
| I-dichlorobenzene | ND | 67 | n | 11 | n | | " | 37 | IJ |
| I-dichlorobenzene | ND | 67 | I# | tı | Ħ | i, | | " | U |
| ?-dichlorobenzene | ND | 67 | D | ŧI | B | 18 | H | | U |
| :(2-chloroisopropyl)ether | ND | 67 | п | ff | " | н . | | | U |
| nzył alcohol | ND | 67 | H | a. | I# | | 16 | tr
It | U |
| nethylphenol | ND | 67 | и | н | 9 | 31 | H | | U |
| xachloroethane | ND | 67 | Ħ | u | 11 | B | tt | н | U |
| Nitrosodi-n-propylamine | ND | 67 | 11 | 0 | " | fi | ii
2 | н | U |
| & 4-methylphenol | ND | 130 | 19 | †3 | u | ŧŧ | 11 | น | U |
| robenzene | ND | 67 | FF | H | 11 | 11 | a | ft. | Į.J |
| phorone | ND | 67 | n | l1 | 19 | tt | 11 | H | U |
| utrophenol | ND | 130 | и | 11 | II | 11 | 11 | 11 | U |
| umethylphenol | ND | 130 | it | Ħ | 11 | n | ŧŧ | " | U |
| . 2-chloroethoxy)methane | ND | 67 | . # | Ħ | ** | Ħ | U | # | U |
| nzoic acid | ND | 330 | †± | Ħ | 14 | H | ti | 11 | U |
| 1-dichlorophenol | ND | 130 | tt | u u | н | н | br | н | Ų |
| 2,4-trichlorobenzene | ND | 67 | ti. | U | 54 | ** | 11 | H | Į! |
| phthalene | ND | 67 | n | þa
19 | n | ti . | †# | rt | 1 |
| chloroaniline | ND | 67 | n | Ħ | 11 | 31 | 11 | 31 | () |
| xachlorobutadiene | ND | 67 | 11 | . " | ч | 11 | 21 | n | t |
| chloro-3-methylphenol | ND | 130 | \$‡ | Ħ | * | n | • | н | Į. |
| methylnaphthalene | ND | 67 | 3 T | Ħ | 11 | Ŧŧ | u | fı | t. |
| xachlorocyclopentadiene | ND | 130 | 11 | 19 | Ħ | u | n | н | l. |
| 4.6-trichlorophenol | ND | 130 | H | n | † ‡ | 11 | | 11 | ŧ |
| 4,5-trichlorophenol | ND | 67 | н | bş | " | n | 13 | It | l. |
| chloronaphthalene | ND | 67 | Ħ | 11 | 11 | н | . " | 0 | ι |
| nitroaniline | ND | 67 | Ħ | я | 19 | ŧi | ** | a | 1. |
| enaphthylene | ND | 67 | 11 | ** | žs | " | Pt. | bs. | ţ |
| methyl phthalate | ND | 67 | н | n | н | u | 11 | 11 | ŧ |
| 5-dinitrotoluene | ND | 67 | 41 | I) | Ħ | 77 | н | и | ŧ |
| enaphthene | ND | 67 | и - | 11 | ** | H | u | Iş | , (|
| nitroaniline | ND | 67 | Ħ | Ħ | n | Ħ | , я | Ħ | Į |
| 4-dinitrophenol | ND | 130 | n | p | ** | l† | 11 | II. | ι |
| benzofuran | ND | 67 | | fr | #1 | 11 | 11 | ıı | ţ |
| 4-dinitrotoluene | ND | 67 | Ħ | tí | н | Ħ | B | 11 | Į |
| nitrophenol | ND | 130 | | tj | n . | U | 31 | 31 | ţ |
| iorene | ND | 67 | | н | n | 11 | 12 | 11 | ι |
| Chlorophenyl phenyl ether | ND | 67 | | If | 'n | 11 | 11 | u | l |

Vaste Stream Technology Inc.

³.O. Box 406 3uffalo NY, 14205 Project: LCS Price List

Project Number: 177 & 255 Great Arrow

Project Manager: Doug Reid

Reported: 08/25/04 15:13

| nalyte | Result | Reporting
Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|------------------------------|-------------------------|--------------------|----------------------|----------|---------|-------------|----------|----------------|-------|
| H25 (2-4) (4H12020-06) Soil | Sampled: 08/11/04 00:00 | Receive | d: 08/1 2 /04 | 15:54 | | | | | |
| ethyl phthalate | ND | 67. | ug/kg đry | 1 | AH41727 | 08/17/04 | 08/20/04 | 8270 | U |
| nitroaniline | ND | 67 | łı | # | ħ | ч | , п | ,,, | U |
| 5-Dinitro-2-methylphenol | ND | 130 | я | 19 | 11 | п | IT. | 11 | U |
| nitrosodiphenylamine | ND | 67 | # | н | H | 1ŧ | 1) | u | Į. |
| bromophenylphenylether | ND | 67 | þ | 0 | ft | If | ŢĬ | Ð | U |
| xachlorobenzene | ND | 67 | t> | II . | n | lt | Ħ | н | () |
| ntachlorophenol | ND | 130 | н | 11 | și. | " | n | В | U |
| ienanthrene | 269 | 67 | P | tı | 31 | и | 47 | 3) | |
| thracene | ND | 67 | н | и | ** | 74 | 31 | ti | ţ |
| rbazole | ND | 67 | n | Ħ | 11 | ht | Ħ | Ħ | U |
| -n-butyl phthalate | ND . | 67 | It. | ** | Ħ | ŋ | ц | l y | U |
| nzidine | ND | 330 | 17 | Ħ | ti | Ţ | Ħ | Ħ | U |
| ioranthene | 1050 | 67 | U | н | 11 | ** | 11 | H | |
| rene | 1180 | 67 | 33 | н | Ħ | n | H | tŧ | |
| ityl benzyl phthalate | ND | 67 | 11 | n | ŧ | II | п | 11 | ŧ. |
| · Dichlorobenzidine | ND | 67 | U | Ħ | 11 | н | 11 | 11 | 1. |
| azo (a) anthracene | 493 | 67 | 11 | 19 | U, | н | н | Ħ | |
| rysene | 435 | 67 | 11 | Ħ | Ħ | U | В | . It | |
| s(2-ethylhexyl)phthalate | ND | 67 | я | n | Ħ | IJ | n | 11 | l. |
| -n-octyl phthalate | ND | 67 | Ħ | R | h | 14 | 11 | Ħ | l |
| enzo (b) fluoranthene | 557 | 67 | ** | п | R | 11 | ĒŤ | P | |
| enzo (k) fluoranthene | 195 | 67 | R | ŧI | 17 | 10 | tr | 19 | |
| enzo (a) pyrene | 7420 | 67 | В | u | Ħ | Ħ | u | п | |
| deno (1,2,3-cd) pyrene | 127 | 67 | n | ** | ti | 36 | 71 | hr | |
| benz (a,h) anthracene | 110 | 67 | n | tr | ŧı. | ** | 11 | 11 | |
| enzo (g,h,i) perylene | 141 | 67 | U | ļī | 11 | 11 | t# | υ | |
| rrogate: 2-Fluorophenol | | 77.3 % | 50-1 | 112 | 11 | | " | " " | |
| rrogate: Phenol-d6 | | 78.0 % | 52-1 | 17 | # | " | " | " | |
| rrogate: Nitrobenzene-d5 | | 81.6% | 48-1 | 22 | " | " | ** | n | |
| rrogate: 2-Fluorobiphenyl | | 87.7 % | 50-1 | 21 | " | п | " | Ħ | • |
| rrogate: 2,4,6-Tribromopheno | ol | 92.9 % | 50-1 | 32 | v | n | " | . " | |
| rrogate: Terphenyl-d14 | | 119% | 36-1 | 134 | " | п | " | " | |

.O. Box 406 uffalo NY, 14205 Project: LCS Price List

Project Number: 177 & 255 Great Arrow

Project Manager: Doug Reid

Reported: 08/25/04 15:13

Semivolatile Organic Compounds by EPA Method 8270C Waste Stream Technology Inc.

| ıslyte | Result | Reporting
Limit | Units | Dilution | Batch | Prepared | Analyzed | ,
Method | Notes |
|-----------------------------|-------------------------|--------------------|-------------|------------|-----------|----------|----------------|-------------|-------|
| 126 (0-2) (4H12020-07) Soil | Sampled: 08/11/04 00:00 | Receive | d: 08/12/04 | 1 15:54 | | | | | - |
| Nitrosodimethylamine | ND | | ug/kg dry | www | AH41727 | 08/17/04 | 08/20/04 | 8270 | U |
| (2-chloroethyl)ether | ND | 67 | n | " | н | 11 | 19 | 17 | () |
| enol | ND | 130 | # | n | ** | ** | ft | 11 | U |
| hlorophenol | ND | 130 | # | H | Ħ | It | n | n | t i |
| - tichlorobenzene | ND | 67 | 11 | ţi | h | . " | 55 | j# | [] |
| - achlorobenzene | ND | 67 | 11 | *1 | 10 | ** | et | н | [] |
| -dichlorobenzene | ND | 67 | ŧı | ** | II . | ts | 14 | ti. | U |
| (2-chloroisopropyl)ether | ND | 67 | AI. | 21 | 10 | я | ţi. | ti . | U |
| izyl alcohol | ND | 67 | 11 | 5 5 | ri | н | ‡ŧ | 38 | () |
| nethylphenol | ND | 67 | 11 | n | 51 | †# | n | £\$. | U |
| cachloroethane | ND | 67 | th. | ** | tf | 19 | 0 | u | U |
| Nitrosodi-n-propylamine | ND | 67 | Ħ | я | Ħ | 11 | 5 + | †1 | U |
| ¿ 4-methylphenol | ND | 130 | It | ti. | # | #1 | 11 | н | Į) |
| robenzene | ND | 67 | t) | 54 | ħ | 11 | и | tt. | U |
| phorone | ND | 67 | 10 | 37 | ** | n | Ħ | 11 | U |
| itrophenol | ND | 130 | 11 | It | lf | i. | n | . 4 | . () |
| -dimethylphenol | ND | 130 | Ħ | H | 17 | 11 | п | Ιť | υ |
| 2-chloroethoxy)methane | ND | 67 | 11 | | n | H | 14 | Ħ | Į. |
| izore acid | ND | 330 | 71 | ** | #1 | 11 | 11 | 13 | Į. |
| -dichlorophenol | ND | 130 | f1 | 11 | lr . | 49 | u | n | l |
| .4-trichlorobenzene | ND | 67 | P | 39 | Ħ | u , | #1 | 11 | Į |
| ohthalene | ND | 67 | в | н | 31 | \$# | н | н | ι |
| hloroaniline | . ND | 67 | If | н | ** | 17 | n | и | į |
| cachlorobutadiene | ND | 67 | e | n | n | n | н | ** | Į |
| :hloro-3-methylphenol | ND | 130 | U | Ħ | IF | 11 | μ | 21 | i |
| nethylnaphthalene | ND | 67 | n n | Ħ | n | 12 | U | Ħ | ŧ |
| cachlorocyclopentadiene | ND | 130 | " | f • | n | 11 | n | Ħ | ŧ |
| .6-trichlorophenol | ND | 130 | n | 37 | n | н | £t. | P | ι |
| .5-trichlorophenol | ND | 67 | 31 | В | i# | H | U | 29 | Į. |
| :hloronaphthalene | ND | 67 | ts. | lj. | п | 11 | ai . | В | ŧ |
| ntroaniline | ND | 67 | и | н | 3) | Ħ | ** | u | į |
| | 91 | 67 | н | 11 | Ħ | В | н | 11 | , |
| enaphthylene | ND | 67 | н | ST. | Ħ | 11 | 11 | a | { |
| methyl phthalate | ND | 67 | ħ | н | ti | н | 71 | įi. | ì |
| -dinitrotoluene | 132 | 67 | ır | 11 | В | ** | и | н | |
| enaphthene | | 67 | 17 | n. | ti | 1) | Ħ | U | Į |
| itroaniline | ND
ND | 130 | 22 | ti. | 11 | II. | f) | ħ | į. |
| -dinitrophenol | ND
99 | 67 | п | 11 | EF. | st | H | Pi | , |
| enzofuran | | | 11 | ** | н | 11 | u | 0 | ŧ |
| -dinitrotoluene | ND | 67 | "
H | 11 | 11 | | н | 11 | . [|
| itrophenol | ND | 130 | | "
| R | " | 11 | h | , |
| orene | 236 | 67 | 11 | žt. | u | " | ** | u | ţ |
| Chlorophenyl phenyl ether | ND | 67 | Ħ | ** | ** | •• | * | ** | · |

7aste Stream Technology Inc.

Project: LCS Price List

.O. Box 406 Juffalo NY, 14205 Project Number: 177 & 255 Great Arrow

Project Manager: Doug Reid

Reported: 08/25/04 15:13

Semivolatile Organic Compounds by EPA Method 8270C Waste Stream Technology Inc.

Reporting Method Notes Limit Units Dilution Prepared Analyzed Result ıalyte Sampled: 08/11/04 00:00 Received: 08/12/04 15:54 I26 (0-2) (4H12020-07) Soil 08/20/04 U ND 67 AH41727 08/17/04 8270 ethyl phthalate ug/kg dry ND 67 U iitroaniline ND 130 U -Dinitro-2-methylphenol ND 67 11 iitrosodiphenylamine ND 67 U romophenylphenylether ND 67 U cachlorobenzene ND 130 U ntachlorophenol 2950 67 enanthrene 770 67 thracene ND 67 U bazole ND U 67 -n-butyl phthalate ND U 330 ızidine 3300 67 oranthene 4260 67 rene ND U. 67 tyl benzyl phthalate l: ND 67 -Dichlorobenzidine 1360 67 aizo (a) anthracene 1200 67 rysene 11 ND 67 (2-ethylhexyl)phthalate ND 67 U -n-octyl phthalate 1350 67 nzo (b) fluoranthene 67 457 nzo (k) fluoranthene 1100 67 nzo (a) pyrene -251 67 leno (1,2,3-cd) pyrene 122 67 benz (a,h) anthracene 256 67 nzo (g,h,i) perylene 74.5 % 50-112 rogate: 2-Fluorophenol 73.8 % 52-117 rogate: Phenol-d6 77.7% 48-122 rogate: Nitrobenzene-d5 86.9 % 50-121 rogate: 2-Fluorobiphenyl 95.5% 50-132 rogate: 2,4,6-Tribromophenol 116% 36-134 rogate: Terphenyl-d14

³ O. Box 406 Buffalo NY, 14205 Project: LCS Price List

Project Number: 177 & 255 Great Arrow

Project Manager: Doug Reid

Reported: 08/25/04 15:13

Semivolatile Organic Compounds by EPA Method 8270C Waste Stream Technology Inc.

| nalyte | Result | Reporting
Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|-----------------------------|-------------------------|--------------------|------------|----------|---------|----------|----------|--------|--|
| H27 (2-4) (4H12020-08) Soil | Sampled: 08/11/04 00:00 | Receive | d: 08/12/0 | 4 15:54 | | | | | , |
| Nitrosodimethylamine | ND | 67 | | i | AH41727 | 08/17/04 | 08/20/04 | 8270 | Į. |
| s(2-chloroethyl)ether | ND | 67 | 4 | n | n | Ħ | n | 31 | Ü |
| enol | ND | 130 | * | n | 10 | it . | п | н | {, |
| chlorophenol | ND | 130 | II. | 11 | н | It | 11 | n | <u>. </u> |
| 3-dichlorobenzene | ND | 67 | R | н | п | fr | н . | tt | [] |
| 4-dichlorobenzene | ND | 67 | н | н | ji | \$E | 14 | tí | Ü |
| 2-dichlorobenzene | ND | 67 | 49 | Ft | n | (r | ıı | н | Ü |
| s(2-chloroisopropyl)ether | ND | 67 | Ħ | Ħ | н | sı | H | ft | į. |
| nzyl alcohol | ND | 67 | ft | #1 | n | st | 31 | . н | t, |
| methylphenol | ND | 67 | ft | п | H | n | п | 15 | l. |
| xachloroethane | ND | 67 | ,, | н | n | н | Ħ | ** | t |
| Nitrosodi-n-propylamine | ND | 67 | " | . # | H | н | It | 71 | Į. |
| & 4-methylphenol | ND | 130 | 34 | H | #1 | H | n | н | 1. |
| robenzene | ND | 67 | u |)T | ** | H 5 | | n | Ĺ |
| phorone | ND | 67 | " | u | ## | 11 | ti | п | ĺ |
| rephenol | ND | 130 | H | н | 15 | u | р | 0 | ì |
| suethylphenol | ND | 130 | " | n | ti | #1 | n | 11 | ĺ |
| . 2-chloroethoxy)methane | ND | 67 | n | я | 11 | 14 | in . | 11 | Ĭ |
| nzoic acid | ND | 330 | Ιŧ | ш | н | 14 | 11 | п | - (|
| 4-dichlorophenol | ND | 130 | ** | 11 | n | n | ti | ** | |
| 2.4-trichlorobenzene | ND | 67 | ł# | 41 | ff | H | H | 71 | i |
| phthalene | ND | 67 | B | 11 | tt | #1 | U | lı | į |
| chloroaniline | ND | 67 | f1 | 31 | ŧł. | Ħ | 11 | н | į |
| xachlorobutadiene | ND | 67 | 81 | u . | 11 | n | и. | lt. | Ę |
| thloro-3-methylphenol | ND | 130 | ŧŧ | 31 | 17 | μ | а | TI | ĺ |
| nethylnaphthalene | ND | 67 | Ħ | u | 0 | h | н | 11 | į |
| xachlorocyclopentadiene | ND | 130 | 31 | 41 | 10 | 14 | R | Ħ | į |
| 1.6-trichlorophenol | ND | 130 | π | 11 | R | tr | | 24 | i |
| 1,5-trichlorophenol | ND | 67 | ti | 11 | n | Ħ | 11 | n | l |
| thloronaphthalene | ND | 67 | U | 11 | н | ři. | я | tr | ŧ |
| nitroaniline | ND | 67 | 11 | 15 | Ħ | R | rt | n | l |
| enaphthylene | ND | 67 | n | a a | स | lf. | ** | 31 | Į |
| methyl phthalate | ND | 67 | 11 | Ħ | 13 | p. | U | ts | ì |
| i-dinitrotoluene | ND | 67 | n | ¥† | ěτ | fi | u | n | ì |
| enaphthene | ND | 67 | 11 | ** | H | u | u | 11 | l |
| nitroaniline | ND | 67 | U | H | н | łī | 11 | u | 1 |
| I-dinitrophenol | ND | 130 | 11 | n | u | n | 17 | н . | · |
| enzofuran | ND | 67 | 11 | 11 | U | u | н | fI | Į |
| l-dinitrotoluene | ND
ND | 67 | D | 11 | 9 | If | ri | er | Į |
| | ND | 130 | 11 | n | н | u | 11 | Ħ | ί |
| nitrophenol | ND
ND | 67 | ,, | n. | | pt | 11 | ** | Į |
| orene | | | 17 | | н | n | ls . | er | į. |
| Chlorophenyl phenyl ether | ND | 67 | | ** | •• | •• | •• | - | ţ |

/aste Stream Technology Inc.

Project: LCS Price List

P.O. Box 406 Buffalo NY, 14205 Project Number: 177 & 255 Great Arrow

Project Manager: Doug Reid

Reported: 08/25/04 15:13

| nalyte | Result | Reporting
Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|-------------------------------|-------------------------|--------------------|-------------|----------|------------|----------|----------|-----------|-------|
| H27 (2-4) (4H12020-08) Soil | Sampled: 08/11/04 00:00 | Receive | d: 08/12/04 | 1 15:54 | | | | | |
| iethyl phthalate | ND | 67 | ug/kg dry |] | AH41727 | 08/17/04 | 08/20/04 | 8270 | Į |
| nitroaniline | ND | 67 | 34 | n | ŧı | *** | 11 | n | ι |
| 6-Dinitro-2-methylphenol | ND | 130 | Ħ | Ħ | Ħ | Ħ | ti | Ħ | ŧ |
| nitrosodiphenylamine | ND | 67 | Ħ | Ħ | អ | Ħ | 11 | и | į |
| bromophenylphenylether | ND | 67 | 17 | Ħ | n | ¥f | " | 11 | Į |
| xachlorobenzene | ND | 67 | II | Ħ | ม | Ħ | ** | н | į |
| ntachlorophenol | ND | 130 | u | u | 11 | 1F | If | tt | ι |
| nenanthrene | 325 | 67 | и | Ŧ1 | źı | tt | 1F | Ħ | |
| thracene | ND | 67 | II | н | 81 | ij | 11 | Ħ | Į |
| rbazole | ND | 67 | п | н | 11 | n | ħ | н | 1 |
| i-n-butyl phthalate | ND | 67 | n | \$# | 21 | u | n | 11 | ŧ |
| nzidine | ND | 330 | ţı. | Ħ | 19 | и | H | rı. | ţ |
| ioranthene | 874 | 67 | ** | It | H | tł. | H | Ħ | |
| /rene | 939 | 67 | т н | " | ff | и | # | я . | |
| ityl benzyl phthalate | ND | 67 | n | н | l; | ø |) i | Ħ | l |
| * -Dichlorobenzidine | ND | 67 | u | If | ย | ** | a | lt | į |
| razo (a) anthracene | 355 | 67 | ti | ŋ | 31 | ** | n | ŧŧ | |
| rysene | 388 | 67 | a | H | £ 1 | 11 | 17 | (1 | |
| s(2-ethylhexyl)phthalate | ND | 67 | п | u, | 11 | 11 | tr. | Ħ | l |
| i-n-octyl phthalate | ND | 67 | H. | ü | Я | 11 | ţI | и | (|
| enzo (b) fluoranthene | 422 | 67 | н | 11 | Ħ | IX | ţ1 | В | |
| enzo (k) fluoranthene | 151 | 67 | н | n | tt | 15 | 11 | ** | |
| enzo (a) pyrene | (345) | 67 | " | 11 | 11 | 46 | Ħ | ** | |
| deno (1,2,3-cd) pyrene | 150 | 67 | n | н | 17 | 41 | n | Ħ | |
| benz (a,h) anthracene | 96 | 67 | n | it | 11 | n | 51 | ħ | |
| enzo (g,h,i) perylene | 172 | 67 | li . | n | II . | ķi. | H | Ħ | |
| rrogate: 2-Fluorophenol | | 76.3 % | 50-1 | 112 | " | | · " | 'n · | |
| rrogate: Phenol-d6 | | 76.1 % | 52-1 | | ft | n | . # | п | |
| rrogate: Nitrobenzene-d5 | | 80.9 % | 48-1 | | 71 | 77 | Ħ | ** | |
| rrogate: 2-Fluorobiphenyl | | 87.3 % | 50-1 | | " | 74 | " | " | |
| rrogate: 2,4,6-Tribromophenoi | ! | 94.6 % | 50-1 | | " | ** | " | ** | |
| rrogate: Terphenyl-d14 | | 104% | 36-1 | 134 | n |) r | Ħ | ** | |

P.O. Box 406 Buffalo NY, 14205 Project: LCS Price List

Project Number: 177 & 255 Great Arrow

Project Manager: Doug Reid

Reported: 08/25/04 15:13

Semivolatile Organic Compounds by EPA Method 8270C

Waste Stream Technology Inc.

| nalyte | Result | Reporting
Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|-----------------------------|-------------------------|--------------------|------------|----------|---------|------------|----------|----------|--------|
| H28 (0-2) (4H12020-09) Soil | Sampled: 08/11/04 00:00 | Receive | d: 08/12/0 | 4 15:54 | | | | | |
| -Nitrosodimethylamine | ND | 67 | ug/kg dry | F | AH41727 | 08/17/04 | 08/20/04 | 8270 | U |
| s(2-chloroethyl)ether | ND | 67 | Ħ | 47 | n | ŧ | н | н | U |
| enol | ND | 130 | ** | 11 | 71 | H. | ti | п | U |
| chlorophenol | ND | 130 | * | 18 | н | b | et . | n | H |
| 3-dichlorobenzene | ND | 67 | В | 11 | н | н | ** | υ | Į.) |
| 4-dichlorobenzene | ND | 67 | it | ** | IF | ¥ | tt , | u | U |
| 2-dichlorobenzene | ND | 67 | π | 11 | Ü | H | μ | 31 | () |
| s(2-chloroisopropyl)ether | ND | 67 | tı | # | 11 | rr | 11 | , н | 11 |
| :nzyl alcohol | ND | 67 | U | 11 | น | u | n . | ы | Į) |
| methylphenol | ND | 67 | 16 | 11 | 'n | n | п | н | [] |
| xachloroethane | ND | 67 | B | n | н | # | 11 | 11 | U |
| -Nitrosodi-n-propylamine | ND | 67 | н | Ħ | H | " | 11 | u | Ü |
| & 4-methylphenol | ND | 130 | n | 1) | 51 | н | Pê . | 1) | U |
| trobenzene | ND | 67 | ** | n | В | н | в | и . | Ü |
| ophorone | ND | 67 | 11 | 11 | н | н | eş | н | Ü |
| nitrophenol | ND | 130 | Œ | ıı | 17 | н | н | 41 | Ų |
| 4-dimethylphenol | ND | 130 | 11 | (1 | #1 | lą. | н | н | Ü |
| a 2-chloroethoxy)methane | ND | 67 | Ħ | н | 11 | U | fl | 0 | U |
| azoic acid | ND | 330 | и | u | 34 | н | (1 | ŧŧ | 11 |
| 4-dichlorophenol | ND | 130 | 12 | н | 11 | 71 | ** | п | U |
| 2,4-trichlorobenzene | ND | 67 | 39 | Ħ | IJ | n | ** | n | U |
| phthalene | ND | 67 | н | п | u | 19 | n | FF | 1 |
| chloroaniline | ND | 67 | lt. | 11 | 11 | В | п | 14 | U |
| xachlorobutadiene | ND | 67 | н | ħ | 11 | ų | ħ | u | บ |
| chloro-3-methylphenol | ND | 130 | н | 11 | 14 | н | п | 11 | U
U |
| methylnaphthalene | ND | 67 | Ħ | tf | 41 | ,, | n | 91 | U |
| xachlorocyclopentadiene | ND ND | 130 | Ħ | ti | Ħ | 19 | я | ŦF | U |
| 4.6-trichlorophenol | ND | 130 | 71 | ti | ** | я | er . | er. | U |
| 4,5-trichlorophenol | ND | 67 | ** | 71 | n | н | н | | υ |
| chloronaphthalene | ND
ND | 67 | 31 | н | п | f 1 | u | ıı | U |
| nitroaniline | ND | 67 | şı. | 21 | μ | it | v | n | |
| | ND | 67 | 11 | н | 14 | ų | 11 | 4 | () |
| enaphthylene | ND | 67 | u | 11 | · n | " | ** | 11 | 11 |
| methyl phthalate | | | " | 77 | n · | ы | ** | | IJ |
| 5-dinitrotoluene | ND
ND | 67 | " | 11 | "
" | | H | ,,
FE | U |
| enaphthene | ND | 67 | ,, | ** | "
!i | | 41 | " | L! |
| nitroaniline | ND | 67 | | " | "
n | ., | 10 | u u | Ų |
| 1-dinitrophenol | ND | 130 | " | | | | | | () |
| penzofuran | ND | 67 | ** | " | 31 | 41 | " | ** | () |
| 1-dinitrotoluene | ND | 67 | bt . | II | t* | et . | 51 | H | U |
| nitrophenol | ND | 130 | 33 | n | 31 | ff | 11 | н | (J |
| iorene | ND | 67 | n | 'n | 17 | U | н | n | U |
| Chlorophenyl phenyl ether | ND | 67 | u | u | " | 11 | tr | u | (I |

/aste Stream Technology Inc.

P.O. Box 406 Buffalo NY, 14205 Project: LCS Price List

Project Number: 177 & 255 Great Arrow

Project Manager: Doug Reid

Reported: 08/25/04 15:13

Semivolatile Organic Compounds by EPA Method 8270C

Waste Stream Technology Inc.

| ınalyte | Result | Reporting
Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|------------------------------|-------------------------|--------------------|-------------|----------|---------|--|----------|--------|---------|
| H28 (0-2) (4H12020-09) Soil | Sampled: 08/11/04 00:00 | Receive | d: 08/12/04 | 15:54 | | | | | |
| iethyl phthalate | ND | 67 | ug/kg dry | l | AH41727 | 08/17/04 | 08/20/04 | 8270 | U |
| -nitroaniline | ND | 67 | ti | ii. | (t | li . | 16 | В | U |
| Dinitro-2-methylphenol | ND | 130 | 11 | Œ | н | II. | II | н | U |
| -nitrosodiphenylamine | ND | 67 | n | H | Ħ | 19 | íi . | ŧŧ | {1 |
| bromophenylphenylether | ND | 67 | f1 | by | н | at the state of th | ti | ŧį | · • |
| exachlorobenzene | ND | 67 | 11 | Ħ | U | 11 | Ħ | и | U |
| entachlorophenol | ND | 130 | n | 15 | t) | (I | H | 11 | U |
| nenanthrene | ND | 67 | ** | βŧ | 0 | 11 | †\$ | pł | Į. |
| nthracene | ND | 67 | II | Ħ | H | Ŧ1 | ħ |); | U |
| ırbazole | ND | 67 | и | Ħ | s | Ħ | 0 | 11 | 1 |
| i-n-butyl phthalate | ND | 67 | 11 | 11 | Ħ | It | u u | n | ι |
| enzidine | , ND | 330 | н | ĸ | 31 | 11 | 11 | R | l. |
| uoranthene | ND | 67 | ti | H | # | 11 | lt | 41 | 1. |
| yrene | ND | 67 | n | Ħ | ti | Ħ | II | ŧŧ | ŧ |
| utyl benzyl phthalate | ND | 67 | # | N | \$I | н | ii | 11 | ł |
| · Dichlorobenzidine | ND | 67 | tf | 11 | . 11 | 16 | u | N | l. |
| e (a) anthracene | ND | 67 | 11 | is | # | jx | Ħ | н | L |
| acysene | ND | 67 | Ħ | +7 | Ħ | п | it. | н | Ĺ |
| s(2-ethylhexyl)phthalate | ND | 67 | ff | 19 | 19 | U | " | " | Ĺ |
| i-n-octyl phthalate | ND | 67 | ** | * | ti | п | H | u | l, |
| enzo (b) fluoranthene | ND | 67 | n | # | Ħ | 11 | u | ŧ | l. |
| enzo (k) fluoranthene | ND | 67 | ** | H | 11 | Ħ | 11 | 19 | ι |
| enzo (a) pyrene | ND | 67 | n | ţş | Ħ | ŧŧ | 15 | в | ŧ |
| deno (1,2,3-cd) pyrene | ND | 67 | " | 19 | н | II | ** | ef | ſ |
| ibenz (a.h) anthracene | ND | 67 | 11 | 16 | 11 | н | v | ıı. | t |
| enzo (g,h,i) perylene | ND | 67 | 17 | 11 | Ħ | It | н | 11 | Ę |
| urrogate: 2-Fluorophenol | | 68.3 % | 50-1 | 12 | †i | u | · · · ; | 'n | ** * ** |
| irrogate: Phenol-d6 | | 66.9 % | 52-1 | 17 | " | " | " | " | |
| ırrogate: Nîtrobenzene-d5 | | 72.0 % | 48-1 | 22 | ** | n | " | n | |
| wrogate: 2-Fluorobiphenyl | | 80.6 % | 50-1 | 21 | # | # | n | " | |
| urogate: 2,4,6-Tribromopheno | I | 98.8 % | 50-1 | 32 | # | " | " | " | |
| irrogate: Terphenyl-d14 | | 106 % | 36-1 | 34 | " | " | " | " | |

O. Box 406 uffalo NY, 14205 Project: LCS Price List

Project Number: 177 & 255 Great Arrow

Project Manager: Doug Reid

Reported: 08/25/04 15:13

Semivolatile Organic Compounds by EPA Method 8270C Waste Stream Technology Inc.

| ialyte | Result | Reporting
Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|-----------------------------|-------------------------|--------------------|------------|----------|-----------|-----------|----------|--------|-------|
| 129 (0-2) (4H12020-10) Soil | Sampled: 08/11/04 00:00 | | | 1 15:54 | | - | | | |
| Nitrosodimethylamine | ND | 670 | ug/kg dry | 10 | AH41801 | 08/18/04 | 08/21/04 | 8270 | U |
| (2-chloroethyl)ether | ND | 670 | n | 11 | # | h | tr | н | Ü |
| enol | ND | 1300 | 11 | ** | " | n | ŢI. | ar . | Ü |
| hlorophenol | ND | 1300 | н | и | п | 51 | н | п | U |
| -dichlorobenzene | ND | 670 | ţţ | 15 | н | ** | P | n | Į. |
| -dichlorobenzene | ND | 670 | 31 | 11 | ** | jŧ. | fF | FF | Ü |
| :-dichlorobenzene | ND | 670 | † £ | ŢI | ** | u | n | n | U |
| (2-chloroisopropyl)ether | ND | 670 | 11 | a | 11 | 21 | γi | u | į j |
| nzyl alcohol | ND | 670 | ŧ1 | н | n | н | ц | Ħ | U |
| nethylphenol | ND | 670 | ti. | 17 | ti | It | ŧŧ | H | Ü |
| cachloroethane | ND | 670 | 95 | n | ** | * | ** | u | U |
| Nitrosodi-n-propylamine | ND | 670 | ** | 71 | 11 | 11 | H | ** | U |
| | ND | 1300 | #1 | Ħ | ц | It. | 9 | 11 | U |
| ¿ 4-methylphenol | ND | 670 | 11 | Is | £1 | a | ŧı | u | U |
| robenzene | ND | 670 | 11 | B | tt | я | 11 | 11 | U |
| phorone | ND
ND | 1300 | 11 | 11 | n | н | и | | U |
| itrophenol | ND
ND | 1300 | 12 | 11 | st . | ** | 71 | н | U |
| -dimethylphenol | | | и | 11 | n | × | н | B | U |
| 3(2-chloroethoxy)methane | ND | 670 | H | | 11 | | 13 | n | U |
| nzoic acid | ND | 3300 | ri | n | ıı . | | U | я | U |
| dichlorophenol | ND | 1300 | ** | и | ** | 11 | h | br | U |
| .4-trichlorobenzene | ND | 670 | 11 | ji | н | H | 11 | ų | Ų |
| ohthalene | ND | 670 | ,, | | 11 | n | н | u | U |
| thloroaniline | ND | 670 | | | n | ,, | н | tr . | |
| vachlorobutadiene | ND | 670 | | ir | " | | 11 | H. | U |
| :hloro-3-methylphenol | ND | 1300 | | H | **
**E | и | | q | U |
| nethylnaphthalene | ND | 670 | | 11 | 1) | " | n | | U |
| cachlorocyclopentadiene | ND | 1300 | | ** | ,,
H | 11 | H. | ,, | į. |
| L6-trichlorophenol | ND | 1300 | | т | tt | " | ,, | " | l: |
| .5-trichlorophenol | ND | 670 | | - | | it | ,,
11 | ·· | U |
| :hioronaphthalene | ND | 670 | | # | 1)
H | 11 | i. | #
| l. |
| nitroaniline | ND | 670 | | n | 11 | " | 12 | N | į. |
| enaphthylene | ND | 670 | | | | " | · · | " | l. |
| methyl phthalate | ND | 670 | | tr | İt | | H | n | L |
| ı-dinitrotoluene | ND | 670 | | н | 11 | 11 | ti
Hi | н | l. |
| enaphthene | ND | 670 | | н | 31 | Ħ | | | Ĺ |
| nitroaniline | ND | 670 | | +1 | 11 | | ** | n | ί. |
| I-dinitrophenol | ND | 1300 | | 11 | u | ** | n | н | l. |
| enzofuran | ND | 670 | | Iţ | Ħ | 11 | и | Ħ | ţ |
| I-dinitrotoluene | ND | 670 | | ш | f# | fi | ì | 17 | ţ |
| nitrophenol | ND | 1300 | n | †1 | 1! | н | Ħ | ŧı | Į |
| orene | ND | 670 | tı. | II | 41 | 10 | 1) | tt | ţ |
| Chlorophenyl phenyl ether | ND | 670 | 17 | tt | ęs | If | 31 | н | J |

Taste Stream Technology Inc.

P.O. Box 406 Buffalo NY, 14205 Project: LCS Price List

Project Number: 177 & 255 Great Arrow

Project Manager: Doug Reid

Reported: 08/25/04 15:13

| Analyte | Result | Reporting
Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|--------------------------------|-------------------------|--------------------|-------------|----------|---------|----------|------------|--------|-------|
| BH29 (0-2) (4H12020-10) Soil | Sampled: 08/11/04 00:00 | Receive | d: 08/12/04 | 15:54 | | | | | |
| Diethyl phthalate | ND | 670 | ug/kg dry | 10 | AH41801 | 08/18/04 | 08/21/04 | 8270 | U |
| 1-nitroaniline | ND | 670 | H | Ħ | u | D. | II | II. | U |
| 1.6-Dinitro-2-methylphenol | ND | 1300 | | 77 | ** | b | II . | ** | U |
| i-nitrosodiphenylamine | ND | 670 | Ħ | ** | Ħ | # | U | u | () |
| i-bromophenylphenylether | ND | 670 | 15 | B | # | 37 | u | ti | U |
| nexachlorobenzene | ND | 670 | ŧſ | 11 | ŧŧ | Ħ | 17 | U | ii. |
| pentachlorophenol | ND | 1300 | ti | n | t* | 11 | n | u | U |
| henanthrene | ND | 670 | lt. | H . | tt | n | 19 | u | Ü |
| ınthracene | ND | 670 | tı | łi | n | η | Iţ | n | U |
| arbazole | ND | 670 | U | Ħ | , 16 | 11 | zf | n | Ū |
| Di-n-butyl phthalate | ND | 670 | #3 | Ħ | tt | 11 | H | n | U |
| enzidine | ND | 3300 | # | 4 | +7 | 10 | н | n | Į] |
| luoranthene | ND | 670 | Ħ | N | * | ŧ | ít | н | U |
| yrene | 879 | 670 | ħ | p | u | 77 | ŧ | 11 | |
| 3utyl benzyl phthalate | ND | 670 | Ħ | ti | Ħ | ŋ | 11 | 39 | U |
| 1.3'-Dichlorobenzidine | ND | 670 | n | Ħ | n | Ħ | ** | a | U |
| ionzo (a) anthracene | ND | 670 | Ð | tt | и | ff. | и | ŧı | U |
| mysene | ND | 670 | Ħ | 31 | 18 | ø | # | Đ | U |
| is(2-ethylhexyl)phthalate | ND | 670 | Ħ | Ħ | Ħ | it | 55 | 11 | U |
| Di-n-octyl phthalate | ND | 670 | tt | ti | 11 | n n | ** | н | U |
| 3enzo (b) fluoranthene | ND | 670 | # | 73 | н | п | ч | u | U |
| 3enzo (k) fluoranthene | ND | 670 | 33 | H | н | н | 73 | 11 | Ü |
| łenzo (a) pyrene | ND | 670 | h | Ħ | II | # | Ħ | n | U |
| ndeno (1,2,3-cd) pyrene | ND | 670 | 14 | μ | 10 | P. | n | π | U |
| Dibenz (a,h) anthracene | ND | 670 | tı | lt . | 17 | · н | ** | ** | U |
| łenzo (g.h.i) perylene | ND | 670 | н | £I. | 9 | n | 11 | ri . | Įį |
| urrogate: 2-Fluorophenol | | 44.1 % | 50-1 | 12 | rr | н | " <u>"</u> | ,, | S-04 |
| 'urrogate: Phenol-d6 | | 50.7% | 52-1 | 17 | u | n | " | " | S-04 |
| `urrogate: Nitrobenzene-d5 | | 73.6 % | 48-1. | | rt | " | " | # | •- " |
| urrogate: 2-Fluorobiphenyl | , | 63.3 % | 50-1. | | 11 | n | " | n | |
| urrogate: 2,4,6-Tribromophenol | | 83.6% | 50-1. | | н | n | H | n | |
| urrogate: Terphenyl-d14 | | 144% | 36-1. | | " | a | ** | " | 5-04 |

'.O. Box 406 Suffalo NY, 14205 Project: LCS Price List

Project Number: 177 & 255 Great Arrow

Project Manager: Doug Reid

Reported: 08/25/04 15:13

Semivolatile Organic Compounds by EPA Method 8270C Waste Stream Technology Inc.

| nalyte | Result | Reporting
Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|-----------------------------|-------------------------|--------------------|------------|----------|------------|----------|-----------|--------|-------|
| 133 (0-2) (4H12020-11) Soil | Sampled: 08/11/04 00:00 | Receive | d: 08/12/0 | 4 15:54 | | | | | |
| Nitrosodimethylamine | ND | 67 | ug/kg dry | 1 | AH41801 | 08/18/04 | 08/20/04 | 8270 | U |
| (2-chloroethyl)ether | ND | 67 | 11 | 74 | ti | . " | n | ь | U |
| enol | ND | 130 | Ħ | It | π | 11 | 11 | " | [] |
| chlorophenol | ND | 130 | Ħ | Đ | 11 | R | 81 | 20 | [] |
| 1-dichlorobenzene | ND | 67 | н | tī | I\$ | ii . | Ħ | H | U |
| l-dichlorobenzene | ND | 67 | 11 | U | lt | Ħ | li . | п | ţ |
| ?-dichlorobenzene | ND | 67 | 11 | u | н . | ** | n | n | U |
| (2-chloroisopropyl)ether | ND | 67 | н | u | Ħ | н | ţı | st | l. |
| nzyl alcohol | ND | 67 | 31 | (I | F1 | it | *1 | # | Ę |
| nethylphenol | ND | 67 | Ħ | re | 11 | n | 11 | н | t |
| xachloroethane | ND | 67 | +3 | ** | н | 11 | 1) | 11 | Į, |
| Nitrosodi-n-propylamine | ND | 67 | Ħ | 11 | ıt | n | R | 16 | Į. |
| & 4-methylphenol | ND | 130 | P | n | n | n | н | ŧi | Į |
| robenzene | ND | 67 | 17 | ø | ŧı | 11 | н | 31 | ι |
| nhorone | ND | 67 | н | u | u | 21 | 0 | 11 . | Į |
| imphenol | ND | 130 | ** | *1 | H : | н | \$4 | n | { |
| umethylphenol | ND | 130 | tt. | #1 | R | ji. | R | ** | 1 |
| s(2-chloroethoxy)methane | ND | 67 | ţŧ | at . | 6 | 91 | 35 | ŧs | Į |
| nzoic acid | ND | 330 | v | 11 | u | n | 17 | n | Į |
| 1-dichlorophenol | ND | 130 | 17 | 17 | 71 | п | 11 | u | ŧ |
| 2,4-trichlorobenzene | ND | 67 | н | Ð | ** | H | н | er · | 1 |
| phthalene | ND | 67 | u | н | F | Ħ | H | 11 | Į |
| chloroaniline | ND | 67 | н | п | IF. | Ħ | u | 11 | Į |
| xachlorobutadiene | ND | 67 | n | # | a | ч | 71 | ** | Į |
| chloro-3-methylphenol | ND | 130 | 41 | Ħ | tr | 11 | (1 | 11 | Į |
| nethylnaphthalene | ND | 67 | ī | н | ŢI | ŧt | ít | н | l |
| xachlorocyclopentadiene | ND | 130 | н | н | # t | 11 | *1 | 15 | (|
| 1,6-trichlorophenol | ND | 130 | a | u | 19 | u | н | н | 1 |
| 1,5-trichlorophenol | ND | 67 | ft. | u | U | Ħ | o | n | 1 |
| chloronaphthalene | ND | 67 | Ħ | n | ŧ1 | 28 | 11 | n | 1 |
| nitroaniline | ND | 67 | н | 11 | ŧ | 41 | Ħ | 11 | l |
| enaphthylene | ND | 67 | 11 | #1 | 11 | п | n | n | (|
| • - | ND | 67 | н | H | н | a | H | ** | - |
| methyl phthalate | ND | 67 | B | ш | p | at . | u | 25 | - |
| 5-dinitrotoluene | ND | 67 | ¢t . | р | α | £Ţ | н | II. | |
| enaphthene | ND | 67 | H | It | tt | u | HE | 11 | , |
| nitroaniline | ND
ND | 130 | В | 17 | #t | u | 11 | It. | , |
| 1-dinitrophenol | ND
ND | 67 | ji. | ls. | u | Ħ | 11 | 19 | , |
| penzofuran | • | 67 | 51 | It | þi | Ħ | 64 | п | , |
| 1-dinitrotoluene | ND | | n . | ** | n | ø | " | 11 | , |
| nitrophenol | ND | 130 | 11 | | | 11 | ,, | " | |
| iorene | · ND | 67 | 41 | n | te | ** | Ħ | 11 | ! |
| Chlorophenyl phenyl ether | ND | 67 | 41 | н | • | | | | ! |

Vaste Stream Technology Inc.

P.O. Box 406 Buffalo NY, 14205 Project: LCS Price List

Project Number: 177 & 255 Great Arrow

Project Manager: Doug Reid

Reported: 08/25/04 15:13

| Analyte | Result | Reporting
Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|--------------------------------|-------------------------|--------------------|-------------|-----------|---------|----------|----------|--------|-------|
| BH33 (0-2) (4H12020-11) Soil | Sampled: 08/11/04 00:00 | Receive | d: 08/12/04 | 1 15:54 | | | | | |
| Diethyl phthalate | ND | 67 | ug/kg dry | l | AH41801 | 08/18/04 | 08/20/04 | 8270 | U |
| I-nitroaniline | ND | 67 | U | 11 | 11 | я | н | n | IJ |
| 1,6-Dinitro-2-methylphenol | ND | 130 | R | *1 | lt. | n | n | o o | U |
| n-nitrosodiphenylamine | ND | 67 | R | 31 | er | ģī | fi | it | U |
| bromophenylphenylether | ND | 67 | 1) | п | , h | Ħ | žī |) tr | IJ |
| auchlorobenzene | ND | 67 | 11 | n | Ħ | 1t | Ħ | #1 | U |
| entachlorophenol | ND | 130 | ŧτ | ŧf | n | 11 | н | 19 | U |
|)henanthrene | 969 | 67 | 11 | ft | II . | ** | 11 | # | |
| inthracene | 158 | 67 | ŧì | 11 | IF | 11 | şı | 31 | |
| arbazole | ND | 67 | 31 | u | n . | и | н | " | [] |
| Di-n-butyl phthalate | ND | 67 | 17 | n | u | et | n | ** | 11 |
| penzidine | ND | 330 | tt | и | II | IE | ti | 11 | U |
| luoranthene | 1070 | 67 | IP | ts | II. | n . | 11 | Ħ | |
| yrene | 1020 | 67 | fl | ř. | If | 15 | ŧ1 |) F | |
| Butyl benzyl phthalate | ND | 67 | II . | H | 17 | u | n | | U |
| 3.3'-Dichlorobenzidine | ND | 67 | 0 | 11 | B | # | 21 | 11 | U |
| Benzo (a) anthracene | 461 | 67 | 'n | st | h | 39 | 17 | \$1 | |
| hrysene | 435 | 67 | lş | 41 | H | я | ie | ts | |
| 43(2-ethylhexyl)phthalate | ND | 67 | H | 11 | 11 | п | n | ē# | LI |
| - Goctyl phthalate | ND | 67 | 41 | II. | 10 | н | 11 | 11 | U |
| Senzo (b) fluoranthene | 432 | 67 | 11 | 11 | H | H | 11 | u | |
| Benzo (k) fluoranthene | 152 | 67 | Ħ | В | н | н | n | я | |
| Benzo (a) pyrene | 335 | 67 | II . | 11 | IJ | u | Ħ | n | |
| ndeno (1,2,3-cd) pyrene | 163 | 67 | 17 | н | H | ti | Ħ | ** | |
| Dibenz (a,h) anthracene | 110 | 67 | Ħ | Ħ | 11 | Ħ | n | \$1 | |
| Benzo (g,h,i) perylene | 186 | 67 | н | и | #F | ti | It | Ħ | |
| urrogate: 2-Fluorophenol | | 59.1% | 50-1 | 12 | | ,, | ïı | " | |
| iurrogate: Phenol-d6 | | 62.7 % | 52-1 | 17 | ** | # | " | " | |
| urrogate: Nitrobenzene-d5 | | 68.1 % | 48-1. | | п | " | n | ** | |
| urrogate: 2-Fluorobiphenyl | | 75.5 % | 50-1. | 21 | п | # | ij | " | |
| urrogate: 2,4,6-Tribromophenos | ! | 85.1% | 50-1 | <i>32</i> | н | ** | " | " | |
| urrogate: Terphenyl-d14 | | 95.6 % | 36-1 | 34 | er | " | n | " | |

∴O. Box 406 Buffalo NY, 14205 Project: LCS Price List

Project Number: 177 & 255 Great Arrow

Project Manager: Doug Reid

Reported: 08/25/04 15:13

Semivolatile Organic Compounds by EPA Method 8270C Waste Stream Technology Inc.

| nalyte | Result | Reporting
Limit | Units | Dilution | Batch | Prepared | Analyzed | ,
Method | Notes |
|-----------------------------|-------------------------|--------------------|----------------|----------------------|------------|----------|----------|----------------|---------|
| H35 (0-2) (4H12020-12) Soil | Sampled: 08/11/04 00:00 | Receive | d: 08/12/0 | 4 15:54 | | | ~ | | |
| -Nitrosodimethylamine | ND | 67 | ug/kg dry | 1 | AH41801 | 08/18/04 | 08/20/04 | 8270 | l |
| s(2-chloroethyl)ether | ND | 67 | 12 | u | n | 54 | tí | 11 | () |
| ienol | ND | 130 | я | H | н | 45 | н | 11 | į |
| chlorophenol | ND | 130 | Ħ | Ħ | n | Ħ | n | †I | [] |
| 3-dichlorobenzene | ND | 67 | l t | rt . | H | rt | 11 | 41 | U |
| 4-dichlorobenzene | ND | 67 | \$\$ | 10 | #1 | II . | n | # | U |
| 2-dichlorobenzene | ND | 67 | 11 | | Ħ | ø | If | n | U |
| s(2-chloroisopropyl)ether | ND | 67 | н | Ħ | tt · | * #1 | n . | ij | U |
| enzyl alcohol | ND | 67 | 11 | " | 11 | н . | 71 | n | U |
| methylphenol | ND | 67 | tt | ,, | Ħ | tŧ | 71 | 57 | () |
| xachloroethane | ND | 67 | Ħ | II | Ħ | Ħ | н | I# | U |
| -Nitrosodi-n-propylamine | ND | 67 | ti | 31 | it | n | u | и | U |
| & 4-methylphenol | ND | 130 | 11 | ŢI | 0 | 11 | π | Ħ | Ų |
| trobenzene | ND | 67 | n. | 33 | ii | " | | n | U |
| ophorone | ND | 67 | ì | 11 | n | *11 | 11 | 11 | Į. |
| nitrophenol | ND | 130 | Iŧ | *1 | ξĺ | *1 | н | II. | t. |
| .cthylphenol | ND | 130 | н | Ħ | # | и : | 15 | 1) | l. |
| -citloroethoxy)methane | ND | 67 | 17 | 11 | Ħ | 11 | ** | 11 | l. |
| mizote acid | ND | 330 | tt | 11 | n | 11 | n | и | 1. |
| 4-dichlorophenol | ND | 130 | H | н | li I | n | n | Ħ | |
| 2.4-trichlorobenzene | ND | 67 | н | Ħ | 47 | u | в | н | į |
| phthalene | ND | 67 | pt | | p | 11 | R | n | į, |
| chloroaniline | ND | 67 | и | # | K | ** | ** | t i | i. |
| xachlorobutadiene | ND | 67 | 14 | ŧŧ | n | n | # | н | I. |
| chloro-3-methylphenol | ND | 130 | 11 | 11 | Ħ | Ħ | ** | н | ι |
| | ND | 67 | 31 | If | u | . 11 | H | u | į |
| methylnaphthalene | ND | 130 | n | н | н | ** | " | n | ì |
| xachlorocyclopentadiene | ND | 130 | at | Ħ | 3 } | īt. | 11 | # | (|
| 4.6-trichlorophenol | ND | 67 | *1 | j# | я | ii. | ŧ | 17 | į |
| 4,5-trichlorophenol | ND | 67 | n | 11 | #1 | Į1 | н | 11 | i |
| chloronaphthalene | ND
ND | 67 | 11 | n | # | " | P | н | i |
| nitroaniline | ND
ND | 67 | U | fs | bf | n | 17 | н | |
| enaphthylene | ND | 67 | Ħ | 91 | B | tr | Ħ | *1 | ·
{ |
| imethyl phthalate | | | ,, | 0 | B | P | 11 | Į? | ı.
L |
| 6-dinitrotoluene | ND
185 | 67
67 | n | 11 | ŧs | 18 | 11 | ь | , |
| enaphthene | | | | 11 | n | н | н | n | |
| nitroaniline | ND | 67 | 11 | | ŧì | n | h | 11 | l |
| 4-dinitrophenol | ND
ND | 130 | " | н " | я. | # | D. | ** | l
l |
| benzofuran | ND | 67 | " | ¥f | ₹1 | ** | ** | " | |
| 4-dinitrotoluene | ND | 67 | n | | 16 | n
n | ::
:1 | В | l |
| nitrophenol | ND | 130 | | f3
t 3 | B | 11 | R | น | ι |
| iorene | 132 | 67 | " | er
H | # | 11 | | | |
| Chlorophenyl phenyl ether | ND | 67 | " | п | ** | 11 | ** | 11 | į |

Vaste Stream Technology Inc.

Project: LCS Price List

l'.O. Box 406 Buffalo NY, 14205 Project Number: 177 & 255 Great Arrow

Project Manager: Doug Reid

Reported: 08/25/04 15:13

| Analyte | Result | Reporting
Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|-------------------------------|-------------------------|--------------------|-------------|----------|---------|----------|----------|----------|-------|
| H35 (0-2) (4H12020-12) Soil | Sampled: 08/11/04 00:00 | Receive | d: 08/12/04 | 15:54 | | | | | |
| iethyl phthalate | ND | 67 | ug/kg dry | 1 | AH41801 | 08/18/04 | 08/20/04 | 8270 | U |
| -nitroaniline | ND | 67 | H | ** | #1 | . 11 | ft. | 14 | U |
| .6-Dinitro-2-methylphenol | ND | 130 | It | 91 | †\$ | lf . | It | Ħ | () |
| -nitrosodiphenylamine | ND | 67 | IT | 9† | и | n | I) | ij | U |
| -bromophenylphenylether | ND | 67 | II. | 75 | II . | н | ** | 11 | U |
| exachlorobenzene | ND | 67 | 16 | Ħ | H | #1 | 11 | H | U |
| entachlorophenol | ND | 130 | Ħ | ä | и | n | H | H | U |
| henanthrene | 1850 | 67 | 11 | Ħ | ri . | 15 | H | II. | |
| nthracene | 327 | 67 | 11 | н | ч | H | It | " | |
| arbazole | 122 | 67 | ** | R | #1 | " | н | 11 | |
| ii-n-butyl phthalate | ND | 67 | Ħ | B | łı | и | *1 | Ħ | IJ |
| enzidine | ND | 330 | #1 | В | n | # | H | 11 | [] |
| uoranthene | 2210 | 67 | n | ** | 17 | 11 | и | # | |
| yrene | 2230 | 67 | 21 | (1 | ı | #1 | tı | R | |
| utyl benzyl phthalate | ND | 67 | H | u | It | # | H | п | Į. |
| -Dichlorobenzidine | ND | 67 | 71 | iı | h | Ħ | ıţ | ža | () |
| , azo (a) anthracene | 902 | 67 | п | 71 | n | t) | · at | rī | |
| hrysene | 818 | 67 | 78 | ** | 4t | ** | 11 | tt | |
| is(2-ethylhexyl)phthalate | ND | 67 | ય | ji | Ħ | ti | н | tı | U |
| i-n-octyl phthalate | ND | 67 | я | 49 | it | n |)ı | n | U |
| enzo (b) fluoranthene | 892 | 67 | R | 11 | IJ | 11 | 11 | ** | |
| enzo (k) fluoranthene | _326 | 67 | H | n | tt | ** | 71 | U | |
| lenzo (a) pyrene | (760) | 67 | tŧ | II. | tt | Ħ | n | я . | |
| ndeno (1,2,3-cd) pyrene | 319 | 67 | f f | R | tt | н | n | ** | |
| libenz (a,h) anthracene | 135 | 67 | 11 | n | 18 | B | Ħ | II | |
| lenzo (g,h,i) perylene | 315 | 67 | 75 | n | 17 | (I | 11 | 11 | |
| urrogate: 2-Fluorophenol | | 62.7% | 50-1 | 12 | 71 | 77 | 'n | ñ | |
| urrogate: Phenol-d6 | | 65.5 % | 52-1 | 17 | n | n | 11 | n | |
| urrogate: Nitrobenzene-d5 | | 70.2 % | 48-1 | 22 | н | 11 | # | n | |
| urrogate: 2-Fluorobiphenyl | | 77.5 % | 50-1 | 21 | n | . " | ,, | " | |
| urrogate: 2,4,6-Tribromopheno | l | 93.4 % | 50-1 | 32 | " | " | " | " | |
| urrogate: Terphenyl-d14 | | 98.9 % | 36-1 | 34 | и | ! | n · | " | |

P.O. Box 406 Buffalo NY, 14205 Project: LCS Price List

Project Number: 177 & 255 Great Arrow

Project Manager: Doug Reid

Reported: 08/25/04 15:13

Semivolatile Organic Compounds by EPA Method 8270C

Waste Stream Technology Inc.

| nalyte | Result | Reporting
Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|-----------------------------|-------------------------|--------------------|-------------|----------|---------|-------------|-----------|--------|-------------|
| H36 (4-8) (4H12020-18) Soil | Sampled: 08/12/04 00:00 | Receive | d: 08/12/04 | 15:54 | | | | | |
| -Nitrosodimethylamine | ND | 67 | ug/kg dry | 1 | AH41801 | 08/18/04 | 08/20/04 | 8270 | |
| s(2-chloroethyl)ether | ND | 67 | н | # | ú | 11 | u, | 31 | Ę |
| ienol - | ND | 130 | Ħ | 31 | H | U | " | . 4 | ţ |
| chlorophenol | ND | 130 | 99 | 11 | rŧ | н | n | 11 | į |
| 3-dichlorobenzene | ND | 67 | jt. | U | it | +1 | n | ıı, | ι |
| 4-dichlorobenzene | ND | 67 | #1 | tj | Ħ | tr | 51 | u | 1. |
| 2-dichlorobenzene | ND | 67 | n | н | н | 58 | tr | ń | 1 |
| s(2-chloroisopropyl)ether | ND | 67 | IF | 11 | н | 51 | н | IF | |
| nzyl alcohol | ND | 67 | Ħ | ŧη | jŧ. | Ħ | Ħ | и | Ĺ |
| methylphenol | ND | 67 | n | If | и | tt | 11 | ρ | į. |
| xachloroethane | ND | 67 | п | Ħ | 11 | ш | u | п | Į. |
| -Nitrosodi-n-propylamine | ND | 67 | II | и | 16 | 41 | 11 | U | a. |
| & 4-methylphenol | ND | 130 | et | н | я | \$ ‡ | 18 | ŧı | į |
| trobenzene | ND | . 67 | Ħ | n | ŧ) | 83 | ŧį | 11 | l. |
| ophorone | ND | 67 | 11 | 1f | 0 | н | и | u | |
| nitrophenol | ND | 130 | II | ,, | и | ч | н | 11 | (|
| methylphenol | ND | 130 | Ħ | n | 8 | 11 | EF . | H | į, |
| -chloroethoxy)methane | ND | 67 | n | н | H | 11 | Ħ | н | į. |
| nzoic acid | ND | 330 | u | ** | 11 | II | ** | 41 | |
| 4-dichlorophenol | ND | 130 | It | 4 | п | II | 17 | Ħ | ι. |
| 2,4-trichlorobenzene | ND | 67 | H | н | H | 9 | +5 | н | <u>.</u> |
| phthalene | ND | 67 | Ħ | n | #1 | a a | Þf. | έq | Ĺ |
| chloroaniline | ND | 67 | # | 41 | fi | U | В | n | į. |
| xachlorobutadiene | ND | 67 | • | It | н | 11 | Ir | н | į. |
| chloro-3-methylphenol | ND | 130 | 11 | Ħ | 11 | 11 | H | н | į. |
| methylnaphthalene | 90 | 67 | и | н | H | н | н | þ | |
| xachlorocyclopentadiene | ND | 130 | Ħ | 31 | R | Ħ | н | 44 | ŧ. |
| 1.6-trichlorophenol | ND | 130 | tt | 11 | n | 1) | н | 11 | Į. |
| 1,5-trîchlorophenol | ND | 67 | ly. | 17 | h | 11 | н | ย | į. |
| chloronaphthalene | ND | 67 | Ħ | · H | †I | ** | 71 | н | l, |
| nitroaniline | ND | 67 | Ħ | 11 | ħ | " | н | Ħ | l: |
| enaphthylene | ND | 67 | ** | 11 | n | 11 | Ħ | 11 | l: |
| methyl phthalate | ND | 67 | h | u | 27 | Ħ | п | 11 | U |
| i-dinitrotoluene | ND | 67 | H | 31 | pt . | . 19 | 89 | 13 | į. |
| enaphthene | ND | 67 | n | It | II. | 11 | 16 | п | Li |
| itroaniline | ND | 67 | н | er e | 18 | ** | ** | я | (|
| 1-dinitrophenol | ND | 130 | tr | 11- | þr | 29 | ** | 11 | (; |
| r-ammophonor
penzofuran | ND | 67 | ŧī | Eir | 18 | ¥f | н | n | ** |
| I-dinitrotoluene | ND | 67 | 15 | 11- | ħ | 17 |)te | I† | į. |
| nitrophenol | ND | 130 | π | 11 | ц | 11 | ır | h | į, |
| orene | ND | 67 | н | n | п | +3 | et | (r | t.
Li |
| Chlorophenyl phenyl ether | ND | 67 | п | u | a | Ħ | 19 | it . | į, |

/aste Stream Technology Inc.

P.O. Box 406 Buffalo NY, 14205 Project: LCS Price List

Project Number: 177 & 255 Great Arrow

Project Manager: Doug Reid

Reported: 08/25/04 15:13

| nalyte | Result | Reporting
Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|------------------------------|-------------------------|--------------------|-------------|------------|------------|----------|----------|-----------|-------|
| H36 (4-8) (4H12020-18) Soil | Sampled: 08/12/04 00:00 | Receive | d: 08/12/04 | 15:54 | | | | | |
| iethyl phthalate | ND | 67 | ug/kg dry | 1 | AH41801 | 08/18/04 | 08/20/04 | 8270 | U |
| nitroaniline | ND | 67 | p | ts . | 11 | Н | tı | u | Į) |
| 6-Dinitro-2-methylphenol | ND | 130 | II. | 11 | 11 | H | n | #1 | () |
| nitrosodiphenylamine | ND | 67 | II . | . " | P | It | п | !* | U |
| bromophenylphenylether | ND | 67 | 11 | " | H | Ħ | H | n | U |
| exachlorobenzene | ND | 67 | н | н | ħ | It | f‡ | 91 | t! |
| entachlorophenol | ND | 130 | 11 | ri | II. | D | n | şı | U |
| ienanthrene | 93 | 67 | 11 | " | n | Ħ | u | £1 | |
| ithracene | ND | 67 | n | *1 | tr | 71 | u | н | į. |
| ırbazole | ND | 67 | Ħ | ŧI | łı | ff. | žŧ | f† | l |
| i-n-butyl phthalate | ND | 67 | 11 | ti | ţı | # | b | u | Į |
| mzidine | ND | 330 | 11 | † t | 1† | 11 | н | tí | Į |
| uoranthene | 94 | 67 | #1 | U | It | łI | 11 | 19 | |
| yrene | 160 | 67 | Ħ | lş | B | # | н | 11 | |
| utyl benzyl phthalate | ND | 67 | 11 | U | Ħ | Ħ | Ħ | 41 | Į |
| 3 -Dichlorobenzidine | ND | 67 | 11 | 11 | Ħ | U | " | 15 | (|
| aro (a) anthracene | ND | 67 | t# | 41 | 11 | 11 | 41 | II. | l, |
| irysene | ND | 67 | ş r | п | N | ŧτ | В | 11 | ι |
| s(2-ethylhexyl)phthalate | ND | 67 | *1 | Ħ | 11 | 59 | 11 | я | Ę |
| i-n-octyl phthalate | ND | 67 | Ħ | 14 | В | 0 | a | н | Į. |
| enzo (b) fluoranthene | ND | 67 | lt | ** | t t | и | #1 | u. | Į. |
| enzo (k) fluoranthene | ND | 67 | f# | и | tt | 16 | n | 11 | τ |
| enzo (a) pyrene | ND | 67 | н | Ħ | 11 | Ħ | 11 | ţi. | Į |
| deno (1,2,3-cd) pyrene | ND | 67 | В | 11 | 31 | H | U | rt | ŧ |
| ibenz (a,h) anthracene | ND | 67 | tt | 11 | 11 | II. | it . |)ı | ι |
| enzo (g,h,i) perylene | ND | 67 | 19 | ít. | я . | 31 | 11 | u | 1 |
| irrogate: 2-Fluorophenol | | 68.2 % | 50-1 | 112 | <i>p</i> | | i i | 'n | |
| ırrogate: Phenol-d6 | | 69.4 % | 52-1 | | rr | " | " | # | |
| irrogate: Nitrobenzene-d5 | | 77.4 % | 48- | | " | H | " | n | |
| irrogate: 2-Fluorobiphenyl | | 81.6% | 50-1 | | " | n | p | rf . | |
| wrogate: 2,4,6-Tribromopheno | ol. | 83.2 % | 50-1 | | # | ** | n | " | |
| urrogate: Terphenyl-d14 | - | 106 % | 36- | | H | п | " | и | |

Project: LCS Price List

○ D. Box 406○ Butfalo NY, 14205

Project Number: 177 & 255 Great Arrow

Project Manager: Doug Reid

Reported: 08/25/04 15:13

Semivolatile Organic Compounds by EPA Method 8270C Waste Stream Technology Inc.

| ınalyte | Result | Reporting
Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|-----------------------------|-------------------------|--------------------|----------------|----------|------------|------------|----------|--------|-------|
| H37 (4-6) (4H12020-14) Soil | Sampled: 08/12/04 00:00 | Receive | d: 08/12/04 | 1 15:54 | | | | | |
| -Nitrosodimethylamine | ND | 67 | ug/kg dry | l | AH41801 | 08/18/04 | 08/20/04 | 8270 | Ţ |
| s(2-chloroethyl)ether | ND | 67 | и | 49 | 19 | 19 | 71 | Ħ | Į. |
| renol | ND | 130 | н | u. | 17 | R | 11 | 11 | į. |
| chlorophenoi | ND | 130 | 11 | 10 | n | 15 | sı | 13 | į |
| 3-dichlorobenzene | ND | 67 | 18 | 11 | Ħ | 17 | 11 | +1 | 1. |
| 4-dichlorobenzene | ND | 67 | # | 11 | R | " | 11 | | l |
| 2-dichlorobenzene | ND | 67 | Ħ | íf | # | В | Ħ | n | ι |
| s(2-chloroisopropyl)ether | ND | 67 | 11 | It | # | b | br | п | i |
| enzyl alcohol | ND | 67 | ц | 11 | st | U | IT | n | . 1 |
| methylphenol | ND | 67 | 11 | n | #* | 0 | н | 21 | Ų. |
| exachloroethane | ND | 67 | 49 | u | # | U | If | ** | Į. |
| -Nitrosodi-n-propylamine | ND | 67 | n | Ħ | u | Ħ | ŢI. | n | l |
| & 4-methylphenol | ND | 130 | ü | н | " | TI TI | 71 | II. | 1 |
| trobenzene | ND | 67 | " | Ħ | и | +1 | ri . | tı | Į. |
| ophorone | ND | 67 | 11 | Ħ | D | H | n | 54 | ŧ |
| nitrophenol | ND | 130 | 31 | н | U | ij | В | ŧŧ | l |
| · ::methylphenol | ND | 130 | п | h | u | II | 11 | p. | t |
| -chloroethoxy)methane | ND | 67 | ** | If | 11 | " | u | 78 | ţ |
| inzole acid | ND | 330 | 71 | n | 11 | tı | 11 | II | l |
| 4-dichlorophenol | ND | 130 | ţi. | н | 91 | U | e | a | l |
| 2,4-trichlorobenzene | ND | 67 | u | h | Ħ | Ħ | 73 | fi | J |
| iphthalene | ND | 67 | n | Ħ | th | ŧı | 21 | ** | Į |
| chloroaniline | ND | 67 | II . | н | 71 | 31 | je. | n | ι |
| xachlorobutadiene | ND | 67 | If | 11 | ď | Ħ | n | я | ŧ |
| chloro-3-methylphenol | ND | 130 | Ħ | 19 | 11 | Ħ | B | π | Į |
| methylnaphthalene | ND | 67 | 14 | # | Ħ | II . | ĸ | 58 | ι |
| xachlorocyclopentadiene | ND | 130 | n | н | #1 | † † | u | н | 1. |
| 4,6-trichlorophenol | ND | 130 | tı | ţi. | Ŧ ? | # | \$1 | ti | L |
| 4.5-trichlorophenol | ND | 67 | Ü | ti | н | и | 8 | . a | |
| chloronaphthalene | ND | 67 | 11 | 19 | 31 | H | 77 | fi | j |
| nitroaniline | ND | 67 | u u | ti | 25 | н | н | et | l |
| enaphthylene | ND | 67 | U | Ħ | 27 | II . | ь | 19 | 1, |
| methyl phthalate | ND | 67 | 13 | Ħ | Ħ | u | В | H | ţ |
| 5-dinitrotoluene | ND | 67 | ** | n | 11 | n | If | t* | l |
| enaphthene | ND | 67 | ŧ ₁ | 11 | \$4 | n | в | U | ι |
| nitroaniline | ND | 67 | u | п | н | 19 | В | п | t |
| 4-dinitrophenol | ND | 130 | п | ŧı | H | Ħ | н | u | ι |
| benzofuran | ND | 67 | n | 11 | ţ6 | ŦI | fr . | | t |
| 4-dinitrotoluene | ND | 67 | n | 11 | If | 11 | t) | ţs . | ŧ |
| nitrophenol | ND | 130 | н | u | н | 13 | ** | Ħ | ι |
| iorene | ND | 67 | y u | ŧI | II. | Ħ | 11 | Ħ | ι |
| Chlorophenyl phenyl ether | ND | 67 | п | 11 | " | n | н | п | ι |

Vaste Stream Technology Inc.

P.O. Box 406 Buffalo NY, 14205 Project: LCS Price List

Project Number: 177 & 255 Great Arrow

Project Manager: Doug Reid

Reported: 08/25/04 15:13

| nalyte | Result | Reporting
Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|------------------------------|--|--------------------|-------------|----------|------------|----------|----------|--------|-------|
| H37 (4-6) (4H12020-14) Soil | Sampled: 08/12/04 00:00 | Receive | d: 08/12/04 | 15:54 | | | | | |
| ethyl phthalate | ND | 67 | ug/kg dry | 1 | AH41801 | 08/18/04 | 08/20/04 | 8270 | U |
| nitroaniline | ND | 67 | R | q | #1 | n . | н | W | U |
| 5-Dinitro-2-methylphenol | ND | 130 | tt | 11 | 11 | Ð | u | ıı . | [] |
| nitrosodiphenylamine | ND | 67 | H | H | H | 11 | n | 1) | 11 |
| bromophenylphenylether | ND | 67 | ŦI | н | 11 | Ð | u | 11 | [] |
| xachlorobenzene | ND | 67 | Ħ | н | ** | D | н | a a | U |
| ntachlorophenol | ND | 130 | u | . 10 | 17 | D | n | U | U |
| enanthrene | ND | 67 | Ħ | ข | Ff. | *1 | 11 | 16 | U |
| thracene | ND | 67 | п |)7 | 17 | В | В | 49 | U |
| rbazole | ND | 67 | ŋ | n | 59 | U | II. | 17 | U |
| -n-butyl phthalate | ND | 67 | H | u | 11 | n . | II. | tr | U |
| nzidine | ND | 330 | l# | H | 11 | 11 | \$1 | स | U |
| ioranthene | ND | 67 | lit | IS | 11 | \$1 | n | Ħ | U |
| rene | ND | 67 | \$1 | rt | t f | 0 | 11 | υ, | U |
| ityl benzyl phthalate | ND | 67 | 11 | ti | 1+ | ŧŧ | u | +1 | U |
| 3'-Dichlorobenzidine | ND | 67 | ht | \$# | 45 | tt | 16 | Ħ | U |
| nzo (a) anthracene | ND | 67 | н | †ŧ | 91 | Ħ | 19 | tţ | [] |
| rysene | ND | 67 | н | Ħ | rt | #1 | 11 | в | U |
| 42-ethylhexyl)phthalate | 89 | 67 | Ħ | u | F 7 | Ħ | # | B | |
| -n-octyl phthalate | ND | 67 | Ħ | H | r; | a | 11 | # | U |
| nzo (b) fluoranthene | ND | 67 | ** | 11 | Ħ | я | ŧŧ | н | U |
| nzo (k) fluoranthene | ND | 67 | U | n | Ħ | †I | # | Ħ | U |
| nzo (a) pyrene | ND | 67 | II | R | II . | 1) | H | tı | U |
| teno (1,2,3-cd) pyrene | ND | 67 | į+ | 12 | tr. | tt | u | tí | U |
| benz (a,h) anthracene | ND | 67 | 11 | 11 | H | 31 | н | 15 | U |
| nzo (g,h,i) perylene | ND | 67 | 11 | 15 | н | 11 | 'n | 12 | U |
| rrogate: 2-Fluorophenol | ······································ | 59.1 % | 50-1 | 12 | | " | ,, | i, | ÷ |
| rrogate: Phenol-d6 | | 62.0 % | 52-1 | | " | " | n | # | |
| rrogate: Nitrobenzene-d5 | | 69.1 % | 48-1. | | # | n | u | Ħ | |
| rogate: 2-Fluorobiphenyl | | 78.5 % | 50-I. | | ** | 11 | ** | # | |
| rogate: 2,4,6-Tribromophenol | | 100 % | 50-1 | | " | " | " | n | |
| rogate: Terphenyl-d14 | | 104 % | 36-1. | 34 | " | " | " | " | |

O. Box 406 Buffalo NY, 14205 Project: LCS Price List

Project Number: 177 & 255 Great Arrow

Project Manager: Doug Reid

Reported: 08/25/04 15:13

Semivolatile Organic Compounds by EPA Method 8270C Waste Stream Technology Inc.

| nalyte | Result | Reporting
Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|--------------------------------|-------------------------|--------------------|------------|----------------|------------|------------|----------|-------------|-------|
| 138 (4-6) (4H12020-15) Soil | Sampled: 08/12/04 00:00 | Receive | d: 08/12/0 | 4 15:54 | | | | | |
| Nitrosodimethylamine | ND | 67 | ug/kg dry | ı | AH41801 | 08/18/04 | 08/20/04 | 8270 | [J |
| (2-chloroethyl)ether | ND | 67 | * | 11 | 11 | (t | и | 0 | IJ |
| enol | ND | 130 | 11 | 11 | 19 | π | 11 | บ | U |
| chlorophenol | ND | 130 | 15 | В | 11 | Ħ | 0 | н | () |
| 3-dichlorobenzene | ND | 67 | 27 | II | Ħ | E† | Ħ | 17 | f) |
| I-dichlorobenzene | ND | 67 | 3 1 | u | 11 | n | n | D | ij |
| !-dichlorobenzene | ND | 67 | Ħ | 11 | 91 | n | В | ŧŧ | IJ |
| (2-chloroisopropyl)ether | ND | 67 | 88 | 11 | Ħ | #1 | ŧı | Ħ | U |
| nzyl alcohol | ND | 67 | tt . | n | n | 3 F | ង | Ħ | U |
| nethylphenol | ND | 67 | ŧ | 0 | It | В | Ħ | n n | () |
| xachloroethane | ND | 67 | ** | ** | H | л | et | " | IJ |
| Nitrosodi-n-propylamine | ND | 67 | *1 | ** | Ħ | 59 | u | 19 | U |
| & 4-methylphenol | ND | 130 | . 17 | it. | \$1 | n | 11 | o o | U |
| robenzene | ND | 67 | f 7 | n | f t | n | lt . | a | U |
| phorone | ND | 67 | 9 t | n | 11 | 16 | ıt | H | U |
| Frophenol | ND | 130 | 16 | 11 | jŧ. | 17 | я | n | IJ |
| methylphenol | ND | 130 | fi | n | ti | n | а | 11 | U |
| s(2-chloroethoxy)methane | ND | 67 | 17 | n | n | и | н | " | U |
| nzoic acid | ND | 330 | 11 | u | н | 11 | a | 0 | 11 |
| I-dichlorophenol | ND | 130 | 17 | U | н | 91 | u | Я | () |
| 2,4-trichlorobenzene | ND | . 67 | 11 | 11 | В | 11 | ř | II | U |
| phthalene | ND | 67 | 0 | Ħ | n | и | H | 71 | IJ |
| chloroaniline | ND | 67 | " | 17 | н | 19 | n | 25 | Ų |
| xachlorobutadiene | ND | 67 | II. | н | *1 | *11 | a | bs | Į. |
| chloro-3-methylphenol | ND | 130 | II. | H | * | н | B | u | U |
| nethylnaphthalene | ND | 67 | 11 | п | 11 | n | R | Ħ | U |
| xachlorocyclopentadiene | ND | 130 | 17 | D | If | Ħ | U | н | U |
| 1,6-trichlorophenol | ND | 130 | п | u | ķi | n | 78 | et | υ |
| k,5-trichlorophenol | ND | 67 | H | н | n | n | R | er | t |
| :hloronaphthalene | ND | 67 | 17 | 11 | 31 | 21 | n | Ŧį | t. |
| nitroaniline | ND | 67 | μ | 16 | н | 11 | w | n | 1. |
| naphthylene | ND | 67 | n | f t | ** | #t | v | n | {. |
| methyl phthalate | ND | 67 | U | n | H | 0 | n | 17 | l |
| inenty) philianate | ND | 67 | U | n | н | ŧI | n | 11 | l. |
| enaphthene | ND | 67 | н | U | н | Ħ | 35 | \$ 1 | Į |
| nitroaniline | ND | 67 | н | u u | #1 | u | n | u | (|
| | ND | 130 | tt | 21 | H | tt. | n | н | Į |
| I-dinitrophenol | ND | 67 | и | #1 | 14 | Ħ | 1Ē | п | ì |
| penzofuran
I-dinitrotoluene | ND | 67 | u | Ħ | lt. | ß | н | It | ί |
| | ND | 130 | н | ** | 5 f | " | н | ** | ì |
| nitrophenol | ND | 67 | н | † * | şı | u | 17 | ** | į |
| orene | ND | 67 | Ħ | 1¢ | Ħ | R | n | в | 1 |
| Thlorophenyl phenyl ether | ND | 07 | | | | | | • | |

/aste Stream Technology Inc.

P.O. Box 406 Buffalo NY, 14205 Project: LCS Price List

Project Number: 177 & 255 Great Arrow

Project Manager: Doug Reid

Reported: 08/25/04 15:13

| .nalyte | Result | Reporting
Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|-------------------------------|-------------------------|--------------------|----------------|----------|---------|--------------------|----------|----------|-------|
| | | | | | Datell | 1 Tepated | Anatyzeu | 141C(nod | Hotes |
| H38 (4-6) (4H12020-15) Soil | Sampled: 08/12/04 00:00 | | | 15:54 | | | | | |
| iethyl phthalate | ND | 67 | ug/kg dry | 1 | AH41801 | 08/18/04 | 08/20/04 | 8270 | l |
| nitroaniline | ND | 67 | н | If | 75 | n | şı | Ħ | l |
| 6-Dinitro-2-methylphenol | ND | 130 | n | 1! | Ħ | Ħ | H | н | į |
| nitrosodiphenylamine | ND | 67 | łī | 17 | Ħ. | lt. | и | 11 | i |
| bromophenylphenylether | ND | 67 | 15 | 91 | ŧr | 11 | 11 | u u | ŧ |
| xachlorobenzene | ND | 67 | łp | ## | žŧ | II. | Ħ | n | 1 |
| entachlorophenol | ND | 130 | Ħ | Ħ | t) | B | Ħ | II. | į |
| ienanthrene | ND | 67 | IL | 11 | tı | 6 | н | " | ŧ |
| ithracene | ND | 67 | B | \$1 | n | n | н | " | Į |
| rbazole | ND | 67 | 11 | 31 | ti | II | н | 9 | 1 |
| i-n-butyl phthalate | ND | 67 | ti | ti . | u | n | н | n | Ę |
| nzidine | ND | 330 | n | II | şı | n | If | ń | Į |
| ioranthene | ND | 67 | (1 | 11 | 18 | п | ı) | " | (|
| rene | ND | 67 | EF | tr | tr . | v | If | 31 | Į |
| ıtyl benzyl phthalate | ND | 67 | Ħ | 11 | н | U | b | 11 | { |
| -Dichlorobenzidine | ND | 67 | Ħ | н | 11 | 11 | π | 71 | į |
| ा (a) anthracene | ND | 67 | Ħ | 11 | II . | U | 11 | tt | 1 |
| rysene | ND | 67 | н | n | tt | U | *1 | ts | 1 |
| s(2-ethylhexyl)phthalate | 110 | 67 | Ħ | tt | ti | u | n | В | |
| i-n-octyl phthalate | ND | 67 | h | Ħ | ħ | H | n | ii. | į |
| enzo (b) fluoranthene | ND | 67 | " | 11 | ĮĮ. | H | 4 | | Į |
| enzo (k) fluoranthene | ND | 67 | н | п | fi | Ħ | н | 11 | ŧ |
| enzo (a) pyrene | ND | 67 | 11 | ĮI | н | ŧ | Ħ | ŧı | Į |
| deno (1,2,3-cd) pyrene | ND | 67 | 15 | ţı | н |) to | IF. | į į | į |
| benz (a,h) anthracene | ND | 67 | ** | Ħ | II . | n | n | Ħ | ŧ |
| enzo (g.h,i) perylene | ND | 67 | t) | U | 11 | #1 | h | # | { |
| rrogate: 2-Fluorophenol | | 67.8 % | 50-1 | 12 | | <i>n</i> · · · · · | 'n | `# ' | |
| rrogate: Phenol-d6 | | 69.7 % | 52-1 | 17 | н | H | # | " | |
| rrogate: Nitrobenzene-d5 | | 75.1% | 48-1 | 22 | н | " | ** | " | |
| rrogate: 2-Fluorobiphenyl | | 85.4% | 50-1 | | " | 31* | " | n | |
| rrogate: 2,4,6-Tribromophenol | | 96.1 % | 50-1 | 32 | " | " | H | n | |
| rrogate: Terphenyl-d14 | | 104% | 36-1 | 34 | ** | # | u | н | |

P.O. Box 406 Buffalo NY, 14205 Project: LCS Price List

Project Number: 177 & 255 Great Arrow

Project Manager: Doug Reid

Reported: 08/25/04 15:13

Semivolatile Organic Compounds by EPA Method 8270C Waste Stream Technology Inc.

| Analyte | Result | Reporting
Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|------------------------------|-------------------------|--------------------|----------------|----------|----------|----------------|-----------|------------|------------|
| 3H42 (2-4) (4H12020-16) Soil | Sampled: 08/12/04 00:00 | Receive | d: 08/12/04 | 15:54 | | | | | |
| 1-Nitrosodimethylamine | ND | 67 | ug/kg dry | 1 | AH41801 | 08/18/04 | 08/20/04 | 8270 | U |
| is(2-chloroethyl)ether | ND | 67 | " " | tı | 16 | 11 | н | 11 | |
| henol | ND | 130 | rt . | Ħ | н | li. | ft | n | U |
| -chlorophenol | ND | 130 | ıt | 91 | п | 81 | 11 | # | U |
| .3-dichlorobenzene | ND | 67 | 11 | ti | 15 | н | 11 | n | 11 |
| .4-dichlorobenzene | ND | 67 | Ħ | n | tt | It | н | 0 | U |
| .2-dichlorobenzene | ND | 67 | tt | †1 | 18 | н | ŧ | . 11 | () |
| is(2-chloroisopropyl)ether | ND | 67 | It | n | Ħ | ŢI | 11 | | U |
| enzyl alcohol | ND | 67 | †1 | ţi | b | 1) | rr | " | U |
| -methylphenol | ND | 67 | 11 | н | н | 11 | tt | | U |
| exachloroethane | ND | 67 | " | r | 44 | 11 | н | | () |
| l-Nitrosodi-n-propylamine | ND | 67 | н | н | п | Ħ | н | ., | l I |
| & 4-methylphenol | ND | 130 | 11 | n | п | 11 | | te | Į.) |
| itrobenzene | ND | 67 | 11 | D | n | lt. | 11 | " | (1 |
| ophorone | ND | 67 | n | 11 | п | н | я | ., | U |
| -nitrophenol | ND | 130 | 1) | v | U | h | | 14 | U |
| 4-dimethylphenol | ND | 130 | P | B | R | 0 | " | H | IJ |
| is(2-chloroethoxy)methane | ND | 67 | Ħ | řt. | ţ1 | 17 | | 0 | U |
| enzoic acid | ND | 330 | 16 | " | ,, | н | ** | | U |
| 4-dichlorophenol | ND | 130 | ** | Ú | H | | " | " | 11 |
| 2.4-trichlorobenzene | ND | 67 | 31 | fl | 11 | ,, | " | }1
}1 | 1) |
| iphthalene | ND | 67 | ti. | #1 | h | 15 | ** | | { 1 |
| chloroaniline | ND | 67 | I) | 11 | ** | şı | n | | U |
| exachlorobutadiene | ND | 67 | ti | H | Ħ | | u | ts | U |
| chloro-3-methylphenol | ND | 130 | If | n | ji | " | | 17 | U |
| methylnaphthalene | ND | 67 | #1 | H | n | .,
Et | N
|) ! | U |
| xachlorocyclopentadiene | ND | 130 | | H | n | 11 | | tt. | U |
| 4.6-trichlorophenol | ND | 130 | * 14 | 11 | | (1 | ** | 78 | U |
| 4.5-trichlorophenol | ND | 67 | ji . | В | # | ,, | | n | () |
| chloronaphthalene | ND | 67 | ,, | tı. | ,, | *1 | H | u | t1 |
| nitroaniline | ND | 67 | ft | ,, | u | 11 | 71 | н | U |
| enaphthylene | ND | 67 | " | 11 | "
" | n | n | 42 | U |
| methyl phthalate | ND | 67 | lt. | 11 | fi
11 | | fi | ĮI | U |
| 5-dinitrotoluene | ND | 67 | ti. | ''
II | n | В | IE | " | ţI |
| enaphthene | ND | 67 | |
EP | 17 | T † | īī | 17 | U |
| nitroaniline | ND | | ,, | " | | | ** | Ħ | U |
| 4-dinitrophenol | ND
ND | 67 | ** | | 11 | h | 11 | н | U |
| penzofuran | ND
ND | 130 | 11 | | 31 | 57 | li . | u | 1.5 |
| 1-dinitrotoluene | ND
ND | 67 | | " | " | Ħ | n | u | U |
| nitrophenol | | 67 | | # | ff | ij | 11 | 11 | U |
| orene | ND | 130 | " | 41 | " | n | 31 | Ħ | U |
| Chlorophenyl phenyl ether | ND | 67 | " | 11 | u | O. | U | u | U |
| omorophicity: pacity: caler | ND | 67 | 11 | и | н | PS | 11 | n | [] |

7aste Stream Technology Inc.

3uffalo NY, 14205

².O. Box 406

Project: LCS Price List

Project Number: 177 & 255 Great Arrow

Project Manager: Doug Reid

Reported: 08/25/04 15:13

| nalyte | Result | Reporting
Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|-------------------------------|-------------------------|--------------------|-------------|-----------|---------|----------|----------|---------------------------------------|---|
| 142 (2-4) (4H12020-16) Soil | Sampled: 08/12/04 00:00 | Receive | d: 08/12/04 | 15:54 | | | | | *************************************** |
| ethyl phthalate | ND | 67 | ug/kg dry | 1 | AH41801 | 08/18/04 | 08/20/04 | 8270 | U |
| nitroaniline | ND | 67 | 45 | lf. | n | 'n | Ħ | Ħ | U |
| 5-Dinitro-2-methylphenol | ND | 130 | \$1 | R | Ħ | u | Ħ | ŧt | U |
| nitrosodiphenylamine | ND | 67 | Ħ | H | н | \$t | 17 | 17 | U |
| bromophenylphenylether | ND | 67 | u | 14 | n. | tr. | n | P | U |
| xachlorobenzene | ND | 67 | н | 10 | n | H | H | н | () |
| ntachlorophenol | ND | 130 | 11 | Ħ | n | *1 | rt | R | U |
| enanthrene | ND | 67 | 11 | Ħ | н | 11 | 41 | # | U |
| thracene | ND | 67 | 81 | tı | υ, | н | te | 11 | U |
| rbazole | ND | 67 | Ħ | ti | и . | н | n | tt | U |
| -n-butyl phthalate | ND | 67 | ŧI | n | н | 11 | 11 | 9 . | U |
| nzidine | ND | 330 | ři . | 11 | ti |)Ŧ | U | Ħ | IJ |
| oranthene | ND | 67 | łI | н | " | 11 | ** | H | U |
| rene | ND | 67 | H | ti | H | n | n | ## | IJ |
| ityl benzyl phthalate | ND | 67 | n | Ħ | 19 | H | tt | Ħ | U |
| -Dichlorobenzidine | ND | 67 | 11 | *1 | t* | n | Ħ | Ħ | () |
| .xo (a) anthracene | ND | 67 | ų | 31 | ** | Ħ | ŧr | It | U |
| rysene | ND | 67 | u | U | ** | п | 29 | # | () |
| (2-ethylhexyl)phthalate | ND | 67 | 12 | It | 19 | ŧı | н | II. | U |
| -n-octyl phthalate | ND | 67 | tr tr | υ | ŧŧ | Ħ | P\$ | Ħ | U |
| nzo (b) fluoranthene | ND | 67 | ** | II . | If | Ħ | 15 | U | U |
| nzo (k) fluoranthene | ND | 67 | ŧŧ | et | P | IF | II . | я | IJ |
| nzo (a) pyrene | ND | 67 | п | n | ** | Ħ | R | tí | U |
| ieno (1,2,3-cd) pyrene | ND | 67 | 11 | H | H | 11 | н | н | U |
| benz (a.h) anthracene | ND | 67 | я | D. | " . | lf. | 31 | #1 | U |
| nzo (g.h,i) perylene | ND | 67 | ** | n | Ħ | ** | o o | n | U |
| rrogate: 2-Fluorophenol | | 72.4 % | 50-1 | 12 | и | ii ii | ï, | , , , , , , , , , , , , , , , , , , , | |
| rrogate: Phenol-d6 | | 75.0 % | 52-1 | 17 | u | n | H | " | |
| rrogate: Nitrobenzene-d5 | | 77.7 % | 48-1 | 22 | n | n | " | " | |
| rrogate: 2-Fluorobiphenyl | | 86.7 % | 50-1 | 21 | ** | " | " | " | |
| rrogate: 2,4,6-Tribromopheno. | l | 99.3 % | 50-1 | <i>32</i> | n | ,, | " | èr . | |
| rogate: Terphenyl-d14 | | 108 % | 36-1 | 34 | u | п | " | ,, | |

P.O. Box 406 Buffalo NY, 14205 Project: LCS Price List

Project Number: 177 & 255 Great Arrow

Project Manager: Doug Reid

Reported: 08/25/04 15:13

Semivolatile Organic Compounds by EPA Method 8270C Waste Stream Technology Inc.

| Analyte | Result | Reporting
Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|------------------------------|-------------------------|--------------------|-------------|------------|----------|----------|------------------|--------|-----------|
| BH43 (2-4) (4H12020-17) Soil | Sampled: 08/12/04 00:00 | Receive | d: 08/12/04 | 15:54 | | | | | |
| N-Nitrosodimethylamine | ND | 67 | ug/kg dry | 1 | AH41801 | 08/18/04 | 08/20/04 | 8270 | Į. |
| bis(2-chloroethyl)ether | ND | 67 | ti | tı | e | 19 | sı | 17 | į |
| phenol | ND | 130 | ti | 11 | b | н | H | 18 | l, |
| 2-chlorophenol | ND | 130 | н | Ħ | Ħ | Ħ · | 15 | в | t: |
| 1.3-dichlorobenzene | ND | 67 | В | 18 | 11 | tı | В | B | l. |
| 1,4-dichlorobenzene | ND | 67 | Ħ | н | 31 | U | 19 |)+ | l, |
| 1,2-dichlorobenzene | ND | 67 | n | ** | н | n | n | 11 | l. |
| bis(2-chloroisopropyl)ether | ND | 67 | H | 17 | н | Ð | Ħ | #1 | Į, |
| penzyl alcohol | ND | 67 | Ħ | ** | tt | It . | n | 31 | U |
| 2-methylphenol | ND | 67 | # | 11 | tt. | rt | ** | ¥I | Į. |
| nexachloroethane | ND | 67 | n | " | н | n | п | ŧ | (,
(,) |
| N-Nitrosodi-n-propylamine | ND | 67 | 59 | 'n | Ħ | 13 | H | บ | į, |
| 3 & 4-methylphenol | ND | 130 | 11 | f 2 | It | H | Ð | n | |
| itrobenzene | ND | 67 | ft | n | ŧI | tt | II. | 11 | () |
| sophorone | ND | 67 | ŧ | ** | *1 | | В | н | U |
| 2-nitrophenol | ND | 130 | 21 | 11 | 'n | Ħ | R | 74 | U |
| ¹ 4-dimethylphenol | ND | 130 | ŧI | Ħ | fi | B | 12 | พ | U |
| -chloroethoxy)methane | ND
ND | 67 | В | ., | It | IJ | ır | t! | U |
| izoie acid | ND | 330 | It | n | 11 | ži | tt. | 52 | Ų |
| 2,4-dichlorophenol | ND | 130 | a | 10 | ŧł | 11 | ** | n | U |
| 1,2,4-trichlorobenzene | ND
ND | 67 | 11 | 31 | 71 | # | #
| If | U |
| naphthalene | ND
ND | 67 | t1 | n | ."
₹I | 11 | 71 | 17 | () |
| I-chloroaniline | ND | | lt. | n | | в. | u
u | | U |
| nexachlorobutadiene | | 67 | R | " | " | 14 | te
te | | U |
| l-chloro-3-methylphenol | ND | 67 | ** | tr | 11 | 19 | | et | U |
| | ND | 130 | | | | | h | lt. | 1) |
| 2-methylnaphthalene | ND | 67 | # | 11 | 14 | н | Iŧ | ₹# | U |
| nexachlorocyclopentadiene | ND | 130 | l1 | п | tl | н | н . | 72 | U |
| 2,4,6-trichlorophenol | ND | 130 | Ħ | 11 | H | 11 | \$ \$ | ŧį | Į Į |
| .4.5-trichlorophenol | ND | 67 | Ħ | EE. | H | ŧ | Ħ | ## | ţJ |
| -chloronaphthalene | ND | 67 | н | 79 | It | ** | ** | ** | U |
| -nitroaniline | ND | 67 | †1 | 38 | # | 19 | fI | 13 | U |
| cenaphthylene | ND | 67 | 17 | n | n | n | Ħ | 23 | U |
| Dimethyl phthalate | ND | 67 | Ħ | н | #1 | H | u | ēτ | IJ |
| ,6-dinitrotoluene | ND | 67 | bj | 11 | Ħ | 84 | в | п | Ų |
| cenaphthene | ND | 67 | , n | ** | н | n | n | n | U |
| -nitroaniline | ND | 67 | ų | 71 | u | 11 | н | IP | U |
| .4-dinitrophenol | ND | 130 | B | u | U | 41 | u u | ч | IJ |
| ibenzofuran | ND | 67 | н | ii | D | н | Ħ | n n | Į. |
| .4-dinitrotoluene | ND | 67 | B | 11 | 11 | 19 | 19 | ** | U |
| -nitrophenol | ND | 130 | ** | 89 | h | * | 17 | n | 11 |
| uorene | ND | 67 | 11 | 19 | H | 11 | £† | н | Ù |
| -Chlorophenyl phenyl ether | ND | 67 | st | 24 | Ħ | Ħ | #7 | n | U |

Waste Stream Technology Inc.

Project: LCS Price List

P.O. Box 406 Buffalo NY, 14205 Project Number: 177 & 255 Great Arrow

Project Manager: Doug Reid

Reported: 08/25/04 15:13

| nalyte | Result | Reporting
Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|------------------------------|---|--------------------|-------------|-----------|--|----------|----------|--------|-------|
| H43 (2-4) (4H12020-17) Soil | Sampled: 08/12/04 00:00 | Received | d: 08/12/04 | 15:54 | | | | | |
| ethyl phthalate | ND | 67 | ug/kg dry | 1 | AH41801 | 08/18/04 | 08/20/04 | 8270 | 11 |
| retroaniline | ND | 67 | ** | 1) | t7 | tt | I† | 11 | U |
| Protro-2-methylphenol | ND | 130 | Ħ | Ħ | H | ft | н | В | U |
| mrosodiphenylamine | ND | 67 | 3) | н | 19 | 1f | η | 14 | Ü |
| bromophenylphenylether | ND | 67 | ft. | ÞŦ | 5 9 | If | ır | 41 | U |
| xachlorobenzene | ND | 67 | 17 | # | Ħ | if . | IF | v | U |
| ntachlorophenol | ND | 130 | Ħ | u | Ħ | 41 |) i | ** | U |
| enanthrene | ND | 67 | ąı. | н | ii | \$1 | p | n | U |
| thracene | ND | 67 | j) | Ħ | u | 11 | 11 | h | U |
| rbazole | ND | 67 | " | IJ | ** | 7* | u | п | 1) |
| -n-butyl phthalate | ND | 67 | H | н | #1 | ** | n | и | U |
| nzidine | ND | 330 | †1 | tr | 31 | 11 | 11 | H | U |
| oranthene | ND | 67 | ** | It | st | и | . u | 91 | U |
| rene | ND | 67 | tt. | n | Ħ | н | а | n | U |
| tyl benzyl phthalate | ND | 67 | H | # | Ħ | n | п | Ħ | U |
| -Dichlorobenzidine | ND | 67 | 11 | н | 34 | п | н | 14 | U |
| zo (a) anthracene | ND | 67 | n | ** | †I | e e | 31 | 11 | U |
| ysene | ND | 67 | ** | rı . | βt | u | я | #t | U |
| (2-ethylhexyl)phthalate | ND | 67 | 11 | п | Ħ | 16 | #4 | | (1 |
| -n-octyl phthalate | ND | 67 | i) | ţi | 11 | št | ft | ts | U |
| nzo (b) fluoranthene | ND | 67 | U | 11 | u | 11 | 19 | n | U |
| nzo (k) fluoranthene | ND | 67 | O | ıı | #1 | #7 | Ħ | н | 11 |
| nzo (a) pyrene | ND | 67 | H | н | ti | 17 | 15 | ii . | U |
| leno (1,2,3-cd) pyrene | ND | 67 | Ħ | n | al . | 11 | R | п | U |
| penz (a,h) anthracene | ND | 67 | 11 | H | ŧ | n | \$F | Ħ | U |
| nzo (g,h,i) perylene | ND | 67 | u | 17 | 11 | ii. | I7 | Ħ | U |
| rogate: 2-Fluorophenol | and and the second second commencer and the second | 67.5% | 50-1 | <u>12</u> | ······································ | | 'n | ** | |
| rogate: Phenol-d6 | y | 70.3 % | 52-1 | | " | " | 77 | t, | |
| rogate: Nitrobenzene-d5 | | 75.7 % | 48-1 | 22 | Ħ | " | n | ,, | |
| rogate: 2-Fluorobiphenyl | | 84.3 % | 50-1 | | <i>p</i> | ** | ** | ,, | |
| rogate: 2,4,6-Tribromophenol | | 100 % | 50-1 | 32 | " | n | n | " | |
| rogate: Terphenyl-d14 | | 107% | 36-1 | | " | " | " | " | |

Project: LCS Price List

P.O. Box 406 Buffalo NY, 14205 Project Number: 177 & 255 Great Arrow

Project Manager: Doug Reid

Reported: 08/25/04 15:13

Conventional Chemistry Parameters by APHA/EPA Methods Waste Stream Technology Inc.

| Analyte | Result | Reporting
Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|------------------------------|-------------------------|--------------------|------------|--|---------|----------|----------|---------------|---|
| H20 (2-4) (4H12020-01) Soil | Sampled: 08/11/04 00:00 | Received | - 08/12/0/ | | | | | | |
| 6 Solids | 81.5 | 0.1 | % | 1 13.34 | AH41805 | 08/17/04 | 08/18/04 | 07 | |
| a Sonus | 61.5 | 0.1 | 76 | 1 | AH41003 | 08/17/04 | 08/18/04 | % calculation | |
| H21 (2-4) (4H12020-02) Soil | Sampled: 08/11/04 00:00 | Received | : 08/12/0 | 4 15:54 | | | | | |
| 6 Solids | 80.4 | 0.1 | % | j. | AH41707 | 08/16/04 | 08/17/04 | % calculation | |
| H22 (6-8) (4H12020-03) Soil | Sampled: 08/11/04 00:00 | Received | : 08/12/04 | 1 15:54 | | • | | | |
| 6 Solids | 83.5 | 0.1 | % | 1 | AH41707 | 08/16/04 | 08/17/04 | % calculation | |
| H23 (0-2) (4H12020-04) Soil | Sampled: 08/11/04 00:00 | Received | : 08/12/04 | 15:54 | | | ٠ | | |
| Solids | 75.4 | 0.1 | % | 1 | AH41707 | 08/16/04 | 08/17/04 | % calculation | |
| H24 (0-2) (4H12020-05) Soil | Sampled: 08/11/04 00:00 | Received | : 08/12/04 | 1 15:54 | | | | | |
| > Solids | 79.7 | 0.1 | % | 1 | AH41707 | 08/16/04 | 08/17/04 | % calculation | |
| H25 (2-4) (4H12020-06) Soil | Sampled: 08/11/04 00:00 | Received | : 08/12/04 | 15:54 | | | | | |
| › Solids | 68.8 | 0.1 | % | 1 | AH41707 | 08/16/04 | 08/17/04 | % calculation | |
| 1126 (0-2) (4H12020-07) Soil | Sampled: 08/11/04 00:00 | Received | : 08/12/04 | 15:54 | | | | | |
| Solids | 74.0 | 0.1 | % | The state of the s | AH41707 | 08/16/04 | 08/17/04 | % calculation | |
| H27 (2-4) (4H12020-08) Soil | Sampled: 08/11/04 00:00 | Received | 08/12/04 | 15:54 | | | | | |
| Solids | 81.2 | 0.1 | % | 1 | AH41907 | 08/18/04 | 08/19/04 | % calculation | |
| H28 (0-2) (4H12020-09) Soil | Sampled: 08/11/04 00:00 | Received: | 08/12/04 | 15:54 | | | | | |
| Solids | 77.1 | 0.1 | % | 1 | AH41707 | 08/16/04 | 08/17/04 | % calculation | *************************************** |

'.O. Box 406 3uffalo NY, 14205 Project: LCS Price List

Project Number: 177 & 255 Great Arrow

Project Manager: Doug Reid

Reported: 08/25/04 15:13

Conventional Chemistry Parameters by APHA/EPA Methods Waste Stream Technology Inc.

| nalyte | Result | Reporting
Limit | Units | Dilution | Batch | Prepared | Analyzed | ,
Method | Notes |
|-----------------------------|-------------------------|--------------------|-----------|----------|---------|----------|----------|---------------|--|
| 129 (0-2) (4H12020-10) Soil | Sampled: 08/11/04 00:00 | Received | : 08/12/0 | 4 15:54 | | | | | |
| Solids | 81.2 | 0.1 | % | 1 | AH41707 | 08/16/04 | 08/17/04 | % calculation | |
| I33 (0-2) (4H12020-11) Soil | Sampled: 08/11/04 00:00 | Received | : 08/12/0 | 4 15:54 | | | | | |
| Solids | 76.1 | 0.1 | % | 1 | AH41707 | 08/16/04 | 08/17/04 | % calculation | |
| 135 (0-2) (4H12020-12) Soil | Sampled: 08/11/04 00:00 | Received | : 08/12/0 | 4 15:54 | | | | | |
| Solids | 75.5 | 0.1 | % | 1 | AH41707 | 08/16/04 | 08/17/04 | % calculation | |
| 136 (2-4) (4H12020-13) Soil | Sampled: 08/12/04 00:00 | Received | : 08/12/0 | 4 15:54 | | | | | |
| Solids | 75.6 | 0.1 | % | I | AH41707 | 08/16/04 | 08/17/04 | % calculation | |
| 137 (4-6) (4H12020-14) Soil | Sampled: 08/12/04 00:00 | Received | : 08/12/0 | 4 15:54 | | | | | |
| Solids | 81.6 | 0.1 | % | 1 | AH41707 | 08/16/04 | 08/17/04 | % calculation | |
| 138 (4-6) (4H12020-15) Soil | Sampled: 08/12/04 00:00 | Received | : 08/12/0 | 4 15:54 | | | | | |
| Solids | 69.8 | 0.1 | % | 1 | AH41707 | 08/16/04 | 08/17/04 | % calculation | |
| 142 (2-4) (4H12020-16) Soil | Sampled: 08/12/04 00:00 | Received | : 08/12/0 | 4 15:54 | | | | | |
| Solids | 79.1 | 0.1 | % | l | AH41707 | 08/16/04 | 08/17/04 | % calculation | ************************************** |
| 143 (2-4) (4H12020-17) Soil | Sampled: 08/12/04 00:00 | Received | : 08/12/0 | 4 15:54 | | | | | |
| Solids | 79.1 | 0.1 | % | 1 | AH41707 | 08/16/04 | 08/17/04 | % calculation | |
| 136 (4-8) (4H12020-18) Soil | Sampled: 08/12/04 00:00 | Received | : 08/12/0 | 4 15:54 | | | | | |
| Solids | 82.7 | 1.0 | % | 1 | AH41707 | 08/16/04 | 08/17/04 | % calculation | |

Project: LCS Price List

P.O. Box 406

Buffalo NY, 14205

Project Number: 177 & 255 Great Arrow

Project Manager: Doug Reid

Reported: 08/25/04 15:13

Notes and Definitions

U Analyte included in the analysis, but not detected

S-04 The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.

The surrogate recovery for this sample is not available due to sample dilution required from high analyte concentration and/or S-01

matrix interference's.

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

٧R Not Reported

iry Sample results reported on a dry weight basis

RPD Relative Percent Difference

| ARE SPECIAL DETECTION LIMITS REQUIRED: YES NO If yes please attach requirements. Is a QC Package required: YES NO | F CONTAINER ONLY WST. I.D. | ð | | | 0.56 | | - SS | lane de | J. K. | | |
|--|---|---|------|---|--|-----|----------|---------|-------|-----|--|
| ARE SPEC REQUIREC YES If yes pleas | TYPE OF CONTAINER/ | | X. | | , | | 1 | | | | |
| GROUP # # PENCE OF COLUDGE DATE TURN AROUND TIME: LUDGE OIL OUD AND AND AND AND AND AND AND AND AND AN | ANALYSES TO BE PERFORMED | | | | | | | | | | |
| S S S S S S S S S S S S S S S S S S S | WHY | | λ× | > | \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ | 14. |) | _ | | 2 × | \ |
| hnology Inc. alo, NY 14207 (716) 876-2412 DW DRINKING WATER SW SURFACE WATER SW SURFACE WATER O OIL | SABANIANO. OF CONTAINERS | × × × × | | >
>
>
>
> | | | | | NO N | | |
| Waste Stream Technology Inc. 302 Grote Street, Buffalo, NY 14207 (716) 876-5290 • FAX (716) 876-241 DW DRINKING GW GROUND V SW SURFACE WWW WASTE WW | DATE SAMPLED TIME OF SAMPLING SAMPLE TYPE | () | -(1) | 7 - 2 - 3 - 3 - 3 - 3 - 3 - 3 - 3 - 3 - 3 | | | | | | * | \$0.00 |
| | T DESCRIPTION R SIGNATURE SAMPLE 1,D. | N. S. C. S. | | | | | | | | | 13 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 |
| CONTACT PH.#() | BILL TO: BILL TO: PO# SAMPLE | - | 2 | m | 4 | 2 | 9 | 7 | 88 | 6 | 10
BEMADKS |

| RELINOUISHED BY: | DATE: | TIME | RECEIVED BY: | | DATE: | TIME: |
|------------------|-------|-------|--------------|---|-------|-------|
| | | | | | さ自分の | 7 |
| RELINQUISHED BY: | DATE | TIME: | RECEIVED BY: | | DATE | TIME |
| | | | | - | | |

| ARE SPECIAL DETECTION LIMITS REQUIRED: YES If yes please attach requirements. Is a QC Package required YES If yes please attach requirements. | TYPE OF CONTAINER/ COMMENTS: WST. 1.D. | | | | To a second seco | | and the second s | | | DATE: TIME: SY SY DATE: TIME: TIME: SY TIME: TIM |
|---|---|---|---|-----------|--|---|--|----------------|-------|--|
| TURN AROUND TIME: | | | - | | | | | | | |
| hnology Inc. alo, NY 14207 (716) 876-2412 DW DRINKING WATER SCOOL SW SURFACE WATER SOOIL SW WASTE WATER SOUND WW WASTE WATER SOUND WW WASTE WATER SOUND WW WASTE WATER SOUND WW WASTE WATER SOUND WW WASTE WATER SOUND WATER SOUND WATER SOUND WATER SOUND WATER WATER SOUND WATER SOUND WATER WATER SOUND WATER WATER SOUND WATER WATER SOUND WATER WATER SOUND WATER WATER SOUND WATER WATER SOUND WATER WATER WATER SOUND WATER WATER WATER SOUND WATER WATER WATER SOUND WATER | TOTAL NO. OF CONTAINERS ANALYSES TO BE PERFORMED | X | | こうべき 小木子木 | | | \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ | X | | RECEIVED BY: |
| Waste Stream Technology Inc. 302 Grote Street, Buffalo, NY. 14207 (716) 876-5290 • FAX (716) 876-2412 DW DRINKING W GW GROUND WP SW SURFACE W O OIL | DATE SAMPLED TIME OF SAMPLING SAMPLE TYPE | | | | | | | £ -25 | | DATE: TIM |
| REPORT TO: CONTACT PH. # () | BILL TO: PO# PROJECT DESCRIPTION SAMPLER SIGNATURE SAMPLE SIGNATURE SAMPLE SIGNATURE SAMPLE SIGNATURE | | 2 | 3 112 11 | 27 7 7 7 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 | 9 | 7 18 14 18 18 18 18 18 18 18 18 18 18 18 18 18 | (8 PH36 / H-8) | 1 500 | RELINGUISHED BY: RELINGUISHED BY: |

WASTE STREAM TECHNOLOGY, INC.

302 Grote Street Buffalo, NY 14207 (716) 876-5290

Analytical Data Report

Report Date: 08/27/04 Work Order Number: 4H13024

Prepared For

Doug Reid

Lender Consulting Service

P.O. Box 406

Buffalo, NY 14205

Fax: (716) 845-6164

Site: Great Arrow

closed are the results of analyses for samples received by the laboratory on 08/13/04. If you have any lestions concerning this report, please feel free to contact me.

ncerely,

an S. Schepart, PhYD., Laboratory Director

ENVIRONMENTAL LABORATORY ACCREDITATION CERTIFICATION NUMBERS
NYSDOH ELAP #11179 NJDEPE #73977 PADEP #68757





Lender Consulting Service Project: New York State Projects

P.O. Box 406 Project Number: Great Arrow Reported:

Buffalo NY, 14205 Project Manager: Doug Reid 08/27/04 13:11

ANALYTICAL REPORT FOR SAMPLES

| Sample ID | Laboratory ID | Matrix | Date Sampled | Date Received |
|------------|---------------|--------|----------------|----------------|
| 3H45 10-12 | 4H13024-01 | Soil | 08/13/04 08:00 | 08/13/04 16:15 |
| 3H46 0-2 | 4H13024-02 | Soil | 08/13/04 08:30 | 08/13/04 16:15 |
| 3H46 4-6 | 4H13024-03 | Soil | 08/13/04 08:45 | 08/13/04 16:15 |
| 3H48 2-4 | 41-13024-04 | Soil | 08/13/04 10:00 | 08/13/04 16:15 |
| 4149 0-2 | 4H13024-05 | Soil | 08/13/04 11:00 | 08/13/04 16:15 |

P.O. Box 406 Buffalo NY, 14205 Project: New York State Projects

Project Number: Great Arrow Project Manager: Doug Reid

Reported: 08/27/04 13:11

RCRA Metals by EPA 6000/7000 Series Methods Waste Stream Technology Inc.

| ınalyte | Result | Reporting
Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---------------------------|-------------------------|--------------------|------------|----------|---------|-----------|----------|-----------|-------|
| H48 2-4 (4H13024-04) Soil | Sampled: 08/13/04 10:00 | Received | 08/13/04 | 16:15 | | • | | | |
| Iercury | 0.017 | 0.012 | mg/kg dry | l | AH42512 | 08/25/04 | 08/25/04 | EPA 7471A | |
| ilver | ND | 0.500 | Ħ | 11 | AH41812 | 08/18/04 | 08/18/04 | EPA 6010B | |
| rsenic | 5.20 | 1.70 | 11 | Ħ | 31 | | u . | н | |
| arium | 99.3 | 1.00 | Ħ | !t | 8 | *1 | at . | н | |
| admium | ND | 1.00 | п | | Ħ | 7.5 | 11 | н | |
| hromium | 20.0 | 1.00 | u | " | н | 11 | 'n | 45 | |
| ead | 10.9 | 4.10 | įt | ** | н. | n | n | n | |
| elenium | 3.02 | 1.40 | #1 | #1 | В | u u | u | 15 | |
| H49 0-2 (4H13024-05) Soil | Sampled: 08/13/04 11:00 | Received: | 08/13/04 1 | 6:15 | | | | | |
| lercury | 0.017 | 0.012 | mg/kg dry | 1 | AH42512 | 08/25/04 | 08/25/04 | EPA 7471A | |
| lver | ND | 0.500 | U | ŧı | AH41812 | 08/18/04 | 08/18/04 | EPA 6010B | |
| rsenic | 4.50 | 1.70 | 11 | ıı . | н | 3) | 11 | tr | |
| arium | 125 | 1.00 | 17 | 11 | a | u | u | " | |
| admium | ND | 1.00 | н | 17 | 14 | 21 | 11 | u | |
| hromium | 8.65 | 1.00 | 24 | 11 | 11 | 77 | ** | ø | |
| ead | 176 | 4.10 | п | н | \$1 | ø | н | 11 | |
| ·lenium | 4.91 | 1.40 | n ' | Ħ | u | U | н | 11 | |

P.O. Box 406 Buffalo NY, 14205 Project: New York State Projects

Project Number: Great Arrow Project Manager: Doug Reid

Reported: 08/27/04 13:11

Polychlorinated Biphenyls by EPA Method 8082 Waste Stream Technology Inc.

| nalyte | Result | Reporting
Limit | | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|-----------------------------|-------------------------|--------------------|--------------|----------|---------|------------|----------|--------|-------|
| 148 2-4 (4H13024-04) Soil | Sampled: 08/13/04 10:00 | Received | : 08/13/04 1 | 6:15 | | , | | | |
| ocior 1016 | ND | 3.30 | ug/kg dry | i | AH42005 | 08/20/04 | 08/22/04 | 8082 | (; |
| oclor 1221 | ND | 3.30 | " | 15 | ** | ** | tr | . 11 | l- |
| roelor 1232 | ND | 3.30 | н | H | P | 5 † | II . | †r | l: |
| octor 1242 | ND | 3.30 | 19 | h | н | Ti. | n | Ħ | [1 |
| oclor 1248 | ND | 3.30 | # | Ħ | 8 | 22 | ŋ | fi fi | Į! |
| oclor 1254 | ND | 3.30 | p | 31 | n | 45 | n | II . | (: |
| oclor 1260 | ND | 3.30 | Ħ | 11 | н | 11 | н | ц | ť. |
| rrogate: Tetrachloro-meta-x | vlene | 99.5 % | 74-1 | 22 | 0 | и | 34 | It | |
| rrogate: Decachlorobipheny | | 94.5 % | 64-1 | 27 | " | tr . | T/ | ** | |
| 149 0-2 (4H13024-05) Soil | Sampled: 08/13/04 11:00 | Received: | : 08/13/04 1 | 6:15 | | | | | |
| oclor 1016 | ND | 33.0 | ug/kg dry | 10 | AH42005 | 08/20/04 | 08/22/04 | 8082 | (! |
| oclor 1221 | ND | 33.0 | # | n | ft | н | tı | 11 | U |
| oclor 1232 | ND | 33.0 | 41 | o o | . 15 | t † | н | H | ξ. |
| 45r 1242 | ND | 33.0 | IF | 11 | 57 | " | h | li . | 1. |
| ж с 1248 | ND | 33.0 | II | 11 | D | #1 | ģt | H | [] |
| octor 1254 | ND | 33.0 | II | 11 | Ħ | ii. | u | U | [] |
| oclor 1260 | ND | 33.0 | 19 | u | # | # | ţt. | " | U |
| rrogate: Tetrachloro-meta-x | ylene | 87.8 % | 74-7 | 22 | | " | " | " | |
| rrogate: Decachlorobipheny | | 108 % | 64-1 | 27 | n | " | " | ** | |

2.O. Box 406

3uffalo NY, 14205

Project: New York State Projects

Project Number: Great Arrow

Reported: 08/27/04 13:11

Project Manager: Doug Reid

Volatile Organic Compounds by EPA Method 8260B Waste Stream Technology Inc.

| nalyte | R
Result | eporting
Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---|---|--|-------------------------|--|--------------|---|---|--------|----------------|
| 145 10-12 (4H13024-01) Soil | Sampled: 08/13/04 08:00 | Receive | ed: 08/13/0 |)4 16:15 | | · · · · · · · · · · · · · · · · · · · | | | |
| ethyl tert-butyl ether | ND | 10 | ug/kg dry | ı | AH41902 | 08/19/04 | 08/19/04 | 8260 | (: |
| nzene | ND | 10 | н | Ħ | tt | # | *1 | Ħ | Į. |
| uene | ND | 10 | н | п | n | ** | | 11 | 1. |
| ry lbenzene | ND | 10 | 11 | n | 13 | и | 11 | H | (* |
| p-xylene | ND | 20 | u | 31 | 11 | lt . | ħ | H | . (|
| tylene | ND | 10 | u | u | n | н | 11 | ** | U |
| propylbenzene | ND | 10 | * | ** | . # | я | se | 41 | (: |
| propylbenzene | ND | 10 | p. | 11 | II | H | я | ų | (|
| .5-trimethylbenzene | ND | 10 | 11 | B | 11 | н | ti | 11 | { : |
| t-butylbenzene | ND | 10 | 11 | IŦ | 18 | В | #1 | ** | 1. |
| 4-trimethylbenzene | ND | 10 | 11 | R | 14 | p | 15 | н | £: |
| :-butylbenzene | ND | 10 | 4 | Ħ | ** | I# | | BY | Į: |
| sopropyltoluene | ND | 10 | 31 | Ħ | H | 17 | n | Ħ | Į. |
| utylbenzene | ND | 10 | n | Ħ | 11 | В | l; | н | ι |
| ·····len e | ND | 10 | tr | н | t+ | в | ш | H | l: |
| wie: 1,2-Dichloroethane-d4 | | 105 % | 69-1 | 132 | ' w ' ' | , n | a | a | |
| rrogate: Toluene-d8 | | 93.0 % | 81-1 | 121 | U | a | ** | • | |
| | | | | | | | | | |
| rogate: Bromofluorobenzene | | 102 % | 83-1 | 121 | n | 11 | tr. | n | |
| 146 0-2 (4H13024-02RE2) Soil | Sampled: 08/13/04 08:3 | 0 Recei | ved: 08/13 | | | 08/18/04 | 08/23/04 | 8260 | |
| 146 0-2 (4H13024-02RE2) Soil
:thyl tert-butyl ether | | | | | 5 | | | | |
| 146 0-2 (4H13024-02RE2) Soil
thyl tert-butyl ether
izene | ND | 0 Recei | ved: 08/13
ug/kg dry | 3/04 16:15
1 | 5
AH42302 | 08/18/04 | 08/23/04 | 8260 | . 1 |
| 146 0-2 (4H13024-02RE2) Soil
thyl tert-butyl ether
izene
uene | ND
ND | 0 Recei
8
8 | wed: 08/13
ug/kg dry | 3/04 16:15
1
" | 5
AH42302 | 08/18/04 | 08/23/04 | 8260 | . 1 |
| 146 0-2 (4H13024-02RE2) Soil
hyl tert-butyl ether
nzene
uene
lylbenzene | ND
ND
ND | 0 Recei
8
8
8 | ug/kg dry | 3/04 16:15
1
" | AH42302 | 08/18/04 | 08/23/04 | 8260 | . 1 |
| 146 0-2 (4H13024-02RE2) Soil thyl tert-butyl ether nzene uene sylbenzene p-xylene | ND
ND
ND
169 | 0 Recei
8
8
8
8 | ug/kg dry | 3/04 16:15
1
" | AH42302 | 08/18/04 | 08/23/04 | 8260 | . 1 |
| 146 0-2 (4H13024-02RE2) Soil thyl tert-butyl ether nzene uene sylbenzene p-xylene sylene | ND
ND
ND
169
119 | 0 Recei
8
8
8
8
8 | ug/kg dry | 3/04 16:15

 | AH42302 | 08/18/04 | 08/23/04 | 8260 | . 1 |
| 146 0-2 (4H13024-02RE2) Soil thyl tert-butyl ether tizene tiene tylbenzene tylene tylene tylene propylbenzene | ND
ND
ND
169
119 | 0 Recei | ved: 08/13
ug/kg dry | 3/04 16:15 | AH42302 | 08/18/04 | 08/23/04 | 8260 | . 1 |
| 146 0-2 (4H13024-02RE2) Soil thyl tert-butyl ether tizene tiene tylbenzene tylene tylene tylene propylbenzene | ND
ND
ND
169
119
13 | 0 Recei
8
8
8
8
8
17
8
8 | ug/kg dry | 3/04 16:15 | AH42302 | 08/18/04 | 08/23/04 | 8260 | . 1 |
| 146 0-2 (4H13024-02RE2) Soil thyl tert-butyl ether tzene uene tylbenzene p-xylene tylene propylbenzene tropylbenzene tylene,5-trimethylbenzene | ND
ND
169
119
13
222
578 | 0 Recei
8
8
8
8
17
8
8
8 | ug/kg dry | 3/04 16:15 | AH42302 | 08/18/04 | 08/23/04 | 8260 | i i |
| 146 0-2 (4H13024-02RE2) Soil thyl tert-butyl ether tzene uene tylbenzene p-xylene tylene propylbenzene propylbenzene p-trimethylbenzene -butylbenzene | ND
ND
169
119
13
222
578 | 0 Recei
8
8
8
8
17
8
8
8 | ug/kg dry | 3/04 16:15 | AH42302 | 08/18/04 | 08/23/04 | 8260 | L L |
| 146 0-2 (4H13024-02RE2) Soil thyl tert-butyl ether izene uene iylbenzene p-xylene iylene propylbenzene ropylbenzene -5-trimethylbenzene -4-trimethylbenzene | ND
ND
ND
169
119
13
222
578
77
ND | 8 8 8 8 17 8 8 8 8 8 8 8 8 8 8 8 | ug/kg dry | 3/04 16:15 | AH42302 | 08/18/04 | 08/23/04 | 8260 | L L |
| 146 0-2 (4H13024-02RE2) Soil thyl tert-butyl ether tizene uene tylbenzene p-xylene tylene propylbenzene ropylbenzene -5-trimethylbenzene -butylbenzene -butylbenzene -butylbenzene -butylbenzene -butylbenzene | ND
ND
169
119
13
222
578
77
ND
3090 | 8 8 8 8 17 8 8 8 8 8 8 8 8 8 8 8 8 8 9 249 | ug/kg dry | 3/04 16:15 | AH42302 | 08/18/04 | 08/23/04 " " " " " " " " " " 08/20/04 | 8260 | 13
13 |
| 146 0-2 (4H13024-02RE2) Soil thyl tert-butyl ether nzene uene lylbenzene p-xylene ylene propylbenzene ropylbenzene -butylbenzene -butylbenzene -butylbenzene -butylbenzene sopropyltoluene | ND
ND
169
119
13
222
578
77
ND
3090
710 | 8 8 8 8 17 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 | ug/kg dry | 3/04 16:15 | AH42302 | 08/18/04 | 08/23/04 " " " " " " " " 08/20/04 08/23/04 | 8260 | L L |
| 146 0-2 (4H13024-02RE2) Soil thyl tert-butyl ether nzene uene lylbenzene p-xylene lylene propylbenzene propylbenzene -5-trimethylbenzene -butylbenzene -butylbenzene sopropyltoluene utylbenzene | ND
ND
169
119
13
222
578
77
ND
3090
710
596 | 8 8 8 8 17 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 | ug/kg dry | 3/04 16:15 | 5 AH42302 | 08/18/04 | 08/23/04 " " " " " " " " " " 08/20/04 08/23/04 | 8260 | ()
(; |
| 146 0-2 (4H13024-02RE2) Soil thyl tert-butyl ether tizene uene tylbenzene p-xylene tylene propylbenzene propylbenzene p-trimethylbenzene p-trimethylbenzene butylbenzene sopropyltoluene tylbenzene butylbenzene | ND
ND
ND
169
119
13
222
578
77
ND
3090
710
596
986 | 8 8 8 17 8 8 8 8 249 8 8 8 249 | ug/kg dry | 3/04 16:15
1
"
"
29.43
1
29.43 | AH42302 | 08/18/04 | 08/23/04 " " " " " " " " " " " " " " " 08/20/04 08/23/04 " " 08/20/04 | 8260 | 13
13
13 |
| -butylbenzene .4-trimethylbenzene | ND
ND
ND
169
119
13
222
578
77
ND
3090
710
596
986
1580 | 8 8 8 17 8 8 8 8 249 8 8 8 | ug/kg dry | 3/04 16:15
1
"
"
29.43
1
29.43 | AH42302 | 08/18/04 "" "" "" "" "" "" "" "" "" "" "" "" " | 08/23/04 " " " " " " " 08/20/04 08/23/04 | 8260 | 13
13
13 |

P.O. Box 406 Buffalo NY, 14205 Project: New York State Projects

Project Number: Great Arrow Project Manager: Doug Reid Reported: 08/27/04 13:11

Volatile Organic Compounds by EPA Method 8260B Waste Stream Technology Inc.

| Analyte | R
Result | eporting
Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|--------------------------------|------------------------|-------------------|-------------|------------|------------|----------|--------------------|--------|-------|
| H46 4-6 (4H13024-03RE2) Soil | Sampled: 08/13/04 08:4 | 5 Rece | ived: 08/13 | 3/04 16:15 | , | | | ····· | |
| tethyl tert-butyl ether | ND | 9 | ug/kg dry | 1 | AH42302 | 08/18/04 | 08/23/04 | 8260 | |
| enzene | ND | 9 | Ħ | н | # | u | н | #1 | Į |
| luene | ND | 9 | 11 | H | . 41 | п | tf | а | 1 |
| hylbenzene | 110 | 9 | D | +9 | Ħ | u u | P | 16 | |
| ı,p-xylene | 114 | 18 | . ** | 71 | D | U | ц | 11 | |
| xylene | ND | 9 | 27 | ii. | B | tt | я | o | (|
| opropylbenzene | 285 | 9 | u | | " | n. | n | | |
| propylbenzene | 737 | 9 | п | " | ## | tr. | n | | |
| 3.5-trimethylbenzene | ND | 9 | Ħ | ts. | h | Ħ | u | te . | Į |
| rt-butylbenzene | ND | 9 | ŧt | Ħ | н | 17 | łı | It | , |
| 2,4-trimethylbenzene | 3020 | 248 | #1 | 27.72 | Ħ | 18 | 08/20/04 | п | · |
| c-butylbenzene | 985 | 9 | O . | 1 | tı | 19 | 08/23/04 | H | |
| isopropyltoluene | 550 | 9 | p | n | ft | H | 11 | ti ti | |
| butylbenzene | 3480 | 248 | n | 27.72 | 9 | lt | 08/20/04 | 11 | 1 |
| aphthalene | 4430 | 248 | 19 | | 11 | 71 | 1/ | 15 | |
| rrogate: 1,2-Dichloroethane-d4 | | 103% | 69-1 | 35 | ··· -···· | ıi. | 08/23/04 | " | |
| rrogate: Toluene-d8 | | 93.3 % | 81-1 | | ,, | " | <i>110723701</i> 4 | " | |
| urrogate: Bromofluorobenzene | | 119% | 83-1 | | " | 11 | # | " | |
| • | | | | | | | | | |
| H48 2-4 (4H13024-04) Soil San | | | | 16:15 | | | | | |
| foromethane | ND | 10 | ug/kg dry | 1 | AH41902 | 08/19/04 | 08/19/04 | 8260 | Į |
| nyl chloride | ND | 10 | 11 | n | b | Ħ | ** | 41 | Į |
| omomethane | ND | 10 | 11 | If |)t | Ħ | 11 | 31 | į |
| lloroethane | ND | 10 | H | rs | ji. | Ħ | ** | ч | { |
| 1-dichloroethene | ND | 2 | ** | ** | Ħ | ** | 11 | 11 | ţ |
| etone | ND | 10 | 11 | 11 | ti | 11 | o o | D | ŧ |
| rbon disulfide | ND | 2 | u | п | ţi | tt | n | h | (|
| ethylene chloride | 5 | 2 | II . | 31 | Ħ | ti | v | u u | |
| ıns-1,2-dichloroethene | ND | 2 | н | 16 | n | ч | b | 1) | ι |
| 1-dichloroethane | ND | 2 | lτ | Ħ | 11 | 11 | ts | 1) | 1 |
| nyl acetate | ND | 10 | 11 | #1 | " | 11 | 35 | ħ | l |
| butanone | ND | 10 | 9 | 11 | 17 | 11 | н | H | i |
| :-1.2-dichloroethene | ND | 2 | н | ** | н | H | 15 | п | Į |
| leroform | ND | 2 | н | u | ? † | н | н | n | 1 |
| 1.1-trichloroethane | ND | 2 | u | 19 | 10 | М | þ | ii. | 1 |
| rbon tetrachloride | ND | 2 | n . | n | Ħ | řŧ. | п | и | |
| nzene | ND | 2 | ų | В | 17 | н. | н | 11 | Į |
| 2-dichloroethane | ND | 2 | " | 11 | я | tt | la . | а | l |
| chloroethene | ND | 2 | 19 | # | Ħ | FT | н | 48 | |
| 2-dichloropropane | ND | 2 | įi | 11 | н | įs | я | 15 | ì |
| | | _ | | | | | | | ` |
| omodichloromethane | ND | 2 | | u u | †I | T# | n - | †1 | ι |

/aste Stream Technology Inc.

Project: New York State Projects

².O. Box 406 3uffalo NY, 14205 Project Number: Great Arrow Project Manager: Doug Reid

Reported: 08/27/04 13:11

Volatile Organic Compounds by EPA Method 8260B Waste Stream Technology Inc.

| nalyte | Result | Reporting
Limit | Units | Dilution | Batch | Prepared | Analyzed | ,
Method | Notes |
|-----------------------------|-------------------------|--------------------|------------|----------|-----------|----------|----------|-------------|------------|
| 148 2-4 (4H13024-04) Soil | Sampled: 08/13/04 10:00 | Received | : 08/13/04 | 16:15 | | | | | |
| :-1.3-dichloropropene | ND | 2 | ug/kg dry | l | AH41902 | 08/19/04 | 08/19/04 | 8260 | Į. |
| uene | ND | 2 | ** | " | ** | ** | ti | " | U |
| ins-1,3-dichloropropene | ND | 2 | şı | Ħ | Ħ | į) | B | 11 | (.) |
| 1.2-trichloroethane | ND | 2 | Ħ | 11 | Ħ | н | . " | n | Ţ i |
| rxanone | ND | 10 | 11 | н | a | Ħ | | н | ť |
| achloroethene | ND | 2 | н | 71 | Ħ | н | U | н | Į |
| promochloromethane | ND | 2 | (t | τι | a | Ħ | u | ** | t- |
| lorobenzene | ND | 2 | D | n | н | H | 11 | ŧŧ | U |
| lylbenzene | ND | 2 | JE . | #1 | Ħ | η. | н | Ð | U |
| p-xylene | ND | 4 | ,, | 11 | н | U | н | h | Į i |
| kylene | ND | 2 | " | ** | 11 | н | ** | Et . | (§ |
| /rene | ND | 2 | 0 | p | lt | я | 15 | tt | يا |
| əmoform | ND | 2 | it | 11 | et | 25 | 11 | 11 | U |
| 1.2.2-tetrachloroethane | ND | 2 | н | II | ii . | n | , # | n | £, |
| rrogate: 1,2-Dichloroethane | | 101 % | 69- | 132 | | " | " | " | |
| rrogate: Toluene-d8 | | 91.7% | 81- | | μ | " | ,, | " | |
| rrogate: Bromofluorobenzen | 10 | 104 % | 83- | | н | 11 | 21 | μ | |
| 149 0-2 (4H13024-05) Soil | | | | | A 1341003 | 08/10/04 | 00/10/04 | 9277 | 1 ' |
| foromethane | ND | 10 | ug/kg dry | l
" | AH41902 | 08/19/04 | 08/19/04 | 8260 | T. |
| nyl chloride | ND | 10 | " | | | | u u | ** | (: |
| omomethane | ND | 01 | | ** | " | ,, | | , | U |
| loroethane | ND | 10 | " | er
er | | u | ** | | į į |
| I-dichloroethene | ND | 2 | u | | | | | | (! |
| etone | ND | 10 | lt. | e | R | 0 | н | 11 | 1: |
| rbon disulfide | ND | 2 | R | n | £ŧ | U | 8 | 11 | £: |
| ethylene chloride | 7 | 2 | n | u | 17 | 11 | n. | #1 | |
| ns-1,2-dichloroethene | ND | 2 | 11 | n | H | н | " | 11- | C |
| i-dichloroethane | ND | 2 | B | 9 | 11 | B | n | u | (1) |
| nyl acetate | ND | 10 | н | 9 | n . | R | ti | ħ | [] |
| putanone | ND | 10 | 11 | ,,, | ţ1 | n | н | ** | 1: |
| -1.2-dichloroethene | ND | 2 |)) | . " | u | | n | h | f: |
| loroform | ND | 2 | H | vi | a | +i | 11 | п | f. |
| .1-trichloroethane | ND | 2 | If | 17 | ц | n | 11 | ti. | Į į |
| bon tetrachloride | ND | 2 | H | †ŧ | B | fž. | 11 | п | C. |
| nzene | ND | 2 | R | D | 17 | ** | 11 | М | f; |
| !-dichloroethane | ND | 2 | н | 11 | H | *1 | H | D. | ί. |
| chloroethene | ND | 2 | er. | и | 11 | н | 11 | 11 | ţ: |
| !-dichloropropane | ND | 2 | 11 | u | łı | fī | 11 | ** | ſ, |
| omodichloromethane | ND | 2 | в | " | н | 11 | ** | 75 | P. |
| Methyl-2-pentanone (MIBK) | ND | 10 | į) | 11 | h | " | 4 | EF | 1. |
| -1.3-dichloropropene | ND | 2 | 16 | tr | 0 | 11 | u | п | 1 |

/aste Stream Technology Inc.

Project: New York State Projects

2.O. Box 406 3uffalo NY, 14205 Project Number: Great Arrow Project Manager: Doug Reid

Reported: 08/27/04 13:11

Volatile Organic Compounds by EPA Method 8260B Waste Stream Technology Inc.

| nalyte | Result | Reporting
Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|-----------------------------|-------------------------|--------------------|------------|----------|---------|----------|---|------------|------------|
| 149 0-2 (4H13024-05) Soil | Sampled: 08/13/04 11:00 | Received | : 08/13/04 | 16:15 | | | *************************************** | | |
| luene | 3 | 2 | ug/kg dry | j | AH41902 | 08/19/04 | 08/19/04 | 8260 | |
| ins-1,3-dichloropropene | ND | 2 | н | u | tt | n | u | n | 1.3 |
| 1.2-trichloroethane | ND | 2 | н | u | U | Ħ | 21 | o | [1 |
| hexanone | ND | 01 | U | n | Ü | 11 | Ħ | 11 | t: |
| rachloroethene | ND | 2 | (I | я | n | 11 | Ħ | u | ι: |
| promochloromethane | ND | 2 | n | 31 | 11 | 11 | n | 11 | <i>{</i> : |
| Iorobenzene | ND | 2 | rt . | n | | 11 | 11 | 11 | Į. |
| nylbenzene | ND | 2 | 11 | n | U | # | žF. | 71 | C |
| p-xylene | ND | 4 | lt. | 0 | 15 | H | 11 | 11 | (: |
| kylene | ND | 2 | \$1 | n | D | Ħ | n | #1 | U |
| rene | ND | 2 | N | " | U | 11 | ,,, | 51 | U |
| omoform | ND | 2 | Ħ | n | u | 77 | " | я | (! |
| 1.2.2-tetrachloroethane | ND | 2 | Ħ | n | U | Ħ | 11 | ET . | 1; |
| rrogate: 1,2-Dichloroethane | -d4 | 112 % | 69-1 | 32 | | | " | <i>"</i> . | |
| rogate: Toluene-d8 | • | 91.7% | 81-1 | 21 | " | ,, | " | ** | |
| rrogate: Bromofluorobenzen | e | 105 % | 83-1 | 21 | n | " | 24 | 11 | |

³.O. Box 406 3uffalo NY, 14205 Project: New York State Projects

Project Number: Great Arrow Project Manager: Doug Reid Reported: 08/27/04 13:11

Semivolatile Organic Compounds by EPA Method 8270C Waste Stream Technology Inc.

| nalyte | Result | Reporting
Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---|---|--------------------|--------------|----------|---------|--------------------|----------|--------|-------|
| H45 10-12 (4H13024-01RE1) Soil | Sampled: 08/13/04 | 08:00 Re | ceived: 08/1 | 3/04 16: | 15 | | | | |
| phthalene | ND | 67 | ug/kg dry | 1 | AH41929 | 08/19/04 | 08/24/04 | 8270 | l |
| ithracene | ND | 67 | P | u | 25 | u | н | er | 1 |
| enaphthene | ND | 67 | HE | TI. | 11 | łr | 13 | D | 1 |
| cenaphthylene | ND | 67 | U | 15 | 11 | it | 17 | H | l |
| enzo (a) anthracene | ND | 67 | u | 17 | II | " | ti | н | Į |
| enzo (b) fluoranthene | ND | 67 | *1 | lt . | tı | ti . | 71 | " | Į |
| enzo (k) fluoranthene | ND | 67 | 11 | п | 39 | н | H | II . | Į |
| enzo (g.h.i) perylene | ND | 67 | н | 41 | " | Ħ | 11 | н | l |
| enzo (a) pyrene | ND | 67 | H | #1 | n | n | ** | * | ŧ |
| rysene | ND | 67 | u | E+ | Ħ | u | n | 0 | 1 |
| ibenz (a.h) anthracene | ND | 67 | n | h | н | Ħ | н | " | i |
| Joranthene | ND | 67 | n | 11 | 11 | H | 31 | н | į |
| Jorene | ND | 67 | tt | Ħ | Ħ | n | 11 | P | Į. |
| deno (1.2.3-cd) pyrene | ND | 67 | ts | je . | †1 | 11 | н | 11 | Į |
| cananthrene | ND | 67 | tr | If | и | 11 | н | н | Į |
| rene | ND | 67 | 11 | Ħ | н | и | t† | h | 1 |
| urrogate: Nitrobenzene-d5 | | 63.2 % | 48-12 | <u> </u> | 11 | ~ · _• , | " | н | |
| rrogate: 2-Fluorobiphenyl | | 96.0 % | 50~12 | | " | " | и | " | |
| urrogate: Terphenyl-dl4 | | 102 % | 36-1. | | ,, | 11 | ** | ** | |
| H46 0-2 (4H13024-02RE1) Soil S | |).70 B | | 04.16.15 | • | | | | |
| nphthalene | ND | 67 | | | AH41929 | 08/19/04 | 08/24/04 | 8270 | |
| 1thracene | 357 | 67 | ng/kg dry | 1 | # | 6 | 1 | н | |
| zenaphthene | 215 | 67 | n | п | D | 13 | IŦ | R | |
| cenaphthylene | ND | 67 | | ıf | ** |) T | u | 16 | i |
| enzo (a) anthracene | 843 | 67 | п | ,, | 11 | н | 11 | n | |
| enzo (b) fluoranthene | 722 | 67 | 1) | 1,5 | ft | 71 | ti | 11 | |
| enzo (k) fluoranthene | 877 | 67 | ** | ы | łr . | 19 | 11 | H | |
| enzo (g,h,i) perylene | 348 | 67 | at. | ,, | li | 11 | ji . | n | |
| enzo (g,n,i) per yiene
enzo (a) pyrene | 772 | 67 | 12 | H | 'n | 11 | u | , | |
| | 884 | 67 | u | * | 11 | n | 11 | 4 | |
| rrysene
ibenz (a,h) anthracene | 154 | 67 | u | н | łı | ** | R | п | |
| | 2070 | 67 | 57 | g | R | n | 11 | n | |
| uoranthene | 169 | 67 | ţī | , н | ,, | " | | 11 | |
| uorene | 299 | 67 | # | pt . | u | 11 | ÷., | н | |
| ideno (1,2,3-cd) pyrene | 1610 | 67 | ri . | r | | 73 | n | tt | |
| henanthrene | 1730 | 67 | | st | 11 | В | u u | 11 | |
| yrene | (1/30 | | | | | | ,, | ,, | |
| urrogate: Nitrobenzene-d5 | *************************************** | 66.9 % | | | | " | ,, | ,, | |
| urrogate: 2-Fluorobiphenyl | | 97.2 % | | | " | | " | | |
| urrogate: Terphenyl-d14 | | 110% | 36-1. | | | ti | | *** | |

Waste Stream Technology Inc.

Project: New York State Projects

P.O. Box 406 Buffalo NY, 14205 Project Number: Great Arrow Project Manager: Doug Reid Reported: 08/27/04 13:11

Semivolatile Organic Compounds by EPA Method 8270C Waste Stream Technology Inc.

| | F | Reporting | | | | | | 1 | ļ |
|------------------------------|-------------------------|-----------|-------------|------------|---------|------------|----------|------------|------------|
| malyte | Result | Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
| H46 4-6 (4H13024-03RE2) Soil | Sampled: 08/13/04 08:4 | 15 Rece | ived: 08/1. | 3/04 16:1: | 5 | , | | | |
| aphthalene | 1080 | 335 | ug/kg dry | 5 | AH41929 | 08/19/04 | 08/24/04 | 8270 | |
| ithracene | 2500 | 335 | 10 | 11 | " | 1† | н | D. | |
| renaphthene | 1390 | 335 | h | и | Ħ | If | n | u | |
| cenaphthylene | ND | 335 | и | rt | H | 1f | 11 | и | { i |
| enzo (a) anthracene | 4830 | 335 | и | n | н | п | 11 | 14 | |
| enzo (b) fluoranthene | 5170 | 335 | п | н | н | н | u | n | |
| enzo (k) fluoranthene | 4160 | 335 | 11 | n | h | μ | и | tr | |
| enzo (g,h,i) perylene | 1440 | 335 | μ | ti. | n | и | n | 11 | |
| enzo (a) pyrene | 4160 | 335 | w. | ıt | н | 11 | п | D | |
| irysene | 4470 | 335 | 11 | h | P | 11 | n | n | |
| ibenz (a,h) anthracene | 779 | 335 | 11 | н | n | " | " | ii. | |
| uoranthene | 12600 | 335 | יין | " | 11 | u | 11 | lş . | |
| uorene | 1480 | 335 | li | !: | 41 | ij | н | и | |
| ideno (1,2,3-cd) pyrene | 1350 | 335 | n | " | я | 10 | н | н | |
| ienanthrene | 10100 | 335 | 11 | " | 11 | If | н | n | |
| vrene | 9720 | 335 | D. | " | Iŧ | н | ir. | n | |
| arogate: Nitrobenzene-d5 | | 90.1% | 48- | 122 | | i | *1 | <i>u</i> | |
| urogate: 2-Fluorobiphenyl | | 89.2 % | 50- | | n | • | " | ., | |
| urogate: Terphenyl-d14 | | 105% | 36- | | " | " | 11 | " | • |
| | mpled: 08/13/04 10:00 F | | | 16:15 | | | | | |
| -Nitrosodimethylamine | ND | 67 | | 1 | AH41929 | 08/19/04 | 08/27/04 | 8270 | 1' |
| s(2-chloroethyl)ether | ND | 67 | 11 | 11 | O | n | п | " | ť |
| renol | ND | 130 | u | 16 | " | и | н | ** | ł: |
| chlorophenol | ND | 130 | 41 | n | 11 | н | н | ત | [] |
| 3-dichlorobenzene | ND | 67 | 10 | 11 | υ. | 19 | n | 1 2 | ſ: |
| 4-dichlorobenzene | ND | 67 | 11 | ff | " | 11 | v | 11 | į i |
| 2-dichlorobenzene | ND | 67 | ,, | ** | " | 11 | u | 11 | f. |
| inzyl alcohol | ND | 67 | ıı | I† | Ð | н | ч | п | t: |
| s(2-chloroisopropyl)ether | ND | 67 | II | 1* | 11 | ų | 10 | к | (! |
| methylphenol | ND | 67 | u | n | 11 | " | и | 41 | Ι. |
| xachloroethane | ND | 67 | " | " | tı | " | " | н | ι |
| -Nitrosodi-n-propylamine | ND | 67 | н | " | н | 13 | u | 17 | ι |
| & 4-methylphenol | ND | 130 | н | н | H | Į C | 11 | ** | ţ |
| trobenzene | ND | 67 | и | 11 | II . | 17 | 15 | Ħ | Į |
| ophorone | ND | 67 | n | " | н | n | 1. | | [|
| nitrophenol | ND | 130 | н | н | II. | n | п | 11 | l |
| 4-dimethylphenol | ND | 130 | н | н | u | ŧr | и | 11 | 1 |
| s(2-chloroethoxy)methane | ND | 67 | 11 | " | 11 | et e | " | n | 1 |
| inzoic acid | ND | 330 | n | u | u | 41 | 14 | 11 | l |
| 4-dichlorophenol | ИD | 130 | 14 | " | 11 | iJ | и | n | |
| 2.4-trichlorobenzene | ND | 67 | 16 | R | 11 | н | H | D | ţ |

Vaste Stream Technology Inc.

P.O. Box 406 Buffalo NY, 14205 Project: New York State Projects

Project Number: Great Arrow Project Manager: Doug Reid

Reported: 08/27/04 13:11

Semivolatile Organic Compounds by EPA Method 8270C Waste Stream Technology Inc.

| ınalyte | Result | Reporting
Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---------------------------|-------------------------|--------------------|-----------|------------|---------------|--------------|----------|--------------|-------|
| H48 2-4 (4H13024-04) Soil | Sampled: 08/13/04 10:00 | Received: | 08/13/04 | 16:15 | · | | | | |
| phthalene | ND | 67 | ug/kg dry | 1 | AH41929 | 08/19/04 | 08/27/04 | 8270 | l |
| chloroaniline | ND | 67 | н | u | H | IT | 0 | н | 1 |
| exachlorobutadiene | ND | 67 | 11 | u | tf | R | и., | It | :(|
| chloro-3-methylphenol | ND | 130 | ít | 11 | źŧ | 11 | R | ıt | Į |
| methylnaphthalene | * ND | 67 | # | Ħ | н | н | и | lf. | ι |
| exachlorocyclopentadiene | ND | 130 | 71 | n | n | n | " | by . | l |
| 4,6-trichlorophenol | ND | 130 | tt | fr | н | n | 14 | 1F | ι |
| 4.5-trichlorophenol | ND | 67 | u | n | Iŧ | и | H | 31 | ι |
| chloronaphthalene | ND | 67 | u | 11 | H | n | ** | 71 | (|
| nitroaniline | ND | 67 | p | н | £\$ | и | u | u | 1 |
| enaphthylene | ND | 67 | Ħ | 11 | H | £9 | n | Ħ | ŧ |
| imethyl phthalate | ND | 67 | н | н | f± | ey | Ħ | н | Į |
| 6-dinitrotoluene | ND | 67 | lf. | н | D | rt | n | и | ι |
| enaplatiene | ND | 67 | ** | ** | tt | residence in | " | 10 | |
| nitroaniline | ND | 67 | и | 11 | Ħ | It | 15 | o o | į |
| imitrophenol | ND | 130 | н | H | Ħ | ů. | n | IF | 1 |
| penzofuran | ND | 67 | 11 | и | 18 | u | 11 | ø | į |
| 4-dinitrotoluene | ND | 67 | n | 17 | ţŧ | u | 11 | 11 | 1 |
| nitrophenol | ND | 130 | 39 | n | н | n | n | H | į |
| iorene | ND | 67 | n | Ħ | 16 | 11 | 11 | n | 1 |
| Chlorophenyl phenyl ether | ND | 67 | 31 | n | n | ** | 11 | H | l |
| iethyl phthalate | ND | 67 | 11 | It | 11 | ++ | £# | n | 1 |
| nitroaniline | ND | 67 | ц | H ~ | " | *1 | п | 32 | 1 |
| 6-Dinitro-2-methylphenol | ND | 130 | tt. | † 3 | # | 11 | Ħ | ** | l |
| nitrosodiphenylamine | ND | 67 | R | tf | n | n | n | ч | ı |
| bromophenylphenylether | ND | 67 | tt. | Ħ | fŧ | 29 | IT | ** | 1 |
| xachlorobenzene | ND | 67 | ** | Ħ | ** | łŦ | ** | 0 | ł |
| ntachlorophenol | ND | 130 | ** | ŧı | tş | 11 | u | н | i |
| enanthrene | ND | 67 | H | Ħ | Ħ | şţ | н | 71 | (|
| thracene | ND | 67 | 6 | n | 78 | ** | U | ŧi | 1 |
| rbazole | ND | 67 | n | 0 | 76 | ** | u | н | 1 |
| -n-butyl phthalate | ND | 67 | tt | II | FF | Ħ | a | h | t |
| nzidine | ND | 330 | 12 | n | Ħ | ft. | n | ft . | į |
| ioranthene | ND · | 67 | Ħ | # | Ħ | ** | п | H | Į |
| rene | ND | 67 | þŢ | Ħ | #1 | ž + | n | 37 | l |
| ityl benzyl phthalate | ND | 67 | h | H | Ħ | ** | н | n | Į |
| 3'-Dichlorobenzidine | ND | 67 | н | н | Ħ | В | H | н | ι |
| nzo (a) anthracene | ND | 67 | п | Ħ | sı | 11 | н . | P4 | į |
| rysene | ND | 67 | 11 | ŧŧ | 11 | u | 11 | 12 | · |
| s(2-ethylhexyl)phthalate | 92 | 67 | 11 | н | tf | 11 | 11 | п | |
| -n-octyl phthalate | ND | 67 | ** | Ħ | Ħ | n | ** | п | Į |
| nzo (b) fluoranthene | ND | 67 | 41 | ŧI | 11 | п | 11 | 11 | ì |

/aste Stream Technology Inc.

Project: New York State Projects

P.O. Box 406 Buffalo NY, 14205 Project Number: Great Arrow Project Manager: Doug Reid

Reported: 08/27/04 13:11

Semivolatile Organic Compounds by EPA Method 8270C Waste Stream Technology Inc.

| Analyte | Result | Reporting
Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|-------------------------------|-------------------------|--------------------|------------|----------|---------------------------------------|---------------------------------------|------------|--------|----------|
| H48 2-4 (4H13024-04) Soil | Sampled: 08/13/04 10:00 | Received: | 08/13/04 | 16:15 | | | | | |
| enzo (k) fluoranthene | ND | 67 | ug/kg dry | l | AH41929 | 08/19/04 | 08/27/04 | 8270 | [|
| enzo (a) pyrene | ND | 67 | и | 31 | 11 | II | 33 | Ħ | Į. |
| ideno (1,2,3-cd) pyrene | ND | 67 | H | 14 | ** | n | 11 | 41 | Į. |
| ibenz (a,h) anthracene | ND | 67 | н | 18 | 31 | ri | 14 | n | 1. |
| enzo (g.h.i) perylene | ND | 67 | n | н | ji . | fī | . # | n | i |
| urrogate: 2-Fluorophenol | | 74.1 % | 50- | 112 | · · · · · · · · · · · · · · · · · · · | · · · · · · · · · · · · · · · · · · · | " | * | |
| urrogate: Phenol-d6 | | 77.1 % | 52- | | ** | n | " | " | |
| urrogate: Nitrobenzene-d5 | | 74.5 % | 48- | | H 1 | n | " | " | |
| urrogate: 2-Fluorobiphenyl | | 82.0 % | 50- | 121 | н | ıt | n | n | |
| urrogate: 2,4,6-Tribromopheno | 2/ | 91.9% | 50- | 132 | 11 | Ft . | 77 | n | |
| urrogate: Terphenyl-d14 | ·· | 95.0 % | 36- | | " | " | " | " | |
| | Sampled: 08/13/04 11:00 | Received: | : 08/13/04 | 16:15 | | | | | |
| -Nitrosodimethylamine | ND | 670 | ug/kg dry | 10 | AH41929 | 08/19/04 | 08/27/04 | 8270 | 1 |
| is(2-chloroethyl)ether | ND | 670 | " | ** | | n | 11 | 11 | t |
| henol | ND · | 1300 | ** | n | 11 | n. | ч | n | Į |
| -chlorophenol | ND | 1300 | 11 | 11 | Ħ | tt | ij | н | |
| 3-dichlorobenzene | ND | 670 | 71 | u | н | m | 0 | н | 1 |
| 4-dichlorobenzene | ND | 670 | 11 | H | 17 | н | н | 44 | ŧ |
| .2-dichlorobenzene | ND | 670 | 11 | 11 | п | U | н | u | |
| | ND | 670 | ŧì | H | n | н | n | þ | |
| is(2-chloroisopropyl)ether | ND | 670 | 71 | 17 | 11 | I+ | ŦI | Ħ | |
| enzyl alcohol | ND | 670 | ** | n | 54 | n | 14 | 31 | ì |
| -methylphenol | ND
ND | 670 | h | n | ** |)1 | H | H | , |
| exachloroethane | ND
ND | 670 | n | u | n | 31 | 11 | 11 | , |
| -Nitrosodi-n-propylamine | ND
ND | 1300 | H | ,11 | H | Ħ | 11 | 11 | \
{ |
| & 4-methylphenol | | | 11 | , | ıı | ts | n | 11 | · · |
| itrobenzene | ND | 670 |
H | 14 | ,, | ų | bz | tr | ,
[|
| ophorone | ND | 670 | " | 11 | ** | u | ** | | |
| ·nitrophenol | ND | 1300 | "
" | "
If | P | ** | n | 41 | ! |
| 4-dimethylphenol | ND | 1300 | " " | | " | | | ts | ŧ |
| 1s(2-chloroethoxy)methane | ND | 670 | " | n
D | ,,
(i | 0 | В | | |
| enzoic acid | ND | 3300 | "
" | ** | " | " | | | i |
| 4-dichlorophenol | ND | 1300 | | | ,, | " | | er | ! |
| 2.4-trichlorobenzene | ND | 670 | | 11 | | n
H | , | » | 1 |
| iphthalene | ND | 670 |) i | 11 | *1 | H | | | 1 |
| -chloroaniline | ND | 670 | н | 41 | tt | - | | " | |
| exachlorobutadiene | ND | 670 | t# | н | 11 | 79 | " | ** | |
| -chloro-3-methylphenol | ND | 1300 | 17 | н | н | 11 | 21 | tt | ! |
| -methylnaphthalene | ND | 670 | fτ | n | Ħ | H | Ff . | p | ! |
| exachlorocyclopentadiene | ND | 1300 | 11 | В | 31 | fi . | u . | ** | : |
| 4.6-trichlorophenol | ND | 1300 | u | v | 71 | u | 24 | 17 | |
| 4.5-trichlorophenol | ND | 670 | п | 11 | 12 | n | 11 | 24 | |

Waste Stream Technology Inc.

Project: New York State Projects

P.O. Box 406 Buffalo NY, 14205 Project Number: Great Arrow Project Manager: Doug Reid

Reported: 08/27/04 13:11

Semivolatile Organic Compounds by EPA Method 8270C Waste Stream Technology Inc.

| malyte | Result | Reporting
Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---------------------------|-------------------------|--------------------|-----------|----------|------------|----------|--------------|------------|-------|
| H49 0-2 (4H13024-05) Soil | Sampled: 08/13/04 11:00 | Received: | 08/13/04 | 16:15 | | | | | |
| chloronaphthalene | ND | 670 | ug/kg dry | 10 | AH41929 | 08/19/04 | 08/27/04 | 8270 | ŧ |
| nitroaniline | ND | 670 | 11 | н | a | н | н | " | Į |
| enaphthylene | ND | 670 | 11 | H | ** | " | #1 | н | l |
| imethyl phthalate | ND | 670 | 11 | н | 31 | #1 | 11 | 97 | Į |
| 6-dinitrotoluene | ND | 670 | u | 31 | н | *11 | 11 | 38 | Į. |
| enaphthene | ND | 670 | u | ţI | 11 | 11 | U | н | ł |
| nitroaniline | ND | 670 | U | tt | н | u | F4 | H | { |
| 4-dinitrophenol | ND | 1300 | u | Ħ | Ħ | ij. | R | и | 1 |
| benzofuran | ND | 670 | " | . # | Ħ | 11 | Ħ | H | ı |
| amitrotoluene | ND | 670 | u | ** | u | n | 15 | 19 | 1 |
| introphenol | ND | 1300 | 19 | н | 11 |)ı | н. | ** | |
| uorene | ND | 670 | Ħ | It | н | lt . | bį | н | 1 |
| Chlorophenyl phenyl ether | ND | 670 | H | 11 | " | n | n | н | ļ |
| iethyl phthalate | ND | 670 | D | " | м | 12 | f t . | U | 1 |
| nitroaniline | ND | 670 | n | 11 | 11 | | | и | 1 |
| 6-Dinitro-2-methylphenol | ND | 1300 | Ħ | 12 | n | 44 | †ŧ | н | 1 |
| nitrosodiphenylamine | ND | 670 | U | Ħ | į. | 19 | Ħ | 4) | 1 |
| bromophenylphenylether | ND | 670 | " | 11 | Ħ | n | м | ft | 1 |
| exachlorobenzene | ND | 670 | 11 | " | ** | " | 16 | н | 1 |
| entachlorophenol | ND | 1300 | 11 | n | Ħ | u | H : | 44 | |
| henanthrene | 3660 | 670 | Ħ | 11 | 11 | ** | Ħ | 16 | |
| ithracene | ND | 670 | 31 | 11 | ij | pt. | h | 18 | |
| ırbazole | ND | 670 | 11 | Ħ | я | H. | n | " | |
| i-n-butyl phthalate | ND | 670 | н | 11 | \$1 | Ħ | n | н | |
| enzidine | ND | 3300 | łı | 34 | ţī | # | 41 | 31- | |
| uoranthene | 19500 | 670 | ři . | 11 | IT | 71 | Ħ | ti | |
| yrene | 22900 | 670 | " | H | " | " | Ħ | н | |
| utyl benzyl phthalate | ND | 670 | М | D | lt. | 0 | ŧŧ | н | |
| 3'-Dichlorobenzidine | ND | 670 | н | H | 11 | 44 | н | 92 | |
| enzo (a) anthracene | 8770 | 670 | ŧ | ij | А | ч | ft | 1F | |
| irysene | 10100 | 670 | Ħ | n | N | Ħ | н | 11 | |
| s(2-ethylhexyl)phthalate | ND | 670 | | 11 | h | n | ts . | . " | |
| i-n-octyl phthalate | ND | 670 | i. | tt | ıs | H | H | н | |
| enzo (b) fluoranthene | 8790 | 670 | Ħ | ¥ŧ | 11 | tt | 抖 | 5 4 | |
| enzo (k) fluoranthene | 11000 | 670 | n | 11 | н | ,, | 11 | 11 | |
| enzo (a) pyrene | 8940 | 670 | 1) | u | 11 | н | 11 | ø | |
| ideno (1,2,3-cd) pyrene | 2960 | 670 | v | μ | it | EFF | R | н | |
| ibenz (a,h) anthracene | 820 | 670 | u | a | ıt | e e | tr | 11 | |
| enzo (g,h,i) perylene | 3280 | 670 | 21 | 13 | u | b1 | | N | |
| urrogate: 2-Fluorophenol | | 90.6 % | 50- | 112 | n. | ** | " | | |
| irrogate: Phenol-d6 | | 91.1% | 52- | 117 | " | # | и | n | |
| ırrogate: Nitrobenzene-d5 | | 88.5 % | | 122 | " | n | n | # | |

Vaste Stream Technology Inc.

P.O. Box 406 Buffalo NY, 14205 Project: New York State Projects

Project Number: Great Arrow Project Manager: Doug Reid

Reported: 08/27/04 13:11

Semivolatile Organic Compounds by EPA Method 8270C Waste Stream Technology Inc.

| nalyte | Result | Reporting
Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|-----------------------------|-------------------------|--------------------|----------|----------|---------|----------|----------|--------|-------|
| H49 0-2 (4H13024-05) Soil | Sampled: 08/13/04 11:00 | Received: | 08/13/04 | 6:15 | | | | | |
| rogate: 2-Fluorobiphenyl | | 98.8 % | 50-1 | 21 | AH41929 | 08/19/04 | 08/27/04 | 8270 | |
| aragate: 2,4,6-Tribromophen | nol | 94.9 % | 50-1 | 32 | " | 11 | n · | " | |
| urrogate: Terphenyl-d14 | | 109 % | 36-1 | 34 | " | " | " | " | |

P.O. Box 406 Buffalo NY, 14205 Project: New York State Projects

Project Number: Great Arrow Project Manager: Doug Reid

Reported: 08/27/04 13:11

Conventional Chemistry Parameters by APHA/EPA Methods Waste Stream Technology Inc.

| Analyte | Result | Reporting
Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|----------------------------|---------------------------|--------------------|----------------|----------|---------|----------|----------|---------------|---|
| 3H45 10-12 (4H13024-01) So | il Sampled: 08/13/04 08:0 | 0 Receiv | ed: 08/13/ | 04 16:15 | | | | | |
| 6 Solids | 82.6 | 0.1 | % ₀ | 1 | AH42015 | 08/19/04 | 08/20/04 | % calculation | |
| 3H46 0-2 (4H13024-02) Soil | Sampled: 08/13/04 08:30 | Received | : 08/13/04 | 16:15 | | | | | |
| 4 Solids | 93.3 | 0.1 | % | 1 | AH42015 | 08/19/04 | 08/20/04 | % calculation | |
| 1H46 4-6 (4H13024-03) Soil | Sampled: 08/13/04 08:45 | Received | : 08/13/04 | 16:15 | | | | | |
| % Solids | 76.8 | 0.1 | % | I | AH42015 | 08/19/04 | 08/20/04 | % calculation | ····· |
| 1H48 2-4 (4H13024-04) Soil | Sampled: 08/13/04 10:00 | Received | : 08/13/04 | 16:15 | | | | | |
| 'yanide (total) | ND | 0.50 | mg/kg dry | ı | AH41924 | 08/19/04 | 08/19/04 | EPA 9014 | *************************************** |
| 6 Solids | 82.8 | 0.1 | % | h | AH41907 | 08/18/04 | 08/19/04 | % calculation | |
| 1H49 0-2 (4H13024-05) Soil | Sampled: 08/13/04 11:00 | Received | : 08/13/04 | 16:15 | | | | • | |
| vanide (total) | 26.9 | 0.50 | mg/kg dry | 1 | AH41924 | 08/19/04 | 08/19/04 | EPA 9014 | |
| υ Solids | 80.8 | 0.1 | % | ft . | AH41907 | 08/18/04 | 08/19/04 | % calculation | |

Project: New York State Projects

2.O. Box 406
Project Number: Great Arrow Reported:
3uffalo NY, 14205
Project Manager: Doug Reid
08/27/04 13:11

Notes and Definitions

| J | Analyte included in the analysis, but not detected |
|-----|---|
| C | This flag assigned to compounds identified in an analysis at a secondary dilution factor. |
| DET | Analyte DETECTED |
| 1D | Analyte NOT DETECTED at or above the reporting limit |
| ۱R | Not Reported |
| fry | Sample results reported on a dry weight basis |
| ₹PD | Relative Percent Difference |

1E VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.

AH41902-BLK1

| | · | | | |
|----------------------|---------------|--------------------------|----------------------|----------------|
| Lab Name: Waste Str | eam Technolog | y Contract: | LCS | |
| Project No.: | ·
 | Site: Great Arrow | Location: | Group: 4H13024 |
| Matrix: (soil/water) | soîl | · | Lab Sample ID: | AH41902-BLK1 |
| Sample wt/vol: | 1.00 | (g/mL) <u>g</u> | Lab File ID: | 0024384 |
| Level: (low/med) | low | | Date Received: | na |
| % Moisture: not dec. | na | | Date Analyzed: | 08/19/04 |
| GC Column: | Rtx 502.2 | ID: <u>0.18</u> (mm) | Dilution Factor: | <u>na</u> |
| Soil Extract Volume: | na | (uL) | Soil Aliquot Volume: | na (uL) |
| Number TICs found: | 1 | Concentration (ug/L or u | | |
| CA | S Number | Compound Name | RT Est. Conc. | Q |
| 1 | . 000075-09-2 | Methylene Chloride | 3.45 23 | J |
| 2 | | | | |
| 3 | | | | |

| CAS Number | Compound Name | RT | Est. Conc. | Q |
|-----------------------|--------------------|----------|------------|------------|
| 1. 000075-09-2 | Methylene Chloride | 3.45 | 23 | J |
| 2. | | | | |
| 3. | | | | |
| | · | | | • |
| 4 . 5 . | | | | |
| 6. | | | | <u>.</u> . |
| 7. | | | | |
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| 27. | | | | |
| 28. | | | | |
| 29. | | | | |
| 30. | | | <u> </u> | <u> </u> |

1E VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

| | | ٦ | ENTATIVELY IDE | INTIFIED COM | 1POUNDS | 5 | AH4230 | 2-BLK1 |
|---------------------|----------|--------------|--|--------------------------|---------------------------------------|---------------|-----------|---------|
| Lab Name: Waste | e Stre | am Technolog | у | Contract: | LCS | | | |
| Project No.: | | | Site: Great A | /rrow | Location | 1 | Group: | 4H13024 |
| Matrix: (soil/water |) | soil | | | Lab : | Sample ID: | AH42302-E | BLK1 |
| Sample wt/vol: | | 1.00 | (g/mL) <u>g</u> | | L | ab File ID: | 0024416 | |
| Level: (low/med |) | low | | | Date | Received: | na | |
| % Moisture: not c | iec. | na | | | Date | Analyzed: | 08/23/04 | |
| GC Column: | | Rtx 502.2 | ID: 0.18 | (mm) | Dilut | ion Factor: | na | |
| Soil Extract Volum | ie: | na | (uL) | | Soil Aliqu | ot Volume: | na | (uL) |
| Number TICs foun | d: _ | 2 | | Concentration (ug/L or u | on Units:
g/Kg) | μg/ Kg | | |
| | CAS | Number | Compo | und Name | RT | Est. Conc. | Q | |
| | 1. | 000075-09-2 | Methylene Chloric | ie | 3.44 | 30 | J | |
| | | 000110-54-3 | Hexane | | 3.91 | 30 | J | |
| | 3. | | | | | | | |
| | 4. | | · · · · · · · · · · · · · · · · · · · | | | | | |
| | 5. | | | | | | | |
| | 6. | | | | · · · · · · · · · · · · · · · · · · · | | | |
| , | 7.
8. | , | : | | | | | |
| | 9. | | P. Makatana and an ana Matanata da ana atamata da matata da ata | | | | | |
| | 10. | ., | | | | | | |
| | 11. | | | | | | | |

12. 13. 14. 15.

| 10. | <u>i</u> | 1 | 1 | ! |
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1E VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

| | | 7 | ENTATI | AFTA IDEN | LIFIED COM | IPOUNDS | | BH45 | 10-12 |
|--|------------|--------------|-------------|---------------------------------------|--|--|--------------|--|---------|
| Lab Name: Waste | Stre | am Technolog | У | | Contract: | LCS | <u> </u> | | |
| Project No.: | | | Site | e: Great Arre | <u>o</u> w | Location | | Group: | 4H13024 |
| Matrix: (soil/water) |) . | soil | | | | Lab | Sample ID: | 4H13024-0 | 1 |
| Sample wt/vol: | _ | 1.09 | (g/mL) | g | | ı | _ab File ID: | 0024400 | |
| Level: (low/med) |) [| low | | | | Date | Received: | 0813/04 | |
| % Moisture: not d | ec. | 17.4 | | | | Date | e Analyzed: | 08/19/04 | |
| GC Column: | | Rtx 502.2 | | D: 0.18 | (mm) | Dilu | tion Factor: | na | |
| Soil Extract Volume | e: | na | (uL) | | | Soil Aliqu | ot Volume: | na | (uL) |
| | - | | | | Concentration | on Unite: | | | |
| Number TICs foun | d: | 2 | | | (ug/L or u | | μg/Kg | | |
| | CAS | Number | | Compoun | d Name | RT | Est. Conc. | Q | |
| | | 000075-09-2 | Methyle | | 4 / (4///0 | 3.45 | | J, B | |
| | | 000110-54-3 | | | | 3.91 | | J | |
| | 3. | 000110010 | TIOXATIO | | | 4.5 1 | | | |
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1E VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.

BH46 (0-2)

| Lab Name: Waste Stre | am Technolog | gy Contra | act: LCS | |
|----------------------|--------------|----------------------|------------------------|----------------|
| Project No.: | | Site: Great Arrow | Location: | Group: 4H13024 |
| Matrix: (soil/water) | soil | | Lab Sample ID: | 4H13024-02 |
| Sample wt/vol: | 1.18 | _(g/mL) <u>g</u> | Lab File ID: | 0024425 |
| Level: (low/med) | low | | Date Received: | 08/13/04 |
| % Moisture: not dec. | 6.7 | _ | Date Analyzed: | 08/23/04 |
| GC Column: | Rtx 502.2 | ID: <u>0.18</u> (mm) | Dilution Factor: | <u>na</u> |
| Soil Extract Volume: | na | _(uL) | Soil Aliquot Volume: | na (uL) |
| | | Concent | tration Units: | |
| Number TICs found: | 10 | _ (ug/L | or ug/Kg) <u>µg/Kg</u> | |
| | A 1 5 | | | |

| - | | • | | | |
|-----|-------------|---------------------------------|-------|------------|----------|
| CAS | Number | Compound Name | RT | Est. Conc. | Q |
| 1. | | Cyclohexane, propyl- | 15.46 | | J |
| 2. | | Naphthalene, decahydro- isome | | | J |
| 3. | | Substituted Aromatic | 21.39 | | J |
| 4. | | Substituted Alkane | 22.38 | 1 | J |
| 5. | | Substituted Benzene | 22.58 | | J |
| 6. | 000119-64-2 | Naphthalene, 1,2,3,4-tetrahydro | | | J |
| 7. | | Substituted Alkane | 22.99 | | J |
| 8. | 003877-19-8 | Naphthalene, 1,2,3,4-tetrahydro | | | J |
| 9. | | Dodecane, trimethyl- isomer | 23.24 | | J |
| 10. | | Naphthalene, methyl-isomer | 24.42 | 541 | J |
| 11. | | | | | |
| 12. | | | | | |
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VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.

BH46 (4-6)

| Lab Name: Waste Stre | am Technolo | gy | Contract: | LCS | |
|----------------------|-------------|------------------|--------------|----------------------|----------------|
| Project No.: | | Site: Great Arro | <u>w</u> | Location: | Group: 4H13024 |
| Matrix: (soil/water) | soil | | | Lab Sample ID: | 4H13024-03 |
| Sample wt/vol: | 1.12 | (g/mL)g | | Lab File ID: | 0024426 |
| Lével: (low/med) | low | _ | | Date Received: | 08/13/04 |
| % Moisture: not dec. | 23.2 | | | Date Analyzed: | 08/23/04 |
| GC Column: | Rtx 502.2 | ID: 0.18 | (mm) | Dilution Factor: | na |
| Soil Extract Volume: | na | _ (uL) | | Soil Aliquot Volume: | na (uL) |
| | | • | Concentratio | on Units: | |

| Number TICs found: | 10 | (ug/L or ug/Kg) | _μg/Kg |
|--------------------|----|-----------------|--------|
|--------------------|----|-----------------|--------|

| | | . ., | <u> F-33</u> | |
|------------|---------------------------------|-------------|--------------|-----|
| CAS Number | Compound Name | RT | Est. Conc. | Q |
| 1. | Substituted Alkane | 15.75 | 1080 | · J |
| 2. | Naphthalene, decahydro- isome | | 941 | 7 |
| 3. | Substituted Alkane | 22.38 | 2110 | J |
| 4. | Substituted Benzene | 22.59 | 930 | J |
| | Naphthalene, 1,2,3,4-tetrahydro | - 22.90 | 1120 | J |
| 6. | Substituted Alkane | 22,99 | 2200 | J |
| | Naphthalene, 1,2,3,4-tetrahydro | | 875 | J |
| 8, | Unknown | 23,48 | 847 | J |
| 9. | Dodecane, trimethyl- isomer | 23,94 | 1130 | J |
| | Naphthalene, 1-methyl- | 24.43 | 1010 | J |
| 11. | | | | |
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1F SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.

BHY5 10-12

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|-------------------------|-----------|-------------|--------------|-----------------------------|------------------|----------------|
| Lab Name: WASTE S | TREAM TEC | HNOLOGY | | Contract: | | |
| Project No.: Great Arro | w | Site | e: | Location: | BHY5 10-12 | Group: 4H13024 |
| Matrix: (soil/water) | SOIL | | | | Lab Sample ID: | 4H13024-01 |
| Sample wt/vol: | 30.3 | (g/mL) | ML | | Lab File ID: | 0018493.D |
| Level: (low/med) | | | | | Date Received: | 8/13/2004 |
| % Moisture: NA | | deca | nted: (Y/N)_ | N | Date Extracted: | 8/22/2004 |
| Concentrated Extract Vo | lume: | 1000 | _ (uL) | | Date Analyzed: | 8/24/2004 |
| Injection Volume: | 1.0 | _(uL) | | | Dilution Factor: | 1.0 |
| GPC Cleanup: (Y/N) | N | | pH:_ | NA | | |
| Number TICs found: | 1 | | Co | oncentration
(ug/L or ug | | |

| CAS Number | Compound Name | RT | Est. Conc. | Q |
|------------|-------------------------|------|------------|-------|
| 1. | DIFLUOROBIPHENYL ISOMER | 4.86 | 235 | J |
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1F SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

| SAMPLE NO. | |
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| BHY6 0-2 | |

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|--------------------------|-----------|----------|--------------|-----------------------------|------------------|----------------|
| Lab Name: WASTE ST | REAM TECH | HNOLOGY | · | Contract: | | |
| Project No.: Great Arrov | v | Site | e: | Location: | BHY6 0-2 | Group: 4H13024 |
| Matrix: (soil/water) | SOIL | | | | Lab Sample ID: | 4H13024-02 |
| Sample wt/vol: | 30.0 | _ (g/mL) | ML | | Lab File ID; | 0018494.D |
| Level: (low/med) | | _ | | • | Date Received: | 8/13/2004 |
| % Moisture: NA | | deca | nted: (Y/N)_ | N | Date Extracted: | 8/22/2004 |
| Concentrated Extract Vol | ume: | 1000 | _(uL) | | Date Analyzed: | 8/24/2004 |
| Injection Volume: | 1.0 | _(uL) | | | Dilution Factor: | 1.0 |
| GPC Cleanup: (Y/N) | N | | pH: | NA | | |
| Number TICs found: | 9 | _ | C | oncentration
(ug/L or ug | | |

| CAS Number | Compound Name | RT | Est. Conc. | Q |
|------------|-----------------------------|-------|------------|---|
| 1. | UNKNOWN ALKANE | 3.96 | 291 | J |
| 2. | Unknown Alkane | 4.45 | 486 | J |
| 3. | UNKNOWN ALKANE | 4.85 | 433 | J |
| 4. | Dimethyl Napthalene isomer | 5.31 | 439 | J |
| 5. | Trimethyl Napthalene Isomer | 5.87 | 304 | J |
| 6. | UNKNOWN ALKANE | 6.01 | 220 | J |
| 7. | Unknown PAH | 7.87 | 183 | J |
| 8. | Unknown | 7.99 | 199 | J |
| 9. | Unknown Alkane | 19.43 | 217 | J |
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1F SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

| S/NV | | NO. | |
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| BHY6 4- | 6 | | |
| | _ | | |

| Lab Name: WASTE ST | REAM TEC | HNOLOGY | | Contract: | <u> </u> | |
|--------------------------|----------|---------|--------------|-----------------------------|------------------|----------------|
| Project No.: Great Arrow | V | Site | e; <u> </u> | Location: | BHY6 4-6 | Group: 4H13024 |
| Matrix: (soil/water) | SOIL | | | | Lab Sample ID: | 4H13024-03 |
| Sample wt/vol: | 30.0 | (g/mL) | ML | | Lab File ID: | 0018496.D |
| Level: (low/med) | | | | | Date Received: | 8/13/2004 |
| % Moisture: NA | | deca | nted: (Y/N)_ | N | Date Extracted: | 8/22/2004 |
| Concentrated Extract Vol | ume: | 1000 | _(uL) | | Date Analyzed: | 8/24/2004 |
| Injection Volume: | 1.0 | (uL) | | | Dilution Factor: | 5.0 |
| GPC Cleanup: (Y/N) | N | | pH: _ | NA | | |
| Number TICs found: | 3 | _ | Ce | oncentratior
(ug/L or ug | | |

| CAS Number | Compound Name | RT | Est. Conc. | Q |
|------------|---------------|-------|------------|---|
| 1. | UNKNOWN | 4.75 | 1015 | J |
| 2. | DIBENZOFURAN | 4.11 | 888 | J |
| 3. | Unknown PAH | 16.84 | 1296 | J |
| 4. | | | | |
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| ARE SPECIAL DETECTION LIMITS REQUIRED: | If yes please attach requirements. | which we will be a second and the se | | TYPE OF CONTAINER/
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| Waste Stream Technology Inc.
302 Grote Street, Buffalo, NY 14207
(716) 876-5290 • FAX (716) 876-2412 | DW DRINKING WATER
GW GROUND WATER
SW SURFACE WATER
WW WASTE WATER
O OIL | IERS | | | Trongs a | | rate space. | | ~~ Alage | | | | | |
| te Stream Technology
Arote Street, Buffalo, NY 1876-5290 • FAX (716) 87 | | | TYPE | AMAG | * | ri | 1 | Ç. | | | | | | |
| Waste Stream Techno
302 Grote Street, Buffalo,
(716) 876-5290 • FAX (71 | | | OF SAMPLING | ∃MIT | Y 13% | 78.7 | £); | p. 53 | HW. | | | | | |
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WASTE STREAM TECHNOLOGY, INC.

302 Grote Street Buffalo, NY 14207 (716) 876-5290

Analytical Data Report

Report Date: 09/01/04 Work Order Number: 4H17009

Prepared For

Doug Reid

Lender Consulting Service

P.O. Box 406

Buffalo, NY 14205

Fax: (716) 845-6164

Site: 177 & 255 Great Arrow - 04B1552.22

nclosed are the results of analyses for samples received by the laboratory on <u>08/17/04</u>. If you have any restions concerning this report, please feel free to contact me.

ncerely,

niel W. Vollmer, Laboratory QA/QC Officer

ENVIRONMENTAL LABORATORY ACCREDITATION CERTIFICATION NUMBERS
NYSDOH ELAP #11179 NJDEPE #73977 PADEP #68757





P.O. Box 406

Buffalo NY, 14205

Project: New York State Projects

Project Number: 177 & 255 Great Arrow - 04B1552.22

Project Manager: Doug Reid

Reported: 09/01/04 10:15

ANALYTICAL REPORT FOR SAMPLES

| Sample ID | Laboratory ID | Matrix | Date Sampled | Date Received |
|------------|---------------|--------|----------------|----------------|
| BH51 (0-2) | 4H17009-01 | Soil | 08/16/04 00:00 | 08/17/04 12:10 |
| BH52 (0-2) | 4H17009-02 | Soil | 08/16/04 00:00 | 08/17/04 12:10 |
| BH53 (0-2) | 4H17009-03 | Soil | 08/16/04 00:00 | 08/17/04 12:10 |
| BH54 (1-3) | 4H17009-04 | Soil | 08/16/04 00:00 | 08/17/04 12:10 |
| BH55 (0-2) | 4H17009-05 | Soil | 08/16/04 00:00 | 08/17/04 12:10 |
| BH56 (0-2) | 4H17009-06 | Soil | 08/16/04 00:00 | 08/17/04 12:10 |

P.O. Box 406 Buffalo NY, 14205 Project: New York State Projects

Project Number: 177 & 255 Great Arrow - 04B1552.22

Project Manager: Doug Reid

Reported: 09/01/04 10:15

RCRA Metals by EPA 6000/7000 Series Methods Waste Stream Technology Inc.

| Analyte | Result | Reporting
Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|------------------------------|-------------------------|--------------------|-------------|----------|---------|----------|----------|-----------|-------|
| BH51 (0-2) (4H17009-01) Soil | Sampled: 08/16/04 00:00 | Receive | d: 08/17/04 | 12:10 | | | | | |
| Mercury | ND | 0.014 | mg/kg dry |] | AH43007 | 08/30/04 | 08/30/04 | EPA 7471A | |
| Silver | 1.58 | 0.500 | n | n | AH42311 | 08/23/04 | 08/24/04 | EPA 6010B | |
| Arsenic | ND | 1.70 | 9 | Ħ | ü | ** | D | | |
| Barium | 278 | 1.00 | 15 | н | 17 | 11 | ft | 71 | |
| Cadmium | ND | 1.00 | M | н | ri . | 11 | 19 | # | |
| Chromium | 6.79 | 1.00 | u | U | 7.7 | lı . | n | TF | |
| _ead | ND | 4.10 | js. | ч | u | 11 | H | ** | |
| Selenium | 3.86 | 1.40 | Ħ | ħ | " | 11 | n | 75 | |
| 3H52 (0-2) (4H17009-02) Soil | Sampled: 08/16/04 00:00 | Received | d: 08/17/04 | 12:10 | | | | | |
| Vercury | ND | 0.016 | mg/kg dry | 1 | AH43007 | 08/30/04 | 08/30/04 | EPA 7471A | |
| Bilver | 2.07 | 0.500 | н | r | AH42311 | 08/23/04 | 08/24/04 | EPA 6010B | |
| Arsenic | 2.50 | 1.70 | ft | ** | 11 | *1 | ** | " | |
| Barium | 106 | 1.00 | Ħ | 11 | ** | 11 | n | 41 | |
| 'admium | ND | 1.00 | .11 | h | п | " | 31 | 8+ | |
| aromium | 7.64 | 1.00 | 11 | 17 | ti | u | ** | ēļ. | |
| lead | 14.8 | 4.10 | ħ | ч | n | n | 11 | 77 | |
| elenium | 2.01 | 1.40 | | н | н | tt | 11 | . •• | |
| 3H53 (0-2) (4H17009-03) Soil | Sampled: 08/16/04 00:00 | Received | l: 08/17/04 | 12:10 | | | | | |
| Tercury | 0.084 | 0.014 | mg/kg dry | l | AH43007 | 08/30/04 | 08/30/04 | EPA 7471A | , |
| ilver | 0.608 | 0.500 | " | u | AH42311 | 08/23/04 | 08/24/04 | EPA 6010B | |
| rsenic | 4.89 | 1.70 | p | 17 | ŧI | н | 13 | н | |
| larium | 259 | 1.00 | FF . | #1 | n | Ħ | ŧ | 11 | |
| `admium | ND | 1.00 | 11 | п | 11 | ŧŧ | 34 | n | |
| Thromium | 19.7 | 1.00 | # | " | £\$ | н | n | n | |
| ead | 30.4 | 4.10 | н | ** | ** | 19 | ,, | 11 | |
| elenium | 4.51 | 1.40 | Ħ | tt | п | 14 | łŢ | μ | |

².O. Box 406 3uffalo NY, 14205 Project: New York State Projects

Project Number: 177 & 255 Great Arrow - 04B1552.22

Project Manager: Doug Reid

Reported: 09/01/04 10:15

RCRA Metals by EPA 6000/7000 Series Methods

Waste Stream Technology Inc.

| nalyte | Result | Reporting
Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|-----------------------------|-------------------------|--------------------|-------------|-------------|----------|----------|----------|-----------|-------|
| H54 (1-3) (4H17009-04) Soil | Sampled: 08/16/04 00:00 | Receive | d: 08/17/04 | 12:10 | | | | | |
| ercury | 0.056 | 0.014 | mg/kg dry | 1 | AH43007 | 08/30/04 | 08/30/04 | EPA 7471A | |
| lver | ND | 0.500 | μ | 17 | AH42311 | 08/23/04 | 08/24/04 | EPA 6010B | |
| rsenic | 4.55 | 1.70 | " | " | P | н | 08/24/04 | " | |
| rium | 115 | 1.00 | п | ч | н | u | 08/24/04 | # | |
| ıdmium | ND | 1.00 | Ú | 11 | 10 | в | 08/24/04 | 16 | |
| romium | 8.12 | 1.00 | н | n | 1 | Ħ | н | h | |
| ead | 17.5 | 4.10 | . 0 | " | Ħ | н | 15 | U, | |
| lenium | 3.55 | 1.40 | U | n | и | н | 11 | 11 | |
| H55 (0-2) (4H17009-05) Soil | Sampled: 08/16/04 00:00 | Receive | d: 08/17/04 | 12:10 | | | | | |
| ercury | 0.051 | 0.014 | mg/kg dry | 1 | AH43007 | 08/30/04 | 08/30/04 | EPA 7471A | |
| ver | 1.43 | 0.500 | 40 | u | AH42311 | 08/23/04 | 08/24/04 | EPA 6010B | |
| senic | 2.47 | 1.70 | 12 | ** | 11 | n | 08/24/04 | D | |
| rium | 169 | 1.00 | h | 31 | f1 | н | 08/24/04 | O | |
| dmium | ND | 1.00 | 33 | н | н | ** | 08/24/04 | u | |
| romium | 11.6 | 1.00 | н | ** | b | 11 | tr | н | |
| ad | 18.3 | 4.10 | H | n | 17 | j# | n | rt . | |
| lenium | 3.34 | 1.40 | 11 | u | ø | 59 | 11 | n | |
| H56 (0-2) (4H17009-06) Soil | Sampled: 08/16/04 00:00 | Receive | d: 08/17/04 | 12:10 | | | | | |
| ercury | ND | 0.014 | mg/kg dry | 1 | AH43007 | 08/30/04 | 08/30/04 | EPA 7471A | |
| ver | ND | 0.500 | n | н | AH42311 | 08/23/04 | 08/24/04 | EPA 6010B | |
| senic | 3.46 | 1.70 | u | n | Ħ | Ħ | 13 | 11 | |
| rium | 55.4 | 1.00 | ti | 11 | 13 | н | 11 | Ħ | |
| dmium | ND | 1.00 | i. | u | 12 | н | 11 | и | |
| ıromium | 11.4 | 1.00 | 11 | Ħ | IJ | 14 ' | ıı | n | |
| ead | 32.4 | 4.10 | 41 | 11 . | 11 | B | β¥ | ŧı | |
| lenium | ND | 1.40 | n | n | #1 | 11 | tt | R | |

.O. Box 406 uffalo NY, 14205 Project: New York State Projects

Project Number: 177 & 255 Great Arrow - 04B1552.22

Project Manager: Doug Reid

Reported: 09/01/04 10:15

Polychlorinated Biphenyls by EPA Method 8082 Waste Stream Technology Inc.

| ialyte | Result | Reporting
Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|------------------------------|-------------------------|--------------------|-------------|----------|---------------------------------------|----------|--|---------------------------------------|------------|
| I51 (0-2) (4H17009-01) Soil | Sampled: 08/16/04 00:00 | Receive | d: 08/17/04 | 4 12:10 | | | The state of the s | · · · · · · · · · · · · · · · · · · · | |
| pelor 1016 | ND | 33.0 | ug/kg dry | 10 | AH42501 | 08/25/04 | 08/27/04 | 8082 | () |
| pelor 1221 | ND | 33.0 | # | B | if . | 11 | 16 | ** | [] |
| -dor 1232 | ND | 33.0 | π | st | ti | н | ** | 13 | 1.5 |
| Jor 1242 | ND | 33.0 | н | n | ** | " | ** | ħ | i |
| octor 1248 | ND | 33.0 | 10 | п | μ | 11 | tr. | ** | l - |
| octor 1254 | ND | 33.0 | ts | 11 | Ħ | 17 | 34 | Ð | ₹. |
| pelor 1260 | ND | 33.0 | Ħ | b | 11 | U | 31 | и, | U |
| rogate: Tetrachloro-meta-xyl | lene | 96.3 % | 74-1 | [22 | | н | " | n | |
| rogate: Decachlorobiphenyl | | 108 % | 64-1 | 127 | # | " | " | Ħ | |
| 152 (0-2) (4H17009-02) Soil | Sampled: 08/16/04 00:00 | Receive | d: 08/17/0 | 4 12:10 | | | | | |
| oclor 1016 | ND | 33,0 | ug/kg dry | 10 | AH42501 | 08/25/04 | 08/27/04 | 8082 | IJ |
| pelor 1221 | ND | 33.0 | 13 | It | †# | 11 | 11 | 31 | (1 |
| octor 1232 | ND | 33.0 | H | II | B | я | . H | я | f J |
| oclor 1242 | ND | 33.0 | n | 0 | IŢ. | F# | TI | Ħ | 1: |
| oclor 1248 | ND | 33.0 | " | 71 | 9) | п | ** | 17 | Į. |
| octor 1254 | ND | 33.0 | 11 | ** | ** | 11 | £¢ | и | 1 |
| eior 1260 | ND | 33.0 | n | H | 44 | н | at . | Ħ | I_{τ} |
| rogate: Tetrachloro-meta-xyl | lene | 98.9 % | 74 | 122 | · · · · · · · · · · · · · · · · · · · | | n | " | |
| rogate: Decachlorobiphenyl | | 101 % | 64- | 127 | " | n | " | " | |
| 153 (0-2) (4H17009-03) Soil | Sampled: 08/16/04 00:00 | Receive | d: 08/17/0 | 4 12:10 | | | | | |
| oclor 1016 | ND | 33.0 | ug/kg dry | 10 | AH42501 | 08/25/04 | 08/27/04 | 8082 | [] |
| octor 1221 | ND | 33.0 | 11 | tt | £\$ | В | 11 | u | [1 |
| pelor 1232 | ND | 33.0 | п | 11 | 17 | U | #1 | Ħ | Į î |
| pelor 1242 | ND | 33.0 | * | ŧτ | Ħ | 11 | н | 0 | (: |
| pelor 1248 | ND | 33.0 | 11 | 11 | н | 79 | 15 | н | [1 |
| oclor 1254 | ND | 33.0 | n | U | ¥1 | н | 11 | 67 | f: |
| pelor 1260 | ND | 33.0 | 17 | ,, | Ħ | " , | 11 | - н | 1 |
| rogate: Tetrachloro-meta-xyl | ene | 95.4% | 74- | 122 | н | н | " | " | |
| rogate: Decachlorobiphenyl | | 97.4 % | 64- | | n | Ħ | H | " | |

P.O. Box 406 3uffalo NY, 14205 Project: New York State Projects

Project Number: 177 & 255 Great Arrow - 04B1552.22

Project Manager: Doug Reid

Reported: 09/01/04 10:15

Polychlorinated Biphenyls by EPA Method 8082 Waste Stream Technology Inc.

| | Result | Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|--------------------------------|-------------------------|---------|-------------|----------|---------------------------------------|----------------|----------|--------|------------|
| H54 (1-3) (4H17009-04) Soil | Sampled: 08/16/04 00:00 | Receive | d: 08/17/04 | 1 12:10 | | | | | |
| oclor 1016 | ND | 33.0 | ug/kg dry | 10 | AH42501 | 08/25/04 | 08/27/04 | 8082 | [: |
| octor 1221 | ND | 33.0 | If | u | 11 | Ħ | Ħ | H | Į: |
| octor 1232 | ND | 33.0 | 15 | 4 | н | 41 | FT | ti | (1 |
| octor 1242 | ND | 33.0 | IT. | ** | 11 | tt | 0 | 71 | (: |
| octor 1248 | ND | 33.0 | rì | Ħ | +1 | 11 | n | 44 | (; |
| oclor 1254 | ND | 33.0 | Ħ | И | H | 11 | 1) | r# | [] |
| oclor 1260 | ND | 33.0 | 41 | #1 | 11 | U | 71 | 11 | [-] |
| rrogate: Tetrachloro-meta-xyle | ene | 81.6% | 74-7 | 22 | · · · · · · · · | | n | ** | • |
| rrogate: Decachlorobiphenyl | | 86.5 % | 64-1 | 127 | ** | " | " | " | |
| 455 (0-2) (4H17009-05) Soil | Sampled: 08/16/04 00:00 | Receive | d: 08/17/04 | 1 12:10 | | | | | |
| oclor 1016 | ND | 33.0 | ug/kg dry | 10 | AH42501 | 08/25/04 | 08/27/04 | 8082 | Į. |
| octor 1221 | ND | 16.5 | 11 | 5 | 11 | н | b | R | 1 |
| octor 1232 | ND | 16.5 | ti . | 3\$ | ¥ | 1 [†] | 31 | н | 1 |
| oclor 1242 | ND | 16.5 | (1 | Ħ | 1* | FF | o o | 41 | 1 |
| rocior 1248 | ND | 16.5 | n | fi fi | ** | " | 11 | 11 | l |
| roclor 1254 | ND | 16.5 | ++ | n | H | 11 | 11 | n. | ł |
| octor 1260 | ND | 16.5 | łı | 13 | n | ** | н | н | Į |
| rrogate: Tetrachloro-meta-xyle | ene | 105 % | 74-1 | 122 | | n | " | ** | |
| rrogate: Decachlorobiphenyl | | 91.1 % | 64-1 | 127 | " | " | " | n | |
| 456 (0-2) (4H17009-06) Soil | Sampled: 08/16/04 00:00 | Receive | d: 08/17/04 | 4 12:10 | | | | | |
| oclor 1016 | ND | 33.0 | ug/kg dry | 10 | AH42501 | 08/25/04 | 08/27/04 | 8082 | l |
| oclor 1221 | ND | 33.0 | 11 | u | в | n | 11 | tt | ţ |
| oclor 1232 | ND | 33.0 | #1 | It | Įt | 11 | n | n | (|
| oclor 1242 | ND | 33.0 | H | at . | a | n | н | 18 | Ę |
| oclor 1248 | ND | 33.0 | н . | 31 | 10 | n | н | н | Į |
| oclor 1254 | ND | 33.0 | п | 31 | 11 | 11 | 11 | t# | ι |
| octor 1260 | ND | 33.0 | Ħ | н | 11 | 11 | Ħ | н | l |
| rrogate: Tetrachloro-meta-xyle | | 97.8% | 74-7 | 122 | · · · · · · · · · · · · · · · · · · · | | " | ** | |
| rrogate: Decachlorobiphenyl | | 105 % | 64-1 | | " | ,, | 11 | n | |

O. Box 406 utfalo NY, 14205

Project: New York State Projects

Project Number: 177 & 255 Great Arrow - 04B1552.22

Project Manager: Doug Reid

Reported: 09/01/04 10:15

Volatile Organic Compounds by EPA Method 8260B Waste Stream Technology Inc.

| nalyte | Result | Reporting
Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|-----------------------------------|--------|--------------------|------------|----------|---------|------------|----------|----------|-------|
| I51 (0-2) (4H17009-01) Soil | | | | 12:10 | | | | | |
| oromethane | ND | | ug/kg dry | 1 | AH42505 | 08/18/04 | 08/25/04 | 8260 | l |
| ıyl chloride | ND | 10 | ŧŧ | \$Ŧ | ff | н | | 91
91 | ţ |
| momethane | ND | 10 | Ħ | H | ¥t | Ħ | Ħ | | l |
| oroethane | ND | 10 | 11 | " | 11 | . н | и | n | (|
| -dichloroethene | ND | 2 | j. | 15 | 1/ | R | " | ti. | 1 |
| etone | 22 | 10 | jı. | Ħ | α | k | t# | u | |
| mon disulfide | ND | 2 | fi | Ħ | 11 | 11 | st . | Ħ | ţ |
| mylene chloride | 3 | 2 | 11 | μ. | 11 | ** | 18 | n, | |
| .5-1,2-dichloroethene | ND | 2 | п | u |) i | 11 | v | u | 1 |
| -dichloroethane | ND | 2 | tf | ч | н | It | н | 'n | (|
| ıyl acetate | ND | 10 | н | Ħ | 11 | u | н | 39 | (|
| outanone | ND | 10 | u u | 16 | ** | 3 2 | n | н | ţ |
| -1.2-dichloroethene | ND | 2 | n | 11 | н | 11 | н | н | 1 |
| oroform | ND | 2 | 11 | n | Ħ | 54 | e | 11 | 1 |
| .1-trichloroethane | ND | 2 | a | Ħ | ii | ta | n | ŧ | (|
| bon tetrachloride | ND | 2 | ħ | n | # | £4 | n | Ħ | 1 |
| izene | ND | 2 | n | ,, | n | 11 | n | 11 | I |
| !-dichloroethane | ND | 2 | ıs | 11 | ч | er | ** | Ħ | 1 |
| chloroethene | ND | 2 | ß | н | Ħ | μ | ** | b | |
| !-dichloropropane | ND | 2 | 11 | Ħ | I) | u | b | п | |
| omodichloromethane | ND | 2 | 11 | " | ft | n | * | н | ! |
| Methyl-2-pentanone (MIBK) | ND | 10 | ŧ | 24 | Ħ | 11 | 11 | n | |
| -1.3-dichloropropene | ND | 2 | n | Ħ | н | Ħ | ti | ** | |
| uene | 3 | 2 | U | н | H | 15 | n | n | |
| ns-1.3-dichloropropene | ND | 2 | и | 11 | n | H | u | 11 | |
| .2-trichloroethane | ND | 2 | r | 11 | tı . | ** | 16 | 0 | |
| 1exanone | ND | 10 | 11 | u | 41 | સ | и | н | |
| rachloroethene | ND | 2 | γi | Ħ | н | ff | н | Pt | |
| promochloromethane | ND | 2 | я | н | * | н | u | 11 | |
| lorobenzene | ND | 2 | 11 | 11 | H | 11 | *1 | 11 | |
| wibenzene
wibenzene | ND | 2 | 17 | u | 11 | n | | н | |
| - | 8 | 4 | ** | 11 | 31 | н | U | tr. | |
| p-xylene | ND | 2 | 11 | 11 | Ħ | н | 11 | 11 | |
| cylene | ND | 2 | u | ** | В | ** | ** | Iτ | |
| rene | ND | 2 | 44 | u | 11 | п | n | tr | |
| omoform
,2.2-tetrachloroethane | ND | 2 | þi | 11 | tt | " | 31 | tt | |
| | | 84.3 % | <u> </u> | 132 | | " | <i>n</i> | u | |
| rrogate: 1,2-Dichloroethane-a | !# | 84.3 %
104 % | 81- | | " | n | ,, | ,, | |
| rrogate: Toluene-d8 | | | 81-
83- | | n | " | 77 | " | |
| rrogate: Bromofluorobenzene | | 95.3 % | -ده | 1 2 1 | | | | | |

/aste Stream Technology Inc.

.O. Box 406 uffalo NY, 14205 Project: New York State Projects

Project Number: 177 & 255 Great Arrow - 04B1552.22

Project Manager: Doug Reid

Reported: 09/01/04 10:15

Volatile Organic Compounds by EPA Method 8260B Waste Stream Technology Inc.

| inlyte | Result | Reporting
Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|-------------------------------|---|--------------------|-------------|----------|---------|------------|-----------|------------|-------|
| 152 (0-2) (4H17009-02) Soil | Sampled: 08/16/04 00:00 | Receive | d: 08/17/04 | 12:10 | | | | | |
| oromethane | ND | 10 | | 1 | AH42505 | 08/18/04 | 08/25/04 | 8260 | (: |
| yl chloride | ND | 10 | H | šž | 11 | H | II. | v | [1 |
| momethane | ND | 10 | 15 | ** | ** | D | ч | 11 | (! |
| oroethane | ND | 10 | H | Ħ | II | Ħ | P | 41 | 1; |
| -dichloroethene | ND | 2 | n | 11 | u | н | R | 11 | 11 |
| etone | 26 | 10 | H | " | н | 15 | u | 11 | |
| non disulfide | ND | 2 | IT | ** | | ** | 11 | н | 1 |
| thylene chloride | 3 | 2 | ft | #1 | ** | h | ** | tt. | |
| ns-1.2-dichloroethene | ND | 2 | II. | H | u | н | 11 | н | Į |
| -dichloroethane | ND | 2 | U | Ħ | U | 11 | +1 | r! | 1 |
| ıyl acetate | ND | 10 | 11 | " | Ħ | 17 | " | " | ţ |
| nutanone | ND | 10 | 11 | II . | †1 | ** | ** | ti | l |
| -1.2-dichloroethene | ND | 2 | Pt | n | 11 | U | n | 11 | Į |
| oroform | ND | 2 | 11 | ış | 11 | 11 | 11 | 11: | Į |
| .1-trichloroethane | ND | 2 | m | # | Ħ | tt. | 44 | н | ţ |
| bon tetrachloride | ND | 2 | II. | n | 17 | н | 47 | TF. | ŧ |
| ızene | ND | 2 | lı | II | #1 | 11 | ıt | af: | 1 |
| !-dichloroethane | ND | 2 | ** | 31 | H | łf | n | 15 | 1 |
| thloroethene | ND | 2 | +1 | tr | Ħ | n | †1 | þá | ţ |
| !-dichloropropane | ND | 2 | 71 | tı | ** | | н | • | l |
| modichloromethane | ND | 2 | Ħ | U | R | Ħ | tt | н | l |
| Methyl-2-pentanone (MIBK) | ND | 10 | Ħ | 81 | *11 | n | 11 | tı | Į |
| -1.3-dichloropropene | ND | 2 | tt | 81 | ţı | h | | 41 | 1 |
| uene | 2 | 2 | it | 11 | *1 | # | 11 | 11 | |
| ns-1,3-dichloropropene | ND | 2 | ÌT | +1 | Ħ | 11 | I† | н | Į. |
| .2-trichloroethane | ND | 2 | (r | ŧt | н | и | It | п | ŧ |
| iexanone | ND | 10 | tt | II | IJ | 11 | n n | 38 | ţ |
| rachloroethene | ND | 2 | IJ | U | ŧı | ** | 11 | 16 | l |
| romochloromethane | ND | 2 | 0 | 0 | 11 | n | +1 | н | Į |
| lorobenzene | ND | 2 | в | | R | ш | Iş | ir | i |
| wibenzene | ND | 2 | W | 11 | lt | ## | n | t F | Į. |
| p-xylene | 10 | 4 | 11 | tt | n | н | н | ** | |
| tylene | 3 | 2 | 11 | 17 | 11 | ,,, | и | p1 | |
| rene | ND | 2 | Ħ | H | n | a | n | ft | ! |
| moform | ND | 2 | н | 17 | IF. | . н | a | а | 1 |
| _2.2-tetrachloroethane | ND | 2 | н | " | и | u | 8 | н | 1 |
| | | 95.3 % | 69-1 | 132 | | <i>n</i> · | p | " | |
| rrogate: 1,2-Dichloroethane-c | . · · · · · · · · · · · · · · · · · · · | 108 % | 81-1 | | н | " | 1+ | " | |
| rrogate: Toluene-d8 | | 102 % | 83-1 | | ,, | ** | 13 | и | |
| rrogaie: Bromofluorobenzene | | 102 70 | 03-1 | ا ئد | | | | | |

/aste Stream Technology Inc.

P.O. Box 406 Buffalo NY, 14205 Project: New York State Projects

Project Number: 177 & 255 Great Arrow - 04B1552.22

Project Manager: Doug Reid

Reported: 09/01/04 10:15

Volatile Organic Compounds by EPA Method 8260B Waste Stream Technology Inc.

| Analyte | Result | Reporting
Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|--------------------------------|-------------------------|--------------------|-------------|----------|-----------|----------|----------|--------|------------|
| H53 (0-2) (4H17009-03) Soil | Sampled: 08/16/04 00:00 | Receive | d: 08/17/04 | 12:10 | | | | | |
| hloromethane | ND | 10 | ug/kg dry | 1 | AH42505 | 08/18/04 | 08/25/04 | 8260 | () |
| inyl chloride | ND | 10 | H | В | H | # | ** | ,, | 1,5 |
| romomethane | ND | 10 | H | 14 | и | H | " | 71 | { ! |
| hloroethane | ND | 10 | 11 | ** | 11 | " | ** | н | 1. |
| .1-dichloroethene | ND | 2 | n | 19 | B | ** | -ti | н | + |
| cetone | 17 | 10 | 11 | 41 | h | ø | ái . | н | |
| arbon disulfide | ND | 2 | IY | ff | n | " | н | P | 11 |
| nethylene chloride | 6 | 2 | řt. | 11 | " | n | 11 | • | |
| ans-1.2-dichloroethene | ND | 2 | tr | 11 | U | | ti | 15 | į. |
| .1-dichloroethane | ND | 2 | ** | †I | n | u | Ħ | 31 | ₹. |
| inyl acetate | ND | 10 | *1 | 11 | U | 10 | н | 31 | (; |
| -butanone | ND | 10 | ti | 71 | †1 | Ħ | " | 11 | (; |
| is-1.2-dichloroethene | ND | 2 | # | 13 | Ħ | # | 44 | 17 | Į: |
| hloroform | ND | 2 | Ħ | 11 | Ħ | 117 | ш | ti. | [1 |
| i.1-trichloroethane | ND | 2 | 74 | Ħ | Ħ | μ | 11 | 11 | Ų |
| arbon tetrachloride | ND | 2 | 31 | 11 | 11 | ,, | н | 11 | ſ, |
| enzene | ND | 2 | łı | 71 | P | 11 | 17 | н | 1. |
| .2-dichloroethane | ND | 2 | π | łs | H | н | D | tt | f; |
| ichloroethene | ND | 2 | 11 | Fŧ | 11 | n | n | 0 | 1, |
| .2-dichloropropane | ND | 2 | וו | řŧ. | 11 | t† | ** | 11 | l |
| romodichloromethane | ND | 2 | 11 | н | п | n | žŤ. | ti | 1 |
| -Methyl-2-pentanone (MIBK) | ND | 10 | Ħ | Ħ | ,,, | ¥ | +1 | t# | ί, |
| s-1,3-dichloropropene | ND | 2 | 11 | н | п | 31 | п | p | (; |
| luene | ND | 2 | 11 | ti | н | 11 | " | н | Į į |
| ans-1,3-dichloropropene | ND | 2 | 11 | н | п | н | 11 | 11 | ſ, |
| 1.2-trichloroethane | ND | 2 | 11 | н | я | t\$ | | tt | (: |
| ·hexanone | ND | 10 | u | £4 | Я | tł | 15 | 16 | (3 |
| trachloroethene | ND | 2 | U | Ħ | Ħ | t) | 18 | н | (1 |
| bromochloromethane | ND | 2 | II . | 11 | £# | В | 18 | н | 1: |
| ılorobenzene | ND | 2 | " | и | 11 | 11 | 19 | 19 | 1 ' |
| hylbenzene | ND | 2 | 11 | 11 | 11 | 11 | u | R | (: |
| .p-xylene | 6 | 4 | R | u | 12 | ii. | | Œ | |
| xylene | ND | 2 | n | ď | n | n | " | 15 | 1 |
| yrene | ND | 2 | tf | 11 | 14 | 11 | 17 | " | l |
| romoform | ND | 2 | Ħ | *1 | 17 | н | \$1 | n | Į |
| 1.2.2-tetrachloroethane | ND | 2 | н | 11 | 11 | н | 11 | h | 1 - |
| irrogate: 1,2-Dichloroethane-d | 4 | 69.0% | 69-1 | 32 | | · " | ** | " | |
| irrogate: Toluene-d8 | | 109 % | 81-1 | | n | н | " | " | |
| urrogate: Bromofluorobenzene | | 93.0 % | 83-1 | 21 | " | n | | ŧŧ | |

4.O. Box 406 Buffalo NY, 14205 Project: New York State Projects

Project Number: 177 & 255 Great Arrow - 04B1552.22

Project Manager: Doug Reid

Reported: 09/01/04 10:15

Volatile Organic Compounds by EPA Method 8260B Waste Stream Technology Inc.

| nalyte | Result | Reporting
Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---|---------------------|--------------------|-------------|----------|---------|----------------|-----------|--------|-------|
| H54 (1-3) (4H17009-04RE1) Soil | Sampled: 08/16/04 (| 00:00 Rec | eived: 08/1 | 7/04 12: | 10 | | | | ~~~ |
| loromethane | ND | 45 | ug/kg dry | 1 | AH42505 | 08/18/04 | 08/25/04 | 8260 | l |
| nyl chloride | ND | 45 | 11 | I† | 9 | IT | Ħ | स | 1 |
| omomethane | ND | 45 | н | 41 | н | р | I# | II. | ŧ |
| oroethane | ND | 45 | U | 41 | н | ft | 21 | 0 | ı |
| 1-dichloroethene | ND | 9 | н | 17 | 11 | 11 | 11 | ** | Į |
| etone | 113 | 45 | Ħ | #1 | Ħ | 19 | 51 | 11 | |
| rbon disulfide | ND | 9 | n | ıt | n | 11 | 11 | H | Į |
| ethylene chloride | 19 | 9 | 31 | £# | 11 | ų | 81 | n | |
| ıns-1.2-dichloroethene | ND | 9 | 11 | 11 | u | n | # | u | Į |
| 1-dichloroethane | ND | 9 | žt | н , | Ħ | ** | 11 | 48 | l |
| nyl acetate | ND | 45 | u | f1 | Ħ | η | 85 | Ħ | ţ |
| butanone | ND | 45 | 32 | IT | B | 11 | Ħ | ft | ι |
| s-1.2-dichloroethene | ND | 9 | 75 | n | 17 | th. | н | π | Į |
| loroform | . ND | 9 | ** | er. | * | Ħ | · · | ti | 1 |
| 1.1-trichloroethane | ND | 9 | н | 17 | If | n | II. | 11 | 1 |
| ·· ui tetrachloride | ND | 9 | 71 | 37 | H . | U | n | 11 | l |
| rang | ND | 9 | 57 | 11 | 21 | II. | a. | 11 | l |
| 2-dichloroethane | ND | 9 | u | tt. | n | " | и | . 0 | l |
| chloroethene | ND | 9 | ji | u | ţı | 11 | п | 41 | Į |
| 2-dichloropropane | ND | 9 | 19 | 11 | n | Ħ | D | ŧI | 1 |
| omodichloromethane | ND | 9 | 31 | | н | U | v | н | { |
| Methyl-2-pentanone (MIBK) | ND | 45 | ħ | 16 | N | ij | u | ii . | { |
| s-1.3-dichloropropene | ND | 9 | 11 | 0 | н | u | 11 | n | I |
| luene | 71 | 9 | Ħ | 41 | 1# | ** | ** | ti | |
| ins-1,3-dichloropropene | ND | 9 | 11 | ŢI. | 19 | l ₇ | If | 19 | ţ |
| 1.2-trichloroethane | ND | 9 | 11 | 11 | " | IT | 11 | 1+ | Į |
| hexanone | ND | 45 | 11 | et | II. | n | 11 | u · | 1 |
| rachloroethene | ND | 9 | U | 19 | by | В | 11 | u | l |
| oromochloromethane | ND | 9 | ıı . | 11 | 11 | п | tt | t) | Į |
| lorobenzene | ND | 9 | н | 16 | n | ti | н | 31 | į |
| wibenzene | 60 | 9 | b | 41 | tı | # | в | n , | |
| p-xylene | 713 | 18 | и | 11 | u | ti | 19 | n | |
| xylene | 418 | 9 | n | 11 | Ħ | в | ** | t. | |
| /rene | 116 | 9 | n | • | 71 | ŧŧ | 11 | 11 | |
| omoform | ND | 9 | 11 | 11 | 71 | 11 | 11 | Ħ | 1 |
| 1.2.2-tetrachioroethane | ND | 9 | H | pi | FI | н | HE | н | 1 |
| rrogate: 1,2-Dichloroethane-d4 | | 90.0 % | 69-13 | 72 | . " | tr. | ч | ,, | |
| rrogate: T ₁ ,2-Dictioroethane-u+
rrogate: Toluene-d8 | | 109 % | 81-12 | | ,, | " | ,, | ,, | |
| | | 113 % | 83-12 | | " | " | ** | " | |
| rrogate: Bromofluorobenzene | | 113 70 | 05-12 | - 1 | | | | | |

/aste Stream Technology Inc.

².O. Box 406 3uffalo NY, 14205 Project: New York State Projects

Project Number: 177 & 255 Great Arrow - 04B1552.22

Project Manager: Doug Reid

Reported: 09/01/04 10:15

Volatile Organic Compounds by EPA Method 8260B Waste Stream Technology Inc.

| nalyte | Result | Reporting
Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|--------------------------------|-------------------------|--------------------|-------------|----------|---------|----------|----------|--------|-------|
| H55 (0-2) (4H17009-05) Soil | Sampled: 08/16/04 00:00 | Receive | d: 08/17/0 | 1 12:10 | | <u> </u> | | | |
| Ioromethane | ND | 10 | | 1 | AH42505 | 08/18/04 | 08/25/04 | 8260 | 1: |
| nyl chloride | ND | 10 | 0 | и | H | n | Fê . | n | £: |
| omomethane | ND | 10 | 11 | H | H | н | n | u u | Ü |
| ioroethane | ND | 10 | t s | н | e | н | я | u u | ſ. |
| 1-dichloroethene | ND | 2 | FF | n | 0 | ч | ** | TT . | f. |
| etone | 14 | 10 | tt | 11 | 0 | 11 | 19 | н | |
| rbon disulfide | ND | 2 | 11 | o | n | 11 | 10 | n | [: |
| ethylene chloride | 2 | 2 | 11 | n | tı | IJ | n | 11 | |
| ins-1.2-dichloroethene | ND | 2 | ** | u | ય | Ħ | н | 16 | 1. |
| I-dichloroethane | ND | 2 | Ω | *1 | 11 | n | 15 | pē | T, |
| nyl acetate | ND | 10 | ,, | н | 16 | H | u | n n | l |
| butanone | ND | 10 | 12 | ŧŧ | it | 31 | | 11 | [] |
| s-1.2-dichloroethene | ND | 2 | н | lf. | ŧŧ | ŧ | 19 | н | 1! |
| loroform | ND | 2 | ú | | #1 | R | " | | . 1 |
| I. I-trichloroethane | ND | 2 | +5 | 0 | Ħ | " | н | 17 | () |
| rbon tetrachloride | ND | 2 | # | ** | tt. | и | n | n | [! |
| nzene | ND | 2 | 11 | tı | H | ù | ** | п | L: |
| 2-dichloroethane | ND | 2 | 11 | #1 | U | ŧŦ | n | 71 | (: |
| chloroethene | ND | 2 | ** | 37 | n | 11 | 11 | ** | () |
| 2-dichloropropane | ND | 2 | " | R | ** | u | 44 | " | Į, |
| omodichloromethane | ND | 2 | 41 | 11 | н | # | ш | u | į: |
| Methyl-2-pentanone (MIBK) | ND | 10 | 11 | U | H | 15 | 91 | ** | t: |
| s-1,3-dichloropropene | ND | 2 | II | 11 | u | 11 | и | 17 | Į ļ |
| luene | 2 | 2 | 11 | 19 | ıı | n | 16 | ti | |
| ins-1,3-dichloropropene | ND | 2 | и | 11 | şi | Ħ | TI. | \$1 | Į. |
| 1.2-trichloroethane | ND | 2 | e | Ħ | н | 0 | 11 | n | 13 |
| hexanone | ND | 10 | 11 | н | # | u | . и | It. | 1 |
| trachloroethene | ND | 2 | H | | . 0 | н | ч | ** | 1 |
| bromochloromethane | ND | 2 | a | n | н | q | n | ** | Į: |
| forobenzene | ND | 2 | *1 | # | 31 | 15 | n | II | Į: |
| hylbenzene | ND | 2 | п | lt. | Ħ | n | n | n n | Į. |
| .p-xylene | ND | 4 | 25 | " | n | " | n | " | ı |
| xylene | ND | 2 | 17 | 11 | н | tr | н | | 1 |
| Arene | ND | 2 | \$1 | я | # | 18 | 11 | P | 1 |
| omoform | ND | 2 | rí | u | 11 | 41 | 311 | # | 1 |
| 1.2.2-tetrachloroethane | ND | 2 | F# | 11 | u | а | n | н | Į |
| | | 82.3 % | 69- | 135 | | n | 18 | " | |
| urrogate: 1,2-Dichloroethane-c | € † | 106 % | 81- | | o | Ff | " | " | |
| rrogate: Toluene-d8 | • | 95.3 % | 81-
83- | | , # | " | " | и | |
| urrogate: Bromofluorobenzene | | 93.3 70 | 0.5- | 1 22 1 | | | | | |

O. Box 406 Suffalo NY, 14205 Project: New York State Projects

Project Number: 177 & 255 Great Arrow - 04B1552.22

Project Manager: Doug Reid

Reported: 09/01/04 10:15

Volatile Organic Compounds by EPA Method 8260B Waste Stream Technology Inc.

| nalyte | Result | Reporting
Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|-------------------------------|-------------------------|--------------------|------------|----------|---------|----------|-----------|-----------|------------|
| 156 (0-2) (4H17009-06) Soil | Sampled: 08/16/04 00:00 | Receive | d: 08/17/0 | 4 12:10 | | | | | |
| loromethane | ND | 10 | ug/kg dry | 1 | AH42505 | 08/18/04 | 08/25/04 | 8260 | l |
| nyl chloride | ND | 10 | п | . " | U | н | h | n | 1 |
| omomethane | ND | 10 | Ħ | R | fr | а | ŧτ | 11 | { : |
| loroethane | ND | 10 | U | ef | ta . | Ħ | ¥† | 31 | 1. |
| l-dichloroethene | ND | 2 | u | Ħ | Ħ | n | 31 | - (1 | Į į |
| etone | 21 | 10 | R | и | " | H | ft | *1 | |
| bon disulfide | ND | 2 | þ. | P | н | tt. | n | pt | (i |
| ethylene chloride | 6 | 2 | it. | p | 14 | 9 | n | н | |
| ns-1,2-dichloroethene | ND | 2 | Ħ | Ħ | 14 | h | 11 | Ħ | 1 |
| -dichloroethane | ND | 2 | н | * | 17 | u | n | 14 | (: |
| nyl acetate | ND | 10 | 41 | II. | It | ** | м . | 11- | (: |
| outanone | ND | 10 | в | İt | Ħ | и | # | н | [: |
| -1,2-dichloroethene | ND | 2 | 11 | 13 | p | 1) | ti. | ы | Į. |
| loroform | ND | 2 | 17 | и | 18 | 11 | u | 11 | 1: |
| 1-trichloroethane | ND | 2 | n | п | Ff | 54 | и | tr. | t. |
| con terrachloride | ND | 2 | e e | n | 27 | P | H | æ | () |
| nzene | ND | 2 | tt | н | n | Ħ | В | 0 | [] |
| 2-dichloroethane | ND | 2 | R | 11 | 11 | п | н | n | U |
| chloroethene | ND | 2 | t! | н | tf. | D | ¥r. | 11 | Į į |
| !-dichloropropane | ND | 2 | n | ır | 1) | Ð | 11 | ,, | U |
| omodichloromethane | ND | 2 | !! | " | a | 11 | н | к | 11 |
| Methyl-2-pentanone (MIBK) | ND | 10 | Ħ | 11 | ŧ | H | 11 | п | Į i |
| -1.3-dichloropropene | ND | 2 | tt | U | 11 | . # | n | TF | Į: |
| uene | ND | 2 | H | 10 | tř | p | н | и | Į. |
| ns-1.3-dichloropropene | ND | 2 | Ħ | n | Ħ | " | n | н | {! |
| ,2-trichloroethane | ND | 2 | B | н | ħ | u | ** | н | ! : |
| iexanone | ND | 10 | 11 | 11 | и | 11 | J. | н | (: |
| rachloroethene | ND | 2 | н | н | H. | 14 | th | 0 | Į i |
| promochloromethane | ND | 2 | tı | 11 | U | ii | H | Đ | į į |
| lorobenzene | ND | 2 | n . | #1 | II | t+ | †I | e | Į į |
| albenzene | ND | 2 | ** | 11 | н | 11 | 21 | n | U |
| p-xylene | 6 | 4 | v | Ħ | D | 18 | 11 | 'n | |
| (ylene | 3 | 2 | 11 | н | п | 14 | ri | u | |
| rene | ND | 2 | 11 | H | #1 | н | В | н | [] |
| moform | ND | 2 | н | ** | ,, | e e | п | п | 1: |
| 2.2-tetrachloroethane | ND | 2 | • P | n | 11 | 11 | 11 | | 1 |
| rrogate: 1,2-Dichloroethane-a | | 70.0% | 69~1 | 132 | u | н | ,, | 0 | |
| rogate: Toluene-d8 | 7 | 103 % | 87-1 | | п | н | tr | 11- | |
| rrogate: Bromofluorobenzene | | 105 % | 83-1 | | " | и | " | t) | |
| тодин; рготојнютовнате | | 1.72 70 | ر ۳۰ ر ب | | | | | | |

.O. Box 406 uffalo NY, 14205 Project: New York State Projects

Project Number: 177 & 255 Great Arrow - 04B1552.22

Project Manager: Doug Reid

Reported: 09/01/04 10:15

Semivolatile Organic Compounds by EPA Method 8270C Waste Stream Technology Inc.

| alyte | Result | Reporting
Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|-----------------------------|-------------------------|--------------------|-------------|----------|---------|----------|----------------|-----------|-------|
| 151 (0-2) (4H17009-01) Soil | Sampled: 08/16/04 00:00 | Receive | d: 08/17/04 | 12:10 | | | | | |
| Vitrosodimethylamine | ND | 67 | ug/kg dry |] | AH42601 | 08/26/04 | 08/31/04 | 8270 | [] |
| (2-chloroethyl)ether | ND | 67 | 41 | ,, | ţ1 | Ħ | н | t# | 1.1 |
| mol | ND | 130 | H | п | 11 | je . | " | t) | Į I |
| hlorophenol | ND | 130 | п | п | . 19 | R | " | " | U |
| -dichlorobenzene | ND | 67 | 15 | Ħ | FF . | R | 41 | н | (* |
| -dichlorobenzene | ND | 67 | н | Ħ | 17 | 23 | h | Ħ | 1: |
| -dichlorobenzene | ND | 67 | ** | H | n | н | " | н | 1) |
| (2-chloroisopropyl)ether | ND | 67 | n | n | ** | ** | " | v | Ļi |
| ızyl alcohol | ND | 67 | ir | H | Ħ | Ħ | а | u | Li |
| nethylphenol | ND | 67 | 17 | n | 11 | н | 11 | u | 1: |
| tachloroethane | ND | 67 | " | H | ** | н | 15 | 11 | 1: |
| Nitrosodi-n-propylamine | ND | 67 | 11 | ** | is | u | " | D | 1.1 |
| : 4-methylphenol | ND | 130 | n | 11 | μ | n | 14 | ti . | [] |
| obenzene | ND | 67 | n | †1 | D | н | 41 | U | Į i |
| phorone | ND | 67 | п | ь | ţı | R | n | # | Į i |
| itrophenol | ND | 130 | a | 11 | 11 | n | u | н | {1 |
| -dimethylphenol | ND | 130 | ti. | 19 | 17 | u | и | R | ι, |
| (2-chloroethoxy)methane | ND | 67 | 311 | 11 | 19 | н | н | U | (: |
| izoic acid | ND | 330 | 11 | p | n | tt | 15 | 11 | Į i |
| -dichlorophenol | ND | 130 | 71 | ıı | 11 | 12 | 0 | н | (; |
| · · | ND | 67 | н | 11 | IJ | 31 | u | H | (: |
| .4-trichlorobenzene | ND | 67 | Ħ | 11 | *1 | Ħ | Ħ | B | Ù |
| hthalene | ND | 67 | tt | Ħ | 11 | #1 | et - | ŋ | () |
| hloroaniline | ND | | 11 | 11 | 10 | м | 0 | 33 | U |
| :achlorobutadiene | | 67 | 11 | n | 14 | n | u | H | () |
| hloro-3-methylphenol | ND | 130 | n | Þ | н | lt | v | ,
11 | (· |
| nethylnaphthalene | ND | 67 | ,, | н | ij | lt. | , | TH. | Į. |
| achlorocyclopentadiene | ND | 130 | ** |
U | " | | £ 4 | ,, | Į1 |
| .6-trichlorophenol | ND | 130 | 11 | n. | " | ,, | | ,, | |
| .5-trichlorophenol | ND | 67 | | lt | 11 | и. | "
n | 11 | Į. |
| hloronaphthalene | ND | 67 | 11 | | | | | | (|
| itroaniline | ND | 67 | *1 | ь | # | p. | 0 | | 1 |
| naphthylene | ND | 67 | Ħ | 11 | er
 | ,, | 11 | 19 | 1 |
| nethyl phthalate | ND | 67 | . #1 | н | 11 | 1) | | n | |
| -dinitrotoluene | NĎ | 67 | 79 | (1 | n | 15 | ** | 1) | [|
| naphthene | ND | 67 | н | н | 11 | 31 | , e | ii | 1 |
| itroaniline | ND | 67 | н | ra
ra | " | и | 11 | †† | 1 |
| -dinitrophenol | ND | 130 | t | и | ţτ | ы | 10 | ** | 1 |
| enzofuran | ND | 67 | н | IT | Ħ | ** | " | 11 | Į. |
| -dinitrotoluene | ND | 67 | tr | ıı | Ħ | 1) | ii | ti. | į |
| itrophenol | ND | 130 | B | 11 | +1 | 39 | n | u | l |
| orene | ND | 67 | H | " | н | Ħ | ** | 11 | Į, |
| 'hlorophenyl phenyl ether | ND | 67 | if | *1 | ** | rt | n | II. | l |

aste Stream Technology Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

².O. Box 406 3uffalo NY, 14205 Project: New York State Projects

Project Number: 177 & 255 Great Arrow - 04B1552.22

Project Manager: Doug Reid

Reported: 09/01/04 10:15

Semivolatile Organic Compounds by EPA Method 8270C Waste Stream Technology Inc.

| nalyte | Result | Reporting
Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|------------------------------|-------------------------|--------------------|----------------|----------|----------|----------|----------|--------|------------|
| H51 (0-2) (4H17009-01) Soil | Sampled: 08/16/04 00:00 | Receive | d: 08/17/04 | 12:10 | | | | | |
| ethyl phthalate | ND | 67 | ug/kg dry |] | AH42601 | 08/26/04 | 08/31/04 | 8270 | 13 |
| nitroaniline | ND | 67 | 31 | ft | и | ŧr | h | 14 | Į · |
| 6-Dinitro-2-methylphenol | ND | 130 | 73 | 11 | R | n | н | ,,, | 1. |
| nitrosodiphenylamine | ND | 67 | it | U | ti | 11 | 17 | 11 | U |
| bromophenylphenylether | ND | 67 | 11 | U | II. | ğt | U | ti . | [] |
| xachiorobenzene | ND | 67 | R | Ħ | II. | ¥ | 1] | 11 | U |
| ntachlorophenol | ND | 130 | " | 11 | u | π | 0 | и | [1 |
| enanthrene | ND | 67 | jt. | 11 | h | 1F | #1 | ti | [] |
| thracene | ND | 67 | r t | 1) | D- | †I | ft | н | [] |
| rbazole | ND | 67 | Ef | 11 | řŧ | 11 | ਸ | ft. | [1 |
| -n-butyl phthalate | ND | 67 | ř* | U | н | 10 | н | 17 | [] |
| nzidine | ND | 330 | h | 11 | 75 | и | 11 | 11 | 11 |
| ioranthene | ND | 67 | Þ | я | " | U | 19 | *13 | [} |
| rene | 94 | 67 | 17 | . # | H | 15 | u | a | |
| ityl benzyl phthalate | . ND | 67 | H | ti | n | u | н | 6 | ι, |
| 3'-Dichlorobenzidine | ND | 67 | 88 | а | н | 11 | η | 11 | 11 |
| mzo (a) anthracene | ND | 67 | н | 18 | n | 17 | 16 | ti | į į |
| visene | ND | 67 | н | н | U | В | TI. | 11 | 1) |
| s(2-ethylhexyl)phthalate | 6470 | 67 | 17 | n | ri | n | n | ¥ | |
| -n-octyl phthalate | ND | 67 | н | n | ** | u | u | ** | f: |
| inzo (b) fluoranthene | ND | 67 | ft | n | tF | H | H | я | U |
| inzo (k) fluoranthene | ND | 67 | H | 11 | 19 | 11 | *1 | tt | [] |
| inzo (a) pyrene | ND | 67 | Ţ\$ | Ħ | Ħ | Ħ | 11 | н | { 1 |
| Jeno (1,2,3-cd) pyrene | ND | 67 | tt | +* | स | H | tr | 29 | [! |
| benz (a,h) anthracene | ND | 67 | 31 | ŧŧ | 11 | 11 | " | 11 | (1 |
| mzo (g,h,i) perylene | ND | 67 | tí | þ | f) | n | ,, | 11 | (i |
| rrogate: 2-Fluorophenol | | 50.6% | 50-1 | 12 | · · · ii | " | n | " | |
| rrogate: Phenol-d6 | | 78.0 % | 52-1 | | ** | " | " | " | |
| rrogate: Nitrobenzene-d5 | | 81.5% | 48-1 | 22 | " | " | " | " | |
| rrogate: 2-Fluorobiphenyl | | 87.2 % | 50-1 | 21 | u | ti. | tr | u | |
| rrogate: 2,4,6-Tribromopheno | I | 8.80 % | 50-1 | 32 | " | tt | H | n | S-04 |
| rrogate: Terphenyl-d14 | | 157% | 36-1 | | ** | и | " | " | S-04 |

.O. Box 406 utfalo NY, 14205 Project: New York State Projects

Project Number: 177 & 255 Great Arrow - 04B1552.22

Project Manager: Doug Reid

Reported: 09/01/04 10:15

Semivolatile Organic Compounds by EPA Method 8270C Waste Stream Technology Inc.

| nalyte | Result | Reporting
Limit | Units | Dilution | Batch | Prepared | Analyzed | ,
Method | Notes |
|-----------------------------|-------------------------|--------------------|-------------|----------|------------|----------|----------|-------------|--------|
| 152 (0-2) (4H17009-02) Soil | Sampled: 08/16/04 00:00 | Receive | d: 08/17/04 | 12:10 | | | | | |
| Nitrosodimethylamine | ND | 67 | ug/kg dry | 1 | AH42601 | 08/26/04 | 08/30/04 | 8270 | U |
| 2-chloroethyl)ether | ND | 67 | 94 | 17 | It | τí | . # | Ħ | Į. |
| enol | ND | 130 | u | 74 | υ | tf | ř¥. | 0 | I_1 |
| hlorophenol | ND | 130 | 17 | H | tı |); | 17 | 74 | { : |
| -dichlorobenzene | ND | 67 | 17 | п | n | n | 9 | н | 1 |
| -dichlorobenzene | ND | 67 | 11 | ** | ** | н | *1 | bb. | l |
| -dichlorobenzene | ND | 67 | " | 11 | ŧ | " | şi | TF. | l |
| nzyl alcohol | ND | 67 | н | n | Ħ | tt | 11 | " | 1 |
| (2-chloroisopropyl)ether | ND | 67 | н | u | н | ų | n | n | 1 |
| nethylphenol | ND | 67 | Iŧ | Ħ | n | п | ft | # | 1 |
| cachloroethane | ND | 67 | P | ** | н | n | 33 | 14 | l |
| Nitrosodi-n-propylamine | ND | 67 | ** | 19 | U . | ** | *1 | v | (. |
| ε 4-methylphenol | ND | 130 | 11 | н | n | н | tt | u | l |
| robenzene | ND | 67 | 37 | H | ŧı | n | " | н | (|
| phorone | ND | 67 | 11 | tf | 11 | В | n | n | Į |
| irophenol | ND | 130 | †I | н | ** | ii. | 11 | 11 | i |
| staticthylphenol | ND | 130 | 11 | n | H* | ч | м . | ar . | į |
| a2-chloroethoxy)methane | ND | 67 | 11 | ** | n. | 11 | ,, | и | į |
| izoic acid | ND | 330 | 18 | 11 | U | Ħ | 11 | u | ŧ |
| -dichlorophenol | ND | 130 | 17 | 11 | n | н | 11 | н | l |
| .4-trichlorobenzene | ND | 67 | 17 | ,, | π | u | ** | u | ι |
| hthalene | ND | 67 | ŧŧ | If | fl | 31 | ir | ц | ι |
| hloroaniline | ND | 67 | Ħ | fs | 8 1 | 11 | ış | n | ι |
| tachlorobutadiene | ND | 67 | Ħ | It | tt | н | н | 11: | Į |
| | ND | 130 | ** | н | | 11 | ** | 0 | Į |
| hloro-3-methylphenol | ND | 67 | ** | lt | It | 11 | н | o | . (|
| nethylnaphthalene | ND | 130 | #1 | 11 | U | 8 | E | н | į |
| tachlorocyclopentadiene | ND | 130 | ŧŧ | 71 | ri | h | U | R | 1 |
| .6-trichlorophenol | ND | 67 | 24 | n | ,11 | 11 | 11 | # | |
| .5-trichlorophenol | | | 19 | h | e e | Ħ | ы | 11 | 1 |
| hloronaphthalene | ND | 67
67 | ıt. | er . | # | 17 | tt | ti. | ` (|
| itroaniline | ND | 67 | n | R | Ħ | ft. | 11 | В | , |
| naphthylene | ND | | h | p | 77 | 11 | 11 | D | , |
| nethyl phthalate | ND | 67 | n | 11 | R | ., | TP | v | ·
! |
| -dinitrotoluene | ND | 67 | и | ,, | tŧ | f1 | ti | 11 | ,
Į |
| naphthene | ND | 67 | R | P1 | п | n | | a | ,
[|
| itroaniline | ND | 67 | | " " | 9 | H | " | u | |
| -dinitrophenol | ND | 130 | , | | | tr | " | ,, | 1 |
| enzofuran | ND | 67 | t) | 31 | | | H | 19 | (|
| -dinitrotoluene | ND | 67 | н | 33 | 11 | | | | (|
| itrophenol | ND | 130 | Ħ | ti | lt . | | н | 74 | |
| orene | ND | 67 | 11 | н | ft | н | 11 | н | (|
| hlorophenyl phenyl ether | ND | 67 | II | 10 | t# | tı | ** | u | i |

aste Stream Technology Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

O. Box 406 uffalo NY. 14205

Project: New York State Projects

Project Number: 177 & 255 Great Arrow - 04B1552.22

Project Manager: Doug Reid

Reported: 09/01/04 10:15

Semivolatile Organic Compounds by EPA Method 8270C Waste Stream Technology Inc.

| nalyte | Result | Reporting
Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|------------------------------|-------------------------|--------------------|-------------|----------|---------|----------|------------|----------------|-------|
| 152 (0-2) (4H17009-02) Soil | Sampled: 08/16/04 00:00 | Receive | d: 08/17/04 | 12:10 | | | | | |
| ethyl phthalate | ND | 67 | ug/kg dry | l | AH42601 | 08/26/04 | 08/30/04 | 8270 | l i |
| iitroaniline | ND | 67 | n | ** | 10 | H | ** | 51 | Į : |
| -Dinitro-2-methylphenol | ND | 130 | 11 | ** | 71 | н | li . | 11 | ľ. |
| nitrosodiphenylamine | ND | 67 | #1 | 11 | t) | . " | ,, | " | Ţ |
| promophenylphenylether | ND | 67 | 11 | и | # | 19 | " | ,, | Į į |
| vachlorobenzene | ND | 67 | ti | " | 1+ | 11 | ţ1 | н | (} |
| ntachlorophenol | ND | 130 | 0 | 11 | II | 11 | 11 | tf | li |
| enanthrene | 531 | 67 | (t | II . | 47 | t) | H |): | |
| thracene | ND | 67 | u | 11 | ** | (r | ţr | 11 | f : |
| bazole | ND | 67 | (I | н | 71 | 16 | 11 | t t | li |
| -n-butyl phthalate | ND | 67 | н | 51 | H | Ħ | ย | 3 f | Į i |
| azidine | ND | 330 | Ħ | Ħ | ħ | Ħ | tt | n | [1 |
| oranthene | 426 | 67 | Ħ | #1 | Ħ | 11 | P † | n | |
| rene | 1090 | 67 | Ht. | tt | n | Tf | 0 | 21 | |
| tyl benzyl phthalate | ND | 67 | и | D | #1 | н | н | II. | . 11 |
| :-Dichlorobenzidine | ND | 67 | 0 | U | 21 | 11 | ы | 0 | 1. |
| nzo (a) anthracene | 274 | 67 | n | ** | 11 | n | et | " | |
| rysene | 368 | 67 | e | *1 | eş | ft | | n | |
| (2-ethylhexyl)phthalate | 3560 | 67 | Bf | \$1 | If | t) | * 16 | II. | |
| -n-octyl phthalate | ND | 67 | D | ţŦ | It | " | 11 | TI | U |
| nzo (b) fluoranthene | 253 | 67 | " | | ,, | | н | н | |
| nzo (k) fluoranthene | 267 | 67 | u | U | 11 | м | 14 | tt | |
| nzo (a) pyrene | 310 | 67 | II. | 9 | 15 | ft | ŧŧ | IF | |
| deno (1,2,3-cd) pyrene | 172 | 67 | Ħ | u | Ħ | U | н | 11 | |
| benz (a,h) anthracene | ND | 67 | н | 21 | " | 31 | н | и | (1 |
| nzo (g,h,i) perylene | 221 | 67 | 31 | н | H | ч | n | н | |
| rrogate: 2-Fluorophenol | | 20.5 % | 50-1 | 12 | , , , , | n | n |)+ | S-04 |
| rrogate: Phenol-d6 | | 67.3 % | 52-1 | 1.7 | # | и | " | TF. | |
| rrogate: Nitrobenzene-d5 | | 74.6 % | 48-1 | 22 | " | " | ,, | n | |
| rrogate: 2-Fluorobiphenyl | | 86.9 % | 50-1 | | " | " | • | " | |
| rrogate: 2,4,6-Tribromopheno | ol . | 3.03 % | 50-1 | | n | H | 12 | ,, | S-04 |
| rrogate: Terphenyl-d14 | | 141 % | 36-1 | | n | " | ** | n | S-04 |
| Togue, to promy at | | | | | | | | | |

.O. Box 406 uffalo NY, 14205 Project: New York State Projects

Project Number: 177 & 255 Great Arrow - 04B1552.22

Project Manager: Doug Reid

Reported: 09/01/04 10:15

Semivolatile Organic Compounds by EPA Method 8270C Waste Stream Technology Inc.

| ialyte | Result | Reporting
Limit | Units | Dilution | Batch | Prepared | Analyzed | ,
Method | Notes |
|-----------------------------|-------------------------|--------------------|------------|----------|------------|----------|----------|-------------|------------|
| 153 (0-2) (4H17009-03) Soil | Sampled: 08/16/04 00:00 | Receive | d: 08/17/0 | 4 12:10 | | | | | |
| Nitrosodimethylamine | ND | 67 | ug/kg dry | 1 | AH42601 | 08/26/04 | 08/30/04 | 8270 | 1.5 |
| 2-chloroethyl)ether | ND | 67 | Ħ | 71 | 19 | н | t# | *** | 11 |
| anol | ND | 130 | Ħ | 11 | It | R | п | и | (1 |
| hlorophenol | ND | 130 | ** | ** | u | 11 | " | ŧ. | [1 |
| -dichlorobenzene | ND | 67 | n | #1 | u | 11 | " | " | (: |
| -dichlorobenzene | ND | 67 | 11 | н | 78 | že. | *1 | 11 | () |
| -dichlorobenzene | ND | 67 | 11 | н | f† | я | br | ŦI | <i>[</i> : |
| ızyl alcohol | ND | 67 | ţ1 | II | Ħ | я | " | н | (: |
| (2-chloroisopropyl)ether | ND | 67 | 11 | tt | 11 | В | n | ŧr | 1.1 |
| nethylphenol | ND | 67 | 11 | ts | 11 | łı | ** | 11 | (1 |
| tachloroethane | ND | 67 | Ħ | ts | 11 | μ | н | 11 | ţ: |
| Nitrosodi-n-propylamine | ND | 67 | ţţ | *1 | 19 | l# | U | i1 | () |
| ¿ 4-methylphenol | ND | 130 | 14 | H | н | n | 11 | It | ł. |
| obenzene | ND | 67 | tt . | n | 11 | fl | н | H | 1 |
| phorone | ND | 67 | H | ŧr | n | 31 | н | и | 1. |
| itrophenol | ND | 130 | h | n | # . | n | 11 | 39 | 1 |
| timethylphenol | ND | 130 | к | it. | FF | H | n | ti ti | i |
| 2-chloroethoxy)methane | ND | 67 | n | u u | u | ** | *1 | а | 1 |
| nzoic acid | ND | 330 | В | is . | u | 11 | 34 | н | 1 |
| -dichlorophenol | ND | 130 | 9 | 11 | u | ŧ | b | e | { |
| 4-trichlorobenzene | ND | 67 | " | н | ** | şt | 11 | 11 | Į |
| ohthalene | ND | 67 | et e | ti | H | U | п | н | Į |
| hloroaniline | ND | 67 | 0 | #1 | h | ij | н | b | Į |
| tachlorobutadiene | ND | 67 | H | 17 | n | 11 | D | и | Į |
| hloro-3-methylphenol | ND | 130 | U | ĸ | H | 1f | U | ıt | ι |
| nethylnaphthalene | ND | 67 | u | ** | п | R | v | . н | l |
| achlorocyclopentadiene | ND | 130 | ц | 11 | н | 17 | ** | 18 | 1 |
| .6-trichlorophenol | ND | 130 | п | n | Ħ | u | ÷1 | H | (|
| .5-trichlorophenol | ND | 67 | n | a | 39 | u | . 11 | n | ŧ |
| hloronaphthalene | ND | 67 | " | и | 16 | " | Pt . | W | l |
| itroaniline | ND | 67 | u, | it. | U | ** | | 11 | ι |
| naphthylene | ND | 67 | 91 | 15 | 19 | B | 11 | 4) | (|
| nethyl phthalate | ND | 67 | a | 41 | Ħ | н |) E | п | ţ |
| -dinitrotoluene | ND | 67 | " | ţ¥. | Ħ | " | 3+ | tf | i |
| naphthene | ND | 67 | n | н | Ħ | 11 | 11 | 11 | l |
| itroaniline | ND | 67 | ti | н | ti | н | н | 0 | l |
| -dinitrophenol | ND | 130 | #1 | 11 | Ħ | п | H | н | Į |
| enzofuran | ND | 67 | ŧı | n | 71 | 11 | 28 | DF. | į |
| -dinitrotoluene | ND | 67 | ŧ | # | n | н | u | v | 1 |
| itrophenol | ND | 130 | 29 | # | ĒŢ . | †* | ń | u | l |
| orene | ND | 67 | ži. | н | D | ļŧ | н | , a | (|
| Thiorophenyl phenyl ether | ND | 67 | Ħ | 11 | u | 11 | II. | ** | (|

aste Stream Technology Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

.O. Box 406 uffalo NY, 14205 Project: New York State Projects

Project Number: 177 & 255 Great Arrow - 04B1552.22

Project Manager: Doug Reid

Reported: 09/01/04 10:15

Semivolatile Organic Compounds by EPA Method 8270C

Waste Stream Technology Inc.

| ıalyte | Result | Reporting
Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|-----------------------------|-------------------------|--------------------|-------------|------------|------------|----------|----------|--------|------------|
| 153 (0-2) (4H17009-03) Soil | Sampled: 08/16/04 00:00 | Receive | d: 08/17/04 | 12:10 | | | | | |
| ethyl phthalate | ND | 67 | ug/kg dry | l | AH42601 | 08/26/04 | 08/30/04 | 8270 | Į į |
| itroaniline | ND | 67 | ŧF. | ai . | Ħ | я | 71 | H | 1.1 |
| -Dinitro-2-methylphenol | ND | 130 | 111 | #1 | 14 | Ħ | n | 19 | (f |
| itrosodiphenylamine | ND | 67 | *1 | li . | 11 | ц | | •• | [] |
| romophenylphenylether | ND | 67 | н | 11 | U | st . | 11 | 19 | [1 |
| cachlorobenzene | ND | 67 | tt | n | П | e e | *1 | †1 | 11 |
| ntachlorophenol | ND | 130 | II . | Ħ | n | 11 | 19 | н | (i |
| enanthrene | 455 | 67 | H | 11 | 11 | " | n | н | |
| thracene | 81 | 67 | н | " | 11 | 11 | n | 19 | |
| bazole | ND | 67 | u | 11 | rŧ. | н | až. | 11 | Į i |
| n-butyl phthalate | ND | 67 | н | +1 | ŧł | t# | 11 | a | į i |
| nzidine | ND | 330 | 11 | įŧ | n | # | FT | N | Į į |
| oranthene | 551 | 67 | 31 | er | n | Ħ | n | n | |
| rene | 1470 | 67 | H | r# | H | 14 | U | it. | |
| tyl benzyl phthalate | ND | 67 | u | п | 11 | В | ** | - 11 | Į į |
| -Dichlorobenzidine | ND | 67 | u | 81 | * * | 11 | 51 | \$1 | [1 |
| nzo (a) anthracene | 406 | 67 | 11 | 16 | Tf | n | ft | h | |
| rysene | 424 | 67 | It | H | 19 |)1 | Ħ | В | |
| (2-ethylhexyl)phthalate | 5060 | 67 | H | li. | If | н | 11 | 11 | |
| n-octyl phthalate | ND | 67 | II. | ji | и | n | 14 | 11 | Į |
| nzo (b) fluoranthene | 480 | 67 | ĸ | u | u | Iŧ | 19 | и | |
| nzo (k) fluoranthene | 414 | 67 | 31 | 11 | n | tt | 11 | n | |
| nzo (a) pyrene | (534) | 67 | ts | ij | u | H | п | Ay. | |
| leno (1,2,3-cd) pyrene | 300 | 67 | u | 11 | 11 | 59 | 11 | 18 | |
| enz (a,h) anthracene | 117 | 67 | iz | †t | P | 17 | *1 | H | |
| nzo (g,h,i) perylene | 395 | 67 | 12 | 11 | Pt | t† | 18 | н | |
| rogate: 2-Fluorophenol | | 80.1 % | 50-1 | 12 | | | n | n | |
| rogate: Phenol-d6 | | 93.8 % | 52-1 | 17 | " | " | " | u | |
| rogate: Nitrobenzene-d5 | | 80.4 % | 48-12 | 22 | " | " | " | " | |
| rogate: 2-Fluorobiphenyl | | 90.7% | 50-1. | 21 | " | er | " | 11 | |
| rogate: 2,4,6-Tribromopheno | 1 | 112 % | 50-1. | 3 <i>2</i> | ,,, | n | " | p# | |
| rogate: Terphenyl-d14 | | 173 % | 36-1. | 34 | " | H | *** | " | 5-04 |

'.O. Box 406 3uffalo NY, 14205 Project: New York State Projects

Project Number: 177 & 255 Great Arrow - 04B1552.22

Project Manager: Doug Reid

Reported: 09/01/04 10:15

Semivolatile Organic Compounds by EPA Method 8270C Waste Stream Technology Inc.

| ıalyte | Result | Reporting
Limit | Units | Dilution | Batch | Prepared | Analyzed | ,
Method | Notes |
|-----------------------------|-------------------------|--------------------|-------------|----------|------------|----------|----------|-------------|-------|
| 154 (1-3) (4H17009-04) Soil | Sampled: 08/16/04 00:00 | Receive | d: 08/17/04 | 12:10 | | | | | |
| Nitrosodimethylamine | ND | 134 | ug/kg dry | 2 | AH42601 | 08/26/04 | 08/31/04 | 8270 | l |
| (2-chloroethyl)ether | ND | 134 | 19 | п | 11 | st | н | U | Į |
| enol | ND | 260 | н | ш | ** | 11 | н | 11 | Į |
| thlorophenol | ND | 260 | н | u | n | n | н | ** | 1 |
| -dichlorobenzene | ND | 134 | 11 | t† | 11 | 11 | 71 | †I | (|
| dichlorobenzene | ND | 134 | B | 11 | ħ | н | 11 | Ħ | 1 |
| :-dichlorobenzene | ND | 134 | Ħ | н | 11 | н | п | μ | (|
| nzyl alcohol | ND | 134 | n | #1 | ** | и | *9 | n | Į |
| (2-chloroisopropyl)ether | ND | 134 | ** | 11 | tt | # | 16 | If | ţ |
| nethylphenol | ND | 134 | ** | 31 | " | b | н | 11 | Į |
| cachloroethane | ND | 134 | 17 | н | Ħ | В | н | 11 | Į |
| Nitrosodi-n-propylamine | ND | 134 | ** | ## | ** | tt | n | ** | ι |
| ٤ 4-methylphenol | ND | 260 | (7 | " | ŧr | " | u . | 19 | Į |
| robenzene | ND | 134 | н | ** | ** | It | It | п | ι |
| phorone | ND | 134 | н | U | #1 | Ü | n | н | Į |
| itrophenol | ND | 260 | ŧ1 | H | rt | U | o | If | Į |
| samethylphenol | ND | 260 | U | ħ | 17 | U | 11 | n n | Į |
| #2-chloroethoxy)methane | ND | 134 | ti | 19 | ** | ., | 11 | # | ı |
| nzoic acid | ND | 660 | Iŧ | н | ** | H | 19 | u | Į |
| -dichlorophenol | ND | 260 | Ħ | u | ** | ţı . | h | 11 | i |
| .4-trichlorobenzene | ND | 134 | et | п | " | п | 24 | N | , (|
| phthalene | ND | 134 | n | . 11 | 11 | r | u | и | ŧ |
| hloroaniline | ND | 134 | Ħ | н | 11 | ŋ | 11 | ** | Į |
| tachlorobutadiene | ND | 134 | u | b | Ŧ 1 | ų | ti | n | Ę |
| hloro-3-methylphenol | ND | 260 | ti. | n | 17 | п | u | п | Į |
| nethylnaphthalene | ND | 134 | U | ** | ** | 34 | 0 | " | l |
| :achlorocyclopentadiene | ND | 260 | Ħ | 31 | 34 | Ħ | u | н | l |
| .6-trichlorophenol | ND | 260 | tı | ** | H | Ħ | 11 | ų | ι |
| .5-trichlorophenol | ND | 134 | U | п | n | 11 | u | ıı . | ŧ |
| hloronaphthalene | ND | 134 | " | n | n | н | 11 | 11 | t. |
| itroaniline | ND | 134 | U | Ü | Ħ | ŧŧ | ** | н | (|
| naphthylene | ND | 134 | rt | ø | *1 | Ħ | 11 | и | - |
| nethyl phthalate | ND | 134 | н | 14 | η | Ü | n | ь | l |
| -dinitrotoluene | ND | 134 | H | ** | " | n | n | n | |
| naphthene | ND | 134 | Ħ | p | и | " | р | U | 1 |
| itroaniline | ND | 134 | 11 | IŞ | n . | ,, | н | u | į |
| -dinitrophenol | ND | 260 | 11 | 19 | tt | 11 | u | n | ł |
| enzofuran | ND | 134 | 11 | 10 | \$1 | 11 | " | (+ | ţ |
| -dinitrotoluene | ND | 134 | n | *1 | u | " | 11 | tt | (|
| itrophenol | ND | 260 | P | Ħ | ** | 11 | n n | Ħ | ŧ |
| rene | ND | 134 | 11 | 17 | 11 | 11 | 71 | н | [|
| hlorophenyl phenyl ether | ND | 134 | ** | n | ** | tt | м | " | Į |

aste Stream Technology Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

P.O. Box 406 Buffalo NY, 14205 Project: New York State Projects

Project Number: 177 & 255 Great Arrow - 04B1552.22

Project Manager: Doug Reid

Reported: 09/01/04 10:15

Semivolatile Organic Compounds by EPA Method 8270C Waste-Stream Technology Inc.

| nalyte | Result | Reporting
Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|------------------------------|-------------------------|--------------------|-------------|----------|---------------------------------------|--------------|------------|--------|-------|
| H54 (1-3) (4H17009-04) Soil | Sampled: 08/16/04 00:00 | Receive | d: 08/17/04 | 12:10 | | | | | |
| ethyl phthalate | ND | 134 | ug/kg dry | 2 | AH42601 | 08/26/04 | 08/31/04 | 8270 | [] |
| nitroaniline | ND | 134 |)ı | н | n | a | R | 52 | {! |
| 5-Dinitro-2-methylphenol | ND | 260 | H | by. | " | tt | H* | ** | [] |
| nitrosodiphenylamine | ND | 134 | 11 | 17 | * | 11 | te | я | () |
| ecomophenylphenylether | ND | 134 | . 41 | H | ft - | u | ts | Ħ | [] |
| xachlorobenzene | ND | 134 | n | a | 11 | п | n | n | U |
| ntachlorophenol | ND | 260 | ** | н | н | н | и | " | U |
| enanthrene | ND | 134 | LP. | u | " | 14 | te | 11 | {} |
| thracene | ND | 134 | 11 | H | В | 19 | te . | o o | [] |
| rbazole | ND | 134 | ıţ | H | μ | 17 | · " | T T | [] |
| -n-butyl phthalate | ND | 134 | FF | п | 14 | 11 | U | tr. | [] |
| nzidine | ND | 660 | 78 | # | R | 28 | sy. | u | (1 |
| oranthene | ND | 134 | Ħ | 11 | R | и . | 6 | ft | [] |
| rene | 428 | 134 | ji | . 0 | 11 | 11 | 13 | R | · |
| tyl benzyl phthalate | ND | 134 | H | 0 | 27 | 11 | fs | 11 | Į] |
| '-Dichlorobenzidine | ND | 134 | 11 | H | н | tı | h | 11 | IJ |
| nzo (a) anthracene | ND | 134 | tr | 11 | u | IJ | tt . | Ħ | - [] |
| rysene | 214 | 134 | 11 | Ħ | u | ш | н | В | |
| (2-ethylhexyl)phthalate | 1160 | 134 | 11 | H | υ | U | н | 17 | В |
| -n-octyl phthalate | ND | 134 | 11 | ** | п | ji . | gk | 15 | U |
| nzo (b) fluoranthene | 216 | 134 | ** | n | It. | п | н | †i | |
| nzo (k) fluoranthene | ND | 134 | Ħ | મ | n | u | ŧi | H | [] |
| nzo (a) pyrene | 402 | 134 | 11 | u | ‡± | n | ** | ij | , |
| leno (1,2,3-cd) pyrene | MD | 134 | 11 | D | f ‡ | n | 11 | †1 | [1 |
| penz (a.h) anthracene | ND | 134 | n | μ | et | ** | (1 | 31 | U |
| nzo (g,h,i) perylene | 893 | 134 | 11 | Ħ | n | 11 | tj | 41 | |
| rogate: 2-Fluorophenol | | 64.0 % | 50-1 | 12 | · · · · · · · · · · · · · · · · · · · | _P | " | " | |
| rogate: Phenol-d6 | | 75.8 % | 52-1 | | F2 | n | ,, | " | |
| rogate: Nitrobenzene-d5 | | 63.3 % | 48-1 | | ,, | " | " | ,,, | |
| rogate: 2-Fluorobiphenyl | | 83.3 % | 50-1 | | " | tr | P 2 | n | |
| rogate: 2,4,6-Tribromophenol | | 81.9% | 50-1 | | " | и | 91 | " | |
| rogate: Terphenyl-d14 | | 157% | 36-1 | | ** | " | re | 0 | S-04 |

².O. Box 406 3uffalo NY, 14205 Project: New York State Projects

Project Number: 177 & 255 Great Arrow - 04B1552.22

Project Manager: Doug Reid

Reported: 09/01/04 10:15

Semivolatile Organic Compounds by EPA Method 8270C Waste Stream Technology Inc.

| nalyte | Result | Reporting
Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|-----------------------------|-------------------------|--------------------|-------------|-----------------|---------|----------|----------|--------|------------|
| H55 (0-2) (4H17009-05) Soil | Sampled: 08/16/04 00:00 | | d: 08/17/04 | 12:10 | | | | - | |
| Nitrosodimethylamine | ND | | ug/kg dry | 10 | AH42601 | 08/26/04 | 08/27/04 | 8270 | () |
| s(2-chloroethyl)ether | ND | 670 | 11 | ** | 17 | ** | ** | . " | Į į |
| ienol | 5670 | 1300 | tí | # | H | tt | 11 | R | |
| chlorophenol | ND | 1300 | 76 | 11 | H | II | n . | n | { } |
| 3-dichlorobenzene | ND | 670 | U | ** | 11 | p | ** | u | [1 |
| 1-dichlorobenzene | ND | 670 | n | Ħ | Ħ | п | n | 73 | IJ |
| 2-dichlorobenzene | ND | 670 | Ħ | n | H | u | *1 | 71 | 11 |
| s(2-chloroisopropyl)ether | ND | 670 | н | н | n | ų. | H | я | () |
| nzyl alcohol | ND | 670 | 11 | Ħ | a) | \$1 | (t | | (! |
| methylphenol | 1220 | 670 | н | 0 | ** | It | 11 | 11 | |
| xachloroethane | ND | 670 | †i | U | 18 | II . | ь | ** | 1: |
| Nitrosodi-n-propylamine | ND | 670 | 31 | 11 | 45 | 11 | 11 | н | () |
| & 4-methylphenol | 3850 | 1300 | Ħ | 11 | 11 | n | 31 | 1E | |
| robenzene | ND | 670 | " | #4 | " | H | 11 | 14 | [] |
| chorone | ND | 670 | и | 35 | п | (I | " | н | Ü |
| nitrophenol | ND | 1300 | Ħ | ŧŧ | 15 | ** | 11 | н | Į. |
| 1-dimethylphenol | ND | 1300 | a | \$ 1 | tr | 11 | 31 | 11 | () |
| s(2-chloroethoxy)methane | ND | 670 | IJ | *1 | Ħ | 41 | 34 | 31 | [] |
| nzoic acid | ND | 3300 | II . | н | 17 | | D | р | 1 |
| 1-dichlorophenol | ND | 1300 | · n | ** | ** | 1) | O . | n | l |
| 2,4-trichlorobenzene | ND | 670 | II. | ti | n | Ħ | 11 | U | l |
| phthalene | 240000 | 6700 | n , | 100 | н | 11 | 11 | 31 | 1 |
| chloroaniline | ND | 670 | O | 10 | 11 | 13 | н | 11 | Į. |
| xachlorobutadiene | ND | 670 | 1) | #7 | n · | ĮΤ | В | 11 | Į |
| chloro-3-methylphenol | ND | 1300 | #1 | Ħ | Ü | Ü | и | łs | ţ |
| methylnaphthalene | 48900 | 670 | ff | 11 | It | н | ** | ŧŧ | |
| xachlorocyclopentadiene | ND | 1300 | *1 | n | н | ** | ** | n | Į |
| 1.6-trichlorophenol | ND | 1300 | 11 | 18 | H . | 71 | н | 11 | l |
| 1.5-trichlorophenol | ND | 670 | п | U | n | #1 | Ħ | 19 | l |
| chloronaphthalene | ND | 670 | ii. | u | u | n | It | tr | l |
| nitroaniline | ND | 670 | ** | п | lt. | 11 | n | 11 | ţ |
| enaphthylene | 17100 | 670 | tf | n | H | u | a |)) | |
| methyl phthalate | ND | 670 | 13 | n n | 11 | 67 | # · · | н | Į |
|)-dinitrotoluene | ND | 670 | a | п | 11 | ** | 14 | 43 | 1 |
| enaphthene | 20500 | 670 |)1 | ** | ħ | *** | н | н | |
| nitroaniline | ND | 670 | u | u u | Ħ | n | H | p | į |
| l-dinitrophenol | ND | 1300 | fi | и | ŦŤ | п | ** | u | Į |
| penzofuran | 55000 | 670 | . " | ы | 11 | ч | . н | Ħ | |
| l-dinitrotoluene | ND | 670 | ji | u | п | T† | n | ŧr | ţ |
| itrophenol | ND | 1300 | ,, | н | h | n | ** | Pt | ţ |
| orene | 21400 | 670 | ,11 | 11 | 11 | U | " | ** | |
| Chlorophenyl phenyl ether | ND | 670 | Ħ | 44 | 1\$ | Ħ | ts | Я | t |

/aste Stream Technology Inc.

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P.O. Box 406 Buffalo NY, 14205 Project: New York State Projects

Project Number: 177 & 255 Great Arrow - 04B1552.22

Project Manager: Doug Reid

Reported: 09/01/04 10:15

Semivolatile Organic Compounds by EPA Method 8270C Waste Stream Technology Inc.

| nalyte | Result | Reporting
Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|------------------------------|-------------------------|--------------------|-------------|----------|---------|----------|----------|----------|-------|
| H55 (0-2) (4H17009-05) Soil | Sampled: 08/16/04 00:00 | Receive | d: 08/17/04 | 12:10 | | | | | |
| iethyl phthalate | ND | 670 | ug/kg dry | 10 | AH42601 | 08/26/04 | 08/27/04 | 8270 | (; |
| nitroaniline | ND | 670 | n | ** | u | н | ţ1 | n | l. |
| ~-Dinitro-2-methylphenol | ND | 1300 | ** | tt. | 11 | n | ** | 11 | U |
| nitrosodiphenylamine | ND | 670 | tī. | te | н | n | ** | स | [] |
| bromophenylphenylether | ND | 670 | H | н | н | н | 51 | ## | Ļi |
| xachlorobenzene | ND | 670 | н | u | 0 | и | že. | 11 | U |
| ntachlorophenol | ND | 1300 | 11 | н | н | " | Ħ | n . | IJ |
| ienanthrene | 408000 | 6700 | ti | 100 | # | u | n | н | D |
| thracene | 91900 | 6700 | tr . | . н | Ħ | ч | ** | 14 | Ð |
| rbazole | 41000 | 670 | tt | 10 | Ħ | n | n | 14 | |
| -n-butyl phthalate | ND | 670 | н | в | Ħ | 11 | ц | b+ | 1. |
| nzidine | ND | 3300 | ** | 0 | 11 | 17 | ,, | u | 1.) |
| ioranthene | 333000 | 6700 | н | 100 | n | ** | ** | 21 | () |
| rene | 269000 | 6700 | н | lt. | D | P | ti . | 11 | 11 |
| ityl benzyl phthalate | ND | 670 | Ħ | 10 | 11 | 11 | н | #1 | Į į |
| -Dichlorobenzidine | ND | 670 | н | н | n | " . | 1) | H | () |
| nzo (a) anthracene | 128000 | 6700 | 77 | 100 | ú | " | ři. | н | () |
| rysene | 125000 | 6700 | \$1 | р | 11 | tì | Ţŧ | 15 | D |
| s(2-ethylhexyl)phthalate | 1010 | 670 | ti. | 10 | н | ŧı | #1 | 13 | В |
| -n-octyl phthalate | ND | 670 | It. | 14 | þ | η | n | ŧt. | Į J |
| nzo (b) fluoranthene | 116000 | 6700 | EF . | 100 | 11 | II . | 1) | н | D |
| nzo (k) fluoranthene | 112000 | 6700 | Ħ | R | п | ti . | n | Ħ | D |
| nzo (a) pyrene | 108000 | 6700 | Ħ | ŧŧ | н | u | 11 | Ħ | D |
| deno (1,2,3-cd) pyrene | 50000 | 670 | n | 10 | н | 19 | fŦ | Ħ | |
| benz (a,h) anthracene | 17800 | 670 | n | if | ** | 11 | ** | 31 | |
| nzo (g,h,ì) perylene | 42700 | 6700 | н | 100 | 71 | Ħ | ŧi. | स | 1) |
| rrogate: 2-Fluorophenol | | 15.5 % | 50-1 | 72 | , | н | et . | n | S-04 |
| rrogate: Phenol-d6 | | 62.7 % | 52-1 | | n | 11 | " | " | |
| rrogate: Nitrobenzene-d5 | | 72.8 % | 48-1 | | p | " | 0 | " | |
| rrogate: 2-Fluorobiphenyl | | 81.1% | 50-1 | | n | н | p) . | <i>n</i> | |
| crogate: 2,4,6-Tribromopheno | ! | 0.800 % | 50-1 | | n | В | | n | S-04 |
| rrogate: Terphenyl-d14 | | 121 % | 36-1 | 34 | " | " | " | n | |

P.O. Box 406 Buffalo NY, 14205 Project: New York State Projects

Project Number: 177 & 255 Great Arrow - 04B1552.22

Project Manager: Doug Reid

Reported: 09/01/04 10:15

Semivolatile Organic Compounds by EPA Method 8270C Waste Stream Technology Inc.

| nalyte | Result | Reporting
Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|-----------------------------|-------------------------|--------------------|-------------|----------|-----------|-----------------|-----------------|--------|------------|
| H56 (0-2) (4H17009-06) Soil | Sampled: 08/16/04 00:00 | Receive | d: 08/17/04 | 1 12:10 | | | | | |
| -Nitrosodimethylamine | ND | 67 | ug/kg dry | l | AH42601 | 08/26/04 | 08/27/04 | 8270 | [] |
| s(2-chloroethyl)ether | ND | 67 | " | Ħ | H | . It | 11 | н | () |
| renol | 260 | 130 | 17 | tf | H | # | D | 0 | |
| chlorophenol | ND | 130 | H | н | H | 17 | • 41 | 11 | Į i |
| 3-dichlorobenzene | ND | 67 | it. | n | В | ış | , | п | [; |
| 4-dichlorobenzene | ND | 67 | ** | в | 15 | Ħ | n | #1 | [] |
| 2-dichlorobenzene | ND | 67 | n | и | H | 11 | 11 | ** | Li |
| inzyl alcohol | ND | 67 | n | Ħ | н | n | н . | ** | U |
| s(2-chloroisopropyl)ether | , ND | 67 | н | я | 14 | ži. | н | 11 | U |
| methylphenol | ND | 67 | 11 | и | is | Ħ | Ħ | js | U |
| xachloroethane | ND | 67 | 11 | 11 | и | P | 11 | 11 | 11 |
| -Nitrosodi-n-propylamine | ND | 67 | l† | *1 | U | ,, | n | " | [1 |
| & 4-methylphenol | ND | 130 | н | ÷1 | ŧı. | ,, | u | Ħ | 11 |
| trobenzene | ND | 67 | ji . | ય | Ħ | ft. | u | tt | Į. |
| phorone | ND | 67 | If | 41 | Ħ | ц | n | jı , | [] |
| atrophenol | ND | 130 | n | н | 31 | H | н | п | [] |
| dimethylphenol | ND | 130 | ff | н | Ħ | B | Ft. | 11 | () |
| s(2-chloroethoxy)methane | ND | 67 | 11 | #1 | n | f \$ | et. | n | [] |
| nzoic acid | ND | 330 | žт | н | T) | H | 11 | п | Ü |
| 4-dichlorophenol | ND | 130 | n | 71 | Ħ | " | | 31 | [1 |
| 2.4-trichlorobenzene | ND | 67 | u | 11 | ħ | п | ** | n | (1 |
| iphthalene | 1410 | 67 | Ħ | и | Fi | н | ft | ŧł | |
| chloroaniline | ND | 67 | U | a | łı | ji | н | #1 | [1 |
| xachlorobutadiene | ND | 67 | ρ | n | ** | 51 | н | 0 | . (1 |
| chloro-3-methylphenol | ND
ND | 130 | ** | *1 | 11 | ¥f | | 11 | [1 |
| methylnaphthalene | 2170 | 67 | ** | tı | +1 | tt | n | U | ** |
| | , ND | 130 | #1 | 11 | 11 | łł | n | #I | [] |
| xachlorocyclopentadiene | , ND
ND | 130 | H | ** | If | 14 | | 11 | u |
| 4.6-trichlorophenol | ND | 67 | 11 | 0 | ** | ,, | u | 11 | Į1 |
| 4,5-trichlorophenol | ND
ND | 67 | sı | 11 | Ħ | 11 | 11 | я | (1 |
| chloronaphthalene | ND | 67 | n | li. | ‡I | n. | ,
H | 11 | . U |
| nitroaniline | 93 | 67 | U | r, | n | H | ** | н | |
| enaphthylene | ND | 67 | ,1 | n | ft | 11 | 11 | ,, | Į1 |
| methyl phthalate | | | H | 11 | 11 | | n | o. | (1 |
| 5-dinitrotoluene | ND | 67 | n. | R | H | U. | 11 | , . | £1 |
| enaphthene | 1080 | 67 | ,, | | | | 18 | ** | * : |
| nitroaniline | ND | 67 | " | ** | , | и, | II. | 11 | [] |
| 1-dinitrophenol | ND | 130 | " | | r/ | 11 | 1) | ** | 1) |
| benzofuran | 10400 | 670 |) F | 10 | | FF
EF | | | D |
| I-dinitrotoluene | ND | 67 | tr | 1 | 11 | | <i>t</i> r
0 | II. | l i |
| nitrophenol | ND | 130 | μ | | | E)
IF | | | 11 |
| iorene | 200 | 67 | ff . | " | ** | | " | ,, | |
| Chlorophenyl phenyl ether | ND | 67 | 75 | 17 | 11 | 16 | 11 | н | C |

/aste Stream Technology Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

P.O. Box 406 Buffalo NY, 14205 Project: New York State Projects

Project Number: 177 & 255 Great Arrow - 04B1552.22

Project Manager: Doug Reid

Reported: 09/01/04 10:15

Semivolatile Organic Compounds by EPA Method 8270C Waste Stream Technology Inc.

| | | Reporting | | | | | | | |
|-------------------------------|-------------------------|-----------|-------------|------------|---------------------------------------|-----------------------------------|----------|--------|--------------|
| ınalyte | Result | Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
| H56 (0-2) (4H17009-06) Soil | Sampled: 08/16/04 00:00 | Receive | d: 08/17/04 | 12:10 | | | | | |
| iethyl phthalate | ND | 67 | ug/kg dry | 1 | AH42601 | 08/26/04 | 08/27/04 | 8270 | 1.1 |
| -nitroaniline | ND | 67 | я | п | ft | н | n | я | į į |
| 6-Dinitro-2-methylphenol | ND | 130 | IJ | ## | n | n | u | 11 | 11 |
| nitrosodiphenylamine | , ND | 67 | я | ** | н | н | 11 | n | [] |
| bromophenylphenylether | ND | 67 | II . | ti | н | II . | 11 | н | { |
| exachlorobenzene | ND | 67 | Ħ | EF | er | н | Ð | bt . | (1 |
| entachlorophenol | ND | 130 | п | lt. | H | If | 0 | ij | 11 |
| henanthrene | 42000 | 670 | ш | 10 | h | К | 0 | n | 1) |
| nthracene | 1770 | 67 | 11 | 1 | 19 | • | n | IT | |
| ırbazole | 819 | 67 | н | 11 | n | 'n | 11 | et | |
| i-n-butyl phthalate | ND | 67 | n | f † | п | n | a a | Ħ | () |
| mzidine | ND | 330 | н | 1+ | н | 41 | н | u u | (1 |
| uoranthene | 22200 | 670 | н | 10 | ** | ft | n | Ħ | D |
| yrene | 16400 | 670 | tı | If | Ħ | n | и | н | [] |
| utyl benzyl phthalate | ND | 67 | 11 | 1 | Ħ | Ħ | и | +1 | [] |
| 3'-Dichlorobenzidine | ND | 67 | 11 | В | н | н | ы | 21 | (! |
| enzo (a) anthracene | 3760 | 67 | 11 | U | ır | | n | н | |
| ırysene | 4270 | 67 | u | u | H | 3 t | н | н | |
| is(2-ethylhexyl)phthalate | 825 | 67 | 11 | 41 | ıı | Ħ | н | ft | В |
| i-n-octyl phthalate | ND | 67 | н | " | n | 15 | n | 77 | U |
| enzo (b) fluoranthene | 4460 | 67 | п | " | 16 | ir | tr | п | |
| enzo (k) fluoranthene | 3600 | 67 | 11 | 1f | и | H | · n | В | |
| епzo (a) pyrene | (1360) | 6.7 | !! | в | H | I# | n | b | |
| ideno (1,2,3-cd) pyrene | 964 | 67 | 11 | β | 19 | u | 11 | 11 | |
| ibenz (a,h) anthracene | 384 | 67 | ß | 11 | B | a | ** | 0 | |
| enzo (g,h,i) perylene | 1440 | 67 | n | tt | н. | U | 11 | tı | |
| irrogate: 2-Fluorophenol | | 20.3 % | 50-1 | 12 | · · · · · · · · · · · · · · · · · · · | · · · · · · · · · · · · · · · · · | u | 16 | S-04 |
| irrogate: Phenol-d6 | | 62.1 % | 52-1 | | н | n | и | Ħ | |
| ırrogate: Nitrobenzene-d5 | | 74.5 % | 48-1. | | n | " | | ,, | |
| irrogate: 2-Fluorobiphenyl | | 79.5 % | 50-1 | | ** | ** | " | " | |
| urrogate: 2,4,6-Tribromopheno | l | 1.87 % | 50-1 | | <i>n</i> | # | " | 75 | S-04 |
| urrogate: Terphenyl-d14 | | 101 % | 36-1 | | n | ** | " | " | - |
| | | | | | | | | | |

riojeci.

Project: New York State Projects

².O. Box 406 3uffalo NY, 14205 Project Number: 177 & 255 Project Manager: Doug Reid

Project Number: 177 & 255 Great Arrow - 04B1552.22

Reported: 09/01/04 10:15

Conventional Chemistry Parameters by APHA/EPA Methods Waste Stream Technology Inc.

| nalyte | Result | Reporting
Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|-----------------------------|-------------------------|--------------------|-----------|------------|---------|------------|------------|---------------|-------|
| 33007 60 | | Cimic | J | 2711111011 | Daton | 7.70/20100 | 7111017200 | | |
| 451 (0-2) (4H17009-01) Soil | Sampled: 08/16/04 00:00 | Received | : 08/17/0 | 4 12:10 | | | | | |
| Solids | 76.0 | 0.1 | % | 1 | AH42408 | 08/24/04 | 08/24/04 | % calculation | |
| 452 (0-2) (4H17009-02) Soil | Sampled: 08/16/04 00:00 | Received | : 08/17/0 | 4 12:10 | | | | | |
| Solids | 91.0 | 0.1 | % | I | AH42408 | 08/24/04 | 08/24/04 | % calculation | |
| 453 (0-2) (4H17009-03) Soil | Sampled: 08/16/04 00:00 | Received | : 08/17/0 | 4 12:10 | | | | | |
| Solids | 85.6 | 0.1 | 0/0 | 1 | AH42408 | 08/24/04 | 08/24/04 | % calculation | |
| 154 (1-3) (4H17009-04) Soil | Sampled: 08/16/04 00:00 | Received | : 08/17/0 | 4 12:10 | | | | | |
| Solids | 80.5 | 0.1 | % | I | AH42408 | 08/24/04 | 08/24/04 | % calculation | |
| 155 (0-2) (4H17009-05) Soil | Sampled: 08/16/04 00:00 | Received | : 08/17/0 | 4 12:10 | | | | | |
| Solids | 92.2 | 0.1 | %
% | 1 | AH42408 | 08/24/04 | 08/24/04 | % calculation | |
| 156 (0-2) (4H17009-06) Soil | Sampled: 08/16/04 00:00 | Received | 08/17/0 | 4 12:10 | | | | | |
| Solids | 90.6 | - 0.1 | º/o | 1 | AH42408 | 08/24/04 | 08/24/04 | % calculation | |

P.O. Box 406 Buffalo NY, 14205 Project: New York State Projects

Project Number: 177 & 255 Great Arrow - 04B1552.22

Project Manager: Doug Reid

Reported: 09/01/04 10:15

Semivolatile Organic Compounds by EPA Method 8270C - Quality Control Waste Stream Technology Inc.

| nalyte | Result | Reporting
Limit | Units | Spike
Level | Source
Result | %REC | %REC
Limits | RPD | RPD
Limit | Notes |
|--------------------------|--------|--------------------|-----------|----------------|------------------|----------|----------------|-----|--------------|-------|
| atch AH42601 - EPA 3550B | | | | | | | | | | |
| ank (AH42601-BLK1) | | | | Prepared: | 08/26/04 | Analyzed | 1: 08/27/04 | | | |
| Nitrosodimethylamine | ND | 67 | ug/kg wet | | | ** | | | | |
| s(2-chloroethyl)ether | ND | 67 | 11 | | | | | | | |
| enol | ND | 130 | tr | | | | | | | |
| chlorophenol | ND | 130 | ŧŧ | - | | | | | | |
| 3-dichlorobenzene | ND | 67 | ti | | | | | | | |
| l-dichlorobenzene | ND | 67 | 0 | | | | | | | - |
| !-dichlorobenzene | ND | 67 | 19 | | | | | | | |
| (2-chloroisopropyl)ether | ND | 67 | R | | | | | | | |
| nzyl alcohol | ND | 67 | н | | | | | | | |
| nethylphenol | ND | 67 | 19 | | | | | | | |
| vachioroethane | ND | 67 | sı | | | | | | | |
| Nitrosodi-n-propylamine | ND | 67 | 14 | | | | | | | |
| . 4-methylphenol | ND | 130 | D | | | | | | | |
| robenzene | ND | 67 | н | | | | | | | |
| phorone | ND | 67 | и | | | | | | | |
| itrophenol | ND | 130 | н | | | | | | | |
| -dimethylphenol | ND | 130 | *1 | | | | | | | |
| (2-chloroethoxy)methane | ND | 67 | 9 | | | | | | | |
| nzoic acid | ND | 330 | ht | | | | | | | |
| -dichlorophenol | ND | 130 | P | | | | | | | |
| 4-trichlorobenzene | ND | 67 | 25 | | | | | | | |
| ohthalene | ND | 67 | Ħ | | | | | | | |
| hloroaniline | ND | 67 | n | | | | • | | | |
| achlorobutadiene | ND | 67 | ** | | | | | | | |
| hloro-3-methylphenol | ND | 130 | 12 | | | | | | | |
| nethylnaphthalene | ND | 67 | u | | | | | | | |
| achlorocyclopentadiene | ND | 130 | II | | | | | | | |
| .6-trichlorophenol | ND | 130 | 11 | | | | | | | |
| .5-trichlorophenol | ND | 67 | †† | | | | | | | |
| hloronaphthalene | ND | 67 | u | | | | | | | |
| itroaniline | ND | 67 | 11 | | | | | | | |
| naphthylene | ND | 67 | 11 | | | | | | | |
| nethyl phthalate | ND | 67 | 11 | | | | | | | |
| -dinitrotoluene | ND | 67 | n | | | | | | | |
| naphthene | ND | 67 | 17 | | | | | | | |
| itroaniline | ND | 67 | | | | | | | | |
| -dinitrophenol | ND | 130 | | | | | | | | |
| enzofuran | ND | 67 | н | | | | | | | |
| AIZOI (II AII | 110 | 07 | | | | | | | | |

aste Stream Technology Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

P.O. Box 406 Buffalo NY, 14205 Project: New York State Projects

Project Number: 177 & 255 Great Arrow - 04B1552.22

Project Manager: Doug Reid

Reported: 09/01/04 10:15

Semivolatile Organic Compounds by EPA Method 8270C - Quality Control Waste Stream Technology Inc.

| nalyte | Result | Reporting
Limit | Units | Spike
Level | Source
Result | %REC | %REC
Limits | RPD | RPD
Limit | Notes |
|------------------------------|--------|--------------------|-----------|----------------|------------------|------------------|----------------|-----|--------------|-------|
| atch AH42601 - EPA 3550B | | | | | | | | | | |
| ank (AH42601-BLK1) | | | | Prepared: | 08/26/04 | Analyzec | l: 08/27/04 | | | |
| 4-dinitrotoluene | ND | 67 | ug/kg wet | | | | • | | | |
| nitrophenol | ND | 130 | Ħ | | | | | | | |
| iorene | ND | 67 | II. | | | | | | | |
| Chlorophenyl phenyl ether | ND | 67 | H | | | | | | | |
| ethyl phthalate | ND | 67 | н | | | | | | | |
| nitroaniline | ND | 67 | Ħ | | | | | | | |
| 5-Dinitro-2-methylphenol | ND | 130 | 41 | | | | | | | |
| nitrosodiphenylamine | ND | 67 | n | | | | | | | |
| promophenylphenylether | ND | 67 | Ħ | | | | | | | |
| Nachlorobenzene | ND | 67 | н | | | | | | | |
| : achlorophenol | ND | 130 | 11 | | | | | | | |
| nanthrene | ND | 67 | Ħ | | | | | | | |
| thracene | ND | 67 | R | | | | | | | |
| bazole | ND | 67 | 17 | | | | | | | |
| n-butyi phthalate | ND | 67 | +2 | | | | | | | |
| nzidine | ND | 330 | ** | | | | | | | |
| oranthene | ND | 67 | 25 | | | | | | | |
| rene | ND | 67 | ?? | | | | | | | |
| tył benzyl phthalate | ND | 67 | н | | | | | | | |
| -Dichlorobenzidine | ND | 67 | ij | | | | | | | |
| nzo (a) anthracene | ND | 67 | 11 | | | | | | | |
| ysene | ND | 67 | H | | | | | | | |
| (2-ethylhexyl)phthalate | 117 | 67 | ** | | | | | | | |
| n-octyl phthalate | ND | 67 | 11 | | | | | | | |
| nzo (b) fluoranthene | ND | 67 | Ħ | | | | | | | |
| nzo (k) fluoranthene | ND | 67 | " | | | | | | | |
| nzo (a) pyrene | ND | 67 | D | | | | | | | |
| leno (1,2.3-cd) pyrene | ND | 67 | " | | | | | | | |
| penz (a,h) anthracene | ND | 67 | 17 | | | | | | | |
| nzo (g.h.i) perylene | ND | 67 | н | | | | | | | |
| rogate: 2-Fluorophenol | 3630 | | | 6670 | | 54.4 | 50-112 | | | |
| rogate: Phenol-d6 | 3250 | | " | 6670 | | 48.7 | 52-117 | | | |
| rogate: Nitrobenzene-d5 | 1770 | | н | 3330 | | 53.2 | 48-122 | | | • |
| rogate: 2-Fluorobiphenyl | 2240 | | n | 3330 | | 67.3 | 50-121 | | | |
| rogate: 2.4.6-Tribromophenol | 5240 | | " | 6670 | | ⁻ 8.6 | 50-132 | | | |
| rogate: Terphenyl-d14 | 2990 | | 11 | 3330 | | 89.8 | 36-134 | | | |

aste Stream Technology Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Lender Consulting Service Project: New York State Projects

P.O. Box 406 Project Number: 177 & 255 Great Arrow - 04B1552.22 Reported:

Buffalo NY, 14205 Project Manager: Doug Reid 09/01/04 10:15

Notes and Definitions

U Analyte included in the analysis, but not detected S-04 The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect. L denotes analyte recovery is less than the lower quality control limit. This flag assigned to compounds identified in an analysis at a secondary dilution factor. D Analyte is found in the associated blank as well as in the sample (CLP B-flag). DET Analyte DETECTED Analyte NOT DETECTED at or above the reporting limit ٧D ٧R Not Reported Sample results reported on a dry weight basis lry RPD Relative Percent Difference

| PAGE | | ARE SPECIAL DETECTION LIMITS REQUIRED: | YES NO If yes please attach requirements. | Is a QC Package required: YES NO If yes please attach requirements | | | | | TYPE OF CONTAINER/ ONLY COMMENTS: WST, I.D. | | | 56 | | | | | | | | | | |
|------------------|-----------------------|---|---|---|--------------------------|---|---------------|-----------------|---|-----------------------|---------------|---------------|-----------|-------------------|----------------------|----------|---|---|----|---------|----------------|-------------|
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alo, NY 14207 | (716) 876-2412 | DW DRINKING WATER
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302 Grote Street, Buffalo, NY 14207 | (716) 876-5290 • FAX (716) 876-2412 | | | _ | NDE WALING | S OF S | MAS MAS | .50 3 | <u>(</u> 54 | (VA) | M | | 200 | | , | | | | ~
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1/2 las DATE: 利器 ١ RELING RELIN



LIMITATIONS



This environmental study is limited by the scope of services contained within this report and time frames specified within the contract for services agreed to by you dated August 6, 2004. The scope of services was based on the results LCS' review of GZA's Phase I Environmental Site Assessment dated May 2004.

This environmental study makes no warranties nor implies any liability regarding:

- 1. Any impacted media located beneath the on-site structure(s).
- 2. Any chemical analytes not included within the analytical test methods employed during this study.
- 3. Any impacted media present from off-site sources.
- 4. Any impacted groundwater either on-site or off-site.
- Any impact at locations and depths not assessed in this study.
- 6. Any impact at locations where access was limited.

Conclusions and/or recommendations made within the study are based on the interpretation of data collected at individual sample locations and may change if additional data is collected during future study. Conditions between sampling locations are estimated based on available data. Intrusive studies serve to reduce, but not eliminate, the potential environmental risk associated with a property. No study is considered all-inclusive or representative of the entire subject property. Such would be cost prohibitive.





SUBSURFACE INVESTIGATION REPORT

Pierce Arrow Apartments Site 157 Great Arrow Avenue Buffalo, New York

July 26, 2017 File No. 21.0056831.10



PREPARED FOR:

Great Arrow Estates, LLC Buffalo, New York

GZA GeoEnvironmental of New York

535 Washington Street, 11th Floor | Buffalo, New York 14203 716-685-2300

27 Offices Nationwide www.gza.com

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CONSTRUCTION MANAGEMENT

GZA GeoEnvironmental of NY 535 Washington Street 11th Floor Buffalo, NY 14203 T: 716.685.2300 F: 716.685.3629 www.gza.com



VIA EMAIL

July 26, 2017 File No. 21.0056831.10

Mr. Matthew Connors Great Arrow Estates, LLC 617 Main Street, Suite 350 Buffalo, New York 14203

email: matt@sinatraandcompany.com

Re: Subsurface Investigation Report Pierce Arrow Apartments Site

157 Great Arrow Avenue Buffalo, New York 14207 (Site)

Dear Mr. Connors:

GZA GeoEnvironmental of New York (GZA) prepared this report describing the results of our subsurface investigation at the above-referenced Site. The investigation was conducted at the request of Great Arrow Estates, LLC (Client) to further characterize the environmental conditions at the Site in support of application to the New York State Department of Environmental Conservation (NYSDEC) Brownfield Cleanup Program (BCP).

We trust this report satisfies your present needs. Should you have any questions or require additional information following your review, please do not hesitate to contact Jim Richert at (716) 844-7048.

Sincerely,

GZA GEOENVIRONMENTAL OF NEW YORK

Thomas Bohlen Project Manager

Daniel J. Troy, P.E., LEED®AP Consultant Reviewer James J. Richert, C.P.G. Senior Project Manager

Sim Richart

Sout a. Klouk

Bart A. Klettke, P.E.

Principal



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1.0 INTRODUCTION

In accordance with our June 27, 2017 proposal, GZA GeoEnvironmental of New York (GZA) performed a subsurface investigation at the Pierce Arrow Apartments Site addressed as 157 Great Arrow Avenue in Buffalo, New York (Site) for Great Arrow Estates, LLC (Client). A Site Investigation Plan is attached as **Figure 1**.

1.1 BACKGROUND

Based upon our correspondence, GZA understands the Client desires to enter the Brownfield Cleanup Program (BCP) for Site redevelopment. Pierce Arrow Development, LLC previously agreed to a Brownfield Cleanup Agreement (BCA, BCP site number C915220) with the New York State Department of Environmental Conservation (NYSDEC). This BCA was later rescinded by NYSDEC due to non-implementation of the environmental work by the applicant.

GZA reviewed the following publicly available documents. GZA makes no statement or opinion regarding the quality, accuracy, or completeness of investigations or reporting conducted by others.

- GZA's Phase I ESA dated May 19, 2004, prepared for Tower Building Management.
- Lender Consulting Services' (LCS) Limited and Focused Subsurface Soil Investigation dated September 8, 2004, prepared for FourthofAugust, LLC.
- Malcolm Pirnie's NYSDEC-approved Remedial Investigation Work Plan (RIWP) prepared in 2007.

GZA reviewed the above referenced environmental data collected by LCS in 2004, which was part of a larger investigation of the former Pierce Arrow Manufacturing facility. That review suggested the number and distribution of samples from the Site that exceeded state soil cleanup objectives was limited and likely insufficient for NYSDEC-approved entry into the BCP.

GZA prepared the following scope of work with the intent to further characterize the Site in support of a new BCP application. Our scope of work was prepared to supplement the 2004 Subsurface Soil Investigation by LCS, and incorporates aspects of the NYSDEC-approved Remedial Investigation Work Plan (RIWP) prepared by Malcolm Pirnie in 2007.

1.2 PURPOSE AND SCOPE

The purpose of this subsurface investigation was to further characterize environmental media at the Site (soil and groundwater) in support of a new BCP application. To accomplish this, GZA developed a scope of work based on generally accepted standards of care and practices, which consisted of the following:

Observed the completion of 13 soil probes (identified as SP-1 through SP-13) by TREC Environmental on July 11, 2017 (Figure 1). Temporary groundwater monitoring wells were installed at soil probes SP-9 and SP-13. Soil probes SP-1 through SP-4 were completed interior of the eastern portion of the Site building (western portions of the Site building were inaccessible to the soil probe rig). SP-5 was completed in a trench drain located exterior to the southeastern portion of the Site building. SP-6 was completed near a loading dock southwest of the Site building. SP-7 was completed on the southwestern portion of the Site in the access driveway/alley. SP-8 through SP-10, and SP-12 were completed near the exterior building perimeter proximate to former railroad lines. SP-11 was completed proximate to an existing former underground storage tank (UST) staged on the surface of northern



portion of the Site, south of the elevated earthen berm (**Figure 1**). According to information provided during our Phase I ESA dated May 2004, this UST formerly contained #2 fuel oil for a boiler on the east side of Building C.

SP-13 was completed on the northwestern portion of the Site. Mr. Thomas Wall, Great Arrow Management, LLC, provided GZA with historical Site plans the day of the scheduled investigation for utility clearance purposes. The historical plans indicated an "oil house", "coal storage area" and at least three historical tanks (aboveground or underground not specified) were formerly present on the northwestern portion of the Site (**Figure 1**). Copies of these provided plans are included in **Appendix B**. GZA notes these historical plans were not provided to GZA during the Phase I ESA conducted in May 2004. GZA was unaware of these historical Site features while developing the scope of this subsurface investigation.

- Collected subsurface soil samples continuously in 4-foot sample intervals from the ground surface to depths ranging from approximately 8 to 16 feet below ground surface (ft. bgs). Soil samples were collected using a macrocore sampler at each probe location.
- Collected near surface soil samples from an elevated earthen berm located on the northern portion of the Site. The samples were collected using a decontaminated hand shovel beneath the upper 6-inches of the berm.
- Field screened soil samples in 2-foot sample intervals using an organic vapor meter (OVM) equipped with a photoionization detector (PID) with a 10.6 eV ultraviolet lamp.
- Submitted 12 soil samples and two groundwater samples for analysis for Target Compound List (TCL) plus Final Commissioner's Policy-51 (CP-51) list volatile organic compounds (VOCs) via USEPA SW-846 Test Method 8260.
- Submitted 18 soil samples and two groundwater samples for analysis for semivolatile organic compounds (SVOCs) polycyclic aromatic hydrocarbons (PAHs) via USEPA SW-846 Test Method 8270.
- Submitted 16 soil samples for analysis for Resource Conservation and Recovery Act (RCRA)NYSDEC SCO list metals via USEPA SW-846 Test Methods 6010/7471.
- Submitted six soil samples for analysis for polychlorinated biphenyls (PCBs) via USEPA SW-846 Test Method 8082.
- Prepared this report, which summarizes the data collected during the Phase II ESA.

This report presents GZA's field observations, analytical results, and opinions and is subject to the limitations presented in Appendix A, and modification if subsequent information is developed by GZA or any other party.

2.0 FIELD METHODS

This section describes the field methods utilized as part of GZA's subsurface investigation.

2.1 SOIL PROBE INSTALLATIONS

Thirteen soil probes, designated SP-1 through SP-13 (**Figure 1**), were completed in readily accessible interior and exterior portions of the Site on July 11, 2017, utilizing a track-mounted Geoprobe direct-push rig (6620 UT) equipped with a 2-inch diameter, 48-inch long macro-core sampler.





New, dedicated, and disposable acetate sample liners were used inside of the macro-core sampler between sample intervals. The soil probes were advanced to total depths ranging from approximately 8 to 16 ft. bgs. Representative portions of the recovered soils from each boring were placed into zip-lock bags for further classification and headspace screening.

Upon completion of the soil probes (and removal of temporary monitoring wells), the soil probes were backfilled with associated soil cuttings and patched with asphalt (exterior) and concrete (interior) at the surface.

GZA prepared soil probe logs summarizing the general subsurface conditions that were observed at each probe location. These logs provide a summary description of the soils based on visual observations of the recovered soil's color and composition. Soil boring logs are included as Appendix B.

2.2 <u>HEADSPACE SCREENING</u>

Soil samples were generally collected in approximate two-foot intervals from the ground surface to the bottom of the soil probes. A representative portion of each sample was placed in a sealable plastic bag to allow organic vapors to accumulate in the headspace of the bag. The headspace in each bag was then screened for total organic vapors using a MiniRae 3000 OVM equipped with a PID with a 10.6 eV ultraviolet lamp. The OVM was calibrated in accordance with the manufacturer's recommendations utilizing a gas standard of isobutylene at a concentration of 100 parts per million (ppm). Ambient air at the Site was used to establish background organic vapor concentrations (approximately 0.0 ppm).

2.3 TEMPORARY MONITORING WELL INSTALLATIONS

Temporary one-inch diameter PVC groundwater monitoring wells were installed at locations where saturated soils were observed in the soil core [SP-9 (bottom of well (BOW) 16 ft bgs, screened 6 to 16 ft bgs) and SP-13 (BOW 8 ft bgs, screened 0 to 8 ft bgs)].

3.0 FIELD OBSERVATIONS

3.1 SOIL AND GROUNDWATER

Fill materials were not encountered in soil probes conducted beneath the concrete of the Site building (SP-1 through SP-4), beneath the concrete in the trench drain located southeast of the Site building (SP-5), or beneath the asphalt on the southwestern portion of the Site (SP-7).

Fill materials (*i.e.*, sands and gravels with varying amounts of silt, brick, and glass) were observed at the remaining completed soil probe locations (SP-6, SP-8 through SP-13) to depths ranging from one-foot to 13 ft bgs. Evidence of fill (fragments of concrete, asphalt, and wood) were observed in the elevated earthen berm located on the northern portion of the Site (sampling locations SS-1 through SS-4, Figure 1).

Native silty clay was observed to the bottom of all soil probes beneath the concrete, asphalt, or fill material (where encountered). Evidence of saturated fill materials were observed at SP-9 (approximately 11 to 13 ft bgs) and at SP-13 (approximately 3.5 to 4.5 ft bgs). The underlying native silty clays were observed to be moist (unsaturated). Evidence of saturated fill/soil was not observed at the remaining soil probe locations.



3.2 HEADSPACE SCREENING AND VISUAL/OLFACTORY EVIDENCE OF IMPACT

Elevated PID readings and visual/olfactory evidence of petroleum impact were observed at SP-13 from approximately 3.5 to 4.5 ft bgs (granular fill). The maximum PID screening result was 42.3 ppm. This result was obtained directly from the impacted fill in the acetate liner immediately after cutting/opening. A headspace result was not feasible, as the impacted material was immediately sampled and containerized for analysis. Visual and olfactory evidence of (*i.e.*, sheen and odor) suspected petroleum impact was observed from the groundwater sample collected from SP-13.

No elevated PID readings or visual/olfactory evidence of impact (except for the presence of fill) was observed from samples collected from the remaining soil probes.

Headspace results and visual and olfactory observations are provided on the soil probe logs included in Appendix B.

4.0 ANALYTICAL LABORATORY TESTING AND COMPARISON CRITERIA

Table 1 provides a summary of the samples submitted for laboratory analysis and the chemical analyses performed on each sample. Soil samples were selected for laboratory analysis based on the near-surface soil stratigraphy observed and the characteristics of potential contaminants in the environment. Soil and groundwater samples were submitted for analysis to Alpha Analytical in Westborough, MA. Typical chain-of-custody procedures were followed. The analytical laboratory report is provided in Appendix C.

Summaries of analytical results for the soil and groundwater samples are summarized in **Tables 2** and **3**, respectively.

4.1 ANALYTICAL COMPARISON CRITERIA - SOIL

The analytical test results were compared to the NYSDEC Part 375 Soil Cleanup Objectives (SCOs) for unrestricted, residential, restricted residential, commercial and industrial site uses of 6 NYCRR Part 375 (December 14, 2006). The SCOs are typically utilized at sites undergoing investigation and remediation through a NYSDEC program (i.e., Brownfield Cleanup Program, State Superfund Program). The Part 375 SCOs for unrestricted site use are concentrations of contaminants in soil that are considered protective of human health and the environment without requiring the use of engineering and/or institutional controls (i.e. soil caps/covers, environmental easement, vapor barrier, groundwater treatment systems). The Part 375 SCOs for more restricted site uses (residential, restricted residential, commercial, and industrial) are concentrations of contaminants in soil that require the use of long-term engineering and/or institutional controls to be considered protective of human health and the environment because of the increased levels of contamination to be left on-site.

4.2 ANALYTICAL COMPARISON CRITERIA – GROUNDWATER

The analytical test results for the groundwater sample were compared to the NYSDEC Class GA Groundwater Criteria (Division of Water Technical and Operational Guidance Series [TOGS 1.1.1], June 1998), consisting of both standards and guidance values. All fresh groundwater in New York State is classified as Class GA.



5.0 RESULTS

5.1 SOIL

Volatile Organic Compounds

VOCs were detected above method detection limits (MDLs) in 11 of the 12 samples submitted for analysis (**Table 2**). Most of the VOCs detected were at estimated concentrations (*i.e.* low level concentrations detected between the MDL and the reporting limit (RL)) and below NYSDEC Part 375 Unrestricted SCOs. GZA notes the MDLs for benzene and/or acetone slightly exceeded NYSDEC Part 375 Unrestricted SCOs in nine of the 12 samples submitted for analysis. Method detection limits for trans-1,2-dichloroethene slightly exceeded its respective NYSDEC Part 375 Unrestricted SCO for the sample submitted from SP-11 (3 ft bgs).

SP-13: Trichloroethene (TCE) was detected at SP-13 (4.5 ft bgs) at a concentration (23 mg/kg) exceeding its respective NYSDEC Part 375 Commercial SCO (10 mg/kg).

No other VOCs were detected at concentrations at or above the NYSDEC Part 375 SCOs for residential site use in the soil samples submitted for analysis.

Semivolatile Organic Compounds

SVOCs were detected above MDLs in all 12 samples submitted for analysis. SVOCs were detected below NYSDEC Part 375 Unrestricted SCOs in 10 of the 12 samples analyzed.

SP-6: Seventeen SVOCs were detected above MDLs from the sample from SP-6 (0 to 1 ft bgs), six of which exceeded their respective SCOs. Chrysene was detected at a concentration (2.4 mg/kg) slightly exceeding its respective NYSDEC Part 375 Residential SCO (1 mg/kg). Four compounds (benzo(a)anthracene, benzo(b)fluoranthene, dibenzo(a,h)anthracene, and indeno(1,2,3-cd)pyrene) slightly exceeded their respective Part 375 Restricted Residential SCOs. Benzo(a)pyrene was detected at a concentration (2.1 mg/kg) exceeding its respective Part 375 Industrial SCO (1.1 mg/kg).

SP-10: Seventeen SVOCs were detected above MDLs from the sample from SP-10 (0 to 4.5 ft bgs), seven of which exceeded their respective SCOs. Chrysene and benzo(k)fluoranthene were detected at concentrations slightly exceeding their respective NYSDEC Part 375 Residential SCOs. Four compounds (benzo(a)anthracene, benzo(b)fluoranthene, dibenzo(a,h)anthracene, and indeno(1,2,3-cd)pyrene) exceeded their respective Part 375 Restricted Residential SCOs. Benzo(a)pyrene was detected at a concentration (2.5 mg/kg) exceeding its respective Part 375 Industrial SCO (1.1 mg/kg).

No other SVOCs were detected at concentrations at or above the NYSDEC Part 375 SCOs for unrestricted site use in the soil samples submitted for analysis.

<u>Metals</u>

Metals were detected above MDLs in all 12 samples submitted for analysis. Metals were detected below Part 375 Unrestricted SCOs in five of the 12 samples analyzed; and below Part 375 Residential SCOs in six of the 12 samples analyzed.



- *SP-6:* Manganese was detected at a concentration of 2,180 mg/kg, which exceeds its respective Part 375 Commercial SCO (2,000 mg/kg) at SP-6 (0 to 1 ft bgs).
- SP-8: Four analytes (copper, nickel, selenium, and silver) exceeded their respective Part 375 Unrestricted SCOs at SP-8 (0 to 1 ft bgs). Cadmium was detected at a concentration of 4.2 mg/kg, which exceeds its respective Part 375 Residential SCO (2.5 mg/kg). Total chromium was detected at 1,510 mg/kg, which exceeds its respective Part 375 Commercial SCO (1,500 mg/kg for trivalent chromium; GZA notes that hexavalent chromium analysis was not conducted). Manganese was detected at a concentration of 38,600 mg/kg, which significantly exceeds its respective Part 375 Industrial SCO (10,000 mg/kg).
- *SP-10:* Four analytes (arsenic, lead, mercury and nickel) exceeded their respective Part 375 Unrestricted SCOs at SP-10 (0 to 4.5 ft bgs). Copper was detected at 494 mg/kg, which exceeds its respective Part 375 Commercial SCO (270 mg/kg).
- *SP-11:* Arsenic was detected at a concentration (52.7 mg/kg) that exceeded its respective Part 375 Industrial SCO (16 mg/kg) at SP-11 (0.5 to 4.5 ft bgs).
- *SP-12:* Two analytes (arsenic and zinc) exceeded their respective Part 375 Unrestricted SCOs at SP-12 (0 to 3 ft bgs). Total chromium was detected at 45.8 mg/kg, which exceeds its respective Part 375 Residential SCO (36 mg/kg for trivalent chromium).
- *SP-13:* Two analytes (copper and lead) exceeded their respective Part 375 Unrestricted SCOs at SP-13 (0 to 4.5 ft bgs). Total chromium was detected at 66.6 mg/kg, which exceeds its respective Part 375 Residential SCO (36 mg/kg for trivalent chromium).

Polychlorinated Biphenyls (PCBs)

PCBs were not detected above Part 375 Unrestricted SCOs in the six samples submitted for analysis.

5.2 NEAR SURFACE SOIL

Semivolatile Organic Compounds

SVOCs were detected above MDLs in all four samples submitted for analysis. SVOCs were detected below NYSDEC Part 375 Unrestricted SCOs in two of the four samples analyzed.

- SS-1: Seventeen SVOCs were detected above MDLs from the sample from SS-1, seven of which exceeded their respective SCOs. Chrysene and benzo(k)fluoranthene were detected at concentrations exceeding their respective NYSDEC Part 375 Residential SCOs. Four compounds (benzo(a)anthracene, benzo(b)fluoranthene, dibenzo(a,h)anthracene, and indeno(1,2,3-cd)pyrene) slightly exceeded their respective Part 375 Restricted Residential SCOs. Benzo(a)pyrene was detected at a concentration (2.7 mg/kg) exceeding its respective Part 375 Industrial SCO (1.1 mg/kg).
- SS-4: Seventeen SVOCs were detected above MDLs from the sample from SP-4, five of which exceeded their respective SCOs. Chrysene was detected at a concentration (2.4 mg/kg) slightly exceeding its respective NYSDEC Part 375 Residential SCO (1 mg/kg). Three compounds (benzo(a)anthracene, benzo(b)fluoranthene, and indeno(1,2,3-cd)pyrene) exceeded their respective Part 375 Restricted Residential SCOs. Benzo(a)pyrene was detected at a concentration (1.5 mg/kg) slightly exceeding its respective Part 375 Industrial SCO (1.1 mg/kg).



No other SVOCs were detected at concentrations at or above the NYSDEC Part 375 SCOs for unrestricted site use in the near surface soil samples submitted for analysis.

<u>Metals</u>

Metals were detected above MDLs in all four samples submitted for analysis. Metals were detected below Part 375 Unrestricted SCOs in two of the four samples analyzed; and below Part 375 Residential SCOs in three of the four samples analyzed.

SS-2: Total chromium was detected at 277 mg/kg, which exceeds its respective Part 375 Restricted Residential SCO (180 mg/kg for trivalent chromium). Nickel was detected at a concentration of 482 mg/kg, which exceeds its respective Part 375 Commercial SCO (310 mg/kg).

5.3 GROUNDWATER

Volatile Organic Compounds

VOCs were detected above MDLs in both samples submitted for analysis (Table 3).

SP-9: Two VOCs (cis-1,2-dichloroethene and TCE) were detected at estimated concentrations and below NYSDEC Part 375 Unrestricted SCOs. No other VOCs were detected above MDLs from the groundwater sample submitted for analysis from SP-9.

SP-13: Four VOCs (acetone, 1,1-dichloroethane, cis-1,2-dichloroethene, and methylcyclohexane) were detected at concentrations below their respective Class GA criteria. Trichloroethene (TCE) was detected at a concentration of 28 ug/L exceeding its respective Class GA criterion (5 ug/L).

No other VOCs were detected at concentrations at or above MDLs in the groundwater samples submitted for analysis.

Semivolatile Organic Compounds

SVOCs were detected above MDLs in both samples submitted for analysis (**Table 3**).

SP-9: Fourteen SVOCs were detected above MDLs, six of which (benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, and indeno(1,2,3-cd)pyrene) exceeded their respective Class GA criteria.

SP-13: Ten SVOCs were detected above MDLs, eight of which (anthracene, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, chrysene, fluoranthene, indeno(1,2,3-cd)pyrene, and pyrene) exceeded their respective Class GA criteria. GZA notes the MDL (8.4 ug/L) for benzo(k)fluoranthene exceeded its respective Class GA criterion (0.002 ug/L).

No other SVOCs were detected at concentrations at or above MDLs in the groundwater samples submitted for analysis.





6.0 CONCLUSIONS AND RECOMMENDATIONS

The results of GZA's subsurface investigation identified VOC, SVOC, and metals impact to the Site soil and/or groundwater at concentrations that exceed NYSDEC Part 375 SCOs and/or Class GA Groundwater criteria (see **Tables 2 and 3**).

Field evidence of environmental impact (*i.e.*, elevated PID readings and visual/olfactory evidence) at SP-13 was observed. SP-13 was conducted on the northwestern portion of the Site proximate to a reported former oil house, coal storage area, and railroad lines. On behalf of the Site owner and in consultation with the Client, GZA notified NYSDEC of the historical release and Spill Number 1703633 was assigned to the Site. Subsequent analytical results identified TCE at concentrations that exceed Restricted Residential SCOs and Class GA groundwater criteria.

The significance of the impact at SP-13 is unknown. GZA recommends that additional investigation be conducted to better assess the magnitude and extent of the chlorinated organic impact identified. GZA also recommends this report be provided to NYSDEC for review in relation to Spill Number 1703633.

As with any property, should future site development/excavation encounter impacted soils, groundwater, and/or USTs, such would need to be properly addressed at that time.



Tables

Table 1 Analytical Sample Summary Pierce Arrow Apartments 157 Great Arrow Avenue Buffalo, New York

| | D. G.II. | Depth/ | VOCs | PAHs | Metals | PCBs | August |
|----------------|----------------|-----------|------------------|------------|----------------|----------------|--|
| Location | Date Collected | Interval | EPA Method | EPA Method | EPA Method | EPA Method | Area of Concern |
| GLIDGLIDE A GE | COTT CAMPLE | (ft. bgs) | 8260 TCL + CP-51 | 8270 | 6010/7471 RCRA | 6010/7471 RCRA | |
| | SOIL SAMPLE | | T | | | | |
| SP-1 | 7/11/2017 | 0.67 | X | | | | Eastern interior of Site building |
| SP-1 | 7/11/2017 | 0.5-8 | | X | X | | Eastern interior of Site building |
| SP-2 | 7/11/2017 | 3.5 | X | X | X | X | Eastern interior of Site building |
| SP-3 | 7/11/2017 | 2 | X | | | | MS/MSD; Eastern interior of Site building |
| SP-3 | 7/11/2017 | 1-8 | | X | X | | MS/MSD; Eastern interior of Site building |
| SP-5 | 7/11/2017 | 1 | X | | | | Subsurface Duplicate; trench drain south of Site building |
| SP-5 | 7/11/2017 | 1-8 | | X | X | | Subsurface Duplicate; trench drain south of Site building |
| SP-6 | 7/11/2017 | 0.5 | X | | | | Dock southwest of Site building |
| SP-6 | 7/11/2017 | 0-1 | | X | X | X | Dock southwest of Site building |
| SP-7 | 7/11/2017 | 4 | X | | | | Southwestern portion of Site |
| SP-7 | 7/11/2017 | 4-8 | | X | X | X | Southwestern portion of Site |
| SP-8 | 7/11/2017 | 0.5 | X | | | | Railbed southeast of Site building |
| SP-8 | 7/11/2017 | 0-1 | | X | X | X | Railbed southeast of Site building |
| SP-9 | 7/11/2017 | 2 | X | | | | Railbed northeast of Site building |
| SP-9 | 7/11/2017 | 0-13 | | X | X | X | Railbed northeast of Site building |
| SP-10 | 7/11/2017 | 4 | X | | | | Railbed north of Site building |
| SP-10 | 7/11/2017 | 0-4.5 | | X | X | | Railbed north of Site building |
| SP-11 | 7/11/2017 | 3 | X | | | | AST on northern portion of Site |
| SP-11 | 7/11/2017 | 0.5-4.5 | | X | X | X | AST on northern portion of Site |
| SP-12 | 7/11/2017 | 1.5 | X | | | | Parking lot north of Site building |
| SP-12 | 7/11/2017 | 0-3 | | X | X | | Parking lot north of Site building |
| SP-13 | 7/11/2017 | 4.5 | X | | | | Parking lot north of Site building, east of historical oil house and southeast of historical tanks |
| SP-13 | 7/11/2017 | 0-4.5 | | X | X | | Parking lot north of Site building, east of historical oil house and southeast of historical tanks |
| NEAR SURFA | CE SOIL SAMP | LES | | | | | |
| SS-1 | 7/11/2017 | 0.5-1 | | X | X | | MS/MSD; Northern earthen berm |
| SS-2 | 7/11/2017 | 0.5-1 | | X | X | | Northern earthen berm |
| SS-3 | 7/11/2017 | 0.5-1 | | X | X | | Surface Sample Duplicate; Northern earthen berm |
| SS-4 | 7/11/2017 | 0.5-1 | | X | X | | Northern earthen berm |
| GROUNDWAT | ER SAMPLES | | | | | | |
| SP-9 | 7/11/2017 | *6-16 | X | X | | | Railbed northeast of Site building |
| SP-13 | 7/11/2017 | *0-8 | X | X | | | Parking lot north of Site building, east of historical oil house and southeast of historical tanks |

Notes:

- 1. ft. bgs = feet below ground surface
- 2. VOCs = Volatile Organic Compounds
- 3. PAHs = Polycyclic Aromatic Hydrocarbons
- 4. TCL = Target Compound List
- 5. PCBs = Polychlorinated biphenyls
- 6. CP-51 = Final Commissioner's Policy-51
- 7. RCRA = Resource Conservation and Recovery Act
- 8. AST = Aboveground Storage Tank
- 9. MS/MSD = Matrix Spike/Matrix Spike Duplicate
- 10. EPA = Environmental Protection Agency
- 11. * = Depth interval represents the screened interval.

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Table 2

Soil Analytical Testing Results Summary Pierce Arrow Apartments 157 Great Arrow Avenue Buffalo, New York

| LOCATION
SAMPLING DATE | | | | | | SP-1-8"-071117
7/11/2017 | | SP-1-0.5-8-0711
7/11/20 | | SP-2-3.5-071117
7/11/2017 | | SP-3-2-071117
7/11/2017 | | SP-3-1-8-071117
7/11/2017 | | SP-5-1-071117
7/11/2017 | | SP-5-1-8-0711
7/11/20 | | SP-6-0.5-071117
7/11/2017 | | SP-6-0-1-071
7/11/2 | |
|---|----------------|-------------------------------------|---------------|--------------|---------------|-----------------------------|------|----------------------------|------|------------------------------|------|----------------------------|------|------------------------------|------|----------------------------|------|--------------------------|------|------------------------------|------|------------------------|------|
| LAB SAMPLE ID | | | | | | L1723613-01 | | L1723613- | | L1723613-03 | | L1723613-04 | | L1723613-05 | | L1723613-06 | | L1723613- | | L1723613-08 | | L1723613 | |
| | | | Part 375 Soil | | | | | | | | | | | | | | | | | | | | |
| | Part 375 Soil | Part 375 Soil | Cleanup | | | | | | | | | | | | | | | | | | | | |
| | Cleanup | Cleanup | Objectives | Cleanup | Cleanup | | | | | | | | | | | | | | | | | | |
| | Objectives | Objectives | Restricted | Objectives | Objectives | | | | | | | | | | | | | | | | | | |
| | Unrestricted | Residential | Residential | Commercial | Industrial | Results | Qual | Results | Qual | Results | Qual | Results | Qual | Results | Qual | Results | Qual | Results | Qual | Results | Qual | Results | Qual |
| General Chemistry | | | | | | | | | | =0.1 | | | | | | | | | | 212 | | | |
| Solids, Total (%) | 27 | 27 | 27 | 27 | 10000 | 80.7 | - | 81.8
0.93 | J | 76.4
0.36 | J | 82.4 | | 80.5 | U | 80.8 | - | 78.3 | - 11 | 81.2 | - | 86.5
0.91 | J |
| Cyanide, Total (mg/kg) Polychlorinated Biphenyls by GC | | £, | | | 10000 | • | - | 0.95 | J | 0.30 | J | · | _ | 1.2 | 0 | - | _ | 2.4 | U | - | | 0.91 | |
| Aroclor 1254 | 0.1 | 1 | 1 | 1 | 25 | - | - | - | - | 0.043 | U | - | - | - | - | - | - | - | - | - | - | 0.026 | J |
| Aroclor 1260 | 0.1 | 1 | 1 | 1 | 25 | - | - | - | - | 0.043 | U | - | - | - | - | - | - | - | | - | - | 0.0245 | J |
| PCBs, Total | | | | | | - | - | - | - | 0.043 | U | - | - | - | - | - | - | - | - | - | - | 0.0505 | J |
| Semivolatile Organics by GC/MS
Acenaphthene | 20 | 100 | 100 | 500 | 1000 | | - 1 | 0.16 | U | 0.17 | U | - | - | 0.16 | U | | - 1 | 0.16 | U | - | - 1 | 0.34 | |
| Fluoranthene | 100 | 100 | 100 | 500 | 1000 | - | - | 0.078 | J | 0.13 | U | | - | 0.16 | 0 | - | - | 0.073 | J | - | _ | 5.2 | |
| Naphthalene | 12 | 100 | 100 | 500 | 1000 | - | - | 0.2 | U | 0.21 | U | - | - | 0.2 | U | - | - | 0.026 | J | - | - | 0.11 | J |
| Benzo(a)anthracene | 1 | 1 | 1 | 5.6 | 11 | - | - | 0.032 | J | 0.13 | U | - | - | 0.08 | J | - | - | 0.035 | J | - | - | 2.3 | |
| Benzo(a)pyrene | 1 | 1 | 1 | 1 | 1.1 | - | - | 0.16 | U | 0.17 | U | _ | - | 0.069 | J | - | _ | 0.16 | U | - | - | 2.1 | |
| Benzo(b)fluoranthene | 1 | 1 | 1 | 5.6 | 11 | - | - | 0.12 | U | 0.13 | U | - | - | 0.081 | J | - | - | 0.04 | J | _ | - | 3.1 | |
| Benzo(k)fluoranthene | 0.8 | 1 | 3.9 | 56 | 110 | - | - | 0.12 | U | 0.13 | U | - | - | 0.12 | U | - | | 0.12 | U | - | - | 0.95 | |
| | 1 | 1 | 3.9 | 56 | 110 | | | 0.03 | J | 0.13 | U | | | 0.07 | J | | | 0.037 | J | - | | 2.4 | |
| Chrysene
Acenaphthylene | 100 | 100 | 100 | 500 | 1000 | <u> </u> | - | 0.03 | U | 0.13 | U | - | - | 0.07 | U | - | - | 0.037 | U | - | - | 0.15 | U |
| Anthracene | 100 | 100 | 100 | 500 | 1000 | - | - | 0.12 | U | 0.17 | U | - | - | 0.16 | U | - | - | 0.16 | U | - | - | 0.15 | |
| Benzo(ghi)perylene | 100 | 100 | 100 | 500 | 1000 | - | - | 0.16 | U | 0.17 | U | - | - | 0.034 | J | - | - | 0.16 | U | - | - | 1.3 | |
| Fluorene | 30 | 100 | 100 | 500 | 1000 | - | - | 0.2 | U | 0.21 | U | - | - | 0.2 | U | - | - | 0.21 | U | - | - | 0.25 | |
| Phenanthrene | 100 | 100 | 100 | 500 | 1000 | - | - | 0.06 | J | 0.13 | U | - | - | 0.093 | J | - | - | 0.064 | J | - | - | 3.2 | |
| Dibenzo(a,h)anthracene | 0.33 | 0.33 | 0.33 | 0.56 | 1.1 | - | - | 0.12 | U | 0.13 | U | - | - | 0.12 | U | - | - | 0.12 | U | - | - | 0.35 | |
| Indeno(1,2,3-cd)pyrene | 0.5 | 0.5 | 0.5 | 5.6 | 11 | - | - | 0.16 | U | 0.17 | U | - | - | 0.037 | J | - | - | 0.16 | U | - | - | 1.4 | |
| Pyrene | 100 | 100 | 100 | 500 | 1000 | | - | 0.065 | J | 0.022 | J | - | - | 0.14 | | - | - | 0.061 | J | - | - | 4.2 | |
| Dibenzofuran | 7 | 14 | 59 | 350 | 1000 | - | - | 0.2 | U | 0.21 | U | - | - | 0.2 | U | - | - | 0.21 | U | - | - | 0.17 | J |
| 3-Methylphenol/4-Methylphenol Total Metals (mg/kg) | 0.33 | 34 | 100 | 500 | 1000 | | - | 0.29 | U | 0.31 | U | <u> </u> | | 0.29 | U | - | - | 0.3 | U | - | - | 0.28 | U |
| Arsenic, Total | 13 | 16 | 16 | 16 | 16 | | - 1 | 4.25 | | 4.64 | | | - | 5.41 | | _ | - | 5.86 | | - | . 1 | 4.41 | |
| Barium, Total | 350 | 350 | 400 | 400 | 10000 | | - | 103 | | 110 | | | | 66.9 | | _ | - | 136 | | _ | | 209 | |
| Beryllium, Total | 7.2 | 14 | 72 | 590 | 2700 | - | - | 0.563 | | 0.615 | | - | - | 0.416 | J | - | - | 0.476 | | - | - | 1.54 | |
| Cadmium, Total | 2.5 | 2.5 | 4.3 | 9.3 | 60 | - | - | 0.71 | | 0.782 | J | - | | 0.734 | J | - | - | 0.905 | J | - | - | 0.324 | J |
| Chromium Total (assumed all Trivalent) | (1°/30°) | (22 ^a /36 ^b) | (110°/180°) | (400°/1500b) | (800°/6,800°) | - | - | 13.8 | | 16.9 | | - | - | 13.2 | | _ | - | 18 | | - | - | 7 | |
| Copper, Total | 50 | 270 | 270 | 270 | 10000 | - | - | 18 | | 18.6 | | - | - | 14.2 | | _ | - | 21.8 | | - | - | 29.2 | |
| Lead, Total | 63 | 400 | 400 | 1000 | 3900 | - | - | 122 | | 18.2 | | | | 17.5 | | - | - | 10.9 | | _ | - | 33.2 | |
| Manganese, Total | 1600 | 2000 | 2000 | 10000 | 10000 | - | - | 266 | | 307 | | _ | | 218 | | - | - | 431 | | _ | - | 2180 | |
| Mercury, Total | 0.18 | 0.81 | 0.81 | 2.8 | 5.7 | | - | 0.12 | | 0.05 | J | | | 0.04 | J | | - | 0.08 | U | - | | 0.03 | J |
| | 30 | 140 | 310 | 310 | 10000 | | - | 16.8 | | 17.4 | J | | | 13.3 | | _ | - | 23.1 | | _ | - | 6.32 | |
| Nickel, Total | | | | | | | | | | | | | | | | - | | | | | | | |
| Selenium, Total | 3.9 | 36 | 180 | 1500 | 6800 | - | - | 0.147 | J | 2.08 | U | - | - | 1.98 | U | - | - | 1.98 | U | - | - | 1.97 | |
| Silver, Total | 2 | 36 | 180 | 1500 | 6800 | - | - | 0.473 | U | 1.04 | U | - | - | 0.991 | U | - | - | 0.992 | U | - | - | 0.738 | J |
| Zinc, Total | 109 | 2200 | 10000 | 10000 | 10000 | - | - | 83.5 | | 56.8 | | - | - | 49.3 | | - | - | 60.6 | | - | - | 33.2 | |
| Volatile Organics by 8260/5035 (r
1,1-Dichloroethane | mg/kg)
0.27 | 19 | 26 | 240 | 480 | 0.1 | U | | - | 0.1 | U | 0.087 | U | _ | - | 0.082 | U | | | 0.15 | U | | |
| Benzene | 0.06 | 2.9 | 4.8 | 44 | | 0.069 (Note 10) | U | | | 0.07 (Note 10) | U | 0.058 | U | | - | 0.063 (Note 10) | U | | | 0.1 (Note 10) | U | | |
| Toluene | 0.7 | 100 | 100 | 500 | 1000 | 0.009 (Note 10) | U | - | | 0.07 (Note 10)
0.1 | U | 0.087 | U | | | 0.003 (Note 10) | U | | | 0.033 | J | • | |
| | 0.7 | 30 | | 390 | | | | - | | | | | | - | | | | • | | | | | |
| Ethylbenzene | 1
NV | NV | 41
NV | 390
NV | 780
NV | 0.069 | U | - | • | 0.07 | U | 0.058 | U | - | - | 0.055 | U | * | - | 0.1 | U | - | - |
| Chloromethane
Bromomethane | NV | NV
NV | NV
NV | NV | NV
NV | 0.35 | J | - | - | 0.35
0.14 | U | 0.29 | .I | - | - | 0.27
0.12 | J | - | - | 0.5 | U | - | |
| trans-1,2-Dichloroethene | 0.19 | 100 | 100 | 500 | 1000 | 0.1 | U | - | - | 0.14 | U | 0.020 | U | - | - | 0.082 | U | - | | 0.15 | U | | |
| Trichloroethene | 0.47 | 10 | 21 | 200 | 400 | 0.069 | U | | | 0.07 | U | 0.058 | U | - | | 0.055 | U | | | 0.13 | U | | |
| p/m-Xylene | NV | NV | NV | NV | NV | 0.069 | U | - | | 0.07 | U | 0.056 | U | - | | 0.055 | U | - | - | 0.1 | U | | |
| o-Xylene | NV | NV | NV | NV | NV | 0.14 | U | - | - | 0.14 | U | 0.12 | U | - | - | 0.11 | U | = | - | 0.2 | U | - | |
| cis-1,2-Dichloroethene | 0.25 | 59 | 100 | 500 | 1000 | 0.069 | U | - | - | 0.07 | U | 0.058 | U | - | - | 0.055 | U | - | - | 0.1 | U | - | - |
| Acetone | 0.05 | 100 | 100 | 500 | 1000 | 0.69 (Note 10) | U | - | - | 0.7 (Note 10) | U | 0.58 (Note 10) | U | - | - | 0.55 (Note 10) | U | - | - | 0.46 | J | | - |
| Carbon disulfide | NV | 100* | NV | NV | NV | 0.69 | U | - | - | 0.7 | U | 0.58 | U | - | - | 0.18 | J | - | - | 1 | Ü | | |
| n-Butylbenzene | 12 | 100 | 100 | 500 | 1000 | 0.069 | Ü | - | - | 0.07 | Ü | 0.058 | Ü | - | - | 0.055 | Ü | - | - | 0.1 | Ü | | - |
| sec-Butylbenzene | 11 | 100 | 100 | 500 | 1000 | 0.069 | U | - | - | 0.07 | U | 0.058 | U | - | - | 0.055 | U | = | - | 0.1 | U | - | - |
| Isopropylbenzene | NV | 100 | NV | NV | NV | 0.069 | U | - | - | 0.07 | U | 0.058 | U | - | - | 0.055 | U | - | - | 0.1 | U | - | - |
| p-Isopropyltoluene | NV
12 | NV
400 | NV | NV | NV
1000 | 0.069 | U | - | - | 0.07 | U | 0.058 | U | - | - | 0.055 | U | - | - | 0.1 | U | - | - |
| Naphthalene
n Propulhonzono | 12
3.9 | 100
100 | 100
100 | 500
500 | 1000
1000 | 0.35 | U | - | - | 0.35
0.07 | U | 0.29 | U | - | - | 0.018 | J | - | - | 0.022 | J | - | - |
| n-Propylbenzene
1,3,5-Trimethylbenzene | 3.9
8.4 | 47 | 52 | 190 | 380 | 0.069 | U | - | - | 0.07 | U | 0.058 | U | - | | 0.055
0.27 | U | - | - | 0.1 | J | - | |
| 1,2,4-Trimethylbenzene | 3.6 | 47 | 52 | 190 | 380 | 0.35 | U | - | | 0.35 | U | 0.29 | U | - | - | 0.27 | U | - | - | 0.032 | J | - | - |
| Methyl Acetate | NV NV | NV | NV | NV | NV | 1.4 | U | - | | 1.4 | U | 0.14 | J | | | 1.1 | U | - | - | 0.87 | J | · · | - |
| Cyclohexane | NV | NV | NV | NV | NV | 1.4 | U | - | - | 1.4 | U | 1.2 | U | - | - | 1.1 | U | - | | 0.24 | J | - | - |
| Methyl cyclohexane | NV | NV | NV | NV | NV | 0.28 | U | - | - | 0.28 | U | 0.23 | U | - | - | 0.22 | U | - | - | 0.82 | | - | - |
| | | | | | | | | | | | | | | | | | | | | | | | |

- Notes:

 1. Compounds detected in one or more samples are presented on this table. Refer to Appendix C for a list of all compounds included in the analysis.

 2. Analytical testing completed by Alpha Analytical in Westborough, MA.

 3. ug/kg = parts per billion. mg/kg = parts per million. ft. bgs = feet below ground surface.

 4. U Qualifier = not detected at a concentration at or above the laboratory's method detection limit. Method detection limit is indicated.

 5. Part 375 Soil Cleanup Objectives are from 6 NYCRR Part 375, effective December 14, 2006, values current as of May 2007.

 6. NL = Not Listed. NV = No Value.

 7. J = Indicates an estimated value.

 8. * Supplemental Soil Cleanup Objective for Residential Use, from NYSDEC CP-51 Soil Cleanup Guidance, Table 1, issued October 21, 2010.

 9. "-" = Not Tested

 10. Method detection limit exceeded Part 375 Unrestricted Criteria

 11. "= Pervayent chromium

- 11. a = hexavalent chromium
- b = trivalent chromium
 Results shown for SP-5-1 and SP-5-1-8 are the higher of the initial result or their respective duplicate sample.
 Results shown for SS-3 are the higher of the initial result or its respective duplicate sample.

Table 2

Soil Analytical Testing Results Summary Pierce Arrow Apartments

157 Great Arrow Avenue Buffalo, New York

| T OCUTTON | | | | | | CD = 4 05111 | 1 | CD = 4 0 0=11 | | CD 0 0 5 051115 | | CD 0 0 1 0711 | | CD 0 2 07111 | _ | CD 0 0 12 07111 | _ | CD 10 4 05111 | - | CD 10 0 4 5 0511 | | CD 11 2 051115 | |
|--|---------------|-------------------------------------|---------------------------------------|---------------|--------------------------|--------------------------|------|--------------------------|--------|------------------------------|------|--------------------------|----------|--------------------------|--------|-----------------------------|------|---------------------------|------|-----------------------------|------|-----------------------------|----------|
| LOCATION
SAMPLING DATE | | | | | | SP-7-4-07111
7/11/201 | 17 | SP-7-4-8-0711
7/11/20 |)17 | SP-8-0.5-071117
7/11/2017 | • | SP-8-0-1-0711
7/11/20 | 17 | SP-9-2-07111
7/11/201 | 7 | SP-9-0-13-07111
7/11/201 | 17 | SP-10-4-07111
7/11/201 | 7 | SP-10-0-4.5-0711
7/11/20 | 017 | SP-11-3-071117
7/11/2017 | 7 |
| AB SAMPLE ID | | | D | | 1 | L1723613-1 | 10 | L1723613- | -11 | L1723613-12 | ļ. | L1723613- | 13 | L1723613-1 | 4 | L1723613-1 | 15 | L1723613-1 | 6 | L1723613- | -17 | L1723613-18 | <u> </u> |
| | Part 375 Soil | Part 375 Soil | Part 375 Soil
Cleanup | Part 375 Soil | Part 375 Soil | | | | | | | | | | | | | | | | | | |
| | Cleanup | Cleanup | Objectives | Cleanup | Cleanup | | | | | | | | | | | | | | | | | | |
| | Objectives | Objectives
Residential | Restricted | Objectives | Objectives
Industrial | | | | | | | | | | | | | | | | | | |
| | Unrestricted | Residentiai | Residential | Commercial | Industriai | Results | Qual | Results | Qual | Results | Qual | Results | Qual | Results | Qual | Results | Qual | Results | Qual | Results | Qual | Results | Qua |
| General Chemistry Folids, Total (%) | | l | l | T | 1 | 79.9 | 1 | 83.6 | | 95.8 | | 90.8 | | 85.5 | | 85 | | 76 | | 91.7 | | 92.4 | |
| Cyanide, Total (mg/kg) | 27 | 27 | 27 | 27 | 10000 | - | - | 1.1 | U | - | - | 8.4 | | - | - | 0.53 | J | - | - | 0.68 | J | - | |
| Polychlorinated Biphenyls by GO | | | | | | | 1 | | | I | | | | | | | | | | | | | |
| roclor 1254
roclor 1260 | 0.1 | 1 | 1 | 1 | 25
25 | - | - | 0.0391 | U | - | - | 0.0362 | U
J | - | - | 0.0384 | U | - | - | - | - | - | |
| CBs, Total | | | | | 20 | - | - | 0.0391 | U | - | - | 0.00779 | J | - | - | 0.0384 | U | - | - | - | - | - | - |
| Semivolatile Organics by GC/MS | | 400 | 400 | | 4000 | | | | | | | | | | | 0.000 | | | | 0.00 | | | |
| cenaphthene
Tuoranthene | 20
100 | 100
100 | 100
100 | 500
500 | 1000
1000 | | - | 0.16 | U
J | - | | 0.14
0.24 | U | - | - | 0.038 | J | - | | 0.28
4.8 | | | |
| Naphthalene | 12 | 100 | 100 | 500 | 1000 | - | - | 0.2 | U | - | - | 0.18 | U | - | - | 0.15 | J | - | - | 0.81 | | - | - |
| Senzo(a)anthracene | 1 | 1 | 1 | 5.6 | 11 | - | - | 0.12 | U | - | - | 0.12 | | - | - | 0.49 | | - | - | 2.2 | | - | - |
| Benzo(a)pyrene | 1 | 1 | 1 | 1 | 1.1 | - | - | 0.16 | U | - | - | 0.12 | J | - | - | 0.39 | | - | - | 2.5 | | - | - |
| Benzo(b)fluoranthene | 1 | 1 | 1 | 5.6 | 11 | - | - | 0.12 | U | - | - | 0.18 | | - | - | 0.51 | | - | - | 3.9 | | - | - |
| Benzo(k)fluoranthene | 0.8 | 1 | 3.9 | 56 | 110 | - | - | 0.12 | U | - | - | 0.066 | J | - | - | 0.18 | | - | - | 1.4 | | - | - |
| Chrysene | 1 | 1 | 3.9 | 56 | 110 | - | - | 0.12 | U | - | - | 0.13 | | - | - | 0.53 | | - | - | 2.7 | | - | - |
| cenaphthylene
Inthracene | 100
100 | 100
100 | 100
100 | 500
500 | 1000
1000 | - | - | 0.16
0.12 | U | - | - | 0.14
0.11 | U | - | - | 0.05
0.11 | J | - | - | 0.39 | | - | - |
| Anthracene
Benzo(ghi)perylene | 100 | 100 | 100 | 500 | 1000 | | - | 0.12 | U | - | | 0.11 | J | - | - | 0.11 | | - | - | 1.8 | | | |
| luorene | 30 | 100 | 100 | 500 | 1000 | - | - | 0.2 | U | - | = | 0.18 | U | | - | 0.054 | J | - | - | 0.31 | | - | - |
| Phenanthrene | 100 | 100 | 100 | 500 | 1000 | - | - | 0.12 | U | - | - | 0.12 | | - | - | 0.63 | | - | - | 3.2 | | - | - |
| Dibenzo(a,h)anthracene | 0.33 | 0.33 | 0.33 | 0.56 | 1.1 | - | - | 0.12 | U | - | - | 0.024 | J | - | - | 0.079 | J | - | - | 0.44 | | - | - |
| ndeno(1,2,3-cd)pyrene | 0.5
100 | 0.5
100 | 0.5
100 | 5.6
500 | 11
1000 | - | - | 0.16 | U
J | - | | 0.086
0.23 | J | - | - | 0.27 | | - | - | 2.1
4 | | | - |
| Pyrene
Dibenzofuran | 7 | 14 | 59 | 350 | 1000 | - | - | 0.037 | U | - | - | 0.23 | U | - | - | 0.087 | J | - | - | 0.42 | | - | _ |
| -Methylphenol/4-Methylphenol | 0.33 | 34 | 100 | 500 | 1000 | - | - | 0.28 | Ü | - | - | 0.26 | Ü | - | - | 0.27 | Ü | - | - | 0.26 | U | - | - |
| otal Metals (mg/kg) | - 10 | | | | | | | 0.00 | | I | | 7.15 | | _ | | 5.70 | | | ı | 44.0 | ı | | |
| Arsenic, Total | 13
350 | 16
350 | 16
400 | 16
400 | 16
10000 | - | - | 3.86
90.5 | | - | - | 7.15
192 | | - | - | 5.73
44.6 | | - | - | 14.6
101 | | - | - |
| Barium, Total
Beryllium, Total | 7.2 | 14 | 72 | 590 | 2700 | - | - | 0.548 | | - | | 0.751 | | - | - | 0.295 | J | - | - | 0.454 | | - | |
| Cadmium, Total | 2.5 | 2.5 | 4.3 | 9.3 | 60 | - | - | 1.04 | | - | - | 4.2 | | - | - | 0.572 | J | - | - | 1.94 | | - | - |
| Chromium Total (assumed all Trivalent | (1°/30°) | (22 ^a /36 ^b) | (110 ^a /180 ^b) | (400°/1500b) | (800°/6,800°) | - | - | 19.5 | | - | - | 1510 | | - | - | 7.78 | | - | - | 20.5 | | - | - |
| Copper, Total | 50 | 270 | 270 | 270 | 10000 | - | - | 24.1 | | - | - | 200 | | - | - | 50 | | - | - | 494 | | - | - |
| ead, Total | 63 | 400 | 400 | 1000 | 3900 | - | - | 9.86 | | - | - | 30.3 | | - | - | 47.6 | | - | - | 210 | | - | - |
| Manganese, Total | 1600 | 2000 | 2000 | 10000 | 10000 | - | - | 451 | | - | - | 38600 | | - | - | 155 | | - | - | 388 | | - | - |
| Mercury, Total | 0.18 | 0.81 | 0.81 | 2.8 | 5.7 | - | - | 0.08 | U | - | - | 0.07 | U | - | - | 0.04 | J | - | - | 0.55 | | ÷ | - |
| Nickel, Total | 30 | 140 | 310 | 310 | 10000 | - | - | 25.4 | | - | - | 72 | | - | - | 9.83 | | - | - | 34.7 | | - | - |
| Selenium, Total | 3.9 | 36 | 180 | 1500 | 6800 | - | - | 1.89 | U | - | - | 8.23 | | - | - | 0.777 | J | - | - | 0.737 | J | - | - |
| Silver, Total | 2 | 36 | 180 | 1500 | 6800 | - | - | 0.944 | U | - | - | 7.32 | | - | - | 0.893 | U | - | - | 0.6 | J | - | - |
| Zinc, Total | 109 | 2200 | 10000 | 10000 | 10000 | - | - | 65.6 | | - | | 70.2 | | - | - | 54.2 | | - | - | 269 | | - | - |
| /olatile Organics by 8260/5035 (
1,1-Dichloroethane | 0.27 | 19 | 26 | 240 | 480 | 0.09 | U | - | | 0.086 | U | - | - | 0.17 | U | - | - | 0.18 | U | - | - | 0.2 | U |
| Benzene | 0.06 | 2.9 | 4.8 | 44 | 89 | 0.06 | U | - | - | 0.058 | U | - | - | O.11 (Note 10) |) U | - | - | 0.12 | | - | - | 0.36 | |
| oluene | 0.7 | 100 | 100 | 500 | 1000 | 0.09 | U | - | - | 0.086 | U | - | - | 0.1 | J | - | - | 0.58 | | - | - | 6.8 | |
| Ethylbenzene | 1 | 30 | 41 | 390 | 780 | 0.06 | U | - | - | 0.058 | U | - | - | 0.11 | U | - | - | 0.1 | J | - | - | 1.8 | |
| Chloromethane | NV | NV | NV | NV | NV | 0.3 | U | - | - | 0.29 | U | - | - | 0.56 | U | - | - | 0.61 | U | - | - | 0.073 | J |
| Bromomethane | NV | NV
100 | NV
100 | NV
500 | NV
1000 | 0.028 | J | - | - | 0.024 | J | - | - | 0.075 | J | - | - | 0.24 | U | - | - | 0.26 | U |
| rans-1,2-Dichloroethene | 0.19 | 100 | 100 | 500
200 | 1000
400 | 0.09 | U | - | - | 0.086 | U | - | - | 0.17 | U | - | - | 0.18 | U | - | - | 0.2 (Note 10) | U |
| richloroethene
/m-Xylene | 0.47
NV | NV | NV | 200
NV | 400
NV | 0.06 | U | - | - | 0.058
0.12 | U | - | | 0.11 | U
J | - | - | 0.29
0.72 | | - | - | 0.13 | U |
| -Xylene | NV | NV | NV | NV | NV | 0.12 | U | - | - | 0.12 | U | - | - | 0.11 | J | = | - | 0.39 | | - | - | 6.3 | |
| s-1,2-Dichloroethene | 0.25 | 59 | 100 | 500 | 1000 | 0.06 | U | - | - | 0.058 | U | - | - | 0.11 | U | - | - | 0.12 | U | - | - | 0.13 | U |
| cetone | 0.05 | 100 | 100 | 500 | 1000 | 0.6 (Note 10) | U | - | - | 0.58 (Note 10) | U | - | - | 1.1 (Note 10) | U | = | - | 1.2 (Note 10) | U | - | - | 1.8 | |
| arbon disulfide | NV | 100* | NV | NV | NV | 0.6 | U | - | - | 0.58 | U | - | | 1.1 | U | - | - | 1.2 | U | - | - | 1.3 | U |
| -Butylbenzene
ec-Butylbenzene | 12
11 | 100
100 | 100 | 500
500 | 1000
1000 | 0.06 | U | - | | 0.058
0.058 | U | - | - | 0.11
0.11 | U | - | - | 0.12 | J | - | - | 0.31 | |
| opropylbenzene | NV | 100 | NV | NV | NV | 0.06 | U | - | | 0.058 | U | - | | 0.11 | U | - | | 0.031 | J | - | - | 0.62 | |
| Isopropyltoluene | NV | NV | NV | NV | NV | 0.06 | Ü | - | - | 0.058 | U | - | - | 0.11 | Ü | - | - | 0.028 | Ĵ | - | - | 0.22 | |
| aphthalene | 12 | 100 | 100 | 500 | 1000 | 0.3 | U | - | - | 0.29 | U | - | - | 0.064 | J | - | - | 0.22 | J | - | - | 5.4 | |
| Propylbenzene
3,5-Trimethylbenzene | 3.9
8.4 | 100
47 | 100
52 | 500
190 | 1000
380 | 0.06 | U | · · | - | 0.058
0.29 | U | - | <u> </u> | 0.11
0.045 | J | - | - | 0.053
0.14 | J | - | - | 0.96
0.86 | |
| 2,4-Trimethylbenzene | 3.6 | 47 | 52 | 190 | 380 | 0.3 | U | - | - | 0.29 | U | - | | 0.045 | J | | | 0.14 | J | - | - | 3.7 | |
| ethyl Acetate | NV | NV | NV | NV | NV | 1.2 | U | - | - | 1.2 | U | - | - | 2.2 | U | - | - | 1.1 | J | - | - | 2.6 | U |
| | NV | NV | NV | NV | NV | 1.2 | U | - | - | 1.2 | U | - | - | 0.29 | J | - | - | 0.32 | J | - | - | 7.2 | |
| yclohexane
ethyl cyclohexane | NV | NV | NV | NV | NV | 0.24 | U | | - | 0.23 | U | | | 0.81 | | | - | 1.3 | | | - | 19 | |

- Notes:

 1. Compounds detected in one or more samples are presented on this table. Refer to Appendix C for a list of all compounds included in the analysis.

 2. Analytical testing completed by Alpha Analytical in Westborough, MA.

 3. ug/kg = parts per billion. mg/kg = parts per million. ft. bgs = feet below ground surface.

 4. U Qualifier = not detected at a concentration at or above the laboratory's method detection limit. Method detection limit is indicated.

 5. Part 375 Soil Cleanup Objectives are from 6 NYCRR Part 375, effective December 14, 2006, values current as of May 2007.

 6. NL = Not Listed. NV = No Value.

 7. J = Indicates an estimated value.

 8. *Supplemental Soil Cleanup Objective for Residential Use, from NYSDEC CP-51 Soil Cleanup Guidance, Table 1, issued October 21, 2010.

 9. "-" = Not Tested

 10. Method detection limit exceeded Part 375 Unrestricted Criteria

 11. "= pervayatent chromium

- 11. a = hexavalent chromium
- 12. b = trivalent chromium
 13. Results shown for SP-5-1 and SP-5-1-8 are the higher of the initial result or their respective duplicate sample.
 14. Results shown for SS-3 are the higher of the initial result or its respective duplicate sample.

Table 2

Soil Analytical Testing Results Summary Pierce Arrow Apartments 157 Great Arrow Avenue Buffalo, New York

| LOCATION | | | | | | SP-11-0.5-4.5-071 | 117 | SP-12-1.5-07111 | 7 | SP-12-0-3-0711 | 17 | SP-13-4.5-0711 | 117 | SP-13-0-4.5-071 | 117 | SS-1-07111 | 7 | SS-2-07111 | 7 | SS-3-07111 | 7 | SS-4-071117 |
|---|--|---|--|--|--|-------------------|------|-----------------|------|----------------|------|----------------|------|-----------------|------|--------------------|------|------------|------|--------------|------|--------------------|
| SAMPLING DATE | | | | | | 7/11/2 | 017 | 7/11/201 | 7 | 7/11/20 | 17 | 7/11/20 |)17 | 7/11/2 | 017 | 7/11/201 | 17 | 7/11/201 | 7 | 7/11/2017 | 7 | 7/11/2017 |
| LAB SAMPLE ID | T | | Part 375 Soil | | 1 | L1723613 | 5-19 | L1723613-2 | 20 | L1723613- | 21 | L1723613 | -22 | L1723613 | 5-23 | L1723613-2 | 17 | L1723613-2 | 8 | L1723613-29 | , | L1723613-30 |
| | Part 375 Soil
Cleanup
Objectives
Unrestricted | Part 375 Soil
Cleanup
Objectives
Residential | Cleanup
Objectives
Restricted
Residential | Part 375 Soil
Cleanup
Objectives
Commercial | Part 375 Soil
Cleanup
Objectives
Industrial | Results | Qual | Results | Qual | Results | Qual | Results | Qual | Results | Qual | Results | Qual | Results | Qual | Results | Qual | Results Qual |
| General Chemistry Solids, Total (%) | | | | 1 | Ι Ι | 85.4 | | 79 | 1 | 77.4 | 1 | 72.8 | | 77.3 | 1 | 83.7 | | 84.3 | - T | 91.4 | - | 97.4 |
| Cyanide, Total (mg/kg) | 27 | 27 | 27 | 27 | 10000 | 2.2 | U | - | - | 1.6 | | - | - | 1.2 | U | 0.8 | J | 0.35 | J | 0.24 | J | 0.27 J |
| Polychlorinated Biphenyls by G | | | | | | | | | | | | | | | | | | | | | | |
| Aroclor 1254 | 0.1 | 1 | 1 | 1 | 25
25 | 0.0383 | U | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| Aroclor 1260
PCBs. Total | 0.1 | 1 | 1 | 1 | 25 | 0.0383 | U | | - | | - | | - | | - | <u> </u> | - | - | - | | - | |
| Semivolatile Organics by GC/M | S (mg/kg) | | <u> </u> | | | 0.0000 | | | | | | | | | | | | | | | | |
| Acenaphthene | 20 | 100 | 100 | 500 | 1000 | 0.15 | U | - | - | 0.047 | J | - | - | 0.17 | U | 0.92 | | 0.023 | J | 0.08 | J | 0.67 |
| Fluoranthene | 100
12 | 100 | 100
100 | 500 | 1000 | 0.28 | | - | - | 0.83 | | - | - | 0.24 | | 7.3 | | 0.36 | | 1.2 | | 5.8 |
| Naphthalene
Repro(a) anthroppe | 12 | 100 | 100 | 500
5.6 | 11 | 0.54 | | - | - | 0.51 | | - | - | 0.11
0.28 | J | 0.32
3.6 | | 0.031 | J | 0.16
0.46 | J | 0.73
2.4 |
| Benzo(a)anthracene | 1 | 1 | 1 | 1 | 1.1 | 0.19 | | - | - | 0.35 | | | - | 0.28 | J | 2.7 | | 0.16 | | 0.46 | | 1.5 |
| Benzo(a)pyrene Benzo(b)fluoranthene | 1 | 1 | 1 | 5.6 | 11 | 0.13 | | - | - | 0.52 | | - | - | 0.12 | J | 3.6 | | 0.10 | | 0.5 | | 2.4 |
| Benzo(k)fluoranthene | 0.8 | 1 | 3.9 | 56 | 110 | 0.056 | J | | - | 0.32 | | | - | 0.035 | J | 1.2 | | 0.068 | J | 0.17 | | 0.67 |
| . , , | 0.6 | 1 | 3.9 | 56 | 110 | 0.056 | J | - | - | 0.16 | | - | - | 0.035 | J | 3.1 | | 0.066 | J | 0.17 | | 2.4 |
| Chrysene
Acenaphthylene | 100 | 100 | 100 | 500 | 1000 | 0.27 | U | - | - | 0.44 | U | - | - | 0.26 | U | 0.038 | J | 0.17 | U | 0.46 | U | 0.026 J |
| Anthracene | 100 | 100 | 100 | 500 | 1000 | 0.04 | J | - | - | 0.11 | J | - | - | 0.14 | Ü | 1.8 | | 0.05 | J | 0.17 | J | 1.1 |
| Benzo(ghi)perylene | 100 | 100 | 100 | 500 | 1000 | 0.13 | J | - | - | 0.19 | | - | - | 0.063 | J | 1.3 | | 0.11 | J | 0.28 | | 0.98 |
| Fluorene | 30 | 100 | 100 | 500 | 1000 | 0.033 | J | - | - | 0.063 | J | - | - | 0.21 | U | 0.98 | | 0.022 | J | 0.067 | J | 0.57 |
| Phenanthrene | 100
0.33 | 100
0.33 | 100
0.33 | 500 | 1000 | 0.41 | | - | - | 0.82 | | - | - | 0.15 | | 6.4 | | 0.23 | | 0.8 | - | 6 |
| Dibenzo(a,h)anthracene | | | | 0.56 | 1.1 | 0.038 | J | - | - | 0.06 | J | - | - | 0.13 | U | 0.38
1.6 | | 0.032 | J | 0.073 | J | 0.26 |
| Indeno(1,2,3-cd)pyrene | 0.5
100 | 0.5
100 | 0.5
100 | 5.6
500 | 1000 | 0.11 | J | - | - | 0.21 | | - | - | 0.055
0.7 | J | 5.9 | | 0.13 | J | 0.27 | | 1.1
4.6 |
| Pyrene
Dibenzofuran | 7 | 14 | 59 | 350 | 1000 | 0.29 | J | - | | 0.69 | J | - | - | 0.7 | U | 0.58 | | 0.29 | J | 0.049 | J | 0.56 |
| 3-Methylphenol/4-Methylphenol
Total Metals (mg/kg) | 0.33 | 34 | 100 | 500 | 1000 | 0.28 | Ü | | - | 0.31 | Ü | - | - | 0.14 | J | 0.28 | U | 0.28 | Ü | 0.26 | Ü | 0.24 U |
| Arsenic, Total | 13 | 16 | 16 | 16 | 16 | 52.7 | | - | - | 14.3 | | - | - | 11 | | 5.38 | | 5.71 | | 3.61 | | 3.3 |
| Barium, Total | 350 | 350 | 400 | 400 | 10000 | 76.7 | | - | - | 101 | | - | - | 67.3 | | 110 | | 102 | | 69.6 | | 49.4 |
| Beryllium, Total | 7.2 | 14 | 72 | 590 | 2700 | 0.427 | J | - | - | 0.596 | | - | - | 0.494 | J | 0.474 | | 0.492 | | 0.563 | | 0.232 J |
| Cadmium, Total | 2.5 | 2.5 | 4.3 | 9.3 | 60 | 1.97 | | - | - | 1.52 | | - | - | 1.03 | | 1.26 | | 1.18 | | 0.811 | J | 0.625 J |
| Chromium Total (assumed all Trivalen | | (22 ^a /36 ^b) | (110°/180°) | (400°/1500°) | (800°/6,800°) | 17.3 | | - | - | 45.8 | | - | - | 66.6 | | 26.6 | | 277 | | 12.6 | | 11.5 |
| Copper, Total | 50 | 270 | 270 | 270 | 10000 | 49.5 | | - | - | 268 | | - | - | 202 | | 45 | | 48.6 | | 33.9 | | 18.8 |
| Lead, Total | 63 | 400 | 400 | 1000 | 3900 | 29.8 | | - | - | 200 | | - | - | 69.7 | | 57 | | 51.1 | | 32.4 | | 12.3 |
| Manganese, Total | 1600 | 2000 | 2000 | 10000 | 10000
5.7 | 87.3 | | - | - | 452 | | - | - | 756 | | 677 | | 642 | | 499 | - | 305 |
| Mercury, Total | 0.18 | 0.81 | 0.81 | 2.8 | | 0.05 | J | - | - | 0.16 | | - | - | 0.04 | J | 0.05 | J | 0.05 | J | 0.03 | J | 0.03 J |
| Nickel, Total | 30 | 140 | 310 | 310 | 10000 | 8.96 | | - | - | 21.6 | | - | - | 22.1 | | 23.2 | | 482 | | 11.5 | | 13 |
| Selenium, Total | 3.9 | 36 | 180 | 1500 | 6800 | 1.88 | | - | - | 1.05 | J | - | - | 1.76 | J | 1.89 | U | 0.647 | J | 0.914 | J | 1.6 U |
| Silver, Total | 2 | 36 | 180 | 1500 | 6800 | 0.267 | J | - | - | 0.339 | J | - | - | 0.494 | J | 0.398 | J | 0.355 | J | 0.256 | J | 0.801 U |
| Zinc, Total Volatile Organics by 8260/5035 | 109
(ma/ka) | 2200 | 10000 | 10000 | 10000 | 41.6 | | - | - | 234 | | - | - | 85.9 | | 135 | | 96.6 | | 95.8 | | 59.8 |
| 1,1-Dichloroethane | 0.27 | 19 | 26 | 240 | 480 | - | | 0.14 | U | - | - | 0.15 | J | - | - | - | - | | - | - | - | |
| Benzene | 0.06 | 2.9 | 4.8 | 44 | 89 | - | - | 0.096 (Note 10) |) U | - | - | 0.068 | J | - | - | - | - | - | - | - | - | |
| Toluene | 0.7 | 100 | 100 | 500 | 1000 | - | - | 0.022 | J | - | - | 0.16 | J | - | - | - | - | - | - | - | - | |
| Ethylbenzene | 1 | 30 | 41 | 390 | 780 | - | - | 0.096 | U | - | - | 0.061 | J | - | - | - | - | - | - | - | - | |
| Chloromethane | NV | NV | NV | NV | NV | - | - | 0.48 | U | - | - | 0.91 | U | - | - | - | - | - | - | - | - | |
| Bromomethane | NV | NV | NV | NV | NV | - | | 0.19 | U | - | - | 0.36 | U | - | - | - | - | - | - | - | - | |
| trans-1,2-Dichloroethene | 0.19 | 100 | 100 | 500 | 1000 | - | - | 0.14 | U | - | - | 0.064 | J | - | - | - | - | - | - | - | - | |
| Trichloroethene | 0.47 | 10 | 21 | 200 | 400 | - | - | 0.043 | J | - | - | 23 | | - | - | - | - | - | - | - | - | |
| p/m-Xylene | NV
NV | NV
NV | NV
NV | NV
NV | NV
NV | - | - | 0.039 | J | - | - | 0.37
0.12 | J | - | - | - | - | - | - | - | - | |
| o-Xylene
cis-1,2-Dichloroethene | 0.25 | 59 | 100 | 500 | 1000 | <u> </u> | - | 0.04 | U | - | - | 0.12 | J | - | - | - | - | | - | | - | <u> </u> |
| Acetone | 0.25 | 100 | 100 | 500 | 1000 | | - | 0.32 | J | | - | 0.73 | J | | | | | | | | | |
| Carbon disulfide | NV | 100* | NV | NV | NV | - | - | 0.15 | J | - | - | 0.31 | J | | - | - | - | - | - | - | - | |
| n-Butylbenzene | 12 | 100 | 100 | 500 | 1000 | | - | 0.096 | Ü | - | - | 0.18 | Ü | | - | - | - | - | - | - | - | |
| sec-Butylbenzene | 11 | 100 | 100 | 500 | 1000 | - | - | 0.096 | U | - | - | 0.18 | U | - | - | - | - | - | - | - | - | |
| Isopropylbenzene | NV | 100 | NV | NV | NV
NV | - | - | 0.096 | U | - | - | 0.18 | U | - | - | - | - | - | - | - | - | |
| p-Isopropyltoluene
Naphthalene | NV
12 | NV
100 | NV
100 | NV
500 | NV
1000 | - | - | 0.096 | J | - | - | 0.18 | U | - | - | - | - | - | - | - | - | |
| n-Propylbenzene | 3.9 | 100 | 100 | 500 | 1000 | - | - | 0.096 | U | - | - | 0.18 | U | - | - | - | - | - | - | - | - | |
| 1,3,5-Trimethylbenzene | 8.4 | 47 | 52 | 190 | 380 | - | - | 0.017 | J | - | - | 0.077 | J | - | - | - | - | - | - | - | - | |
| 1,2,4-Trimethylbenzene | 3.6 | 47 | 52 | 190 | 380 | - | - | 0.032 | J | - | - | 0.22 | J | - | - | - | - | - | - | - | - | |
| Methyl Acetate | NV | NV | NV | NV | NV | - | | 0.42 | J | - | - | 0.57 | J | - | - | - | - | - | - | - | - | |
| Cyclohexane | NV | NV
NV | NV | NV | NV
NV | - | - | 0.088 | J | - | - | 3.6 | U | - | - | - | - | - | - | - | - | |
| Methyl cyclohexane | NV | NV | NV | NV | NV | - | - | 0.34 | J | - | - | 0.22 | J | - | - | - | - | - | - | - | - | |

- Notes:

 1. Compounds detected in one or more samples are presented on this table. Refer to Appendix C for a list of all compounds included in the analysis.

 2. Analytical testing completed by Alpha Analytical in Westborough, MA.

 3. ug/kg = parts per billion. mg/kg = parts per million. ft. bgs = feet below ground surface.

 4. U Qualifier = not detected at a concentration at or above the laboratory's method detection limit. Method detection limit is indicated.

 5. Part 375 Soil Cleanup Objectives are from 6 NYCRR Part 375, effective December 14, 2006, values current as of May 2007.

 6. NL = Not Listed. NV = No Value.

 7. J = Indicates an estimated value.

 8. *Supplemental Soil Cleanup Objective for Residential Use, from NYSDEC CP-51 Soil Cleanup Guidance, Table 1, issued October 21, 2010.

 9. "-" = Not Tested

 10. Method detection limit exceeded Part 375 Unrestricted Criteria

 1. **a | Parvaylent chromium

- 11. a = hexavalent chromium
- 12. b = trivalent chromium

 13. Results shown for SP-5-1 and SP-5-1-8 are the higher of the initial result or their respective duplicate sample.

 14. Results shown for SS-3 are the higher of the initial result or its respective duplicate sample.

Table 3

Groundwater Analytical Testing Results Summary Pierce Arrow Apartments 157 Great Arrow Avenue Buffalo, New York

| Parameter | Class GA Groundwater Standard or Guidance Value | SP-9-GW
7/11/2017 | SP-13-GW
7/11/2017 |
|-------------------------------|---|----------------------|-----------------------|
| Volatile Organic Compounds - | | | //11/2017 |
| Acetone | 50 | < 1.5 | 9.3 |
| 1,1-Dichloroethane | 5 | < 0.7 | 3.2 |
| cis-1,2-Dichloroethene | 5 | 0.96 J | 2.3 J |
| Methylcyclohexane | NV | < 0.4 | 0.54 J |
| Trichloroethene | 5 | 0.29 J | 28 |
| Polycyclic Aromatic Hydrocarl | oons - EPA Method 827 | 0 (ug/L) | |
| Acenaphthylene | NV | 0.07 J | 14 J |
| Anthracene | 50 | 0.1 | 71 |
| Benzo(a)anthracene | 0.002 | 0.52 | 120 |
| Benzo(a)pyrene | Non-Detect | 0.59 | 36 |
| Benzo(b)fluoranthene | 0.002 | 0.86 | 28 |
| Benzo(g,h,i)perylene | NV | 0.55 | 23 |
| Benzo(k)fluoranthene | 0.002 | 0.29 | < 8.4* |
| Chrysene | 0.002 | 0.63 | 140 |
| Dibenzo(a,h)anthracene | NV | 0.11 | < 7.8 |
| Fluoranthene | 50 | 0.93 | 70 |
| Fluorene | 50 | 0.04 J | < 7.4 |
| Indeno(1,2,3-cd)pyrene | 0.002 | 0.53 | 9.4 J |
| Phenanthrene | 50 | 0.41 | < 3 |
| Pyrene | 50 | 0.9 | 390 |

= Analyte detected at a concentration at or above the Class GA Groundwater Standard or Guidance Value.

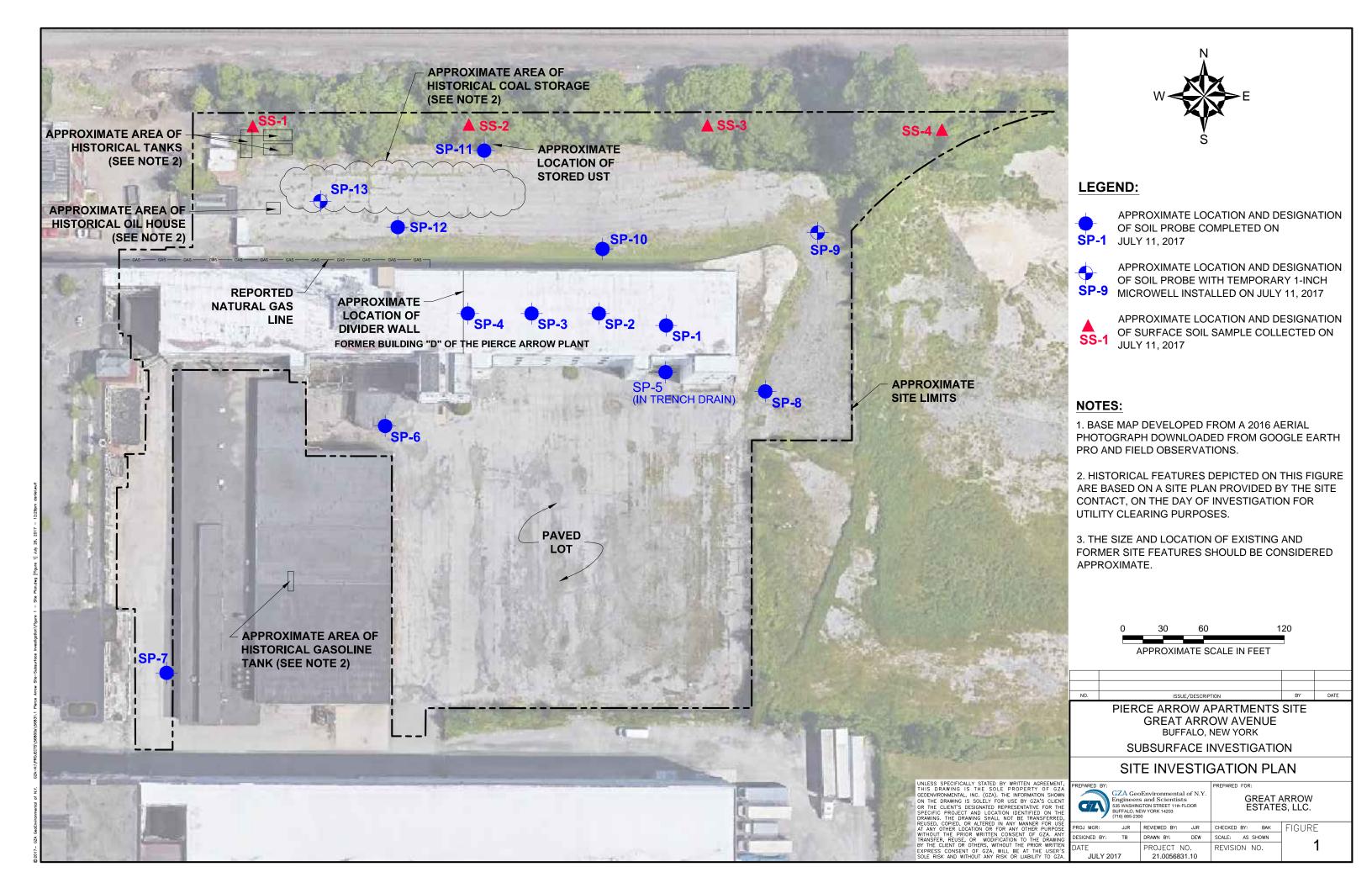
Notes:

- 1. Compounds detected in one or more samples are presented on this table. Refer to Appendix C for a list of all compounds included in the analysis.
- 2. Analytical testing completed by Alpha Analytical in Westborough, MA.
- 3. ug/L = parts per billion.
- 4. < = not detected at a concentration at or above the laboratory's method detection limit. Method Standards and Guidance Values and detection limit is indicated.
- 5. Class GA Groundwater Standards and Guidance Values are from NYSDEC Ambient Water Quality Groundater Effluent Limitations, effective June 2008.
- 6. NV = No Value.
- 7. * Method Detection Limit exceeded criterion.

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Figures





Appendix A – Limitations

GEOHYDROLOGICAL LIMITATIONS 21.0056831.10



Page | 1 April 2012

USE OF REPORT

1. GZA GeoEnvironmental, Inc. (GZA) prepared this report on behalf of, and for the exclusive use of our Client for the stated purpose(s) and location(s) identified in the Proposal for Services and/or Report. Use of this report, in whole or in part, at other locations, or for other purposes, may lead to inappropriate conclusions; and we do not accept any responsibility for the consequences of such use(s). Further, reliance by any party not expressly identified in the agreement, for any use, without our prior written permission, shall be at that party's sole risk, and without any liability to GZA.

STANDARD OF CARE

- 2. GZA's findings and conclusions are based on the work conducted as part of the Scope of Services set forth in the Proposal for Services and/or Report and reflect our professional judgment. These findings and conclusions must be considered not as scientific or engineering certainties, but rather as our professional opinions concerning the limited data gathered during the course of our work. Conditions other than described in this report may be found at the subject location(s).
- 3. GZA's services were performed using the degree of skill and care ordinarily exercised by qualified professionals performing the same type of services, at the same time, under similar conditions, at the same or a similar property. No warranty, expressed or implied, is made. Specifically, GZA does not and cannot represent that the Site contains no hazardous material, oil, or other latent condition beyond that observed by GZA during its study. Additionally, GZA makes no warranty that any response action or recommended action will achieve all of its objectives or that the findings of this study will be upheld by a local, state or federal agency.
- 4. In conducting our work, GZA relied upon certain information made available by public agencies, Client and/or others. GZA did not attempt to independently verify the accuracy or completeness of that information. Inconsistencies in this information which we have noted, if any, are discussed in the Report.

SUBSURFACE CONDITIONS

- 5. The generalized soil profile(s) provided in our Report are based on widely-spaced subsurface explorations and are intended only to convey trends in subsurface conditions. The boundaries between strata are approximate and idealized, and were based on our assessment of subsurface conditions. The composition of strata, and the transitions between strata, may be more variable and more complex than indicated. For more specific information on soil conditions at a specific location refer to the exploration logs. The nature and extent of variations between these explorations may not become evident until further exploration or construction. If variations or other latent conditions then become evident, it will be necessary to reevaluate the conclusions and recommendations of this report.
- 6. Water level readings have been made, as described in this Report, in and monitoring wells at the specified times and under the stated conditions. These data have been reviewed and interpretations have been made in this report. Fluctuations in the level of the groundwater however occur due to temporal or spatial variations in areal recharge rates, soil heterogeneities, the presence of subsurface utilities, and/or natural or artificially induced perturbations. The observed water table may be other than indicated in the Report.

COMPLIANCE WITH CODES AND REGULATIONS

7. We used reasonable care in identifying and interpreting applicable codes and regulations necessary to execute our scope of work. These codes and regulations are subject to various, and possibly contradictory, interpretations. Interpretations and compliance with codes and regulations by other parties is beyond our control.





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SCREENING AND ANALYTICAL TESTING

- 8. GZA collected environmental samples at the locations identified in the Report. These samples were analyzed for the specific parameters identified in the report. Additional constituents, for which analyses were not conducted, may be present in soil, groundwater, surface water, sediment and/or air. Future Site activities and uses may result in a requirement for additional testing.
- 9. Our interpretation of field screening and laboratory data is presented in the Report. Unless otherwise noted, we relied upon the laboratory's QA/QC program to validate these data.
- 10. Variations in the types and concentrations of contaminants observed at a given location or time may occur due to release mechanisms, disposal practices, changes in flow paths, and/or the influence of various physical, chemical, biological or radiological processes. Subsequently observed concentrations may be other than indicated in the Report.

INTERPRETATION OF DATA

11. Our opinions are based on available information as described in the Report, and on our professional judgment. Additional observations made over time, and/or space, may not support the opinions provided in the Report.

ADDITIONAL INFORMATION

12. In the event that the Client or others authorized to use this report obtain additional information on environmental or hazardous waste issues at the Site not contained in this report, such information shall be brought to GZA's attention forthwith. GZA will evaluate such information and, on the basis of this evaluation, may modify the conclusions stated in this report.

ADDITIONAL SERVICES

13. GZA recommends that we be retained to provide services during any future investigations, design, implementation activities, construction, and/or property development/ redevelopment at the Site. This will allow us the opportunity to: i) observe conditions and compliance with our design concepts and opinions; ii) allow for changes in the event that conditions are other than anticipated; iii) provide modifications to our design; and iv) assess the consequences of changes in technologies and/or regulations.



Appendix B – Soil Probe Logs and Provided Historical Plans

157 Great Arrow Avenue Buffalo, New York Subsurface Investigation Soil Probe: SP- 1 SHEET 1 OF 1 FILE No. 21.0056831.10 CHECKED BY: JR

| CON | TRACTOR TREC Environmental, Inc. LER James Agar | | mental, Inc. | BORING LOCATION See Site Plan | | | | | |
|--------------|--|-------|----------------|-------------------------------|--|-------------------|-------|--|--|
| DRIL | LER. | | James Agar | | GROUND SURFACE ELEVATION NM DATUM NA | | | | |
| STAI | RT DATE | | 7/11/2017 | END DATE: 7/11/2017 | GZA GEOENVIRONMENTAL REPRESENTATIVE Thomas Bohlen | | | | |
| W | ATER LEV | | | T | TYPE OF DRILL RIG Track Mounted Geoprobe 6620 UT | | | | |
| | DATE | TIME | WATER | CASING | CASING SIZE AND DIAMETER 2" diameter by 48" long | | | | |
| | | | | | OVERBURDEN SAMPLING METHOL Direct Push | | | | |
| | | | | | ROCK DRILLING METHOD NA | | | | |
| D | | | | | | | | | |
| E | | S | AMPLE INFOR | MATION | SAMPLE DESCRIPTION | NOTES | 0 | | |
| Р | | | | | | | V | | |
| Т | Sample N | umber | DEPTH | RECOVERY (%) | | | М | | |
| Н | | | (FT BGS) | | | | (ppm) | | |
| | 1 | | 0-2 | 70 | | robe installed in | 0.0 | | |
| 1 | | | | | + | of exposed | | | |
| _ | | | | | NATIVE: Brown Silty CLAY, trace Gravel, trace Sand, moist. woode | en pavers. | | | |
| 2 | 2 | | 2-4 | 70 | 1 | | 0.0 | | |
| 3 | | | <u> </u> | 10 | 1 | | 0.0 | | |
| | | | | | j | | | | |
| 4 | | | | | | | | | |
| | 3 | | 4-6 | 100 | | | 0.0 | | |
| 5 | | | | | | | | | |
| | | | | | | | | | |
| 6 | 4 | | 6-8 | 100 | | | 0.0 | | |
| 7 | 4 | | 0-0 | 100 | | | 0.0 | | |
| ' | | | | | | | | | |
| 8 | | | | | | | | | |
| | | | | | End of soil probe at 8 ft. bgs. | | | | |
| 9 | | | | | | | | | |
| | | | | | | | | | |
| 10 | | | | | | | | | |
| | | | | | | | | | |
| 11 | | | | | | | | | |
| 12 | | | | | | | | | |
| 12 | | | | | j | | | | |
| 13 | | | | | 1 | | | | |
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| 14 | | - | | |] | | | | |
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| 15 | | | | | | | | | |
| 16 | | | | | 1 | | | | |
| 10 | | | | | 1 | | | | |
| 17 | | | | | 1 | | | | |
| | | | | | | | | | |
| 18 | | | | | | | | | |
| | | | | | | | | | |
| 19 | | | | | | | | | |
| 00 | | | | | | | | | |
| 20 | Calit Car | on C | ample | NOTES: MiniDAG | 2000 was used to field serees and headeness sail serrals. | | | | |
| ა - :
C - | Split Spo
Rock Co | re Sa | anipie
mole | | E 3000 was used to field screen and headspace soil samples.
= feet below ground surface. ppm = parts per million. | | | | |
| | neral | | | | oximate boundry between soil types, transitions may be gradual. | | | | |

2) Water level readings have been made at times and under conditions stated, fluctuations of groundwater

157 Great Arrow Avenue Buffalo, New York Subsurface Investigation Soil Probe: SP- 2 SHEET 1 OF 1 FILE No. 21.0056831.10 CHECKED BY: JR

| | NTRACTOR | ₹ | TREC Environ | nmental, Inc. | BORING LOCATION | See Site Plan | | • |
|-------------|-----------|-------|-------------------|---------------------|-----------------------------------|------------------------------|---------|------------|
| | LLER | | James Agar | | GROUND SURFACE ELEVATION | NM DATUM | NA | _ |
| | RT DATE | | 7/11/2017 | END DATE: 7/11/2017 | GZA GEOENVIRONMENTAL REPRE | | | |
| W | ATER LEV | | | | TYPE OF DRILL RIG | Track Mounted Geoprobe 6620 | 0 UT | - |
| | DATE | TIME | WATER | CASING | CASING SIZE AND DIAMETER | 2" diameter by 48" long | | _ |
| | | | | | OVERBURDEN SAMPLING METH | | | _ |
| | | | | | ROCK DRILLING METHOD | NA | | - |
| | | | | | | | | |
| D
E
P | | s | AMPLE INFOR | RMATION | SAMPLE DE | SCRIPTION | NOTES | 0
V |
| T
H | Sample N | umber | DEPTH
(FT BGS) | RECOVERY (%) | - | | | M
(ppm) |
| | 1 | | 0-2 | 80 | Concrete (10-inches). | | | 0.0 |
| 1 | | | | | | | | |
| | | | | | NATIVE: Brown Silty CLAY, trace (| Gravel, trace Sand, moist. | | |
| 2 | | | | | 1 | | | |
| | 2 | | 2-4 | 80 | | | | 0.0 |
| 3 | | | | |] | | | |
| 1 | | | | |] | | | |
| 4 | | | | | Grades to: Gray. | | | |
| | 3 | | 4-6 | 100 | Grades to: Brown. | | | 0.0 |
| 5 | | | | | 1 | | | |
| | | | | | | | | |
| 6 | | | | | 4 | | | |
| | 4 | | 6-8 | 100 | 4 | | | 0.0 |
| 7 | | | | | 4 | | | |
| | | | | | 4 | | | |
| 8 | | | | | | | | |
| | | | | | End of soil probe at 8 ft. bgs. | | | |
| 9 | | | | | 4 | | | |
| 40 | | | | | 4 | | | |
| 10 | | | | | 4 | | | |
| 11 | | | | | 1 | | | |
| 11 | | | | | 1 | | | |
| 12 | | | | | + | | | |
| 12 | | | | | † | | | |
| 13 | | | | | † | | | |
| | | | | | 1 | | | |
| 14 | | | | | 1 | | | |
| 1 | | | | | 1 | | | |
| 15 | | | | |] | | | |
| | | | | | | | | |
| 16 | | | | |] | | | |
| 1 | | | | |] | | | |
| 17 | | | | | | | | |
| 1 | | | | | _ | | | |
| 18 | | | | | | | | |
| | | | | | 4 | | | |
| 19 | | | | | 4 | | | |
| 1 | | | | | 4 | | | |
| 20 | | | <u> </u> | | <u> </u> | | | |
| | Split Spo | | | | E 3000 was used to field screer | | es. | |
| | Rock Co | | | | = feet below ground surface. p | | . 1 . 1 | |
| Ge | neral | 1) St | ratification li | ines represent appi | oximate boundry between soil t | ypes, transitions may be gra | adual. | |

Page 1 of 1

2) Water level readings have been made at times and under conditions stated, fluctuations of groundwater

157 Great Arrow Avenue Buffalo, New York Subsurface Investigation Soil Probe: SP- 3 SHEET 1 OF 1 FILE No. 21.0056831.10 CHECKED BY: JR

| CON | NTRACTOR | ₹ | TREC Environ | mental, Inc. | BORING LOCATION See Site Plan | | _ |
|------|-----------|-------|------------------|---------------------|--|----------|-------|
| | LLER | | James Agar | | GROUND SURFACE ELEVATION NM DATUM | NA | _ |
| | RT DATE | | 7/11/2017 | END DATE: 7/11/2017 | GZA GEOENVIRONMENTAL REPRESENTATIVE Thomas Bohlen | | |
| W | ATER LEV | | | | TYPE OF DRILL RIG Track Mounted Geoprobe | 6620 UT | _ |
| | DATE | TIME | WATER | CASING | CASING SIZE AND DIAMETER 2" diameter by 48" long | | _ |
| | | | | | OVERBURDEN SAMPLING METHOL Direct Push | | - |
| | | | | | ROCK DRILLING METHOD NA | | - |
| D | | | | 1 | | | |
| E | | s | AMPLE INFOR | MATION | SAMPLE DESCRIPTION | NOTES | 0 |
| P | | Ü | / ((()) | | Similar Bessian Heit | 110120 | V |
| Т | Sample N | umber | DEPTH | RECOVERY (%) | 1 | | М |
| Н | | | (FT BGS) | | | | (ppm) |
| | 1 | | 0-2 | 80 | Concrete (10-inches). | | 0.0 |
| 1 | | | | | 1 | | |
| | | | | | NATIVE: Brown Silty CLAY, trace Gravel, trace Sand, moist. | | |
| 2 | | | | | | | |
| | 2 | | 2-4 | 80 | | | 0.0 |
| 3 | | | | | 4 | | |
| 4 | | | | | - | | |
| 4 | 3 | | 4-6 | 100 | - | | 0.0 |
| 5 | - | | . 0 | 1.00 | 1 | | 0.0 |
| | | | | | 1 | | |
| 6 | | | | | 1 | | |
| | 4 | | 6-8 | 100 | 1 | | 0.0 |
| 7 | | | | | | | |
| | | | | | | | |
| 8 | | | | | | | |
| | | | | | End of soil probe at 8 ft. bgs. | | |
| 9 | | | | | _ | | |
| 40 | | | | | - | | |
| 10 | | | | | - | | |
| 11 | | | | | 1 | | |
| | | | | | 1 | | |
| 12 | | | | | 1 | | |
| | | | | | 1 | | |
| 13 | | | | | | | |
| | | | | | | | |
| 14 | | | | | | | |
| | | | | | 4 | | |
| 15 | | | | | - | | |
| 16 | | | | | - | | |
| 10 | | | | | 1 | | |
| 17 | | | | <u> </u> | 1 | | |
| 1 '' | | | | | 1 | | |
| 18 | | | | | 1 | | |
| | | | | |] | | |
| 19 | | | | | | | |
| 1 | | | | | | | |
| 20 | | | | | | | |
| | Split Spc | | | | E 3000 was used to field screen and headspace soil sar | nples. | |
| | Rock Co | | | | = feet below ground surface. ppm = parts per million. | gradual | |
| ьe | neral | 1) St | i atilication li | mes represent appr | oximate boundry between soil types, transitions may be | graduar. | |

Page 1 of 1

2) Water level readings have been made at times and under conditions stated, fluctuations of groundwater

157 Great Arrow Avenue Buffalo, New York Subsurface Investigation Soil Probe: SP- 4 SHEET 1 OF 1 FILE No. 21.0056831.10 CHECKED BY : JR

| SALE | | CONTRACTOR
DRILLER | | TREC Environ | nmental, Inc. | BORING LOCATION See Site Plan | | | | | |
|--|----|-----------------------|---------|--------------|---------------------|-----------------------------------|----------------------------|-------|-----|--|--|
| WATER EVEL DATA TYPE OF DRILL RIG | | | | | END DATE: 7/11/2017 | _ | | NA | - | | |
| DATE TIME WATER CASING CASING SIZE AND DIAMETER 2 diameter by 48 long OVERNIFORM ETHOLOGOUS Push NAC | | | | | END DATE. 7/11/2017 | | | OLIT | | | |
| | VV | | | | CASING | -1 | | 001 | - | | |
| | | DATE | 1 IIVIL | VV/(TEIX | O/ (Olivo | 4 | | | - | | |
| SAMPLE INFORMATION SAMPLE DESCRIPTION NOTES O V V M M (FT BGS) | | | | | | -1 | | | - | | |
| SAMPLE INFORMATION SAMPLE DESCRIPTION NOTES O V V M M (FT BGS) | | | | | | | | | | | |
| Nample Number OEPTH RECOVERY (%) | D | | | | | | | | | | |
| Sample Number GETTH RECOVERY (%) | | | S | AMPLE INFOR | RMATION | SAMPLE DE | SCRIPTION | NOTES | | | |
| 1 | | Sample N | umbor | DEDTH | DECOVEDY (9/) | - | | | | | |
| 1 0-2 70 Concrete (10-inches). NATIVE: Brown Sity CLAY, trace Gravel, trace Sand, moist. 2 2 2-4 70 | | Sample IV | umber | | RECOVERT (%) | | | | | | |
| NATIVE: Brown Silly CLAY, trace Gravel, trace Sand, moiet. 2 2 2-4 70 3 4-6 100 5 6 4 6-8 100 7 7 8 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 | H | 1 | | | 70 | Concrete (10-inches) | | | | | |
| 2 2 2.4 70 3 4 3 4-6 100 5 6 4 6-8 100 7 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 | 1 | | | V = | 1 | | | | 0.0 | | |
| 2 2 2.4 70 3 4 3 4-6 100 5 6 4 6-8 100 7 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 | | | | | | NATIVE: Brown Silty CLAY, trace (| Gravel, trace Sand, moist. | • | | | |
| 3 | 2 | | | | | | | | | | |
| 4 3 4-6 100 0.0 5 4 6-8 100 0.0 7 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 | | | | 2-4 | 70 | 4 | | | 0.0 | | |
| 3 4-6 100 6 4 6-8 100 7 8 | 3 | | | | | 4 | | | | | |
| 3 4-6 100 6 4 6-8 100 7 8 | | - | | | | - | | | | | |
| 5 | 4 | 3 | | 4-6 | 100 | 1 | | | 0.0 | | |
| 6 4 6-8 100 0.0 7 8 9 10 | 5 | | | | | - | | | 0.0 | | |
| 4 6-8 100 7 | | | | | | | | | | | |
| End of soil probe at 8 ft. bgs. End of soil probe at 8 ft. bgs. End of soil probe at 8 ft. bgs. | 6 | | | | | | | | | | |
| 8 | | 4 | | 6-8 | 100 | | | | 0.0 | | |
| End of soil probe at 8 ft. bgs. Find of | 7 | | | | | 4 | | | | | |
| End of soil probe at 8 ft. bgs. Find of | | | | | | - | | | | | |
| 9 | 0 | | | | | End of soil probe at 8 ft. has | | | | | |
| 10 | 9 | | | | | End of soil probe at one bys. | | | | | |
| 11 | | | | | | 1 | | | | | |
| 12 | 10 | | | | | | | | | | |
| 12 | | | | | | | | | | | |
| 13 14 15 16 17 18 19 20 S - Split Spoon Sample NOTES: MiniRAE 3000 was used to field screen and headspace soil samples. | 11 | | | | | 4 | | | | | |
| 13 14 15 16 17 18 19 20 S - Split Spoon Sample NOTES: MiniRAE 3000 was used to field screen and headspace soil samples. | 12 | | | | | 4 | | | | | |
| 14 15 16 17 18 19 20 S - Split Spoon Sample NOTES: MiniRAE 3000 was used to field screen and headspace soil samples. | 12 | | | | | 1 | | | | | |
| 15 | 13 | | | | | 1 | | | | | |
| 15 | | | | | | | | | | | |
| 16 | 14 | | | | | | | | | | |
| 16 | 1 | | | | | 4 | | | | | |
| 17 18 19 20 S - Split Spoon Sample NOTES: MiniRAE 3000 was used to field screen and headspace soil samples. | 15 | | | | | 4 | | | | | |
| 17 18 19 20 S - Split Spoon Sample NOTES: MiniRAE 3000 was used to field screen and headspace soil samples. | 16 | | | | | 4 | | | | | |
| 18 19 20 S - Split Spoon Sample NOTES: MiniRAE 3000 was used to field screen and headspace soil samples. | | | | | | † | | | | | |
| 19 20 NOTES: MiniRAE 3000 was used to field screen and headspace soil samples. | 17 | | | | | 1 | | | | | |
| 19 20 NOTES: MiniRAE 3000 was used to field screen and headspace soil samples. | | | | | | | | | | | |
| 20 NOTES: MiniRAE 3000 was used to field screen and headspace soil samples. | 18 | | | | | 4 | | | | | |
| 20 NOTES: MiniRAE 3000 was used to field screen and headspace soil samples. | | | | | | 4 | | | | | |
| S - Split Spoon Sample NOTES: MiniRAE 3000 was used to field screen and headspace soil samples. | 19 | <u> </u> | | | + | 1 | | | | | |
| S - Split Spoon Sample NOTES: MiniRAE 3000 was used to field screen and headspace soil samples. | 20 | | | | | - | | | | | |
| | | | on S | ample | NOTES: MiniRAI | E 3000 was used to field screer | and headspace soil sample | es. | | | |
| | | | | | | | | | | | |

General 1) Stratification lines represent approximate boundry between soil types, transitions may be gradual.

2) Water level readings have been made at times and under conditions stated, fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.

157 Great Arrow Avenue Buffalo, New York Subsurface Investigation Soil Probe: SP- 5 SHEET 1 OF 1 FILE No. 21.0056831.10 CHECKED BY: JR

| SRILE Sample Sample Sample SRILE Sample S | | ITRACTOF | ₹ | TREC Environ | mental, Inc. | BORING LOCATION | See Site Plan | | |
|--|-------|-----------|-------|-----------------|---------------------|-----------------------------------|-----------------------------|----------------------|----------|
| Note | | | | | | | | NA | . |
| DATE TIME WATER CASING CASING CASING SIZE AND DIAMETER 2 diameter by 48* long OVERBURDON METHOD NAC | | | Dv. | | END DATE: 7/11/2017 | | | | |
| | VV | | | | CASING | 1 | |) () (| . |
| | | | | ***** | 0,1010 | | | | ' |
| SAMPLE INFORMATION SAMPLE DESCRIPTION NOTES O V M M M M M M M M M M M M M M M M M M | | | | | | | | | <u>.</u> |
| SAMPLE INFORMATION SAMPLE DESCRIPTION NOTES O V M M M M M M M M M M M M M M M M M M | | | | | | | | - | |
| Nample Number DEPTH RECOVERY (%) | Е | | SA | AMPLE INFOR | MATION | SAMPLE DE | ESCRIPTION | NOTES | |
| Concrete (3-inches) NATIVE: Brown Sity CLAY, trace Gravel, trace Sand, moist. 2 2-4 50 3 4-6 100 4 6-8 100 7 4 6-8 100 10 11 11 11 11 11 11 11 11 11 11 11 11 1 | Т | Sample N | umber | | RECOVERY (%) | | | | М |
| NATIVE: Brown Silty CLAY, trace Gravel, trace Sand, moist. of southeastern overhead door. | | 1 | | | 50 | Trench drain (10-inches deep). | | Soil probe conducted | 0.0 |
| 2 2-4 50 0.0 3 4 0 0.0 4 3 4-6 100 0.0 6 4 6-8 100 0.0 7 8 0 0 0 0.0 10 0 0 0.0 11 0 0 0 0 0.0 11 0 0 0 0 0 0.0 11 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | 1 | | | | | | | | |
| 2 2-4 50 0.0 4 3 4-6 100 0.0 5 4 6-8 100 0.0 7 8 9 0 0 0 0.0 10 0 0 0 0.0 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | | | | | | NATIVE: Brown Silty CLAY, trace 0 | Gravel, trace Sand, moist. | | |
| 3 | 2 | 2 | | 2-4 | 50 | | | overhead door. | 00 |
| 5 | 3 | | | 2-4 | 50 | | | | 0.0 |
| 5 | ŭ | | | | | | | | |
| 5 | 4 | | | | | | | | |
| 6 4 6-8 100 0.0 7 8 | | 3 | | 4-6 | 100 | | | | 0.0 |
| 4 6-8 100 7 8 9 10 11 12 13 14 15 16 17 18 19 20 S - Split Spoon Sample NOTES: MiniRAE 3000 was used to field screen and headspace soil samples. | 5 | | | | | | | | |
| 4 6-8 100 7 8 9 10 11 12 13 14 15 16 17 18 19 20 S - Split Spoon Sample NOTES: MiniRAE 3000 was used to field screen and headspace soil samples. | 6 | | | | | | | | 1 |
| 8 | O | 4 | | 6-8 | 100 | | | | 0.0 |
| 9 | 7 | | | | | | | | 0.0 |
| 9 | | | | | | | | | |
| 9 | 8 | | | | | | |] | |
| 10 | | | | | | End of soil probe at 8 ft. bgs. | |] | |
| 11 | 9 | | | | | | | | |
| 11 | 10 | | | | | | | | |
| 12 | 10 | | | | | | | | |
| 12 | 11 | | - | | | | | | |
| 13 | | | | | | | | | |
| 14 15 16 17 18 19 20 S - Split Spoon Sample NOTES: MiniRAE 3000 was used to field screen and headspace soil samples. | 12 | | | | | | | | 1 |
| 14 15 16 17 18 19 20 S - Split Spoon Sample NOTES: MiniRAE 3000 was used to field screen and headspace soil samples. | | | | | | | | | |
| 15 | 13 | | | | | | | | |
| 15 | 1/1 | | | | | | | | |
| 16 | 14 | | | | | | | | 1 |
| 16 | 15 | | | | | | | | 1 |
| 17 18 19 20 S - Split Spoon Sample NOTES: MiniRAE 3000 was used to field screen and headspace soil samples. | | | | | | | | | |
| 18 19 20 S - Split Spoon Sample NOTES: MiniRAE 3000 was used to field screen and headspace soil samples. | 16 | | | | | | | | |
| 18 19 20 S - Split Spoon Sample NOTES: MiniRAE 3000 was used to field screen and headspace soil samples. | | | | | | | | | 1 |
| 19 20 NOTES: MiniRAE 3000 was used to field screen and headspace soil samples. | 17 | | | | <u> </u> | | | | |
| 19 20 NOTES: MiniRAE 3000 was used to field screen and headspace soil samples. | 18 | | | | | | | | |
| 20 NOTES: MiniRAE 3000 was used to field screen and headspace soil samples. | | | | | | | | | |
| S - Split Spoon Sample NOTES: MiniRAE 3000 was used to field screen and headspace soil samples. | 19 | | | | | | | | |
| S - Split Spoon Sample NOTES: MiniRAE 3000 was used to field screen and headspace soil samples. | | | | | | | | | |
| S - Split Spoon Sample NOTES: MiniRAE 3000 was used to field screen and headspace soil samples. C - Rock Core Sample FT BGS = feet below ground surface. ppm = parts per million. General 1) Stratification lines represent approximate boundry between soil types, transitions may be gradual. | | 6 | | | | | | | |
| General 1) Stratification lines represent approximate boundry between soil types, transitions may be gradual | S - 3 | Split Spc | on Sa | ample | | | | ∌ S. | |
| | Ger | neral | 1) St | ratification li | nes renresent appro | = leet below ground surface. p | ynes transitions may be ara | adual | |

Page 1 of 1

2) Water level readings have been made at times and under conditions stated, fluctuations of groundwater

157 Great Arrow Avenue Buffalo, New York Subsurface Investigation Soil Probe: SP- 6 SHEET 1 OF 1 FILE No. 21.0056831.10 CHECKED BY: JR

| | ITRACTOF | ₹ | TREC Enviror | nmental, Inc. | BORING LOCATION See Site Plan | | _ |
|----------------|-----------|------------------------|-----------------|---------------------|---|--------|-------|
| | LER | | James Agar | | GROUND SURFACE ELEVATION NM DATUM | NA | - |
| | RT DATE | | 7/11/2017 | END DATE: 7/11/2017 | GZA GEOENVIRONMENTAL REPRESENTATIVE Thomas Bohlen | | |
| W. | ATER LEV | | T | T | TYPE OF DRILL RIG Track Mounted Geoprobe 662 | 0 UT | - |
| | DATE | TIME | WATER | CASING | CASING SIZE AND DIAMETER 2" diameter by 48" long | | - |
| | | | | | OVERBURDEN SAMPLING METHOL Direct Push ROCK DRILLING METHOD NA | | - |
| | | | | | ROCK DRILLING METHOD NA | | - |
| D | | | | l | | | |
| E | | S | AMPLE INFOR | RMATION | SAMPLE DESCRIPTION | NOTES | 0 |
| Р | | | | | | | V |
| Т | Sample N | umber | DEPTH | RECOVERY (%) | | | М |
| Н | | | (FT BGS) | | | | (ppm) |
| | 1 | | 0-2 | 90 | FILL: Brown/Black/Gray SAND and GRAVEL, little Silt, moist. | | 0.0 |
| 1 | | | | | | | |
| _ | | | | | NATIVE: Brown Silty CLAY, trace Gravel, trace Sand, moist. | | |
| 2 | 2 | | 2-4 | 90 | - | | 0.0 |
| 3 | | | 2-4 | 90 | | | 0.0 |
| l ³ | | | | | 1 | | |
| 4 | | | | | 1 | | |
| | 3 | | 4-6 | 100 | | | 0.0 |
| 5 | | | | | | | |
| | | | | | | | |
| 6 | | | | | | | |
| l _ | 4 | | 6-8 | 100 | | | 0.0 |
| 7 | | | | | - | | |
| 8 | | | | | | | |
| | | | | | End of soil probe at 8 ft. bgs. | | |
| 9 | | | | | End of compressed at a fit ago. | | |
| | | | | | 1 | | |
| 10 | | | | | | | |
| | | | | | | | |
| 11 | | | | | | | |
| | | | | | | | |
| 12 | | | | | - | | |
| 13 | | | | | | | |
| 13 | | | | | 1 | | |
| 14 | | | | | 1 | | |
| | | | | | | | |
| 15 | | | | | | | |
| | | | | | | | |
| 16 | | | | | - | | |
| | | | | | 1 | | |
| 17 | | | | | 1 | | |
| 18 | | | | | 1 | | |
| 10 | | | | | 1 | | |
| 19 | | | | | 1 | | |
| | | | | |] | | |
| 20 | | | | | | | |
| S - | Split Spc | on S | ample | | E 3000 was used to field screen and headspace soil sample | es. | |
| | Rock Co | | | | = feet below ground surface. ppm = parts per million. | | |
| Ger | neral | St | tratification l | ines represent appr | oximate boundry between soil types, transitions may be gra | adual. | |

2) Water level readings have been made at times and under conditions stated, fluctuations of groundwater

157 Great Arrow Avenue Buffalo, New York Subsurface Investigation Soil Probe: SP- 7 SHEET 1 OF 1 FILE No. 21.0056831.10 CHECKED BY: JR

| | CONTRACTOR
DRILLER | | | | BORING LOCATION | NA . | | |
|------|-----------------------|-------|-------------|---------------------|---|----------------------------|-------|-------|
| | RT DATE | | 7/11/2017 | END DATE: 7/11/2017 | GROUND SURFACE ELEVATION GZA GEOENVIRONMENTAL REPRI | NM DATUM | NA | - |
| | ATER LEV | EL DA | | END DATE. 7/11/2017 | TYPE OF DRILL RIG | Track Mounted Geoprobe 662 | OUT | |
| l vv | DATE | TIME | | CASING | CASING SIZE AND DIAMETER | 2" diameter by 48" long | 001 | _ |
| | BATTE | | WALLER | 07101110 | OVERBURDEN SAMPLING METH | | | - |
| | | | | | ROCK DRILLING METHOD | NA | | - |
| | | | | | 1 | | | |
| D | | | | | | | | |
| Е | | S | AMPLE INFOR | RMATION | SAMPLE DE | ESCRIPTION | NOTES | 0 |
| Р | | | | - | | | | V |
| Т | Sample N | umber | | RECOVERY (%) | | | | М |
| Н | | | (FT BGS) | | | | | (ppm) |
| | 1 | | 0-2 | 40 | Asphalt (2-inches) and Concrete (4 | | _[| 0.0 |
| 1 | | | | | NATIVE: Brown Silty CLAY, trace (| Gravel, trace Silt, moist. | | |
| | | | | | 4 | | | |
| 2 | 2 | | 2-4 | 40 | 4 | | | 0.0 |
| 3 | | | 2-4 | 40 | 4 | | | 0.0 |
| | | | | | 1 | | | |
| 4 | | | | | 1 | | | |
| | 3 | | 4-6 | 100 | 1 | | | 0.0 |
| 5 | | | | | 1 | | | |
| | | | | | | | | |
| 6 | <u> </u> | | | | | | | |
| | 4 | | 6-8 | 100 | | | | 0.0 |
| 7 | | | | | 4 | | | |
| | | | | | 4 | | | |
| 8 | | | | | End of ooil probe at 0 ft has | | | |
| 9 | | | | | End of soil probe at 8 ft. bgs. | | | |
| 9 | | | | | 1 | | | |
| 10 | | | | | 1 | | | |
| | | | | | 1 | | | |
| 11 | | | | | | | | |
| | | | | | | | | |
| 12 | | | | | | | | |
| | | | | | 4 | | | |
| 13 | | | | | 4 | | | |
| 14 | <u> </u> | | | | - | | | |
| 14 | | | | | 4 | | | |
| 15 | | | | | 1 | | | |
| 1 | | | | | 1 | | | |
| 16 | | | | | 1 | | | |
| | | | | |] | | | |
| 17 | | | | | | | | |
| | | | | | 1 | | | |
| 18 | | | | | 4 | | | |
| | | | | | 4 | | | |
| 19 | - | | | | - | | | |
| 20 | | | | 1 | 4 | | | |
| _ | Split Spo | on S | ample | NOTES: MiniRAI | E 3000 was used to field screer | and headsnace soil sample | | I |
| | Rock Co | | | | = feet below ground surface. p | | | |
| Ĕ | | 4) 00 | | | | parto por miniorii | | |

General 1) Stratification lines represent approximate boundry between soil types, transitions may be gradual.

2) Water level readings have been made at times and under conditions stated, fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.

157 Great Arrow Avenue Buffalo, New York Subsurface Investigation Soil Probe: SP-8 SHEET 1 OF 1 FILE No. 21.0056831.10 CHECKED BY : JR

| CON | NTRACTOR | ₹ | TREC Environ | nmental, Inc. | BORING LOCATION See Site Plan | | |
|-----|------------------|-------|-------------------------|---------------------|--|--------|-------|
| | LLER | | James Agar | | GROUND SURFACE ELEVATION NM DATUM | NA | • |
| | RT DATE | | 7/11/2017 | END DATE: 7/11/2017 | GZA GEOENVIRONMENTAL REPRESENTATIVE Thomas Bohlen | | |
| W | ATER LEV | | | | TYPE OF DRILL RIG Track Mounted Geoprobe 662 | :0 UT | - |
| | DATE | TIME | WATER | CASING | CASING SIZE AND DIAMETER 2" diameter by 48" long | | - |
| | | | | | OVERBURDEN SAMPLING METHOL Direct Push | | - |
| | | | | | ROCK DRILLING METHOD NA | | - |
| D | | | | <u>I</u> | | | |
| E | | s | AMPLE INFOR | RMATION | SAMPLE DESCRIPTION | NOTES | 0 |
| P | | Ü | / ((VIII EE II (II O) (| | Gravit EL BESSIAN FISH | 110120 | V |
| Т | Sample N | umber | DEPTH | RECOVERY (%) | | | М |
| Н | | | (FT BGS) | | | | (ppm) |
| | 1 | | 0-2 | 90 | FILL: Brown/Gray/Black SAND and GRAVEL, trace Silt, moist. | | 0.0 |
| 1 | | | | | 1 | | |
| | | | | | NATIVE: Brown Silty CLAY, trace Gravel, trace Sand, moist. |] | |
| 2 | | | | | | | |
| | 2 | | 2-4 | 90 | | | 0.0 |
| 3 | | | | | - | | |
| 4 | | | | | 1 | | |
| 4 | 3 | | 4-6 | 100 | | | 0.0 |
| 5 | - | | . 0 | | 1 | | 0.0 |
| | | | | | 1 | | |
| 6 | | | | | | | |
| | 4 | | 6-8 | 100 | | | 0.0 |
| 7 | | | | | | | |
| | | | | | | | |
| 8 | | | | | | | |
| | | | | | End of soil probe at 8 ft. bgs. | | |
| 9 | | | | | | | |
| 4.0 | | | | | - | | |
| 10 | | | | | - | | |
| 11 | | | | | 1 | | |
| | | | | | 1 | | |
| 12 | | | | | | | |
| | | | | | | | |
| 13 | | | | | | 1 | |
| ĺ | | | | | - | | |
| 14 | | | | | | 1 | |
| 1 | | | | | - | 1 | |
| 15 | - | | | + | 1 | 1 | |
| 16 | | | | 1 | 1 | 1 | |
| | | | | | 1 | | |
| 17 | | | | | 1 | 1 | |
| 1 | | | | | 1 | | |
| 18 | | | | |] | | |
| 1 | | | | | | | |
| 19 | | | | | | | |
| 1 | | | | | - | 1 | |
| 20 | | | <u> </u> |
 | | | |
| | Split Spo | | | | 3000 was used to field screen and headspace soil samp | es. | |
| | Rock Co
neral | | | | = feet below ground surface. ppm = parts per million.
oximate boundry between soil types, transitions may be gr | | |
| 00 | ııcıal | 1) 31 | aunoauon n | mes represent appr | ozimate boundry between son types, transitions may be gr | auuai. | |

Page 1 of 1

2) Water level readings have been made at times and under conditions stated, fluctuations of groundwater

157 Great Arrow Avenue Buffalo, New York Subsurface Investigation Soil Probe: SP-9 SHEET 1 OF 1 FILE No. 21.0056831.10 CHECKED BY : JR

| стл | LER
RT DATE | - | James Agar | END DATE: 7/11/2017 | GROUND SURFACE ELEVATION NM DATUM GZA GEOENVIRONMENTAL REPRESENTATIVE Thomas Bohlen | NA | - |
|-------------|----------------|--------|-------------------|---------------------|--|---------------------------------------|----------|
| | ATER LEV | EL DAT | | LND DATE. 1/11/2017 | TYPE OF DRILL RIG Track Mounted Geoprobe 662 | OLIT | |
| vv | DATE | TIME | WATER | CASING | CASING SIZE AND DIAMETER 2" diameter by 48" long | .0 01 | _ |
| | | | | | OVERBURDEN SAMPLING METHOL Direct Push | | _ |
| | | | | | ROCK DRILLING METHOD NA | | _ |
| | | | | | | | |
| D
E
P | | SA | MPLE INFORI | MATION | SAMPLE DESCRIPTION | NOTES | C |
| Т
Н | Sample N | umber | DEPTH
(FT BGS) | RECOVERY (%) | | | N
(pp |
| 1 | 1 | | 0-2 | 60 | FILL: Brown/Black/Gray SAND, some Gravel, trace Silt, trace Brick, trace Glass, moist. | Temporary 1-inch microwell installed. | 0. |
| 2 | | | | | † | - Bottom of Well at | |
| | 2 | | 2-4 | 60 |] | 16 ft. bgs. | 0 |
| 3 | | | | | | - Screened from 6 to 16 ft. bgs. | |
| 5 | 3 | | 4-6 | 40 | Grades to: Black. | | 0. |
| 6 | 4 | | 6-8 | 40 | | | 0. |
| 7 | | | | | | | |
| 9 | 5 | | 8-10 | 50 | | | 0. |
| 10 | 6 | | 10-12 | 50 | | | 0. |
| 11 | | | | | Grades to: wet. | | |
| 12 | 7 | | 12-14 | 100 | - | | 0 |
| 13
14 | | | | | NATIVE: Brown Silty CLAY, trace Gravel, trace Sand, moist. | - | |
| 15 | 8 | | 14-16 | 100 | | | 0 |
| 16 | | | | | | | |
| 17 | | | | | End of soil probe at 16 ft. bgs. | | |
| 18 | | | | | 1 | | |
| 19 | | | | | | | |
| 20
S - | Split Spc | on Sa | mple | NOTES: MiniRA | 3000 was used to field screen and headspace soil sample | es. | |

Page 1 of 1

2) Water level readings have been made at times and under conditions stated, fluctuations of groundwater

157 Great Arrow Avenue Buffalo, New York Subsurface Investigation Soil Probe: SP-10 SHEET 1 OF 1 FILE No. 21.0056831.10 CHECKED BY : JR

| | ITRACTOF | ₹ | TREC Environ | nmental, Inc. | | e Site Plan | | _ |
|-----|-----------|-------|--------------|---------------------|--|----------------------------|---------------------------------------|-------|
| | LER | | James Agar | | - · · · · · · · · · · · · · · · · · · · | NM DATUM | NA | _ |
| | RT DATE | | 7/11/2017 | END DATE: 7/11/2017 | GZA GEOENVIRONMENTAL REPRESEN | | | |
| W | ATER LEV | | 7 | T | - | Frack Mounted Geoprobe 662 |) UT | _ |
| | DATE | TIME | WATER | CASING | - | 2" diameter by 48" long | | - |
| | | | | | OVERBURDEN SAMPLING METHOLE ROCK DRILLING METHOD N | | | - |
| | | | | | ROCK DRILLING WETHOD | NA . | | - |
| D | | | | L | | | | |
| E | | s | AMPLE INFOR | RMATION | SAMPLE DESCR | RIPTION | NOTES | 0 |
| P | | | | | | | | V |
| Т | Sample N | umber | DEPTH | RECOVERY (%) | 1 | | | М |
| Н | | | (FT BGS) | | | | | (ppm) |
| | 1 | | 0-2 | 80 | FILL: Black SAND, little Gravel, trace B | Brick, moist. | | 0.0 |
| 1 | | | | | | | | |
| | | | | | | | | |
| 2 | | | | | | | | |
| | 2 | | 2-4 | 80 | - | | | 0.0 |
| 3 | | | | | 1 | | | |
| 4 | | | | | 1 | | | |
| | 3 | | 4-6 | 100 | 1 | | | 0.0 |
| 5 | | | | | NATIVE: Brown Silty CLAY, trace Grave | el. trace Sand. moist. | - | |
| | | | | | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | ., | | |
| 6 | | | | | | | | |
| | 4 | | 6-8 | 100 | | | | 0.0 |
| 7 | | | | | | | | |
| | | | | | | | | |
| 8 | | | | | | | | |
| | | | | | End of soil probe at 8 ft. bgs. | | | |
| 9 | | | | | 1 | | | |
| 10 | | | | | 1 | | | |
| | | | | | 1 | | | |
| 11 | | | | | 1 | | | |
| | | | | | | | | |
| 12 | | | | | | | | |
| | | | | | | | | |
| 13 | | | | | 4 | | | |
| 14 | | | | | - | | | |
| 14 | | | | | 1 | | | |
| 15 | | | | | 1 | | | |
| I | | | | | 1 | | | |
| 16 | | | | | 1 | | | |
| | | | | |] | | | |
| 17 | | | | |] | | | |
| | | | | | | | | |
| 18 | | | | | - | | | |
| | | | | | - | | | |
| 19 | | | | | 1 | | | |
| 20 | | | | | 1 | | | |
| | Split Spo | on S | ample | NOTES: MiniRAI | E 3000 was used to field screen an | d headspace soil sample | es | |
| С - | Rock Co | re Sa | ımple | | = feet below ground surface. ppm | | · · · · · · · · · · · · · · · · · · · | |
| | neral | | | | oximate boundry between soil type | | adual. | |

2) Water level readings have been made at times and under conditions stated, fluctuations of groundwater

157 Great Arrow Avenue Buffalo, New York Subsurface Investigation Soil Probe: SP-11 SHEET 1 OF 1 FILE No. 21.0056831.10 CHECKED BY : JR

| | NTRACTOR | ? | TREC Environ | nmental, Inc. | BORING LOCATION | See Site Plan | NA | _ |
|-----|---|--------|---------------------------------------|---------------------|-----------------------------------|------------------------------|------------------------|-------|
| | DRILLER James Agar START DATE 7/11/2017 END DATE: 7/11/2017 | | GROUND SURFACE ELEVATION NM_ DATUM NA | | | | | |
| | | 'EL DA | | LND DATE. 7/11/2017 | TYPE OF DRILL RIG | Track Mounted Geoprobe 662 | OLIT | |
| VV | ATER LEV | TIME | | CASING | CASING SIZE AND DIAMETER | 2" diameter by 48" long | 0 01 | - |
| | DATE | IIIVIL | WAILK | CASING | OVERBURDEN SAMPLING METH | | | - |
| | | | | | ROCK DRILLING METHOD | NA | | - |
| | | | | | NOOK BRIZEING ME 1110B | 177 | | - |
| D | | | | | | | | |
| E | | 9 | AMPLE INFOR | ΡΜΑΤΙΩΝΙ | SAMPLE DE | SCRIPTION | NOTES | 0 |
| P | | Ū | , LL OI | | 57 WH 22 B2 | .com mon | 110120 | V |
| l T | Sample N | umber | DEPTH | RECOVERY (%) | | | | M |
| Н | | | (FT BGS) | (,,, | | | | (ppm) |
| H | 1 | | 0-2 | 90 | Asphalt (2-inches). FILL: Brown/G | rav/Black SAND_little Gravel | Soil probe conducted | 0.0 |
| 1 | · | | V - | | trace Silt, moist. | | near present AST | 0.0 |
| | | | | | ado oni, moion | | on northern portion of | |
| 2 | | | | | 1 | | Site. | |
| | 2 | | 2-4 | 90 | 1 | | | 0.0 |
| 3 | | | | | 1 | | | |
| | | | | | 1 | | | |
| 4 | | | | | 1 | | | |
| | 3 | | 4-6 | 100 | 1 | | | 0.0 |
| 5 | | | | | NATIVE: Brown Silty CLAY, trace (| Gravel, trace Sand, moist. | - | |
| | | | | | 1 | , | | |
| 6 | | | | | 1 | | | |
| | 4 | | 6-8 | 100 | 1 | | | 0.0 |
| 7 | | | | | 1 | | | |
| | | | | | 1 | | | |
| 8 | | | | | 1 | | | |
| | | | | | End of soil probe at 8 ft. bgs. | | | |
| 9 | | | | | 1 | | | |
| | | | | | 1 | | | |
| 10 | | | | | 1 | | | |
| | | | | | 1 | | | |
| 11 | | | | | 1 | | | |
| | | | | | | | | |
| 12 | | | | | 1 | | | |
| | | | | | 1 | | | |
| 13 | | | | | 1 | | | |
| | | | | | 1 | | | |
| 14 | | | | |] | | | |
| 1 | | | | | | | | |
| 15 | | | | | | | | |
| 1 | | | | | | | | |
| 16 | | | | |] | | | |
| | | | | |] | | | |
| 17 | | | | |] | | | |
| 1 | | | | |] | | | |
| 18 | | | | |] | | | |
| 1 | | | | |] | | | |
| 19 | | | | |] | | | |
| | | | | |] | | | |
| 20 | | | | | | | | |
| | Split Spo | | | | E 3000 was used to field screen | | es. | |
| | Rock Co | | | | = feet below ground surface. p | | | |
| Gei | neral | 1) St | ratification li | ines represent appr | oximate boundry between soil t | ypes, transitions may be gra | adual. | |

Page 1 of 1

2) Water level readings have been made at times and under conditions stated, fluctuations of groundwater

may occur due to other factors than those present at the time measurements were made.

Soil Probe: SP-11

157 Great Arrow Avenue Buffalo, New York Subsurface Investigation Soil Probe: SP-12 SHEET 1 OF 1 FILE No. 21.0056831.10 CHECKED BY: JR

| | NTRACTOR | ₹ | TREC Environ | nmental, Inc. | BORING LOCATION | See Site Plan | | _ |
|--------|--------------------|-------|--------------------------------------|---------------------|--------------------------------------|----------------------------|------------------------|-------|
| | DRILLER James Agar | | GROUND SURFACE ELEVATION NM DATUM NA | | | - | | |
| | RT DATE | | 7/11/2017 | END DATE: 7/11/2017 | GZA GEOENVIRONMENTAL REPRE | | | |
| W | ATER LEV | | | | TYPE OF DRILL RIG | Track Mounted Geoprobe 662 | 0 UT | - |
| | DATE | TIME | WATER | CASING | CASING SIZE AND DIAMETER | 2" diameter by 48" long | | _ |
| | | | | | OVERBURDEN SAMPLING METH | | | - |
| | | | | | ROCK DRILLING METHOD | NA | | _ |
| | | | | | | | 1 | |
| D
E | | 9 | AMPLE INFOR | PMATION . | SAMDLE DE | ESCRIPTION | NOTES | 0 |
| P | | 3 | AIVIFEE IIVI ON | MINATION | SAMIFLE DE | LOCKIF HON | NOTES | V |
| I T | Sample N | umber | DEPTH | RECOVERY (%) | 1 | | | M |
| Н | | | (FT BGS) | (,,, | | | | (ppm) |
| | 1 | | 0-2 | 60 | FILL: Black SAND, little Gravel, tra | ce Silt. moist. | Soil probe moved | 0.0 |
| 1 | | | | | 1 | , | approximately 30 ft. | |
| | | | | | 1 | | north of Site building | |
| 2 | | | | | | | due to presence of | |
| | 2 | | 2-4 | 60 | 1 | | natural gas line. | 0.0 |
| 3 | | | | | | | | |
| 1 | | | | | NATIVE: Brown Silty CLAY, trace (| Gravel, trace Sand, moist. | -[| |
| 4 | | | | | | | | |
| | 3 | | 4-6 | 100 | | | | 0.0 |
| 5 | | | | | | | | |
| | | | | | | | | |
| 6 | | | | |] | | | |
| | 4 | | 6-8 | 100 |] | | | 0.0 |
| 7 | | | | |] | | | |
| | | | | | | | | |
| 8 | | | | | | | | |
| | | | | | End of soil probe at 8 ft. bgs. | | | |
| 9 | | | | | | | | |
| | | | | | | | | |
| 10 | | | | | 4 | | | |
| | | | | | 4 | | | |
| 11 | | | | | | | | |
| | | | | | 4 | | | |
| 12 | | | | | 4 | | | |
| 40 | | | | | - | | | |
| 13 | - | | | | 1 | | | |
| 14 | | | | | 4 | | | |
| 14 | | | | | 4 | | | |
| 15 | | | | | 1 | | | |
| 13 | | | | | 1 | | | |
| 16 | | | | | 1 | | | |
| 10 | | | | | 1 | | | |
| 17 | | | | | 1 | | | |
| 1 '' | | | | | 1 | | | |
| 18 | | | | † | 1 | | | |
| | | | | | 1 | | | |
| 19 | | | | | 1 | | | |
| 1 | | | | | 1 | | | |
| 20 | | | | | 1 | | | |
| _ | Split Spo | on S | ample | NOTES: MiniRAI | E 3000 was used to field screer | and headspace soil sample | es. | - |
| | Rock Co | | | | = feet below ground surface. p | | | |
| | neral | | | | oximate boundry between soil t | | adual. | |

Page 1 of 1

2) Water level readings have been made at times and under conditions stated, fluctuations of groundwater

may occur due to other factors than those present at the time measurements were made.

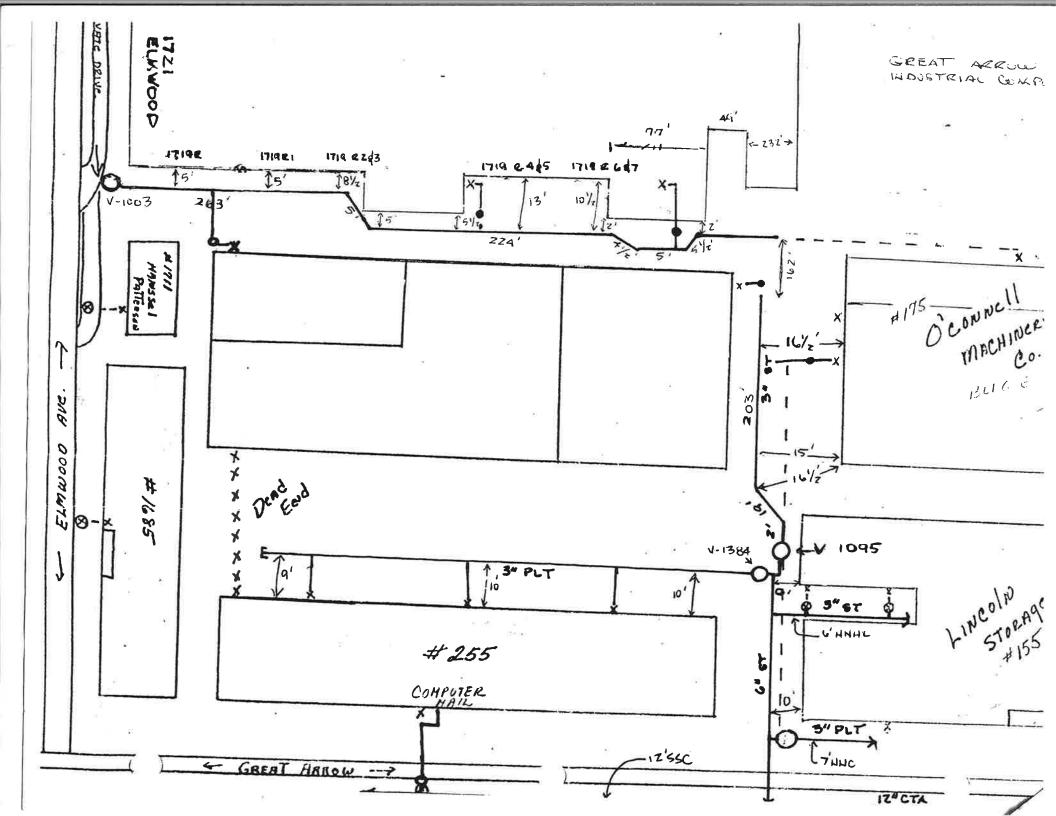
Soil Probe: SP-12

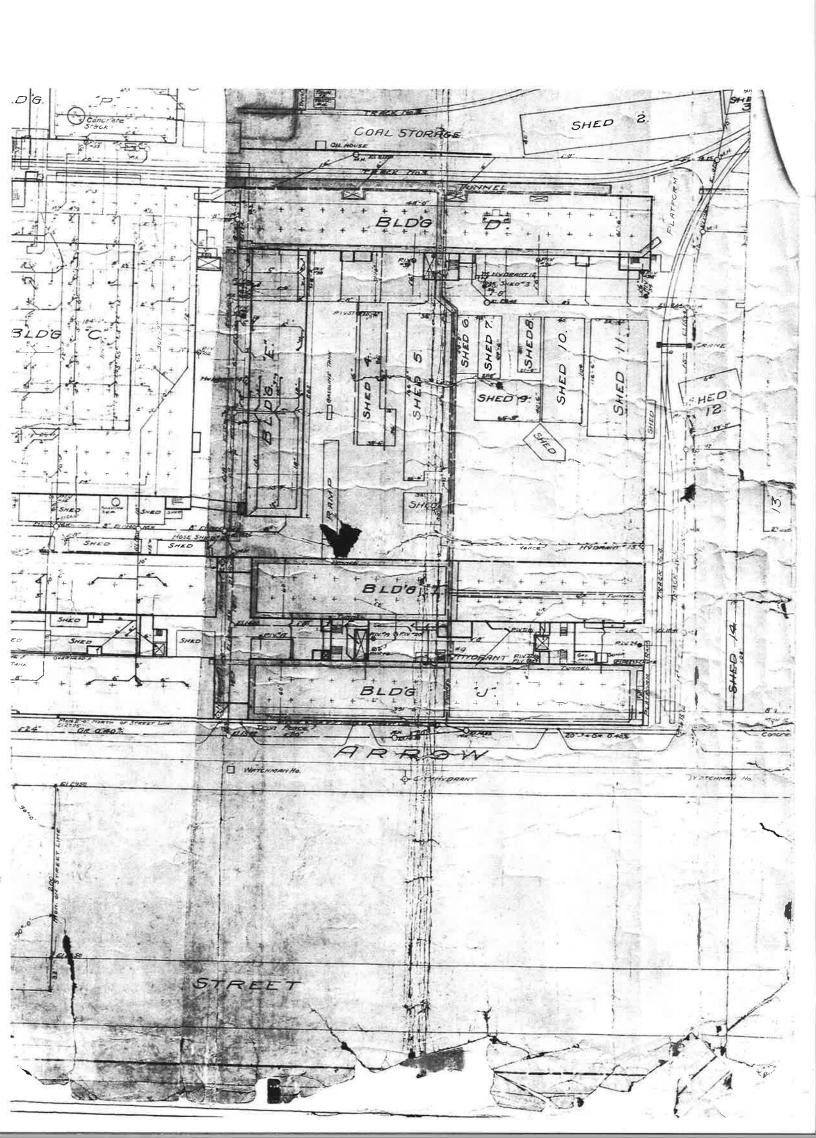
157 Great Arrow Avenue Buffalo, New York Subsurface Investigation Soil Probe: SP-13 SHEET 1 OF 1 FILE No. 21.0056831.10 CHECKED BY: JR

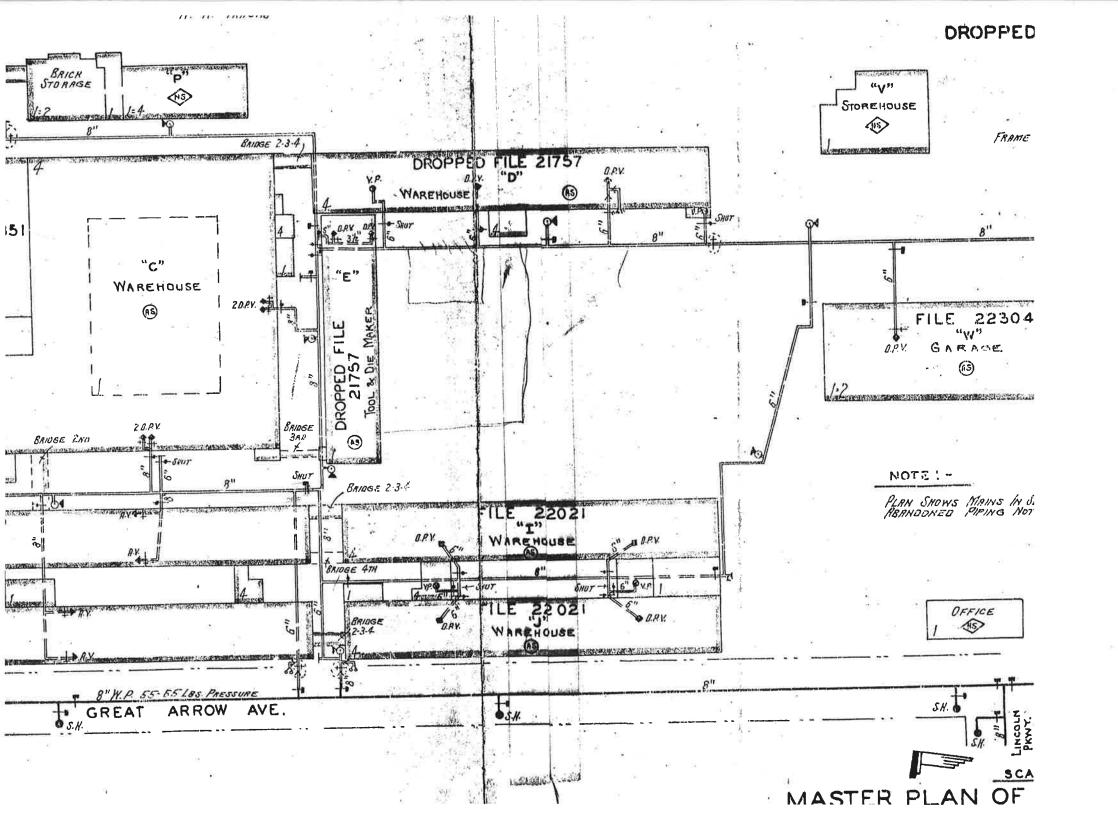
| DRILLER James Agar GROUND SURFACE ELEVATION NM DATUM NA | _ |
|---|---------|
| WATER LEVEL DATA | _ |
| DATE TIME WATER CASING OVERBURDEN SAMPLING METHOL Direct Push ROCK DRILLING METHOL DIrect Push ROCK DRILLING METHOD NA | |
| OVERBURDEN SAMPLING METHOT Direct Push NA | _ |
| ROCK DRILLING METHOD NA | _ |
| DE SAMPLE INFORMATION SAMPLE DESCRIPTION NOTES Sample Number DEPTH (FT BGS) 1 0-2 60 Asphalt (2-inches). FILL: Brown/Black/Orange SAND, little Gravel, moist. Temporary 1-inch microwell installed Bottom of Well at 8 ft. bgs Screened from 0 to 8 ft. bgs. Grades to: wet. Black staining, weathered silver sheen, and petroleum odor observed. NATIVE: Brown Silty CLAY, trace Gravel, trace Sand, moist. | _ |
| E SAMPLE INFORMATION SAMPLE DESCRIPTION NOTES Sample Number DEPTH (FT BGS) 1 0-2 60 Asphalt (2-inches). FILL: Brown/Black/Orange SAND, little Gravel, moist. Temporary 1-inch microwell installed. Bottom of Well at 8 ft. bgs. Screened from 0 to 8 ft. bgs. Grades to: wet. Black staining, weathered silver sheen, and petroleum odor observed. NATIVE: Brown Silty CLAY, trace Gravel, trace Sand, moist. End of soil probe at 8 ft. bgs. | _ |
| E SAMPLE INFORMATION SAMPLE DESCRIPTION NOTES Sample Number DEPTH (FT BGS) 1 0-2 60 Asphalt (2-inches). FILL: Brown/Black/Orange SAND, little Gravel, moist. Temporary 1-inch microwell installed. Bottom of Well at 8 ft. bgs. Screened from 0 to 8 ft. bgs. Grades to: wet. Black staining, weathered silver sheen, and petroleum odor observed. NATIVE: Brown Silty CLAY, trace Gravel, trace Sand, moist. End of soil probe at 8 ft. bgs. | _ |
| T Sample Number DEPTH (FT BGS) 1 0-2 60 Asphalt (2-inches). FILL: Brown/Black/Orange SAND, little Gravel, moist. 2 2 2-4 60 3 Grades to: wet. Black staining, weathered silver sheen, and petroleum odor observed. 5 NATIVE: Brown Silty CLAY, trace Gravel, trace Sand, moist. End of soil probe at 8 ft. bgs. | 0 |
| 1 | M (ppm) |
| Gravel, moist. Gravel, moist. Gravel, moist. Gravel, moist. Bottom of Well at 8 ft. bgs. Screened from 0 to 8 ft. bgs. Additional states and petroleum odor observed. NATIVE: Brown Silty CLAY, trace Gravel, trace Sand, moist. End of soil probe at 8 ft. bgs. | 0.0 |
| 2 | 0.0 |
| 2 2-4 60 3 | |
| 2 2-4 60 3 | |
| Grades to: wet. Black staining, weathered silver sheen, and petroleum odor observed. NATIVE: Brown Silty CLAY, trace Gravel, trace Sand, moist. End of soil probe at 8 ft. bgs. | 0.0 |
| Grades to: wet. Black staining, weathered silver sheen, and petroleum odor observed. NATIVE: Brown Silty CLAY, trace Gravel, trace Sand, moist. Screened from 0 to 8 ft. bgs. | 1 |
| Grades to: wet. Black staining, weathered silver sheen, and petroleum odor observed. NATIVE: Brown Silty CLAY, trace Gravel, trace Sand, moist. End of soil probe at 8 ft. bgs. | |
| 3 4-6 70 petroleum odor observed. NATIVE: Brown Silty CLAY, trace Gravel, trace Sand, moist. A 6-8 70 End of soil probe at 8 ft. bgs. | |
| NATIVE: Brown Silty CLAY, trace Gravel, trace Sand, moist. NATIVE: Brown Silty CLAY, trace Gravel, trace Sand, moist. End of soil probe at 8 ft. bgs. | 42.3 |
| 6 | 1.2.0 |
| 4 6-8 70 7 8 End of soil probe at 8 ft. bgs. | |
| 4 6-8 70 7 8 End of soil probe at 8 ft. bgs. | |
| 8 End of soil probe at 8 ft. bgs. | 0.0 |
| 8 End of soil probe at 8 ft. bgs. | 0.0 |
| End of soil probe at 8 ft. bgs. | |
| End of soil probe at 8 ft. bgs. | |
| 9 | |
| | |
| 1 | |
| 10 | |
| | |
| | |
| | |
| 12 | |
| | |
| 13 | |
| | |
| 14 | |
| | |
| 15 | |
| | |
| 16 | |
| | |
| 17 | |
| | |
| 18 | |
| | |
| 19 | |
| | |
| 20 | |
| S - Split Spoon Sample NOTES: MiniRAE 3000 was used to field screen and headspace soil samples. | 1 |
| C - Rock Core Sample FT BGS = feet below ground surface. ppm = parts per million. | |
| General 1) Stratification lines represent approximate boundry between soil types, transitions may be gradual. | |

Page 1 of 1

2) Water level readings have been made at times and under conditions stated, fluctuations of groundwater









Appendix C – Laboratory Report

```
JOB: L1723613
                  REPORT STYLE: Data Usability Report
0010: Alpha Analytical Report Cover Page - OK
0015: Sample Cross Reference Summary - OK
0060: Case Narrative - OK
0100: Volatiles Cover Page - OK
0110: Volatiles Sample Results - OK
0120: Volatiles Method Blank Report - OK
0130: Volatiles LCS Report - OK
0150: Volatiles Matrix SpikeReport - OK
0180: Semivolatiles Cover Page - OK
0190: Semivolatiles Sample Results - OK
0200: Semivolatiles Method Blank Report - OK
0210: Semivolatiles LCS Report - OK
0230: Semivolatiles Matrix Spike Report - OK
0700: PCBs Cover Page - OK
0710: PCBs Sample Results - OK
0720: PCBs Method Blank Report - OK
0730: PCBs LCS Report - OK
1005: Metals Sample Results - OK
1010: Metals Method Blank Report - OK
1020: Metals LCS Report - OK
1040: Metals Matrix Spike Report - OK
1180: Inorganics Cover Page - OK
1200: Wet Chemistry Sample Results - OK
1210: Wet Chemistry Method Blank Report - OK
1220: Wet Chemistry LCS Report - OK
1240: Wet Chemistry Matrix Spike Report - OK
1250: Wet Chemistry Duplicate Report - OK
5100: Sample Receipt & Container Information Report - OK
5200: Glossary - OK
5400: References - OK
```



ANALYTICAL REPORT

Lab Number: L1723613

Client: GZA GeoEnvironmental

535 Washington St. Buffalo, NY 14203

ATTN: James Richert Phone: (716) 685-2300

Project Name: PIERCE ARROW APARTMENTS

Project Number: 56831.10

Report Date: 07/19/17

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), NJ NELAP (MA935), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-14-00197).

Eight Walkup Drive, Westborough, MA 01581-1019 508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name:

Project Number: 56831.10

PIERCE ARROW APARTMENTS

Lab Number: L1723613 Report Date: 07/19/17

| Alpha
Sample ID | Client ID | Matrix | Sample
Location | Collection
Date/Time | Receive Date |
|--------------------|------------------------|--------|--------------------|-------------------------|--------------|
| L1723613-01 | SP-1-8"-071117 | SOIL | BUFFALO, NY | 07/11/17 09:40 | 07/11/17 |
| L1723613-02 | SP-1-0.5-8-071117 | SOIL | BUFFALO, NY | 07/11/17 09:40 | 07/11/17 |
| L1723613-03 | SP-2-3.5-071117 | SOIL | BUFFALO, NY | 07/11/17 10:10 | 07/11/17 |
| L1723613-04 | SP-3-2-071117 | SOIL | BUFFALO, NY | 07/11/17 10:30 | 07/11/17 |
| L1723613-05 | SP-3-1-8-071117 | SOIL | BUFFALO, NY | 07/11/17 10:30 | 07/11/17 |
| L1723613-06 | SP-5-1-071117 | SOIL | BUFFALO, NY | 07/11/17 11:15 | 07/11/17 |
| L1723613-07 | SP-5-1-8-071117 | SOIL | BUFFALO, NY | 07/11/17 11:15 | 07/11/17 |
| L1723613-08 | SP-6-0.5-071117 | SOIL | BUFFALO, NY | 07/11/17 11:40 | 07/11/17 |
| L1723613-09 | SP-6-0-1-071117 | SOIL | BUFFALO, NY | 07/11/17 11:40 | 07/11/17 |
| L1723613-10 | SP-7-4-071117 | SOIL | BUFFALO, NY | 07/11/17 12:30 | 07/11/17 |
| L1723613-11 | SP-7-4-8-071117 | SOIL | BUFFALO, NY | 07/11/17 12:30 | 07/11/17 |
| L1723613-12 | SP-8-0.5-071117 | SOIL | BUFFALO, NY | 07/11/17 13:00 | 07/11/17 |
| L1723613-13 | SP-8-0-1-071117 | SOIL | BUFFALO, NY | 07/11/17 13:00 | 07/11/17 |
| L1723613-14 | SP-9-2-071117 | SOIL | BUFFALO, NY | 07/11/17 13:20 | 07/11/17 |
| L1723613-15 | SP-9-0-13-071117 | SOIL | BUFFALO, NY | 07/11/17 13:20 | 07/11/17 |
| L1723613-16 | SP-10-4-071117 | SOIL | BUFFALO, NY | 07/11/17 13:50 | 07/11/17 |
| L1723613-17 | SP-10-0-4.5-071117 | SOIL | BUFFALO, NY | 07/11/17 13:50 | 07/11/17 |
| L1723613-18 | SP-11-3-071117 | SOIL | BUFFALO, NY | 07/11/17 14:20 | 07/11/17 |
| L1723613-19 | SP-11-0.5-4.5-071117 | SOIL | BUFFALO, NY | 07/11/17 14:20 | 07/11/17 |
| L1723613-20 | SP-12-1.5-071117 | SOIL | BUFFALO, NY | 07/11/17 14:45 | 07/11/17 |
| L1723613-21 | SP-12-0-3-071117 | SOIL | BUFFALO, NY | 07/11/17 14:45 | 07/11/17 |
| L1723613-22 | SP-13-4.5-071117 | SOIL | BUFFALO, NY | 07/11/17 15:15 | 07/11/17 |
| L1723613-23 | SP-13-0-4.5-071117 | SOIL | BUFFALO, NY | 07/11/17 15:15 | 07/11/17 |
| Pa923695224 | SUBSURFACE DUPLICATE - | SOIL | BUFFALO, NY | 07/11/17 00:00 | 07/11/17 |



| Alpha | | | Sample | Serial_No:0 | o:07191714:36 | |
|-------------|------------------------|--------|-------------|----------------|---------------|--|
| Sample ID | Client ID | Matrix | Location | Date/Time | Receive Date | |
| | 071117 | | | | | |
| L1723613-25 | SP-9-GW-071117 | WATER | BUFFALO, NY | 07/11/17 15:30 | 07/11/17 | |
| L1723613-26 | SP-13-GW-071117 | WATER | BUFFALO, NY | 07/11/17 15:45 | 07/11/17 | |
| L1723613-27 | SS-1-071117 | SOIL | BUFFALO, NY | 07/11/17 15:50 | 07/11/17 | |
| L1723613-28 | SS-2-071117 | SOIL | BUFFALO, NY | 07/11/17 15:55 | 07/11/17 | |
| L1723613-29 | SS-3-071117 | SOIL | BUFFALO, NY | 07/11/17 16:00 | 07/11/17 | |
| L1723613-30 | SS-4-071117 | SOIL | BUFFALO, NY | 07/11/17 16:10 | 07/11/17 | |
| L1723613-31 | SURFACE SOIL DUPLICATE | SOIL | BUFFALO, NY | 07/11/17 00:00 | 07/11/17 | |



Project Name: PIERCE ARROW APARTMENTS Lab Number: L1723613 **Project Number:** 56831.10 **Report Date:** 07/19/17

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY

For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.



Project Name:PIERCE ARROW APARTMENTSLab Number:L1723613Project Number:56831.10Report Date:07/19/17

Case Narrative (continued)

Report Submission

This is a partial report. A final report will be issued as soon as the results of all requested analyses become available.

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

Volatile Organics

L1723613-01, -03, -04, -06, -10, -12, -20, and -24: The analysis of Volatile Organics by EPA Method 5035/8260 Low Level could not be performed due to excessive sample weight. A High Level analysis was performed and is reported.

Semivolatile Organics

L1723613-26: The sample has elevated detection limits due to limited sample volume available for analysis and the analytical dilution required by the sample matrix.

The WG1022578-4/-5 MS/MSD recoveries, performed on L1723613-27, are outside the acceptance criteria for fluoranthene (0%/0%), benzo(a)anthracene (MSD at 0%), benzo(a)pyrene (MSD at 0%), benzo(b)fluoranthene (MSD at 0%), phenanthrene (0%/0%) and pyrene (0%/0%). The unacceptable percent recoveries are attributed to the elevated concentrations of target compounds present in the native sample.

Semivolatile Organics by SIM

L1723613-26: The sample has elevated detection limits due to limited sample volume available for analysis and the analytical dilution required by the sample matrix.

L1723613-26: The surrogate recoveries are below the acceptance criteria for 2-fluorophenol (0%), phenol-d6 (0%), nitrobenzene-d5 (0%), 2-fluorobiphenyl (0%), 2,4,6-tribromophenol (0%) and 4-terphenyl-d14 (0%) due to the dilution required to quantitate the sample. Re-extraction was not required; therefore, the results of the original analysis are reported.



Project Name:PIERCE ARROW APARTMENTSLab Number:L1723613Project Number:56831.10Report Date:07/19/17

Case Narrative (continued)

Total Metals

L1723613-03, -05, -07, -09, -11, -13, -15, -17, -19, -21, -23, -24, -27 through -31: The sample has elevated detection limits for all elements, with the exception of mercury, due to the dilution required by matrix interferences encountered during analysis.

The WG1021962-4 MSD recovery for manganese (0%), performed on L1723613-05, does not apply because the sample concentration is greater than four times the spike amount added.

The WG1021962-3/-4 MS/MSD RPD, performed on L1723613-05, is above the acceptance criteria for manganese (28%).

The WG1021962-7/-8 MS/MSD recoveries, performed on L1723613-27, are outside the acceptance criteria for cadmium (MSD at 73%), chromium (MS at 356%), lead (MSD at 60%), nickel (71%/73%) and zinc (148%/53%). A post digestion spike was performed and yielded unacceptable recoveries for cadmium (73%), chromium (66%), lead (68%), nickel (69%) and zinc (59%). This has been attributed to sample matrix. The WG1021962-7 MS recovery for manganese (2170%), performed on L1723613-27, does not apply because the sample concentration is greater than four times the spike amount added.

The WG1021962-7/-8 MS/MSD RPDs for chromium (78%), manganese (79%) and zinc (24%), performed on L1723613-27, are above the acceptance criteria.

The WG1022069-3/-4 MS/MSD recoveries, performed on L1723613-05, are outside the acceptance criteria for mercury (123%/128%). A post digestion spike was performed and was within acceptance criteria. The WG1022069-5/-6 MS/MSD recoveries, performed on L1723613-27, are outside the acceptance criteria for mercury (127%/126%). A post digestion spike was performed and was within acceptance criteria.

Cyanide, Total

L1723613-07, -15, -17 and -19: The sample has an elevated detection limit due to the dilution required by the sample matrix.

The WG1022226-2 LCS recovery (136%), associated with L1723613-02 and -03, is above our in-house acceptance criteria, but within the vendor-certified acceptance limits. The results of the original analyses are reported.

The WG1022230-2 LCS recovery (136%), associated with L1723613-05, -07, -09, -11, -13, -15, -17 and -



Serial_No:07191714:36

Project Name:PIERCE ARROW APARTMENTSLab Number:L1723613Project Number:56831.10Report Date:07/19/17

Case Narrative (continued)

19, is above our in-house acceptance criteria, but within the vendor-certified acceptance limits. The results of the original analyses are reported.

The WG1022567-3 LCSD recovery (124%), associated with L1723613-21, -23, -24 and -27 through -31, is above our in-house acceptance criteria, but within the vendor-certified acceptance limits. The results of the original analyses are reported.

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

Willelle M. Morris

Authorized Signature:

Title: Technical Director/Representative Date: 07/19/17

ORGANICS



VOLATILES



Serial_No:07191714:36

L1723613

07/19/17

Project Name: PIERCE ARROW APARTMENTS

L1723613-01

Project Number: 56831.10

Lab ID:

SAMPLE RESULTS

Date Collected: 07/11/17 09:40

Lab Number:

Report Date:

Date Received: 07/11/17
Field Prep: Not Specified

Client ID: SP-1-8"-071117 Sample Location: BUFFALO, NY

Matrix: Soil Analytical Method: 1,8260C

Analytical Date: 07/16/17 11:55

Analyst: MV Percent Solids: 81%

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---------------------------------------|-------------|-----------|-------|-----|-----|-----------------|
| Volatile Organics by 8260/5035 - West | borough Lab | | | | | |
| Methylene chloride | ND | | ug/kg | 690 | 110 | 1 |
| 1,1-Dichloroethane | ND | | ug/kg | 100 | 19. | 1 |
| Chloroform | ND | | ug/kg | 100 | 26. | 1 |
| Carbon tetrachloride | ND | | ug/kg | 69 | 24. | 1 |
| 1,2-Dichloropropane | ND | | ug/kg | 240 | 16. | 1 |
| Dibromochloromethane | ND | | ug/kg | 69 | 12. | 1 |
| 1,1,2-Trichloroethane | ND | | ug/kg | 100 | 22. | 1 |
| Tetrachloroethene | ND | | ug/kg | 69 | 21. | 1 |
| Chlorobenzene | ND | | ug/kg | 69 | 24. | 1 |
| Trichlorofluoromethane | ND | | ug/kg | 350 | 29. | 1 |
| 1,2-Dichloroethane | ND | | ug/kg | 69 | 17. | 1 |
| 1,1,1-Trichloroethane | ND | | ug/kg | 69 | 24. | 1 |
| Bromodichloromethane | ND | | ug/kg | 69 | 21. | 1 |
| trans-1,3-Dichloropropene | ND | | ug/kg | 69 | 14. | 1 |
| cis-1,3-Dichloropropene | ND | | ug/kg | 69 | 16. | 1 |
| Bromoform | ND | | ug/kg | 280 | 16. | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | ug/kg | 69 | 21. | 1 |
| Benzene | ND | | ug/kg | 69 | 13. | 1 |
| Toluene | ND | | ug/kg | 100 | 14. | 1 |
| Ethylbenzene | ND | | ug/kg | 69 | 12. | 1 |
| Chloromethane | ND | | ug/kg | 350 | 30. | 1 |
| Bromomethane | 68 | J | ug/kg | 140 | 23. | 1 |
| Vinyl chloride | ND | | ug/kg | 140 | 22. | 1 |
| Chloroethane | ND | | ug/kg | 140 | 22. | 1 |
| 1,1-Dichloroethene | ND | | ug/kg | 69 | 26. | 1 |
| trans-1,2-Dichloroethene | ND | | ug/kg | 100 | 17. | 1 |
| Trichloroethene | ND | | ug/kg | 69 | 21. | 1 |
| 1,2-Dichlorobenzene | ND | | ug/kg | 350 | 13. | 1 |
| 1,3-Dichlorobenzene | ND | | ug/kg | 350 | 15. | 1 |
| 1,4-Dichlorobenzene | ND | | ug/kg | 350 | 13. | 1 |



Project Name: PIERCE ARROW APARTMENTS Lab Number: L1723613

Project Number: 56831.10 **Report Date:** 07/19/17

SAMPLE RESULTS

Lab ID: Date Collected: 07/11/17 09:40

Client ID: SP-1-8"-071117 Date Received: 07/11/17 Sample Location: BUFFALO, NY Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|-------------------------------------|---------------|-----------|-------|------|------|-----------------|
| Volatile Organics by 8260/5035 - We | stborough Lab | | | | | |
| Methyl tert butyl ether | ND | | ug/kg | 140 | 11. | 1 |
| p/m-Xylene | ND | | ug/kg | 140 | 24. | 1 |
| o-Xylene | ND | | ug/kg | 140 | 23. | 1 |
| cis-1,2-Dichloroethene | ND | | ug/kg | 69 | 24. | 1 |
| Styrene | ND | | ug/kg | 140 | 28. | 1 |
| Dichlorodifluoromethane | ND | | ug/kg | 690 | 35. | 1 |
| Acetone | ND | | ug/kg | 690 | 160 | 1 |
| Carbon disulfide | ND | | ug/kg | 690 | 76. | 1 |
| 2-Butanone | ND | | ug/kg | 690 | 48. | 1 |
| 4-Methyl-2-pentanone | ND | | ug/kg | 690 | 17. | 1 |
| 2-Hexanone | ND | | ug/kg | 690 | 46. | 1 |
| Bromochloromethane | ND | | ug/kg | 350 | 25. | 1 |
| 1,2-Dibromoethane | ND | | ug/kg | 280 | 14. | 1 |
| n-Butylbenzene | ND | | ug/kg | 69 | 16. | 1 |
| sec-Butylbenzene | ND | | ug/kg | 69 | 15. | 1 |
| 1,2-Dibromo-3-chloropropane | ND | | ug/kg | 350 | 27. | 1 |
| Isopropylbenzene | ND | | ug/kg | 69 | 13. | 1 |
| p-Isopropyltoluene | ND | | ug/kg | 69 | 14. | 1 |
| Naphthalene | ND | | ug/kg | 350 | 9.6 | 1 |
| n-Propylbenzene | ND | | ug/kg | 69 | 15. | 1 |
| 1,2,3-Trichlorobenzene | ND | | ug/kg | 350 | 17. | 1 |
| 1,2,4-Trichlorobenzene | ND | | ug/kg | 350 | 15. | 1 |
| 1,3,5-Trimethylbenzene | ND | | ug/kg | 350 | 11. | 1 |
| 1,2,4-Trimethylbenzene | ND | | ug/kg | 350 | 13. | 1 |
| Methyl Acetate | ND | | ug/kg | 1400 | 32. | 1 |
| Cyclohexane | ND | | ug/kg | 1400 | 30. | 1 |
| 1,4-Dioxane | ND | | ug/kg | 2800 | 1000 | 1 |
| Freon-113 | ND | | ug/kg | 1400 | 36. | 1 |
| Methyl cyclohexane | ND | | ug/kg | 280 | 17. | 1 |
| | | | | | | |

| Surrogate | % Recovery | Acceptance
Qualifier Criteria | |
|-----------------------|------------|----------------------------------|--|
| 1,2-Dichloroethane-d4 | 113 | 70-130 | |
| Toluene-d8 | 104 | 70-130 | |
| 4-Bromofluorobenzene | 107 | 70-130 | |
| Dibromofluoromethane | 97 | 70-130 | |



L1723613

07/19/17

Project Name: PIERCE ARROW APARTMENTS

L1723613-03

BUFFALO, NY

SP-2-3.5-071117

Project Number: 56831.10

Lab ID:

Client ID:

Sample Location:

SAMPLE RESULTS

Date Collected: 07/11/17 10:10

Lab Number:

Report Date:

Date Received: 07/11/17 Field Prep: Not Specified

Matrix: Soil Analytical Method: 1,8260C Analytical Date: 07/16/17 12:21

Analyst: MV Percent Solids: 76%

| Parameter | Result | Qualifier Units | RL | MDL | Dilution Factor |
|--------------------------------|-------------------|-----------------|-----|-----|-----------------|
| Volatile Organics by 8260/5035 | - Westborough Lab | | | | |
| Methylene chloride | ND | ug/kg | 700 | 120 | 1 |
| 1,1-Dichloroethane | ND | ug/kg | 100 | 19. | 1 |
| Chloroform | ND | ug/kg | 100 | 26. | 1 |
| Carbon tetrachloride | ND | ug/kg | 70 | 24. | 1 |
| 1,2-Dichloropropane | ND | ug/kg | 240 | 16. | 1 |
| Dibromochloromethane | ND | ug/kg | 70 | 12. | 1 |
| 1,1,2-Trichloroethane | ND | ug/kg | 100 | 22. | 1 |
| Tetrachloroethene | ND | ug/kg | 70 | 21. | 1 |
| Chlorobenzene | ND | ug/kg | 70 | 24. | 1 |
| Trichlorofluoromethane | ND | ug/kg | 350 | 29. | 1 |
| 1,2-Dichloroethane | ND | ug/kg | 70 | 17. | 1 |
| 1,1,1-Trichloroethane | ND | ug/kg | 70 | 24. | 1 |
| Bromodichloromethane | ND | ug/kg | 70 | 22. | 1 |
| trans-1,3-Dichloropropene | ND | ug/kg | 70 | 14. | 1 |
| cis-1,3-Dichloropropene | ND | ug/kg | 70 | 16. | 1 |
| Bromoform | ND | ug/kg | 280 | 16. | 1 |
| 1,1,2,2-Tetrachloroethane | ND | ug/kg | 70 | 21. | 1 |
| Benzene | ND | ug/kg | 70 | 14. | 1 |
| Toluene | ND | ug/kg | 100 | 14. | 1 |
| Ethylbenzene | ND | ug/kg | 70 | 12. | 1 |
| Chloromethane | ND | ug/kg | 350 | 30. | 1 |
| Bromomethane | ND | ug/kg | 140 | 24. | 1 |
| Vinyl chloride | ND | ug/kg | 140 | 22. | 1 |
| Chloroethane | ND | ug/kg | 140 | 22. | 1 |
| 1,1-Dichloroethene | ND | ug/kg | 70 | 26. | 1 |
| trans-1,2-Dichloroethene | ND | ug/kg | 100 | 17. | 1 |
| Trichloroethene | ND | ug/kg | 70 | 21. | 1 |
| 1,2-Dichlorobenzene | ND | ug/kg | 350 | 13. | 1 |
| 1,3-Dichlorobenzene | ND | ug/kg | 350 | 15. | 1 |
| 1,4-Dichlorobenzene | ND | ug/kg | 350 | 13. | 1 |



Project Name: PIERCE ARROW APARTMENTS Lab Number: L1723613

Project Number: 56831.10 **Report Date:** 07/19/17

SAMPLE RESULTS

Lab ID: L1723613-03 Date Collected: 07/11/17 10:10

Client ID: SP-2-3.5-071117 Date Received: 07/11/17 Sample Location: BUFFALO, NY Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|-------------------------------------|---------------|-----------|-------|------|------|-----------------|
| Volatile Organics by 8260/5035 - We | stborough Lab | | | | | |
| Methyl tert butyl ether | ND | | ug/kg | 140 | 11. | 1 |
| p/m-Xylene | ND | | ug/kg | 140 | 24. | 1 |
| o-Xylene | ND | | ug/kg | 140 | 24. | 1 |
| cis-1,2-Dichloroethene | ND | | ug/kg | 70 | 24. | 1 |
| Styrene | ND | | ug/kg | 140 | 28. | 1 |
| Dichlorodifluoromethane | ND | | ug/kg | 700 | 35. | 1 |
| Acetone | ND | | ug/kg | 700 | 160 | 1 |
| Carbon disulfide | ND | | ug/kg | 700 | 77. | 1 |
| 2-Butanone | ND | | ug/kg | 700 | 48. | 1 |
| 4-Methyl-2-pentanone | ND | | ug/kg | 700 | 17. | 1 |
| 2-Hexanone | ND | | ug/kg | 700 | 47. | 1 |
| Bromochloromethane | ND | | ug/kg | 350 | 25. | 1 |
| 1,2-Dibromoethane | ND | | ug/kg | 280 | 14. | 1 |
| n-Butylbenzene | ND | | ug/kg | 70 | 16. | 1 |
| sec-Butylbenzene | ND | | ug/kg | 70 | 15. | 1 |
| 1,2-Dibromo-3-chloropropane | ND | | ug/kg | 350 | 28. | 1 |
| Isopropylbenzene | ND | | ug/kg | 70 | 14. | 1 |
| p-Isopropyltoluene | ND | | ug/kg | 70 | 14. | 1 |
| Naphthalene | ND | | ug/kg | 350 | 9.6 | 1 |
| n-Propylbenzene | ND | | ug/kg | 70 | 15. | 1 |
| 1,2,3-Trichlorobenzene | ND | | ug/kg | 350 | 18. | 1 |
| 1,2,4-Trichlorobenzene | ND | | ug/kg | 350 | 15. | 1 |
| 1,3,5-Trimethylbenzene | ND | | ug/kg | 350 | 11. | 1 |
| 1,2,4-Trimethylbenzene | ND | | ug/kg | 350 | 13. | 1 |
| Methyl Acetate | ND | | ug/kg | 1400 | 32. | 1 |
| Cyclohexane | ND | | ug/kg | 1400 | 30. | 1 |
| 1,4-Dioxane | ND | | ug/kg | 2800 | 1000 | 1 |
| Freon-113 | ND | | ug/kg | 1400 | 36. | 1 |
| Methyl cyclohexane | ND | | ug/kg | 280 | 17. | 1 |
| | | | | | | |

| Surrogate | % Recovery | Acceptance
Qualifier Criteria | |
|-----------------------|------------|----------------------------------|--|
| 1,2-Dichloroethane-d4 | 110 | 70-130 | |
| Toluene-d8 | 106 | 70-130 | |
| 4-Bromofluorobenzene | 105 | 70-130 | |
| Dibromofluoromethane | 100 | 70-130 | |



L1723613

07/19/17

Project Name: PIERCE ARROW APARTMENTS

Project Number: 56831.10

Lab ID:

SAMPLE RESULTS

Lab Number:

Report Date:

L1723613-04 Date Collected: 07/11/17 10:30

Client ID: Date Received: 07/11/17 SP-3-2-071117 Sample Location: Field Prep: BUFFALO, NY Not Specified

Matrix: Soil Analytical Method: 1,8260C

Analytical Date: 07/16/17 12:48

Analyst: MV Percent Solids: 82%

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|-------------------------------------|---------------|-----------|-------|-----|-----|-----------------|
| Volatile Organics by 8260/5035 - We | stborough Lab | | | | | |
| Methylene chloride | ND | | ug/kg | 580 | 96. | 1 |
| 1,1-Dichloroethane | ND | | ug/kg | 87 | 16. | 1 |
| Chloroform | ND | | ug/kg | 87 | 21. | 1 |
| Carbon tetrachloride | ND | | ug/kg | 58 | 20. | 1 |
| 1,2-Dichloropropane | ND | | ug/kg | 200 | 13. | 1 |
| Dibromochloromethane | ND | | ug/kg | 58 | 10. | 1 |
| 1,1,2-Trichloroethane | ND | | ug/kg | 87 | 18. | 1 |
| Tetrachloroethene | ND | | ug/kg | 58 | 18. | 1 |
| Chlorobenzene | ND | | ug/kg | 58 | 20. | 1 |
| Trichlorofluoromethane | ND | | ug/kg | 290 | 24. | 1 |
| 1,2-Dichloroethane | ND | | ug/kg | 58 | 14. | 1 |
| 1,1,1-Trichloroethane | ND | | ug/kg | 58 | 20. | 1 |
| Bromodichloromethane | ND | | ug/kg | 58 | 18. | 1 |
| trans-1,3-Dichloropropene | ND | | ug/kg | 58 | 12. | 1 |
| cis-1,3-Dichloropropene | ND | | ug/kg | 58 | 13. | 1 |
| Bromoform | ND | | ug/kg | 230 | 14. | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | ug/kg | 58 | 17. | 1 |
| Benzene | ND | | ug/kg | 58 | 11. | 1 |
| Toluene | ND | | ug/kg | 87 | 11. | 1 |
| Ethylbenzene | ND | | ug/kg | 58 | 9.9 | 1 |
| Chloromethane | ND | | ug/kg | 290 | 25. | 1 |
| Bromomethane | 26 | J | ug/kg | 120 | 20. | 1 |
| Vinyl chloride | ND | | ug/kg | 120 | 18. | 1 |
| Chloroethane | ND | | ug/kg | 120 | 18. | 1 |
| 1,1-Dichloroethene | ND | | ug/kg | 58 | 22. | 1 |
| trans-1,2-Dichloroethene | ND | | ug/kg | 87 | 14. | 1 |
| Trichloroethene | ND | | ug/kg | 58 | 18. | 1 |
| 1,2-Dichlorobenzene | ND | | ug/kg | 290 | 10. | 1 |
| 1,3-Dichlorobenzene | ND | | ug/kg | 290 | 13. | 1 |
| 1,4-Dichlorobenzene | ND | | ug/kg | 290 | 10. | 1 |



Project Name: PIERCE ARROW APARTMENTS Lab Number: L1723613

Project Number: 56831.10 **Report Date:** 07/19/17

SAMPLE RESULTS

Lab ID: L1723613-04 Date Collected: 07/11/17 10:30

Client ID: SP-3-2-071117 Date Received: 07/11/17 Sample Location: BUFFALO, NY Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|-------------------------------------|----------------|-----------|-------|------|-----|-----------------|
| Volatile Organics by 8260/5035 - We | estborough Lab | | | | | |
| Methyl tert butyl ether | ND | | ug/kg | 120 | 8.9 | 1 |
| p/m-Xylene | ND | | ug/kg | 120 | 20. | 1 |
| o-Xylene | ND | | ug/kg | 120 | 20. | 1 |
| cis-1,2-Dichloroethene | ND | | ug/kg | 58 | 20. | 1 |
| Styrene | ND | | ug/kg | 120 | 23. | 1 |
| Dichlorodifluoromethane | ND | | ug/kg | 580 | 29. | 1 |
| Acetone | ND | | ug/kg | 580 | 130 | 1 |
| Carbon disulfide | ND | | ug/kg | 580 | 64. | 1 |
| 2-Butanone | ND | | ug/kg | 580 | 40. | 1 |
| 4-Methyl-2-pentanone | ND | | ug/kg | 580 | 14. | 1 |
| 2-Hexanone | ND | | ug/kg | 580 | 39. | 1 |
| Bromochloromethane | ND | | ug/kg | 290 | 21. | 1 |
| 1,2-Dibromoethane | ND | | ug/kg | 230 | 12. | 1 |
| n-Butylbenzene | ND | | ug/kg | 58 | 13. | 1 |
| sec-Butylbenzene | ND | | ug/kg | 58 | 13. | 1 |
| 1,2-Dibromo-3-chloropropane | ND | | ug/kg | 290 | 23. | 1 |
| Isopropylbenzene | ND | | ug/kg | 58 | 11. | 1 |
| p-Isopropyltoluene | ND | | ug/kg | 58 | 12. | 1 |
| Naphthalene | ND | | ug/kg | 290 | 8.0 | 1 |
| n-Propylbenzene | ND | | ug/kg | 58 | 12. | 1 |
| 1,2,3-Trichlorobenzene | ND | | ug/kg | 290 | 14. | 1 |
| 1,2,4-Trichlorobenzene | ND | | ug/kg | 290 | 12. | 1 |
| 1,3,5-Trimethylbenzene | ND | | ug/kg | 290 | 9.4 | 1 |
| 1,2,4-Trimethylbenzene | ND | | ug/kg | 290 | 11. | 1 |
| Methyl Acetate | 140 | J | ug/kg | 1200 | 27. | 1 |
| Cyclohexane | ND | | ug/kg | 1200 | 25. | 1 |
| 1,4-Dioxane | ND | | ug/kg | 2300 | 840 | 1 |
| Freon-113 | ND | | ug/kg | 1200 | 30. | 1 |
| Methyl cyclohexane | ND | | ug/kg | 230 | 14. | 1 |
| | | | | | | |

| Surrogate | % Recovery | Acceptance
Qualifier Criteria | |
|-----------------------|------------|----------------------------------|--|
| 1,2-Dichloroethane-d4 | 112 | 70-130 | |
| Toluene-d8 | 105 | 70-130 | |
| 4-Bromofluorobenzene | 107 | 70-130 | |
| Dibromofluoromethane | 102 | 70-130 | |



Project Name: PIERCE ARROW APARTMENTS

Project Number: 56831.10

SAMPLE RESULTS

L1723613

Lab Number:

Report Date: 07/19/17

Lab ID: L1723613-06 Date Collected: 07/11/17 11:15

Client ID: Date Received: 07/11/17 SP-5-1-071117 Sample Location: Field Prep: BUFFALO, NY Not Specified

Matrix: Soil Analytical Method: 1,8260C

Analytical Date: 07/16/17 14:06

Analyst: MV Percent Solids: 81%

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|-------------------------------------|----------------|-----------|-------|-----|-----|-----------------|
| Volatile Organics by 8260/5035 - We | estborough Lab | | | | | |
| Methylene chloride | ND | | ug/kg | 550 | 90. | 1 |
| 1,1-Dichloroethane | ND | | ug/kg | 82 | 15. | 1 |
| Chloroform | ND | | ug/kg | 82 | 20. | 1 |
| Carbon tetrachloride | ND | | ug/kg | 55 | 19. | 1 |
| 1,2-Dichloropropane | ND | | ug/kg | 190 | 12. | 1 |
| Dibromochloromethane | ND | | ug/kg | 55 | 9.6 | 1 |
| 1,1,2-Trichloroethane | ND | | ug/kg | 82 | 17. | 1 |
| Tetrachloroethene | ND | | ug/kg | 55 | 16. | 1 |
| Chlorobenzene | ND | | ug/kg | 55 | 19. | 1 |
| Trichlorofluoromethane | ND | | ug/kg | 270 | 23. | 1 |
| 1,2-Dichloroethane | ND | | ug/kg | 55 | 13. | 1 |
| 1,1,1-Trichloroethane | ND | | ug/kg | 55 | 19. | 1 |
| Bromodichloromethane | ND | | ug/kg | 55 | 17. | 1 |
| trans-1,3-Dichloropropene | ND | | ug/kg | 55 | 11. | 1 |
| cis-1,3-Dichloropropene | ND | | ug/kg | 55 | 13. | 1 |
| Bromoform | ND | | ug/kg | 220 | 13. | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | ug/kg | 55 | 16. | 1 |
| Benzene | ND | | ug/kg | 55 | 10. | 1 |
| Toluene | ND | | ug/kg | 82 | 11. | 1 |
| Ethylbenzene | ND | | ug/kg | 55 | 9.3 | 1 |
| Chloromethane | ND | | ug/kg | 270 | 24. | 1 |
| Bromomethane | 42 | J | ug/kg | 110 | 18. | 1 |
| Vinyl chloride | ND | | ug/kg | 110 | 17. | 1 |
| Chloroethane | ND | | ug/kg | 110 | 17. | 1 |
| 1,1-Dichloroethene | ND | | ug/kg | 55 | 20. | 1 |
| trans-1,2-Dichloroethene | ND | | ug/kg | 82 | 13. | 1 |
| Trichloroethene | ND | | ug/kg | 55 | 16. | 1 |
| 1,2-Dichlorobenzene | ND | | ug/kg | 270 | 10. | 1 |
| 1,3-Dichlorobenzene | ND | | ug/kg | 270 | 12. | 1 |
| 1,4-Dichlorobenzene | ND | | ug/kg | 270 | 10. | 1 |



Project Name: PIERCE ARROW APARTMENTS Lab Number: L1723613

Project Number: 56831.10 **Report Date:** 07/19/17

SAMPLE RESULTS

Lab ID: L1723613-06 Date Collected: 07/11/17 11:15

Client ID: SP-5-1-071117 Date Received: 07/11/17 Sample Location: BUFFALO, NY Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|-------------------------------------|---------------|-----------|-------|------|-----|-----------------|
| Volatile Organics by 8260/5035 - We | stborough Lab | | | | | |
| Methyl tert butyl ether | ND | | ug/kg | 110 | 8.4 | 1 |
| p/m-Xylene | ND | | ug/kg | 110 | 19. | 1 |
| o-Xylene | ND | | ug/kg | 110 | 18. | 1 |
| cis-1,2-Dichloroethene | ND | | ug/kg | 55 | 19. | 1 |
| Styrene | ND | | ug/kg | 110 | 22. | 1 |
| Dichlorodifluoromethane | ND | | ug/kg | 550 | 27. | 1 |
| Acetone | ND | | ug/kg | 550 | 120 | 1 |
| Carbon disulfide | ND | | ug/kg | 550 | 60. | 1 |
| 2-Butanone | ND | | ug/kg | 550 | 38. | 1 |
| 4-Methyl-2-pentanone | ND | | ug/kg | 550 | 13. | 1 |
| 2-Hexanone | ND | | ug/kg | 550 | 36. | 1 |
| Bromochloromethane | ND | | ug/kg | 270 | 20. | 1 |
| 1,2-Dibromoethane | ND | | ug/kg | 220 | 11. | 1 |
| n-Butylbenzene | ND | | ug/kg | 55 | 12. | 1 |
| sec-Butylbenzene | ND | | ug/kg | 55 | 12. | 1 |
| 1,2-Dibromo-3-chloropropane | ND | | ug/kg | 270 | 22. | 1 |
| Isopropylbenzene | ND | | ug/kg | 55 | 11. | 1 |
| p-Isopropyltoluene | ND | | ug/kg | 55 | 11. | 1 |
| Naphthalene | 18 | J | ug/kg | 270 | 7.6 | 1 |
| n-Propylbenzene | ND | | ug/kg | 55 | 12. | 1 |
| 1,2,3-Trichlorobenzene | ND | | ug/kg | 270 | 14. | 1 |
| 1,2,4-Trichlorobenzene | ND | | ug/kg | 270 | 12. | 1 |
| 1,3,5-Trimethylbenzene | ND | | ug/kg | 270 | 8.8 | 1 |
| 1,2,4-Trimethylbenzene | ND | | ug/kg | 270 | 10. | 1 |
| Methyl Acetate | ND | | ug/kg | 1100 | 25. | 1 |
| Cyclohexane | ND | | ug/kg | 1100 | 24. | 1 |
| 1,4-Dioxane | ND | | ug/kg | 2200 | 790 | 1 |
| Freon-113 | ND | | ug/kg | 1100 | 28. | 1 |
| Methyl cyclohexane | ND | | ug/kg | 220 | 13. | 1 |
| | | | | | | |

| Surrogate | % Recovery | Acceptance
Qualifier Criteria | |
|-----------------------|------------|----------------------------------|--|
| 1,2-Dichloroethane-d4 | 114 | 70-130 | |
| Toluene-d8 | 104 | 70-130 | |
| 4-Bromofluorobenzene | 102 | 70-130 | |
| Dibromofluoromethane | 104 | 70-130 | |



L1723613

07/19/17

Project Name: PIERCE ARROW APARTMENTS

L1723613-08

BUFFALO, NY

SP-6-0.5-071117

Project Number: 56831.10

Lab ID:

Client ID:

Sample Location:

SAMPLE RESULTS

Date Collected: 07/11/17 11:40

Lab Number:

Report Date:

Date Collected: 07/11/17 11:4

Date Received: 0//11/1/
Field Prep: Not Specified

Matrix: Soil Analytical Method: 1,8260C

Analytical Date: 07/16/17 14:33

Analyst: MV Percent Solids: 81%

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|--------------------------------------|--------------|-----------|-------|------|-----|-----------------|
| Volatile Organics by 8260/5035 - Wes | tborough Lab | | | | | |
| Methylene chloride | ND | | ug/kg | 1000 | 160 | 1 |
| 1,1-Dichloroethane | ND | | ug/kg | 150 | 27. | 1 |
| Chloroform | ND | | ug/kg | 150 | 37. | 1 |
| Carbon tetrachloride | ND | | ug/kg | 100 | 34. | 1 |
| 1,2-Dichloropropane | ND | | ug/kg | 350 | 23. | 1 |
| Dibromochloromethane | ND | | ug/kg | 100 | 18. | 1 |
| 1,1,2-Trichloroethane | ND | | ug/kg | 150 | 31. | 1 |
| Tetrachloroethene | ND | | ug/kg | 100 | 30. | 1 |
| Chlorobenzene | ND | | ug/kg | 100 | 35. | 1 |
| Trichlorofluoromethane | ND | | ug/kg | 500 | 42. | 1 |
| 1,2-Dichloroethane | ND | | ug/kg | 100 | 24. | 1 |
| 1,1,1-Trichloroethane | ND | | ug/kg | 100 | 35. | 1 |
| Bromodichloromethane | ND | | ug/kg | 100 | 31. | 1 |
| trans-1,3-Dichloropropene | ND | | ug/kg | 100 | 21. | 1 |
| cis-1,3-Dichloropropene | ND | | ug/kg | 100 | 23. | 1 |
| Bromoform | ND | | ug/kg | 400 | 24. | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | ug/kg | 100 | 30. | 1 |
| Benzene | ND | | ug/kg | 100 | 19. | 1 |
| Toluene | 33 | J | ug/kg | 150 | 19. | 1 |
| Ethylbenzene | ND | | ug/kg | 100 | 17. | 1 |
| Chloromethane | ND | | ug/kg | 500 | 43. | 1 |
| Bromomethane | ND | | ug/kg | 200 | 34. | 1 |
| Vinyl chloride | ND | | ug/kg | 200 | 31. | 1 |
| Chloroethane | ND | | ug/kg | 200 | 31. | 1 |
| 1,1-Dichloroethene | ND | | ug/kg | 100 | 37. | 1 |
| trans-1,2-Dichloroethene | ND | | ug/kg | 150 | 24. | 1 |
| Trichloroethene | ND | | ug/kg | 100 | 30. | 1 |
| 1,2-Dichlorobenzene | ND | | ug/kg | 500 | 18. | 1 |
| 1,3-Dichlorobenzene | ND | | ug/kg | 500 | 22. | 1 |
| 1,4-Dichlorobenzene | ND | | ug/kg | 500 | 18. | 1 |



Project Name: PIERCE ARROW APARTMENTS Lab Number: L1723613

Project Number: 56831.10 **Report Date:** 07/19/17

SAMPLE RESULTS

Lab ID: L1723613-08 Date Collected: 07/11/17 11:40

Client ID: SP-6-0.5-071117 Date Received: 07/11/17 Sample Location: BUFFALO, NY Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|-------------------------------------|---------------|-----------|-------|------|------|-----------------|
| Volatile Organics by 8260/5035 - We | stborough Lab | | | | | |
| Methyl tert butyl ether | ND | | ug/kg | 200 | 15. | 1 |
| p/m-Xylene | ND | | ug/kg | 200 | 35. | 1 |
| o-Xylene | ND | | ug/kg | 200 | 34. | 1 |
| cis-1,2-Dichloroethene | ND | | ug/kg | 100 | 34. | 1 |
| Styrene | ND | | ug/kg | 200 | 40. | 1 |
| Dichlorodifluoromethane | ND | | ug/kg | 1000 | 50. | 1 |
| Acetone | 460 | J | ug/kg | 1000 | 230 | 1 |
| Carbon disulfide | ND | | ug/kg | 1000 | 110 | 1 |
| 2-Butanone | ND | | ug/kg | 1000 | 69. | 1 |
| 4-Methyl-2-pentanone | ND | | ug/kg | 1000 | 24. | 1 |
| 2-Hexanone | ND | | ug/kg | 1000 | 66. | 1 |
| Bromochloromethane | ND | | ug/kg | 500 | 36. | 1 |
| 1,2-Dibromoethane | ND | | ug/kg | 400 | 20. | 1 |
| n-Butylbenzene | ND | | ug/kg | 100 | 23. | 1 |
| sec-Butylbenzene | ND | | ug/kg | 100 | 22. | 1 |
| 1,2-Dibromo-3-chloropropane | ND | | ug/kg | 500 | 39. | 1 |
| Isopropylbenzene | ND | | ug/kg | 100 | 19. | 1 |
| p-Isopropyltoluene | ND | | ug/kg | 100 | 20. | 1 |
| Naphthalene | 22 | J | ug/kg | 500 | 14. | 1 |
| n-Propylbenzene | ND | | ug/kg | 100 | 21. | 1 |
| 1,2,3-Trichlorobenzene | ND | | ug/kg | 500 | 25. | 1 |
| 1,2,4-Trichlorobenzene | ND | | ug/kg | 500 | 21. | 1 |
| 1,3,5-Trimethylbenzene | 32 | J | ug/kg | 500 | 16. | 1 |
| 1,2,4-Trimethylbenzene | 33 | J | ug/kg | 500 | 18. | 1 |
| Methyl Acetate | 870 | J | ug/kg | 2000 | 46. | 1 |
| Cyclohexane | 240 | J | ug/kg | 2000 | 43. | 1 |
| 1,4-Dioxane | ND | | ug/kg | 4000 | 1400 | 1 |
| Freon-113 | ND | | ug/kg | 2000 | 51. | 1 |
| Methyl cyclohexane | 820 | | ug/kg | 400 | 24. | 1 |
| | | | | | | |

| Surrogate | % Recovery | Acceptance
Qualifier Criteria | |
|-----------------------|------------|----------------------------------|--|
| 1,2-Dichloroethane-d4 | 109 | 70-130 | |
| Toluene-d8 | 106 | 70-130 | |
| 4-Bromofluorobenzene | 107 | 70-130 | |
| Dibromofluoromethane | 99 | 70-130 | |



L1723613

07/11/17 12:30

Not Specified

Dilution Factor

07/11/17

Project Name: PIERCE ARROW APARTMENTS

Project Number: 56831.10

SAMPLE RESULTS

Qualifier

Result

Units

Lab Number:

Date Collected:

Date Received:

Field Prep:

RL

MDL

Report Date: 07/19/17

Lab ID: L1723613-10 Client ID: SP-7-4-071117

Sample Location: BUFFALO, NY

Matrix: Soil Analytical Method: 1,8260C

Analytical Date: 07/16/17 14:59

Analyst: MV Percent Solids: 80%

Parameter

| Parameter | Result | Qualifier | Units | KL | MDL | Dilution Factor | |
|-------------------------------------|----------------|-----------|-------|-----|-----|-----------------|--|
| Volatile Organics by 8260/5035 - We | estborough Lab | | | | | | |
| Methylene chloride | ND | | ug/kg | 600 | 99. | 1 | |
| 1,1-Dichloroethane | ND | | ug/kg | 90 | 16. | 1 | |
| Chloroform | ND | | ug/kg | 90 | 22. | 1 | |
| Carbon tetrachloride | ND | | ug/kg | 60 | 21. | 1 | |
| 1,2-Dichloropropane | ND | | ug/kg | 210 | 14. | 1 | |
| Dibromochloromethane | ND | | ug/kg | 60 | 10. | 1 | |
| 1,1,2-Trichloroethane | ND | | ug/kg | 90 | 19. | 1 | |
| Tetrachloroethene | ND | | ug/kg | 60 | 18. | 1 | |
| Chlorobenzene | ND | | ug/kg | 60 | 21. | 1 | |
| Trichlorofluoromethane | ND | | ug/kg | 300 | 25. | 1 | |
| 1,2-Dichloroethane | ND | | ug/kg | 60 | 15. | 1 | |
| 1,1,1-Trichloroethane | ND | | ug/kg | 60 | 21. | 1 | |
| Bromodichloromethane | ND | | ug/kg | 60 | 18. | 1 | |
| trans-1,3-Dichloropropene | ND | | ug/kg | 60 | 12. | 1 | |
| cis-1,3-Dichloropropene | ND | | ug/kg | 60 | 14. | 1 | |
| Bromoform | ND | | ug/kg | 240 | 14. | 1 | |
| 1,1,2,2-Tetrachloroethane | ND | | ug/kg | 60 | 18. | 1 | |
| Benzene | ND | | ug/kg | 60 | 12. | 1 | |
| Toluene | ND | | ug/kg | 90 | 12. | 1 | |
| Ethylbenzene | ND | | ug/kg | 60 | 10. | 1 | |
| Chloromethane | ND | | ug/kg | 300 | 26. | 1 | |
| Bromomethane | 28 | J | ug/kg | 120 | 20. | 1 | |
| Vinyl chloride | ND | | ug/kg | 120 | 19. | 1 | |
| Chloroethane | ND | | ug/kg | 120 | 19. | 1 | |
| 1,1-Dichloroethene | ND | | ug/kg | 60 | 22. | 1 | |
| trans-1,2-Dichloroethene | ND | | ug/kg | 90 | 14. | 1 | |
| Trichloroethene | ND | | ug/kg | 60 | 18. | 1 | |
| 1,2-Dichlorobenzene | ND | | ug/kg | 300 | 11. | 1 | |
| 1,3-Dichlorobenzene | ND | | ug/kg | 300 | 13. | 1 | |
| 1,4-Dichlorobenzene | ND | | ug/kg | 300 | 11. | 1 | |



Project Name: PIERCE ARROW APARTMENTS Lab Number: L1723613

Project Number: 56831.10 **Report Date:** 07/19/17

SAMPLE RESULTS

Lab ID: Date Collected: 07/11/17 12:30

Client ID: SP-7-4-071117 Date Received: 07/11/17 Sample Location: BUFFALO, NY Field Prep: Not Specified

| | | | | riot opcomed | | |
|---|-----------|-----------|-------|--------------|-----|-----------------|
| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
| Volatile Organics by 8260/5035 - Westbo | rough Lab | | | | | |
| Methyl tert butyl ether | ND | | ug/kg | 120 | 9.2 | 1 |
| p/m-Xylene | ND | | ug/kg | 120 | 21. | 1 |
| o-Xylene | ND | | ug/kg | 120 | 20. | 1 |
| cis-1,2-Dichloroethene | ND | | ug/kg | 60 | 20. | 1 |
| Styrene | ND | | ug/kg | 120 | 24. | 1 |
| Dichlorodifluoromethane | ND | | ug/kg | 600 | 30. | 1 |
| Acetone | ND | | ug/kg | 600 | 140 | 1 |
| Carbon disulfide | ND | | ug/kg | 600 | 66. | 1 |
| 2-Butanone | ND | | ug/kg | 600 | 41. | 1 |
| 4-Methyl-2-pentanone | ND | | ug/kg | 600 | 15. | 1 |
| 2-Hexanone | ND | | ug/kg | 600 | 40. | 1 |
| Bromochloromethane | ND | | ug/kg | 300 | 21. | 1 |
| 1,2-Dibromoethane | ND | | ug/kg | 240 | 12. | 1 |
| n-Butylbenzene | ND | | ug/kg | 60 | 14. | 1 |
| sec-Butylbenzene | ND | | ug/kg | 60 | 13. | 1 |
| 1,2-Dibromo-3-chloropropane | ND | | ug/kg | 300 | 24. | 1 |
| Isopropylbenzene | ND | | ug/kg | 60 | 12. | 1 |
| p-Isopropyltoluene | ND | | ug/kg | 60 | 12. | 1 |
| Naphthalene | ND | | ug/kg | 300 | 8.3 | 1 |
| n-Propylbenzene | ND | | ug/kg | 60 | 13. | 1 |
| 1,2,3-Trichlorobenzene | ND | | ug/kg | 300 | 15. | 1 |
| 1,2,4-Trichlorobenzene | ND | | ug/kg | 300 | 13. | 1 |
| 1,3,5-Trimethylbenzene | ND | | ug/kg | 300 | 9.6 | 1 |
| 1,2,4-Trimethylbenzene | ND | | ug/kg | 300 | 11. | 1 |
| Methyl Acetate | ND | | ug/kg | 1200 | 28. | 1 |
| Cyclohexane | ND | | ug/kg | 1200 | 26. | 1 |
| 1,4-Dioxane | ND | | ug/kg | 2400 | 860 | 1 |
| Freon-113 | ND | | ug/kg | 1200 | 31. | 1 |
| Methyl cyclohexane | ND | | ug/kg | 240 | 14. | 1 |

| Surrogate | % Recovery | Acceptance
Qualifier Criteria | |
|-----------------------|------------|----------------------------------|--|
| 1,2-Dichloroethane-d4 | 112 | 70-130 | |
| Toluene-d8 | 105 | 70-130 | |
| 4-Bromofluorobenzene | 105 | 70-130 | |
| Dibromofluoromethane | 101 | 70-130 | |



L1723613

07/11/17 13:00

Not Specified

Dilution Factor

07/11/17

Project Name: PIERCE ARROW APARTMENTS

Project Number: 56831.10

SAMPLE RESULTS

Report Date: 07/19/17

MDL

Lab Number:

Date Collected:

Date Received:

Field Prep:

RL

Qualifier

Result

Units

Lab ID: L1723613-12

Client ID: SP-8-0.5-071117 Sample Location: BUFFALO, NY

Matrix: Soil Analytical Method: 1,8260C

Analytical Date: 07/16/17 15:25

Analyst: MV Percent Solids: 96%

Parameter

| Parameter | Result | Qualifier | Units | KL | MDL | Dilution Factor | |
|------------------------------------|-----------------|-----------|-------|-----|-----|-----------------|--|
| Volatile Organics by 8260/5035 - W | Vestborough Lab | | | | | | |
| Methylene chloride | ND | | ug/kg | 580 | 95. | 1 | |
| 1,1-Dichloroethane | ND | | ug/kg | 86 | 16. | 1 | |
| Chloroform | ND | | ug/kg | 86 | 21. | 1 | |
| Carbon tetrachloride | ND | | ug/kg | 58 | 20. | 1 | |
| 1,2-Dichloropropane | ND | | ug/kg | 200 | 13. | 1 | |
| Dibromochloromethane | ND | | ug/kg | 58 | 10. | 1 | |
| 1,1,2-Trichloroethane | ND | | ug/kg | 86 | 18. | 1 | |
| Tetrachloroethene | ND | | ug/kg | 58 | 17. | 1 | |
| Chlorobenzene | ND | | ug/kg | 58 | 20. | 1 | |
| Trichlorofluoromethane | ND | | ug/kg | 290 | 24. | 1 | |
| 1,2-Dichloroethane | ND | | ug/kg | 58 | 14. | 1 | |
| 1,1,1-Trichloroethane | ND | | ug/kg | 58 | 20. | 1 | |
| Bromodichloromethane | ND | | ug/kg | 58 | 18. | 1 | |
| trans-1,3-Dichloropropene | ND | | ug/kg | 58 | 12. | 1 | |
| cis-1,3-Dichloropropene | ND | | ug/kg | 58 | 13. | 1 | |
| Bromoform | ND | | ug/kg | 230 | 14. | 1 | |
| 1,1,2,2-Tetrachloroethane | ND | | ug/kg | 58 | 17. | 1 | |
| Benzene | ND | | ug/kg | 58 | 11. | 1 | |
| Toluene | ND | | ug/kg | 86 | 11. | 1 | |
| Ethylbenzene | ND | | ug/kg | 58 | 9.8 | 1 | |
| Chloromethane | ND | | ug/kg | 290 | 25. | 1 | |
| Bromomethane | 24 | J | ug/kg | 120 | 20. | 1 | |
| Vinyl chloride | ND | | ug/kg | 120 | 18. | 1 | |
| Chloroethane | ND | | ug/kg | 120 | 18. | 1 | |
| 1,1-Dichloroethene | ND | | ug/kg | 58 | 21. | 1 | |
| trans-1,2-Dichloroethene | ND | | ug/kg | 86 | 14. | 1 | |
| Trichloroethene | ND | | ug/kg | 58 | 17. | 1 | |
| 1,2-Dichlorobenzene | ND | | ug/kg | 290 | 10. | 1 | |
| 1,3-Dichlorobenzene | ND | | ug/kg | 290 | 12. | 1 | |
| 1,4-Dichlorobenzene | ND | | ug/kg | 290 | 10. | 1 | |



Project Name: PIERCE ARROW APARTMENTS Lab Number: L1723613

Project Number: 56831.10 **Report Date:** 07/19/17

SAMPLE RESULTS

Lab ID: L1723613-12 Date Collected: 07/11/17 13:00

Client ID: SP-8-0.5-071117 Date Received: 07/11/17 Sample Location: BUFFALO, NY Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---------------------------------------|--------------|-----------|-------|------|-----|-----------------|
| Volatile Organics by 8260/5035 - West | tborough Lab | | | | | |
| Methyl tert butyl ether | ND | | ug/kg | 120 | 8.8 | 1 |
| p/m-Xylene | ND | | ug/kg | 120 | 20. | 1 |
| o-Xylene | ND | | ug/kg | 120 | 20. | 1 |
| cis-1,2-Dichloroethene | ND | | ug/kg | 58 | 20. | 1 |
| Styrene | ND | | ug/kg | 120 | 23. | 1 |
| Dichlorodifluoromethane | ND | | ug/kg | 580 | 29. | 1 |
| Acetone | ND | | ug/kg | 580 | 130 | 1 |
| Carbon disulfide | ND | | ug/kg | 580 | 63. | 1 |
| 2-Butanone | ND | | ug/kg | 580 | 40. | 1 |
| 4-Methyl-2-pentanone | ND | | ug/kg | 580 | 14. | 1 |
| 2-Hexanone | ND | | ug/kg | 580 | 38. | 1 |
| Bromochloromethane | ND | | ug/kg | 290 | 21. | 1 |
| 1,2-Dibromoethane | ND | | ug/kg | 230 | 11. | 1 |
| n-Butylbenzene | ND | | ug/kg | 58 | 13. | 1 |
| sec-Butylbenzene | ND | | ug/kg | 58 | 12. | 1 |
| 1,2-Dibromo-3-chloropropane | ND | | ug/kg | 290 | 23. | 1 |
| Isopropylbenzene | ND | | ug/kg | 58 | 11. | 1 |
| p-Isopropyltoluene | ND | | ug/kg | 58 | 12. | 1 |
| Naphthalene | ND | | ug/kg | 290 | 8.0 | 1 |
| n-Propylbenzene | ND | | ug/kg | 58 | 12. | 1 |
| 1,2,3-Trichlorobenzene | ND | | ug/kg | 290 | 14. | 1 |
| 1,2,4-Trichlorobenzene | ND | | ug/kg | 290 | 12. | 1 |
| 1,3,5-Trimethylbenzene | ND | | ug/kg | 290 | 9.3 | 1 |
| 1,2,4-Trimethylbenzene | ND | | ug/kg | 290 | 11. | 1 |
| Methyl Acetate | ND | | ug/kg | 1200 | 27. | 1 |
| Cyclohexane | ND | | ug/kg | 1200 | 25. | 1 |
| 1,4-Dioxane | ND | | ug/kg | 2300 | 830 | 1 |
| Freon-113 | ND | | ug/kg | 1200 | 30. | 1 |
| Methyl cyclohexane | ND | | ug/kg | 230 | 14. | 1 |
| | | | | | | |

| Surrogate | % Recovery | Acceptance
Qualifier Criteria | |
|-----------------------|------------|----------------------------------|--|
| 1,2-Dichloroethane-d4 | 111 | 70-130 | |
| Toluene-d8 | 106 | 70-130 | |
| 4-Bromofluorobenzene | 101 | 70-130 | |
| Dibromofluoromethane | 98 | 70-130 | |



L1723613

Project Name: PIERCE ARROW APARTMENTS

L1723613-14

SP-9-2-071117

BUFFALO, NY

Project Number: 56831.10

Lab ID:

Client ID:

Sample Location:

SAMPLE RESULTS

Report Date: 07/19/17

Lab Number:

Date Collected: 07/11/17 13:20

Date Received: 07/11/17
Field Prep: Not Specified

Matrix: Soil Analytical Method: 1,8260C

Analytical Date: 07/16/17 15:51

Analyst: MV Percent Solids: 86%

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|--|-------------|-----------|-------|------|-----|-----------------|
| Volatile Organics by 8260/5035 - Westl | borough Lab | | | | | |
| Methylene chloride | ND | | ug/kg | 1100 | 190 | 1 |
| 1,1-Dichloroethane | ND | | ug/kg | 170 | 30. | 1 |
| Chloroform | ND | | ug/kg | 170 | 42. | 1 |
| Carbon tetrachloride | ND | | ug/kg | 110 | 39. | 1 |
| 1,2-Dichloropropane | ND | | ug/kg | 400 | 26. | 1 |
| Dibromochloromethane | ND | | ug/kg | 110 | 20. | 1 |
| 1,1,2-Trichloroethane | ND | | ug/kg | 170 | 35. | 1 |
| Tetrachloroethene | ND | | ug/kg | 110 | 34. | 1 |
| Chlorobenzene | ND | | ug/kg | 110 | 39. | 1 |
| Trichlorofluoromethane | ND | | ug/kg | 560 | 47. | 1 |
| 1,2-Dichloroethane | ND | | ug/kg | 110 | 28. | 1 |
| 1,1,1-Trichloroethane | ND | | ug/kg | 110 | 40. | 1 |
| Bromodichloromethane | ND | | ug/kg | 110 | 35. | 1 |
| trans-1,3-Dichloropropene | ND | | ug/kg | 110 | 23. | 1 |
| cis-1,3-Dichloropropene | ND | | ug/kg | 110 | 26. | 1 |
| Bromoform | ND | | ug/kg | 450 | 27. | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | ug/kg | 110 | 34. | 1 |
| Benzene | ND | | ug/kg | 110 | 22. | 1 |
| Toluene | 100 | J | ug/kg | 170 | 22. | 1 |
| Ethylbenzene | ND | | ug/kg | 110 | 19. | 1 |
| Chloromethane | ND | | ug/kg | 560 | 49. | 1 |
| Bromomethane | 75 | J | ug/kg | 220 | 38. | 1 |
| Vinyl chloride | ND | | ug/kg | 220 | 36. | 1 |
| Chloroethane | ND | | ug/kg | 220 | 36. | 1 |
| 1,1-Dichloroethene | ND | | ug/kg | 110 | 42. | 1 |
| trans-1,2-Dichloroethene | ND | | ug/kg | 170 | 27. | 1 |
| Trichloroethene | ND | | ug/kg | 110 | 34. | 1 |
| 1,2-Dichlorobenzene | ND | | ug/kg | 560 | 20. | 1 |
| 1,3-Dichlorobenzene | ND | | ug/kg | 560 | 25. | 1 |
| 1,4-Dichlorobenzene | ND | | ug/kg | 560 | 20. | 1 |



Project Name: PIERCE ARROW APARTMENTS Lab Number: L1723613

Project Number: 56831.10 **Report Date:** 07/19/17

SAMPLE RESULTS

Lab ID: L1723613-14 Date Collected: 07/11/17 13:20

Client ID: SP-9-2-071117 Date Received: 07/11/17 Sample Location: BUFFALO, NY Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---------------------------------------|-------------|-----------|-------|------|------|-----------------|
| Volatile Organics by 8260/5035 - West | borough Lab | | | | | |
| Methyl tert butyl ether | ND | | ug/kg | 220 | 17. | 1 |
| p/m-Xylene | 200 | J | ug/kg | 220 | 40. | 1 |
| o-Xylene | 110 | J | ug/kg | 220 | 38. | 1 |
| cis-1,2-Dichloroethene | ND | | ug/kg | 110 | 39. | 1 |
| Styrene | ND | | ug/kg | 220 | 45. | 1 |
| Dichlorodifluoromethane | ND | | ug/kg | 1100 | 56. | 1 |
| Acetone | ND | | ug/kg | 1100 | 260 | 1 |
| Carbon disulfide | ND | | ug/kg | 1100 | 120 | 1 |
| 2-Butanone | ND | | ug/kg | 1100 | 78. | 1 |
| 4-Methyl-2-pentanone | ND | | ug/kg | 1100 | 28. | 1 |
| 2-Hexanone | ND | | ug/kg | 1100 | 75. | 1 |
| Bromochloromethane | ND | | ug/kg | 560 | 40. | 1 |
| 1,2-Dibromoethane | ND | | ug/kg | 450 | 22. | 1 |
| n-Butylbenzene | ND | | ug/kg | 110 | 26. | 1 |
| sec-Butylbenzene | ND | | ug/kg | 110 | 24. | 1 |
| 1,2-Dibromo-3-chloropropane | ND | | ug/kg | 560 | 45. | 1 |
| Isopropylbenzene | ND | | ug/kg | 110 | 22. | 1 |
| p-Isopropyltoluene | ND | | ug/kg | 110 | 23. | 1 |
| Naphthalene | 64 | J | ug/kg | 560 | 16. | 1 |
| n-Propylbenzene | ND | | ug/kg | 110 | 24. | 1 |
| 1,2,3-Trichlorobenzene | ND | | ug/kg | 560 | 28. | 1 |
| 1,2,4-Trichlorobenzene | ND | | ug/kg | 560 | 24. | 1 |
| 1,3,5-Trimethylbenzene | 45 | J | ug/kg | 560 | 18. | 1 |
| 1,2,4-Trimethylbenzene | 95 | J | ug/kg | 560 | 21. | 1 |
| Methyl Acetate | ND | | ug/kg | 2200 | 52. | 1 |
| Cyclohexane | 290 | J | ug/kg | 2200 | 49. | 1 |
| 1,4-Dioxane | ND | | ug/kg | 4500 | 1600 | 1 |
| Freon-113 | ND | | ug/kg | 2200 | 58. | 1 |
| Methyl cyclohexane | 810 | | ug/kg | 450 | 27. | 1 |

| Surrogate | % Recovery | Acceptance
Qualifier Criteria | |
|-----------------------|------------|----------------------------------|--|
| 1,2-Dichloroethane-d4 | 112 | 70-130 | |
| Toluene-d8 | 105 | 70-130 | |
| 4-Bromofluorobenzene | 104 | 70-130 | |
| Dibromofluoromethane | 100 | 70-130 | |



L1723613

Project Name: PIERCE ARROW APARTMENTS

Project Number: 56831.10

SAMPLE RESULTS

Lab Number:

Report Date: 07/19/17

Lab ID: L1723613-16 Date Collected: 07/11/17 13:50

Client ID: Date Received: 07/11/17 SP-10-4-071117 Sample Location: Field Prep: BUFFALO, NY Not Specified

Matrix: Soil Analytical Method: 1,8260C

Analytical Date: 07/16/17 18:55

Analyst: MV Percent Solids: 76%

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|--------------------------------------|--------------|-----------|-------|------|-----|-----------------|
| Volatile Organics by 8260/5035 - Wes | tborough Lab | | | | | |
| Methylene chloride | ND | | ug/kg | 1200 | 200 | 1 |
| 1,1-Dichloroethane | ND | | ug/kg | 180 | 33. | 1 |
| Chloroform | ND | | ug/kg | 180 | 45. | 1 |
| Carbon tetrachloride | ND | | ug/kg | 120 | 42. | 1 |
| 1,2-Dichloropropane | ND | | ug/kg | 430 | 28. | 1 |
| Dibromochloromethane | ND | | ug/kg | 120 | 21. | 1 |
| 1,1,2-Trichloroethane | ND | | ug/kg | 180 | 38. | 1 |
| Tetrachloroethene | ND | | ug/kg | 120 | 37. | 1 |
| Chlorobenzene | ND | | ug/kg | 120 | 42. | 1 |
| Trichlorofluoromethane | ND | | ug/kg | 610 | 51. | 1 |
| 1,2-Dichloroethane | ND | | ug/kg | 120 | 30. | 1 |
| 1,1,1-Trichloroethane | ND | | ug/kg | 120 | 43. | 1 |
| Bromodichloromethane | ND | | ug/kg | 120 | 38. | 1 |
| trans-1,3-Dichloropropene | ND | | ug/kg | 120 | 25. | 1 |
| cis-1,3-Dichloropropene | ND | | ug/kg | 120 | 28. | 1 |
| Bromoform | ND | | ug/kg | 490 | 29. | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | ug/kg | 120 | 36. | 1 |
| Benzene | 120 | | ug/kg | 120 | 24. | 1 |
| Toluene | 580 | | ug/kg | 180 | 24. | 1 |
| Ethylbenzene | 100 | J | ug/kg | 120 | 21. | 1 |
| Chloromethane | ND | | ug/kg | 610 | 53. | 1 |
| Bromomethane | ND | | ug/kg | 240 | 41. | 1 |
| Vinyl chloride | ND | | ug/kg | 240 | 38. | 1 |
| Chloroethane | ND | | ug/kg | 240 | 38. | 1 |
| 1,1-Dichloroethene | ND | | ug/kg | 120 | 45. | 1 |
| trans-1,2-Dichloroethene | ND | | ug/kg | 180 | 29. | 1 |
| Trichloroethene | 290 | | ug/kg | 120 | 37. | 1 |
| 1,2-Dichlorobenzene | ND | | ug/kg | 610 | 22. | 1 |
| 1,3-Dichlorobenzene | ND | | ug/kg | 610 | 26. | 1 |
| 1,4-Dichlorobenzene | ND | | ug/kg | 610 | 22. | 1 |



Project Name: PIERCE ARROW APARTMENTS Lab Number: L1723613

Project Number: 56831.10 **Report Date:** 07/19/17

SAMPLE RESULTS

Lab ID: L1723613-16 Date Collected: 07/11/17 13:50

Client ID: SP-10-4-071117 Date Received: 07/11/17 Sample Location: BUFFALO, NY Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|-------------------------------------|---------------|-----------|-------|------|------|-----------------|
| Volatile Organics by 8260/5035 - We | stborough Lab | | | | | |
| Methyl tert butyl ether | ND | | ug/kg | 240 | 19. | 1 |
| p/m-Xylene | 720 | | ug/kg | 240 | 43. | 1 |
| o-Xylene | 390 | | ug/kg | 240 | 41. | 1 |
| cis-1,2-Dichloroethene | ND | | ug/kg | 120 | 42. | 1 |
| Styrene | ND | | ug/kg | 240 | 49. | 1 |
| Dichlorodifluoromethane | ND | | ug/kg | 1200 | 61. | 1 |
| Acetone | ND | | ug/kg | 1200 | 280 | 1 |
| Carbon disulfide | ND | | ug/kg | 1200 | 130 | 1 |
| 2-Butanone | ND | | ug/kg | 1200 | 84. | 1 |
| 4-Methyl-2-pentanone | ND | | ug/kg | 1200 | 30. | 1 |
| 2-Hexanone | ND | | ug/kg | 1200 | 81. | 1 |
| Bromochloromethane | ND | | ug/kg | 610 | 44. | 1 |
| 1,2-Dibromoethane | ND | | ug/kg | 490 | 24. | 1 |
| n-Butylbenzene | ND | | ug/kg | 120 | 28. | 1 |
| sec-Butylbenzene | 31 | J | ug/kg | 120 | 26. | 1 |
| 1,2-Dibromo-3-chloropropane | ND | | ug/kg | 610 | 48. | 1 |
| Isopropylbenzene | 46 | J | ug/kg | 120 | 24. | 1 |
| p-Isopropyltoluene | 28 | J | ug/kg | 120 | 25. | 1 |
| Naphthalene | 220 | J | ug/kg | 610 | 17. | 1 |
| n-Propylbenzene | 53 | J | ug/kg | 120 | 26. | 1 |
| 1,2,3-Trichlorobenzene | ND | | ug/kg | 610 | 30. | 1 |
| 1,2,4-Trichlorobenzene | ND | | ug/kg | 610 | 26. | 1 |
| 1,3,5-Trimethylbenzene | 140 | J | ug/kg | 610 | 20. | 1 |
| 1,2,4-Trimethylbenzene | 320 | J | ug/kg | 610 | 23. | 1 |
| Methyl Acetate | 1100 | J | ug/kg | 2400 | 56. | 1 |
| Cyclohexane | 320 | J | ug/kg | 2400 | 53. | 1 |
| 1,4-Dioxane | ND | | ug/kg | 4900 | 1800 | 1 |
| Freon-113 | ND | | ug/kg | 2400 | 63. | 1 |
| Methyl cyclohexane | 1300 | | ug/kg | 490 | 29. | 1 |
| | | | | | | |

| Surrogate | % Recovery | Acceptance
Qualifier Criteria | |
|-----------------------|------------|----------------------------------|--|
| 1,2-Dichloroethane-d4 | 108 | 70-130 | |
| Toluene-d8 | 108 | 70-130 | |
| 4-Bromofluorobenzene | 109 | 70-130 | |
| Dibromofluoromethane | 97 | 70-130 | |



L1723613

07/19/17

Project Name: PIERCE ARROW APARTMENTS

L1723613-18

Project Number: 56831.10

Lab ID:

SAMPLE RESULTS

Lab Number:

Report Date:

Date Collected: 07/11/17 14:20

Date Received: 07/11/17 Field Prep: Not Specified

Client ID: SP-11-3-071117 Sample Location: BUFFALO, NY

Matrix: Soil Analytical Method: 1,8260C Analytical Date: 07/16/17 19:21

Analyst: MV Percent Solids: 92%

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|-------------------------------------|---------------|-----------|-------|------|-----|-----------------|
| Volatile Organics by 8260/5035 - We | stborough Lab | | | | | |
| Methylene chloride | ND | | ug/kg | 1300 | 220 | 1 |
| 1,1-Dichloroethane | ND | | ug/kg | 200 | 36. | 1 |
| Chloroform | ND | | ug/kg | 200 | 49. | 1 |
| Carbon tetrachloride | ND | | ug/kg | 130 | 46. | 1 |
| 1,2-Dichloropropane | ND | | ug/kg | 460 | 30. | 1 |
| Dibromochloromethane | ND | | ug/kg | 130 | 23. | 1 |
| 1,1,2-Trichloroethane | ND | | ug/kg | 200 | 42. | 1 |
| Tetrachloroethene | ND | | ug/kg | 130 | 40. | 1 |
| Chlorobenzene | ND | | ug/kg | 130 | 46. | 1 |
| Trichlorofluoromethane | ND | | ug/kg | 660 | 55. | 1 |
| 1,2-Dichloroethane | ND | | ug/kg | 130 | 33. | 1 |
| 1,1,1-Trichloroethane | ND | | ug/kg | 130 | 46. | 1 |
| Bromodichloromethane | ND | | ug/kg | 130 | 41. | 1 |
| trans-1,3-Dichloropropene | ND | | ug/kg | 130 | 28. | 1 |
| cis-1,3-Dichloropropene | ND | | ug/kg | 130 | 31. | 1 |
| Bromoform | ND | | ug/kg | 530 | 32. | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | ug/kg | 130 | 40. | 1 |
| Benzene | 360 | | ug/kg | 130 | 26. | 1 |
| Toluene | 6800 | | ug/kg | 200 | 26. | 1 |
| Ethylbenzene | 1800 | | ug/kg | 130 | 23. | 1 |
| Chloromethane | 73 | J | ug/kg | 660 | 58. | 1 |
| Bromomethane | ND | | ug/kg | 260 | 45. | 1 |
| Vinyl chloride | ND | | ug/kg | 260 | 42. | 1 |
| Chloroethane | ND | | ug/kg | 260 | 42. | 1 |
| 1,1-Dichloroethene | ND | | ug/kg | 130 | 49. | 1 |
| trans-1,2-Dichloroethene | ND | | ug/kg | 200 | 32. | 1 |
| Trichloroethene | ND | | ug/kg | 130 | 40. | 1 |
| 1,2-Dichlorobenzene | ND | | ug/kg | 660 | 24. | 1 |
| 1,3-Dichlorobenzene | ND | | ug/kg | 660 | 29. | 1 |
| 1,4-Dichlorobenzene | ND | | ug/kg | 660 | 24. | 1 |



Project Name: PIERCE ARROW APARTMENTS Lab Number: L1723613

Project Number: 56831.10 **Report Date:** 07/19/17

SAMPLE RESULTS

Lab ID: Date Collected: 07/11/17 14:20

Client ID: SP-11-3-071117 Date Received: 07/11/17 Sample Location: BUFFALO, NY Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|------------------------------------|----------------|-----------|-------|------|------|-----------------|
| Volatile Organics by 8260/5035 - W | estborough Lab | | | | | |
| Methyl tert butyl ether | ND | | ug/kg | 260 | 20. | 1 |
| p/m-Xylene | 10000 | | ug/kg | 260 | 47. | 1 |
| o-Xylene | 6300 | | ug/kg | 260 | 45. | 1 |
| cis-1,2-Dichloroethene | ND | | ug/kg | 130 | 45. | 1 |
| Styrene | ND | | ug/kg | 260 | 53. | 1 |
| Dichlorodifluoromethane | ND | | ug/kg | 1300 | 66. | 1 |
| Acetone | 1800 | | ug/kg | 1300 | 300 | 1 |
| Carbon disulfide | ND | | ug/kg | 1300 | 150 | 1 |
| 2-Butanone | ND | | ug/kg | 1300 | 92. | 1 |
| 4-Methyl-2-pentanone | ND | | ug/kg | 1300 | 32. | 1 |
| 2-Hexanone | ND | | ug/kg | 1300 | 88. | 1 |
| Bromochloromethane | ND | | ug/kg | 660 | 47. | 1 |
| 1,2-Dibromoethane | ND | | ug/kg | 530 | 26. | 1 |
| n-Butylbenzene | 310 | | ug/kg | 130 | 30. | 1 |
| sec-Butylbenzene | 240 | | ug/kg | 130 | 29. | 1 |
| 1,2-Dibromo-3-chloropropane | ND | | ug/kg | 660 | 53. | 1 |
| Isopropylbenzene | 620 | | ug/kg | 130 | 26. | 1 |
| p-Isopropyltoluene | 220 | | ug/kg | 130 | 27. | 1 |
| Naphthalene | 5400 | | ug/kg | 660 | 18. | 1 |
| n-Propylbenzene | 960 | | ug/kg | 130 | 28. | 1 |
| 1,2,3-Trichlorobenzene | ND | | ug/kg | 660 | 33. | 1 |
| 1,2,4-Trichlorobenzene | ND | | ug/kg | 660 | 28. | 1 |
| 1,3,5-Trimethylbenzene | 860 | | ug/kg | 660 | 21. | 1 |
| 1,2,4-Trimethylbenzene | 3700 | | ug/kg | 660 | 25. | 1 |
| Methyl Acetate | ND | | ug/kg | 2600 | 62. | 1 |
| Cyclohexane | 7200 | | ug/kg | 2600 | 58. | 1 |
| 1,4-Dioxane | ND | | ug/kg | 5300 | 1900 | 1 |
| Freon-113 | ND | | ug/kg | 2600 | 68. | 1 |
| Methyl cyclohexane | 19000 | | ug/kg | 530 | 32. | 1 |
| | | | | | | |

| Surrogate | % Recovery | Acceptance
Qualifier Criteria | |
|-----------------------|------------|----------------------------------|--|
| 1,2-Dichloroethane-d4 | 109 | 70-130 | |
| Toluene-d8 | 119 | 70-130 | |
| 4-Bromofluorobenzene | 120 | 70-130 | |
| Dibromofluoromethane | 99 | 70-130 | |



L1723613

Project Name: PIERCE ARROW APARTMENTS

Project Number: 56831.10

SAMPLE RESULTS

Date Collected: 07/11/17 14:45

07/19/17

Lab Number:

Report Date:

Date Received: 07/11/17 Field Prep: Not Specified

Lab ID: L1723613-20 Client ID: SP-12-1.5-071117 Sample Location: BUFFALO, NY

Matrix: Soil Analytical Method: 1,8260C

Analytical Date: 07/15/17 18:33

Analyst: CBN Percent Solids: 79%

| Volatile Organics by 8260/5035 - Westbo | | | | | | Dilution Factor |
|---|-----------|---|-------|-----|-----|-----------------|
| | rough Lab | | | | | |
| Methylene chloride | ND | | ug/kg | 960 | 160 | 1 |
| 1,1-Dichloroethane | ND | | ug/kg | 140 | 26. | 1 |
| Chloroform | ND | | ug/kg | 140 | 36. | 1 |
| Carbon tetrachloride | ND | | ug/kg | 96 | 33. | 1 |
| 1,2-Dichloropropane | ND | | ug/kg | 340 | 22. | 1 |
| Dibromochloromethane | ND | | ug/kg | 96 | 17. | 1 |
| 1,1,2-Trichloroethane | ND | | ug/kg | 140 | 30. | 1 |
| Tetrachloroethene | ND | | ug/kg | 96 | 29. | 1 |
| Chlorobenzene | ND | | ug/kg | 96 | 34. | 1 |
| Trichlorofluoromethane | ND | | ug/kg | 480 | 40. | 1 |
| 1,2-Dichloroethane | ND | | ug/kg | 96 | 24. | 1 |
| 1,1,1-Trichloroethane | ND | | ug/kg | 96 | 34. | 1 |
| Bromodichloromethane | ND | | ug/kg | 96 | 30. | 1 |
| trans-1,3-Dichloropropene | ND | | ug/kg | 96 | 20. | 1 |
| cis-1,3-Dichloropropene | ND | | ug/kg | 96 | 22. | 1 |
| Bromoform | ND | | ug/kg | 390 | 23. | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | ug/kg | 96 | 29. | 1 |
| Benzene | ND | | ug/kg | 96 | 19. | 1 |
| Toluene | 22 | J | ug/kg | 140 | 19. | 1 |
| Ethylbenzene | ND | | ug/kg | 96 | 16. | 1 |
| Chloromethane | ND | | ug/kg | 480 | 42. | 1 |
| Bromomethane | ND | | ug/kg | 190 | 33. | 1 |
| Vinyl chloride | ND | | ug/kg | 190 | 30. | 1 |
| Chloroethane | ND | | ug/kg | 190 | 30. | 1 |
| 1,1-Dichloroethene | ND | | ug/kg | 96 | 36. | 1 |
| trans-1,2-Dichloroethene | ND | | ug/kg | 140 | 23. | 1 |
| Trichloroethene | 43 | J | ug/kg | 96 | 29. | 1 |
| 1,2-Dichlorobenzene | ND | | ug/kg | 480 | 18. | 1 |
| 1,3-Dichlorobenzene | ND | | ug/kg | 480 | 21. | 1 |
| 1,4-Dichlorobenzene | ND | | ug/kg | 480 | 18. | 1 |



Project Name: PIERCE ARROW APARTMENTS Lab Number: L1723613

Project Number: 56831.10 **Report Date:** 07/19/17

SAMPLE RESULTS

Lab ID: Date Collected: 07/11/17 14:45

Client ID: SP-12-1.5-071117 Date Received: 07/11/17 Sample Location: BUFFALO, NY Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|--------------------------------------|---------------|-----------|-------|------|------|-----------------|
| Volatile Organics by 8260/5035 - Wes | stborough Lab | | | | | |
| Methyl tert butyl ether | ND | | ug/kg | 190 | 15. | 1 |
| p/m-Xylene | 39 | J | ug/kg | 190 | 34. | 1 |
| o-Xylene | 40 | J | ug/kg | 190 | 33. | 1 |
| cis-1,2-Dichloroethene | ND | | ug/kg | 96 | 33. | 1 |
| Styrene | ND | | ug/kg | 190 | 39. | 1 |
| Dichlorodifluoromethane | ND | | ug/kg | 960 | 48. | 1 |
| Acetone | 320 | J | ug/kg | 960 | 220 | 1 |
| Carbon disulfide | 150 | J | ug/kg | 960 | 110 | 1 |
| 2-Butanone | ND | | ug/kg | 960 | 67. | 1 |
| 4-Methyl-2-pentanone | ND | | ug/kg | 960 | 24. | 1 |
| 2-Hexanone | ND | | ug/kg | 960 | 64. | 1 |
| Bromochloromethane | ND | | ug/kg | 480 | 34. | 1 |
| 1,2-Dibromoethane | ND | | ug/kg | 390 | 19. | 1 |
| n-Butylbenzene | ND | | ug/kg | 96 | 22. | 1 |
| sec-Butylbenzene | ND | | ug/kg | 96 | 21. | 1 |
| 1,2-Dibromo-3-chloropropane | ND | | ug/kg | 480 | 38. | 1 |
| Isopropylbenzene | ND | | ug/kg | 96 | 19. | 1 |
| p-Isopropyltoluene | ND | | ug/kg | 96 | 20. | 1 |
| Naphthalene | 40 | J | ug/kg | 480 | 13. | 1 |
| n-Propylbenzene | ND | | ug/kg | 96 | 21. | 1 |
| 1,2,3-Trichlorobenzene | ND | | ug/kg | 480 | 24. | 1 |
| 1,2,4-Trichlorobenzene | ND | | ug/kg | 480 | 21. | 1 |
| 1,3,5-Trimethylbenzene | 17 | J | ug/kg | 480 | 16. | 1 |
| 1,2,4-Trimethylbenzene | 32 | J | ug/kg | 480 | 18. | 1 |
| Methyl Acetate | 420 | J | ug/kg | 1900 | 45. | 1 |
| Cyclohexane | 88 | J | ug/kg | 1900 | 42. | 1 |
| 1,4-Dioxane | ND | | ug/kg | 3900 | 1400 | 1 |
| Freon-113 | ND | | ug/kg | 1900 | 50. | 1 |
| Methyl cyclohexane | 340 | J | ug/kg | 390 | 23. | 1 |
| | | | | | | |

| Surrogate | % Recovery | Acceptance
Qualifier Criteria | |
|-----------------------|------------|----------------------------------|--|
| 1,2-Dichloroethane-d4 | 102 | 70-130 | |
| Toluene-d8 | 95 | 70-130 | |
| 4-Bromofluorobenzene | 100 | 70-130 | |
| Dibromofluoromethane | 102 | 70-130 | |



L1723613

07/19/17

Project Name: PIERCE ARROW APARTMENTS

L1723613-22

1,8260C

SP-13-4.5-071117

Project Number: 56831.10

Lab ID:

Client ID:

SAMPLE RESULTS

Lab Number:

Report Date:

Date Collected: 07/11/17 15:15

Date Received: 07/11/17 Field Prep: Not Specified

Sample Location: BUFFALO, NY Matrix: Soil

Analytical Date: 07/15/17 18:59

Analyst: CBN Percent Solids: 73%

Analytical Method:

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor | | | |
|--|--------|-----------|-------|------|-----|-----------------|--|--|--|
| Volatile Organics by 8260/5035 - Westborough Lab | | | | | | | | | |
| Methylene chloride | ND | | ug/kg | 1800 | 300 | 1 | | | |
| 1,1-Dichloroethane | 150 | J | ug/kg | 270 | 49. | 1 | | | |
| Chloroform | ND | | ug/kg | 270 | 67. | 1 | | | |
| Carbon tetrachloride | ND | | ug/kg | 180 | 63. | 1 | | | |
| 1,2-Dichloropropane | ND | | ug/kg | 640 | 42. | 1 | | | |
| Dibromochloromethane | ND | | ug/kg | 180 | 32. | 1 | | | |
| 1,1,2-Trichloroethane | ND | | ug/kg | 270 | 57. | 1 | | | |
| Tetrachloroethene | ND | | ug/kg | 180 | 55. | 1 | | | |
| Chlorobenzene | ND | | ug/kg | 180 | 63. | 1 | | | |
| Trichlorofluoromethane | ND | | ug/kg | 910 | 76. | 1 | | | |
| 1,2-Dichloroethane | ND | | ug/kg | 180 | 45. | 1 | | | |
| 1,1,1-Trichloroethane | ND | | ug/kg | 180 | 64. | 1 | | | |
| Bromodichloromethane | ND | | ug/kg | 180 | 56. | 1 | | | |
| trans-1,3-Dichloropropene | ND | | ug/kg | 180 | 38. | 1 | | | |
| cis-1,3-Dichloropropene | ND | | ug/kg | 180 | 42. | 1 | | | |
| Bromoform | ND | | ug/kg | 730 | 43. | 1 | | | |
| 1,1,2,2-Tetrachloroethane | ND | | ug/kg | 180 | 54. | 1 | | | |
| Benzene | 68 | J | ug/kg | 180 | 35. | 1 | | | |
| Toluene | 160 | J | ug/kg | 270 | 36. | 1 | | | |
| Ethylbenzene | 61 | J | ug/kg | 180 | 31. | 1 | | | |
| Chloromethane | ND | | ug/kg | 910 | 79. | 1 | | | |
| Bromomethane | ND | | ug/kg | 360 | 62. | 1 | | | |
| Vinyl chloride | ND | | ug/kg | 360 | 57. | 1 | | | |
| Chloroethane | ND | | ug/kg | 360 | 58. | 1 | | | |
| 1,1-Dichloroethene | ND | | ug/kg | 180 | 68. | 1 | | | |
| trans-1,2-Dichloroethene | 64 | J | ug/kg | 270 | 44. | 1 | | | |
| Trichloroethene | 23000 | | ug/kg | 180 | 55. | 1 | | | |
| 1,2-Dichlorobenzene | ND | | ug/kg | 910 | 33. | 1 | | | |
| 1,3-Dichlorobenzene | ND | | ug/kg | 910 | 40. | 1 | | | |
| 1,4-Dichlorobenzene | ND | | ug/kg | 910 | 33. | 1 | | | |
| | | | | | | | | | |



Project Name: PIERCE ARROW APARTMENTS Lab Number: L1723613

Project Number: 56831.10 **Report Date:** 07/19/17

SAMPLE RESULTS

Lab ID: L1723613-22 Date Collected: 07/11/17 15:15

Client ID: SP-13-4.5-071117 Date Received: 07/11/17 Sample Location: BUFFALO, NY Field Prep: Not Specified

| - · · · · · · · · · · · · · · · · · · · | | | | | 1 | |
|---|-------------|-----------|-------|------|------|-----------------|
| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
| Volatile Organics by 8260/5035 - West | borough Lab | | | | | |
| Methyl tert butyl ether | ND | | ug/kg | 360 | 28. | 1 |
| p/m-Xylene | 370 | | ug/kg | 360 | 64. | 1 |
| o-Xylene | 120 | J | ug/kg | 360 | 62. | 1 |
| cis-1,2-Dichloroethene | 730 | | ug/kg | 180 | 62. | 1 |
| Styrene | ND | | ug/kg | 360 | 73. | 1 |
| Dichlorodifluoromethane | ND | | ug/kg | 1800 | 91. | 1 |
| Acetone | 640 | J | ug/kg | 1800 | 420 | 1 |
| Carbon disulfide | 310 | J | ug/kg | 1800 | 200 | 1 |
| 2-Butanone | ND | | ug/kg | 1800 | 120 | 1 |
| 4-Methyl-2-pentanone | ND | | ug/kg | 1800 | 44. | 1 |
| 2-Hexanone | ND | | ug/kg | 1800 | 120 | 1 |
| Bromochloromethane | ND | | ug/kg | 910 | 65. | 1 |
| 1,2-Dibromoethane | ND | | ug/kg | 730 | 36. | 1 |
| n-Butylbenzene | ND | | ug/kg | 180 | 42. | 1 |
| sec-Butylbenzene | ND | | ug/kg | 180 | 40. | 1 |
| 1,2-Dibromo-3-chloropropane | ND | | ug/kg | 910 | 72. | 1 |
| Isopropylbenzene | ND | | ug/kg | 180 | 35. | 1 |
| p-Isopropyltoluene | ND | | ug/kg | 180 | 37. | 1 |
| Naphthalene | ND | | ug/kg | 910 | 25. | 1 |
| n-Propylbenzene | ND | | ug/kg | 180 | 39. | 1 |
| 1,2,3-Trichlorobenzene | ND | | ug/kg | 910 | 46. | 1 |
| 1,2,4-Trichlorobenzene | ND | | ug/kg | 910 | 39. | 1 |
| 1,3,5-Trimethylbenzene | 77 | J | ug/kg | 910 | 29. | 1 |
| 1,2,4-Trimethylbenzene | 220 | J | ug/kg | 910 | 34. | 1 |
| Methyl Acetate | 570 | J | ug/kg | 3600 | 84. | 1 |
| Cyclohexane | ND | | ug/kg | 3600 | 79. | 1 |
| 1,4-Dioxane | ND | | ug/kg | 7300 | 2600 | 1 |
| Freon-113 | ND | | ug/kg | 3600 | 94. | 1 |
| Methyl cyclohexane | 220 | J | ug/kg | 730 | 44. | 1 |
| | | | | | | |

| Surrogate | % Recovery | Acceptance
Qualifier Criteria | |
|-----------------------|------------|----------------------------------|--|
| 1,2-Dichloroethane-d4 | 103 | 70-130 | |
| Toluene-d8 | 92 | 70-130 | |
| 4-Bromofluorobenzene | 114 | 70-130 | |
| Dibromofluoromethane | 102 | 70-130 | |



L1723613

07/19/17

Project Name: PIERCE ARROW APARTMENTS

Project Number: 56831.10

SAMPLE RESULTS

Date Collected: 07/11/17 00:00

Lab ID: L1723613-24

Client ID: SUBSURFACE DUPLICATE -071117 Sample Location: BUFFALO, NY

Date Received: 07/11/17 Field Prep: Not Specified

Lab Number:

Report Date:

Matrix: Soil Analytical Method: 1,8260C

Analytical Date: 07/15/17 19:24

Analyst: CBN Percent Solids: 83%

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|-------------------------------------|----------------|-----------|-------|-----|-----|-----------------|
| Volatile Organics by 8260/5035 - We | estborough Lab | | | | | |
| Methylene chloride | ND | | ug/kg | 630 | 100 | 1 |
| 1,1-Dichloroethane | ND | | ug/kg | 94 | 17. | 1 |
| Chloroform | ND | | ug/kg | 94 | 23. | 1 |
| Carbon tetrachloride | ND | | ug/kg | 63 | 22. | 1 |
| 1,2-Dichloropropane | ND | | ug/kg | 220 | 14. | 1 |
| Dibromochloromethane | ND | | ug/kg | 63 | 11. | 1 |
| 1,1,2-Trichloroethane | ND | | ug/kg | 94 | 20. | 1 |
| Tetrachloroethene | ND | | ug/kg | 63 | 19. | 1 |
| Chlorobenzene | ND | | ug/kg | 63 | 22. | 1 |
| Trichlorofluoromethane | ND | | ug/kg | 310 | 26. | 1 |
| 1,2-Dichloroethane | ND | | ug/kg | 63 | 15. | 1 |
| 1,1,1-Trichloroethane | ND | | ug/kg | 63 | 22. | 1 |
| Bromodichloromethane | ND | | ug/kg | 63 | 19. | 1 |
| trans-1,3-Dichloropropene | ND | | ug/kg | 63 | 13. | 1 |
| cis-1,3-Dichloropropene | ND | | ug/kg | 63 | 14. | 1 |
| Bromoform | ND | | ug/kg | 250 | 15. | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | ug/kg | 63 | 19. | 1 |
| Benzene | ND | | ug/kg | 63 | 12. | 1 |
| Toluene | ND | | ug/kg | 94 | 12. | 1 |
| Ethylbenzene | ND | | ug/kg | 63 | 11. | 1 |
| Chloromethane | ND | | ug/kg | 310 | 27. | 1 |
| Bromomethane | ND | | ug/kg | 120 | 21. | 1 |
| Vinyl chloride | ND | | ug/kg | 120 | 20. | 1 |
| Chloroethane | ND | | ug/kg | 120 | 20. | 1 |
| 1,1-Dichloroethene | ND | | ug/kg | 63 | 23. | 1 |
| trans-1,2-Dichloroethene | ND | | ug/kg | 94 | 15. | 1 |
| Trichloroethene | ND | | ug/kg | 63 | 19. | 1 |
| 1,2-Dichlorobenzene | ND | | ug/kg | 310 | 11. | 1 |
| 1,3-Dichlorobenzene | ND | | ug/kg | 310 | 14. | 1 |
| 1,4-Dichlorobenzene | ND | | ug/kg | 310 | 11. | 1 |
| | | | | | | |



Project Name: PIERCE ARROW APARTMENTS Lab Number: L1723613

Project Number: 56831.10 **Report Date:** 07/19/17

SAMPLE RESULTS

Lab ID: L1723613-24 Date Collected: 07/11/17 00:00

Client ID: SUBSURFACE DUPLICATE -071117 Date Received: 07/11/17
Sample Location: BUFFALO, NY Field Prep: Not Specified

| • | | | | | • | • |
|---|------------|-----------|-------|------|-----|-----------------|
| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
| Volatile Organics by 8260/5035 - Westbo | orough Lab | | | | | |
| Methyl tert butyl ether | ND | | ug/kg | 120 | 9.6 | 1 |
| p/m-Xylene | ND | | ug/kg | 120 | 22. | 1 |
| o-Xylene | ND | | ug/kg | 120 | 21. | 1 |
| cis-1,2-Dichloroethene | ND | | ug/kg | 63 | 21. | 1 |
| Styrene | ND | | ug/kg | 120 | 25. | 1 |
| Dichlorodifluoromethane | ND | | ug/kg | 630 | 31. | 1 |
| Acetone | 190 | J | ug/kg | 630 | 140 | 1 |
| Carbon disulfide | 180 | J | ug/kg | 630 | 69. | 1 |
| 2-Butanone | ND | | ug/kg | 630 | 43. | 1 |
| 4-Methyl-2-pentanone | ND | | ug/kg | 630 | 15. | 1 |
| 2-Hexanone | ND | | ug/kg | 630 | 42. | 1 |
| Bromochloromethane | ND | | ug/kg | 310 | 22. | 1 |
| 1,2-Dibromoethane | ND | | ug/kg | 250 | 12. | 1 |
| n-Butylbenzene | ND | | ug/kg | 63 | 14. | 1 |
| sec-Butylbenzene | ND | | ug/kg | 63 | 14. | 1 |
| 1,2-Dibromo-3-chloropropane | ND | | ug/kg | 310 | 25. | 1 |
| Isopropylbenzene | ND | | ug/kg | 63 | 12. | 1 |
| p-Isopropyltoluene | ND | | ug/kg | 63 | 13. | 1 |
| Naphthalene | ND | | ug/kg | 310 | 8.6 | 1 |
| n-Propylbenzene | ND | | ug/kg | 63 | 13. | 1 |
| 1,2,3-Trichlorobenzene | ND | | ug/kg | 310 | 16. | 1 |
| 1,2,4-Trichlorobenzene | ND | | ug/kg | 310 | 13. | 1 |
| 1,3,5-Trimethylbenzene | ND | | ug/kg | 310 | 10. | 1 |
| 1,2,4-Trimethylbenzene | ND | | ug/kg | 310 | 12. | 1 |
| Methyl Acetate | ND | | ug/kg | 1200 | 29. | 1 |
| Cyclohexane | ND | | ug/kg | 1200 | 27. | 1 |
| 1,4-Dioxane | ND | | ug/kg | 2500 | 900 | 1 |
| Freon-113 | ND | | ug/kg | 1200 | 32. | 1 |
| Methyl cyclohexane | ND | | ug/kg | 250 | 15. | 1 |

| Surrogate | % Recovery | Acceptance
Qualifier Criteria | |
|-----------------------|------------|----------------------------------|--|
| 1,2-Dichloroethane-d4 | 98 | 70-130 | |
| Toluene-d8 | 95 | 70-130 | |
| 4-Bromofluorobenzene | 100 | 70-130 | |
| Dibromofluoromethane | 101 | 70-130 | |



L1723613

Project Name: PIERCE ARROW APARTMENTS

Project Number: 56831.10

SAMPLE RESULTS

07/19/17

Lab Number:

Report Date:

Lab ID: L1723613-25 Date Collected: 07/11/17 15:30

Client ID: Date Received: 07/11/17 SP-9-GW-071117 Sample Location: Field Prep: BUFFALO, NY Not Specified

Matrix: Water Analytical Method: 1,8260C

Analytical Date: 07/15/17 14:53

Analyst: PD

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|----------------------------------|--------------|-----------|-------|------|------|-----------------|
| Volatile Organics by GC/MS - Wes | tborough Lab | | | | | |
| Methylene chloride | ND | | ug/l | 2.5 | 0.70 | 1 |
| 1,1-Dichloroethane | ND | | ug/l | 2.5 | 0.70 | 1 |
| Chloroform | ND | | ug/l | 2.5 | 0.70 | 1 |
| Carbon tetrachloride | ND | | ug/l | 0.50 | 0.13 | 1 |
| 1,2-Dichloropropane | ND | | ug/l | 1.0 | 0.14 | 1 |
| Dibromochloromethane | ND | | ug/l | 0.50 | 0.15 | 1 |
| 1,1,2-Trichloroethane | ND | | ug/l | 1.5 | 0.50 | 1 |
| Tetrachloroethene | ND | | ug/l | 0.50 | 0.18 | 1 |
| Chlorobenzene | ND | | ug/l | 2.5 | 0.70 | 1 |
| Trichlorofluoromethane | ND | | ug/l | 2.5 | 0.70 | 1 |
| 1,2-Dichloroethane | ND | | ug/l | 0.50 | 0.13 | 1 |
| 1,1,1-Trichloroethane | ND | | ug/l | 2.5 | 0.70 | 1 |
| Bromodichloromethane | ND | | ug/l | 0.50 | 0.19 | 1 |
| trans-1,3-Dichloropropene | ND | | ug/l | 0.50 | 0.16 | 1 |
| cis-1,3-Dichloropropene | ND | | ug/l | 0.50 | 0.14 | 1 |
| Bromoform | ND | | ug/l | 2.0 | 0.65 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | ug/l | 0.50 | 0.17 | 1 |
| Benzene | ND | | ug/l | 0.50 | 0.16 | 1 |
| Toluene | ND | | ug/l | 2.5 | 0.70 | 1 |
| Ethylbenzene | ND | | ug/l | 2.5 | 0.70 | 1 |
| Chloromethane | ND | | ug/l | 2.5 | 0.70 | 1 |
| Bromomethane | ND | | ug/l | 2.5 | 0.70 | 1 |
| Vinyl chloride | ND | | ug/l | 1.0 | 0.07 | 1 |
| Chloroethane | ND | | ug/l | 2.5 | 0.70 | 1 |
| 1,1-Dichloroethene | ND | | ug/l | 0.50 | 0.17 | 1 |
| trans-1,2-Dichloroethene | ND | | ug/l | 2.5 | 0.70 | 1 |
| Trichloroethene | 0.29 | J | ug/l | 0.50 | 0.18 | 1 |
| 1,2-Dichlorobenzene | ND | | ug/l | 2.5 | 0.70 | 1 |
| 1,3-Dichlorobenzene | ND | | ug/l | 2.5 | 0.70 | 1 |
| 1,4-Dichlorobenzene | ND | | ug/l | 2.5 | 0.70 | 1 |



L1723613

Project Name: PIERCE ARROW APARTMENTS

Project Number: 56831.10

SAMPLE RESULTS

Report Date: 07/19/17

Lab Number:

Lab ID: L1723613-25 Client ID: SP-9-GW-071117 Sample Location: BUFFALO, NY

Date Collected: 07/11/17 15:30

Date Received: 07/11/17 Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|--|---------|-----------|-------|-----|------|-----------------|
| Volatile Organics by GC/MS - Westborou | igh Lab | | | | | |
| Methyl tert butyl ether | ND | | ug/l | 2.5 | 0.70 | 1 |
| p/m-Xylene | ND | | ug/l | 2.5 | 0.70 | 1 |
| o-Xylene | ND | | ug/l | 2.5 | 0.70 | 1 |
| cis-1,2-Dichloroethene | 0.96 | J | ug/l | 2.5 | 0.70 | 1 |
| Styrene | ND | | ug/l | 2.5 | 0.70 | 1 |
| Dichlorodifluoromethane | ND | | ug/l | 5.0 | 1.0 | 1 |
| Acetone | ND | | ug/l | 5.0 | 1.5 | 1 |
| Carbon disulfide | ND | | ug/l | 5.0 | 1.0 | 1 |
| 2-Butanone | ND | | ug/l | 5.0 | 1.9 | 1 |
| 4-Methyl-2-pentanone | ND | | ug/l | 5.0 | 1.0 | 1 |
| 2-Hexanone | ND | | ug/l | 5.0 | 1.0 | 1 |
| Bromochloromethane | ND | | ug/l | 2.5 | 0.70 | 1 |
| 1,2-Dibromoethane | ND | | ug/l | 2.0 | 0.65 | 1 |
| n-Butylbenzene | ND | | ug/l | 2.5 | 0.70 | 1 |
| sec-Butylbenzene | ND | | ug/l | 2.5 | 0.70 | 1 |
| 1,2-Dibromo-3-chloropropane | ND | | ug/l | 2.5 | 0.70 | 1 |
| Isopropylbenzene | ND | | ug/l | 2.5 | 0.70 | 1 |
| p-Isopropyltoluene | ND | | ug/l | 2.5 | 0.70 | 1 |
| Naphthalene | ND | | ug/l | 2.5 | 0.70 | 1 |
| n-Propylbenzene | ND | | ug/l | 2.5 | 0.70 | 1 |
| 1,2,3-Trichlorobenzene | ND | | ug/l | 2.5 | 0.70 | 1 |
| 1,2,4-Trichlorobenzene | ND | | ug/l | 2.5 | 0.70 | 1 |
| 1,3,5-Trimethylbenzene | ND | | ug/l | 2.5 | 0.70 | 1 |
| 1,2,4-Trimethylbenzene | ND | | ug/l | 2.5 | 0.70 | 1 |
| Methyl Acetate | ND | | ug/l | 2.0 | 0.23 | 1 |
| Cyclohexane | ND | | ug/l | 10 | 0.27 | 1 |
| 1,4-Dioxane | ND | | ug/l | 250 | 61. | 1 |
| Freon-113 | ND | | ug/l | 2.5 | 0.70 | 1 |
| Methyl cyclohexane | ND | | ug/l | 10 | 0.40 | 1 |

| Surrogate | % Recovery | Acceptance
Qualifier Criteria | |
|-----------------------|------------|----------------------------------|--|
| 1,2-Dichloroethane-d4 | 120 | 70-130 | |
| Toluene-d8 | 97 | 70-130 | |
| 4-Bromofluorobenzene | 88 | 70-130 | |
| Dibromofluoromethane | 114 | 70-130 | |



L1723613

07/19/17

Project Name: PIERCE ARROW APARTMENTS

Project Number: 56831.10

Lab ID:

SAMPLE RESULTS

D + O || + | + | 07/44/47 45 45

Lab Number:

Report Date:

L1723613-26 Date Collected: 07/11/17 15:45

Client ID: SP-13-GW-071117 Date Received: 07/11/17
Sample Location: BUFFALO, NY Field Prep: Not Specified

Matrix: Water Analytical Method: 1,8260C

Analytical Date: 07/17/17 23:30

Analyst: PK

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|------------------------------------|-------------|-----------|-------|------|------|-----------------|
| Volatile Organics by GC/MS - Westl | oorough Lab | | | | | |
| Methylene chloride | ND | | ug/l | 2.5 | 0.70 | 1 |
| 1,1-Dichloroethane | 3.2 | | ug/l | 2.5 | 0.70 | 1 |
| Chloroform | ND | | ug/l | 2.5 | 0.70 | 1 |
| Carbon tetrachloride | ND | | ug/l | 0.50 | 0.13 | 1 |
| 1,2-Dichloropropane | ND | | ug/l | 1.0 | 0.14 | 1 |
| Dibromochloromethane | ND | | ug/l | 0.50 | 0.15 | 1 |
| 1,1,2-Trichloroethane | ND | | ug/l | 1.5 | 0.50 | 1 |
| Tetrachloroethene | ND | | ug/l | 0.50 | 0.18 | 1 |
| Chlorobenzene | ND | | ug/l | 2.5 | 0.70 | 1 |
| Trichlorofluoromethane | ND | | ug/l | 2.5 | 0.70 | 1 |
| 1,2-Dichloroethane | ND | | ug/l | 0.50 | 0.13 | 1 |
| 1,1,1-Trichloroethane | ND | | ug/l | 2.5 | 0.70 | 1 |
| Bromodichloromethane | ND | | ug/l | 0.50 | 0.19 | 1 |
| trans-1,3-Dichloropropene | ND | | ug/l | 0.50 | 0.16 | 1 |
| cis-1,3-Dichloropropene | ND | | ug/l | 0.50 | 0.14 | 1 |
| Bromoform | ND | | ug/l | 2.0 | 0.65 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | ug/l | 0.50 | 0.17 | 1 |
| Benzene | ND | | ug/l | 0.50 | 0.16 | 1 |
| Toluene | ND | | ug/l | 2.5 | 0.70 | 1 |
| Ethylbenzene | ND | | ug/l | 2.5 | 0.70 | 1 |
| Chloromethane | ND | | ug/l | 2.5 | 0.70 | 1 |
| Bromomethane | ND | | ug/l | 2.5 | 0.70 | 1 |
| Vinyl chloride | ND | | ug/l | 1.0 | 0.07 | 1 |
| Chloroethane | ND | | ug/l | 2.5 | 0.70 | 1 |
| 1,1-Dichloroethene | ND | | ug/l | 0.50 | 0.17 | 1 |
| trans-1,2-Dichloroethene | ND | | ug/l | 2.5 | 0.70 | 1 |
| Trichloroethene | 28 | | ug/l | 0.50 | 0.18 | 1 |
| 1,2-Dichlorobenzene | ND | | ug/l | 2.5 | 0.70 | 1 |
| 1,3-Dichlorobenzene | ND | | ug/l | 2.5 | 0.70 | 1 |
| 1,4-Dichlorobenzene | ND | | ug/l | 2.5 | 0.70 | 1 |



L1723613

07/19/17

Project Name: PIERCE ARROW APARTMENTS

L1723613-26

BUFFALO, NY

SP-13-GW-071117

Project Number: 56831.10

Lab ID:

Client ID:

Sample Location:

SAMPLE RESULTS

Date Collected: 07/11/17 15:45

Lab Number:

Report Date:

Date Received: 07/11/17

Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|----------------------------------|--------------|-----------|-------|-----|------|-----------------|
| Volatile Organics by GC/MS - Wes | tborough Lab | | | | | |
| Methyl tert butyl ether | ND | | ug/l | 2.5 | 0.70 | 1 |
| p/m-Xylene | ND | | ug/l | 2.5 | 0.70 | 1 |
| o-Xylene | ND | | ug/l | 2.5 | 0.70 | 1 |
| cis-1,2-Dichloroethene | 2.3 | J | ug/l | 2.5 | 0.70 | 1 |
| Styrene | ND | | ug/l | 2.5 | 0.70 | 1 |
| Dichlorodifluoromethane | ND | | ug/l | 5.0 | 1.0 | 1 |
| Acetone | 9.3 | | ug/l | 5.0 | 1.5 | 1 |
| Carbon disulfide | ND | | ug/l | 5.0 | 1.0 | 1 |
| 2-Butanone | ND | | ug/l | 5.0 | 1.9 | 1 |
| 4-Methyl-2-pentanone | ND | | ug/l | 5.0 | 1.0 | 1 |
| 2-Hexanone | ND | | ug/l | 5.0 | 1.0 | 1 |
| Bromochloromethane | ND | | ug/l | 2.5 | 0.70 | 1 |
| 1,2-Dibromoethane | ND | | ug/l | 2.0 | 0.65 | 1 |
| n-Butylbenzene | ND | | ug/l | 2.5 | 0.70 | 1 |
| sec-Butylbenzene | ND | | ug/l | 2.5 | 0.70 | 1 |
| 1,2-Dibromo-3-chloropropane | ND | | ug/l | 2.5 | 0.70 | 1 |
| Isopropylbenzene | ND | | ug/l | 2.5 | 0.70 | 1 |
| p-Isopropyltoluene | ND | | ug/l | 2.5 | 0.70 | 1 |
| Naphthalene | ND | | ug/l | 2.5 | 0.70 | 1 |
| n-Propylbenzene | ND | | ug/l | 2.5 | 0.70 | 1 |
| 1,2,3-Trichlorobenzene | ND | | ug/l | 2.5 | 0.70 | 1 |
| 1,2,4-Trichlorobenzene | ND | | ug/l | 2.5 | 0.70 | 1 |
| 1,3,5-Trimethylbenzene | ND | | ug/l | 2.5 | 0.70 | 1 |
| 1,2,4-Trimethylbenzene | ND | | ug/l | 2.5 | 0.70 | 1 |
| Methyl Acetate | ND | | ug/l | 2.0 | 0.23 | 1 |
| Cyclohexane | ND | | ug/l | 10 | 0.27 | 1 |
| 1,4-Dioxane | ND | | ug/l | 250 | 61. | 1 |
| Freon-113 | ND | | ug/l | 2.5 | 0.70 | 1 |
| Methyl cyclohexane | 0.54 | J | ug/l | 10 | 0.40 | 1 |

| Surrogate | % Recovery | Acceptance
Qualifier Criteria | |
|-----------------------|------------|----------------------------------|--|
| 1,2-Dichloroethane-d4 | 114 | 70-130 | |
| Toluene-d8 | 93 | 70-130 | |
| 4-Bromofluorobenzene | 96 | 70-130 | |
| Dibromofluoromethane | 110 | 70-130 | |



Project Number: 56831.10 **Report Date:** 07/19/17

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 07/15/17 10:52

Analyst: MV

| Volatile Organics by 8260/5035 - W Methylene chloride 1,1-Dichloroethane Chloroform | ND ND ND ND ND | Lab for sar | mple(s): ug/kg ug/kg | 500 | Batch: | WG1023111-5 |
|---|----------------|-------------|------------------------|-----|--------|-------------|
| 1,1-Dichloroethane | ND
ND | | | | | 00 |
| | ND | | ug/kg | | | 82. |
| Chloroform | | | | 75 | | 14. |
| | ND | | ug/kg | 75 | | 18. |
| Carbon tetrachloride | | | ug/kg | 50 | | 17. |
| 1,2-Dichloropropane | ND | | ug/kg | 180 | | 11. |
| Dibromochloromethane | ND | | ug/kg | 50 | | 8.8 |
| 1,1,2-Trichloroethane | ND | | ug/kg | 75 | | 16. |
| Tetrachloroethene | ND | | ug/kg | 50 | | 15. |
| Chlorobenzene | ND | | ug/kg | 50 | | 17. |
| Trichlorofluoromethane | ND | | ug/kg | 250 | | 21. |
| 1,2-Dichloroethane | ND | | ug/kg | 50 | | 12. |
| 1,1,1-Trichloroethane | ND | | ug/kg | 50 | | 18. |
| Bromodichloromethane | ND | | ug/kg | 50 | | 15. |
| trans-1,3-Dichloropropene | ND | | ug/kg | 50 | | 10. |
| cis-1,3-Dichloropropene | ND | | ug/kg | 50 | | 12. |
| Bromoform | ND | | ug/kg | 200 | | 12. |
| 1,1,2,2-Tetrachloroethane | ND | | ug/kg | 50 | | 15. |
| Benzene | ND | | ug/kg | 50 | | 9.6 |
| Toluene | ND | | ug/kg | 75 | | 9.8 |
| Ethylbenzene | ND | | ug/kg | 50 | | 8.5 |
| Chloromethane | ND | | ug/kg | 250 | | 22. |
| Bromomethane | ND | | ug/kg | 100 | | 17. |
| Vinyl chloride | ND | | ug/kg | 100 | | 16. |
| Chloroethane | ND | | ug/kg | 100 | | 16. |
| 1,1-Dichloroethene | ND | | ug/kg | 50 | | 19. |
| trans-1,2-Dichloroethene | ND | | ug/kg | 75 | | 12. |
| Trichloroethene | ND | | ug/kg | 50 | | 15. |
| 1,2-Dichlorobenzene | ND | | ug/kg | 250 | | 9.1 |
| 1,3-Dichlorobenzene | ND | | ug/kg | 250 | | 11. |



Project Number: 56831.10 **Report Date:** 07/19/17

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 07/15/17 10:52

Analyst: MV

| Parameter | Result | Qualifier | Units | RL | I | MDL |
|---------------------------------|-------------|------------|-----------|----------|--------|-------------|
| olatile Organics by 8260/5035 - | Westborough | Lab for sa | ample(s): | 20,22,24 | Batch: | WG1023111-5 |
| 1,4-Dichlorobenzene | ND | | ug/kg | 250 | | 9.1 |
| Methyl tert butyl ether | ND | | ug/kg | 100 | | 7.6 |
| p/m-Xylene | ND | | ug/kg | 100 | | 18. |
| o-Xylene | ND | | ug/kg | 100 | | 17. |
| cis-1,2-Dichloroethene | ND | | ug/kg | 50 | | 17. |
| Styrene | ND | | ug/kg | 100 | | 20. |
| Dichlorodifluoromethane | ND | | ug/kg | 500 | | 25. |
| Acetone | 120 | J | ug/kg | 500 | | 110 |
| Carbon disulfide | 380 | J | ug/kg | 500 | | 55. |
| 2-Butanone | ND | | ug/kg | 500 | | 34. |
| 4-Methyl-2-pentanone | ND | | ug/kg | 500 | | 12. |
| 2-Hexanone | ND | | ug/kg | 500 | | 33. |
| Bromochloromethane | ND | | ug/kg | 250 | | 18. |
| 1,2-Dibromoethane | ND | | ug/kg | 200 | | 10. |
| n-Butylbenzene | ND | | ug/kg | 50 | | 11. |
| sec-Butylbenzene | ND | | ug/kg | 50 | | 11. |
| 1,2-Dibromo-3-chloropropane | ND | | ug/kg | 250 | | 20. |
| Isopropylbenzene | ND | | ug/kg | 50 | | 9.7 |
| p-Isopropyltoluene | ND | | ug/kg | 50 | | 10. |
| Naphthalene | ND | | ug/kg | 250 | | 6.9 |
| n-Propylbenzene | ND | | ug/kg | 50 | | 11. |
| 1,2,3-Trichlorobenzene | ND | | ug/kg | 250 | | 12. |
| 1,2,4-Trichlorobenzene | ND | | ug/kg | 250 | | 11. |
| 1,3,5-Trimethylbenzene | ND | | ug/kg | 250 | | 8.0 |
| 1,2,4-Trimethylbenzene | ND | | ug/kg | 250 | | 9.3 |
| Methyl Acetate | ND | | ug/kg | 1000 | | 23. |
| Cyclohexane | ND | | ug/kg | 1000 | | 22. |
| 1,4-Dioxane | ND | | ug/kg | 2000 | | 720 |
| Freon-113 | ND | | ug/kg | 1000 | | 26. |



Project Number: 56831.10 **Report Date:** 07/19/17

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 07/15/17 10:52

Analyst: MV

| Parameter | Result | Qualifier | Units | RL | MDL |
|--------------------------------|---------------|-------------|----------|----------|--------------------|
| Volatile Organics by 8260/5035 | - Westborough | Lab for sai | mple(s): | 20,22,24 | Batch: WG1023111-5 |
| Methyl cyclohexane | ND | | ug/kg | 200 | 12. |

| | | Acceptance | |
|-----------------------|------------------|---------------|--|
| Surrogate | %Recovery Qualit | fier Criteria | |
| 4.2 Diablaracthana d4 | 100 | 70.420 | |
| 1,2-Dichloroethane-d4 | 109 | 70-130 | |
| Toluene-d8 | 99 | 70-130 | |
| 4-Bromofluorobenzene | 98 | 70-130 | |
| Dibromofluoromethane | 107 | 70-130 | |



L1723613

Project Name: PIERCE ARROW APARTMENTS Lab Number:

Project Number: 56831.10 **Report Date:** 07/19/17

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 07/16/17 09:44

Analyst: CBN

| arameter | Result | Qualifier | Units | RL | MDL |
|--|---------------|------------|----------|---------------|-------------------|
| olatile Organics by 8260/5035 -
atch: WG1023156-5 | - Westborough | Lab for sa | mple(s): | 01,03-04,06,0 | 08,10,12,14,16,18 |
| Methylene chloride | ND | | ug/kg | 500 | 82. |
| 1,1-Dichloroethane | ND | | ug/kg | 75 | 14. |
| Chloroform | ND | | ug/kg | 75 | 18. |
| Carbon tetrachloride | ND | | ug/kg | 50 | 17. |
| 1,2-Dichloropropane | ND | | ug/kg | 180 | 11. |
| Dibromochloromethane | ND | | ug/kg | 50 | 8.8 |
| 1,1,2-Trichloroethane | ND | | ug/kg | 75 | 16. |
| Tetrachloroethene | ND | | ug/kg | 50 | 15. |
| Chlorobenzene | ND | | ug/kg | 50 | 17. |
| Trichlorofluoromethane | ND | | ug/kg | 250 | 21. |
| 1,2-Dichloroethane | ND | | ug/kg | 50 | 12. |
| 1,1,1-Trichloroethane | ND | | ug/kg | 50 | 18. |
| Bromodichloromethane | ND | | ug/kg | 50 | 15. |
| trans-1,3-Dichloropropene | ND | | ug/kg | 50 | 10. |
| cis-1,3-Dichloropropene | ND | | ug/kg | 50 | 12. |
| Bromoform | ND | | ug/kg | 200 | 12. |
| 1,1,2,2-Tetrachloroethane | ND | | ug/kg | 50 | 15. |
| Benzene | ND | | ug/kg | 50 | 9.6 |
| Toluene | ND | | ug/kg | 75 | 9.8 |
| Ethylbenzene | ND | | ug/kg | 50 | 8.5 |
| Chloromethane | ND | | ug/kg | 250 | 22. |
| Bromomethane | 37 | J | ug/kg | 100 | 17. |
| Vinyl chloride | ND | | ug/kg | 100 | 16. |
| Chloroethane | ND | | ug/kg | 100 | 16. |
| 1,1-Dichloroethene | ND | | ug/kg | 50 | 19. |
| trans-1,2-Dichloroethene | ND | | ug/kg | 75 | 12. |
| Trichloroethene | ND | | ug/kg | 50 | 15. |
| 1,2-Dichlorobenzene | ND | | ug/kg | 250 | 9.1 |
| 1,3-Dichlorobenzene | ND | | ug/kg | 250 | 11. |



L1723613

Project Name: PIERCE ARROW APARTMENTS

Project Number: 56831.10

Lab Number:

Report Date: 07/19/17

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 07/16/17 09:44

Analyst: CBN

| Parameter | Result | Qualifier | Units | RL | MDL |
|---|---------------|------------|----------|---------------|-------------------|
| olatile Organics by 8260/5035
Batch: WG1023156-5 | - Westborough | Lab for sa | mple(s): | 01,03-04,06,0 | 08,10,12,14,16,18 |
| 1,4-Dichlorobenzene | ND | | ug/kg | 250 | 9.1 |
| Methyl tert butyl ether | ND | | ug/kg | 100 | 7.6 |
| p/m-Xylene | ND | | ug/kg | 100 | 18. |
| o-Xylene | ND | | ug/kg | 100 | 17. |
| cis-1,2-Dichloroethene | ND | | ug/kg | 50 | 17. |
| Styrene | ND | | ug/kg | 100 | 20. |
| Dichlorodifluoromethane | ND | | ug/kg | 500 | 25. |
| Acetone | 110 | J | ug/kg | 500 | 110 |
| Carbon disulfide | 120 | J | ug/kg | 500 | 55. |
| 2-Butanone | ND | | ug/kg | 500 | 34. |
| 4-Methyl-2-pentanone | ND | | ug/kg | 500 | 12. |
| 2-Hexanone | ND | | ug/kg | 500 | 33. |
| Bromochloromethane | ND | | ug/kg | 250 | 18. |
| 1,2-Dibromoethane | ND | | ug/kg | 200 | 10. |
| n-Butylbenzene | ND | | ug/kg | 50 | 11. |
| sec-Butylbenzene | ND | | ug/kg | 50 | 11. |
| 1,2-Dibromo-3-chloropropane | ND | | ug/kg | 250 | 20. |
| Isopropylbenzene | ND | | ug/kg | 50 | 9.7 |
| p-Isopropyltoluene | ND | | ug/kg | 50 | 10. |
| Naphthalene | ND | | ug/kg | 250 | 6.9 |
| n-Propylbenzene | ND | | ug/kg | 50 | 11. |
| 1,2,3-Trichlorobenzene | ND | | ug/kg | 250 | 12. |
| 1,2,4-Trichlorobenzene | ND | | ug/kg | 250 | 11. |
| 1,3,5-Trimethylbenzene | ND | | ug/kg | 250 | 8.0 |
| 1,2,4-Trimethylbenzene | ND | | ug/kg | 250 | 9.3 |
| Methyl Acetate | ND | | ug/kg | 1000 | 23. |
| Cyclohexane | ND | | ug/kg | 1000 | 22. |
| 1,4-Dioxane | ND | | ug/kg | 2000 | 720 |
| Freon-113 | ND | | ug/kg | 1000 | 26. |
| | | | | | |



Project Number: 56831.10 **Report Date:** 07/19/17

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 07/16/17 09:44

Analyst: CBN

| Parameter | Result | Qualifier | Units | RL | MDL | |
|--|-------------|------------|----------|---------------|-------------------|--|
| Volatile Organics by 8260/5035 -
Batch: WG1023156-5 | Westborough | Lab for sa | mple(s): | 01,03-04,06,0 | 08,10,12,14,16,18 | |
| Methyl cyclohexane | ND | | ug/kg | 200 | 12. | |

| | Acceptance | | | | |
|-----------------------|----------------|----------------|--|--|--|
| Surrogate | %Recovery Qual | ifier Criteria | | | |
| 1,2-Dichloroethane-d4 | 110 | 70-130 | | | |
| Toluene-d8 | 104 | 70-130 | | | |
| 4-Bromofluorobenzene | 104 | 70-130 | | | |
| Dibromofluoromethane | 99 | 70-130 | | | |



L1723613

Project Name: PIERCE ARROW APARTMENTS Lab Number:

Project Number: 56831.10 **Report Date:** 07/19/17

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 07/15/17 09:02

Analyst: PD

| Parameter | Result | Qualifier Units | RL | MDL |
|---------------------------|-------------------|-------------------|--------|-------------|
| olatile Organics by GC/MS | - Westborough Lab | for sample(s): 25 | Batch: | WG1023200-5 |
| Methylene chloride | ND | ug/l | 2.5 | 0.70 |
| 1,1-Dichloroethane | ND | ug/l | 2.5 | 0.70 |
| Chloroform | ND | ug/l | 2.5 | 0.70 |
| Carbon tetrachloride | ND | ug/l | 0.50 | 0.13 |
| 1,2-Dichloropropane | ND | ug/l | 1.0 | 0.14 |
| Dibromochloromethane | ND | ug/l | 0.50 | 0.15 |
| 1,1,2-Trichloroethane | ND | ug/l | 1.5 | 0.50 |
| Tetrachloroethene | ND | ug/l | 0.50 | 0.18 |
| Chlorobenzene | ND | ug/l | 2.5 | 0.70 |
| Trichlorofluoromethane | ND | ug/l | 2.5 | 0.70 |
| 1,2-Dichloroethane | ND | ug/l | 0.50 | 0.13 |
| 1,1,1-Trichloroethane | ND | ug/l | 2.5 | 0.70 |
| Bromodichloromethane | ND | ug/l | 0.50 | 0.19 |
| trans-1,3-Dichloropropene | ND | ug/l | 0.50 | 0.16 |
| cis-1,3-Dichloropropene | ND | ug/l | 0.50 | 0.14 |
| Bromoform | ND | ug/l | 2.0 | 0.65 |
| 1,1,2,2-Tetrachloroethane | ND | ug/l | 0.50 | 0.17 |
| Benzene | ND | ug/l | 0.50 | 0.16 |
| Toluene | ND | ug/l | 2.5 | 0.70 |
| Ethylbenzene | ND | ug/l | 2.5 | 0.70 |
| Chloromethane | ND | ug/l | 2.5 | 0.70 |
| Bromomethane | ND | ug/l | 2.5 | 0.70 |
| Vinyl chloride | ND | ug/l | 1.0 | 0.07 |
| Chloroethane | ND | ug/l | 2.5 | 0.70 |
| 1,1-Dichloroethene | ND | ug/l | 0.50 | 0.17 |
| trans-1,2-Dichloroethene | ND | ug/l | 2.5 | 0.70 |
| Trichloroethene | ND | ug/l | 0.50 | 0.18 |
| 1,2-Dichlorobenzene | ND | ug/l | 2.5 | 0.70 |
| 1,3-Dichlorobenzene | ND | ug/l | 2.5 | 0.70 |



Project Name: PIERCE ARROW APARTMENTS

Project Number: 56831.10

Lab Number: L1723613

Report Date: 07/19/17

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 07/15/17 09:02

Analyst: PD

| Parameter | Result | Qualifier Units | RL | MDL |
|-----------------------------|-------------------|-------------------|--------|-------------|
| olatile Organics by GC/MS | - Westborough Lab | for sample(s): 25 | Batch: | WG1023200-5 |
| 1,4-Dichlorobenzene | ND | ug/l | 2.5 | 0.70 |
| Methyl tert butyl ether | ND | ug/l | 2.5 | 0.70 |
| p/m-Xylene | ND | ug/l | 2.5 | 0.70 |
| o-Xylene | ND | ug/l | 2.5 | 0.70 |
| cis-1,2-Dichloroethene | ND | ug/l | 2.5 | 0.70 |
| Styrene | ND | ug/l | 2.5 | 0.70 |
| Dichlorodifluoromethane | ND | ug/l | 5.0 | 1.0 |
| Acetone | ND | ug/l | 5.0 | 1.5 |
| Carbon disulfide | ND | ug/l | 5.0 | 1.0 |
| 2-Butanone | ND | ug/l | 5.0 | 1.9 |
| 4-Methyl-2-pentanone | ND | ug/l | 5.0 | 1.0 |
| 2-Hexanone | ND | ug/l | 5.0 | 1.0 |
| Bromochloromethane | ND | ug/l | 2.5 | 0.70 |
| 1,2-Dibromoethane | ND | ug/l | 2.0 | 0.65 |
| n-Butylbenzene | ND | ug/l | 2.5 | 0.70 |
| sec-Butylbenzene | ND | ug/l | 2.5 | 0.70 |
| 1,2-Dibromo-3-chloropropane | ND | ug/l | 2.5 | 0.70 |
| Isopropylbenzene | ND | ug/l | 2.5 | 0.70 |
| p-Isopropyltoluene | ND | ug/l | 2.5 | 0.70 |
| Naphthalene | ND | ug/l | 2.5 | 0.70 |
| n-Propylbenzene | ND | ug/l | 2.5 | 0.70 |
| 1,2,3-Trichlorobenzene | ND | ug/l | 2.5 | 0.70 |
| 1,2,4-Trichlorobenzene | ND | ug/l | 2.5 | 0.70 |
| 1,3,5-Trimethylbenzene | ND | ug/l | 2.5 | 0.70 |
| 1,2,4-Trimethylbenzene | ND | ug/l | 2.5 | 0.70 |
| Methyl Acetate | ND | ug/l | 2.0 | 0.23 |
| Cyclohexane | ND | ug/l | 10 | 0.27 |
| 1,4-Dioxane | ND | ug/l | 250 | 61. |
| Freon-113 | ND | ug/l | 2.5 | 0.70 |



Project Name: PIERCE ARROW APARTMENTS **Lab Number:** L1723613

Project Number: 56831.10 **Report Date:** 07/19/17

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 07/15/17 09:02

Analyst: PD

| Parameter | Result | Qualifier | Units | RL | MDL | |
|--------------------------------|-----------------|-------------|---------|--------|-------------|--|
| Volatile Organics by GC/MS - V | Vestborough Lab | for sample(| (s): 25 | Batch: | WG1023200-5 | |
| Methyl cyclohexane | ND | | ug/l | 10 | 0.40 | |

| | | Acceptance | |
|-----------------------|---------------|-----------------|--|
| Surrogate | %Recovery Qua | lifier Criteria | |
| 1,2-Dichloroethane-d4 | 115 | 70-130 | |
| Toluene-d8 | 98 | 70-130 | |
| 4-Bromofluorobenzene | 94 | 70-130 | |
| Dibromofluoromethane | 107 | 70-130 | |



Project Name: PIERCE ARROW APARTMENTS

Project Number: 56831.10

Lab Number: L1723613

Report Date: 07/19/17

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 07/17/17 22:05

Analyst: PK

| Parameter | Result | Qualifier Units | RL | MDL |
|---------------------------|-------------------|-------------------|--------|-------------|
| olatile Organics by GC/MS | - Westborough Lab | for sample(s): 26 | Batch: | WG1023473-5 |
| Methylene chloride | ND | ug/l | 2.5 | 0.70 |
| 1,1-Dichloroethane | ND | ug/l | 2.5 | 0.70 |
| Chloroform | ND | ug/l | 2.5 | 0.70 |
| Carbon tetrachloride | ND | ug/l | 0.50 | 0.13 |
| 1,2-Dichloropropane | ND | ug/l | 1.0 | 0.14 |
| Dibromochloromethane | ND | ug/l | 0.50 | 0.15 |
| 1,1,2-Trichloroethane | ND | ug/l | 1.5 | 0.50 |
| Tetrachloroethene | ND | ug/l | 0.50 | 0.18 |
| Chlorobenzene | ND | ug/l | 2.5 | 0.70 |
| Trichlorofluoromethane | ND | ug/l | 2.5 | 0.70 |
| 1,2-Dichloroethane | ND | ug/l | 0.50 | 0.13 |
| 1,1,1-Trichloroethane | ND | ug/l | 2.5 | 0.70 |
| Bromodichloromethane | ND | ug/l | 0.50 | 0.19 |
| trans-1,3-Dichloropropene | ND | ug/l | 0.50 | 0.16 |
| cis-1,3-Dichloropropene | ND | ug/l | 0.50 | 0.14 |
| Bromoform | ND | ug/l | 2.0 | 0.65 |
| 1,1,2,2-Tetrachloroethane | ND | ug/l | 0.50 | 0.17 |
| Benzene | ND | ug/l | 0.50 | 0.16 |
| Toluene | ND | ug/l | 2.5 | 0.70 |
| Ethylbenzene | ND | ug/l | 2.5 | 0.70 |
| Chloromethane | ND | ug/l | 2.5 | 0.70 |
| Bromomethane | ND | ug/l | 2.5 | 0.70 |
| Vinyl chloride | ND | ug/l | 1.0 | 0.07 |
| Chloroethane | ND | ug/l | 2.5 | 0.70 |
| 1,1-Dichloroethene | ND | ug/l | 0.50 | 0.17 |
| trans-1,2-Dichloroethene | ND | ug/l | 2.5 | 0.70 |
| Trichloroethene | ND | ug/l | 0.50 | 0.18 |
| 1,2-Dichlorobenzene | ND | ug/l | 2.5 | 0.70 |
| 1,3-Dichlorobenzene | ND | ug/l | 2.5 | 0.70 |



Project Name: PIERCE ARROW APARTMENTS

Project Number: 56831.10

Lab Number: L1723613

Report Date: 07/19/17

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 07/17/17 22:05

Analyst: PK

| Parameter | Result | Qualifier | Units | | RL | MDL |
|-----------------------------|-------------------|-----------|-------|----|--------|-------------|
| olatile Organics by GC/MS | - Westborough Lab | for sampl | e(s): | 26 | Batch: | WG1023473-5 |
| 1,4-Dichlorobenzene | ND | | ug/l | | 2.5 | 0.70 |
| Methyl tert butyl ether | ND | | ug/l | | 2.5 | 0.70 |
| p/m-Xylene | ND | | ug/l | | 2.5 | 0.70 |
| o-Xylene | ND | | ug/l | | 2.5 | 0.70 |
| cis-1,2-Dichloroethene | ND | | ug/l | | 2.5 | 0.70 |
| Styrene | ND | | ug/l | | 2.5 | 0.70 |
| Dichlorodifluoromethane | ND | | ug/l | | 5.0 | 1.0 |
| Acetone | ND | | ug/l | | 5.0 | 1.5 |
| Carbon disulfide | ND | | ug/l | | 5.0 | 1.0 |
| 2-Butanone | ND | | ug/l | | 5.0 | 1.9 |
| 4-Methyl-2-pentanone | ND | | ug/l | | 5.0 | 1.0 |
| 2-Hexanone | ND | | ug/l | | 5.0 | 1.0 |
| Bromochloromethane | ND | | ug/l | | 2.5 | 0.70 |
| 1,2-Dibromoethane | ND | | ug/l | | 2.0 | 0.65 |
| n-Butylbenzene | ND | | ug/l | | 2.5 | 0.70 |
| sec-Butylbenzene | ND | | ug/l | | 2.5 | 0.70 |
| 1,2-Dibromo-3-chloropropane | ND | | ug/l | | 2.5 | 0.70 |
| Isopropylbenzene | ND | | ug/l | | 2.5 | 0.70 |
| p-Isopropyltoluene | ND | | ug/l | | 2.5 | 0.70 |
| Naphthalene | ND | | ug/l | | 2.5 | 0.70 |
| n-Propylbenzene | ND | | ug/l | | 2.5 | 0.70 |
| 1,2,3-Trichlorobenzene | ND | | ug/l | | 2.5 | 0.70 |
| 1,2,4-Trichlorobenzene | ND | | ug/l | | 2.5 | 0.70 |
| 1,3,5-Trimethylbenzene | ND | | ug/l | | 2.5 | 0.70 |
| 1,2,4-Trimethylbenzene | ND | | ug/l | | 2.5 | 0.70 |
| Methyl Acetate | ND | | ug/l | | 2.0 | 0.23 |
| Cyclohexane | ND | | ug/l | | 10 | 0.27 |
| 1,4-Dioxane | ND | | ug/l | | 250 | 61. |
| Freon-113 | ND | | ug/l | | 2.5 | 0.70 |



Project Name: PIERCE ARROW APARTMENTS **Lab Number:** L1723613

Project Number: 56831.10 **Report Date:** 07/19/17

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 07/17/17 22:05

Analyst: PK

| Parameter | Result | Qualifier | Units | RL | MDL | |
|----------------------------------|---------------|------------|----------|--------|-------------|--|
| Volatile Organics by GC/MS - Wes | stborough Lab | for sample | e(s): 26 | Batch: | WG1023473-5 | |
| Methyl cyclohexane | ND | | ug/l | 10 | 0.40 | |

| | | Acceptance | |
|-----------------------|---------------|------------------|--|
| Surrogate | %Recovery Qua | alifier Criteria | |
| 1,2-Dichloroethane-d4 | 115 | 70-130 | |
| Toluene-d8 | 97 | 70-130 | |
| 4-Bromofluorobenzene | 95 | 70-130 | |
| Dibromofluoromethane | 111 | 70-130 | |



Project Name: PIERCE ARROW APARTMENTS

Project Number: 56831.10

Lab Number: L1723613

| Parameter | LCS
%Recovery | LCSD
Qual %Recovery | %Recovery
Qual Limits | RPD | RPD
Qual Limits |
|--------------------------------------|--------------------------|--------------------------|--------------------------|-------|--------------------|
| Volatile Organics by 8260/5035 - Wes | stborough Lab Associated | sample(s): 20,22,24 Bate | ch: WG1023111-3 WG1023 | 111-4 | |
| Methylene chloride | 112 | 113 | 70-130 | 1 | 30 |
| 1,1-Dichloroethane | 118 | 116 | 70-130 | 2 | 30 |
| Chloroform | 117 | 115 | 70-130 | 2 | 30 |
| Carbon tetrachloride | 113 | 113 | 70-130 | 0 | 30 |
| 1,2-Dichloropropane | 114 | 112 | 70-130 | 2 | 30 |
| Dibromochloromethane | 100 | 97 | 70-130 | 3 | 30 |
| 1,1,2-Trichloroethane | 103 | 100 | 70-130 | 3 | 30 |
| Tetrachloroethene | 101 | 98 | 70-130 | 3 | 30 |
| Chlorobenzene | 101 | 99 | 70-130 | 2 | 30 |
| Trichlorofluoromethane | 120 | 117 | 70-139 | 3 | 30 |
| 1,2-Dichloroethane | 116 | 116 | 70-130 | 0 | 30 |
| 1,1,1-Trichloroethane | 117 | 115 | 70-130 | 2 | 30 |
| Bromodichloromethane | 112 | 112 | 70-130 | 0 | 30 |
| trans-1,3-Dichloropropene | 102 | 99 | 70-130 | 3 | 30 |
| cis-1,3-Dichloropropene | 109 | 109 | 70-130 | 0 | 30 |
| Bromoform | 99 | 94 | 70-130 | 5 | 30 |
| 1,1,2,2-Tetrachloroethane | 97 | 95 | 70-130 | 2 | 30 |
| Benzene | 114 | 112 | 70-130 | 2 | 30 |
| Toluene | 105 | 98 | 70-130 | 7 | 30 |
| Ethylbenzene | 104 | 100 | 70-130 | 4 | 30 |
| Chloromethane | 120 | 119 | 52-130 | 1 | 30 |
| Bromomethane | 113 | 113 | 57-147 | 0 | 30 |
| Vinyl chloride | 116 | 117 | 67-130 | 1 | 30 |
| | | | | | |



Project Name: PIERCE ARROW APARTMENTS

Project Number: 56831.10

Lab Number: L1723613

| Parameter | LCS
%Recovery | Qual | LCSD
%Recovery | Qual | %Recovery
Limits | RPD | RPD
Qual Limits |
|---|------------------|----------------|-------------------|------------|---------------------|-------|--------------------|
| /olatile Organics by 8260/5035 - Westboro | ugh Lab Associat | ted sample(s): | 20,22,24 Bato | ch: WG1023 | 111-3 WG1023 | 111-4 | |
| Chloroethane | 127 | | 123 | | 50-151 | 3 | 30 |
| 1,1-Dichloroethene | 112 | | 112 | | 65-135 | 0 | 30 |
| trans-1,2-Dichloroethene | 112 | | 110 | | 70-130 | 2 | 30 |
| Trichloroethene | 116 | | 111 | | 70-130 | 4 | 30 |
| 1,2-Dichlorobenzene | 95 | | 97 | | 70-130 | 2 | 30 |
| 1,3-Dichlorobenzene | 97 | | 94 | | 70-130 | 3 | 30 |
| 1,4-Dichlorobenzene | 95 | | 93 | | 70-130 | 2 | 30 |
| Methyl tert butyl ether | 107 | | 109 | | 66-130 | 2 | 30 |
| p/m-Xylene | 105 | | 100 | | 70-130 | 5 | 30 |
| o-Xylene | 102 | | 98 | | 70-130 | 4 | 30 |
| cis-1,2-Dichloroethene | 109 | | 109 | | 70-130 | 0 | 30 |
| Styrene | 105 | | 99 | | 70-130 | 6 | 30 |
| Dichlorodifluoromethane | 120 | | 120 | | 30-146 | 0 | 30 |
| Acetone | 115 | | 113 | | 54-140 | 2 | 30 |
| Carbon disulfide | 137 | Q | 159 | Q | 59-130 | 15 | 30 |
| 2-Butanone | 116 | | 109 | | 70-130 | 6 | 30 |
| 4-Methyl-2-pentanone | 92 | | 90 | | 70-130 | 2 | 30 |
| 2-Hexanone | 98 | | 96 | | 70-130 | 2 | 30 |
| Bromochloromethane | 111 | | 112 | | 70-130 | 1 | 30 |
| 1,2-Dibromoethane | 100 | | 100 | | 70-130 | 0 | 30 |
| n-Butylbenzene | 103 | | 100 | | 70-130 | 3 | 30 |
| sec-Butylbenzene | 101 | | 100 | | 70-130 | 1 | 30 |
| 1,2-Dibromo-3-chloropropane | 90 | | 94 | | 68-130 | 4 | 30 |



Project Name: PIERCE ARROW APARTMENTS

Project Number: 56831.10

Lab Number: L1723613

| Parameter | LCS
%Recovery | Qual | LCSD
%Recovery | Qual | %Recovery
Limits | RPD | Qual | RPD
Limits | |
|--|--------------------|---------------|-------------------|-----------|---------------------|--------|------|---------------|--|
| Volatile Organics by 8260/5035 - Westbor | ough Lab Associate | ed sample(s): | 20,22,24 Bat | ch: WG102 | 23111-3 WG1023 | 3111-4 | | | |
| Isopropylbenzene | 100 | | 96 | | 70-130 | 4 | | 30 | |
| p-Isopropyltoluene | 100 | | 98 | | 70-130 | 2 | | 30 | |
| Naphthalene | 88 | | 87 | | 70-130 | 1 | | 30 | |
| n-Propylbenzene | 103 | | 98 | | 70-130 | 5 | | 30 | |
| 1,2,3-Trichlorobenzene | 90 | | 89 | | 70-130 | 1 | | 30 | |
| 1,2,4-Trichlorobenzene | 93 | | 89 | | 70-130 | 4 | | 30 | |
| 1,3,5-Trimethylbenzene | 101 | | 98 | | 70-130 | 3 | | 30 | |
| 1,2,4-Trimethylbenzene | 101 | | 98 | | 70-130 | 3 | | 30 | |
| Methyl Acetate | 117 | | 114 | | 51-146 | 3 | | 30 | |
| Cyclohexane | 117 | | 115 | | 59-142 | 2 | | 30 | |
| 1,4-Dioxane | 92 | | 103 | | 65-136 | 11 | | 30 | |
| Freon-113 | 116 | | 115 | | 50-139 | 1 | | 30 | |
| Methyl cyclohexane | 112 | | 110 | | 70-130 | 2 | | 30 | |

| Surrogate | LCS
%Recovery Qual | LCSD
%Recovery Qual | Acceptance
Criteria |
|-----------------------|-----------------------|------------------------|------------------------|
| 1,2-Dichloroethane-d4 | 108 | 106 | 70-130 |
| Toluene-d8 | 99 | 95 | 70-130 |
| 4-Bromofluorobenzene | 101 | 98 | 70-130 |
| Dibromofluoromethane | 103 | 104 | 70-130 |



Project Name: PIERCE ARROW APARTMENTS

Project Number: 56831.10

Lab Number: L1723613

| Parameter | LCS
%Recovery | Qual | LCSD
%Recovery | Qual | %Recovery
Limits | RPD | | RPD
Limits |
|---|------------------|----------------|-------------------|--------------|---------------------|-------------|-------------|---------------|
| Volatile Organics by 8260/5035 - Westboroug | gh Lab Associa | ted sample(s): | 01,03-04,06,08, | 10,12,14,16, | 18 Batch: | WG1023156-3 | WG1023156-4 | |
| Methylene chloride | 81 | | 90 | | 70-130 | 11 | | 30 |
| 1,1-Dichloroethane | 83 | | 95 | | 70-130 | 13 | | 30 |
| Chloroform | 85 | | 95 | | 70-130 | 11 | | 30 |
| Carbon tetrachloride | 93 | | 104 | | 70-130 | 11 | | 30 |
| 1,2-Dichloropropane | 91 | | 98 | | 70-130 | 7 | | 30 |
| Dibromochloromethane | 91 | | 98 | | 70-130 | 7 | | 30 |
| 1,1,2-Trichloroethane | 92 | | 99 | | 70-130 | 7 | | 30 |
| Tetrachloroethene | 93 | | 99 | | 70-130 | 6 | | 30 |
| Chlorobenzene | 90 | | 97 | | 70-130 | 7 | | 30 |
| Trichlorofluoromethane | 85 | | 94 | | 70-139 | 10 | | 30 |
| 1,2-Dichloroethane | 90 | | 99 | | 70-130 | 10 | | 30 |
| 1,1,1-Trichloroethane | 90 | | 99 | | 70-130 | 10 | | 30 |
| Bromodichloromethane | 92 | | 100 | | 70-130 | 8 | | 30 |
| trans-1,3-Dichloropropene | 96 | | 102 | | 70-130 | 6 | | 30 |
| cis-1,3-Dichloropropene | 86 | | 92 | | 70-130 | 7 | | 30 |
| Bromoform | 93 | | 97 | | 70-130 | 4 | | 30 |
| 1,1,2,2-Tetrachloroethane | 93 | | 98 | | 70-130 | 5 | | 30 |
| Benzene | 84 | | 95 | | 70-130 | 12 | | 30 |
| Toluene | 93 | | 99 | | 70-130 | 6 | | 30 |
| Ethylbenzene | 92 | | 100 | | 70-130 | 8 | | 30 |
| Chloromethane | 81 | | 88 | | 52-130 | 8 | | 30 |
| Bromomethane | 87 | | 88 | | 57-147 | 1 | | 30 |
| Vinyl chloride | 88 | | 99 | | 67-130 | 12 | | 30 |



Project Name: PIERCE ARROW APARTMENTS

Project Number: 56831.10

Lab Number: L1723613

| arameter | LCS
%Recovery | Qual | LCSD
%Recovery | Qual | %Recovery
Limits | RPD | | RPD
Limits |
|--|------------------|----------------|-------------------|--------------|---------------------|-------------|-------------|---------------|
| olatile Organics by 8260/5035 - Westboroug | gh Lab Associa | ted sample(s): | 01,03-04,06,08, | 10,12,14,16, | 18 Batch: | WG1023156-3 | WG1023156-4 | |
| Chloroethane | 83 | | 87 | | 50-151 | 5 | | 30 |
| 1,1-Dichloroethene | 72 | | 77 | | 65-135 | 7 | | 30 |
| trans-1,2-Dichloroethene | 80 | | 91 | | 70-130 | 13 | | 30 |
| Trichloroethene | 90 | | 98 | | 70-130 | 9 | | 30 |
| 1,2-Dichlorobenzene | 93 | | 98 | | 70-130 | 5 | | 30 |
| 1,3-Dichlorobenzene | 94 | | 100 | | 70-130 | 6 | | 30 |
| 1,4-Dichlorobenzene | 90 | | 99 | | 70-130 | 10 | | 30 |
| Methyl tert butyl ether | 69 | | 62 | Q | 66-130 | 11 | | 30 |
| p/m-Xylene | 91 | | 98 | | 70-130 | 7 | | 30 |
| o-Xylene | 90 | | 97 | | 70-130 | 7 | | 30 |
| cis-1,2-Dichloroethene | 85 | | 92 | | 70-130 | 8 | | 30 |
| Styrene | 90 | | 98 | | 70-130 | 9 | | 30 |
| Dichlorodifluoromethane | 83 | | 92 | | 30-146 | 10 | | 30 |
| Acetone | 95 | | 100 | | 54-140 | 5 | | 30 |
| Carbon disulfide | 64 | | 62 | | 59-130 | 3 | | 30 |
| 2-Butanone | 84 | | 87 | | 70-130 | 4 | | 30 |
| 4-Methyl-2-pentanone | 98 | | 103 | | 70-130 | 5 | | 30 |
| 2-Hexanone | 97 | | 102 | | 70-130 | 5 | | 30 |
| Bromochloromethane | 86 | | 90 | | 70-130 | 5 | | 30 |
| 1,2-Dibromoethane | 93 | | 99 | | 70-130 | 6 | | 30 |
| n-Butylbenzene | 97 | | 103 | | 70-130 | 6 | | 30 |
| sec-Butylbenzene | 95 | | 103 | | 70-130 | 8 | | 30 |
| 1,2-Dibromo-3-chloropropane | 90 | | 92 | | 68-130 | 2 | | 30 |



Project Name: PIERCE ARROW APARTMENTS

Project Number: 56831.10

Lab Number: L1723613

| rameter | LCS
%Recovery | Qual | LCSD
%Recovery | %
Qual | Recovery
Limits | RPD | Qual | RPD
Limits |
|--|-------------------|---------------|-------------------|------------------|--------------------|-------------|-----------|---------------|
| platile Organics by 8260/5035 - Westbord | ough Lab Associat | ed sample(s): | 01,03-04,06,08 | 3,10,12,14,16,18 | Batch: | WG1023156-3 | WG1023156 | -4 |
| Isopropylbenzene | 96 | | 103 | | 70-130 | 7 | | 30 |
| p-Isopropyltoluene | 96 | | 104 | | 70-130 | 8 | | 30 |
| Naphthalene | 91 | | 94 | | 70-130 | 3 | | 30 |
| n-Propylbenzene | 96 | | 104 | | 70-130 | 8 | | 30 |
| 1,2,3-Trichlorobenzene | 93 | | 98 | | 70-130 | 5 | | 30 |
| 1,2,4-Trichlorobenzene | 91 | | 97 | | 70-130 | 6 | | 30 |
| 1,3,5-Trimethylbenzene | 95 | | 105 | | 70-130 | 10 | | 30 |
| 1,2,4-Trimethylbenzene | 96 | | 104 | | 70-130 | 8 | | 30 |
| Methyl Acetate | 86 | | 96 | | 51-146 | 11 | | 30 |
| Cyclohexane | 91 | | 105 | | 59-142 | 14 | | 30 |
| 1,4-Dioxane | 104 | | 103 | | 65-136 | 1 | | 30 |
| Freon-113 | 85 | | 87 | | 50-139 | 2 | | 30 |
| Methyl cyclohexane | 91 | | 100 | | 70-130 | 9 | | 30 |

| Surrogate | LCS
%Recovery Qual | LCSD
%Recovery Qual | Acceptance
Criteria |
|-----------------------|-----------------------|------------------------|------------------------|
| 1,2-Dichloroethane-d4 | 104 | 106 | 70-130 |
| Toluene-d8 | 108 | 108 | 70-130 |
| 4-Bromofluorobenzene | 107 | 106 | 70-130 |
| Dibromofluoromethane | 98 | 100 | 70-130 |



Project Name: PIERCE ARROW APARTMENTS

Project Number: 56831.10

Lab Number: L1723613

| Parameter | LCS
%Recovery | Qual | LCSD
%Recovery | Qual | %Recovery
Limits | RPD | Qual | RPD
Limits |
|--|------------------|---------------|-------------------|----------|---------------------|-----|------|---------------|
| Volatile Organics by GC/MS - Westborough L | ab Associated | sample(s): 25 | Batch: WG1 | 023200-3 | WG1023200-4 | | | |
| Methylene chloride | 96 | | 100 | | 70-130 | 4 | | 20 |
| 1,1-Dichloroethane | 93 | | 99 | | 70-130 | 6 | | 20 |
| Chloroform | 98 | | 100 | | 70-130 | 2 | | 20 |
| Carbon tetrachloride | 96 | | 100 | | 63-132 | 4 | | 20 |
| 1,2-Dichloropropane | 93 | | 100 | | 70-130 | 7 | | 20 |
| Dibromochloromethane | 97 | | 110 | | 63-130 | 13 | | 20 |
| 1,1,2-Trichloroethane | 98 | | 110 | | 70-130 | 12 | | 20 |
| Tetrachloroethene | 98 | | 100 | | 70-130 | 2 | | 20 |
| Chlorobenzene | 93 | | 99 | | 75-130 | 6 | | 20 |
| Trichlorofluoromethane | 92 | | 96 | | 62-150 | 4 | | 20 |
| 1,2-Dichloroethane | 100 | | 110 | | 70-130 | 10 | | 20 |
| 1,1,1-Trichloroethane | 95 | | 100 | | 67-130 | 5 | | 20 |
| Bromodichloromethane | 99 | | 100 | | 67-130 | 1 | | 20 |
| trans-1,3-Dichloropropene | 85 | | 92 | | 70-130 | 8 | | 20 |
| cis-1,3-Dichloropropene | 87 | | 92 | | 70-130 | 6 | | 20 |
| Bromoform | 82 | | 88 | | 54-136 | 7 | | 20 |
| 1,1,2,2-Tetrachloroethane | 90 | | 98 | | 67-130 | 9 | | 20 |
| Benzene | 99 | | 100 | | 70-130 | 1 | | 20 |
| Toluene | 91 | | 97 | | 70-130 | 6 | | 20 |
| Ethylbenzene | 93 | | 97 | | 70-130 | 4 | | 20 |
| Chloromethane | 87 | | 89 | | 64-130 | 2 | | 20 |
| Bromomethane | 82 | | 95 | | 39-139 | 15 | | 20 |
| Vinyl chloride | 93 | | 94 | | 55-140 | 1 | | 20 |



Project Name: PIERCE ARROW APARTMENTS

Project Number: 56831.10

Lab Number: L1723613

| Parameter | LCS
%Recovery | Qual | LCSD
%Recovery | %Reco
Qual Limi | | Qual | RPD
Limits |
|--|------------------|--------------|-------------------|--------------------|-------|------|---------------|
| Volatile Organics by GC/MS - Westborough | Lab Associated | sample(s): 2 | 25 Batch: WG10 | 023200-3 WG1023 | 200-4 | | |
| Chloroethane | 96 | | 100 | 55-13 | 38 4 | | 20 |
| 1,1-Dichloroethene | 98 | | 96 | 61-14 | 15 2 | | 20 |
| trans-1,2-Dichloroethene | 92 | | 96 | 70-13 | 30 4 | | 20 |
| Trichloroethene | 96 | | 100 | 70-13 | 30 4 | | 20 |
| 1,2-Dichlorobenzene | 92 | | 98 | 70-13 | 6 | | 20 |
| 1,3-Dichlorobenzene | 92 | | 97 | 70-13 | 5 | | 20 |
| 1,4-Dichlorobenzene | 91 | | 95 | 70-13 | 30 4 | | 20 |
| Methyl tert butyl ether | 100 | | 110 | 63-13 | 10 | | 20 |
| p/m-Xylene | 95 | | 100 | 70-13 | 5 | | 20 |
| o-Xylene | 90 | | 95 | 70-13 | 5 | | 20 |
| cis-1,2-Dichloroethene | 97 | | 100 | 70-13 | 30 | | 20 |
| Styrene | 95 | | 100 | 70-13 | 5 | | 20 |
| Dichlorodifluoromethane | 72 | | 74 | 36-14 | 17 3 | | 20 |
| Acetone | 160 | Q | 90 | 58-14 | 18 56 | Q | 20 |
| Carbon disulfide | 96 | | 91 | 51-13 | 5 | | 20 |
| 2-Butanone | 96 | | 93 | 63-13 | 3 | | 20 |
| 4-Methyl-2-pentanone | 67 | | 75 | 59-13 | 30 11 | | 20 |
| 2-Hexanone | 65 | | 69 | 57-13 | 80 6 | | 20 |
| Bromochloromethane | 100 | | 110 | 70-13 | 30 10 | | 20 |
| 1,2-Dibromoethane | 99 | | 110 | 70-13 | 30 11 | | 20 |
| n-Butylbenzene | 91 | | 93 | 53-13 | 36 2 | | 20 |
| sec-Butylbenzene | 90 | | 93 | 70-13 | 30 | | 20 |
| 1,2-Dibromo-3-chloropropane | 88 | | 94 | 41-14 | 7 | | 20 |



Project Name: PIERCE ARROW APARTMENTS

Project Number: 56831.10

Lab Number: L1723613

| arameter | LCS
%Recovery | Qual | LCSD
%Recovery | Qual | %Recovery
Limits | RPD | Qual | RPD
Limits |
|---|------------------|--------------|-------------------|-----------|---------------------|-----|------|---------------|
| olatile Organics by GC/MS - Westborough L | ab Associated | sample(s): 2 | 5 Batch: WG | 1023200-3 | WG1023200-4 | | | |
| Isopropylbenzene | 90 | | 92 | | 70-130 | 2 | | 20 |
| p-Isopropyltoluene | 84 | | 86 | | 70-130 | 2 | | 20 |
| Naphthalene | 88 | | 89 | | 70-130 | 1 | | 20 |
| n-Propylbenzene | 89 | | 92 | | 69-130 | 3 | | 20 |
| 1,2,3-Trichlorobenzene | 100 | | 110 | | 70-130 | 10 | | 20 |
| 1,2,4-Trichlorobenzene | 85 | | 88 | | 70-130 | 3 | | 20 |
| 1,3,5-Trimethylbenzene | 90 | | 95 | | 64-130 | 5 | | 20 |
| 1,2,4-Trimethylbenzene | 86 | | 88 | | 70-130 | 2 | | 20 |
| Methyl Acetate | 91 | | 100 | | 70-130 | 9 | | 20 |
| Cyclohexane | 86 | | 89 | | 70-130 | 3 | | 20 |
| 1,4-Dioxane | 118 | | 122 | | 56-162 | 3 | | 20 |
| Freon-113 | 88 | | 87 | | 70-130 | 1 | | 20 |
| Methyl cyclohexane | 86 | | 90 | | 70-130 | 5 | | 20 |

| Surrogate | LCS
%Recovery Qual | LCSD
%Recovery Qual | Acceptance
Criteria |
|-----------------------|-----------------------|------------------------|------------------------|
| 1,2-Dichloroethane-d4 | 112 | 114 | 70-130 |
| Toluene-d8 | 99 | 99 | 70-130 |
| 4-Bromofluorobenzene | 97 | 94 | 70-130 |
| Dibromofluoromethane | 105 | 107 | 70-130 |



Project Name: PIERCE ARROW APARTMENTS

Project Number: 56831.10

Lab Number: L1723613

| Parameter | LCS
%Recovery | Qual | LCSD
%Recovery | Qual | %Recovery
Limits | RPD | Qual | RPD
Limits |
|--|-------------------|--------------|-------------------|----------|---------------------|-----|------|---------------|
| olatile Organics by GC/MS - Westboroug | gh Lab Associated | sample(s): 2 | 6 Batch: WG1 | 023473-3 | WG1023473-4 | | | |
| Methylene chloride | 99 | | 97 | | 70-130 | 2 | | 20 |
| 1,1-Dichloroethane | 98 | | 95 | | 70-130 | 3 | | 20 |
| Chloroform | 110 | | 100 | | 70-130 | 10 | | 20 |
| Carbon tetrachloride | 110 | | 110 | | 63-132 | 0 | | 20 |
| 1,2-Dichloropropane | 94 | | 93 | | 70-130 | 1 | | 20 |
| Dibromochloromethane | 100 | | 100 | | 63-130 | 0 | | 20 |
| 1,1,2-Trichloroethane | 91 | | 91 | | 70-130 | 0 | | 20 |
| Tetrachloroethene | 100 | | 100 | | 70-130 | 0 | | 20 |
| Chlorobenzene | 97 | | 94 | | 75-130 | 3 | | 20 |
| Trichlorofluoromethane | 110 | | 100 | | 62-150 | 10 | | 20 |
| 1,2-Dichloroethane | 110 | | 110 | | 70-130 | 0 | | 20 |
| 1,1,1-Trichloroethane | 110 | | 110 | | 67-130 | 0 | | 20 |
| Bromodichloromethane | 110 | | 100 | | 67-130 | 10 | | 20 |
| trans-1,3-Dichloropropene | 91 | | 88 | | 70-130 | 3 | | 20 |
| cis-1,3-Dichloropropene | 100 | | 100 | | 70-130 | 0 | | 20 |
| Bromoform | 96 | | 96 | | 54-136 | 0 | | 20 |
| 1,1,2,2-Tetrachloroethane | 85 | | 84 | | 67-130 | 1 | | 20 |
| Benzene | 97 | | 94 | | 70-130 | 3 | | 20 |
| Toluene | 94 | | 91 | | 70-130 | 3 | | 20 |
| Ethylbenzene | 94 | | 92 | | 70-130 | 2 | | 20 |
| Chloromethane | 85 | | 84 | | 64-130 | 1 | | 20 |
| Bromomethane | 93 | | 94 | | 39-139 | 1 | | 20 |
| Vinyl chloride | 88 | | 86 | | 55-140 | 2 | | 20 |
| | | | | | | | | |



Project Name: PIERCE ARROW APARTMENTS

Project Number: 56831.10

Lab Number: L1723613

| Parameter | LCS
%Recovery | Qual | LCSD
%Recovery | Qual | %Recovery
Limits | RPD | Qual | RPD
Limits |
|--|--------------------|--------------|-------------------|----------|---------------------|-----|------|---------------|
| /olatile Organics by GC/MS - Westborou | ugh Lab Associated | sample(s): 2 | 6 Batch: WG1 | 023473-3 | WG1023473-4 | | | |
| Chloroethane | 94 | | 93 | | 55-138 | 1 | | 20 |
| 1,1-Dichloroethene | 99 | | 95 | | 61-145 | 4 | | 20 |
| trans-1,2-Dichloroethene | 100 | | 99 | | 70-130 | 1 | | 20 |
| Trichloroethene | 100 | | 100 | | 70-130 | 0 | | 20 |
| 1,2-Dichlorobenzene | 95 | | 92 | | 70-130 | 3 | | 20 |
| 1,3-Dichlorobenzene | 96 | | 92 | | 70-130 | 4 | | 20 |
| 1,4-Dichlorobenzene | 95 | | 90 | | 70-130 | 5 | | 20 |
| Methyl tert butyl ether | 100 | | 100 | | 63-130 | 0 | | 20 |
| p/m-Xylene | 100 | | 95 | | 70-130 | 5 | | 20 |
| o-Xylene | 100 | | 95 | | 70-130 | 5 | | 20 |
| cis-1,2-Dichloroethene | 100 | | 100 | | 70-130 | 0 | | 20 |
| Styrene | 100 | | 95 | | 70-130 | 5 | | 20 |
| Dichlorodifluoromethane | 89 | | 87 | | 36-147 | 2 | | 20 |
| Acetone | 110 | | 110 | | 58-148 | 0 | | 20 |
| Carbon disulfide | 93 | | 90 | | 51-130 | 3 | | 20 |
| 2-Butanone | 82 | | 85 | | 63-138 | 4 | | 20 |
| 4-Methyl-2-pentanone | 83 | | 79 | | 59-130 | 5 | | 20 |
| 2-Hexanone | 76 | | 76 | | 57-130 | 0 | | 20 |
| Bromochloromethane | 110 | | 110 | | 70-130 | 0 | | 20 |
| 1,2-Dibromoethane | 100 | | 100 | | 70-130 | 0 | | 20 |
| n-Butylbenzene | 87 | | 84 | | 53-136 | 4 | | 20 |
| sec-Butylbenzene | 89 | | 85 | | 70-130 | 5 | | 20 |
| 1,2-Dibromo-3-chloropropane | 84 | | 84 | | 41-144 | 0 | | 20 |
| | | | | | | | | |



Project Name: PIERCE ARROW APARTMENTS

Project Number: 56831.10

Lab Number: L1723613

| rameter | LCS
%Recovery | Qual | LCSE
%Recov | | %Recovery
Limits | RPD | Qual | RPD
Limits |
|---|------------------|------------|----------------|-------------|---------------------|-----|------|---------------|
| platile Organics by GC/MS - Westborough L | ab Associated | sample(s): | 26 Batch: | WG1023473-3 | WG1023473-4 | | | |
| Isopropylbenzene | 92 | | 87 | | 70-130 | 6 | | 20 |
| p-Isopropyltoluene | 93 | | 90 | | 70-130 | 3 | | 20 |
| Naphthalene | 83 | | 89 | | 70-130 | 7 | | 20 |
| n-Propylbenzene | 88 | | 84 | | 69-130 | 5 | | 20 |
| 1,2,3-Trichlorobenzene | 86 | | 95 | | 70-130 | 10 | | 20 |
| 1,2,4-Trichlorobenzene | 90 | | 92 | | 70-130 | 2 | | 20 |
| 1,3,5-Trimethylbenzene | 92 | | 89 | | 64-130 | 3 | | 20 |
| 1,2,4-Trimethylbenzene | 94 | | 90 | | 70-130 | 4 | | 20 |
| Methyl Acetate | 88 | | 79 | | 70-130 | 11 | | 20 |
| Cyclohexane | 85 | | 82 | | 70-130 | 4 | | 20 |
| 1,4-Dioxane | 106 | | 112 | | 56-162 | 6 | | 20 |
| Freon-113 | 97 | | 94 | | 70-130 | 3 | | 20 |
| Methyl cyclohexane | 90 | | 86 | | 70-130 | 5 | | 20 |

| Surrogate | LCS
%Recovery Qual | LCSD
%Recovery Qual | Acceptance
Criteria |
|-----------------------|-----------------------|------------------------|------------------------|
| 1,2-Dichloroethane-d4 | 111 | 110 | 70-130 |
| Toluene-d8 | 97 | 96 | 70-130 |
| 4-Bromofluorobenzene | 95 | 94 | 70-130 |
| Dibromofluoromethane | 110 | 111 | 70-130 |



Matrix Spike Analysis Batch Quality Control

Project Name: PIERCE ARROW APARTMENTS

Project Number: 56831.10

Lab Number:

L1723613

Report Date:

07/19/17

| Parameter | Native
Sample | MS
Added | MS
Found | MS
%Recovery | MSD
Qual Found | MSD
%Recovery | | ecovery
Limits | RPD | Qual | RPD
Limits |
|---|------------------|-------------|----------------|------------------|--------------------|------------------|------------|-------------------|-------|---------|---------------|
| Volatile Organics by 8260/50
L1723613-04 Client ID: SF | | ugh Lab | Associated sam | ple(s): 01,03-04 | ,06,08,10,12,14,16 | ,18 QC Batc | h ID: WG10 |)23156-6 | WG102 | 23156-7 | QC Sample: |
| Methylene chloride | ND | 1200 | 920 | 76 | 950 | 79 | | 70-130 | 4 | | 30 |
| 1,1-Dichloroethane | ND | 1200 | 900 | 75 | 950 | 79 | | 70-130 | 6 | | 30 |
| Chloroform | ND | 1200 | 930 | 78 | 1000 | 83 | | 70-130 | 7 | | 30 |
| Carbon tetrachloride | ND | 1200 | 840 | 70 | 940 | 78 | | 70-130 | 11 | | 30 |
| 1,2-Dichloropropane | ND | 1200 | 1000 | 84 | 1000 | 87 | | 70-130 | 3 | | 30 |
| Dibromochloromethane | ND | 1200 | 1000 | 86 | 1100 | 88 | | 70-130 | 3 | | 30 |
| 1,1,2-Trichloroethane | ND | 1200 | 1100 | 90 | 1100 | 92 | | 70-130 | 3 | | 30 |
| Tetrachloroethene | ND | 1200 | 850 | 71 | 920 | 77 | | 70-130 | 8 | | 30 |
| Chlorobenzene | ND | 1200 | 970 | 81 | 1000 | 84 | | 70-130 | 4 | | 30 |
| Trichlorofluoromethane | ND | 1200 | 270J | 22 | Q 300 | 25 | Q | 70-139 | 12 | | 30 |
| 1,2-Dichloroethane | ND | 1200 | 1100 | 88 | 1100 | 92 | | 70-130 | 4 | | 30 |
| 1,1,1-Trichloroethane | ND | 1200 | 860 | 71 | 950 | 79 | | 70-130 | 11 | | 30 |
| Bromodichloromethane | ND | 1200 | 1000 | 83 | 1100 | 88 | | 70-130 | 5 | | 30 |
| trans-1,3-Dichloropropene | ND | 1200 | 1100 | 88 | 1100 | 91 | | 70-130 | 3 | | 30 |
| cis-1,3-Dichloropropene | ND | 1200 | 960 | 80 | 1000 | 84 | | 70-130 | 5 | | 30 |
| Bromoform | ND | 1200 | 990 | 82 | 1100 | 88 | | 70-130 | 6 | | 30 |
| 1,1,2,2-Tetrachloroethane | ND | 1200 | 1000 | 87 | 1100 | 88 | | 70-130 | 2 | | 30 |
| Benzene | ND | 1200 | 900 | 75 | 960 | 80 | | 70-130 | 7 | | 30 |
| Toluene | ND | 1200 | 950 | 79 | 990 | 82 | | 70-130 | 4 | | 30 |
| Ethylbenzene | ND | 1200 | 940 | 78 | 990 | 82 | | 70-130 | 5 | | 30 |
| Chloromethane | ND | 1200 | 900 | 75 | 970 | 81 | | 52-130 | 8 | | 30 |
| Bromomethane | 26.J | 1200 | 880 | 74 | 900 | 75 | | 57-147 | 2 | | 30 |
| Vinyl chloride | ND | 1200 | 850 | 71 | 960 | 80 | | 67-130 | 11 | | 30 |



Matrix Spike Analysis Batch Quality Control

Project Name: PIERCE ARROW APARTMENTS

Project Number: 56831.10

Lab Number:

L1723613

Report Date:

07/19/17

| Parameter | Native
Sample | MS
Added | MS
Found | MS
%Recovery | Qual | MSD
Found | MSD
%Recovery | Qual | Recovery
Limits | RPD | Qual | RPD
Limits |
|--|------------------|-------------|----------------|------------------|-----------|--------------------------|------------------|----------|--------------------|-------|---------|---------------|
| Volatile Organics by 8260/50
L1723613-04 Client ID: S | | ugh Lab | Associated sam | ple(s): 01,03-04 | ,06,08,10 |),12,14,16, ⁻ | 18 QC Batch | ı ID: WG | G1023156-6 | WG102 | 23156-7 | QC Sample: |
| Chloroethane | ND | 1200 | 330 | 27 | Q | 370 | 31 | Q | 50-151 | 13 | | 30 |
| 1,1-Dichloroethene | ND | 1200 | 740 | 62 | Q | 750 | 62 | Q | 65-135 | 0 | | 30 |
| trans-1,2-Dichloroethene | ND | 1200 | 800 | 66 | Q | 880 | 73 | | 70-130 | 9 | | 30 |
| Trichloroethene | ND | 1200 | 890 | 74 | | 990 | 82 | | 70-130 | 10 | | 30 |
| 1,2-Dichlorobenzene | ND | 1200 | 1100 | 88 | | 1000 | 87 | | 70-130 | 1 | | 30 |
| 1,3-Dichlorobenzene | ND | 1200 | 980 | 82 | | 1000 | 87 | | 70-130 | 6 | | 30 |
| 1,4-Dichlorobenzene | ND | 1200 | 1000 | 84 | | 1000 | 85 | | 70-130 | 1 | | 30 |
| Methyl tert butyl ether | ND | 1200 | 590 | 49 | Q | 690 | 57 | Q | 66-130 | 15 | | 30 |
| o/m-Xylene | ND | 2300 | 1900 | 80 | | 2000 | 85 | | 70-130 | 5 | | 30 |
| o-Xylene | ND | 2300 | 1900 | 83 | | 2000 | 86 | | 70-130 | 4 | | 30 |
| cis-1,2-Dichloroethene | ND | 1200 | 900 | 75 | | 950 | 80 | | 70-130 | 6 | | 30 |
| Styrene | ND | 2300 | 2000 | 85 | | 2000 | 87 | | 70-130 | 3 | | 30 |
| Dichlorodifluoromethane | ND | 1200 | 770 | 64 | | 850 | 71 | | 30-146 | 11 | | 30 |
| Acetone | ND | 1200 | 1200 | 103 | | 1400 | 113 | | 54-140 | 9 | | 30 |
| Carbon disulfide | ND | 1200 | 600 | 50 | Q | 670 | 56 | Q | 59-130 | 11 | | 30 |
| 2-Butanone | ND | 1200 | 1100 | 88 | | 1200 | 98 | | 70-130 | 10 | | 30 |
| 4-Methyl-2-pentanone | ND | 1200 | 1100 | 90 | | 1100 | 91 | | 70-130 | 1 | | 30 |
| 2-Hexanone | ND | 1200 | 1000 | 86 | | 1100 | 94 | | 70-130 | 9 | | 30 |
| Bromochloromethane | ND | 1200 | 950 | 79 | | 990 | 83 | | 70-130 | 4 | | 30 |
| 1,2-Dibromoethane | ND | 1200 | 1100 | 88 | | 1100 | 92 | | 70-130 | 4 | | 30 |
| n-Butylbenzene | ND | 1200 | 920 | 76 | | 950 | 79 | | 70-130 | 3 | | 30 |
| sec-Butylbenzene | ND | 1200 | 910 | 75 | | 970 | 81 | | 70-130 | 7 | | 30 |
| 1,2-Dibromo-3-chloropropane | ND | 1200 | 990 | 82 | | 1000 | 84 | | 68-130 | 2 | | 30 |



Matrix Spike Analysis Batch Quality Control

Project Name: PIERCE ARROW APARTMENTS

Project Number: 56831.10

Lab Number:

L1723613

| | Native | MS | MS | MS | MSD | MSD | Recovery | | RPD |
|---|--------|-----------|----------------|------------------|---------------------|-------------|-------------------|------|--------------------|
| Parameter | Sample | Added | Found | %Recovery | Qual Found | %Recovery | Qual Limits | RPD | Qual Limits |
| Volatile Organics by 8260/5
L1723613-04 Client ID: S | | ugh Lab A | ssociated samp | ole(s): 01,03-04 | ,06,08,10,12,14,16, | 18 QC Batch | n ID: WG1023156-6 | WG10 | 23156-7 QC Sample: |
| Isopropylbenzene | ND | 1200 | 920 | 76 | 990 | 82 | 70-130 | 7 | 30 |
| p-Isopropyltoluene | ND | 1200 | 930 | 77 | 990 | 82 | 70-130 | 6 | 30 |
| Naphthalene | ND | 1200 | 1000 | 87 | 1100 | 90 | 70-130 | 4 | 30 |
| n-Propylbenzene | ND | 1200 | 930 | 77 | 1000 | 83 | 70-130 | 7 | 30 |
| 1,2,3-Trichlorobenzene | ND | 1200 | 1000 | 85 | 1100 | 88 | 70-130 | 3 | 30 |
| 1,2,4-Trichlorobenzene | ND | 1200 | 990 | 83 | 1000 | 86 | 70-130 | 4 | 30 |
| 1,3,5-Trimethylbenzene | ND | 1200 | 970 | 81 | 1000 | 84 | 70-130 | 4 | 30 |
| 1,2,4-Trimethylbenzene | ND | 1200 | 990 | 82 | 1000 | 85 | 70-130 | 3 | 30 |
| Methyl Acetate | 140J | 1200 | 1400 | 118 | 1500 | 125 | 51-146 | 6 | 30 |
| Cyclohexane | ND | 1200 | 820J | 69 | 960J | 80 | 59-142 | 15 | 30 |
| 1,4-Dioxane | ND | 58000 | 61000 | 105 | 61000 | 105 | 65-136 | 0 | 30 |
| Freon-113 | ND | 1200 | 760J | 64 | 880J | 74 | 50-139 | 15 | 30 |
| Methyl cyclohexane | ND | 1200 | 800 | 66 | Q 920 | 76 | 70-130 | 14 | 30 |

| | MS | MSD | Acceptance | |
|-----------------------|----------------------|----------------------|------------|--|
| Surrogate | % Recovery Qualifier | % Recovery Qualifier | Criteria | |
| 1,2-Dichloroethane-d4 | 106 | 109 | 70-130 | |
| 4-Bromofluorobenzene | 104 | 104 | 70-130 | |
| Dibromofluoromethane | 101 | 103 | 70-130 | |
| Toluene-d8 | 106 | 108 | 70-130 | |



SEMIVOLATILES



L1723613

07/19/17

Project Name: PIERCE ARROW APARTMENTS

L1723613-02

BUFFALO, NY

SP-1-0.5-8-071117

Project Number: 56831.10

Lab ID:

Client ID:

Sample Location:

SAMPLE RESULTS

Date Collected:

07/11/17 09:40

Lab Number:

Report Date:

Date Received: 07/11/17 Field Prep: Not Specified Extraction Method: EPA 3546

Extraction Date: 07/14/17 08:04

Matrix: Soil Analytical Method: 1,8270D Analytical Date: 07/17/17 16:18

Analyst: RC Percent Solids: 82%

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor | | | |
|--|--------|-----------|-------|-----|-----|-----------------|--|--|--|
| Semivolatile Organics by GC/MS - Westborough Lab | | | | | | | | | |
| Accordability | ND | | | 400 | 04 | | | | |
| Acenaphthene | ND | | ug/kg | 160 | 21. | 1 | | | |
| Hexachlorobenzene | ND | | ug/kg | 120 | 22. | 1 | | | |
| Fluoranthene | 78 | J | ug/kg | 120 | 23. | 1 | | | |
| Naphthalene | ND | | ug/kg | 200 | 24. | 1 | | | |
| Benzo(a)anthracene | 32 | J | ug/kg | 120 | 22. | 1 | | | |
| Benzo(a)pyrene | ND | | ug/kg | 160 | 49. | 1 | | | |
| Benzo(b)fluoranthene | ND | | ug/kg | 120 | 34. | 1 | | | |
| Benzo(k)fluoranthene | ND | | ug/kg | 120 | 32. | 1 | | | |
| Chrysene | 30 | J | ug/kg | 120 | 21. | 1 | | | |
| Acenaphthylene | ND | | ug/kg | 160 | 31. | 1 | | | |
| Anthracene | ND | | ug/kg | 120 | 39. | 1 | | | |
| Benzo(ghi)perylene | ND | | ug/kg | 160 | 24. | 1 | | | |
| Fluorene | ND | | ug/kg | 200 | 19. | 1 | | | |
| Phenanthrene | 60 | J | ug/kg | 120 | 24. | 1 | | | |
| Dibenzo(a,h)anthracene | ND | | ug/kg | 120 | 23. | 1 | | | |
| Indeno(1,2,3-cd)pyrene | ND | | ug/kg | 160 | 28. | 1 | | | |
| Pyrene | 65 | J | ug/kg | 120 | 20. | 1 | | | |
| Dibenzofuran | ND | | ug/kg | 200 | 19. | 1 | | | |
| Pentachlorophenol | ND | | ug/kg | 160 | 44. | 1 | | | |
| Phenol | ND | | ug/kg | 200 | 30. | 1 | | | |
| 2-Methylphenol | ND | | ug/kg | 200 | 31. | 1 | | | |
| 3-Methylphenol/4-Methylphenol | ND | | ug/kg | 290 | 31. | 1 | | | |

Project Name: PIERCE ARROW APARTMENTS Lab Number: L1723613

Project Number: 56831.10 **Report Date:** 07/19/17

SAMPLE RESULTS

Date Collected: 07/11/17 09:40

Client ID: SP-1-0.5-8-071117 Date Received: 07/11/17 Sample Location: BUFFALO, NY Field Prep: Not Specified

Parameter Result Qualifier Units RL MDL Dilution Factor

Semivolatile Organics by GC/MS - Westborough Lab

L1723613-02

Lab ID:

| Surrogate | % Recovery | Acceptance
Qualifier Criteria |
|----------------------|------------|----------------------------------|
| 2-Fluorophenol | 67 | 25-120 |
| Phenol-d6 | 72 | 10-120 |
| Nitrobenzene-d5 | 72 | 23-120 |
| 2-Fluorobiphenyl | 67 | 30-120 |
| 2,4,6-Tribromophenol | 108 | 10-136 |
| 4-Terphenyl-d14 | 66 | 18-120 |



L1723613

07/19/17

Project Name: PIERCE ARROW APARTMENTS

07/17/17 16:44

Project Number: 56831.10

SAMPLE RESULTS

Date Collected: 07/11/17 10:10

Lab Number:

Report Date:

Lab ID: L1723613-03 Client ID: Date Received: 07/11/17 SP-2-3.5-071117

Sample Location: Field Prep: BUFFALO, NY Not Specified

Extraction Method: EPA 3546 Matrix: Soil Extraction Date: 07/14/17 08:04 Analytical Method: 1,8270D

Analyst: RC Percent Solids: 76%

Analytical Date:

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|-------------------------------------|----------------|-----------|-------|-----|-----|-----------------|
| Semivolatile Organics by GC/MS - We | estborough Lab | | | | | |
| Acenaphthene | ND | | ug/kg | 170 | 22. | 1 |
| Hexachlorobenzene | ND | | ug/kg | 130 | 24. | 1 |
| Fluoranthene | ND | | ug/kg | 130 | 25. | 1 |
| Naphthalene | ND | | ug/kg | 210 | 26. | 1 |
| Benzo(a)anthracene | ND | | ug/kg | 130 | 24. | 1 |
| Benzo(a)pyrene | ND | | ug/kg | 170 | 52. | 1 |
| Benzo(b)fluoranthene | ND | | ug/kg | 130 | 36. | 1 |
| Benzo(k)fluoranthene | ND | | ug/kg | 130 | 34. | 1 |
| Chrysene | ND | | ug/kg | 130 | 22. | 1 |
| Acenaphthylene | ND | | ug/kg | 170 | 33. | 1 |
| Anthracene | ND | | ug/kg | 130 | 42. | 1 |
| Benzo(ghi)perylene | ND | | ug/kg | 170 | 25. | 1 |
| Fluorene | ND | | ug/kg | 210 | 21. | 1 |
| Phenanthrene | ND | | ug/kg | 130 | 26. | 1 |
| Dibenzo(a,h)anthracene | ND | | ug/kg | 130 | 25. | 1 |
| Indeno(1,2,3-cd)pyrene | ND | | ug/kg | 170 | 30. | 1 |
| Pyrene | 22 | J | ug/kg | 130 | 21. | 1 |
| Dibenzofuran | ND | | ug/kg | 210 | 20. | 1 |
| Pentachlorophenol | ND | | ug/kg | 170 | 47. | 1 |
| Phenol | ND | | ug/kg | 210 | 32. | 1 |
| 2-Methylphenol | ND | | ug/kg | 210 | 33. | 1 |
| 3-Methylphenol/4-Methylphenol | ND | | ug/kg | 310 | 34. | 1 |



Project Name: PIERCE ARROW APARTMENTS Lab Number: L1723613

Project Number: 56831.10 **Report Date:** 07/19/17

SAMPLE RESULTS

Date Collected: 07/11/17 10:10

Client ID: SP-2-3.5-071117 Date Received: 07/11/17 Sample Location: BUFFALO, NY Field Prep: Not Specified

Parameter Result Qualifier Units RL MDL Dilution Factor

Semivolatile Organics by GC/MS - Westborough Lab

L1723613-03

Lab ID:

| Surrogate | % Recovery | Acceptance
Qualifier Criteria |
|----------------------|------------|----------------------------------|
| 2-Fluorophenol | 54 | 25-120 |
| Phenol-d6 | 60 | 10-120 |
| Nitrobenzene-d5 | 60 | 23-120 |
| 2-Fluorobiphenyl | 60 | 30-120 |
| 2,4,6-Tribromophenol | 94 | 10-136 |
| 4-Terphenyl-d14 | 61 | 18-120 |



L1723613

07/19/17

Lab Number:

Report Date:

Project Name: PIERCE ARROW APARTMENTS

Project Number: 56831.10

Lab ID:

SAMPLE RESULTS

L1723613-05 Date Collected: 07/11/17 10:30

Client ID: SP-3-1-8-071117 Date Received: 07/11/17
Sample Location: BUFFALO, NY Field Prep: Not Specified

Extraction Method: EPA 3546

Extraction Method: EPA 3546

Matrix: Soil Extraction Date: 07/14/17 08:04

Analytical Method: 1,8270D

Analytical Date: 07/17/17 15:52

Analyst: RC
Percent Solids: 81%

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|------------------------------------|----------------|-----------|-------|-----|-----|-----------------|
| Semivolatile Organics by GC/MS - W | estborough Lab | | | | | |
| Acenaphthene | ND | | ug/kg | 160 | 21. | 1 |
| Hexachlorobenzene | ND | | ug/kg | 120 | 23. | 1 |
| Fluoranthene | 160 | | ug/kg | 120 | 23. | 1 |
| Naphthalene | ND | | ug/kg | 200 | 25. | 1 |
| Benzo(a)anthracene | 80 | J | ug/kg | 120 | 23. | 1 |
| Benzo(a)pyrene | 69 | J | ug/kg | 160 | 50. | 1 |
| Benzo(b)fluoranthene | 81 | J | ug/kg | 120 | 34. | 1 |
| Benzo(k)fluoranthene | ND | | ug/kg | 120 | 33. | 1 |
| Chrysene | 70 | J | ug/kg | 120 | 21. | 1 |
| Acenaphthylene | ND | | ug/kg | 160 | 32. | 1 |
| Anthracene | ND | | ug/kg | 120 | 40. | 1 |
| Benzo(ghi)perylene | 34 | J | ug/kg | 160 | 24. | 1 |
| Fluorene | ND | | ug/kg | 200 | 20. | 1 |
| Phenanthrene | 93 | J | ug/kg | 120 | 25. | 1 |
| Dibenzo(a,h)anthracene | ND | | ug/kg | 120 | 24. | 1 |
| Indeno(1,2,3-cd)pyrene | 37 | J | ug/kg | 160 | 28. | 1 |
| Pyrene | 140 | | ug/kg | 120 | 20. | 1 |
| Dibenzofuran | ND | | ug/kg | 200 | 19. | 1 |
| Pentachlorophenol | ND | | ug/kg | 160 | 45. | 1 |
| Phenol | ND | | ug/kg | 200 | 31. | 1 |
| 2-Methylphenol | ND | | ug/kg | 200 | 32. | 1 |
| 3-Methylphenol/4-Methylphenol | ND | | ug/kg | 290 | 32. | 1 |

Project Name: PIERCE ARROW APARTMENTS Lab Number: L1723613

Project Number: 56831.10 **Report Date:** 07/19/17

SAMPLE RESULTS

Lab ID: Date Collected: 07/11/17 10:30

Client ID: SP-3-1-8-071117 Date Received: 07/11/17 Sample Location: BUFFALO, NY Field Prep: Not Specified

Parameter Result Qualifier Units RL MDL Dilution Factor

Semivolatile Organics by GC/MS - Westborough Lab

| Surrogate | % Recovery | Acceptance
Qualifier Criteria |
|----------------------|------------|----------------------------------|
| 2-Fluorophenol | 44 | 25-120 |
| Phenol-d6 | 50 | 10-120 |
| Nitrobenzene-d5 | 48 | 23-120 |
| 2-Fluorobiphenyl | 54 | 30-120 |
| 2,4,6-Tribromophenol | 99 | 10-136 |
| 4-Terphenyl-d14 | 64 | 18-120 |



L1723613

07/19/17

Project Name: PIERCE ARROW APARTMENTS

Project Number: 56831.10

SAMPLE RESULTS

Lab Number:

Report Date:

Lab ID: L1723613-07 Date Collected: 07/11/17 11:15 Date Received: Client ID: SP-5-1-8-071117 07/11/17

Sample Location: Field Prep: BUFFALO, NY Not Specified Extraction Method: EPA 3546

Matrix: Soil Extraction Date: 07/14/17 08:04 Analytical Method: 1,8270D Analytical Date: 07/17/17 17:10

Analyst: RC Percent Solids: 78%

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|------------|-----------|-------|-----|-----|-----------------|
| Semivolatile Organics by GC/MS - Westbe | orough Lab | | | | | |
| Acenaphthene | ND | | ug/kg | 160 | 21. | 1 |
| Hexachlorobenzene | ND | | ug/kg | 120 | 23. | 1 |
| Fluoranthene | 73 | J | ug/kg | 120 | 24. | 1 |
| Naphthalene | 26 | J | ug/kg | 210 | 25. | 1 |
| Benzo(a)anthracene | 35 | J | ug/kg | 120 | 23. | 1 |
| Benzo(a)pyrene | ND | | ug/kg | 160 | 50. | 1 |
| Benzo(b)fluoranthene | 40 | J | ug/kg | 120 | 35. | 1 |
| Benzo(k)fluoranthene | ND | | ug/kg | 120 | 33. | 1 |
| Chrysene | 37 | J | ug/kg | 120 | 22. | 1 |
| Acenaphthylene | ND | | ug/kg | 160 | 32. | 1 |
| Anthracene | ND | | ug/kg | 120 | 40. | 1 |
| Benzo(ghi)perylene | ND | | ug/kg | 160 | 24. | 1 |
| Fluorene | ND | | ug/kg | 210 | 20. | 1 |
| Phenanthrene | 64 | J | ug/kg | 120 | 25. | 1 |
| Dibenzo(a,h)anthracene | ND | | ug/kg | 120 | 24. | 1 |
| Indeno(1,2,3-cd)pyrene | ND | | ug/kg | 160 | 29. | 1 |
| Pyrene | 61 | J | ug/kg | 120 | 20. | 1 |
| Dibenzofuran | ND | | ug/kg | 210 | 20. | 1 |
| Pentachlorophenol | ND | | ug/kg | 160 | 46. | 1 |
| Phenol | ND | | ug/kg | 210 | 31. | 1 |
| 2-Methylphenol | ND | | ug/kg | 210 | 32. | 1 |
| 3-Methylphenol/4-Methylphenol | ND | | ug/kg | 300 | 32. | 1 |

Project Name: PIERCE ARROW APARTMENTS Lab Number: L1723613

Project Number: 56831.10 **Report Date:** 07/19/17

SAMPLE RESULTS

Lab ID: L1723613-07 Date Collected: 07/11/17 11:15

Client ID: SP-5-1-8-071117 Date Received: 07/11/17 Sample Location: BUFFALO, NY Field Prep: Not Specified

Parameter Result Qualifier Units RL MDL Dilution Factor

Semivolatile Organics by GC/MS - Westborough Lab

| Surrogate | % Recovery | Acceptance
Qualifier Criteria |
|----------------------|------------|----------------------------------|
| 2-Fluorophenol | 83 | 25-120 |
| Phenol-d6 | 88 | 10-120 |
| Nitrobenzene-d5 | 87 | 23-120 |
| 2-Fluorobiphenyl | 82 | 30-120 |
| 2,4,6-Tribromophenol | 107 | 10-136 |
| 4-Terphenyl-d14 | 67 | 18-120 |



L1723613

07/19/17

Project Name: PIERCE ARROW APARTMENTS

07/17/17 17:36

Project Number: 56831.10

SAMPLE RESULTS

Lab Number:

Report Date:

Lab ID: L1723613-09 Date Collected: 07/11/17 11:40

Date Received: Client ID: 07/11/17 SP-6-0-1-071117 Sample Location: Field Prep: BUFFALO, NY Not Specified

Extraction Method: EPA 3546 Matrix: Soil Extraction Date: 07/14/17 08:04 Analytical Method: 1,8270D

Analyst: RC Percent Solids: 87%

Analytical Date:

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---------------------------------------|---------------|-----------|-------|-----|-----|-----------------|
| Semivolatile Organics by GC/MS - Wes | stborough Lab | | | | | |
| Acenaphthene | 340 | | ug/kg | 150 | 20. | 1 |
| · · · · · · · · · · · · · · · · · · · | | | | | | |
| Hexachlorobenzene | ND | | ug/kg | 120 | 22. | 1 |
| Fluoranthene | 5200 | | ug/kg | 120 | 22. | 1 |
| Naphthalene | 110 | J | ug/kg | 190 | 23. | 1 |
| Benzo(a)anthracene | 2300 | | ug/kg | 120 | 22. | 1 |
| Benzo(a)pyrene | 2100 | | ug/kg | 150 | 47. | 1 |
| Benzo(b)fluoranthene | 3100 | | ug/kg | 120 | 32. | 1 |
| Benzo(k)fluoranthene | 950 | | ug/kg | 120 | 31. | 1 |
| Chrysene | 2400 | | ug/kg | 120 | 20. | 1 |
| Acenaphthylene | ND | | ug/kg | 150 | 30. | 1 |
| Anthracene | 600 | | ug/kg | 120 | 37. | 1 |
| Benzo(ghi)perylene | 1300 | | ug/kg | 150 | 22. | 1 |
| Fluorene | 250 | | ug/kg | 190 | 19. | 1 |
| Phenanthrene | 3200 | | ug/kg | 120 | 23. | 1 |
| Dibenzo(a,h)anthracene | 350 | | ug/kg | 120 | 22. | 1 |
| Indeno(1,2,3-cd)pyrene | 1400 | | ug/kg | 150 | 27. | 1 |
| Pyrene | 4200 | | ug/kg | 120 | 19. | 1 |
| Dibenzofuran | 170 | J | ug/kg | 190 | 18. | 1 |
| Pentachlorophenol | ND | | ug/kg | 150 | 42. | 1 |
| Phenol | ND | | ug/kg | 190 | 29. | 1 |
| 2-Methylphenol | ND | | ug/kg | 190 | 30. | 1 |
| 3-Methylphenol/4-Methylphenol | ND | | ug/kg | 280 | 30. | 1 |

Project Name: PIERCE ARROW APARTMENTS Lab Number: L1723613

Project Number: 56831.10 **Report Date:** 07/19/17

SAMPLE RESULTS

Lab ID: Date Collected: 07/11/17 11:40

Client ID: SP-6-0-1-071117 Date Received: 07/11/17 Sample Location: BUFFALO, NY Field Prep: Not Specified

Parameter Result Qualifier Units RL MDL Dilution Factor

Semivolatile Organics by GC/MS - Westborough Lab

| Surrogate | % Recovery | Acceptance
Qualifier Criteria |
|----------------------|------------|----------------------------------|
| 2-Fluorophenol | 67 | 25-120 |
| Phenol-d6 | 71 | 10-120 |
| Nitrobenzene-d5 | 82 | 23-120 |
| 2-Fluorobiphenyl | 76 | 30-120 |
| 2,4,6-Tribromophenol | 84 | 10-136 |
| 4-Terphenyl-d14 | 71 | 18-120 |



L1723613

07/19/17

Project Name: PIERCE ARROW APARTMENTS

L1723613-11

SP-7-4-8-071117

BUFFALO, NY

Project Number: 56831.10

Lab ID:

Client ID:

Sample Location:

SAMPLE RESULTS

Date Collected: 07/11/17 12:30

AMPLE RESULTS

Lab Number:

Report Date:

Date Received: 07/11/17
Field Prep: Not Specified
Extraction Method: EPA 3546

Extraction Date: 07/14/17 08:06

Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 07/17/17 18:02

Analyst: RC Percent Solids: 84%

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|--|--------|-----------|-------|-----|-----|-----------------|
| Semivolatile Organics by GC/MS - Westborough Lab | | | | | | |
| Acceptable | ND | | | 400 | 20 | 4 |
| Acenaphthene | | | ug/kg | 160 | 20. | 1 |
| Hexachlorobenzene | ND | | ug/kg | 120 | 22. | 1 |
| Fluoranthene | 35 | J | ug/kg | 120 | 23. | 1 |
| Naphthalene | ND | | ug/kg | 200 | 24. | 1 |
| Benzo(a)anthracene | ND | | ug/kg | 120 | 22. | 1 |
| Benzo(a)pyrene | ND | | ug/kg | 160 | 48. | 1 |
| Benzo(b)fluoranthene | ND | | ug/kg | 120 | 33. | 1 |
| Benzo(k)fluoranthene | ND | | ug/kg | 120 | 32. | 1 |
| Chrysene | ND | | ug/kg | 120 | 20. | 1 |
| Acenaphthylene | ND | | ug/kg | 160 | 30. | 1 |
| Anthracene | ND | | ug/kg | 120 | 38. | 1 |
| Benzo(ghi)perylene | ND | | ug/kg | 160 | 23. | 1 |
| Fluorene | ND | | ug/kg | 200 | 19. | 1 |
| Phenanthrene | ND | | ug/kg | 120 | 24. | 1 |
| Dibenzo(a,h)anthracene | ND | | ug/kg | 120 | 23. | 1 |
| Indeno(1,2,3-cd)pyrene | ND | | ug/kg | 160 | 28. | 1 |
| Pyrene | 37 | J | ug/kg | 120 | 20. | 1 |
| Dibenzofuran | ND | | ug/kg | 200 | 19. | 1 |
| Pentachlorophenol | ND | | ug/kg | 160 | 43. | 1 |
| Phenol | ND | | ug/kg | 200 | 30. | 1 |
| 2-Methylphenol | ND | | ug/kg | 200 | 31. | 1 |
| 3-Methylphenol/4-Methylphenol | ND | | ug/kg | 280 | 31. | 1 |

Project Name: PIERCE ARROW APARTMENTS Lab Number: L1723613

Project Number: 56831.10 **Report Date:** 07/19/17

SAMPLE RESULTS

Lab ID: L1723613-11 Date Collected: 07/11/17 12:30

Client ID: SP-7-4-8-071117 Date Received: 07/11/17 Sample Location: BUFFALO, NY Field Prep: Not Specified

Parameter Result Qualifier Units RL MDL Dilution Factor

Semivolatile Organics by GC/MS - Westborough Lab

| Surrogate | % Recovery | Acceptance
Qualifier Criteria |
|----------------------|------------|----------------------------------|
| 2-Fluorophenol | 66 | 25-120 |
| Phenol-d6 | 71 | 10-120 |
| Nitrobenzene-d5 | 74 | 23-120 |
| 2-Fluorobiphenyl | 66 | 30-120 |
| 2,4,6-Tribromophenol | 82 | 10-136 |
| 4-Terphenyl-d14 | 57 | 18-120 |



L1723613

07/19/17

Project Name: PIERCE ARROW APARTMENTS

L1723613-13

BUFFALO, NY

SP-8-0-1-071117

Project Number: 56831.10

Lab ID:

Client ID:

Sample Location:

SAMPLE RESULTS

Date Collected: 07/11/17 13:00

Lab Number:

Report Date:

Date Received: 07/11/17 T3.00

Date Received: 07/11/17 Field Prep: Not Specified

Extraction Method:EPA 3546

Extraction Date: 07/14/17 08:06

Matrix: Soil
Analytical Method: 1,8270D

Analytical Date: 07/17/17 18:28

Analyst: RC Percent Solids: 91%

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor | |
|--|--------|-----------|-------|-----|-----|-----------------|--|
| Semivolatile Organics by GC/MS - Westborough Lab | | | | | | | |
| Acenaphthene | ND | | ug/kg | 140 | 18. | 1 | |
| Hexachlorobenzene | ND | | ug/kg | 110 | 20. | 1 | |
| Fluoranthene | 240 | | ug/kg | 110 | 20. | 1 | |
| Naphthalene | ND | | ug/kg | 180 | 22. | 1 | |
| Benzo(a)anthracene | 120 | | ug/kg | 110 | 20. | 1 | |
| Benzo(a)pyrene | 120 | J | ug/kg | 140 | 44. | 1 | |
| Benzo(b)fluoranthene | 180 | | ug/kg | 110 | 30. | 1 | |
| Benzo(k)fluoranthene | 66 | J | ug/kg | 110 | 29. | 1 | |
| Chrysene | 130 | | ug/kg | 110 | 19. | 1 | |
| Acenaphthylene | ND | | ug/kg | 140 | 28. | 1 | |
| Anthracene | ND | | ug/kg | 110 | 35. | 1 | |
| Benzo(ghi)perylene | 110 | J | ug/kg | 140 | 21. | 1 | |
| Fluorene | ND | | ug/kg | 180 | 17. | 1 | |
| Phenanthrene | 120 | | ug/kg | 110 | 22. | 1 | |
| Dibenzo(a,h)anthracene | 24 | J | ug/kg | 110 | 21. | 1 | |
| Indeno(1,2,3-cd)pyrene | 86 | J | ug/kg | 140 | 25. | 1 | |
| Pyrene | 230 | | ug/kg | 110 | 18. | 1 | |
| Dibenzofuran | ND | | ug/kg | 180 | 17. | 1 | |
| Pentachlorophenol | ND | | ug/kg | 140 | 39. | 1 | |
| Phenol | ND | | ug/kg | 180 | 27. | 1 | |
| 2-Methylphenol | ND | | ug/kg | 180 | 28. | 1 | |
| 3-Methylphenol/4-Methylphenol | ND | | ug/kg | 260 | 28. | 1 | |
| | | | | | | | |

Project Name: PIERCE ARROW APARTMENTS Lab Number: L1723613

Project Number: 56831.10 **Report Date:** 07/19/17

SAMPLE RESULTS

Date Collected: 07/11/17 13:00

Client ID: SP-8-0-1-071117 Date Received: 07/11/17 Sample Location: BUFFALO, NY Field Prep: Not Specified

Parameter Result Qualifier Units RL MDL Dilution Factor

Semivolatile Organics by GC/MS - Westborough Lab

L1723613-13

Lab ID:

| Surrogate | % Recovery | Acceptance
Qualifier Criteria |
|----------------------|------------|----------------------------------|
| 2-Fluorophenol | 37 | 25-120 |
| Phenol-d6 | 51 | 10-120 |
| Nitrobenzene-d5 | 59 | 23-120 |
| 2-Fluorobiphenyl | 56 | 30-120 |
| 2,4,6-Tribromophenol | 25 | 10-136 |
| 4-Terphenyl-d14 | 51 | 18-120 |



L1723613

07/19/17

Project Name: PIERCE ARROW APARTMENTS

Project Number: 56831.10

SAMPLE RESULTS

Date Collected: 07/11/17 13:20

Lab Number:

Report Date:

Lab ID: L1723613-15 Date Collected: Client ID: SP-9-0-13-071117 Date Received:

Date Received: 07/11/17
Field Prep: Not Specified

Sample Location: BUFFALO, NY

Extraction Method: EPA 3546

Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 07/17/17 18:54

Extraction Date: 07/14/17 08:06

Analyst: RC Percent Solids: 85%

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|--|--------|-----------|-------|-----|-----|-----------------|
| Semivolatile Organics by GC/MS - Westborough Lab | | | | | | |
| Acenaphthene | 38 | J | ug/kg | 150 | 20. | 1 |
| Hexachlorobenzene | ND | <u> </u> | | | | |
| | | | ug/kg | 110 | 21. | 1 |
| Fluoranthene | 960 | | ug/kg | 110 | 22. | 1 |
| Naphthalene | 150 | J | ug/kg | 190 | 23. | 1 |
| Benzo(a)anthracene | 490 | | ug/kg | 110 | 21. | 1 |
| Benzo(a)pyrene | 390 | | ug/kg | 150 | 46. | 1 |
| Benzo(b)fluoranthene | 510 | | ug/kg | 110 | 32. | 1 |
| Benzo(k)fluoranthene | 180 | | ug/kg | 110 | 30. | 1 |
| Chrysene | 530 | | ug/kg | 110 | 20. | 1 |
| Acenaphthylene | 50 | J | ug/kg | 150 | 29. | 1 |
| Anthracene | 110 | | ug/kg | 110 | 37. | 1 |
| Benzo(ghi)perylene | 290 | | ug/kg | 150 | 22. | 1 |
| Fluorene | 54 | J | ug/kg | 190 | 18. | 1 |
| Phenanthrene | 630 | | ug/kg | 110 | 23. | 1 |
| Dibenzo(a,h)anthracene | 79 | J | ug/kg | 110 | 22. | 1 |
| Indeno(1,2,3-cd)pyrene | 270 | | ug/kg | 150 | 26. | 1 |
| Pyrene | 1000 | | ug/kg | 110 | 19. | 1 |
| Dibenzofuran | 87 | J | ug/kg | 190 | 18. | 1 |
| Pentachlorophenol | ND | | ug/kg | 150 | 42. | 1 |
| Phenol | ND | | ug/kg | 190 | 29. | 1 |
| 2-Methylphenol | ND | | ug/kg | 190 | 30. | 1 |
| 3-Methylphenol/4-Methylphenol | ND | | ug/kg | 270 | 30. | 1 |

Project Name: PIERCE ARROW APARTMENTS Lab Number: L1723613

Project Number: 56831.10 **Report Date:** 07/19/17

SAMPLE RESULTS

Lab ID: L1723613-15 Date Collected: 07/11/17 13:20

Client ID: SP-9-0-13-071117 Date Received: 07/11/17 Sample Location: BUFFALO, NY Field Prep: Not Specified

Parameter Result Qualifier Units RL MDL Dilution Factor

| Surrogate | % Recovery | Acceptance
Qualifier Criteria |
|----------------------|------------|----------------------------------|
| 2-Fluorophenol | 45 | 25-120 |
| Phenol-d6 | 50 | 10-120 |
| Nitrobenzene-d5 | 61 | 23-120 |
| 2-Fluorobiphenyl | 60 | 30-120 |
| 2,4,6-Tribromophenol | 60 | 10-136 |
| 4-Terphenyl-d14 | 51 | 18-120 |



L1723613

07/19/17

Project Name: PIERCE ARROW APARTMENTS

Project Number: 56831.10

SAMPLE RESULTS

Date Collected: 07/11/17 13:50

Lab Number:

Report Date:

Lab ID: L1723613-17

Date Received: Client ID: SP-10-0-4.5-071117 07/11/17 Sample Location: Field Prep: BUFFALO, NY Not Specified Extraction Method: EPA 3546

Matrix: Soil Extraction Date: 07/14/17 08:06 Analytical Method: 1,8270D Analytical Date: 07/17/17 19:20

Analyst: RC Percent Solids: 92%

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor | | | |
|--|--------|-----------|-------|-----|-----|-----------------|--|--|--|
| Semivolatile Organics by GC/MS - Westborough Lab | | | | | | | | | |
| Assessables | 000 | | | 440 | 40 | | | | |
| Acenaphthene | 280 | | ug/kg | 140 | 19. | 1 | | | |
| Hexachlorobenzene | ND | | ug/kg | 110 | 20. | 1 | | | |
| Fluoranthene | 4800 | | ug/kg | 110 | 21. | 1 | | | |
| Naphthalene | 810 | | ug/kg | 180 | 22. | 1 | | | |
| Benzo(a)anthracene | 2200 | | ug/kg | 110 | 20. | 1 | | | |
| Benzo(a)pyrene | 2500 | | ug/kg | 140 | 44. | 1 | | | |
| Benzo(b)fluoranthene | 3900 | | ug/kg | 110 | 30. | 1 | | | |
| Benzo(k)fluoranthene | 1400 | | ug/kg | 110 | 29. | 1 | | | |
| Chrysene | 2700 | | ug/kg | 110 | 19. | 1 | | | |
| Acenaphthylene | 390 | | ug/kg | 140 | 28. | 1 | | | |
| Anthracene | 740 | | ug/kg | 110 | 35. | 1 | | | |
| Benzo(ghi)perylene | 1800 | | ug/kg | 140 | 21. | 1 | | | |
| Fluorene | 310 | | ug/kg | 180 | 18. | 1 | | | |
| Phenanthrene | 3200 | | ug/kg | 110 | 22. | 1 | | | |
| Dibenzo(a,h)anthracene | 440 | | ug/kg | 110 | 21. | 1 | | | |
| Indeno(1,2,3-cd)pyrene | 2100 | | ug/kg | 140 | 25. | 1 | | | |
| Pyrene | 4000 | | ug/kg | 110 | 18. | 1 | | | |
| Dibenzofuran | 420 | | ug/kg | 180 | 17. | 1 | | | |
| Pentachlorophenol | ND | | ug/kg | 140 | 40. | 1 | | | |
| Phenol | ND | | ug/kg | 180 | 27. | 1 | | | |
| 2-Methylphenol | ND | | ug/kg | 180 | 28. | 1 | | | |
| 3-Methylphenol/4-Methylphenol | ND | | ug/kg | 260 | 28. | 1 | | | |

Project Name: PIERCE ARROW APARTMENTS Lab Number: L1723613

Project Number: 56831.10 **Report Date:** 07/19/17

SAMPLE RESULTS

Lab ID: L1723613-17 Date Collected: 07/11/17 13:50

Client ID: SP-10-0-4.5-071117 Date Received: 07/11/17 Sample Location: BUFFALO, NY Field Prep: Not Specified

Parameter Result Qualifier Units RL MDL Dilution Factor

| Surrogate | % Recovery | Acceptance
Qualifier Criteria |
|----------------------|------------|----------------------------------|
| 2-Fluorophenol | 47 | 25-120 |
| Phenol-d6 | 51 | 10-120 |
| Nitrobenzene-d5 | 77 | 23-120 |
| 2-Fluorobiphenyl | 60 | 30-120 |
| 2,4,6-Tribromophenol | 73 | 10-136 |
| 4-Terphenyl-d14 | 61 | 18-120 |



L1723613

07/19/17

Project Name: PIERCE ARROW APARTMENTS

07/17/17 19:46

Project Number: 56831.10

SAMPLE RESULTS

Date Collected: 07/11/17 14:20

Lab Number:

Report Date:

Lab ID: L1723613-19

Date Received: Client ID: SP-11-0.5-4.5-071117 07/11/17 Sample Location: Field Prep: BUFFALO, NY Not Specified

Extraction Method: EPA 3546 Matrix: Soil Extraction Date: 07/14/17 08:06 Analytical Method: 1,8270D Analytical Date:

Analyst: RC Percent Solids: 85%

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor | | | |
|--|--------|-----------|--------|-----|-----|-----------------|--|--|--|
| Semivolatile Organics by GC/MS - Westborough Lab | | | | | | | | | |
| Accomplete | ND | | a/l.ca | 150 | 20. | 1 | | | |
| Acenaphthene | | | ug/kg | | | | | | |
| Hexachlorobenzene | ND | | ug/kg | 120 | 22. | 1 | | | |
| Fluoranthene | 280 | | ug/kg | 120 | 22. | 1 | | | |
| Naphthalene | 540 | | ug/kg | 190 | 23. | 1 | | | |
| Benzo(a)anthracene | 190 | | ug/kg | 120 | 22. | 1 | | | |
| Benzo(a)pyrene | 150 | | ug/kg | 150 | 47. | 1 | | | |
| Benzo(b)fluoranthene | 210 | | ug/kg | 120 | 32. | 1 | | | |
| Benzo(k)fluoranthene | 56 | J | ug/kg | 120 | 31. | 1 | | | |
| Chrysene | 270 | | ug/kg | 120 | 20. | 1 | | | |
| Acenaphthylene | ND | | ug/kg | 150 | 30. | 1 | | | |
| Anthracene | 40 | J | ug/kg | 120 | 37. | 1 | | | |
| Benzo(ghi)perylene | 130 | J | ug/kg | 150 | 22. | 1 | | | |
| Fluorene | 33 | J | ug/kg | 190 | 19. | 1 | | | |
| Phenanthrene | 410 | | ug/kg | 120 | 23. | 1 | | | |
| Dibenzo(a,h)anthracene | 38 | J | ug/kg | 120 | 22. | 1 | | | |
| Indeno(1,2,3-cd)pyrene | 110 | J | ug/kg | 150 | 27. | 1 | | | |
| Pyrene | 290 | | ug/kg | 120 | 19. | 1 | | | |
| Dibenzofuran | 180 | J | ug/kg | 190 | 18. | 1 | | | |
| Pentachlorophenol | ND | | ug/kg | 150 | 42. | 1 | | | |
| Phenol | ND | | ug/kg | 190 | 29. | 1 | | | |
| 2-Methylphenol | ND | | ug/kg | 190 | 30. | 1 | | | |
| 3-Methylphenol/4-Methylphenol | ND | | ug/kg | 280 | 30. | 1 | | | |

Project Name: PIERCE ARROW APARTMENTS Lab Number: L1723613

Project Number: 56831.10 **Report Date:** 07/19/17

SAMPLE RESULTS

Lab ID: Date Collected: 07/11/17 14:20

Client ID: SP-11-0.5-4.5-071117 Date Received: 07/11/17 Sample Location: BUFFALO, NY Field Prep: Not Specified

Parameter Result Qualifier Units RL MDL Dilution Factor

| Surrogate | % Recovery | Acceptance
Qualifier Criteria |
|----------------------|------------|----------------------------------|
| 2-Fluorophenol | 56 | 25-120 |
| Phenol-d6 | 62 | 10-120 |
| Nitrobenzene-d5 | 78 | 23-120 |
| 2-Fluorobiphenyl | 85 | 30-120 |
| 2,4,6-Tribromophenol | 79 | 10-136 |
| 4-Terphenyl-d14 | 64 | 18-120 |



L1723613

07/19/17

Project Name: PIERCE ARROW APARTMENTS

L1723613-21

SP-12-0-3-071117

Project Number: 56831.10

Lab ID:

Client ID:

SAMPLE RESULTS

Date Collected: 07/11/17 14:45

Date Received: 07/11/17
Field Prep: Not Specified
Extraction Method: EPA 3546

Lab Number:

Report Date:

Extraction Date: 07/14/17 08:06

Sample Location: BUFFALO, NY

Matrix: Soil

Analytical Method: 1,8270D
Analytical Date: 07/17/17 20:12

Analyst: RC Percent Solids: 77%

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|------------------------------------|----------------|-----------|-------|-----|-----|-----------------|
| Semivolatile Organics by GC/MS - W | estborough Lab | | | | | |
| Acenaphthene | 47 | J | ug/kg | 170 | 22. | 1 |
| Hexachlorobenzene | ND | | ug/kg | 130 | 24. | 1 |
| Fluoranthene | 830 | | ug/kg | 130 | 24. | 1 |
| Naphthalene | 510 | | ug/kg | 210 | 26. | 1 |
| Benzo(a)anthracene | 390 | | ug/kg | 130 | 24. | 1 |
| Benzo(a)pyrene | 350 | | ug/kg | 170 | 52. | 1 |
| Benzo(b)fluoranthene | 520 | | ug/kg | 130 | 36. | 1 |
| Benzo(k)fluoranthene | 160 | | ug/kg | 130 | 34. | 1 |
| Chrysene | 440 | | ug/kg | 130 | 22. | 1 |
| Acenaphthylene | ND | | ug/kg | 170 | 33. | 1 |
| Anthracene | 110 | J | ug/kg | 130 | 42. | 1 |
| Benzo(ghi)perylene | 190 | | ug/kg | 170 | 25. | 1 |
| Fluorene | 63 | J | ug/kg | 210 | 21. | 1 |
| Phenanthrene | 820 | | ug/kg | 130 | 26. | 1 |
| Dibenzo(a,h)anthracene | 60 | J | ug/kg | 130 | 25. | 1 |
| Indeno(1,2,3-cd)pyrene | 210 | | ug/kg | 170 | 30. | 1 |
| Pyrene | 690 | | ug/kg | 130 | 21. | 1 |
| Dibenzofuran | 200 | J | ug/kg | 210 | 20. | 1 |
| Pentachlorophenol | ND | | ug/kg | 170 | 47. | 1 |
| Phenol | ND | | ug/kg | 210 | 32. | 1 |
| 2-Methylphenol | ND | | ug/kg | 210 | 33. | 1 |
| 3-Methylphenol/4-Methylphenol | ND | | ug/kg | 310 | 33. | 1 |
| | | | | | | |

Project Name: Lab Number: PIERCE ARROW APARTMENTS L1723613

Project Number: Report Date: 56831.10 07/19/17

SAMPLE RESULTS

Lab ID: Date Collected: 07/11/17 14:45 L1723613-21

Date Received: Client ID: SP-12-0-3-071117 07/11/17 Field Prep: Sample Location: BUFFALO, NY Not Specified

RL Parameter Result Qualifier Units MDL **Dilution Factor**

| Surrogate | % Recovery | Acceptance
Qualifier Criteria |
|----------------------|------------|----------------------------------|
| 2-Fluorophenol | 52 | 25-120 |
| Phenol-d6 | 57 | 10-120 |
| Nitrobenzene-d5 | 77 | 23-120 |
| 2-Fluorobiphenyl | 64 | 30-120 |
| 2,4,6-Tribromophenol | 77 | 10-136 |
| 4-Terphenyl-d14 | 49 | 18-120 |



L1723613

07/19/17

Project Name: PIERCE ARROW APARTMENTS

L1723613-23

BUFFALO, NY

SP-13-0-4.5-071117

Project Number: 56831.10

Lab ID:

Client ID:

Sample Location:

SAMPLE RESULTS

Date Collected: 07/11/17 15:15

Lab Number:

Report Date:

Date Received: 07/11/17 Field Prep: Not Specified Extraction Method: EPA 3546

Extraction Date: 07/14/17 08:06

Matrix: Soil Analytical Method: 1,8270D

Analytical Date: 07/17/17 20:37

Analyst: RC Percent Solids: 77%

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor | | |
|--|--------|-----------|-------|-----|-----|-----------------|--|--|
| Semivolatile Organics by GC/MS - Westborough Lab | | | | | | | | |
| Acenaphthene | ND | | ug/kg | 170 | 22. | 1 | | |
| Hexachlorobenzene | ND | | ug/kg | 130 | 24. | 1 | | |
| Fluoranthene | 240 | | ug/kg | 130 | 24. | 1 | | |
| Naphthalene | 110 | J | ug/kg | 210 | 26. | 1 | | |
| Benzo(a)anthracene | 280 | | ug/kg | 130 | 24. | 1 | | |
| Benzo(a)pyrene | 100 | J | ug/kg | 170 | 52. | 1 | | |
| Benzo(b)fluoranthene | 120 | J | ug/kg | 130 | 36. | 1 | | |
| Benzo(k)fluoranthene | 35 | J | ug/kg | 130 | 34. | 1 | | |
| Chrysene | 260 | | ug/kg | 130 | 22. | 1 | | |
| Acenaphthylene | ND | | ug/kg | 170 | 33. | 1 | | |
| Anthracene | 140 | | ug/kg | 130 | 42. | 1 | | |
| Benzo(ghi)perylene | 63 | J | ug/kg | 170 | 25. | 1 | | |
| Fluorene | ND | | ug/kg | 210 | 21. | 1 | | |
| Phenanthrene | 150 | | ug/kg | 130 | 26. | 1 | | |
| Dibenzo(a,h)anthracene | ND | | ug/kg | 130 | 25. | 1 | | |
| Indeno(1,2,3-cd)pyrene | 55 | J | ug/kg | 170 | 30. | 1 | | |
| Pyrene | 700 | | ug/kg | 130 | 21. | 1 | | |
| Dibenzofuran | ND | | ug/kg | 210 | 20. | 1 | | |
| Pentachlorophenol | ND | | ug/kg | 170 | 47. | 1 | | |
| Phenol | ND | | ug/kg | 210 | 32. | 1 | | |
| 2-Methylphenol | ND | | ug/kg | 210 | 33. | 1 | | |
| 3-Methylphenol/4-Methylphenol | 140 | J | ug/kg | 310 | 34. | 1 | | |

Project Name: PIERCE ARROW APARTMENTS Lab Number: L1723613

Project Number: 56831.10 **Report Date:** 07/19/17

SAMPLE RESULTS

Lab ID: L1723613-23 Date Collected: 07/11/17 15:15

Client ID: SP-13-0-4.5-071117 Date Received: 07/11/17 Sample Location: BUFFALO, NY Field Prep: Not Specified

Parameter Result Qualifier Units RL MDL Dilution Factor

| Surrogate | % Recovery | Acceptance
Qualifier Criteria |
|----------------------|------------|----------------------------------|
| 2-Fluorophenol | 49 | 25-120 |
| Phenol-d6 | 66 | 10-120 |
| Nitrobenzene-d5 | 81 | 23-120 |
| 2-Fluorobiphenyl | 70 | 30-120 |
| 2,4,6-Tribromophenol | 53 | 10-136 |
| 4-Terphenyl-d14 | 66 | 18-120 |



Project Name: Lab Number: PIERCE ARROW APARTMENTS L1723613

Project Number: Report Date: 56831.10 07/19/17

SAMPLE RESULTS

07/18/17 05:59

Lab ID: L1723613-25 Date Collected: 07/11/17 15:30

Client ID: Date Received: SP-9-GW-071117 07/11/17 Sample Location: Field Prep: BUFFALO, NY Not Specified Extraction Method: EPA 3510C

Matrix: Water Extraction Date: 07/14/17 04:18 Analytical Method: 1,8270D

Analyst: RC

Analytical Date:

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor | |
|--|--------|-----------|-------|-----|------|-----------------|--|
| Semivolatile Organics by GC/MS - Westborough Lab | | | | | | | |
| Dibenzofuran | ND | | ug/l | 1.9 | 0.63 | 1 | |
| Phenol | ND | | ug/l | 4.8 | 1.8 | 1 | |
| 2-Methylphenol | ND | | ug/l | 4.8 | 0.98 | 1 | |
| 3-Methylphenol/4-Methylphenol | ND | | ug/l | 4.8 | 1.1 | 1 | |

| Surrogate | % Recovery | Acceptance
Qualifier Criteria |
|----------------------|------------|----------------------------------|
| 2-Fluorophenol | 30 | 21-120 |
| Phenol-d6 | 23 | 10-120 |
| Nitrobenzene-d5 | 57 | 23-120 |
| 2-Fluorobiphenyl | 54 | 15-120 |
| 2,4,6-Tribromophenol | 60 | 10-120 |
| 4-Terphenyl-d14 | 48 | 41-149 |



L1723613

07/19/17

07/14/17 04:18

07/11/17

Project Name: PIERCE ARROW APARTMENTS

Project Number: 56831.10

SAMPLE RESULTS

Lab Number:

Report Date:

Extraction Date:

Lab ID: Date Collected: 07/11/17 15:30 L1723613-25 Date Received:

Client ID: SP-9-GW-071117 Sample Location: BUFFALO, NY

Field Prep: Not Specified Extraction Method: EPA 3510C

Matrix: Water

Analytical Method: 1,8270D-SIM Analytical Date: 07/15/17 15:57

Analyst: KL

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor | | |
|--|--------|-----------|--------------|------|------|-----------------|--|--|
| Semivolatile Organics by GC/MS-SIM - Westborough Lab | | | | | | | | |
| Acenaphthene | ND | | ug/l | 0.10 | 0.03 | 1 | | |
| Fluoranthene | 0.93 | | ug/l
ug/l | 0.10 | 0.03 | 1 | | |
| Naphthalene | 0.10 | | ug/l | 0.10 | 0.04 | 1 | | |
| Benzo(a)anthracene | 0.52 | | ug/l | 0.10 | 0.02 |
1 | | |
| Benzo(a)pyrene | 0.59 | | ug/l | 0.10 | 0.04 | 1 | | |
| Benzo(b)fluoranthene | 0.86 | | ug/l | 0.10 | 0.02 | 1 | | |
| Benzo(k)fluoranthene | 0.29 | | ug/l | 0.10 | 0.04 | 1 | | |
| Chrysene | 0.63 | | ug/l | 0.10 | 0.04 | 1 | | |
| Acenaphthylene | 0.07 | J | ug/l | 0.10 | 0.03 | 1 | | |
| Anthracene | 0.10 | | ug/l | 0.10 | 0.03 | 1 | | |
| Benzo(ghi)perylene | 0.55 | | ug/l | 0.10 | 0.04 | 1 | | |
| Fluorene | 0.04 | J | ug/l | 0.10 | 0.04 | 1 | | |
| Phenanthrene | 0.41 | | ug/l | 0.10 | 0.01 | 1 | | |
| Dibenzo(a,h)anthracene | 0.11 | | ug/l | 0.10 | 0.04 | 1 | | |
| Indeno(1,2,3-cd)pyrene | 0.53 | | ug/l | 0.10 | 0.04 | 1 | | |
| Pyrene | 0.90 | | ug/l | 0.10 | 0.04 | 1 | | |
| Pentachlorophenol | ND | | ug/l | 0.77 | 0.21 | 1 | | |
| Hexachlorobenzene | ND | | ug/l | 0.77 | 0.03 | 1 | | |

| Surrogate | % Recovery | Acceptance
Qualifier Criteria | |
|----------------------|------------|----------------------------------|--|
| 2-Fluorophenol | 39 | 21-120 | |
| Phenol-d6 | 28 | 10-120 | |
| Nitrobenzene-d5 | 59 | 23-120 | |
| 2-Fluorobiphenyl | 64 | 15-120 | |
| 2,4,6-Tribromophenol | 64 | 10-120 | |
| 4-Terphenyl-d14 | 53 | 41-149 | |



Project Name: PIERCE ARROW APARTMENTS Lab Number: L1723613

Project Number: 56831.10 **Report Date:** 07/19/17

SAMPLE RESULTS

Lab ID: L1723613-26 D Date Collected: 07/11/17 15:45

Client ID: SP-13-GW-071117 Date Received: 07/11/17
Sample Location: BUFFALO, NY Field Prep: Not Specified
Extraction Method:EPA 3510C

Matrix: Water Extraction Method: EPA 3510C

Analytical Method: 1,8270D

Analytical Date: 07/18/17 10:15

Analyst: RC

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor | |
|--|--------|-----------|-------|-----|-----|-----------------|--|
| Semivolatile Organics by GC/MS - Westborough Lab | | | | | | | |
| Dibenzofuran | ND | | ug/l | 40 | 13. | 10 | |
| Phenol | ND | | ug/l | 100 | 38. | 10 | |
| 2-Methylphenol | ND | | ug/l | 100 | 20. | 10 | |
| 3-Methylphenol/4-Methylphenol | ND | | ug/l | 100 | 22. | 10 | |

| Surrogate | % Recovery | Qualifier | Acceptance
Criteria |
|----------------------|------------|-----------|------------------------|
| 2-Fluorophenol | 19 | Q | 21-120 |
| Phenol-d6 | 15 | | 10-120 |
| Nitrobenzene-d5 | 64 | | 23-120 |
| 2-Fluorobiphenyl | 30 | | 15-120 |
| 2,4,6-Tribromophenol | 34 | | 10-120 |
| 4-Terphenyl-d14 | 27 | Q | 41-149 |



L1723613

07/19/17

07/14/17 04:18

Project Name: PIERCE ARROW APARTMENTS

Project Number: 56831.10

Lab ID:

SAMPLE RESULTS

Lab Number:

Report Date:

Extraction Date:

D Date Collected: 07/11/17 15:45 L1723613-26

Date Received: Client ID: SP-13-GW-071117 07/11/17 Sample Location: Field Prep: BUFFALO, NY Not Specified Extraction Method: EPA 3510C

Matrix: Water

Analytical Method: 1,8270D-SIM Analytical Date: 07/17/17 11:01

Analyst: KL

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor | | |
|--|--|-----------|-------|-----|-----|-----------------|--|--|
| Semivolatile Organics by GC/MS-SIM - W | Semivolatile Organics by GC/MS-SIM - Westborough Lab | | | | | | | |
| Acenaphthene | ND | | ug/l | 20 | 7.0 | 100 | | |
| Fluoranthene | 70 | | ug/l | 20 | 7.6 | 100 | | |
| Naphthalene | ND | | ug/l | 20 | 8.6 | 100 | | |
| Benzo(a)anthracene | 120 | | ug/l | 20 | 3.6 | 100 | | |
| Benzo(a)pyrene | 36 | | ug/l | 20 | 7.8 | 100 | | |
| Benzo(b)fluoranthene | 28 | | ug/l | 20 | 3.2 | 100 | | |
| Benzo(k)fluoranthene | ND | | ug/l | 20 | 8.4 | 100 | | |
| Chrysene | 140 | | ug/l | 20 | 7.6 | 100 | | |
| Acenaphthylene | 14 | J | ug/l | 20 | 7.0 | 100 | | |
| Anthracene | 71 | | ug/l | 20 | 7.0 | 100 | | |
| Benzo(ghi)perylene | 23 | | ug/l | 20 | 8.4 | 100 | | |
| Fluorene | ND | | ug/l | 20 | 7.4 | 100 | | |
| Phenanthrene | ND | | ug/l | 20 | 3.0 | 100 | | |
| Dibenzo(a,h)anthracene | ND | | ug/l | 20 | 7.8 | 100 | | |
| Indeno(1,2,3-cd)pyrene | 9.4 | J | ug/l | 20 | 8.0 | 100 | | |
| Pyrene | 390 | | ug/l | 20 | 8.0 | 100 | | |
| Pentachlorophenol | ND | | ug/l | 160 | 44. | 100 | | |
| Hexachlorobenzene | ND | | ug/l | 160 | 6.4 | 100 | | |

| Surrogate | % Recovery | Qualifier | Acceptance
Criteria |
|----------------------|------------|-----------|------------------------|
| 2-Fluorophenol | 0 | Q | 21-120 |
| Phenol-d6 | 0 | Q | 10-120 |
| Nitrobenzene-d5 | 0 | Q | 23-120 |
| 2-Fluorobiphenyl | 0 | Q | 15-120 |
| 2,4,6-Tribromophenol | 0 | Q | 10-120 |
| 4-Terphenyl-d14 | 0 | Q | 41-149 |



L1723613

07/19/17

Project Name: PIERCE ARROW APARTMENTS

07/17/17 18:06

Project Number: 56831.10

Lab ID:

SAMPLE RESULTS

Date Collected: 07/11/17 15:50

Lab Number:

Report Date:

L1723613-27

Client ID: Date Received: SS-1-071117 07/11/17 Sample Location: Field Prep: BUFFALO, NY Not Specified Extraction Method: EPA 3546

Matrix: Soil Extraction Date: 07/14/17 09:59 Analytical Method: 1,8270D

Analyst: CB Percent Solids: 84%

Analytical Date:

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor | |
|--|--------|-----------|-------|-----|-----|-----------------|--|
| Semivolatile Organics by GC/MS - Westborough Lab | | | | | | | |
| Acenaphthene | 920 | | ug/kg | 160 | 20. | 1 | |
| Hexachlorobenzene | ND | | ug/kg | 120 | 22. | 1 | |
| Fluoranthene | 7300 | | ug/kg | 120 | 23. | 1 | |
| Naphthalene | 320 | | ug/kg | 200 | 24. | 1 | |
| Benzo(a)anthracene | 3600 | | ug/kg | 120 | 22. | 1 | |
| Benzo(a)pyrene | 2700 | | ug/kg | 160 | 48. | 1 | |
| Benzo(b)fluoranthene | 3600 | | ug/kg | 120 | 33. | 1 | |
| Benzo(k)fluoranthene | 1200 | | ug/kg | 120 | 32. | 1 | |
| Chrysene | 3100 | | ug/kg | 120 | 20. | 1 | |
| Acenaphthylene | 38 | J | ug/kg | 160 | 30. | 1 | |
| Anthracene | 1800 | | ug/kg | 120 | 38. | 1 | |
| Benzo(ghi)perylene | 1300 | | ug/kg | 160 | 23. | 1 | |
| Fluorene | 980 | | ug/kg | 200 | 19. | 1 | |
| Phenanthrene | 6400 | | ug/kg | 120 | 24. | 1 | |
| Dibenzo(a,h)anthracene | 380 | | ug/kg | 120 | 23. | 1 | |
| Indeno(1,2,3-cd)pyrene | 1600 | | ug/kg | 160 | 27. | 1 | |
| Pyrene | 5900 | | ug/kg | 120 | 20. | 1 | |
| Dibenzofuran | 580 | | ug/kg | 200 | 19. | 1 | |
| Pentachlorophenol | ND | | ug/kg | 160 | 43. | 1 | |
| Phenol | ND | | ug/kg | 200 | 30. | 1 | |
| 2-Methylphenol | ND | | ug/kg | 200 | 30. | 1 | |
| 3-Methylphenol/4-Methylphenol | ND | | ug/kg | 280 | 31. | 1 | |



Project Name: PIERCE ARROW APARTMENTS Lab Number: L1723613

Project Number: 56831.10 **Report Date:** 07/19/17

SAMPLE RESULTS

Lab ID: L1723613-27 Date Collected: 07/11/17 15:50

Client ID: SS-1-071117 Date Received: 07/11/17 Sample Location: BUFFALO, NY Field Prep: Not Specified

Parameter Result Qualifier Units RL MDL Dilution Factor

| Surrogate | % Recovery | Acceptance
Qualifier Criteria |
|----------------------|------------|----------------------------------|
| 2-Fluorophenol | 73 | 25-120 |
| Phenol-d6 | 73 | 10-120 |
| Nitrobenzene-d5 | 81 | 23-120 |
| 2-Fluorobiphenyl | 74 | 30-120 |
| 2,4,6-Tribromophenol | 115 | 10-136 |
| 4-Terphenyl-d14 | 54 | 18-120 |



L1723613

07/19/17

Project Name: PIERCE ARROW APARTMENTS

07/18/17 03:51

Project Number: 56831.10

SAMPLE RESULTS

Lab Number:

Report Date:

Lab ID: Date Collected: 07/11/17 15:55 L1723613-28

Date Received: Client ID: SS-2-071117 07/11/17 Sample Location: Field Prep: BUFFALO, NY Not Specified

Extraction Method: EPA 3546 Matrix: Soil Extraction Date: 07/14/17 09:59 Analytical Method: 1,8270D Analytical Date:

Analyst: PS Percent Solids: 84%

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor | |
|------------------------------------|----------------|-----------|-------|-----|-----|-----------------|--|
| Semivolatile Organics by GC/MS - W | estborough Lab | | | | | | |
| Acenaphthene | 23 | J | ug/kg | 160 | 20. | 1 | |
| Hexachlorobenzene | ND | | ug/kg | 120 | 22. | 1 | |
| Fluoranthene | 360 | | ug/kg | 120 | 22. | 1 | |
| Naphthalene | 31 | J | ug/kg | 200 | 24. | 1 | |
| Benzo(a)anthracene | 180 | | ug/kg | 120 | 22. | 1 | |
| Benzo(a)pyrene | 160 | | ug/kg | 160 | 48. | 1 | |
| Benzo(b)fluoranthene | 230 | | ug/kg | 120 | 33. | 1 | |
| Benzo(k)fluoranthene | 68 | J | ug/kg | 120 | 31. | 1 | |
| Chrysene | 170 | | ug/kg | 120 | 20. | 1 | |
| Acenaphthylene | ND | | ug/kg | 160 | 30. | 1 | |
| Anthracene | 50 | J | ug/kg | 120 | 38. | 1 | |
| Benzo(ghi)perylene | 110 | J | ug/kg | 160 | 23. | 1 | |
| Fluorene | 22 | J | ug/kg | 200 | 19. | 1 | |
| Phenanthrene | 230 | | ug/kg | 120 | 24. | 1 | |
| Dibenzo(a,h)anthracene | 32 | J | ug/kg | 120 | 23. | 1 | |
| Indeno(1,2,3-cd)pyrene | 130 | J | ug/kg | 160 | 27. | 1 | |
| Pyrene | 290 | | ug/kg | 120 | 19. | 1 | |
| Dibenzofuran | 20 | J | ug/kg | 200 | 18. | 1 | |
| Pentachlorophenol | ND | | ug/kg | 160 | 43. | 1 | |
| Phenol | ND | | ug/kg | 200 | 30. | 1 | |
| 2-Methylphenol | ND | | ug/kg | 200 | 30. | 1 | |
| 3-Methylphenol/4-Methylphenol | ND | | ug/kg | 280 | 31. | 1 | |

Project Name: PIERCE ARROW APARTMENTS Lab Number: L1723613

Project Number: 56831.10 **Report Date:** 07/19/17

SAMPLE RESULTS

Lab ID: L1723613-28 Date Collected: 07/11/17 15:55

Client ID: SS-2-071117 Date Received: 07/11/17 Sample Location: BUFFALO, NY Field Prep: Not Specified

Parameter Result Qualifier Units RL MDL Dilution Factor

| Surrogate | % Recovery | Acceptance
Qualifier Criteria |
|----------------------|------------|----------------------------------|
| 2-Fluorophenol | 78 | 25-120 |
| Phenol-d6 | 79 | 10-120 |
| Nitrobenzene-d5 | 91 | 23-120 |
| 2-Fluorobiphenyl | 66 | 30-120 |
| 2,4,6-Tribromophenol | 62 | 10-136 |
| 4-Terphenyl-d14 | 51 | 18-120 |



L1723613

07/11/17 16:00

Project Name: PIERCE ARROW APARTMENTS

Project Number: 56831.10

SAMPLE RESULTS

110port Bute. 07/19/17

Report Date: 07/19/17

Lab Number:

Date Collected:

Lab ID: L1723613-29
Client ID: SS-3-071117
Sample Location: BUFFALO, NY

Date Received: 07/11/17
Field Prep: Not Specified
Extraction Method:EPA 3546

Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 07/18/17.1

Extraction Date: 07/14/17 09:59

Analytical Date: 07/18/17 17:25

Analyst: PS Percent Solids: 91%

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---------------------------------------|-------------|-----------|-------|-----|-----|-----------------|
| Semivolatile Organics by GC/MS - West | borough Lab | | | | | |
| Acenaphthene | 52 | J | ug/kg | 140 | 19. | 1 |
| Hexachlorobenzene | ND | | ug/kg | 110 | 20. | 1 |
| Fluoranthene | 670 | | ug/kg | 110 | 21. | 1 |
| Naphthalene | 84 | J | ug/kg | 180 | 22. | 1 |
| Benzo(a)anthracene | 300 | | ug/kg | 110 | 20. | 1 |
| Benzo(a)pyrene | 270 | | ug/kg | 140 | 44. | 1 |
| Benzo(b)fluoranthene | 370 | | ug/kg | 110 | 30. | 1 |
| Benzo(k)fluoranthene | 130 | | ug/kg | 110 | 29. | 1 |
| Chrysene | 300 | | ug/kg | 110 | 19. | 1 |
| Acenaphthylene | ND | | ug/kg | 140 | 28. | 1 |
| Anthracene | 97 | J | ug/kg | 110 | 35. | 1 |
| Benzo(ghi)perylene | 170 | | ug/kg | 140 | 21. | 1 |
| Fluorene | 42 | J | ug/kg | 180 | 17. | 1 |
| Phenanthrene | 480 | | ug/kg | 110 | 22. | 1 |
| Dibenzo(a,h)anthracene | 42 | J | ug/kg | 110 | 21. | 1 |
| Indeno(1,2,3-cd)pyrene | 170 | | ug/kg | 140 | 25. | 1 |
| Pyrene | 530 | | ug/kg | 110 | 18. | 1 |
| Dibenzofuran | 31 | J | ug/kg | 180 | 17. | 1 |
| Pentachlorophenol | ND | | ug/kg | 140 | 40. | 1 |
| Phenol | ND | | ug/kg | 180 | 27. | 1 |
| 2-Methylphenol | ND | | ug/kg | 180 | 28. | 1 |
| 3-Methylphenol/4-Methylphenol | ND | | ug/kg | 260 | 28. | 1 |

Project Name: PIERCE ARROW APARTMENTS Lab Number: L1723613

Project Number: 56831.10 **Report Date:** 07/19/17

SAMPLE RESULTS

Lab ID: Date Collected: 07/11/17 16:00

Client ID: SS-3-071117 Date Received: 07/11/17 Sample Location: BUFFALO, NY Field Prep: Not Specified

Parameter Result Qualifier Units RL MDL Dilution Factor

| Surrogate | % Recovery | Acceptance
Qualifier Criteria |
|----------------------|------------|----------------------------------|
| 2-Fluorophenol | 31 | 25-120 |
| Phenol-d6 | 35 | 10-120 |
| Nitrobenzene-d5 | 39 | 23-120 |
| 2-Fluorobiphenyl | 35 | 30-120 |
| 2,4,6-Tribromophenol | 30 | 10-136 |
| 4-Terphenyl-d14 | 25 | 18-120 |



L1723613

07/19/17

Project Name: PIERCE ARROW APARTMENTS

07/19/17 04:19

Project Number: 56831.10

SAMPLE RESULTS

Date Collected:

Lab Number:

Report Date:

Lab ID: L1723613-30 07/11/17 16:10

Client ID: Date Received: SS-4-071117 07/11/17 Sample Location: Field Prep: BUFFALO, NY Not Specified Extraction Method: EPA 3546

Matrix: Soil Extraction Date: 07/18/17 20:32 Analytical Method: 1,8270D Analytical Date:

Analyst: СВ Percent Solids: 97%

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor | | | |
|------------------------------------|--|-----------|-------|-----|-----|-----------------|--|--|--|
| Semivolatile Organics by GC/MS - W | Semivolatile Organics by GC/MS - Westborough Lab | | | | | | | | |
| Acenaphthene | 670 | | ug/kg | 130 | 17. | 1 | | | |
| Hexachlorobenzene | ND | | ug/kg | 100 | 19. | 1 | | | |
| Fluoranthene | 5800 | | ug/kg | 100 | 19. | 1 | | | |
| Naphthalene | 730 | | ug/kg | 170 | 20. | 1 | | | |
| Benzo(a)anthracene | 2400 | | ug/kg | 100 | 19. | 1 | | | |
| Benzo(a)pyrene | 1500 | | ug/kg | 130 | 41. | 1 | | | |
| Benzo(b)fluoranthene | 2400 | | ug/kg | 100 | 28. | 1 | | | |
| Benzo(k)fluoranthene | 670 | | ug/kg | 100 | 27. | 1 | | | |
| Chrysene | 2400 | | ug/kg | 100 | 18. | 1 | | | |
| Acenaphthylene | 26 | J | ug/kg | 130 | 26. | 1 | | | |
| Anthracene | 1100 | | ug/kg | 100 | 33. | 1 | | | |
| Benzo(ghi)perylene | 980 | | ug/kg | 130 | 20. | 1 | | | |
| Fluorene | 570 | | ug/kg | 170 | 16. | 1 | | | |
| Phenanthrene | 6000 | | ug/kg | 100 | 20. | 1 | | | |
| Dibenzo(a,h)anthracene | 260 | | ug/kg | 100 | 19. | 1 | | | |
| Indeno(1,2,3-cd)pyrene | 1100 | | ug/kg | 130 | 24. | 1 | | | |
| Pyrene | 4600 | | ug/kg | 100 | 17. | 1 | | | |
| Dibenzofuran | 560 | | ug/kg | 170 | 16. | 1 | | | |
| Pentachlorophenol | ND | | ug/kg | 130 | 37. | 1 | | | |
| Phenol | ND | | ug/kg | 170 | 25. | 1 | | | |
| 2-Methylphenol | ND | | ug/kg | 170 | 26. | 1 | | | |
| 3-Methylphenol/4-Methylphenol | ND | | ug/kg | 240 | 26. | 1 | | | |
| | | | | | | | | | |



Project Name: PIERCE ARROW APARTMENTS Lab Number: L1723613

Project Number: 56831.10 **Report Date:** 07/19/17

SAMPLE RESULTS

Lab ID: L1723613-30 Date Collected: 07/11/17 16:10

Client ID: SS-4-071117 Date Received: 07/11/17 Sample Location: BUFFALO, NY Field Prep: Not Specified

Parameter Result Qualifier Units RL MDL Dilution Factor

| Surrogate | % Recovery | Acceptance
Qualifier Criteria |
|----------------------|------------|----------------------------------|
| 2-Fluorophenol | 30 | 25-120 |
| Phenol-d6 | 30 | 10-120 |
| Nitrobenzene-d5 | 38 | 23-120 |
| 2-Fluorobiphenyl | 30 | 30-120 |
| 2,4,6-Tribromophenol | 24 | 10-136 |
| 4-Terphenyl-d14 | 28 | 18-120 |



L1723613

07/19/17

07/14/17 09:59

Project Name: PIERCE ARROW APARTMENTS

Project Number: 56831.10

SAMPLE RESULTS

Date Collected: 07/11/17 00:00

Lab Number:

Report Date:

Extraction Date:

Lab ID: L1723613-31

Date Received: Client ID: SURFACE SOIL DUPLICATE 07/11/17 Sample Location: Field Prep: BUFFALO, NY Not Specified

Extraction Method: EPA 3546

Matrix: Soil Analytical Method: 1,8270D Analytical Date: 07/18/17 18:18

Analyst: PS Percent Solids: 93%

| Result | Qualifier | Units | RL | MDL | Dilution Factor | | |
|--|---|---|--|--|--|---|--|
| Semivolatile Organics by GC/MS - Westborough Lab | | | | | | | |
| 80 | J | ug/kg | 140 | 18. | 1 | | |
| ND | | ug/kg | 100 | 20. | 1 | | |
| 1200 | | ug/kg | 100 | 20. | 1 | | |
| 160 | J | ug/kg | 180 | 21. | 1 | | |
| 460 | | ug/kg | 100 | 20. | 1 | | |
| 340 | | ug/kg | 140 | 43. | 1 | | |
| 500 | | ug/kg | 100 | 30. | 1 | | |
| 170 | | ug/kg | 100 | 28. | 1 | | |
| 460 | | ug/kg | 100 | 18. | 1 | | |
| ND | | ug/kg | 140 | 27. | 1 | | |
| 170 | | ug/kg | 100 | 34. | 1 | | |
| 280 | | ug/kg | 140 | 21. | 1 | | |
| 67 | J | ug/kg | 180 | 17. | 1 | | |
| 800 | | ug/kg | 100 | 21. | 1 | | |
| 73 | J | ug/kg | 100 | 20. | 1 | | |
| 270 | | ug/kg | 140 | 25. | 1 | | |
| 930 | | ug/kg | 100 | 18. | 1 | | |
| 49 | J | ug/kg | 180 | 17. | 1 | | |
| ND | | ug/kg | 140 | 39. | 1 | | |
| ND | | ug/kg | 180 | 27. | 1 | | |
| ND | | ug/kg | 180 | 27. | 1 | | |
| ND | | ug/kg | 250 | 28. | 1 | | |
| | 80 ND 1200 160 460 340 500 170 460 ND 170 280 67 800 73 270 930 49 ND ND ND | 80 J ND 1200 160 J 460 340 500 170 460 ND 170 280 67 J 800 73 J 270 930 49 J ND ND ND | 80 J ug/kg ND ug/kg 1200 ug/kg 160 J ug/kg 460 ug/kg 340 ug/kg 500 ug/kg 170 ug/kg 460 ug/kg 170 ug/kg 460 ug/kg Afo ug/kg 500 ug/kg | borough Lab 80 J ug/kg 140 ND ug/kg 100 1200 ug/kg 100 160 J ug/kg 180 460 ug/kg 100 340 ug/kg 140 500 ug/kg 100 170 ug/kg 100 460 ug/kg 100 ND ug/kg 140 170 ug/kg 140 280 ug/kg 100 280 ug/kg 180 800 ug/kg 180 800 ug/kg 100 73 J ug/kg 100 270 ug/kg 140 930 ug/kg 100 49 J ug/kg 180 ND ug/kg 180 ND ug/kg 180 ND ug/kg 180 | Norough Lab 80 J ug/kg 140 18. ND ug/kg 100 20. 1200 ug/kg 100 20. 160 J ug/kg 180 21. 460 ug/kg 100 20. 340 ug/kg 140 43. 500 ug/kg 100 30. 170 ug/kg 100 28. 460 ug/kg 100 18. ND ug/kg 140 27. 170 ug/kg 140 27. 170 ug/kg 140 21. 67 J ug/kg 140 21. 67 J ug/kg 180 17. 800 ug/kg 100 20. 270 ug/kg 140 25. 930 ug/kg 100 18. 49 J ug/kg 180 17. ND ug/kg 140 39. ND ug/kg | 80 J ug/kg 140 18. 1 ND ug/kg 100 20. 1 1200 ug/kg 100 20. 1 160 J ug/kg 180 21. 1 460 ug/kg 100 20. 1 340 ug/kg 140 43. 1 500 ug/kg 100 30. 1 170 ug/kg 100 28. 1 460 ug/kg 100 28. 1 ND ug/kg 100 30. 1 170 ug/kg 100 30. 1 170 ug/kg 100 31. 1 800 ug/kg 140 27. 1 170 ug/kg 140 27. 1 170 ug/kg 140 27. 1 280 ug/kg 140 21. 1 280 ug/kg 140 21. 1 73 J ug/kg 180 17. 1 800 ug/kg 100 20. 1 270 ug/kg 100 20. 1 270 ug/kg 140 25. 1 930 ug/kg 140 25. 1 930 ug/kg 140 25. 1 930 ug/kg 140 39. 1 ND ug/kg 140 39. 1 ND ug/kg 140 39. 1 ND ug/kg 140 39. 1 ND ug/kg 140 39. 1 ND ug/kg 140 39. 1 ND ug/kg 140 39. 1 ND ug/kg 140 39. 1 ND ug/kg 180 27. 1 | |



Project Name: PIERCE ARROW APARTMENTS Lab Number: L1723613

Project Number: 56831.10 **Report Date:** 07/19/17

SAMPLE RESULTS

Lab ID: L1723613-31 Date Collected: 07/11/17 00:00

Client ID: SURFACE SOIL DUPLICATE Date Received: 07/11/17
Sample Location: BUFFALO, NY Field Prep: Not Specified

Parameter Result Qualifier Units RL MDL Dilution Factor

| Surrogate | % Recovery | Acceptance
Qualifier Criteria |
|----------------------|------------|----------------------------------|
| 2-Fluorophenol | 44 | 25-120 |
| Phenol-d6 | 45 | 10-120 |
| Nitrobenzene-d5 | 52 | 23-120 |
| 2-Fluorobiphenyl | 47 | 30-120 |
| 2,4,6-Tribromophenol | 39 | 10-136 |
| 4-Terphenyl-d14 | 33 | 18-120 |



Project Name: PIERCE ARROW APARTMENTS

Project Number: 56831.10 Lab Number: Report Date:

L1723613 07/19/17

Method Blank Analysis Batch Quality Control

Analytical Method: Analytical Date:

1,8270D 07/18/17 01:18

Analyst: RC Extraction Method: EPA 3510C

Extraction Date:

07/14/17 04:18

| Parameter | Result | Qualifier | Units | RL | | MDL | |
|--------------------------------|---------------|-----------|------------|-------|--------|-------------|--|
| Semivolatile Organics by GC/MS | - Westborough | Lab for | sample(s): | 25-26 | Batch: | WG1022459-1 | |
| Dibenzofuran | ND | | ug/l | 2.0 | | 0.66 | |
| Phenol | ND | | ug/l | 5.0 | | 1.9 | |
| 2-Methylphenol | ND | | ug/l | 5.0 | | 1.0 | |
| 3-Methylphenol/4-Methylphenol | ND | | ug/l | 5.0 | | 1.1 | |

Tentatively Identified Compounds

No Tentatively Identified Compounds

ND

ug/l

| Surrogate | %Recovery | Acceptance
Qualifier Criteria |
|----------------------|-----------|----------------------------------|
| 2-Fluorophenol | 37 | 21-120 |
| Phenol-d6 | 28 | 10-120 |
| Nitrobenzene-d5 | 70 | 23-120 |
| 2-Fluorobiphenyl | 81 | 15-120 |
| 2,4,6-Tribromophenol | 89 | 10-120 |
| 4-Terphenyl-d14 | 69 | 41-149 |
| | | |



Project Name: PIERCE ARROW APARTMENTS

Project Number: 56831.10

Lab Number: L1723613

Report Date: 07/19/17

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D-SIM Analytical Date: 07/15/17 14:38

Analyst: KL

Extraction Method: EPA 3510C Extraction Date: 07/14/17 04:18

| arameter | Result | Qualifier | Units | RL | MDL | |
|---------------------------------|--------------|-----------|----------------|-------|-----------|-----------|
| emivolatile Organics by GC/MS-S | SIM - Westbo | rough Lab | for sample(s): | 25-26 | Batch: WG | 1022460-1 |
| Acenaphthene | ND | | ug/l | 0.10 | 0.04 | |
| Fluoranthene | ND | | ug/l | 0.10 | 0.04 | |
| Naphthalene | ND | | ug/l | 0.10 | 0.04 | |
| Benzo(a)anthracene | ND | | ug/l | 0.10 | 0.02 | |
| Benzo(a)pyrene | ND | | ug/l | 0.10 | 0.04 | |
| Benzo(b)fluoranthene | ND | | ug/l | 0.10 | 0.02 | |
| Benzo(k)fluoranthene | ND | | ug/l | 0.10 | 0.04 | |
| Chrysene | ND | | ug/l | 0.10 | 0.04 | |
| Acenaphthylene | ND | | ug/l | 0.10 | 0.04 | |
| Anthracene | ND | | ug/l | 0.10 | 0.04 | |
| Benzo(ghi)perylene | ND | | ug/l | 0.10 | 0.04 | |
| Fluorene | ND | | ug/l | 0.10 | 0.04 | |
| Phenanthrene | ND | | ug/l | 0.10 | 0.02 | |
| Dibenzo(a,h)anthracene | ND | | ug/l | 0.10 | 0.04 | |
| Indeno(1,2,3-cd)pyrene | ND | | ug/l | 0.10 | 0.04 | |
| Pyrene | ND | | ug/l | 0.10 | 0.04 | |
| Pentachlorophenol | ND | | ug/l | 0.80 | 0.22 | |
| Hexachlorobenzene | ND | | ug/l | 0.80 | 0.03 | |

| Surrogate | %Recovery | Acceptance Qualifier Criteria |
|----------------------|-----------|-------------------------------|
| 2-Fluorophenol | 54 | 21-120 |
| Phenol-d6 | 37 | 10-120 |
| Nitrobenzene-d5 | 94 | 23-120 |
| 2-Fluorobiphenyl | 97 | 15-120 |
| 2,4,6-Tribromophenol | 94 | 10-120 |
| 4-Terphenyl-d14 | 82 | 41-149 |
| | | |



Project Name: PIERCE ARROW APARTMENTS

Project Number: 56831.10

Lab Number:

L1723613

Report Date:

07/19/17

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D Analytical Date: 07/17/17 11:07

Analyst: RC

Extraction Method: EPA 3546
Extraction Date: 07/14/17 08:04

| arameter | Result | Qualifier | Units | RL | MDL | |
|--|--------------|-------------|-----------|-------------|---------------------|---------|
| Semivolatile Organics by GC/MS
Batch: WG1022533-1 | - Westboroug | h Lab for s | ample(s): | 02-03,05,07 | 7,09,11,13,15,17,19 | 9,21,23 |
| Acenaphthene | ND | | ug/kg | 130 | 17. | |
| Hexachlorobenzene | ND | | ug/kg | 98 | 18. | |
| Fluoranthene | ND | | ug/kg | 98 | 19. | |
| Naphthalene | ND | | ug/kg | 160 | 20. | |
| Benzo(a)anthracene | ND | | ug/kg | 98 | 18. | |
| Benzo(a)pyrene | ND | | ug/kg | 130 | 40. | |
| Benzo(b)fluoranthene | ND | | ug/kg | 98 | 27. | |
| Benzo(k)fluoranthene | ND | | ug/kg | 98 | 26. | |
| Chrysene | ND | | ug/kg | 98 | 17. | |
| Acenaphthylene | ND | | ug/kg | 130 | 25. | |
| Anthracene | ND | | ug/kg | 98 | 32. | |
| Benzo(ghi)perylene | ND | | ug/kg | 130 | 19. | |
| Fluorene | ND | | ug/kg | 160 | 16. | |
| Phenanthrene | ND | | ug/kg | 98 | 20. | |
| Dibenzo(a,h)anthracene | ND | | ug/kg | 98 | 19. | |
| Indeno(1,2,3-cd)pyrene | ND | | ug/kg | 130 | 23. | |
| Pyrene | ND | | ug/kg | 98 | 16. | |
| Dibenzofuran | ND | | ug/kg | 160 | 15. | |
| Pentachlorophenol | ND | | ug/kg | 130 | 36. | |
| Phenol | ND | | ug/kg | 160 | 24. | |
| 2-Methylphenol | ND | | ug/kg | 160 | 25. | |
| 3-Methylphenol/4-Methylphenol | ND | | ug/kg | 230 | 25. | |

Tentatively Identified Compounds

No Tentatively Identified Compounds

ND

ug/kg



L1723613

Lab Number:

Project Name: PIERCE ARROW APARTMENTS

Project Number: 56831.10 **Report Date:** 07/19/17

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D Extraction Method: EPA 3546
Analytical Date: 07/17/17 11:07 Extraction Date: 07/14/17 08:04

Analytical Date: 07/17/17 11:07 Extraction Date: Analyst: RC

Parameter Result Qualifier Units RL MDL

Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 02-03,05,07,09,11,13,15,17,19,21,23

Batch: WG1022533-1

| | | Acceptance | |
|----------------------|-----------|--------------------|--|
| Surrogate | %Recovery | Qualifier Criteria | |
| 2-Fluorophenol | 71 | 25-120 | |
| Phenol-d6 | 76 | 10-120 | |
| Nitrobenzene-d5 | 72 | 23-120 | |
| 2-Fluorobiphenyl | 83 | 30-120 | |
| 2,4,6-Tribromophenol | 108 | 10-136 | |
| 4-Terphenyl-d14 | 101 | 18-120 | |



Project Name: PIERCE ARROW APARTMENTS

Project Number: 56831.10

Lab Number:

L1723613

Report Date: 07/19/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D Analytical Date: 07/15/17 13:26

Analyst: PS

Extraction Method: EPA 3546 Extraction Date: 07/14/17 09:59

| arameter | Result | Qualifier | Units | RL | MDL | |
|--------------------------------|---------------|-----------|------------|----------|---------------|--------|
| semivolatile Organics by GC/MS | - Westborough | Lab for s | sample(s): | 27-29,31 | Batch: WG1022 | 2578-1 |
| Acenaphthene | ND | | ug/kg | 130 | 17. | |
| Hexachlorobenzene | ND | | ug/kg | 99 | 18. | |
| Fluoranthene | ND | | ug/kg | 99 | 19. | |
| Naphthalene | ND | | ug/kg | 160 | 20. | |
| Benzo(a)anthracene | ND | | ug/kg | 99 | 18. | |
| Benzo(a)pyrene | ND | | ug/kg | 130 | 40. | |
| Benzo(b)fluoranthene | ND | | ug/kg | 99 | 28. | |
| Benzo(k)fluoranthene | ND | | ug/kg | 99 | 26. | |
| Chrysene | ND | | ug/kg | 99 | 17. | |
| Acenaphthylene | ND | | ug/kg | 130 | 25. | |
| Anthracene | ND | | ug/kg | 99 | 32. | |
| Benzo(ghi)perylene | ND | | ug/kg | 130 | 19. | |
| Fluorene | ND | | ug/kg | 160 | 16. | |
| Phenanthrene | ND | | ug/kg | 99 | 20. | |
| Dibenzo(a,h)anthracene | ND | | ug/kg | 99 | 19. | |
| Indeno(1,2,3-cd)pyrene | ND | | ug/kg | 130 | 23. | |
| Pyrene | ND | | ug/kg | 99 | 16. | |
| Dibenzofuran | ND | | ug/kg | 160 | 16. | |
| Pentachlorophenol | ND | | ug/kg | 130 | 36. | |
| Phenol | ND | | ug/kg | 160 | 25. | |
| 2-Methylphenol | ND | | ug/kg | 160 | 26. | |
| 3-Methylphenol/4-Methylphenol | ND | | ug/kg | 240 | 26. | |

Tentatively Identified Compounds

No Tentatively Identified Compounds

ND

ug/kg



L1723613

Lab Number:

Project Name: PIERCE ARROW APARTMENTS

Project Number: 56831.10 **Report Date:** 07/19/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D Extraction Method: EPA 3546
Analytical Date: 07/15/17 13:26 Extraction Date: 07/14/17 09:59

Analyst: PS

ParameterResultQualifierUnitsRLMDLSemivolatile Organics by GC/MS - Westborough Lab for sample(s): 27-29,31Batch: WG1022578-1

| | | Acceptance |
|----------------------|-----------|--------------------|
| Surrogate | %Recovery | Qualifier Criteria |
| 2-Fluorophenol | 93 | 25-120 |
| Phenol-d6 | 95 | 10-120 |
| Nitrobenzene-d5 | 98 | 23-120 |
| 2-Fluorobiphenyl | 85 | 30-120 |
| 2,4,6-Tribromophenol | 86 | 10-136 |
| 4-Terphenyl-d14 | 89 | 18-120 |



Project Name: PIERCE ARROW APARTMENTS

Project Number: 56831.10

Lab Number: L1723613

Report Date: 07/19/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D Analytical Date: 07/18/17 16:59

Analyst: SZ

Extraction Method: EPA 3546
Extraction Date: 07/18/17 07:44

| Parameter | Result | Qualifier | Units | | RL | MDL | |
|--------------------------------|---------------|-----------|-----------|----|--------|-------------|--|
| Semivolatile Organics by GC/MS | - Westborough | Lab for s | ample(s): | 30 | Batch: | WG1023388-1 | |
| Acenaphthene | ND | | ug/kg | | 130 | 17. | |
| Hexachlorobenzene | ND | | ug/kg | | 98 | 18. | |
| Fluoranthene | ND | | ug/kg | | 98 | 19. | |
| Naphthalene | ND | | ug/kg | | 160 | 20. | |
| Benzo(a)anthracene | ND | | ug/kg | | 98 | 18. | |
| Benzo(a)pyrene | ND | | ug/kg | | 130 | 40. | |
| Benzo(b)fluoranthene | ND | | ug/kg | | 98 | 28. | |
| Benzo(k)fluoranthene | ND | | ug/kg | | 98 | 26. | |
| Chrysene | ND | | ug/kg | | 98 | 17. | |
| Acenaphthylene | ND | | ug/kg | | 130 | 25. | |
| Anthracene | ND | | ug/kg | | 98 | 32. | |
| Benzo(ghi)perylene | ND | | ug/kg | | 130 | 19. | |
| Fluorene | ND | | ug/kg | | 160 | 16. | |
| Phenanthrene | ND | | ug/kg | | 98 | 20. | |
| Dibenzo(a,h)anthracene | ND | | ug/kg | | 98 | 19. | |
| Indeno(1,2,3-cd)pyrene | ND | | ug/kg | | 130 | 23. | |
| Pyrene | ND | | ug/kg | | 98 | 16. | |
| Dibenzofuran | ND | | ug/kg | | 160 | 16. | |
| Pentachlorophenol | ND | | ug/kg | | 130 | 36. | |
| Phenol | ND | | ug/kg | | 160 | 25. | |
| 2-Methylphenol | ND | | ug/kg | | 160 | 25. | |
| 3-Methylphenol/4-Methylphenol | ND | | ug/kg | | 240 | 26. | |

ND ug/kg



Tentatively Identified Compounds

No Tentatively Identified Compounds

L1723613

Project Name: PIERCE ARROW APARTMENTS

Project Number: 56831.10 Report D

Report Date: 07/19/17

Lab Number:

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D Analytical Date: 07/18/17 16:59

Analyst: SZ

Extraction Method: EPA 3546
Extraction Date: 07/18/17 07:44

ParameterResultQualifierUnitsRLMDLSemivolatile Organics by GC/MS - Westborough Lab for sample(s):30Batch:WG1023388-1

| | | Acceptance |
|----------------------|-----------|--------------------|
| Surrogate | %Recovery | Qualifier Criteria |
| 2-Fluorophenol | 75 | 25-120 |
| Phenol-d6 | 76 | 10-120 |
| Nitrobenzene-d5 | 77 | 23-120 |
| 2-Fluorobiphenyl | 72 | 30-120 |
| 2,4,6-Tribromophenol | 58 | 10-136 |
| 4-Terphenyl-d14 | 72 | 18-120 |



Project Name: PIERCE ARROW APARTMENTS

Project Number: 56831.10

Lab Number: L1723613

Report Date: 07/19/17

| Parameter | LCS
%Recovery | Qual | LCSD
%Recovery | Qual | %Recovery
Limits | RPD | Qual | RPD
Limits |
|--|------------------|----------------|-------------------|------------|---------------------|------|------|---------------|
| Semivolatile Organics by GC/MS - Westbor | ough Lab Associa | ated sample(s) | : 25-26 Bat | ch: WG1022 | 2459-2 WG10224 | 59-3 | | |
| Dibenzofuran | 74 | | 75 | | 40-140 | 1 | | 30 |
| Phenol | 34 | | 34 | | 12-110 | 0 | | 30 |
| 2-Methylphenol | 71 | | 68 | | 30-130 | 4 | | 30 |
| 3-Methylphenol/4-Methylphenol | 74 | | 72 | | 30-130 | 3 | | 30 |

| | LCS | LCSD | Acceptance |
|----------------------|---------------|-------------------|------------|
| Surrogate | %Recovery Qua | al %Recovery Qual | Criteria |
| 2-Fluorophenol | 58 | 46 | 21-120 |
| Phenol-d6 | 40 | 38 | 10-120 |
| Nitrobenzene-d5 | 78 | 82 | 23-120 |
| 2-Fluorobiphenyl | 78 | 77 | 15-120 |
| 2,4,6-Tribromophenol | 119 | 95 | 10-120 |
| 4-Terphenyl-d14 | 77 | 70 | 41-149 |



Project Name: PIERCE ARROW APARTMENTS

Project Number: 56831.10

Lab Number: L1723613

Report Date: 07/19/17

| Parameter | LCS
%Recovery | | .CSD
ecovery | Qua | %Recove
Limits | ry
RPD | Qual | RPD
Limits |
|--|------------------|----------------------|-----------------|--------|-------------------|-------------|------|---------------|
| Semivolatile Organics by GC/MS-SIM - W | estborough Lab A | ssociated sample(s): | 25-26 | Batch: | WG1022460-2 | WG1022460-3 | | |
| Acenaphthene | 78 | | 72 | | 37-111 | 8 | | 40 |
| Fluoranthene | 81 | | 77 | | 40-140 | 5 | | 40 |
| Naphthalene | 76 | | 71 | | 40-140 | 7 | | 40 |
| Benzo(a)anthracene | 79 | | 75 | | 40-140 | 5 | | 40 |
| Benzo(a)pyrene | 78 | | 74 | | 40-140 | 5 | | 40 |
| Benzo(b)fluoranthene | 78 | | 75 | | 40-140 | 4 | | 40 |
| Benzo(k)fluoranthene | 79 | | 77 | | 40-140 | 3 | | 40 |
| Chrysene | 78 | | 74 | | 40-140 | 5 | | 40 |
| Acenaphthylene | 82 | | 76 | | 40-140 | 8 | | 40 |
| Anthracene | 80 | | 74 | | 40-140 | 8 | | 40 |
| Benzo(ghi)perylene | 76 | | 70 | | 40-140 | 8 | | 40 |
| Fluorene | 80 | | 74 | | 40-140 | 8 | | 40 |
| Phenanthrene | 78 | | 72 | | 40-140 | 8 | | 40 |
| Dibenzo(a,h)anthracene | 78 | | 72 | | 40-140 | 8 | | 40 |
| Indeno(1,2,3-cd)pyrene | 79 | | 73 | | 40-140 | 8 | | 40 |
| Pyrene | 80 | | 76 | | 26-127 | 5 | | 40 |
| Pentachlorophenol | 95 | | 87 | | 9-103 | 9 | | 40 |
| Hexachlorobenzene | 76 | | 71 | | 40-140 | 7 | | 40 |



Project Name: PIERCE ARROW APARTMENTS

Lab Number:

L1723613

Project Number: 56831.10

Report Date:

07/19/17

| | LCS | | LCSD | | %Recovery | | | RPD |
|-----------|-----------|------|-----------|------|-----------|-----|------|--------|
| Parameter | %Recovery | Qual | %Recovery | Qual | Limits | RPD | Qual | Limits |

Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 25-26 Batch: WG1022460-2 WG1022460-3

| Surrogate | LCS
%Recovery Qual | LCSD
%Recovery Qual | Acceptance
Criteria |
|----------------------|-----------------------|------------------------|------------------------|
| 2-Fluorophenol | 51 | 47 | 21-120 |
| Phenol-d6 | 36 | 33 | 10-120 |
| Nitrobenzene-d5 | 75 | 68 | 23-120 |
| 2-Fluorobiphenyl | 84 | 77 | 15-120 |
| 2,4,6-Tribromophenol | 83 | 78 | 10-120 |
| 4-Terphenyl-d14 | 80 | 75 | 41-149 |



Project Name: PIERCE ARROW APARTMENTS

Project Number: 56831.10

Lab Number: L1723613

Report Date: 07/19/17

| ırameter | LCS
%Recovery | Qual | LCSD
%Recovery | Qual | %Recovery
Limits | | RPD | Qua | RPD
I Limits | |
|--------------------------------------|---------------------|-----------------|-------------------|------------|---------------------|--------|---------|-------|-----------------|--|
| emivolatile Organics by GC/MS - West | tborough Lab Associ | ated sample(s): | 02-03,05,07,0 | 9,11,13,15 | ,17,19,21,23 | Batch: | WG10225 | 533-2 | WG1022533-3 | |
| Acenaphthene | 86 | | 80 | | 31-137 | | 7 | | 50 | |
| Hexachlorobenzene | 100 | | 89 | | 40-140 | | 12 | | 50 | |
| Fluoranthene | 89 | | 82 | | 40-140 | | 8 | | 50 | |
| Naphthalene | 77 | | 74 | | 40-140 | | 4 | | 50 | |
| Benzo(a)anthracene | 80 | | 72 | | 40-140 | | 11 | | 50 | |
| Benzo(a)pyrene | 85 | | 77 | | 40-140 | | 10 | | 50 | |
| Benzo(b)fluoranthene | 82 | | 74 | | 40-140 | | 10 | | 50 | |
| Benzo(k)fluoranthene | 88 | | 80 | | 40-140 | | 10 | | 50 | |
| Chrysene | 80 | | 75 | | 40-140 | | 6 | | 50 | |
| Acenaphthylene | 82 | | 76 | | 40-140 | | 8 | | 50 | |
| Anthracene | 80 | | 75 | | 40-140 | | 6 | | 50 | |
| Benzo(ghi)perylene | 84 | | 76 | | 40-140 | | 10 | | 50 | |
| Fluorene | 91 | | 83 | | 40-140 | | 9 | | 50 | |
| Phenanthrene | 82 | | 76 | | 40-140 | | 8 | | 50 | |
| Dibenzo(a,h)anthracene | 79 | | 71 | | 40-140 | | 11 | | 50 | |
| Indeno(1,2,3-cd)pyrene | 82 | | 75 | | 40-140 | | 9 | | 50 | |
| Pyrene | 88 | | 82 | | 35-142 | | 7 | | 50 | |
| Dibenzofuran | 89 | | 80 | | 40-140 | | 11 | | 50 | |
| Pentachlorophenol | 101 | | 88 | | 17-109 | | 14 | | 50 | |
| Phenol | 72 | | 68 | | 26-90 | | 6 | | 50 | |
| 2-Methylphenol | 83 | | 81 | | 30-130. | | 2 | | 50 | |
| 3-Methylphenol/4-Methylphenol | 89 | | 83 | | 30-130 | | 7 | | 50 | |



Lab Control Sample Analysis

Project Name: PIERCE ARROW APARTMENTS

Batch Quality Control

Lab Number:

L1723613

07/19/17

Project Number: 56831.10

Report Date:

LCS LCSD %Recovery RPD Parameter %Recovery Qual %Recovery Qual Limits RPD Qual Limits

Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-03,05,07,09,11,13,15,17,19,21,23 Batch: WG1022533-2 WG1022533-3

| Surrogate | LCS
%Recovery Qual | LCSD
%Recovery Qual | Acceptance
Criteria |
|----------------------|-----------------------|------------------------|------------------------|
| 2-Fluorophenol | 75 | 74 | 25-120 |
| Phenol-d6 | 85 | 79 | 10-120 |
| Nitrobenzene-d5 | 88 | 85 | 23-120 |
| 2-Fluorobiphenyl | 84 | 76 | 30-120 |
| 2,4,6-Tribromophenol | 117 | 102 | 10-136 |
| 4-Terphenyl-d14 | 90 | 82 | 18-120 |



Project Name: PIERCE ARROW APARTMENTS

Project Number: 56831.10

Lab Number: L1723613

Report Date: 07/19/17

| arameter | LCS
%Recovery | Qual | LCSD
%Recovery | Qual | %Recovery
Limits | RPD | RPD
Qual Limits | |
|--|------------------|------------------|-------------------|------------|---------------------|-----------|--------------------|--|
| emivolatile Organics by GC/MS - Westboro | ugh Lab Assoc | iated sample(s): | 27-29,31 | Batch: WG1 | 1022578-2 WG | 1022578-3 | | |
| Acenaphthene | 103 | | 72 | | 31-137 | 35 | 50 | |
| Hexachlorobenzene | 95 | | 62 | | 40-140 | 42 | 50 | |
| Fluoranthene | 101 | | 69 | | 40-140 | 38 | 50 | |
| Naphthalene | 91 | | 66 | | 40-140 | 32 | 50 | |
| Benzo(a)anthracene | 99 | | 66 | | 40-140 | 40 | 50 | |
| Benzo(a)pyrene | 99 | | 66 | | 40-140 | 40 | 50 | |
| Benzo(b)fluoranthene | 104 | | 68 | | 40-140 | 42 | 50 | |
| Benzo(k)fluoranthene | 92 | | 62 | | 40-140 | 39 | 50 | |
| Chrysene | 94 | | 64 | | 40-140 | 38 | 50 | |
| Acenaphthylene | 94 | | 64 | | 40-140 | 38 | 50 | |
| Anthracene | 101 | | 70 | | 40-140 | 36 | 50 | |
| Benzo(ghi)perylene | 97 | | 65 | | 40-140 | 40 | 50 | |
| Fluorene | 106 | | 72 | | 40-140 | 38 | 50 | |
| Phenanthrene | 98 | | 68 | | 40-140 | 36 | 50 | |
| Dibenzo(a,h)anthracene | 98 | | 67 | | 40-140 | 38 | 50 | |
| Indeno(1,2,3-cd)pyrene | 101 | | 68 | | 40-140 | 39 | 50 | |
| Pyrene | 100 | | 69 | | 35-142 | 37 | 50 | |
| Dibenzofuran | 104 | | 72 | | 40-140 | 36 | 50 | |
| Pentachlorophenol | 82 | | 54 | | 17-109 | 41 | 50 | |
| Phenol | 113 | Q | 79 | | 26-90 | 35 | 50 | |
| 2-Methylphenol | 104 | | 74 | | 30-130. | 34 | 50 | |
| 3-Methylphenol/4-Methylphenol | 109 | | 75 | | 30-130 | 37 | 50 | |



Project Name: PIERCE ARROW APARTMENTS

Lab Number:

L1723613

Project Number: 56831.10

Report Date:

07/19/17

| | LCS | | LCSD | | %Recovery | | | RPD |
|-----------|-----------|------|-----------|------|-----------|-----|------|--------|
| Parameter | %Recovery | Qual | %Recovery | Qual | Limits | RPD | Qual | Limits |

Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 27-29,31 Batch: WG1022578-2 WG1022578-3

| Surrogate | LCS
%Recovery Qual | LCSD
%Recovery Qual | Acceptance
Criteria |
|----------------------|-----------------------|------------------------|------------------------|
| 2-Fluorophenol | 98 | 69 | 25-120 |
| Phenol-d6 | 97 | 69 | 10-120 |
| Nitrobenzene-d5 | 101 | 73 | 23-120 |
| 2-Fluorobiphenyl | 88 | 60 | 30-120 |
| 2,4,6-Tribromophenol | 94 | 66 | 10-136 |
| 4-Terphenyl-d14 | 89 | 62 | 18-120 |

Project Name: PIERCE ARROW APARTMENTS

Project Number: 56831.10

Lab Number: L1723613

Report Date: 07/19/17

| arameter | LCS
%Recovery | Qual | LCSD
%Recovery | Qual | %Recovery
Limits | RPD | Qual | RPD
Limits |
|---|------------------|------------------|-------------------|-------------|---------------------|-----|------|---------------|
| emivolatile Organics by GC/MS - Westborou | ıgh Lab Assoc | iated sample(s): | 30 Batch: | WG1023388-2 | 2 WG1023388-3 | | | |
| Acenaphthene | 69 | | 66 | | 31-137 | 4 | | 50 |
| Hexachlorobenzene | 63 | | 63 | | 40-140 | 0 | | 50 |
| Fluoranthene | 66 | | 62 | | 40-140 | 6 | | 50 |
| Naphthalene | 61 | | 60 | | 40-140 | 2 | | 50 |
| Benzo(a)anthracene | 62 | | 59 | | 40-140 | 5 | | 50 |
| Benzo(a)pyrene | 60 | | 59 | | 40-140 | 2 | | 50 |
| Benzo(b)fluoranthene | 58 | | 58 | | 40-140 | 0 | | 50 |
| Benzo(k)fluoranthene | 58 | | 58 | | 40-140 | 0 | | 50 |
| Chrysene | 60 | | 58 | | 40-140 | 3 | | 50 |
| Acenaphthylene | 68 | | 64 | | 40-140 | 6 | | 50 |
| Anthracene | 67 | | 64 | | 40-140 | 5 | | 50 |
| Benzo(ghi)perylene | 57 | | 55 | | 40-140 | 4 | | 50 |
| Fluorene | 71 | | 67 | | 40-140 | 6 | | 50 |
| Phenanthrene | 64 | | 60 | | 40-140 | 6 | | 50 |
| Dibenzo(a,h)anthracene | 59 | | 58 | | 40-140 | 2 | | 50 |
| Indeno(1,2,3-cd)pyrene | 59 | | 60 | | 40-140 | 2 | | 50 |
| Pyrene | 66 | | 61 | | 35-142 | 8 | | 50 |
| Dibenzofuran | 70 | | 67 | | 40-140 | 4 | | 50 |
| Pentachlorophenol | 61 | | 56 | | 17-109 | 9 | | 50 |
| Phenol | 71 | | 67 | | 26-90 | 6 | | 50 |
| 2-Methylphenol | 74 | | 69 | | 30-130. | 7 | | 50 |
| 3-Methylphenol/4-Methylphenol | 74 | | 68 | | 30-130 | 8 | | 50 |



Project Name: PIERCE ARROW APARTMENTS

Lab Number: L1723613

Project Number: 56831.10 Report Date:

07/19/17

| | LCS | | LCSD | | %Recovery | | | RPD |
|-----------|-----------|------|-----------|------|-----------|-----|------|--------|
| Parameter | %Recovery | Qual | %Recovery | Qual | Limits | RPD | Qual | Limits |

Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 30 Batch: WG1023388-2 WG1023388-3

| Surrogate | LCS
%Recovery Qua | LCSD
Il %Recovery Qual | Acceptance
Criteria |
|----------------------|----------------------|---------------------------|------------------------|
| 2-Fluorophenol | 65 | 62 | 25-120 |
| Phenol-d6 | 70 | 64 | 10-120 |
| Nitrobenzene-d5 | 70 | 66 | 23-120 |
| 2-Fluorobiphenyl | 63 | 59 | 30-120 |
| 2,4,6-Tribromophenol | 60 | 61 | 10-136 |
| 4-Terphenyl-d14 | 60 | 57 | 18-120 |



Project Name: PIERCE ARROW APARTMENTS

Project Number: 56831.10

Lab Number:

L1723613

Report Date:

07/19/17

| Parameter | Native
Sample | MS
Added | MS
Found | MS
%Recovery | MSD
Qual Found | MSD
%Recovery | Recovery
Qual Limits | RPD | RPD
Qual Limits | |
|---|------------------|-------------|---------------|------------------|-----------------------------|------------------|-------------------------|--------|--------------------|----|
| Semivolatile Organics by C
Sample: L1723613-05 C | | | Associated sa | mple(s): 02-03,0 | 05,07,09,11,13,15, <i>1</i> | 7,19,21,23 | QC Batch ID: WG102 | 2533-4 | WG1022533-5 Q | ίC |
| Acenaphthene | ND | 1600 | 1400 | 87 | 1200 | 74 | 31-137 | 15 | 50 | |
| Hexachlorobenzene | ND | 1600 | 1600 | 100 | 1400 | 86 | 40-140 | 13 | 50 | |
| Fluoranthene | 160 | 1600 | 1800 | 100 | 1300 | 70 | 40-140 | 32 | 50 | |
| Naphthalene | ND | 1600 | 1200 | 75 | 1100 | 68 | 40-140 | 9 | 50 | |
| Benzo(a)anthracene | 80.J | 1600 | 1400 | 87 | 1100 | 68 | 40-140 | 24 | 50 | |
| Benzo(a)pyrene | 69.J | 1600 | 1400 | 87 | 1100 | 68 | 40-140 | 24 | 50 | |
| Benzo(b)fluoranthene | 81.J | 1600 | 1400 | 87 | 1100 | 68 | 40-140 | 24 | 50 | |
| Benzo(k)fluoranthene | ND | 1600 | 1300 | 81 | 1100 | 68 | 40-140 | 17 | 50 | |
| Chrysene | 70.J | 1600 | 1400 | 87 | 1100 | 68 | 40-140 | 24 | 50 | |
| Acenaphthylene | ND | 1600 | 1300 | 81 | 1200 | 74 | 40-140 | 8 | 50 | |
| Anthracene | ND | 1600 | 1400 | 87 | 1200 | 74 | 40-140 | 15 | 50 | |
| Benzo(ghi)perylene | 34.J | 1600 | 1400 | 87 | 1100 | 68 | 40-140 | 24 | 50 | |
| Fluorene | ND | 1600 | 1500 | 93 | 1200 | 74 | 40-140 | 22 | 50 | |
| Phenanthrene | 93.J | 1600 | 1700 | 110 | 1200 | 74 | 40-140 | 34 | 50 | |
| Dibenzo(a,h)anthracene | ND | 1600 | 1200 | 75 | 1000 | 62 | 40-140 | 18 | 50 | |
| Indeno(1,2,3-cd)pyrene | 37.J | 1600 | 1400 | 87 | 1100 | 68 | 40-140 | 24 | 50 | |
| Pyrene | 140 | 1600 | 1800 | 100 | 1300 | 72 | 35-142 | 32 | 50 | |
| Dibenzofuran | ND | 1600 | 1400 | 87 | 1200 | 74 | 40-140 | 15 | 50 | |
| Pentachlorophenol | ND | 1600 | 1700 | 110 | Q 1400 | 86 | 17-109 | 19 | 50 | |
| Phenol | ND | 1600 | 1200 | 75 | 1000 | 62 | 26-90 | 18 | 50 | |
| 2-Methylphenol | ND | 1600 | 1400 | 87 | 1200 | 74 | 30-130. | 15 | 50 | |
| 3-Methylphenol/4-Methylphenol | ND | 1600 | 1400 | 87 | 1300 | 80 | 30-130 | 7 | 50 | |



Project Name: PIERCE ARROW APARTMENTS

Project Number: 56831.10 Lab Number:

L1723613

Report Date:

07/19/17

| | Native | MS | MS | MS | | MSD | MSD | | Recovery | | | RPD |
|-----------|--------|-------|-------|-----------|------|-------|-----------|------|----------|-----|------|--------|
| Parameter | Sample | Added | Found | %Recovery | Qual | Found | %Recovery | Qual | Limits | RPD | Qual | Limits |

Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-03,05,07,09,11,13,15,17,19,21,23 QC Batch ID: WG1022533-4 WG1022533-5 QC Sample: L1723613-05 Client ID: SP-3-1-8-071117

| | MS | MSD | Acceptance | |
|----------------------|----------------------|----------------------|------------|--|
| Surrogate | % Recovery Qualifier | % Recovery Qualifier | Criteria | |
| 2,4,6-Tribromophenol | 117 | 98 | 10-136 | |
| 2-Fluorobiphenyl | 83 | 71 | 30-120 | |
| 2-Fluorophenol | 75 | 67 | 25-120 | |
| 4-Terphenyl-d14 | 86 | 74 | 18-120 | |
| Nitrobenzene-d5 | 90 | 75 | 23-120 | |
| Phenol-d6 | 81 | 73 | 10-120 | |



Project Name: PIERCE ARROW APARTMENTS

Project Number: 56831.10

Lab Number: L1723613

Report Date: 07/19/17

| Parameter | Native
Sample | MS
Added | MS
Found | MS
%Recovery | Qual | MSD
Found | MSD
%Recovery | Qual | Recovery
Limits | RPD | Qual | RPD
Limits |
|--|------------------|-------------|---------------|------------------|-------|--------------|------------------|-------|--------------------|--------|-----------|---------------|
| Semivolatile Organics by GC Client ID: SS-1-071117 | C/MS - Westbor | ough Lab | Associated sa | mple(s): 27-29,3 | 1 QCE | Batch ID: W | /G1022578-4 | WG102 | 2578-5 QC | Sample | e: L17236 | 613-27 |
| Acenaphthene | 920 | 1570 | 2100 | 75 | | 1800 | 56 | | 31-137 | 15 | | 50 |
| Hexachlorobenzene | ND | 1570 | 1600 | 100 | | 1300 | 83 | | 40-140 | 21 | | 50 |
| Fluoranthene | 7300 | 1570 | 7000 | 0 | Q | 6400 | 0 | Q | 40-140 | 9 | | 50 |
| Naphthalene | 320 | 1570 | 1500 | 75 | | 1200 | 56 | | 40-140 | 22 | | 50 |
| Benzo(a)anthracene | 3600 | 1570 | 3900 | 19 | Q | 3400 | 0 | Q | 40-140 | 14 | | 50 |
| Benzo(a)pyrene | 2700 | 1570 | 3200 | 32 | Q | 2700 | 0 | Q | 40-140 | 17 | | 50 |
| Benzo(b)fluoranthene | 3600 | 1570 | 4200 | 38 | Q | 3400 | 0 | Q | 40-140 | 21 | | 50 |
| Benzo(k)fluoranthene | 1200 | 1570 | 1900 | 45 | | 1700 | 32 | Q | 40-140 | 11 | | 50 |
| Chrysene | 3100 | 1570 | 3600 | 32 | Q | 3300 | 13 | Q | 40-140 | 9 | | 50 |
| Acenaphthylene | 38.J | 1570 | 1400 | 89 | | 1100 | 70 | | 40-140 | 24 | | 50 |
| Anthracene | 1800 | 1570 | 2700 | 57 | | 2400 | 38 | Q | 40-140 | 12 | | 50 |
| Benzo(ghi)perylene | 1300 | 1570 | 1900 | 38 | Q | 1700 | 26 | Q | 40-140 | 11 | | 50 |
| Fluorene | 980 | 1570 | 2200 | 78 | | 1900 | 59 | | 40-140 | 15 | | 50 |
| Phenanthrene | 6400 | 1570 | 6400 | 0 | Q | 6000 | 0 | Q | 40-140 | 6 | | 50 |
| Dibenzo(a,h)anthracene | 380 | 1570 | 1300 | 59 | | 1000 | 40 | | 40-140 | 26 | | 50 |
| Indeno(1,2,3-cd)pyrene | 1600 | 1570 | 2200 | 38 | Q | 1900 | 19 | Q | 40-140 | 15 | | 50 |
| Pyrene | 5900 | 1570 | 5800 | 0 | Q | 5300 | 0 | Q | 35-142 | 9 | | 50 |
| Dibenzofuran | 580 | 1570 | 2000 | 90 | | 1700 | 72 | | 40-140 | 16 | | 50 |
| Pentachlorophenol | ND | 1570 | 1500 | 96 | | 1100 | 70 | | 17-109 | 31 | | 50 |
| Phenol | ND | 1570 | 1200 | 76 | | 1000 | 64 | | 26-90 | 18 | | 50 |
| 2-Methylphenol | ND | 1570 | 1200 | 76 | | 1100 | 70 | | 30-130. | 9 | | 50 |
| 3-Methylphenol/4-Methylphenol | ND | 1570 | 1300 | 83 | | 1100 | 70 | | 30-130 | 17 | | 50 |



Project Name: PIERCE ARROW APARTMENTS

Project Number: 56831.10 Lab Number:

L1723613

Report Date:

07/19/17

| | Native | MS | MS | MS | | MSD | MSD | | Recovery | | | RPD | |
|-----------|--------|-------|-------|-----------|------|-------|-----------|--------|----------|-----|------|--------|--|
| Parameter | Sample | Added | Found | %Recovery | Qual | Found | %Recovery | ' Qual | Limits | RPD | Qual | Limits | |

Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 27-29,31 QC Batch ID: WG1022578-4 WG1022578-5 QC Sample: L1723613-27 Client ID: SS-1-071117

| | MS | MSD | Acceptance | |
|----------------------|----------------------|----------------------|------------|--|
| Surrogate | % Recovery Qualifier | % Recovery Qualifier | Criteria | |
| 2,4,6-Tribromophenol | 121 | 99 | 10-136 | |
| 2-Fluorobiphenyl | 81 | 70 | 30-120 | |
| 2-Fluorophenol | 78 | 66 | 25-120 | |
| 4-Terphenyl-d14 | 72 | 61 | 18-120 | |
| Nitrobenzene-d5 | 85 | 73 | 23-120 | |
| Phenol-d6 | 76 | 64 | 10-120 | |



PCBS



Project Name: PIERCE ARROW APARTMENTS Lab Number: L1723613

Project Number: 56831.10 **Report Date:** 07/19/17

SAMPLE RESULTS

Lab ID: Date Collected: 07/11/17 10:10

Client ID: SP-2-3.5-071117 Date Received: 07/11/17 Sample Location: BUFFALO, NY Field Prep: Not Specified

Matrix: Soil Extraction Method:EPA 3546

Extraction Date: 07/14/17 13:33

Analytical Method: 1,8082A Cleanup Method: EPA 3665A Analytical Date: 07/18/17 09:55 Cleanup Date: 07/15/17

Analyst: JA Cleanup Method: EPA 3660B Percent Solids: 76% Cleanup Date: 07/15/17

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor | Column |
|---------------------------------|-------------------|-----------|-------|------|------|-----------------|--------|
| Polychlorinated Biphenyls by GC | - Westborough Lab | | | | | | |
| Aroclor 1016 | ND | | ug/kg | 43.0 | 4.88 | 1 | А |
| Aroclor 1221 | ND | | ug/kg | 43.0 | 6.55 | 1 | A |
| Aroclor 1232 | ND | | ug/kg | 43.0 | 4.23 | 1 | Α |
| Aroclor 1242 | ND | | ug/kg | 43.0 | 5.27 | 1 | Α |
| Aroclor 1248 | ND | | ug/kg | 43.0 | 4.83 | 1 | Α |
| Aroclor 1254 | ND | | ug/kg | 43.0 | 3.51 | 1 | Α |
| Aroclor 1260 | ND | | ug/kg | 43.0 | 4.49 | 1 | Α |
| Aroclor 1262 | ND | | ug/kg | 43.0 | 3.54 | 1 | Α |
| Aroclor 1268 | ND | | ug/kg | 43.0 | 3.05 | 1 | Α |
| PCBs, Total | ND | | ug/kg | 43.0 | 3.05 | 1 | Α |

| Surrogate | % Recovery | Qualifier | Acceptance
Criteria | Column |
|------------------------------|--|-----------|------------------------|--------|
| | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | | | |
| 2,4,5,6-Tetrachloro-m-xylene | 34 | | 30-150 | Α |
| Decachlorobiphenyl | 42 | | 30-150 | Α |
| 2,4,5,6-Tetrachloro-m-xylene | 35 | | 30-150 | В |
| Decachlorobiphenyl | 56 | | 30-150 | В |



Project Name: Lab Number: PIERCE ARROW APARTMENTS L1723613

Project Number: 56831.10 **Report Date:** 07/19/17

SAMPLE RESULTS

Date Collected: 07/11/17 11:40

Lab ID: L1723613-09 Client ID: Date Received: 07/11/17 SP-6-0-1-071117

Sample Location: Field Prep: BUFFALO, NY Not Specified Extraction Method: EPA 3546

Matrix: Soil Extraction Date: 07/14/17 13:33 Analytical Method: 1,8082A Cleanup Method: EPA 3665A Analytical Date: 07/18/17 10:12

Cleanup Date: 07/15/17 Analyst: JΑ Cleanup Method: EPA 3660B Percent Solids: 87% Cleanup Date: 07/15/17

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor | Column |
|---------------------------------------|--------------|-----------|-------|------|------|-----------------|--------|
| Polychlorinated Biphenyls by GC - Wes | tborough Lab | | | | | | |
| Aroclor 1016 | ND | | ug/kg | 37.5 | 4.26 | 1 | А |
| Aroclor 1221 | ND | | ug/kg | 37.5 | 5.71 | 1 | Α |
| Aroclor 1232 | ND | | ug/kg | 37.5 | 3.69 | 1 | Α |
| Aroclor 1242 | ND | | ug/kg | 37.5 | 4.59 | 1 | Α |
| Aroclor 1248 | ND | | ug/kg | 37.5 | 4.21 | 1 | Α |
| Aroclor 1254 | 26.0 | J | ug/kg | 37.5 | 3.06 | 1 | В |
| Aroclor 1260 | 24.5 | J | ug/kg | 37.5 | 3.92 | 1 | В |
| Aroclor 1262 | ND | | ug/kg | 37.5 | 3.08 | 1 | Α |
| Aroclor 1268 | ND | | ug/kg | 37.5 | 2.66 | 1 | Α |
| PCBs, Total | 50.5 | J | ug/kg | 37.5 | 3.06 | 1 | В |

| | | | Acceptance | |
|------------------------------|------------|-----------|------------|--------|
| Surrogate | % Recovery | Qualifier | Criteria | Column |
| 2,4,5,6-Tetrachloro-m-xylene | 51 | | 30-150 | Α |
| Decachlorobiphenyl | 54 | | 30-150 | Α |
| 2,4,5,6-Tetrachloro-m-xylene | 47 | | 30-150 | В |
| Decachlorobiphenyl | 72 | | 30-150 | В |



Project Name: PIERCE ARROW APARTMENTS Lab Number: L1723613

Project Number: 56831.10 **Report Date:** 07/19/17

SAMPLE RESULTS

Lab ID: L1723613-11 Date Collected: 07/11/17 12:30

Client ID: SP-7-4-8-071117 Date Received: 07/11/17
Sample Location: BUFFALO, NY Field Prep: Not Specified

Matrix: Soil Extraction Method: EPA 3546

Matrix: Soil Extraction Date: 07/14/17 13:33

Analytical Method: 1,8082A Cleanup Method: EPA 3665A

Analytical Date: 07/18/17 10:28 Cleanup Date: 07/15/17

Analyst: JA Cleanup Method: EPA 3660B Percent Solids: 84% Cleanup Date: 07/15/17

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor | Column |
|------------------------------|----------------------|-----------|-------|------|------|------------------------|--------|
| Polychlorinated Biphenyls by | GC - Westborough Lab | | | | | | |
| Aroclor 1016 | ND | | ug/kg | 39.1 | 4.43 | 1 | Α |
| Aroclor 1221 | ND | | ug/kg | 39.1 | 5.94 | 1 | Α |
| Aroclor 1232 | ND | | ug/kg | 39.1 | 3.84 | 1 | Α |
| Aroclor 1242 | ND | | ug/kg | 39.1 | 4.78 | 1 | Α |
| Aroclor 1248 | ND | | ug/kg | 39.1 | 4.38 | 1 | Α |
| Aroclor 1254 | ND | | ug/kg | 39.1 | 3.19 | 1 | Α |
| Aroclor 1260 | ND | | ug/kg | 39.1 | 4.08 | 1 | Α |
| Aroclor 1262 | ND | | ug/kg | 39.1 | 3.21 | 1 | Α |
| Aroclor 1268 | ND | | ug/kg | 39.1 | 2.76 | 1 | Α |
| PCBs, Total | ND | | ug/kg | 39.1 | 2.76 | 1 | Α |

| Surrogate | % Recovery | Qualifier | Acceptance
Criteria | Column |
|------------------------------|------------|-----------|------------------------|--------|
| 2,4,5,6-Tetrachloro-m-xylene | 54 | | 30-150 | Α |
| Decachlorobiphenyl | 51 | | 30-150 | Α |
| 2,4,5,6-Tetrachloro-m-xylene | 59 | | 30-150 | В |
| Decachlorobiphenyl | 65 | | 30-150 | В |



Project Name: PIERCE ARROW APARTMENTS Lab Number: L1723613

Project Number: 56831.10 **Report Date:** 07/19/17

SAMPLE RESULTS

Lab ID: Date Collected: 07/11/17 13:00

Client ID: SP-8-0-1-071117 Date Received: 07/11/17 Sample Location: BUFFALO, NY Field Prep: Not Specified

Matrix: Soil Extraction Method: EPA 3546

Extraction Date: 07/14/17 13:33

Analytical Method: 1,8082A Cleanup Method: EPA 3665A
Analytical Date: 07/18/17 10:45 Cleanup Date: 07/15/17
Analyst: JA Cleanup Method: EPA 3660B

Percent Solids: 91% Cleanup Date: 07/15/17

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor | Column |
|---------------------------------|---------------------|-----------|-------|------|------|-----------------|--------|
| Polychlorinated Biphenyls by GC | C - Westborough Lab | | | | | | |
| | | | | | | | |
| Aroclor 1016 | ND | | ug/kg | 36.2 | 4.10 | 1 | Α |
| Aroclor 1221 | ND | | ug/kg | 36.2 | 5.50 | 1 | Α |
| Aroclor 1232 | ND | | ug/kg | 36.2 | 3.56 | 1 | Α |
| Aroclor 1242 | ND | | ug/kg | 36.2 | 4.42 | 1 | Α |
| Aroclor 1248 | ND | | ug/kg | 36.2 | 4.06 | 1 | Α |
| Aroclor 1254 | ND | | ug/kg | 36.2 | 2.95 | 1 | Α |
| Aroclor 1260 | 7.79 | J | ug/kg | 36.2 | 3.77 | 1 | В |
| Aroclor 1262 | ND | | ug/kg | 36.2 | 2.97 | 1 | Α |
| Aroclor 1268 | ND | | ug/kg | 36.2 | 2.56 | 1 | Α |
| PCBs, Total | 7.79 | J | ug/kg | 36.2 | 3.77 | 1 | В |

| | | | Acceptance | |
|------------------------------|------------|-----------|------------|--------|
| Surrogate | % Recovery | Qualifier | Criteria | Column |
| 2,4,5,6-Tetrachloro-m-xylene | 50 | | 30-150 | Α |
| Decachlorobiphenyl | 39 | | 30-150 | Α |
| 2,4,5,6-Tetrachloro-m-xylene | 51 | | 30-150 | В |
| Decachlorobiphenyl | 56 | | 30-150 | В |



Project Name: Lab Number: PIERCE ARROW APARTMENTS L1723613

Project Number: 56831.10 **Report Date:** 07/19/17

SAMPLE RESULTS

Lab ID: Date Collected: L1723613-15 07/11/17 13:20

Client ID: Date Received: 07/11/17 SP-9-0-13-071117 Sample Location: Field Prep: BUFFALO, NY Not Specified

Extraction Method: EPA 3546

Matrix: Soil Extraction Date: 07/14/17 13:33 Analytical Method: 1,8082A Cleanup Method: EPA 3665A Analytical Date: 07/18/17 11:01 07/15/17

Cleanup Date: Analyst: JΑ Cleanup Method: EPA 3660B

Percent Solids: 85% Cleanup Date: 07/15/17

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor | Column |
|------------------------------|----------------------|-----------|-------|------|------|------------------------|--------|
| Polychlorinated Biphenyls by | GC - Westborough Lab | | | | | | |
| Aroclor 1016 | ND | | ug/kg | 38.4 | 4.35 | 1 | Α |
| Aroclor 1221 | ND | | ug/kg | 38.4 | 5.84 | 1 | Α |
| Aroclor 1232 | ND | | ug/kg | 38.4 | 3.78 | 1 | Α |
| Aroclor 1242 | ND | | ug/kg | 38.4 | 4.70 | 1 | Α |
| Aroclor 1248 | ND | | ug/kg | 38.4 | 4.31 | 1 | Α |
| Aroclor 1254 | ND | | ug/kg | 38.4 | 3.13 | 1 | Α |
| Aroclor 1260 | ND | | ug/kg | 38.4 | 4.01 | 1 | Α |
| Aroclor 1262 | ND | | ug/kg | 38.4 | 3.16 | 1 | Α |
| Aroclor 1268 | ND | | ug/kg | 38.4 | 2.72 | 1 | Α |
| PCBs, Total | ND | | ug/kg | 38.4 | 2.72 | 1 | Α |

| | | | Acceptance | |
|------------------------------|------------|-----------|------------|--------|
| Surrogate | % Recovery | Qualifier | Criteria | Column |
| 2,4,5,6-Tetrachloro-m-xylene | 52 | | 30-150 | Α |
| Decachlorobiphenyl | 49 | | 30-150 | Α |
| 2,4,5,6-Tetrachloro-m-xylene | 51 | | 30-150 | В |
| Decachlorobiphenyl | 69 | | 30-150 | В |



Project Name: Lab Number: PIERCE ARROW APARTMENTS L1723613

Project Number: 56831.10 **Report Date:** 07/19/17

SAMPLE RESULTS

Date Collected: 07/11/17 14:20

Lab ID: L1723613-19 Client ID: Date Received: 07/11/17 SP-11-0.5-4.5-071117

Sample Location: Field Prep: BUFFALO, NY Not Specified

Extraction Method: EPA 3546 Matrix: Soil Extraction Date: 07/14/17 13:33

Analytical Method: 1,8082A Cleanup Method: EPA 3665A Analytical Date: 07/18/17 11:17 Cleanup Date: 07/15/17 Analyst: JA

Cleanup Method: EPA 3660B Percent Solids: 85% Cleanup Date: 07/15/17

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor | Column |
|---------------------------------------|---------------|-----------|-------|------|------|-----------------|--------|
| Polychlorinated Biphenyls by GC - Wes | stborough Lab | | | | | | |
| Aroclor 1016 | ND | | ug/kg | 38.3 | 4.34 | 1 | Α |
| Aroclor 1221 | ND | | ug/kg | 38.3 | 5.82 | 1 | Α |
| Aroclor 1232 | ND | | ug/kg | 38.3 | 3.76 | 1 | Α |
| Aroclor 1242 | ND | | ug/kg | 38.3 | 4.68 | 1 | Α |
| Aroclor 1248 | ND | | ug/kg | 38.3 | 4.29 | 1 | Α |
| Aroclor 1254 | ND | | ug/kg | 38.3 | 3.12 | 1 | Α |
| Aroclor 1260 | ND | | ug/kg | 38.3 | 4.00 | 1 | Α |
| Aroclor 1262 | ND | | ug/kg | 38.3 | 3.14 | 1 | Α |
| Aroclor 1268 | ND | | ug/kg | 38.3 | 2.71 | 1 | Α |
| PCBs, Total | ND | | ug/kg | 38.3 | 2.71 | 1 | Α |

| Surrogate | % Recovery | Qualifier | Acceptance
Criteria | Column |
|------------------------------|------------|-----------|------------------------|--------|
| 2,4,5,6-Tetrachloro-m-xylene | 62 | | 30-150 | A |
| Decachlorobiphenyl | 54 | | 30-150 | Α |
| 2,4,5,6-Tetrachloro-m-xylene | 63 | | 30-150 | В |
| Decachlorobiphenyl | 74 | | 30-150 | В |



Project Name: PIERCE ARROW APARTMENTS

Project Number: 56831.10 Lab Number:

L1723613

Report Date:

07/19/17

Method Blank Analysis Batch Quality Control

Analytical Method: Analytical Date:

1,8082A 07/16/17 21:07

Analyst: JW Extraction Method: EPA 3546 Extraction Date:

07/14/17 01:05

Cleanup Method: Cleanup Date:

EPA 3665A 07/14/17

Cleanup Method: Cleanup Date:

EPA 3660B 07/14/17

| Parameter | Result | Qualifier | Units | RL | MDL | Column |
|---|--------------|-------------|-----------|-------------|-------------|--------|
| Polychlorinated Biphenyls by GC WG1022440-1 | - Westboroug | h Lab for s | ample(s): | 03,09,11,13 | ,15,19 Bato | h: |
| Aroclor 1016 | ND | | ug/kg | 31.6 | 3.58 | Α |
| Aroclor 1221 | ND | | ug/kg | 31.6 | 4.81 | Α |
| Aroclor 1232 | ND | | ug/kg | 31.6 | 3.11 | Α |
| Aroclor 1242 | ND | | ug/kg | 31.6 | 3.87 | Α |
| Aroclor 1248 | ND | | ug/kg | 31.6 | 3.55 | Α |
| Aroclor 1254 | ND | | ug/kg | 31.6 | 2.58 | Α |
| Aroclor 1260 | ND | | ug/kg | 31.6 | 3.30 | Α |
| Aroclor 1262 | ND | | ug/kg | 31.6 | 2.60 | Α |
| Aroclor 1268 | ND | | ug/kg | 31.6 | 2.24 | Α |
| PCBs, Total | ND | | ug/kg | 31.6 | 2.24 | Α |

| | | Acceptance | | | | |
|------------------------------|-----------|------------|----------|--------|--|--|
| Surrogate | %Recovery | Qualifier | Criteria | Column | | |
| | | | | | | |
| 2,4,5,6-Tetrachloro-m-xylene | 79 | | 30-150 | Α | | |
| Decachlorobiphenyl | 85 | | 30-150 | Α | | |
| 2,4,5,6-Tetrachloro-m-xylene | 85 | | 30-150 | В | | |
| Decachlorobiphenyl | 103 | | 30-150 | В | | |



Project Name: PIERCE ARROW APARTMENTS

Project Number: 56831.10

Lab Number:

L1723613

Report Date:

07/19/17

| | LCS | | LCSD | | %Recovery | | | RPD | |
|---|-----------------|-----------------|---------------|-------------|-------------|-----------|------|--------|--------|
| Parameter | %Recovery | Qual | %Recovery | Qual | Limits | RPD | Qual | Limits | Column |
| Polychlorinated Biphenyls by GC - Westborou | ugh Lab Associa | ited sample(s): | 03,09,11,13,1 | 5,19 Batch: | WG1022440-2 | WG1022440 | 0-3 | | |
| Aroclor 1016 | 77 | | 78 | | 40-140 | 1 | | 50 | Α |
| Aroclor 1260 | 73 | | 76 | | 40-140 | 4 | | 50 | Α |

| Surrogate | LCS
%Recovery Qua | LCSD
al %Recoverv Qual | Acceptance
Criteria Column |
|------------------------------|----------------------|---------------------------|-------------------------------|
| Gurrogate | 70Necovery Qua | www. | |
| 2,4,5,6-Tetrachloro-m-xylene | 75 | 78 | 30-150 A |
| Decachlorobiphenyl | 79 | 81 | 30-150 A |
| 2,4,5,6-Tetrachloro-m-xylene | 83 | 85 | 30-150 B |
| Decachlorobiphenyl | 96 | 100 | 30-150 B |



METALS



Project Number: 56831.10 **Report Date:** 07/19/17

SAMPLE RESULTS

 Lab ID:
 L1723613-02
 Date Collected:
 07/11/17 09:40

 Client ID:
 SP-1-0.5-8-071117
 Date Received:
 07/11/17

Sample Location: BUFFALO, NY Field Prep: Not Specified

Matrix: Soil Percent Solids: 82%

| i ordorit dollad. | 0270 | | | | | Dilution | Date | Date | Prep | Analytical | |
|---------------------|------------|-----------|-------|-------|-------|----------|----------------|------------------|-----------|------------|---------|
| Parameter | Result | Qualifier | Units | RL | MDL | Factor | Prepared | Analyzed | Method | Method | Analyst |
| | | | | | | | | | | | |
| Total Metals - Mans | sfield Lab | | | | | | | | | | |
| Arsenic, Total | 4.25 | | mg/kg | 0.473 | 0.098 | 1 | 07/12/17 21:10 | 0 07/17/17 15:47 | EPA 3050B | 1,6010C | PS |
| Barium, Total | 103 | | mg/kg | 0.473 | 0.082 | 1 | 07/12/17 21:10 | 0 07/17/17 15:47 | EPA 3050B | 1,6010C | PS |
| Beryllium, Total | 0.563 | | mg/kg | 0.236 | 0.016 | 1 | 07/12/17 21:10 | 0 07/17/17 15:47 | EPA 3050B | 1,6010C | PS |
| Cadmium, Total | 0.710 | | mg/kg | 0.473 | 0.046 | 1 | 07/12/17 21:10 | 0 07/17/17 15:47 | EPA 3050B | 1,6010C | PS |
| Chromium, Total | 13.8 | | mg/kg | 0.473 | 0.045 | 1 | 07/12/17 21:10 | 0 07/17/17 15:47 | EPA 3050B | 1,6010C | PS |
| Copper, Total | 18.0 | | mg/kg | 0.473 | 0.122 | 1 | 07/12/17 21:10 | 0 07/17/17 15:47 | EPA 3050B | 1,6010C | PS |
| Lead, Total | 122 | | mg/kg | 2.36 | 0.127 | 1 | 07/12/17 21:10 | 0 07/17/17 15:47 | EPA 3050B | 1,6010C | PS |
| Manganese, Total | 266 | | mg/kg | 0.473 | 0.075 | 1 | 07/12/17 21:10 | 0 07/17/17 15:47 | EPA 3050B | 1,6010C | PS |
| Mercury, Total | 0.12 | | mg/kg | 0.08 | 0.02 | 1 | 07/13/17 09:0 | 0 07/17/17 14:51 | EPA 7471B | 1,7471B | MG |
| Nickel, Total | 16.8 | | mg/kg | 1.18 | 0.114 | 1 | 07/12/17 21:10 | 0 07/17/17 15:47 | EPA 3050B | 1,6010C | PS |
| Selenium, Total | 0.147 | J | mg/kg | 0.946 | 0.122 | 1 | 07/12/17 21:10 | 0 07/17/17 15:47 | EPA 3050B | 1,6010C | PS |
| Silver, Total | ND | | mg/kg | 0.473 | 0.134 | 1 | 07/12/17 21:10 | 0 07/17/17 15:47 | EPA 3050B | 1,6010C | PS |
| Zinc, Total | 83.5 | | mg/kg | 2.36 | 0.139 | 1 | 07/12/17 21:10 | 0 07/17/17 15:47 | EPA 3050B | 1,6010C | PS |
| | | | | | | | | - | | - | |



Project Number: 56831.10 **Report Date:** 07/19/17

SAMPLE RESULTS

 Lab ID:
 L1723613-03
 Date Collected:
 07/11/17 10:10

 Client ID:
 SP-2-3.5-071117
 Date Received:
 07/11/17

Sample Location: BUFFALO, NY Field Prep: Not Specified

Matrix: Soil Percent Solids: 76%

| i ordorit dollad. | 1070 | | | | | Dilution | Date | Date | Prep | Analytical | |
|---------------------|-----------------|-----------|-------|-------|-------|----------|----------------|------------------|-----------|------------|---------|
| Parameter | Result | Qualifier | Units | RL | MDL | Factor | Prepared | Analyzed | Method | Method | Analyst |
| Taral Marrala Mara | - C - L - L - L | | | | | | | | | | |
| Total Metals - Mans | stield Lab | | | | | | | | | | |
| Arsenic, Total | 4.64 | | mg/kg | 1.04 | 0.217 | 2 | 07/12/17 21:10 | 0 07/17/17 15:51 | EPA 3050B | 1,6010C | PS |
| Barium, Total | 110 | | mg/kg | 1.04 | 0.181 | 2 | 07/12/17 21:10 | 0 07/17/17 15:51 | EPA 3050B | 1,6010C | PS |
| Beryllium, Total | 0.615 | | mg/kg | 0.521 | 0.034 | 2 | 07/12/17 21:10 | 0 07/17/17 15:51 | EPA 3050B | 1,6010C | PS |
| Cadmium, Total | 0.782 | J | mg/kg | 1.04 | 0.102 | 2 | 07/12/17 21:10 | 0 07/17/17 15:51 | EPA 3050B | 1,6010C | PS |
| Chromium, Total | 16.9 | | mg/kg | 1.04 | 0.100 | 2 | 07/12/17 21:10 | 0 07/17/17 15:51 | EPA 3050B | 1,6010C | PS |
| Copper, Total | 18.6 | | mg/kg | 1.04 | 0.269 | 2 | 07/12/17 21:10 | 0 07/17/17 15:51 | EPA 3050B | 1,6010C | PS |
| Lead, Total | 18.2 | | mg/kg | 5.21 | 0.279 | 2 | 07/12/17 21:10 | 0 07/17/17 15:51 | EPA 3050B | 1,6010C | PS |
| Manganese, Total | 307 | | mg/kg | 1.04 | 0.166 | 2 | 07/12/17 21:10 | 0 07/17/17 15:51 | EPA 3050B | 1,6010C | PS |
| Mercury, Total | 0.05 | J | mg/kg | 0.08 | 0.02 | 1 | 07/13/17 09:0 | 0 07/17/17 14:53 | EPA 7471B | 1,7471B | MG |
| Nickel, Total | 17.4 | | mg/kg | 2.60 | 0.252 | 2 | 07/12/17 21:10 | 0 07/17/17 15:51 | EPA 3050B | 1,6010C | PS |
| Selenium, Total | ND | | mg/kg | 2.08 | 0.269 | 2 | 07/12/17 21:10 | 0 07/17/17 15:51 | EPA 3050B | 1,6010C | PS |
| Silver, Total | ND | | mg/kg | 1.04 | 0.295 | 2 | 07/12/17 21:10 | 0 07/17/17 15:51 | EPA 3050B | 1,6010C | PS |
| Zinc, Total | 56.8 | | mg/kg | 5.21 | 0.305 | 2 | 07/12/17 21:10 | 0 07/17/17 15:51 | EPA 3050B | 1,6010C | PS |
| | | | | | | | | | | | |



Project Number: 56831.10 **Report Date:** 07/19/17

SAMPLE RESULTS

 Lab ID:
 L1723613-05
 Date Collected:
 07/11/17 10:30

 Client ID:
 SP-3-1-8-071117
 Date Received:
 07/11/17

Sample Location: BUFFALO, NY Field Prep: Not Specified

Matrix: Soil
Percent Solids: 81%

Dilution Date Date Prep **Analytical** Method Factor **Prepared Analyzed** Method Result Qualifier RL MDL **Parameter** Units **Analyst** Total Metals - Mansfield Lab Arsenic, Total 5.41 mg/kg 0.991 0.206 2 07/12/17 21:10 07/17/17 15:31 EPA 3050B 1,6010C PS 66.9 2 07/12/17 21:10 07/17/17 15:31 EPA 3050B 1,6010C PS Barium, Total mg/kg 0.991 0.172 J 2 1,6010C 0.416 0.496 0.033 07/12/17 21:10 07/17/17 15:31 EPA 3050B PS Beryllium, Total mg/kg J 2 Cadmium, Total 0.734 mg/kg 0.991 0.097 07/12/17 21:10 07/17/17 15:31 EPA 3050B 1,6010C PS 0.991 0.095 2 07/12/17 21:10 07/17/17 15:31 EPA 3050B 1,6010C PS Chromium, Total 13.2 mg/kg 14.2 0.991 0.256 2 07/12/17 21:10 07/17/17 15:31 EPA 3050B 1,6010C PS Copper, Total mg/kg Lead, Total 17.5 4.96 0.266 2 07/12/17 21:10 07/17/17 15:31 EPA 3050B 1,6010C PS mg/kg Manganese, Total 218 mg/kg 0.991 0.158 2 07/12/17 21:10 07/17/17 15:31 EPA 3050B 1,6010C PS J 1 0.04 07/13/17 09:00 07/17/17 14:32 EPA 7471B 1,7471B MG Mercury, Total mg/kg 0.08 0.02 Nickel, Total 13.3 mg/kg 2.48 0.240 2 07/12/17 21:10 07/17/17 15:31 EPA 3050B 1,6010C PS Selenium, Total ND 1.98 0.256 2 07/12/17 21:10 07/17/17 15:31 EPA 3050B 1,6010C PS mg/kg Silver, Total ND 0.991 0.280 2 07/12/17 21:10 07/17/17 15:31 EPA 3050B 1,6010C PS mg/kg Zinc, Total 49.3 mg/kg 4.96 0.290 2 07/12/17 21:10 07/17/17 15:31 EPA 3050B 1,6010C PS



Project Number: 56831.10 **Report Date:** 07/19/17

SAMPLE RESULTS

 Lab ID:
 L1723613-07
 Date Collected:
 07/11/17 11:15

 Client ID:
 SP-5-1-8-071117
 Date Received:
 07/11/17

Sample Location: BUFFALO, NY Field Prep: Not Specified

Matrix: Soil Percent Solids: 78%

Dilution Date Date Prep **Analytical** Method Method Factor **Prepared Analyzed** Result Qualifier RL MDL **Parameter** Units **Analyst** Total Metals - Mansfield Lab Arsenic, Total 5.86 mg/kg 0.992 0.206 2 07/12/17 21:10 07/17/17 15:55 EPA 3050B 1,6010C PS 2 07/12/17 21:10 07/17/17 15:55 EPA 3050B 1,6010C PS Barium, Total 90.1 mg/kg 0.992 0.172 J 2 1,6010C 0.456 0.496 0.033 07/12/17 21:10 07/17/17 15:55 EPA 3050B PS Beryllium, Total mg/kg J Cadmium, Total 0.902 mg/kg 0.992 0.097 2 07/12/17 21:10 07/17/17 15:55 EPA 3050B 1,6010C PS 17.2 0.992 0.095 2 07/12/17 21:10 07/17/17 15:55 EPA 3050B 1,6010C PS Chromium, Total mg/kg 21.8 0.992 0.256 2 07/12/17 21:10 07/17/17 15:55 EPA 3050B 1,6010C PS Copper, Total mg/kg Lead, Total 10.9 4.96 0.266 2 07/12/17 21:10 07/17/17 15:55 EPA 3050B 1,6010C PS mg/kg Manganese, Total 422 mg/kg 0.992 0.158 2 07/12/17 21:10 07/17/17 15:55 EPA 3050B 1,6010C PS 1 ND 07/13/17 09:00 07/17/17 14:55 EPA 7471B 1,7471B MG Mercury, Total mg/kg 0.08 0.02 Nickel, Total 21.9 mg/kg 2.48 0.240 2 07/12/17 21:10 07/17/17 15:55 EPA 3050B 1,6010C PS Selenium, Total ND 1.98 0.256 2 07/12/17 21:10 07/17/17 15:55 EPA 3050B 1,6010C PS mg/kg Silver, Total ND 0.992 0.281 2 07/12/17 21:10 07/17/17 15:55 EPA 3050B 1,6010C PS mg/kg Zinc, Total 57.0 mg/kg 4.96 0.290 2 07/12/17 21:10 07/17/17 15:55 EPA 3050B 1,6010C PS



Project Number: 56831.10 **Report Date:** 07/19/17

SAMPLE RESULTS

 Lab ID:
 L1723613-09
 Date Collected:
 07/11/17 11:40

 Client ID:
 SP-6-0-1-071117
 Date Received:
 07/11/17

Sample Location: BUFFALO, NY Field Prep: Not Specified

Matrix: Soil Percent Solids: 87%

| r crocrit dollas. | 07 70 | | | | | Dilution | Date | Date | Prep | Analytical | |
|---------------------|------------|-----------|-------|-------|-------|----------|---------------|------------------|-----------|------------|---------|
| Parameter | Result | Qualifier | Units | RL | MDL | Factor | Prepared | Analyzed | Method | Method | Analyst |
| | | | | | | | | | | | |
| Total Metals - Mans | sfield Lab | | | | | | | | | | |
| Arsenic, Total | 4.41 | | mg/kg | 0.900 | 0.187 | 2 | 07/12/17 21:1 | 0 07/17/17 16:11 | EPA 3050B | 1,6010C | PS |
| Barium, Total | 209 | | mg/kg | 0.900 | 0.156 | 2 | 07/12/17 21:1 | 0 07/17/17 16:11 | EPA 3050B | 1,6010C | PS |
| Beryllium, Total | 1.54 | | mg/kg | 0.450 | 0.030 | 2 | 07/12/17 21:1 | 0 07/17/17 16:11 | EPA 3050B | 1,6010C | PS |
| Cadmium, Total | 0.324 | J | mg/kg | 0.900 | 0.088 | 2 | 07/12/17 21:1 | 0 07/17/17 16:11 | EPA 3050B | 1,6010C | PS |
| Chromium, Total | 7.00 | | mg/kg | 0.900 | 0.086 | 2 | 07/12/17 21:1 | 0 07/17/17 16:11 | EPA 3050B | 1,6010C | PS |
| Copper, Total | 29.2 | | mg/kg | 0.900 | 0.232 | 2 | 07/12/17 21:1 | 0 07/17/17 16:11 | EPA 3050B | 1,6010C | PS |
| Lead, Total | 33.2 | | mg/kg | 4.50 | 0.241 | 2 | 07/12/17 21:1 | 0 07/17/17 16:11 | EPA 3050B | 1,6010C | PS |
| Manganese, Total | 2180 | | mg/kg | 0.900 | 0.143 | 2 | 07/12/17 21:1 | 0 07/17/17 16:11 | EPA 3050B | 1,6010C | PS |
| Mercury, Total | 0.03 | J | mg/kg | 0.07 | 0.02 | 1 | 07/13/17 09:0 | 0 07/17/17 14:56 | EPA 7471B | 1,7471B | MG |
| Nickel, Total | 6.32 | | mg/kg | 2.25 | 0.218 | 2 | 07/12/17 21:1 | 0 07/17/17 16:11 | EPA 3050B | 1,6010C | PS |
| Selenium, Total | 1.97 | | mg/kg | 1.80 | 0.232 | 2 | 07/12/17 21:1 | 0 07/17/17 16:11 | EPA 3050B | 1,6010C | PS |
| Silver, Total | 0.738 | J | mg/kg | 0.900 | 0.255 | 2 | 07/12/17 21:1 | 0 07/17/17 16:11 | EPA 3050B | 1,6010C | PS |
| Zinc, Total | 33.2 | | mg/kg | 4.50 | 0.264 | 2 | 07/12/17 21:1 | 0 07/17/17 16:11 | EPA 3050B | 1,6010C | PS |
| | | | | | | | | | | | |



Project Number: 56831.10 Report Date: 07/19/17

SAMPLE RESULTS

 Lab ID:
 L1723613-11
 Date Collected:
 07/11/17 12:30

 Client ID:
 SP-7-4-8-071117
 Date Received:
 07/11/17

Sample Location: BUFFALO, NY Field Prep: Not Specified

Matrix: Soil Percent Solids: 84%

Dilution Date Date Prep **Analytical** Method Method Factor **Prepared Analyzed** Result Qualifier RL MDL **Parameter** Units **Analyst** Total Metals - Mansfield Lab Arsenic, Total 3.86 mg/kg 0.944 0.196 2 07/12/17 21:10 07/17/17 16:15 EPA 3050B 1,6010C PS 90.5 0.164 2 07/12/17 21:10 07/17/17 16:15 EPA 3050B 1,6010C PS Barium, Total mg/kg 0.944 2 1,6010C 0.548 0.472 0.031 07/12/17 21:10 07/17/17 16:15 EPA 3050B PS Beryllium, Total mg/kg 2 Cadmium, Total 1.04 mg/kg 0.944 0.093 07/12/17 21:10 07/17/17 16:15 EPA 3050B 1,6010C PS 19.5 0.944 0.091 2 07/12/17 21:10 07/17/17 16:15 EPA 3050B 1,6010C PS Chromium, Total mg/kg 24.1 0.944 0.244 2 07/12/17 21:10 07/17/17 16:15 EPA 3050B 1,6010C PS Copper, Total mg/kg Lead, Total 9.86 4.72 0.253 2 07/12/17 21:10 07/17/17 16:15 EPA 3050B 1,6010C PS mg/kg Manganese, Total 451 mg/kg 0.944 0.150 2 07/12/17 21:10 07/17/17 16:15 EPA 3050B 1,6010C PS 1 ND 07/13/17 09:00 07/17/17 14:58 EPA 7471B 1,7471B MG Mercury, Total mg/kg 0.08 0.02 Nickel, Total 25.4 mg/kg 2.36 0.228 2 07/12/17 21:10 07/17/17 16:15 EPA 3050B 1,6010C PS Selenium, Total ND 1.89 0.244 2 07/12/17 21:10 07/17/17 16:15 EPA 3050B 1,6010C PS mg/kg Silver, Total ND 0.944 0.267 2 07/12/17 21:10 07/17/17 16:15 EPA 3050B 1,6010C PS mg/kg



1,6010C

PS

Zinc, Total

65.6

mg/kg

4.72

0.277

2

07/12/17 21:10 07/17/17 16:15 EPA 3050B

Project Number: 56831.10 **Report Date:** 07/19/17

SAMPLE RESULTS

 Lab ID:
 L1723613-13
 Date Collected:
 07/11/17 13:00

 Client ID:
 SP-8-0-1-071117
 Date Received:
 07/11/17

Sample Location: BUFFALO, NY Field Prep: Not Specified

Matrix: Soil Percent Solids: 91%

| Percent Solids: | 91% | | | | | Dilution | Date | Date | Prep | Analytical | |
|--------------------|------------|-----------|-------|-------|-------|----------|----------------|----------------|-----------|------------|---------|
| Parameter | Result | Qualifier | Units | RL | MDL | Factor | Prepared | Analyzed | Method | Method | Analyst |
| | | | | | | | | | | | |
| Total Metals - Man | sfield Lab | | | | | | | | | | |
| Arsenic, Total | 7.15 | | mg/kg | 0.864 | 0.180 | 2 | 07/12/17 21:10 | 07/17/17 16:19 | EPA 3050B | 1,6010C | PS |
| Barium, Total | 192 | | mg/kg | 0.864 | 0.150 | 2 | 07/12/17 21:10 | 07/17/17 16:19 | EPA 3050B | 1,6010C | PS |
| Beryllium, Total | 0.751 | | mg/kg | 0.432 | 0.029 | 2 | 07/12/17 21:10 | 07/17/17 16:19 | EPA 3050B | 1,6010C | PS |
| Cadmium, Total | 4.20 | | mg/kg | 0.864 | 0.085 | 2 | 07/12/17 21:10 | 07/17/17 16:19 | EPA 3050B | 1,6010C | PS |
| Chromium, Total | 1510 | | mg/kg | 0.864 | 0.083 | 2 | 07/12/17 21:10 | 07/17/17 16:19 | EPA 3050B | 1,6010C | PS |
| Copper, Total | 200 | | mg/kg | 0.864 | 0.223 | 2 | 07/12/17 21:10 | 07/17/17 16:19 | EPA 3050B | 1,6010C | PS |
| Lead, Total | 30.3 | | mg/kg | 4.32 | 0.231 | 2 | 07/12/17 21:10 | 07/17/17 16:19 | EPA 3050B | 1,6010C | PS |
| Manganese, Total | 38600 | | mg/kg | 8.64 | 1.37 | 20 | 07/12/17 21:10 | 07/17/17 18:20 | EPA 3050B | 1,6010C | AB |
| Mercury, Total | ND | | mg/kg | 0.07 | 0.02 | 1 | 07/13/17 09:00 | 07/17/17 15:00 | EPA 7471B | 1,7471B | MG |
| Nickel, Total | 72.0 | | mg/kg | 2.16 | 0.209 | 2 | 07/12/17 21:10 | 07/17/17 16:19 | EPA 3050B | 1,6010C | PS |
| Selenium, Total | 8.23 | | mg/kg | 1.73 | 0.223 | 2 | 07/12/17 21:10 | 07/17/17 16:19 | EPA 3050B | 1,6010C | PS |
| Silver, Total | 7.32 | | mg/kg | 0.864 | 0.244 | 2 | 07/12/17 21:10 | 07/17/17 16:19 | EPA 3050B | 1,6010C | PS |
| Zinc, Total | 70.2 | | mg/kg | 4.32 | 0.253 | 2 | 07/12/17 21:10 | 07/17/17 16:19 | EPA 3050B | 1,6010C | PS |



Project Number: 56831.10 **Report Date:** 07/19/17

SAMPLE RESULTS

 Lab ID:
 L1723613-15
 Date Collected:
 07/11/17 13:20

 Client ID:
 SP-9-0-13-071117
 Date Received:
 07/11/17

Sample Location: BUFFALO, NY Field Prep: Not Specified

Matrix: Soil Percent Solids: 85%

| i orooni Condo. | 0070 | | | | | Dilution | Date | Date | Prep | Analytical | |
|--------------------|------------|-----------|-------|-------|-------|----------|---------------|------------------|-----------|------------|---------|
| Parameter | Result | Qualifier | Units | RL | MDL | Factor | Prepared | Analyzed | Method | Method | Analyst |
| | | | | | | | | | | | |
| Total Metals - Man | stield Lab | | | | | | | | | | |
| Arsenic, Total | 5.73 | | mg/kg | 0.893 | 0.186 | 2 | 07/12/17 21:1 | 0 07/17/17 16:23 | EPA 3050B | 1,6010C | PS |
| Barium, Total | 44.6 | | mg/kg | 0.893 | 0.155 | 2 | 07/12/17 21:1 | 0 07/17/17 16:23 | EPA 3050B | 1,6010C | PS |
| Beryllium, Total | 0.295 | J | mg/kg | 0.447 | 0.030 | 2 | 07/12/17 21:1 | 0 07/17/17 16:23 | EPA 3050B | 1,6010C | PS |
| Cadmium, Total | 0.572 | J | mg/kg | 0.893 | 0.088 | 2 | 07/12/17 21:1 | 0 07/17/17 16:23 | EPA 3050B | 1,6010C | PS |
| Chromium, Total | 7.78 | | mg/kg | 0.893 | 0.086 | 2 | 07/12/17 21:1 | 0 07/17/17 16:23 | EPA 3050B | 1,6010C | PS |
| Copper, Total | 50.0 | | mg/kg | 0.893 | 0.230 | 2 | 07/12/17 21:1 | 0 07/17/17 16:23 | EPA 3050B | 1,6010C | PS |
| Lead, Total | 47.6 | | mg/kg | 4.47 | 0.239 | 2 | 07/12/17 21:1 | 0 07/17/17 16:23 | EPA 3050B | 1,6010C | PS |
| Manganese, Total | 155 | | mg/kg | 0.893 | 0.142 | 2 | 07/12/17 21:1 | 0 07/17/17 16:23 | EPA 3050B | 1,6010C | PS |
| Mercury, Total | 0.04 | J | mg/kg | 0.07 | 0.02 | 1 | 07/13/17 09:0 | 0 07/17/17 15:02 | EPA 7471B | 1,7471B | MG |
| Nickel, Total | 9.83 | | mg/kg | 2.23 | 0.216 | 2 | 07/12/17 21:1 | 0 07/17/17 16:23 | EPA 3050B | 1,6010C | PS |
| Selenium, Total | 0.777 | J | mg/kg | 1.79 | 0.230 | 2 | 07/12/17 21:1 | 0 07/17/17 16:23 | EPA 3050B | 1,6010C | PS |
| Silver, Total | ND | | mg/kg | 0.893 | 0.253 | 2 | 07/12/17 21:1 | 0 07/17/17 16:23 | EPA 3050B | 1,6010C | PS |
| Zinc, Total | 54.2 | | mg/kg | 4.47 | 0.262 | 2 | 07/12/17 21:1 | 0 07/17/17 16:23 | EPA 3050B | 1,6010C | PS |



07/11/17 13:50

Not Specified

Date Collected:

Project Name: PIERCE ARROW APARTMENTS Lab Number: L1723613

Project Number: 56831.10 **Report Date:** 07/19/17

SAMPLE RESULTS

Lab ID: L1723613-17

Client ID: SP-10-0-4.5-071117 Date Received: 07/11/17

Sample Location: BUFFALO, NY Field Prep:

Matrix: Soil
Percent Solids: 92%

Dilution Date Date Prep **Analytical** Method Method Factor **Prepared Analyzed** Result Qualifier Units RL MDL **Parameter Analyst** Total Metals - Mansfield Lab Arsenic, Total 14.6 mg/kg 0.857 0.178 2 07/12/17 21:10 07/17/17 16:27 EPA 3050B 1,6010C PS 101 2 07/12/17 21:10 07/17/17 16:27 EPA 3050B 1,6010C PS Barium, Total mg/kg 0.857 0.149 2 1,6010C PS 0.454 0.428 0.028 07/12/17 21:10 07/17/17 16:27 EPA 3050B Beryllium, Total mg/kg Cadmium, Total 1.94 mg/kg 0.857 0.084 2 07/12/17 21:10 07/17/17 16:27 EPA 3050B 1,6010C PS 20.5 0.857 0.082 2 07/12/17 21:10 07/17/17 16:27 EPA 3050B 1,6010C PS Chromium, Total mg/kg 494 0.857 0.221 2 07/12/17 21:10 07/17/17 16:27 EPA 3050B 1,6010C PS Copper, Total mg/kg Lead, Total 210 4.28 0.230 2 07/12/17 21:10 07/17/17 16:27 EPA 3050B 1,6010C PS mg/kg Manganese, Total 388 mg/kg 0.857 0.136 2 07/12/17 21:10 07/17/17 16:27 EPA 3050B 1,6010C PS 0.55 1 07/13/17 09:00 07/17/17 15:04 EPA 7471B 1,7471B MG Mercury, Total mg/kg 0.07 0.01 Nickel, Total 34.7 mg/kg 2.14 0.207 2 07/12/17 21:10 07/17/17 16:27 EPA 3050B 1,6010C PS Selenium, Total 0.737 J 1.71 0.221 2 07/12/17 21:10 07/17/17 16:27 EPA 3050B 1,6010C PS mg/kg J Silver, Total 0.600 0.857 0.242 2 07/12/17 21:10 07/17/17 16:27 EPA 3050B 1,6010C PS mg/kg Zinc, Total 269 mg/kg 4.28 0.251 2 07/12/17 21:10 07/17/17 16:27 EPA 3050B 1,6010C PS



Project Number: Report Date: 56831.10 07/19/17

SAMPLE RESULTS

Lab ID: L1723613-19

41.6

mg/kg

4.45

0.261

2

07/12/17 21:10 07/17/17 17:04 EPA 3050B

Date Collected: 07/11/17 14:20 Client ID: SP-11-0.5-4.5-071117 Date Received: 07/11/17

Sample Location: BUFFALO, NY Field Prep: Not Specified

Matrix: Soil 85% Percent Solids:

Dilution Date Date Prep **Analytical** Method **Prepared** Method Factor **Analyzed** Result Qualifier Units RL MDL **Parameter Analyst** Total Metals - Mansfield Lab Arsenic, Total 52.7 mg/kg 0.890 0.185 2 07/12/17 21:10 07/17/17 17:04 EPA 3050B 1,6010C AB 76.7 0.155 2 07/12/17 21:10 07/17/17 17:04 EPA 3050B 1,6010C Barium, Total mg/kg 0.890 AΒ J 2 1,6010C Beryllium, Total 0.427 0.445 0.029 07/12/17 21:10 07/17/17 17:04 EPA 3050B AΒ mg/kg 2 Cadmium, Total 1.97 mg/kg 0.890 0.087 07/12/17 21:10 07/17/17 17:04 EPA 3050B 1,6010C AB 17.3 0.890 0.086 2 07/12/17 21:10 07/17/17 17:04 EPA 3050B 1,6010C Chromium, Total mg/kg AΒ 49.5 0.890 0.230 2 07/12/17 21:10 07/17/17 17:04 EPA 3050B 1,6010C AΒ Copper, Total mg/kg Lead, Total 29.8 4.45 0.239 2 07/12/17 21:10 07/17/17 17:04 EPA 3050B 1,6010C AB mg/kg Manganese, Total 87.3 mg/kg 0.890 0.142 2 07/12/17 21:10 07/17/17 17:04 EPA 3050B 1,6010C AΒ J 0.05 0.02 1 07/13/17 09:00 07/17/17 15:10 EPA 7471B 1,7471B MG Mercury, Total mg/kg 0.07 Nickel, Total 8.96 mg/kg 2.23 0.215 2 07/12/17 21:10 07/17/17 17:04 EPA 3050B 1,6010C AΒ Selenium, Total 1.88 1.78 0.230 2 07/12/17 21:10 07/17/17 17:04 EPA 3050B 1,6010C AB mg/kg J 1,6010C Silver, Total 0.267 0.890 0.252 2 07/12/17 21:10 07/17/17 17:04 EPA 3050B AΒ mg/kg



1,6010C

AΒ

Zinc, Total

Project Number: 56831.10 **Report Date:** 07/19/17

SAMPLE RESULTS

Lab ID: L1723613-21 Date Collected: 07/11/17 14:45

Client ID: SP-12-0-3-071117 Date Received: 07/11/17
Sample Location: BUFFALO, NY Field Prep: Not Specified

Matrix: Soil Percent Solids: 77%

Dilution Date Date Prep **Analytical** Method Factor **Prepared Analyzed** Method Qualifier RL MDL **Parameter** Result Units **Analyst** Total Metals - Mansfield Lab Arsenic, Total 14.3 mg/kg 1.03 0.214 2 07/12/17 21:10 07/17/17 17:08 EPA 3050B 1,6010C AB 101 2 07/12/17 21:10 07/17/17 17:08 EPA 3050B 1,6010C Barium, Total mg/kg 1.03 0.179 AΒ 2 1,6010C 0.596 0.514 0.034 07/12/17 21:10 07/17/17 17:08 EPA 3050B AΒ Beryllium, Total mg/kg Cadmium, Total 1.52 mg/kg 1.03 0.101 2 07/12/17 21:10 07/17/17 17:08 EPA 3050B 1,6010C AB 45.8 1.03 0.099 2 07/12/17 21:10 07/17/17 17:08 EPA 3050B 1,6010C Chromium, Total mg/kg AΒ 268 1.03 0.265 2 07/12/17 21:10 07/17/17 17:08 EPA 3050B 1,6010C AΒ Copper, Total mg/kg Lead, Total 200 5.14 0.275 2 07/12/17 21:10 07/17/17 17:08 EPA 3050B 1,6010C AB mg/kg Manganese, Total 452 mg/kg 1.03 0.163 2 07/12/17 21:10 07/17/17 17:08 EPA 3050B 1,6010C AΒ 0.08 1 07/13/17 09:00 07/17/17 15:11 EPA 7471B 1,7471B Mercury, Total 0.16 mg/kg 0.02 MG Nickel, Total 21.6 mg/kg 2.57 0.248 2 07/12/17 21:10 07/17/17 17:08 EPA 3050B 1,6010C AΒ Selenium, Total 1.05 J 2.05 0.265 2 07/12/17 21:10 07/17/17 17:08 EPA 3050B 1,6010C AB mg/kg Silver, Total 0.339 J 1.03 0.291 2 07/12/17 21:10 07/17/17 17:08 EPA 3050B 1,6010C AΒ mg/kg Zinc, Total 234 mg/kg 5.14 0.301 2 07/12/17 21:10 07/17/17 17:08 EPA 3050B 1,6010C AΒ



07/11/17 15:15

Date Collected:

Project Name: PIERCE ARROW APARTMENTS Lab Number: L1723613

Project Number: 56831.10 **Report Date:** 07/19/17

SAMPLE RESULTS

Lab ID: L1723613-23

Client ID: SP-13-0-4.5-071117 Date Received: 07/11/17

Sample Location: BUFFALO, NY Field Prep: Not Specified

Matrix: Soil Percent Solids: 77%

Dilution Date Date Prep **Analytical** Method Method Factor **Prepared Analyzed** Qualifier Units RL MDL **Parameter** Result **Analyst** Total Metals - Mansfield Lab Arsenic, Total 11.0 mg/kg 1.01 0.210 2 07/12/17 21:10 07/17/17 17:12 EPA 3050B 1,6010C AB 2 07/12/17 21:10 07/17/17 17:12 EPA 3050B 1,6010C Barium, Total 67.3 mg/kg 1.01 0.175 AΒ J 2 1,6010C 0.494 0.504 0.033 07/12/17 21:10 07/17/17 17:12 EPA 3050B AΒ Beryllium, Total mg/kg 2 Cadmium, Total 1.03 mg/kg 1.01 0.099 07/12/17 21:10 07/17/17 17:12 EPA 3050B 1,6010C AB 66.6 1.01 0.097 2 07/12/17 21:10 07/17/17 17:12 EPA 3050B 1,6010C Chromium, Total mg/kg AΒ 202 1.01 0.260 2 07/12/17 21:10 07/17/17 17:12 EPA 3050B 1,6010C AΒ Copper, Total mg/kg Lead, Total 69.7 5.04 0.270 2 07/12/17 21:10 07/17/17 17:12 EPA 3050B 1,6010C AB mg/kg Manganese, Total 756 mg/kg 1.01 0.160 2 07/12/17 21:10 07/17/17 17:12 EPA 3050B 1,6010C AΒ J 1 0.04 0.08 07/13/17 09:00 07/17/17 15:13 EPA 7471B 1,7471B Mercury, Total mg/kg 0.02 MG Nickel, Total 22.1 mg/kg 2.52 0.244 2 07/12/17 21:10 07/17/17 17:12 EPA 3050B 1,6010C AΒ Selenium, Total 1.76 J 2.02 0.260 2 07/12/17 21:10 07/17/17 17:12 EPA 3050B 1,6010C AB mg/kg J Silver, Total 0.494 1.01 0.285 2 07/12/17 21:10 07/17/17 17:12 EPA 3050B 1,6010C AΒ mg/kg Zinc, Total 85.9 mg/kg 5.04 0.295 2 07/12/17 21:10 07/17/17 17:12 EPA 3050B 1,6010C AΒ



07/12/17 21:10 07/17/17 17:16 EPA 3050B

Not Specified

Project Name: PIERCE ARROW APARTMENTS Lab Number: L1723613

Project Number: 56831.10 **Report Date:** 07/19/17

SAMPLE RESULTS

Lab ID: L1723613-24

60.6

Date Collected: 07/11/17 00:00 Client ID: SUBSURFACE DUPLICATE -071117 Date Received: 07/11/17

Field Prep: Sample Location: BUFFALO, NY

mg/kg

4.76

0.279

Matrix: Soil 83% Percent Solids:

| Percent Solids: | 83% | | | | | Dilution | Date | Date | Prep | Analytical | |
|---------------------|------------|-----------|-------|-------|-------|----------|----------------|----------------|-----------|------------|---------|
| Parameter | Result | Qualifier | Units | RL | MDL | Factor | Prepared | Analyzed | Method | Method | Analyst |
| Total Metals - Man | ofiold Lob | | | | | | | | | | |
| Total Metals - Mari | Sileiu Lab | | | | | | | | | | |
| Arsenic, Total | 2.51 | | mg/kg | 0.952 | 0.198 | 2 | 07/12/17 21:10 | 07/17/17 17:16 | EPA 3050B | 1,6010C | AB |
| Barium, Total | 136 | | mg/kg | 0.952 | 0.166 | 2 | 07/12/17 21:10 | 07/17/17 17:16 | EPA 3050B | 1,6010C | AB |
| Beryllium, Total | 0.476 | | mg/kg | 0.476 | 0.031 | 2 | 07/12/17 21:10 | 07/17/17 17:16 | EPA 3050B | 1,6010C | AB |
| Cadmium, Total | 0.905 | J | mg/kg | 0.952 | 0.093 | 2 | 07/12/17 21:10 | 07/17/17 17:16 | EPA 3050B | 1,6010C | AB |
| Chromium, Total | 18.0 | | mg/kg | 0.952 | 0.091 | 2 | 07/12/17 21:10 | 07/17/17 17:16 | EPA 3050B | 1,6010C | AB |
| Copper, Total | 20.6 | | mg/kg | 0.952 | 0.246 | 2 | 07/12/17 21:10 | 07/17/17 17:16 | EPA 3050B | 1,6010C | AB |
| Lead, Total | 9.72 | | mg/kg | 4.76 | 0.255 | 2 | 07/12/17 21:10 | 07/17/17 17:16 | EPA 3050B | 1,6010C | AB |
| Manganese, Total | 431 | | mg/kg | 0.952 | 0.151 | 2 | 07/12/17 21:10 | 07/17/17 17:16 | EPA 3050B | 1,6010C | AB |
| Mercury, Total | ND | | mg/kg | 0.08 | 0.02 | 1 | 07/13/17 09:00 | 07/17/17 15:15 | EPA 7471B | 1,7471B | MG |
| Nickel, Total | 23.1 | | mg/kg | 2.38 | 0.230 | 2 | 07/12/17 21:10 | 07/17/17 17:16 | EPA 3050B | 1,6010C | AB |
| Selenium, Total | ND | | mg/kg | 1.90 | 0.246 | 2 | 07/12/17 21:10 | 07/17/17 17:16 | EPA 3050B | 1,6010C | AB |
| Silver, Total | ND | | mg/kg | 0.952 | 0.270 | 2 | 07/12/17 21:10 | 07/17/17 17:16 | EPA 3050B | 1,6010C | AB |
| | | | | | | | | | | _ | |



1,6010C

AΒ

Zinc, Total

Project Number: 56831.10 **Report Date:** 07/19/17

SAMPLE RESULTS

Lab ID: L1723613-27 Date Collected: 07/11/17 15:50
Client ID: SS-1-071117 Date Received: 07/11/17

Sample Location: BUFFALO, NY Field Prep: Not Specified

Matrix: Soil Percent Solids: 84%

Dilution Date Date Prep **Analytical** Method Method Factor **Prepared Analyzed** Result Qualifier RL MDL **Parameter** Units **Analyst** Total Metals - Mansfield Lab Arsenic, Total 5.38 mg/kg 0.947 0.197 2 07/12/17 21:10 07/17/17 16:31 EPA 3050B 1,6010C PS 110 0.165 2 07/12/17 21:10 07/17/17 16:31 EPA 3050B 1,6010C PS Barium, Total mg/kg 0.947 2 1,6010C 0.474 0.474 0.031 07/12/17 21:10 07/17/17 16:31 EPA 3050B PS Beryllium, Total mg/kg 2 Cadmium, Total 1.26 mg/kg 0.947 0.093 07/12/17 21:10 07/17/17 16:31 EPA 3050B 1,6010C PS 26.6 0.947 0.091 2 07/12/17 21:10 07/17/17 16:31 EPA 3050B 1,6010C PS Chromium, Total mg/kg 45.0 0.947 0.244 2 07/12/17 21:10 07/17/17 16:31 EPA 3050B 1,6010C PS Copper, Total mg/kg Lead, Total 57.0 4.74 0.254 2 07/12/17 21:10 07/17/17 16:31 EPA 3050B 1,6010C PS mg/kg Manganese, Total 677 mg/kg 0.947 0.151 2 07/12/17 21:10 07/17/17 16:31 EPA 3050B 1,6010C PS J 1 0.05 07/13/17 09:00 07/17/17 14:40 EPA 7471B 1,7471B MG Mercury, Total mg/kg 0.08 0.02 Nickel, Total 23.2 mg/kg 2.37 0.229 2 07/12/17 21:10 07/17/17 16:31 EPA 3050B 1,6010C PS Selenium, Total ND 1.89 0.244 2 07/12/17 21:10 07/17/17 16:31 EPA 3050B 1,6010C PS mg/kg J Silver, Total 0.398 0.947 0.268 2 07/12/17 21:10 07/17/17 16:31 EPA 3050B 1,6010C PS mg/kg Zinc, Total 135 mg/kg 4.74 0.278 2 07/12/17 21:10 07/17/17 16:31 EPA 3050B 1,6010C PS



Project Number: 56831.10 **Report Date:** 07/19/17

SAMPLE RESULTS

Lab ID: L1723613-28 Date Collected: 07/11/17 15:55
Client ID: SS-2-071117 Date Received: 07/11/17

Sample Location: BUFFALO, NY Field Prep: Not Specified

Matrix: Soil
Percent Solids: 84%

Dilution Date Date Prep **Analytical** Method Factor **Prepared Analyzed** Method Result Qualifier RL MDL **Parameter** Units **Analyst** Total Metals - Mansfield Lab Arsenic, Total 5.71 mg/kg 0.911 0.190 2 07/12/17 21:10 07/17/17 17:20 EPA 3050B 1,6010C AB 102 2 07/12/17 21:10 07/17/17 17:20 EPA 3050B 1,6010C Barium, Total mg/kg 0.911 0.158 AΒ 2 1,6010C 0.492 0.456 0.030 07/12/17 21:10 07/17/17 17:20 EPA 3050B AΒ Beryllium, Total mg/kg 2 Cadmium, Total 1.18 mg/kg 0.911 0.089 07/12/17 21:10 07/17/17 17:20 EPA 3050B 1,6010C AB 277 0.911 0.088 2 07/12/17 21:10 07/17/17 17:20 EPA 3050B 1,6010C Chromium, Total mg/kg AΒ 48.6 0.911 0.235 2 07/12/17 21:10 07/17/17 17:20 EPA 3050B 1,6010C AΒ Copper, Total mg/kg Lead, Total 51.1 4.56 0.244 2 07/12/17 21:10 07/17/17 17:20 EPA 3050B 1,6010C AB mg/kg Manganese, Total 642 mg/kg 0.911 0.145 2 07/12/17 21:10 07/17/17 17:20 EPA 3050B 1,6010C AΒ J 0.05 1 07/13/17 09:00 07/17/17 15:17 EPA 7471B 1,7471B Mercury, Total mg/kg 0.07 0.02 MG Nickel, Total 482 mg/kg 2.28 0.220 2 07/12/17 21:10 07/17/17 17:20 EPA 3050B 1,6010C AΒ Selenium, Total 0.647 J 1.82 0.235 2 07/12/17 21:10 07/17/17 17:20 EPA 3050B 1,6010C AB mg/kg J Silver, Total 0.355 0.911 0.258 2 07/12/17 21:10 07/17/17 17:20 EPA 3050B 1,6010C AΒ mg/kg Zinc, Total 96.6 mg/kg 4.56 0.267 2 07/12/17 21:10 07/17/17 17:20 EPA 3050B 1,6010C AΒ



Project Number: 56831.10 **Report Date:** 07/19/17

SAMPLE RESULTS

Lab ID: L1723613-29 Date Collected: 07/11/17 16:00
Client ID: SS-3-071117 Date Received: 07/11/17

Sample Location: BUFFALO, NY Field Prep: Not Specified

Matrix: Soil
Percent Solids: 91%

Dilution Date Date Prep **Analytical** Method Factor **Prepared Analyzed** Method Qualifier RL MDL **Parameter** Result Units **Analyst** Total Metals - Mansfield Lab Arsenic, Total 3.61 mg/kg 0.828 0.172 2 07/12/17 21:10 07/17/17 17:24 EPA 3050B 1,6010C AB 68.2 2 07/12/17 21:10 07/17/17 17:24 EPA 3050B 1,6010C Barium, Total mg/kg 0.828 0.144 AΒ 2 1,6010C 0.563 0.414 0.027 07/12/17 21:10 07/17/17 17:24 EPA 3050B Beryllium, Total mg/kg AΒ J Cadmium, Total 0.811 mg/kg 0.828 0.081 2 07/12/17 21:10 07/17/17 17:24 EPA 3050B 1,6010C AB 0.828 12.5 0.079 2 07/12/17 21:10 07/17/17 17:24 EPA 3050B 1,6010C Chromium, Total mg/kg AΒ 33.9 0.828 0.214 2 07/12/17 21:10 07/17/17 17:24 EPA 3050B 1,6010C AΒ Copper, Total mg/kg Lead, Total 32.4 4.14 0.222 2 07/12/17 21:10 07/17/17 17:24 EPA 3050B 1,6010C AB mg/kg Manganese, Total 414 mg/kg 0.828 0.132 2 07/12/17 21:10 07/17/17 17:24 EPA 3050B 1,6010C AΒ J 0.03 1 07/13/17 09:00 07/17/17 15:19 EPA 7471B 1,7471B Mercury, Total mg/kg 0.07 0.01 MG Nickel, Total 11.5 mg/kg 2.07 0.200 2 07/12/17 21:10 07/17/17 17:24 EPA 3050B 1,6010C AΒ Selenium, Total 0.364 J 1.66 0.214 2 07/12/17 21:10 07/17/17 17:24 EPA 3050B 1,6010C AB mg/kg J Silver, Total 0.256 0.828 0.234 2 07/12/17 21:10 07/17/17 17:24 EPA 3050B 1,6010C AB mg/kg



1,6010C

AΒ

Zinc, Total

95.8

mg/kg

4.14

0.242

2

07/12/17 21:10 07/17/17 17:24 EPA 3050B

Project Number: 56831.10 **Report Date:** 07/19/17

SAMPLE RESULTS

 Lab ID:
 L1723613-30
 Date Collected:
 07/11/17 16:10

 Client ID:
 SS-4-071117
 Date Received:
 07/11/17

Sample Location: BUFFALO, NY Field Prep: Not Specified

Matrix: Soil
Percent Solids: 97%

Dilution Date Date Prep **Analytical** Method Method Factor **Prepared Analyzed** Result Qualifier RL MDL **Parameter** Units **Analyst** Total Metals - Mansfield Lab Arsenic, Total 3.30 mg/kg 0.801 0.167 2 07/12/17 21:10 07/17/17 17:28 EPA 3050B 1,6010C AB 49.4 0.139 2 07/12/17 21:10 07/17/17 17:28 EPA 3050B 1,6010C Barium, Total mg/kg 0.801 AΒ J 2 1,6010C 0.232 0.401 0.026 07/12/17 21:10 07/17/17 17:28 EPA 3050B AΒ Beryllium, Total mg/kg J Cadmium, Total 0.625 mg/kg 0.801 0.079 2 07/12/17 21:10 07/17/17 17:28 EPA 3050B 1,6010C AB 0.801 11.5 0.077 2 07/12/17 21:10 07/17/17 17:28 EPA 3050B 1,6010C Chromium, Total mg/kg AΒ 18.8 0.801 0.207 2 07/12/17 21:10 07/17/17 17:28 EPA 3050B 1,6010C AΒ Copper, Total mg/kg Lead, Total 12.3 4.01 0.215 2 07/12/17 21:10 07/17/17 17:28 EPA 3050B 1,6010C AB mg/kg Manganese, Total 305 mg/kg 0.801 0.127 2 07/12/17 21:10 07/17/17 17:28 EPA 3050B 1,6010C AΒ J 0.03 1 07/13/17 09:00 07/17/17 15:21 EPA 7471B 1,7471B MG Mercury, Total mg/kg 0.06 0.01 Nickel, Total 13.0 mg/kg 2.00 0.194 2 07/12/17 21:10 07/17/17 17:28 EPA 3050B 1,6010C AΒ Selenium, Total ND 1.60 0.207 2 07/12/17 21:10 07/17/17 17:28 EPA 3050B 1,6010C AB mg/kg

0.801

4.01

mg/kg

mg/kg

0.227

0.235

2

2

07/12/17 21:10 07/17/17 17:28 EPA 3050B

07/12/17 21:10 07/17/17 17:28 EPA 3050B



1,6010C

1,6010C

AΒ

AΒ

Silver, Total

Zinc, Total

ND

59.8

Not Specified

Project Name: PIERCE ARROW APARTMENTS Lab Number: L1723613

Project Number: 56831.10 **Report Date:** 07/19/17

SAMPLE RESULTS

Lab ID: L1723613-31

Date Collected: 07/11/17 00:00 Client ID: Date Received: SURFACE SOIL DUPLICATE 07/11/17

Sample Location: BUFFALO, NY

Matrix: Soil Percent Solids: 93%

Analytical Dilution Date Date Prep

Field Prep:

| Parameter | Result | Qualifier | Units | RL | MDL | Factor | Prepared | Analyzed | Method | Method | Analyst |
|---------------------|-----------|-----------|-------|-------|-------|--------|----------------|----------------|-----------|---------|---------|
| Total Metals - Mans | field Lab | | | | | | | | | | |
| Arsenic, Total | 3.43 | | mg/kg | 0.838 | 0.174 | 2 | 07/12/17 21:10 | 07/17/17 17:56 | EPA 3050B | 1,6010C | AB |
| Barium, Total | 69.6 | | mg/kg | 0.838 | 0.146 | 2 | 07/12/17 21:10 | 07/17/17 17:56 | EPA 3050B | 1,6010C | AB |
| Beryllium, Total | 0.335 | J | mg/kg | 0.419 | 0.028 | 2 | 07/12/17 21:10 | 07/17/17 17:56 | EPA 3050B | 1,6010C | AB |
| Cadmium, Total | 0.771 | J | mg/kg | 0.838 | 0.082 | 2 | 07/12/17 21:10 | 07/17/17 17:56 | EPA 3050B | 1,6010C | AB |
| Chromium, Total | 12.6 | | mg/kg | 0.838 | 0.081 | 2 | 07/12/17 21:10 | 07/17/17 17:56 | EPA 3050B | 1,6010C | AB |
| Copper, Total | 29.4 | | mg/kg | 0.838 | 0.216 | 2 | 07/12/17 21:10 | 07/17/17 17:56 | EPA 3050B | 1,6010C | AB |
| Lead, Total | 29.1 | | mg/kg | 4.19 | 0.225 | 2 | 07/12/17 21:10 | 07/17/17 17:56 | EPA 3050B | 1,6010C | AB |
| Manganese, Total | 499 | | mg/kg | 0.838 | 0.133 | 2 | 07/12/17 21:10 | 07/17/17 17:56 | EPA 3050B | 1,6010C | AB |
| Mercury, Total | 0.03 | J | mg/kg | 0.07 | 0.01 | 1 | 07/13/17 09:00 | 07/17/17 15:23 | EPA 7471B | 1,7471B | MG |
| Nickel, Total | 11.4 | | mg/kg | 2.10 | 0.203 | 2 | 07/12/17 21:10 | 07/17/17 17:56 | EPA 3050B | 1,6010C | AB |
| Selenium, Total | 0.914 | J | mg/kg | 1.68 | 0.216 | 2 | 07/12/17 21:10 | 07/17/17 17:56 | EPA 3050B | 1,6010C | AB |
| Silver, Total | ND | | mg/kg | 0.838 | 0.237 | 2 | | 07/17/17 17:56 | | 1,6010C | AB |
| Zinc, Total | 93.6 | | mg/kg | 4.19 | 0.246 | 2 | | 07/17/17 17:56 | | 1,6010C | AB |



L1723613

Project Name: PIERCE ARROW APARTMENTS Lab Number:

Project Number: 56831.10 **Report Date:** 07/19/17

Method Blank Analysis Batch Quality Control

| Parameter | Result Q | ualifier | Units | RL | MDL | Dilution
Factor | Date
Prepared | Date
Analyzed | Analytical
Method | Analyst |
|--------------------------|------------|----------|-----------|----------|----------|--------------------|------------------|------------------|----------------------|---------|
| Total Metals - Mansfield | Lab for sa | mple(s): | 02-03,05, | 07,09,11 | ,13,15,1 | 17,19,21,23 | 3-24,27-31 Ba | tch: WG102 | 1962-1 | |
| Arsenic, Total | 0.164 | J | mg/kg | 0.400 | 0.083 | 1 | 07/12/17 21:10 | 07/17/17 15:23 | 1,6010C | PS |
| Barium, Total | ND | | mg/kg | 0.400 | 0.070 | 1 | 07/12/17 21:10 | 07/17/17 15:23 | 1,6010C | PS |
| Beryllium, Total | ND | | mg/kg | 0.200 | 0.013 | 1 | 07/12/17 21:10 | 07/17/17 15:23 | 1,6010C | PS |
| Cadmium, Total | ND | | mg/kg | 0.400 | 0.039 | 1 | 07/12/17 21:10 | 07/17/17 15:23 | 1,6010C | PS |
| Chromium, Total | ND | | mg/kg | 0.400 | 0.038 | 1 | 07/12/17 21:10 | 07/17/17 15:23 | 1,6010C | PS |
| Copper, Total | ND | | mg/kg | 0.400 | 0.103 | 1 | 07/12/17 21:10 | 07/17/17 15:23 | 1,6010C | PS |
| Lead, Total | ND | | mg/kg | 2.00 | 0.107 | 1 | 07/12/17 21:10 | 07/17/17 15:23 | 1,6010C | PS |
| Manganese, Total | ND | | mg/kg | 0.400 | 0.064 | 1 | 07/12/17 21:10 | 07/17/17 15:23 | 1,6010C | PS |
| Nickel, Total | ND | | mg/kg | 1.00 | 0.097 | 1 | 07/12/17 21:10 | 07/17/17 15:23 | 1,6010C | PS |
| Selenium, Total | ND | | mg/kg | 0.800 | 0.103 | 1 | 07/12/17 21:10 | 07/17/17 15:23 | 1,6010C | PS |
| Silver, Total | ND | | mg/kg | 0.400 | 0.113 | 1 | 07/12/17 21:10 | 07/17/17 15:23 | 1,6010C | PS |
| Zinc, Total | ND | | mg/kg | 2.00 | 0.117 | 1 | 07/12/17 21:10 | 07/17/17 15:23 | 1,6010C | PS |

Prep Information

Digestion Method: EPA 3050B

| Parameter | Result Qualifier | Units | RL | MDL | Dilution
Factor | Date
Prepared | Date
Analyzed | Analytical
Method | Analyst |
|----------------|--------------------------------|----------|-----------|----------|--------------------|------------------|------------------|----------------------|---------|
| Total Metals - | - Mansfield Lab for sample(s): | 02-03,05 | ,07,09,11 | 1,13,15, | 17,19,21,23 | 3-24,27-31 Ba | tch: WG102 | 2069-1 | |
| Mercury, Total | ND | mg/kg | 0.08 | 0.02 | 1 | 07/13/17 09:00 | 07/17/17 14:28 | B 1,7471B | MG |

Prep Information

Digestion Method: EPA 7471B



Lab Control Sample Analysis Batch Quality Control

Project Name: PIERCE ARROW APARTMENTS

Project Number: 56831.10

Lab Number:

L1723613

Report Date:

07/19/17

| Parameter | LCS
%Recovery | LCSD
Qual %Recovery | %Recovery
Qual Limits | RPD Qual RPD | Limits |
|--------------------------------------|------------------------------|-----------------------------|--------------------------|-------------------------|--------|
| Total Metals - Mansfield Lab Associa | ted sample(s): 02-03,05,07,0 | 09,11,13,15,17,19,21,23-24, | 27-31 Batch: WG1021962-2 | SRM Lot Number: D093-54 | 40 |
| Arsenic, Total | 110 | - | 70-130 | - | |
| Barium, Total | 104 | - | 83-117 | - | |
| Beryllium, Total | 100 | - | 83-117 | - | |
| Cadmium, Total | 97 | - | 83-117 | - | |
| Chromium, Total | 100 | - | 80-120 | - | |
| Copper, Total | 101 | - | 82-118 | - | |
| Lead, Total | 96 | - | 82-117 | - | |
| Manganese, Total | 104 | - | 81-119 | - | |
| Nickel, Total | 95 | - | 83-117 | - | |
| Selenium, Total | 103 | - | 78-122 | - | |
| Silver, Total | 108 | - | 76-124 | - | |
| Zinc, Total | 96 | - | 83-117 | - | |
| otal Metals - Mansfield Lab Associa | ted sample(s): 02-03,05,07,0 | 09,11,13,15,17,19,21,23-24, | 27-31 Batch: WG1022069-2 | SRM Lot Number: D093-54 | 40 |
| Mercury, Total | 81 | - | 72-128 | - | |



Matrix Spike Analysis Batch Quality Control

Project Name: PIERCE ARROW APARTMENTS

Project Number: 56831.10

Lab Number: L1723613

Report Date: 07/19/17

| arameter | Native
Sample | MS
Added | MS
Found | MS
%Recovery | MSD
Qual Found | MSD
%Recovery | Recovery
Qual Limits | RPD | RPD
Qual Limits |
|--|------------------|-------------|--------------|-----------------|-------------------|------------------|-------------------------|--------|--------------------|
| otal Metals - Mansfield
Sample: L1723613-05 | | , | 03,05,07,09, | 11,13,15,17,19 |),21,23-24,27-31 | QC Batch ID: | WG1021962-3 W | G10219 | 62-4 QC |
| Arsenic, Total | 5.41 | 11.4 | 16.4 | 96 | 17.0 | 101 | 75-125 | 4 | 20 |
| Barium, Total | 66.9 | 191 | 235 | 88 | 233 | 87 | 75-125 | 1 | 20 |
| Beryllium, Total | 0.416J | 4.77 | 4.44 | 93 | 4.46 | 93 | 75-125 | 0 | 20 |
| Cadmium, Total | 0.734J | 4.87 | 4.94 | 101 | 4.96 | 102 | 75-125 | 0 | 20 |
| Chromium, Total | 13.2 | 19.1 | 29.6 | 86 | 29.0 | 82 | 75-125 | 2 | 20 |
| Copper, Total | 14.2 | 23.9 | 36.4 | 93 | 34.3 | 84 | 75-125 | 6 | 20 |
| Lead, Total | 17.5 | 48.7 | 56.9 | 81 | 61.1 | 89 | 75-125 | 7 | 20 |
| Manganese, Total | 218. | 47.7 | 266 | 100 | 200 | 0 | Q 75-125 | 28 | Q 20 |
| Nickel, Total | 13.3 | 47.7 | 53.6 | 84 | 52.4 | 82 | 75-125 | 2 | 20 |
| Selenium, Total | ND | 11.4 | 9.88 | 86 | 10.5 | 91 | 75-125 | 6 | 20 |
| Silver, Total | ND | 28.6 | 24.6 | 86 | 24.8 | 86 | 75-125 | 1 | 20 |
| Zinc, Total | 49.3 | 47.7 | 95.4 | 96 | 91.0 | 87 | 75-125 | 5 | 20 |

Matrix Spike Analysis Batch Quality Control

Project Name: PIERCE ARROW APARTMENTS

Project Number: 56831.10

Lab Number:

L1723613

07/19/17

Report Date:

| arameter | Native
Sample | MS
Added | MS
Found | MS
%Recovery | MS
Fou | | MSD
%Recovery | F | Recovery
Limits | RPD | | RPD
Limits |
|--|------------------|-------------|--------------|-----------------|---------------|------|------------------|--------|--------------------|--------|-------|---------------|
| Fotal Metals - Mansfield La
Sample: L1723613-27 C | | . , , | 03,05,07,09, | 11,13,15,17,19 | 9,21,23-24,27 | 7-31 | QC Batch ID: \ | WG1021 | 962-7 W | G10219 | 962-8 | QC |
| Arsenic, Total | 5.38 | 11.2 | 15.1 | 87 | | 15.0 | 85 | | 75-125 | 1 | | 20 |
| Barium, Total | 110. | 187 | 275 | 88 | | 255 | 77 | | 75-125 | 8 | | 20 |
| Beryllium, Total | 0.474 | 4.67 | 4.06 | 87 | | 3.99 | 85 | | 75-125 | 2 | | 20 |
| Cadmium, Total | 1.26 | 4.77 | 5.08 | 80 | | 4.74 | 73 | Q | 75-125 | 7 | | 20 |
| Chromium, Total | 26.6 | 18.7 | 93.2 | 356 | Q | 41.1 | 77 | | 75-125 | 78 | Q | 20 |
| Copper, Total | 45.0 | 23.4 | 68.1 | 99 | | 63.3 | 78 | | 75-125 | 7 | | 20 |
| Lead, Total | 57.0 | 47.7 | 99.7 | 90 | | 85.5 | 60 | Q | 75-125 | 15 | | 20 |
| Manganese, Total | 677. | 46.7 | 1690 | 2170 | Q | 731 | 115 | | 75-125 | 79 | Q | 20 |
| Nickel, Total | 23.2 | 46.7 | 56.4 | 71 | Q | 57.3 | 73 | Q | 75-125 | 2 | | 20 |
| Selenium, Total | ND | 11.2 | 10.2 | 91 | | 9.14 | 81 | | 75-125 | 11 | | 20 |
| Silver, Total | 0.398J | 28 | 24.3 | 87 | | 22.8 | 81 | | 75-125 | 6 | | 20 |
| Zinc, Total | 135. | 46.7 | 204 | 148 | Q | 160 | 53 | Q | 75-125 | 24 | Q | 20 |
| otal Metals - Mansfield La
Sample: L1723613-05 C | | | 03,05,07,09, | 11,13,15,17,19 | 9,21,23-24,27 | 7-31 | QC Batch ID: \ | WG1022 | :069-3 W | G10220 | 069-4 | QC |
| Mercury, Total | 0.04J | 0.162 | 0.20 | 123 | Q | 0.20 | 128 | Q | 80-120 | 0 | | 20 |
| otal Metals - Mansfield La
Sample: L1723613-27 C | | | 03,05,07,09, | 11,13,15,17,19 | 9,21,23-24,27 | 7-31 | QC Batch ID: \ | WG1022 | :069-5 W | G10220 | 069-6 | QC |
| Mercury, Total | 0.05J | 0.15 | 0.19 | 127 | Q | 0.19 | 126 | Q | 80-120 | 0 | | 20 |



INORGANICS & MISCELLANEOUS



Project Name: PIERCE ARROW APARTMENTS Lab Number: L1723613

Project Number: 56831.10 Report Date: 07/19/17

SAMPLE RESULTS

Lab ID: L1723613-01 Date Collected: 07/11/17 09:40

Client ID: SP-1-8"-071117 Date Received: 07/11/17 Sample Location: BUFFALO, NY Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution
Factor | Date
Prepared | Date
Analyzed | Analytical
Method | Analyst |
|-------------------|-------------------|-----------|-------|-------|-----|--------------------|------------------|------------------|----------------------|---------|
| General Chemistry | - Westborough Lab |) | | | | | | | | |
| Solids, Total | 80.7 | | % | 0.100 | NA | 1 | - | 07/12/17 17:40 | 121,2540G | RI |



Project Name: PIERCE ARROW APARTMENTS Lab Number: L1723613

Project Number: 56831.10 Report Date: 07/19/17

SAMPLE RESULTS

Lab ID: L1723613-02 Date Collected: 07/11/17 09:40

Client ID: SP-1-0.5-8-071117 Date Received: 07/11/17 Sample Location: BUFFALO, NY Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution
Factor | Date
Prepared | Date
Analyzed | Analytical
Method | Analyst |
|---------------------|-----------------|-----------|-------|-------|------|--------------------|------------------|------------------|----------------------|---------|
| General Chemistry - | Westborough Lal | b | | | | | | | | |
| Solids, Total | 81.8 | | % | 0.100 | NA | 1 | - | 07/12/17 17:40 | 121,2540G | RI |
| Cyanide, Total | 0.93 | J | mg/kg | 1.2 | 0.20 | 1 | 07/13/17 12:50 | 07/13/17 15:59 | 1,9010C/9012B | LK |



Project Name: PIERCE ARROW APARTMENTS Lab Number: L1723613

Project Number: 56831.10 Report Date: 07/19/17

SAMPLE RESULTS

Lab ID: L1723613-03 Date Collected: 07/11/17 10:10

Client ID: SP-2-3.5-071117 Date Received: 07/11/17 Sample Location: BUFFALO, NY Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution
Factor | Date
Prepared | Date
Analyzed | Analytical
Method | Analyst |
|-----------------------|---------------|-----------|-------|-------|------|--------------------|------------------|------------------|----------------------|---------|
| General Chemistry - W | estborough La | ab | | | | | | | | |
| Solids, Total | 76.4 | | % | 0.100 | NA | 1 | - | 07/12/17 17:40 | 121,2540G | RI |
| Cyanide, Total | 0.36 | J | mg/kg | 1.2 | 0.20 | 1 | 07/13/17 12:50 | 07/13/17 16:00 | 1,9010C/9012B | LK |



Project Name: PIERCE ARROW APARTMENTS Lab Number: L1723613

Project Number: 56831.10 Report Date: 07/19/17

SAMPLE RESULTS

Lab ID: L1723613-04 Date Collected: 07/11/17 10:30

Client ID: SP-3-2-071117 Date Received: 07/11/17 Sample Location: BUFFALO, NY Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution
Factor | Date
Prepared | Date
Analyzed | Analytical
Method | Analyst |
|---------------------|-------------------|-----------|-------|-------|-----|--------------------|------------------|------------------|----------------------|---------|
| General Chemistry - | · Westborough Lab |) | | | | | | | | |
| Solids, Total | 82.4 | | % | 0.100 | NA | 1 | - | 07/12/17 17:40 | 121,2540G | RI |



Project Name: PIERCE ARROW APARTMENTS Lab Number: L1723613

Project Number: 56831.10 Report Date: 07/19/17

SAMPLE RESULTS

Lab ID: L1723613-05 Date Collected: 07/11/17 10:30

Client ID: SP-3-1-8-071117 Date Received: 07/11/17 Sample Location: BUFFALO, NY Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution
Factor | Date
Prepared | Date
Analyzed | Analytical
Method | Analyst |
|---------------------|-----------------|-----------|-------|-------|------|--------------------|------------------|------------------|----------------------|---------|
| General Chemistry - | Westborough Lab |) | | | | | | | | |
| Solids, Total | 80.5 | | % | 0.100 | NA | 1 | - | 07/12/17 17:40 | 121,2540G | RI |
| Cyanide, Total | ND | | mg/kg | 1.2 | 0.20 | 1 | 07/13/17 12:50 | 07/13/17 16:02 | 1,9010C/9012B | LK |



Project Name: PIERCE ARROW APARTMENTS Lab Number: L1723613

Project Number: 56831.10 Report Date: 07/19/17

SAMPLE RESULTS

 Lab ID:
 L1723613-06
 Date Collected:
 07/11/17 11:15

 Client ID:
 SP-5-1-071117
 Date Received:
 07/11/17

Sample Location: BUFFALO, NY Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution
Factor | Date
Prepared | Date
Analyzed | Analytical
Method | Analyst |
|-------------------|-------------------|-----------|-------|-------|-----|--------------------|------------------|------------------|----------------------|---------|
| General Chemistry | - Westborough Lab |) | | | | | | | | |
| Solids, Total | 80.8 | | % | 0.100 | NA | 1 | - | 07/12/17 17:40 | 121,2540G | RI |



Project Name: PIERCE ARROW APARTMENTS Lab Number: L1723613

Project Number: 56831.10 Report Date: 07/19/17

SAMPLE RESULTS

Lab ID: L1723613-07 Date Collected: 07/11/17 11:15
Client ID: SP-5-1-8-071117 Date Received: 07/11/17

Client ID: SP-5-1-8-071117 Date Received: 07/11/17 Sample Location: BUFFALO, NY Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution
Factor | Date
Prepared | Date
Analyzed | Analytical
Method | Analyst |
|---------------------|-----------------|-----------|-------|-------|------|--------------------|------------------|------------------|----------------------|---------|
| General Chemistry - | Westborough Lab |) | | | | | | | | |
| Solids, Total | 78.3 | | % | 0.100 | NA | 1 | - | 07/13/17 11:22 | 121,2540G | RI |
| Cyanide, Total | ND | | mg/kg | 2.4 | 0.40 | 2 | 07/13/17 12:50 | 07/13/17 16:23 | 1,9010C/9012B | LK |



Project Name: PIERCE ARROW APARTMENTS Lab Number: L1723613

Project Number: 56831.10 Report Date: 07/19/17

SAMPLE RESULTS

Lab ID: L1723613-08 Date Collected: 07/11/17 11:40

Client ID: SP-6-0.5-071117 Date Received: 07/11/17 Sample Location: BUFFALO, NY Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution
Factor | Date
Prepared | Date
Analyzed | Analytical
Method | Analyst |
|-------------------|-------------------|-----------|-------|-------|-----|--------------------|------------------|------------------|----------------------|---------|
| General Chemistry | - Westborough Lab | | | | | | | | | |
| Solids, Total | 81.2 | | % | 0.100 | NA | 1 | - | 07/12/17 17:40 | 121,2540G | RI |



Project Name: PIERCE ARROW APARTMENTS Lab Number: L1723613

Project Number: 56831.10 Report Date: 07/19/17

SAMPLE RESULTS

Lab ID: L1723613-09 Date Collected: 07/11/17 11:40

Client ID: SP-6-0-1-071117 Date Received: 07/11/17 Sample Location: BUFFALO, NY Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution
Factor | Date
Prepared | Date
Analyzed | Analytical
Method | Analyst |
|-----------------------|----------------|-----------|-------|-------|------|--------------------|------------------|------------------|----------------------|---------|
| General Chemistry - V | Vestborough La | b | | | | | | | | |
| Solids, Total | 86.5 | | % | 0.100 | NA | 1 | - | 07/12/17 17:40 | 121,2540G | RI |
| Cyanide, Total | 0.91 | J | mg/kg | 1.1 | 0.18 | 1 | 07/13/17 12:50 | 07/13/17 16:05 | 1,9010C/9012B | LK |



Project Name: PIERCE ARROW APARTMENTS Lab Number: L1723613

Project Number: 56831.10 Report Date: 07/19/17

SAMPLE RESULTS

Lab ID: L1723613-10 Date Collected: 07/11/17 12:30

Client ID: SP-7-4-071117 Date Received: 07/11/17 Sample Location: BUFFALO, NY Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution
Factor | Date
Prepared | Date
Analyzed | Analytical
Method | Analyst |
|-------------------|-------------------|-----------|-------|-------|-----|--------------------|------------------|------------------|----------------------|---------|
| General Chemistry | - Westborough Lab |) | | | | | | | | |
| Solids, Total | 79.9 | | % | 0.100 | NA | 1 | - | 07/12/17 17:40 | 121,2540G | RI |



Project Name: PIERCE ARROW APARTMENTS Lab Number: L1723613

Project Number: 56831.10 Report Date: 07/19/17

SAMPLE RESULTS

Lab ID: L1723613-11 Date Collected: 07/11/17 12:30

Client ID: SP-7-4-8-071117 Date Received: 07/11/17 Sample Location: BUFFALO, NY Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution
Factor | Date
Prepared | Date
Analyzed | Analytical
Method | Analyst |
|---------------------|-----------------|-----------|-------|-------|------|--------------------|------------------|------------------|----------------------|---------|
| General Chemistry - | Westborough Lab |) | | | | | | | | |
| Solids, Total | 83.6 | | % | 0.100 | NA | 1 | - | 07/13/17 11:22 | 121,2540G | RI |
| Cyanide, Total | ND | | mg/kg | 1.1 | 0.19 | 1 | 07/13/17 12:50 | 07/13/17 16:06 | 1,9010C/9012B | LK |



Project Name: PIERCE ARROW APARTMENTS Lab Number: L1723613

Project Number: 56831.10 Report Date: 07/19/17

SAMPLE RESULTS

Lab ID: L1723613-12 Date Collected: 07/11/17 13:00

Client ID: SP-8-0.5-071117 Date Received: 07/11/17 Sample Location: BUFFALO, NY Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution
Factor | Date
Prepared | Date
Analyzed | Analytical
Method | Analyst |
|---------------------|-----------------|-----------|-------|-------|-----|--------------------|------------------|------------------|----------------------|---------|
| General Chemistry - | Westborough Lab |) | | | | | | | | |
| Solids, Total | 95.8 | | % | 0.100 | NA | 1 | - | 07/13/17 11:22 | 121,2540G | RI |



Project Name: PIERCE ARROW APARTMENTS Lab Number: L1723613

Project Number: 56831.10 Report Date: 07/19/17

SAMPLE RESULTS

Lab ID: L1723613-13 Date Collected: 07/11/17 13:00

Client ID: SP-8-0-1-071117 Date Received: 07/11/17 Sample Location: BUFFALO, NY Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution
Factor | Date
Prepared | Date
Analyzed | Analytical
Method | Analyst |
|---------------------|-----------------|-----------|-------|-------|------|--------------------|------------------|------------------|----------------------|---------|
| General Chemistry - | Westborough Lab |) | | | | | | | | |
| Solids, Total | 90.8 | | % | 0.100 | NA | 1 | - | 07/13/17 11:22 | 121,2540G | RI |
| Cyanide, Total | 8.4 | | mg/kg | 1.0 | 0.17 | 1 | 07/13/17 12:50 | 07/13/17 16:07 | 1,9010C/9012B | LK |



Project Name: PIERCE ARROW APARTMENTS Lab Number: L1723613

Project Number: 56831.10 Report Date: 07/19/17

SAMPLE RESULTS

Lab ID: L1723613-14 Date Collected: 07/11/17 13:20

Client ID: SP-9-2-071117 Date Received: 07/11/17 Sample Location: BUFFALO, NY Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution
Factor | Date
Prepared | Date
Analyzed | Analytical
Method | Analyst |
|-------------------|-------------------|-----------|-------|-------|-----|--------------------|------------------|------------------|----------------------|---------|
| General Chemistry | - Westborough Lab | | | | | | | | | |
| Solids, Total | 85.5 | | % | 0.100 | NA | 1 | - | 07/13/17 11:22 | 121,2540G | RI |



Project Name: PIERCE ARROW APARTMENTS Lab Number: L1723613

Project Number: 56831.10 Report Date: 07/19/17

SAMPLE RESULTS

Lab ID: L1723613-15 Date Collected: 07/11/17 13:20

Client ID: SP-9-0-13-071117 Date Received: 07/11/17 Sample Location: BUFFALO, NY Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution
Factor | Date
Prepared | Date
Analyzed | Analytical
Method | Analyst |
|-----------------------|----------------|-----------|-------|-------|------|--------------------|------------------|------------------|----------------------|---------|
| General Chemistry - \ | Westborough La | b | | | | | | | | |
| Solids, Total | 85.0 | | % | 0.100 | NA | 1 | - | 07/13/17 11:22 | 121,2540G | RI |
| Cyanide, Total | 0.53 | J | mg/kg | 2.2 | 0.37 | 2 | 07/13/17 12:50 | 07/13/17 16:21 | 1,9010C/9012B | LK |



Project Name: PIERCE ARROW APARTMENTS Lab Number: L1723613

Project Number: 56831.10 Report Date: 07/19/17

SAMPLE RESULTS

Lab ID: L1723613-16 Date Collected: 07/11/17 13:50

Client ID: SP-10-4-071117 Date Received: 07/11/17 Sample Location: BUFFALO, NY Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution
Factor | Date
Prepared | Date
Analyzed | Analytical
Method | Analyst |
|-------------------|-------------------|-----------|-------|-------|-----|--------------------|------------------|------------------|----------------------|---------|
| General Chemistry | - Westborough Lab | | | | | | | | | |
| Solids, Total | 76.0 | | % | 0.100 | NA | 1 | - | 07/13/17 11:22 | 121,2540G | RI |



Project Name: PIERCE ARROW APARTMENTS Lab Number: L1723613

Project Number: 56831.10 Report Date: 07/19/17

SAMPLE RESULTS

Lab ID: L1723613-17 Date Collected: 07/11/17 13:50

Client ID: SP-10-0-4.5-071117 Date Received: 07/11/17 Sample Location: BUFFALO, NY Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution
Factor | Date
Prepared | Date
Analyzed | Analytical
Method | Analyst |
|-----------------------|---------------|-----------|-------|-------|------|--------------------|------------------|------------------|----------------------|---------|
| General Chemistry - W | estborough La | ıb | | | | | | | | |
| Solids, Total | 91.7 | | % | 0.100 | NA | 1 | - | 07/13/17 11:22 | 121,2540G | RI |
| Cyanide, Total | 0.68 | J | mg/kg | 2.0 | 0.33 | 2 | 07/13/17 12:50 | 07/13/17 16:22 | 1,9010C/9012B | LK |



Project Name: PIERCE ARROW APARTMENTS Lab Number: L1723613

Project Number: 56831.10 Report Date: 07/19/17

SAMPLE RESULTS

Lab ID: L1723613-18 Date Collected: 07/11/17 14:20

Client ID: SP-11-3-071117 Date Received: 07/11/17 Sample Location: BUFFALO, NY Field Prep: Not Specified

| Parameter | Result Qu | ualifier Unit | s RL | MDL | Dilution
Factor | Date
Prepared | Date
Analyzed | Analytical
Method | Analyst |
|-------------------|-------------------|---------------|-------|-----|--------------------|------------------|------------------|----------------------|---------|
| General Chemistry | - Westborough Lab | | | | | | | | |
| Solids, Total | 92.4 | % | 0.100 | NA | 1 | - | 07/13/17 11:22 | 121,2540G | RI |



Project Name: PIERCE ARROW APARTMENTS Lab Number: L1723613

Project Number: 56831.10 Report Date: 07/19/17

SAMPLE RESULTS

Lab ID: L1723613-19 Date Collected: 07/11/17 14:20

Client ID: SP-11-0.5-4.5-071117 Date Received: 07/11/17 Sample Location: BUFFALO, NY Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution
Factor | Date
Prepared | Date
Analyzed | Analytical
Method | Analyst |
|---------------------|-----------------|-----------|-------|-------|------|--------------------|------------------|------------------|----------------------|---------|
| General Chemistry - | Westborough Lab |) | | | | | | | | |
| Solids, Total | 85.4 | | % | 0.100 | NA | 1 | - | 07/13/17 11:22 | 121,2540G | RI |
| Cvanide, Total | ND | | ma/ka | 2.2 | 0.36 | 2 | 07/13/17 12:50 | 07/13/17 16:23 | 1.9010C/9012B | LK |



Project Name: PIERCE ARROW APARTMENTS Lab Number: L1723613

Project Number: 56831.10 Report Date: 07/19/17

SAMPLE RESULTS

Lab ID: L1723613-20 Date Collected: 07/11/17 14:45

Client ID: SP-12-1.5-071117 Date Received: 07/11/17 Sample Location: BUFFALO, NY Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution
Factor | Date
Prepared | Date
Analyzed | Analytical
Method | Analyst |
|-------------------|-------------------|-----------|-------|-------|-----|--------------------|------------------|------------------|----------------------|---------|
| General Chemistry | - Westborough Lab | | | | | | | | | |
| Solids, Total | 79.0 | | % | 0.100 | NA | 1 | - | 07/13/17 11:22 | 121,2540G | RI |



Project Name: PIERCE ARROW APARTMENTS Lab Number: L1723613

Project Number: 56831.10 Report Date: 07/19/17

SAMPLE RESULTS

Lab ID: L1723613-21 Date Collected: 07/11/17 14:45

Client ID: SP-12-0-3-071117 Date Received: 07/11/17 Sample Location: BUFFALO, NY Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution
Factor | Date
Prepared | Date
Analyzed | Analytical
Method | Analyst |
|---------------------|-----------------|-----------|-------|-------|------|--------------------|------------------|------------------|----------------------|---------|
| General Chemistry - | Westborough Lab |) | | | | | | | | |
| Solids, Total | 77.4 | | % | 0.100 | NA | 1 | - | 07/13/17 11:22 | 121,2540G | RI |
| Cyanide, Total | 1.6 | | mg/kg | 1.2 | 0.20 | 1 | 07/14/17 10:40 | 07/14/17 13:41 | 1,9010C/9012B | LK |



Project Name: PIERCE ARROW APARTMENTS Lab Number: L1723613

Project Number: 56831.10 Report Date: 07/19/17

SAMPLE RESULTS

Lab ID: L1723613-22 Date Collected: 07/11/17 15:15

Client ID: SP-13-4.5-071117 Date Received: 07/11/17 Sample Location: BUFFALO, NY Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution
Factor | Date
Prepared | Date
Analyzed | Analytical
Method | Analyst |
|---------------------|-------------------|-----------|-------|-------|-----|--------------------|------------------|------------------|----------------------|---------|
| General Chemistry - | - Westborough Lab |) | | | | | | | | |
| Solids, Total | 72.8 | | % | 0.100 | NA | 1 | - | 07/13/17 11:22 | 121,2540G | RI |



Project Name: PIERCE ARROW APARTMENTS Lab Number: L1723613

Project Number: 56831.10 Report Date: 07/19/17

SAMPLE RESULTS

Lab ID: L1723613-23 Date Collected: 07/11/17 15:15
Client ID: SP-13-0-4.5-071117 Date Received: 07/11/17

Client ID: SP-13-0-4.5-071117 Date Received: 07/11/17 Sample Location: BUFFALO, NY Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution
Factor | Date
Prepared | Date
Analyzed | Analytical
Method | Analyst |
|---------------------|-----------------|-----------|-------|-------|------|--------------------|------------------|------------------|----------------------|---------|
| General Chemistry - | Westborough Lab |) | | | | | | | | |
| Solids, Total | 77.3 | | % | 0.100 | NA | 1 | - | 07/13/17 11:22 | 121,2540G | RI |
| Cyanide, Total | ND | | mg/kg | 1.2 | 0.20 | 1 | 07/14/17 10:40 | 07/14/17 13:42 | 1,9010C/9012B | LK |



07/11/17 00:00

Not Specified

07/11/17

Date Collected:

Field Prep:

Project Name: PIERCE ARROW APARTMENTS Lab Number: L1723613

Project Number: Report Date: 07/19/17 56831.10

SAMPLE RESULTS

Lab ID: L1723613-24

SUBSURFACE DUPLICATE -071117 Client ID: Date Received:

Sample Location: BUFFALO, NY

Matrix: Soil

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution
Factor | Date
Prepared | Date
Analyzed | Analytical
Method | Analyst |
|-----------------------|-----------------|-----------|-------|-------|------|--------------------|------------------|------------------|----------------------|---------|
| General Chemistry - V | Westborough Lat | | | | | | | | | |
| Solids, Total | 82.6 | | % | 0.100 | NA | 1 | - | 07/13/17 11:22 | 121,2540G | RI |
| Cyanide, Total | ND | | mg/kg | 1.2 | 0.20 | 1 | 07/14/17 10:40 | 07/14/17 13:44 | 1,9010C/9012B | LK |



Project Name: PIERCE ARROW APARTMENTS Lab Number: L1723613

Project Number: 56831.10 Report Date: 07/19/17

SAMPLE RESULTS

 Lab ID:
 L1723613-27
 Date Collected:
 07/11/17 15:50

 Client ID:
 SS-1-071117
 Date Received:
 07/11/17

Sample Location: BUFFALO, NY Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution
Factor | Date
Prepared | Date
Analyzed | Analytical
Method | Analyst |
|---------------------|----------------|-----------|-------|-------|------|--------------------|------------------|------------------|----------------------|---------|
| General Chemistry - | Westborough La | b | | | | | | | | |
| Solids, Total | 83.7 | | % | 0.100 | NA | 1 | - | 07/13/17 10:52 | 121,2540G | RI |
| Cyanide, Total | 0.80 | J | mg/kg | 1.1 | 0.18 | 1 | 07/14/17 10:40 | 07/14/17 13:45 | 1,9010C/9012B | LK |



Project Name: PIERCE ARROW APARTMENTS Lab Number: L1723613

Project Number: 56831.10 Report Date: 07/19/17

SAMPLE RESULTS

 Lab ID:
 L1723613-28
 Date Collected:
 07/11/17 15:55

 Client ID:
 SS-2-071117
 Date Received:
 07/11/17

Sample Location: BUFFALO, NY Field Prep: Not Specified

| Parameter | Resul | t Qualifier | Units | RL | MDL | Dilution
Factor | Date
Prepared | Date
Analyzed | Analytical
Method | Analyst |
|-----------------------|---------------|-------------|-------|-------|------|--------------------|------------------|------------------|----------------------|---------|
| General Chemistry - W | estborough La | ab | | | | | | | | |
| Solids, Total | 84.3 | | % | 0.100 | NA | 1 | - | 07/13/17 10:52 | 121,2540G | RI |
| Cyanide, Total | 0.35 | J | mg/kg | 1.1 | 0.18 | 1 | 07/14/17 10:40 | 07/14/17 13:48 | 1,9010C/9012B | LK |



Project Name: PIERCE ARROW APARTMENTS Lab Number: L1723613

Project Number: 56831.10 Report Date: 07/19/17

SAMPLE RESULTS

 Lab ID:
 L1723613-29
 Date Collected:
 07/11/17 16:00

 Client ID:
 SS-3-071117
 Date Received:
 07/11/17

Sample Location: BUFFALO, NY Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution
Factor | Date
Prepared | Date
Analyzed | Analytical
Method | Analyst |
|---------------------|----------------|-----------|-------|-------|------|--------------------|------------------|------------------|----------------------|---------|
| General Chemistry - | Westborough La | b | | | | | | | | |
| Solids, Total | 91.4 | | % | 0.100 | NA | 1 | - | 07/13/17 10:52 | 121,2540G | RI |
| Cyanide, Total | 0.18 | J | mg/kg | 1.0 | 0.17 | 1 | 07/14/17 10:40 | 07/14/17 13:48 | 1,9010C/9012B | LK |



Project Name: PIERCE ARROW APARTMENTS Lab Number: L1723613

Project Number: 56831.10 Report Date: 07/19/17

SAMPLE RESULTS

 Lab ID:
 L1723613-30
 Date Collected:
 07/11/17 16:10

 Client ID:
 SS-4-071117
 Date Received:
 07/11/17

Sample Location: BUFFALO, NY Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution
Factor | Date
Prepared | Date
Analyzed | Analytical
Method | Analyst |
|-----------------------|----------------|-----------|-------|-------|------|--------------------|------------------|------------------|----------------------|---------|
| General Chemistry - \ | Westborough La | b | | | | | | | | |
| Solids, Total | 97.4 | | % | 0.100 | NA | 1 | - | 07/13/17 10:52 | 121,2540G | RI |
| Cyanide, Total | 0.27 | J | mg/kg | 1.0 | 0.16 | 1 | 07/14/17 10:40 | 07/14/17 13:49 | 1,9010C/9012B | LK |



07/11/17 00:00

Not Specified

07/11/17

Date Collected:

Field Prep:

Project Name: PIERCE ARROW APARTMENTS Lab Number: L1723613

Project Number: 56831.10 Report Date: 07/19/17

SAMPLE RESULTS

Lab ID: L1723613-31

Client ID: SURFACE SOIL DUPLICATE Date Received:

Sample Location: BUFFALO, NY

| Parameter | Resul | t Qualifie | r Units | RL | MDL | Dilution
Factor | Date
Prepared | Date
Analyzed | Analytical
Method | Analyst |
|-----------------------|---------------|------------|---------|-------|------|--------------------|------------------|------------------|----------------------|---------|
| General Chemistry - W | estborough La | ab | | | | | | | | |
| Solids, Total | 92.6 | | % | 0.100 | NA | 1 | - | 07/13/17 10:52 | 121,2540G | RI |
| Cyanide, Total | 0.24 | J | mg/kg | 1.0 | 0.17 | 1 | 07/14/17 10:40 | 07/14/17 13:50 | 1,9010C/9012B | LK |



Project Name: PIERCE ARROW APARTMENTS Lab Number: L1723613

Project Number: 56831.10 Report Date: 07/19/17

Method Blank Analysis Batch Quality Control

| Parameter | Result Qualifi | er Units | RL | MDL | Dilution
Factor | Date
Prepared | Date
Analyzed | Analytical
Method | Analyst |
|-----------------------|----------------------|---------------|----------|---------|--------------------|------------------|------------------|----------------------|---------|
| General Chemistry - W | estborough Lab for s | sample(s): 02 | -03 Ba | tch: WC | G1022226-1 | | | | |
| Cyanide, Total | ND | mg/kg | 0.86 | 0.14 | 1 | 07/13/17 12:50 | 07/13/17 15:24 | 1,9010C/9012E | B LK |
| General Chemistry - W | estborough Lab for s | sample(s): 05 | ,07,09,1 | 1,13,15 | ,17,19 Bat | tch: WG1022 | 230-1 | | |
| Cyanide, Total | ND | mg/kg | 0.86 | 0.14 | 1 | 07/13/17 12:50 | 07/13/17 15:23 | 1,9010C/9012E | B LK |
| General Chemistry - W | estborough Lab for s | sample(s): 21 | ,23-24,2 | 27-31 E | Batch: WG1 | 022567-1 | | | |
| Cyanide, Total | ND | mg/kg | 0.94 | 0.16 | 1 | 07/14/17 10:40 | 07/14/17 13:27 | 1,9010C/9012E | B LK |



Lab Control Sample Analysis Batch Quality Control

Project Name: PIERCE ARROW APARTMENTS

Project Number: 56831.10

Lab Number:

L1723613

Report Date:

07/19/17

| Parameter | LCS
%Recovery | Qual | LCSD
%Recovery | Qual | %Recovery
Limits | RPD | Qual RPD | Limits |
|---------------------------------------|---------------------|------------|-------------------|----------|---------------------|-------------|----------|--------|
| General Chemistry - Westborough Lab A | ssociated sample(s) | : 02-03 | Batch: WG10222 | 226-2 WG | 1022226-3 | | | |
| Cyanide, Total | 136 | Q | 95 | | 80-120 | 29 | | 35 |
| General Chemistry - Westborough Lab A | ssociated sample(s) | : 05,07,09 | 9,11,13,15,17,19 | Batch: W | 'G1022230-2 V | VG1022230-3 | | |
| Cyanide, Total | 136 | Q | 96 | | 80-120 | 27 | | 35 |
| General Chemistry - Westborough Lab A | ssociated sample(s) | : 21,23-24 | 4,27-31 Batch: | WG102256 | 57-2 WG10225 | 67-3 | | |
| Cyanide, Total | 118 | | 124 | Q | 80-120 | 4 | | 35 |

Matrix Spike Analysis Batch Quality Control

Project Name: PIERCE ARROW APARTMENTS

Project Number: 56831.10

Lab Number:

L1723613

Report Date: 07/19/17

| Parameter | Native
Sample | MS
Added | MS
Found | MS
%Recovery | Qual | MSD
Found | MSD
%Recovery | | overy
nits RI | PD Qua | RPD
Limits |
|---|------------------|--------------|---------------|-----------------|---------|--------------|------------------|------------|------------------|-----------|---------------|
| General Chemistry - Westboroug Sample | h Lab Asso | ciated sampl | e(s): 02-03 | QC Batch II | D: WG1 | 022226-4 | WG1022226-5 | QC Sampl | e: L17234 | 04-01 (| Client ID: MS |
| Cyanide, Total | 0.78J | 11 | 11 | 89 | | 12 | 96 | 75 | -125 | 9 | 35 |
| General Chemistry - Westboroug
05 Client ID: SP-3-1-8-071117 | | ciated sampl | le(s): 05,07, | 09,11,13,15,1 | 17,19 | QC Batch I | ID: WG1022230 |)-4 WG1022 | 2230-5 Q | C Sample | e: L1723613- |
| Cyanide, Total | ND | 12 | 11 | 89 | | 12 | 99 | 75 | -125 | 9 | 35 |
| General Chemistry - Westboroug
Client ID: SS-1-071117 | h Lab Asso | ciated sampl | le(s): 21,23- | 24,27-31 Q | C Batch | ID: WG10 |)22567-4 WG1 | 022567-5 (| QC Sample | e: L17236 | 613-27 |
| Cyanide, Total | 0.80J | 12 | 13 | 100 | | 11 | 94 | 75 | -125 | 17 | 35 |



Lab Duplicate Analysis Batch Quality Control

Project Name: PIERCE ARROW APARTMENTS

Project Number: 56831.10

Lab Number:

L1723613

Report Date:

07/19/17

| Parameter | Native Sample | Duplicate Sample | Units | RPD | Qual | RPD Limits |
|---|----------------------|-------------------------|----------------|------------|--------------|------------------|
| General Chemistry - Westborough Lab Associated san 071117 | nple(s): 01-06,08-10 | QC Batch ID: WG1021937 | 7-1 QC Sampl | e: L17236 | 13-05 Clier | nt ID: SP-3-1-8- |
| Solids, Total | 80.5 | 82.5 | % | 2 | | 20 |
| General Chemistry - Westborough Lab Associated san 071117 | nple(s): 07,11-24 Q | C Batch ID: WG1022198-1 | QC Sample: | L1723613-(| 07 Client IE |): SP-5-1-8- |
| Solids, Total | 78.3 | 77.7 | % | 1 | | 20 |
| General Chemistry - Westborough Lab Associated san | nple(s): 27-31 QC E | Batch ID: WG1022212-1 G | QC Sample: L17 | 23613-27 | Client ID: S | SS-1-071117 |
| Solids, Total | 83.7 | 84.3 | % | 1 | | 20 |



Project Name: PIERCE ARROW APARTMENTS

Project Number: 56831.10

Lab Number: L1723613 **Report Date:** 07/19/17

Sample Receipt and Container Information

YES

Were project specific reporting limits specified?

Cooler Information

Custody Seal Cooler

Α Absent В Absent

| Container Info | ormation | | Initial | Final | Temp | | | Frozen | |
|----------------|--|--------|---------|-------|-------|------|--------|-----------------|--|
| Container ID | Container Type | Cooler | pН | pН | deg C | Pres | Seal | Date/Time | Analysis(*) |
| L1723613-01A | Vial MeOH preserved | В | NA | | 4.2 | Υ | Absent | | NYTCL-8260HLW(14) |
| L1723613-01B | Vial water preserved | В | NA | | 4.2 | Υ | Absent | 12-JUL-17 07:54 | NYTCL-8260HLW(14) |
| L1723613-01C | Vial water preserved | В | NA | | 4.2 | Υ | Absent | 12-JUL-17 07:54 | NYTCL-8260HLW(14) |
| L1723613-01D | Plastic 2oz unpreserved for TS | В | NA | | 4.2 | Υ | Absent | | TS(7) |
| L1723613-02A | Metals Only-Glass 60mL/2oz unpreserved | А | NA | | 4.7 | Υ | Absent | | BE-TI(180),AS-TI(180),BA-TI(180),AG-
TI(180),CR-TI(180),NI-TI(180),CU-TI(180),PB-
TI(180),SE-TI(180),ZN-TI(180),HG-T(28),MN-
TI(180),CD-TI(180) |
| L1723613-02B | Glass 120ml/4oz unpreserved | Α | NA | | 4.7 | Υ | Absent | | NYTCL-8270(14),TS(7) |
| L1723613-03A | Vial MeOH preserved | В | NA | | 4.2 | Υ | Absent | | NYTCL-8260HLW(14) |
| L1723613-03B | Vial water preserved | В | NA | | 4.2 | Υ | Absent | 12-JUL-17 07:54 | NYTCL-8260HLW(14) |
| L1723613-03C | Vial water preserved | В | NA | | 4.2 | Υ | Absent | 12-JUL-17 07:54 | NYTCL-8260HLW(14) |
| L1723613-03D | Plastic 2oz unpreserved for TS | В | NA | | 4.2 | Υ | Absent | | TS(7) |
| L1723613-03E | Metals Only-Glass 60mL/2oz unpreserved | А | NA | | 4.7 | Υ | Absent | | BE-TI(180),AS-TI(180),BA-TI(180),AG-
TI(180),CR-TI(180),NI-TI(180),CU-TI(180),PB-
TI(180),SE-TI(180),ZN-TI(180),HG-T(28),MN-
TI(180),CD-TI(180) |
| L1723613-03F | Glass 60mL/2oz unpreserved | Α | NA | | 4.7 | Υ | Absent | | NYTCL-8270(14),NYTCL-8082(14) |
| L1723613-03G | Glass 120ml/4oz unpreserved | Α | NA | | 4.7 | Υ | Absent | | NYTCL-8270(14),NYTCL-8082(14) |
| L1723613-04A | Vial MeOH preserved | В | NA | | 4.2 | Υ | Absent | | NYTCL-8260HLW(14) |
| L1723613-04A1 | Vial MeOH preserved | В | NA | | 4.2 | Υ | Absent | | NYTCL-8260HLW(14) |
| L1723613-04A2 | Vial MeOH preserved | В | NA | | 4.2 | Υ | Absent | | NYTCL-8260HLW(14) |
| L1723613-04B | Vial water preserved | В | NA | | 4.2 | Υ | Absent | 12-JUL-17 07:54 | NYTCL-8260HLW(14) |
| L1723613-04B1 | Vial water preserved | В | NA | | 4.2 | Υ | Absent | 12-JUL-17 07:54 | NYTCL-8260HLW(14) |
| L1723613-04B2 | Vial water preserved | В | NA | | 4.2 | Υ | Absent | 12-JUL-17 07:54 | NYTCL-8260HLW(14) |



Lab Number: L1723613

Report Date: 07/19/17

Project Name: PIERCE ARROW APARTMENTS

| Container Info | ormation | | Initial | Final | Temp | | | Frozen | |
|----------------|--|--------|---------|-------|------|------|--------|-----------------|--|
| Container ID | Container Type | Cooler | | pН | | Pres | Seal | Date/Time | Analysis(*) |
| L1723613-04C | Vial water preserved | В | NA | | 4.2 | Υ | Absent | 12-JUL-17 07:54 | NYTCL-8260HLW(14) |
| L1723613-04C1 | Vial water preserved | В | NA | | 4.2 | Υ | Absent | 12-JUL-17 07:54 | NYTCL-8260HLW(14) |
| L1723613-04C2 | Vial water preserved | В | NA | | 4.2 | Υ | Absent | 12-JUL-17 07:54 | NYTCL-8260HLW(14) |
| L1723613-04D | Plastic 2oz unpreserved for TS | В | NA | | 4.2 | Υ | Absent | | TS(7) |
| L1723613-04D1 | Plastic 2oz unpreserved for TS | В | NA | | 4.2 | Υ | Absent | | TS(7) |
| L1723613-04D2 | Plastic 2oz unpreserved for TS | В | NA | | 4.2 | Υ | Absent | | TS(7) |
| L1723613-05A | Metals Only-Glass 60mL/2oz unpreserved | Α | NA | | 4.7 | Υ | Absent | | BE-TI(180),AS-TI(180),BA-TI(180),AG-
TI(180),CR-TI(180),NI-TI(180),CU-TI(180),PB-
TI(180),SE-TI(180),ZN-TI(180),HG-T(28),MN-
TI(180),CD-TI(180) |
| L1723613-05A1 | Metals Only-Glass 60mL/2oz unpreserved | Α | NA | | 4.7 | Y | Absent | | BE-TI(180),AS-TI(180),BA-TI(180),AG-
TI(180),CR-TI(180),NI-TI(180),CU-TI(180),PB-
TI(180),SE-TI(180),ZN-TI(180),HG-T(28),MN-
TI(180),CD-TI(180) |
| L1723613-05A2 | Metals Only-Glass 60mL/2oz unpreserved | Α | NA | | 4.7 | Y | Absent | | BE-TI(180),AS-TI(180),BA-TI(180),AG-
TI(180),CR-TI(180),NI-TI(180),CU-TI(180),PB-
TI(180),SE-TI(180),ZN-TI(180),HG-T(28),MN-
TI(180),CD-TI(180) |
| L1723613-05B | Glass 120ml/4oz unpreserved | Α | NA | | 4.7 | Υ | Absent | | NYTCL-8270(14),TS(7) |
| L1723613-05B1 | Glass 120ml/4oz unpreserved | Α | NA | | 4.7 | Υ | Absent | | NYTCL-8270(14),TS(7) |
| L1723613-05B2 | Glass 120ml/4oz unpreserved | Α | NA | | 4.7 | Υ | Absent | | NYTCL-8270(14),TS(7) |
| L1723613-06A | Vial MeOH preserved | Α | NA | | 4.7 | Υ | Absent | | NYTCL-8260HLW(14) |
| L1723613-06B | Vial water preserved | В | NA | | 4.2 | Υ | Absent | 12-JUL-17 07:54 | NYTCL-8260HLW(14) |
| L1723613-06C | Vial water preserved | В | NA | | 4.2 | Υ | Absent | 12-JUL-17 07:54 | NYTCL-8260HLW(14) |
| L1723613-06D | Plastic 2oz unpreserved for TS | В | NA | | 4.2 | Υ | Absent | | TS(7) |
| L1723613-07A | Metals Only-Glass 60mL/2oz unpreserved | Α | NA | | 4.7 | Y | Absent | | BE-TI(180),AS-TI(180),BA-TI(180),AG-
TI(180),CR-TI(180),NI-TI(180),CU-TI(180),PB-
TI(180),SE-TI(180),ZN-TI(180),HG-T(28),MN-
TI(180),CD-TI(180) |
| L1723613-07B | Glass 120ml/4oz unpreserved | Α | NA | | 4.7 | Υ | Absent | | NYTCL-8270(14),TS(7) |
| L1723613-08A | Vial MeOH preserved | Α | NA | | 4.7 | Υ | Absent | | NYTCL-8260HLW(14) |
| L1723613-08B | Vial water preserved | Α | NA | | 4.7 | Υ | Absent | 12-JUL-17 07:54 | NYTCL-8260HLW(14) |
| L1723613-08C | Vial water preserved | Α | NA | | 4.7 | Υ | Absent | 12-JUL-17 07:54 | NYTCL-8260HLW(14) |
| L1723613-08D | Plastic 2oz unpreserved for TS | Α | NA | | 4.7 | Υ | Absent | | TS(7) |
| L1723613-09A | Glass 60mL/2oz unpreserved | Α | NA | | 4.7 | Υ | Absent | | TS(7) |



Lab Number: L1723613

Report Date: 07/19/17

Project Name: PIERCE ARROW APARTMENTS

| Container Info | ormation | | Initial | Final | Temp | | | Frozen | |
|----------------|--|--------|---------|-------|-------|------|--------|-----------------|--|
| Container ID | Container Type | Cooler | | pН | deg C | Pres | Seal | Date/Time | Analysis(*) |
| L1723613-09B | Metals Only-Glass 60mL/2oz unpreserved | Α | NA | | 4.7 | Υ | Absent | | BE-TI(180),AS-TI(180),BA-TI(180),AG-
TI(180),CR-TI(180),NI-TI(180),CU-TI(180),PB-
TI(180),SE-TI(180),ZN-TI(180),HG-T(28),MN-
TI(180),CD-TI(180) |
| L1723613-09C | Glass 120ml/4oz unpreserved | Α | NA | | 4.7 | Υ | Absent | | NYTCL-8270(14),NYTCL-8082(14) |
| L1723613-10A | Vial MeOH preserved | Α | NA | | 4.7 | Υ | Absent | | NYTCL-8260HLW(14) |
| L1723613-10B | Vial water preserved | Α | NA | | 4.7 | Υ | Absent | 12-JUL-17 07:54 | NYTCL-8260HLW(14) |
| L1723613-10C | Vial water preserved | Α | NA | | 4.7 | Υ | Absent | 12-JUL-17 07:54 | NYTCL-8260HLW(14) |
| L1723613-10D | Plastic 2oz unpreserved for TS | Α | NA | | 4.7 | Υ | Absent | | TS(7) |
| L1723613-11A | Glass 60mL/2oz unpreserved | Α | NA | | 4.7 | Υ | Absent | | TS(7) |
| L1723613-11B | Metals Only-Glass 60mL/2oz unpreserved | Α | NA | | 4.7 | Υ | Absent | | BE-TI(180),AS-TI(180),BA-TI(180),AG-
TI(180),CR-TI(180),NI-TI(180),CU-TI(180),PB-
TI(180),SE-TI(180),ZN-TI(180),HG-T(28),MN-
TI(180),CD-TI(180) |
| L1723613-11C | Glass 120ml/4oz unpreserved | Α | NA | | 4.7 | Υ | Absent | | NYTCL-8270(14),NYTCL-8082(14) |
| L1723613-12A | Vial MeOH preserved | Α | NA | | 4.7 | Υ | Absent | | NYTCL-8260HLW(14) |
| L1723613-12B | Vial water preserved | Α | NA | | 4.7 | Υ | Absent | 12-JUL-17 07:54 | NYTCL-8260HLW(14) |
| L1723613-12C | Vial water preserved | Α | NA | | 4.7 | Υ | Absent | 12-JUL-17 07:54 | NYTCL-8260HLW(14) |
| L1723613-12D | Plastic 2oz unpreserved for TS | Α | NA | | 4.7 | Υ | Absent | | TS(7) |
| L1723613-13A | Glass 60mL/2oz unpreserved | Α | NA | | 4.7 | Υ | Absent | | TS(7) |
| L1723613-13B | Metals Only-Glass 60mL/2oz unpreserved | Α | NA | | 4.7 | Υ | Absent | | BE-TI(180),AS-TI(180),BA-TI(180),AG-
TI(180),CR-TI(180),NI-TI(180),CU-TI(180),PB-
TI(180),SE-TI(180),ZN-TI(180),HG-T(28),MN-
TI(180),CD-TI(180) |
| L1723613-13C | Glass 120ml/4oz unpreserved | Α | NA | | 4.7 | Υ | Absent | | NYTCL-8270(14),NYTCL-8082(14) |
| L1723613-14A | Vial MeOH preserved | Α | NA | | 4.7 | Υ | Absent | | NYTCL-8260HLW(14) |
| L1723613-14B | Vial water preserved | Α | NA | | 4.7 | Υ | Absent | 12-JUL-17 07:54 | NYTCL-8260HLW(14) |
| L1723613-14C | Vial water preserved | Α | NA | | 4.7 | Υ | Absent | 12-JUL-17 07:54 | NYTCL-8260HLW(14) |
| L1723613-14D | Plastic 2oz unpreserved for TS | Α | NA | | 4.7 | Υ | Absent | | TS(7) |
| L1723613-15A | Glass 60mL/2oz unpreserved | Α | NA | | 4.7 | Υ | Absent | | TS(7) |
| L1723613-15B | Metals Only-Glass 60mL/2oz unpreserved | Α | NA | | 4.7 | Υ | Absent | | BE-TI(180),AS-TI(180),BA-TI(180),AG-
TI(180),CR-TI(180),NI-TI(180),CU-TI(180),PB-
TI(180),SE-TI(180),ZN-TI(180),HG-T(28),MN-
TI(180),CD-TI(180) |
| L1723613-15C | Glass 120ml/4oz unpreserved | Α | NA | | 4.7 | Υ | Absent | | NYTCL-8270(14),NYTCL-8082(14) |



Lab Number: L1723613

Report Date: 07/19/17

Project Name: PIERCE ARROW APARTMENTS

| Container Info | ormation | | Initial | Final | Temp | | | Frozen | |
|----------------|--|--------|---------|-------|-------|------|--------|-----------------|--|
| Container ID | Container Type | Cooler | рН | рН | deg C | Pres | Seal | Date/Time | Analysis(*) |
| L1723613-16A | Vial MeOH preserved | Α | NA | | 4.7 | Υ | Absent | | NYTCL-8260HLW(14) |
| L1723613-16B | Vial water preserved | Α | NA | | 4.7 | Υ | Absent | 12-JUL-17 07:54 | NYTCL-8260HLW(14) |
| L1723613-16C | Vial water preserved | Α | NA | | 4.7 | Υ | Absent | 12-JUL-17 07:54 | NYTCL-8260HLW(14) |
| L1723613-16D | Plastic 2oz unpreserved for TS | Α | NA | | 4.7 | Υ | Absent | | TS(7) |
| L1723613-17A | Metals Only-Glass 60mL/2oz unpreserved | Α | NA | | 4.7 | Υ | Absent | | BE-TI(180),AS-TI(180),BA-TI(180),AG-
TI(180),CR-TI(180),NI-TI(180),CU-TI(180),PB-
TI(180),SE-TI(180),ZN-TI(180),HG-T(28),MN-
TI(180),CD-TI(180) |
| L1723613-17B | Glass 120ml/4oz unpreserved | Α | NA | | 4.7 | Υ | Absent | | NYTCL-8270(14),TS(7) |
| L1723613-18A | Vial MeOH preserved | В | NA | | 4.2 | Υ | Absent | | NYTCL-8260HLW(14) |
| L1723613-18B | Vial water preserved | В | NA | | 4.2 | Υ | Absent | 12-JUL-17 07:54 | NYTCL-8260HLW(14) |
| L1723613-18C | Vial water preserved | В | NA | | 4.2 | Υ | Absent | 12-JUL-17 07:54 | NYTCL-8260HLW(14) |
| L1723613-18D | Plastic 2oz unpreserved for TS | В | NA | | 4.2 | Υ | Absent | | TS(7) |
| L1723613-19A | Glass 60mL/2oz unpreserved | Α | NA | | 4.7 | Υ | Absent | | TS(7) |
| L1723613-19B | Metals Only-Glass 60mL/2oz unpreserved | Α | NA | | 4.7 | Υ | Absent | | BE-TI(180),AS-TI(180),BA-TI(180),AG-
TI(180),CR-TI(180),NI-TI(180),CU-TI(180),PB-
TI(180),SE-TI(180),ZN-TI(180),HG-T(28),MN-
TI(180),CD-TI(180) |
| L1723613-19C | Glass 120ml/4oz unpreserved | Α | NA | | 4.7 | Υ | Absent | | NYTCL-8270(14),NYTCL-8082(14) |
| L1723613-20A | Vial MeOH preserved | Α | NA | | 4.7 | Υ | Absent | | NYTCL-8260HLW(14) |
| L1723613-20B | Vial water preserved | Α | NA | | 4.7 | Υ | Absent | 12-JUL-17 07:54 | NYTCL-8260HLW(14) |
| L1723613-20C | Vial water preserved | Α | NA | | 4.7 | Υ | Absent | 12-JUL-17 07:54 | NYTCL-8260HLW(14) |
| L1723613-20D | Plastic 2oz unpreserved for TS | Α | NA | | 4.7 | Υ | Absent | | TS(7) |
| L1723613-21A | Metals Only-Glass 60mL/2oz unpreserved | Α | NA | | 4.7 | Υ | Absent | | BE-TI(180),AS-TI(180),BA-TI(180),AG-
TI(180),CR-TI(180),NI-TI(180),CU-TI(180),PB-
TI(180),SE-TI(180),ZN-TI(180),HG-T(28),MN-
TI(180),CD-TI(180) |
| L1723613-21B | Glass 120ml/4oz unpreserved | Α | NA | | 4.7 | Υ | Absent | | NYTCL-8270(14),TS(7) |
| L1723613-22A | Vial MeOH preserved | В | NA | | 4.2 | Υ | Absent | | NYTCL-8260HLW(14) |
| L1723613-22B | Vial water preserved | В | NA | | 4.2 | Υ | Absent | 12-JUL-17 07:54 | NYTCL-8260HLW(14) |
| L1723613-22C | Vial water preserved | В | NA | | 4.2 | Υ | Absent | 12-JUL-17 07:54 | NYTCL-8260HLW(14) |
| L1723613-22D | Plastic 2oz unpreserved for TS | В | NA | | 4.2 | Υ | Absent | | TS(7) |



Lab Number: L1723613

Report Date: 07/19/17

Project Name: PIERCE ARROW APARTMENTS

| Container Info | ormation | | Initial | Final | Temp | | | Frozen | |
|----------------|--|--------|---------|-------|-------|------|--------|-----------------|--|
| Container ID | Container Type | Cooler | | рН | deg C | Pres | Seal | Date/Time | Analysis(*) |
| L1723613-23A | Metals Only-Glass 60mL/2oz unpreserved | А | NA | | 4.7 | Y | Absent | | BE-TI(180),AS-TI(180),BA-TI(180),AG-
TI(180),CR-TI(180),NI-TI(180),CU-TI(180),PB-
TI(180),SE-TI(180),ZN-TI(180),HG-T(28),MN-
TI(180),CD-TI(180) |
| L1723613-23B | Glass 120ml/4oz unpreserved | Α | NA | | 4.7 | Υ | Absent | | NYTCL-8270(14),TS(7) |
| L1723613-24A | Vial MeOH preserved | Α | NA | | 4.7 | Υ | Absent | | NYTCL-8260HLW(14) |
| L1723613-24B | Vial water preserved | Α | NA | | 4.7 | Υ | Absent | 12-JUL-17 07:54 | NYTCL-8260HLW(14) |
| L1723613-24C | Vial water preserved | Α | NA | | 4.7 | Υ | Absent | 12-JUL-17 07:54 | NYTCL-8260HLW(14) |
| L1723613-24D | Plastic 2oz unpreserved for TS | Α | NA | | 4.7 | Υ | Absent | | TS(7) |
| L1723613-24E | Metals Only-Glass 60mL/2oz unpreserved | А | NA | | 4.7 | Y | Absent | | BE-TI(180),AS-TI(180),BA-TI(180),AG-
TI(180),CR-TI(180),NI-TI(180),CU-TI(180),PB-
TI(180),SE-TI(180),ZN-TI(180),HG-T(28),MN-
TI(180),CD-TI(180) |
| L1723613-24F | Glass 120ml/4oz unpreserved | Α | NA | | 4.7 | Υ | Absent | | - |
| L1723613-25A | Vial HCl preserved | Α | NA | | 4.7 | Υ | Absent | | NYTCL-8260(14) |
| L1723613-25B | Vial HCl preserved | Α | NA | | 4.7 | Υ | Absent | | NYTCL-8260(14) |
| L1723613-25C | Vial HCl preserved | Α | NA | | 4.7 | Υ | Absent | | NYTCL-8260(14) |
| L1723613-25D | Amber 1000ml unpreserved | В | 7 | 7 | 4.2 | Υ | Absent | | NYTCL-8270(7),NYTCL-8270-SIM(7) |
| L1723613-26A | Vial HCl preserved | В | NA | | 4.2 | Υ | Absent | | NYTCL-8260(14) |
| L1723613-26B | Vial HCl preserved | В | NA | | 4.2 | Υ | Absent | | NYTCL-8260(14) |
| L1723613-26C | Vial HCl preserved | В | NA | | 4.2 | Υ | Absent | | NYTCL-8260(14) |
| L1723613-26D | Amber 1000ml unpreserved | В | 8 | 8 | 4.2 | Υ | Absent | | NYTCL-8270(7),NYTCL-8270-SIM(7) |
| L1723613-27A | Metals Only-Glass 60mL/2oz unpreserved | В | NA | | 4.2 | Y | Absent | | BE-TI(180),AS-TI(180),BA-TI(180),AG-
TI(180),CR-TI(180),NI-TI(180),CU-TI(180),PB-
TI(180),SE-TI(180),ZN-TI(180),HG-T(28),MN-
TI(180),CD-TI(180) |
| L1723613-27A1 | Metals Only-Glass 60mL/2oz unpreserved | В | NA | | 4.2 | Y | Absent | | BE-TI(180),AS-TI(180),BA-TI(180),AG-
TI(180),CR-TI(180),NI-TI(180),CU-TI(180),PB-
TI(180),SE-TI(180),ZN-TI(180),HG-T(28),MN-
TI(180),CD-TI(180) |
| L1723613-27A2 | Metals Only-Glass 60mL/2oz unpreserved | В | NA | | 4.2 | Υ | Absent | | BE-TI(180),AS-TI(180),BA-TI(180),AG-
TI(180),CR-TI(180),NI-TI(180),CU-TI(180),PB-
TI(180),SE-TI(180),ZN-TI(180),HG-T(28),MN-
TI(180),CD-TI(180) |
| L1723613-27B | Glass 120ml/4oz unpreserved | В | NA | | 4.2 | Υ | Absent | | NYTCL-8270(14),TS(7) |
| L1723613-27B1 | Glass 120ml/4oz unpreserved | В | NA | | 4.2 | Υ | Absent | | NYTCL-8270(14),TS(7) |



Lab Number: L1723613

Report Date: 07/19/17

NYTCL-8270(14),TS(7)

Project Number: 56831.10

PIERCE ARROW APARTMENTS

Project Name:

| Container Info | rmation | | Initial | Final | Temp | | | Frozen | |
|----------------|--|--------|---------|-------|-------|------|--------|-----------|--|
| Container ID | Container Type | Cooler | рH | pН | deg C | Pres | Seal | Date/Time | Analysis(*) |
| L1723613-27B2 | Glass 120ml/4oz unpreserved | В | NA | | 4.2 | Υ | Absent | | NYTCL-8270(14),TS(7) |
| L1723613-28A | Metals Only-Glass 60mL/2oz unpreserved | В | NA | | 4.2 | Υ | Absent | | BE-TI(180),AS-TI(180),BA-TI(180),AG-
TI(180),CR-TI(180),NI-TI(180),CU-TI(180),PB-
TI(180),SE-TI(180),ZN-TI(180),HG-T(28),MN-
TI(180),CD-TI(180) |
| L1723613-28B | Glass 120ml/4oz unpreserved | В | NA | | 4.2 | Υ | Absent | | NYTCL-8270(14),TS(7) |
| L1723613-29A | Metals Only-Glass 60mL/2oz unpreserved | В | NA | | 4.2 | Υ | Absent | | BE-TI(180),AS-TI(180),BA-TI(180),AG-
TI(180),CR-TI(180),NI-TI(180),CU-TI(180),PB-
TI(180),SE-TI(180),ZN-TI(180),HG-T(28),MN-
TI(180),CD-TI(180) |
| L1723613-29B | Glass 120ml/4oz unpreserved | В | NA | | 4.2 | Υ | Absent | | NYTCL-8270(14),TS(7) |
| L1723613-30A | Metals Only-Glass 60mL/2oz unpreserved | В | NA | | 4.2 | Y | Absent | | BE-TI(180),AS-TI(180),BA-TI(180),AG-
TI(180),CR-TI(180),NI-TI(180),CU-TI(180),PB-
TI(180),SE-TI(180),ZN-TI(180),HG-T(28),MN-
TI(180),CD-TI(180) |
| L1723613-30B | Glass 120ml/4oz unpreserved | В | NA | | 4.2 | Υ | Absent | | NYTCL-8270(14),TS(7) |
| L1723613-31A | Metals Only-Glass 60mL/2oz unpreserved | В | NA | | 4.2 | Υ | Absent | | BE-TI(180),AS-TI(180),BA-TI(180),AG-
TI(180),CR-TI(180),NI-TI(180),CU-TI(180),PB-
TI(180),SE-TI(180),ZN-TI(180),HG-T(28),MN-
TI(180),CD-TI(180) |

4.2

Y Absent



L1723613-31B

Glass 120ml/4oz unpreserved

В

NA

Project Name:PIERCE ARROW APARTMENTSLab Number:L1723613Project Number:56831.10Report Date:07/19/17

GLOSSARY

Acronyms

EDL - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated

values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis

of PAHs using Solid-Phase Microextraction (SPME).

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of

analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of

analytes or a material containing known and verified amounts of analytes.

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any

adjustments from dilutions, concentrations or moisture content, where applicable.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for

which an independent estimate of target analyte concentration is available.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's

reporting unit.

NDPA/DPA - N-Nitrosodiphenylamine/Diphenylamine.

NI - Not Ignitable.

NP - Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL

includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less

than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the

values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the

associated field samples.

STLP - Semi-dynamic Tank Leaching Procedure per EPA Method 1315.

TIC - Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound

list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

- The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

В

A - Spectra identified as "Aldol Condensation Product".

- The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related

Report Format: DU Report with 'J' Qualifiers



Project Name:PIERCE ARROW APARTMENTSLab Number:L1723613Project Number:56831.10Report Date:07/19/17

Data Qualifiers

projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

- Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations
 of the analyte.
- E Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- G The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.
- H The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I The lower value for the two columns has been reported due to obvious interference.
- M Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- NJ Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P The RPD between the results for the two columns exceeds the method-specified criteria.
- Q The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- **R** Analytical results are from sample re-analysis.
- RE Analytical results are from sample re-extraction.
- S Analytical results are from modified screening analysis.
- Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers



Project Name:PIERCE ARROW APARTMENTSLab Number:L1723613Project Number:56831.10Report Date:07/19/17

REFERENCES

Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Alpha Analytical, Inc. Facility: Company-wide

Department: Quality Assurance

Title: Certificate/Approval Program Summary

ID No.:17873

Revision 10

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Published Date: 1/16/2017 11:00:05 AM

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility

EPA 624: m/p-xylene, o-xylene

EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.

EPA 300: DW: Bromide

EPA 6860: NPW and SCM: Perchlorate

EPA 9010: NPW and SCM: Amenable Cyanide Distillation

EPA 9012B: NPW: Total Cyanide EPA 9050A: NPW: Specific Conductance

SM3500: NPW: Ferrous Iron

SM4500: NPW: Amenable Cyanide, Dissolved Oxygen; SCM: Total Phosphorus, TKN, NO2, NO3.

SM5310C: DW: Dissolved Organic Carbon

Mansfield Facility

SM 2540D: TSS EPA 3005A NPW

EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water

EPA 300.0: Nitrate-N, Fluoride, Sulfate; EPA 353.2: Nitrate-N, Nitrite-N; SM4500NO3-F: Nitrate-N, Nitrite-N; SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B

EPA 332: Perchlorate; EPA 524.2: THMs and VOCs; EPA 504.1: EDB, DBCP.

Microbiology: SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D.

Non-Potable Water

SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH, EPA 350.1: Ammonia-N, LACHAT 10-107-06-1-B: Ammonia-N, SM4500NO3-F, EPA 353.2: Nitrate-N, EPA 351.1, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D.

EPA 624: Volatile Halocarbons & Aromatics,

EPA 608: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan II, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625: SVOC (Acid/Base/Neutral Extractables), EPA 600/4-81-045: PCB-Oil.

Microbiology: SM9223B-Colilert-QT; Enterolert-QT, SM9221E.

Mansfield Facility:

Drinking Water

EPA 200.7: Ba, Be, Cd, Cr, Cu, Ni, Na, Ca. EPA 200.8: Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Ni, Se, TL. EPA 245.1 Hg.

EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.

EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn.

EPA 245.1 Hg.

SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

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GZA GeoEnvironmental, Inc.



APPENDIX B

NYSDEC PFAS SAMPLING REFERENCE DOCUMENTS

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Remediation, Region 9 270 Michigan Avenue, Buffalo, NY 14203-2915 P: (716) 851-7220 | F: (716) 851-7226 www.dec.ny.gov

March 26, 2018

Great Arrow Estates, LLC Mr. Nick Sinatra 617 Main Street Buffalo, New York 14203

RE: Request for sampling of Emerging Contaminants

Site Name: 157 Great Arrow, Buffalo, Erie County

Site ID: C915326

Dear Mr. Sinatra:

The New York State Department of Environmental Conservation (DEC) is undertaking a Statewide evaluation of remediation sites to better understand the risk posed to New Yorkers by 1,4-dioxane and per- and polyfluoroalkyl substances (PFAS). PFAS have historically not been evaluated at remediation sites, and 1,4-dioxane has not been evaluated at the levels that are now thought to represent a health concern. This initiative is being undertaken as a result of these "emerging contaminants" having been found in a number of drinking water supplies in New York. The DEC is requesting that you test the water for these chemicals utilizing a select number of existing monitoring wells that represent the groundwater quality of the above-referenced site. DEC recommends that at least one of these wells should be up gradient of the site.

The attached guidance provides information on the analytical methods and reporting requirements. A second guidance document describes special precautions that need to be considered when sampling for PFAS.

Please prepare a draft letter work plan that identifies the wells proposed for sampling, brief description of the sampling methods, and anticipated sampling date within 60 business days. If you wish to discuss the scope of the requested water testing, please contact me within 10 business days. If you have any questions please feel free to contact me, at 716-851-7220.



Mr. Nick Sinatra March 26, 2018

Sincerely,

Anthony Lopes, P.E. Project Manager

anthy L. Capes

Ec:C. Staniszewski

J. Richert

C. Slater

Groundwater Sampling for Emerging Contaminants

February 2018

<u>Issue:</u> NYSDEC has committed to analyzing representative groundwater samples at remediation sites for emerging contaminants (1,4-dioxane and PFAS) as described in the below quidance.

Implementation

NYSDEC project managers will be contacting site owners to schedule sampling for these chemicals. Only groundwater sampling is required. The number of samples required will be similar to the number of samples where "full TAL/TCL sampling" would typically be required in a remedial investigation. If sampling is not feasible (e.g., the site no longer has any monitoring wells in place), sampling may be waived on a site-specific basis after first considering potential sources of these chemicals and whether there are water supplies nearby.

Upon a new site being brought into any program (i.e., SSF, BCP), PFAS and 1,4-dioxane will be incorporated into the investigation of groundwater as part of the standard "full TAL/TCL" sampling. Until an SCO is established for PFAS, soil samples do not need to be analyzed for PFAS unless groundwater contamination is detected. Separate guidance will be developed to address sites where emerging contaminants are found in the groundwater. The analysis currently performed for SVOCs in soil is adequate for evaluation of 1,4-dioxane, which already has an established SCO.

Analysis and Reporting

Labs should provide a full category B deliverable, and a DUSR should be prepared by a data validator.

The work plan should explicitly describe analysis and reporting requirements.

<u>PFAS sample analysis</u>: Samples should be analyzed by an environmental laboratory certified by ELAP to use EPA method 537 or ISO 25101. ELAP does not currently offer certification for PFAS analysis of non-drinking water samples (including groundwater, soil and sediment), so there is no requirement to use an ELAP certified method. The preferred method is the modified EPA Method 537. Labs have been able to achieve reporting limits for PFOA and PFOS of 2 ng/l (part per trillion). If labs are not able to achieve similar reporting limits, the NYSDEC project manager will make case-by-case decisions as to whether the analysis can meet the needs for the specific site.

<u>PFAS sample reporting:</u> DER has developed a PFAS target analyte list (below) with the intent of achieving reporting consistency between labs for commonly reportable analytes. It is expected that reported results for PFAS will include, at a minimum, all the compounds listed. This list may be updated in the future as new information is learned and as labs develop new capabilities. If lab and/or matrix specific issues are encountered for any particular compounds, the NYSDEC project manager will make case-by-case decisions as to whether particular analytes may be temporarily or permanently discontinued from analysis for each site. Any technical lab issues should be brought to the attention of a NYSDEC chemist.

Some sampling using this full PFAS target analyte list is needed to understand the nature of contamination. It may also be critical to differentiate PFAS compounds associated with a site from other sources of these chemicals. Like routine refinements to parameter lists based on investigative findings, the full PFAS target analyte list may not be needed for all sampling intended to define the extent of

contamination. Project managers may approve a shorter analyte list (e.g., just the UCMR3 list) for some reporting on a case by case basis.

<u>1,4-Dioxane Analysis and Reporting:</u> The method detection limit (MDL) for 1,4-dioxane should be no higher than 0.28 μ g/l (ppb). ELAP offers certification for both EPA Methods 8260 and 8270. In order to get the appropriate detection limits, the lab would need to run either of these methods in "selective ion monitoring" (SIM) mode. DER is advising PMS to use 8270, since this method provides a more robust extraction procedure, uses a larger sample volume, and is less vulnerable to interference from chlorinated solvents (we acknowledge that 8260 has been shown to have a higher recovery in some studies).

Full PFAS Target Analyte List

| Group | Chemical Name | Abbreviation | CAS Number |
|----------------------------------|--|---------------|------------|
| | Perfluorobutanesulfonic acid | PFBS | 375-73-5 |
| | Perfluorohexanesulfonic acid | PFHxS | 355-46-4 |
| Perfluoroalkyl sulfonates | Perfluoroheptanesulfonic acid | PFHpS | 375-92-8 |
| Sunomates | Perfluorooctanessulfonic acid | PFOS | 1763-23-1 |
| | Perfluorodecanesulfonic acid | PFDS | 335-77-3 |
| | Perfluorobutanoic acid | PFBA | 375-22-4 |
| | Perfluoropentanoic acid | PFPeA | 2706-90-3 |
| | Perfluorohexanoic acid | PFHxA | 307-24-4 |
| | Perfluoroheptanoic acid | PFHpA | 375-85-9 |
| Dorfluoroollad | Perfluorooctanoic acid | PFOA | 335-67-1 |
| Perfluoroalkyl carboxylates | Perfluorononanoic acid | PFNA | 375-95-1 |
| | Perfluorodecanoic acid | PFDA | 335-76-2 |
| | Perfluoroundecanoic acid | PFUA/PFUdA | 2058-94-8 |
| | Perfluorododecanoic acid | PFDoA | 307-55-1 |
| | Perfluorotridecanoic acid | PFTriA/PFTrDA | 72629-94-8 |
| | Perfluorotetradecanoic acid | PFTA/PFTeDA | 376-06-7 |
| Fluorinated Telomer | 6:2 Fluorotelomer sulfonate | 6:2 FTS | 27619-97-2 |
| Sulfonates | 8:2 Fluorotelomer sulfonate | 8:2 FTS | 39108-34-4 |
| Perfluorooctane-
sulfonamides | Perfluroroctanesulfonamide | FOSA | 754-91-6 |
| Perfluorooctane- | N-methyl perfluorooctanesulfonamidoacetic acid | N-MeFOSAA | 2355-31-9 |
| sulfonamidoacetic acids | N-ethyl perfluorooctanesulfonamidoacetic acid | N-EtFOSAA | 2991-50-6 |

Bold entries depict the 6 original UCMR3 chemicals

Collection of Groundwater Samples for Perfluorooctanoic Acid (PFOA) and Perfluorinated Compounds (PFCs) from Monitoring Wells Sample Protocol

Samples collected using this protocol are intended to be analyzed for perfluorooctanoic acid (PFOA) and other perfluorinated compounds by Modified (Low Level) Test Method 537.

The procedure used must be consistent with the NYSDEC March 1991 Sampling Guidelines and Protocols http://www.dec.ny.gov/docs/remediation_hudson_pdf/sgpsect5.pdf with the following materials limitations.

At this time acceptable materials for sampling include: stainless steel, high density polyethylene (HDPE), PVC, silicone, acetate and polypropylene. Equipment blanks should be generated at least daily. Additional materials may be acceptable if preapproved by NYSDEC. Requests to use alternate equipment should include clean equipment blanks. NOTE: Grunfos pumps and bladder pumps are known to contain PFC materials (e.g. TeflonTM washers for Grunfos pumps and LDPE bladders for bladder pumps). All sampling equipment components and sample containers should not come in contact with aluminum foil, low density polyethylene (LDPE), glass or polytetrafluoroethylene (PTFE, TeflonTM) materials including sample bottle cap liners with a PTFE layer. Standard two step decontamination using detergent and clean water rinse will be performed for equipment that does come in contact with PFC materials. Clothing that contains PTFE material (including GORE-TEX®) or that have been waterproofed with PFC materials must be avoided. Many food and drink packaging materials and "plumbers thread seal tape" contain PFCs.

All clothing worn by sampling personnel must have been laundered multiple times. The sampler must wear nitrile gloves while filling and sealing the sample bottles.

Pre-cleaned sample bottles with closures, coolers, ice, sample labels and a chain of custody form will be provided by the laboratory.

- 1. Fill two pre-cleaned 500 mL HDPE or polypropylene bottle with the sample.
- 2. Cap the bottles with an acceptable cap and liner closure system.
- 3. Label the sample bottles.
- 4. Fill out the chain of custody.
- 5. Place in a cooler maintained at 4 ± 2° Celsius.

Collect one equipment blank for every sample batch, not to exceed 20 samples.

Collect one field duplicate for every sample batch, not to exceed 20 samples.

Collect one matrix spike / matrix spike duplicate (MS/MSD) for every sample batch, not to exceed 20 samples.

Request appropriate data deliverable (Category A or B) and an electronic data deliverable.



APPENDIX C

QUALITY ASSURANCE PROJECT PLAN (QAPP)

QUALITY ASSURANCE PROJECT PLAN 157 GREAT ARROW AVENUE SITE BUFFALO, NEW YORK BROWNFIELD CLEANUP PROGRAM SITE NO. C915326

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1.0 INTRODUCTION

1.1 PURPOSE AND OBJECTIVE

This Quality Assurance Project Plan (QAPP) has been developed by GZA GeoEnvironmental of New York (GZA) for project activities described in the associated Remedial Investigation Work Plan (RIWP) for the 157 Great Arrow Avenue Site, located at 157 Great Arrow Avenue, Buffalo, New York (see Figure 1). This QAPP presents the project scope, objectives, organization, planned activities, sampling procedures, data quality objectives and quality assurance/quality control (QA/QC) procedures.

Protocols for sample collection, sample handling and storage, equipment decontamination, chain- of-custody procedures, etc. are described in Section 3. This QAPP was developed in general accordance with the requirements of Section 2.4 of the NYSDEC DER-10/Technical Guidance for Site Investigation and Remediation, effective May 3, 2010 (NYSDEC DER-10).

1.2 PROJECT BACKGROUND

The 157 Great Arrow Ave. Site (Site) is a brownfield site with known contamination of on-site soil and groundwater. The Site is planned to be redeveloped into residential apartments. The Site is part of the former heavy manufacturing facility known as the Former Pierce Arrow Manufacturing Facility. The on-Site soil and groundwater contamination will require further investigation and remediation prior to Site redevelopment. The nature, extent, and impact of the environmental contamination is not yet sufficiently defined, thus further environmental investigation work must be completed to provide information necessary to evaluate and select remedial measures. The Remedial Investigation Work Plan (RIWP) provides descriptions of the investigation procedures to be implemented to characterize the environmental conditions of the Site. Data collected through the RI will be used to define the nature and extent of environmental contamination and the related risks to human health, if any. Potential remedial alternatives will then be identified and assessed in a Remedial Alternatives Analysis (RAA). Recommended remedial actions will then be presented a Remedial Work Plan (RWP). This QAPP was prepared to supplement and support the RIWP.

1.3 PROJECT DESCRIPTION

This QAPP is the quality control basis for the scope of work, which is further described in the Remedial Investigation Work Plan. The major tasks involved at the Site are:

- Characterization of Urban Fill;
- Characterization of Native Soil;
- Characterization of Surface Soil;
- Characterization of Groundwater;
- Characterization of Soil Gas and Indoor Air; and
- Characterization of Earthen Berm.

1.4 PROJECT MANAGEMENT AND ORGANIZATION

1.4.1 Personnel

The general responsibilities of key project personnel are listed below.

NYSDEC Project Manager – Tony Lopes will have the responsibility for regulatory oversight for the work associated with BCP.

Great Arrow Estates, LLC Project Manager — Nick Sinatra will have the responsibility for implementing the project and has the authority to commit funding necessary to meet the objectives and requirements.

GZA Project Manager – Jim Richert will be responsible for managing the implementation of the activities associated with the remedial investigation, remediation and coordinating the collection of data during the project. The Project Manager is responsible for technical quality control and project oversight.

Quality Assurance (QA) Officer – Todd Bown will report to the Project Manager and will be responsible for ensuring that QA/QC procedures are being followed. The QA Officer will be responsible for overseeing the review of field and laboratory data.

The QA Officer will monitor the performance of the laboratory to verify that the Data Quality Objectives for the project are met.

Field QA Officer – Todd Bown will be responsible for the overall operation of the field team and reports directly to the Project Manager.

2.0 SITE INVESTIGATION PROCEDURES AND RATIONALE

General field activities are described in the following sections and described in further detail in the Interim Remedial Measures Work Plan.

2.1 AIR SURVEILLANCE AND MONITORING

Air surveillance screening for total volatile organics and particulates for health and safety concerns will be performed with a portable organic vapor meter (OVM) equipped with a photoionization detector (PID) that is using a 11.7 electron volt (eV) bulb and dust monitors placed both upwind and downwind of intrusive work sites. Monitoring will be performed during invasive activities such as the planned soil excavations of the berm. The OVM will also be used to field screen samples. Additional details are presented in the Site-specific Health and Safety Plan which includes the NYSDOH generic Community Air Monitoring Plan (CAMP).

2.2 SOIL SAMPLING

Soil sampling will occur during remedial investigation activities involving soil boring and berm excavation activities and waste characterization. Samples will be collected and transferred to sample containers as soon as possible after being retrieved from the subsurface (i.e., acetate Geoprobe liners and excavator bucket).

The sampling equipment will be decontaminated by the subcontractor prior to arrival on-Site. During remedial investigation activities, decontamination will be accomplished using steam cleaning or high pressure hot water to wash equipment prior to moving to the next location. Stainless steel sampling devices will be cleaned manually with non-phosphate detergent (i.e., Alconox) wash and potable water followed by a potable water rinse or a second steam cleaning followed by a distilled/deionized water rinse. Equipment will be similarly cleaned prior to leaving the Site.

Soil samples, with the exception of those for VOCs, will be homogenized using a "coning and quartering" procedure. The soil will be removed from the sampling equipment and transferred to a clean surface (metal foil, steel pan, bowl, etc.). Observed debris, such as bricks, large stones, organics, etc. will be removed from the sample. The soil will be mixed to provide a more homogeneous sample for lab analysis. The soil will be scraped from the sides, corners, and bottom of the clean surface, rolled to the middle, and thoroughly mixed until the material appears homogeneous. An aliquot of this pile will then be transferred to the required sample containers, slightly tamped-down, filled to near the top of the container, and sealed with the appropriate cap. Soil or sediment on the threads of the container will be removed prior to placing the cap on the sample container. Soil samples for VOC analysis will be collected and directly placed into one unpreserved 2 oz jar per sample location.

Soil screening will be performed in two ways: by holding the probe of the OVM directly over the sample once it is retrieved from the subsurface and again by headspace screening after a representative portion of the soil samples has been placed in plastic bags, allowed to warm to ambient temperature, and placing the tip of the OVM into the plastic bag. The OVM used will be equipped with a PID that is using a 11.7 eV bulb.

The OVM will be calibrated daily, in accordance to manufacturer's requirements using a standard gas. Prior to screening, the headspace soil samples will be allowed to equilibrate to ambient temperature. For headspace screening, a hole will be made in the sample bag and the tip of the OVM inserted into the bag, and the peak response will be recorded. A response of less than 1 part per million (ppm), using this method, is not considered significant and will be reported as not detected.

2.3 EQUIPMENT DECONTAMINATION

To avoid cross contamination, non-disposable sampling equipment (defined as any piece of re- usable equipment which may contact a sample) will be decontaminated according to the following procedures outlined below.

2.3.1 Non-Dedicated Reusable Equipment

Non-dedicated reusable equipment such as stainless steel mixing bowls; pumps used for groundwater evacuation (and sampling, if applicable) etc. will require field decontamination. Acids and solvents will not be used in the field decontamination of such equipment.

Decontamination typically involves scrubbing/washing with a laboratory grade detergent (e.g. Alconox) to remove visible contamination, followed by potable (tap) water and analyte-free water rinses. Tap water may be used from any treated municipal water system; the use of an untreated potable water supply is not an acceptable substitute. Equipment should be allowed to dry prior to use. Steam cleaning or high pressure hot water cleaning may be used in the initial removal of gross, visible contamination. Tubing will not be re-used (new tubing will be used for each well).

2.3.2 Disposable Sampling Equipment

Disposable sampling equipment will not be field-decontaminated; equipment may be rinsed with laboratory-provided analyte-free water prior to use. Disposable spoons or spatulas purchased from non-environmental equipment vendors (such as restaurant supply houses) will be decontaminated by scrubbing/washing with a laboratory grade detergent followed by potable water and Analyte-free water rinse; or by using steam or high pressure hot water rinse, followed by analyte free water rinse. The equipment will be allowed to air dry prior to use.

2.3.3 Heavy Equipment

Certain heavy equipment such as, excavator buckets, etc. may be used to obtain samples. Such equipment will be subject to high pressure hot water or steam cleaning between uses. A member of the sampling team will visually inspect the equipment to check that visible contamination has been removed by this procedure prior to sampling. Such equipment will be cleaned between excavation locations. Decontamination between excavation samples at a single location will be performed using Alconox and water to clean the samplers. Samples submitted for analysis will not include material, which has been in direct contact with the excavator bucket.

2.4 STORAGE AND DISPOSAL OF INVESTIGATION-DERIVED WASTE

The sampling methods and equipment have been selected to limit both the need for decontamination and the volume of waste material to be generated. Investigation-derived material (e.g., decon sediments and water) generated during this project shall be presumed to be non- hazardous waste and will be discharged to the ground surface unless evidence of contamination such as elevated PID readings (>10 PPM above background), visual staining, petroleum or solvent odors are encountered. If evince of contamination is encountered, soil IDW will be containerized in 55-gallon drums for proper characterization and disposal during Site remediation.

Personal protective equipment and disposable sampling equipment will be placed in plastic garbage bags for disposal as a non-hazardous solid waste.

Decontamination Fluids

Wash water and rinse water, including mild detergent, generated during Site work will be discharged to the ground surface on-site near the site of generation.

3.0 SAMPLE HANDLING

3.1 SAMPLE IDENTIFICATION/LABELING

Samples will be assigned a unique identification using the sample location or other sample-specific identifier. Sample identification will be limited to seven alphanumeric characters to be consistent with the limitations of the laboratory tracking/reporting software. The general sample identification format follows.

Where:

SP = Type of sample (i.e., Soil Probe, groundwater, surface soil)
XX = Numeric character indicating the number from which the sample was obtained.

Y'-Y' = Depth of the sample.

Quality control (QC) field duplicate samples will be submitted blind to the laboratory; a fictitious sample identification will be created using the same system as the original. The sample identifications (of the original sample and its field duplicate) will be marked in the project specific field book and on the copy of the chain-of-custody kept by the sampler and copied to the project manager. Sample containers will be labeled in the field prior to the collection of samples. Affixed to each sampling container will be a non-removable label on which the following information will be recorded with permanent water-proof ink:

- Site name and location;
- Sample identification code;
- Date and time;
- Sampler's initials;
- Preservative; and
- Requested analyses.

3.2 SAMPLES, BOTTLES, PRESERVATION, AND HOLDING TIME

Table 1 specifies the analytical method, matrix, holding time, containers, and preservatives for the various analyses to be completed. Sample bottle requirements and holding times are discussed further below.

3.2.1 Sample Bottles

The selection of sample containers used to collect samples is based on the criteria of sample matrix, analytical method, potential contaminants of concern, reactivity of container material with the sample, QA/QC requirements and regulatory protocol requirements. Sample bottles will be provided by the analytical laboratory and will conform to the requirements of USEPA's Specifications and Guidance for Contaminant-Free Sample Containers.

3.2.2 Holding Times

Holding times are judged from the verified time of sample receipt (VTSR) by the laboratory; samples will be shipped from the field to arrive at the lab no later than 48 hours from the time of sample collection. Holding time requirements will be those specified in the NYSDEC ASP; it should be noted that for some analyses, these holding times are more stringent than the holding time for the corresponding USEPA method.

Although trip blanks are prepared in the analytical laboratory and shipped to the Site prior to the collection of environmental samples, for the purposes of determining holding time conformance, trip blanks will be considered to have been generated on the same day as the environmental samples with which they are shipped and delivered. Procurement of bottles and blanks will be scheduled to prevent trip blanks from being stored for excessive periods prior to their return to the laboratory; the goal is that trip blanks should be held for no longer than one week prior to use.

3.3 CHAIN OF CUSTODY AND SHIPPING

A chain-of-custody form will trace the path of sample containers from the project site to the laboratory. A sample Chain of Custody is included in Attachment 1, Field Forms. Sample/bottle tracking sheets or the chain-of-custody will be used to track the containers from the laboratory to the containers' destination. The project manager will notify the laboratory of upcoming field sampling events and the subsequent transfer of samples. This notification will include information concerning the number and type of samples, and the anticipated date of arrival. Insulated sample shipping containers (typically coolers) will be provided by the laboratory for shipping samples. All sample bottles within each shipping container will be individually labeled with an adhesive identification label provided by the laboratory. Project personnel receiving the sample containers from the laboratory will check each cooler for the condition and integrity of the bottles prior to field work.

Once the sample containers are filled, they will be immediately placed in the cooler with ice (in plastic bags to prevent leaking) or synthetic ice packs to maintain the samples at 4 °C. The field sampler will indicate the sample designation/location number in the space provided on the chain- of-custody form for each sample. The chain of custody forms will be signed and placed in a sealed plastic bag in the cooler. The completed shipping container will be closed for transport with nylon strapping, or a similar shipping tape, and two paper seals will be affixed to the lid. The seals must be broken to open the cooler and will indicate tampering if the seals are broken before receipt at the laboratory. The cooler will be shipped either by laboratory-provided courier or by an overnight delivery service to the laboratory. When the laboratory receives the coolers, the custody seals will be checked and lab personnel will sign the chain-of-custody form.

4.0 QUALITY ASSURANCE/QUALITY CONTROL PROTOCOLS

This section describes the analytical methods, principles and procedures that will be used to generate quality data. These protocols include laboratory calibration, field equipment calibration, QC sample collection and analysis, quantitative evaluation of data quality protocols and data qualification, if necessary.

4.1 ANALYTICAL METHODS, PROCEDURES & CALIBRATION

4.1.1 Methods

Analytical methods to be used during this project are presented in the NYSDEC Analytical Services Protocol (ASP), June 2005. Specific methods and references for each parameter are shown in Table 1. The sample preservation and holding time requirements are also identified in Table 1. Quantification and detections limits for all analysis are those specified under the appropriate test methods.

It is the laboratory's responsibility to be familiar with this document, procedures and deliverables pertaining to the Site work. Analytical testing will be performed by a laboratory certified by the NYSDOH Environmental Laboratory Approval Program and Contract Laboratory Protocol.

4.1.2 Laboratory Instrumentation & Equipment

Laboratory instruments and equipment will be calibrated following SW-846 analytical methods protocol. Initial calibrations will be performed before samples analysis. Calibration checks will be performed at the frequencies specified in each analytical method.

4.1.3 Field Equipment

Field equipment will be used during various activities of the project and during the collection of environmental samples. The field equipment to be used may include the following.

Field equipment used includes:

- OVM with a photoionization detector.
- Electronic water level indicator.
- Multi-gas meter (CO, LEL, O2, and H2S).
- Particulate monitor

Field equipment will be cleaned and calibrated prior to use. The Operating and Maintenance (O&M) manuals for the field equipment will be kept in the field when in use and a copy will be retained in project files.

Calibration and standardization for the field equipment during project use will be in accordance with the manufacturer's recommendations and will be recorded in the field log book. If instrument performance or data fall outside acceptable limits, then corrective actions will be taken. These actions may include recalibration of instruments, acquiring new standards, replacing equipment, or repairing equipment. Subcontractors providing analytical services should perform their own internal laboratory audits and calibration procedures with data review conducted at a frequency so that errors and problems are detected early, thus avoiding the prospect of redoing large segments of work.

4.2 QUALITY CONTROL SAMPLES

4.2.1 Analytical Equipment

The analytical methods to be utilized (see Table 1) for laboratory sample analysis address the quality control to be used and the frequency of replicates, blanks and calibration standards for laboratory analytical equipment.

4.2.2 Field Samples

Field quality control samples will consist of trip blanks, sample duplicate, matrix spike and matrix spike duplicate. Trip blanks, for VOCs only, will consist of analyte free reagent grade water in VOC sampling containers to be used for the project. Trip blanks will be prepared at the laboratory, sealed, transported to the Site and returned without being opened to assess contamination that may have occurred during transport. Trip blanks will be submitted at a rate of one per sampling event when VOCs are shipped to the laboratory.

Field duplicate samples are used to assess the variability of a matrix at a specific sampling point and to assess the reproducibility of the sampling method. For soil samples, these samples are separate aliquots of the same sample; prior to dividing the sample into "sample" and "duplicate" aliquots, the samples are homogenized (except for the VOC aliquots, which are not homogenized). Aqueous field duplicate samples are second samples collected from the same location, at the same time, in the same manner as the first, and placed into a separate container. Each duplicate sample will be analyzed for the same parameters as the original sample collected that day. The blind field duplicate Relative Percent Difference (RPD) objective will be ±50% percent RPD for all matrices. Field duplicates will be collected at a frequency of 1 per 20 environmental samples for both matrices (aqueous and non-aqueous) and test parameters.

Matrix spike/matrix spike duplicate (MS/MSD) samples are used to assess the laboratory method's accuracy and precision. These samples are spiked with known quantities of target analytes at the laboratory. The samples are collected at a frequency of five percent(1 in 20).

5.0 DATA DOCUMENTATION

5.1 FIELD NOTEBOOK

Field notebooks will be initiated at the start of on-Site work, in addition to field forms that will be filled out summarizing field work and become part of the project file. The field notebook will include the following daily information for Site activities:

- Date:
- Meteorological conditions (temperature, wind, precipitation);
- Site conditions (e.g., dry, damp, dusty, etc.);
- Identification of crew members (GZA and subcontractor present) and other personnel (e.g., agency or site owner) present;
- Description of field activities;
- Location(s) where work is performed;
- Problems encountered and corrective actions taken;
- Records of field measurements or descriptions recorded; and,
- Notice of modifications to the scope of work.

5.2 FIELD REPORTING FORMS

Field reporting forms (or their equivalent) to be utilized during the remediation may include the following:

- Excavation Log;
- Sample Collection Log;
- Chain of Custody Form; and
- Calibration Log.

These forms, when completed, will become part of the project file.

6.0 CORRECTIVE ACTIONS

If instrument performance or data fall outside acceptable limits, then corrective actions will be taken. These actions may include recalibration or standardization of instruments, acquiring new standards, replacing equipment, repairing equipment, and reanalyzing samples or redoing sections of work. Subcontractors providing analytical services should perform their own internal laboratory audits and calibration procedures with data review conducted at a frequency so that errors and problems are detected early, thus avoiding the prospect of redoing large segments of work.

Situations related to this project requiring corrective action will be documented and made part of the project file. For each measurement system identified requiring corrective action, the responsible individual for initiating the corrective action and also the individual responsible for approving the corrective action, if necessary, will be identified. As part of its total quality management program, GZA makes the results of laboratory audits and data validation reports available to the analytical laboratories. The laboratories are therefore made aware of non-critical items and areas where improvement may be made in subsequent NYSDEC ASP work.

7.0 DATA REDUCTION, VALIDATION, AND REPORTING

The guidance followed to perform quality data validation, and the methods and procedures outlined herein pertain to initiating and performing data validation, as well as reviewing data validation performed by others (if applicable). An outline of the data validation process is presented here, followed by a description of data validation review summaries.

7.1 LABORATORY DATA REPORTING AND REDUCTION

The laboratory will meet the applicable documentation, data reduction, and reporting protocols as specified in the 2005 revision of the NYSDEC ASP CLP. Laboratory data reports for non-CLP data will conform to NYSDEC Category B deliverable requirements. With full CLP documentation, deliverables will include, but not be limited to:

| <u>Organics</u> | <u>Inorganics</u> |
|-------------------------------------|-----------------------------------|
| Chains of Custody | Chains of Custody |
| Blanks | Blanks |
| Holding Times | Holding Times |
| Internal Standards | Furnace AA QC |
| Laboratory Duplicates | CRDL Standards |
| Tentatively Identified Compounds | ICP Serial Dilutions |
| GC/MS Instrument Performance Check | Laboratory Control Samples |
| System Monitoring Compound Recovery | Laboratory Duplicates Matrix |
| Spike & Matrix Spike Duplicates | ICP Interference Check GC/MS |
| Tuning | Spiked Sample Recovery |
| Surrogate Recoveries | |

Copies of the laboratory's generic Quality Assurance Plan (QAP) will be on file at GZA. The laboratory's QAP will indicate the standard methods and practices for obtaining and assessing data, and how data are reduced from the analytical instruments to a finished report, indicating levels of review along the way.

In addition to the hard copy of the data report, the laboratory will be asked to provide the sample data in spreadsheet form to minimize possible transcription errors resulting from the manual transcription of data.

7.2 DATA VALIDATION AND DATA USABILITY SUMMARY REPORT

CLP data will be validated by a data validation subcontractor. Data validation will be performed in accordance with guidelines established in Appendix 2B of the NYSDEC DER-10. Where necessary and appropriate, supplemental validation criteria may be derived from the EPA Functional Guidelines (<u>USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review</u>, EPA-540/R-94/012, February 1993; and <u>USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review</u>, EPA-540/R-94/013, February, 1994).

Data Usability Summary Reports (DUSRs) will consist of text results of the review and marked up copies of Form I (results with qualifiers applied by the validator). Validation will consist of target and non-target compounds with corresponding method blank data, spike and surrogate recoveries, sample data, and a final note of validation decision or qualification, along with any pertinent footnote references. Qualifiers applied to the data will be documented in the report text.

There may be some analyses for which there is no established USEPA or NYSDEC data validation protocol. In such cases, validation will be based on the EPA Region II SOPs and EPA Functional Guidelines as much as possible, as well as the laboratory's adherence to the technical requirements of the method, and the professional judgment of the validator. The degree of rigor in such validation will correspond to the nature of the data and the significance of the data and its intended use. Unless otherwise requested, non-CLP data (e.g., total organic carbon) is not subject to validation.

7.3 FIELD DATA

Field chemistry data collected during air monitoring, and soil screening (e.g., OVM readings), will be presented on field logs and provided in the appendices of the report.

8.0 PERFORMANCE AND SYSTEM AUDITS

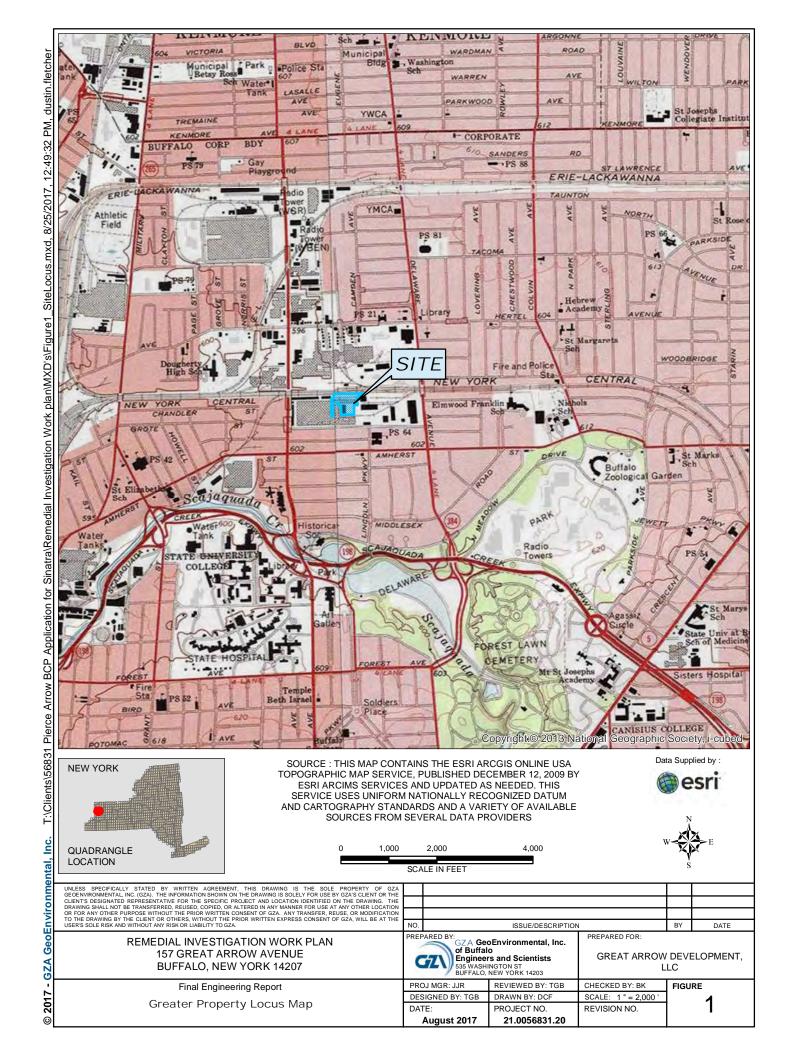
An audit of the laboratory(s) during the BCP work will not be performed unless warranted by a problem(s) that cannot be resolved by any other means, or at the discretion of GZA or NYSDEC.

9.0 QUALITY ASSURANCE REPORTS TO MANAGEMENT

Monthly project status reporting to the NYSDEC will include aspects of quality control that were pertinent during the month's activities. Problems revealed during review of the month's activities will be documented and addressed. These reports will include a description of completed and on-going activities, and an indication how each task is progressing relative to the project schedule.

The project manager, through task managers, will be responsible for verifying that records and files related to this project are stored appropriately and are retrievable.

The laboratory will submit memoranda or correspondence related to quality control of this project's samples as part of its deliverables package.



QAPP Table 1 Summary of Analytical Program

| Medium | Analysis Type | Method | Sample Container | Preservative | Temperature | Holding Time |
|--------|--------------------------------|------------------|----------------------------|--|---------------------------|---------------------|
| | | | | | | |
| Soil | Volatile Organic Compounds | EPA 8260 | Glass with Teflon Line Cap | None | 4° C (Minimize Headspace) | 10 days |
| Soil | Semivolatile Organic Compounds | EPA 8270 | Glass with Teflon Line Cap | None | 4° C (Store in Dark) | 5 Days |
| Soil | Metals | EPA 6010 | Plastic/Glass | None | 4° C | 180 Days |
| Soil | Polychlrinated BiPhenyls | EPA 8082 | Glass with Teflon Line Cap | None | 4° C | 5 Days |
| Soil | Pesticides | EPA 8081 | Glass with Teflon Line Cap | None | 4° C | 5 Days |
| Soil | Total Cyanide | EPA 9012 | Glass | None | 4° C | 14 Days |
| Soil | Hexavalent Chromimium | EPA 7196A | Plastic/Glass | None | 4° C | 24 Hours |
| | | • | • | | | |
| Water | Volatile Organic Compounds | EPA 8260 | Glass with Teflon Line Cap | Hydrochloric Acid | 4° C (Minimize Headspace) | 10 days |
| Water | Semivolatile Organic Compounds | EPA 8270 | Glass with Teflon Line Cap | None | 4° C (Store in Dark) | 5 Days |
| Water | Metals | EPA 6010 | Plastic/Glass | Nitric Acid (pH <2) | 4° C | 180 Days |
| Water | Polychlrinated BiPhenyls | EPA 8082 | Glass with Teflon Line Cap | None | 4° C | 5 Days |
| Water | Pesticides | EPA 8081 | Glass with Teflon Line Cap | None | 4° C | 5 Days |
| Water | Total Cyanide | EPA 9012A | Plastic/Glass | Sodium Hydroxide (pH<12 + 0.6g Asorbic Acid) | 4° C | 14 Days |
| Water | Hexavalent Chromimium | EPA 7196A | Plastic/Glass | None | 4° C | 24 Hours |
| Water | 1,4-Dioxane | EPA 8270D-SIM | amber glass | None | 4° C | 7 days |
| Water | PFAS -(NY 21 List) | EPA 537 Modified | plastic | None | 4° C | 14 Days |
| | | • | • | • | • | • |
| ΑIR | Volatile Organic Compounds | EPA TO-15 | Canister | | Ambient | 30 days |



APPENDIX D

HEALTH AND SAFETY PLAN (HASP)

with

COMMUNITY AIR MONITORING PLAN (CAMP)

| 1. CLIENT/SITE/PROJECT INFORMATION | | | | | |
|--|------|--|--|--|--|
| Client: Sinatra and Company Real Estate | | | | | |
| Site Address: 157 Great Arrow Ave., Buffalo, New | York | | | | |
| Site Description (be sure to list pertinent site features, chemicals used at the facility, and other potential hazard sources: Vacant four-story warehouse building and surrounding parking and former rail yard. | | | | | |
| Work Environment (active manufacturing, office, vacant site, undeveloped property, etc.): Vacant warehouse of former Pierce Arrow auto manufacturing complex. | | | | | |
| Job/Project #: 21.0056831.20 Estimated Start Date: TBA Estimated Finish Date: TBA | | | | | |
| Site is Covered by the Following Regulations: OSHA HAZWOPER Standard Mine Safety and Health Administration | | | | | |
| OSHA Construction Regulations | | | | | |

| 2. EMERGENCY INFORMATION | | | | | |
|--|--|---|--|--|--|
| Hospital Name: Sister's Hospital | | Hospital Phone: 716-862-1000 | | | |
| Hospital Address: 2157 Main Street, Buffalo, NY, 1 | 4215 | Directions and Street Map Attached: Xes | | | |
| Local Fire #: 911 | Local Ambulance #: 911 or | Local Police #: 911 | | | |
| WorkCare Incident Intervention Services: | For non-emergencies, if an employee becomes hurt or sick call 888-449-7787 | | | | |
| Other Emergency Contact(s): Bart Klettke | Phone #'s: 716-570-2093 | | | | |

Site-Specific Emergency Preparedness/Response Procedures/Concerns:

Conduct pre-job site briefing with project members, including subcontractors and client representatives (as applicable) to review emergency procedures and responsibilities prior to start of each day's work. Review emergency contact information, locations of emergency equipment (e.g. first aid kits, fire extinguishers, evacuation routes), review of emergency procedures, and current location and access to hospital. Ensure that cell phones are charged daily and have vehicle phone chargers on hand.

Possible emergencies on site include physical injuries. Personnel on site will have current first aid and will be able to respond to minor injuries while emergency response personnel are contacted for assistance.

- All EHS Events (incidents, first aid, near misses, unsafe acts/conditions, fires, chemical spills, property damage, and extraordinary safe behaviors) must be reported immediately to the Project Manager, and within 24 hours to the EHS Event Reporting Portal at http://www.kelleronline.com. Username gempl1 Password 4Incidents&
- In the event of a chemical release greater than 5 gallons, site personnel will evacuate the affected area and relocate to an upwind location. The GZA Field Safety Officer and client site representative shall be contacted immediately.
- Site work shall not be conducted during nighttime, severe weather, including high winds and lightning. In the event of severe weather, stop work, lower any equipment (drill rigs), and evacuate the affected area.

| 3. SCOPE OF WORK | | | | |
|---|--|--|--|--|
| General project description, and phase(s) or work to which this H&S Plan applies ¹ . | Fieldwork | | | |
| Specific Tasks Performed by GZA: | Observe drilling interior and exterior soil probes, excavation of test pits, sub-slab vapor sampling and permanent well installation, sample and handle soil and groundwater, assist with backfilling holes. | | | |
| Concurrent Tasks to be Performed by GZA-hired Subcontractors (List Subcontractors by Name): | Subcontractors (to be determined) to drill through building floor at three interior locations and exterior soil probes. Excavation activities of six test pit locations. Install approximately 6 permanent wells, backfill and patch holes, handle soil, cut acetate liners. | | | |
| Concurrent Tasks to be Performed by Others: | None | | | |

¹ Copy from or reference proposal or applicable design plan as appropriate.

| Any OSHA PERMIT-REQUIRED CONFINED SPACE er | ntry? | | Any INDOOR fieldwork? YES NO | | |
|--|-------------------------|-----------------|---|--|--|
| YES NO | | | IF YES, EXPLAIN: drilling soil probes in a warehouse- | | |
| IF YES, ADD CONFINED SPACE ENTRY PERMIT FOR | THAT PORTION OF | THE WORK | type structure | | |
| | | | | | |
| 4. SUB-SURFACE WORK, UNDERGROUND UTILITY | LOCATION | | | | |
| Will subsurface explorations be conducted as part of | f this work (drilling o | or excavation)? | ∑ Yes ☐ No | | |
| Will GZA personnel be required to use a hand-auger | as part of this work | ? | Yes No | | |
| Site property ownership where underground explor | ations will be cond | ucted on: | Public Access Property Yes No | | |
| Owned by Sinatra's investment group for the site. | | | Private Property X Yes No | | |
| Have Necessary Underground Utility Notifications for Subsurface Work Been Made? | | | Yes Yet to be conducted | | |
| Specify Clearance Date & Time, Dig Safe Clearance I.D. #, And Other Relevant Information: To be performed by subcontractor prior to start date. | | | | | |
| IMPORTANT! For subsurface work, prior to the initiation of ground penetrating activities, GZA personnel to assess whether the underground utility clearance (UUC) process has been completed in an manner that appears acceptable, based on participation/ confirmation by other responsible parties (utility companies, subcontractor, client, owner, etc.), for the following: | | | | | |
| Electric: Yes | ☐ No | ☐ NA | Other | | |
| Fuel (gas, petroleum, steam): | ☐ No | ☐ NA | Other | | |
| Communication: Yes | ☐ No | ☐ NA | Other | | |
| Water: Yes | ☐ No | ☐ NA | Other | | |
| Sewer: Yes | ☐ No | ☐ NA | Other | | |
| Other: Yes | ☐ No | ☐ NA | Other | | |
| Comments: | | | | | |

5. HAZARD ASSESSMENT (CHECK ALL THAT APPLY AND ADDRESS EACH HAZARD IN SECTION 6)

| A. GENERAL FIELDWORK HAZARDS | |
|---|---|
| Confined Space Entry (Add Confined Space Entry F | Permit) Overhead Hazards (i.e. falling objects, overhead power lines) |
| Abandoned or vacant building/Enclosed Spaces | Portable Hand Tools or Power Tools |
| Significant Slip/Trip/Fall Hazards | Significant Lifting or Ergonomic Hazards |
| Unsanitary/Infectious Hazards | Electrical Hazards (i.e. Equipment 120 Volts or Greater, Work |
| Poisonous Plants | Inside Electrical Panels, or Maintenance of Electrical Equipment) |
| Biting/Stinging Insects | Other Stored energy Hazards (i.e. Equipment with High Pressure or Stored Chemicals) |
| Feral Animal Hazards | Fire and/or Explosion Hazard |
| Water/Wetlands Hazards | Elevated Noise Levels |
| Remote Locations/Navigation/Orientation hazard | |
| Heavy Traffic or Work Alongside a Roadway | Explosives or Unexploded Ordinance/MEC |
| Weather-Related Hazards | Long Distance or Overnight Travel |
| Motor vehicle operation Hazards | Personal Security or High Crime Area Hazards |
| Heavy Equipment Hazards | Working Alone |
| Structural Hazards (i.e. unsafe floors/stairways/ro | |
| Demolition/Renovation | Chemical/Exposure Hazards (See Part B for Details) |
| Presence of Pedestrians or the General Public | Other: |
| | |
| B. CHEMICAL/EXPOSURE HAZARDS (CONTAMINANTS ARE CONTAI | NED IN SOIL, WATER, GROUNDWATER) |
| No chemical hazards anticipated | Methane |
| Hydrogen Sulfide (H2S) | Chemicals Subject to OSHA Hazard Communication (attach Safety |
| Cyanides, Hydrogen Cyanide (HCN) | Data Sheet for each chemical GZA brings to the site) |
| Carbon Monoxide | Containerized Waste, Chemicals in Piping & Process Equipment |
| Herbicides, Pesticide, Fungicide, Animal Poisons | Emissions from Gasoline-, Diesel-, Propane-fired Engine, Heater, Similar Equipment |
| Metals, Metal Compounds: | General Work Site Airborne Dust Hazards |
| Corrosives, Acids, Caustics, Strong Irritants | Volatile Organic Compounds (VOCs), BTEX |
| Polychlorinated Biphenyls (PCBs) | Chlorinated Organic Compounds |
| Polycyclic Aromatic Hydrocarbons (PAHs) | Fuel Oil, Gasoline, Petroleum Products, Waste Oil |
| Compressed Gases | Asbestos |
| Flammable/Combustible Liquids | Oxygen Deficiency, Asphyxiation Hazards |
| Radiation Hazards (i.e. radioactive sealed/open | |
| ultra violet, infrared, radio-frequency, etc.) | N and a mind, are proper ventilation |
| | |
| 6. SITE-SPECIFIC OVERVIEW OF H&S HAZARDS/MITIO | GATIONS (NOTE: Based on Hazard Assessment, Section 5) |
| | t at the jobsite, and describe the safety measures to be implemented for worker). Use brief abstract statements or more detailed narrative as may be appropriate. |
| ON-SITE HAZARDS: | HAZARD MITIGATIONS: |
| | |
| Motor Vehicle Operation Hazards | GZA will observe the speed limit and traffic laws when operating a motor vehicle |

| | occur. Seat belts will be worn at all times when vehicle is in motion. Cell phones will not be operated when the car is on. |
|---|--|
| Biting/Stinging Insects | Long pants will be worn. Insect repellant will be made available. All site personnel will periodically check for tics during and after fieldwork. |
| Elevated Noise Levels | GZA will wear hearing protection as needed. |
| Chemical Hazards and collection of soil and groundwater samples | A PID will be used to monitor VOC concentrations in the work area, as indicated below. Gloves will be worn at all times to help prevent dermal exposure. |
| Working around drill rig | High-visiblity vests, hearing protection, safety glasses and steel toes will be worn at all time. |
| Slips, Trips, and Falls | Pay attention when walking on uneven surfaces, do not walk with hands in pockets, general overall awareness of site area, identify hazards prior to start of work. |
| Indoor drilling | Will ventilate interior work area or pipe rig exhaust to exterior of building |
| Overhead Hazards | GZA will proceed cautiously within the building and will wear a hard hat. A flashlight will be used if needed. |
| | |

| | 7. AIR MONITORING ACTION LEVELS – Make sure air monitoring instruments are in working order, calibrated before use, and 'bump-checked' periodically throughout the day and/or over multiple days of use | | | | | |
|---|---|--|--|--|--|--|
| Is air monitoring to be perfo | ormed for this project? | Yes No No | | | | |
| ACTION LEVELS FOR OXYGEN DE | FICIENCY AND EXPLOSIVE | ATMOSPHERIC HAZARDS (Action levels apply to occupied work space in general work area) | | | | |
| Applicable, See Below hour and overhead doors wond anticipated. | | le Only four holes to be drilled inside of building. Each hole will take less than half an ation. Based on large size of building, accumulation of CO/oxygen deficiency in work area | | | | |
| Parameter | Response Actions | for Elevated Airborne Hazards | | | | |
| Oxygen Verify presence o | | Exit area, provide adequate ventilation, or proceed to Level B, or discontinue activities
adequate oxygen (approx. 12% or more) before taking readings with LEL meter. els are below 12%, LEL meter readings are not valid. | | | | |
| le. | | Less than 10% LEL – Continue working, continue to monitor LEL levels | | | | |
| LEL | Resume work act | Greater than or Equal to 10% LEL – Discontinue work operations and immediately withdraw from area. Resume work activities ONLY after LEL readings have been reduced to less than 10% through passive dissipation, or through active vapor control measures. | | | | |
| ACTION LEVELS FOR INHALATION | OF TOXIC/HAZARDOUS SU | BSTANCES (Action levels are for sustained breathing zone concentrations) | | | | |
| Applicable, See Below | . Not Applicable | e | | | | |
| Air Quality Parameters (Check all that apply) | Remain in Level D or Modified D | Response Actions for Elevated Airborne Hazards | | | | |
| VOCs | 0 to 5 ppm | From 5 ppm to 10 ppm: Proceed to Level C, or Ventilate, or Discontinue Activities If greater than 10 ppm: Discontinue Activities and consult EHS Team | | | | |
| Carbon
Monoxide | 0 to 35 ppm | At greater than 35 ppm, exit area, provide adequate ventilation, proceed to Level B, or discontinue activities. | | | | |
| Hydrogen Sulfide | 0 to 10 ppm | At greater than 10 ppm, exit area, provide adequate ventilation, proceed to Level B, or discontinue activities | | | | |
| Dust | 0 to mg/m ³ | Monitor per the Generic Community Air Monitoring Plan, attached hereto. | | | | |

| 0 to | |
|--|--|
| SPECIAL INSTRUCTIONS/COMMENTS REGARDING AIR MONITO | ORING (IF APPLICABLE) |
| | |
| | |
| 8. HEALTH AND SAFETY EQUIPMENT AND CONTRO | N C |
| · | |
| AIR MONITORING INSTRUMENTS | PERSONAL PROTECTIVE EQUIPMENT |
| ☐ PID Type: Lamp Energy: 10.6 eV | Respirator – Type |
| ☐ FID Type: | Respirator - Cartridge Type: |
| Carbon Monoxide Meter | Hardhat |
| Hydrogen Sulfide Meter | Outer Gloves Type: Nitrile |
| O ₂ /LEL Meter | Inner Gloves Type: |
| Particulate (Dust) Meter | Steel-toed boots/shoes |
| Calibration Gas Type isobutylene | Coveralls – Type |
| Others: | Outer Boots – Type |
| | Eye Protection with side shields |
| OTHER H&S EQUIPMENT & GEAR | Face Shield |
| Fire Extinguisher | ☐ Traffic Vest |
| Caution Tape | Personal Flotation Device (PFD) |
| Traffic Cones or Stanchions | Fire Retardant Clothing |
| Warning Signs or Placards | EH (Electrical Hazard) Rated Boots, Gloves, etc. |
| Decon Buckets, Brushes, etc. | Noise/Hearing Protection |
| Portable Ground Fault Interrupter (GFI) | Others: |
| Lockout/Tagout Equipment | Discuss/Clarify, as Appropriate: |
| Ventilation Equipment, or open overhead doors | |
| Others: | |
| | |
| 9. H&S TRAINING/QUALIFICATIONS FOR FIELD PER | SONNEL |
| Project-Specific H&S Orientation (Required for Al | Il Projects/Staff) Lockout/Tagout Training |
| OSHA 40-Hour HAZWOPER/8 Hour Refreshers | ☐ Electrical Safety Training |
| Hazard Communication (for project-specific chem | nical products) 🔀 Bloodborne Pathogen Training |
| First Aid/CPR (required for HAZWOPER for at lea | st one individual on site) |
| Current Medical Clearance Letter (required for H | HAZWOPER) |
| OSHA 10-hour Construction Safety Training | |
| Fall Protection Training | |
| ☐ Trenching & Excavation | |
| Discuss/Clarify, as needed: | |
| | |
| 10. PERSONNEL AND EQUIPMENT DECONTAMINAT | TION (SECTION ONLY REQUIRED FOR HAZWOPER SITES) |
| are and uran for the area in at site in aluding | ves will be discarded into a garbage bag and disposed of as solid waste. Further decon is not anticipated. |

11. PROJECT PERSONNEL - ROLES AND RESPONSIBILITIES

| GZA On-Site Personnel: | | |
|------------------------|-----------------------------|--------------------|
| Name(s) | Project Title/Assigned Role | Telephone Numbers |
| Tom Bohlen | Site Supervisor | Work: 716-844-7050 |
| | | Cell: 716-570-5983 |
| Tom Bohlen | Field Safety Officer | Work: 716-844-7050 |
| | | Cell: 716-570-5983 |
| Tom Bohlen | First Aid Personnel | Work: 716-844-7050 |
| | | Cell: 716-570-5983 |
| Pete Nyznyk | GZA Project Team Members | Work: 716-844-7045 |
| | | Cell: 716-517-5708 |

Site Supervisors and Project Managers (SS/PM): Responsibility for compliance with GZA Health and Safety programs, policies, procedures and applicable laws and regulations is shared by all GZA management and supervisory personnel. This includes the need for effective oversight and supervision of project staff necessary to control the Health and Safety aspects of GZA on-site activities.

Field Safety Officer (FSO): The FSO is responsible for implementation of the Site Specific Health and Safety Plan.

First Aid Personnel: At least one individual designated by GZA who has current training and certification in basic first aid and cardiopulmonary resuscitation (CPR) must be present during on-site activities involving multiple GZA personnel at HAZWOPER sites.

GZA Project Team: Follow instructions relayed by the HASP and GZA manager on-site.

OTHER PROJECT PERSONNEL:

| Name | Project Title/Assigned Role | Telephone Numbers |
|---------------|-------------------------------------|--------------------|
| Bart Klettke | Principal-in-Charge | Work: 716-844-7035 |
| | | Cell: 716-570-2093 |
| Jim Richert | Project Manager | Work: 716-844-7048 |
| | | Cell: 716-341-4459 |
| Jim Richert | Health and Safety Coordinator (HSC) | Work: 716-844-7048 |
| | | Cell: 716-341-4459 |
| Richard Ecord | GZA EHS Director | Work: 781-278-3809 |
| | | Cell: 404-234-2834 |

Principal-in-Charge: Responsible of overall project oversight, including responsibility for Health and Safety.

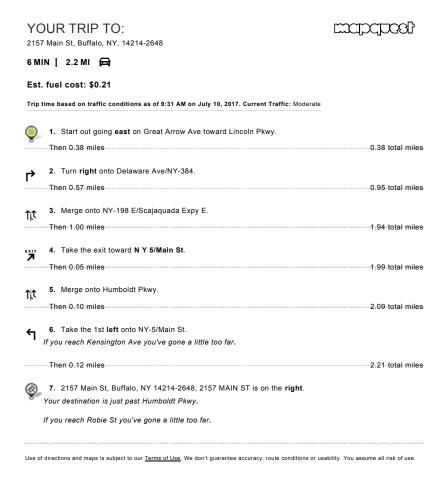
Project Manager: Responsible for day-to-day project management, including Health and Safety.

Health and Safety Coordinator: General Health and Safety guidance and assistance.

GZA EHS Director: H &S technical and regulatory guidance, assistance regarding GZA H&S policies and procedures.

1 have read, understood, and agree to abide by the information set forth in this Safety and Accident Prevention Plan. I will follow guidance in this plan and in the GZA Health and Safety Program Manual. I understand the training and medical monitoring requirements covered by the work outlined in this plan and have met those requirements. GZA Employee Name GZA Employee Signature Date

| Subcontrac | tor Site Worker Plar | n Acknowledgement | |
|--|--|------------------------------------|--------------------------------|
| GZA has prepared this plan solely for the purpose of pro
at the site must refer to their organization's health and
may use this plan for general informational purposes o
to their work, and understand this plan covers GZA acti | l safety program or s
only. Subcontractor j | site-specific HASP for their prote | ction. Subcontractor employees |
| Subcontractor Employee Name | Subcontractor Emp | oloyee Signatures | Date |
| | | | |
| | | | |
| | | | |
| G | ZA HASP Approval S | Signatures | |
| The following individuals indicate their acknowledgen understanding of project work activities, associated has signed copy of this document must be present at the project was activities. | zards and the approp | oriateness of health and safety i | = |
| GZA Author/Reviewer Role | Signature | | Date |
| HASP Preparer – Jim Richert | Sim | Richart | 9/1/2017 |
| EHS Reviewer – Jim Richert | Jim | Richart | 9/1/2017 |
| Principal in Charge – Bart Klettke | | | |







Material Safety Data Sheet

Prepared to U.S. OSHA, CMA, ANSI and Canadian WHMIS Standards

1. PRODUCT IDENTIFICATION CHEMICAL NAME; CLASS: NONFLAMMABLE GAS MIXTURE Containing One or More of the Following Components in a Nitrogen Balance Gas: Oxygen 0-23.5%; Isobutylene, 0.0005-0.9% SYNONYMS: Not Applicable CHEMICAL FAMILY NAME: Not Applicable PRODUCT USE: Calibration of Monitoring and Research Equipment Document Number: MSDS1069 Note: The Material Safety Data Sheet is for this gas mixture supplied in cylinders with 33 cubic feet (935 liters) or less gas capacity (DOT - 39 cylinders). This MSDS has been developed for various gas mixtures with the composition of components within the ranges listed in Section 2 (Composition and Information on Ingredients). Refer to the product label for information on the actual composition of the product.

SUPPLIER/MANUFACTURER'S NAME: Portagas ADDRESS: 6717-B Polk Street, Houston, TX 77011 BUSINESS PHONE: General MSDS Info: (713) 928-6477 EMERGENCY PHONE: INFOTRAC: (800) 535-5053

2. COMPOSITION and INFORMATION ON INGREDIENTS

| CHEMICAL NAME | CAS# | mole % | EXPOSURE LIMITS IN AIR | | | | | |
|---------------|-----------|-------------|--|------|-----|-------|-------|-------|
| | | | ACGIH-TLV | | OSH | A-PEL | NIOSH | OTHER |
| | | | TWA | STEL | TWA | STEL | IDLH | |
| | | | ppm | ppm | ppm | ppm | ppm | ppm |
| Isobutylene | 115-11-7 | 0.0005-0.9% | 0.0005-0.9% There are no specific exposure limits for Isobutylene, | | | e, | | |
| Oxygen | 7782-44-7 | 0-23.5% | 0-23.5% There are no specific exposure limits for Oxygen. | | | | | |
| Nitrogen | 7727-37-9 | Balance | | | | | | |

NE = Not Established. See Section 16 for Definitions of Terms Used. NOTE (1): ALL WHMIS required information is included in appropriate sections based on the ANSI Z400.1-1998 format. This gas mixture has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

3. HAZARD IDENTIFICATION

EMERGENCY OVERVIEW: This is a colorless, odorless gas mixture. Releases of this gas mixture may produce oxygen-deficient atmospheres (especially in confined spaces or other poorly-ventilated environments); individuals in such atmospheres may be asphyxiated. Isobutylene, a component of this gas mixture, may cause drowsiness and other central nervous system effects in high concentrations; however, due to its low concentration in this gas mixture, this is unlikely to occur.

SYMPTOMS OF OVER-EXPOSURE BY ROUTE OF EXPOSURE: The most significant route of over-exposure for this gas mixture is by inhalation. INHALATION: Due to the small size of an individual cylinder of this gas mixture, no unusual health effects from over-exposure to the product are anticipated under routine circumstances of use. The chief health hazard associated with this gas mixture is when this gas mixture contains less than 19.596 Oxygen and is released in a small, poorly-ventilated area (i.e. an enclosed or confined space). Under this circumstance, an oxygen-deficient environment may occur. Individuals breathing such an atmosphere may experience symptoms which include headaches, ringing in ears, dizziness, drowsiness, unconsciousness, nausea, vomiting, and depression of all the senses. Under some circumstances of over-exposure, death may occur. The effects associated with various levels of oxygen are as follows:

CONCENTRATION OF OXYGEN 12-16% Oxygen: 10-14% Oxygen:

6-10% Oxygen:

OBSERVED EFFECT

Breathing and pulse rate increase, muscular coordination slightly disturbed. Emotional upset, abnormal fatigue, disturbed respiration.

Nausea, vomiting, collapse, or loss of consciousness.

Below 6%:

Convulsive movements, possible respiratory collapse, and death.

HEALTH EFFECTS OR RISKS FROM EXPOSURE: An Explanation in Lay Terms. Over-exposure to this gas mixture may cause the following health effects: ACUTE: Due to the small size of the individual cylinder of this gas mixture, no unusual health effects from exposure to the product are anticipated under routine circumstances of use. The most significant hazard associated with this gas mixture when it contains less than 19,5% oxygen is the potential for exposure to oxygen-deficient atmospheres. Symptoms of oxygen deficiency include respiratory difficulty, ringing in ears, headaches, shortness of breath, wheezing, headache, dizziness, indigestion, nausea, unconsciousness, and death. The skin of a victim of over-exposure may have a blue color. Additionally, isobutylene, a component of this gas mixture, may cause drowsiness or central nervous system effects in high concentrations; however, due to its low concentration in this gas mixture, this is unlikely to occur. CHRONIC: Chronic exposure to oxygen-deficient atmospheres (below 18% oxygen in air) may affect the heart and nervous system, TARGET

ORGANS: ACUTE: Respiratory system, eyes. CHRONIC: Heart, cardiovascular system, central nervous system, eyes. CHRONIC: Heart, cardiovascular system, central nervous system.

4. FIRST-AID MEASURES RESCUERS SHOULD NOT ATTEMPT TO RETRIEVE VICTIMS OF EXPOSURE TO THIS GAS MIXTURE WITHOUT ADEQUATE PERSONAL PROTECTIVE EQUIPMENT. At a minimum, Self-Contained Breathing Apparatus must be worn. No unusual health effects are anticipated after exposure to this gas mixture, due to the small cylinder size. If any adverse symptom develops after over-exposure to this gas mixture, remove victim(s) to fresh air as quickly as possible. Only trained personnel should administer supplemental oxygen and/or cardio-pulmonary resuscitation if necessary. Victim(s) who experience any adverse effect after over-exposure to this gas mixture must be taken for medical attention. Rescuers should be taken for medical attention if necessary. Take a copy of the label and the MSDS to physician or other health professional with victim(s), MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Acute or chronic respiratory conditions may be aggravated by over-exposure to this gas mixture. RECOMMENDATIONS TO PHYSICIANS:

Administer oxygen, if necessary, treat symptoms and eliminate exposure.

5. FIRE-FIGHTING MEASURES FLASH POINT: Not applicable. AUTOIGNITION TEMPERATURE: Not applicable. FLAMMABLE LIMITS (in air by volume, %): Lower (LEL): Not applicable. Upper (UEL): Not applicable. FIRE EXTINGUISHING MATERIALS: Non-flammable gas mixture. Use extinguishing media appropriate for surrounding fire. UNUSUAL FIRE AND EXPLOSION HAZARDS: This gas mixture is not flammable; however, containers, when involved in fire, appropriate of surburining irre. UNUSUAL FIRE AND EXPLOSION HAZARDS: This gas mixture is not flammable; however, containers, when involved in fire may rupture or burst in the heat of the fire. Explosion Sensitivity to Mechanical Impact: Not sensitive. Explosion Sensitivity to Static Discharge: Not sensitive. SPECIAL FIRE-FIGHTING PROCEDURES: Structural firefighters must wear Self-Contained Breathing Apparatus and full protective equipment.

6. ACCIDENTAL RELEASE MEASURES LEAK RESPONSE: Due to the small size and content of the cylinder, an accidental release of this gas mixture presents significantly less risk of an oxygen deficient environment and other safety hazards than a similar release from a larger cylinder. However, as with any chemical release, extreme caution must be used during emergency response procedures. In the event of a release in which the atmosphere is unknown, and in which other chemicals are potentially involved, evacuate immediate area. Such releases should be responded to by trained personnel using pre-planned

procedures. Proper protective equipment should be used. In case of a leak, clear the affected area, protect people, and responded to by frained personnel. Allow the gas mixture to dissipate. If necessary, monitor the surrounding area (and the original area of the release) for oxygen. Oxygen levels must be above 19.5% before non-emergency personnel are allowed to re-enter area. If leaking incidentally from the cylinder, contact your supplier.

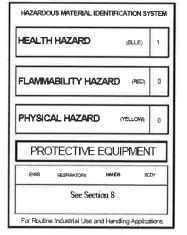
7. HANDLING and USE WORK PRACTICES AND HYGIENE PRACTICES: Be aware of any signs of dizziness or fatigue; exposures to fatal concentrations of this gas mixture could occur without any significant warning symptoms, due to oxygen deficiency. Do not attempt to repair, adjust, or in any other way modify the cylinders containing this gas mixture. If there is a malfunction or another type of operational problem, contact nearest distributor immediately. STORAGE AND HANDLING PRACTICES: Cylinders should be firmly secured to prevent falling or being knocked-over. Cylinders must be protected from the environment, and preferably kept at room temperature (approximately 21°C [70°F]). Cylinders should be stored in dry, well-ventilated areas, away from sources of heat, ignition, and direct sunlight. Protect cylinders against physical damage. Full and empty cylinders should be segregated. Use a first-in, first-out inventory system to prevent full containers from being stored for long periods of time. These cylinders are not refillable. WARNING! Do not refill DOT 39 cylinders. To do so may cause personal injury or property damage. SPECIAL PRECAUTIONS FOR HANDLING GAS CYLINDERS:
WARNING! Compressed gases can present significant safety hazards. During cylinder use, use equipment designed for these specific cylinders. Ensure all lines and equipment are rated for proper service pressure.
PROTECTIVE PRACTICES DURING MAINTENANCE OF CONTAMINATED EQUIPMENT: Follow practices indicated in Section 6 (Accidental Release Measures). Make certain that application equipment is locked and tagged-out safety. Always use product in areas where adequate ventilation is provided.

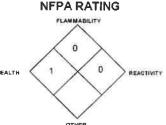
8. EXPOSURE CONTROLS - PERSONAL PROTECTION VENTILATION AND ENGINEERING CONTROLS: No special ventilation systems or engineering controls are needed under normal circumstances of use. As

8. EXPOSURE CONTROLS - PERSONAL PROTECTION AND ENGINEERING CONTROLS: No special ventilation systems or engineering controls are needed under normal circumstances of use. As with all chemicals, use this gas mixture in well-ventilated areas, if this gas mixture propriets is used in a ponyl-ventilated area, install automatic monitoring equipment to detect the levels of Nitrous Oxide and Oxygen. RESPIRATORY PROTECTION: No special respiratory protection is required under normal circumstances of use. Maintain oxygen levels above 19.5% in the workplace. Use supplied air respiratory protection when oxygen levels are below 19.5%, or during emergency response to a release of this gas mixture. During an emergency situation, before entering the area, check the concentration of Methane and Oxygen. If respiratory protection is needed, use only protection autonized in the U.S. Federal OSHA Standard (29 CFR 1910.134), applicable U.S. State regulations, or the Canadian CSA Standard Z94.4-93 and applicable standards of Canadian Provinces. Oxygen levels below 19.5% are considered IDLH by OSHA. In such atmospheres, use of a full-facepiece pressure/demand SCBA or a full facepiece, supplied air respiratory with auxiliary self-contained air supply is required under OSHA'S Respiratory Protection Standard (1910.134-1998). EVE PROTECTION: Safety glasses. If necessary, refer to U.S. OSHA 29 CFR 1910.133 or appropriate Canadian (1910.134-1998). EVE PROTECTION: Safety glasses, refer to U.S. OSHA 29 CFR 1910.133 or appropriate Canadian (1910.134-1998). EVER PROTECTION: Safety glasses, refer to U.S. OSHA 29 CFR 1910.133 or appropriate Canadian (1910.134-1998). EVER PROTECTION: Safety glasses.

contained air supply is required under OSHA's Respiratory Protection Standard (1910.134-1998). EYE PROTECTION: Safety glasses. If necessary, refer to U.S. OSHA 29 CFR 1910.133 or appropriate Canadian Standards. HAND PROTECTION: Wear leather gloves when handling cylinders. Chemically resistant gloves should be worn when using this gas mixture. If necessary, refer to U.S. OSHA 29 CFR 1910.138 or appropriate Standards of Canada. BODY PROTECTION: No special protection is needed under normal circumstances of use. If a hazard of injury to the feet exists due to falling objects, where objects may pierce the soles of the feet or where employee's feet may be exposed to electrical hazards, use foot protection, as described in U.S. OSHA 29 CFR 1910.136.

9. PHYSICAL and CHEMICAL PROPERTIES The following information is for Nitrogen, a main component of this gas mixture. GAS DENSITY @ 32°F (0°C) and 1 atm: 0.072 lbs/ ft² (1.153 kg/m²) BOILING POINT: -195.8°C (-320.4°F) FREEZING/MELTING POINT @ 10 psig: -210°C, CAS.8°F) SPECIFIC GRAVITY (air = 1) @ 70°F (21.1°C): 0.906 pH: Not applicable. SOLUBILITY IN WATER vollvol @ 32°F (0°C) and 1 atm: 0.023 MOLECULAR WEIGHT: 28.01 EVAPORATION RATE (nBuAc = 1): Not applicable. EXPANSION RATIO: Not applicable. DOOR THRESHOLD: Not applicable. SPECIFIC VOLUME (ft/lb): 13.8 VAPOR PRESSURE @ 70°F (21.1°C) psig: Not applicable. COEFFICIENT WATER/OIL DISTRIBUTION: Not applicable. The following information is for Oxygen, a main component of this gas mixture. GAS DENSITY @ 32°F (0°C) and 1 atm: 0.083 lb/cu ft (1.326 kg/m²) PREZING/MELTING POINT @ 10 psig: -21.8°C (-361.8°F) BOILING POINT: -183.0°C (-297.4°F) SPECIFIC GRAVITY (air = 1) @ 70°F (21.1°C): 1.105 pH: Not applicable. SOLUBILITY IN WATER vollvol at 32°F (0°C) and 1 atm: 0.04.91 MOLECULAR WEIGHT: 32.00 EVAPORATION RATE (nBuAc = 1): Not applicable. EXPANSION RATIO: Not applicable. ODOR THRESHOLD: Not applicable. COEFFICIENT WATER/OIL DISTRIBUTION: Not applicable. The are no unusual warning properties associated with a release of this gas m associated with a release of this gas mixture. In terms of leak detection, fittings and joints can be painted with a soap solution to detect leaks, which will be indicated by a bubble formation.





MSDS1069



Material Safety Data Sheet

10. STABILITY and REACTIVITY STABILITY: Normally stable in gaseous state. DECOMPOSITION PRODUCTS: The thermal decomposition products of Isobutylene include carbon oxides. The other components of this gas mixture do not decompose, per se, but can react with other compounds in the heat of a fire. MATERIALS WITH WHICH SUBSTANCE IS INCOMPATIBLE: Titanium will burn in the Nitrogen component of this gas mixture, Lithium reacts slowly with Nitrogen at ambient temperatures. The Isobutylene component of this gas mixture is also incompatible with strong oxidizers (i.e. chlorine, bromine pentafluoride, oxygen diffuoride, and nitrogen trifluoride). HAZARDOUS POLYMERIZATION: Will not occur. CONDITIONS TO AVOID: Contact with incompatible materials. Cylinders exposed to high temperatures or direct flame can rupture or burst.

11. TOXICOL OGICAL INFORMATION TOXICITY DATA: The following toxicology data are available for the components of this gas mixture: ISOBUTYLENE: LCso (inhalation, rat) = 620,000 mg/kg/4 hours LCso (inhalation, mouse) = 415,000 mg/kg NITROGEN: There are no specific toxicology data for Nitrogen. Nitrogen is a simple asphyxiant, which acts to displace oxygen in the environment. SUSPECTED CANCER
AGENT: The components of this gas mixture are not found on the following lists: FEDERAL OSHA Z LIST, NTP, CAL/OSHA, and IARC; therefore, they are not considered to be, nor suspected to be, cancer-causing agents by these agencies. IRRITANCY OF PRODUCT: Contact with rapidly expanding gases can be irritating to exposed skin and eyes. SENSITIZATION TO THE PRODUCT: The components of this gas mixture are not known to cause human skin or respiratory sensitization. REPRODUCTIVE TOXICITY INFORMATION: Listed below is information concerning the effects of this gas mixture and its components on the human reproductive system. Mutagenicity: No mutagenicity effects have been described for the components in this gas mixture. Embryotoxcity: No embryotoxic effects have been described for the components in this gas mixture. Teratogenicity: No teratogenicity effects have been described for the components in this gas mixture. Reproductive Toxicity: No reproductive toxicity effects have been described for the components in gas mixture, A <u>mutagen</u> is a chemical which causes permanent changes to genetic material (DNA) such that the changes will propagate through generation lines. An embryotoxin is a chemical which causes damage to a developing embryo (i.e. within the first eight weeks of pregnancy in humans), but the damage does not propagate across generational lines. A teratogen is a chemical which causes damage to a developing fetus, but the damage does not propagate across generational lines. A reproductive toxin is any substance which interferes in any way with the reproductive process. BIOLOGICAL EXPOSURE INDICES (BEIs): Currently, Biological Exposure Indices (BEIs) are not applicable for the components of this gas mixture.

21. ECOLOGICAL INFORMATION ENVIRONMENTAL STABILITY: The components of this gas mixture occur naturally in the atmosphere. The gas will be dissipated rapidly in well-ventilated areas. The following environmental data are applicable to the components of this gas mixture. OXYGEN: Water Solubility = 1 volume Oxygen/32 volumes water at 20°C. Log K_m = -0.65 NITROGEN: Water Solubility = 2.4 volumes Nitrogen/100 volumes water at 0°C. 1.6 volumes Nitrogen/100 volumes water at 20°C. EFFECT OF MATERIAL ON PLANTS or ANIMALS: No evidence is currently available on the effects of this gas mixture on plant and animal life. EFFECT OF CHEMICAL ON AQUATIC LIFE: No evidence is currently available on the effects of this gas mixture on aquatic life.

13. DISPOSAL CONSIDERATIONS PREPARING WASTES FOR DISPOSAL PREPARING WASTES FOR DISPOSAL: Waste disposal must be in accordance with appropriate Federal, State, and local regulations.

Cylinders with undesired residual product may be safely vented outdoors with the proper regulators. For further information, refer to Section 16 (Other Information).

14. TRANSPORTATION INFORMATION THIS GAS MIXTURE IS HAZARDOUS AS DEFINED BY 49 CFR 172.101 BY THE U.S. DEPARTMENT OF TRANSPORTATION. PROPER SHIPPING NAME: Compressed gases, n.o.s. (*Oxygen, Nitrogen)*or the gas component with the next highest concentration next to Nitrogen. HAZARD CLASS NUMBER and DESCRIPTION: 2.2 (Non-Flammable Gas) UN IDENTIFICATION NUMBER: UN 1955 PACKING GROUP: Not applicable. DOT LABEL(S) REQUIRED: Class 2.2 (Non-Flammable Gas) NORTH AMERICAN EMERGENCY RESPONSE GUIDEBOOK NUMBER (2000): 126 MARINE POLLUTANT: The components of this gas mixture are not classified by the DOT as Marine Pollutants (as defined by 49 CFR 172.101, Appendix B). SPECIAL SHIPPING INFORMATION: Cylinders should be transported in a secure position, in a well-ventilated vehicle. The transportation of compressed gas cylinders in automobiles or in closed-body vehicles can present serious safety hazards. If transporting these cylinders in vehicles, ensure these cylinders are not exposed to extremely high temperatures (as may occur in an enclosed vehicle on a hot day). Additionally, the vehicle should be well-ventilated during transportation. Note: DOT 39 Cylinders ship in a strong outer carton (overpack). Pertinent shipping information goes on the outside of the overpack. DOT 39 Cylinders do not have transportation information on the cylinder itself.

TRANSPORT CANADA TRANSPORTATION OF DANGEROUS GOODS REGULATIONS: This gas is considered as Dangerous Goods, per regulations of Transport Canada. PROPER SHIPPING NAME: Compressed gases, n.o.s. (*Oxygen, Nitrogen)*or the gas component with the next highest concentration next to Nitrogen, HAZARD CLASS NUMBER and DESCRIPTION: 2.2 (Non-Flammable Gas) UN IDENTIFICATION NUMBER: UN 1956 PACKING GROUP: Not Applicable HAZARD LABEL: Class 2.2 (Non-Flammable Gas) SPECIAL PROVISIONS: None EXPLOSIVE LIMIT AND LIMITED QUANTITY INDEX: 0.12 ERAP INDEX: None PASSENGER CARRYING SHIP INDEX: None PASSENGER CARRYING ROAD VEHICLE OR PASSENGER CARRYING RAILWAY VEHICLE INDEX: 75 NORTH AMERICAN EMERGENCY RESPONSE GUIDEBOOK NUMBER (2000): 126 NOTE: Shipment of compressed gas cylinders via Public Passenger Road Vehicle is a violation of Canadian law (Transport Canada Transportation of Dangerous Goods Act. 1992).

15. REGULATORY INFORMATION ADDITIONAL U.S. REGULATIONS: U.S. SARA REPORTING REQUIREMENTS: The components of this gas mixture are not subject to the reporting requirements of Sections 302, 304, and 313 of Title III of the Superfund Amendments and Reauthorization Act. U.S. SARA THRESHOLD PLANNING QUANTITY: There are no specific Threshold Planning Quantities for this gas mixture. The default Federal MSDS submission and inventory requirement filing threshold of 10,000 lb (4,540 kg) may apply, per 40 CFR 370.20. U.S. TSCA INVENTORY STATUS: The components of this gas mixture are listed on the TSCA Inventory. U.S. CERCLA REPORTABLE QUANTITY (RQ): Not applicable, OTHER U.S. FEDERAL REGULATIONS: No component of this gas mixture is subject to the requirements of CFR 29 1910.1000 (under the 1989 PELs). Isobutylene is subject to the reporting requirements of Section 112(r) of the Clean Air Act. The Threshold Quantity for this gas is 10,000 pounds. The regulations of the Process Safety Management of Highly Hazardous Chemicals are not applicable (29 CFR 1910.119). This gas mixture does not contain any Class I or Class II ozone depleting chemicals (40 CFR Part 82). Nitrogen and Oxygen are not listed as Regulated Substances, per 40 CFR, Part 68, of the Risk Management for Chemical Releases. Isobutylene is listed under this regulation in Table 3 as Regulated Substances (Flammable Substances), in quantities of 10,000 lbs (4,554 kg) or greater. U.S. STATE REGULATORY INFORMATION: The components of this gas mixture are covered under the following specific State regulations: Alaska - Designated Toxic and Hazardous Substances: No. California - Permissible Exposure Limits for Chemical Contaminants: Nitrogen, Florida - Substance List: Oxygen, Isobutylene, Illinois - Toxic Substance List: No. Kansas - Section 302/313 List: No. Massachusetts - Substance List: Oxygen, Isobutylene, Michigan - Critical Materials Register: No. Minnesota - List of Hazardous Substances: No. Missouri - Employer Information/Toxic Substance List: No. New Jersey - Right to Know Hazardous Substance List: Oxygen, Nitrogen, Isobutylene, North Dakota - List of Hazardous Chemicals, Reportable Quantities: No. Pennsylvania - Hazardous Substance List: Oxygen, Nitrogen, Isobutylene. Rhode Island - Hazardous Substance List: Oxygen, Nitrogen. Texas - Hazardous Substance List: No. Wisconsin - Toxic and Hazardous Substances: : No. CALIFORNIA SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT (PROPOSITION 65): No component of this gas mixture is Substance List: No. Wisconsin - Toxic and Hazardous Substances: A California Are Britishing water and Toxic enter 10 february and Toxic enter 10 february and Toxic enter 10 february and Toxic enter 10 february and Toxic enter 10 february are listed on the DSL Inventory. CANADIAN DSL/NDSL INVENTORY STATUS: The components of this gas mixture are listed on the DSL Inventory. CANADIAN ENVIRONMENTAL PROTECTION ACT (CEPA) PRIORITIES SUBSTANCES LISTS: The components of this gas mixture are not on the CEPA Priorities Substances Lists. CANADIAN WHMIS REGULATIONS: This gas mixture is categorized as a Controlled Product, Hazard Class A, as per the Controlled Product Regulations.

16. OTHER INFORMATION ABOUT DOT-39 NRC (Non-Refillable Cylinder) PRODUCTS DOT 39 cylinders ship as hazardous materials when full. Once the cylinders are relieved of pressure (empty) they are not considered hazardous material or waste. Residual gas in this type of cylinder is not an issue because toxic gas mixtures are prohibited. Calibration gas mixtures typically packaged in these

cylinders are Nonflammable n.o.s., UN 1956. A small percentage of calibration gases packaged in DOT 39 cylinders are flammable or oxidizing gas mixtures. For disposal of used DOT-39 cylinders, it is acceptable to place them in a landfill if local laws permit. Their disposal is no different than that employed with other DOT containers such as spray paint cans, household aerosols, or disposable cylinders of propane (for camping, torch etc.). When feasible, we recommended recycling for scrap metal content. MIXTURES: When two or more gases or liquefied gases are mixed, their hazardous properties may combine to create additional. unexpected hazards. Obtain and evaluate the safety information for each component before you produce the mixture. Consult an Industrial Hygienist or other trained person when you make your safety evaluation of the end product. Remember, gases and liquids have properties which can cause serious injury or death. Disclaimer: To the best of Portagas's knowledge, the information contained herein is reliable and accurate as of this date; however, accuracy, suitability or completeness is not guaranteed and no warranties of any type either express or implied are provided. The information contained herein relates only to this specific product. Data may be changed from time to time. Be sure to consult the latest edition.



Job: Groundwater Sampling

Analysis By: Andrew Whitsitt Reviewed By: Guy Dalton Approved By: Jayanti Chatterjee , CIH

Date: October 2, 2011 Date: June 15, 2012 Date: June 26, 2012

Revised: June 15, 2012

| Task 4.2 GROUNDWATER SAMPLING | | | |
|--|--|--|--|
| | HAZARD CON | | |
| GZA Job Tasks | Potential Hazards | Controls | |
| Review Related THA's –
21.1 – General Outdoor Field W | ork | | |
| Deploying Traffic Protection
Equipment | Personal injury due to vehicle traffic; Collisions, injuries | GZA drivers shall be properly licensed and abide by driving safety procedures. Inspect vehicle to determine if it is in safe operating condition. | |
| _ | | Park in designated parking locations, or select off-road areas that are firm and without hazards. Directly observe parking location on foot if necessary. | |
| | | Use emergency flashers or other appropriate vehicle warning system as appropriate to local conditions. | |
| | | Utilize police detail (when necessary) to direct traffic while entering traffic safety zone, if applicable. | |
| Handling Flammable Liquids | Fire Hazards | Use only approved fuel containers for fuel, heavy duty metal cans with stable base and self closing nozzle is recommended. | |
| | | Store flammable liquids in an appropriate area when not
in use. | |
| | | Provide working fire extinguisher with current inspection certificate with the sampling equipment. | |
| | | Observe GZA's "no smoking" policy at all work sites. | |
| Mobilizing Equipment | Collision; struck by | Perform a pre-operation check of the vehicle, ensuring service brakes, parking brake, steering, lights, tires, horn, wipers mirrors, and glass are in good condition. Do not drive a vehicle that is not roadworthy. | |
| | | All vehicle occupants shall wear seat belts. | |
| | | Secure loose materials in the cab or bed of the vehicle. | |
| | | Keep the windows and lights clean. | |
| | | Do not operate the vehicle if it is in an unsafe condition. | |
| | | Abide by driving safety procedures and laws. | |
| Positioning vehicle at monitoring well | Unstable, uneven terrain and ground obstacles | Locate the vehicle on stable ground. | |



Job: Groundwater Sampling

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| | Task 4. | | | |
|--------------------------------------|---|--|--|--|
| GROUNDWATER SAMPLING HAZARD CONTROLS | | | | |
| OTA Ish Tasks | | | | |
| GZA Job Tasks | Potential Hazards | Controls Avoid wet areas/mud when possible. | | |
| | | | | |
| | | Assess the need for blocking/chocking wheels | | |
| | Backing Collisions | If possible, avoid backing by taking a route that allows you to pull straight through. | | |
| | | If you must back, do a complete walk around the vehicle to look for objects that could be struck or run over by the vehicle. | | |
| | | Use a spotter when available to help guide the backing safely. | | |
| | | Look over shoulders and glance back to make sure fenders are clearing objects. Back out slowly. | | |
| Well Sampling | Hazardous material contact | Identify wells with hazardous concentrations of contaminants. | | |
| | | Sample wells in order from least to most impacted. | | |
| | | Wear proper gloves specified in the project HASP when
handling jars, preservatives could leak during shipment
from the laboratory. | | |
| | Cuts and bruises from Sample jar | Do not over-tighten glass jars (especially VOAs); they can break, causing a laceration. | | |
| | Exposure to Hazardous
Substances | Become familiar with the hazards associated with hazardous commercial products used while groundwater sampling (laboratory preservatives decontamination solutions, etc.). Review Safety Data Sheets (SDS) for such products. | | |
| | | Wear proper personal protective equipment (PPE) as specified in the Health and Safety Plan (HASP) to avoid direct contact with Site contaminants, calibration solutions, decontamination supplies, and laboratory preservatives. | | |
| | | Respiratory protection as specified by the HASP must be available and used when necessary. Decontamination procedures as specified in the HASP must be followed. | | |
| Sampling Equipment Operation | Splashes, electrical shocks, fires, caught by | Perform an equipment observation before use; pumps flow meters, and water quality meters must be calibrated and in good working condition. | | |
| | | Use GFCI with all electrical cords. | | |



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Date: October 2, 2011 Date: June 15, 2012 Date: June 26, 2012

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| Task 4.2 GROUNDWATER SAMPLING | | | |
|-------------------------------|------------------------------------|---|--|
| | HAZARD CONT | | |
| GZA Job Tasks | Potential Hazards | Controls | |
| | | All equipment (especially generators) must be properly grounded. Completely shut down all equipment prior to conducting maintenance activities, fueling, servicing or repairs. Follow lock-out/tag-out procedures as needed. | |
| | Manual lifting, equipment handling | Use proper lifting techniques when lifting equipment (generators, pumps, air compressors, tubing, etc.) Seek assistance with heavy loads. | |
| | | Use work gloves where appropriate to prevent hand injuries. | |
| | | Wear steel toed boots. | |
| | | When containerizing water, do not try to carry more than you can safely carry. It is better to make multiple trips. | |
| | Noise | Wear appropriate hearing protection during activities that produce noise (running generators, pumps, air compressors, etc.) | |
| | Slips, trips and falls | Maintain a clean and sanitary work area free of tripping/slipping hazards. | |
| | | Store hand tools in their proper storage location when not in use. | |
| | | Provide adequate space for each employee to work safely with sound footing. | |
| | | Provide adequate lighting. | |
| | Tool-related hazards | Do not use electrical tools with damaged cords or other electrical components. | |
| | | Observe proper electrical safety practices. | |
| | | Properly maintain tools; do not use damaged tools. | |
| | l l | Wear eye protection. | |
| | | Store and carry tools correctly. | |
| | | Use the correct tool for the job. | |
| | | Protect from gouges, hammer blows, cutting tools, etc. Position your hands to prevent injury in case the tool slips while in use. | |



Job: Drilling Observations, Monitoring Well Installation Observation and Soil Sampling

Approved By: Jayanti Chatterjee, CIH Analysis By: Andrew Whitsitt | Reviewed By: Guy Dalton

Date: October 2, 2011

Date: June 14, 2012 Revised: June 14, 2012

Date: June 26, 2012

Task 4.1 DRILLING OBSERVATIONS, MONITORING WELL INSTALLATION ORSERVATIONS SOIL SAMPLING

| HAZARD CONTROLS | | | |
|--|--|--|--|
| GZA Job Tasks Potential Haza | ards Controls | | |
| | | | |
| Review Related THA's – | | | |
| 21.1 – General Outdoor Field Work | | | |
| Observation of Deploying of Traffic Personal injury of Protection Equipment by Drilling traffic, Collisions Contractor | | | |
| (e.g., cones, signs, etc.) | Park in designated parking locations or select off-road areas that are firm and free of hazards. Directly inspect parking location on foot if necessary. | | |
| | Use emergency flashers or other appropriate vehicle warning system as appropriate to local conditions when parking personal or GZA vehicle and/or equipment. | | |
| | If parking outside of a designated parking area demarcate vehicle with traffic cones or equivalent. | | |
| | Use emergency flashers or other appropriate vehicle warning system when placing equipment. | | |
| | Observe if police detail or other required traffic control system (if necessary) is in place. | | |
| | Stay within the confines of the work area and do no venture outside of the demarcated work area into traffic | | |
| | If you observe that contractor may back into structures vehicles, fences, etc., notify contractor immediately wit pre-determined signals. Do not cross the path of the heavy equipment. | | |
| | Stand clear of moving Drill Rig. | | |
| Observation of Mobilizing Drill Rig To Job Site and positioning at borehole by Drilling Contractor | g Before drilling begins, confirm that drill rig has been parked properly and securely by the drilling contractor. | | |
| | Wear high visibility vests. Make sure that the driver can see you and is aware of your location at all times. | | |
| | Inform the driller if it is observed that the rig is being moved with the mast raised and/or tools and othe equipment on the rig are not secured and can fall over and potentially hurt personnel. | | |



Job: Drilling Observations, Monitoring Well Installation Observation and Soil Sampling

Analysis By: Andrew Whitsitt Reviewed By: Guy Dalton Approved By: Jayanti Chatterjee , CIH

Revised: June 14, 2012

Task 4.1

DRILLING OBSERVATIONS, MONITORING WELL INSTALLATION OBSERVATIONS, SOIL SAMPLING

| | HAZARD CON | TROLS |
|--|---|---|
| GZA Job Tasks | Potential Hazards | Controls |
| | Overhead utility | Look overhead to assess if any utilities are present and confirm with driller that they are aware of the overhead utility location and to take appropriate actions to preven contact with the overhead utilities and to minimize and arc flash hazards. Review GZA's Electrical Safe World Practices Program 03-3003. |
| Observation of drilling operations and monitoring well installations | Underground utilities | Confirm that underground utility clearance procedures have been completed in accordance with GZA Policy #04-0301 Responsibility for Utility Clearance of Exploration Locations for clearing utility locations prior |
| | Moving machinery, rotating parts, cables, ropes, etc. | Do not wear loose fitting clothing. |
| | | All GZA personnel working in proximity to a drill rig will be familiarized with the location and operation of emergency kill switches prior to equipment start-up. Maintain safe distance from rotating auger, dril casing, rods and cathead at all times. Observe operations from a safe distance. Persons shall not pass under or over a moving stem or auger Check that "kill' switches are present and working. Confirm with driller that daily inspection of rig has been performed prior to commencing work and no conditions were noted with the rig that would affect its proper operation. |
| | - | Do not touch or operate or assist with any rig operations
and maintenance work. |
| | | Make eye contact with operator before approaching
equipment. Be alert and take proper precautions regarding slippery |
| | | ground surfaces and similar hazards near rotating auger. |
| | | Do not engage the driller or helper when drill is in operation. Work out prearranged signals to get their attention before approaching them. |
| | | Confirm prior to drilling operations that driller and helper
communicate and coordinate their actions and
movements. |
| | | GZA personnel are not allowed to be on the drill rig or
operate a rig. |



Job: Drilling Observations, Monitoring Well Installation Observation and Soil Sampling

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Revised: June 14, 2012

Task 4.1 DRILLING OBSERVATIONS, MONITORING WELL INSTALLATION OBSERVATIONS, SOIL SAMPLING

| HAZARD CONTROLS | | | |
|-----------------|---|---|--|
| GZA Job Tasks | Potential Hazards | Controls | |
| | | Wear steel toed boots, hardhat and side-shieldin safety glasses/goggles. | |
| | Falling objects, debris | Stand clear of stacked drill rods. If stack appear unstable inform driller. | |
| | Noise | Wear appropriate hearing protection. | |
| | Roadway/traffic hazards | Be alert at all times; never step outside traffic cones. | |
| | | Wear high visibility vests at all times. | |
| | | Be familiar with escape routes at each location. | |
| | | Follow project Traffic Control Plan. Be alert at all time and never step outside the traffic cones. Use a Police detail when necessary. | |
| | Slips, trips and falls | Maintain clean and sanitary work area free tripping/slipping hazards. | |
| | | All borings, excavations, or partially complete
groundwater monitoring wells will be adequate
covered and/or barricaded if left unattended for a
period of time to prevent injury. | |
| | | Store any hand tools used for sampling in their prop storage location when not in use. | |
| | | Provide adequate space for each employee to wo safely with sound footing. | |
| | | Do not perform work if adequate lighting is not available | |
| | | Maintain an exit pathway away from the rig at all times. | |
| | Cuts, bruises, shocks, laceration sprains and strains during tool | use crew with their work. | |
| | | Use properly maintained tools; do not use damage tools. | |
| | | Wear the proper Personal Protective Equipment based on the task being performed. | |
| | | Store and carry tools correctly. | |
| | | Use the correct tool for the job. | |
| | | Do not use electrical tools with damaged cords or othe electrical components. | |
| | | Observe proper electrical safety practices. Do not use electrical tools in wet areas. | |



Job: Drilling Observations, Monitoring Well Installation Observation and Soil Sampling

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Task 4.1 DRILLING OBSERVATIONS, MONITORING WELL INSTALLATION OBSERVATIONS, SOIL SAMPLING

| HAZARD CONTROLS | | | | |
|-----------------|---|--|--|--|
| GZA Job Tasks | Potential Hazards | Controls | | |
| | | Coordinate activities with driller. Allow driller to ope sampling equipment (i.e., split spoons, Geoprob sleeves, etc.) | | |
| | Fire hazards | Be familiar with emergency procedures and where fine extinguishers are present on site. | | |
| | | Inform GZA subcontractor if you observe improper storage of used rags and unsafe storage of flammable/combustible liquids brought on site. | | |
| | | GZA and its subcontractors, suppliers and vendors sha
not smoke in the work area in GZA project sites. | | |
| | | Smoking can only be in designated smoking areas awa from work areas and potential fire hazard locations. | | |
| | | Confirm with driller that a fire extinguisher present wit
rig and will be available at all times and that inspectio
tag is not expired. | | |
| | | If driller is welding or cutting on site confirm there are n flammables or combustible materials near the vicinity of welding machines or torches (such as debris, fuels grass/weeds, etc.). Review Site requirements for obtaining "Hot Work Permit". | | |
| | | Stand well clear of welding/cutting/burning areas. | | |
| | | When drilling activities encounter the presence of gas of electric, the drill crew shall immediately curtail drilling activity, shut down the drill rig and contact the Project Manager. | | |
| | Exposure to Hazardous
Substances/Chemicals | Become familiar with hazards associated with hazardous commercial products used in drilling (fuels silica sand, grout, cement, bentonite, etc.). Review Safety Data Sheets (SDSs) for such products an participate in daily safety tailgate meetings. | | |
| | | Do not handle drilling chemicals. | | |
| | | Wear appropriate personal protective equipment. Review hazards of chemicals that may have been use or currently are being used on site. | | |
| | | Refer to the site specific HASP for chemical hazard and the necessary precautions required for sampling. | | |

Job Hazard Analysis



Job: Drilling Observations, Monitoring Well Installation Observation and Soil Sampling

Analysis By: Andrew Whitsitt Reviewed By: Guy Dalton Approved By: Jayanti Chatterjee , CIH

Revised: June 14, 2012

Task 4.1 DRILLING OBSERVATIONS, MONITORING WELL INSTALLATION OBSERVATIONS, SOIL SAMPLING

| | HAZARD CONTROLS | | | | |
|---------------|-----------------------|--|--|--|--|
| GZA Job Tasks | Potential Hazards | Controls | | | |
| | | Be alert for hazardous site contaminants (as indicated by odor, visual characteristics, location, and site history). Assess whether procedures and contingencies are in place for characterizing hazards and protecting workers by use of appropriate air monitoring, personal protective clothing and respiratory protection, as needed. If contamination is identified at the Site only personnel trained and medically qualified to work on hazardous sites will be permitted to proceed with the work. | | | |
| Sampling Soil | Exposure to chemicals | Refer to the site specific HASP for chemical hazards and the necessary precautions required for sampling. | | | |
| | 1 | Understand potential hazards associated with handling sample collection preservatives. | | | |
| - | | Review and have SDS available for chemicals being brought on site, including that of sample preservatives. | | | |
| | | Wear appropriate PPE identified in the HASP | | | |
| | | Wash hands before eating and drinking. Eating and drinking are prohibited in areas of soil contamination/work area. | | | |



| Job: General Outdoor Field Work | | | |
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| Analysis By: Anthony Zemba, Reviewed By: Guy Dalton Approved By: Jayanti Chatterjee , CIH | | | |
| Date: June 25, 2012 | Date: June 25, 2012 | Date: July 12, 2012 | |

Task 21.1 General Outdoor Field Work

| | HAZARD CON | |
|--|--|--|
| GZA Job Tasks | Potential Hazards | Controls |
| Pre-work preparation | Overlooking of potential hazards | Become familiar with project area and job site by reviewing available on-line mapping (USGS Topographic, NWI Wetland, NRCS Soil, etc.; and aerial photographs before visiting site. Understand related hazards through review of this and other Task Hazard Analyses and participate in daily safety tailgate meetings (where applicable). |
| | _ | Communicate Task Hazard Analysis and Lessons Learned information to operator(s) prior to initiating work and throughout the project as needed. |
| Driving to site | Vehicle
accidents/collisions/injuries | Perform pre-operation check of vehicle, verifying service brakes, parking brake, steering, lights, tires, horn, wipers mirrors and glass are in good condition. verify that the rig is roadworthy. |
| | l | Wear seat belts always when driving even on site. |
| | | Secure loose materials in cab or bed of vehicle. |
| | | Keep windshields, windows and lights cleans. |
| | | Abide by safe driving procedures. |
| | Backing collisions | If possible avoid backing by using a route that allows you to pull through. If backing up from a parked area do a quality 360 |
| Manda and the form | | walker. |
| Working within transportation corridors or active construction sites | Collisions injuries | Wear high visibility safety vest on site when out of personal or GZA vehicle. |
| | | Park vehicle in designated parking locations, or select off-road area that is firm, and without hazards. Directly inspect parking location on foot if necessary. |
| | | Use emergency flashers or other appropriate
vehicle warning system as appropriate to local
conditions when parking vehicle. |
| | | Use emergency flashers or other appropriate vehicle warning system when parking outside of standard parking spaces, or to stop in right-of-Be alert at all times; never step outside traffic |
| ļ | Job Hazard Ana | cones. |



| Job: General Outdoor Field Work | | | |
|-------------------------------------|-------------------------|---------------------------------------|--|
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CHMM | Reviewed By: Guy Dalton | Approved By: Jayanti Chatterjee , CIH | |
| Date: June 25, 2012 | Date: June 25, 2012 | Date: July 12, 2012 | |

Task 21.1 General Outdoor Field Work

| HAZARD CONTROLS | | |
|---------------------------------------|---|---|
| GZA Job Tasks | Potential Hazards | Controls |
| | | Stand clear of moving heavy equipment and awa from any overhead utility lines until equipment is safely in position and parked properly and securel by the contractor. Do not wear headphones or earbuds, or listen to musior talk on the phone, which may distract from wor |
| | Crossing Automobile traffic lanes | hazards. Wear high visibility safety vests at all times when out of vehicle and working within or adjacent to the roadway. |
| | Crossing Airport Movement
Areas (e.g., Runways, taxiways,
approaches) | Learn, know, and conform to project site Airport's, Airfield's, or Airbase's protocol for crossing movement areas (whether on foot or in vehicle). |
| | | Work within airport movement areas or safety zones must be coordinated with the Air Traffic Control Tower. |
| | | Vehicles to have blinking or flashing lights or beacons; pedestrians to wear high visibility safety vests. |
| | | Using protocol, maintain communication with
airport security and air traffic controllers. |
| | Crossing Railways | Work within active railroad ROWs requires railroad safety training. No work can be done within the railroad traffic envelope without the permission of a railroad flagman. |
| | | No equipment or vehicles can cross without the permission of a railroad flagman. Expect any train on any track coming from either direction at any time. |
| Working in Natural or Remote
Areas | Slips, trips, fall | Be aware of loose ground materials such as talus unconsolidated rock, soil, sediment, ice and othe media that could cause slips, trips or falls. |
| | | Be careful when walking in heavily vegetated areas. Mind tangles of vines, thorny branches, and slippery logs and rock surfaces. Dense vegetation and especially entangled vines present triphazards, or can mask voids, sharp objects, on other hazards beneath. |



| Job: General Outdoor Field Work | | |
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| Date: June 25, 2012 | Date: June 25, 2012 | Date: July 12, 2012 |

| | Task | 21.1 |
|---------------|-------------------|--|
| | General Outdo | oor Field Work |
| | HAZARD C | ONTROLS |
| GZA Job Tasks | Potential Hazards | Controls |
| | | Be vigilant for signs of cracking, shifting, fracturing, and evidence of past movement. |
| | | Use wood mats or other stabilizing materials for equipment if soft ground conditions are present. |
| | | Use walking stick, auger, or ski poles to steady
yourself when traversing loose material or slopes. |



| Job: General Outdoor Field Work | | |
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| Analysis By: Anthony Zemba, Reviewed By: Guy Dalton Approved By: Jayanti Chatterjee , CIH CHMM | | |
| Date: June 25, 2012 | Date: June 25, 2012 | Date: July 12, 2012 |

| | Task 2 | | |
|-------------------------|---------------------------------|---|--|
| | General Outdoor Field Work | | |
| | HAZARD CON | TROLS | |
| GZA Job Tasks | Potential Hazards | Controls | |
| | | Wear proper footwear for conditions. | |
| 1 | | Store tools in their proper storage location when | |
| | 1 | not in use. | |
| | | Provide adequate lighting when necessary. | |
| | Falls into excavations/ voids | Stand away from edges of excavations and voids. | |
| 1 | 1 | Do not attempt access without proper equipment / | |
| i e | | training. Remember that some excavations or | |
| | | voids may constitute a confined space and may
present structural stability issues. | |
| | | present structural stability issues. | |
| l | Cave-ins and engulfment | DO NOT enter caves, sinkholes, excavations, and | |
| 1 | | other voids or concavities that are not sloped or | |
| | | shored properly and have not been evaluated by a | |
| | | competent person to be safe. | |
| | | Stand away from edges of excavations, cliffs, dug | |
| | I | wells, and other voids. Watch for cracks/fissures in the ground surface in | |
| | | the immediate vicinity of a pit or void, which | |
| 1 | | indicate imminent sidewall failure/cave-in. | |
| | | Assess if confined space entry procedures need to | |
| | | be implemented. | |
| | | Before entering void (if required to do so and with | |
| | | proper training) be aware of any hazards at the surface (boulders, equipment) which may fall into | |
| | | the void. | |
| Working among hazardous | Plant toxins Incidental contact | Know the appearance of poison ivy and poison | |
| biota | | sumac in all seasons, and if sensitive to these | |
| | | toxins, carry and use special cleaning | |
| | | soaps/solutions when thought to be exposed. | |
| | | Stock first aid kit with poison ivy/sumac cleaning | |
| | Ticks | soaps/solutions. Ticks carry risk of Lyme's and other Diseases. | |
| | Tioks | Tick season is basically any field day above 40 | |
| | ľ | degrees F. | |
| | 1 | Tuck pants into long socks. | |
| | | The application of DEET (or permethrin pre- | |
| | | treatment) to clothing in season to control | |
| | 1 | exposure to ticks is recommended. | |
| | | Check clothing for ticks frequently. | |



| Job: General Outdoor Field Work | | |
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| Date: June 25, 2012 | Date: June 25, 2012 | Date: July 12, 2012 |

Task 21.1 General Outdoor Field Work

| HAZARD CONTROLS | | |
|-----------------|-------------------------|---|
| GZA Job Tasks | Potential Hazards | Controls |
| | | Check whole body immediately upon returning from field and shower. |
| | Mosquitoes | Be aware of intermittent seasonal reports of mosquito borne diseases, such as West Nill disease and Eastern Equine Encephalitis (EEE) and their locations relative to your field site. Use of DEET or other mosquito repellant is recommended. |
| | Stinging bees and wasps | Be aware of potential cavity, suspended or grounnesting bee/wasp/hornet nests. Avoid undudisturbance or approach with appropriate safet clothing, protection and netting. Take appropriate precautions if allergic to bees Carry at least two epi-pens in first aid kit as well a anti-histamines (oral and inhalers). |
| | | Avoid areas of heavy bee activity if allergic. Avoid perfumed soaps, shampoos, deodorants colognes, etc. that may attract bees. |
| | Poisonous Snakes | Be aware of terrain likelihood of harboring poisonous snakes in your work zone. Avoid reaching or stepping into hidden areas (such as into wood pile, rock pile, debris pile, stone wall etc.) without pre-inspection. |
| | | Coordinate with local hospitals to verify they have proper anti-venom in stock. Learn first aid procedures in case of poisonous snake bite. |
| | | Devise an action plan and include in the site specific HASP. |
| | Wild Animals | Do NOT handle wildlife unless properly trained to do so. Beware of any wild animal that shows no sign o wariness of humans. |
| | | Do NOT attempt to feed wild animals or to help apparently injured wild animals. Be aware of domestic animals that may also pose. |
| | | a threat such as dogs off leash, bulls out to
pasture, etc. |



| Job: General Outdoor Field Work | | |
|-------------------------------------|-------------------------|---------------------------------------|
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CHMM | Reviewed By: Guy Dalton | Approved By: Jayanti Chatterjee , CIH |
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Task 21.1 General Outdoor Field Work

| | HAZARD CON | TROLS |
|--|--|---|
| GZA Job Tasks | Potential Hazards | Controls |
| Working in Adverse Weather
Conditions | Heat / cold stress and other weather related hazards | Assess weather conditions prior to on-site work and examine forecast for anticipated period of work. |
| | | Dress appropriately for weather conditions (e.g., precipitation, temperature ranges over anticipated duration of field work). Include clothing and the presence / absence of shade when calculating a heat index. |
| | | Schedule work day to avoid working during hottest
or coldest parts of the day, to the extent
practicable. |
| | | Keep exposed skin covered in extremely cold weather. |
| | | Recognize signs of frostbite; use warming packs and layer clothing to maintain warmth. |
| | | Use a wicking layer of clothing against your body to keep moisture away from skin. |
| | | Wool clothing will continue to keep you warm after it becomes wet; cotton will not. |
| a a | | Use protective ointments such as sunscreen and chap stick, as appropriate to the field conditions. |
| | | Stay hydrated in hot weather; drink fluids regularly throughout the day, even if not thirsty. |
| | | Recognize signs of heat stress; take frequent breaks in shade when working in direct sunlight for prolonged periods. |
| | | Be familiar with Heat index chart - add 20 degrees to chart if fully clothed and if working in direct sunlight. |
| | | NOTE: Unacceptable field work conditions are not precise, but may include site specific conditions, general location, extreme weather conditions (e.g., |
| | | icing, lightning, excessive cold or wind), travel conditions, and other factors. Professional judgment is required, and personal assessment of safety must always be individually assessed. |
| | Working on Ice | Assess relative load bearing capacity of ice on lakes, ponds and other waterways. If unsure do not venture onto the ice. |



| Job: General Outdoor Field Work | | |
|--|---------------------|---------------------|
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| Date: June 25, 2012 | Date: June 25, 2012 | Date: July 12, 2012 |

Task 21.1 General Outdoor Field Work

| HAZARD CONTROLS | | |
|--------------------------|-------------------------|--|
| GZA Job Tasks | Potential Hazards | Controls |
| | | Wear proper footwear modified for traction on ice. |
| | Electrical storms | If lightning is observed during drilling activities, |
| | | work shall be suspended immediately and employees shall find suitable shelter (building or |
| | | vehicle at minimum). Work will commence no |
| | | sooner than 30 minutes after the last indications of lightning have been observed |
| | | Seek shelter inside a walled building or your |
| | | vehicle. Open picnic pavilions and under trees are not |
| | | adequate shelters. |
| 4 | | Assess vulnerability to lightning strikes as soon as thunder is heard on the horizon. Open areas and |
| | . 1 | higher elevations are more susceptible to strikes. |
| +0 | | Tall objects such as metal towers and flag poles |
| , | | may attract lightning. Consult internet weather radar tracking devices to |
| | | learn of impending storm patterns proximal to you |
| | | work area. |
| | High Winds | Avoid working at high elevations, elevated |
| | | platforms, and other exposed areas during high wind conditions. |
| | | Assess work area for equipment that may be blow |
| A | | down, over, or carried aloft by high winds. |
| Norking in areas without | Hygiene related hazards | Provide hand washing kits (e.g., baby wipes, han |
| sanitary facilities | , | sanitizers, paper towels, bottled water, etc.) to b |
| | | used prior to eating and drinking. Have garbage bags handy to collect trash. |
| Vorking in remote areas | Emergency Conditions | Be familiar with onsite emergency procedures an |
| | , | route to nearest hospital. |
| | 1 | Have a first aid kit available; know its contents an |
| | | how to use them. |
| | | Carry a cell phone during all field work for |
| | 1 | emergency purposes, and confirm the nearest |
| | | location of cell phone signal on site prior to start of worksite. |
| | Disorientation | Plan your route and anticipated progress prior to |
| | | field work. |

Job Hazard Analysis



| Job: General Outdoor Field W | ork | <u> </u> |
|-------------------------------------|-------------------------|---------------------------------------|
| Analysis By: Anthony Zemba,
CHMM | Reviewed By: Guy Dalton | Approved By: Jayanti Chatterjee , CIH |
| Date: June 25, 2012 | Date: June 25, 2012 | Date: July 12, 2012 |

| Task 21.1 General Outdoor Field Work HAZARD CONTROLS | | | | |
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| | | | | |
| | | Have multiple navigation aids (e.g., USGS Map, compass, GPS, etc.) and know how to use them before entering field. Remember to have charged batteries and battery back-ups for electronic devices. Share your progress plan with office staff prior to entering the field. Check in with office personnel periodically to update progress. Review and comply with GZA's Working Alone | | |
| | | Policy 03-1009 in advance of working alone on a project site. | | |
| | Hunting | Be familiar with the various game hunting seasons. Follow rules and guidelines for remaining visible to hunters. | | |
| | | Try to plan work around active hunting seasons or daily peak hunting hours as warranted. | | |

20.11 - Field Sampling.xlsx Page 1 of 1

| GZA GEOENVIRONMENTAL, INC. | | | | |
|---------------------------------|---|--------------------------------------|--|--|
| JOB HAZARD ANALYSIS WORKSHEET | | | | |
| Job: Field Sampling | | | | |
| Analysis By: Christie
Wagner | Reviewed By: Jayanti
Chatterjee, CIH | Approved By: Jayanti Chatterjee, CIH | | |
| Date: November 4, 2011 | Date: July 12, 2012 | Date: July 12, 2012 | | |
| Revised: July 12, 2012 | I | | | |

| Task 20.11 | | | | |
|-----------------------------------|--|--|--|--|
| Field Sampling HAZARD CONTROLS | | | | |
| | | | | |
| Review Related THA's – | | | | |
| 21.1 General Outdoor Field Work | (| | | |
| Pre work task for site visit | Adverse Weather Conditions | Assess weather conditions prior to on-site work and examine forecast for anticipated period of work. | | |
| | | Dress appropriately for weather conditions (e.g., precipitation, temperature ranges over anticipated duration of field work). | | |
| | | Use protective ointments such as sunscreen and chap stick, as appropriate to the field conditions. | | |
| | | Be aware of the anticipated weather conditions prior to mobilization to the site. Unacceptable field work conditions are not precise, but may include site specific conditions, general location, extreme weather conditions (e.g., icing, lightening, excessive cold or wind), travel conditions, and other factors. Professional judgment is required, and personal assessment of safety must always be individually assessed. | | |
| Conduct visual inspection of site | Dangerous Terrain | Be aware of the site terrain, watch for holes and rocks that can be tripping hazards | | |
| | | Learn to identify and watch for plants such as thorn
bushes and poision ivy that can either scratch you or
give you a rash. | | |
| Collecting sample | Muscle strain from lifting heavy objects | Use proper lifting techniques. Use appropriate mechanical assistance and tools when possible. | | |
| | | Wear work gloves and steel toed boots. | | |
| | Exposure to unknown sample | Be sure to treat effluent samples as unknowns and wear the proper PPE. | | |
| | | If there are any unusual odors/fumes coming from a
sample, especially those that cause reactions in the
eyes or nose, leave the area and inform a supervisor
immediately. | | |

New York State Department of Health Generic Community Air Monitoring Plan

A Community Air Monitoring Plan (CAMP) requires real-time monitoring for volatile organic compounds (VOCs) and particulates (i.e., dust) at the downwind perimeter of each designated work area when certain activities are in progress at contaminated sites. The CAMP is not intended for use in establishing action levels for worker respiratory protection. Rather, its intent is to provide a measure of protection for the downwind community (i.e., off-site receptors including residences and businesses and on-site workers not directly involved with the subject work activities) from potential airborne contaminant releases as a direct result of investigative and remedial work activities. The action levels specified herein require increased monitoring, corrective actions to abate emissions, and/or work shutdown. Additionally, the CAMP helps to confirm that work activities did not spread contamination off-site through the air.

The generic CAMP presented below will be sufficient to cover many, if not most, sites. Specific requirements should be reviewed for each situation in consultation with NYSDOH to ensure proper applicability. In some cases, a separate site-specific CAMP or supplement may be required. Depending upon the nature of contamination, chemical-specific monitoring with appropriately-sensitive methods may be required. Depending upon the proximity of potentially exposed individuals, more stringent monitoring or response levels than those presented below may be required. Special requirements will be necessary for work within 20 feet of potentially exposed individuals or structures and for indoor work with co-located residences or facilities. These requirements should be determined in consultation with NYSDOH.

Reliance on the CAMP should not preclude simple, common-sense measures to keep VOCs, dust, and odors at a minimum around the work areas.

Community Air Monitoring Plan

Depending upon the nature of known or potential contaminants at each site, real-time air monitoring for volatile organic compounds (VOCs) and/or particulate levels at the perimeter of the exclusion zone or work area will be necessary. Most sites will involve VOC and particulate monitoring; sites known to be contaminated with heavy metals alone may only require particulate monitoring. If radiological contamination is a concern, additional monitoring requirements may be necessary per consultation with appropriate NYSDEC/NYSDOH staff.

Continuous monitoring will be required for all <u>ground intrusive</u> activities and during the demolition of contaminated or potentially contaminated structures. Ground intrusive activities include, but are not limited to, soil/waste excavation and handling, test pitting or trenching, and the installation of soil borings or monitoring wells.

Periodic monitoring for VOCs will be required during <u>non-intrusive</u> activities such as the collection of soil and sediment samples or the collection of groundwater samples from existing monitoring wells. "Periodic" monitoring during sample collection might reasonably consist of taking a reading upon arrival at a sample location, monitoring while opening a well cap or overturning soil, monitoring during well baling/purging, and taking a reading prior to leaving a sample location. In some instances, depending upon the proximity of potentially exposed individuals, continuous monitoring may be required during sampling activities. Examples of such situations include groundwater sampling at wells on the curb of a busy urban street, in the midst of a public park, or adjacent to a school or residence.

VOC Monitoring, Response Levels, and Actions

Volatile organic compounds (VOCs) must be monitored at the downwind perimeter of the immediate work area (i.e., the exclusion zone) on a **continuous** basis or as otherwise specified. Upwind concentrations should be measured at the start of each workday and periodically thereafter to establish background conditions. The monitoring work should be performed using equipment appropriate to measure the types of contaminants known or suspected to be present. The equipment should be calibrated at least daily for the contaminant(s) of concern or for an appropriate surrogate. The equipment should be capable of calculating 15-minute running average concentrations, which will be compared to the levels specified below.

- If the ambient air concentration of total organic vapors at the downwind perimeter of the work area or exclusion zone exceeds 5 parts per million (ppm) above background for the 15-minute average, work activities must be temporarily halted and monitoring continued. If the total organic vapor level readily decreases (per instantaneous readings) below 5 ppm over background, work activities can resume with continued monitoring.
- If total organic vapor levels at the downwind perimeter of the work area or exclusion zone persist at levels in excess of 5 ppm over background but less than 25 ppm, work activities must be halted, the source of vapors identified, corrective actions taken to abate emissions, and monitoring continued. After these steps, work activities can resume provided that the total organic vapor level 200 feet downwind of the exclusion zone or half the distance to the nearest potential receptor or residential/commercial structure, whichever is less but in no case less than 20 feet, is below 5 ppm over background for the 15-minute average.
- If the organic vapor level is above 25 ppm at the perimeter of the work area, activities must be shutdown.

All 15-minute readings must be recorded and be available for State (DEC and DOH) personnel to review. Instantaneous readings, if any, used for decision purposes should also be recorded.

Particulate Monitoring, Response Levels, and Actions

Particulate concentrations should be monitored **continuously** at the upwind and downwind perimeters of the exclusion zone at temporary particulate monitoring stations. The particulate monitoring should be performed using real-time monitoring equipment capable of measuring particulate matter less than 10 micrometers in size (PM-10) and capable of integrating over a period of 15 minutes (or less) for comparison to the airborne particulate action level. The equipment must be equipped with an audible alarm to indicate exceedance of the action level. In addition, fugitive dust migration should be visually assessed during all work activities.

- If the downwind PM-10 particulate level is 100 micrograms per cubic meter (mcg/m³) greater than background (upwind perimeter) for the 15-minute period or if airborne dust is observed leaving the work area, then dust suppression techniques must be employed. Work may continue with dust suppression techniques provided that downwind PM-10 particulate levels do not exceed 150 mcg/m³ above the upwind level and provided that no visible dust is migrating from the work area.
- If, after implementation of dust suppression techniques, downwind PM-10 particulate levels are greater than 150 mcg/m³ above the upwind level, work must be stopped and a re-evaluation of activities initiated. Work can resume provided that dust suppression measures and other controls are successful in reducing the downwind PM-10 particulate concentration to within 150 mcg/m³ of the upwind level and in preventing visible dust migration.

All readings must be recorded and be available for State (DEC and DOH) personnel to review.

June 20, 2000



GZA GeoEnvironmental of New York