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REPORT ON

STAGE 1/ PHASE 1 SOIL INVESTIGATION AND SOIL MANAGEMENT PLAN
ST. ELIZABETHS EAST CAMPUS
MARTIN LUTHER KING JR. (MLK) AVENUE SE
WASHINGTON, D.C.

by Haley & Aldrich, Inc.
McLean, Virginia

for Delon Hampton & Associates, Chartered
Silver Spring, Maryland

File No. 38677-007
January 2016

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25 January 2016
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Attention: Mamo Assefa, P.E., Vice President

Subject: Stage 1/ Phase 1 Subsurface Investigation and Soil Management Plan
St. Elizabeths East Campus
Martin Luther King Jr. (MLK) Avenue SE
Washington, D.C.

Ladies and Gentlemen:

We are pleased to submit this Subsurface Investigation and Soil Management Plan for the above-referenced site. This report summarizes investigative work conducted at the St. Elizabeths East Campus in support of the Stage 1/Phase 1 proposed roadway and proposed utility construction. Please feel free to contact us with any questions.

Sincerely yours,
HALEY & ALDRICH, INC.

Kristen M. Wright-Ng
Senior Engineer

Thomas A. Varner, LSRP
Client Leader

Enclosures

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1. Introduction

The enclosed report presents the results of a soil investigation conducted at the St. Elizabeths East Campus located at 1100 Alabama Avenue, SE in Washington, DC (herein referred to as the "Site") along with a soil management plan. This work was performed by Haley & Aldrich, Inc. (Haley & Aldrich), in accordance with our proposal to Delon Hampton & Associates, Chartered dated 23 October 2015 and executed on 20 November 2015. As indicated in our proposal, this investigation was conducted using practices generally consistent with the American Society of Testing and Materials (ASTM) E 1903-11 Standard Practice for Environmental Site Assessments: Phase II Environmental Site Assessment Process (ASTM E 1903-11 Standard).

1.1 OBJECTIVE

The purpose of this investigation was to investigate potential soil and groundwater contamination in areas of proposed roadway and utility construction at the Site in the Stage 1/ Phase 1 areas of redevelopment. The anticipated depth of work in proposed roadways is 12-15 feet below ground surface (ft bgs) and in proposed utility corridors is 15-20 ft bgs. The results of the investigation, combined with results from the "Phase II Environmental Site Assessment, St. Elizabeths East Campus, Martin Luther King Jr. (MLK) Avenue SE, Washington D.C.", prepared by Haley & Aldrich, Inc., dated November 2012, were used to develop recommendations regarding the management of soil and water generated during construction.

1.2 LIMITATIONS

This report was prepared pursuant to an Agreement dated 20 November 2015 between Delon Hampton & Associates, Chartered and Haley & Aldrich. All uses of this report are subject to, and deemed accepting of, the conditions and restrictions contained in the Agreement. The observations and conclusions described in this report are based solely on the Scope of Services provided pursuant to the Agreement. Haley & Aldrich has not performed any additional observations, investigations, studies, or other testing not specified in the Agreement. Haley & Aldrich shall not be liable for the existence of any condition the discovery of which would have required the performance of services not authorized under the Agreement.

This report is prepared for the exclusive use of Delon Hampton & Associates, Chartered and CH2M Hill. There are no intended beneficiaries other than Delon Hampton & Associates, Chartered and CH2M Hill. Haley & Aldrich shall owe no duty whatsoever to any other person or entity on account of the Agreement or the report. Use of this report by any person or entity other than Delon Hampton & Associates, Chartered and CH2M Hill for any purpose whatsoever is expressly forbidden unless such other person or entity obtains written authorization from Delon Hampton & Associates, Chartered, CH2M Hill, and from Haley & Aldrich. Use of this report by such other person or entity without the written authorization of Delon Hampton & Associates, Chartered, and CH2M Hill, and Haley & Aldrich shall be at such other person's or entities sole risk, and shall be without legal exposure or liability to Haley & Aldrich.

Use of this report by any person or entity, including by Delon Hampton & Associates, Chartered and CH2M Hill, for a purpose other than for future potential redevelopment is expressly prohibited unless such person or entity obtains written authorization from Haley & Aldrich indicating that the report is

adequate for such other use. Use of this report by any person or entity for such other purpose without written authorization by Haley & Aldrich shall be at such person's or entities sole risk and shall be without legal exposure or liability to Haley & Aldrich.

This report reflects Site conditions observed and described by records available to Haley & Aldrich as of the date of report preparation. The passage of time may result in significant changes in Site conditions, technology, or economic conditions, which could alter the findings and/or recommendations of the report. Accordingly, Delon Hampton & Associates, Chartered, CH2M Hill, and any other party to whom the report is provided recognize and agree that Haley & Aldrich shall bear no liability for deviations from observed conditions or available records after the time of report preparation.

Use of this report by any person or entity in violation of the restrictions expressed in this report shall be deemed and accepted by the user as conclusive evidence that such use and the reliance placed on this report, or any portions thereof, is unreasonable, and that the user accepts full and exclusive responsibility and liability for any losses, damages, or other liability which may result.

Considerations outside of the scope of this report include asbestos-containing materials, radon, lead-based paint, lead in drinking water, wetlands, regulatory compliance, cultural and historic resources, industrial hygiene, health and safety, ecological resources, endangered species, indoor air quality, bio-agents, and mold.

2. Background

2.1 SITE DESCRIPTION

The Site is located at the St. Elizabeths East Campus at 1100 Alabama Avenue, SE in Washington, DC and is also referred to as 2700 MLK Avenue, SE in Washington, DC. The Site is located on the east side of MLK and north side of Alabama Avenue as shown on Figure 1, Project Locus. An underground easement runs through the northern portion of the Site and is utilized by the Green Line of the Washington, DC Metrorail system (Metro).

The proposed utility and roadway alignment considered as part of this report includes:

- Sycamore Street from Building 95 to Dogwood Street;
- Dogwood Street from Sycamore Street to 13th Street;
- Cypress Street from MLK Avenue to 13th Street;
- 13th Street from Pecan Street to Alabama Avenue SE; and
- Oak Street.

The Site is bordered to the northwest by the "North Parcel" portion of the St. Elizabeths East Campus (currently vacant buildings), to the northeast by a ravine and wooded land below which is a portion of the Metro line, to the southeast by Alabama Avenue beyond which are residential neighborhoods, and to the west/southwest by MLK Avenue beyond which is the St. Elizabeths West Campus (currently vacant buildings).

2.2 PHYSICAL SETTING

The Site is located within the Coastal Plain Physiographic Province in the District of Columbia. The Coastal Plain consists of a seaward-thickening wedge of alluvial to marginal-marine sedimentary deposits generally consisting of interbedded sands and clays.

The upper, natural soils at the Site generally consist of Terrace Deposits associated with the nearby Potomac River. These deposits represent ancient flood plain sediments, generally characterized by interbedded layers of silt, sand, clay and gravel that were deposited when the river and its tributaries were at a higher elevation than current day. Underlying the Terrace Deposits are the Cretaceous age marine deposits of the Arundel Formation of the Potomac Group, which are generally characterized as highly over-consolidated sands, silts and clays. The silts and clays of the Potomac Formation are often referred to locally as "marine clays", and typically have high plasticity characteristics, significant shrink-swell potential and can be highly fissured. The Potomac Group deposits are generally underlain by crystalline bedrock at depths greater than approximately 500 ft bgs.

Based on a review of hydrogeologic data and reports from the St. Elizabeths West Campus redevelopment, two zones of groundwater are anticipated to exist at the Site. The uppermost zone consists of a water table aquifer present within the Terrace Deposits that is perched on top of the clayey soils of the Potomac Group. The second and lower zone of groundwater is a confined aquifer that consists of intercalated layers of sand within the highly over-consolidated Arundel Formation clays of the Potomac Group. Observations in the vicinity of the project Site indicate that groundwater levels in the upper perched groundwater zone range from approximately 15 and 30 ft bgs. It should be noted

that groundwater levels will fluctuate with the season, precipitation, and adjacent construction activity and may significantly vary in elevation across the Site.

2.3 SITE HISTORY AND LAND USE

St. Elizabeths Hospital was once a government hospital for the insane. The Site was used for residential and agricultural purposes prior to St. Elizabeths purchasing the Site in November 1869. The purchase was intended to provide grazing grounds for cattle. In 1902, four hospital pavilions were constructed and an underpass below MLK Avenue was constructed. The grounds around the pavilions were developed with roads, walks, and lawns. In the 1930s, the hospital significantly expanded their facilities at the Site although agricultural activities continued. The Site development was completed by 1963.

The northeastern portion of the Site extends into the North Parcel which was used as a landfill from 1982 to 1989 by the District of Columbia (DC) government. Subsurface investigations were reported in 1991 and 2008 as summarized in Section 2.4.

2.4 SUMMARY OF PREVIOUS ASSESSMENTS

"Phase I Environmental Site Assessment Report, Proposed Saint Elizabeths East Campus Roadway Improvements," prepared by Tidewater, Inc., dated 1 March 2012.

This Phase I Environmental Site Assessment (ESA) summarized historical information, regulatory information, and results of a site reconnaissance for the Site in an effort to identify Recognized Environmental Conditions (RECs). The following RECs were identified:

1. Fly ash disposal area along Pecan Street in the northeast portion of the Site (currently a paved parking area).

2. Potential soil and groundwater impacts associated with offsite sources (dry cleaning and gas station operations) along the southwest property line.

3. Underground storage tanks (USTs) associated with emergency generators at Buildings 100, 109, 119, and 124.

4. Product or waste drums around Building 125.

5. Outside transformers associated with Buildings 88, 89, 117, 119, and 124.

6. Aboveground storage tanks (ASTs) associated with Buildings 94, 95, 102, 111, 119, and 124.

Tidewater recommended that a Phase II soil and groundwater investigation be conducted to investigate possible petroleum hydrocarbon and volatile organic compound (VOC) contamination related to RECs.

"Final Department of Homeland Security Headquarter Consolidation at St. Elizabeths Master Plan Amendment – East Campus North Parcel Environmental Impact Statement," prepared by U.S. General Services Administration National Capital Region, dated March 2012.

This report summarized subsurface investigations reported in 1991 and 2008 at the former landfill area located on the northeastern portion of the Site.

- 1991 field investigation report (refer to Figure 2; 1991 Ash/Fill Area): The fill material within the landfill was composed of storm sewer cleanings, street sweepings, road construction debris, and incinerator fly ash. The landfill was composed of four portions which were closed in 1983, 1987, 1988, and 1989, respectively. Closure consisted of a cap of 18 to 30 inches of a mixture of milled asphalt, soils, and compost from a sewage treatment plant. Sampling of fill, fill leachate, and pond sediment in the area of the landfill was conducted in 1984 and 1985. Chlorinated dioxins and furans were detected in ash fill and polychlorinated biphenyl (PCB)-1260 was detected in pond sediments.

- 2008 geotechnical report (refer to Figure 2; 2008 Fly Ash Zone): This report identified ash fill. A composite soil sample was collected and analyzed for metals and semi-volatile organic compounds (SVOCs) to characterize ash for disposal. Results were below RCRA limits and the ash was not considered a RCRA hazardous waste for metals or SVOCs.

"Phase II Environmental Site Assessment, St. Elizabeths East Campus, Martin Luther King Jr. (MLK) Avenue SE, Washington D.C.", prepared by Haley & Aldrich, Inc., dated November 2012.

This Phase II ESA summarized a subsurface investigation in 2012 to investigate potential soil and groundwater contamination in areas of proposed roadway and utility construction based on findings of "Phase I Environmental Site Assessment Report, Proposed Saint Elizabeths East Campus Roadway Improvements," prepared by Tidewater, Inc., dated 1 March 2012. The number, depth and locations of the borings were designed to provide spatial coverage throughout the future construction area and to provide data in the vicinity of nearby RECs. Twenty-seven soil borings were completed to depths ranging from 11 to 25 ft bgs and forty-three soil samples were analyzed.

Groundwater was encountered at only one boring location within the depth of proposed construction, and therefore only one temporary monitoring well was installed (at B103) on 11 September 2012. Groundwater was encountered at a depth of 10 ft at B103. A groundwater sample was collected using a bailer on 12 September 2012 and submitted to Caliber for analysis of VOCs by EPA Method 8260B and Total Petroleum Hydrocarbons (TPH) – Diesel Range Organics (DRO)/ Gasoline Range Organics (GRO)/ Oil Range Organics (ORO) by EPA Method 8015C. VOCs, TPH-GRO, and TPH-ORO were not detected. TPH-DRO was detected at a concentration of 0.24 milligram per liter (mg/l), which is less than the Petroleum Contaminated Groundwater Cleanup Standards for the DC UST Program Tier 1 Screening Levels 2003 Revision of 3.57 mg/l.

The following describes findings of the investigation relevant to the RECs:

1. Fly ash disposal area along Pecan Street in the northeast portion of the Site (currently a paved parking area):

   B101 was the boring completed nearest to the anticipated fly ash disposal area. Fly ash and other debris indicative of a landfill were not observed in B101. However, the soil analytical results for B101 indicate the most constituent detections and concentrations exceeding regulatory criteria of any boring location investigated during this Phase II ESA. An elevated concentration of Aroclor-1260 relative to regulatory criteria was consistent with findings from a 1984/85 sampling event in which Aroclor-1260 was also detected in soil associated with the ash

disposal area. The highest concentrations of polycyclic aromatic hydrocarbons (PAHs), TPH, barium and mercury were observed in samples collected from this boring. Exceedances of regulatory criteria were observed to a depth of 15 ft bgs.

2. Potential soil and groundwater impacts associated with offsite sources (dry cleaning and gas station operations) along the southwest property line:

   Selected soil samples from boring locations along the southwest property line were analyzed for benzene, toluene, ethylbenzene, xylene, and naphthalene (BTEXN) and VOCs; none were detected. Groundwater was not encountered in borings completed along the southwestern portion of the Site. Results indicate that evidence of a release associated with offsite sources was not observed in the upper 11 to 25 ft. bgs of soil on the southwest portion of the Site.

3. Impacts from the following RECs and fill placement throughout the Site:

   - USTs associated with Buildings 100, 109, 119, and 124 emergency generators
   - Product or waste drums around Building 125
   - Outside transformers associated with Buildings 88, 89, 117, 119, and 124
   - ASTs associated with Buildings 94, 95, 102, 111, 119, and 124

   Concentrations of PAHs or TPH were observed at several sampling locations near these RECs. The PAHs or TPH concentrations may be attributable to the USTs, drums, transformers, and/or ASTs. The presence of PAHs in borings B106, B117, and B121 may be the result of discharges from RECs (currently identified or previously unidentified), or possibly emplacement of impacted urban fill. Similarly, the presence of PAHs and TPH at B129, which is not in close proximity to RECs identified to date, may be attributable to impacted urban fill, or possibly the presence of a previously unidentified REC.

   The presence of arsenic above regulatory criteria appears to be related to background conditions based on the distribution of occurrences and the similarity in concentration from location to location. Additionally, the eastern United States has an average arsenic concentration in soil of 4.8 mg/kg which is similar to the average arsenic concentration at the Site (USGS, 1984). Similarly, the presence of mercury above regulatory criteria (except in boring B101 as discussed previously) also appears to be related to background conditions, based on the average eastern United States concentration of 0.081 mg/kg, which is similar to the mercury concentrations detected in samples collected during this investigation.

3. Subsurface Exploration Program

Notwithstanding physical access limitations, boring locations were selected to coincide with future road and utility construction as indicated on the electronic file named "Saint Elizabeth – Stage 1 – Phase I Design.DGN" provided by CH2M Hill on 13 January 2016. The number, depth and locations of the borings were designed to provide spatial coverage throughout the future construction area.

Prior to completing soil borings, boring locations were verified and marked-out in the field by Haley & Aldrich through the use of a handheld GPS unit and by measuring off existing structures. Utility locations at or near marked-out boring locations were identified by Mid-Atlantic Utility Locating, LLC of Chantilly, Virginia, a private utility locator. Access to the Site, drilling of soil borings, and installation of temporary monitoring wells was authorized by the Washington, DC Deputy Mayor for Planning and Economic Development.

Soil borings were conducted using a track-mounted Geoprobe® drill rig operated by Vironex, Inc. of Bowie, Maryland at the locations shown on Figure 2, Exploration Location Plan[1]. The Geoprobe® sampling device consisted of a 1.5-inch-diameter, five-foot-long hollow steel tube with an expendable internal plastic sleeve that retained the sample. During 14-16 December 2015, 20 soil borings (B201 through B220) were completed. Boring depths were completed to 15 ft bgs, the assumed maximum depth of proposed utilities. Boreholes were grouted upon completion.

Refusals were encountered at several locations:

- B201: Refusal was first encountered at 5 ft bgs at staked location. The first offset was 5 ft to the south of the staked location where refusal was encountered at 10 ft bgs. A second offset was 10 ft south of the staked location where the boring could be completed to 15 ft bgs.
- B211: Four attempts were made to complete this boring to 15 ft bgs but refusal was encountered at depths ranging from 4.5 ft to 8 ft bgs.
- B212: Six attempts were made to complete this boring to 15 ft bgs but refusal was encountered at depths ranging from 6 ft to 10 ft bgs.
- B213: Four attempts were made to complete this boring to 15 ft bgs but refusal was encountered at depths ranging from 4 ft to 10 ft bgs.
- B214: Two attempts were made to complete this boring and refusal was encountered at depths ranging from 7 ft to 10 ft bgs.
- B216: Two attempts were made to complete this boring and refusal was encountered at depths ranging from 9 ft to 10 ft bgs.

Data collected from the borings consisted of field observations including soil type, soil color, and degree of impact (e.g., odor, staining, ash) if any. Soil cores were also screened for VOC impacts using a photoionization detector (PID). Boring logs are included in Appendix A.

If <u>no</u> PID readings, stains, odors, ash, or other signs of contamination were observed, a soil sample was collected from a composited 5-ft interval (i.e., 0-5 ft bgs, 5-10 ft bgs, and 10-15 ft bgs). If the preceding were observed, a grab soil sample was collected from the impacted interval within the retrieved soil core.

[1] The exploration location plan depicts environmental and geotechnical boring locations completed by Haley & Aldrich, Inc. Findings of the geotechnical investigation are summarized in a separate report.

Soil samples were collected into pre-cleaned glassware provided by the laboratory and shipped in coolers with ice under chain of custody. Sample fractions for VOC analysis were collected into vials containing methanol as a preservative, also provided by the laboratory. The soil samples were submitted to Alpha Analytical of Westborough, Massachusetts for analysis. Fifty-five soil samples were analyzed for one or more of the following:

- VOCs by EPA Method 8260C;
- PAHs by EPA Method 8270D;
- PCBs by EPA Method 8082A;
- TPH-DRO by EPA Method 8015D;
- TPH-GRO by EPA Method 8015C;
- TPH-ORO by EPA Method 8015D; and
- RCRA Metals by EPA Method 6010C. (Where total lead concentrations exceeded the 20x rule, a TCLP lead analysis was performed.)

Groundwater was encountered at one boring location (at B202) and therefore only one temporary monitoring point was installed on 15 December 2015. Groundwater was encountered at B202 at a depth of 10 ft bgs. The temporary monitoring point was constructed with 1-inch-diameter PVC well screen and riser, and was screened from a depth of 10 ft to 15 ft bgs. Water did not accumulate in the well; therefore, a groundwater sample could not be collected. The temporary monitoring point was removed on 16 December 2015 and the borehole was grouted.

4. Data Evaluation

4.1 SUBSURFACE CONDITIONS

Explorations at the Site generally revealed subsurface conditions consistent with probable man-placed fill consisting of re-worked borrow material from the Terrace Deposits, natural undisturbed Terrace Deposits, and the sand facies of the Potomac Formation with depth. Accordingly, distinct changes in strata are difficult to interpret given the similarity of the probable man-placed fill and Terrace Deposits, and the gradual transition between Terrace and Potomac Formation soils. The materials encountered generally consisted of sands with varying amounts of silts, clays and gravels, though the primary component of the soil included lean clay and silt at some locations and depths (refer to boring logs in Appendix A). Drilling refusal indicates discontinuous layers or possible former channel deposits containing significant amounts of gravel-sized material are present throughout the probable fill and Terrace Deposits. Refusal could also occur due to the presence of utilities and other below-grade man-placed structures.

Elevated PID readings, stains, ash, or other signs of contamination were not observed in the soil samples recovered except for a petroleum odor that was observed in B201 from 12 to 14 ft bgs.

Groundwater was encountered during the exploration program at one boring location, namely B202. Groundwater was measured at 10 ft bgs at B202 at the completion of drilling. A temporary monitoring point was constructed; however, water did not accumulate in the well. Groundwater level readings were made in the borings at times and under conditions stated in the boring logs. However, it must be noted that fluctuations in the level of the groundwater may occur due to variations in season, rainfall, temperature, and other factors not evident at the time measurements were made and reported herein.

The boring logs depict subsurface conditions only at the specific locations and at the particular time designated on the logs. Soil conditions at other locations may differ from conditions occurring at the boring locations. Also the passage of time and proposed construction activity may result in a change in the soil conditions at these boring locations.

4.2 RECEPTORS AND POTENTIAL EXPOSURE PATHWAYS

The Site is planned to be redeveloped as a mixed use development. Potential human receptors at the Site include the construction worker during redevelopment and residential/commercial/retail occupants, as applicable, after redevelopment.

The construction worker may have potential exposure to soil via incidental ingestion of soil, dermal contact with soil, and inhalation of VOCs emanating from soil (if present) and non-VOCs as fugitive dust generated from soil. It is also assumed that the construction worker may have potential exposure to the perched water located beneath the Site via dermal contact and inhalation of volatilized VOCs (if present) from perched water during possible trenching activities.

Once redeveloped, the utility and roadway portion of the Site is assumed to be covered with impervious surface treatments (e.g., concrete and/or asphalt pavement and sidewalks). Therefore, residential/commercial/retail occupants will have insignificant potential exposure to soil or groundwater within the utility and roadway portion of the Site. The residential/commercial/retail occupants may

potentially be exposed to VOCs (if present) if indoor air were to be impacted due to subsurface vapor intrusion through the soil surrounding the foundations of the future on-Site buildings. Residential/commercial/retail occupants could also potentially be exposed if soil with contaminants above corresponding criteria were relocated from beneath excavated areas and used elsewhere onsite, depending on factors such as depth and presence/absence of surface treatment.

Groundwater beneath the Site is not expected to be a source of potable water and therefore not used for drinking water or irrigation.

4.3 SCREENING LEVELS

Based on the receptors and potential exposure pathways identified above, the following soil screening levels were selected for the Site. Soil sample analytical results were compared to the following screening levels:

- D.C. Tier 0 Soil Standards from the Tier 0 Standards Final Rulemaking published at 40 DCR 7835, 7892 (12 November 1993), as amended by Final Rulemaking published at 46 DCR 7699 (1 October 1999)[2];

- Environmental Protection Agency (EPA) Region 3 Regional Screening Level for Residential Soil from the EPA Regional Screening Level Tables (November 2015); and

- EPA Region 3 Regional Screening Level for Industrial Soil from the EPA Regional Screening Level Tables (November 2015).

The EPA Region 3 Regional Screening Levels for Residential Soil are more conservative than the DC Risk Based Corrective Action (RBCA) Risk-Based Screening Levels for Resident Child Surficial Soil dated June 2011. As used in this report, "residential soil screening levels" are the lower of these screening levels; therefore, the D.C. RBCA screening levels were not included in the evaluation. The EPA Region 3 Regional Screening Level for Industrial Soil is appropriate for the non-residential use scenarios and is therefore suitable for comparison for commercial/retail uses, and as used in this report, is considered the "industrial soil screening levels". Residential and Industrial soil screening levels were compared to soil sample analytical results.

The EPA residential and Industrial Screening levels are based on specific scenarios and corresponding assumptions for residents and the commercial/industrial workers that occupy above-ground structures. These EPA screening levels do not account for the construction worker exposure scenario, which is relevant to the planned redevelopment work. Therefore, additional evaluation of potential exposure by construction workers should be conducted to determine what administrative and/or engineering controls (including personal protective equipment), if any, should be used for worker protection during redevelopment work in accordance with applicable local, state and federal statutes and regulations.

As discussed in Section 4, in 2015 groundwater was encountered at one location where a temporary point was installed, but no recoverable sample could be collected for analysis. In 2012, TPH-DRO was the only constituent detected in groundwater and the relevant criteria for comparison was Petroleum

[2] Please note that regulatory criteria for TPH-ORO does not exist and therefore the 100 mg/kg D.C. Tier 0 Soil Standard for TPH-DRO and TPH-GRO was also applied to TPH-ORO as a conservative measure.

Contaminated Groundwater Cleanup Standards for the DC UST Program Tier 1 Screening Levels 2003 Revision.

4.4 CHEMICALS OF POTENTIAL CONCERN

During the 2012 and 2015 Site investigations, samples were collected and analyzed for select chemicals based on the confirmed or expected use of materials and chemicals historically or currently used at the Site as identified in provided previously prepared reports discussed in Section 2. These chemicals and the associated analytical methodologies generally include:

- Benzene, Toluene, Ethylbenzene, Xylenes, and Naphthalene (BTEXN) and Volatile Organic Compounds (VOCs)
- Polycyclic Aromatic Hydrocarbons (PAHs)
- Total Petroleum Hydrocarbons (TPH)
- Polychlorinated Biphenyls (PCBs)
- Metals

The following summarizes the chemicals of potential concern (COPCs) in soil and groundwater based on the investigations conducted by Haley & Aldrich in 2012 (B100 series borings) and 2015 (B200 series borings). Analytical results are summarized on Table 1, results are depicted on Figure 3, and complete analytical reports are included in Appendix B.

4.4.1 BTEX and VOCs in Soil

BTEX and VOCs were not detected in soil samples at concentrations exceeding soil screening levels.

4.4.2 PAHs in Soil

PAHs were detected in 24 soil samples. PAHs were detected above residential soil screening levels in B101 from 13-15 ft bgs, B104 1.5-3.5 ft bgs, B106 from 7-9 ft bgs, B117 from 2-4 ft bgs, and B219 from 0-5 ft bgs. PAHs were detected above both residential and industrial soil screening levels in B101 from 8-10 ft bgs, B201 from 0-5 ft bgs, B201 from 5-10 ft bgs, and B218 from 0-5 ft bgs.

4.4.3 TPH in Soil

TPH-GRO was not detected in soil samples at concentrations exceeding soil screening levels. TPH-DRO was detected above soil screening levels in B101 from 8-10 ft bgs, B101 from 13-15 ft bgs, B111 from 10-12 ft bgs, and B129 from 5-7 ft bgs. TPH-ORO was detected above soil screening levels in B111 from 10-12 ft bgs and B129 from 5-7 ft bgs.

4.4.4 PCBs in Soil

Archlor-1260 was detected above residential and industrial soil screening levels in B101 from 13-15 ft bgs and B201 from 12-14 ft bgs. These borings were located near the former disposal area to the north of the Stage 1/Phase 1 project area. An elevated concentration of Aroclor-1260 relative to residential and industrial soil screening criteria is consistent with findings from a 1984/85 sampling event in which Aroclor-1260 was also detected in soil associated with the disposal area.

4.4.5 Metals in Soil

Metals were not detected in soils at concentrations exceeding soil screening levels except for arsenic. The presence of arsenic above regulatory criteria appears to be related to background conditions based on the distribution of occurrences and the similarity in concentration from location to location. Additionally, the eastern United States has an average arsenic concentration in soil of 4.8 mg/kg and the regional background in the Washington DC area range of 0.97 to 16.7 mg/kg which are similar to the arsenic concentrations at the Site (USGS, 1984 and Abouelnasr, 1997).

In 2012, lead was detected in B101 from 8-10 ft bgs at 230 mg/kg. In 2015, lead was detected in B201 from 5-10 ft bgs at 110 mg/kg. If total lead results exceed 100 mg/L (which is 20 times the TCLP regulatory limit for lead), there is the potential the sample may be considered a hazardous waste. Therefore, the soil sample from B201 from 5-10 ft bgs was analyzed for TCLP lead with the result less than 0.5 mg/L indicating lead is not a hazardous waste.

4.4.6 Groundwater

In 2012, one groundwater sample was collected from a temporary point installed at boring B103. Table 2 provides a summary of the analytes detected. VOCs, TPH-GRO, and TPH-ORO were not detected. TPH-DRO was detected at a concentration of 0.24 milligram per liter (mg/l), which is less than the Petroleum Contaminated Groundwater Cleanup Standards for the DC UST Program Tier 1 Screening Levels 2003 Revision of 3.57 mg/l.

4.5 AREAS OF POTENTIAL CONCERN

A review of the results of the previously described environmental investigations identified areas of potential concern (AOPCs) that represent areas with COPC concentrations in soil that may require remedial action to be protective of human health or groundwater quality. In general, the distribution of COPC in soil at the Site is coincident with former Site activities including a former landfill area, the presence of ASTs and USTs, and the placement of fill. AOPC locations are shown on Figure 3 as red dots and on Figure 4 as soil classification areas that will require soil management during construction.

4.6 QUALTITY CONTROL SUMMARY

Following is a summary of the results of field-based quality control measures undertaken during the 2015 sampling event:

- One field duplicate was collected to provide an indication of the variability in field conditions. The duplicate sample was collected at B208 from 5 to 10 ft bgs. The relative percent difference (RPD) between the detected results for the duplicate pair was relatively low except for metals. These results indicate some variability in the analytical results due to the heterogeneous nature of Site soils over a 5-ft sample interval.
- Four trip blanks (one trip blank per shipment) were submitted for VOC analyses. Results for the trip blanks were below laboratory reporting detection limits except for TB-121415 where acetone was detected at 12 ug/L, indicating that reported concentrations for acetone from samples collected on 14 December 2015 may be biased high. However, acetone is not a COPC for the Site based on sampling results and the result is not significant.

- One field/equipment rinse blank was collected during the sampling event to evaluate equipment cleanliness and decontamination procedures and was analyzed for the Site COPCs. Results were below laboratory reporting detection limits except for barium which was detected at 0.8921 ug/l. However, barium is not a COPC for the Site and the result is not significant.

Our review of the laboratory data does not identify significant bias in the results. No data were rejected as part of our review and the data are acceptable for its intended use.

5. Soil Management Plan

The purpose of this soil management plan is to classify soils to be excavated with regard to appropriate handling based on the concentrations and types of contaminants detected in the samples.

5.1 SOIL MANAGEMENT CLASSIFICATION

Haley & Aldrich has developed the following soil classification system to describe soil quality with regard to regulatory criteria for purposes of the planned construction work. The spatial extent and depths of soils meeting these classifications are depicted on Figure 4.

Class 1: Unrestricted Material

Class 1 soils have contaminant concentrations that are less than:

- D.C. Tier 0 Soil Standards from the Tier 0 Standards Final Rulemaking published at 40 DCR 7835, 7892 (12 November 1993), as amended by Final Rulemaking published at 46 DCR 7699 (1 October 1999);
- EPA Region 3 Regional Screening Level for Residential Soil from the EPA Regional Screening Level Tables (November 2015); and
- Arsenic concentrations not exceeding background concentrations in the Washington DC area (range of 0.97 to 16.7 mg/kg according to Abouelnasr 1997).

Soils designated herein (Figure 4) as Class 1 soils have no restrictions or special requirements for onsite reuse. Class 1 soil may also be disposed off-site if desired at an appropriate facility subject to their restrictions and requirements as they may be and in accordance with applicable state and local requirements, where present.

Class 2: Restricted Material

Class 2 soils have contaminant concentrations that are greater than:

- EPA Region 3 Regional Screening Level for Residential Soil from the EPA Regional Screening Level Tables (November 2015)

but are less than:

- D.C. Tier 0 Soil Standards from the Tier 0 Standards Final Rulemaking published at 40 DCR 7835, 7892 (12 November 1993), as amended by Final Rulemaking published at 46 DCR 7699 (1 October 1999);
- EPA Region 3 Regional Screening Level for Industrial Soil from the EPA Regional Screening Level Tables (November 2015); and
- Arsenic concentrations not exceeding background concentrations in the Washington DC area (range of 0.97 to 16.7 mg/kg according to Abouelnasr 1997).

Class 2 soils can be reused onsite only if placement is restricted to non-residential areas, including beneath roadways and parking lots and in utility excavations. If reused onsite the locations of such placement should be documented; an institutional control such as a deed notice may be required. Otherwise, Class 2 soils cannot be reused onsite and must be disposed of in an offsite, regulated solid waste disposal facility, such as a solid waste landfill.

Class 3: Contaminated Material

Class 3 soils have contaminant concentrations that are greater than:

- D.C. Tier 0 Soil Standards from the Tier 0 Standards Final Rulemaking published at 40 DCR 7835, 7892 (12 November 1993), as amended by Final Rulemaking published at 46 DCR 7699 (1 October 1999);
- EPA Region 3 Regional Screening Level for Residential Soil from the EPA Regional Screening Level Tables (November 2015);
- EPA Region 3 Regional Screening Level for Industrial Soil from the EPA Regional Screening Level Tables (Novemebr 2015); and
- For arsenic, concentrations less than background in the Washington DC area (range of 0.97 to 16.7 mg/kg according to Abouelnasr 1997).

Class 3 soils cannot be reused onsite and must be disposed of in an offsite regulated solid waste disposal facility, such as a solid waste landfill. Soil for offsite disposal must be properly classified and profiled for acceptance by the selected disposal facility. The presence of other contaminants, or COPC (e.g., PCBs) at higher concentrations than identified to date, may impact the acceptability of the material by a given disposal facility.

5.2 ESTIMATED SOIL VOLUMES BASED ON CLASSIFICATION

Class 2 and Class 3 soils have restrictions for onsite use and offsite disposal as discussed above. The following volumes of Class 2 and Class 3 soils have been estimated based on the AOPCs and Soil Classifications. Based on the utility profile drawings reviewed, the maximum width of the expected excavations assumed is 30 feet centered on the center station line.

AOPC	Soil Class	Station	Depth of Impacts ft bgs	Total Excavation Depth based on Utility Profiles ft	Estimated Thickness of Impacted Soils to be Excavated based on Utility Profiles ft	Estimated Impacted Soil Volume CY
B101/ B201	Class 3	122+00 to 124+50	0 to 20	18	18	5,000
B104	Class 2	116+50 to 117+50	0 to 10	22	10	1,110
B106	Class 2	110+75 to 112+50	0 to 20	8	8	1,555
B111	Class 3	81+00 to 83+00	5 to 16	16	11	2,445
B117	Class 2	316+50 to 317+50	0 to 15	14	14	1,555
B129	Class 3	216+50 to 217+50	0 to 10	16	10	1,110
B218	Class 3	204+50 to 206+00	0 to 5	14	5	835
B219	Class 2	203+50 to 204+50	0 to 5	14	5	555
					Total of Class 2 Soils	**4,775**
					Total of Class 3 Soils	**9,390**

Notes:

1. The utility profile depths were estimated from the Sanitary Sewer Profile Drawings prepared by Delon Hampton & Associates Charted and CH2M dated December 2015. The sanitary sewer is the deepest utility to be installed.

2. Soil samples from a 2-ft sample were assumed representative of the 0-5 ft depths, 5-10 ft depths, or 10-15 ft depths as appropriate.
3. The following depth intervals were assumed to be impacted based on vertically adjacent impacted soil intervals. These intervals were assumed to be impacted due to the absence of a chemical analysis data point.

    - B101: 0-5 ft, 15-20 ft
    - B201: 15-18 ft
    - B104: 5-10 ft
    - B106: 0-5 ft, 10-20 ft
    - B111: 5-10 ft, 15-16 ft
    - B117: 5-15 ft
    - B129: 0-5 ft

    The vertical extent of impacts is not defined at all boring locations. Therefore, the depth of impacts at vertically undefined locations may be greater than the depths indicated in the table above. This should be considered if excavation depths vary from those depicted in the profile drawings referenced above.

5.3 SOIL MANAGEMENT COSIDERATIONS

The information and chemical test data contained in this report can be used by the contractor and/or its subcontractors to arrange for offsite disposition of soil. Onsite monitoring of the contractor's excavation activities is warranted to confirm the vertical and lateral limits of the various soil group classifications. Additional testing may be conducted to further refine the extents of Class 2 and Class 3 soil to potentially reduce handling and disposal costs.

Additional testing may be required for offsite disposition at certain receiving facilities. The contractor should coordinate additional testing prior to and/or during construction. The times required for additional sampling, laboratory testing, and data review should be coordinated and considered in the project sequence and schedule.

This report provides data and represents the chemical properties of the soil retrieved from explorations conducted for this study. Physical properties of the materials are noted on the boring logs in Appendix B. However, the logs document observations and conditions encountered at the specific exploration locations, and may not be representative of the bulk soil requiring management. The contractor needs to understand the physical acceptance criteria for each facility and is responsible for the material meeting that respective facility's criteria (e.g., screening excavated soils to remove oversized materials such as demolition debris as required by the facility).

5.4 OTHER MATERIAL MANAGEMENT CRITERIA

Groundwater was generally not encountered during the 2012 and 2015 investigations. The one groundwater sample collected was found to contain TPH-DRO. Insufficient data are available to determine the nature and extent of significant groundwater impacts, if any. Therefore, no recommendations can be made at this time regarding handling of water removed during construction. If

groundwater is encountered and removed from excavations it should be characterized appropriately as may be required depending on the planned disposition of the water.

If encountered, UST systems will require closure in accordance with DC Department of Energy & Environment requirements.

6. References

1. "Phase I Environmental Site Assessment Report, Proposed Saint Elizabeths East Campus Roadway Improvements," prepared by Tidewater, Inc., dated 1 March 2012.

2. "Final Department of Homeland Security Headquarter Consolidation at St. Elizabeths Master Plan Amendment – East Campus North Parcel Environmental Impact Statement," prepared by U.S. General Services Administration National Capital Region, dated March 2012.

3. "Phase II Environmental Site Assessment, St. Elizabeths East Campus, Martin Luther King Jr. (MLK) Avenue SE, Washington D.C.", prepared by Haley & Aldrich, Inc., dated November 2012

4. "Element Concentrations in Soils and other Surficial Materials of the Conterminous United States, U.S. Geological Survey Professional Paper 1270," prepared by Hansford T. Shacklette and Josephine G. Boerngen, dated 1984.

5. "Assessment of Soil Sampling Results at the American University, Washington, DC," prepared by Dana Abouelnasr, Ph.D. of Agency for Toxic Substances and Disease Registry, dated 26 August 1997. Available: http://www.atsdr.cdc.gov/sites/springvalley/consult_082697.html

6. "Managing Your Environmental Responsibilities, Section VI – Polychlorinated Biphenyl Checklist" prepared by USEPA. Available: http://archive.epa.gov/compliance/resources/publications/assistance/sectors/web/pdf/myer2_pcb.pdf

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Tables

TABLE 1
SUMMARY OF SOIL ANALYTICAL RESULTS
ST. ELIZABETH EAST CAMPUS
WASHINGTON, D.C.

Location	DC Tier 0	EPA Regional	EPA Regional	B101	B101	B102	B102	B103	B103	B104	B104	B105	B105B
Sample Date	Soil Standards [3a]	Screening Level	Screening Level	09/10/2012	09/10/2012	09/10/2012	09/10/2012	09/11/2012	09/11/2012	09/10/2012	09/10/2012	09/12/2012	09/12/2012
Sample Type		for Residential	for Industrial	N	N	N	N	N	N	N	N	N	N
Sample Depth (bgs)		Soil [3b]	Soil [3b]	8 - 10 (ft)	13 - 15 (ft)	5 - 6.5 (ft)	11 - 13 (ft)	0.5 - 1.5 (ft)	5 - 7 (ft)	1.5 - 3.5 (ft)	10 - 12 (ft)	5 - 7 (ft)	1 - 5 (ft)
Sample Name				B101-S1-8'-10'	B101-S2-13'-15'	B102-S2-5'-6_5'	B102-S1-11'-13'	B103-S1-0_5'-1_5'	B103-S2-5'-7'	B104-S1-1_5'-3_5'	B104-S2-10'-12'	B105-S1-5'-7'	B105B-S1-1'-5'
Semi-Volatile Organic Compounds (mg/kg)													
2-Methylnaphthalene	-	240	3000	**0.13**	**0.11**	< 0.005	< 0.005	-	-	**0.009**	< 0.005	-	-
Acenaphthene	-	3600	45000	**0.51**	< 0.006	< 0.005	< 0.005	-	-	< 0.006	< 0.005	-	-
Acenaphthylene	-	-	-	**0.057**	< 0.006	< 0.005	< 0.005	-	-	**0.007**	< 0.005	-	-
Anthracene	-	18000	230000	**1.3**	**0.006**	< 0.005	< 0.005	-	-	**0.007**	< 0.005	-	-
Benzo(a)anthracene	-	0.16	2.9	**2**	**0.022**	**0.008**	< 0.005	-	-	**0.036**	< 0.005	-	-
Benzo(a)pyrene	-	0.016	0.29	**2.5**	**0.02**	**0.01**	< 0.005	-	-	**0.058**	**0.013**	-	-
Benzo(b)fluoranthene	-	0.16	2.9	**3.4**	**0.041**	**0.016**	< 0.005	-	-	**0.082**	**0.025**	-	-
Benzo(g,h,i)perylene	-	-	-	**1.5**	**0.014**	**0.005**	< 0.005	-	-	**0.037**	**0.007**	-	-
Benzo(k)fluoranthene	-	1.6	29	**1.5**	**0.011**	**0.006**	< 0.005	-	-	**0.025**	**0.008**	-	-
Chrysene	-	16	290	**1.8**	**0.02**	**0.007**	< 0.005	-	-	**0.045**	< 0.005	-	-
Dibenz(a,h)anthracene	-	0.016	0.29	**0.44**	< 0.006	< 0.005	< 0.005	-	-	**0.008**	< 0.005	-	-
Fluoranthene	-	2400	30000	**4**	**0.06**	**0.014**	< 0.005	-	-	**0.053**	**0.019**	-	-
Fluorene	-	2400	30000	**0.69**	< 0.006	< 0.005	< 0.005	-	-	< 0.006	< 0.005	-	-
Indeno(1,2,3-cd)pyrene	-	0.16	2.9	**1.4**	**0.011**	< 0.005	< 0.005	-	-	**0.023**	< 0.005	-	-
Naphthalene	-	3.8	17	**0.16**	**0.031**	< 0.005	< 0.005	-	-	**0.008**	< 0.005	-	-
Phenanthrene	-	-	-	**3.3**	**0.15**	**0.007**	< 0.005	-	-	**0.032**	**0.021**	-	-
Pyrene	-	1800	23000	**3.4**	**0.05**	**0.012**	< 0.005	-	-	**0.064**	**0.019**	-	-
Total Petroleum Hydrocarbons (mg/kg)													
Gasoline Range Organics	100	-	-	-	-	-	-	-	-	-	-	-	-
Total Petroleum Hydrocarbons (C6-C10) GRO	100	-	-	**0.81**	**1.6**	< 0.17	< 0.19	< 0.23	< 0.2	< 0.17	< 0.16	< 0.18	< 0.18
Total Petroleum Hydrocarbons (C10-C28) DRO	100	-	-	**260**	**440**	< 11	< 11	< 12	< 12	**35**	**62**	< 12	**23**
Total Petroleum Hydrocarbons (>C28-C40) ORO	100	-	-	**26**	**45**	< 11	< 11	< 12	< 12	**17**	**36**	< 12	< 11
Inorganic Compounds (mg/kg)													
Arsenic	-	0.68	3	**5.5**	**3.6**	**4.1**	**3.1**	-	-	**4.7**	**2.3**	-	-
Barium	-	15000	220000	**170**	**50**	**35**	**11**	-	-	**89**	**21**	-	-
Chromium	-	-	-	**15**	**20**	**15**	**9.7**	-	-	**21**	**16**	-	-
Lead	-	400	800	**230**	**22**	**12**	**3.2**	-	-	**38**	**4.9**	-	-
Mercury	-	11	46	**2.6**	< 0.12	< 0.095	< 0.081	-	-	**0.13**	< 0.085	-	-
TCLP Inorganic Compounds (mg/L)													
Lead	-	-	-	-	-	-	-	-	-	-	-	-	-
Other (%)													
Total Solids	-	-	-	**84**	**79**	**94**	**90**	**85**	**84**	**87**	**93**	**90**	**95**
PCBs (mg/kg)													
Aroclor-1260 (PCB-1260)	-	0.24	0.99	< 1.5	**7.8**	< 0.053	< 0.052	-	-	< 0.063	< 0.051	< 0.052	< 0.054
Polychlorinated biphenyls (PCBs)	-	0.23	0.94	-	-	-	-	-	-	-	-	-	-
BTEX (mg/kg)													
Toluene	9.6	4900	47000	< 0.005	< 0.007	-	-	< 0.005	< 0.005	< 0.005	< 0.005	< 0.004	< 0.004
BTEX Sum	10	-	-	ND	ND	-	-	ND	ND	ND	ND	ND	ND
Volatile Organic Compounds (mg/kg)													
2-Butanone (Methyl Ethyl Ketone)	-	27000	190000	< 0.054	< 0.066	-	-	< 0.051	< 0.046	< 0.054	< 0.046	-	-
Acetone	-	61000	670000	< 0.22	< 0.079	-	-	< 0.051	< 0.055	< 0.08	< 0.046	-	-
Methyl acetate	-	78000	1200000	< 0.027	< 0.033	-	-	< 0.026	< 0.023	< 0.027	< 0.023	-	-

Notes and abbreviations are on last page.

TABLE 1
SUMMARY OF SOIL ANALYTICAL RESULTS
ST. ELIZABETH EAST CAMPUS
WASHINGTON, D.C.

Location	DC Tier 0	EPA Regional	EPA Regional	B106	B106	B107	B107	B110	B110	B111	B111	B112	B112
Sample Date	Soil Standards [3a]	Screening Level	Screening Level	09/12/2012	09/12/2012	09/12/2012	09/12/2012	09/12/2012	09/12/2012	09/11/2012	09/11/2012	09/11/2012	09/11/2012
Sample Type		for Residential	for Industrial	N	N	N	N	N	N	N	N	N	N
Sample Depth (bgs)		Soil [3b]	Soil [3b]	7 - 9 (ft)	21 - 23 (ft)	5 - 7 (ft)	20 - 22 (ft)	3 - 5 (ft)	13 - 15 (ft)	1 - 3 (ft)	10 - 12 (ft)	5 - 6 (ft)	18 - 20 (ft)
Sample Name				B106-S1-7'-9'	B106-S2-21'-23'	B107-S1-5'-7'	B107-S2-20'-22'	B110-S1-3'-5'	B110-S2-13'-15'	B111-S2-1'-3'	B111-S1-10'-12'	B112-S1-5'-6'	B112-S2-18'-20'
Semi-Volatile Organic Compounds (mg/kg)													
2-Methylnaphthalene	-	240	3000	**0.011**	< 0.006	-	-	-	-	-	-	-	-
Acenaphthene	-	3600	45000	**0.005**	< 0.006	-	-	-	-	-	-	-	-
Acenaphthylene	-	-	-	< 0.005	< 0.006	-	-	-	-	-	-	-	-
Anthracene	-	18000	230000	**0.011**	**0.009**	-	-	-	-	-	-	-	-
Benzo(a)anthracene	-	0.16	2.9	**0.02**	**0.013**	-	-	-	-	-	-	-	-
Benzo(a)pyrene	-	0.016	0.29	**0.019**	**0.011**	-	-	-	-	-	-	-	-
Benzo(b)fluoranthene	-	0.16	2.9	**0.023**	**0.013**	-	-	-	-	-	-	-	-
Benzo(g,h,i)perylene	-	-	-	**0.017**	**0.013**	-	-	-	-	-	-	-	-
Benzo(k)fluoranthene	-	1.6	29	**0.018**	**0.014**	-	-	-	-	-	-	-	-
Chrysene	-	16	290	**0.021**	**0.014**	-	-	-	-	-	-	-	-
Dibenz(a,h)anthracene	-	0.016	0.29	**0.012**	**0.011**	-	-	-	-	-	-	-	-
Fluoranthene	-	2400	30000	**0.025**	**0.011**	-	-	-	-	-	-	-	-
Fluorene	-	2400	30000	**0.006**	< 0.006	-	-	-	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	-	0.16	2.9	**0.016**	**0.011**	-	-	-	-	-	-	-	-
Naphthalene	-	3.8	17	< 0.005	< 0.006	-	-	-	-	-	-	-	-
Phenanthrene	-	-	-	**0.018**	**0.009**	-	-	-	-	-	-	-	-
Pyrene	-	1800	23000	**0.025**	**0.011**	-	-	-	-	-	-	-	-
Total Petroleum Hydrocarbons (mg/kg)													
Gasoline Range Organics	100	-	-	-	-	-	-	-	-	-	-	-	-
Total Petroleum Hydrocarbons (C6-C10) GRO	100	-	-	< 0.18	< 0.21	< 0.2	< 0.17	< 0.19	< 0.17	< 0.18	< 0.18	< 0.2	< 0.19
Total Petroleum Hydrocarbons (C10-C28) DRO	100	-	-	< 11	< 13	< 12	< 11	< 11	< 11	< 11	**170**	**22**	< 11
Total Petroleum Hydrocarbons (>C28-C40) ORO	100	-	-	< 11	< 13	< 12	< 11	< 11	< 11	< 11	**170**	**19**	< 11
Inorganic Compounds (mg/kg)													
Arsenic	-	0.68	3	**5.3**	**0.88**	-	-	-	-	-	-	-	-
Barium	-	15000	220000	**72**	**5.6**	-	-	-	-	-	-	-	-
Chromium	-	-	-	**20**	**2.9**	-	-	-	-	-	-	-	-
Lead	-	400	800	**23**	**2.8**	-	-	-	-	-	-	-	-
Mercury	-	11	46	< 0.11	< 0.11	-	-	-	-	-	-	-	-
TCLP Inorganic Compounds (mg/L)													
Lead	-	-	-	-	-	-	-	-	-	-	-	-	-
Other (%)													
Total Solids	-	-	-	**90**	**77**	**83**	**90**	**88**	**90**	**90**	**94**	**81**	**91**
PCBs (mg/kg)													
Aroclor-1260 (PCB-1260)	-	0.24	0.99	< 0.053	< 0.062	< 0.058	< 0.055	< 0.055	< 0.055	< 0.055	< 0.052	< 0.065	< 0.058
Polychlorinated biphenyls (PCBs)	-	0.23	0.94	-	-	-	-	-	-	-	-	-	-
BTEX (mg/kg)													
Toluene	9.6	4900	47000	< 0.004	< 0.004	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.006	< 0.004	< 0.005
BTEX Sum	10	-	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Volatile Organic Compounds (mg/kg)													
2-Butanone (Methyl Ethyl Ketone)	-	27000	190000	< 0.041	< 0.043	-	-	-	-	-	-	-	-
Acetone	-	61000	670000	< 0.041	< 0.043	-	-	-	-	-	-	-	-
Methyl acetate	-	78000	1200000	< 0.02	< 0.022	-	-	-	-	-	-	-	-

Notes and abbreviations are on last page.

TABLE 1
SUMMARY OF SOIL ANALYTICAL RESULTS
ST. ELIZABETH EAST CAMPUS
WASHINGTON, D.C.

Location	DC Tier 0	EPA Regional	EPA Regional	B113	B114	B114	B115	B115	B116	B117	B117	B118	B119
Sample Date	Soil Standards [3a]	Screening Level	Screening Level	09/10/2012	09/12/2012	09/12/2012	09/12/2012	09/12/2012	09/11/2012	09/11/2012	09/11/2012	09/11/2012	09/10/2012
Sample Type		for Residential	for Industrial	N	N	N	N	N	N	N	N	N	N
Sample Depth (bgs)		Soil [3b]	Soil [3b]	5 - 7 (ft)	3 - 5 (ft)	13 - 15 (ft)	5 - 7 (ft)	12 - 14 (ft)	6 - 8 (ft)	2 - 4 (ft)	15 - 17 (ft)	10 - 11 (ft)	5 - 7 (ft)
Sample Name				B113-S1-5'-7'	B114-S1-3'-5'	B114-S2-13'-15'	B115-S1-5'-7'	B115-S2-12'-14'	B116-S1-6'-8'	B117-S2-2'-4'	B117-S1-15'-17'	B118-S1-10'-11'	B119-S1-5'-7'
Semi-Volatile Organic Compounds (mg/kg)													
2-Methylnaphthalene	-	240	3000	-	-	-	-	-	-	< 0.006	< 0.006	-	-
Acenaphthene	-	3600	45000	-	-	-	-	-	-	< 0.006	< 0.006	-	-
Acenaphthylene	-	-	-	-	-	-	-	-	-	< 0.006	< 0.006	-	-
Anthracene	-	18000	230000	-	-	-	-	-	-	< 0.006	< 0.006	-	-
Benzo(a)anthracene	-	0.16	2.9	-	-	-	-	-	-	**0.017**	< 0.006	-	-
Benzo(a)pyrene	-	0.016	0.29	-	-	-	-	-	-	**0.029**	< 0.006	-	-
Benzo(b)fluoranthene	-	0.16	2.9	-	-	-	-	-	-	**0.049**	**0.006**	-	-
Benzo(g,h,i)perylene	-	-	-	-	-	-	-	-	-	**0.014**	< 0.006	-	-
Benzo(k)fluoranthene	-	1.6	29	-	-	-	-	-	-	**0.016**	< 0.006	-	-
Chrysene	-	16	290	-	-	-	-	-	-	**0.023**	< 0.006	-	-
Dibenz(a,h)anthracene	-	0.016	0.29	-	-	-	-	-	-	< 0.006	< 0.006	-	-
Fluoranthene	-	2400	30000	-	-	-	-	-	-	**0.03**	**0.007**	-	-
Fluorene	-	2400	30000	-	-	-	-	-	-	< 0.006	< 0.006	-	-
Indeno(1,2,3-cd)pyrene	-	0.16	2.9	-	-	-	-	-	-	**0.012**	< 0.006	-	-
Naphthalene	-	3.8	17	-	-	-	-	-	-	< 0.006	< 0.006	-	-
Phenanthrene	-	-	-	-	-	-	-	-	-	**0.013**	< 0.006	-	-
Pyrene	-	1800	23000	-	-	-	-	-	-	**0.021**	**0.006**	-	-
Total Petroleum Hydrocarbons (mg/kg)													
Gasoline Range Organics	100	-	-	-	-	-	-	-	-	-	-	-	-
Total Petroleum Hydrocarbons (C6-C10) GRO	100	-	-	< 0.21	< 0.19	< 0.2	< 0.2	< 0.15	< 0.24	< 0.2	< 0.21	**0.22**	< 0.14
Total Petroleum Hydrocarbons (C10-C28) DRO	100	-	-	**20**	< 11	< 12	< 11	< 11	< 12	**13**	< 12	< 12	< 11
Total Petroleum Hydrocarbons (>C28-C40) ORO	100	-	-	**13**	< 11	< 12	< 11	< 11	< 12	< 12	< 12	< 12	< 11
Inorganic Compounds (mg/kg)													
Arsenic	-	0.68	3	-	-	-	-	-	-	**6.3**	**0.77**	-	-
Barium	-	15000	220000	-	-	-	-	-	-	**51**	**21**	-	-
Chromium	-	-	-	-	-	-	-	-	-	**25**	**12**	-	-
Lead	-	400	800	-	-	-	-	-	-	**27**	**5.9**	-	-
Mercury	-	11	46	-	-	-	-	-	-	**0.12**	< 0.093	-	-
TCLP Inorganic Compounds (mg/L)													
Lead	-	-	-	-	-	-	-	-	-	-	-	-	-
Other (%)													
Total Solids	-	-	-	**86**	**87**	**85**	**87**	**94**	**85**	**85**	**87**	**84**	**84**
PCBs (mg/kg)													
Aroclor-1260 (PCB-1260)	-	0.24	0.99	-	-	-	< 0.055	< 0.051	< 0.054	< 0.061	< 0.06	< 0.062	-
Polychlorinated biphenyls (PCBs)	-	0.23	0.94	-	-	-	-	-	-	-	-	-	-
BTEX (mg/kg)													
Toluene	9.6	4900	47000	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
BTEX Sum	10	-	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Volatile Organic Compounds (mg/kg)													
2-Butanone (Methyl Ethyl Ketone)	-	27000	190000	-	-	-	-	-	-	< 0.055	< 0.048	-	-
Acetone	-	61000	670000	-	-	-	-	-	-	< 0.14	< 0.048	-	-
Methyl acetate	-	78000	1200000	-	-	-	-	-	-	< 0.027	< 0.024	-	-

Notes and abbreviations are on last page.

TABLE 1
SUMMARY OF SOIL ANALYTICAL RESULTS
ST. ELIZABETH EAST CAMPUS
WASHINGTON, D.C.

Location	DC Tier 0	EPA Regional	EPA Regional	B120	B121	B121	B122	B123	B124	B125	B125	B126	B127
Sample Date	Soil Standards [3a]	Screening Level	Screening Level	09/10/2012	09/12/2012	09/12/2012	09/10/2012	09/10/2012	09/10/2012	09/11/2012	09/11/2012	09/11/2012	09/10/2012
Sample Type		for Residential	for Industrial	N	N	N	N	N	N	N	N	N	N
Sample Depth (bgs)		Soil [3b]	Soil [3b]	5 - 7 (ft)	5 - 7 (ft)	13 - 15 (ft)	0.5 - 2.5 (ft)	5 - 7 (ft)	5 - 7 (ft)	1 - 3 (ft)	8 - 10 (ft)	18 - 20 (ft)	5 - 7 (ft)
Sample Name				B120-S1-5'-7'	B121-S1-5'-7'	B121-S1-13'-15'	B122-S1-0_5'-2_5'	B123-S1-5'-7'	B124-S1-5'-7'	B125-S1-1'-3'	B125-S2-8'-10'	B126-S1-18'-20'	B127-S1-5'-7'
Semi-Volatile Organic Compounds (mg/kg)													
2-Methylnaphthalene	-	240	3000	-	< 0.006	< 0.005	-	-	-	< 0.006	< 0.005	-	**0.012**
Acenaphthene	-	3600	45000	-	**0.006**	< 0.005	-	-	-	< 0.006	< 0.005	-	< 0.006
Acenaphthylene	-	-	-	-	< 0.006	< 0.005	-	-	-	< 0.006	< 0.005	-	< 0.006
Anthracene	-	18000	230000	-	**0.013**	**0.005**	-	-	-	< 0.006	< 0.005	-	< 0.006
Benzo(a)anthracene	-	0.16	2.9	-	**0.016**	**0.007**	-	-	-	< 0.006	< 0.005	-	< 0.006
Benzo(a)pyrene	-	0.016	0.29	-	**0.015**	**0.007**	-	-	-	< 0.006	< 0.005	-	< 0.006
Benzo(b)fluoranthene	-	0.16	2.9	-	**0.019**	**0.008**	-	-	-	**0.008**	**0.008**	-	< 0.006
Benzo(g,h,i)perylene	-	-	-	-	**0.015**	**0.005**	-	-	-	< 0.006	< 0.005	-	< 0.006
Benzo(k)fluoranthene	-	1.6	29	-	**0.016**	**0.008**	-	-	-	< 0.006	< 0.005	-	< 0.006
Chrysene	-	16	290	-	**0.023**	**0.008**	-	-	-	< 0.006	< 0.005	-	< 0.006
Dibenz(a,h)anthracene	-	0.016	0.29	-	**0.014**	**0.005**	-	-	-	< 0.006	< 0.005	-	< 0.006
Fluoranthene	-	2400	30000	-	**0.018**	**0.006**	-	-	-	**0.008**	**0.008**	-	< 0.006
Fluorene	-	2400	30000	-	**0.006**	< 0.005	-	-	-	< 0.006	< 0.005	-	< 0.006
Indeno(1,2,3-cd)pyrene	-	0.16	2.9	-	**0.015**	**0.005**	-	-	-	< 0.006	< 0.005	-	< 0.006
Naphthalene	-	3.8	17	-	< 0.006	< 0.005	-	-	-	< 0.006	< 0.005	-	< 0.006
Phenanthrene	-	-	-	-	**0.021**	**0.005**	-	-	-	**0.011**	**0.005**	-	< 0.006
Pyrene	-	1800	23000	-	**0.018**	**0.007**	-	-	-	**0.007**	**0.007**	-	< 0.006
Total Petroleum Hydrocarbons (mg/kg)													
Gasoline Range Organics	100	-	-	-	-	-	-	-	-	-	-	-	-
Total Petroleum Hydrocarbons (C6-C10) GRO	100	-	-	**0.26**	< 0.21	< 0.17	< 0.21	< 0.23	**0.21**	< 0.17	< 0.19	< 0.15	< 0.27
Total Petroleum Hydrocarbons (C10-C28) DRO	100	-	-	< 12	**13**	< 10	< 13	< 12	< 13	< 12	< 11	< 10	< 12
Total Petroleum Hydrocarbons (>C28-C40) ORO	100	-	-	< 12	< 12	< 10	< 13	< 12	< 13	< 12	< 11	< 10	< 12
Inorganic Compounds (mg/kg)													
Arsenic	-	0.68	3	-	**6.1**	**0.56**	-	-	-	**2.9**	**2.8**	-	**4**
Barium	-	15000	220000	-	**46**	**4.1**	-	-	-	**63**	**16**	-	**44**
Chromium	-	-	-	-	**34**	**2.6**	-	-	-	**17**	**14**	-	**23**
Lead	-	400	800	-	**18**	**2.2**	-	-	-	**16**	**7.7**	-	**15**
Mercury	-	11	46	-	< 0.12	< 0.076	-	-	-	**0.18**	< 0.11	-	< 0.077
TCLP Inorganic Compounds (mg/L)													
Lead	-	-	-	-	-	-	-	-	-	-	-	-	-
Other (%)													
Total Solids	-	-	-	**84**	**82**	**96**	**77**	**83**	**83**	**83**	**87**	**95**	**87**
PCBs (mg/kg)													
Aroclor-1260 (PCB-1260)	-	0.24	0.99	-	< 0.06	< 0.049	-	-	-	< 0.058	< 0.053	-	< 0.057
Polychlorinated biphenyls (PCBs)	-	0.23	0.94	-	-	-	-	-	-	-	-	-	-
BTEX (mg/kg)													
Toluene	9.6	4900	47000	< 0.004	< 0.005	< 0.004	< 0.006	< 0.005	< 0.005	< 0.005	< 0.005	< 0.003	< 0.005
BTEX Sum	10	-	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Volatile Organic Compounds (mg/kg)													
2-Butanone (Methyl Ethyl Ketone)	-	27000	190000	-	< 0.054	< 0.044	-	-	-	< 0.047	< 0.054	-	< 0.052
Acetone	-	61000	670000	-	< 0.054	< 0.044	-	-	-	< 0.047	< 0.054	-	< 0.052
Methyl acetate	-	78000	1200000	-	< 0.027	< 0.022	-	-	-	< 0.024	< 0.027	-	< 0.026

Notes and abbreviations are on last page.

TABLE 1
SUMMARY OF SOIL ANALYTICAL RESULTS
ST. ELIZABETH EAST CAMPUS
WASHINGTON, D.C.

Location	DC Tier 0	EPA Regional	EPA Regional	B128	B129	B129	B201	B201	B201	B202	B202
Sample Date	Soil Standards [3a]	Screening Level	Screening Level	09/10/2012	09/11/2012	09/11/2012	12/15/2015	12/15/2015	12/15/2015	12/15/2015	12/15/2015
Sample Type		for Residential	for Industrial	N	N	N	N	N	N	N	N
Sample Depth (bgs)		Soil [3b]	Soil [3b]	5 - 7 (ft)	5 - 7 (ft)	13 - 15 (ft)	0 - 5 (ft)	5 - 10 (ft)	12 - 14 (ft)	0 - 5 (ft)	5 - 10 (ft)
Sample Name				B128-S1-5'-7'	B129-S1-5'-7'	B129-S2-13'-15'	B-201-1215-0805-0-5	B-201-1215-0825-5-10	B-201-1215-0840-12-14	B-202-1215-0915-0-5	B-202-1215-0925-5-10
Semi-Volatile Organic Compounds (mg/kg)											
2-Methylnaphthalene	-	240	3000	-	< 0.006	< 0.005	< 0.23	< 0.23	**0.26**	< 0.21	< 0.21
Acenaphthene	-	3600	45000	-	< 0.006	< 0.005	< 0.15	**0.35**	< 0.17	< 0.14	< 0.14
Acenaphthylene	-	-	-	-	< 0.006	< 0.005	< 0.15	**0.76**	< 0.17	< 0.14	< 0.14
Anthracene	-	18000	230000	-	< 0.006	< 0.005	**0.15**	**1.2**	< 0.13	< 0.1	< 0.1
Benzo(a)anthracene	-	0.16	2.9	-	**0.007**	**0.007**	**0.47**	**4.6**	< 0.13	< 0.1	< 0.1
Benzo(a)pyrene	-	0.016	0.29	-	**0.014**	**0.009**	**0.44**	**4.1**	< 0.17	< 0.14	< 0.14
Benzo(b)fluoranthene	-	0.16	2.9	-	**0.023**	**0.011**	**0.54**	**4.9**	< 0.13	< 0.1	< 0.1
Benzo(g,h,i)perylene	-	-	-	-	**0.012**	**0.006**	**0.24**	**2.2**	< 0.17	< 0.14	< 0.14
Benzo(k)fluoranthene	-	1.6	29	-	**0.007**	**0.011**	**0.22**	**2**	< 0.13	< 0.1	< 0.1
Chrysene	-	16	290	-	**0.02**	**0.007**	**0.46**	**4**	< 0.13	< 0.1	< 0.1
Dibenz(a,h)anthracene	-	0.016	0.29	-	< 0.006	**0.006**	< 0.11	**0.73**	< 0.13	< 0.1	< 0.1
Fluoranthene	-	2400	30000	-	**0.009**	**0.006**	**0.98**	**6.2**	< 0.13	< 0.1	< 0.1
Fluorene	-	2400	30000	-	< 0.006	< 0.005	< 0.19	**0.37**	< 0.22	< 0.17	< 0.18
Indeno(1,2,3-cd)pyrene	-	0.16	2.9	-	< 0.006	**0.006**	**0.27**	**2.6**	< 0.17	< 0.14	< 0.14
Naphthalene	-	3.8	17	-	< 0.006	< 0.005	< 0.19	**0.56**	< 0.22	< 0.17	< 0.18
Phenanthrene	-	-	-	-	**0.008**	< 0.005	**0.62**	**3.3**	**0.32**	< 0.1	< 0.1
Pyrene	-	1800	23000	-	**0.012**	**0.008**	**0.85**	**6**	< 0.13	< 0.1	< 0.1
Total Petroleum Hydrocarbons (mg/kg)											
Gasoline Range Organics	100	-	-	-	-	-					
Total Petroleum Hydrocarbons (C6-C10) GRO	100	-	-	< 0.23	< 0.2	< 0.19	< 2.6	< 2.9	< 2.4	< 2.9	< 2.3
Total Petroleum Hydrocarbons (C10-C28) DRO	100	-	-	< 11	**280**	< 11	**0.0133**	**0.108**	**0.639**	**0.00731**	**0.00919**
Total Petroleum Hydrocarbons (>C28-C40) ORO	100	-	-	< 11	**340**	< 11	**0.0322**	**0.0809**	**0.493**	**0.0314**	**0.0166**
Inorganic Compounds (mg/kg)											
Arsenic	-	0.68	3	-	**5.7**	**0.91**	**2.6**	**3.3**	**2.6**	**0.67**	**2.9**
Barium	-	15000	220000	-	**42**	**29**	**79**	**120**	**49**	**3**	**31**
Chromium	-	-	-	-	**30**	**4.9**	**12**	**9.4**	**11**	**3.1**	**12**
Lead	-	400	800	-	**15**	**13**	**17**	**110**	**11**	< 2.1	**4.4**
Mercury	-	11	46	-	< 0.11	< 0.058	**0.11**	**1.5**	< 0.09	< 0.07	**0.08**
TCLP Inorganic Compounds (mg/L)											
Lead	-	-	-	-	-	-	-	< 0.5	-	-	-
Other (%)											
Total Solids	-	-	-	**85**	**84**	**94**	**86.9**	**86.7**	**77**	**93.7**	**91.9**
PCBs (mg/kg)											
Aroclor-1260 (PCB-1260)	-	0.24	0.99	-	< 0.056	< 0.057	< 0.0367	< 0.0375	**1.36**	< 0.0343	< 0.036
Polychlorinated biphenyls (PCBs)	-	0.23	0.94	-	-	-	< 0.0367	< 0.0375	**1.36**	< 0.0343	< 0.036
BTEX (mg/kg)											
Toluene	9.6	4900	47000	< 0.005	< 0.005	< 0.005	< 0.0014	< 0.0014	< 0.0019	< 0.0017	**0.0022**
BTEX Sum	10	-	-	ND	ND	ND	ND	ND	ND	ND	**0.0022**
Volatile Organic Compounds (mg/kg)											
2-Butanone (Methyl Ethyl Ketone)	-	27000	190000	-	< 0.048	< 0.049	< 0.0093	< 0.0096	< 0.013	< 0.012	< 0.0099
Acetone	-	61000	670000	-	< 0.048	< 0.098	< 0.033	**0.063**	< 0.046	< 0.042	< 0.036
Methyl acetate	-	78000	1200000	-	< 0.024	< 0.025	< 0.0037	< 0.0038	< 0.0051	< 0.0046	< 0.004

Notes and abbreviations are on last page.

TABLE 1
SUMMARY OF SOIL ANALYTICAL RESULTS
ST. ELIZABETH EAST CAMPUS
WASHINGTON, D.C.

Location	DC Tier 0	EPA Regional	EPA Regional	B202	B203	B203	B203	B204	B204	B204
Sample Date	Soil Standards [3a]	Screening Level	Screening Level	12/15/2015	12/15/2015	12/15/2015	12/15/2015	12/15/2015	12/15/2015	12/15/2015
Sample Type		for Residential	for Industrial	N	N	N	N	N	N	N
Sample Depth (bgs)		Soil [3b]	Soil [3b]	10 - 15 (ft)	0 - 5 (ft)	5 - 10 (ft)	10 - 15 (ft)	0 - 5 (ft)	5 - 10 (ft)	10 - 15 (ft)
Sample Name				B-202-1215-0930-10-15	B-203-1215-1040-0-5	B-203-1215-1045-5-10	B-203-1215-1050-10-15	B-204-1215-1125-0-5	B-204-1215-1130-5-10	B-204-1215-1135-10-15
Semi-Volatile Organic Compounds (mg/kg)										
2-Methylnaphthalene	-	240	3000	< 0.21	< 0.21	< 0.23	< 0.22	< 0.23	< 0.22	< 0.22
Acenaphthene	-	3600	45000	< 0.14	< 0.14	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15
Acenaphthylene	-	-	-	< 0.14	< 0.14	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15
Anthracene	-	18000	230000	< 0.11	< 0.1	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11
Benzo(a)anthracene	-	0.16	2.9	< 0.11	< 0.1	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11
Benzo(a)pyrene	-	0.016	0.29	< 0.14	< 0.14	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15
Benzo(b)fluoranthene	-	0.16	2.9	< 0.11	< 0.1	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11
Benzo(g,h,i)perylene	-	-	-	< 0.14	< 0.14	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15
Benzo(k)fluoranthene	-	1.6	29	< 0.11	< 0.1	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11
Chrysene	-	16	290	< 0.11	< 0.1	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11
Dibenz(a,h)anthracene	-	0.016	0.29	< 0.11	< 0.1	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11
Fluoranthene	-	2400	30000	< 0.11	< 0.1	< 0.11	< 0.11	**0.12**	< 0.11	< 0.11
Fluorene	-	2400	30000	< 0.18	< 0.18	< 0.19	< 0.18	< 0.19	< 0.18	< 0.18
Indeno(1,2,3-cd)pyrene	-	0.16	2.9	< 0.14	< 0.14	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15
Naphthalene	-	3.8	17	< 0.18	< 0.18	< 0.19	< 0.18	< 0.19	< 0.18	< 0.18
Phenanthrene	-	-	-	< 0.11	< 0.1	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11
Pyrene	-	1800	23000	< 0.11	< 0.1	< 0.11	< 0.11	**0.13**	< 0.11	< 0.11
Total Petroleum Hydrocarbons (mg/kg)										
Gasoline Range Organics	100	-	-							
Total Petroleum Hydrocarbons (C6-C10) GRO	100	-	-	< 2.8	< 2.4	< 2.2	< 2.6	< 2.3	< 2.3	< 2.2
Total Petroleum Hydrocarbons (C10-C28) DRO	100	-	-	**0.00196**	< 0.0015	**0.0057**	< 0.00155	**0.00462**	< 0.00152	**0.0137**
Total Petroleum Hydrocarbons (>C28-C40) ORO	100	-	-	**0.00758**	< 0.000784	**0.0116**	< 0.000812	**0.00674**	< 0.000796	**0.0332**
Inorganic Compounds (mg/kg)										
Arsenic	-	0.68	3	**3.8**	**4**	**4**	**1.2**	**3.8**	**0.86**	**7.5**
Barium	-	15000	220000	**12**	**28**	**36**	**13**	**48**	**10**	**38**
Chromium	-	-	-	**13**	**13**	**18**	**3.2**	**14**	**6.5**	**18**
Lead	-	400	800	< 2.2	**2.1**	**3**	< 2.2	**14**	**4.7**	**8.5**
Mercury	-	11	46	< 0.07	**0.1**	**0.09**	< 0.07	< 0.07	**0.08**	**0.08**
TCLP Inorganic Compounds (mg/L)										
Lead	-	-	-	-	-	-	-	-	-	-
Other (%)										
Total Solids	-	-	-	**91.9**	**93**	**87.3**	**90.5**	**86**	**89.7**	**89**
PCBs (mg/kg)										
Aroclor-1260 (PCB-1260)	-	0.24	0.99	< 0.0357	< 0.0353	< 0.0371	< 0.0351	< 0.0374	< 0.0363	< 0.0363
Polychlorinated biphenyls (PCBs)	-	0.23	0.94	< 0.0357	< 0.0353	< 0.0371	< 0.0351	< 0.0374	< 0.0363	< 0.0363
BTEX (mg/kg)										
Toluene	9.6	4900	47000	**0.002**	< 0.0014	< 0.0013	< 0.0013	< 0.0014	< 0.0013	< 0.0012
BTEX Sum	10	-	-	**0.002**	ND	ND	ND	ND	ND	ND
Volatile Organic Compounds (mg/kg)										
2-Butanone (Methyl Ethyl Ketone)	-	27000	190000	< 0.0074	< 0.0093	< 0.0085	< 0.0088	< 0.0092	< 0.0086	< 0.0083
Acetone	-	61000	670000	< 0.026	**0.045**	< 0.031	< 0.032	< 0.033	< 0.031	< 0.03
Methyl acetate	-	78000	1200000	< 0.0029	< 0.0037	< 0.0034	< 0.0035	< 0.0037	< 0.0034	< 0.0033

Notes and abbreviations are on last page.

TABLE 1
SUMMARY OF SOIL ANALYTICAL RESULTS
ST. ELIZABETH EAST CAMPUS
WASHINGTON, D.C.

Location	DC Tier 0	EPA Regional	EPA Regional	B205	B205	B205	B206	B206	B206	B207
Sample Date	Soil Standards [3a]	Screening Level	Screening Level	12/15/2015	12/15/2015	12/15/2015	12/15/2015	12/15/2015	12/15/2015	12/15/2015
Sample Type		for Residential	for Industrial	N	N	N	N	N	N	N
Sample Depth (bgs)		Soil [3b]	Soil [3b]	0 - 5 (ft)	5 - 10 (ft)	10 - 15 (ft)	0 - 5 (ft)	5 - 10 (ft)	10 - 15 (ft)	0 - 5 (ft)
Sample Name				B-205-1215-1230-0-5	B-205-1215-1235-5-10	B-205-1215-1240-10-15	B-206-1215-1310-0-5	B-206-1215-1315-5-10	B-206-1215-1320-10-15	B207-1215-1420-0-5
Semi-Volatile Organic Compounds (mg/kg)										
2-Methylnaphthalene	-	240	3000	< 0.22	< 0.22	< 0.22	< 0.23	< 0.23	< 0.22	< 0.24
Acenaphthene	-	3600	45000	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	< 0.16
Acenaphthylene	-	-	-	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	< 0.16
Anthracene	-	18000	230000	< 0.11	< 0.11	< 0.11	< 0.11	< 0.12	< 0.11	< 0.12
Benzo(a)anthracene	-	0.16	2.9	< 0.11	< 0.11	< 0.11	< 0.11	< 0.12	< 0.11	< 0.12
Benzo(a)pyrene	-	0.016	0.29	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	< 0.16
Benzo(b)fluoranthene	-	0.16	2.9	< 0.11	< 0.11	< 0.11	< 0.11	< 0.12	< 0.11	< 0.12
Benzo(g,h,i)perylene	-	-	-	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	< 0.16
Benzo(k)fluoranthene	-	1.6	29	< 0.11	< 0.11	< 0.11	< 0.11	< 0.12	< 0.11	< 0.12
Chrysene	-	16	290	< 0.11	< 0.11	< 0.11	< 0.11	< 0.12	< 0.11	< 0.12
Dibenz(a,h)anthracene	-	0.016	0.29	< 0.11	< 0.11	< 0.11	< 0.11	< 0.12	< 0.11	< 0.12
Fluoranthene	-	2400	30000	< 0.11	< 0.11	< 0.11	< 0.11	< 0.12	**0.2**	< 0.12
Fluorene	-	2400	30000	< 0.18	< 0.18	< 0.18	< 0.19	< 0.19	< 0.18	< 0.2
Indeno(1,2,3-cd)pyrene	-	0.16	2.9	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	< 0.16
Naphthalene	-	3.8	17	< 0.18	< 0.18	< 0.18	< 0.19	< 0.19	< 0.18	< 0.2
Phenanthrene	-	-	-	< 0.11	< 0.11	< 0.11	< 0.11	< 0.12	< 0.11	< 0.12
Pyrene	-	1800	23000	< 0.11	< 0.11	< 0.11	< 0.11	< 0.12	**0.16**	< 0.12
Total Petroleum Hydrocarbons (mg/kg)										
Gasoline Range Organics	100	-	-							
Total Petroleum Hydrocarbons (C6-C10) GRO	100	-	-	< 2.3	< 2.5	< 2.7	< 3.1	< 2.2	< 2.9	< 2.5
Total Petroleum Hydrocarbons (C10-C28) DRO	100	-	-	**0.00503**	< 0.00155	< 0.00156	**0.00459**	**0.00194**	**0.00455**	< 0.00167
Total Petroleum Hydrocarbons (>C28-C40) ORO	100	-	-	**0.0111**	**0.00289**	**0.000826**	**0.0027**	**0.00222**	**0.00486**	< 0.000876
Inorganic Compounds (mg/kg)										
Arsenic	-	0.68	3	**8.7**	**9.8**	**2.7**	**11**	**7.2**	**7.1**	**2.7**
Barium	-	15000	220000	**32**	**39**	**5.4**	**36**	**34**	**27**	**39**
Chromium	-	-	-	**16**	**17**	**3.6**	**16**	**15**	**13**	**11**
Lead	-	400	800	**6.6**	< 2.2	< 2.2	< 2.2	**2.7**	< 2.2	**6.5**
Mercury	-	11	46	**0.08**	**0.09**	< 0.07	< 0.08	**0.09**	< 0.07	< 0.079
TCLP Inorganic Compounds (mg/L)										
Lead	-	-	-	-	-	-	-	-	-	-
Other (%)										
Total Solids	-	-	-	**87.5**	**89.1**	**89.1**	**86.7**	**86.3**	**87.2**	**83.6**
PCBs (mg/kg)										
Aroclor-1260 (PCB-1260)	-	0.24	0.99	< 0.0364	< 0.0362	< 0.0365	< 0.0363	< 0.0371	< 0.0362	< 0.0386
Polychlorinated biphenyls (PCBs)	-	0.23	0.94	< 0.0364	< 0.0362	< 0.0365	< 0.0363	< 0.0371	< 0.0362	< 0.0386
BTEX (mg/kg)										
Toluene	9.6	4900	47000	< 0.0016	< 0.0012	< 0.0013	< 0.0013	< 0.0013	< 0.0012	< 0.0014
BTEX Sum	10	-	-	ND	ND	ND	ND	ND	ND	ND
Volatile Organic Compounds (mg/kg)										
2-Butanone (Methyl Ethyl Ketone)	-	27000	190000	< 0.011	< 0.0081	< 0.0089	< 0.0087	< 0.0086	**0.014**	< 0.0092
Acetone	-	61000	670000	**0.14**	< 0.029	< 0.032	< 0.031	< 0.031	**0.11**	< 0.033
Methyl acetate	-	78000	1200000	< 0.0043	< 0.0032	< 0.0036	< 0.0035	< 0.0034	< 0.0031	< 0.0037

Notes and abbreviations are on last page.

TABLE 1
SUMMARY OF SOIL ANALYTICAL RESULTS
ST. ELIZABETH EAST CAMPUS
WASHINGTON, D.C.

Location	DC Tier 0	EPA Regional	EPA Regional	B207	B207	B208	B208	B208	B208	B209
Sample Date	Soil Standards [3a]	Screening Level	Screening Level	12/15/2015	12/15/2015	12/16/2015	12/16/2015	12/16/2015	12/16/2015	12/16/2015
Sample Type		for Residential	for Industrial	N	N	N	N	FD	N	N
Sample Depth (bgs)		Soil [3b]	Soil [3b]	5 - 10 (ft)	10 - 15 (ft)	0 - 5 (ft)	5 - 10 (ft)	5 - 10 (ft)	10 - 15 (ft)	0 - 5 (ft)
Sample Name				B207-1215-1425-5-10	B207-1215-1430-10-15	B208-1216-0815-0-5	B208-1216-0825-5-10	DUP121615	B208-1216-0835-10-15	B209-1216-0910-0-5
Semi-Volatile Organic Compounds (mg/kg)										
2-Methylnaphthalene	-	240	3000	< 0.23	< 0.21	< 0.23	< 0.2	< 0.22	< 0.21	< 0.23
Acenaphthene	-	3600	45000	< 0.15	< 0.14	< 0.16	< 0.14	< 0.15	< 0.14	< 0.16
Acenaphthylene	-	-	-	< 0.15	< 0.14	< 0.16	< 0.14	< 0.15	< 0.14	< 0.16
Anthracene	-	18000	230000	< 0.11	< 0.11	< 0.12	< 0.1	< 0.11	< 0.1	< 0.12
Benzo(a)anthracene	-	0.16	2.9	< 0.11	< 0.11	< 0.12	< 0.1	< 0.11	< 0.1	< 0.12
Benzo(a)pyrene	-	0.016	0.29	< 0.15	< 0.14	< 0.16	< 0.14	< 0.15	< 0.14	< 0.16
Benzo(b)fluoranthene	-	0.16	2.9	< 0.11	< 0.11	< 0.12	< 0.1	< 0.11	< 0.1	< 0.12
Benzo(g,h,i)perylene	-	-	-	< 0.15	< 0.14	< 0.16	< 0.14	< 0.15	< 0.14	< 0.16
Benzo(k)fluoranthene	-	1.6	29	< 0.11	< 0.11	< 0.12	< 0.1	< 0.11	< 0.1	< 0.12
Chrysene	-	16	290	< 0.11	< 0.11	< 0.12	< 0.1	< 0.11	< 0.1	< 0.12
Dibenz(a,h)anthracene	-	0.016	0.29	< 0.11	< 0.11	< 0.12	< 0.1	< 0.11	< 0.1	< 0.12
Fluoranthene	-	2400	30000	< 0.11	< 0.11	< 0.12	< 0.1	< 0.11	< 0.1	< 0.12
Fluorene	-	2400	30000	< 0.19	< 0.18	< 0.2	< 0.17	< 0.19	< 0.17	< 0.2
Indeno(1,2,3-cd)pyrene	-	0.16	2.9	< 0.15	< 0.14	< 0.16	< 0.14	< 0.15	< 0.14	< 0.16
Naphthalene	-	3.8	17	< 0.19	< 0.18	< 0.2	< 0.17	< 0.19	< 0.17	< 0.2
Phenanthrene	-	-	-	< 0.11	< 0.11	< 0.12	< 0.1	< 0.11	< 0.1	< 0.12
Pyrene	-	1800	23000	< 0.11	< 0.11	< 0.12	< 0.1	< 0.11	< 0.1	< 0.12
Total Petroleum Hydrocarbons (mg/kg)										
Gasoline Range Organics	100	-	-							
Total Petroleum Hydrocarbons (C6-C10) GRO	100	-	-	< 2.3	< 2.6	< 2.2	< 2.3	< 3.2	< 2.9	< 2.2
Total Petroleum Hydrocarbons (C10-C28) DRO	100	-	-	< 0.00156	**0.0054**	**0.00657**	< 0.00143	< 0.00156	< 0.00144	< 0.00167
Total Petroleum Hydrocarbons (>C28-C40) ORO	100	-	-	< 0.000816	**0.0259**	**0.0195**	**0.00593**	**0.00496**	**0.00409**	**0.00361**
Inorganic Compounds (mg/kg)										
Arsenic	-	0.68	3	**2.1**	**2.6**	**4.4**	**4**	**0.86**	**16**	**16**
Barium	-	15000	220000	**21**	**20**	**23**	**61**	**8.1**	**72**	**61**
Chromium	-	-	-	**7.7**	**12**	**18**	**42**	**5.1**	**86**	**72**
Lead	-	400	800	**5.7**	**6**	**8.1**	**36**	**4.5**	**35**	**38**
Mercury	-	11	46	< 0.07	< 0.07	< 0.08	< 0.07	< 0.07	< 0.07	< 0.081
TCLP Inorganic Compounds (mg/L)										
Lead	-	-	-	-	-	-	-	-	-	-
Other (%)										
Total Solids	-	-	-	**87.8**	**91.9**	**84.1**	**96.2**	**88.9**	**94.9**	**83.6**
PCBs (mg/kg)										
Aroclor-1260 (PCB-1260)	-	0.24	0.99	< 0.0362	< 0.0344	< 0.0384	< 0.0337	< 0.037	< 0.0349	< 0.0382
Polychlorinated biphenyls (PCBs)	-	0.23	0.94	< 0.0362	< 0.0344	< 0.0384	< 0.0337	< 0.037	< 0.0349	< 0.0382
BTEX (mg/kg)										
Toluene	9.6	4900	47000	< 0.0014	< 0.0013	< 0.0015	< 0.0011	< 0.0016	< 0.0014	< 0.0014
BTEX Sum	10	-	-	ND	ND	ND	ND	ND	ND	ND
Volatile Organic Compounds (mg/kg)										
2-Butanone (Methyl Ethyl Ketone)	-	27000	190000	< 0.0095	< 0.0085	< 0.0097	< 0.0072	< 0.011	< 0.0092	< 0.0096
Acetone	-	61000	670000	< 0.034	< 0.031	< 0.035	< 0.026	**0.062**	< 0.033	< 0.035
Methyl acetate	-	78000	1200000	< 0.0038	< 0.0034	< 0.0039	< 0.0029	< 0.0042	< 0.0037	< 0.0038

Notes and abbreviations are on last page.

TABLE 1
SUMMARY OF SOIL ANALYTICAL RESULTS
ST. ELIZABETH EAST CAMPUS
WASHINGTON, D.C.

Location	DC Tier 0	EPA Regional	EPA Regional	B209	B209	B210	B210	B210	B211	B211
Sample Date	Soil Standards [3a]	Screening Level	Screening Level	12/16/2015	12/16/2015	12/16/2015	12/16/2015	12/16/2015	12/16/2015	12/16/2015
Sample Type		for Residential	for Industrial	N	N	N	N	N	N	N
Sample Depth (bgs)		Soil [3b]	Soil [3b]	5 - 10 (ft)	10 - 15 (ft)	0 - 5 (ft)	5 - 10 (ft)	10 - 15 (ft)	0 - 5 (ft)	5 - 8 (ft)
Sample Name				B209-1216-0920-5-10	B209-1216-0930-10-15	B210-1216-1010-0-5	B210-1216-1020-5-10	B210-1216-1030-10-15	B211-1216-1120-0-5	B211-1216-1130-5-8
Semi-Volatile Organic Compounds (mg/kg)										
2-Methylnaphthalene	-	240	3000	< 0.24	< 0.24	< 0.23	< 0.2	< 0.22	< 0.23	< 0.24
Acenaphthene	-	3600	45000	< 0.16	< 0.16	< 0.15	< 0.14	< 0.15	< 0.16	< 0.16
Acenaphthylene	-	-	-	< 0.16	< 0.16	< 0.15	< 0.14	< 0.15	< 0.16	< 0.16
Anthracene	-	18000	230000	< 0.12	< 0.12	< 0.11	< 0.1	< 0.11	< 0.12	< 0.12
Benzo(a)anthracene	-	0.16	2.9	< 0.12	< 0.12	< 0.11	< 0.1	< 0.11	< 0.12	< 0.12
Benzo(a)pyrene	-	0.016	0.29	< 0.16	< 0.16	< 0.15	< 0.14	< 0.15	< 0.16	< 0.16
Benzo(b)fluoranthene	-	0.16	2.9	< 0.12	< 0.12	< 0.11	< 0.1	< 0.11	< 0.12	< 0.12
Benzo(g,h,i)perylene	-	-	-	< 0.16	< 0.16	< 0.15	< 0.14	< 0.15	< 0.16	< 0.16
Benzo(k)fluoranthene	-	1.6	29	< 0.12	< 0.12	< 0.11	< 0.1	< 0.11	< 0.12	< 0.12
Chrysene	-	16	290	< 0.12	< 0.12	< 0.11	< 0.1	< 0.11	< 0.12	< 0.12
Dibenz(a,h)anthracene	-	0.016	0.29	< 0.12	< 0.12	< 0.11	< 0.1	< 0.11	< 0.12	< 0.12
Fluoranthene	-	2400	30000	< 0.12	< 0.12	< 0.11	< 0.1	< 0.11	< 0.12	< 0.12
Fluorene	-	2400	30000	< 0.2	< 0.2	< 0.19	< 0.17	< 0.19	< 0.2	< 0.2
Indeno(1,2,3-cd)pyrene	-	0.16	2.9	< 0.16	< 0.16	< 0.15	< 0.14	< 0.15	< 0.16	< 0.16
Naphthalene	-	3.8	17	< 0.2	< 0.2	< 0.19	< 0.17	< 0.19	< 0.2	< 0.2
Phenanthrene	-	-	-	< 0.12	< 0.12	< 0.11	< 0.1	< 0.11	< 0.12	< 0.12
Pyrene	-	1800	23000	< 0.12	< 0.12	< 0.11	< 0.1	< 0.11	< 0.12	< 0.12
Total Petroleum Hydrocarbons (mg/kg)										
Gasoline Range Organics	100	-	-							
Total Petroleum Hydrocarbons (C6-C10) GRO	100	-	-	< 2.6	< 2.5	< 2.5	< 2.2	< 2.4	< 2.5	< 3
Total Petroleum Hydrocarbons (C10-C28) DRO	100	-	-	**0.013**	< 0.00173	< 0.00162	**0.00208**	< 0.00159	< 0.002	**0.00839**
Total Petroleum Hydrocarbons (>C28-C40) ORO	100	-	-	**0.0494**	**0.0116**	**0.00588**	**0.0095**	**0.00378**	**0.00372**	**0.0236**
Inorganic Compounds (mg/kg)										
Arsenic	-	0.68	3	**4.6**	**4.3**	**5.1**	**1.1**	**0.56**	**5.5**	**3.9**
Barium	-	15000	220000	**34**	**36**	**25**	**18**	**11**	**30**	**25**
Chromium	-	-	-	**18**	**19**	**20**	**5.4**	**3.6**	**22**	**16**
Lead	-	400	800	**10**	**9.1**	**9**	**3.9**	**5**	**9.5**	**5.7**
Mercury	-	11	46	**0.09**	**0.13**	< 0.07	< 0.07	< 0.08	< 0.08	< 0.08
TCLP Inorganic Compounds (mg/L)										
Lead	-	-	-	-	-	-	-	-	-	-
Other (%)										
Total Solids	-	-	-	**81.9**	**80.3**	**85.1**	**95.3**	**87.6**	**83.3**	**82.3**
PCBs (mg/kg)										
Aroclor-1260 (PCB-1260)	-	0.24	0.99	< 0.04	< 0.039	< 0.0386	< 0.0344	< 0.0375	< 0.0397	< 0.0399
Polychlorinated biphenyls (PCBs)	-	0.23	0.94	< 0.04	< 0.039	< 0.0386	< 0.0344	< 0.0375	< 0.0397	< 0.0399
BTEX (mg/kg)										
Toluene	9.6	4900	47000	< 0.0016	< 0.0018	< 0.0015	< 0.0013	< 0.0013	< 0.0015	< 0.0013
BTEX Sum	10	-	-	ND	ND	ND	ND	ND	ND	ND
Volatile Organic Compounds (mg/kg)										
2-Butanone (Methyl Ethyl Ketone)	-	27000	190000	< 0.011	< 0.012	< 0.01	< 0.0085	< 0.0085	< 0.01	< 0.0087
Acetone	-	61000	670000	< 0.038	**0.22**	< 0.037	< 0.03	< 0.031	< 0.037	< 0.031
Methyl acetate	-	78000	1200000	< 0.0043	< 0.0047	< 0.0041	< 0.0034	< 0.0034	< 0.0041	< 0.0035

Notes and abbreviations are on last page.

TABLE 1
SUMMARY OF SOIL ANALYTICAL RESULTS
ST. ELIZABETH EAST CAMPUS
WASHINGTON, D.C.

Location	DC Tier 0	EPA Regional	EPA Regional	B212	B212	B213	B213	B214	B214	B215
Sample Date	Soil Standards [3a]	Screening Level	Screening Level	12/14/2015	12/14/2015	12/16/2015	12/16/2015	12/16/2015	12/16/2015	12/16/2015
Sample Type		for Residential	for Industrial	N	N	N	N	N	N	N
Sample Depth (bgs)		Soil [3b]	Soil [3b]	0 - 5 (ft)	5 - 10 (ft)	0 - 5 (ft)	5 - 10 (ft)	0 - 5 (ft)	5 - 10 (ft)	0 - 5 (ft)
Sample Name				B212-1214-1005-0-5	B212-1214-1005-5-10	B213-1216-1255-0-5	B213-1216-1315-5-10	B214-1216-1405-0-5	B214-1216-1415-5-10	B215-1216-1505-0-5
Semi-Volatile Organic Compounds (mg/kg)										
2-Methylnaphthalene	-	240	3000	< 0.23	< 0.22	< 0.22	< 0.24	< 0.23	< 0.23	< 0.24
Acenaphthene	-	3600	45000	< 0.16	< 0.15	< 0.15	< 0.16	< 0.15	< 0.15	< 0.16
Acenaphthylene	-	-	-	< 0.16	< 0.15	< 0.15	< 0.16	< 0.15	< 0.15	< 0.16
Anthracene	-	18000	230000	< 0.12	< 0.11	< 0.11	< 0.12	< 0.11	< 0.11	< 0.12
Benzo(a)anthracene	-	0.16	2.9	< 0.12	< 0.11	< 0.11	< 0.12	< 0.11	< 0.11	< 0.12
Benzo(a)pyrene	-	0.016	0.29	< 0.16	< 0.15	< 0.15	< 0.16	< 0.15	< 0.15	< 0.16
Benzo(b)fluoranthene	-	0.16	2.9	< 0.12	< 0.11	< 0.11	< 0.12	< 0.11	< 0.11	< 0.12
Benzo(g,h,i)perylene	-	-	-	< 0.16	< 0.15	< 0.15	< 0.16	< 0.15	< 0.15	< 0.16
Benzo(k)fluoranthene	-	1.6	29	< 0.12	< 0.11	< 0.11	< 0.12	< 0.11	< 0.11	< 0.12
Chrysene	-	16	290	< 0.12	< 0.11	< 0.11	< 0.12	< 0.11	< 0.11	< 0.12
Dibenz(a,h)anthracene	-	0.016	0.29	< 0.12	< 0.11	< 0.11	< 0.12	< 0.11	< 0.11	< 0.12
Fluoranthene	-	2400	30000	< 0.12	< 0.11	< 0.11	< 0.12	< 0.11	< 0.11	< 0.12
Fluorene	-	2400	30000	< 0.2	< 0.18	< 0.18	< 0.2	< 0.19	< 0.19	< 0.2
Indeno(1,2,3-cd)pyrene	-	0.16	2.9	< 0.16	< 0.15	< 0.15	< 0.16	< 0.15	< 0.15	< 0.16
Naphthalene	-	3.8	17	< 0.2	< 0.18	< 0.18	< 0.2	< 0.19	< 0.19	< 0.2
Phenanthrene	-	-	-	< 0.12	< 0.11	< 0.11	< 0.12	< 0.11	< 0.11	< 0.12
Pyrene	-	1800	23000	< 0.12	< 0.11	< 0.11	< 0.12	< 0.11	< 0.11	< 0.12
Total Petroleum Hydrocarbons (mg/kg)										
Gasoline Range Organics	100	-	-							
Total Petroleum Hydrocarbons (C6-C10) GRO	100	-	-	< 2	< 2.5	< 2.5	< 3.2	< 2.6	< 2.3	< 2.3
Total Petroleum Hydrocarbons (C10-C28) DRO	100	-	-	**0.00176**	< 0.00157	**0.00259**	**0.00807**	**0.00404**	< 0.00161	< 0.00164
Total Petroleum Hydrocarbons (>C28-C40) ORO	100	-	-	< 0.000873	< 0.000823	**0.00743**	**0.0196**	**0.0131**	**0.00656**	**0.00502**
Inorganic Compounds (mg/kg)										
Arsenic	-	0.68	3	**4**	**4.4**	**4**	**5.7**	**4.1**	**2.1**	**3**
Barium	-	15000	220000	**48**	**14**	**26**	**27**	**31**	**19**	**28**
Chromium	-	-	-	**10**	**14**	**17**	**20**	**20**	**8.4**	**14**
Lead	-	400	800	**22**	**5.7**	**7.2**	**9.4**	**8.1**	**6.6**	**6.3**
Mercury	-	11	46	< 0.08	< 0.07	< 0.08	**0.09**	< 0.08	< 0.07	< 0.08
TCLP Inorganic Compounds (mg/L)										
Lead	-	-	-	-	-	-	-	-	-	-
Other (%)										
Total Solids	-	-	-	**83.3**	**87**	**87.6**	**82.6**	**85.8**	**86.2**	**84**
PCBs (mg/kg)										
Aroclor-1260 (PCB-1260)	-	0.24	0.99	< 0.0388	< 0.0368	< 0.038	< 0.039	< 0.0383	< 0.0383	< 0.0388
Polychlorinated biphenyls (PCBs)	-	0.23	0.94	< 0.0388	< 0.0368	< 0.038	< 0.039	< 0.0383	< 0.0383	< 0.0388
BTEX (mg/kg)										
Toluene	9.6	4900	47000	< 0.0013	< 0.0012	< 0.0016	< 0.0015	< 0.0014	< 0.0014	< 0.0014
BTEX Sum	10	-	-	ND	ND	ND	ND	ND	ND	ND
Volatile Organic Compounds (mg/kg)										
2-Butanone (Methyl Ethyl Ketone)	-	27000	190000	< 0.0088	< 0.0079	< 0.01	< 0.0098	< 0.0092	< 0.0095	< 0.0092
Acetone	-	61000	670000	< 0.032	< 0.028	< 0.038	< 0.035	< 0.033	< 0.034	< 0.033
Methyl acetate	-	78000	1200000	< 0.0035	< 0.0031	< 0.0042	< 0.0039	< 0.0037	< 0.0038	< 0.0037

Notes and abbreviations are on last page.

TABLE 1
SUMMARY OF SOIL ANALYTICAL RESULTS
ST. ELIZABETH EAST CAMPUS
WASHINGTON, D.C.

Location	DC Tier 0	EPA Regional	EPA Regional	B215	B215	B216	B216	B217	B217	B217
Sample Date	Soil Standards [3a]	Screening Level	Screening Level	12/16/2015	12/16/2015	12/16/2015	12/16/2015	12/14/2015	12/14/2015	12/14/2015
Sample Type		for Residential	for Industrial	N	N	N	N	N	N	N
Sample Depth (bgs)		Soil [3b]	Soil [3b]	5 - 10 (ft)	10 - 15 (ft)	0 - 5 (ft)	5 - 10 (ft)	0 - 5 (ft)	5 - 10 (ft)	10 - 15 (ft)
Sample Name				B215-1216-1510-5-10	B215-1216-1515-10-15	B216-1215-1545-0-5	B216-1215-1550-5-10	B217-1214-1120-0-5	B217-1214-1125-5-10	B217-1214-1130-10-15
Semi-Volatile Organic Compounds (mg/kg)										
2-Methylnaphthalene	-	240	3000	< 0.24	< 0.23	< 0.23	< 0.24	< 0.23	< 0.22	< 0.22
Acenaphthene	-	3600	45000	< 0.16	< 0.15	< 0.15	< 0.16	< 0.16	< 0.15	< 0.15
Acenaphthylene	-	-	-	< 0.16	< 0.15	< 0.15	< 0.16	< 0.16	< 0.15	< 0.15
Anthracene	-	18000	230000	< 0.12	< 0.11	< 0.11	< 0.12	< 0.12	< 0.11	< 0.11
Benzo(a)anthracene	-	0.16	2.9	< 0.12	< 0.11	< 0.11	< 0.12	< 0.12	< 0.11	< 0.11
Benzo(a)pyrene	-	0.016	0.29	< 0.16	< 0.15	< 0.15	< 0.16	< 0.16	< 0.15	< 0.15
Benzo(b)fluoranthene	-	0.16	2.9	< 0.12	< 0.11	< 0.11	< 0.12	< 0.12	< 0.11	< 0.11
Benzo(g,h,i)perylene	-	-	-	< 0.16	< 0.15	< 0.15	< 0.16	< 0.16	< 0.15	< 0.15
Benzo(k)fluoranthene	-	1.6	29	< 0.12	< 0.11	< 0.11	< 0.12	< 0.12	< 0.11	< 0.11
Chrysene	-	16	290	< 0.12	< 0.11	< 0.11	< 0.12	< 0.12	< 0.11	< 0.11
Dibenz(a,h)anthracene	-	0.016	0.29	< 0.12	< 0.11	< 0.11	< 0.12	< 0.12	< 0.11	< 0.11
Fluoranthene	-	2400	30000	< 0.12	< 0.11	< 0.11	< 0.12	< 0.12	< 0.11	< 0.11
Fluorene	-	2400	30000	< 0.2	< 0.19	< 0.19	< 0.2	< 0.2	< 0.19	< 0.18
Indeno(1,2,3-cd)pyrene	-	0.16	2.9	< 0.16	< 0.15	< 0.15	< 0.16	< 0.16	< 0.15	< 0.15
Naphthalene	-	3.8	17	< 0.2	< 0.19	< 0.19	< 0.2	< 0.2	< 0.19	< 0.18
Phenanthrene	-	-	-	< 0.12	< 0.11	< 0.11	< 0.12	< 0.12	< 0.11	< 0.11
Pyrene	-	1800	23000	< 0.12	< 0.11	< 0.11	< 0.12	< 0.12	< 0.11	< 0.11
Total Petroleum Hydrocarbons (mg/kg)										
Gasoline Range Organics	100	-	-							
Total Petroleum Hydrocarbons (C6-C10) GRO	100	-	-	< 2.1	< 2.3	< 2.5	< 2.5	< 2.5	< 2.2	< 2.5
Total Petroleum Hydrocarbons (C10-C28) DRO	100	-	-	**0.00283**	**0.00401**	**0.00319**	**0.00317**	**0.00415**	< 0.00158	< 0.00155
Total Petroleum Hydrocarbons (>C28-C40) ORO	100	-	-	**0.00482**	**0.00745**	**0.00549**	**0.00844**	**0.00427**	< 0.000831	< 0.000814
Inorganic Compounds (mg/kg)										
Arsenic	-	0.68	3	**6.6**	**4.3**	**4.8**	**3**	**4**	**3.4**	**0.9**
Barium	-	15000	220000	**21**	**49**	**44**	**30**	**61**	**19**	**9.1**
Chromium	-	-	-	**38**	**24**	**25**	**20**	**14**	**12**	**4.4**
Lead	-	400	800	< 12	< 11	< 2.3	< 2.4	**8.2**	**7.3**	**4.2**
Mercury	-	11	46	< 0.08	< 0.08	**0.1**	**0.11**	< 0.08	< 0.07	< 0.07
TCLP Inorganic Compounds (mg/L)										
Lead	-	-	-	-	-	-	-	-	-	-
Other (%)										
Total Solids	-	-	-	**83.7**	**86.4**	**87.2**	**83.1**	**83.3**	**88.1**	**87.6**
PCBs (mg/kg)										
Aroclor-1260 (PCB-1260)	-	0.24	0.99	< 0.0391	< 0.0376	< 0.0368	< 0.0393	< 0.0378	< 0.0368	< 0.0371
Polychlorinated biphenyls (PCBs)	-	0.23	0.94	< 0.0391	< 0.0376	< 0.0368	< 0.0393	< 0.0378	< 0.0368	< 0.0371
BTEX (mg/kg)										
Toluene	9.6	4900	47000	< 0.0015	< 0.0012	< 0.0014	< 0.0016	< 0.0013	< 0.0013	< 0.002
BTEX Sum	10	-	-	ND	ND	ND	ND	ND	ND	ND
Volatile Organic Compounds (mg/kg)										
2-Butanone (Methyl Ethyl Ketone)	-	27000	190000	< 0.01	< 0.0077	< 0.0094	< 0.01	< 0.0086	< 0.0085	< 0.013
Acetone	-	61000	670000	< 0.036	< 0.028	< 0.034	< 0.038	< 0.031	< 0.03	< 0.048
Methyl acetate	-	78000	1200000	< 0.004	< 0.0031	< 0.0038	< 0.0042	< 0.0034	< 0.0034	< 0.0053

Notes and abbreviations are on last page.

TABLE 1
SUMMARY OF SOIL ANALYTICAL RESULTS
ST. ELIZABETH EAST CAMPUS
WASHINGTON, D.C.

Location	DC Tier 0	EPA Regional	EPA Regional	B218	B218	B218	B219	B219	B219	B220
Sample Date	Soil Standards [3a]	Screening Level	Screening Level	12/14/2015	12/14/2015	12/14/2015	12/14/2015	12/14/2015	12/14/2015	12/14/2015
Sample Type		for Residential	for Industrial	N	N	N	N	N	N	N
Sample Depth (bgs)		Soil [3b]	Soil [3b]	0 - 5 (ft)	5 - 10 (ft)	10 - 15 (ft)	0 - 5 (ft)	5 - 10 (ft)	10 - 15 (ft)	0 - 5 (ft)
Sample Name				B218-1214-1210-0-5	B218-1214-1215-5-10	B218-1214-1220-10-15	B219-1214-1300-0-5	B219-1214-1305-5-10	B219-1214-1310-10-15	B220-1214-1420-0-5
Semi-Volatile Organic Compounds (mg/kg)										
2-Methylnaphthalene	-	240	3000	< 0.23	< 0.22	< 0.22	< 0.24	< 0.23	< 0.23	< 0.24
Acenaphthene	-	3600	45000	**0.79**	< 0.15	< 0.15	< 0.16	< 0.16	< 0.15	< 0.16
Acenaphthylene	-	-	-	< 0.15	< 0.15	< 0.15	< 0.16	< 0.16	< 0.15	< 0.16
Anthracene	-	18000	230000	**0.76**	< 0.11	< 0.11	< 0.12	< 0.12	< 0.11	< 0.12
Benzo(a)anthracene	-	0.16	2.9	**1.5**	< 0.11	**0.11**	**0.26**	< 0.12	< 0.11	< 0.12
Benzo(a)pyrene	-	0.016	0.29	**1.2**	< 0.15	< 0.15	**0.22**	< 0.16	< 0.15	< 0.16
Benzo(b)fluoranthene	-	0.16	2.9	**1.6**	< 0.11	**0.12**	**0.29**	< 0.12	< 0.11	< 0.12
Benzo(g,h,i)perylene	-	-	-	**0.77**	< 0.15	< 0.15	< 0.16	< 0.16	< 0.15	< 0.16
Benzo(k)fluoranthene	-	1.6	29	**0.69**	< 0.11	< 0.11	**0.12**	< 0.12	< 0.11	< 0.12
Chrysene	-	16	290	**1.5**	< 0.11	**0.11**	**0.25**	< 0.12	< 0.11	< 0.12
Dibenz(a,h)anthracene	-	0.016	0.29	**0.18**	< 0.11	< 0.11	< 0.12	< 0.12	< 0.11	< 0.12
Fluoranthene	-	2400	30000	**4**	< 0.11	**0.26**	**0.6**	< 0.12	< 0.11	< 0.12
Fluorene	-	2400	30000	**0.43**	< 0.18	< 0.18	< 0.2	< 0.2	< 0.19	< 0.2
Indeno(1,2,3-cd)pyrene	-	0.16	2.9	**0.86**	< 0.15	< 0.15	< 0.16	< 0.16	< 0.15	< 0.16
Naphthalene	-	3.8	17	**0.31**	< 0.18	< 0.18	< 0.2	< 0.2	< 0.19	< 0.2
Phenanthrene	-	-	-	**3.7**	< 0.11	**0.25**	**0.4**	< 0.12	< 0.11	< 0.12
Pyrene	-	1800	23000	**3.1**	< 0.11	**0.21**	**0.49**	< 0.12	< 0.11	< 0.12
Total Petroleum Hydrocarbons (mg/kg)										
Gasoline Range Organics	100	-	-							
Total Petroleum Hydrocarbons (C6-C10) GRO	100	-	-	**6.9**	< 2.1	< 2.4	< 2.5	< 2.4	< 2.3	< 2.6
Total Petroleum Hydrocarbons (C10-C28) DRO	100	-	-	**0.0557**	**0.00301**	**0.00401**	**0.00297**	< 0.00166	< 0.00156	< 0.00164
Total Petroleum Hydrocarbons (>C28-C40) ORO	100	-	-	**0.122**	**0.0162**	**0.0184**	**0.00248**	< 0.000869	< 0.000818	< 0.000861
Inorganic Compounds (mg/kg)										
Arsenic	-	0.68	3	**3.7**	**3.7**	**2.5**	**3.7**	**4.5**	**1.8**	**2.6**
Barium	-	15000	220000	**35**	**20**	**22**	**55**	**27**	**7.4**	**47**
Chromium	-	-	-	**9.2**	**14**	**8.5**	**12**	**15**	**7.7**	**11**
Lead	-	400	800	**150**	**6.2**	**5.8**	**14**	**8.6**	**3.9**	**9.4**
Mercury	-	11	46	**0.2**	< 0.075	< 0.08	**0.11**	< 0.079	< 0.07	**0.08**
TCLP Inorganic Compounds (mg/L)										
Lead	-	-	-	-	-	-	-	-	-	-
Other (%)										
Total Solids	-	-	-	**85.2**	**89.2**	**89.6**	**83.4**	**83.1**	**88.2**	**84.1**
PCBs (mg/kg)										
Aroclor-1260 (PCB-1260)	-	0.24	0.99	< 0.0369	< 0.0368	< 0.0358	< 0.0392	< 0.04	< 0.0372	< 0.0376
Polychlorinated biphenyls (PCBs)	-	0.23	0.94	< 0.0369	< 0.0368	< 0.0358	< 0.0392	< 0.04	< 0.0372	< 0.0376
BTEX (mg/kg)										
Toluene	9.6	4900	47000	< 0.098	< 0.0012	< 0.0012	< 0.0014	< 0.0013	< 0.0014	< 0.0016
BTEX Sum	10	-	-	ND	ND	ND	ND	ND	ND	ND
Volatile Organic Compounds (mg/kg)										
2-Butanone (Methyl Ethyl Ketone)	-	27000	190000	< 0.65	< 0.008	**0.0082**	< 0.0091	< 0.0087	< 0.0094	< 0.011
Acetone	-	61000	670000	< 2.3	**0.048**	**0.091**	< 0.033	< 0.031	**0.062**	< 0.04
Methyl acetate	-	78000	1200000	**6.2**	< 0.0032	< 0.0033	< 0.0036	< 0.0035	< 0.0038	< 0.0044

Notes and abbreviations are on last page.

TABLE 1
SUMMARY OF SOIL ANALYTICAL RESULTS
ST. ELIZABETH EAST CAMPUS
WASHINGTON, D.C.

Location	DC Tier 0	EPA Regional	EPA Regional	B220	B220
Sample Date	Soil Standards [3a]	Screening Level	Screening Level	12/14/2015	12/14/2015
Sample Type		for Residential	for Industrial	N	N
Sample Depth (bgs)		Soil [3b]	Soil [3b]	5 - 10 (ft)	10 - 15 (ft)
Sample Name				B220-1214-1425-5-10	B220-1214-1430-10-15
Semi-Volatile Organic Compounds (mg/kg)					
2-Methylnaphthalene	-	240	3000	< 0.21	< 0.23
Acenaphthene	-	3600	45000	< 0.14	< 0.16
Acenaphthylene	-	-	-	< 0.14	< 0.16
Anthracene	-	18000	230000	< 0.11	< 0.12
Benzo(a)anthracene	-	0.16	2.9	< 0.11	< 0.12
Benzo(a)pyrene	-	0.016	0.29	< 0.14	< 0.16
Benzo(b)fluoranthene	-	0.16	2.9	< 0.11	< 0.12
Benzo(g,h,i)perylene	-	-	-	< 0.14	< 0.16
Benzo(k)fluoranthene	-	1.6	29	< 0.11	< 0.12
Chrysene	-	16	290	< 0.11	< 0.12
Dibenz(a,h)anthracene	-	0.016	0.29	< 0.11	< 0.12
Fluoranthene	-	2400	30000	< 0.11	< 0.12
Fluorene	-	2400	30000	< 0.18	< 0.2
Indeno(1,2,3-cd)pyrene	-	0.16	2.9	< 0.14	< 0.16
Naphthalene	-	3.8	17	< 0.18	< 0.2
Phenanthrene	-	-	-	< 0.11	< 0.12
Pyrene	-	1800	23000	< 0.11	< 0.12
Total Petroleum Hydrocarbons (mg/kg)					
Gasoline Range Organics	100	-	-		
Total Petroleum Hydrocarbons (C6-C10) GRO	100	-	-	< 2.8	< 3
Total Petroleum Hydrocarbons (C10-C28) DRO	100	-	-	< 0.00148	**0.0081**
Total Petroleum Hydrocarbons (>C28-C40) ORO	100	-	-	< 0.000776	**0.0154**
Inorganic Compounds (mg/kg)					
Arsenic	-	0.68	3	**5**	**2.7**
Barium	-	15000	220000	**21**	**23**
Chromium	-	-	-	**22**	**15**
Lead	-	400	800	**8.2**	**12**
Mercury	-	11	46	< 0.07	< 0.07
TCLP Inorganic Compounds (mg/L)					
Lead	-	-	-	-	-
Other (%)					
Total Solids	-	-	-	**93.6**	**84.8**
PCBs (mg/kg)					
Aroclor-1260 (PCB-1260)	-	0.24	0.99	< 0.0346	< 0.039
Polychlorinated biphenyls (PCBs)	-	0.23	0.94	< 0.0346	< 0.039
BTEX (mg/kg)					
Toluene	9.6	4900	47000	< 0.0013	< 0.0015
BTEX Sum	10	-	-	ND	ND
Volatile Organic Compounds (mg/kg)					
2-Butanone (Methyl Ethyl Ketone)	-	27000	190000	< 0.0085	< 0.01
Acetone	-	61000	670000	< 0.03	< 0.036
Methyl acetate	-	78000	1200000	< 0.0034	< 0.004

Notes and abbreviations are on last page.

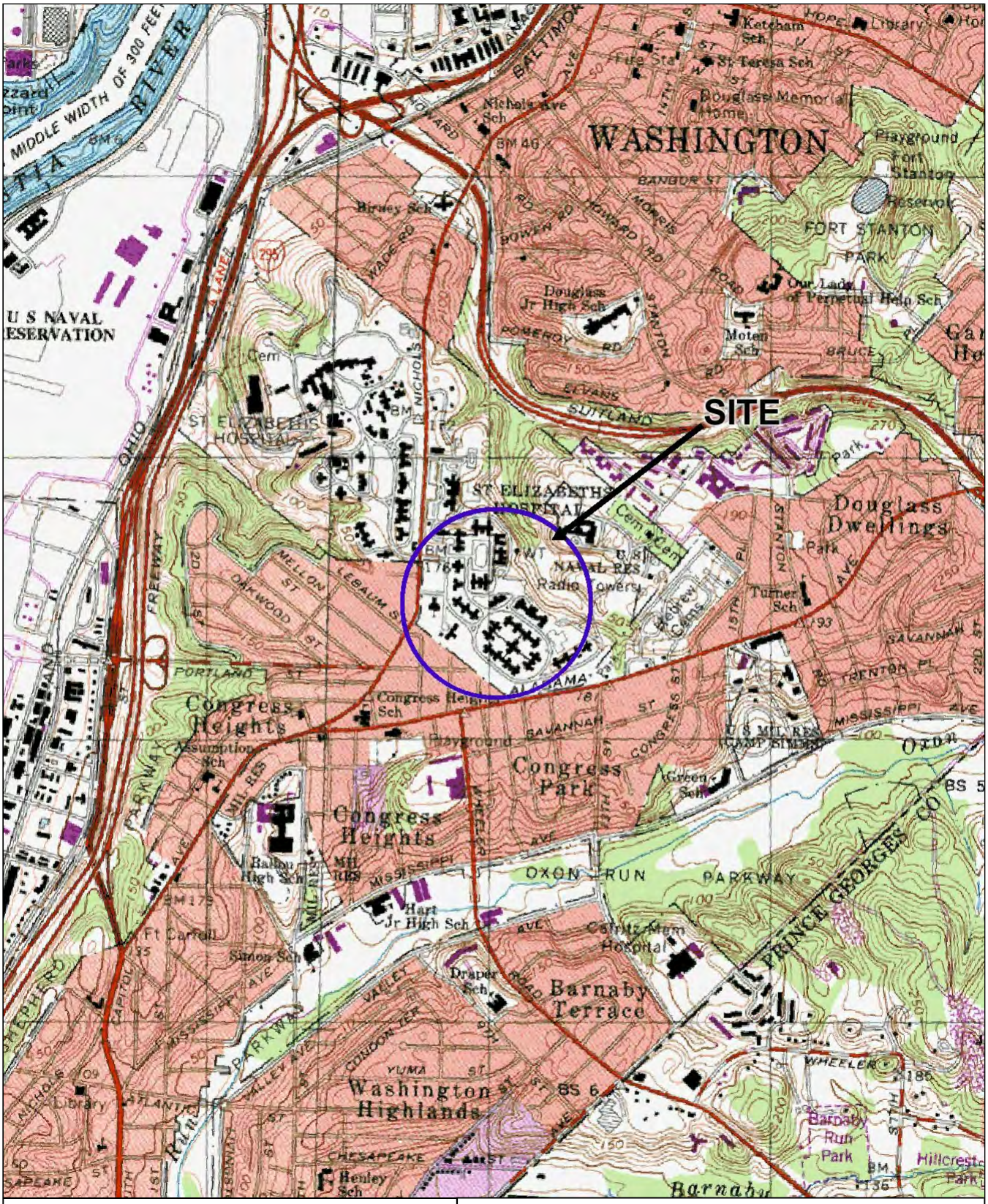
Notes:
1. <: Result is not detected above the indicated reporting limit.
2. Results in **bold** are detected.
3. Detected results were screened against the following criteria. Exceedences are highlighted in gray. Industrial soil exceedences are in **red** text.
   a. DC Tier 0 Standards from the Tier 0 Standard Final Rulemaking published at 40 DCR 7835, 7892 (November 12, 1993); as amended by Final Rulemaking published at 46 DCR 7699 (October 1, 1999)
   b. United States Environmental Protection Agency (EPA) Regional Screening Level (RSL) for Residential Soil (November 2015), EPA Region 3
   c. United States Environmental Protection Agency (EPA) Regional Screening Level (RSL) for Industrial Soil (November 2015), EPA Region 3
4. Sample type codes: N - Normal, FD - Field Duplicate
5. Detected chemicals are shown.

TABLE 2
SUMMARY OF LABORTORY ANALYTICAL DATA FOR GROUNDWATER
ST. ELIZABETHS EAST CAMPUS
WASHINGTON, D.C.

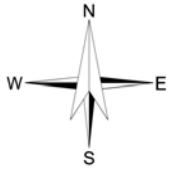
		Petroleum Contaminated GW Cleanup Standards for the DC UST Program Tier 1 Screening Levels 2003 Revison	B103 Temp Well 9/12/2012
VOCs (COMPLETE LIST)	ug/l	NA	ND
TPH-Diesel Range Organics	mg/l	3.57	**0.24**
TPH-Gasoline Range Organics	mg/l	7.3	<0.2
TPH-Oil Range Organics	mg/l	NA	<0.2

Notes and Abbreviations:
1. Only those compounds detected in at least one sample are shown.
2. <#: Result is less than indicated reporting limit.
3. Results in bold are detected.
4. ND means not detected or less than the laboratory reporting limit for each constituent; NA means criteria not available
5. VOC: volatile organic compound; TPH: total petroleum hydrocarbons
7. ug/l means micrograms per liter; mg/l means milligram per liter

Figures



SITE COORDINATES:38°50'50"N 76°59'35"W



U.S.G.S. QUADRANGLE: ANACOSTIA, DC

HALEY & ALDRICH

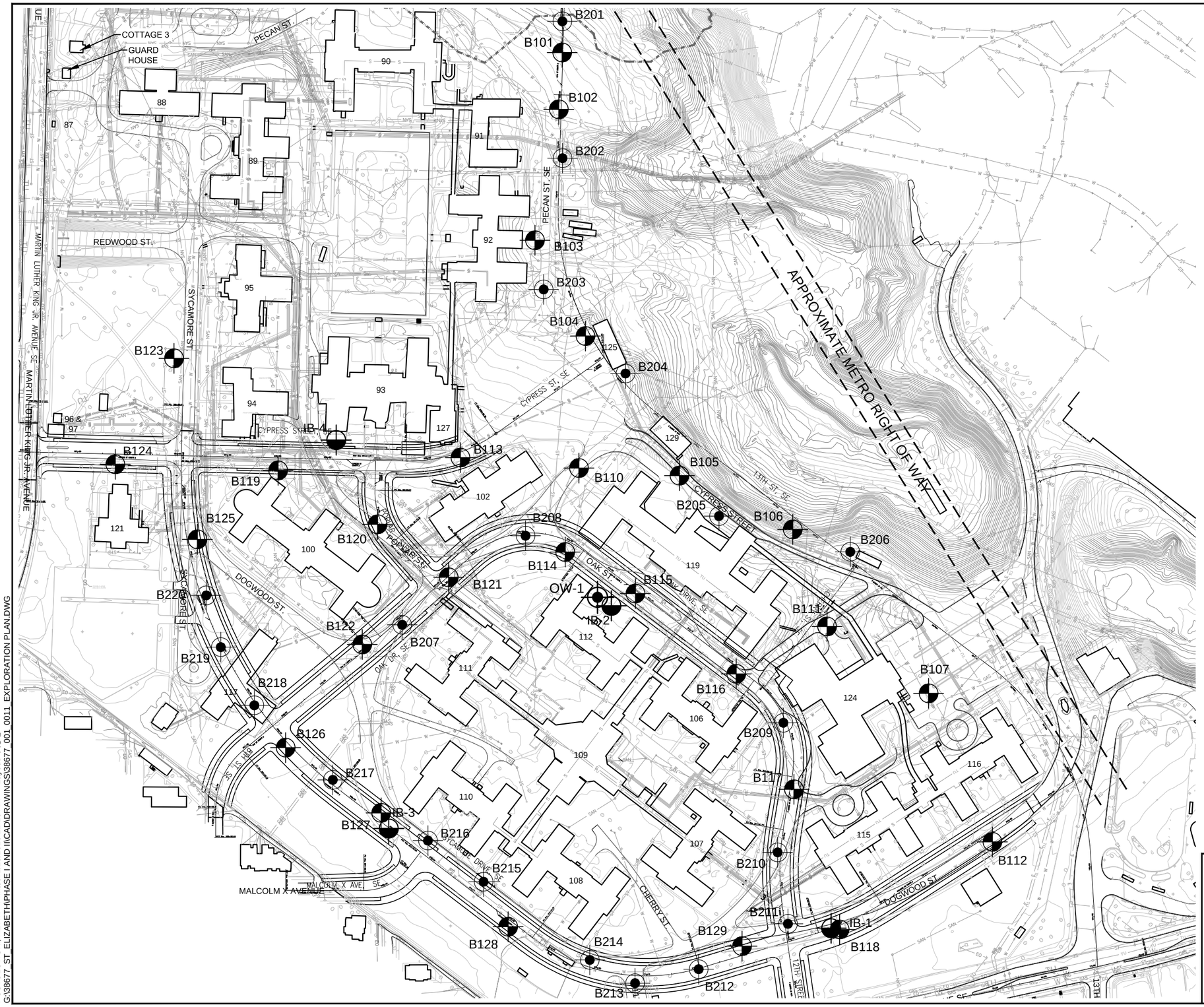
ST ELIZABETHS EAST CAMPUS
MARTIN LUTHER KING JR. (MLK) AVENUE SE
WASHINGTON, DISTRICT OF COLUMBIA

PROJECT LOCUS

SCALE: 1:24,000
OCTOBER 2012

FIGURE 1

38677-004 1.PDF



LEGEND

B205 — DESIGNATION AND APPROXIMATE LOCATION OF TEST BORINGS DRILLED BETWEEN 14 AND 16 DECEMBER 2015 BY VIRONEX OF BOWIE, MARYLAND.

OW-1 — DESIGNATION AND APPROXIMATE LOCATION OF TEMPORARY OBSERVATION WELL INSTALLED BY GEOSERVICES CORPORATION ON 6 JANUARY 2016.

IB-2 — DESIGNATION AND APPROXIMATE LOCATION OF GEOTECHNICAL TEST BORING DRILLED BETWEEN 6, 7 JANUARY 2016 BY GEOSERVICES CORPORATION.

B108 — DESIGNATION AND APPROXIMATE LOCATION OF GEOPROBE BORINGS DRILLED BETWEEN 10 AND 12 SEPTEMBER 2012 BY VIRONEX, INC. OF BOWIE, MARYLAND.

APPROXIMATE ASH / FILL AREA AS DEPICTED BY OTHERS, 1991.

APPROXIMATE FLY ASH ZONE AS DEPICTED BY OTHERS, 2008.

NOTES

1. BASEMAP BASED ON ELECTRONIC CAD FILES OBTAINED FROM CH2MHILL OF ATLANTA, GEORGIA ON 27 AUGUST 2012.
2. PROPOSED DESIGN LAYOUT FROM ELECTRONIC CAD FILE ENTITLED "SAINT ELIZABETH - STAGE 1 - PHASE 1 DESIGN.DGN" RECEIVED ON 13 JANUARY 2016.
3. LIMITS OF THE DISPOSAL FROM "FINAL DEPARTMENT OF HOMELAND SECURITY HEADQUARTERS CONSOLATION AT ST. ELIZABETH'S MASTER PLAN AMENDMENT - EAST CAMPUS NORTH PARCEL ENVIRONMENTAL IMPACT STATEMENT," PREPARED BY U.S. GENERAL SERVICES ADMINISTRATION NATIONAL CAPITAL REGION, DATED MARCH 2012.

UTILITY LEGEND

- STORM DRAIN
- GAS LINE
- SANITARY SEWER
- WATER MAIN
- STEAM LINE
- ELECTRICAL

N

0 200 400
SCALE IN FEET

HALEY ALDRICH

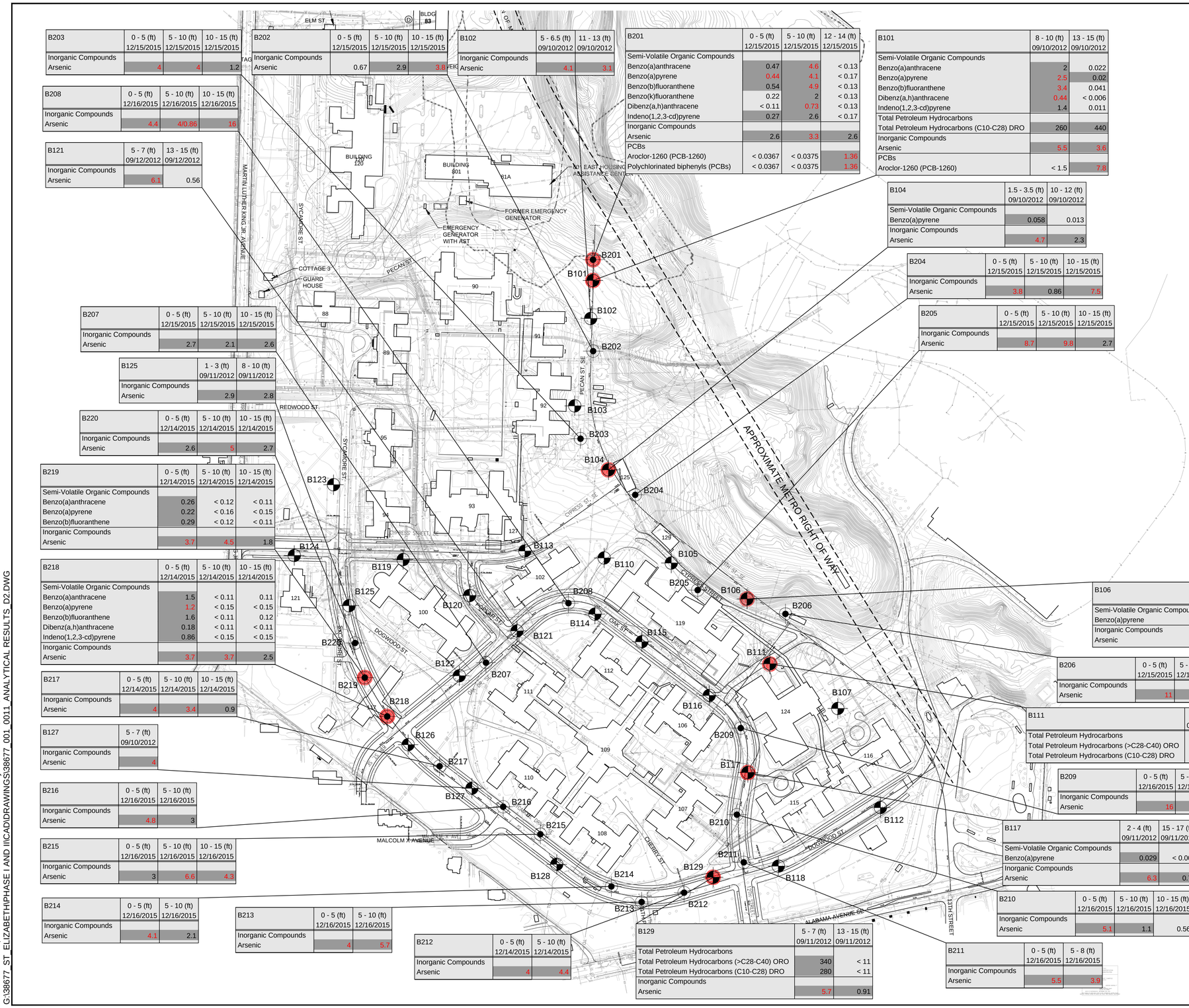
ST. ELIZABETHS EAST CAMPUS
MARTIN LUTHER KING JR. (MLK) AVENUE SE
WASHINGTON D.C.

EXPLORATION LOCATION PLAN

SCALE: AS SHOWN
JANUARY 2016

FIGURE 2

POSTOLOWSKI, KEVIN Printed: 1/19/2016 11:15 AM Layout: FIG 2
G:\38677_ST_ELIZABETH\PHASE I AND II\CAD\DRAWINGS\38677_001_0011_EXPLORATION PLAN.DWG



B203	0 - 5 (ft) 12/15/2015	5 - 10 (ft) 12/15/2015	10 - 15 (ft) 12/15/2015
Inorganic Compounds			
Arsenic	4	4	1.2

B202	0 - 5 (ft) 12/15/2015	5 - 10 (ft) 12/15/2015	10 - 15 (ft) 12/15/2015
Inorganic Compounds			
Arsenic	0.67	2.9	3.6

B102	5 - 6.5 (ft) 09/10/2012	11 - 13 (ft) 09/10/2012
Inorganic Compounds		
Arsenic	4.1	3.1

B201	0 - 5 (ft) 12/15/2015	5 - 10 (ft) 12/15/2015	12 - 14 (ft) 12/15/2015
Semi-Volatile Organic Compounds			
Benzo(a)anthracene	0.47	4.6	< 0.13
Benzo(a)pyrene	0.44	4.1	< 0.17
Benzo(b)fluoranthene	0.54	4.9	< 0.13
Benzo(k)fluoranthene	0.22	2	< 0.13
Dibenz(a,h)anthracene	< 0.11	0.73	< 0.13
Indeno(1,2,3-cd)pyrene	0.27	2.6	< 0.17
Inorganic Compounds			
Arsenic	2.6	3.3	2.6
PCBs			
Aroclor-1260 (PCB-1260)	< 0.0367	< 0.0375	1.36
Polychlorinated biphenyls (PCBs)	< 0.0367	< 0.0375	1.36

B101	8 - 10 (ft) 09/10/2012	13 - 15 (ft) 09/10/2012
Semi-Volatile Organic Compounds		
Benzo(a)anthracene	2	0.022
Benzo(a)pyrene	2.5	0.02
Benzo(b)fluoranthene	3.4	0.041
Dibenz(a,h)anthracene	0.44	< 0.006
Indeno(1,2,3-cd)pyrene	1.4	0.011
Total Petroleum Hydrocarbons		
Total Petroleum Hydrocarbons (C10-C28) DRO	260	440
Inorganic Compounds		
Arsenic	5.5	3.6
PCBs		
Aroclor-1260 (PCB-1260)	< 1.5	7.8

B208	0 - 5 (ft) 12/16/2015	5 - 10 (ft) 12/16/2015	10 - 15 (ft) 12/16/2015
Inorganic Compounds			
Arsenic	4.4	4/0.86	16

B121	5 - 7 (ft) 09/12/2012	13 - 15 (ft) 09/12/2012
Inorganic Compounds		
Arsenic	6.1	0.56

B104	1.5 - 3.5 (ft) 09/10/2012	10 - 12 (ft) 09/10/2012
Semi-Volatile Organic Compounds		
Benzo(a)pyrene	0.058	0.013
Inorganic Compounds		
Arsenic	4.7	2.3

B204	0 - 5 (ft) 12/15/2015	5 - 10 (ft) 12/15/2015	10 - 15 (ft) 12/15/2015
Inorganic Compounds			
Arsenic	3.8	0.86	7.5

B205	0 - 5 (ft) 12/15/2015	5 - 10 (ft) 12/15/2015	10 - 15 (ft) 12/15/2015
Inorganic Compounds			
Arsenic	8.7	9.8	2.7

B207	0 - 5 (ft) 12/15/2015	5 - 10 (ft) 12/15/2015	10 - 15 (ft) 12/15/2015
Inorganic Compounds			
Arsenic	2.7	2.1	2.6

B125	1 - 3 (ft) 09/11/2012	8 - 10 (ft) 09/11/2012
Inorganic Compounds		
Arsenic	2.9	2.8

B220	0 - 5 (ft) 12/14/2015	5 - 10 (ft) 12/14/2015	10 - 15 (ft) 12/14/2015
Inorganic Compounds			
Arsenic	2.6	5	2.7

B219	0 - 5 (ft) 12/14/2015	5 - 10 (ft) 12/14/2015	10 - 15 (ft) 12/14/2015
Semi-Volatile Organic Compounds			
Benzo(a)anthracene	0.26	< 0.12	< 0.11
Benzo(a)pyrene	0.22	< 0.16	< 0.15
Benzo(b)fluoranthene	0.29	< 0.12	< 0.11
Inorganic Compounds			
Arsenic	3.7	4.5	1.8

B218	0 - 5 (ft) 12/14/2015	5 - 10 (ft) 12/14/2015	10 - 15 (ft) 12/14/2015
Semi-Volatile Organic Compounds			
Benzo(a)anthracene	1.5	< 0.11	0.11
Benzo(a)pyrene	1.2	< 0.15	< 0.15
Benzo(b)fluoranthene	1.6	< 0.11	0.12
Dibenz(a,h)anthracene	0.18	< 0.11	< 0.11
Indeno(1,2,3-cd)pyrene	0.86	< 0.15	< 0.15
Inorganic Compounds			
Arsenic	3.7	3.7	2.5

B217	0 - 5 (ft) 12/14/2015	5 - 10 (ft) 12/14/2015	10 - 15 (ft) 12/14/2015
Inorganic Compounds			
Arsenic	4	3.4	0.9

B127	5 - 7 (ft) 09/10/2012
Inorganic Compounds	
Arsenic	4

B216	0 - 5 (ft) 12/16/2015	5 - 10 (ft) 12/16/2015
Inorganic Compounds		
Arsenic	4.8	3

B215	0 - 5 (ft) 12/16/2015	5 - 10 (ft) 12/16/2015	10 - 15 (ft) 12/16/2015
Inorganic Compounds			
Arsenic	3	6.6	4.3

B214	0 - 5 (ft) 12/16/2015	5 - 10 (ft) 12/16/2015
Inorganic Compounds		
Arsenic	4.1	2.1

B213	0 - 5 (ft) 12/16/2015	5 - 10 (ft) 12/16/2015
Inorganic Compounds		
Arsenic	4	5.7

B212	0 - 5 (ft) 12/14/2015	5 - 10 (ft) 12/14/2015
Inorganic Compounds		
Arsenic	4	4.4

B129	5 - 7 (ft) 09/11/2012	13 - 15 (ft) 09/11/2012
Total Petroleum Hydrocarbons		
Total Petroleum Hydrocarbons (>C28-C40) ORO	340	< 11
Total Petroleum Hydrocarbons (C10-C28) DRO	280	< 11
Inorganic Compounds		
Arsenic	5.7	0.91

B211	0 - 5 (ft) 12/16/2015	5 - 8 (ft) 12/16/2015
Inorganic Compounds		
Arsenic	5.5	3.9

B210	0 - 5 (ft) 12/16/2015	5 - 10 (ft) 12/16/2015	10 - 15 (ft) 12/16/2015
Inorganic Compounds			
Arsenic	5.1	1.1	0.56

B117	2 - 4 (ft) 09/11/2012	15 - 17 (ft) 09/11/2012
Semi-Volatile Organic Compounds		
Benzo(a)pyrene	0.029	< 0.006
Inorganic Compounds		
Arsenic	6.3	0.77

B209	0 - 5 (ft) 12/16/2015	5 - 10 (ft) 12/16/2015	10 - 15 (ft) 12/16/2015
Inorganic Compounds			
Arsenic	16	4.6	4.3

B111	1 - 3 (ft) 09/11/2012	10 - 12 (ft) 09/11/2012
Total Petroleum Hydrocarbons		
Total Petroleum Hydrocarbons (>C28-C40) ORO	< 11	170
Total Petroleum Hydrocarbons (C10-C28) DRO	< 11	170

B206	0 - 5 (ft) 12/15/2015	5 - 10 (ft) 12/15/2015	10 - 15 (ft) 12/15/2015
Inorganic Compounds			
Arsenic	11	7.2	7.1

B106	7 - 9 (ft) 09/12/2012	21 - 23 (ft) 09/12/2012
Semi-Volatile Organic Compounds		
Benzo(a)pyrene	0.019	0.011
Inorganic Compounds		
Arsenic	5.3	0.88

LEGEND

B205 — DESIGNATION AND APPROXIMATE LOCATION OF TEST BORINGS DRILLED BETWEEN 14 AND 16 DECEMBER 2015 BY VIRONEX OF BOWIE, MARYLAND.

B108 — DESIGNATION AND APPROXIMATE LOCATION OF GEOPROBE BORINGS DRILLED BETWEEN 10 AND 12 SEPTEMBER 2012 BY VIRONEX, INC. OF BOWIE, MARYLAND.

INDICATES NON-ARSENIC RELATED EXCEEDANCE

APPROXIMATE ASH / FILL AREA AS DEPICTED BY OTHERS, 1991.

APPROXIMATE FLY ASH ZONE AS DEPICTED BY OTHERS, 2008.

NOTES

1. BASEMAP BASED ON ELECTRONIC CAD FILES OBTAINED FROM CH2MHILL OF ATLANTA, GEORGIA ON 27 AUGUST 2012.
2. PROPOSED DESIGN LAYOUT FROM ELECTRONIC CAD FILE ENTITLED "SAINT ELIZABETH - STAGE 1 - PHASE 1 DESIGN.DGN" RECEIVED ON 13 JANUARY 2016.
3. LIMITS OF THE DISPOSAL FROM "FINAL DEPARTMENT OF HOMELAND SECURITY HEADQUARTERS CONSOLATION AT ST. ELIZABETH'S MASTER PLAN AMENDMENT - EAST CAMPUS NORTH PARCEL ENVIRONMENTAL IMPACT STATEMENT," PREPARED BY U.S. GENERAL SERVICES ADMINISTRATION NATIONAL CAPITAL REGION, DATED MARCH 2012.
4. DATABOX ANALYTICAL RESULTS ARE IN MG/KG.
5. CHEMICALS SHOWN ARE THOSE THAT EXCEED CRITERIA AT EACH SAMPLE LOCATION.
6. DETECTED RESULTS WERE SCREENED AGAINST THE FOLLOWING CRITERIA. EXCEEDANCES ARE HIGHLIGHTED IN GRAY. INDUSTRIAL SOIL EXCEEDANCES ARE IN RED TEXT.
   - DC TIER 0 SOIL STANDARDS FROM THE TIER 0 STANDARD FINAL RULEMAKING PUBLISHED AT 40 DCR 7835, 7892 (NOVEMBER 12, 1993); AS AMENDED BY FINAL RULEMAKING PUBLISHED AT 46 DCR 7699 (OCTOBER 1, 1999)
   - UNITED STATES ENVIRONMENTAL PROTECTION AGENCY (EPA) REGIONAL SCREENING LEVEL FOR RESIDENTIAL SOIL (NOVEMBER 2015), EPA REGION 3
   - UNITED STATES ENVIRONMENTAL PROTECTION AGENCY (EPA) REGIONAL SCREENING LEVEL FOR INDUSTRIAL SOIL (NOVEMBER 2015), EPA REGION 3
6. <: RESULT IS NOT DETECTED ABOVE THE INDICATED REPORTING LIMIT.
7. /: INDICATES A NORMAL AND FIELD DUPLICATE RESULT

UTILITY LEGEND
- STORM DRAIN
- GAS LINE
- SANITARY SEWER
- WATER MAIN
- STEAM LINE
- ELECTRICAL

N

0 150 300 450 600
SCALE IN FEET

HALEY ALDRICH

ST. ELIZABETHS EAST CAMPUS
MARTIN LUTHER KING JR. (MLK) AVENUE SE
WASHINGTON D.C.

ANALYTICAL RESULTS

SCALE: AS SHOWN
JANUARY 2016

FIGURE 3

POSTOLOWSKI, KEVIN Printed: 1/19/2016 11:18 AM Layout: DATABOX FIG 3
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SOIL CLASSIFICATION WITH ESTIMATED VOLUMES TABLE

AOPC	Soil Class	Station		Station	Length	Depth of Impacts	Estimated Thickness of Soils to be Excavated based on Utility Profiles	Estimated Volume
					ft	ft bgs	ft	CY
B101/B201	Class 3	122+00	to	124+50	250	ALL (0 to 18)	18	5000
B104	Class 2	116+50	to	117+50	100	0 to 5	5	555
B106	Class 2	112+50	to	110+75	175	5 to 10	5	970
B111	Class 3	81+00	to	83+00	200	>10 (10 to 16)	6	1335
B117	Class 2	317+50	to	316+50	100	0 to 5	5	555
B129	Class 3	216+50	to	217+50	100	5 to 10	5	555
B218	Class 3	206+00	to	204+50	150	0 to 5	5	835
B219	Class 2	204+50	to	203+50	100	0 to 5	5	555

CLASS 2

CLASS 3

LEGEND

B205 — DESIGNATION AND APPROXIMATE LOCATION OF TEST BORINGS DRILLED BETWEEN 14 AND 16 DECEMBER 2015 BY VIRONEX OF BOWIE, MARYLAND.

B108 — DESIGNATION AND APPROXIMATE LOCATION OF GEOPROBE BORINGS DRILLED BETWEEN 10 AND 12 SEPTEMBER 2012 BY VIRONEX, INC. OF BOWIE, MARYLAND.

INDICATES NON-ARSENIC RELATED EXCEEDANCE

APPROXIMATE ASH / FILL AREA AS DEPICTED BY OTHERS, 1991.

APPROXIMATE FLY ASH ZONE AS DEPICTED BY OTHERS, 2008.

NOTES

1. BASEMAP BASED ON ELECTRONIC CAD FILES OBTAINED FROM CH2MHILL OF ATLANTA, GEORGIA ON 27 AUGUST 2012.
2. PROPOSED DESIGN LAYOUT FROM ELECTRONIC CAD FILE ENTITLED "SAINT ELIZABETH - STAGE 1 - PHASE 1 DESIGN.DGN" RECEIVED ON 13 JANUARY 2016.
3. LIMITS OF THE DISPOSAL FROM "FINAL DEPARTMENT OF HOMELAND SECURITY HEADQUARTERS CONSOLATION AT ST. ELIZABETH'S MASTER PLAN AMENDMENT - EAST CAMPUS NORTH PARCEL ENVIRONMENTAL IMPACT STATEMENT," PREPARED BY U.S. GENERAL SERVICES ADMINISTRATION NATIONAL CAPITAL REGION, DATED MARCH 2012.

UTILITY LEGEND

- STORM DRAIN
- GAS LINE
- SANITARY SEWER
- WATER MAIN
- STEAM LINE
- ELECTRICAL

N

0 150 300 450 600

SCALE IN FEET

HALEY ALDRICH

ST. ELIZABETHS EAST CAMPUS
MARTIN LUTHER KING JR. (MLK) AVENUE SE
WASHINGTON D.C.

SOIL CLASSIFICATION

SCALE: AS SHOWN
JANUARY 2016

FIGURE 4

POSTOLOWSKI, KEVIN Printed:1/19/2016 11:16 AM Layout: FIG 4
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APPENDIX A

2012 and 2015 Soil Boring Logs

HALEY & ALDRICH

GEOPROBE REPORT

Boring No. B101

Project	St. Elizabeths East Campus; Martin Luther King Jr. (MLK) Avenue SE; Washington, DC
Client	CH2M Hill
Contractor	Vironex, Inc.

File No. 38677-004
Sheet No. 1 of 1
Start September 10, 2012
Finish September 10, 2012
Driller B. Porter
H&A Rep. M. Tschibelu
Elevation
Datum
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	2 1/4 in.	-	-	Rig Make & Model: Geoprobe
Inside Diameter (in.)	2	-	-	Bit Type: -
Hammer Weight (lb)	-	-	-	Drill Mud: -
Hammer Fall (in.)	-	-	-	Casing: -
				Hoist/Hammer: Direct Push -
				PID Make & Model: MiniRAE 2000

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	PID Readings (ppm)
0	G1 60	0.0 5.0	0.5		-ASPHALT (2 in.) / SUBBASE (4 in.)-	
				SM	Light brown silty SAND with gravel, no odor, dry	0.0
				SM	Dark brown with red pockets silty SAND with gravel, petroleum odor, moist	
5	G2 48	5.0 10.0		SM	Similar to above	0.0
						0.1
10	G3 60	10.0 15.0		SM	Dark brown with red-pockets silty SAND with gravel, petroleum odor and staining, moist	0.2
				SM	Tan and gray silty SAND with gravel, no odor, dry	
15			15.0		Bottom of exploration at 15.0 ft	
					Note: Borehole grouted upon completion	

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water
		Not Encountered			

Sample ID

O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram

Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary

Overburden (ft)	15.0
Rock Cored (ft)	-
Samples	3G

Boring No. B101

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None **Plasticity**: N - Nonplastic L - Low M - Medium H - High
Toughness: L - Low M - Medium H - High **Dry Strength**: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-GEOPROBE-NO BLOW COLUMN HAR HA-LIB07-R1.GLB HA-TB+CORE+WELL-07-1.GDT \\WAS\COMMON\PROJECTS\38677 - ST E. EAST\004 ST E. EAST PHASE II REPORT\DATABASE\2012-0917 38677-004 GEOPROBES.GPJ Oct 3, 12

HALEY & ALDRICH

GEOPROBE REPORT

Boring No. B102

Project	St. Elizabeths East Campus; Martin Luther King Jr. (MLK) Avenue SE; Washington, DC
Client	CH2M Hill
Contractor	Vironex, Inc.

File No. 38677-004
Sheet No. 1 of 1
Start September 10, 2012
Finish September 10, 2012
Driller B. Porter
H&A Rep. M. Tschibelu
Elevation
Datum
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	2 1/4 in.	-	-	Rig Make & Model: Geoprobe
Inside Diameter (in.)	2	-	-	Bit Type: -
Hammer Weight (lb)	-	-	-	Drill Mud: -
Hammer Fall (in.)	-	-	-	Casing: -
				Hoist/Hammer: Direct Push -
				PID Make & Model: MiniRAE 2000

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	PID Readings (ppm)
0					-ASPHALT (2 in.) / SUBBASE (4 in.)-	
	G1 24	0.0 5.0	0.5	SM	Dark brown to brown silty SAND with gravel, no odor, moist	0.0
			2.5		No recovery	
5	G2 18	5.0 10.0	5.0	SM	Brown silty SAND with quartz gravel, no odor, moist	0.0
			6.5		No recovery	
10	G3 36	10.0 15.0	10.0	SM	Brown silty sand with quartz gravel, no odor, moist	0.0
			13.0		No recovery	
15			15.0		Bottom of exploration at 15.0 ft	

Note: Borehole grouted upon completion

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water
		Not Encountered			

Sample ID

O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram

Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary

Overburden (ft)	15.0
Rock Cored (ft)	-
Samples	3G

Boring No. B102

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None **Plasticity**: N - Nonplastic L - Low M - Medium H - High
Toughness: L - Low M - Medium H - High **Dry Strength**: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-GEOPROBE-NO BLOW COLUMN HAR HA-LIB07-R1.GLB HA-TB+CORE+WELL-07-1.GDT \\WAS\COMMON\PROJECTS\38677 - ST E. EAST\004 ST E. EAST PHASE II REPORT\DATABASE\2012-0917 38677-004 GEOPROBES.GPJ Oct 3, 12

HALEY & ALDRICH

GEOPROBE REPORT

Boring No. B103

Project	St. Elizabeths East Campus; Martin Luther King Jr. (MLK) Avenue SE; Washington, DC
Client	CH2M Hill
Contractor	Vironex, Inc.

File No.	38677-004
Sheet No.	1 of 1
Start	September 11, 2012
Finish	September 11, 2012
Driller	B. Porter
H&A Rep.	M. Tschibelu
Elevation	
Datum	
Location	See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	2 1/4 in.	-	-	Rig Make & Model: Geoprobe
Inside Diameter (in.)	2	-	-	Bit Type: -
Hammer Weight (lb)	-	-	-	Drill Mud: -
Hammer Fall (in.)	-	-	-	Casing: -
				Hoist/Hammer: Direct Push -
				PID Make & Model: MiniRAE 2000

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	PID Readings (ppm)
0	G1 18	0.0 5.0	0.5		-TOPSOIL-	
				ML	Brown sandy SILT with gravel, no odor, dry	61.3
			1.5		No recovery	
5	G2 24	5.0 10.0	5.0	SC	Brown clayey SAND with gravel, slight petroleum odor, dry	49.2
			7.0		No recovery	
10	G3 30	10.0 15.0	10.0	SM	Red-brown silty SAND, trace gravel, no odor, wet	36.9
			12.5		No recovery	
15	G4 60	15.0 20.0	15.0	SC	Red-brown clayey SAND, trace gravel, no odor, wet	20.7
20			20.0		Bottom of exploration at 20.0 ft	

Note: Temporary well installed with S1 screen between 10.0 to 15.0 ft that was later removed. Borehole grouted upon completion

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water
9/11/12	1100	-	-	-	12.5
9/12/12	0900	-	-	-	10.0

Sample ID

O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram

Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary

Overburden (ft)	20.0
Rock Cored (ft)	-
Samples	4G

Boring No. B103

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None **Toughness**: L - Low M - Medium H - High **Plasticity**: N - Nonplastic L - Low M - Medium H - High **Dry Strength**: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-GEOPROBE-NO BLOW COLUMN HAR HA-LIB07-R1.GLB HA-TB+CORE+WELL-07-1.GDT \\WAS\COMMON\PROJECTS\38677 - ST E. EAST\004 ST E. EAST PHASE II REPORT\DATABASE\2012-0917 38677-004 GEOPROBES.GPJ Oct 3, 12

HALEY & ALDRICH

GEOPROBE REPORT

Boring No. B104

Project	St. Elizabeths East Campus; Martin Luther King Jr. (MLK) Avenue SE; Washington, DC
Client	CH2M Hill
Contractor	Vironex, Inc.

File No. 38677-004
Sheet No. 1 of 1
Start September 10, 2012
Finish September 10, 2012
Driller B. Porter
H&A Rep. M. Tschibelu
Elevation
Datum
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	2 1/4 in.	-	-	Rig Make & Model: Geoprobe
Inside Diameter (in.)	2	-	-	Bit Type: -
Hammer Weight (lb)	-	-	-	Drill Mud: -
Hammer Fall (in.)	-	-	-	Casing: -
				Hoist/Hammer: Direct Push -
				PID Make & Model: MiniRAE 2000

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	PID Readings (ppm)
0					-ASPHALT (2 in.) / SUBBASE (4 in.)-	
	G1 42	0.0 5.0	0.5	SM	Brown silty SAND with gravel, petroleum odor and staining, moist	0.0
			3.5		No recovery	
5	G2 42	5.0 10.0	5.0	SM	Brown silty SAND with gravel, no odor, moist	0.0
			8.5		No recovery	
10	G3 24	10.0 15.0	10.0	SW	Light brown to tan well-graded SAND with quartz gravel, petroleum odor, moist	0.0
			12.0		No recovery	
15			15.0		Bottom of exploration at 15.0 ft	

Note: Borehole grouted upon completion

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water
		Not Encountered			

Sample ID

O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram

Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary

Overburden (ft)	15.0
Rock Cored (ft)	-
Samples	3G

Boring No. B104

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None **Plasticity**: N - Nonplastic L - Low M - Medium H - High
Toughness: L - Low M - Medium H - High **Dry Strength**: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-GEOPROBE-NO BLOW COLUMN HAR HA-LIB07-R1.GLB HA-TB+CORE+WELL-07-1.GDT \\WAS\COMMON\PROJECTS\38677 - ST E. EAST\004 ST E. EAST PHASE II REPORT\DATABASE\2012-0917 38677-004 GEOPROBES.GPJ Oct 3, 12

HALEY & ALDRICH

GEOPROBE REPORT

Boring No. B105

Project	St. Elizabeths East Campus; Martin Luther King Jr. (MLK) Avenue SE; Washington, DC
Client	CH2M Hill
Contractor	Vironex, Inc.

File No.	38677-004
Sheet No.	1 of 1
Start	September 12, 2012
Finish	September 12, 2012
Driller	B. Porter
H&A Rep.	M. Tschibelu
Elevation Datum	
Location	See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	2 1/4 in.	-	-	Rig Make & Model: Geoprobe
Inside Diameter (in.)	2	-	-	Bit Type: -
Hammer Weight (lb)	-	-	-	Drill Mud: -
Hammer Fall (in.)	-	-	-	Casing: -
				Hoist/Hammer: Direct Push -
				PID Make & Model: MiniRAE 2000

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	PID Readings (ppm)
0					-ASPHALT (2 in.) / SUBBASE (4 in.)-	
	G1 36	0.0 5.0	0.5	SW-SM	Light brown well-graded silty SAND with coarse gravel, no odor, dry	201.0
			3.0		No recovery	
5	G2 24	5.0 10.0	5.0	SW-SM	Light brown well-graded silty SAND with coarse gravel, no odor, dry	244.0
			7.0		No recovery	
10	G3 0	10.0 15.0	10.0		No recovery Note: Gravel clogged geoprobe sleeve	
15	G4 0	15.0 20.0	15.0		No recovery	
20			20.0		Bottom of exploration at 20.0 ft Note: Borehole grouted upon completion	

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water
		Not Encountered			

Sample ID

O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram

Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary

Overburden (ft)	20.0
Rock Cored (ft)	-
Samples	4G

Boring No. B105

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None **Plasticity**: N - Nonplastic L - Low M - Medium H - High
Toughness: L - Low M - Medium H - High **Dry Strength**: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-GEOPROBE-NO BLOW COLUMN HAR HA-LIB07-R1.GLB HA-TB+CORE+WELL-07-1.GDT \\WAS\COMMON\PROJECTS\38677 - ST E. EAST\004 ST E. EAST PHASE II REPORT\DATABASE\2012-0917 38677-004 GEOPROBES.GPJ Oct 3, 12

HALEY & ALDRICH

GEOPROBE REPORT

Boring No. B105-B

Project	St. Elizabeths East Campus; Martin Luther King Jr. (MLK) Avenue SE; Washington, DC
Client	CH2M Hill
Contractor	Vironex, Inc.

File No. 38677-004
Sheet No. 1 of 1
Start September 12, 2012
Finish September 12, 2012
Driller B. Porter
H&A Rep. M. Tschibelu
Elevation
Datum
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	2 1/4 in.	-	-	Rig Make & Model: Geoprobe
Inside Diameter (in.)	2	-	-	Bit Type: -
Hammer Weight (lb)	-	-	-	Drill Mud: -
Hammer Fall (in.)	-	-	-	Casing: -
				Hoist/Hammer: Direct Push -
				PID Make & Model: MiniRAE 2000

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	PID Readings (ppm)
0					-ASPHALT (2 in.) / SUBBASE (4 in.)-	
	G1 36	0.0 5.0	0.5	SW-SM	Brown well-graded silty SAND with quartz gravel, no odor, moist	109.0
			3.0		No recovery	
5	G2 12	5.0 10.0	5.0	SW-SM	Brown well-graded SAND with silt and gravel, no odor, dry	107.0
			6.0		No recovery	
10	G3 0	10.0 15.0	10.0		No recovery	
15			15.0		Bottom of exploration at 15.0 ft	

Note: Borehole grouted upon completion

Water Level Data					
Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water
		Not Encountered			

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary

Overburden (ft)	15.0
Rock Cored (ft)	-
Samples	3G

Boring No. B105-B

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None **Plasticity**: N - Nonplastic L - Low M - Medium H - High
Toughness: L - Low M - Medium H - High **Dry Strength**: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-GEOPROBE-NO BLOW COLUMN HAR HA-LIB07-R1.GLB HA-TB+CORE+WELL-07-1.GDT \\WAS\COMMON\PROJECTS\38677 - ST E. EAST\004 ST E. EAST PHASE II REPORT\DATABASE\2012-0917 38677-004 GEOPROBES.GPJ Oct 3, 12

HALEY & ALDRICH

GEOPROBE REPORT

Boring No. B106

Project	St. Elizabeths East Campus; Martin Luther King Jr. (MLK) Avenue SE; Washington, DC
Client	CH2M Hill
Contractor	Vironex, Inc.

File No. 38677-004
Sheet No. 1 of 2
Start September 12, 2012
Finish September 12, 2012
Driller B. Porter
H&A Rep. M. Tschibelu
Elevation
Datum
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	2 1/4 in.	-	-	Rig Make & Model: Geoprobe
Inside Diameter (in.)	2	-	-	Bit Type: -
Hammer Weight (lb)	-	-	-	Drill Mud: -
Hammer Fall (in.)	-	-	-	Casing: -
				Hoist/Hammer: Direct Push -
				PID Make & Model: MiniRAE 2000

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	PID Readings (ppm)
0	G1 60	0.0 5.0	0.5		-TOPSOIL-	
				ML	Red-brown sandy SILT with gravel, no odor, dry	10.9
5	G2 48	5.0 10.0		ML	Similar to above, except trace clay	123.0
			9.0		No recovery	
10	G3 24	10.0 15.0	10.0	SW	Brown well-graded SAND with quartz gravel, no odor, dry	9.4
			12.0		No recovery	
15	G4 36	15.0 20.0	15.0	SW	Brown well-graded SAND with quartz gravel, no odor, dry	13.6
			18.0		No recovery	
20						

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water
9/12/12	0745	-	-	-	21.0

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary

Overburden (ft)	25.0
Rock Cored (ft)	-
Samples	5G

Boring No. B106

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None **Plasticity**: N - Nonplastic L - Low M - Medium H - High
Toughness: L - Low M - Medium H - High **Dry Strength**: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**
Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-GEOPROBE-NO BLOW COLUMN HAR HA-LIB07-R1.GLB HA-TB+CORE+WELL-07-1.GDT \\WAS\COMMON\PROJECTS\38677 - ST E. EAST\004 ST E. EAST PHASE II REPORT\DATABASE\2012-0917 38677-004 GEOPROBES.GPJ Oct 3, 12

HALEY & ALDRICH

GEOPROBE REPORT

Boring No. B106
File No. 38677-004
Sheet No. 2 of 2

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	PID Readings (ppm)
20	G5 36	20.0 25.0	20.0	SM	Brown silty SAND, trace clay, no odor, wet	18.6
			23.0		No recovery	
25			25.0		Bottom of exploration at 25.0 ft Note: Borehole grouted upon completion	

NOTE: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

Boring No. B106

H&A-GEOPROBE-NO BLOW COLUMN HAR HA-LIB07-R1.GLB HA-TB+CORE+WELL-07-1.GDT \\WAS\COMMON\PROJECTS\38677 - ST E. EAST\004 ST E. EAST PHASE II REPORT\DATABASE\2012-0917 38677-004 GEOPROBES.GPJ Oct 3, 12

HALEY & ALDRICH

GEOPROBE REPORT

Boring No. B107

Project	St. Elizabeths East Campus; Martin Luther King Jr. (MLK) Avenue SE; Washington, DC
Client	CH2M Hill
Contractor	Vironex, Inc.

File No. 38677-004
Sheet No. 1 of 2
Start September 12, 2012
Finish September 12, 2012
Driller B. Porter
H&A Rep. M. Tschibelu
Elevation
Datum
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	2 1/4 in.	-	-	Rig Make & Model: Geoprobe
Inside Diameter (in.)	2	-	-	Bit Type: -
Hammer Weight (lb)	-	-	-	Drill Mud: -
Hammer Fall (in.)	-	-	-	Casing: -
				Hoist/Hammer: Direct Push -
				PID Make & Model: MiniRAE 2000

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	PID Readings (ppm)
0					-ASPHALT (2 in.) / SUBBASE (4 in.)-	
	G1 48	0.0 5.0	0.5	CL	Dark brown CLAY with sand and gravel, no odor, moist	21.8
			4.0		No recovery	
5	G2 36	5.0 10.0	5.0	CL	Brown sandy CLAY, trace gravel, no odor, moist	49.1
			8.0		No recovery	
10	G3 36	10.0 15.0	10.0	CL	Brown sandy CLAY, trace gravel, no odor, moist	39.8
			13.0		No recovery	
15	G4 24	15.0 20.0	15.0	CL	Brown lean CLAY with sand and gravel, no odor, moist	0.2
			17.0		No recovery	
20						

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water
		Not Encountered			

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary

Overburden (ft)	25.0
Rock Cored (ft)	-
Samples	5G

Boring No. B107

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None **Plasticity**: N - Nonplastic L - Low M - Medium H - High
Toughness: L - Low M - Medium H - High **Dry Strength**: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**
Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-GEOPROBE-NO BLOW COLUMN HAR HA-LIB07-R1.GLB HA-TB+CORE+WELL-07-1.GDT \\WASICOMMON\PROJECTS\38677 - ST E. EAST\004 ST E. EAST PHASE II REPORT\DATABASE\2012-0917 38677-004 GEOPROBES.GPJ Oct 3, 12

HALEY & ALDRICH

GEOPROBE REPORT

Boring No. B107

File No. 38677-004

Sheet No. 2 of 2

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	PID Readings (ppm)
20	G5 24	20.0 25.0	20.0	SW-SC	Yellow-brown well-graded SAND with clay and gravel, no odor, wet	0.0
			22.0		No recovery	
25			25.0		Bottom of exploration at 25.0 ft Note: Borehole grouted upon completion	

NOTE: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

Boring No. B107

H&A-GEOPROBE-NO BLOW COLUMN HAR HA-LIB07-R1.GLB HA-TB+CORE+WELL-07-1.GDT \\WAS\COMMON\PROJECTS\38677 - ST E. EAST\004 ST E. EAST PHASE II REPORT\DATABASE\2012-0917 38677-004 GEOPROBES.GPJ Oct 3, 12

HALEY & ALDRICH

GEOPROBE REPORT

Boring No. B110

Project	St. Elizabeths East Campus; Martin Luther King Jr. (MLK) Avenue SE; Washington, DC
Client	CH2M Hill
Contractor	Vironex, Inc.

File No.	38677-004
Sheet No.	1 of 1
Start	September 12, 2012
Finish	September 12, 2012
Driller	B. Porter
H&A Rep.	M. Tschibelu
Elevation	
Datum	
Location	See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	2 1/4 in.	-	-	Rig Make & Model: Geoprobe
Inside Diameter (in.)	2	-	-	Bit Type: -
Hammer Weight (lb)	-	-	-	Drill Mud: -
Hammer Fall (in.)	-	-	-	Casing: -
				Hoist/Hammer: Direct Push -
				PID Make & Model: MiniRAE 2000

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	PID Readings (ppm)
0					-ASPHALT (2 in.) / SUBBASE (4 in.)-	
	G1 60	0.0 5.0	0.5	SW	Gray to brown well-graded SAND with silt and gravel, slight petroleum odor, dry	2.1
5	G2 60	5.0 10.0		SW	Similar to above, except moist	0.0
10	G3 60	10.0 15.0		SM	Gray-brown silty SAND, no odor, moist	0.0
15			15.0		Bottom of exploration at 15.0 ft Note: Borehole grouted upon completion	

Water Level Data					
Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water
		Not Encountered			

Sample ID
- O - Open End Rod
- T - Thin Wall Tube
- U - Undisturbed Sample
- S - Splitspoon Sample
- G - Geoprobe

Well Diagram
- Riser Pipe
- Screen
- Filter Sand
- Cuttings
- Grout
- Concrete
- Bentonite Seal

Summary

Overburden (ft)	15.0
Rock Cored (ft)	-
Samples	3G

Boring No. B110

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None **Plasticity**: N - Nonplastic L - Low M - Medium H - High
Toughness: L - Low M - Medium H - High **Dry Strength**: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-GEOPROBE-NO BLOW COLUMN HAR HA-LIB07-R1.GLB HA-TB+CORE+WELL-07-1.GDT \\WAS\COMMON\PROJECTS\38677 - ST E. EAST\004 ST E. EAST PHASE II REPORT\DATABASE\2012-0917 38677-004 GEOPROBES.GPJ Oct 3, 12

HALEY & ALDRICH

GEOPROBE REPORT

Boring No. B111

Project	St. Elizabeths East Campus; Martin Luther King Jr. (MLK) Avenue SE; Washington, DC
Client	CH2M Hill
Contractor	Vironex, Inc.

File No. 38677-004
Sheet No. 1 of 1
Start September 11, 2012
Finish September 11, 2012
Driller B. Porter
H&A Rep. M. Tschibelu
Elevation
Datum
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	2 1/4 in.	-	-	Rig Make & Model: Geoprobe
Inside Diameter (in.)	2	-	-	Bit Type: -
Hammer Weight (lb)	-	-	-	Drill Mud: -
Hammer Fall (in.)	-	-	-	Casing: -
				Hoist/Hammer: Direct Push -
				PID Make & Model: MiniRAE 2000

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	PID Readings (ppm)
0					-ASPHALT (2 in.) / SUBBASE (4 in.)-	
	G1 36	0.0 5.0	0.5	SM	Brown silty SAND with quartz gravel, slight petroleum odor, dry	95.3
			3.0		No recovery	
5	G2 24	5.0 10.0	5.0	SM	Brown silty SAND with quartz gravel, slight petroleum odor, dry	87.6
			7.0		No recovery	
10	G3 30	10.0 15.0	10.0	SM	Brown silty SAND with quartz gravel, slight petroleum odor, dry	111.0
			12.5		No recovery	
15			15.0		Bottom of exploration at 15.0 ft	

Note: Borehole grouted upon completion

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water
		Not Encountered			

Sample ID

O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram

Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary

Overburden (ft)	15.0
Rock Cored (ft)	-
Samples	3G

Boring No. B111

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None **Plasticity**: N - Nonplastic L - Low M - Medium H - High
Toughness: L - Low M - Medium H - High **Dry Strength**: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-GEOPROBE-NO BLOW COLUMN HAR HA-LIB07-R1.GLB HA-TB+CORE+WELL-07-1.GDT \\WAS\COMMON\PROJECTS\38677 - ST E. EAST\004 ST E. EAST PHASE II REPORT\DATABASE\2012-0917 38677-004 GEOPROBES.GPJ Oct 3, 12

HALEY & ALDRICH

GEOPROBE REPORT

Boring No. B112

Project	St. Elizabeths East Campus; Martin Luther King Jr. (MLK) Avenue SE; Washington, DC
Client	CH2M Hill
Contractor	Vironex, Inc.

File No.	38677-004
Sheet No.	1 of 1
Start	September 11, 2012
Finish	September 11, 2012
Driller	B. Porter
H&A Rep.	M. Tschibelu
Elevation	
Datum	
Location	See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	2 1/4 in.	-	-	Rig Make & Model: Geoprobe
Inside Diameter (in.)	2	-	-	Bit Type: -
Hammer Weight (lb)	-	-	-	Drill Mud: -
Hammer Fall (in.)	-	-	-	Casing: -
				Hoist/Hammer: Direct Push -
				PID Make & Model: MiniRAE 2000

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	PID Readings (ppm)
0					-ASPHALT (2 in.) / SUBBASE (4 in.)-	
	G1 48	0.0 5.0	0.5	ML	Gray sandy SILT with gravel, trace clay, no odor, dry	105.0
			4.0		No recovery	
5	G2 12	5.0 10.0	5.0	CL	Brown sandy CLAY with gravel, no odor, dry	137.0
			6.0		No recovery	
10	G3 30	10.0 15.0	10.0	SC	Brown clayey SAND with quartz gravel, no odor, moist	104.0
			12.5		No recovery	
15	G4 60	15.0 20.0	15.0	SC	Brown SAND with clay, trace gravel, no odor, moist	0.0
20			20.0		Bottom of exploration at 20.0 ft	
					Note: Borehole grouted upon completion	

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water
		Not Encountered			

Sample ID

O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram

Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary

Overburden (ft)	20.0
Rock Cored (ft)	-
Samples	4G

Boring No. B112

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None **Toughness**: L - Low M - Medium H - High **Plasticity**: N - Nonplastic L - Low M - Medium H - High **Dry Strength**: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-GEOPROBE-NO BLOW COLUMN HAR HA-LIB07-R1.GLB HA-TB+CORE+WELL-07-1.GDT \\WAS\COMMON\PROJECTS\38677 - ST E. EAST\004 ST E. EAST PHASE II REPORT\DATABASE\2012-0917 38677-004 GEOPROBES.GPJ Oct 3, 12

HALEY & ALDRICH

GEOPROBE REPORT

Boring No. B113

Project	St. Elizabeths East Campus; Martin Luther King Jr. (MLK) Avenue SE; Washington, DC
Client	CH2M Hill
Contractor	Vironex, Inc.

File No. 38677-004
Sheet No. 1 of 1
Start September 10, 2012
Finish September 10, 2012
Driller B. Porter
H&A Rep. M. Tschibelu
Elevation
Datum
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	2 1/4 in.	-	-	Rig Make & Model: Geoprobe
Inside Diameter (in.)	2	-	-	Bit Type: -
Hammer Weight (lb)	-	-	-	Drill Mud: -
Hammer Fall (in.)	-	-	-	Casing: -
				Hoist/Hammer: Direct Push -
				PID Make & Model: MiniRAE 2000

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	PID Readings (ppm)
0	G1 60	0.0 5.0			-ASPHALT (3 in.) / SUBBASE (15 in.)-	
			1.5	ML	Red-brown SILT with sand, trace quartz gravel, no odor, dry	0.0
5	G2 60	5.0 10.0		ML	Similar to above	0.0
			6.0	SW	Gray-brown to tan well-graded SAND with quartz gravel, no odor, dry	
10	G3 54	10.0 15.0		SW	Similar to above	0.0
			14.5		No recovery	
15			15.0		Bottom of exploration at 15.0 ft	
					Note: Borehole grouted upon completion	

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water
		Not Encountered			

Sample ID

O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram

Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary

Overburden (ft)	15.0
Rock Cored (ft)	-
Samples	3G

Boring No. B113

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None **Plasticity**: N - Nonplastic L - Low M - Medium H - High
Toughness: L - Low M - Medium H - High **Dry Strength**: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-GEOPROBE-NO BLOW COLUMN HAR HA-LIB07-R1.GLB HA-TB+CORE+WELL-07-1.GDT \\WAS\COMMON\PROJECTS\38677 - ST E. EAST\004 ST E. EAST PHASE II REPORT\DATABASE\2012-0917 38677-004 GEOPROBES.GPJ Oct 3, 12

HALEY & ALDRICH

GEOPROBE REPORT

Boring No. B114

Project	St. Elizabeths East Campus; Martin Luther King Jr. (MLK) Avenue SE; Washington, DC
Client	CH2M Hill
Contractor	Vironex, Inc.

File No. 38677-004
Sheet No. 1 of 1
Start September 12, 2012
Finish September 12, 2012
Driller B. Porter
H&A Rep. M. Tschibelu
Elevation
Datum
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	2 1/4 in.	-	-	Rig Make & Model: Geoprobe
Inside Diameter (in.)	2	-	-	Bit Type: -
Hammer Weight (lb)	-	-	-	Drill Mud: -
Hammer Fall (in.)	-	-	-	Casing: -
				Hoist/Hammer: Direct Push -
				PID Make & Model: MiniRAE 2000

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	PID Readings (ppm)
0					-TOPSOIL-	
	G1 60	0.0 5.0	0.5	ML	Brown sandy SILT with gravel, no odor, dry	12.7
5	G2 60	5.0 10.0		ML	Similar to above	0.0
			8.0	SW	Gray well-graded SAND with quartz gravel, no odor, dry	
10	G3 60	10.0 15.0	10.0	SC	Gray-brown clayey SAND with quartz gravel, no odor, moist	0.0
15			15.0		Bottom of exploration at 15.0 ft	

Note: Borehole grouted upon completion

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water
		Not Encountered			

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary

Overburden (ft)	15.0
Rock Cored (ft)	-
Samples	3G

Boring No. B114

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None **Plasticity**: N - Nonplastic L - Low M - Medium H - High
Toughness: L - Low M - Medium H - High **Dry Strength**: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-GEOPROBE-NO BLOW COLUMN HAR HA-LIB07-R1.GLB HA-TB+CORE+WELL-07-1.GDT \\WAS\COMMON\PROJECTS\38677 - ST E. EAST\004 ST E. EAST PHASE II REPORT\DATABASE\2012-0917 38677-004 GEOPROBES.GPJ Oct 3, 12

HALEY & ALDRICH

GEOPROBE REPORT

Boring No. B115

Project	St. Elizabeths East Campus; Martin Luther King Jr. (MLK) Avenue SE; Washington, DC
Client	CH2M Hill
Contractor	Vironex, Inc.

File No. 38677-004
Sheet No. 1 of 1
Start September 12, 2012
Finish September 12, 2012
Driller B. Porter
H&A Rep. M. Tschibelu
Elevation
Datum
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	2 1/4 in.	-	-	Rig Make & Model: Geoprobe
Inside Diameter (in.)	2	-	-	Bit Type: -
Hammer Weight (lb)	-	-	-	Drill Mud: -
Hammer Fall (in.)	-	-	-	Casing: -
				Hoist/Hammer: Direct Push -
				PID Make & Model: MiniRAE 2000

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	PID Readings (ppm)
0					-ASPHALT (2 in.) / SUBBASE (4 in.)-	
	G1 60	0.0 5.0	0.5	ML	Brown sandy SILT with gravel, no odor, dry	0.0
5	G2 60	5.0 10.0		ML	Similar to above except dark staining	183.0
			8.0	SW	Gray-brown well-graded SAND with gravel, no odor, dry	
10	G3 48	10.0 15.0		SW	Similar to above	201.0
			14.0		No recovery	
15			15.0		Bottom of exploration at 15.0 ft	

Note: Borehole grouted upon completion

Water Level Data					
Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water
		Not Encountered			

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary

Overburden (ft)	15.0
Rock Cored (ft)	-
Samples	3G

Boring No. B115

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None **Plasticity**: N - Nonplastic L - Low M - Medium H - High
Toughness: L - Low M - Medium H - High **Dry Strength**: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-GEOPROBE-NO BLOW COLUMN HAR HA-LIB07-R1.GLB HA-TB+CORE+WELL-07-1.GDT \\WAS\COMMON\PROJECTS\38677 - ST E. EAST\004 ST E. EAST PHASE II REPORT\DATABASE\2012-0917 38677-004 GEOPROBES.GPJ Oct 3, 12

HALEY & ALDRICH

GEOPROBE REPORT

Boring No. B116

Project	St. Elizabeths East Campus; Martin Luther King Jr. (MLK) Avenue SE; Washington, DC
Client	CH2M Hill
Contractor	Vironex, Inc.

File No. 38677-004
Sheet No. 1 of 1
Start September 11, 2012
Finish September 11, 2012
Driller B. Porter
H&A Rep. M. Tschibelu
Elevation
Datum
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	2 1/4 in.	-	-	Rig Make & Model: Geoprobe
Inside Diameter (in.)	2	-	-	Bit Type: -
Hammer Weight (lb)	-	-	-	Drill Mud: -
Hammer Fall (in.)	-	-	-	Casing: -
				Hoist/Hammer: Direct Push -
				PID Make & Model: MiniRAE 2000

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	PID Readings (ppm)
0					-ASPHALT (2 in.) / SUBBASE (4 in.)-	
	G1 60	0.0 5.0	0.5	CL	Brown CLAY with sand and gravel, no odor, dry	38.8
5	G2 60	5.0 10.0	6.0	CL	Similar to above	84.8
				SW	Gray well-graded SAND with quartz gravel, petroleum odor, dry	
10	G3 24	10.0 12.0	10.0	CL	Dark brown CLAY with sand, trace gravel, slight petroleum odor, dry	8.1
			12.0		Bottom of exploration at 12.0 ft	

Note: Refusal at 12.0 ft

Note: Borehole grouted upon completion

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water
		Not Encountered			

Sample ID

O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram

Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary

Overburden (ft)	12.0
Rock Cored (ft)	-
Samples	3G

Boring No. B116

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None **Plasticity**: N - Nonplastic L - Low M - Medium H - High
Toughness: L - Low M - Medium H - High **Dry Strength**: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-GEOPROBE-NO BLOW COLUMN HAR HA-LIB07-R1.GLB HA-TB+CORE+WELL-07-1.GDT \\WAS\COMMON\PROJECTS\38677 - ST E. EAST\004 ST E. EAST PHASE II REPORT\DATABASE\2012-0917 38677-004 GEOPROBES.GPJ Oct 3, 12

HALEY & ALDRICH

GEOPROBE REPORT

Boring No. B117

Project	St. Elizabeths East Campus; Martin Luther King Jr. (MLK) Avenue SE; Washington, DC
Client	CH2M Hill
Contractor	Vironex, Inc.

File No. 38677-004
Sheet No. 1 of 1
Start September 11, 2012
Finish September 11, 2012
Driller B. Porter
H&A Rep. M. Tschibelu
Elevation
Datum
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	2 1/4 in.	-	-	Rig Make & Model: Geoprobe
Inside Diameter (in.)	2	-	-	Bit Type: -
Hammer Weight (lb)	-	-	-	Drill Mud: -
Hammer Fall (in.)	-	-	-	Casing: -
				Hoist/Hammer: Direct Push -
				PID Make & Model: MiniRAE 2000

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	PID Readings (ppm)
0					-ASPHALT (2 in.) / SUBBASE (4 in.)-	
	G1 60	0.0 5.0	0.5	ML	Brown sandy SILT with gravel, petroleum odor, moist	49.7
			4.0	SW	Gray well-graded SAND with gravel, petroleum odor, moist	
5	G2 24	5.0 10.0		SW	Similar to above	9.4
			7.0		No recovery	
10	G3 60	10.0 15.0	10.0	SW-SM	Gray well graded silty SAND with gravel, no odor, moist	24.1
15	G4 30	15.0 17.5		SW-SM	Similar to above	68.9
			17.5		Bottom of exploration at 17.5 ft	
					Note: Refusal at 17.5 ft	
					Note: Borehole grouted upon completion	

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water
		Not Encountered			

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary

Overburden (ft)	17.5
Rock Cored (ft)	-
Samples	4G

Boring No. B117

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None **Plasticity**: N - Nonplastic L - Low M - Medium H - High
Toughness: L - Low M - Medium H - High **Dry Strength**: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-GEOPROBE-NO BLOW COLUMN HAR HA-LIB07-R1.GLB HA-TB+CORE+WELL-07-1.GDT \\WAS\COMMON\PROJECTS\38677 - ST E. EAST\004 ST E. EAST PHASE II REPORT\DATABASE\2012-0917 38677-004 GEOPROBES.GPJ Oct 3, 12

HALEY & ALDRICH

GEOPROBE REPORT

Boring No. B118

Project	St. Elizabeths East Campus; Martin Luther King Jr. (MLK) Avenue SE; Washington, DC
Client	CH2M Hill
Contractor	Vironex, Inc.

File No. 38677-004
Sheet No. 1 of 1
Start September 11, 2012
Finish September 11, 2012
Driller B. Porter
H&A Rep. M. Tschibelu
Elevation
Datum
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	2 1/4 in.	-	-	Rig Make & Model: Geoprobe
Inside Diameter (in.)	2	-	-	Bit Type: -
Hammer Weight (lb)	-	-	-	Drill Mud: -
Hammer Fall (in.)	-	-	-	Casing: -
				Hoist/Hammer: Direct Push -
				PID Make & Model: MiniRAE 2000

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	PID Readings (ppm)
0					-TOPSOIL-	
	G1 60	0.0 5.0	0.5	CL	Dark brown CLAY with sand, no odor, moist	4.8
5	G2 60	5.0 10.0		CL	Dark brown CLAY with sand and gravel, no odor, dry	0.8
			8.0	SW-SC	Gray-brown well-graded SAND with clay and quartz gravel, no odor, dry	
10	G3 12	10.0 11.0	10.0	SW	Gray well-graded SAND with quartz gravel, no odor, dry	10.4
			11.0		Bottom of exploration at 11.0 ft	

Note: Refusal at 11.0 ft

Note: Borehole grouted upon completion

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water
		Not Encountered			

Sample ID

O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram

Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary

Overburden (ft)	11.0
Rock Cored (ft)	-
Samples	3G

Boring No. B118

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None **Plasticity**: N - Nonplastic L - Low M - Medium H - High
Toughness: L - Low M - Medium H - High **Dry Strength**: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-GEOPROBE-NO BLOW COLUMN HAR HA-LIB07-R1.GLB HA-TB+CORE+WELL-07-1.GDT \\WASICOMMON\PROJECTS\38677 - ST E. EAST\004 ST E. EAST PHASE II REPORT\DATABASE\2012-0917 38677-004 GEOPROBES.GPJ Oct 3, 12

HALEY & ALDRICH

GEOPROBE REPORT

Boring No. B119

Project	St. Elizabeths East Campus; Martin Luther King Jr. (MLK) Avenue SE; Washington, DC
Client	CH2M Hill
Contractor	Vironex, Inc.

File No. 38677-004
Sheet No. 1 of 1
Start September 10, 2012
Finish September 10, 2012
Driller B. Porter
H&A Rep. M. Tschibelu
Elevation
Datum
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	2 1/4 in.	-	-	Rig Make & Model: Geoprobe
Inside Diameter (in.)	2	-	-	Bit Type: -
Hammer Weight (lb)	-	-	-	Drill Mud: -
Hammer Fall (in.)	-	-	-	Casing: -
				Hoist/Hammer: Direct Push -
				PID Make & Model: MiniRAE 2000

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	PID Readings (ppm)
0					-TOPSOIL-	
	G1 60	0.0 5.0	0.5	ML	Light brown SILT, trace sand and gravel, no odor, dry	0.0
5	G2 60	5.0 10.0		ML	Light brown SILT with sand, trace gravel, no odor, dry	0.0
10	G3 60	10.0 15.0		ML	Similar to above	0.0
			12.0	SW	Tan to white well-graded SAND with quartz gravel, no odor, dry	
15			15.0		Bottom of exploration at 15.0 ft	
					Note: Borehole grouted upon completion	

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water
		Not Encountered			

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary

Overburden (ft)	15.0
Rock Cored (ft)	-
Samples	3G

Boring No. B119

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None **Plasticity**: N - Nonplastic L - Low M - Medium H - High
Toughness: L - Low M - Medium H - High **Dry Strength**: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-GEOPROBE-NO BLOW COLUMN HAR HA-LIB07-R1.GLB HA-TB+CORE+WELL-07-1.GDT \\WASICOMMON\PROJECTS\38677 - ST E. EAST\004 ST E. EAST PHASE II REPORT\DATABASE\2012-0917 38677-004 GEOPROBES.GPJ Oct 3, 12

HALEY & ALDRICH

GEOPROBE REPORT

Boring No. B120

Project	St. Elizabeths East Campus; Martin Luther King Jr. (MLK) Avenue SE; Washington, DC
Client	CH2M Hill
Contractor	Vironex, Inc.

File No.	38677-004
Sheet No.	1 of 1
Start	September 10, 2012
Finish	September 10, 2012
Driller	B. Porter
H&A Rep.	M. Tschibelu
Elevation	
Datum	
Location	See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	2 1/4 in.	-	-	Rig Make & Model: Geoprobe
Inside Diameter (in.)	2	-	-	Bit Type: -
Hammer Weight (lb)	-	-	-	Drill Mud: -
Hammer Fall (in.)	-	-	-	Casing: -
				Hoist/Hammer: Direct Push -
				PID Make & Model: MiniRAE 2000

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	PID Readings (ppm)
0					-ASPHALT (2 in.) / SUBBASE (4 in.)-	
	G1 60	0.0 5.0	0.5	ML	Light brown sandy SILT, trace gravel and clay, no odor, moist	0.0
5	G2 60	5.0 10.0		ML	Dark brown to brown sandy SILT with gravel, trace clay, no odor, moist	0.0
				ML	Gray-brown, brown and orange sandy SILT with gravel, trace clay, no odor, moist	
10	G3 60	10.0 15.0		ML	Brown orange sandy SILT, trace gravel and clay, no odor, moist	0.0
			11.0	SM	Tan silty SAND with gravel, no odor, dry	
15			15.0		Bottom of exploration at 15.0 ft	
					Note: Borehole grouted upon completion	

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water
		Not Encountered			

Sample ID

O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram

Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary

Overburden (ft)	15.0
Rock Cored (ft)	-
Samples	3G

Boring No. B120

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None **Plasticity**: N - Nonplastic L - Low M - Medium H - High
Toughness: L - Low M - Medium H - High **Dry Strength**: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-GEOPROBE-NO BLOW COLUMN HAR HA-LIB07-R1.GLB HA-TB+CORE+WELL-07-1.GDT \\WAS\COMMON\PROJECTS\38677 - ST E. EAST\004 ST E. EAST PHASE II REPORT\DATABASE\2012-0917 38677-004 GEOPROBES.GPJ Oct 3, 12

HALEY & ALDRICH

GEOPROBE REPORT

Boring No. B121

Project	St. Elizabeths East Campus; Martin Luther King Jr. (MLK) Avenue SE; Washington, DC
Client	CH2M Hill
Contractor	Vironex, Inc.

File No.	38677-004
Sheet No.	1 of 1
Start	September 12, 2012
Finish	September 12, 2012
Driller	B. Porter
H&A Rep.	M. Tschibelu
Elevation	
Datum	
Location	See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	2 1/4 in.	-	-	Rig Make & Model: Geoprobe
Inside Diameter (in.)	2	-	-	Bit Type: -
Hammer Weight (lb)	-	-	-	Drill Mud: -
Hammer Fall (in.)	-	-	-	Casing: -
				Hoist/Hammer: Direct Push -
				PID Make & Model: MiniRAE 2000

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	PID Readings (ppm)
0					-ASPHALT (2 in.) / SUBBASE (4 in.)-	
	G1 60	0.0 5.0	0.5	CL	Brown to dark brown CLAY with sand, no odor, moist	0.0
5	G2 60	5.0 10.0		CL	Similar to above, except contains gravel	0.0
			8.0	SW	Gray well-graded SAND with quartz gravel, no odor, dry	
10	G3 60	10.0 15.0		SW	Similar to above, except trace silt	0.0
15			15.0		Bottom of exploration at 15.0 ft	
					Note: Borehole grouted upon completion	

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water
		Not Encountered			

Sample ID

O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram

Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary

Overburden (ft)	15.0
Rock Cored (ft)	-
Samples	3G

Boring No. B121

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None **Plasticity**: N - Nonplastic L - Low M - Medium H - High
Toughness: L - Low M - Medium H - High **Dry Strength**: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-GEOPROBE-NO BLOW COLUMN HAR HA-LIB07-R1.GLB HA-TB+CORE+WELL-07-1.GDT \\WAS\COMMON\PROJECTS\38677 - ST E. EAST\004 ST E. EAST PHASE II REPORT\DATABASE\2012-0917 38677-004 GEOPROBES.GPJ Oct 3, 12

HALEY & ALDRICH

GEOPROBE REPORT

Boring No. B122

Project	St. Elizabeths East Campus; Martin Luther King Jr. (MLK) Avenue SE; Washington, DC
Client	CH2M Hill
Contractor	Vironex, Inc.

File No. 38677-004
Sheet No. 1 of 1
Start September 10, 2012
Finish September 10, 2012
Driller B. Porter
H&A Rep. M. Tschibelu
Elevation
Datum
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	2 1/4 in.	-	-	Rig Make & Model: Geoprobe
Inside Diameter (in.)	2	-	-	Bit Type: -
Hammer Weight (lb)	-	-	-	Drill Mud: -
Hammer Fall (in.)	-	-	-	Casing: -
				Hoist/Hammer: Direct Push -
				PID Make & Model: MiniRAE 2000

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	PID Readings (ppm)
0	G1 60	0.0 5.0	0.2	SW	-ASPHALT (2 in.)-	0.0
					Orange to black well-graded SAND with gravel, black staining, no odor, dry	
			1.0	CL	Brown lean CLAY with sand, black staining, no odor, dry	
5	G2 60	5.0 10.0		CL	Brown lean CLAY with sand and gravel, no odor, dry	0.0
10	G3 60	10.0 15.0		CL	Brown sandy CLAY with gravel, no odor, dry	0.0
			13.0	SW	Gray well-graded SAND with gravel, black staining, no odor, dry	
			14.0	CL	Gray-brown lean CLAY, trace sand, no odor, dry	
15			15.0		Bottom of exploration at 15.0 ft	
					Note: Borehole grouted upon completion	

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water
		Not Encountered			

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary

Overburden (ft)	15.0
Rock Cored (ft)	-
Samples	3G

Boring No. B122

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None **Toughness**: L - Low M - Medium H - High **Plasticity**: N - Nonplastic L - Low M - Medium H - High **Dry Strength**: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-GEOPROBE-NO BLOW COLUMN HAR HA-LIB07-R1.GLB HA-TB+CORE+WELL-07-1.GDT \\WAS\COMMON\PROJECTS\38677 - ST E. EAST\004 ST E. EAST PHASE II REPORT\DATABASE\2012-0917 38677-004 GEOPROBES.GPJ Oct 3, 12

HALEY & ALDRICH

GEOPROBE REPORT

Boring No. B123

Project	St. Elizabeths East Campus; Martin Luther King Jr. (MLK) Avenue SE; Washington, DC
Client	CH2M Hill
Contractor	Vironex, Inc.

File No. 38677-004
Sheet No. 1 of 1
Start September 10, 2012
Finish September 10, 2012
Driller B. Porter
H&A Rep. M. Tschibelu
Elevation
Datum
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	2 1/4 in.	-	-	Rig Make & Model: Geoprobe
Inside Diameter (in.)	2	-	-	Bit Type: -
Hammer Weight (lb)	-	-	-	Drill Mud: -
Hammer Fall (in.)	-	-	-	Casing: -
				Hoist/Hammer: Direct Push -
				PID Make & Model: MiniRAE 2000

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	PID Readings (ppm)
0					-TOPSOIL-	
	G1 60	0.0 5.0	0.5	ML	Brown SILT with sand, trace gravel, no odor, dry	0.0
5	G2 60	5.0 10.0		ML	Red-brown sandy SILT with gravel, no odor, dry	0.0
10	G3 60	10.0 15.0	10.0	SW	Light brown to tan well-graded SAND with gravel, no odor, dry	0.0
15			15.0		Bottom of exploration at 15.0 ft Note: Borehole grouted upon completion	

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water
		Not Encountered			

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary

Overburden (ft)	15.0
Rock Cored (ft)	-
Samples	3G

Boring No. B123

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None **Plasticity**: N - Nonplastic L - Low M - Medium H - High
Toughness: L - Low M - Medium H - High **Dry Strength**: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**
Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-GEOPROBE-NO BLOW COLUMN HAR HA-LIB07-R1.GLB HA-TB+CORE+WELL-07-1.GDT \\WAS\COMMON\PROJECTS\38677 - ST E. EAST\004 ST E. EAST PHASE II REPORT\DATABASE\2012-0917 38677-004 GEOPROBES.GPJ Oct 3, 12

HALEY & ALDRICH

GEOPROBE REPORT

Boring No. B124

Project	St. Elizabeths East Campus; Martin Luther King Jr. (MLK) Avenue SE; Washington, DC
Client	CH2M Hill
Contractor	Vironex, Inc.

File No. 38677-004
Sheet No. 1 of 1
Start September 10, 2012
Finish September 10, 2012
Driller B. Porter
H&A Rep. M. Tschibelu
Elevation
Datum
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	2 1/4 in.	-	-	Rig Make & Model: Geoprobe
Inside Diameter (in.)	2	-	-	Bit Type: -
Hammer Weight (lb)	-	-	-	Drill Mud: -
Hammer Fall (in.)	-	-	-	Casing: -
				Hoist/Hammer: Direct Push -
				PID Make & Model: MiniRAE 2000

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	PID Readings (ppm)
0	G1 42	0.0 5.0	0.5		-TOPSOIL-	
				ML	Brown sandy SILT with quartz gravel, no odor, moist	0.0
			3.5		No recovery	
5	G2 42	5.0 10.0	5.0	ML	Brown sandy SILT with quartz gravel, no odor, moist	0.0
			8.5		No recovery	
10	G3 48	10.0 15.0	10.0	ML	Brown sandy SILT with quartz gravel, no odor, moist	0.0
			12.0	SW	Light brown well-graded SAND with gravel, no odor, moist	
			14.0		No recovery	
15			15.0		Bottom of exploration at 15.0 ft	

Note: Borehole grouted upon completion

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water
		Not Encountered			

Sample ID

O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram

Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary

Overburden (ft)	15.0
Rock Cored (ft)	-
Samples	3G

Boring No. B124

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None **Plasticity**: N - Nonplastic L - Low M - Medium H - High
Toughness: L - Low M - Medium H - High **Dry Strength**: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-GEOPROBE-NO BLOW COLUMN HAR HA-LIB07-R1.GLB HA-TB+CORE+WELL-07-1.GDT \\WASICOMMON\PROJECTS\38677 - ST E. EAST\004 ST E. EAST PHASE II REPORT\DATABASE\2012-0917 38677-004 GEOPROBES.GPJ Oct 3, 12

HALEY & ALDRICH

GEOPROBE REPORT

Boring No. B125

Project	St. Elizabeths East Campus; Martin Luther King Jr. (MLK) Avenue SE; Washington, DC
Client	CH2M Hill
Contractor	Vironex, Inc.

File No.	38677-004
Sheet No.	1 of 1
Start	September 11, 2012
Finish	September 11, 2012
Driller	B. Porter
H&A Rep.	M. Tschibelu
Elevation	
Datum	
Location	See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	2 1/4 in.	-	-	Rig Make & Model: Geoprobe
Inside Diameter (in.)	2	-	-	Bit Type: -
Hammer Weight (lb)	-	-	-	Drill Mud: -
Hammer Fall (in.)	-	-	-	Casing: -
				Hoist/Hammer: Direct Push -
				PID Make & Model: MiniRAE 2000

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	PID Readings (ppm)
0	G1 60	0.0 5.0	0.5		-ASPHALT (2 in.) / SUBBASE (4 in.)-	
				CL	Gray-black sandy lean CLAY, black staining, slight petroleum odor, dry	120
5	G2 60	5.0 10.0		CL	Gray-brown sandy lean CLAY with gravel, slight petroleum odor, dry	112
10	G3 60	10.0 15.0	10.0	SW	Gray-tan well-graded SAND with gravel, no odor, dry	87.6
15	G4 60	15.0 20.0		SW	Similar to above	59.3
20			20.0		Bottom of exploration at 20.0 ft	
					Note: Borehole grouted upon completion	

Water Level Data					
Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water
		Not Encountered			

Sample ID
- O - Open End Rod
- T - Thin Wall Tube
- U - Undisturbed Sample
- S - Splitspoon Sample
- G - Geoprobe

Well Diagram
- Riser Pipe
- Screen
- Filter Sand
- Cuttings
- Grout
- Concrete
- Bentonite Seal

Summary

Overburden (ft)	20.0
Rock Cored (ft)	-
Samples	4G

Boring No. B125

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None **Plasticity**: N - Nonplastic L - Low M - Medium H - High
Toughness: L - Low M - Medium H - High **Dry Strength**: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-GEOPROBE-NO BLOW COLUMN HAR HA-LIB07-R1.GLB HA-TB+CORE+WELL-07-1.GDT \\WAS\COMMON\PROJECTS\38677 - ST E. EAST\004 ST E. EAST PHASE II REPORT\DATABASE\2012-0917 38677-004 GEOPROBES.GPJ Oct 3, 12

HALEY & ALDRICH

GEOPROBE REPORT

Boring No. B126

Project	St. Elizabeths East Campus; Martin Luther King Jr. (MLK) Avenue SE; Washington, DC
Client	CH2M Hill
Contractor	Vironex, Inc.

File No. 38677-004
Sheet No. 1 of 1
Start September 11, 2012
Finish September 11, 2012
Driller B. Porter
H&A Rep. M. Tschibelu
Elevation
Datum
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	2 1/4 in.	-	-	Rig Make & Model: Geoprobe
Inside Diameter (in.)	2	-	-	Bit Type: -
Hammer Weight (lb)	-	-	-	Drill Mud: -
Hammer Fall (in.)	-	-	-	Casing: -
				Hoist/Hammer: Direct Push -
				PID Make & Model: MiniRAE 2000

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	PID Readings (ppm)
0	G1 60	0.0 5.0	0.5		-TOPSOIL-	
				ML	Brown sandy SILT, trace gravel, no odor, dry	0.0
5	G2 60	5.0 10.0		ML	Similar to above	0.0
10	G3 60	10.0 15.0		ML	Similar to above	0.0
			11.5	SW	Tan to white well-graded SAND with quartz gravel, slight petroleum odor, dry	
15	G4 60	15.0 20.0		SW	Similar to above	0.0
20			20.0		Bottom of exploration at 20.0 ft	
					Note: Borehole grouted upon completion	

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water
		Not Encountered			

Sample ID

O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram

Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary

Overburden (ft)	20.0
Rock Cored (ft)	-
Samples	4G

Boring No. B126

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None **Plasticity**: N - Nonplastic L - Low M - Medium H - High
Toughness: L - Low M - Medium H - High **Dry Strength**: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-GEOPROBE-NO BLOW COLUMN HAR HA-LIB07-R1.GLB HA-TB+CORE+WELL-07-1.GDT \\WAS\COMMON\PROJECTS\38677 - ST E. EAST\004 ST E. EAST PHASE II REPORT\DATABASE\2012-0917 38677-004 GEOPROBES.GPJ Oct 3, 12

HALEY & ALDRICH

GEOPROBE REPORT

Boring No. B127

Project	St. Elizabeths East Campus; Martin Luther King Jr. (MLK) Avenue SE; Washington, DC
Client	CH2M Hill
Contractor	Vironex, Inc.

File No. 38677-004
Sheet No. 1 of 1
Start September 10, 2012
Finish September 10, 2012
Driller B. Porter
H&A Rep. M. Tschibelu
Elevation
Datum
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	2 1/4 in.	-	-	Rig Make & Model: Geoprobe
Inside Diameter (in.)	2	-	-	Bit Type: -
Hammer Weight (lb)	-	-	-	Drill Mud: -
Hammer Fall (in.)	-	-	-	Casing: -
				Hoist/Hammer: Direct Push -
				PID Make & Model: MiniRAE 2000

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	PID Readings (ppm)
0	G1 60	0.0 5.0	0.5		-TOPSOIL-	
				ML	Light brown sandy SILT, trace gravel, no odor, dry	0.0
				ML	Brown SILT with sand, trace gravel and clay, no odor, dry	
5	G2 60	5.0 10.0		ML	Red-brown SILT with sand and quartz gravel, contains clay pockets, no odor, dry	0.0
			9.0	SW	Tan well-graded SAND with gravel, no odor, dry	
10	G3 60	10.0 15.0	10.0	SM	Brown silty SAND with gravel, no odor, dry	0.0
			12.0	SW	White-tan well-graded SAND with quartz gravel, no odor, dry	
15			15.0		Bottom of exploration at 15.0 ft	
					Note: Borehole grouted upon completion	

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water
		Not Encountered			

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary

Overburden (ft)	15.0
Rock Cored (ft)	-
Samples	3G

Boring No. B127

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None **Plasticity**: N - Nonplastic L - Low M - Medium H - High
Toughness: L - Low M - Medium H - High **Dry Strength**: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**
Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-GEOPROBE-NO BLOW COLUMN HAR HA-LIB07-R1.GLB HA-TB+CORE+WELL-07-1.GDT \\WAS\COMMON\PROJECTS\38677 - ST E. EAST\004 ST E. EAST PHASE II REPORT\DATABASE\2012-0917 38677-004 GEOPROBES.GPJ Oct 3, 12

HALEY & ALDRICH

GEOPROBE REPORT

Boring No. B128

Project	St. Elizabeths East Campus; Martin Luther King Jr. (MLK) Avenue SE; Washington, DC
Client	CH2M Hill
Contractor	Vironex, Inc.

File No. 38677-004
Sheet No. 1 of 1
Start September 10, 2012
Finish
Driller B. Porter
H&A Rep. M. Tschibelu
Elevation
Datum
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	2 1/4 in.	-	-	Rig Make & Model: Geoprobe
Inside Diameter (in.)	2	-	-	Bit Type: -
Hammer Weight (lb)	-	-	-	Drill Mud: -
Hammer Fall (in.)	-	-	-	Casing: -
				Hoist/Hammer: Direct Push -
				PID Make & Model:

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	PID Readings (ppm)
0	G1 60	0.0 5.0	0.2	ML	-ASPHALT-	0.0
				ML	Gray sandy SILT with gravel, no odor, dry	
					Brown sandy SILT, trace gravel and clay, no odor, dry	
5	G2 60	5.0 10.0	5.0	SM	Gray-brown silty SAND with gravel, no odor, dry	0.0
				SM	Orange-brown silty SAND with gravel, no odor, dry	
			8.0	SW	Gray-orange SAND with gravel, no odor, dry	
10	G3 36	10.0 13.0		SW	Tan-orange well-graded SAND with quartz gravel, no odor, dry	0.0
			13.0		Bottom of exploration at 13.0 ft	
					Note: Refusal at 13.0 ft	
					Note: Borehole grouted upon completion	

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water
		Not Encountered			

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary

Overburden (ft)	13.0
Rock Cored (ft)	-
Samples	3G

Boring No. B128

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None **Plasticity**: N - Nonplastic L - Low M - Medium H - High
Toughness: L - Low M - Medium H - High **Dry Strength**: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-GEOPROBE-NO BLOW COLUMN HAR HA-LIB07-R1.GLB HA-TB+CORE+WELL-07-1.GDT \\WAS\COMMON\PROJECTS\38677 - ST E. EAST\004 ST E. EAST PHASE II REPORT\DATABASE\2012-0917 38677-004 GEOPROBES.GPJ Oct 3, 12

HALEY & ALDRICH

GEOPROBE REPORT

Boring No. B129

Project	St. Elizabeths East Campus; Martin Luther King Jr. (MLK) Avenue SE; Washington, DC
Client	CH2M Hill
Contractor	Vironex, Inc.

File No. 38677-004
Sheet No. 1 of 1
Start September 11, 2012
Finish September 11, 2012
Driller B. Porter
H&A Rep. M. Tschibelu
Elevation
Datum
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	2 1/4 in.	-	-	Rig Make & Model: Geoprobe
Inside Diameter (in.)	2	-	-	Bit Type: -
Hammer Weight (lb)	-	-	-	Drill Mud: -
Hammer Fall (in.)	-	-	-	Casing: -
				Hoist/Hammer: Direct Push -
				PID Make & Model: MiniRAE 2000

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	PID Readings (ppm)
0					-ASPHALT (2 in.) / SUBBASE (4 in.)-	
	G1 60	0.0 5.0	0.5	CL	Brown CLAY with sand and gravel, slight petroleum odor, dry	4.3
5	G2 60	5.0 10.0		CL	Similar to above	58.9
			8.0	SW	Gray well graded SAND with gravel, no odor, dry	
10	G3 60	10.0 15.0		SW	Similar to above	16.4
			13.0	CL	Brown CLAY with sand, no dor, dry	
15			15.0		Bottom of exploration at 15.0 ft	
					Note: Borehole grouted upon completion	

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water
		Not Encountered			

Sample ID

O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram

Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary

Overburden (ft)	15.0
Rock Cored (ft)	-
Samples	3G

Boring No. B129

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None **Plasticity**: N - Nonplastic L - Low M - Medium H - High
Toughness: L - Low M - Medium H - High **Dry Strength**: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-GEOPROBE-NO BLOW COLUMN HAR HA-LIB07-R1.GLB HA-TB+CORE+WELL-07-1.GDT \\WAS\COMMON\PROJECTS\38677 - ST E. EAST\004 ST E. EAST PHASE II REPORT\DATABASE\2012-0917 38677-004 GEOPROBES.GPJ Oct 3, 12

GEOPROBE REPORT

Boring No. B201

Project	St. Elizabeths East Campus, Washington, D.C.
Client	Delon Hampton
Contractor	Vironex

File No. 38677-007
Sheet No. 1 of 1
Start 15 December 2015
Finish 15 December 2015
Driller L. Caroll
H&A Rep. C. Tschibelu
Elevation 150.5
Datum NAVD 1988
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	2.25 in.	--	--	Rig Make & Model: Geoprobe 6620DT
Inside Diameter (in.)	2.0 in.	--	--	Bit Type: Cutting Head Drill Mud: None
Hammer Weight (lb)	--	--	-	Casing:
Hammer Fall (in.)	--	--	-	Hoist/Hammer: -- -- PID Make & Model: MiniRAE 2000

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Readings (ppm)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
0	G1 60	0.0 5.0	0.0	149.5		ASPHALT (12.0 in.)										
				1.0	ML	Gray-brown sandy SILT with gravel (ML), mps 19 mm, sand lenses, no odor, moist, contains red brick debris	5	10	5	10	20	50				
				146.5 4.0	CL	Clay pocket -FILL-										
			0.0	145.5 5.0												
5	G2 42	5.0 10.0	0.0		GM	Dense red and gray silty GRAVEL with sand (GM), mps 19 mm, no structure, no odor, moist, contains red brick debris, glass and decaying wood -FILL-	10	35	5	10	20	20				
			0.0													
10	G3 47	10.0 15.0	0.0 0.4 1.0 0.0		SM	Gray and tan silty SAND with gravel (SM), mps 19 mm, no structure, minor petroleum-like odor, moist	5	10	10	15	30	30				
15				135.5 15.0		BOTTOM OF EXPLORATION 15.0 FT										
20																

Notes:
1. Refusal at 5.0 ft. First offset - 5.0 ft south. Refusal at 10.0 ft. Second offset - 10.0 ft south.
2. Boring grounded upon completion.

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water
12/15/15	--	--	--		None Encountered

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary
Overburden (ft) 15.0
Rock Cored (ft) --
Samples 3G

Boring No. B201

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None **Toughness**: L - Low M - Medium H - High **Plasticity**: N - Nonplastic L - Low M - Medium H - High **Dry Strength**: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-GEOPROBE-09 W/PID-2 HA-LIB09.GLB HA-TB+CORE+WELL-07-1.GDT L:\WASHINGTON DC\38677\38677-007_GEOPROBES.GPJ Jan 20, 16

GEOPROBE REPORT

Boring No. B202

Project	St. Elizabeths East Campus, Washington, D.C.
Client	Delon Hampton
Contractor	Vironex

File No. 38677-007
Sheet No. 1 of 1
Start 15 December 2015
Finish 16 December 2015
Driller L. Caroll
H&A Rep. C. Tschibelu
Elevation 155.5
Datum NAVD 1988
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	2.25 in.	--	--	Rig Make & Model: Geoprobe 6620DT
Inside Diameter (in.)	2.0 in.	--	--	Bit Type: Cutting Head Drill Mud: None
Hammer Weight (lb)	--	--	-	Casing:
Hammer Fall (in.)	--	--	-	Hoist/Hammer: -- -- PID Make & Model: MiniRAE 2000

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Readings (ppm)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
0				155.0		ASPHALT (6.0 in.)										
	G1 55	0.0 5.0	0.0	0.5	SP	Yellow poorly graded SAND (SP), mps 0.075 mm, no structure, no odor, dry -FILL-	-	-	-	-	90	10				
			0.0	150.5												
5	G2 47	5.0 10.0	0.0	5.0	CL	Yellow-brown sandy lean CLAY with gravel (CL), mps 19 mm, no odor, no structure, moist (wet at bottom of sleeve) -PROBABLE FILL-	5	10	15	10	10	50				
			0.0													
10	G3 32	10.0 15.0	0.0		CL	Yellow-brown sandy lean CLAY with gravel (CL), mps 19 mm, no structure, no odor, wet	5	10	15	10	10	50				
			0.0	140.5												
15				15.0		BOTTOM OF EXPLORATION 15.0 FT										
20																

Notes:
1. First encountered water at 10.0 ft - sample from 10.0 to 15.0 ft was wet.
2. Installed temporary well, 1 in. well, screen from 15.0 to 10.0 and PVC riser from 10.0 to 0.0 ft on 12/15/15.
3. Temporary well was removed and grouted on 12/16/15.
4. Boring grounded upon completion.

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water
12/15/15	09:05	--	15.0	15.0	10.0

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary
Overburden (ft) 15.0
Rock Cored (ft) --
Samples 3G

Boring No. B202

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None **Toughness**: L - Low M - Medium H - High **Plasticity**: N - Nonplastic L - Low M - Medium H - High **Dry Strength**: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-GEOPROBE-09 W/PID-2 HA-LIB09.GLB HA-TB+CORE+WELL-07-1.GDT L:\WASHINGTON DC\38677\38677-007_GEOPROBES.GPJ Jan 20, 16

GEOPROBE REPORT

Boring No. B203

Project	St. Elizabeths East Campus, Washington, D.C.
Client	Delon Hampton
Contractor	Vironex

File No. 38677-007
Sheet No. 1 of 1
Start 15 December 2015
Finish 15 December 2015
Driller L. Caroll
H&A Rep. C. Tschibelu
Elevation 160.5
Datum NAVD 1988
Location See Plan

	Casing	Sampler	Barrel
Type	2.25 in.	--	--
Inside Diameter (in.)	2.0 in.	--	--
Hammer Weight (lb)	--	--	-
Hammer Fall (in.)	--	--	-

Drilling Equipment and Procedures

Rig Make & Model: Geoprobe 6620DT
Bit Type: Cutting Head
Drill Mud: None
Casing:
Hoist/Hammer: -- --
PID Make & Model: MiniRAE 2000

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Readings (ppm)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
0	G1 31	0.0 5.0	0.0	160.0		ASPHALT (6.0 in.)										
			0.0	0.5 / 155.5	CL	Tan and yellow-brown sandy lean CLAY with gravel (CL), mps 19 mm, no structure, no odor, moist -FILL-	5	10	10	10	20	45				
5	G2 40	5.0 10.0	0.0	5.0 / 150.5	CL	Yellow-brown sandy lean CLAY with gravel (CL), mps 19 mm, no structure, no odor, moist, contains quartz -PROBABLE FILL-	5	10	5	5	20	55				
10	G3 48	10.0 15.0	0.0	10.0 / 145.5	SP	Yellow-brown poorly graded SAND with gravel (SP), mps 19 mm, no structure, no odor, moist	10	15	15	25	30	5				
15			0.0	15.0		BOTTOM OF EXPLORATION 15.0 FT										
20						Note: 1. Boring grounded upon completion.										

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water
12/15/15	--	--	--		None Encountered

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary
Overburden (ft) 15.0
Rock Cored (ft) --
Samples 3G

Boring No. B203

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None **Toughness**: L - Low M - Medium H - High **Plasticity**: N - Nonplastic L - Low M - Medium H - High **Dry Strength**: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-GEOPROBE-09 W/PID-2 HA-LIB09.GLB HA-TB+CORE+WELL-07-1.GDT L:\WASHINGTON DC\38677\38677-007_GEOPROBES.GPJ Jan 20, 16

GEOPROBE REPORT

Boring No. B204

Project	St. Elizabeths East Campus, Washington, D.C.
Client	Delon Hampton
Contractor	Vironex

File No. 38677-007
Sheet No. 1 of 1
Start 15 December 2015
Finish 15 December 2015
Driller L. Caroll
H&A Rep. C. Tschibelu
Elevation 168.0
Datum NAVD 1988
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	2.25 in.	--	--	Rig Make & Model: Geoprobe 6620DT
Inside Diameter (in.)	2.0 in.	--	--	Bit Type: Cutting Head Drill Mud: None
Hammer Weight (lb)	--	--	-	Casing:
Hammer Fall (in.)	--	--	-	Hoist/Hammer: -- -- PID Make & Model: MiniRAE 2000

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Readings (ppm)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
0	G1 35	0.0 5.0	0.0	167.5		ASPHALT (6.0 in.)										
			0.0	0.5	CL	Brown sandy lean CLAY with gravel (CL), mps 19 mm, no structure, no odor, moist -FILL-	5	10	5	10	20	50				
5	G2 42	5.0 10.0	0.0	163.0 5.0	CL	Hard tan and yellow-brown sandy lean CLAY (CL), mps 2.0 mm, no structure, no odor, moist -PROBABLE FILL-			5	5	20	70				
10	G3 20	10.0 15.0	0.0	158.0 10.0	SC	Yellow-brown clayey SAND with gravel (SC), mps 19 mm, no structure, no odor, moist	10	10	5	10	40	25				
15			0.0	153.0 15.0		BOTTOM OF EXPLORATION 15.0 FT Note: 1. Boring grounded upon completion.										
20																

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water
12/15/15	--	--	--		None Encountered

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary
Overburden (ft) 15.0
Rock Cored (ft) --
Samples 3G

Boring No. B204

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None **Plasticity**: N - Nonplastic L - Low M - Medium H - High
Toughness: L - Low M - Medium H - High **Dry Strength**: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-GEOPROBE-09 W/PID-2 HA-LIB09.GLB HA-TB+CORE+WELL-07-1.GDT L:\WASHINGTON DC\38677\38677-007_GEOPROBES.GPJ Jan 20, 16

GEOPROBE REPORT

Boring No. B205

Project	St. Elizabeths East Campus, Washington, D.C.
Client	Delon Hampton
Contractor	Vironex

File No. 38677-007
Sheet No. 1 of 1
Start 15 December 2015
Finish 15 December 2015
Driller L. Caroll
H&A Rep. C. Tschibelu
Elevation 162.0
Datum NAVD 1988
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	2.25 in.	--	--	Rig Make & Model: Geoprobe 6620DT
Inside Diameter (in.)	2.0 in.	--	--	Bit Type: Cutting Head Drill Mud: None
Hammer Weight (lb)	--	--	-	Casing:
Hammer Fall (in.)	--	--	-	Hoist/Hammer: -- -- PID Make & Model: MiniRAE 2000

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Readings (ppm)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
0	G1 55	0.0 5.0	0.0	161.5		TOPSOIL (6.0 in.)										
			0.0	0.5	CL	Brown sandy lean CLAY with gravel, mps 19 mm, no structure, no odor, moist, contains quartz -FILL-	10	5	5	10	20	50				
5	G2 59	5.0 10.0	0.0	157.0	CL	Yellow-brown sandy lean CLAY with gravel (CL), mps 19 mm, no structure, no odor, moist -PROBABLE FILL-	5	10	5	15	20	45				
10	G3 50	10.0 15.0	0.0	152.0	SM	Yellow-brown and tan silty SAND (SM), mps 0.075 mm, silt pocket from 12.0 to 13.0 ft, no odor, moist				5	70	25				
15			0.0	147.0		BOTTOM OF EXPLORATION 15.0 FT Note: 1. Boring grounded upon completion.										
20																

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water
12/15/15	--	--	--		None Encountered

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary
Overburden (ft) 15.0
Rock Cored (ft) --
Samples 3G

Boring No. B205

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None **Plasticity**: N - Nonplastic L - Low M - Medium H - High
Toughness: L - Low M - Medium H - High **Dry Strength**: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-GEOPROBE-09 W/PID-2 HA-LIB09.GLB HA-TB+CORE+WELL-07-1.GDT L:\WASHINGTON DC\38677\38677-007_GEOPROBES.GPJ Jan 20, 16

GEOPROBE REPORT

Boring No. B206

Project	St. Elizabeths East Campus, Washington, D.C.
Client	Delon Hampton
Contractor	Vironex

File No. 38677-007
Sheet No. 1 of 1
Start 15 December 2015
Finish 15 December 2015
Driller L. Caroll
H&A Rep. C. Tschibelu
Elevation 167.5
Datum NAVD 1988
Location See Plan

	Casing	Sampler	Barrel
Type	2.25 in.	--	--
Inside Diameter (in.)	2.0 in.	--	--
Hammer Weight (lb)	--	--	-
Hammer Fall (in.)	--	--	-

Drilling Equipment and Procedures

Rig Make & Model: Geoprobe 6620DT
Bit Type: Cutting Head
Drill Mud: None
Casing:
Hoist/Hammer: -- --
PID Make & Model: MiniRAE 2000

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Readings (ppm)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
0				167.0		TOPSOIL (6.0 in.)										
	G1 60	0.0 5.0	0.0	0.5	SC	Yellow-brown and tan clayey SAND with gravel (CL), mps 19 mm, no structure, no odor, moist, contains quartz	5	15	5	10	20	45				
5			0.0	162.5 5.0												
	G2 60	5.0 10.0	0.0		ML	Yellow-brown and tan sandy SILT with gravel (ML), mps 4.75 mm, no structure, no odor, moist		15	5	10	25	45				
10			0.0	157.5 10.0												
	G3 60	10.0 15.0	0.0		SC	Yellow-brown and gray clayey SAND with gravel (SC), mps 19 mm, no structure, organic odor, moist, contains a gray pocket with organic odor at 11.0 ft.	5	15	5	10	20	45				
15			0.0	152.5 15.0		BOTTOM OF EXPLORATION 15.0 FT										
20																

Note:
1. Boring grounded upon completion.

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water
12/15/15	--	--	--		None Encountered

Sample ID

O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram

Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary

Overburden (ft) 15.0
Rock Cored (ft) --
Samples 3G

Boring No. B206

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None **Toughness**: L - Low M - Medium H - High **Plasticity**: N - Nonplastic L - Low M - Medium H - High **Dry Strength**: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-GEOPROBE-09 W/PID-2 HA-LIB09.GLB HA-TB+CORE+WELL-07-1.GDT L:\WASHINGTON DC\38677\38677-007_GEOPROBES.GPJ Jan 20, 16

GEOPROBE REPORT

Boring No. B207

Project	St. Elizabeths East Campus, Washington, D.C.
Client	Delon Hampton
Contractor	Vironex

File No. 38677-007
Sheet No. 1 of 1
Start 15 December 2015
Finish 15 December 2015
Driller L. Caroll
H&A Rep. C. Tschibelu
Elevation 178.0
Datum NAVD 1988
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	2.25 in.	--	--	Rig Make & Model: Geoprobe 6620DT
Inside Diameter (in.)	2.0 in.	--	--	Bit Type: Cutting Head Drill Mud: None
Hammer Weight (lb)	--	--	-	Casing:
Hammer Fall (in.)	--	--	-	Hoist/Hammer: -- -- PID Make & Model: MiniRAE 2000

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Readings (ppm)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
0	G1 60	0.0 5.0	0.0	177.5		ASPHALT (6.0 in.)										
				0.5	CL	Yellow-brown lean CLAY with sand and gravel (CL), mps 19 mm, no structure, no odor, moist, contains black stain at 1.0 ft. -FILL-	5	15	5	5	5	65				
			0.0													
5	G2 55	5.0 10.0	0.0		CL	Yellow-brown sandy lean CLAY (CL), mps 19 mm, no structure, no odor, moist	5	10	5	10	25	45				
			0.0													
10	G3 29	10.0 15.0	0.0		CL	Yellow-brown and gray sandy lean CLAY with gravel (CL), mps 19 mm, no structure, no odor, moist, contains quartz	5	15	10	10	25	35				
			0.0													
15				163.0 15.0		BOTTOM OF EXPLORATION 15.0 FT										
20																

Notes:
1. Offset 5.0 ft south of staked location due to utility..
2. Boring grounded upon completion.

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water
12/15/15	--	--	--		None Encountered

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary
Overburden (ft) 15.0
Rock Cored (ft) --
Samples 3G

Boring No. B207

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None **Plasticity**: N - Nonplastic L - Low M - Medium H - High
Toughness: L - Low M - Medium H - High **Dry Strength**: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-GEOPROBE-09 W/PID-2 HA-LIB09.GLB HA-TB+CORE+WELL-07-1.GDT L:\WASHINGTON DC\38677\38677-007_GEOPROBES.GPJ Jan 20, 16

GEOPROBE REPORT

Boring No. B208

Project	St. Elizabeths East Campus, Washington, D.C.
Client	Delon Hampton
Contractor	Vironex

File No. 38677-007
Sheet No. 1 of 1
Start 16 December 2015
Finish 16 December 2015
Driller L. Caroll
H&A Rep. C. Tschibelu
Elevation 175.5
Datum NAVD 1988
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	2.25 in.	--	--	Rig Make & Model: Geoprobe 6620DT
Inside Diameter (in.)	2.0 in.	--	--	Bit Type: Cutting Head Drill Mud: None
Hammer Weight (lb)	--	--	-	Casing:
Hammer Fall (in.)	--	--	-	Hoist/Hammer: -- -- PID Make & Model: MiniRAE 2000

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Readings (ppm)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
0				175.0		ASPHALT (6.0 in.)										
	G1 60	0.0 5.0	0.0	0.5	CL	Hard tan and yellow-brown sandy lean CLAY with gravel (CL), mps 19 mm, mottled, no odor, moist		15	5	10	15	55				
			0.0	170.5												
5	G2 60	5.0 10.0	0.0	5.0	SW-SC	Very dense tan and yellow well graded SAND with clay and gravel (SW-SC), mps 19 mm, mottled, no odor, moist to dry, contains quartz	10	25	15	20	15	15				
			0.0													
10	G3 60	10.0 15.0	0.0		SW-SC	Similar to G2	10	25	15	20	15	15				
				161.5 14.0	SP	Tan poorly graded SAND (SP), mps 0.075 mm, mottled no odor, moist					90	10				
			0.0	160.5												
15				15.0		BOTTOM OF EXPLORATION 15.0 FT										
20																

Notes:
1. Offset 5.0 ft south of staked locations due to refusal.
2. Collected duplicate from G2 from 5.0 to 10.0 ft, B208-1216-0830-5-10.
3. Boring grounded upon completion.

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water
12/16/15	--	--	--		None Encountered

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary
Overburden (ft) 15.0
Rock Cored (ft) --
Samples 3G

Boring No. B208

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None **Plasticity**: N - Nonplastic L - Low M - Medium H - High
Toughness: L - Low M - Medium H - High **Dry Strength**: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-GEOPROBE-09 W/PID-2 HA-LIB09.GLB HA-TB+CORE+WELL-07-1.GDT L:\WASHINGTON DC\38677\38677-007_GEOPROBES.GPJ Jan 20, 16

GEOPROBE REPORT

Boring No. B209

Project	St. Elizabeths East Campus, Washington, D.C.
Client	Delon Hampton
Contractor	Vironex

File No. 38677-007
Sheet No. 1 of 1
Start 16 December 2015
Finish 16 December 2015
Driller L. Caroll
H&A Rep. C. Tschibelu
Elevation 175.0
Datum NAVD 1988
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	2.25 in.	--	--	Rig Make & Model: Geoprobe 6620DT
Inside Diameter (in.)	2.0 in.	--	--	Bit Type: Cutting Head Drill Mud: None
Hammer Weight (lb)	--	--	-	Casing:
Hammer Fall (in.)	--	--	-	Hoist/Hammer: -- -- PID Make & Model: MiniRAE 2000

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Readings (ppm)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
0				174.5		ASPHALT (6.0 in.)										
	G1 42	0.0 5.0	0.0	0.5	CL	Yellow-brown lean CLAY with sand and gravel (CL), mps 19 mm, no structure, no odor, moist, contains red brick debris -FILL-	5	10	5	10	10	60				
			0.0													
5	G2 49	5.0 10.0	0.0		CL	Yellow-brown sandy lean CLAY (CL), mps 19 mm, no structure, no odor, moist, contains red brick fragments		10	5	15	20	50				
			0.0													
10	G3 60	10.0 15.0	0.0		CL	Similar to G2 above		10	5	15	20	50				
			0.0	160.0												
15				15.0		BOTTOM OF EXPLORATION 15.0 FT Note: 1. Boring grounded upon completion.										
20																

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water
12/16/15	--	--	--		None Encountered

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary
Overburden (ft) 15.0
Rock Cored (ft) --
Samples 3G

Boring No. B209

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None **Toughness**: L - Low M - Medium H - High **Plasticity**: N - Nonplastic L - Low M - Medium H - High **Dry Strength**: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-GEOPROBE-09 W/PID-2 HA-LIB09.GLB HA-TB+CORE+WELL-07-1.GDT L:\WASHINGTON DC\38677\38677-007_GEOPROBES.GPJ Jan 20, 16

GEOPROBE REPORT

Boring No. B210

Project	St. Elizabeths East Campus, Washington, D.C.
Client	Delon Hampton
Contractor	Vironex

File No. 38677-007
Sheet No. 1 of 1
Start 16 December 2015
Finish 16 December 2015
Driller L. Caroll
H&A Rep. C. Tschibelu
Elevation 176.0
Datum NAVD 1988
Location See Plan

	Casing	Sampler	Barrel
Type	2.25 in.	--	--
Inside Diameter (in.)	2.0 in.	--	--
Hammer Weight (lb)	--	--	-
Hammer Fall (in.)	--	--	-

Drilling Equipment and Procedures

Rig Make & Model: Geoprobe 6620DT
Bit Type: Cutting Head
Drill Mud: None
Casing:
Hoist/Hammer: -- --
PID Make & Model: MiniRAE 2000

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Readings (ppm)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
0				175.5		ASPHALT (6.0 in.)										
	G1 60	0.0 5.0	0.0	0.5	SC	Dense yellow-brown and tan clayey SAND with gravel (SC), mps 19 mm, no structure, no odor, moist -PROBABLE FILL-	5	10	10	20	30	25				
			0.0													
5	G2 60	5.0 10.0	0.0		GW-GM	Tan and yellow well graded GRAVEL with sand and silt (GW-GM), mps 19 mm, no odor, no structure, moist to dry	20	25	20	15	10	10				
			0.0													
10	G3 60	10.0 15.0	0.0		GW-GM	Similar to G2 above										
				165.0 11.0	CL	Hard gray-brown lean CLAY (CL), mps 0.075 mm, mottled, no odor, moist					10	90				
			0.0													
15				161.0 15.0		BOTTOM OF EXPLORATION 15.0 FT										
20						Note: 1. Boring grounded upon completion.										

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water
12/16/15	--	--	--		None Encountered

Sample ID

O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram

Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary

Overburden (ft) 15.0
Rock Cored (ft) --
Samples 3G

Boring No. B210

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None **Plasticity**: N - Nonplastic L - Low M - Medium H - High
Toughness: L - Low M - Medium H - High **Dry Strength**: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-GEOPROBE-09 W/PID-2 HA-LIB09.GLB HA-TB+CORE+WELL-07-1.GDT L:\WASHINGTON DC\38677\38677-007_GEOPROBES.GPJ Jan 20, 16

GEOPROBE REPORT

Boring No. B211

Project	St. Elizabeths East Campus, Washington, D.C.
Client	Delon Hampton
Contractor	Vironex

File No. 38677-007
Sheet No. 1 of 1
Start 16 December 2015
Finish 16 December 2015
Driller L. Caroll
H&A Rep. C. Tschibelu
Elevation 179.0
Datum NAVD 1988
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	2.25 in.	--	--	Rig Make & Model: Geoprobe 6620DT
Inside Diameter (in.)	2.0 in.	--	--	Bit Type: Cutting Head Drill Mud: None
Hammer Weight (lb)	--	--	-	Casing:
Hammer Fall (in.)	--	--	-	Hoist/Hammer: -- -- PID Make & Model: MiniRAE 2000

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Readings (ppm)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
0	G1 60	0.0 5.0	0.0	178.0		ASPHALT (12.0 in.)										
				1.0	CL	Hard yellow-brown sandy lean CLAY with gravel (CL), mps 4.75 mm, no structure, no odor, moist		15	5	10	15	55				
			0.0	174.0												
5	G2 36	5.0 10.0	0.0	5.0	SC	Very dense tan, gray and yellow clayey SAND with gravel (SC), mps 19 mm, no structure, no odor, moist, contains quartz	5	15	15	15	30	20				
			0.0	171.0												
				8.0		BOTTOM OF EXPLORATION 8.0 FT										
10																
15																
20																

Notes:
1. Refusal at 8.0 ft at staked location, offset 7.0 ft east. First offset refusal at 4.5 ft. Second offset 12.0 ft east of staked location. Refusal at 8.0 ft. Third offset 21.0 ft west and 6.0 ft north of staked location. Refusal at 7.0 ft..
2. Boring grounded upon completion.

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water
12/16/15	--	--	--		None Encountered

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary
Overburden (ft) 8.0
Rock Cored (ft) --
Samples 2G

Boring No. B211

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None **Toughness**: L - Low M - Medium H - High **Plasticity**: N - Nonplastic L - Low M - Medium H - High **Dry Strength**: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-GEOPROBE-09 W/PID-2 HA-LIB09.GLB HA-TB+CORE+WELL-07-1.GDT L:\WASHINGTON DC\38677\38677-007_GEOPROBES.GPJ Jan 20, 16

GEOPROBE REPORT

Boring No. B212

Project	St. Elizabeths East Campus, Washington, D.C.
Client	Delon Hampton
Contractor	Vironex

File No. 38677-007
Sheet No. 1 of 1
Start 14 December 2015
Finish 14 December 2015
Driller L. Caroll
H&A Rep. C. Tschibelu
Elevation 179.5
Datum NAVD 1988
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	2.25 in.	--	--	Rig Make & Model: Geoprobe 6620DT
Inside Diameter (in.)	2.0 in.	--	--	Bit Type: Cutting Head Drill Mud: None
Hammer Weight (lb)	--	--	-	Casing:
Hammer Fall (in.)	--	--	-	Hoist/Hammer: -- -- PID Make & Model: MiniRAE 2000

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Readings (ppm)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
0				179.0		TOPSOIL (6.0 in.)										
	G1 60	0.0 5.0	0.0	0.5	CL	Yellow-brown lean CLAY with sand (CL), mps 4.75 mm, no structure, no odor, moist		5		5	15	75				
			0.0													
5	G2 60	5.0 10.0	0.0		CL	Yellow-brown sandy lean CLAY with gravel (CL), mps 4.75 mm, no structure, no odor, moist		10	10	10	20	50				
			0.0	169.5												
10				10.0		BOTTOM OF EXPLORATION 10.0 FT										
15																
20																

Notes:
1. Refusal at 10.0 ft, offset at 5 locations. First offset 5.0 ft east of staked location. Refusal at 9.5 ft. Second offset 6.0 ft south of staked location. Refusal at 10.0 ft. Third location 9.0 ft east of staked location. Refusal at 8.0 ft. Fourth offset 12.0 ft west of staked location. Refusal at 8.0 ft. Fifth offset 12.0 ft west and 15 ft south of staked location. Refusal at 7.0 ft.
2. Boring grounded upon completion.

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water
12/14/15	--	--	--		None Encountered

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary
Overburden (ft) 10.0
Rock Cored (ft) --
Samples 2G

Boring No. B212

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None **Plasticity**: N - Nonplastic L - Low M - Medium H - High
Toughness: L - Low M - Medium H - High **Dry Strength**: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-GEOPROBE-09 W/PID-2 HA-LIB09.GLB HA-TB+CORE+WELL-07-1.GDT L:\WASHINGTON DC\38677\38677-007_GEOPROBES.GPJ Jan 20, 16

GEOPROBE REPORT

Boring No. B213

Project	St. Elizabeths East Campus, Washington, D.C.
Client	Delon Hampton
Contractor	Vironex

File No. 38677-007
Sheet No. 1 of 1
Start 16 December 2015
Finish 16 December 2015
Driller L. Caroll
H&A Rep. C. Tschibelu
Elevation 179.0
Datum NAVD 1988
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	2.25 in.	--	--	Rig Make & Model: Geoprobe 6620DT
Inside Diameter (in.)	2.0 in.	--	--	Bit Type: Cutting Head Drill Mud: None
Hammer Weight (lb)	--	--	-	Casing:
Hammer Fall (in.)	--	--	-	Hoist/Hammer: -- -- PID Make & Model: MiniRAE 2000

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Readings (ppm)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
0	G1 60	0.0 5.0	0.0	178.2		ASPHALT (9.0 in.)										
				0.8	CL	Yellow-brown and brown sandy lean CLAY with gravel (CL), mps 19 mm, sand lenses from 2.5 to 4.5 ft, no odor, moist, contains quartz and red brick fragments	5	10	10	10	15	50				
			0.0													
5	G2 60	5.0 10.0	0.0		CL	Yellow-brown and gray lean CLAY with sand (CL), mps 19 mm, no structure, no odor, moist	5	10	5	5	15	60				
			0.0													
10				169.0 10.0		BOTTOM OF EXPLORATION 10.0 FT										
15																
20																

Notes:
1. Refusal at 10.0 ft, first offset - 5.0 ft south of staked location. Refusal at 4.0 ft at offset location. Second offset 9.0 ft south of staked location. Refusal at 4.0 ft. Third offset 9.0 ft north of staked location. Refusal at 4.0 ft.
2. Boring grounded upon completion.

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water
12/16/15	--	--	--		None Encountered

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary
Overburden (ft) 10.0
Rock Cored (ft) --
Samples 2G

Boring No. B213

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None **Toughness**: L - Low M - Medium H - High **Plasticity**: N - Nonplastic L - Low M - Medium H - High **Dry Strength**: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-GEOPROBE-09 W/PID-2 HA-LIB09.GLB HA-TB+CORE+WELL-07-1.GDT L:\WASHINGTON DC\38677\38677-007_GEOPROBES.GPJ Jan 20, 16

GEOPROBE REPORT

Boring No. B214

Project	St. Elizabeths East Campus, Washington, D.C.
Client	Delon Hampton
Contractor	Vironex

File No. 38677-007
Sheet No. 1 of 1
Start 16 December 2015
Finish 16 December 2015
Driller L. Caroll
H&A Rep. C. Tschibelu
Elevation 178.5
Datum NAVD 1988
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	2.25 in.	--	--	Rig Make & Model: Geoprobe 6620DT
Inside Diameter (in.)	2.0 in.	--	--	Bit Type: Cutting Head Drill Mud: None
Hammer Weight (lb)	--	--	-	Casing:
Hammer Fall (in.)	--	--	-	Hoist/Hammer: -- -- PID Make & Model: MiniRAE 2000

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Readings (ppm)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
0	G1 60	0.0 5.0	0.0	177.7		ASPHALT (10.0 in.)										
				0.8	ML	Yellow-brown sandy SILT (ML), mps 4.75 mm, no structure, no odor, moist		5	5	5	20	65				
			0.0													
5	G2 48	5.0 10.0	0.0		ML	Yellow-brown sandy SILT with gravel (ML), mps 19 mm, no structure, no odor, moist	5	10	10	10	15	50				
			0.0	168.5												
10				10.0		BOTTOM OF EXPLORATION 10.0 FT										
15																
20																

Notes:
1. Refusal at 10.0 ft, first offset - 5.0 ft north. Hit obstruction at 7.0 ft.
2. Collected MS/MSD sample from 0 to 5.0 ft interval.
3. Boring grounded upon completion.

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water
12/16/15	--	--	--		None Encountered

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary
Overburden (ft) 10.0
Rock Cored (ft) --
Samples 2G

Boring No. B214

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None **Toughness**: L - Low M - Medium H - High **Plasticity**: N - Nonplastic L - Low M - Medium H - High **Dry Strength**: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-GEOPROBE-09 W/PID-2 HA-LIB09.GLB HA-TB+CORE+WELL-07-1.GDT L:\WASHINGTON DC\38677\38677-007_GEOPROBES.GPJ Jan 20, 16

GEOPROBE REPORT

Boring No. B215

Project	St. Elizabeths East Campus, Washington, D.C.
Client	Delon Hampton
Contractor	Vironex

File No. 38677-007
Sheet No. 1 of 1
Start 16 December 2015
Finish 16 December 2015
Driller L. Caroll
H&A Rep. C. Tschibelu
Elevation 179.0
Datum NAVD 1988
Location See Plan

	Casing	Sampler	Barrel
Type	2.25 in.	--	--
Inside Diameter (in.)	2.0 in.	--	--
Hammer Weight (lb)	--	--	-
Hammer Fall (in.)	--	--	-

Drilling Equipment and Procedures

Rig Make & Model: Geoprobe 6620DT
Bit Type: Cutting Head
Drill Mud: None
Casing:
Hoist/Hammer: -- --
PID Make & Model: MiniRAE 2000

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Readings (ppm)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
0	G1 60	0.0 5.0	0.0	178.5		ASPHALT (6.0 in.)										
			0.0	0.5	ML	Tan and yellow sandy SILT with gravel (ML), mps 19 mm, no structure, no odor, moist	5	10	5	10	15	55				
5	G2 60	5.0 10.0	0.0		ML	Yellow-brown, tan and gray sandy SILT with gravel (ML), mps 19 mm, no structure, no odor, moist	5	10	5	5	15	60				
			0.0													
10	G3 27	10.0 15.0	0.0		ML	Brown sandy SILT with gravel, mps 4.75 mm, no structure, no odor, moist		15	10	10	15	50				
			0.0	164.0												
15				15.0		BOTTOM OF EXPLORATION 15.0 FT										
20																

Note:
1. Boring grounded upon completion.

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water
12/16/15	--	--	--		None Encountered

Sample ID

O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram

Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary

Overburden (ft) 15.0
Rock Cored (ft) --
Samples 3G

Boring No. B215

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None **Plasticity**: N - Nonplastic L - Low M - Medium H - High
Toughness: L - Low M - Medium H - High **Dry Strength**: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-GEOPROBE-09 W/PID-2 HA-LIB09.GLB HA-TB+CORE+WELL-07-1.GDT L:\WASHINGTON DC\38677\38677-007_GEOPROBES.GPJ Jan 20, 16

GEOPROBE REPORT

Boring No. B216

Project	St. Elizabeths East Campus, Washington, D.C.
Client	Delon Hampton
Contractor	Vironex

File No. 38677-007
Sheet No. 1 of 1
Start 16 December 2015
Finish 16 December 2015
Driller L. Caroll
H&A Rep. C. Tschibelu
Elevation 178.5
Datum NAVD 1988
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	2.25 in.	--	--	Rig Make & Model: Geoprobe 6620DT
Inside Diameter (in.)	2.0 in.	--	--	Bit Type: Cutting Head Drill Mud: None
Hammer Weight (lb)	--	--	-	Casing:
Hammer Fall (in.)	--	--	-	Hoist/Hammer: -- -- PID Make & Model: MiniRAE 2000

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Readings (ppm)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
0				178.0		ASPHALT (6.0 in.)										
	G1 60	0.0 5.0	0.0	0.5	CH	Yellow-brown sandy fat CLAY with gravel (CH), mps 4.75 mm, no structure, no odor, moist		15	10	10	15	50				
			0.0													
5	G2 60	5.0 10.0	0.0		CH	Yellow-brown sandy fat CLAY with gravel (CH), mps 19 mm, no structure, no odor, moist, contains quartz	5	15	10	10	15	45				
			0.0													
10				168.5 10.0		BOTTOM OF EXPLORATION 10.0 FT										
15																
20																

Notes:
1. Refusal at 10.0 ft. First offset - 5.0 ft east of staked location. Refusal at 9.0 ft.
2. Boring grounded upon completion.

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water
12/16/15	--	--	--		None Encountered

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary
Overburden (ft) 10.0
Rock Cored (ft) --
Samples 2G

Boring No. B216

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None **Plasticity**: N - Nonplastic L - Low M - Medium H - High
Toughness: L - Low M - Medium H - High **Dry Strength**: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-GEOPROBE-09 W/PID-2 HA-LIB09.GLB HA-TB+CORE+WELL-07-1.GDT L:\WASHINGTON DC\38677\38677-007_GEOPROBES.GPJ Jan 20, 16

GEOPROBE REPORT

Boring No. B217

Project	St. Elizabeths East Campus, Washington, D.C.
Client	Delon Hampton
Contractor	Vironex

File No. 38677-007
Sheet No. 1 of 1
Start 14 December 2015
Finish 14 December 2015
Driller L. Caroll
H&A Rep. C. Tschibelu
Elevation 179.0
Datum NAVD 1988
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	2.25 in.	--	--	Rig Make & Model: Geoprobe 6620DT
Inside Diameter (in.)	2.0 in.	--	--	Bit Type: Cutting Head Drill Mud: None
Hammer Weight (lb)	--	--	-	Casing:
Hammer Fall (in.)	--	--	-	Hoist/Hammer: -- -- PID Make & Model: MiniRAE 2000

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Readings (ppm)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
0	G1 60	0.0 5.0	0.0	178.0 1.0		TOPSOIL mix with gray-brown sandy SILT -FILL-										
			0.0		ML	Yellow-brown and gray sandy SILT (ML), mps 0.075 mm, mottled, no odor, moist					30	70				
5	G2 60	5.0 10.0	0.0		ML	Yellow-brown and gray sandy SILT (ML), mps 4.75 mm, mottled, no odor, moist		10	5	10	20	55				
10	G3 60	10.0 15.0	0.0	169.0 10.0	SM	Tan, yellow-brown and gray silty SAND with gravel (SM), mps 19 mm, no structure, no odor, moist to dry, contains quartz	5	15	10	10	30	30				
15			0.0	164.0 15.0		BOTTOM OF EXPLORATION 15.0 FT Note: 1. Boring grounded upon completion.										
20																

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water
12/14/15	--	--	--		None Encountered

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary
Overburden (ft) 15.0
Rock Cored (ft) --
Samples 3G

Boring No. B217

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None **Plasticity**: N - Nonplastic L - Low M - Medium H - High
Toughness: L - Low M - Medium H - High **Dry Strength**: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-GEOPROBE-09 W/PID-2 HA-LIB09.GLB HA-TB+CORE+WELL-07-1.GDT L:\WASHINGTON DC\38677\38677-007_GEOPROBES.GPJ Jan 20, 16

GEOPROBE REPORT

Boring No. B218

Project	St. Elizabeths East Campus, Washington, D.C.
Client	Delon Hampton
Contractor	Vironex

File No. 38677-007
Sheet No. 1 of 1
Start 14 December 2015
Finish 14 December 2015
Driller L. Caroll
H&A Rep. C. Tschibelu
Elevation 179.0
Datum NAVD 1988
Location See Plan

	Casing	Sampler	Barrel
Type	2.25 in.	--	--
Inside Diameter (in.)	2.0 in.	--	--
Hammer Weight (lb)	--	--	-
Hammer Fall (in.)	--	--	-

Drilling Equipment and Procedures

Rig Make & Model: Geoprobe 6620DT
Bit Type: Cutting Head
Drill Mud: None
Casing:
Hoist/Hammer: -- --
PID Make & Model: MiniRAE 2000

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Readings (ppm)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
0	G1 55	0.0 5.0	0.0	178.5		TOPSOIL (6.0 in.)										
				0.5	ML	Yellow-brown and red sandy SILT with gravel (ML), mps 19 mm, no structure, no odor, moist, contains root fibers in top 1.5 ft, and red brick debris										
			0.0													
5	G2 60	5.0 10.0	0.0		ML	Yellow-brown sandy SILT with gravel (ML), mps 4.75 mm, no structure, no odor, moist, contains red brick debris										
						-FILL-										
			0.0													
10	G3 47	10.0 15.0	0.0		ML	Yellow-brown sandy SILT with gravel (ML), mps 4.75 mm, no structure, no odor, moist										
				166.0 13.0	ML	Tan and yellow silty SAND with gravel (ML), mps 19 mm, no structure, no odor, moist, contains red brick debris										
			0.0													
15				164.0 15.0		BOTTOM OF EXPLORATION 15.0 FT										
20																

Notes:
1. Fill down to 13.0 ft. Boring located in demolished building 117 area.
2. Boring grounded upon completion.

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water
12/14/15	--	--	--		None Encountered

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary
Overburden (ft) 15.0
Rock Cored (ft) --
Samples 3G

Boring No. B218

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None **Toughness**: L - Low M - Medium H - High **Plasticity**: N - Nonplastic L - Low M - Medium H - High **Dry Strength**: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-GEOPROBE-09 W/PID-2 HA-LIB09.GLB HA-TB+CORE+WELL-07-1.GDT L:\WASHINGTON DC\38677\38677-007_GEOPROBES.GPJ Jan 20, 16

GEOPROBE REPORT

Boring No. B219

Project	St. Elizabeths East Campus, Washington, D.C.
Client	Delon Hampton
Contractor	Vironex

File No. 38677-007
Sheet No. 1 of 1
Start 14 December 2015
Finish 14 December 2015
Driller L. Caroll
H&A Rep. C. Tschibelu
Elevation 178.0
Datum NAVD 1988
Location See Plan

	Casing	Sampler	Barrel
Type	2.25 in.	--	--
Inside Diameter (in.)	2.0 in.	--	--
Hammer Weight (lb)	--	--	-
Hammer Fall (in.)	--	--	-

Drilling Equipment and Procedures

Rig Make & Model: Geoprobe 6620DT
Bit Type: Cutting Head
Drill Mud: None
Casing:
Hoist/Hammer: -- --
PID Make & Model: MiniRAE 2000

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Readings (ppm)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
0	G1 60	0.0 5.0	0.0	176.0 2.0	CL	Brown and yellow sandy lean CLAY (CL), mps 0.075 mm, no structure, no odor, moist -FILL-					30	70				
			0.0	173.0 5.0	CL	Yellow-brown sandy lean CLAY (CL), mps 4.75 mm, no structure, no odor, moist		5	5	5	20	65				
5	G2 60	5.0 10.0	0.0	168.0 10.0	ML	Hard yellow-brown sandy SILT with gravel (ML), mps 19 mm, no structure, no odor, moist		15	10	10	20	45				
10	G3 60	10.0 15.0	0.0	163.0 15.0	SM	Very dense yellow, tan and gray silty SAND with gravel (SM), mps 19 mm, no structure, no odor, moist	5	20	10	15	30	20				
15			0.0			BOTTOM OF EXPLORATION 15.0 FT										
20						Note: 1. Boring grounded upon completion.										

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water
12/14/15	--	--	--		None Encountered

Sample ID

O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram

Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary

Overburden (ft) 15.0
Rock Cored (ft) --
Samples 3G

Boring No. B219

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None **Plasticity**: N - Nonplastic L - Low M - Medium H - High
Toughness: L - Low M - Medium H - High **Dry Strength**: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-GEOPROBE-09 W/PID-2 HA-LIB09.GLB HA-TB+CORE+WELL-07-1.GDT L:\WASHINGTON DC\38677\38677-007_GEOPROBES.GPJ Jan 20, 16

GEOPROBE REPORT

Boring No. B220

Project	St. Elizabeths East Campus, Washington, D.C.
Client	Delon Hampton
Contractor	Vironex

File No. 38677-007
Sheet No. 1 of 1
Start 14 December 2015
Finish 14 December 2015
Driller L. Caroll
H&A Rep. C. Tschibelu
Elevation 178.0
Datum NAVD 1988
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	2.25 in.	--	--	Rig Make & Model: Geoprobe 6620DT
Inside Diameter (in.)	2.0 in.	--	--	Bit Type: Cutting Head Drill Mud: None
Hammer Weight (lb)	--	--	-	Casing:
Hammer Fall (in.)	--	--	-	Hoist/Hammer: -- -- PID Make & Model: MiniRAE 2000

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Readings (ppm)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
0	G1 60	0.0 5.0	0.0	176.0	ML	Brown and yellow sandy SILT (ML), mps 0.075 mm, no structure, no odor, moist -FILL-					30	70				
			0.0	2.0	ML	Yellow-brown and gray sandy SILT (ML), mps 0.075 mm, no structure, no odor, moist					30	70				
5	G2 60	5.0 10.0	0.0		ML	Hard yellow-brown and red sandy SILT with gravel (ML), mps 19 mm, no structure, no odor, moist		15	10	10	10	55				
10	G3 16	10.0 15.0	0.0	168.0 10.0	SM	Dense tan and yellow silty SAND with gravel (SM), mps 19 mm, no structure, no odor, moist to dry	5	15	15	20	25	20				
15			0.0	163.0 15.0		BOTTOM OF EXPLORATION 15.0 FT Note: 1. Boring grounded upon completion.										
20																

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water
12/14/15	--	--	--		None Encountered

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary
Overburden (ft) 15.0
Rock Cored (ft) --
Samples 3G

Boring No. B220

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None **Plasticity**: N - Nonplastic L - Low M - Medium H - High
Toughness: L - Low M - Medium H - High **Dry Strength**: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-GEOPROBE-09 W/PID-2 HA-LIB09.GLB HA-TB+CORE+WELL-07-1.GDT L:\WASHINGTON DC\38677\38677-007_GEOPROBES.GPJ Jan 20, 16

APPENDIX B

2015 Laboratory Analytical Data

ANALYTICAL REPORT

Lab Number:	L1532956
Client:	Haley & Aldrich 7926 Jones Branch Drive Suite 870 McLean, VA 22102-3363
ATTN:	Kristen Wright-Ng
Phone:	(703) 336-6234
Project Name:	ST. E'S EAST CAMPUS
Project Number:	38677-007
Report Date:	12/21/15

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), NY (11148), CT (PH-0574), NH (2003), NJ NELAP (MA935), RI (LAO00065), ME (MA00086), PA (68-03671), VA (460195), MD (348), IL (200077), NC (666), TX (T104704476), DOD (L2217), USDA (Permit #P-330-11-00240).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007

Lab Number: L1532956
Report Date: 12/21/15

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1532956-01	B219-1214-1300-0-5	SOIL	WASHINGTON, D.C.	12/14/15 13:00	12/14/15
L1532956-02	B219-1214-1305-5-10	SOIL	WASHINGTON, D.C.	12/14/15 13:05	12/14/15
L1532956-03	B219-1214-1310-10-15	SOIL	WASHINGTON, D.C.	12/14/15 13:10	12/14/15
L1532956-04	B220-1214-1420-0-5	SOIL	WASHINGTON, D.C.	12/14/15 14:20	12/14/15
L1532956-05	B220-1214-1425-5-10	SOIL	WASHINGTON, D.C.	12/14/15 14:25	12/14/15
L1532956-06	B220-1214-1430-10-15	SOIL	WASHINGTON, D.C.	12/14/15 14:30	12/14/15
L1532956-07	TB-121415	WATER	WASHINGTON, D.C.	12/14/15 15:00	12/14/15

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1532956
Project Number: 38677-007 **Report Date:** 12/21/15

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 all of the requirements of NELAC, for all NELAC accredited parameters. 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:	ST. E'S EAST CAMPUS	**Lab Number:**	L1532956
Project Number:	38677-007	**Report Date:**	12/21/15

Case Narrative (continued)

Volatile Organics

L1532956-07: The Trip Blank has a result for acetone present above the reporting limit. The sample was re-analyzed and confirmed the original results. The results of the original analysis are reported.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Kelly Stenstrom

Title: Technical Director/Representative

Date: 12/21/15

ORGANICS

VOLATILES

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1532956

Project Number: 38677-007 **Report Date:** 12/21/15

SAMPLE RESULTS

Lab ID:	L1532956-01	Date Collected:	12/14/15 13:00
Client ID:	B219-1214-1300-0-5	Date Received:	12/14/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Soil		
Analytical Method:	1,8260C		
Analytical Date:	12/18/15 11:24		
Analyst:	BN		
Percent Solids:	83%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS-5035 - Westborough Lab						
Dichlorodifluoromethane	ND		mg/kg	0.0091	--	1
Chloromethane	ND		mg/kg	0.0045	--	1
Vinyl chloride	ND		mg/kg	0.0018	--	1
Bromomethane	ND		mg/kg	0.0018	--	1
Chloroethane	ND		mg/kg	0.0018	--	1
Trichlorofluoromethane	ND		mg/kg	0.0045	--	1
1,1-Dichloroethene	ND		mg/kg	0.00091	--	1
Carbon disulfide	ND		mg/kg	0.0091	--	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		mg/kg	0.018	--	1
Methylene chloride	ND		mg/kg	0.0045	--	1
Acetone	ND		mg/kg	0.033	--	1
trans-1,2-Dichloroethene	ND		mg/kg	0.0014	--	1
Methyl Acetate	ND		mg/kg	0.0036	--	1
Methyl tert butyl ether	ND		mg/kg	0.0018	--	1
1,1-Dichloroethane	ND		mg/kg	0.0014	--	1
cis-1,2-Dichloroethene	ND		mg/kg	0.00091	--	1
1,2-Dichloroethene, Total	ND		mg/kg	0.00091	--	1
Cyclohexane	ND		mg/kg	0.018	--	1
Bromochloromethane	ND		mg/kg	0.0045	--	1
Chloroform	ND		mg/kg	0.0014	--	1
Carbon tetrachloride	ND		mg/kg	0.00091	--	1
1,1,1-Trichloroethane	ND		mg/kg	0.00091	--	1
2-Butanone	ND		mg/kg	0.0091	--	1
Benzene	ND		mg/kg	0.00091	--	1
1,2-Dichloroethane	ND		mg/kg	0.00091	--	1
Methyl cyclohexane	ND		mg/kg	0.0036	--	1
Trichloroethene	ND		mg/kg	0.00091	--	1
1,2-Dichloropropane	ND		mg/kg	0.0032	--	1
Bromodichloromethane	ND		mg/kg	0.00091	--	1
1,4-Dioxane	ND		mg/kg	0.091	--	1

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1532956

Project Number: 38677-007 **Report Date:** 12/21/15

SAMPLE RESULTS

Lab ID: L1532956-01 Date Collected: 12/14/15 13:00

Client ID: B219-1214-1300-0-5 Date Received: 12/14/15

Sample Location: WASHINGTON, D.C. Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS-5035 - Westborough Lab						
cis-1,3-Dichloropropene	ND		mg/kg	0.00091	--	1
Toluene	ND		mg/kg	0.0014	--	1
4-Methyl-2-pentanone	ND		mg/kg	0.0091	--	1
Tetrachloroethene	ND		mg/kg	0.00091	--	1
trans-1,3-Dichloropropene	ND		mg/kg	0.00091	--	1
1,3-Dichloropropene, Total	ND		mg/kg	0.00091	--	1
1,1,2-Trichloroethane	ND		mg/kg	0.0014	--	1
Dibromochloromethane	ND		mg/kg	0.00091	--	1
1,2-Dibromoethane	ND		mg/kg	0.0036	--	1
2-Hexanone	ND		mg/kg	0.0091	--	1
Chlorobenzene	ND		mg/kg	0.00091	--	1
Ethylbenzene	ND		mg/kg	0.00091	--	1
p/m-Xylene	ND		mg/kg	0.0018	--	1
o-Xylene	ND		mg/kg	0.0018	--	1
Xylenes, Total	ND		mg/kg	0.0018	--	1
Styrene	ND		mg/kg	0.0018	--	1
Bromoform	ND		mg/kg	0.0036	--	1
Isopropylbenzene	ND		mg/kg	0.00091	--	1
1,1,2,2-Tetrachloroethane	ND		mg/kg	0.00091	--	1
1,3-Dichlorobenzene	ND		mg/kg	0.0045	--	1
1,4-Dichlorobenzene	ND		mg/kg	0.0045	--	1
1,2-Dichlorobenzene	ND		mg/kg	0.0045	--	1
1,2-Dibromo-3-chloropropane	ND		mg/kg	0.0045	--	1
1,2,4-Trichlorobenzene	ND		mg/kg	0.0045	--	1
1,2,3-Trichlorobenzene	ND		mg/kg	0.0045	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	93		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	104		70-130

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1532956

Project Number: 38677-007 **Report Date:** 12/21/15

SAMPLE RESULTS

Lab ID:	L1532956-02	Date Collected:	12/14/15 13:05
Client ID:	B219-1214-1305-5-10	Date Received:	12/14/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Soil		
Analytical Method:	1,8260C		
Analytical Date:	12/18/15 11:51		
Analyst:	BN		
Percent Solids:	83%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS-5035 - Westborough Lab						
Dichlorodifluoromethane	ND		mg/kg	0.0087	--	1
Chloromethane	ND		mg/kg	0.0044	--	1
Vinyl chloride	ND		mg/kg	0.0017	--	1
Bromomethane	ND		mg/kg	0.0017	--	1
Chloroethane	ND		mg/kg	0.0017	--	1
Trichlorofluoromethane	ND		mg/kg	0.0044	--	1
1,1-Dichloroethene	ND		mg/kg	0.00087	--	1
Carbon disulfide	ND		mg/kg	0.0087	--	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		mg/kg	0.017	--	1
Methylene chloride	ND		mg/kg	0.0044	--	1
Acetone	ND		mg/kg	0.031	--	1
trans-1,2-Dichloroethene	ND		mg/kg	0.0013	--	1
Methyl Acetate	ND		mg/kg	0.0035	--	1
Methyl tert butyl ether	ND		mg/kg	0.0017	--	1
1,1-Dichloroethane	ND		mg/kg	0.0013	--	1
cis-1,2-Dichloroethene	ND		mg/kg	0.00087	--	1
1,2-Dichloroethene, Total	ND		mg/kg	0.00087	--	1
Cyclohexane	ND		mg/kg	0.017	--	1
Bromochloromethane	ND		mg/kg	0.0044	--	1
Chloroform	ND		mg/kg	0.0013	--	1
Carbon tetrachloride	ND		mg/kg	0.00087	--	1
1,1,1-Trichloroethane	ND		mg/kg	0.00087	--	1
2-Butanone	ND		mg/kg	0.0087	--	1
Benzene	ND		mg/kg	0.00087	--	1
1,2-Dichloroethane	ND		mg/kg	0.00087	--	1
Methyl cyclohexane	ND		mg/kg	0.0035	--	1
Trichloroethene	ND		mg/kg	0.00087	--	1
1,2-Dichloropropane	ND		mg/kg	0.0030	--	1
Bromodichloromethane	ND		mg/kg	0.00087	--	1
1,4-Dioxane	ND		mg/kg	0.087	--	1

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1532956

Project Number: 38677-007 **Report Date:** 12/21/15

SAMPLE RESULTS

Lab ID: L1532956-02 Date Collected: 12/14/15 13:05

Client ID: B219-1214-1305-5-10 Date Received: 12/14/15

Sample Location: WASHINGTON, D.C. Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS-5035 - Westborough Lab						
cis-1,3-Dichloropropene	ND		mg/kg	0.00087	--	1
Toluene	ND		mg/kg	0.0013	--	1
4-Methyl-2-pentanone	ND		mg/kg	0.0087	--	1
Tetrachloroethene	ND		mg/kg	0.00087	--	1
trans-1,3-Dichloropropene	ND		mg/kg	0.00087	--	1
1,3-Dichloropropene, Total	ND		mg/kg	0.00087	--	1
1,1,2-Trichloroethane	ND		mg/kg	0.0013	--	1
Dibromochloromethane	ND		mg/kg	0.00087	--	1
1,2-Dibromoethane	ND		mg/kg	0.0035	--	1
2-Hexanone	ND		mg/kg	0.0087	--	1
Chlorobenzene	ND		mg/kg	0.00087	--	1
Ethylbenzene	ND		mg/kg	0.00087	--	1
p/m-Xylene	ND		mg/kg	0.0017	--	1
o-Xylene	ND		mg/kg	0.0017	--	1
Xylenes, Total	ND		mg/kg	0.0017	--	1
Styrene	ND		mg/kg	0.0017	--	1
Bromoform	ND		mg/kg	0.0035	--	1
Isopropylbenzene	ND		mg/kg	0.00087	--	1
1,1,2,2-Tetrachloroethane	ND		mg/kg	0.00087	--	1
1,3-Dichlorobenzene	ND		mg/kg	0.0044	--	1
1,4-Dichlorobenzene	ND		mg/kg	0.0044	--	1
1,2-Dichlorobenzene	ND		mg/kg	0.0044	--	1
1,2-Dibromo-3-chloropropane	ND		mg/kg	0.0044	--	1
1,2,4-Trichlorobenzene	ND		mg/kg	0.0044	--	1
1,2,3-Trichlorobenzene	ND		mg/kg	0.0044	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	95		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	94		70-130
Dibromofluoromethane	103		70-130

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1532956

Project Number: 38677-007 **Report Date:** 12/21/15

SAMPLE RESULTS

Lab ID:	L1532956-03	Date Collected:	12/14/15 13:10
Client ID:	B219-1214-1310-10-15	Date Received:	12/14/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Soil		
Analytical Method:	1,8260C		
Analytical Date:	12/18/15 12:19		
Analyst:	BN		
Percent Solids:	88%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS-5035 - Westborough Lab						
Dichlorodifluoromethane	ND		mg/kg	0.0094	--	1
Chloromethane	ND		mg/kg	0.0047	--	1
Vinyl chloride	ND		mg/kg	0.0019	--	1
Bromomethane	ND		mg/kg	0.0019	--	1
Chloroethane	ND		mg/kg	0.0019	--	1
Trichlorofluoromethane	ND		mg/kg	0.0047	--	1
1,1-Dichloroethene	ND		mg/kg	0.00094	--	1
Carbon disulfide	ND		mg/kg	0.0094	--	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		mg/kg	0.019	--	1
Methylene chloride	ND		mg/kg	0.0047	--	1
Acetone	0.062		mg/kg	0.034	--	1
trans-1,2-Dichloroethene	ND		mg/kg	0.0014	--	1
Methyl Acetate	ND		mg/kg	0.0038	--	1
Methyl tert butyl ether	ND		mg/kg	0.0019	--	1
1,1-Dichloroethane	ND		mg/kg	0.0014	--	1
cis-1,2-Dichloroethene	ND		mg/kg	0.00094	--	1
1,2-Dichloroethene, Total	ND		mg/kg	0.00094	--	1
Cyclohexane	ND		mg/kg	0.019	--	1
Bromochloromethane	ND		mg/kg	0.0047	--	1
Chloroform	ND		mg/kg	0.0014	--	1
Carbon tetrachloride	ND		mg/kg	0.00094	--	1
1,1,1-Trichloroethane	ND		mg/kg	0.00094	--	1
2-Butanone	ND		mg/kg	0.0094	--	1
Benzene	ND		mg/kg	0.00094	--	1
1,2-Dichloroethane	ND		mg/kg	0.00094	--	1
Methyl cyclohexane	ND		mg/kg	0.0038	--	1
Trichloroethene	ND		mg/kg	0.00094	--	1
1,2-Dichloropropane	ND		mg/kg	0.0033	--	1
Bromodichloromethane	ND		mg/kg	0.00094	--	1
1,4-Dioxane	ND		mg/kg	0.094	--	1

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1532956

Project Number: 38677-007 **Report Date:** 12/21/15

SAMPLE RESULTS

Lab ID: L1532956-03 Date Collected: 12/14/15 13:10

Client ID: B219-1214-1310-10-15 Date Received: 12/14/15

Sample Location: WASHINGTON, D.C. Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS-5035 - Westborough Lab						
cis-1,3-Dichloropropene	ND		mg/kg	0.00094	--	1
Toluene	ND		mg/kg	0.0014	--	1
4-Methyl-2-pentanone	ND		mg/kg	0.0094	--	1
Tetrachloroethene	ND		mg/kg	0.00094	--	1
trans-1,3-Dichloropropene	ND		mg/kg	0.00094	--	1
1,3-Dichloropropene, Total	ND		mg/kg	0.00094	--	1
1,1,2-Trichloroethane	ND		mg/kg	0.0014	--	1
Dibromochloromethane	ND		mg/kg	0.00094	--	1
1,2-Dibromoethane	ND		mg/kg	0.0038	--	1
2-Hexanone	ND		mg/kg	0.0094	--	1
Chlorobenzene	ND		mg/kg	0.00094	--	1
Ethylbenzene	ND		mg/kg	0.00094	--	1
p/m-Xylene	ND		mg/kg	0.0019	--	1
o-Xylene	ND		mg/kg	0.0019	--	1
Xylenes, Total	ND		mg/kg	0.0019	--	1
Styrene	ND		mg/kg	0.0019	--	1
Bromoform	ND		mg/kg	0.0038	--	1
Isopropylbenzene	ND		mg/kg	0.00094	--	1
1,1,2,2-Tetrachloroethane	ND		mg/kg	0.00094	--	1
1,3-Dichlorobenzene	ND		mg/kg	0.0047	--	1
1,4-Dichlorobenzene	ND		mg/kg	0.0047	--	1
1,2-Dichlorobenzene	ND		mg/kg	0.0047	--	1
1,2-Dibromo-3-chloropropane	ND		mg/kg	0.0047	--	1
1,2,4-Trichlorobenzene	ND		mg/kg	0.0047	--	1
1,2,3-Trichlorobenzene	ND		mg/kg	0.0047	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	95		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	104		70-130

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1532956

Project Number: 38677-007 **Report Date:** 12/21/15

SAMPLE RESULTS

Lab ID:	L1532956-04	Date Collected:	12/14/15 14:20
Client ID:	B220-1214-1420-0-5	Date Received:	12/14/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Soil		
Analytical Method:	1,8260C		
Analytical Date:	12/18/15 12:46		
Analyst:	BN		
Percent Solids:	84%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS-5035 - Westborough Lab						
Dichlorodifluoromethane	ND		mg/kg	0.011	--	1
Chloromethane	ND		mg/kg	0.0055	--	1
Vinyl chloride	ND		mg/kg	0.0022	--	1
Bromomethane	ND		mg/kg	0.0022	--	1
Chloroethane	ND		mg/kg	0.0022	--	1
Trichlorofluoromethane	ND		mg/kg	0.0055	--	1
1,1-Dichloroethene	ND		mg/kg	0.0011	--	1
Carbon disulfide	ND		mg/kg	0.011	--	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		mg/kg	0.022	--	1
Methylene chloride	ND		mg/kg	0.0055	--	1
Acetone	ND		mg/kg	0.040	--	1
trans-1,2-Dichloroethene	ND		mg/kg	0.0016	--	1
Methyl Acetate	ND		mg/kg	0.0044	--	1
Methyl tert butyl ether	ND		mg/kg	0.0022	--	1
1,1-Dichloroethane	ND		mg/kg	0.0016	--	1
cis-1,2-Dichloroethene	ND		mg/kg	0.0011	--	1
1,2-Dichloroethene, Total	ND		mg/kg	0.0011	--	1
Cyclohexane	ND		mg/kg	0.022	--	1
Bromochloromethane	ND		mg/kg	0.0055	--	1
Chloroform	ND		mg/kg	0.0016	--	1
Carbon tetrachloride	ND		mg/kg	0.0011	--	1
1,1,1-Trichloroethane	ND		mg/kg	0.0011	--	1
2-Butanone	ND		mg/kg	0.011	--	1
Benzene	ND		mg/kg	0.0011	--	1
1,2-Dichloroethane	ND		mg/kg	0.0011	--	1
Methyl cyclohexane	ND		mg/kg	0.0044	--	1
Trichloroethene	ND		mg/kg	0.0011	--	1
1,2-Dichloropropane	ND		mg/kg	0.0038	--	1
Bromodichloromethane	ND		mg/kg	0.0011	--	1
1,4-Dioxane	ND		mg/kg	0.11	--	1

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1532956

Project Number: 38677-007 **Report Date:** 12/21/15

SAMPLE RESULTS

Lab ID: L1532956-04 Date Collected: 12/14/15 14:20

Client ID: B220-1214-1420-0-5 Date Received: 12/14/15

Sample Location: WASHINGTON, D.C. Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS-5035 - Westborough Lab						
cis-1,3-Dichloropropene	ND		mg/kg	0.0011	--	1
Toluene	ND		mg/kg	0.0016	--	1
4-Methyl-2-pentanone	ND		mg/kg	0.011	--	1
Tetrachloroethene	ND		mg/kg	0.0011	--	1
trans-1,3-Dichloropropene	ND		mg/kg	0.0011	--	1
1,3-Dichloropropene, Total	ND		mg/kg	0.0011	--	1
1,1,2-Trichloroethane	ND		mg/kg	0.0016	--	1
Dibromochloromethane	ND		mg/kg	0.0011	--	1
1,2-Dibromoethane	ND		mg/kg	0.0044	--	1
2-Hexanone	ND		mg/kg	0.011	--	1
Chlorobenzene	ND		mg/kg	0.0011	--	1
Ethylbenzene	ND		mg/kg	0.0011	--	1
p/m-Xylene	ND		mg/kg	0.0022	--	1
o-Xylene	ND		mg/kg	0.0022	--	1
Xylenes, Total	ND		mg/kg	0.0022	--	1
Styrene	ND		mg/kg	0.0022	--	1
Bromoform	ND		mg/kg	0.0044	--	1
Isopropylbenzene	ND		mg/kg	0.0011	--	1
1,1,2,2-Tetrachloroethane	ND		mg/kg	0.0011	--	1
1,3-Dichlorobenzene	ND		mg/kg	0.0055	--	1
1,4-Dichlorobenzene	ND		mg/kg	0.0055	--	1
1,2-Dichlorobenzene	ND		mg/kg	0.0055	--	1
1,2-Dibromo-3-chloropropane	ND		mg/kg	0.0055	--	1
1,2,4-Trichlorobenzene	ND		mg/kg	0.0055	--	1
1,2,3-Trichlorobenzene	ND		mg/kg	0.0055	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	97		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	104		70-130

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1532956

Project Number: 38677-007 **Report Date:** 12/21/15

SAMPLE RESULTS

Lab ID:	L1532956-05	Date Collected:	12/14/15 14:25
Client ID:	B220-1214-1425-5-10	Date Received:	12/14/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Soil		
Analytical Method:	1,8260C		
Analytical Date:	12/18/15 12:09		
Analyst:	BN		
Percent Solids:	94%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS-5035 - Westborough Lab						
Dichlorodifluoromethane	ND		mg/kg	0.0085	--	1
Chloromethane	ND		mg/kg	0.0042	--	1
Vinyl chloride	ND		mg/kg	0.0017	--	1
Bromomethane	ND		mg/kg	0.0017	--	1
Chloroethane	ND		mg/kg	0.0017	--	1
Trichlorofluoromethane	ND		mg/kg	0.0042	--	1
1,1-Dichloroethene	ND		mg/kg	0.00085	--	1
Carbon disulfide	ND		mg/kg	0.0085	--	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		mg/kg	0.017	--	1
Methylene chloride	ND		mg/kg	0.0042	--	1
Acetone	ND		mg/kg	0.030	--	1
trans-1,2-Dichloroethene	ND		mg/kg	0.0013	--	1
Methyl Acetate	ND		mg/kg	0.0034	--	1
Methyl tert butyl ether	ND		mg/kg	0.0017	--	1
1,1-Dichloroethane	ND		mg/kg	0.0013	--	1
cis-1,2-Dichloroethene	ND		mg/kg	0.00085	--	1
1,2-Dichloroethene, Total	ND		mg/kg	0.00085	--	1
Cyclohexane	ND		mg/kg	0.017	--	1
Bromochloromethane	ND		mg/kg	0.0042	--	1
Chloroform	ND		mg/kg	0.0013	--	1
Carbon tetrachloride	ND		mg/kg	0.00085	--	1
1,1,1-Trichloroethane	ND		mg/kg	0.00085	--	1
2-Butanone	ND		mg/kg	0.0085	--	1
Benzene	ND		mg/kg	0.00085	--	1
1,2-Dichloroethane	ND		mg/kg	0.00085	--	1
Methyl cyclohexane	ND		mg/kg	0.0034	--	1
Trichloroethene	ND		mg/kg	0.00085	--	1
1,2-Dichloropropane	ND		mg/kg	0.0030	--	1
Bromodichloromethane	ND		mg/kg	0.00085	--	1
1,4-Dioxane	ND		mg/kg	0.085	--	1

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1532956

Project Number: 38677-007 **Report Date:** 12/21/15

SAMPLE RESULTS

Lab ID: L1532956-05 Date Collected: 12/14/15 14:25

Client ID: B220-1214-1425-5-10 Date Received: 12/14/15

Sample Location: WASHINGTON, D.C. Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS-5035 - Westborough Lab						
cis-1,3-Dichloropropene	ND		mg/kg	0.00085	--	1
Toluene	ND		mg/kg	0.0013	--	1
4-Methyl-2-pentanone	ND		mg/kg	0.0085	--	1
Tetrachloroethene	ND		mg/kg	0.00085	--	1
trans-1,3-Dichloropropene	ND		mg/kg	0.00085	--	1
1,3-Dichloropropene, Total	ND		mg/kg	0.00085	--	1
1,1,2-Trichloroethane	ND		mg/kg	0.0013	--	1
Dibromochloromethane	ND		mg/kg	0.00085	--	1
1,2-Dibromoethane	ND		mg/kg	0.0034	--	1
2-Hexanone	ND		mg/kg	0.0085	--	1
Chlorobenzene	ND		mg/kg	0.00085	--	1
Ethylbenzene	ND		mg/kg	0.00085	--	1
p/m-Xylene	ND		mg/kg	0.0017	--	1
o-Xylene	ND		mg/kg	0.0017	--	1
Xylenes, Total	ND		mg/kg	0.0017	--	1
Styrene	ND		mg/kg	0.0017	--	1
Bromoform	ND		mg/kg	0.0034	--	1
Isopropylbenzene	ND		mg/kg	0.00085	--	1
1,1,2,2-Tetrachloroethane	ND		mg/kg	0.00085	--	1
1,3-Dichlorobenzene	ND		mg/kg	0.0042	--	1
1,4-Dichlorobenzene	ND		mg/kg	0.0042	--	1
1,2-Dichlorobenzene	ND		mg/kg	0.0042	--	1
1,2-Dibromo-3-chloropropane	ND		mg/kg	0.0042	--	1
1,2,4-Trichlorobenzene	ND		mg/kg	0.0042	--	1
1,2,3-Trichlorobenzene	ND		mg/kg	0.0042	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	119		70-130
Toluene-d8	92		70-130
4-Bromofluorobenzene	94		70-130
Dibromofluoromethane	108		70-130

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1532956

Project Number: 38677-007 **Report Date:** 12/21/15

SAMPLE RESULTS

Lab ID:	L1532956-06	Date Collected:	12/14/15 14:30
Client ID:	B220-1214-1430-10-15	Date Received:	12/14/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Soil		
Analytical Method:	1,8260C		
Analytical Date:	12/18/15 12:34		
Analyst:	BN		
Percent Solids:	85%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS-5035 - Westborough Lab						
Dichlorodifluoromethane	ND		mg/kg	0.010	--	1
Chloromethane	ND		mg/kg	0.0050	--	1
Vinyl chloride	ND		mg/kg	0.0020	--	1
Bromomethane	ND		mg/kg	0.0020	--	1
Chloroethane	ND		mg/kg	0.0020	--	1
Trichlorofluoromethane	ND		mg/kg	0.0050	--	1
1,1-Dichloroethene	ND		mg/kg	0.0010	--	1
Carbon disulfide	ND		mg/kg	0.010	--	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		mg/kg	0.020	--	1
Methylene chloride	ND		mg/kg	0.0050	--	1
Acetone	ND		mg/kg	0.036	--	1
trans-1,2-Dichloroethene	ND		mg/kg	0.0015	--	1
Methyl Acetate	ND		mg/kg	0.0040	--	1
Methyl tert butyl ether	ND		mg/kg	0.0020	--	1
1,1-Dichloroethane	ND		mg/kg	0.0015	--	1
cis-1,2-Dichloroethene	ND		mg/kg	0.0010	--	1
1,2-Dichloroethene, Total	ND		mg/kg	0.0010	--	1
Cyclohexane	ND		mg/kg	0.020	--	1
Bromochloromethane	ND		mg/kg	0.0050	--	1
Chloroform	ND		mg/kg	0.0015	--	1
Carbon tetrachloride	ND		mg/kg	0.0010	--	1
1,1,1-Trichloroethane	ND		mg/kg	0.0010	--	1
2-Butanone	ND		mg/kg	0.010	--	1
Benzene	ND		mg/kg	0.0010	--	1
1,2-Dichloroethane	ND		mg/kg	0.0010	--	1
Methyl cyclohexane	ND		mg/kg	0.0040	--	1
Trichloroethene	ND		mg/kg	0.0010	--	1
1,2-Dichloropropane	ND		mg/kg	0.0035	--	1
Bromodichloromethane	ND		mg/kg	0.0010	--	1
1,4-Dioxane	ND		mg/kg	0.10	--	1

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1532956

Project Number: 38677-007 **Report Date:** 12/21/15

SAMPLE RESULTS

Lab ID: L1532956-06 Date Collected: 12/14/15 14:30

Client ID: B220-1214-1430-10-15 Date Received: 12/14/15

Sample Location: WASHINGTON, D.C. Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS-5035 - Westborough Lab						
cis-1,3-Dichloropropene	ND		mg/kg	0.0010	--	1
Toluene	ND		mg/kg	0.0015	--	1
4-Methyl-2-pentanone	ND		mg/kg	0.010	--	1
Tetrachloroethene	ND		mg/kg	0.0010	--	1
trans-1,3-Dichloropropene	ND		mg/kg	0.0010	--	1
1,3-Dichloropropene, Total	ND		mg/kg	0.0010	--	1
1,1,2-Trichloroethane	ND		mg/kg	0.0015	--	1
Dibromochloromethane	ND		mg/kg	0.0010	--	1
1,2-Dibromoethane	ND		mg/kg	0.0040	--	1
2-Hexanone	ND		mg/kg	0.010	--	1
Chlorobenzene	ND		mg/kg	0.0010	--	1
Ethylbenzene	ND		mg/kg	0.0010	--	1
p/m-Xylene	ND		mg/kg	0.0020	--	1
o-Xylene	ND		mg/kg	0.0020	--	1
Xylenes, Total	ND		mg/kg	0.0020	--	1
Styrene	ND		mg/kg	0.0020	--	1
Bromoform	ND		mg/kg	0.0040	--	1
Isopropylbenzene	ND		mg/kg	0.0010	--	1
1,1,2,2-Tetrachloroethane	ND		mg/kg	0.0010	--	1
1,3-Dichlorobenzene	ND		mg/kg	0.0050	--	1
1,4-Dichlorobenzene	ND		mg/kg	0.0050	--	1
1,2-Dichlorobenzene	ND		mg/kg	0.0050	--	1
1,2-Dibromo-3-chloropropane	ND		mg/kg	0.0050	--	1
1,2,4-Trichlorobenzene	ND		mg/kg	0.0050	--	1
1,2,3-Trichlorobenzene	ND		mg/kg	0.0050	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	116		70-130
Toluene-d8	92		70-130
4-Bromofluorobenzene	92		70-130
Dibromofluoromethane	107		70-130

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1532956

Project Number: 38677-007 **Report Date:** 12/21/15

SAMPLE RESULTS

Lab ID:	L1532956-07	Date Collected:	12/14/15 15:00
Client ID:	TB-121415	Date Received:	12/14/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Water		
Analytical Method:	1,8260C		
Analytical Date:	12/18/15 08:46		
Analyst:	MM		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Dichlorodifluoromethane	ND		ug/l	5.0	--	1
Chloromethane	ND		ug/l	2.5	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
Bromomethane	ND		ug/l	1.0	--	1
Chloroethane	ND		ug/l	1.0	--	1
Trichlorofluoromethane	ND		ug/l	2.5	--	1
1,1-Dichloroethene	ND		ug/l	0.50	--	1
Carbon disulfide	ND		ug/l	5.0	--	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		ug/l	2.5	--	1
Methylene chloride	ND		ug/l	2.5	--	1
Acetone	12		ug/l	5.0	--	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	--	1
Methyl Acetate	ND		ug/l	2.0	--	1
Methyl tert butyl ether	ND		ug/l	1.0	--	1
1,1-Dichloroethane	ND		ug/l	0.75	--	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	--	1
1,2-Dichloroethene, Total	ND		ug/l	0.50	--	1
Cyclohexane	ND		ug/l	10	--	1
Bromochloromethane	ND		ug/l	2.5	--	1
Chloroform	ND		ug/l	0.75	--	1
Carbon tetrachloride	ND		ug/l	0.50	--	1
1,1,1-Trichloroethane	ND		ug/l	0.50	--	1
2-Butanone	ND		ug/l	5.0	--	1
Benzene	ND		ug/l	0.50	--	1
1,2-Dichloroethane	ND		ug/l	0.50	--	1
Methyl cyclohexane	ND		ug/l	10	--	1
Trichloroethene	ND		ug/l	0.50	--	1
1,2-Dichloropropane	ND		ug/l	1.0	--	1
Bromodichloromethane	ND		ug/l	0.50	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	--	1

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1532956

Project Number: 38677-007 **Report Date:** 12/21/15

SAMPLE RESULTS

Lab ID: L1532956-07 Date Collected: 12/14/15 15:00

Client ID: TB-121415 Date Received: 12/14/15

Sample Location: WASHINGTON, D.C. Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Toluene	ND		ug/l	0.75	--	1
Tetrachloroethene	ND		ug/l	0.50	--	1
4-Methyl-2-pentanone	ND		ug/l	5.0	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	--	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	--	1
1,1,2-Trichloroethane	ND		ug/l	0.75	--	1
Dibromochloromethane	ND		ug/l	0.50	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Chlorobenzene	ND		ug/l	0.50	--	1
Ethylbenzene	ND		ug/l	0.50	--	1
p/m-Xylene	ND		ug/l	1.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
Xylenes, Total	ND		ug/l	1.0	--	1
Styrene	ND		ug/l	1.0	--	1
Bromoform	ND		ug/l	2.0	--	1
Isopropylbenzene	ND		ug/l	0.50	--	1
1,3-Dichlorobenzene	ND		ug/l	2.5	--	1
1,4-Dichlorobenzene	ND		ug/l	2.5	--	1
1,2-Dichlorobenzene	ND		ug/l	2.5	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	--	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	107		70-130
Dibromofluoromethane	100		70-130

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1532956

Project Number: 38677-007 **Report Date:** 12/21/15

SAMPLE RESULTS

Lab ID:	L1532956-07	Date Collected:	12/14/15 15:00
Client ID:	TB-121415	Date Received:	12/14/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Water		
Analytical Method:	1,8260C-SIM(M)		
Analytical Date:	12/18/15 08:46		
Analyst:	MM		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS-SIM - Westborough Lab						
1,4-Dioxane	ND		ug/l	3.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.10	--	1

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1532956

Project Number: 38677-007 **Report Date:** 12/21/15

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C-SIM(M)
Analytical Date: 12/18/15 08:20
Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 07 Batch: WG851054-3					
1,4-Dioxane	ND		ug/l	3.0	--
1,1,2,2-Tetrachloroethane	ND		ug/l	0.10	--

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1532956

Project Number: 38677-007 **Report Date:** 12/21/15

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 12/18/15 08:20
Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 07 Batch: WG851056-3					
Dichlorodifluoromethane	ND		ug/l	5.0	--
Chloromethane	ND		ug/l	2.5	--
Vinyl chloride	ND		ug/l	1.0	--
Bromomethane	ND		ug/l	1.0	--
Chloroethane	ND		ug/l	1.0	--
Trichlorofluoromethane	ND		ug/l	2.5	--
1,1-Dichloroethene	ND		ug/l	0.50	--
Carbon disulfide	ND		ug/l	5.0	--
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		ug/l	2.5	--
Methylene chloride	ND		ug/l	2.5	--
Acetone	ND		ug/l	5.0	--
trans-1,2-Dichloroethene	ND		ug/l	0.75	--
Methyl Acetate	ND		ug/l	2.0	--
Methyl tert butyl ether	ND		ug/l	1.0	--
1,1-Dichloroethane	ND		ug/l	0.75	--
cis-1,2-Dichloroethene	ND		ug/l	0.50	--
1,2-Dichloroethene, Total	ND		ug/l	0.50	--
Cyclohexane	ND		ug/l	10	--
Bromochloromethane	ND		ug/l	2.5	--
Chloroform	ND		ug/l	0.75	--
Carbon tetrachloride	ND		ug/l	0.50	--
1,1,1-Trichloroethane	ND		ug/l	0.50	--
2-Butanone	ND		ug/l	5.0	--
Benzene	ND		ug/l	0.50	--
1,2-Dichloroethane	ND		ug/l	0.50	--
Methyl cyclohexane	ND		ug/l	10	--
Trichloroethene	ND		ug/l	0.50	--
1,2-Dichloropropane	ND		ug/l	1.0	--
Bromodichloromethane	ND		ug/l	0.50	--

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1532956

Project Number: 38677-007 **Report Date:** 12/21/15

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 12/18/15 08:20
Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 07 Batch: WG851056-3					
cis-1,3-Dichloropropene	ND		ug/l	0.50	--
Toluene	ND		ug/l	0.75	--
Tetrachloroethene	ND		ug/l	0.50	--
4-Methyl-2-pentanone	ND		ug/l	5.0	--
trans-1,3-Dichloropropene	ND		ug/l	0.50	--
1,3-Dichloropropene, Total	ND		ug/l	0.50	--
1,1,2-Trichloroethane	ND		ug/l	0.75	--
Dibromochloromethane	ND		ug/l	0.50	--
1,2-Dibromoethane	ND		ug/l	2.0	--
2-Hexanone	ND		ug/l	5.0	--
Chlorobenzene	ND		ug/l	0.50	--
Ethylbenzene	ND		ug/l	0.50	--
p/m-Xylene	ND		ug/l	1.0	--
o-Xylene	ND		ug/l	1.0	--
Xylenes, Total	ND		ug/l	1.0	--
Styrene	ND		ug/l	1.0	--
Bromoform	ND		ug/l	2.0	--
Isopropylbenzene	ND		ug/l	0.50	--
1,3-Dichlorobenzene	ND		ug/l	2.5	--
1,4-Dichlorobenzene	ND		ug/l	2.5	--
1,2-Dichlorobenzene	ND		ug/l	2.5	--
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	--
1,2,4-Trichlorobenzene	ND		ug/l	2.5	--
1,2,3-Trichlorobenzene	ND		ug/l	2.5	--

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1532956

Project Number: 38677-007 **Report Date:** 12/21/15

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 12/18/15 08:20
Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 07 Batch: WG851056-3					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	106		70-130
Dibromofluoromethane	100		70-130

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1532956

Project Number: 38677-007 **Report Date:** 12/21/15

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 12/18/15 09:07
Analyst: BN

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS-5035 - Westborough Lab for sample(s): 01-04 Batch: WG851096-3					
Dichlorodifluoromethane	ND		mg/kg	0.010	--
Chloromethane	ND		mg/kg	0.0050	--
Vinyl chloride	ND		mg/kg	0.0020	--
Bromomethane	ND		mg/kg	0.0020	--
Chloroethane	ND		mg/kg	0.0020	--
Trichlorofluoromethane	ND		mg/kg	0.0050	--
1,1-Dichloroethene	ND		mg/kg	0.0010	--
Carbon disulfide	ND		mg/kg	0.010	--
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		mg/kg	0.020	--
Methylene chloride	ND		mg/kg	0.0050	--
Acetone	ND		mg/kg	0.036	--
trans-1,2-Dichloroethene	ND		mg/kg	0.0015	--
Methyl Acetate	ND		mg/kg	0.0040	--
Methyl tert butyl ether	ND		mg/kg	0.0020	--
1,1-Dichloroethane	ND		mg/kg	0.0015	--
cis-1,2-Dichloroethene	ND		mg/kg	0.0010	--
1,2-Dichloroethene, Total	ND		mg/kg	0.0010	--
Cyclohexane	ND		mg/kg	0.020	--
Bromochloromethane	ND		mg/kg	0.0050	--
Chloroform	ND		mg/kg	0.0015	--
Carbon tetrachloride	ND		mg/kg	0.0010	--
1,1,1-Trichloroethane	ND		mg/kg	0.0010	--
2-Butanone	ND		mg/kg	0.010	--
Benzene	ND		mg/kg	0.0010	--
1,2-Dichloroethane	ND		mg/kg	0.0010	--
Methyl cyclohexane	ND		mg/kg	0.0040	--
Trichloroethene	ND		mg/kg	0.0010	--
1,2-Dichloropropane	ND		mg/kg	0.0035	--
Bromodichloromethane	ND		mg/kg	0.0010	--

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1532956

Project Number: 38677-007 **Report Date:** 12/21/15

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 12/18/15 09:07
Analyst: BN

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS-5035 - Westborough Lab for sample(s): 01-04 Batch: WG851096-3					
1,4-Dioxane	ND		mg/kg	0.10	--
cis-1,3-Dichloropropene	ND		mg/kg	0.0010	--
Toluene	ND		mg/kg	0.0015	--
4-Methyl-2-pentanone	ND		mg/kg	0.010	--
Tetrachloroethene	ND		mg/kg	0.0010	--
trans-1,3-Dichloropropene	ND		mg/kg	0.0010	--
1,3-Dichloropropene, Total	ND		mg/kg	0.0010	--
1,1,2-Trichloroethane	ND		mg/kg	0.0015	--
Dibromochloromethane	ND		mg/kg	0.0010	--
1,2-Dibromoethane	ND		mg/kg	0.0040	--
2-Hexanone	ND		mg/kg	0.010	--
Chlorobenzene	ND		mg/kg	0.0010	--
Ethylbenzene	ND		mg/kg	0.0010	--
p/m-Xylene	ND		mg/kg	0.0020	--
o-Xylene	ND		mg/kg	0.0020	--
Xylenes, Total	ND		mg/kg	0.0020	--
Styrene	ND		mg/kg	0.0020	--
Bromoform	ND		mg/kg	0.0040	--
Isopropylbenzene	ND		mg/kg	0.0010	--
1,1,2,2-Tetrachloroethane	ND		mg/kg	0.0010	--
1,3-Dichlorobenzene	ND		mg/kg	0.0050	--
1,4-Dichlorobenzene	ND		mg/kg	0.0050	--
1,2-Dichlorobenzene	ND		mg/kg	0.0050	--
1,2-Dibromo-3-chloropropane	ND		mg/kg	0.0050	--
1,2,4-Trichlorobenzene	ND		mg/kg	0.0050	--
1,2,3-Trichlorobenzene	ND		mg/kg	0.0050	--

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1532956

Project Number: 38677-007 **Report Date:** 12/21/15

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 12/18/15 09:07
Analyst: BN

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS-5035 - Westborough Lab for sample(s): 01-04 Batch: WG851096-3					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	92		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	102		70-130

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1532956

Project Number: 38677-007 **Report Date:** 12/21/15

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 12/18/15 09:35
Analyst: BN

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS-5035 - Westborough Lab for sample(s): 05-06 Batch: WG851156-3					
Dichlorodifluoromethane	ND		mg/kg	0.010	--
Chloromethane	ND		mg/kg	0.0050	--
Vinyl chloride	ND		mg/kg	0.0020	--
Bromomethane	ND		mg/kg	0.0020	--
Chloroethane	ND		mg/kg	0.0020	--
Trichlorofluoromethane	ND		mg/kg	0.0050	--
1,1-Dichloroethene	ND		mg/kg	0.0010	--
Carbon disulfide	ND		mg/kg	0.010	--
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		mg/kg	0.020	--
Methylene chloride	ND		mg/kg	0.0050	--
Acetone	ND		mg/kg	0.036	--
trans-1,2-Dichloroethene	ND		mg/kg	0.0015	--
Methyl Acetate	ND		mg/kg	0.0040	--
Methyl tert butyl ether	ND		mg/kg	0.0020	--
1,1-Dichloroethane	ND		mg/kg	0.0015	--
cis-1,2-Dichloroethene	ND		mg/kg	0.0010	--
1,2-Dichloroethene, Total	ND		mg/kg	0.0010	--
Cyclohexane	ND		mg/kg	0.020	--
Bromochloromethane	ND		mg/kg	0.0050	--
Chloroform	ND		mg/kg	0.0015	--
Carbon tetrachloride	ND		mg/kg	0.0010	--
1,1,1-Trichloroethane	ND		mg/kg	0.0010	--
2-Butanone	ND		mg/kg	0.010	--
Benzene	ND		mg/kg	0.0010	--
1,2-Dichloroethane	ND		mg/kg	0.0010	--
Methyl cyclohexane	ND		mg/kg	0.0040	--
Trichloroethene	ND		mg/kg	0.0010	--
1,2-Dichloropropane	ND		mg/kg	0.0035	--
Bromodichloromethane	ND		mg/kg	0.0010	--

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1532956

Project Number: 38677-007 **Report Date:** 12/21/15

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 12/18/15 09:35
Analyst: BN

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS-5035 - Westborough Lab for sample(s): 05-06 Batch: WG851156-3					
1,4-Dioxane	ND		mg/kg	0.10	--
cis-1,3-Dichloropropene	ND		mg/kg	0.0010	--
Toluene	ND		mg/kg	0.0015	--
4-Methyl-2-pentanone	ND		mg/kg	0.010	--
Tetrachloroethene	ND		mg/kg	0.0010	--
trans-1,3-Dichloropropene	ND		mg/kg	0.0010	--
1,3-Dichloropropene, Total	ND		mg/kg	0.0010	--
1,1,2-Trichloroethane	ND		mg/kg	0.0015	--
Dibromochloromethane	ND		mg/kg	0.0010	--
1,2-Dibromoethane	ND		mg/kg	0.0040	--
2-Hexanone	ND		mg/kg	0.010	--
Chlorobenzene	ND		mg/kg	0.0010	--
Ethylbenzene	ND		mg/kg	0.0010	--
p/m-Xylene	ND		mg/kg	0.0020	--
o-Xylene	ND		mg/kg	0.0020	--
Xylenes, Total	ND		mg/kg	0.0020	--
Styrene	ND		mg/kg	0.0020	--
Bromoform	ND		mg/kg	0.0040	--
Isopropylbenzene	ND		mg/kg	0.0010	--
1,1,2,2-Tetrachloroethane	ND		mg/kg	0.0010	--
1,3-Dichlorobenzene	ND		mg/kg	0.0050	--
1,4-Dichlorobenzene	ND		mg/kg	0.0050	--
1,2-Dichlorobenzene	ND		mg/kg	0.0050	--
1,2-Dibromo-3-chloropropane	ND		mg/kg	0.0050	--
1,2,4-Trichlorobenzene	ND		mg/kg	0.0050	--
1,2,3-Trichlorobenzene	ND		mg/kg	0.0050	--

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1532956

Project Number: 38677-007 **Report Date:** 12/21/15

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 12/18/15 09:35
Analyst: BN

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS-5035 - Westborough Lab for sample(s): 05-06 Batch: WG851156-3					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	108		70-130
Toluene-d8	94		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	94		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: ST. E'S EAST CAMPUS

Project Number: 38677-007

Lab Number: L1532956

Report Date: 12/21/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 07 Batch: WG851054-1 WG851054-2								
1,4-Dioxane	86		78		70-130	10		25
1,1,2,2-Tetrachloroethane	74		87		70-130	16		25

Lab Control Sample Analysis
Batch Quality Control

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007
Lab Number: L1532956
Report Date: 12/21/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 07 Batch: WG851056-1 WG851056-2								
Dichlorodifluoromethane	108		101		36-147	7		20
Chloromethane	116		111		64-130	4		20
Vinyl chloride	112		108		55-140	4		20
Bromomethane	41		49		39-139	18		20
Chloroethane	102		102		55-138	0		20
Trichlorofluoromethane	110		105		62-150	5		20
1,1-Dichloroethene	116		108		61-145	7		20
Carbon disulfide	**132**	Q	108		51-130	20		20
1,1,2-Trichloro-1,2,2-Trifluoroethane	113		107		70-130	5		20
Methylene chloride	115		106		70-130	8		20
Acetone	143		124		58-148	14		20
trans-1,2-Dichloroethene	114		107		70-130	6		20
Methyl Acetate	**140**	Q	118		70-130	17		20
Methyl tert butyl ether	105		98		63-130	7		20
1,1-Dichloroethane	127		117		70-130	8		20
cis-1,2-Dichloroethene	114		110		70-130	4		20
Cyclohexane	122		107		70-130	13		20
Bromochloromethane	97		92		70-130	5		20
Chloroform	115		107		70-130	7		20
Carbon tetrachloride	105		98		63-132	7		20
1,1,1-Trichloroethane	111		104		67-130	7		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007
Lab Number: L1532956
Report Date: 12/21/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 07 Batch: WG851056-1 WG851056-2								
2-Butanone	137		122		63-138	12		20
Benzene	118		110		70-130	7		20
1,2-Dichloroethane	110		103		70-130	7		20
Methyl cyclohexane	99		94		70-130	5		20
Trichloroethene	108		103		70-130	5		20
1,2-Dichloropropane	127		116		70-130	9		20
Bromodichloromethane	116		109		67-130	6		20
cis-1,3-Dichloropropene	98		92		70-130	6		20
Toluene	104		97		70-130	7		20
Tetrachloroethene	96		91		70-130	5		20
4-Methyl-2-pentanone	94		84		59-130	11		20
trans-1,3-Dichloropropene	106		99		70-130	7		20
1,1,2-Trichloroethane	112		106		70-130	6		20
Dibromochloromethane	97		91		63-130	6		20
1,2-Dibromoethane	102		95		70-130	7		20
2-Hexanone	100		87		57-130	14		20
Chlorobenzene	105		99		75-130	6		20
Ethylbenzene	111		101		70-130	9		20
p/m-Xylene	108		98		70-130	10		20
o-Xylene	101		90		70-130	12		20
Styrene	103		91		70-130	12		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007
Lab Number: L1532956
Report Date: 12/21/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 07 Batch: WG851056-1 WG851056-2								
Bromoform	85		80		54-136	6		20
Isopropylbenzene	109		100		70-130	9		20
1,1,2,2-Tetrachloroethane	110		100		67-130	10		20
1,3,5-Trimethylbenzene	110		104		64-130	6		20
1,2,4-Trimethylbenzene	104		95		70-130	9		20
1,3-Dichlorobenzene	104		96		70-130	8		20
1,4-Dichlorobenzene	102		94		70-130	8		20
1,2-Dichlorobenzene	102		95		70-130	7		20
1,2-Dibromo-3-chloropropane	83		76		41-144	9		20
1,2,4-Trichlorobenzene	89		86		70-130	3		20
Naphthalene	78		74		70-130	5		20
1,2,3-Trichlorobenzene	85		82		70-130	4		20
tert-Butyl Alcohol	**164**	Q	**151**	Q	70-130	8		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	96		98		70-130
Toluene-d8	101		102		70-130
4-Bromofluorobenzene	105		109		70-130
Dibromofluoromethane	96		96		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007
Lab Number: L1532956
Report Date: 12/21/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS-5035 - Westborough Lab Associated sample(s): 01-04 Batch: WG851096-1 WG851096-2								
Dichlorodifluoromethane	83		79		30-146	5		30
Chloromethane	88		83		52-130	6		30
Vinyl chloride	83		82		67-130	1		30
Bromomethane	123		120		57-147	2		30
Chloroethane	118		115		50-151	3		30
Trichlorofluoromethane	105		102		70-139	3		30
1,1-Dichloroethene	88		86		65-135	2		30
Carbon disulfide	90		92		59-130	2		30
1,1,2-Trichloro-1,2,2-Trifluoroethane	110		108		50-139	2		30
Acrolein	87		84		51-130	4		30
Methylene chloride	100		100		70-130	0		30
Acetone	97		90		54-140	7		30
trans-1,2-Dichloroethene	90		89		70-130	1		30
Methyl Acetate	87		87		51-146	0		30
Methyl tert butyl ether	90		89		66-130	1		30
1,1-Dichloroethane	90		90		70-130	0		30
Acrylonitrile	93		94		70-130	1		30
cis-1,2-Dichloroethene	93		95		70-130	2		30
2,2-Dichloropropane	86		87		70-130	1		30
Cyclohexane	80		81		59-142	1		30
Bromochloromethane	104		105		70-130	1		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007
Lab Number: L1532956
Report Date: 12/21/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS-5035 - Westborough Lab Associated sample(s): 01-04 Batch: WG851096-1 WG851096-2								
Chloroform	95		98		70-130	3		30
Carbon tetrachloride	89		88		70-130	1		30
1,1,1-Trichloroethane	88		88		70-130	0		30
2-Butanone	80		80		70-130	0		30
1,1-Dichloropropene	86		86		70-130	0		30
Benzene	93		93		70-130	0		30
1,2-Dichloroethane	93		93		70-130	0		30
Methyl cyclohexane	103		103		70-130	0		30
Trichloroethene	91		91		70-130	0		30
1,2-Dichloropropane	94		95		70-130	1		30
Bromodichloromethane	97		98		70-130	1		30
1,4-Dioxane	91		89		65-136	2		30
2-Chloroethylvinyl ether	93		90		70-130	3		30
cis-1,3-Dichloropropene	96		96		70-130	0		30
Toluene	85		86		70-130	1		30
4-Methyl-2-pentanone	82		81		70-130	1		30
Tetrachloroethene	84		85		70-130	1		30
trans-1,3-Dichloropropene	91		90		70-130	1		30
1,1,2-Trichloroethane	96		97		70-130	1		30
Dibromochloromethane	92		93		70-130	1		30
1,3-Dichloropropane	95		94		69-130	1		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007
Lab Number: L1532956
Report Date: 12/21/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS-5035 - Westborough Lab Associated sample(s): 01-04 Batch: WG851096-1 WG851096-2								
1,2-Dibromoethane	94		95		70-130	1		30
2-Hexanone	**64**	Q	**64**	Q	70-130	0		30
Chlorobenzene	91		92		70-130	1		30
Ethylbenzene	86		86		70-130	0		30
1,1,1,2-Tetrachloroethane	92		92		70-130	0		30
p/m-Xylene	88		88		70-130	0		30
o-Xylene	89		89		70-130	0		30
Styrene	91		91		70-130	0		30
Bromoform	85		88		70-130	3		30
Isopropylbenzene	84		85		70-130	1		30
Bromobenzene	90		91		70-130	1		30
1,1,2,2-Tetrachloroethane	93		93		70-130	0		30
o-Chlorotoluene	71		89		70-130	23		30
1,3,5-Trimethylbenzene	88		89		70-130	1		30
1,2,3-Trichloropropane	91		93		68-130	2		30
p-Chlorotoluene	87		89		70-130	2		30
tert-Butylbenzene	83		85		70-130	2		30
1,2,4-Trimethylbenzene	88		90		70-130	2		30
sec-Butylbenzene	87		87		70-130	0		30
p-Isopropyltoluene	86		86		70-130	0		30
1,3-Dichlorobenzene	94		94		70-130	0		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007
Lab Number: L1532956
Report Date: 12/21/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS-5035 - Westborough Lab Associated sample(s): 01-04 Batch: WG851096-1 WG851096-2								
1,4-Dichlorobenzene	93		94		70-130	1		30
n-Butylbenzene	89		89		70-130	0		30
1,2-Dichlorobenzene	93		94		70-130	1		30
1,2-Dibromo-3-chloropropane	90		91		68-130	1		30
Hexachlorobutadiene	74		76		67-130	3		30
1,2,4-Trichlorobenzene	87		89		70-130	2		30
Naphthalene	90		88		70-130	2		30
1,2,3-Trichlorobenzene	86		87		70-130	1		30
tert-Butyl Alcohol	74		71		40-160	4		30
Tertiary-Amyl Methyl Ether	86		87		70-130	1		30
Isopropyl Ether	85		85		70-130	0		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	93		93		70-130
Toluene-d8	97		98		70-130
4-Bromofluorobenzene	94		95		70-130
Dibromofluoromethane	102		102		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007
Lab Number: L1532956
Report Date: 12/21/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS-5035 - Westborough Lab Associated sample(s): 05-06 Batch: WG851156-1 WG851156-2								
Dichlorodifluoromethane	102		95		30-146	7		30
Chloromethane	98		93		52-130	5		30
Vinyl chloride	111		105		67-130	6		30
Bromomethane	122		121		57-147	1		30
Chloroethane	116		109		50-151	6		30
Trichlorofluoromethane	**140**	Q	134		70-139	4		30
1,1-Dichloroethene	117		109		65-135	7		30
Carbon disulfide	106		105		59-130	1		30
1,1,2-Trichloro-1,2,2-Trifluoroethane	124		116		50-139	7		30
Acrolein	87		91		51-130	4		30
Methylene chloride	98		96		70-130	2		30
Acetone	88		97		54-140	10		30
trans-1,2-Dichloroethene	111		106		70-130	5		30
Methyl Acetate	88		92		51-146	4		30
Methyl tert butyl ether	105		106		66-130	1		30
1,1-Dichloroethane	107		104		70-130	3		30
Acrylonitrile	93		95		70-130	2		30
cis-1,2-Dichloroethene	106		104		70-130	2		30
2,2-Dichloropropane	128		124		70-130	3		30
Cyclohexane	122		114		59-142	7		30
Bromochloromethane	107		105		70-130	2		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007
Lab Number: L1532956
Report Date: 12/21/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS-5035 - Westborough Lab Associated sample(s): 05-06 Batch: WG851156-1 WG851156-2								
Chloroform	113		110		70-130	3		30
Carbon tetrachloride	**140**	Q	**134**	Q	70-130	4		30
1,1,1-Trichloroethane	**133**	Q	127		70-130	5		30
2-Butanone	87		87		70-130	0		30
1,1-Dichloropropene	119		113		70-130	5		30
Benzene	105		101		70-130	4		30
1,2-Dichloroethane	111		113		70-130	2		30
Methyl cyclohexane	121		114		70-130	6		30
Trichloroethene	117		112		70-130	4		30
1,2-Dichloropropane	99		97		70-130	2		30
Bromodichloromethane	108		107		70-130	1		30
1,4-Dioxane	94		93		65-136	1		30
2-Chloroethylvinyl ether	100		102		70-130	2		30
cis-1,3-Dichloropropene	105		104		70-130	1		30
Toluene	95		92		70-130	3		30
4-Methyl-2-pentanone	94		96		70-130	2		30
Tetrachloroethene	117		110		70-130	6		30
trans-1,3-Dichloropropene	97		98		70-130	1		30
1,1,2-Trichloroethane	89		89		70-130	0		30
Dibromochloromethane	86		88		70-130	2		30
1,3-Dichloropropane	91		90		69-130	1		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007
Lab Number: L1532956
Report Date: 12/21/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS-5035 - Westborough Lab Associated sample(s): 05-06 Batch: WG851156-1 WG851156-2								
1,2-Dibromoethane	92		94		70-130	2		30
2-Hexanone	79		82		70-130	4		30
Chlorobenzene	97		96		70-130	1		30
Ethylbenzene	104		101		70-130	3		30
1,1,1,2-Tetrachloroethane	108		105		70-130	3		30
p/m-Xylene	107		104		70-130	3		30
o-Xylene	104		101		70-130	3		30
Styrene	106		105		70-130	1		30
Bromoform	78		83		70-130	6		30
Isopropylbenzene	111		107		70-130	4		30
Bromobenzene	92		92		70-130	0		30
1,1,2,2-Tetrachloroethane	81		83		70-130	2		30
o-Chlorotoluene	98		97		70-130	1		30
1,3,5-Trimethylbenzene	104		101		70-130	3		30
1,2,3-Trichloropropane	84		87		68-130	4		30
p-Chlorotoluene	99		97		70-130	2		30
tert-Butylbenzene	105		103		70-130	2		30
1,2,4-Trimethylbenzene	102		101		70-130	1		30
sec-Butylbenzene	107		102		70-130	5		30
p-Isopropyltoluene	110		107		70-130	3		30
1,3-Dichlorobenzene	98		98		70-130	0		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007
Lab Number: L1532956
Report Date: 12/21/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS-5035 - Westborough Lab Associated sample(s): 05-06 Batch: WG851156-1 WG851156-2								
1,4-Dichlorobenzene	97		97		70-130	0		30
n-Butylbenzene	110		109		70-130	1		30
1,2-Dichlorobenzene	95		95		70-130	0		30
1,2-Dibromo-3-chloropropane	**63**	Q	**67**	Q	68-130	6		30
Hexachlorobutadiene	117		115		67-130	2		30
1,2,4-Trichlorobenzene	104		104		70-130	0		30
Naphthalene	86		88		70-130	2		30
1,2,3-Trichlorobenzene	98		98		70-130	0		30
tert-Butyl Alcohol	88		90		40-160	2		30
Tertiary-Amyl Methyl Ether	105		105		70-130	0		30
Isopropyl Ether	102		101		70-130	1		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	109		111		70-130
Toluene-d8	95		93		70-130
4-Bromofluorobenzene	98		98		70-130
Dibromofluoromethane	110		111		70-130

SEMIVOLATILES

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007
Lab Number: L1532956
Report Date: 12/21/15

SAMPLE RESULTS

Lab ID:	L1532956-01	Date Collected:	12/14/15 13:00
Client ID:	B219-1214-1300-0-5	Date Received:	12/14/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8270D	Extraction Date:	12/16/15 21:59
Analytical Date:	12/18/15 14:43		
Analyst:	RC		
Percent Solids:	83%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Naphthalene	ND		mg/kg	0.20	--	1
2-Methylnaphthalene	ND		mg/kg	0.24	--	1
2-Chloronaphthalene	ND		mg/kg	0.20	--	1
Acenaphthylene	ND		mg/kg	0.16	--	1
Acenaphthene	ND		mg/kg	0.16	--	1
Fluorene	ND		mg/kg	0.20	--	1
Phenanthrene	0.40		mg/kg	0.12	--	1
Anthracene	ND		mg/kg	0.12	--	1
Fluoranthene	0.60		mg/kg	0.12	--	1
Pyrene	0.49		mg/kg	0.12	--	1
Benzo(a)anthracene	0.26		mg/kg	0.12	--	1
Chrysene	0.25		mg/kg	0.12	--	1
Benzo(b)fluoranthene	0.29		mg/kg	0.12	--	1
Benzo(k)fluoranthene	0.12		mg/kg	0.12	--	1
Benzo(a)pyrene	0.22		mg/kg	0.16	--	1
Indeno(1,2,3-cd)pyrene	ND		mg/kg	0.16	--	1
Dibenzo(a,h)anthracene	ND		mg/kg	0.12	--	1
Benzo(ghi)perylene	ND		mg/kg	0.16	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	81		23-120
2-Fluorobiphenyl	82		30-120
4-Terphenyl-d14	80		18-120

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007
Lab Number: L1532956
Report Date: 12/21/15

SAMPLE RESULTS

Lab ID:	L1532956-02	Date Collected:	12/14/15 13:05
Client ID:	B219-1214-1305-5-10	Date Received:	12/14/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8270D	Extraction Date:	12/16/15 21:59
Analytical Date:	12/18/15 15:09		
Analyst:	RC		
Percent Solids:	83%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Naphthalene	ND		mg/kg	0.20	--	1
2-Methylnaphthalene	ND		mg/kg	0.23	--	1
2-Chloronaphthalene	ND		mg/kg	0.20	--	1
Acenaphthylene	ND		mg/kg	0.16	--	1
Acenaphthene	ND		mg/kg	0.16	--	1
Fluorene	ND		mg/kg	0.20	--	1
Phenanthrene	ND		mg/kg	0.12	--	1
Anthracene	ND		mg/kg	0.12	--	1
Fluoranthene	ND		mg/kg	0.12	--	1
Pyrene	ND		mg/kg	0.12	--	1
Benzo(a)anthracene	ND		mg/kg	0.12	--	1
Chrysene	ND		mg/kg	0.12	--	1
Benzo(b)fluoranthene	ND		mg/kg	0.12	--	1
Benzo(k)fluoranthene	ND		mg/kg	0.12	--	1
Benzo(a)pyrene	ND		mg/kg	0.16	--	1
Indeno(1,2,3-cd)pyrene	ND		mg/kg	0.16	--	1
Dibenzo(a,h)anthracene	ND		mg/kg	0.12	--	1
Benzo(ghi)perylene	ND		mg/kg	0.16	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	91		23-120
2-Fluorobiphenyl	89		30-120
4-Terphenyl-d14	76		18-120

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007
Lab Number: L1532956
Report Date: 12/21/15

SAMPLE RESULTS

Lab ID:	L1532956-03	Date Collected:	12/14/15 13:10
Client ID:	B219-1214-1310-10-15	Date Received:	12/14/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8270D	Extraction Date:	12/16/15 21:59
Analytical Date:	12/18/15 02:09		
Analyst:	RC		
Percent Solids:	88%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Naphthalene	ND		mg/kg	0.19	--	1
2-Methylnaphthalene	ND		mg/kg	0.23	--	1
2-Chloronaphthalene	ND		mg/kg	0.19	--	1
Acenaphthylene	ND		mg/kg	0.15	--	1
Acenaphthene	ND		mg/kg	0.15	--	1
Fluorene	ND		mg/kg	0.19	--	1
Phenanthrene	ND		mg/kg	0.11	--	1
Anthracene	ND		mg/kg	0.11	--	1
Fluoranthene	ND		mg/kg	0.11	--	1
Pyrene	ND		mg/kg	0.11	--	1
Benzo(a)anthracene	ND		mg/kg	0.11	--	1
Chrysene	ND		mg/kg	0.11	--	1
Benzo(b)fluoranthene	ND		mg/kg	0.11	--	1
Benzo(k)fluoranthene	ND		mg/kg	0.11	--	1
Benzo(a)pyrene	ND		mg/kg	0.15	--	1
Indeno(1,2,3-cd)pyrene	ND		mg/kg	0.15	--	1
Dibenzo(a,h)anthracene	ND		mg/kg	0.11	--	1
Benzo(ghi)perylene	ND		mg/kg	0.15	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	92		23-120
2-Fluorobiphenyl	102		30-120
4-Terphenyl-d14	86		18-120

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007
Lab Number: L1532956
Report Date: 12/21/15

SAMPLE RESULTS

Lab ID:	L1532956-04	Date Collected:	12/14/15 14:20
Client ID:	B220-1214-1420-0-5	Date Received:	12/14/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8270D	Extraction Date:	12/16/15 21:59
Analytical Date:	12/18/15 02:34		
Analyst:	RC		
Percent Solids:	84%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Naphthalene	ND		mg/kg	0.20	--	1
2-Methylnaphthalene	ND		mg/kg	0.24	--	1
2-Chloronaphthalene	ND		mg/kg	0.20	--	1
Acenaphthylene	ND		mg/kg	0.16	--	1
Acenaphthene	ND		mg/kg	0.16	--	1
Fluorene	ND		mg/kg	0.20	--	1
Phenanthrene	ND		mg/kg	0.12	--	1
Anthracene	ND		mg/kg	0.12	--	1
Fluoranthene	ND		mg/kg	0.12	--	1
Pyrene	ND		mg/kg	0.12	--	1
Benzo(a)anthracene	ND		mg/kg	0.12	--	1
Chrysene	ND		mg/kg	0.12	--	1
Benzo(b)fluoranthene	ND		mg/kg	0.12	--	1
Benzo(k)fluoranthene	ND		mg/kg	0.12	--	1
Benzo(a)pyrene	ND		mg/kg	0.16	--	1
Indeno(1,2,3-cd)pyrene	ND		mg/kg	0.16	--	1
Dibenzo(a,h)anthracene	ND		mg/kg	0.12	--	1
Benzo(ghi)perylene	ND		mg/kg	0.16	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	66		23-120
2-Fluorobiphenyl	76		30-120
4-Terphenyl-d14	72		18-120

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007
Lab Number: L1532956
Report Date: 12/21/15

SAMPLE RESULTS

Lab ID:	L1532956-05	Date Collected:	12/14/15 14:25
Client ID:	B220-1214-1425-5-10	Date Received:	12/14/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8270D	Extraction Date:	12/16/15 21:59
Analytical Date:	12/18/15 03:00		
Analyst:	RC		
Percent Solids:	94%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Naphthalene	ND		mg/kg	0.18	--	1
2-Methylnaphthalene	ND		mg/kg	0.21	--	1
2-Chloronaphthalene	ND		mg/kg	0.18	--	1
Acenaphthylene	ND		mg/kg	0.14	--	1
Acenaphthene	ND		mg/kg	0.14	--	1
Fluorene	ND		mg/kg	0.18	--	1
Phenanthrene	ND		mg/kg	0.11	--	1
Anthracene	ND		mg/kg	0.11	--	1
Fluoranthene	ND		mg/kg	0.11	--	1
Pyrene	ND		mg/kg	0.11	--	1
Benzo(a)anthracene	ND		mg/kg	0.11	--	1
Chrysene	ND		mg/kg	0.11	--	1
Benzo(b)fluoranthene	ND		mg/kg	0.11	--	1
Benzo(k)fluoranthene	ND		mg/kg	0.11	--	1
Benzo(a)pyrene	ND		mg/kg	0.14	--	1
Indeno(1,2,3-cd)pyrene	ND		mg/kg	0.14	--	1
Dibenzo(a,h)anthracene	ND		mg/kg	0.11	--	1
Benzo(ghi)perylene	ND		mg/kg	0.14	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	94		23-120
2-Fluorobiphenyl	102		30-120
4-Terphenyl-d14	87		18-120

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007
Lab Number: L1532956
Report Date: 12/21/15

SAMPLE RESULTS

Lab ID:	L1532956-06	Date Collected:	12/14/15 14:30
Client ID:	B220-1214-1430-10-15	Date Received:	12/14/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8270D	Extraction Date:	12/16/15 21:59
Analytical Date:	12/18/15 14:42		
Analyst:	RC		
Percent Solids:	85%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Naphthalene	ND		mg/kg	0.20	--	1
2-Methylnaphthalene	ND		mg/kg	0.23	--	1
2-Chloronaphthalene	ND		mg/kg	0.20	--	1
Acenaphthylene	ND		mg/kg	0.16	--	1
Acenaphthene	ND		mg/kg	0.16	--	1
Fluorene	ND		mg/kg	0.20	--	1
Phenanthrene	ND		mg/kg	0.12	--	1
Anthracene	ND		mg/kg	0.12	--	1
Fluoranthene	ND		mg/kg	0.12	--	1
Pyrene	ND		mg/kg	0.12	--	1
Benzo(a)anthracene	ND		mg/kg	0.12	--	1
Chrysene	ND		mg/kg	0.12	--	1
Benzo(b)fluoranthene	ND		mg/kg	0.12	--	1
Benzo(k)fluoranthene	ND		mg/kg	0.12	--	1
Benzo(a)pyrene	ND		mg/kg	0.16	--	1
Indeno(1,2,3-cd)pyrene	ND		mg/kg	0.16	--	1
Dibenzo(a,h)anthracene	ND		mg/kg	0.12	--	1
Benzo(ghi)perylene	ND		mg/kg	0.16	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	82		23-120
2-Fluorobiphenyl	76		30-120
4-Terphenyl-d14	65		18-120

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007

Lab Number: L1532956
Report Date: 12/21/15

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 12/17/15 09:33
Analyst: RC

Extraction Method: EPA 3546
Extraction Date: 12/16/15 14:53

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-06 Batch: WG850316-1					
Naphthalene	ND		mg/kg	0.16	--
2-Methylnaphthalene	ND		mg/kg	0.20	--
2-Chloronaphthalene	ND		mg/kg	0.16	--
Acenaphthylene	ND		mg/kg	0.13	--
Acenaphthene	ND		mg/kg	0.13	--
Fluorene	ND		mg/kg	0.16	--
Phenanthrene	ND		mg/kg	0.099	--
Anthracene	ND		mg/kg	0.099	--
Fluoranthene	ND		mg/kg	0.099	--
Pyrene	ND		mg/kg	0.099	--
Benzo(a)anthracene	ND		mg/kg	0.099	--
Chrysene	ND		mg/kg	0.099	--
Benzo(b)fluoranthene	ND		mg/kg	0.099	--
Benzo(k)fluoranthene	ND		mg/kg	0.099	--
Benzo(a)pyrene	ND		mg/kg	0.13	--
Indeno(1,2,3-cd)pyrene	ND		mg/kg	0.13	--
Dibenzo(a,h)anthracene	ND		mg/kg	0.099	--
Benzo(ghi)perylene	ND		mg/kg	0.13	--

Tentatively Identified Compounds

No Tentatively Identified Compounds	ND	mg/kg

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007

Lab Number: L1532956
Report Date: 12/21/15

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 12/17/15 09:33
Analyst: RC

Extraction Method: EPA 3546
Extraction Date: 12/16/15 14:53

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-06 Batch: WG850316-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	77		25-120
Phenol-d6	80		10-120
Nitrobenzene-d5	78		23-120
2-Fluorobiphenyl	76		30-120
2,4,6-Tribromophenol	79		10-136
4-Terphenyl-d14	84		18-120

Lab Control Sample Analysis
Batch Quality Control

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007
Lab Number: L1532956
Report Date: 12/21/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-06 Batch: WG850316-2 WG850316-3								
n-Nitrosodimethylamine	76		69		22-100	10		50
Pyridine	58		60		10-93	3		50
Benzaldehyde	84		83		40-140	1		50
Aniline	58		61		40-140	5		50
Phenol	90		87		26-90	3		50
Bis(2-chloroethyl)ether	78		79		40-140	1		50
2-Chlorophenol	83		84		25-102	1		50
Benzyl Alcohol	94		95		40-140	1		50
2-Methylphenol	90		87		30-130.	3		50
Bis(2-chloroisopropyl)ether	78		80		40-140	3		50
Acetophenone	93		91		14-144	2		50
n-Nitrosodi-n-propylamine	90		88		32-121	2		50
3-Methylphenol/4-Methylphenol	99		97		30-130	2		50
Hexachloroethane	77		79		40-140	3		50
Nitrobenzene	84		85		40-140	1		50
Isophorone	88		88		40-140	0		50
2-Nitrophenol	84		85		30-130	1		50
2,4-Dimethylphenol	101		100		30-130	1		50
Bis(2-chloroethoxy)methane	83		88		40-117	6		50
Benzoic Acid	18		10		10-123	**57**	Q	50
2,4-Dichlorophenol	90		88		30-130	2		50

Lab Control Sample Analysis
Batch Quality Control

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007
Lab Number: L1532956
Report Date: 12/21/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-06 Batch: WG850316-2 WG850316-3								
1,2,4-Trichlorobenzene	78		79		38-107	1		50
Naphthalene	81		80		40-140	1		50
4-Chloroaniline	108		109		40-140	1		50
Hexachlorobutadiene	78		80		40-140	3		50
Caprolactam	103		102		15-130	1		50
P-Chloro-M-Cresol	95		91		26-103	4		50
2-Methylnaphthalene	82		80		40-140	2		50
Hexachlorocyclopentadiene	68		68		40-140	0		50
1,2,4,5-Tetrachlorobenzene	84		82		40-117	2		50
2,4,6-Trichlorophenol	88		85		30-130	3		50
2,4,5-Trichlorophenol	92		89		30-130	3		50
Biphenyl	85		82		54-104	4		50
2-Chloronaphthalene	84		83		40-140	1		50
2-Nitroaniline	89		89		47-134	0		50
Dimethyl phthalate	90		86		40-140	5		50
2,6-Dinitrotoluene	87		88		40-140	1		50
Acenaphthylene	87		84		40-140	4		50
3-Nitroaniline	69		69		26-129	0		50
Acenaphthene	84		83		31-137	1		50
2,4-Dinitrophenol	59		49		4-130	19		50
4-Nitrophenol	97		96		11-114	1		50

Lab Control Sample Analysis
Batch Quality Control

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007
Lab Number: L1532956
Report Date: 12/21/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-06 Batch: WG850316-2 WG850316-3								
2,4-Dinitrotoluene	88		88		28-89	0		50
Dibenzofuran	86		84		40-140	2		50
2,3,4,6-Tetrachlorophenol	92		84		58-132	9		50
Diethyl phthalate	94		90		40-140	4		50
Fluorene	88		84		40-140	5		50
4-Chlorophenyl phenyl ether	83		82		40-140	1		50
4-Nitroaniline	87		89		41-125	2		50
4,6-Dinitro-o-cresol	87		80		10-130	8		50
NitrosoDiPhenylAmine(NDPA)/DPA	91		89		36-157	2		50
Azobenzene	96		90		40-140	6		50
4-Bromophenyl phenyl ether	86		84		40-140	2		50
Hexachlorobenzene	87		85		40-140	2		50
Pentachlorophenol	73		68		17-109	7		50
Atrazine	96		96		40-140	0		50
Phenanthrene	88		85		40-140	3		50
Anthracene	91		90		40-140	1		50
Carbazole	93		89		54-128	4		50
Di-n-butylphthalate	93		90		40-140	3		50
Fluoranthene	90		87		40-140	3		50
Benzidine	60		62		10-66	3		50
Pyrene	89		87		35-142	2		50

Lab Control Sample Analysis
Batch Quality Control

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007
Lab Number: L1532956
Report Date: 12/21/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-06 Batch: WG850316-2 WG850316-3								
Butyl benzyl phthalate	97		90		40-140	7		50
3,3'-Dichlorobenzidine	48		50		40-140	4		50
Benzo(a)anthracene	86		87		40-140	1		50
Chrysene	88		86		40-140	2		50
Bis(2-Ethylhexyl)phthalate	96		92		40-140	4		50
Di-n-octylphthalate	96		94		40-140	2		50
Benzo(b)fluoranthene	80		82		40-140	2		50
Benzo(k)fluoranthene	88		88		40-140	0		50
Benzo(a)pyrene	86		87		40-140	1		50
Indeno(1,2,3-cd)Pyrene	84		84		40-140	0		50
Dibenzo(a,h)anthracene	82		82		40-140	0		50
Benzo(ghi)perylene	86		85		40-140	1		50

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	82		81		25-120
Phenol-d6	87		87		10-120
Nitrobenzene-d5	80		82		23-120
2-Fluorobiphenyl	80		82		30-120
2,4,6-Tribromophenol	82		84		10-136
4-Terphenyl-d14	86		82		18-120

PETROLEUM HYDROCARBONS

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007
Lab Number: L1532956
Report Date: 12/21/15

SAMPLE RESULTS

Lab ID:	L1532956-01	Date Collected:	12/14/15 13:00
Client ID:	B219-1214-1300-0-5	Date Received:	12/14/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	
Analytical Method:	1,8015C(M)		
Analytical Date:	12/18/15 04:26		
Analyst:	KD		
Percent Solids:	83%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Gasoline Range Organics - Westborough Lab						
Gasoline Range Organics	ND		mg/kg	2.5	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,1,1-Trifluorotoluene	101		70-130
4-Bromofluorobenzene	93		70-130

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007
Lab Number: L1532956
Report Date: 12/21/15

SAMPLE RESULTS

Lab ID:	L1532956-01	Date Collected:	12/14/15 13:00
Client ID:	B219-1214-1300-0-5	Date Received:	12/14/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	ALPHA OP-013
Analytical Method:	1,8015D(M)	Extraction Date:	12/16/15 13:24
Analytical Date:	12/18/15 18:03		
Analyst:	ML		
Percent Solids:	83%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Diesel/Other Range Organics by GC-FID - Mansfield Lab						
DRO (C10-C28)	2.97		ug/kg	1.68	--	1
ORO (C28-C40)	2.48		ug/kg	0.878	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
o-Terphenyl	97		50-130
d50-Tetracosane	94		50-130

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007
Lab Number: L1532956
Report Date: 12/21/15

SAMPLE RESULTS

Lab ID:	L1532956-02	Date Collected:	12/14/15 13:05
Client ID:	B219-1214-1305-5-10	Date Received:	12/14/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	
Analytical Method:	1,8015C(M)		
Analytical Date:	12/18/15 05:07		
Analyst:	KD		
Percent Solids:	83%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Gasoline Range Organics - Westborough Lab						
Gasoline Range Organics	ND		mg/kg	2.4	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,1,1-Trifluorotoluene	97		70-130
4-Bromofluorobenzene	88		70-130

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007
Lab Number: L1532956
Report Date: 12/21/15

SAMPLE RESULTS

Lab ID:	L1532956-02	Date Collected:	12/14/15 13:05
Client ID:	B219-1214-1305-5-10	Date Received:	12/14/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	ALPHA OP-013
Analytical Method:	1,8015D(M)	Extraction Date:	12/16/15 13:24
Analytical Date:	12/18/15 19:31		
Analyst:	ML		
Percent Solids:	83%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Diesel/Other Range Organics by GC-FID - Mansfield Lab						
DRO (C10-C28)	ND		ug/kg	1.66	--	1
ORO (C28-C40)	ND		ug/kg	0.869	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
o-Terphenyl	96		50-130
d50-Tetracosane	92		50-130

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007
Lab Number: L1532956
Report Date: 12/21/15

SAMPLE RESULTS

Lab ID:	L1532956-03	Date Collected:	12/14/15 13:10
Client ID:	B219-1214-1310-10-15	Date Received:	12/14/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	
Analytical Method:	1,8015C(M)		
Analytical Date:	12/18/15 05:47		
Analyst:	KD		
Percent Solids:	88%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Gasoline Range Organics - Westborough Lab						
Gasoline Range Organics	ND		mg/kg	2.3	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,1,1-Trifluorotoluene	97		70-130
4-Bromofluorobenzene	89		70-130

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007
Lab Number: L1532956
Report Date: 12/21/15

SAMPLE RESULTS

Lab ID:	L1532956-03	Date Collected:	12/14/15 13:10
Client ID:	B219-1214-1310-10-15	Date Received:	12/14/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	ALPHA OP-013
Analytical Method:	1,8015D(M)	Extraction Date:	12/16/15 13:24
Analytical Date:	12/18/15 20:59		
Analyst:	ML		
Percent Solids:	88%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Diesel/Other Range Organics by GC-FID - Mansfield Lab						
DRO (C10-C28)	ND		ug/kg	1.56	--	1
ORO (C28-C40)	ND		ug/kg	0.818	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
o-Terphenyl	94		50-130
d50-Tetracosane	91		50-130

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007
Lab Number: L1532956
Report Date: 12/21/15

SAMPLE RESULTS

Lab ID:	L1532956-04	Date Collected:	12/14/15 14:20
Client ID:	B220-1214-1420-0-5	Date Received:	12/14/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	
Analytical Method:	1,8015C(M)		
Analytical Date:	12/18/15 06:28		
Analyst:	KD		
Percent Solids:	84%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Gasoline Range Organics - Westborough Lab						
Gasoline Range Organics	ND		mg/kg	2.6	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,1,1-Trifluorotoluene	102		70-130
4-Bromofluorobenzene	92		70-130

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007
Lab Number: L1532956
Report Date: 12/21/15

SAMPLE RESULTS

Lab ID:	L1532956-04	Date Collected:	12/14/15 14:20
Client ID:	B220-1214-1420-0-5	Date Received:	12/14/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	ALPHA OP-013
Analytical Method:	1,8015D(M)	Extraction Date:	12/16/15 13:24
Analytical Date:	12/18/15 22:28		
Analyst:	ML		
Percent Solids:	84%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Diesel/Other Range Organics by GC-FID - Mansfield Lab						
DRO (C10-C28)	ND		ug/kg	1.64	--	1
ORO (C28-C40)	ND		ug/kg	0.861	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
o-Terphenyl	97		50-130
d50-Tetracosane	93		50-130

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007
Lab Number: L1532956
Report Date: 12/21/15

SAMPLE RESULTS

Lab ID:	L1532956-05	Date Collected:	12/14/15 14:25
Client ID:	B220-1214-1425-5-10	Date Received:	12/14/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	
Analytical Method:	1,8015C(M)		
Analytical Date:	12/18/15 07:08		
Analyst:	KD		
Percent Solids:	94%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Gasoline Range Organics - Westborough Lab						
Gasoline Range Organics	ND		mg/kg	2.8	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,1,1-Trifluorotoluene	98		70-130
4-Bromofluorobenzene	90		70-130

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007
Lab Number: L1532956
Report Date: 12/21/15

SAMPLE RESULTS

Lab ID:	L1532956-05	Date Collected:	12/14/15 14:25
Client ID:	B220-1214-1425-5-10	Date Received:	12/14/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	ALPHA OP-013
Analytical Method:	1,8015D(M)	Extraction Date:	12/16/15 13:24
Analytical Date:	12/18/15 23:56		
Analyst:	ML		
Percent Solids:	94%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Diesel/Other Range Organics by GC-FID - Mansfield Lab						
DRO (C10-C28)	ND		ug/kg	1.48	--	1
ORO (C28-C40)	ND		ug/kg	0.776	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
o-Terphenyl	97		50-130
d50-Tetracosane	94		50-130

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007
Lab Number: L1532956
Report Date: 12/21/15

SAMPLE RESULTS

Lab ID:	L1532956-06	Date Collected:	12/14/15 14:30
Client ID:	B220-1214-1430-10-15	Date Received:	12/14/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	
Analytical Method:	1,8015C(M)		
Analytical Date:	12/18/15 07:49		
Analyst:	KD		
Percent Solids:	85%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Gasoline Range Organics - Westborough Lab						
Gasoline Range Organics	ND		mg/kg	3.0	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,1,1-Trifluorotoluene	102		70-130
4-Bromofluorobenzene	93		70-130

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007
Lab Number: L1532956
Report Date: 12/21/15

SAMPLE RESULTS

Lab ID:	L1532956-06	Date Collected:	12/14/15 14:30
Client ID:	B220-1214-1430-10-15	Date Received:	12/14/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	ALPHA OP-013
Analytical Method:	1,8015D(M)	Extraction Date:	12/16/15 13:24
Analytical Date:	12/19/15 01:24		
Analyst:	ML		
Percent Solids:	85%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Diesel/Other Range Organics by GC-FID - Mansfield Lab						
DRO (C10-C28)	8.10		ug/kg	1.65	--	1
ORO (C28-C40)	15.4		ug/kg	0.864	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
o-Terphenyl	99		50-130
d50-Tetracosane	94		50-130

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007

Lab Number: L1532956
Report Date: 12/21/15

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8015D(M)
Analytical Date: 12/18/15 13:37
Analyst: ML

Extraction Method: ALPHA OP-013
Extraction Date: 12/16/15 13:24

Parameter	Result	Qualifier	Units	RL	MDL
Diesel/Other Range Organics by GC-FID - Mansfield Lab for sample(s): 01-06 Batch: WG850254-1					
DRO (C10-C28)	ND		ug/kg	1.40	--
ORO (C28-C40)	ND		ug/kg	0.733	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
o-Terphenyl	98		50-130
d50-Tetracosane	92		50-130

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1532956

Project Number: 38677-007 **Report Date:** 12/21/15

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8015C(M)
Analytical Date: 12/17/15 23:01
Analyst: KD

Parameter	Result	Qualifier	Units	RL	MDL
Gasoline Range Organics - Westborough Lab for sample(s): 01-06 Batch: WG851112-3					
Gasoline Range Organics	ND		mg/kg	2.5	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,1,1-Trifluorotoluene	97		70-130
4-Bromofluorobenzene	87		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007
Lab Number: L1532956
Report Date: 12/21/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Diesel/Other Range Organics by GC-FID - Mansfield Lab Associated sample(s): 01-06 Batch: WG850254-2 WG850254-3								
Nonane (C9)	76		80		50-130	5		30
Decane (C10)	79		81		50-130	3		30
Dodecane (C12)	89		92		50-130	3		30
Tetradecane (C14)	90		94		50-130	4		30
Hexadecane (C16)	101		105		50-130	4		30
Octadecane (C18)	102		106		50-130	4		30
Nonadecane (C19)	94		97		50-130	3		30
Eicosane (C20)	96		100		50-130	4		30
Docosane (C22)	98		102		50-130	4		30
Tetracosane (C24)	98		102		50-130	4		30
Hexacosane (C26)	97		101		50-130	4		30
Octacosane (C28)	106		106		50-130	0		30
Triacontane (C30)	100		104		50-130	4		30
Hexatriacontane (C36)	93		98		50-130	5		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
o-Terphenyl	98		101		50-130
d50-Tetracosane	93		95		50-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: ST. E'S EAST CAMPUS

Project Number: 38677-007

Lab Number: L1532956

Report Date: 12/21/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Gasoline Range Organics - Westborough Lab Associated sample(s): 01-06 Batch: WG851112-1 WG851112-2								
Gasoline Range Organics	96		99		80-120	3		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,1,1-Trifluorotoluene	100		104		70-130
4-Bromofluorobenzene	92		95		70-130

Matrix Spike Analysis
Batch Quality Control

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007
Lab Number: L1532956
Report Date: 12/21/15

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Gasoline Range Organics - Westborough Lab Associated sample(s): 01-06 QC Batch ID: WG851112-5 QC Sample: L1532945-06 Client ID: MS Sample												
Gasoline Range Organics	6.9	23.5	31	104		-	-		80-120	-		20

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria
1,1,1-Trifluorotoluene	92				70-130
4-Bromofluorobenzene	86				70-130

Lab Duplicate Analysis
Batch Quality Control

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007

Lab Number: L1532956
Report Date: 12/21/15

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Gasoline Range Organics - Westborough Lab Associated sample(s): 01-06 QC Batch ID: WG851112-4 QC Sample: L1532945-06 Client ID: DUP Sample						
Gasoline Range Organics	6.9	8.9	mg/kg	**25**	Q	20

Surrogate	%Recovery	Qualifier	%Recovery	Qualifier	Acceptance Criteria
1,1,1-Trifluorotoluene	98		90		70-130
4-Bromofluorobenzene	92		84		70-130

PCBS

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007
Lab Number: L1532956
Report Date: 12/21/15

SAMPLE RESULTS

Lab ID:	L1532956-01	Date Collected:	12/14/15 13:00
Client ID:	B219-1214-1300-0-5	Date Received:	12/14/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8082A	Extraction Date:	12/16/15 18:55
Analytical Date:	12/18/15 15:53	Cleanup Method:	EPA 3665A
Analyst:	TQ	Cleanup Date:	12/18/15
Percent Solids:	83%	Cleanup Method:	EPA 3660B
		Cleanup Date:	12/18/15

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		mg/kg	0.0392	--	1	A
Aroclor 1221	ND		mg/kg	0.0392	--	1	A
Aroclor 1232	ND		mg/kg	0.0392	--	1	A
Aroclor 1242	ND		mg/kg	0.0392	--	1	A
Aroclor 1248	ND		mg/kg	0.0392	--	1	A
Aroclor 1254	ND		mg/kg	0.0392	--	1	A
Aroclor 1260	ND		mg/kg	0.0392	--	1	A
Aroclor 1262	ND		mg/kg	0.0392	--	1	A
Aroclor 1268	ND		mg/kg	0.0392	--	1	A
PCBs, Total	ND		mg/kg	0.0392	--	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	57		30-150	A
Decachlorobiphenyl	65		30-150	A
2,4,5,6-Tetrachloro-m-xylene	60		30-150	B
Decachlorobiphenyl	65		30-150	B

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007
Lab Number: L1532956
Report Date: 12/21/15

SAMPLE RESULTS

Lab ID:	L1532956-02	Date Collected:	12/14/15 13:05
Client ID:	B219-1214-1305-5-10	Date Received:	12/14/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8082A	Extraction Date:	12/16/15 18:55
Analytical Date:	12/18/15 16:07	Cleanup Method:	EPA 3665A
Analyst:	TQ	Cleanup Date:	12/18/15
Percent Solids:	83%	Cleanup Method:	EPA 3660B
		Cleanup Date:	12/18/15

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		mg/kg	0.0400	--	1	A
Aroclor 1221	ND		mg/kg	0.0400	--	1	A
Aroclor 1232	ND		mg/kg	0.0400	--	1	A
Aroclor 1242	ND		mg/kg	0.0400	--	1	A
Aroclor 1248	ND		mg/kg	0.0400	--	1	A
Aroclor 1254	ND		mg/kg	0.0400	--	1	A
Aroclor 1260	ND		mg/kg	0.0400	--	1	A
Aroclor 1262	ND		mg/kg	0.0400	--	1	A
Aroclor 1268	ND		mg/kg	0.0400	--	1	A
PCBs, Total	ND		mg/kg	0.0400	--	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	77		30-150	A
Decachlorobiphenyl	94		30-150	A
2,4,5,6-Tetrachloro-m-xylene	82		30-150	B
Decachlorobiphenyl	88		30-150	B

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007
Lab Number: L1532956
Report Date: 12/21/15

SAMPLE RESULTS

Lab ID:	L1532956-03	Date Collected:	12/14/15 13:10
Client ID:	B219-1214-1310-10-15	Date Received:	12/14/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8082A	Extraction Date:	12/16/15 18:55
Analytical Date:	12/18/15 16:21	Cleanup Method:	EPA 3665A
Analyst:	TQ	Cleanup Date:	12/18/15
Percent Solids:	88%	Cleanup Method:	EPA 3660B
		Cleanup Date:	12/18/15

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		mg/kg	0.0372	--	1	A
Aroclor 1221	ND		mg/kg	0.0372	--	1	A
Aroclor 1232	ND		mg/kg	0.0372	--	1	A
Aroclor 1242	ND		mg/kg	0.0372	--	1	A
Aroclor 1248	ND		mg/kg	0.0372	--	1	A
Aroclor 1254	ND		mg/kg	0.0372	--	1	A
Aroclor 1260	ND		mg/kg	0.0372	--	1	A
Aroclor 1262	ND		mg/kg	0.0372	--	1	A
Aroclor 1268	ND		mg/kg	0.0372	--	1	A
PCBs, Total	ND		mg/kg	0.0372	--	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	72		30-150	A
Decachlorobiphenyl	94		30-150	A
2,4,5,6-Tetrachloro-m-xylene	75		30-150	B
Decachlorobiphenyl	88		30-150	B

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007
Lab Number: L1532956
Report Date: 12/21/15

SAMPLE RESULTS

Lab ID:	L1532956-04	Date Collected:	12/14/15 14:20
Client ID:	B220-1214-1420-0-5	Date Received:	12/14/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8082A	Extraction Date:	12/16/15 18:55
Analytical Date:	12/18/15 16:35	Cleanup Method:	EPA 3665A
Analyst:	TQ	Cleanup Date:	12/18/15
Percent Solids:	84%	Cleanup Method:	EPA 3660B
		Cleanup Date:	12/18/15

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		mg/kg	0.0376	--	1	A
Aroclor 1221	ND		mg/kg	0.0376	--	1	A
Aroclor 1232	ND		mg/kg	0.0376	--	1	A
Aroclor 1242	ND		mg/kg	0.0376	--	1	A
Aroclor 1248	ND		mg/kg	0.0376	--	1	A
Aroclor 1254	ND		mg/kg	0.0376	--	1	A
Aroclor 1260	ND		mg/kg	0.0376	--	1	A
Aroclor 1262	ND		mg/kg	0.0376	--	1	A
Aroclor 1268	ND		mg/kg	0.0376	--	1	A
PCBs, Total	ND		mg/kg	0.0376	--	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	65		30-150	A
Decachlorobiphenyl	84		30-150	A
2,4,5,6-Tetrachloro-m-xylene	68		30-150	B
Decachlorobiphenyl	77		30-150	B

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007
Lab Number: L1532956
Report Date: 12/21/15

SAMPLE RESULTS

Lab ID:	L1532956-05	Date Collected:	12/14/15 14:25
Client ID:	B220-1214-1425-5-10	Date Received:	12/14/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8082A	Extraction Date:	12/16/15 18:55
Analytical Date:	12/18/15 16:48	Cleanup Method:	EPA 3665A
Analyst:	TQ	Cleanup Date:	12/18/15
Percent Solids:	94%	Cleanup Method:	EPA 3660B
		Cleanup Date:	12/18/15

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		mg/kg	0.0346	--	1	A
Aroclor 1221	ND		mg/kg	0.0346	--	1	A
Aroclor 1232	ND		mg/kg	0.0346	--	1	A
Aroclor 1242	ND		mg/kg	0.0346	--	1	A
Aroclor 1248	ND		mg/kg	0.0346	--	1	A
Aroclor 1254	ND		mg/kg	0.0346	--	1	A
Aroclor 1260	ND		mg/kg	0.0346	--	1	A
Aroclor 1262	ND		mg/kg	0.0346	--	1	A
Aroclor 1268	ND		mg/kg	0.0346	--	1	A
PCBs, Total	ND		mg/kg	0.0346	--	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	65		30-150	A
Decachlorobiphenyl	93		30-150	A
2,4,5,6-Tetrachloro-m-xylene	68		30-150	B
Decachlorobiphenyl	83		30-150	B

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007
Lab Number: L1532956
Report Date: 12/21/15

SAMPLE RESULTS

Lab ID:	L1532956-06	Date Collected:	12/14/15 14:30
Client ID:	B220-1214-1430-10-15	Date Received:	12/14/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8082A	Extraction Date:	12/16/15 18:55
Analytical Date:	12/18/15 17:02	Cleanup Method:	EPA 3665A
Analyst:	TQ	Cleanup Date:	12/18/15
Percent Solids:	85%	Cleanup Method:	EPA 3660B
		Cleanup Date:	12/18/15

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		mg/kg	0.0390	--	1	A
Aroclor 1221	ND		mg/kg	0.0390	--	1	A
Aroclor 1232	ND		mg/kg	0.0390	--	1	A
Aroclor 1242	ND		mg/kg	0.0390	--	1	A
Aroclor 1248	ND		mg/kg	0.0390	--	1	A
Aroclor 1254	ND		mg/kg	0.0390	--	1	A
Aroclor 1260	ND		mg/kg	0.0390	--	1	A
Aroclor 1262	ND		mg/kg	0.0390	--	1	A
Aroclor 1268	ND		mg/kg	0.0390	--	1	A
PCBs, Total	ND		mg/kg	0.0390	--	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	47		30-150	A
Decachlorobiphenyl	65		30-150	A
2,4,5,6-Tetrachloro-m-xylene	49		30-150	B
Decachlorobiphenyl	57		30-150	B

Project Name: ST. E'S EAST CAMPUS

Project Number: 38677-007

Lab Number: L1532956

Report Date: 12/21/15

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8082A
Analytical Date: 12/18/15 17:16
Analyst: TQ

Extraction Method: EPA 3546
Extraction Date: 12/16/15 18:55
Cleanup Method: EPA 3665A
Cleanup Date: 12/18/15
Cleanup Method: EPA 3660B
Cleanup Date: 12/18/15

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01-06 Batch: WG850393-1						
Aroclor 1016	ND		mg/kg	0.0330	--	A
Aroclor 1221	ND		mg/kg	0.0330	--	A
Aroclor 1232	ND		mg/kg	0.0330	--	A
Aroclor 1242	ND		mg/kg	0.0330	--	A
Aroclor 1248	ND		mg/kg	0.0330	--	A
Aroclor 1254	ND		mg/kg	0.0330	--	A
Aroclor 1260	ND		mg/kg	0.0330	--	A
Aroclor 1262	ND		mg/kg	0.0330	--	A
Aroclor 1268	ND		mg/kg	0.0330	--	A
PCBs, Total	ND		mg/kg	0.0330	--	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	69		30-150	A
Decachlorobiphenyl	98		30-150	A
2,4,5,6-Tetrachloro-m-xylene	73		30-150	B
Decachlorobiphenyl	86		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: ST. E'S EAST CAMPUS

Project Number: 38677-007

Lab Number: L1532956

Report Date: 12/21/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01-06 Batch: WG850393-2 WG850393-3									
Aroclor 1016	68		75		40-140	10		50	A
Aroclor 1260	73		84		40-140	14		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	63		70		30-150	A
Decachlorobiphenyl	88		103		30-150	A
2,4,5,6-Tetrachloro-m-xylene	66		71		30-150	B
Decachlorobiphenyl	78		91		30-150	B

METALS

Project Name:	ST. E'S EAST CAMPUS	**Lab Number:**	L1532956
Project Number:	38677-007	**Report Date:**	12/21/15

SAMPLE RESULTS

Lab ID:	L1532956-01	Date Collected:	12/14/15 13:00
Client ID:	B219-1214-1300-0-5	Date Received:	12/14/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Soil		
Percent Solids:	83%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Arsenic, Total	3.7		mg/kg	0.48	--	1	12/16/15 07:40	12/17/15 19:18	EPA 3050B	1,6010C	BM
Barium, Total	55		mg/kg	0.48	--	1	12/16/15 07:40	12/17/15 19:18	EPA 3050B	1,6010C	BM
Cadmium, Total	ND		mg/kg	0.48	--	1	12/16/15 07:40	12/17/15 19:18	EPA 3050B	1,6010C	BM
Chromium, Total	12		mg/kg	0.48	--	1	12/16/15 07:40	12/17/15 19:18	EPA 3050B	1,6010C	BM
Lead, Total	14		mg/kg	2.4	--	1	12/16/15 07:40	12/17/15 19:18	EPA 3050B	1,6010C	BM
Mercury, Total	0.11		mg/kg	0.08	--	1	12/16/15 05:30	12/17/15 19:24	EPA 7471B	1,7471B	DB
Selenium, Total	ND		mg/kg	0.96	--	1	12/16/15 07:40	12/17/15 19:18	EPA 3050B	1,6010C	BM
Silver, Total	ND		mg/kg	0.48	--	1	12/16/15 07:40	12/17/15 19:18	EPA 3050B	1,6010C	BM

Project Name: ST. E'S EAST CAMPUS
Lab Number: L1532956
Project Number: 38677-007
Report Date: 12/21/15

SAMPLE RESULTS

Lab ID: L1532956-02
Client ID: B219-1214-1305-5-10
Sample Location: WASHINGTON, D.C.
Matrix: Soil
Percent Solids: 83%

Date Collected: 12/14/15 13:05
Date Received: 12/14/15
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Arsenic, Total	4.5		mg/kg	0.47	--	1	12/16/15 07:40	12/17/15 19:22	EPA 3050B	1,6010C	BM
Barium, Total	27		mg/kg	0.47	--	1	12/16/15 07:40	12/17/15 19:22	EPA 3050B	1,6010C	BM
Cadmium, Total	ND		mg/kg	0.47	--	1	12/16/15 07:40	12/17/15 19:22	EPA 3050B	1,6010C	BM
Chromium, Total	15		mg/kg	0.47	--	1	12/16/15 07:40	12/17/15 19:22	EPA 3050B	1,6010C	BM
Lead, Total	8.6		mg/kg	2.3	--	1	12/16/15 07:40	12/17/15 19:22	EPA 3050B	1,6010C	BM
Mercury, Total	ND		mg/kg	0.079	--	1	12/16/15 05:30	12/17/15 19:26	EPA 7471B	1,7471B	DB
Selenium, Total	ND		mg/kg	0.94	--	1	12/16/15 07:40	12/17/15 19:22	EPA 3050B	1,6010C	BM
Silver, Total	ND		mg/kg	0.47	--	1	12/16/15 07:40	12/17/15 19:22	EPA 3050B	1,6010C	BM

Project Name:	ST. E'S EAST CAMPUS	**Lab Number:**	L1532956
Project Number:	38677-007	**Report Date:**	12/21/15

SAMPLE RESULTS

Lab ID:	L1532956-03	Date Collected:	12/14/15 13:10
Client ID:	B219-1214-1310-10-15	Date Received:	12/14/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Soil		
Percent Solids:	88%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Arsenic, Total	1.8		mg/kg	0.45	--	1	12/16/15 07:40	12/17/15 19:25	EPA 3050B	1,6010C	BM
Barium, Total	7.4		mg/kg	0.45	--	1	12/16/15 07:40	12/17/15 19:25	EPA 3050B	1,6010C	BM
Cadmium, Total	ND		mg/kg	0.45	--	1	12/16/15 07:40	12/17/15 19:25	EPA 3050B	1,6010C	BM
Chromium, Total	7.7		mg/kg	0.45	--	1	12/16/15 07:40	12/17/15 19:25	EPA 3050B	1,6010C	BM
Lead, Total	3.9		mg/kg	2.2	--	1	12/16/15 07:40	12/17/15 19:25	EPA 3050B	1,6010C	BM
Mercury, Total	ND		mg/kg	0.07	--	1	12/16/15 05:30	12/17/15 19:28	EPA 7471B	1,7471B	DB
Selenium, Total	ND		mg/kg	0.90	--	1	12/16/15 07:40	12/17/15 19:25	EPA 3050B	1,6010C	BM
Silver, Total	ND		mg/kg	0.45	--	1	12/16/15 07:40	12/17/15 19:25	EPA 3050B	1,6010C	BM

Project Name:	ST. E'S EAST CAMPUS	**Lab Number:**	L1532956
Project Number:	38677-007	**Report Date:**	12/21/15

SAMPLE RESULTS

Lab ID:	L1532956-04	Date Collected:	12/14/15 14:20
Client ID:	B220-1214-1420-0-5	Date Received:	12/14/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Soil		
Percent Solids:	84%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Arsenic, Total	2.6		mg/kg	0.46	--	1	12/16/15 07:40	12/17/15 19:29	EPA 3050B	1,6010C	BM
Barium, Total	47		mg/kg	0.46	--	1	12/16/15 07:40	12/17/15 19:29	EPA 3050B	1,6010C	BM
Cadmium, Total	ND		mg/kg	0.46	--	1	12/16/15 07:40	12/17/15 19:29	EPA 3050B	1,6010C	BM
Chromium, Total	11		mg/kg	0.46	--	1	12/16/15 07:40	12/17/15 19:29	EPA 3050B	1,6010C	BM
Lead, Total	9.4		mg/kg	2.3	--	1	12/16/15 07:40	12/17/15 19:29	EPA 3050B	1,6010C	BM
Mercury, Total	0.08		mg/kg	0.08	--	1	12/16/15 05:30	12/17/15 19:29	EPA 7471B	1,7471B	DB
Selenium, Total	ND		mg/kg	0.93	--	1	12/16/15 07:40	12/17/15 19:29	EPA 3050B	1,6010C	BM
Silver, Total	ND		mg/kg	0.46	--	1	12/16/15 07:40	12/17/15 19:29	EPA 3050B	1,6010C	BM

Project Name:	ST. E'S EAST CAMPUS	**Lab Number:**	L1532956
Project Number:	38677-007	**Report Date:**	12/21/15

SAMPLE RESULTS

Lab ID:	L1532956-05	Date Collected:	12/14/15 14:25
Client ID:	B220-1214-1425-5-10	Date Received:	12/14/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Soil		
Percent Solids:	94%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Arsenic, Total	5.0		mg/kg	0.42	--	1	12/16/15 07:40	12/17/15 19:33	EPA 3050B	1,6010C	BM
Barium, Total	21		mg/kg	0.42	--	1	12/16/15 07:40	12/17/15 19:33	EPA 3050B	1,6010C	BM
Cadmium, Total	ND		mg/kg	0.42	--	1	12/16/15 07:40	12/17/15 19:33	EPA 3050B	1,6010C	BM
Chromium, Total	22		mg/kg	0.42	--	1	12/16/15 07:40	12/17/15 19:33	EPA 3050B	1,6010C	BM
Lead, Total	8.2		mg/kg	2.1	--	1	12/16/15 07:40	12/17/15 19:33	EPA 3050B	1,6010C	BM
Mercury, Total	ND		mg/kg	0.07	--	1	12/16/15 05:30	12/17/15 19:31	EPA 7471B	1,7471B	DB
Selenium, Total	ND		mg/kg	0.85	--	1	12/16/15 07:40	12/17/15 19:33	EPA 3050B	1,6010C	BM
Silver, Total	ND		mg/kg	0.42	--	1	12/16/15 07:40	12/17/15 19:33	EPA 3050B	1,6010C	BM

Project Name:	ST. E'S EAST CAMPUS	**Lab Number:**	L1532956
Project Number:	38677-007	**Report Date:**	12/21/15

SAMPLE RESULTS

Lab ID:	L1532956-06	Date Collected:	12/14/15 14:30
Client ID:	B220-1214-1430-10-15	Date Received:	12/14/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Soil		
Percent Solids:	85%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Arsenic, Total	2.7		mg/kg	0.46	--	1	12/16/15 07:40	12/17/15 19:37	EPA 3050B	1,6010C	BM
Barium, Total	23		mg/kg	0.46	--	1	12/16/15 07:40	12/17/15 19:37	EPA 3050B	1,6010C	BM
Cadmium, Total	ND		mg/kg	0.46	--	1	12/16/15 07:40	12/17/15 19:37	EPA 3050B	1,6010C	BM
Chromium, Total	15		mg/kg	0.46	--	1	12/16/15 07:40	12/17/15 19:37	EPA 3050B	1,6010C	BM
Lead, Total	12		mg/kg	2.3	--	1	12/16/15 07:40	12/17/15 19:37	EPA 3050B	1,6010C	BM
Mercury, Total	ND		mg/kg	0.07	--	1	12/16/15 05:30	12/17/15 19:37	EPA 7471B	1,7471B	DB
Selenium, Total	ND		mg/kg	0.93	--	1	12/16/15 07:40	12/17/15 19:37	EPA 3050B	1,6010C	BM
Silver, Total	ND		mg/kg	0.46	--	1	12/16/15 07:40	12/17/15 19:37	EPA 3050B	1,6010C	BM

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1532956

Project Number: 38677-007 **Report Date:** 12/21/15

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 01-06 Batch: WG850070-1										
Mercury, Total	ND		mg/kg	0.08	--	1	12/16/15 05:30	12/17/15 11:57	1,7471B	DB

Prep Information

Digestion Method: EPA 7471B

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 01-06 Batch: WG850111-1										
Arsenic, Total	ND		mg/kg	0.40	--	1	12/16/15 07:40	12/17/15 17:22	1,6010C	BM
Barium, Total	ND		mg/kg	0.40	--	1	12/16/15 07:40	12/17/15 17:22	1,6010C	BM
Cadmium, Total	ND		mg/kg	0.40	--	1	12/16/15 07:40	12/17/15 17:22	1,6010C	BM
Chromium, Total	ND		mg/kg	0.40	--	1	12/16/15 07:40	12/17/15 17:22	1,6010C	BM
Lead, Total	ND		mg/kg	2.0	--	1	12/16/15 07:40	12/17/15 17:22	1,6010C	BM
Selenium, Total	ND		mg/kg	0.80	--	1	12/16/15 07:40	12/17/15 17:22	1,6010C	BM
Silver, Total	ND		mg/kg	0.40	--	1	12/16/15 07:40	12/17/15 17:22	1,6010C	BM

Prep Information

Digestion Method: EPA 3050B

Lab Control Sample Analysis

Batch Quality Control

Project Name: ST. E'S EAST CAMPUS

Project Number: 38677-007

Lab Number: L1532956

Report Date: 12/21/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01-06 Batch: WG850070-2 SRM Lot Number: D088-540								
Mercury, Total	107		-		72-128	-		
Total Metals - Westborough Lab Associated sample(s): 01-06 Batch: WG850111-2 SRM Lot Number: D088-540								
Arsenic, Total	88		-		79-121	-		
Barium, Total	83		-		83-117	-		
Cadmium, Total	86		-		83-117	-		
Chromium, Total	101		-		80-120	-		
Lead, Total	84		-		81-117	-		
Selenium, Total	86		-		78-122	-		
Silver, Total	91		-		75-124	-		

Matrix Spike Analysis
Batch Quality Control

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007

Lab Number: L1532956
Report Date: 12/21/15

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01-06 QC Batch ID: WG850070-4 QC Sample: L1533129-01 Client ID: MS Sample												
Mercury, Total	0.37	0.157	0.78	**261**	Q	-	-		80-120	-		20
Total Metals - Westborough Lab Associated sample(s): 01-06 QC Batch ID: WG850111-4 QC Sample: L1532945-01 Client ID: MS Sample												
Arsenic, Total	4.0	11.5	12	**69**	Q	-	-		75-125	-		20
Barium, Total	48	192	180	**69**	Q	-	-		75-125	-		20
Cadmium, Total	ND	4.89	4.0	82		-	-		75-125	-		20
Chromium, Total	10	19.2	28	94		-	-		75-125	-		20
Lead, Total	22	48.9	44	**45**	Q	-	-		75-125	-		20
Selenium, Total	ND	11.5	8.1	**70**	Q	-	-		75-125	-		20
Silver, Total	ND	28.8	24	83		-	-		75-125	-		20

Lab Duplicate Analysis
Batch Quality Control

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007

Lab Number: L1532956
Report Date: 12/21/15

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01-06 QC Batch ID: WG850070-3 QC Sample: L1533129-01 Client ID: DUP Sample						
Mercury, Total	0.37	0.37	mg/kg	0		20
Total Metals - Westborough Lab Associated sample(s): 01-06 QC Batch ID: WG850111-3 QC Sample: L1532945-01 Client ID: DUP Sample						
Arsenic, Total	4.0	5.2	mg/kg	**26**	Q	20
Barium, Total	48	29	mg/kg	**49**	Q	20
Cadmium, Total	ND	ND	mg/kg	NC		20
Chromium, Total	10	19	mg/kg	**62**	Q	20
Lead, Total	22	8.5	mg/kg	**89**	Q	20
Selenium, Total	ND	ND	mg/kg	NC		20
Silver, Total	ND	ND	mg/kg	NC		20

INORGANICS
&
MISCELLANEOUS

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007

Lab Number: L1532956
Report Date: 12/21/15

SAMPLE RESULTS

Lab ID: L1532956-01
Client ID: B219-1214-1300-0-5
Sample Location: WASHINGTON, D.C.
Matrix: Soil

Date Collected: 12/14/15 13:00
Date Received: 12/14/15
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	83.4		%	0.100	NA	1	-	12/15/15 12:06	30,2540G	RI

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007

Lab Number: L1532956
Report Date: 12/21/15

SAMPLE RESULTS

Lab ID: L1532956-02
Client ID: B219-1214-1305-5-10
Sample Location: WASHINGTON, D.C.
Matrix: Soil

Date Collected: 12/14/15 13:05
Date Received: 12/14/15
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	83.1		%	0.100	NA	1	-	12/15/15 12:06	30,2540G	RI

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007

Lab Number: L1532956
Report Date: 12/21/15

SAMPLE RESULTS

Lab ID: L1532956-03
Client ID: B219-1214-1310-10-15
Sample Location: WASHINGTON, D.C.
Matrix: Soil

Date Collected: 12/14/15 13:10
Date Received: 12/14/15
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	88.2		%	0.100	NA	1	-	12/15/15 12:06	30,2540G	RI

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007

Lab Number: L1532956
Report Date: 12/21/15

SAMPLE RESULTS

Lab ID: L1532956-04
Client ID: B220-1214-1420-0-5
Sample Location: WASHINGTON, D.C.
Matrix: Soil

Date Collected: 12/14/15 14:20
Date Received: 12/14/15
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	84.1		%	0.100	NA	1	-	12/15/15 12:06	30,2540G	RI

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007

Lab Number: L1532956
Report Date: 12/21/15

SAMPLE RESULTS

Lab ID: L1532956-05
Client ID: B220-1214-1425-5-10
Sample Location: WASHINGTON, D.C.
Matrix: Soil

Date Collected: 12/14/15 14:25
Date Received: 12/14/15
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	93.6		%	0.100	NA	1	-	12/15/15 12:06	30,2540G	RI

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007

Lab Number: L1532956
Report Date: 12/21/15

SAMPLE RESULTS

Lab ID: L1532956-06
Client ID: B220-1214-1430-10-15
Sample Location: WASHINGTON, D.C.
Matrix: Soil

Date Collected: 12/14/15 14:30
Date Received: 12/14/15
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	84.8		%	0.100	NA	1	-	12/15/15 12:06	30,2540G	RI

Lab Duplicate Analysis
Batch Quality Control

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007

Lab Number: L1532956
Report Date: 12/21/15

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-06 QC Batch ID: WG849864-1 QC Sample: L1532945-01 Client ID: DUP Sample						
Solids, Total	83.3	83.3	%	0		20

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007

Lab Number: L1532956
Report Date: 12/21/15

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: 12/15/2015 06:45

Cooler Information Custody Seal

Cooler	
A	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1532956-01A	Vial MeOH preserved	A	N/A	5.2	Y	Absent	PA-8260HLW(14)
L1532956-01B	Vial water preserved	A	N/A	5.2	Y	Absent	PA-8260HLW(14)
L1532956-01C	Vial water preserved	A	N/A	5.2	Y	Absent	PA-8260HLW(14)
L1532956-01D	Plastic 2oz unpreserved for TS	A	N/A	5.2	Y	Absent	TS(7)
L1532956-01E	Vial Large Septa unpreserved (4o	A	N/A	5.2	Y	Absent	PA-TPH-GRO(14)
L1532956-01E9	Vial MeOH preserved split	A	N/A	5.2	Y	Absent	PA-TPH-GRO(14)
L1532956-01F	Glass 500ml/16oz unpreserved	A	N/A	5.2	Y	Absent	AS-TI(180),BA-TI(180),AG-TI(180),CR-TI(180),PA-8082(14),PB-TI(180),SE-TI(180),HG-T(28),CD-TI(180),PA-8270(14)
L1532956-01X	Glass 100ml unpreserved split	A	N/A	5.2	Y	Absent	A2-TPHDRO/ORO(14)
L1532956-02A	Vial MeOH preserved	A	N/A	5.2	Y	Absent	PA-8260HLW(14)
L1532956-02B	Vial water preserved	A	N/A	5.2	Y	Absent	PA-8260HLW(14)
L1532956-02C	Vial water preserved	A	N/A	5.2	Y	Absent	PA-8260HLW(14)
L1532956-02D	Plastic 2oz unpreserved for TS	A	N/A	5.2	Y	Absent	TS(7)
L1532956-02E	Vial Large Septa unpreserved (4o	A	N/A	5.2	Y	Absent	PA-TPH-GRO(14)
L1532956-02E9	Vial MeOH preserved split	A	N/A	5.2	Y	Absent	PA-TPH-GRO(14)
L1532956-02F	Glass 500ml/16oz unpreserved	A	N/A	5.2	Y	Absent	AS-TI(180),BA-TI(180),AG-TI(180),CR-TI(180),PA-8082(14),PB-TI(180),SE-TI(180),HG-T(28),CD-TI(180),PA-8270(14)
L1532956-02X	Glass 100ml unpreserved split	A	N/A	5.2	Y	Absent	A2-TPHDRO/ORO(14)
L1532956-03A	Vial MeOH preserved	A	N/A	5.2	Y	Absent	PA-8260HLW(14)
L1532956-03B	Vial water preserved	A	N/A	5.2	Y	Absent	PA-8260HLW(14)
L1532956-03C	Vial water preserved	A	N/A	5.2	Y	Absent	PA-8260HLW(14)
L1532956-03D	Plastic 2oz unpreserved for TS	A	N/A	5.2	Y	Absent	TS(7)
L1532956-03E	Vial Large Septa unpreserved (4o	A	N/A	5.2	Y	Absent	PA-TPH-GRO(14)
L1532956-03E9	Vial MeOH preserved split	A	N/A	5.2	Y	Absent	PA-TPH-GRO(14)

*Values in parentheses indicate holding time in days

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007

Lab Number: L1532956
Report Date: 12/21/15

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1532956-03F	Glass 500ml/16oz unpreserved	A	N/A	5.2	Y	Absent	AS-TI(180),BA-TI(180),AG-TI(180),CR-TI(180),PA-8082(14),PB-TI(180),SE-TI(180),HG-T(28),CD-TI(180),PA-8270(14)
L1532956-03X	Glass 100ml unpreserved split	A	N/A	5.2	Y	Absent	A2-TPHDRO/ORO(14)
L1532956-04A	Vial MeOH preserved	A	N/A	5.2	Y	Absent	PA-8260HLW(14)
L1532956-04B	Vial water preserved	A	N/A	5.2	Y	Absent	PA-8260HLW(14)
L1532956-04C	Vial water preserved	A	N/A	5.2	Y	Absent	PA-8260HLW(14)
L1532956-04D	Plastic 2oz unpreserved for TS	A	N/A	5.2	Y	Absent	TS(7)
L1532956-04E	Vial Large Septa unpreserved (4o	A	N/A	5.2	Y	Absent	PA-TPH-GRO(14)
L1532956-04E9	Vial MeOH preserved split	A	N/A	5.2	Y	Absent	PA-TPH-GRO(14)
L1532956-04F	Glass 500ml/16oz unpreserved	A	N/A	5.2	Y	Absent	AS-TI(180),BA-TI(180),AG-TI(180),CR-TI(180),PA-8082(14),PB-TI(180),SE-TI(180),HG-T(28),CD-TI(180),PA-8270(14)
L1532956-04X	Glass 100ml unpreserved split	A	N/A	5.2	Y	Absent	A2-TPHDRO/ORO(14)
L1532956-05A	Vial MeOH preserved	A	N/A	5.2	Y	Absent	PA-8260HLW(14)
L1532956-05B	Vial water preserved	A	N/A	5.2	Y	Absent	PA-8260HLW(14)
L1532956-05C	Vial water preserved	A	N/A	5.2	Y	Absent	PA-8260HLW(14)
L1532956-05D	Plastic 2oz unpreserved for TS	A	N/A	5.2	Y	Absent	TS(7)
L1532956-05E	Vial Large Septa unpreserved (4o	A	N/A	5.2	Y	Absent	PA-TPH-GRO(14)
L1532956-05E9	Vial MeOH preserved split	A	N/A	5.2	Y	Absent	PA-TPH-GRO(14)
L1532956-05F	Glass 500ml/16oz unpreserved	A	N/A	5.2	Y	Absent	AS-TI(180),BA-TI(180),AG-TI(180),CR-TI(180),PA-8082(14),PB-TI(180),SE-TI(180),HG-T(28),CD-TI(180),PA-8270(14)
L1532956-05X	Glass 100ml unpreserved split	A	N/A	5.2	Y	Absent	A2-TPHDRO/ORO(14)
L1532956-06A	Vial MeOH preserved	A	N/A	5.2	Y	Absent	PA-8260HLW(14)
L1532956-06B	Vial water preserved	A	N/A	5.2	Y	Absent	PA-8260HLW(14)
L1532956-06C	Vial water preserved	A	N/A	5.2	Y	Absent	PA-8260HLW(14)
L1532956-06D	Plastic 2oz unpreserved for TS	A	N/A	5.2	Y	Absent	TS(7)
L1532956-06E	Vial Large Septa unpreserved (4o	A	N/A	5.2	Y	Absent	PA-TPH-GRO(14)
L1532956-06E9	Vial MeOH preserved split	A	N/A	5.2	Y	Absent	PA-TPH-GRO(14)
L1532956-06F	Glass 500ml/16oz unpreserved	A	N/A	5.2	Y	Absent	AS-TI(180),BA-TI(180),AG-TI(180),CR-TI(180),PA-8082(14),PB-TI(180),SE-TI(180),HG-T(28),CD-TI(180),PA-8270(14)
L1532956-06X	Glass 100ml unpreserved split	A	N/A	5.2	Y	Absent	A2-TPHDRO/ORO(14)
L1532956-07A	Vial HCl preserved	A	N/A	5.2	Y	Absent	PA-8260-SIM(14),PA-8260(14)

*Values in parentheses indicate holding time in days

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007

Lab Number: L1532956
Report Date: 12/21/15

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1532956-07B	Vial HCl preserved	A	N/A	5.2	Y	Absent	PA-8260-SIM(14),PA-8260(14)
L1532956-07C	Vial HCl preserved	A	N/A	5.2	Y	Absent	PA-8260-SIM(14),PA-8260(14)

*Values in parentheses indicate holding time in days

Project Name:	ST. E'S EAST CAMPUS	**Lab Number:**	L1532956
Project Number:	38677-007	**Report Date:**	12/21/15

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.
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

1	- The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

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.

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.

Data Qualifiers

A	- Spectra identified as "Aldol Condensation Product".
B	- The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

Report Format: Data Usability Report

Project Name:	ST. E'S EAST CAMPUS	**Lab Number:**	L1532956
Project Number:	38677-007	**Report Date:**	12/21/15

Data Qualifiers

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

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.

J - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the reporting limit (RL) for the sample.

Report Format: Data Usability Report

Project Name:	ST. E'S EAST CAMPUS	**Lab Number:**	L1532956
Project Number:	38677-007	**Report Date:**	12/21/15

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

30 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WPCF. 18th Edition. 1992.

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.

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility
EPA 524.2: 1,2-Dibromo-3-chloropropane, 1,2-Dibromoethane, m/p-xylene, o-xylene
EPA 624: 2-Butanone (MEK), 1,4-Dioxane, tert-Amylmethyl Ether, tert-Butyl Alcohol, m/p-xylene, o-xylene
EPA 625: Aniline, Benzoic Acid, Benzyl Alcohol, 4-Chloroaniline, 3-Methylphenol, 4-Methylphenol.
EPA 1010A: NPW: Ignitability
EPA 6010C: NPW: Strontium; SCM: Strontium
EPA 8151A: NPW: 2,4-DB, Dicamba, Dichloroprop, MCPA, MCPP; SCM: 2,4-DB, Dichloroprop, MCPA, MCPP
EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene, Isopropanol; SCM: Iodomethane (methyl iodide), Methyl methacrylate (soil); 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D: NPW: Pentachloronitrobenzene, 1-Methylnaphthalene, Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Pentachloronitrobenzene, 1-Methylnaphthalene, Dimethylnaphthalene,1,4-Diphenylhydrazine.
EPA 9010: NPW: Amenable Cyanide Distillation, Total Cyanide Distillation
EPA 9038: NPW: Sulfate
EPA 9050A: NPW: Specific Conductance
EPA 9056: NPW: Chloride, Nitrate, Sulfate
EPA 9065: NPW: Phenols
EPA 9251: NPW: Chloride
SM3500: NPW: Ferrous Iron
SM4500: NPW: Amenable Cyanide, Dissolved Oxygen; SCM: Total Phosphorus, TKN, NO2, NO3.
SM5310C: DW: Dissolved Organic Carbon

Mansfield Facility
EPA 8270D: NPW: Biphenyl; SCM: Biphenyl
EPA 2540D: TSS
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.

The following analytes are included in our Massachusetts DEP Scope of Accreditation, Westborough Facility:

Drinking Water
EPA 200.8: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl; **EPA 200.7**: Ba,Be,Ca,Cd,Cr,Cu,Na; **EPA 245.1:** Mercury;
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, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B**
EPA 332: Perchlorate.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, Enterolert-QT.**

Non-Potable Water
EPA 200.8: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn;
EPA 200.7: Al,Sb,As,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Mo,Ni,K,Se,Ag,Na,Sr,Ti,Tl,V,Zn;
EPA 245.1, SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2340B, SM2320B, SM4500CL-E, SM4500F-BC, SM426C, SM4500NH3-BH, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, SM4500P-B, E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, SM14 510AC, 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 I, 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, SM9222D-MF**.

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

CHAIN OF CUSTODY

PAGE ____ OF ____

ALPHA ANALYTICAL
WESTBORO, MA TEL: 508-898-9220 FAX: 508-898-9193
MANSFIELD, MA TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab: 12/15/15

ALPHA Job #: L1532956

Client Information

Client: Haley + Aldrich
Address: 7926 Jones Branch Dr Ste 870 McLean VA
Phone: 703 336 7200
Fax:
Email: kwright-ng@haleyaldrich.com
☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: St Es East Campus
Project Location: Washington DC
Project #: 38677-007
Project Manager: Kristen Wright-Ng
ALPHA Quote #:

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved!)
Date Due: 5-7 day Time:

Report Information - Data Deliverables

☐ FAX ☐ EMAIL
☐ ADEx ☐ Add'l Deliverables

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements/Report Limits

State /Fed Program | Criteria

Other Project Specific Requirements/Comments/Detection Limits:
use project specific pricing

SAMPLE HANDLING
Filtration ____
☐ Done
☐ Not needed
☐ Lab to do
Preservation
☐ Lab to do
(Please specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	Total solids	VOCs by 8260	TPH-GRO	TPH-DRO	PAHs by 8270	PCBs by 8082	RCRA 8 metals	Furans + dioxins	Sample Specific Comments	TOTAL # BOTTLES
32956-01	B219-1214-1300-0-5	12/14/15	13:00	S	CT	X	X	X	X	X	X	X		6 jars	
-02	B219-1214-1305-5-10	12/14/15	13:05	S	CT	X	X	X	X	X	X	X		6 jars	
-03	B219-1214-1310-10-15	12/14/15	13:10	S	CT	X	X	X	X	X	X	X		6 jars	
-04	B220-1214-1420-0-5	12/14/15	14:20	S	CT	X	X	X	X	X	X	X		6 jars	
-05	B220-1214-1425-5-10	12/14/15	14:25	S	CT	X	X	X	X	X	X	X		6 jars	
-06	B220-1214-1430-10-15	12/14/15	14:30	S	CT	X	X	X	X	X	X	X		6 jars	
-07	TB-1214 15	12/14/15	15:00		CT		X							Trip blank 3 VOAs 18 day	

Container Type
Preservation

Rel: [illegible] 12/15/15 1105
Rec: [illegible] 12/15/15 1105

Relinquished By:	Date/Time	Received By:	Date/Time
CHRISTIAN TSCHIBGW	12/14/15/15:00	[illegible] (AAL)	12/14/15 1500
[illegible] (AAL)	12/14/15 [illegible]	[illegible]	12/14/15 1500
[illegible]	12/14/15 2320	Albert Willman	12/14/15 2320
Albert Willman	12/15/15 0345	[illegible]	12/15/15 0345
[illegible]	12/15/15 0935	[illegible]	12/15/15 0935

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

FORM NO: 01-01 (rev. 14-OCT-07)

CHAIN OF CUSTODY

PAGE_____ OF _____

ALPHA ANALYTICAL
WESTBORO, MA TEL: 508-898-9220 FAX: 508-898-9193
MANSFIELD, MA TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab: 12/15/15

ALPHA Job #: L1532956

Client Information

Client: Haley + Aldrich
Address: 7926 Jones Branch Dr Ste 870 McLean VA
Phone: 703 336 7200
Fax:
Email: kwright-ng@haleyaldrich.com
☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: St E's East Campus
Project Location: Washington DC
Project #: 38677-007
Project Manager: Kristen Wright-Ng
ALPHA Quote #:

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved!)
Date Due: 5-7 day Time:

Report Information - Data Deliverables

☐ FAX ☐ EMAIL
☐ ADEx ☐ Add'l Deliverables

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements/Report Limits

State /Fed Program	Criteria

Other Project Specific Requirements/Comments/Detection Limits:
use project specific pricing

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	total solids	VOCs by 8260	TPH-GRO	TPH-DRO	PAHs by 8270	PCBs by 8082	RCRA 8 metals	furans + dioxins					Sample Specific Comments	TOTAL # BOTTLES
32956 -01	B219-1214-1300-0-5	12/14/15	13:00	S	CT	X	X	X	X	X	X	X						6 jars	
-02	B219-1214-1305-5-10	12/14/15	13:05	S	CT	X	X	X	X	X	X	X						6 jars	
-03	B219-1214-1310-10-15	12/14/15	13:10	S	CT	X	X	X	X	X	X	X						6 jars	
-04	B220-1214-1420-0-5	12/14/15	14:20	S	CT	X	X	X	X	X	X	X						6 jars	
-05	B220-1214-1425-5-10	12/14/15	14:25	S	CT	X	X	X	X	X	X	X						6 jars	
-06	B220-1214-1430-10-15	12/14/15	14:30	S	CT	X	X	X	X	X	X	X						6 jars	
-07	TB-1214 15	12/14/15	15:00		CT		X											Trip blank 3 voas 18 day	

SAMPLE HANDLING
Filtration_____
☐ Done
☐ Not needed
☐ Lab to do
Preservation
☐ Lab to do
(Please specify below)

Container Type												
Preservative												

Relinquished By:	Date/Time	Received By:	Date/Time
CHRISTIAN TSCHIBGW	12/14/15/15:00	(AAL)	12/14/15 1500
(AAL)	12/14/15 1500		12/14/15 1500
	12/14/15 2320	Albert Willian	12/14/15 2320
Albert Willian	12/15/15 0345	Graham Phillips	12/15/15 0345

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

FORM NO: 01-01 (rev. 14-OCT-07)

ANALYTICAL REPORT

Lab Number:	L1532945
Client:	Haley & Aldrich 7926 Jones Branch Drive Suite 870 McLean, VA 22102-3363
ATTN:	Kristen Wright-Ng
Phone:	(703) 336-6234
Project Name:	ST. E'S EAST CAMPUS
Project Number:	38677-007
Report Date:	12/21/15

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), NY (11148), CT (PH-0574), NH (2003), NJ NELAP (MA935), RI (LAO00065), ME (MA00086), PA (68-03671), VA (460195), MD (348), IL (200077), NC (666), TX (T104704476), DOD (L2217), USDA (Permit #P-330-11-00240).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007

Lab Number: L1532945
Report Date: 12/21/15

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1532945-01	B212-1214-1005-0-5	SOIL	WASHINGTON, D.C.	12/14/15 10:05	12/14/15
L1532945-02	B212-1214-1005-5-10	SOIL	WASHINGTON, D.C.	12/14/15 10:05	12/14/15
L1532945-03	B217-1214-1120-0-5	SOIL	WASHINGTON, D.C.	12/14/15 11:20	12/14/15
L1532945-04	B217-1214-1125-5-10	SOIL	WASHINGTON, D.C.	12/14/15 11:25	12/14/15
L1532945-05	B217-1214-1130-10-15	SOIL	WASHINGTON, D.C.	12/14/15 11:30	12/14/15
L1532945-06	B218-1214-1210-0-5	SOIL	WASHINGTON, D.C.	12/14/15 12:10	12/14/15
L1532945-07	B218-1214-1215-5-10	SOIL	WASHINGTON, D.C.	12/14/15 12:15	12/14/15
L1532945-08	B218-1214-1220-10-15	SOIL	WASHINGTON, D.C.	12/14/15 12:20	12/14/15

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1532945
Project Number: 38677-007 **Report Date:** 12/21/15

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 all of the requirements of NELAC, for all NELAC accredited parameters. 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:	ST. E'S EAST CAMPUS	**Lab Number:**	L1532945
Project Number:	38677-007	**Report Date:**	12/21/15

Case Narrative (continued)

Volatile Organics

L1532945-06: The analysis of Volatile Organics by EPA Method 5035/8260 Low Level could not be performed due to the elevated concentrations of non-target compounds in the sample.

Gasoline Range Organics

The WG851112-4 Laboratory Duplicate RPD (25%), performed on L1532945-06, is outside the acceptance criteria. The elevated RPD has been attributed to the non-homogeneous nature of the native sample.

Metals

The WG850111-4 MS recoveries, performed on L1532945-01, are outside the acceptance criteria for arsenic (69%), barium (69%), lead (45%) and selenium (70%). A post digestion spike was performed and yielded unacceptable recoveries for arsenic (42%), barium (43%), lead (39%) and selenium (48%). This has been attributed to sample matrix.

The WG850111-3 Laboratory Duplicate RPDs, performed on L1532945-01, are outside the acceptance criteria for arsenic (26%), barium (49%), chromium (62%), and lead (89%). The elevated RPDs have been attributed to the non-homogeneous nature of the native sample.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Kelly Stenstrom

Title: Technical Director/Representative

Date: 12/21/15

ORGANICS

VOLATILES

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1532945

Project Number: 38677-007 **Report Date:** 12/21/15

SAMPLE RESULTS

Lab ID:	L1532945-01	Date Collected:	12/14/15 10:05
Client ID:	B212-1214-1005-0-5	Date Received:	12/14/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Soil		
Analytical Method:	1,8260C		
Analytical Date:	12/18/15 03:02		
Analyst:	MS		
Percent Solids:	83%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS-5035 - Westborough Lab						
Dichlorodifluoromethane	ND		mg/kg	0.0088	--	1
Chloromethane	ND		mg/kg	0.0044	--	1
Vinyl chloride	ND		mg/kg	0.0018	--	1
Bromomethane	ND		mg/kg	0.0018	--	1
Chloroethane	ND		mg/kg	0.0018	--	1
Trichlorofluoromethane	ND		mg/kg	0.0044	--	1
1,1-Dichloroethene	ND		mg/kg	0.00088	--	1
Carbon disulfide	ND		mg/kg	0.0088	--	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		mg/kg	0.018	--	1
Methylene chloride	ND		mg/kg	0.0044	--	1
Acetone	ND		mg/kg	0.032	--	1
trans-1,2-Dichloroethene	ND		mg/kg	0.0013	--	1
Methyl Acetate	ND		mg/kg	0.0035	--	1
Methyl tert butyl ether	ND		mg/kg	0.0018	--	1
1,1-Dichloroethane	ND		mg/kg	0.0013	--	1
cis-1,2-Dichloroethene	ND		mg/kg	0.00088	--	1
1,2-Dichloroethene, Total	ND		mg/kg	0.00088	--	1
Cyclohexane	ND		mg/kg	0.018	--	1
Bromochloromethane	ND		mg/kg	0.0044	--	1
Chloroform	ND		mg/kg	0.0013	--	1
Carbon tetrachloride	ND		mg/kg	0.00088	--	1
1,1,1-Trichloroethane	ND		mg/kg	0.00088	--	1
2-Butanone	ND		mg/kg	0.0088	--	1
Benzene	ND		mg/kg	0.00088	--	1
1,2-Dichloroethane	ND		mg/kg	0.00088	--	1
Methyl cyclohexane	ND		mg/kg	0.0035	--	1
Trichloroethene	ND		mg/kg	0.00088	--	1
1,2-Dichloropropane	ND		mg/kg	0.0031	--	1
Bromodichloromethane	ND		mg/kg	0.00088	--	1
1,4-Dioxane	ND		mg/kg	0.088	--	1

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1532945

Project Number: 38677-007 **Report Date:** 12/21/15

SAMPLE RESULTS

Lab ID: L1532945-01 Date Collected: 12/14/15 10:05

Client ID: B212-1214-1005-0-5 Date Received: 12/14/15

Sample Location: WASHINGTON, D.C. Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS-5035 - Westborough Lab						
cis-1,3-Dichloropropene	ND		mg/kg	0.00088	--	1
Toluene	ND		mg/kg	0.0013	--	1
4-Methyl-2-pentanone	ND		mg/kg	0.0088	--	1
Tetrachloroethene	ND		mg/kg	0.00088	--	1
trans-1,3-Dichloropropene	ND		mg/kg	0.00088	--	1
1,3-Dichloropropene, Total	ND		mg/kg	0.00088	--	1
1,1,2-Trichloroethane	ND		mg/kg	0.0013	--	1
Dibromochloromethane	ND		mg/kg	0.00088	--	1
1,2-Dibromoethane	ND		mg/kg	0.0035	--	1
2-Hexanone	ND		mg/kg	0.0088	--	1
Chlorobenzene	ND		mg/kg	0.00088	--	1
Ethylbenzene	ND		mg/kg	0.00088	--	1
p/m-Xylene	ND		mg/kg	0.0018	--	1
o-Xylene	ND		mg/kg	0.0018	--	1
Xylenes, Total	ND		mg/kg	0.0018	--	1
Styrene	ND		mg/kg	0.0018	--	1
Bromoform	ND		mg/kg	0.0035	--	1
Isopropylbenzene	ND		mg/kg	0.00088	--	1
1,1,2,2-Tetrachloroethane	ND		mg/kg	0.00088	--	1
1,3-Dichlorobenzene	ND		mg/kg	0.0044	--	1
1,4-Dichlorobenzene	ND		mg/kg	0.0044	--	1
1,2-Dichlorobenzene	ND		mg/kg	0.0044	--	1
1,2-Dibromo-3-chloropropane	ND		mg/kg	0.0044	--	1
1,2,4-Trichlorobenzene	ND		mg/kg	0.0044	--	1
1,2,3-Trichlorobenzene	ND		mg/kg	0.0044	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	94		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	103		70-130

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1532945

Project Number: 38677-007 **Report Date:** 12/21/15

SAMPLE RESULTS

Lab ID:	L1532945-02	Date Collected:	12/14/15 10:05
Client ID:	B212-1214-1005-5-10	Date Received:	12/14/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Soil		
Analytical Method:	1,8260C		
Analytical Date:	12/18/15 03:29		
Analyst:	MS		
Percent Solids:	87%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS-5035 - Westborough Lab						
Dichlorodifluoromethane	ND		mg/kg	0.0079	--	1
Chloromethane	ND		mg/kg	0.0039	--	1
Vinyl chloride	ND		mg/kg	0.0016	--	1
Bromomethane	ND		mg/kg	0.0016	--	1
Chloroethane	ND		mg/kg	0.0016	--	1
Trichlorofluoromethane	ND		mg/kg	0.0039	--	1
1,1-Dichloroethene	ND		mg/kg	0.00079	--	1
Carbon disulfide	ND		mg/kg	0.0079	--	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		mg/kg	0.016	--	1
Methylene chloride	ND		mg/kg	0.0039	--	1
Acetone	ND		mg/kg	0.028	--	1
trans-1,2-Dichloroethene	ND		mg/kg	0.0012	--	1
Methyl Acetate	ND		mg/kg	0.0031	--	1
Methyl tert butyl ether	ND		mg/kg	0.0016	--	1
1,1-Dichloroethane	ND		mg/kg	0.0012	--	1
cis-1,2-Dichloroethene	ND		mg/kg	0.00079	--	1
1,2-Dichloroethene, Total	ND		mg/kg	0.00079	--	1
Cyclohexane	ND		mg/kg	0.016	--	1
Bromochloromethane	ND		mg/kg	0.0039	--	1
Chloroform	ND		mg/kg	0.0012	--	1
Carbon tetrachloride	ND		mg/kg	0.00079	--	1
1,1,1-Trichloroethane	ND		mg/kg	0.00079	--	1
2-Butanone	ND		mg/kg	0.0079	--	1
Benzene	ND		mg/kg	0.00079	--	1
1,2-Dichloroethane	ND		mg/kg	0.00079	--	1
Methyl cyclohexane	ND		mg/kg	0.0031	--	1
Trichloroethene	ND		mg/kg	0.00079	--	1
1,2-Dichloropropane	ND		mg/kg	0.0028	--	1
Bromodichloromethane	ND		mg/kg	0.00079	--	1
1,4-Dioxane	ND		mg/kg	0.079	--	1

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1532945

Project Number: 38677-007 **Report Date:** 12/21/15

SAMPLE RESULTS

Lab ID: L1532945-02 Date Collected: 12/14/15 10:05

Client ID: B212-1214-1005-5-10 Date Received: 12/14/15

Sample Location: WASHINGTON, D.C. Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS-5035 - Westborough Lab						
cis-1,3-Dichloropropene	ND		mg/kg	0.00079	--	1
Toluene	ND		mg/kg	0.0012	--	1
4-Methyl-2-pentanone	ND		mg/kg	0.0079	--	1
Tetrachloroethene	ND		mg/kg	0.00079	--	1
trans-1,3-Dichloropropene	ND		mg/kg	0.00079	--	1
1,3-Dichloropropene, Total	ND		mg/kg	0.00079	--	1
1,1,2-Trichloroethane	ND		mg/kg	0.0012	--	1
Dibromochloromethane	ND		mg/kg	0.00079	--	1
1,2-Dibromoethane	ND		mg/kg	0.0031	--	1
2-Hexanone	ND		mg/kg	0.0079	--	1
Chlorobenzene	ND		mg/kg	0.00079	--	1
Ethylbenzene	ND		mg/kg	0.00079	--	1
p/m-Xylene	ND		mg/kg	0.0016	--	1
o-Xylene	ND		mg/kg	0.0016	--	1
Xylenes, Total	ND		mg/kg	0.0016	--	1
Styrene	ND		mg/kg	0.0016	--	1
Bromoform	ND		mg/kg	0.0031	--	1
Isopropylbenzene	ND		mg/kg	0.00079	--	1
1,1,2,2-Tetrachloroethane	ND		mg/kg	0.00079	--	1
1,3-Dichlorobenzene	ND		mg/kg	0.0039	--	1
1,4-Dichlorobenzene	ND		mg/kg	0.0039	--	1
1,2-Dichlorobenzene	ND		mg/kg	0.0039	--	1
1,2-Dibromo-3-chloropropane	ND		mg/kg	0.0039	--	1
1,2,4-Trichlorobenzene	ND		mg/kg	0.0039	--	1
1,2,3-Trichlorobenzene	ND		mg/kg	0.0039	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	95		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	103		70-130

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1532945

Project Number: 38677-007 **Report Date:** 12/21/15

SAMPLE RESULTS

Lab ID:	L1532945-03	Date Collected:	12/14/15 11:20
Client ID:	B217-1214-1120-0-5	Date Received:	12/14/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Soil		
Analytical Method:	1,8260C		
Analytical Date:	12/18/15 03:56		
Analyst:	MS		
Percent Solids:	83%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS-5035 - Westborough Lab						
Dichlorodifluoromethane	ND		mg/kg	0.0086	--	1
Chloromethane	ND		mg/kg	0.0043	--	1
Vinyl chloride	ND		mg/kg	0.0017	--	1
Bromomethane	ND		mg/kg	0.0017	--	1
Chloroethane	ND		mg/kg	0.0017	--	1
Trichlorofluoromethane	ND		mg/kg	0.0043	--	1
1,1-Dichloroethene	ND		mg/kg	0.00086	--	1
Carbon disulfide	ND		mg/kg	0.0086	--	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		mg/kg	0.017	--	1
Methylene chloride	ND		mg/kg	0.0043	--	1
Acetone	ND		mg/kg	0.031	--	1
trans-1,2-Dichloroethene	ND		mg/kg	0.0013	--	1
Methyl Acetate	ND		mg/kg	0.0034	--	1
Methyl tert butyl ether	ND		mg/kg	0.0017	--	1
1,1-Dichloroethane	ND		mg/kg	0.0013	--	1
cis-1,2-Dichloroethene	ND		mg/kg	0.00086	--	1
1,2-Dichloroethene, Total	ND		mg/kg	0.00086	--	1
Cyclohexane	ND		mg/kg	0.017	--	1
Bromochloromethane	ND		mg/kg	0.0043	--	1
Chloroform	ND		mg/kg	0.0013	--	1
Carbon tetrachloride	ND		mg/kg	0.00086	--	1
1,1,1-Trichloroethane	ND		mg/kg	0.00086	--	1
2-Butanone	ND		mg/kg	0.0086	--	1
Benzene	ND		mg/kg	0.00086	--	1
1,2-Dichloroethane	ND		mg/kg	0.00086	--	1
Methyl cyclohexane	ND		mg/kg	0.0034	--	1
Trichloroethene	ND		mg/kg	0.00086	--	1
1,2-Dichloropropane	ND		mg/kg	0.0030	--	1
Bromodichloromethane	ND		mg/kg	0.00086	--	1
1,4-Dioxane	ND		mg/kg	0.086	--	1

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1532945

Project Number: 38677-007 **Report Date:** 12/21/15

SAMPLE RESULTS

Lab ID: L1532945-03 Date Collected: 12/14/15 11:20

Client ID: B217-1214-1120-0-5 Date Received: 12/14/15

Sample Location: WASHINGTON, D.C. Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS-5035 - Westborough Lab						
cis-1,3-Dichloropropene	ND		mg/kg	0.00086	--	1
Toluene	ND		mg/kg	0.0013	--	1
4-Methyl-2-pentanone	ND		mg/kg	0.0086	--	1
Tetrachloroethene	ND		mg/kg	0.00086	--	1
trans-1,3-Dichloropropene	ND		mg/kg	0.00086	--	1
1,3-Dichloropropene, Total	ND		mg/kg	0.00086	--	1
1,1,2-Trichloroethane	ND		mg/kg	0.0013	--	1
Dibromochloromethane	ND		mg/kg	0.00086	--	1
1,2-Dibromoethane	ND		mg/kg	0.0034	--	1
2-Hexanone	ND		mg/kg	0.0086	--	1
Chlorobenzene	ND		mg/kg	0.00086	--	1
Ethylbenzene	ND		mg/kg	0.00086	--	1
p/m-Xylene	ND		mg/kg	0.0017	--	1
o-Xylene	ND		mg/kg	0.0017	--	1
Xylenes, Total	ND		mg/kg	0.0017	--	1
Styrene	ND		mg/kg	0.0017	--	1
Bromoform	ND		mg/kg	0.0034	--	1
Isopropylbenzene	ND		mg/kg	0.00086	--	1
1,1,2,2-Tetrachloroethane	ND		mg/kg	0.00086	--	1
1,3-Dichlorobenzene	ND		mg/kg	0.0043	--	1
1,4-Dichlorobenzene	ND		mg/kg	0.0043	--	1
1,2-Dichlorobenzene	ND		mg/kg	0.0043	--	1
1,2-Dibromo-3-chloropropane	ND		mg/kg	0.0043	--	1
1,2,4-Trichlorobenzene	ND		mg/kg	0.0043	--	1
1,2,3-Trichlorobenzene	ND		mg/kg	0.0043	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	96		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	103		70-130

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1532945

Project Number: 38677-007 **Report Date:** 12/21/15

SAMPLE RESULTS

Lab ID:	L1532945-04	Date Collected:	12/14/15 11:25
Client ID:	B217-1214-1125-5-10	Date Received:	12/14/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Soil		
Analytical Method:	1,8260C		
Analytical Date:	12/18/15 04:24		
Analyst:	MS		
Percent Solids:	88%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS-5035 - Westborough Lab						
Dichlorodifluoromethane	ND		mg/kg	0.0085	--	1
Chloromethane	ND		mg/kg	0.0042	--	1
Vinyl chloride	ND		mg/kg	0.0017	--	1
Bromomethane	ND		mg/kg	0.0017	--	1
Chloroethane	ND		mg/kg	0.0017	--	1
Trichlorofluoromethane	ND		mg/kg	0.0042	--	1
1,1-Dichloroethene	ND		mg/kg	0.00085	--	1
Carbon disulfide	ND		mg/kg	0.0085	--	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		mg/kg	0.017	--	1
Methylene chloride	ND		mg/kg	0.0042	--	1
Acetone	ND		mg/kg	0.030	--	1
trans-1,2-Dichloroethene	ND		mg/kg	0.0013	--	1
Methyl Acetate	ND		mg/kg	0.0034	--	1
Methyl tert butyl ether	ND		mg/kg	0.0017	--	1
1,1-Dichloroethane	ND		mg/kg	0.0013	--	1
cis-1,2-Dichloroethene	ND		mg/kg	0.00085	--	1
1,2-Dichloroethene, Total	ND		mg/kg	0.00085	--	1
Cyclohexane	ND		mg/kg	0.017	--	1
Bromochloromethane	ND		mg/kg	0.0042	--	1
Chloroform	ND		mg/kg	0.0013	--	1
Carbon tetrachloride	ND		mg/kg	0.00085	--	1
1,1,1-Trichloroethane	ND		mg/kg	0.00085	--	1
2-Butanone	ND		mg/kg	0.0085	--	1
Benzene	ND		mg/kg	0.00085	--	1
1,2-Dichloroethane	ND		mg/kg	0.00085	--	1
Methyl cyclohexane	ND		mg/kg	0.0034	--	1
Trichloroethene	ND		mg/kg	0.00085	--	1
1,2-Dichloropropane	ND		mg/kg	0.0030	--	1
Bromodichloromethane	ND		mg/kg	0.00085	--	1
1,4-Dioxane	ND		mg/kg	0.085	--	1

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1532945

Project Number: 38677-007 **Report Date:** 12/21/15

SAMPLE RESULTS

Lab ID: L1532945-04 Date Collected: 12/14/15 11:25

Client ID: B217-1214-1125-5-10 Date Received: 12/14/15

Sample Location: WASHINGTON, D.C. Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS-5035 - Westborough Lab						
cis-1,3-Dichloropropene	ND		mg/kg	0.00085	--	1
Toluene	ND		mg/kg	0.0013	--	1
4-Methyl-2-pentanone	ND		mg/kg	0.0085	--	1
Tetrachloroethene	ND		mg/kg	0.00085	--	1
trans-1,3-Dichloropropene	ND		mg/kg	0.00085	--	1
1,3-Dichloropropene, Total	ND		mg/kg	0.00085	--	1
1,1,2-Trichloroethane	ND		mg/kg	0.0013	--	1
Dibromochloromethane	ND		mg/kg	0.00085	--	1
1,2-Dibromoethane	ND		mg/kg	0.0034	--	1
2-Hexanone	ND		mg/kg	0.0085	--	1
Chlorobenzene	ND		mg/kg	0.00085	--	1
Ethylbenzene	ND		mg/kg	0.00085	--	1
p/m-Xylene	ND		mg/kg	0.0017	--	1
o-Xylene	ND		mg/kg	0.0017	--	1
Xylenes, Total	ND		mg/kg	0.0017	--	1
Styrene	ND		mg/kg	0.0017	--	1
Bromoform	ND		mg/kg	0.0034	--	1
Isopropylbenzene	ND		mg/kg	0.00085	--	1
1,1,2,2-Tetrachloroethane	ND		mg/kg	0.00085	--	1
1,3-Dichlorobenzene	ND		mg/kg	0.0042	--	1
1,4-Dichlorobenzene	ND		mg/kg	0.0042	--	1
1,2-Dichlorobenzene	ND		mg/kg	0.0042	--	1
1,2-Dibromo-3-chloropropane	ND		mg/kg	0.0042	--	1
1,2,4-Trichlorobenzene	ND		mg/kg	0.0042	--	1
1,2,3-Trichlorobenzene	ND		mg/kg	0.0042	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	94		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	103		70-130

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1532945

Project Number: 38677-007 **Report Date:** 12/21/15

SAMPLE RESULTS

Lab ID:	L1532945-05	Date Collected:	12/14/15 11:30
Client ID:	B217-1214-1130-10-15	Date Received:	12/14/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Soil		
Analytical Method:	1,8260C		
Analytical Date:	12/18/15 04:51		
Analyst:	MS		
Percent Solids:	88%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS-5035 - Westborough Lab						
Dichlorodifluoromethane	ND		mg/kg	0.013	--	1
Chloromethane	ND		mg/kg	0.0066	--	1
Vinyl chloride	ND		mg/kg	0.0026	--	1
Bromomethane	ND		mg/kg	0.0026	--	1
Chloroethane	ND		mg/kg	0.0026	--	1
Trichlorofluoromethane	ND		mg/kg	0.0066	--	1
1,1-Dichloroethene	ND		mg/kg	0.0013	--	1
Carbon disulfide	ND		mg/kg	0.013	--	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		mg/kg	0.026	--	1
Methylene chloride	ND		mg/kg	0.0066	--	1
Acetone	ND		mg/kg	0.048	--	1
trans-1,2-Dichloroethene	ND		mg/kg	0.0020	--	1
Methyl Acetate	ND		mg/kg	0.0053	--	1
Methyl tert butyl ether	ND		mg/kg	0.0026	--	1
1,1-Dichloroethane	ND		mg/kg	0.0020	--	1
cis-1,2-Dichloroethene	ND		mg/kg	0.0013	--	1
1,2-Dichloroethene, Total	ND		mg/kg	0.0013	--	1
Cyclohexane	ND		mg/kg	0.026	--	1
Bromochloromethane	ND		mg/kg	0.0066	--	1
Chloroform	ND		mg/kg	0.0020	--	1
Carbon tetrachloride	ND		mg/kg	0.0013	--	1
1,1,1-Trichloroethane	ND		mg/kg	0.0013	--	1
2-Butanone	ND		mg/kg	0.013	--	1
Benzene	ND		mg/kg	0.0013	--	1
1,2-Dichloroethane	ND		mg/kg	0.0013	--	1
Methyl cyclohexane	ND		mg/kg	0.0053	--	1
Trichloroethene	ND		mg/kg	0.0013	--	1
1,2-Dichloropropane	ND		mg/kg	0.0046	--	1
Bromodichloromethane	ND		mg/kg	0.0013	--	1
1,4-Dioxane	ND		mg/kg	0.13	--	1

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1532945

Project Number: 38677-007 **Report Date:** 12/21/15

SAMPLE RESULTS

Lab ID: L1532945-05 Date Collected: 12/14/15 11:30

Client ID: B217-1214-1130-10-15 Date Received: 12/14/15

Sample Location: WASHINGTON, D.C. Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS-5035 - Westborough Lab						
cis-1,3-Dichloropropene	ND		mg/kg	0.0013	--	1
Toluene	ND		mg/kg	0.0020	--	1
4-Methyl-2-pentanone	ND		mg/kg	0.013	--	1
Tetrachloroethene	ND		mg/kg	0.0013	--	1
trans-1,3-Dichloropropene	ND		mg/kg	0.0013	--	1
1,3-Dichloropropene, Total	ND		mg/kg	0.0013	--	1
1,1,2-Trichloroethane	ND		mg/kg	0.0020	--	1
Dibromochloromethane	ND		mg/kg	0.0013	--	1
1,2-Dibromoethane	ND		mg/kg	0.0053	--	1
2-Hexanone	ND		mg/kg	0.013	--	1
Chlorobenzene	ND		mg/kg	0.0013	--	1
Ethylbenzene	ND		mg/kg	0.0013	--	1
p/m-Xylene	ND		mg/kg	0.0026	--	1
o-Xylene	ND		mg/kg	0.0026	--	1
Xylenes, Total	ND		mg/kg	0.0026	--	1
Styrene	ND		mg/kg	0.0026	--	1
Bromoform	ND		mg/kg	0.0053	--	1
Isopropylbenzene	ND		mg/kg	0.0013	--	1
1,1,2,2-Tetrachloroethane	ND		mg/kg	0.0013	--	1
1,3-Dichlorobenzene	ND		mg/kg	0.0066	--	1
1,4-Dichlorobenzene	ND		mg/kg	0.0066	--	1
1,2-Dichlorobenzene	ND		mg/kg	0.0066	--	1
1,2-Dibromo-3-chloropropane	ND		mg/kg	0.0066	--	1
1,2,4-Trichlorobenzene	ND		mg/kg	0.0066	--	1
1,2,3-Trichlorobenzene	ND		mg/kg	0.0066	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	95		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	104		70-130

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1532945

Project Number: 38677-007 **Report Date:** 12/21/15

SAMPLE RESULTS

Lab ID:	L1532945-06	Date Collected:	12/14/15 12:10
Client ID:	B218-1214-1210-0-5	Date Received:	12/14/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Soil		
Analytical Method:	1,8260C		
Analytical Date:	12/18/15 06:13		
Analyst:	MS		
Percent Solids:	85%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS-5035 - Westborough Lab						
Dichlorodifluoromethane	ND		mg/kg	0.65	--	1
Chloromethane	ND		mg/kg	0.32	--	1
Vinyl chloride	ND		mg/kg	0.13	--	1
Bromomethane	ND		mg/kg	0.13	--	1
Chloroethane	ND		mg/kg	0.13	--	1
Trichlorofluoromethane	ND		mg/kg	0.32	--	1
1,1-Dichloroethene	ND		mg/kg	0.065	--	1
Carbon disulfide	ND		mg/kg	0.65	--	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		mg/kg	1.3	--	1
Methylene chloride	ND		mg/kg	0.32	--	1
Acetone	ND		mg/kg	2.3	--	1
trans-1,2-Dichloroethene	ND		mg/kg	0.098	--	1
Methyl Acetate	6.2		mg/kg	0.26	--	1
Methyl tert butyl ether	ND		mg/kg	0.13	--	1
1,1-Dichloroethane	ND		mg/kg	0.098	--	1
cis-1,2-Dichloroethene	ND		mg/kg	0.065	--	1
1,2-Dichloroethene, Total	ND		mg/kg	0.065	--	1
Cyclohexane	ND		mg/kg	1.3	--	1
Bromochloromethane	ND		mg/kg	0.32	--	1
Chloroform	ND		mg/kg	0.098	--	1
Carbon tetrachloride	ND		mg/kg	0.065	--	1
1,1,1-Trichloroethane	ND		mg/kg	0.065	--	1
2-Butanone	ND		mg/kg	0.65	--	1
Benzene	ND		mg/kg	0.065	--	1
1,2-Dichloroethane	ND		mg/kg	0.065	--	1
Methyl cyclohexane	ND		mg/kg	0.26	--	1
Trichloroethene	ND		mg/kg	0.065	--	1
1,2-Dichloropropane	ND		mg/kg	0.23	--	1
Bromodichloromethane	ND		mg/kg	0.065	--	1
1,4-Dioxane	ND		mg/kg	6.5	--	1

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1532945

Project Number: 38677-007 **Report Date:** 12/21/15

SAMPLE RESULTS

Lab ID: L1532945-06 Date Collected: 12/14/15 12:10

Client ID: B218-1214-1210-0-5 Date Received: 12/14/15

Sample Location: WASHINGTON, D.C. Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS-5035 - Westborough Lab						
cis-1,3-Dichloropropene	ND		mg/kg	0.065	--	1
Toluene	ND		mg/kg	0.098	--	1
4-Methyl-2-pentanone	ND		mg/kg	0.65	--	1
Tetrachloroethene	ND		mg/kg	0.065	--	1
trans-1,3-Dichloropropene	ND		mg/kg	0.065	--	1
1,3-Dichloropropene, Total	ND		mg/kg	0.065	--	1
1,1,2-Trichloroethane	ND		mg/kg	0.098	--	1
Dibromochloromethane	ND		mg/kg	0.065	--	1
1,2-Dibromoethane	ND		mg/kg	0.26	--	1
2-Hexanone	ND		mg/kg	0.65	--	1
Chlorobenzene	ND		mg/kg	0.065	--	1
Ethylbenzene	ND		mg/kg	0.065	--	1
p/m-Xylene	ND		mg/kg	0.13	--	1
o-Xylene	ND		mg/kg	0.13	--	1
Xylenes, Total	ND		mg/kg	0.13	--	1
Styrene	ND		mg/kg	0.13	--	1
Bromoform	ND		mg/kg	0.26	--	1
Isopropylbenzene	ND		mg/kg	0.065	--	1
1,1,2,2-Tetrachloroethane	ND		mg/kg	0.065	--	1
1,3-Dichlorobenzene	ND		mg/kg	0.32	--	1
1,4-Dichlorobenzene	ND		mg/kg	0.32	--	1
1,2-Dichlorobenzene	ND		mg/kg	0.32	--	1
1,2-Dibromo-3-chloropropane	ND		mg/kg	0.32	--	1
1,2,4-Trichlorobenzene	ND		mg/kg	0.32	--	1
1,2,3-Trichlorobenzene	ND		mg/kg	0.32	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	95		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	101		70-130

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1532945

Project Number: 38677-007 **Report Date:** 12/21/15

SAMPLE RESULTS

Lab ID:	L1532945-07	Date Collected:	12/14/15 12:15
Client ID:	B218-1214-1215-5-10	Date Received:	12/14/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Soil		
Analytical Method:	1,8260C		
Analytical Date:	12/18/15 05:18		
Analyst:	MS		
Percent Solids:	89%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS-5035 - Westborough Lab						
Dichlorodifluoromethane	ND		mg/kg	0.0080	--	1
Chloromethane	ND		mg/kg	0.0040	--	1
Vinyl chloride	ND		mg/kg	0.0016	--	1
Bromomethane	ND		mg/kg	0.0016	--	1
Chloroethane	ND		mg/kg	0.0016	--	1
Trichlorofluoromethane	ND		mg/kg	0.0040	--	1
1,1-Dichloroethene	ND		mg/kg	0.00080	--	1
Carbon disulfide	ND		mg/kg	0.0080	--	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		mg/kg	0.016	--	1
Methylene chloride	ND		mg/kg	0.0040	--	1
Acetone	0.048		mg/kg	0.029	--	1
trans-1,2-Dichloroethene	ND		mg/kg	0.0012	--	1
Methyl Acetate	ND		mg/kg	0.0032	--	1
Methyl tert butyl ether	ND		mg/kg	0.0016	--	1
1,1-Dichloroethane	ND		mg/kg	0.0012	--	1
cis-1,2-Dichloroethene	ND		mg/kg	0.00080	--	1
1,2-Dichloroethene, Total	ND		mg/kg	0.00080	--	1
Cyclohexane	ND		mg/kg	0.016	--	1
Bromochloromethane	ND		mg/kg	0.0040	--	1
Chloroform	ND		mg/kg	0.0012	--	1
Carbon tetrachloride	ND		mg/kg	0.00080	--	1
1,1,1-Trichloroethane	ND		mg/kg	0.00080	--	1
2-Butanone	ND		mg/kg	0.0080	--	1
Benzene	ND		mg/kg	0.00080	--	1
1,2-Dichloroethane	ND		mg/kg	0.00080	--	1
Methyl cyclohexane	ND		mg/kg	0.0032	--	1
Trichloroethene	ND		mg/kg	0.00080	--	1
1,2-Dichloropropane	ND		mg/kg	0.0028	--	1
Bromodichloromethane	ND		mg/kg	0.00080	--	1
1,4-Dioxane	ND		mg/kg	0.080	--	1

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1532945

Project Number: 38677-007 **Report Date:** 12/21/15

SAMPLE RESULTS

Lab ID: L1532945-07 Date Collected: 12/14/15 12:15

Client ID: B218-1214-1215-5-10 Date Received: 12/14/15

Sample Location: WASHINGTON, D.C. Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS-5035 - Westborough Lab						
cis-1,3-Dichloropropene	ND		mg/kg	0.00080	--	1
Toluene	ND		mg/kg	0.0012	--	1
4-Methyl-2-pentanone	ND		mg/kg	0.0080	--	1
Tetrachloroethene	ND		mg/kg	0.00080	--	1
trans-1,3-Dichloropropene	ND		mg/kg	0.00080	--	1
1,3-Dichloropropene, Total	ND		mg/kg	0.00080	--	1
1,1,2-Trichloroethane	ND		mg/kg	0.0012	--	1
Dibromochloromethane	ND		mg/kg	0.00080	--	1
1,2-Dibromoethane	ND		mg/kg	0.0032	--	1
2-Hexanone	ND		mg/kg	0.0080	--	1
Chlorobenzene	ND		mg/kg	0.00080	--	1
Ethylbenzene	ND		mg/kg	0.00080	--	1
p/m-Xylene	ND		mg/kg	0.0016	--	1
o-Xylene	ND		mg/kg	0.0016	--	1
Xylenes, Total	ND		mg/kg	0.0016	--	1
Styrene	ND		mg/kg	0.0016	--	1
Bromoform	ND		mg/kg	0.0032	--	1
Isopropylbenzene	ND		mg/kg	0.00080	--	1
1,1,2,2-Tetrachloroethane	ND		mg/kg	0.00080	--	1
1,3-Dichlorobenzene	ND		mg/kg	0.0040	--	1
1,4-Dichlorobenzene	ND		mg/kg	0.0040	--	1
1,2-Dichlorobenzene	ND		mg/kg	0.0040	--	1
1,2-Dibromo-3-chloropropane	ND		mg/kg	0.0040	--	1
1,2,4-Trichlorobenzene	ND		mg/kg	0.0040	--	1
1,2,3-Trichlorobenzene	ND		mg/kg	0.0040	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	95		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	104		70-130

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1532945

Project Number: 38677-007 **Report Date:** 12/21/15

SAMPLE RESULTS

Lab ID:	L1532945-08	Date Collected:	12/14/15 12:20
Client ID:	B218-1214-1220-10-15	Date Received:	12/14/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Soil		
Analytical Method:	1,8260C		
Analytical Date:	12/18/15 05:45		
Analyst:	MS		
Percent Solids:	90%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS-5035 - Westborough Lab						
Dichlorodifluoromethane	ND		mg/kg	0.0082	--	1
Chloromethane	ND		mg/kg	0.0041	--	1
Vinyl chloride	ND		mg/kg	0.0016	--	1
Bromomethane	ND		mg/kg	0.0016	--	1
Chloroethane	ND		mg/kg	0.0016	--	1
Trichlorofluoromethane	ND		mg/kg	0.0041	--	1
1,1-Dichloroethene	ND		mg/kg	0.00082	--	1
Carbon disulfide	ND		mg/kg	0.0082	--	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		mg/kg	0.016	--	1
Methylene chloride	ND		mg/kg	0.0041	--	1
Acetone	0.091		mg/kg	0.030	--	1
trans-1,2-Dichloroethene	ND		mg/kg	0.0012	--	1
Methyl Acetate	ND		mg/kg	0.0033	--	1
Methyl tert butyl ether	ND		mg/kg	0.0016	--	1
1,1-Dichloroethane	ND		mg/kg	0.0012	--	1
cis-1,2-Dichloroethene	ND		mg/kg	0.00082	--	1
1,2-Dichloroethene, Total	ND		mg/kg	0.00082	--	1
Cyclohexane	ND		mg/kg	0.016	--	1
Bromochloromethane	ND		mg/kg	0.0041	--	1
Chloroform	ND		mg/kg	0.0012	--	1
Carbon tetrachloride	ND		mg/kg	0.00082	--	1
1,1,1-Trichloroethane	ND		mg/kg	0.00082	--	1
2-Butanone	0.0082		mg/kg	0.0082	--	1
Benzene	ND		mg/kg	0.00082	--	1
1,2-Dichloroethane	ND		mg/kg	0.00082	--	1
Methyl cyclohexane	ND		mg/kg	0.0033	--	1
Trichloroethene	ND		mg/kg	0.00082	--	1
1,2-Dichloropropane	ND		mg/kg	0.0029	--	1
Bromodichloromethane	ND		mg/kg	0.00082	--	1
1,4-Dioxane	ND		mg/kg	0.082	--	1

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1532945

Project Number: 38677-007 **Report Date:** 12/21/15

SAMPLE RESULTS

Lab ID: L1532945-08 Date Collected: 12/14/15 12:20

Client ID: B218-1214-1220-10-15 Date Received: 12/14/15

Sample Location: WASHINGTON, D.C. Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS-5035 - Westborough Lab						
cis-1,3-Dichloropropene	ND		mg/kg	0.00082	--	1
Toluene	ND		mg/kg	0.0012	--	1
4-Methyl-2-pentanone	ND		mg/kg	0.0082	--	1
Tetrachloroethene	ND		mg/kg	0.00082	--	1
trans-1,3-Dichloropropene	ND		mg/kg	0.00082	--	1
1,3-Dichloropropene, Total	ND		mg/kg	0.00082	--	1
1,1,2-Trichloroethane	ND		mg/kg	0.0012	--	1
Dibromochloromethane	ND		mg/kg	0.00082	--	1
1,2-Dibromoethane	ND		mg/kg	0.0033	--	1
2-Hexanone	ND		mg/kg	0.0082	--	1
Chlorobenzene	ND		mg/kg	0.00082	--	1
Ethylbenzene	ND		mg/kg	0.00082	--	1
p/m-Xylene	ND		mg/kg	0.0016	--	1
o-Xylene	ND		mg/kg	0.0016	--	1
Xylenes, Total	ND		mg/kg	0.0016	--	1
Styrene	ND		mg/kg	0.0016	--	1
Bromoform	ND		mg/kg	0.0033	--	1
Isopropylbenzene	ND		mg/kg	0.00082	--	1
1,1,2,2-Tetrachloroethane	ND		mg/kg	0.00082	--	1
1,3-Dichlorobenzene	ND		mg/kg	0.0041	--	1
1,4-Dichlorobenzene	ND		mg/kg	0.0041	--	1
1,2-Dichlorobenzene	ND		mg/kg	0.0041	--	1
1,2-Dibromo-3-chloropropane	ND		mg/kg	0.0041	--	1
1,2,4-Trichlorobenzene	ND		mg/kg	0.0041	--	1
1,2,3-Trichlorobenzene	ND		mg/kg	0.0041	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	96		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	104		70-130

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1532945

Project Number: 38677-007 **Report Date:** 12/21/15

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 12/17/15 21:06
Analyst: MS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS-5035 - Westborough Lab for sample(s): 01-05,07-08 Batch: WG850987-3					
Dichlorodifluoromethane	ND		mg/kg	0.010	--
Chloromethane	ND		mg/kg	0.0050	--
Vinyl chloride	ND		mg/kg	0.0020	--
Bromomethane	ND		mg/kg	0.0020	--
Chloroethane	ND		mg/kg	0.0020	--
Trichlorofluoromethane	ND		mg/kg	0.0050	--
1,1-Dichloroethene	ND		mg/kg	0.0010	--
Carbon disulfide	ND		mg/kg	0.010	--
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		mg/kg	0.020	--
Methylene chloride	ND		mg/kg	0.0050	--
Acetone	ND		mg/kg	0.036	--
trans-1,2-Dichloroethene	ND		mg/kg	0.0015	--
Methyl Acetate	ND		mg/kg	0.0040	--
Methyl tert butyl ether	ND		mg/kg	0.0020	--
1,1-Dichloroethane	ND		mg/kg	0.0015	--
cis-1,2-Dichloroethene	ND		mg/kg	0.0010	--
1,2-Dichloroethene, Total	ND		mg/kg	0.0010	--
Cyclohexane	ND		mg/kg	0.020	--
Bromochloromethane	ND		mg/kg	0.0050	--
Chloroform	ND		mg/kg	0.0015	--
Carbon tetrachloride	ND		mg/kg	0.0010	--
1,1,1-Trichloroethane	ND		mg/kg	0.0010	--
2-Butanone	ND		mg/kg	0.010	--
Benzene	ND		mg/kg	0.0010	--
1,2-Dichloroethane	ND		mg/kg	0.0010	--
Methyl cyclohexane	ND		mg/kg	0.0040	--
Trichloroethene	ND		mg/kg	0.0010	--
1,2-Dichloropropane	ND		mg/kg	0.0035	--
Bromodichloromethane	ND		mg/kg	0.0010	--

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1532945

Project Number: 38677-007 **Report Date:** 12/21/15

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 12/17/15 21:06
Analyst: MS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS-5035 - Westborough Lab for sample(s): 01-05,07-08 Batch: WG850987-3					
1,4-Dioxane	ND		mg/kg	0.10	--
cis-1,3-Dichloropropene	ND		mg/kg	0.0010	--
Toluene	ND		mg/kg	0.0015	--
4-Methyl-2-pentanone	ND		mg/kg	0.010	--
Tetrachloroethene	ND		mg/kg	0.0010	--
trans-1,3-Dichloropropene	ND		mg/kg	0.0010	--
1,3-Dichloropropene, Total	ND		mg/kg	0.0010	--
1,1,2-Trichloroethane	ND		mg/kg	0.0015	--
Dibromochloromethane	ND		mg/kg	0.0010	--
1,2-Dibromoethane	ND		mg/kg	0.0040	--
2-Hexanone	ND		mg/kg	0.010	--
Chlorobenzene	ND		mg/kg	0.0010	--
Ethylbenzene	ND		mg/kg	0.0010	--
p/m-Xylene	ND		mg/kg	0.0020	--
o-Xylene	ND		mg/kg	0.0020	--
Xylenes, Total	ND		mg/kg	0.0020	--
Styrene	ND		mg/kg	0.0020	--
Bromoform	ND		mg/kg	0.0040	--
Isopropylbenzene	ND		mg/kg	0.0010	--
1,1,2,2-Tetrachloroethane	ND		mg/kg	0.0010	--
1,3-Dichlorobenzene	ND		mg/kg	0.0050	--
1,4-Dichlorobenzene	ND		mg/kg	0.0050	--
1,2-Dichlorobenzene	ND		mg/kg	0.0050	--
1,2-Dibromo-3-chloropropane	ND		mg/kg	0.0050	--
1,2,4-Trichlorobenzene	ND		mg/kg	0.0050	--
1,2,3-Trichlorobenzene	ND		mg/kg	0.0050	--

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1532945

Project Number: 38677-007 **Report Date:** 12/21/15

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 12/17/15 21:06
Analyst: MS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS-5035 - Westborough Lab for sample(s): 01-05,07-08 Batch: WG850987-3					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	93		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	101		70-130

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1532945

Project Number: 38677-007 **Report Date:** 12/21/15

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 12/17/15 21:06
Analyst: MS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS-5035 - Westborough Lab for sample(s): 06 Batch: WG850988-3					
Dichlorodifluoromethane	ND		mg/kg	0.50	--
Chloromethane	ND		mg/kg	0.25	--
Vinyl chloride	ND		mg/kg	0.10	--
Bromomethane	ND		mg/kg	0.10	--
Chloroethane	ND		mg/kg	0.10	--
Trichlorofluoromethane	ND		mg/kg	0.25	--
1,1-Dichloroethene	ND		mg/kg	0.050	--
Carbon disulfide	ND		mg/kg	0.50	--
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		mg/kg	1.0	--
Methylene chloride	ND		mg/kg	0.25	--
Acetone	ND		mg/kg	1.8	--
trans-1,2-Dichloroethene	ND		mg/kg	0.075	--
Methyl Acetate	ND		mg/kg	0.20	--
Methyl tert butyl ether	ND		mg/kg	0.10	--
1,1-Dichloroethane	ND		mg/kg	0.075	--
cis-1,2-Dichloroethene	ND		mg/kg	0.050	--
1,2-Dichloroethene, Total	ND		mg/kg	0.050	--
Cyclohexane	ND		mg/kg	1.0	--
Bromochloromethane	ND		mg/kg	0.25	--
Chloroform	ND		mg/kg	0.075	--
Carbon tetrachloride	ND		mg/kg	0.050	--
1,1,1-Trichloroethane	ND		mg/kg	0.050	--
2-Butanone	ND		mg/kg	0.50	--
Benzene	ND		mg/kg	0.050	--
1,2-Dichloroethane	ND		mg/kg	0.050	--
Methyl cyclohexane	ND		mg/kg	0.20	--
Trichloroethene	ND		mg/kg	0.050	--
1,2-Dichloropropane	ND		mg/kg	0.18	--
Bromodichloromethane	ND		mg/kg	0.050	--

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1532945

Project Number: 38677-007 **Report Date:** 12/21/15

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 12/17/15 21:06
Analyst: MS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS-5035 - Westborough Lab for sample(s): 06 Batch: WG850988-3					
1,4-Dioxane	ND		mg/kg	5.0	--
cis-1,3-Dichloropropene	ND		mg/kg	0.050	--
Toluene	ND		mg/kg	0.075	--
4-Methyl-2-pentanone	ND		mg/kg	0.50	--
Tetrachloroethene	ND		mg/kg	0.050	--
trans-1,3-Dichloropropene	ND		mg/kg	0.050	--
1,3-Dichloropropene, Total	ND		mg/kg	0.050	--
1,1,2-Trichloroethane	ND		mg/kg	0.075	--
Dibromochloromethane	ND		mg/kg	0.050	--
1,2-Dibromoethane	ND		mg/kg	0.20	--
2-Hexanone	ND		mg/kg	0.50	--
Chlorobenzene	ND		mg/kg	0.050	--
Ethylbenzene	ND		mg/kg	0.050	--
p/m-Xylene	ND		mg/kg	0.10	--
o-Xylene	ND		mg/kg	0.10	--
Xylenes, Total	ND		mg/kg	0.10	--
Styrene	ND		mg/kg	0.10	--
Bromoform	ND		mg/kg	0.20	--
Isopropylbenzene	ND		mg/kg	0.050	--
1,1,2,2-Tetrachloroethane	ND		mg/kg	0.050	--
1,3-Dichlorobenzene	ND		mg/kg	0.25	--
1,4-Dichlorobenzene	ND		mg/kg	0.25	--
1,2-Dichlorobenzene	ND		mg/kg	0.25	--
1,2-Dibromo-3-chloropropane	ND		mg/kg	0.25	--
1,2,4-Trichlorobenzene	ND		mg/kg	0.25	--
1,2,3-Trichlorobenzene	ND		mg/kg	0.25	--

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1532945

Project Number: 38677-007 **Report Date:** 12/21/15

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 12/17/15 21:06
Analyst: MS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS-5035 - Westborough Lab for sample(s): 06 Batch: WG850988-3					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	93		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	101		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007
Lab Number: L1532945
Report Date: 12/21/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS-5035 - Westborough Lab Associated sample(s): 01-05,07-08 Batch: WG850987-1 WG850987-2								
Dichlorodifluoromethane	109		115		30-146	5		30
Chloromethane	91		98		52-130	7		30
Vinyl chloride	102		110		67-130	8		30
Bromomethane	129		140		57-147	8		30
Chloroethane	131		142		50-151	8		30
Trichlorofluoromethane	137		**152**	Q	70-139	10		30
1,1-Dichloroethene	105		115		65-135	9		30
Carbon disulfide	96		104		59-130	8		30
1,1,2-Trichloro-1,2,2-Trifluoroethane	132		**140**	Q	50-139	6		30
Acrolein	82		86		51-130	5		30
Methylene chloride	99		104		70-130	5		30
Acetone	84		90		54-140	7		30
trans-1,2-Dichloroethene	97		106		70-130	9		30
Methyl Acetate	82		90		51-146	9		30
Methyl tert butyl ether	86		93		66-130	8		30
1,1-Dichloroethane	94		102		70-130	8		30
Acrylonitrile	93		99		70-130	6		30
cis-1,2-Dichloroethene	97		104		70-130	7		30
2,2-Dichloropropane	95		103		70-130	8		30
Cyclohexane	109		117		59-142	7		30
Bromochloromethane	101		108		70-130	7		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007

Lab Number: L1532945
Report Date: 12/21/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS-5035 - Westborough Lab Associated sample(s): 01-05,07-08 Batch: WG850987-1 WG850987-2								
Chloroform	97		104		70-130	7		30
Carbon tetrachloride	108		117		70-130	8		30
1,1,1-Trichloroethane	103		110		70-130	7		30
2-Butanone	77		84		70-130	9		30
1,1-Dichloropropene	102		111		70-130	8		30
Benzene	98		106		70-130	8		30
1,2-Dichloroethane	90		98		70-130	9		30
Methyl cyclohexane	127		**135**	Q	70-130	6		30
Trichloroethene	101		106		70-130	5		30
1,2-Dichloropropane	95		101		70-130	6		30
Bromodichloromethane	95		102		70-130	7		30
1,4-Dioxane	88		88		65-136	0		30
2-Chloroethylvinyl ether	89		98		70-130	10		30
cis-1,3-Dichloropropene	93		100		70-130	7		30
Toluene	91		98		70-130	7		30
4-Methyl-2-pentanone	79		85		70-130	7		30
Tetrachloroethene	99		104		70-130	5		30
trans-1,3-Dichloropropene	90		96		70-130	6		30
1,1,2-Trichloroethane	95		103		70-130	8		30
Dibromochloromethane	91		99		70-130	8		30
1,3-Dichloropropane	92		100		69-130	8		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007
Lab Number: L1532945
Report Date: 12/21/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS-5035 - Westborough Lab Associated sample(s): 01-05,07-08 Batch: WG850987-1 WG850987-2								
1,2-Dibromoethane	93		100		70-130	7		30
2-Hexanone	**60**	Q	**67**	Q	70-130	11		30
Chlorobenzene	94		101		70-130	7		30
Ethylbenzene	94		101		70-130	7		30
1,1,1,2-Tetrachloroethane	92		100		70-130	8		30
p/m-Xylene	96		104		70-130	8		30
o-Xylene	94		101		70-130	7		30
Styrene	93		100		70-130	7		30
Bromoform	85		92		70-130	8		30
Isopropylbenzene	95		102		70-130	7		30
Bromobenzene	91		97		70-130	6		30
1,1,2,2-Tetrachloroethane	91		97		70-130	6		30
o-Chlorotoluene	74		98		70-130	28		30
1,3,5-Trimethylbenzene	94		100		70-130	6		30
1,2,3-Trichloropropane	91		98		68-130	7		30
p-Chlorotoluene	90		97		70-130	7		30
tert-Butylbenzene	94		101		70-130	7		30
1,2,4-Trimethylbenzene	91		98		70-130	7		30
sec-Butylbenzene	98		106		70-130	8		30
p-Isopropyltoluene	95		101		70-130	6		30
1,3-Dichlorobenzene	94		100		70-130	6		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007
Lab Number: L1532945
Report Date: 12/21/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS-5035 - Westborough Lab Associated sample(s): 01-05,07-08 Batch: WG850987-1 WG850987-2								
1,4-Dichlorobenzene	93		98		70-130	5		30
n-Butylbenzene	99		106		70-130	7		30
1,2-Dichlorobenzene	93		98		70-130	5		30
1,2-Dibromo-3-chloropropane	88		93		68-130	6		30
Hexachlorobutadiene	85		89		67-130	5		30
1,2,4-Trichlorobenzene	85		89		70-130	5		30
Naphthalene	85		91		70-130	7		30
1,2,3-Trichlorobenzene	85		89		70-130	5		30
tert-Butyl Alcohol	68		75		40-160	10		30
Tertiary-Amyl Methyl Ether	84		90		70-130	7		30
Isopropyl Ether	83		89		70-130	7		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	93		94		70-130
Toluene-d8	97		98		70-130
4-Bromofluorobenzene	94		94		70-130
Dibromofluoromethane	101		102		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007
Lab Number: L1532945
Report Date: 12/21/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS-5035 - Westborough Lab Associated sample(s): 06 Batch: WG850988-1 WG850988-2								
Dichlorodifluoromethane	109		115		30-146	5		30
Chloromethane	91		98		52-130	7		30
Vinyl chloride	102		110		67-130	8		30
Bromomethane	129		140		57-147	8		30
Chloroethane	131		142		50-151	8		30
Trichlorofluoromethane	137		**152**	Q	70-139	10		30
1,1-Dichloroethene	105		115		65-135	9		30
Carbon disulfide	96		104		59-130	8		30
1,1,2-Trichloro-1,2,2-Trifluoroethane	132		**140**	Q	50-139	6		30
Acrolein	82		86		51-130	5		30
Methylene chloride	99		104		70-130	5		30
Acetone	84		90		54-140	7		30
trans-1,2-Dichloroethene	97		106		70-130	9		30
Methyl Acetate	82		90		51-146	9		30
Methyl tert butyl ether	86		93		66-130	8		30
1,1-Dichloroethane	94		102		70-130	8		30
Acrylonitrile	93		99		70-130	6		30
cis-1,2-Dichloroethene	97		104		70-130	7		30
2,2-Dichloropropane	95		103		70-130	8		30
Cyclohexane	109		117		59-142	7		30
Bromochloromethane	101		108		70-130	7		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007
Lab Number: L1532945
Report Date: 12/21/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS-5035 - Westborough Lab Associated sample(s): 06 Batch: WG850988-1 WG850988-2								
Chloroform	97		104		70-130	7		30
Carbon tetrachloride	108		117		70-130	8		30
1,1,1-Trichloroethane	103		110		70-130	7		30
2-Butanone	77		84		70-130	9		30
1,1-Dichloropropene	102		111		70-130	8		30
Benzene	98		106		70-130	8		30
1,2-Dichloroethane	90		98		70-130	9		30
Methyl cyclohexane	127		**135**	Q	70-130	6		30
Trichloroethene	101		106		70-130	5		30
1,2-Dichloropropane	95		101		70-130	6		30
Bromodichloromethane	95		102		70-130	7		30
1,4-Dioxane	88		88		65-136	0		30
2-Chloroethylvinyl ether	89		98		70-130	10		30
cis-1,3-Dichloropropene	93		100		70-130	7		30
Toluene	91		98		70-130	7		30
4-Methyl-2-pentanone	79		85		70-130	7		30
Tetrachloroethene	99		104		70-130	5		30
trans-1,3-Dichloropropene	90		96		70-130	6		30
1,1,2-Trichloroethane	95		103		70-130	8		30
Dibromochloromethane	91		99		70-130	8		30
1,3-Dichloropropane	92		100		69-130	8		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007
Lab Number: L1532945
Report Date: 12/21/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS-5035 - Westborough Lab Associated sample(s): 06 Batch: WG850988-1 WG850988-2								
1,2-Dibromoethane	93		100		70-130	7		30
2-Hexanone	**60**	Q	**67**	Q	70-130	11		30
Chlorobenzene	94		101		70-130	7		30
Ethylbenzene	94		101		70-130	7		30
1,1,1,2-Tetrachloroethane	92		100		70-130	8		30
p/m-Xylene	96		104		70-130	8		30
o-Xylene	94		101		70-130	7		30
Styrene	93		100		70-130	7		30
Bromoform	85		92		70-130	8		30
Isopropylbenzene	95		102		70-130	7		30
Bromobenzene	91		97		70-130	6		30
1,1,2,2-Tetrachloroethane	91		97		70-130	6		30
o-Chlorotoluene	74		98		70-130	28		30
1,3,5-Trimethylbenzene	94		100		70-130	6		30
1,2,3-Trichloropropane	91		98		68-130	7		30
p-Chlorotoluene	90		97		70-130	7		30
tert-Butylbenzene	94		101		70-130	7		30
1,2,4-Trimethylbenzene	91		98		70-130	7		30
sec-Butylbenzene	98		106		70-130	8		30
p-Isopropyltoluene	95		101		70-130	6		30
1,3-Dichlorobenzene	94		100		70-130	6		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007
Lab Number: L1532945
Report Date: 12/21/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS-5035 - Westborough Lab Associated sample(s): 06 Batch: WG850988-1 WG850988-2								
1,4-Dichlorobenzene	93		98		70-130	5		30
n-Butylbenzene	99		106		70-130	7		30
1,2-Dichlorobenzene	93		98		70-130	5		30
1,2-Dibromo-3-chloropropane	88		93		68-130	6		30
Hexachlorobutadiene	85		89		67-130	5		30
1,2,4-Trichlorobenzene	85		89		70-130	5		30
Naphthalene	85		91		70-130	7		30
1,2,3-Trichlorobenzene	85		89		70-130	5		30
tert-Butyl Alcohol	68		75		40-160	10		30
Tertiary-Amyl Methyl Ether	84		90		70-130	7		30
Isopropyl Ether	83		89		70-130	7		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	93		94		70-130
Toluene-d8	97		98		70-130
4-Bromofluorobenzene	94		94		70-130
Dibromofluoromethane	101		102		70-130

SEMIVOLATILES

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007
Lab Number: L1532945
Report Date: 12/21/15

SAMPLE RESULTS

Lab ID:	L1532945-01	Date Collected:	12/14/15 10:05
Client ID:	B212-1214-1005-0-5	Date Received:	12/14/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8270D	Extraction Date:	12/16/15 21:59
Analytical Date:	12/18/15 13:21		
Analyst:	RC		
Percent Solids:	83%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Naphthalene	ND		mg/kg	0.20	--	1
2-Methylnaphthalene	ND		mg/kg	0.23	--	1
2-Chloronaphthalene	ND		mg/kg	0.20	--	1
Acenaphthylene	ND		mg/kg	0.16	--	1
Acenaphthene	ND		mg/kg	0.16	--	1
Fluorene	ND		mg/kg	0.20	--	1
Phenanthrene	ND		mg/kg	0.12	--	1
Anthracene	ND		mg/kg	0.12	--	1
Fluoranthene	ND		mg/kg	0.12	--	1
Pyrene	ND		mg/kg	0.12	--	1
Benzo(a)anthracene	ND		mg/kg	0.12	--	1
Chrysene	ND		mg/kg	0.12	--	1
Benzo(b)fluoranthene	ND		mg/kg	0.12	--	1
Benzo(k)fluoranthene	ND		mg/kg	0.12	--	1
Benzo(a)pyrene	ND		mg/kg	0.16	--	1
Indeno(1,2,3-cd)pyrene	ND		mg/kg	0.16	--	1
Dibenzo(a,h)anthracene	ND		mg/kg	0.12	--	1
Benzo(ghi)perylene	ND		mg/kg	0.16	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	69		23-120
2-Fluorobiphenyl	70		30-120
4-Terphenyl-d14	72		18-120

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007
Lab Number: L1532945
Report Date: 12/21/15

SAMPLE RESULTS

Lab ID:	L1532945-02	Date Collected:	12/14/15 10:05
Client ID:	B212-1214-1005-5-10	Date Received:	12/14/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8270D	Extraction Date:	12/16/15 21:59
Analytical Date:	12/18/15 13:49		
Analyst:	RC		
Percent Solids:	87%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Naphthalene	ND		mg/kg	0.18	--	1
2-Methylnaphthalene	ND		mg/kg	0.22	--	1
2-Chloronaphthalene	ND		mg/kg	0.18	--	1
Acenaphthylene	ND		mg/kg	0.15	--	1
Acenaphthene	ND		mg/kg	0.15	--	1
Fluorene	ND		mg/kg	0.18	--	1
Phenanthrene	ND		mg/kg	0.11	--	1
Anthracene	ND		mg/kg	0.11	--	1
Fluoranthene	ND		mg/kg	0.11	--	1
Pyrene	ND		mg/kg	0.11	--	1
Benzo(a)anthracene	ND		mg/kg	0.11	--	1
Chrysene	ND		mg/kg	0.11	--	1
Benzo(b)fluoranthene	ND		mg/kg	0.11	--	1
Benzo(k)fluoranthene	ND		mg/kg	0.11	--	1
Benzo(a)pyrene	ND		mg/kg	0.15	--	1
Indeno(1,2,3-cd)pyrene	ND		mg/kg	0.15	--	1
Dibenzo(a,h)anthracene	ND		mg/kg	0.11	--	1
Benzo(ghi)perylene	ND		mg/kg	0.15	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	60		23-120
2-Fluorobiphenyl	67		30-120
4-Terphenyl-d14	57		18-120

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007
Lab Number: L1532945
Report Date: 12/21/15

SAMPLE RESULTS

Lab ID:	L1532945-03	Date Collected:	12/14/15 11:20
Client ID:	B217-1214-1120-0-5	Date Received:	12/14/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8270D	Extraction Date:	12/16/15 21:59
Analytical Date:	12/18/15 11:38		
Analyst:	RC		
Percent Solids:	83%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Naphthalene	ND		mg/kg	0.20	--	1
2-Methylnaphthalene	ND		mg/kg	0.23	--	1
2-Chloronaphthalene	ND		mg/kg	0.20	--	1
Acenaphthylene	ND		mg/kg	0.16	--	1
Acenaphthene	ND		mg/kg	0.16	--	1
Fluorene	ND		mg/kg	0.20	--	1
Phenanthrene	ND		mg/kg	0.12	--	1
Anthracene	ND		mg/kg	0.12	--	1
Fluoranthene	ND		mg/kg	0.12	--	1
Pyrene	ND		mg/kg	0.12	--	1
Benzo(a)anthracene	ND		mg/kg	0.12	--	1
Chrysene	ND		mg/kg	0.12	--	1
Benzo(b)fluoranthene	ND		mg/kg	0.12	--	1
Benzo(k)fluoranthene	ND		mg/kg	0.12	--	1
Benzo(a)pyrene	ND		mg/kg	0.16	--	1
Indeno(1,2,3-cd)pyrene	ND		mg/kg	0.16	--	1
Dibenzo(a,h)anthracene	ND		mg/kg	0.12	--	1
Benzo(ghi)perylene	ND		mg/kg	0.16	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	73		23-120
2-Fluorobiphenyl	72		30-120
4-Terphenyl-d14	61		18-120

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007
Lab Number: L1532945
Report Date: 12/21/15

SAMPLE RESULTS

Lab ID:	L1532945-04	Date Collected:	12/14/15 11:25
Client ID:	B217-1214-1125-5-10	Date Received:	12/14/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8270D	Extraction Date:	12/16/15 21:59
Analytical Date:	12/18/15 12:04		
Analyst:	RC		
Percent Solids:	88%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Naphthalene	ND		mg/kg	0.19	--	1
2-Methylnaphthalene	ND		mg/kg	0.22	--	1
2-Chloronaphthalene	ND		mg/kg	0.19	--	1
Acenaphthylene	ND		mg/kg	0.15	--	1
Acenaphthene	ND		mg/kg	0.15	--	1
Fluorene	ND		mg/kg	0.19	--	1
Phenanthrene	ND		mg/kg	0.11	--	1
Anthracene	ND		mg/kg	0.11	--	1
Fluoranthene	ND		mg/kg	0.11	--	1
Pyrene	ND		mg/kg	0.11	--	1
Benzo(a)anthracene	ND		mg/kg	0.11	--	1
Chrysene	ND		mg/kg	0.11	--	1
Benzo(b)fluoranthene	ND		mg/kg	0.11	--	1
Benzo(k)fluoranthene	ND		mg/kg	0.11	--	1
Benzo(a)pyrene	ND		mg/kg	0.15	--	1
Indeno(1,2,3-cd)pyrene	ND		mg/kg	0.15	--	1
Dibenzo(a,h)anthracene	ND		mg/kg	0.11	--	1
Benzo(ghi)perylene	ND		mg/kg	0.15	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	70		23-120
2-Fluorobiphenyl	69		30-120
4-Terphenyl-d14	62		18-120

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007
Lab Number: L1532945
Report Date: 12/21/15

SAMPLE RESULTS

Lab ID:	L1532945-05	Date Collected:	12/14/15 11:30
Client ID:	B217-1214-1130-10-15	Date Received:	12/14/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8270D	Extraction Date:	12/16/15 21:59
Analytical Date:	12/18/15 14:16		
Analyst:	RC		
Percent Solids:	88%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Naphthalene	ND		mg/kg	0.18	--	1
2-Methylnaphthalene	ND		mg/kg	0.22	--	1
2-Chloronaphthalene	ND		mg/kg	0.18	--	1
Acenaphthylene	ND		mg/kg	0.15	--	1
Acenaphthene	ND		mg/kg	0.15	--	1
Fluorene	ND		mg/kg	0.18	--	1
Phenanthrene	ND		mg/kg	0.11	--	1
Anthracene	ND		mg/kg	0.11	--	1
Fluoranthene	ND		mg/kg	0.11	--	1
Pyrene	ND		mg/kg	0.11	--	1
Benzo(a)anthracene	ND		mg/kg	0.11	--	1
Chrysene	ND		mg/kg	0.11	--	1
Benzo(b)fluoranthene	ND		mg/kg	0.11	--	1
Benzo(k)fluoranthene	ND		mg/kg	0.11	--	1
Benzo(a)pyrene	ND		mg/kg	0.15	--	1
Indeno(1,2,3-cd)pyrene	ND		mg/kg	0.15	--	1
Dibenzo(a,h)anthracene	ND		mg/kg	0.11	--	1
Benzo(ghi)perylene	ND		mg/kg	0.15	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	60		23-120
2-Fluorobiphenyl	63		30-120
4-Terphenyl-d14	65		18-120

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007
Lab Number: L1532945
Report Date: 12/21/15

SAMPLE RESULTS

Lab ID:	L1532945-06	Date Collected:	12/14/15 12:10
Client ID:	B218-1214-1210-0-5	Date Received:	12/14/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8270D	Extraction Date:	12/16/15 21:59
Analytical Date:	12/18/15 12:31		
Analyst:	RC		
Percent Solids:	85%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Naphthalene	0.31		mg/kg	0.19	--	1
2-Methylnaphthalene	ND		mg/kg	0.23	--	1
2-Chloronaphthalene	ND		mg/kg	0.19	--	1
Acenaphthylene	ND		mg/kg	0.15	--	1
Acenaphthene	0.79		mg/kg	0.15	--	1
Fluorene	0.43		mg/kg	0.19	--	1
Phenanthrene	3.7		mg/kg	0.12	--	1
Anthracene	0.76		mg/kg	0.12	--	1
Fluoranthene	4.0		mg/kg	0.12	--	1
Pyrene	3.1		mg/kg	0.12	--	1
Benzo(a)anthracene	1.5		mg/kg	0.12	--	1
Chrysene	1.5		mg/kg	0.12	--	1
Benzo(b)fluoranthene	1.6		mg/kg	0.12	--	1
Benzo(k)fluoranthene	0.69		mg/kg	0.12	--	1
Benzo(a)pyrene	1.2		mg/kg	0.15	--	1
Indeno(1,2,3-cd)pyrene	0.86		mg/kg	0.15	--	1
Dibenzo(a,h)anthracene	0.18		mg/kg	0.12	--	1
Benzo(ghi)perylene	0.77		mg/kg	0.15	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	85		23-120
2-Fluorobiphenyl	79		30-120
4-Terphenyl-d14	64		18-120

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007
Lab Number: L1532945
Report Date: 12/21/15

SAMPLE RESULTS

Lab ID:	L1532945-07	Date Collected:	12/14/15 12:15
Client ID:	B218-1214-1215-5-10	Date Received:	12/14/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8270D	Extraction Date:	12/16/15 21:59
Analytical Date:	12/18/15 12:58		
Analyst:	RC		
Percent Solids:	89%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Naphthalene	ND		mg/kg	0.18	--	1
2-Methylnaphthalene	ND		mg/kg	0.22	--	1
2-Chloronaphthalene	ND		mg/kg	0.18	--	1
Acenaphthylene	ND		mg/kg	0.15	--	1
Acenaphthene	ND		mg/kg	0.15	--	1
Fluorene	ND		mg/kg	0.18	--	1
Phenanthrene	ND		mg/kg	0.11	--	1
Anthracene	ND		mg/kg	0.11	--	1
Fluoranthene	ND		mg/kg	0.11	--	1
Pyrene	ND		mg/kg	0.11	--	1
Benzo(a)anthracene	ND		mg/kg	0.11	--	1
Chrysene	ND		mg/kg	0.11	--	1
Benzo(b)fluoranthene	ND		mg/kg	0.11	--	1
Benzo(k)fluoranthene	ND		mg/kg	0.11	--	1
Benzo(a)pyrene	ND		mg/kg	0.15	--	1
Indeno(1,2,3-cd)pyrene	ND		mg/kg	0.15	--	1
Dibenzo(a,h)anthracene	ND		mg/kg	0.11	--	1
Benzo(ghi)perylene	ND		mg/kg	0.15	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	88		23-120
2-Fluorobiphenyl	86		30-120
4-Terphenyl-d14	78		18-120

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007
Lab Number: L1532945
Report Date: 12/21/15

SAMPLE RESULTS

Lab ID:	L1532945-08	Date Collected:	12/14/15 12:20
Client ID:	B218-1214-1220-10-15	Date Received:	12/14/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8270D	Extraction Date:	12/16/15 21:59
Analytical Date:	12/18/15 14:17		
Analyst:	RC		
Percent Solids:	90%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Naphthalene	ND		mg/kg	0.18	--	1
2-Methylnaphthalene	ND		mg/kg	0.22	--	1
2-Chloronaphthalene	ND		mg/kg	0.18	--	1
Acenaphthylene	ND		mg/kg	0.15	--	1
Acenaphthene	ND		mg/kg	0.15	--	1
Fluorene	ND		mg/kg	0.18	--	1
Phenanthrene	0.25		mg/kg	0.11	--	1
Anthracene	ND		mg/kg	0.11	--	1
Fluoranthene	0.26		mg/kg	0.11	--	1
Pyrene	0.21		mg/kg	0.11	--	1
Benzo(a)anthracene	0.11		mg/kg	0.11	--	1
Chrysene	0.11		mg/kg	0.11	--	1
Benzo(b)fluoranthene	0.12		mg/kg	0.11	--	1
Benzo(k)fluoranthene	ND		mg/kg	0.11	--	1
Benzo(a)pyrene	ND		mg/kg	0.15	--	1
Indeno(1,2,3-cd)pyrene	ND		mg/kg	0.15	--	1
Dibenzo(a,h)anthracene	ND		mg/kg	0.11	--	1
Benzo(ghi)perylene	ND		mg/kg	0.15	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	70		23-120
2-Fluorobiphenyl	70		30-120
4-Terphenyl-d14	59		18-120

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007

Lab Number: L1532945
Report Date: 12/21/15

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 12/17/15 09:33
Analyst: RC

Extraction Method: EPA 3546
Extraction Date: 12/16/15 14:53

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-08 Batch: WG850316-1					
Naphthalene	ND		mg/kg	0.16	--
2-Methylnaphthalene	ND		mg/kg	0.20	--
2-Chloronaphthalene	ND		mg/kg	0.16	--
Acenaphthylene	ND		mg/kg	0.13	--
Acenaphthene	ND		mg/kg	0.13	--
Fluorene	ND		mg/kg	0.16	--
Phenanthrene	ND		mg/kg	0.099	--
Anthracene	ND		mg/kg	0.099	--
Fluoranthene	ND		mg/kg	0.099	--
Pyrene	ND		mg/kg	0.099	--
Benzo(a)anthracene	ND		mg/kg	0.099	--
Chrysene	ND		mg/kg	0.099	--
Benzo(b)fluoranthene	ND		mg/kg	0.099	--
Benzo(k)fluoranthene	ND		mg/kg	0.099	--
Benzo(a)pyrene	ND		mg/kg	0.13	--
Indeno(1,2,3-cd)pyrene	ND		mg/kg	0.13	--
Dibenzo(a,h)anthracene	ND		mg/kg	0.099	--
Benzo(ghi)perylene	ND		mg/kg	0.13	--

Tentatively Identified Compounds

No Tentatively Identified Compounds	ND	mg/kg

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007

Lab Number: L1532945
Report Date: 12/21/15

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 12/17/15 09:33
Analyst: RC

Extraction Method: EPA 3546
Extraction Date: 12/16/15 14:53

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-08 Batch: WG850316-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	77		25-120
Phenol-d6	80		10-120
Nitrobenzene-d5	78		23-120
2-Fluorobiphenyl	76		30-120
2,4,6-Tribromophenol	79		10-136
4-Terphenyl-d14	84		18-120

Lab Control Sample Analysis
Batch Quality Control

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007
Lab Number: L1532945
Report Date: 12/21/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-08 Batch: WG850316-2 WG850316-3								
n-Nitrosodimethylamine	76		69		22-100	10		50
Pyridine	58		60		10-93	3		50
Benzaldehyde	84		83		40-140	1		50
Aniline	58		61		40-140	5		50
Phenol	90		87		26-90	3		50
Bis(2-chloroethyl)ether	78		79		40-140	1		50
2-Chlorophenol	83		84		25-102	1		50
Benzyl Alcohol	94		95		40-140	1		50
2-Methylphenol	90		87		30-130.	3		50
Bis(2-chloroisopropyl)ether	78		80		40-140	3		50
Acetophenone	93		91		14-144	2		50
n-Nitrosodi-n-propylamine	90		88		32-121	2		50
3-Methylphenol/4-Methylphenol	99		97		30-130	2		50
Hexachloroethane	77		79		40-140	3		50
Nitrobenzene	84		85		40-140	1		50
Isophorone	88		88		40-140	0		50
2-Nitrophenol	84		85		30-130	1		50
2,4-Dimethylphenol	101		100		30-130	1		50
Bis(2-chloroethoxy)methane	83		88		40-117	6		50
Benzoic Acid	18		10		10-123	**57**	Q	50
2,4-Dichlorophenol	90		88		30-130	2		50

Lab Control Sample Analysis
Batch Quality Control

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007
Lab Number: L1532945
Report Date: 12/21/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-08 Batch: WG850316-2 WG850316-3								
1,2,4-Trichlorobenzene	78		79		38-107	1		50
Naphthalene	81		80		40-140	1		50
4-Chloroaniline	108		109		40-140	1		50
Hexachlorobutadiene	78		80		40-140	3		50
Caprolactam	103		102		15-130	1		50
p-Chloro-m-cresol	95		91		26-103	4		50
2-Methylnaphthalene	82		80		40-140	2		50
Hexachlorocyclopentadiene	68		68		40-140	0		50
1,2,4,5-Tetrachlorobenzene	84		82		40-117	2		50
2,4,6-Trichlorophenol	88		85		30-130	3		50
2,4,5-Trichlorophenol	92		89		30-130	3		50
Biphenyl	85		82		54-104	4		50
2-Chloronaphthalene	84		83		40-140	1		50
2-Nitroaniline	89		89		47-134	0		50
Dimethyl phthalate	90		86		40-140	5		50
2,6-Dinitrotoluene	87		88		40-140	1		50
Acenaphthylene	87		84		40-140	4		50
3-Nitroaniline	69		69		26-129	0		50
Acenaphthene	84		83		31-137	1		50
2,4-Dinitrophenol	59		49		4-130	19		50
4-Nitrophenol	97		96		11-114	1		50

Lab Control Sample Analysis
Batch Quality Control

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007
Lab Number: L1532945
Report Date: 12/21/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-08 Batch: WG850316-2 WG850316-3								
2,4-Dinitrotoluene	88		88		28-89	0		50
Dibenzofuran	86		84		40-140	2		50
2,3,4,6-Tetrachlorophenol	92		84		58-132	9		50
Diethyl phthalate	94		90		40-140	4		50
Fluorene	88		84		40-140	5		50
4-Chlorophenyl phenyl ether	83		82		40-140	1		50
4-Nitroaniline	87		89		41-125	2		50
4,6-Dinitro-o-cresol	87		80		10-130	8		50
NDPA/DPA	91		89		36-157	2		50
Azobenzene	96		90		40-140	6		50
4-Bromophenyl phenyl ether	86		84		40-140	2		50
Hexachlorobenzene	87		85		40-140	2		50
Pentachlorophenol	73		68		17-109	7		50
Atrazine	96		96		40-140	0		50
Phenanthrene	88		85		40-140	3		50
Anthracene	91		90		40-140	1		50
Carbazole	93		89		54-128	4		50
Di-n-butylphthalate	93		90		40-140	3		50
Fluoranthene	90		87		40-140	3		50
Benzidine	60		62		10-66	3		50
Pyrene	89		87		35-142	2		50

Lab Control Sample Analysis
Batch Quality Control

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007
Lab Number: L1532945
Report Date: 12/21/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-08 Batch: WG850316-2 WG850316-3								
Butyl benzyl phthalate	97		90		40-140	7		50
3,3'-Dichlorobenzidine	48		50		40-140	4		50
Benzo(a)anthracene	86		87		40-140	1		50
Chrysene	88		86		40-140	2		50
Bis(2-ethylhexyl)phthalate	96		92		40-140	4		50
Di-n-octylphthalate	96		94		40-140	2		50
Benzo(b)fluoranthene	80		82		40-140	2		50
Benzo(k)fluoranthene	88		88		40-140	0		50
Benzo(a)pyrene	86		87		40-140	1		50
Indeno(1,2,3-cd)pyrene	84		84		40-140	0		50
Dibenzo(a,h)anthracene	82		82		40-140	0		50
Benzo(ghi)perylene	86		85		40-140	1		50

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	82		81		25-120
Phenol-d6	87		87		10-120
Nitrobenzene-d5	80		82		23-120
2-Fluorobiphenyl	80		82		30-120
2,4,6-Tribromophenol	82		84		10-136
4-Terphenyl-d14	86		82		18-120

PETROLEUM HYDROCARBONS

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007
Lab Number: L1532945
Report Date: 12/21/15

SAMPLE RESULTS

Lab ID:	L1532945-01	Date Collected:	12/14/15 10:05
Client ID:	B212-1214-1005-0-5	Date Received:	12/14/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	
Analytical Method:	1,8015C(M)		
Analytical Date:	12/17/15 17:36		
Analyst:	KD		
Percent Solids:	83%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Gasoline Range Organics - Westborough Lab						
Gasoline Range Organics	ND		mg/kg	2.0	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,1,1-Trifluorotoluene	92		70-130
4-Bromofluorobenzene	84		70-130

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007
Lab Number: L1532945
Report Date: 12/21/15

SAMPLE RESULTS

Lab ID:	L1532945-01	Date Collected:	12/14/15 10:05
Client ID:	B212-1214-1005-0-5	Date Received:	12/14/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	ALPHA OP-013
Analytical Method:	1,8015D(M)	Extraction Date:	12/16/15 12:01
Analytical Date:	12/17/15 21:24		
Analyst:	ML		
Percent Solids:	83%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Diesel/Other Range Organics by GC-FID - Mansfield Lab						
DRO (C10-C28)	1.76		ug/kg	1.67	--	1
ORO (C28-C40)	ND		ug/kg	0.873	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
o-Terphenyl	96		50-130
d50-Tetracosane	90		50-130

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007
Lab Number: L1532945
Report Date: 12/21/15

SAMPLE RESULTS

Lab ID:	L1532945-02	Date Collected:	12/14/15 10:05
Client ID:	B212-1214-1005-5-10	Date Received:	12/14/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	
Analytical Method:	1,8015C(M)		
Analytical Date:	12/17/15 19:38		
Analyst:	KD		
Percent Solids:	87%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Gasoline Range Organics - Westborough Lab						
Gasoline Range Organics	ND		mg/kg	2.5	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,1,1-Trifluorotoluene	98		70-130
4-Bromofluorobenzene	90		70-130

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007
Lab Number: L1532945
Report Date: 12/21/15

SAMPLE RESULTS

Lab ID:	L1532945-02	Date Collected:	12/14/15 10:05
Client ID:	B212-1214-1005-5-10	Date Received:	12/14/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	ALPHA OP-013
Analytical Method:	1,8015D(M)	Extraction Date:	12/16/15 12:01
Analytical Date:	12/17/15 22:52		
Analyst:	ML		
Percent Solids:	87%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Diesel/Other Range Organics by GC-FID - Mansfield Lab						
DRO (C10-C28)	ND		ug/kg	1.57	--	1
ORO (C28-C40)	ND		ug/kg	0.823	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
o-Terphenyl	97		50-130
d50-Tetracosane	93		50-130

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007
Lab Number: L1532945
Report Date: 12/21/15

SAMPLE RESULTS

Lab ID:	L1532945-03	Date Collected:	12/14/15 11:20
Client ID:	B217-1214-1120-0-5	Date Received:	12/14/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	
Analytical Method:	1,8015C(M)		
Analytical Date:	12/17/15 20:19		
Analyst:	KD		
Percent Solids:	83%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Gasoline Range Organics - Westborough Lab						
Gasoline Range Organics	ND		mg/kg	2.5	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,1,1-Trifluorotoluene	94		70-130
4-Bromofluorobenzene	87		70-130

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007
Lab Number: L1532945
Report Date: 12/21/15

SAMPLE RESULTS

Lab ID:	L1532945-03	Date Collected:	12/14/15 11:20
Client ID:	B217-1214-1120-0-5	Date Received:	12/14/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	ALPHA OP-013
Analytical Method:	1,8015D(M)	Extraction Date:	12/16/15 12:01
Analytical Date:	12/18/15 00:20		
Analyst:	ML		
Percent Solids:	83%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Diesel/Other Range Organics by GC-FID - Mansfield Lab						
DRO (C10-C28)	4.15		ug/kg	1.66	--	1
ORO (C28-C40)	4.27		ug/kg	0.870	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
o-Terphenyl	95		50-130
d50-Tetracosane	93		50-130

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007
Lab Number: L1532945
Report Date: 12/21/15

SAMPLE RESULTS

Lab ID:	L1532945-04	Date Collected:	12/14/15 11:25
Client ID:	B217-1214-1125-5-10	Date Received:	12/14/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	
Analytical Method:	1,8015C(M)		
Analytical Date:	12/18/15 01:44		
Analyst:	KD		
Percent Solids:	88%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Gasoline Range Organics - Westborough Lab						
Gasoline Range Organics	ND		mg/kg	2.2	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,1,1-Trifluorotoluene	97		70-130
4-Bromofluorobenzene	88		70-130

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007
Lab Number: L1532945
Report Date: 12/21/15

SAMPLE RESULTS

Lab ID:	L1532945-04	Date Collected:	12/14/15 11:25
Client ID:	B217-1214-1125-5-10	Date Received:	12/14/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	ALPHA OP-013
Analytical Method:	1,8015D(M)	Extraction Date:	12/16/15 12:01
Analytical Date:	12/18/15 01:48		
Analyst:	ML		
Percent Solids:	88%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Diesel/Other Range Organics by GC-FID - Mansfield Lab						
DRO (C10-C28)	ND		ug/kg	1.58	--	1
ORO (C28-C40)	ND		ug/kg	0.831	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
o-Terphenyl	96		50-130
d50-Tetracosane	92		50-130

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007
Lab Number: L1532945
Report Date: 12/21/15

SAMPLE RESULTS

Lab ID:	L1532945-05	Date Collected:	12/14/15 11:30
Client ID:	B217-1214-1130-10-15	Date Received:	12/14/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	
Analytical Method:	1,8015C(M)		
Analytical Date:	12/18/15 02:24		
Analyst:	KD		
Percent Solids:	88%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Gasoline Range Organics - Westborough Lab						
Gasoline Range Organics	ND		mg/kg	2.5	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,1,1-Trifluorotoluene	99		70-130
4-Bromofluorobenzene	90		70-130

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007
Lab Number: L1532945
Report Date: 12/21/15

SAMPLE RESULTS

Lab ID:	L1532945-05	Date Collected:	12/14/15 11:30
Client ID:	B217-1214-1130-10-15	Date Received:	12/14/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	ALPHA OP-013
Analytical Method:	1,8015D(M)	Extraction Date:	12/16/15 12:01
Analytical Date:	12/18/15 03:17		
Analyst:	ML		
Percent Solids:	88%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Diesel/Other Range Organics by GC-FID - Mansfield Lab						
DRO (C10-C28)	ND		ug/kg	1.55	--	1
ORO (C28-C40)	ND		ug/kg	0.814	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
o-Terphenyl	98		50-130
d50-Tetracosane	93		50-130

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007
Lab Number: L1532945
Report Date: 12/21/15

SAMPLE RESULTS

Lab ID:	L1532945-06	Date Collected:	12/14/15 12:10
Client ID:	B218-1214-1210-0-5	Date Received:	12/14/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	
Analytical Method:	1,8015C(M)		
Analytical Date:	12/17/15 23:42		
Analyst:	KD		
Percent Solids:	85%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Gasoline Range Organics - Westborough Lab						
Gasoline Range Organics	6.9		mg/kg	2.9	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,1,1-Trifluorotoluene	98		70-130
4-Bromofluorobenzene	92		70-130

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007
Lab Number: L1532945
Report Date: 12/21/15

SAMPLE RESULTS

Lab ID:	L1532945-06	Date Collected:	12/14/15 12:10
Client ID:	B218-1214-1210-0-5	Date Received:	12/14/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	ALPHA OP-013
Analytical Method:	1,8015D(M)	Extraction Date:	12/16/15 12:01
Analytical Date:	12/18/15 04:45		
Analyst:	ML		
Percent Solids:	85%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Diesel/Other Range Organics by GC-FID - Mansfield Lab						
DRO (C10-C28)	55.7		ug/kg	1.59	--	1
ORO (C28-C40)	122		ug/kg	0.833	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
o-Terphenyl	96		50-130
d50-Tetracosane	91		50-130

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007
Lab Number: L1532945
Report Date: 12/21/15

SAMPLE RESULTS

Lab ID:	L1532945-07	Date Collected:	12/14/15 12:15
Client ID:	B218-1214-1215-5-10	Date Received:	12/14/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	
Analytical Method:	1,8015C(M)		
Analytical Date:	12/18/15 03:05		
Analyst:	KD		
Percent Solids:	89%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Gasoline Range Organics - Westborough Lab						
Gasoline Range Organics	ND		mg/kg	2.1	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,1,1-Trifluorotoluene	99		70-130
4-Bromofluorobenzene	89		70-130

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007
Lab Number: L1532945
Report Date: 12/21/15

SAMPLE RESULTS

Lab ID:	L1532945-07	Date Collected:	12/14/15 12:15
Client ID:	B218-1214-1215-5-10	Date Received:	12/14/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	ALPHA OP-013
Analytical Method:	1,8015D(M)	Extraction Date:	12/16/15 12:01
Analytical Date:	12/18/15 06:13		
Analyst:	ML		
Percent Solids:	89%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Diesel/Other Range Organics by GC-FID - Mansfield Lab						
DRO (C10-C28)	3.01		ug/kg	1.53	--	1
ORO (C28-C40)	16.2		ug/kg	0.800	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
o-Terphenyl	98		50-130
d50-Tetracosane	92		50-130

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007
Lab Number: L1532945
Report Date: 12/21/15

SAMPLE RESULTS

Lab ID:	L1532945-08	Date Collected:	12/14/15 12:20
Client ID:	B218-1214-1220-10-15	Date Received:	12/14/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	
Analytical Method:	1,8015C(M)		
Analytical Date:	12/18/15 03:45		
Analyst:	KD		
Percent Solids:	90%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Gasoline Range Organics - Westborough Lab						
Gasoline Range Organics	ND		mg/kg	2.4	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,1,1-Trifluorotoluene	97		70-130
4-Bromofluorobenzene	90		70-130

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007
Lab Number: L1532945
Report Date: 12/21/15

SAMPLE RESULTS

Lab ID:	L1532945-08	Date Collected:	12/14/15 12:20
Client ID:	B218-1214-1220-10-15	Date Received:	12/14/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	ALPHA OP-013
Analytical Method:	1,8015D(M)	Extraction Date:	12/16/15 12:01
Analytical Date:	12/18/15 07:42		
Analyst:	ML		
Percent Solids:	90%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Diesel/Other Range Organics by GC-FID - Mansfield Lab						
DRO (C10-C28)	4.01		ug/kg	1.54	--	1
ORO (C28-C40)	18.4		ug/kg	0.805	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
o-Terphenyl	97		50-130
d50-Tetracosane	92		50-130

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007

Lab Number: L1532945
Report Date: 12/21/15

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8015D(M)
Analytical Date: 12/17/15 16:57
Analyst: ML

Extraction Method: ALPHA OP-013
Extraction Date: 12/16/15 12:01

Parameter	Result	Qualifier	Units	RL	MDL
Diesel/Other Range Organics by GC-FID - Mansfield Lab for sample(s): 01-08 Batch: WG850253-1					
DRO (C10-C28)	ND		ug/kg	1.40	--
ORO (C28-C40)	ND		ug/kg	0.733	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
o-Terphenyl	97		50-130
d50-Tetracosane	92		50-130

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1532945

Project Number: 38677-007 **Report Date:** 12/21/15

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8015C(M)
Analytical Date: 12/17/15 10:49
Analyst: KD

Parameter	Result	Qualifier	Units	RL	MDL
Gasoline Range Organics - Westborough Lab for sample(s): 01-03 Batch: WG851071-3					
Gasoline Range Organics	ND		mg/kg	2.5	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,1,1-Trifluorotoluene	98		70-130
4-Bromofluorobenzene	88		70-130

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1532945

Project Number: 38677-007 **Report Date:** 12/21/15

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8015C(M)
Analytical Date: 12/17/15 23:01
Analyst: KD

Parameter	Result	Qualifier	Units	RL	MDL
Gasoline Range Organics - Westborough Lab for sample(s): 04-08 Batch: WG851112-3					
Gasoline Range Organics	ND		mg/kg	2.5	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,1,1-Trifluorotoluene	97		70-130
4-Bromofluorobenzene	87		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007
Lab Number: L1532945
Report Date: 12/21/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Diesel/Other Range Organics by GC-FID - Mansfield Lab Associated sample(s): 01-08 Batch: WG850253-2 WG850253-3								
Nonane (C9)	79		79		50-130	0		30
Decane (C10)	74		80		50-130	8		30
Dodecane (C12)	77		86		50-130	11		30
Tetradecane (C14)	79		92		50-130	15		30
Hexadecane (C16)	102		103		50-130	1		30
Octadecane (C18)	103		105		50-130	2		30
Nonadecane (C19)	95		96		50-130	1		30
Eicosane (C20)	97		99		50-130	2		30
Docosane (C22)	99		100		50-130	1		30
Tetracosane (C24)	98		100		50-130	2		30
Hexacosane (C26)	97		99		50-130	2		30
Octacosane (C28)	100		103		50-130	3		30
Triacontane (C30)	95		101		50-130	6		30
Hexatriacontane (C36)	56		87		50-130	**43**	Q	30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
o-Terphenyl	98		99		50-130
d50-Tetracosane	93		93		50-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: ST. E'S EAST CAMPUS

Project Number: 38677-007

Lab Number: L1532945

Report Date: 12/21/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Gasoline Range Organics - Westborough Lab Associated sample(s): 01-03 Batch: WG851071-1 WG851071-2								
Gasoline Range Organics	98		100		80-120	2		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,1,1-Trifluorotoluene	103		106		70-130
4-Bromofluorobenzene	95		98		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007
Lab Number: L1532945
Report Date: 12/21/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Gasoline Range Organics - Westborough Lab Associated sample(s): 04-08 Batch: WG851112-1 WG851112-2								
Gasoline Range Organics	96		99		80-120	3		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,1,1-Trifluorotoluene	100		104		70-130
4-Bromofluorobenzene	92		95		70-130

Matrix Spike Analysis
Batch Quality Control

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007
Lab Number: L1532945
Report Date: 12/21/15

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Gasoline Range Organics - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG851071-5 QC Sample: L1532945-01 Client ID: B212-1214-1005-0-5												
Gasoline Range Organics	ND	16.4	16	97		-	-		80-120	-		20

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria
1,1,1-Trifluorotoluene	98				70-130
4-Bromofluorobenzene	90				70-130

Matrix Spike Analysis
Batch Quality Control

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007
Lab Number: L1532945
Report Date: 12/21/15

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Gasoline Range Organics - Westborough Lab Associated sample(s): 04-08 QC Batch ID: WG851112-5 QC Sample: L1532945-06 Client ID: B218-1214-1210-0-5												
Gasoline Range Organics	6.9	23.5	31	104		-	-		80-120	-		20

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria
1,1,1-Trifluorotoluene	92				70-130
4-Bromofluorobenzene	86				70-130

Lab Duplicate Analysis
Batch Quality Control

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007

Lab Number: L1532945
Report Date: 12/21/15

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Gasoline Range Organics - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG851071-4 QC Sample: L1532945-01 Client ID: B212-1214-1005-0-5						
Gasoline Range Organics	ND	ND	mg/kg	NC		20

Surrogate	%Recovery	Qualifier	%Recovery	Qualifier	Acceptance Criteria
1,1,1-Trifluorotoluene	92		100		70-130
4-Bromofluorobenzene	84		91		70-130

Lab Duplicate Analysis
Batch Quality Control

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007

Lab Number: L1532945
Report Date: 12/21/15

Parameter	Native Sample	Duplicate Sample	Units	RPD		RPD Limits
Gasoline Range Organics - Westborough Lab Associated sample(s): 04-08 QC Batch ID: WG851112-4 QC Sample: L1532945-06 Client ID: B218-1214-1210-0-5						
Gasoline Range Organics	6.9	8.9	mg/kg	**25**	Q	20

Surrogate	%Recovery	Qualifier	%Recovery	Qualifier	Acceptance Criteria
1,1,1-Trifluorotoluene	98		90		70-130
4-Bromofluorobenzene	92		84		70-130

PCBS

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007
Lab Number: L1532945
Report Date: 12/21/15

SAMPLE RESULTS

Lab ID:	L1532945-01	Date Collected:	12/14/15 10:05
Client ID:	B212-1214-1005-0-5	Date Received:	12/14/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8082A	Extraction Date:	12/16/15 18:55
Analytical Date:	12/18/15 14:03	Cleanup Method:	EPA 3665A
Analyst:	TQ	Cleanup Date:	12/18/15
Percent Solids:	83%	Cleanup Method:	EPA 3660B
		Cleanup Date:	12/18/15

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		mg/kg	0.0388	--	1	A
Aroclor 1221	ND		mg/kg	0.0388	--	1	A
Aroclor 1232	ND		mg/kg	0.0388	--	1	A
Aroclor 1242	ND		mg/kg	0.0388	--	1	A
Aroclor 1248	ND		mg/kg	0.0388	--	1	A
Aroclor 1254	ND		mg/kg	0.0388	--	1	A
Aroclor 1260	ND		mg/kg	0.0388	--	1	A
Aroclor 1262	ND		mg/kg	0.0388	--	1	A
Aroclor 1268	ND		mg/kg	0.0388	--	1	A
PCBs, Total	ND		mg/kg	0.0388	--	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	74		30-150	A
Decachlorobiphenyl	99		30-150	A
2,4,5,6-Tetrachloro-m-xylene	78		30-150	B
Decachlorobiphenyl	90		30-150	B

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007
Lab Number: L1532945
Report Date: 12/21/15

SAMPLE RESULTS

Lab ID:	L1532945-02	Date Collected:	12/14/15 10:05
Client ID:	B212-1214-1005-5-10	Date Received:	12/14/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8082A	Extraction Date:	12/16/15 18:55
Analytical Date:	12/18/15 14:17	Cleanup Method:	EPA 3665A
Analyst:	TQ	Cleanup Date:	12/18/15
Percent Solids:	87%	Cleanup Method:	EPA 3660B
		Cleanup Date:	12/18/15

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		mg/kg	0.0368	--	1	A
Aroclor 1221	ND		mg/kg	0.0368	--	1	A
Aroclor 1232	ND		mg/kg	0.0368	--	1	A
Aroclor 1242	ND		mg/kg	0.0368	--	1	A
Aroclor 1248	ND		mg/kg	0.0368	--	1	A
Aroclor 1254	ND		mg/kg	0.0368	--	1	A
Aroclor 1260	ND		mg/kg	0.0368	--	1	A
Aroclor 1262	ND		mg/kg	0.0368	--	1	A
Aroclor 1268	ND		mg/kg	0.0368	--	1	A
PCBs, Total	ND		mg/kg	0.0368	--	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	65		30-150	A
Decachlorobiphenyl	92		30-150	A
2,4,5,6-Tetrachloro-m-xylene	69		30-150	B
Decachlorobiphenyl	83		30-150	B

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007
Lab Number: L1532945
Report Date: 12/21/15

SAMPLE RESULTS

Lab ID:	L1532945-03	Date Collected:	12/14/15 11:20
Client ID:	B217-1214-1120-0-5	Date Received:	12/14/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8082A	Extraction Date:	12/16/15 18:55
Analytical Date:	12/18/15 14:30	Cleanup Method:	EPA 3665A
Analyst:	TQ	Cleanup Date:	12/18/15
Percent Solids:	83%	Cleanup Method:	EPA 3660B
		Cleanup Date:	12/18/15

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		mg/kg	0.0378	--	1	A
Aroclor 1221	ND		mg/kg	0.0378	--	1	A
Aroclor 1232	ND		mg/kg	0.0378	--	1	A
Aroclor 1242	ND		mg/kg	0.0378	--	1	A
Aroclor 1248	ND		mg/kg	0.0378	--	1	A
Aroclor 1254	ND		mg/kg	0.0378	--	1	A
Aroclor 1260	ND		mg/kg	0.0378	--	1	A
Aroclor 1262	ND		mg/kg	0.0378	--	1	A
Aroclor 1268	ND		mg/kg	0.0378	--	1	A
PCBs, Total	ND		mg/kg	0.0378	--	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	69		30-150	A
Decachlorobiphenyl	95		30-150	A
2,4,5,6-Tetrachloro-m-xylene	73		30-150	B
Decachlorobiphenyl	84		30-150	B

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007
Lab Number: L1532945
Report Date: 12/21/15

SAMPLE RESULTS

Lab ID:	L1532945-04	Date Collected:	12/14/15 11:25
Client ID:	B217-1214-1125-5-10	Date Received:	12/14/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8082A	Extraction Date:	12/16/15 18:55
Analytical Date:	12/18/15 14:44	Cleanup Method:	EPA 3665A
Analyst:	TQ	Cleanup Date:	12/18/15
Percent Solids:	88%	Cleanup Method:	EPA 3660B
		Cleanup Date:	12/18/15

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		mg/kg	0.0368	--	1	A
Aroclor 1221	ND		mg/kg	0.0368	--	1	A
Aroclor 1232	ND		mg/kg	0.0368	--	1	A
Aroclor 1242	ND		mg/kg	0.0368	--	1	A
Aroclor 1248	ND		mg/kg	0.0368	--	1	A
Aroclor 1254	ND		mg/kg	0.0368	--	1	A
Aroclor 1260	ND		mg/kg	0.0368	--	1	A
Aroclor 1262	ND		mg/kg	0.0368	--	1	A
Aroclor 1268	ND		mg/kg	0.0368	--	1	A
PCBs, Total	ND		mg/kg	0.0368	--	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	67		30-150	A
Decachlorobiphenyl	94		30-150	A
2,4,5,6-Tetrachloro-m-xylene	71		30-150	B
Decachlorobiphenyl	83		30-150	B

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007
Lab Number: L1532945
Report Date: 12/21/15

SAMPLE RESULTS

Lab ID:	L1532945-05	Date Collected:	12/14/15 11:30
Client ID:	B217-1214-1130-10-15	Date Received:	12/14/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8082A	Extraction Date:	12/16/15 18:55
Analytical Date:	12/18/15 14:58	Cleanup Method:	EPA 3665A
Analyst:	TQ	Cleanup Date:	12/18/15
Percent Solids:	88%	Cleanup Method:	EPA 3660B
		Cleanup Date:	12/18/15

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		mg/kg	0.0371	--	1	A
Aroclor 1221	ND		mg/kg	0.0371	--	1	A
Aroclor 1232	ND		mg/kg	0.0371	--	1	A
Aroclor 1242	ND		mg/kg	0.0371	--	1	A
Aroclor 1248	ND		mg/kg	0.0371	--	1	A
Aroclor 1254	ND		mg/kg	0.0371	--	1	A
Aroclor 1260	ND		mg/kg	0.0371	--	1	A
Aroclor 1262	ND		mg/kg	0.0371	--	1	A
Aroclor 1268	ND		mg/kg	0.0371	--	1	A
PCBs, Total	ND		mg/kg	0.0371	--	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	65		30-150	A
Decachlorobiphenyl	96		30-150	A
2,4,5,6-Tetrachloro-m-xylene	68		30-150	B
Decachlorobiphenyl	86		30-150	B

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007
Lab Number: L1532945
Report Date: 12/21/15

SAMPLE RESULTS

Lab ID:	L1532945-06	Date Collected:	12/14/15 12:10
Client ID:	B218-1214-1210-0-5	Date Received:	12/14/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8082A	Extraction Date:	12/16/15 18:55
Analytical Date:	12/18/15 15:12	Cleanup Method:	EPA 3665A
Analyst:	TQ	Cleanup Date:	12/18/15
Percent Solids:	85%	Cleanup Method:	EPA 3660B
		Cleanup Date:	12/18/15

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		mg/kg	0.0369	--	1	A
Aroclor 1221	ND		mg/kg	0.0369	--	1	A
Aroclor 1232	ND		mg/kg	0.0369	--	1	A
Aroclor 1242	ND		mg/kg	0.0369	--	1	A
Aroclor 1248	ND		mg/kg	0.0369	--	1	A
Aroclor 1254	ND		mg/kg	0.0369	--	1	A
Aroclor 1260	ND		mg/kg	0.0369	--	1	A
Aroclor 1262	ND		mg/kg	0.0369	--	1	A
Aroclor 1268	ND		mg/kg	0.0369	--	1	A
PCBs, Total	ND		mg/kg	0.0369	--	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	61		30-150	A
Decachlorobiphenyl	78		30-150	A
2,4,5,6-Tetrachloro-m-xylene	59		30-150	B
Decachlorobiphenyl	73		30-150	B

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007
Lab Number: L1532945
Report Date: 12/21/15

SAMPLE RESULTS

Lab ID:	L1532945-07	Date Collected:	12/14/15 12:15
Client ID:	B218-1214-1215-5-10	Date Received:	12/14/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8082A	Extraction Date:	12/16/15 18:55
Analytical Date:	12/18/15 15:26	Cleanup Method:	EPA 3665A
Analyst:	TQ	Cleanup Date:	12/18/15
Percent Solids:	89%	Cleanup Method:	EPA 3660B
		Cleanup Date:	12/18/15

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		mg/kg	0.0368	--	1	A
Aroclor 1221	ND		mg/kg	0.0368	--	1	A
Aroclor 1232	ND		mg/kg	0.0368	--	1	A
Aroclor 1242	ND		mg/kg	0.0368	--	1	A
Aroclor 1248	ND		mg/kg	0.0368	--	1	A
Aroclor 1254	ND		mg/kg	0.0368	--	1	A
Aroclor 1260	ND		mg/kg	0.0368	--	1	A
Aroclor 1262	ND		mg/kg	0.0368	--	1	A
Aroclor 1268	ND		mg/kg	0.0368	--	1	A
PCBs, Total	ND		mg/kg	0.0368	--	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	71		30-150	A
Decachlorobiphenyl	83		30-150	A
2,4,5,6-Tetrachloro-m-xylene	75		30-150	B
Decachlorobiphenyl	81		30-150	B

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007
Lab Number: L1532945
Report Date: 12/21/15

SAMPLE RESULTS

Lab ID:	L1532945-08	Date Collected:	12/14/15 12:20
Client ID:	B218-1214-1220-10-15	Date Received:	12/14/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8082A	Extraction Date:	12/16/15 18:55
Analytical Date:	12/18/15 15:39	Cleanup Method:	EPA 3665A
Analyst:	TQ	Cleanup Date:	12/18/15
Percent Solids:	90%	Cleanup Method:	EPA 3660B
		Cleanup Date:	12/18/15

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		mg/kg	0.0358	--	1	A
Aroclor 1221	ND		mg/kg	0.0358	--	1	A
Aroclor 1232	ND		mg/kg	0.0358	--	1	A
Aroclor 1242	ND		mg/kg	0.0358	--	1	A
Aroclor 1248	ND		mg/kg	0.0358	--	1	A
Aroclor 1254	ND		mg/kg	0.0358	--	1	A
Aroclor 1260	ND		mg/kg	0.0358	--	1	A
Aroclor 1262	ND		mg/kg	0.0358	--	1	A
Aroclor 1268	ND		mg/kg	0.0358	--	1	A
PCBs, Total	ND		mg/kg	0.0358	--	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	66		30-150	A
Decachlorobiphenyl	64		30-150	A
2,4,5,6-Tetrachloro-m-xylene	68		30-150	B
Decachlorobiphenyl	70		30-150	B

Project Name: ST. E'S EAST CAMPUS

Project Number: 38677-007

Lab Number: L1532945

Report Date: 12/21/15

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8082A
Analytical Date: 12/18/15 17:16
Analyst: TQ

Extraction Method: EPA 3546
Extraction Date: 12/16/15 18:55
Cleanup Method: EPA 3665A
Cleanup Date: 12/18/15
Cleanup Method: EPA 3660B
Cleanup Date: 12/18/15

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01-08 Batch: WG850393-1						
Aroclor 1016	ND		mg/kg	0.0330	--	A
Aroclor 1221	ND		mg/kg	0.0330	--	A
Aroclor 1232	ND		mg/kg	0.0330	--	A
Aroclor 1242	ND		mg/kg	0.0330	--	A
Aroclor 1248	ND		mg/kg	0.0330	--	A
Aroclor 1254	ND		mg/kg	0.0330	--	A
Aroclor 1260	ND		mg/kg	0.0330	--	A
Aroclor 1262	ND		mg/kg	0.0330	--	A
Aroclor 1268	ND		mg/kg	0.0330	--	A
PCBs, Total	ND		mg/kg	0.0330	--	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	69		30-150	A
Decachlorobiphenyl	98		30-150	A
2,4,5,6-Tetrachloro-m-xylene	73		30-150	B
Decachlorobiphenyl	86		30-150	B

Lab Control Sample Analysis
Batch Quality Control

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007
Lab Number: L1532945
Report Date: 12/21/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01-08 Batch: WG850393-2 WG850393-3									
Aroclor 1016	68		75		40-140	10		50	A
Aroclor 1260	73		84		40-140	14		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	63		70		30-150	A
Decachlorobiphenyl	88		103		30-150	A
2,4,5,6-Tetrachloro-m-xylene	66		71		30-150	B
Decachlorobiphenyl	78		91		30-150	B

METALS

Project Name:	ST. E'S EAST CAMPUS	**Lab Number:**	L1532945
Project Number:	38677-007	**Report Date:**	12/21/15

SAMPLE RESULTS

Lab ID:	L1532945-01	Date Collected:	12/14/15 10:05
Client ID:	B212-1214-1005-0-5	Date Received:	12/14/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Soil		
Percent Solids:	83%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Arsenic, Total	4.0		mg/kg	0.47	--	1	12/16/15 07:40	12/17/15 17:34	EPA 3050B	1,6010C	BM
Barium, Total	48		mg/kg	0.47	--	1	12/16/15 07:40	12/17/15 17:34	EPA 3050B	1,6010C	BM
Cadmium, Total	ND		mg/kg	0.47	--	1	12/16/15 07:40	12/17/15 17:34	EPA 3050B	1,6010C	BM
Chromium, Total	10		mg/kg	0.47	--	1	12/16/15 07:40	12/17/15 17:34	EPA 3050B	1,6010C	BM
Lead, Total	22		mg/kg	2.4	--	1	12/16/15 07:40	12/17/15 17:34	EPA 3050B	1,6010C	BM
Mercury, Total	ND		mg/kg	0.08	--	1	12/16/15 05:30	12/17/15 19:06	EPA 7471B	1,7471B	DB
Selenium, Total	ND		mg/kg	0.95	--	1	12/16/15 07:40	12/17/15 17:34	EPA 3050B	1,6010C	BM
Silver, Total	ND		mg/kg	0.47	--	1	12/16/15 07:40	12/17/15 17:34	EPA 3050B	1,6010C	BM

Project Name:	ST. E'S EAST CAMPUS	**Lab Number:**	L1532945
Project Number:	38677-007	**Report Date:**	12/21/15

SAMPLE RESULTS

Lab ID:	L1532945-02	Date Collected:	12/14/15 10:05
Client ID:	B212-1214-1005-5-10	Date Received:	12/14/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Soil		
Percent Solids:	87%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Arsenic, Total	4.4		mg/kg	0.46	--	1	12/16/15 07:40	12/17/15 18:23	EPA 3050B	1,6010C	BM
Barium, Total	14		mg/kg	0.46	--	1	12/16/15 07:40	12/17/15 18:23	EPA 3050B	1,6010C	BM
Cadmium, Total	ND		mg/kg	0.46	--	1	12/16/15 07:40	12/17/15 18:23	EPA 3050B	1,6010C	BM
Chromium, Total	14		mg/kg	0.46	--	1	12/16/15 07:40	12/17/15 18:23	EPA 3050B	1,6010C	BM
Lead, Total	5.7		mg/kg	2.3	--	1	12/16/15 07:40	12/17/15 18:23	EPA 3050B	1,6010C	BM
Mercury, Total	ND		mg/kg	0.07	--	1	12/16/15 05:30	12/17/15 19:08	EPA 7471B	1,7471B	DB
Selenium, Total	ND		mg/kg	0.92	--	1	12/16/15 07:40	12/17/15 18:23	EPA 3050B	1,6010C	BM
Silver, Total	ND		mg/kg	0.46	--	1	12/16/15 07:40	12/17/15 18:23	EPA 3050B	1,6010C	BM

Project Name:	ST. E'S EAST CAMPUS	**Lab Number:**	L1532945
Project Number:	38677-007	**Report Date:**	12/21/15

SAMPLE RESULTS

Lab ID:	L1532945-03	Date Collected:	12/14/15 11:20
Client ID:	B217-1214-1120-0-5	Date Received:	12/14/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Soil		
Percent Solids:	83%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Arsenic, Total	4.0		mg/kg	0.47	--	1	12/16/15 07:40	12/17/15 18:27	EPA 3050B	1,6010C	BM
Barium, Total	61		mg/kg	0.47	--	1	12/16/15 07:40	12/17/15 18:27	EPA 3050B	1,6010C	BM
Cadmium, Total	ND		mg/kg	0.47	--	1	12/16/15 07:40	12/17/15 18:27	EPA 3050B	1,6010C	BM
Chromium, Total	14		mg/kg	0.47	--	1	12/16/15 07:40	12/17/15 18:27	EPA 3050B	1,6010C	BM
Lead, Total	8.2		mg/kg	2.3	--	1	12/16/15 07:40	12/17/15 18:27	EPA 3050B	1,6010C	BM
Mercury, Total	ND		mg/kg	0.08	--	1	12/16/15 05:30	12/17/15 19:10	EPA 7471B	1,7471B	DB
Selenium, Total	ND		mg/kg	0.94	--	1	12/16/15 07:40	12/17/15 18:27	EPA 3050B	1,6010C	BM
Silver, Total	ND		mg/kg	0.47	--	1	12/16/15 07:40	12/17/15 18:27	EPA 3050B	1,6010C	BM

Project Name:	ST. E'S EAST CAMPUS	**Lab Number:**	L1532945
Project Number:	38677-007	**Report Date:**	12/21/15

SAMPLE RESULTS

Lab ID:	L1532945-04	Date Collected:	12/14/15 11:25
Client ID:	B217-1214-1125-5-10	Date Received:	12/14/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Soil		
Percent Solids:	88%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Arsenic, Total	3.4		mg/kg	0.44	--	1	12/16/15 07:40	12/17/15 18:31	EPA 3050B	1,6010C	BM
Barium, Total	19		mg/kg	0.44	--	1	12/16/15 07:40	12/17/15 18:31	EPA 3050B	1,6010C	BM
Cadmium, Total	ND		mg/kg	0.44	--	1	12/16/15 07:40	12/17/15 18:31	EPA 3050B	1,6010C	BM
Chromium, Total	12		mg/kg	0.44	--	1	12/16/15 07:40	12/17/15 18:31	EPA 3050B	1,6010C	BM
Lead, Total	7.3		mg/kg	2.2	--	1	12/16/15 07:40	12/17/15 18:31	EPA 3050B	1,6010C	BM
Mercury, Total	ND		mg/kg	0.07	--	1	12/16/15 05:30	12/17/15 19:15	EPA 7471B	1,7471B	DB
Selenium, Total	ND		mg/kg	0.89	--	1	12/16/15 07:40	12/17/15 18:31	EPA 3050B	1,6010C	BM
Silver, Total	ND		mg/kg	0.44	--	1	12/16/15 07:40	12/17/15 18:31	EPA 3050B	1,6010C	BM

Project Name:	ST. E'S EAST CAMPUS	**Lab Number:**	L1532945
Project Number:	38677-007	**Report Date:**	12/21/15

SAMPLE RESULTS

Lab ID:	L1532945-05	Date Collected:	12/14/15 11:30
Client ID:	B217-1214-1130-10-15	Date Received:	12/14/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Soil		
Percent Solids:	88%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Arsenic, Total	0.90		mg/kg	0.44	--	1	12/16/15 07:40	12/17/15 18:35	EPA 3050B	1,6010C	BM
Barium, Total	9.1		mg/kg	0.44	--	1	12/16/15 07:40	12/17/15 18:35	EPA 3050B	1,6010C	BM
Cadmium, Total	ND		mg/kg	0.44	--	1	12/16/15 07:40	12/17/15 18:35	EPA 3050B	1,6010C	BM
Chromium, Total	4.4		mg/kg	0.44	--	1	12/16/15 07:40	12/17/15 18:35	EPA 3050B	1,6010C	BM
Lead, Total	4.2		mg/kg	2.2	--	1	12/16/15 07:40	12/17/15 18:35	EPA 3050B	1,6010C	BM
Mercury, Total	ND		mg/kg	0.07	--	1	12/16/15 05:30	12/17/15 19:17	EPA 7471B	1,7471B	DB
Selenium, Total	ND		mg/kg	0.88	--	1	12/16/15 07:40	12/17/15 18:35	EPA 3050B	1,6010C	BM
Silver, Total	ND		mg/kg	0.44	--	1	12/16/15 07:40	12/17/15 18:35	EPA 3050B	1,6010C	BM

Project Name:	ST. E'S EAST CAMPUS	**Lab Number:**	L1532945
Project Number:	38677-007	**Report Date:**	12/21/15

SAMPLE RESULTS

Lab ID:	L1532945-06	Date Collected:	12/14/15 12:10
Client ID:	B218-1214-1210-0-5	Date Received:	12/14/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Soil		
Percent Solids:	85%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Arsenic, Total	3.7		mg/kg	0.46	--	1	12/16/15 07:40	12/17/15 18:39	EPA 3050B	1,6010C	BM
Barium, Total	35		mg/kg	0.46	--	1	12/16/15 07:40	12/17/15 18:39	EPA 3050B	1,6010C	BM
Cadmium, Total	ND		mg/kg	0.46	--	1	12/16/15 07:40	12/17/15 18:39	EPA 3050B	1,6010C	BM
Chromium, Total	9.2		mg/kg	0.46	--	1	12/16/15 07:40	12/17/15 18:39	EPA 3050B	1,6010C	BM
Lead, Total	150		mg/kg	2.3	--	1	12/16/15 07:40	12/17/15 18:39	EPA 3050B	1,6010C	BM
Mercury, Total	0.20		mg/kg	0.08	--	1	12/16/15 05:30	12/17/15 19:19	EPA 7471B	1,7471B	DB
Selenium, Total	ND		mg/kg	0.93	--	1	12/16/15 07:40	12/17/15 18:39	EPA 3050B	1,6010C	BM
Silver, Total	ND		mg/kg	0.46	--	1	12/16/15 07:40	12/17/15 18:39	EPA 3050B	1,6010C	BM

Project Name:	ST. E'S EAST CAMPUS	**Lab Number:**	L1532945
Project Number:	38677-007	**Report Date:**	12/21/15

SAMPLE RESULTS

Lab ID:	L1532945-07	Date Collected:	12/14/15 12:15
Client ID:	B218-1214-1215-5-10	Date Received:	12/14/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Soil		
Percent Solids:	89%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Arsenic, Total	3.7		mg/kg	0.44	--	1	12/16/15 07:40	12/17/15 18:42	EPA 3050B	1,6010C	BM
Barium, Total	20		mg/kg	0.44	--	1	12/16/15 07:40	12/17/15 18:42	EPA 3050B	1,6010C	BM
Cadmium, Total	ND		mg/kg	0.44	--	1	12/16/15 07:40	12/17/15 18:42	EPA 3050B	1,6010C	BM
Chromium, Total	14		mg/kg	0.44	--	1	12/16/15 07:40	12/17/15 18:42	EPA 3050B	1,6010C	BM
Lead, Total	6.2		mg/kg	2.2	--	1	12/16/15 07:40	12/17/15 18:42	EPA 3050B	1,6010C	BM
Mercury, Total	ND		mg/kg	0.075	--	1	12/16/15 05:30	12/17/15 19:20	EPA 7471B	1,7471B	DB
Selenium, Total	ND		mg/kg	0.88	--	1	12/16/15 07:40	12/17/15 18:42	EPA 3050B	1,6010C	BM
Silver, Total	ND		mg/kg	0.44	--	1	12/16/15 07:40	12/17/15 18:42	EPA 3050B	1,6010C	BM

Project Name:	ST. E'S EAST CAMPUS	**Lab Number:**	L1532945
Project Number:	38677-007	**Report Date:**	12/21/15

SAMPLE RESULTS

Lab ID:	L1532945-08	Date Collected:	12/14/15 12:20
Client ID:	B218-1214-1220-10-15	Date Received:	12/14/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Soil		
Percent Solids:	90%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Arsenic, Total	2.5		mg/kg	0.44	--	1	12/16/15 07:40	12/17/15 18:46	EPA 3050B	1,6010C	BM
Barium, Total	22		mg/kg	0.44	--	1	12/16/15 07:40	12/17/15 18:46	EPA 3050B	1,6010C	BM
Cadmium, Total	ND		mg/kg	0.44	--	1	12/16/15 07:40	12/17/15 18:46	EPA 3050B	1,6010C	BM
Chromium, Total	8.5		mg/kg	0.44	--	1	12/16/15 07:40	12/17/15 18:46	EPA 3050B	1,6010C	BM
Lead, Total	5.8		mg/kg	2.2	--	1	12/16/15 07:40	12/17/15 18:46	EPA 3050B	1,6010C	BM
Mercury, Total	ND		mg/kg	0.08	--	1	12/16/15 05:30	12/17/15 19:22	EPA 7471B	1,7471B	DB
Selenium, Total	ND		mg/kg	0.87	--	1	12/16/15 07:40	12/17/15 18:46	EPA 3050B	1,6010C	BM
Silver, Total	ND		mg/kg	0.44	--	1	12/16/15 07:40	12/17/15 18:46	EPA 3050B	1,6010C	BM

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1532945

Project Number: 38677-007 **Report Date:** 12/21/15

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 01-08 Batch: WG850070-1										
Mercury, Total	ND		mg/kg	0.08	--	1	12/16/15 05:30	12/17/15 11:57	1,7471B	DB

Prep Information

Digestion Method: EPA 7471B

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 01-08 Batch: WG850111-1										
Arsenic, Total	ND		mg/kg	0.40	--	1	12/16/15 07:40	12/17/15 17:22	1,6010C	BM
Barium, Total	ND		mg/kg	0.40	--	1	12/16/15 07:40	12/17/15 17:22	1,6010C	BM
Cadmium, Total	ND		mg/kg	0.40	--	1	12/16/15 07:40	12/17/15 17:22	1,6010C	BM
Chromium, Total	ND		mg/kg	0.40	--	1	12/16/15 07:40	12/17/15 17:22	1,6010C	BM
Lead, Total	ND		mg/kg	2.0	--	1	12/16/15 07:40	12/17/15 17:22	1,6010C	BM
Selenium, Total	ND		mg/kg	0.80	--	1	12/16/15 07:40	12/17/15 17:22	1,6010C	BM
Silver, Total	ND		mg/kg	0.40	--	1	12/16/15 07:40	12/17/15 17:22	1,6010C	BM

Prep Information

Digestion Method: EPA 3050B

Lab Control Sample Analysis

Batch Quality Control

Project Name: ST. E'S EAST CAMPUS

Project Number: 38677-007

Lab Number: L1532945

Report Date: 12/21/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01-08 Batch: WG850070-2 SRM Lot Number: D088-540								
Mercury, Total	107		-		72-128	-		
Total Metals - Westborough Lab Associated sample(s): 01-08 Batch: WG850111-2 SRM Lot Number: D088-540								
Arsenic, Total	88		-		79-121	-		
Barium, Total	83		-		83-117	-		
Cadmium, Total	86		-		83-117	-		
Chromium, Total	101		-		80-120	-		
Lead, Total	84		-		81-117	-		
Selenium, Total	86		-		78-122	-		
Silver, Total	91		-		75-124	-		

Matrix Spike Analysis
Batch Quality Control

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007

Lab Number: L1532945
Report Date: 12/21/15

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01-08 QC Batch ID: WG850070-4 QC Sample: L1533129-01 Client ID: MS Sample												
Mercury, Total	0.37	0.157	0.78	**261**	Q	-	-		80-120	-		20
Total Metals - Westborough Lab Associated sample(s): 01-08 QC Batch ID: WG850111-4 QC Sample: L1532945-01 Client ID: B212-1214-1005-0-5												
Arsenic, Total	4.0	11.5	12	**69**	Q	-	-		75-125	-		20
Barium, Total	48	192	180	**69**	Q	-	-		75-125	-		20
Cadmium, Total	ND	4.89	4.0	82		-	-		75-125	-		20
Chromium, Total	10	19.2	28	94		-	-		75-125	-		20
Lead, Total	22	48.9	44	**45**	Q	-	-		75-125	-		20
Selenium, Total	ND	11.5	8.1	**70**	Q	-	-		75-125	-		20
Silver, Total	ND	28.8	24	83		-	-		75-125	-		20

Lab Duplicate Analysis
Batch Quality Control

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007

Lab Number: L1532945
Report Date: 12/21/15

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01-08 QC Batch ID: WG850070-3 QC Sample: L1533129-01 Client ID: DUP Sample						
Mercury, Total	0.37	0.37	mg/kg	0		20
Total Metals - Westborough Lab Associated sample(s): 01-08 QC Batch ID: WG850111-3 QC Sample: L1532945-01 Client ID: B212-1214-1005-0-5						
Arsenic, Total	4.0	5.2	mg/kg	**26**	Q	20
Barium, Total	48	29	mg/kg	**49**	Q	20
Cadmium, Total	ND	ND	mg/kg	NC		20
Chromium, Total	10	19	mg/kg	**62**	Q	20
Lead, Total	22	8.5	mg/kg	**89**	Q	20
Selenium, Total	ND	ND	mg/kg	NC		20
Silver, Total	ND	ND	mg/kg	NC		20

INORGANICS
&
MISCELLANEOUS

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007

Lab Number: L1532945
Report Date: 12/21/15

SAMPLE RESULTS

Lab ID: L1532945-01
Client ID: B212-1214-1005-0-5
Sample Location: WASHINGTON, D.C.
Matrix: Soil

Date Collected: 12/14/15 10:05
Date Received: 12/14/15
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	83.3		%	0.100	NA	1	-	12/15/15 12:06	30,2540G	RI

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007

Lab Number: L1532945
Report Date: 12/21/15

SAMPLE RESULTS

Lab ID: L1532945-02
Client ID: B212-1214-1005-5-10
Sample Location: WASHINGTON, D.C.
Matrix: Soil

Date Collected: 12/14/15 10:05
Date Received: 12/14/15
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	87.0		%	0.100	NA	1	-	12/15/15 12:06	30,2540G	RI

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007

Lab Number: L1532945
Report Date: 12/21/15

SAMPLE RESULTS

Lab ID: L1532945-03
Client ID: B217-1214-1120-0-5
Sample Location: WASHINGTON, D.C.
Matrix: Soil

Date Collected: 12/14/15 11:20
Date Received: 12/14/15
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	83.3		%	0.100	NA	1	-	12/15/15 12:06	30,2540G	RI

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007

Lab Number: L1532945
Report Date: 12/21/15

SAMPLE RESULTS

Lab ID: L1532945-04
Client ID: B217-1214-1125-5-10
Sample Location: WASHINGTON, D.C.
Matrix: Soil

Date Collected: 12/14/15 11:25
Date Received: 12/14/15
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	88.1		%	0.100	NA	1	-	12/15/15 12:06	30,2540G	RI

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007

Lab Number: L1532945
Report Date: 12/21/15

SAMPLE RESULTS

Lab ID: L1532945-05
Client ID: B217-1214-1130-10-15
Sample Location: WASHINGTON, D.C.
Matrix: Soil

Date Collected: 12/14/15 11:30
Date Received: 12/14/15
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	87.6		%	0.100	NA	1	-	12/15/15 12:06	30,2540G	RI

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007

Lab Number: L1532945
Report Date: 12/21/15

SAMPLE RESULTS

Lab ID: L1532945-06
Client ID: B218-1214-1210-0-5
Sample Location: WASHINGTON, D.C.
Matrix: Soil

Date Collected: 12/14/15 12:10
Date Received: 12/14/15
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	85.2		%	0.100	NA	1	-	12/15/15 12:06	30,2540G	RI

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007

Lab Number: L1532945
Report Date: 12/21/15

SAMPLE RESULTS

Lab ID: L1532945-07
Client ID: B218-1214-1215-5-10
Sample Location: WASHINGTON, D.C.
Matrix: Soil

Date Collected: 12/14/15 12:15
Date Received: 12/14/15
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	89.2		%	0.100	NA	1	-	12/15/15 12:06	30,2540G	RI

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007

Lab Number: L1532945
Report Date: 12/21/15

SAMPLE RESULTS

Lab ID: L1532945-08
Client ID: B218-1214-1220-10-15
Sample Location: WASHINGTON, D.C.
Matrix: Soil

Date Collected: 12/14/15 12:20
Date Received: 12/14/15
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	89.6		%	0.100	NA	1	-	12/15/15 12:06	30,2540G	RI

Lab Duplicate Analysis
Batch Quality Control

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007

Lab Number: L1532945
Report Date: 12/21/15

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-08 QC Batch ID: WG849864-1 QC Sample: L1532945-01 Client ID: B212-1214-1005-0-5						
Solids, Total	83.3	83.3	%	0		20

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007

Lab Number: L1532945
Report Date: 12/21/15

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: 12/15/2015 06:45

Cooler Information	Custody Seal
Cooler	
A	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1532945-01A	Vial MeOH preserved	A	N/A	3.3	Y	Absent	PA-8260HLW(14)
L1532945-01B	Vial water preserved	A	N/A	3.3	Y	Absent	PA-8260HLW(14)
L1532945-01C	Vial water preserved	A	N/A	3.3	Y	Absent	PA-8260HLW(14)
L1532945-01D	Plastic 2oz unpreserved for TS	A	N/A	3.3	Y	Absent	TS(7)
L1532945-01E	Vial Large Septa unpreserved (4o	A	N/A	3.3	Y	Absent	PA-TPH-GRO(14)
L1532945-01E9	Vial MeOH preserved split	A	N/A	3.3	Y	Absent	PA-TPH-GRO(14)
L1532945-01F	Glass 500ml/16oz unpreserved	A	N/A	3.3	Y	Absent	AS-TI(180),BA-TI(180),AG-TI(180),CR-TI(180),PA-8082(14),PB-TI(180),SE-TI(180),HG-T(28),CD-TI(180),PA-8270(14)
L1532945-01X	Glass 100ml unpreserved split	A	N/A	3.3	Y	Absent	A2-TPHDRO/ORO(14)
L1532945-02A	Vial MeOH preserved	A	N/A	3.3	Y	Absent	PA-8260HLW(14)
L1532945-02B	Vial water preserved	A	N/A	3.3	Y	Absent	PA-8260HLW(14)
L1532945-02C	Vial water preserved	A	N/A	3.3	Y	Absent	PA-8260HLW(14)
L1532945-02D	Plastic 2oz unpreserved for TS	A	N/A	3.3	Y	Absent	TS(7)
L1532945-02E	Vial Large Septa unpreserved (4o	A	N/A	3.3	Y	Absent	PA-TPH-GRO(14)
L1532945-02E9	Vial MeOH preserved split	A	N/A	3.3	Y	Absent	PA-TPH-GRO(14)
L1532945-02F	Glass 500ml/16oz unpreserved	A	N/A	3.3	Y	Absent	AS-TI(180),BA-TI(180),AG-TI(180),CR-TI(180),PA-8082(14),PB-TI(180),SE-TI(180),HG-T(28),CD-TI(180),PA-8270(14)
L1532945-02X	Glass 100ml unpreserved split	A	N/A	3.3	Y	Absent	A2-TPHDRO/ORO(14)
L1532945-03A	Vial MeOH preserved	A	N/A	3.3	Y	Absent	PA-8260HLW(14)
L1532945-03B	Vial water preserved	A	N/A	3.3	Y	Absent	PA-8260HLW(14)
L1532945-03C	Vial water preserved	A	N/A	3.3	Y	Absent	PA-8260HLW(14)
L1532945-03D	Plastic 2oz unpreserved for TS	A	N/A	3.3	Y	Absent	TS(7)
L1532945-03E	Vial Large Septa unpreserved (4o	A	N/A	3.3	Y	Absent	PA-TPH-GRO(14)
L1532945-03E9	Vial MeOH preserved split	A	N/A	3.3	Y	Absent	PA-TPH-GRO(14)

*Values in parentheses indicate holding time in days

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007

Lab Number: L1532945
Report Date: 12/21/15

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1532945-03F	Glass 500ml/16oz unpreserved	A	N/A	3.3	Y	Absent	AS-TI(180),BA-TI(180),AG-TI(180),CR-TI(180),PA-8082(14),PB-TI(180),SE-TI(180),HG-T(28),CD-TI(180),PA-8270(14)
L1532945-03X	Glass 100ml unpreserved split	A	N/A	3.3	Y	Absent	A2-TPHDRO/ORO(14)
L1532945-04A	Vial MeOH preserved	A	N/A	3.3	Y	Absent	PA-8260HLW(14)
L1532945-04B	Vial water preserved	A	N/A	3.3	Y	Absent	PA-8260HLW(14)
L1532945-04C	Vial water preserved	A	N/A	3.3	Y	Absent	PA-8260HLW(14)
L1532945-04D	Plastic 2oz unpreserved for TS	A	N/A	3.3	Y	Absent	TS(7)
L1532945-04E	Vial Large Septa unpreserved (4o	A	N/A	3.3	Y	Absent	PA-TPH-GRO(14)
L1532945-04E9	Vial MeOH preserved split	A	N/A	3.3	Y	Absent	PA-TPH-GRO(14)
L1532945-04F	Glass 500ml/16oz unpreserved	A	N/A	3.3	Y	Absent	AS-TI(180),BA-TI(180),AG-TI(180),CR-TI(180),PA-8082(14),PB-TI(180),SE-TI(180),HG-T(28),CD-TI(180),PA-8270(14)
L1532945-04X	Glass 100ml unpreserved split	A	N/A	3.3	Y	Absent	A2-TPHDRO/ORO(14)
L1532945-05A	Vial MeOH preserved	A	N/A	3.3	Y	Absent	PA-8260HLW(14)
L1532945-05B	Vial water preserved	A	N/A	3.3	Y	Absent	PA-8260HLW(14)
L1532945-05C	Vial water preserved	A	N/A	3.3	Y	Absent	PA-8260HLW(14)
L1532945-05D	Plastic 2oz unpreserved for TS	A	N/A	3.3	Y	Absent	TS(7)
L1532945-05E	Vial Large Septa unpreserved (4o	A	N/A	3.3	Y	Absent	PA-TPH-GRO(14)
L1532945-05E9	Vial MeOH preserved split	A	N/A	3.3	Y	Absent	PA-TPH-GRO(14)
L1532945-05F	Glass 500ml/16oz unpreserved	A	N/A	3.3	Y	Absent	AS-TI(180),BA-TI(180),AG-TI(180),CR-TI(180),PA-8082(14),PB-TI(180),SE-TI(180),HG-T(28),CD-TI(180),PA-8270(14)
L1532945-05X	Glass 100ml unpreserved split	A	N/A	3.3	Y	Absent	A2-TPHDRO/ORO(14)
L1532945-06A	Vial MeOH preserved	A	N/A	3.3	Y	Absent	PA-8260HLW(14)
L1532945-06B	Vial water preserved	A	N/A	3.3	Y	Absent	PA-8260HLW(14)
L1532945-06C	Vial water preserved	A	N/A	3.3	Y	Absent	PA-8260HLW(14)
L1532945-06D	Plastic 2oz unpreserved for TS	A	N/A	3.3	Y	Absent	TS(7)
L1532945-06E	Vial Large Septa unpreserved (4o	A	N/A	3.3	Y	Absent	PA-TPH-GRO(14)
L1532945-06E9	Vial MeOH preserved split	A	N/A	3.3	Y	Absent	PA-TPH-GRO(14)
L1532945-06F	Glass 500ml/16oz unpreserved	A	N/A	3.3	Y	Absent	AS-TI(180),BA-TI(180),AG-TI(180),CR-TI(180),PA-8082(14),PB-TI(180),SE-TI(180),HG-T(28),CD-TI(180),PA-8270(14)
L1532945-06X	Glass 100ml unpreserved split	A	N/A	3.3	Y	Absent	A2-TPHDRO/ORO(14)
L1532945-07A	Vial MeOH preserved	A	N/A	3.3	Y	Absent	PA-8260HLW(14)

*Values in parentheses indicate holding time in days

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007

Lab Number: L1532945
Report Date: 12/21/15

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1532945-07B	Vial water preserved	A	N/A	3.3	Y	Absent	PA-8260HLW(14)
L1532945-07C	Vial water preserved	A	N/A	3.3	Y	Absent	PA-8260HLW(14)
L1532945-07D	Plastic 2oz unpreserved for TS	A	N/A	3.3	Y	Absent	TS(7)
L1532945-07E	Vial Large Septa unpreserved (4o	A	N/A	3.3	Y	Absent	PA-TPH-GRO(14)
L1532945-07E9	Vial MeOH preserved split	A	N/A	3.3	Y	Absent	PA-TPH-GRO(14)
L1532945-07F	Glass 500ml/16oz unpreserved	A	N/A	3.3	Y	Absent	AS-TI(180),BA-TI(180),AG-TI(180),CR-TI(180),PA-8082(14),PB-TI(180),SE-TI(180),HG-T(28),CD-TI(180),PA-8270(14)
L1532945-07X	Glass 100ml unpreserved split	A	N/A	3.3	Y	Absent	A2-TPHDRO/ORO(14)
L1532945-08A	Vial MeOH preserved	A	N/A	3.3	Y	Absent	PA-8260HLW(14)
L1532945-08B	Vial water preserved	A	N/A	3.3	Y	Absent	PA-8260HLW(14)
L1532945-08C	Vial water preserved	A	N/A	3.3	Y	Absent	PA-8260HLW(14)
L1532945-08D	Plastic 2oz unpreserved for TS	A	N/A	3.3	Y	Absent	TS(7)
L1532945-08E	Vial Large Septa unpreserved (4o	A	N/A	3.3	Y	Absent	PA-TPH-GRO(14)
L1532945-08E9	Vial MeOH preserved split	A	N/A	3.3	Y	Absent	PA-TPH-GRO(14)
L1532945-08F	Glass 500ml/16oz unpreserved	A	N/A	3.3	Y	Absent	AS-TI(180),BA-TI(180),AG-TI(180),CR-TI(180),PA-8082(14),PB-TI(180),SE-TI(180),HG-T(28),CD-TI(180),PA-8270(14)
L1532945-08X	Glass 100ml unpreserved split	A	N/A	3.3	Y	Absent	A2-TPHDRO/ORO(14)

*Values in parentheses indicate holding time in days

Project Name:	ST. E'S EAST CAMPUS	**Lab Number:**	L1532945
Project Number:	38677-007	**Report Date:**	12/21/15

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.
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

1	- The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

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.

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.

Data Qualifiers

A	- Spectra identified as "Aldol Condensation Product".
B	- The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

Report Format: Data Usability Report

Project Name:	ST. E'S EAST CAMPUS	**Lab Number:**	L1532945
Project Number:	38677-007	**Report Date:**	12/21/15

Data Qualifiers

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

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.

J - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the reporting limit (RL) for the sample.

Report Format: Data Usability Report

Project Name:	ST. E'S EAST CAMPUS	**Lab Number:**	L1532945
Project Number:	38677-007	**Report Date:**	12/21/15

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

30 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WPCF. 18th Edition. 1992.

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.

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility
EPA 524.2: 1,2-Dibromo-3-chloropropane, 1,2-Dibromoethane, m/p-xylene, o-xylene
EPA 624: 2-Butanone (MEK), 1,4-Dioxane, tert-Amylmethyl Ether, tert-Butyl Alcohol, m/p-xylene, o-xylene
EPA 625: Aniline, Benzoic Acid, Benzyl Alcohol, 4-Chloroaniline, 3-Methylphenol, 4-Methylphenol.
EPA 1010A: NPW: Ignitability
EPA 6010C: NPW: Strontium; SCM: Strontium
EPA 8151A: NPW: 2,4-DB, Dicamba, Dichloroprop, MCPA, MCPP; SCM: 2,4-DB, Dichloroprop, MCPA, MCPP
EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene, Isopropanol; SCM: Iodomethane (methyl iodide), Methyl methacrylate (soil); 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D: NPW: Pentachloronitrobenzene, 1-Methylnaphthalene, Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Pentachloronitrobenzene, 1-Methylnaphthalene, Dimethylnaphthalene,1,4-Diphenylhydrazine.
EPA 9010: NPW: Amenable Cyanide Distillation, Total Cyanide Distillation
EPA 9038: NPW: Sulfate
EPA 9050A: NPW: Specific Conductance
EPA 9056: NPW: Chloride, Nitrate, Sulfate
EPA 9065: NPW: Phenols
EPA 9251: NPW: Chloride
SM3500: NPW: Ferrous Iron
SM4500: NPW: Amenable Cyanide, Dissolved Oxygen; SCM: Total Phosphorus, TKN, NO2, NO3.
SM5310C: DW: Dissolved Organic Carbon

Mansfield Facility
EPA 8270D: NPW: Biphenyl; SCM: Biphenyl
EPA 2540D: TSS
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.

The following analytes are included in our Massachusetts DEP Scope of Accreditation, Westborough Facility:

Drinking Water
EPA 200.8: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl; **EPA 200.7**: Ba,Be,Ca,Cd,Cr,Cu,Na; **EPA 245.1:** Mercury;
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, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B**
EPA 332: Perchlorate.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, Enterolert-QT.**

Non-Potable Water
EPA 200.8: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn;
EPA 200.7: Al,Sb,As,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Mo,Ni,K,Se,Ag,Na,Sr,Ti,Tl,V,Zn;
EPA 245.1, SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2340B, SM2320B, SM4500CL-E, SM4500F-BC, SM426C, SM4500NH3-BH, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, SM4500P-B, E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, SM14 510AC, 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 I, 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, SM9222D-MF**.

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

CHAIN OF CUSTODY

PAGE ____ OF ____

ALPHA TECHNICAL
WESTBORO, MA TEL: 508-898-9220 FAX: 508-898-9193
MANSFIELD, MA TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab: 12/15/15

ALPHA Job #: L1532945 (L1532945)

Client Information

Client: Haley + Aldrich
Address: 7926 Jones Branch Dr. Ste 870 McLean, VA
Phone: 703-336-7200
Fax:
Email: kwright-ng@haleyaldrich.com
☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: St. E East Campus
Project Location: Washington DC
Project #: 38677-007
Project Manager: Kristen Wright-Ng
ALPHA Quote #:

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved!)
Date Due: 5-7 day Time:

Report Information - Data Deliverables

☐ FAX ☐ EMAIL
☐ ADEx ☐ Add'l Deliverables

Billing Information

☐ Same as Client Info PO #:

Regulatory Requirements/Report Limits

State /Fed Program | Criteria

Other Project Specific Requirements/Comments/Detection Limits:

Use project-specific pricing

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	Total Solids	VOCs by 8260	TPH-GRO	TPH-DRO	PAH's by 8270	PCBs by 8082	RCRA 8 Metals	Furans + Dioxins	Sample Specific Comments	Total # Bottles
32945 01	B212-1214-1005-0-5	12/14/15	1005	S	CT	X	X	X	X	X	X	X		6 jars	
02	B212-1214-1005-5-10	12/14/15	1005	S	CT	X	X	X	X	X	X	X		6 jars	
03	B217-1214-1120-0-5	12/14/15	1120	S	CT	X	X	X	X	X	X	X		6 jars	
04	B217-1214-1125-5-10	12/14/15	1125	S	CT	X	X	X	X	X	X	X		6 jars	
05	B217-1214-1130-10-15	12/14/15	1130	S	CT	X	X	X	X	X	X	X		6 jars	
06	B218-1214-1210-0-5	12/14/15	1210	S	CT	X	X	X	X	X	X	X		6 jars	
07	B218-1214-1215-5-10	12/14/15	1215	S	CT	X	X	X	X	X	X	X		6 jars	
08	B218-1214-1220-10-15	12/14/15	1220	S	CT	X	X	X	X	X	X	X		6 jars	

Container Type
Preservative

Rel: [signature] 12/15/15 1105
Rec: [signature] 12/15/15 1105

Relinquished By:	Date/Time	Received By:	Date/Time
CHRISTIAN TSCHIBELI	12/14/15 15:00	[signature] (AAL)	12/14/15 1500
[signature] (AAL)	12/14/15 1800	[signature]	12/14/15 1800
[signature]	12/14/15 2320	Albert Williams	12/14/15 2320
Albert Williams	12/15/15 0345	Graham Phillips	12/15/15 0345
X. D. Zuber	12/15/15 0935	[signature]	12/15/15 0935

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

FORM NO: 01-01 (rev. 14-OCT-07)

CHAIN OF CUSTODY

PAGE_____ OF _____

ALPHA ANALYTICAL
WESTBORO, MA TEL: 508-898-9220 FAX: 508-898-9193
MANSFIELD, MA TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab: 12/15/15

ALPHA Job #: L1532945 (L1532945)

Project Information

Project Name: St. E East Campus
Project Location: Washington DC
Project #: 38677-007
Project Manager: Kristen Wright-Ng
ALPHA Quote #:

Report Information - Data Deliverables

☐ FAX ☐ EMAIL
☐ ADEx ☐ Add'l Deliverables

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements/Report Limits

State /Fed Program | Criteria

Client Information

Client: Haley + Aldrich
Address: 7926 Jones Branch Dr. Ste 870 McLean, VA
Phone: 703-336-7200
Fax:
Email: kwright-ng@haleyaldrich.com
☐ These samples have been previously analyzed by Alpha

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved!)
Date Due: 5-7 day Time:

Other Project Specific Requirements/Comments/Detection Limits:

Use project-specific pricing

SAMPLE HANDLING

Filtration_____
☐ Done
☐ Not needed
☐ Lab to do
Preservation
☐ Lab to do
(Please specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	Total Solids	VOCs by 8260	TPH-GRO	TPH-DRO	PAHs by 8270	PCBs by 8082	RCRA 8 Metals	Furans + Dioxins					Sample Specific Comments	TOTAL # BOTTLES
32945 -01	B212-1214-1005-0-5	12/14/15	1005	S	CT	X	X	X	X	X	X	X						6 jars	
-02	B212-1214-1005-5-10	12/14/15	1005	S	CT	X	X	X	X	X	X	X						6 jars	
-03	B217-1214-1120-0-5	12/14/15	1120	S	CT	X	X	X	X	X	X	X						6 jars	
-04	B217-1214-1125-5-10	12/14/15	1125	S	CT	X	X	X	X	X	X	X						6 jars	
-05	B217-1214-1130-10-15	12/14/15	1130	S	CT	X	X	X	X	X	X	X						6 jars	
-06	B218-1214-1210-0-5	12/14/15	1210	S	CT	X	X	X	X	X	X	X						6 jars	
-07	B218-1214-1215-5-10	12/14/15	1215	S	CT	X	X	X	X	X	X	X						6 jars	
-08	B218-1214-1220-10-15	12/14/15	1220	S	CT	X	X	X	X	X	X	X						6 jars	
					Container Type														
					Preservative														

Relinquished By:	Date/Time	Received By:	Date/Time
CHRISTIAN TSCHIBELL	12/14/15 15:00	(Anthony Thorpe (AAL))	12/14/15 1500
(Anthony Thorpe (AAL))	12/14/15 1800	[signature]	12/14/15 1800
[signature]	12/14/15 2320	Albert Wellin	12/14/15 2320
Albert Wellin	12/15/15 0345	Graham Phillips	12/15/15 0345

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

FORM NO: 01-01 (rev. 14-OCT-07)

ANALYTICAL REPORT

Lab Number:	L1533898
Client:	Haley & Aldrich 7926 Jones Branch Drive Suite 870 McLean, VA 22102-3363
ATTN:	Kristen Wright-Ng
Phone:	(703) 336-6234
Project Name:	ST. ES EAST CAMPUS
Project Number:	38677-007
Report Date:	12/29/15

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), NY (11148), CT (PH-0574), NH (2003), NJ NELAP (MA935), RI (LAO00065), ME (MA00086), PA (68-03671), VA (460195), MD (348), IL (200077), NC (666), TX (T104704476), DOD (L2217), USDA (Permit #P-330-11-00240).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: ST. ES EAST CAMPUS
Project Number: 38677-007

Lab Number: L1533898
Report Date: 12/29/15

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1533898-01	B-201-1215-0825-5-10	SOIL	WASHINGTON, D.C.	12/15/15 08:25	12/15/15

Project Name: ST. ES EAST CAMPUS **Lab Number:** L1533898
Project Number: 38677-007 **Report Date:** 12/29/15

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 all of the requirements of NELAC, for all NELAC accredited parameters. 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.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Michelle M. Morris

Title: Technical Director/Representative Date: 12/29/15

METALS

Project Name:	ST. ES EAST CAMPUS	**Lab Number:**	L1533898
Project Number:	38677-007	**Report Date:**	12/29/15

SAMPLE RESULTS

Lab ID:	L1533898-01	Date Collected:	12/15/15 08:25
Client ID:	B-201-1215-0825-5-10	Date Received:	12/15/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Soil	TCLP/SPLP Ext. Date:	12/26/15 17:01

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
TCLP Metals by EPA 1311 - Westborough Lab											
Lead, TCLP	ND		mg/l	0.50	--	1	12/29/15 06:46	12/29/15 15:04	EPA 3015	1,6010C	PS

Project Name: ST. ES EAST CAMPUS **Lab Number:** L1533898

Project Number: 38677-007 **Report Date:** 12/29/15

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
TCLP Metals by EPA 1311 - Westborough Lab for sample(s): 01 Batch: WG853513-1										
Lead, TCLP	ND		mg/l	0.50	--	1	12/29/15 06:46	12/29/15 13:32	1,6010C	PS

Prep Information

Digestion Method: EPA 3015

TCLP/SPLP Extraction Date: 12/26/15 17:01

Lab Control Sample Analysis

Batch Quality Control

Project Name: ST. ES EAST CAMPUS

Project Number: 38677-007

Lab Number: L1533898

Report Date: 12/29/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
TCLP Metals by EPA 1311 - Westborough Lab Associated sample(s): 01 Batch: WG853513-2								
Lead, TCLP	94		-		75-125	-		20

Matrix Spike Analysis
Batch Quality Control

Project Name: ST. ES EAST CAMPUS
Project Number: 38677-007

Lab Number: L1533898
Report Date: 12/29/15

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
TCLP Metals by EPA 1311 - Westborough Lab Associated sample(s): 01 QC Batch ID: WG853513-4 QC Sample: L1530893-11 Client ID: MS Sample												
Lead, TCLP	ND	5.1	4.8	94		-	-		75-125	-		20

Lab Duplicate Analysis
Batch Quality Control

Project Name: ST. ES EAST CAMPUS
Project Number: 38677-007

Lab Number: L1533898
Report Date: 12/29/15

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
TCLP Metals by EPA 1311 - Westborough Lab Associated sample(s): 01 QC Batch ID: WG853513-3 QC Sample: L1530893-11 Client ID: DUP Sample						
Lead, TCLP	ND	ND	mg/l	NC		20

Project Name: ST. ES EAST CAMPUS
Project Number: 38677-007

Lab Number: L1533898
Report Date: 12/29/15

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information	Custody Seal
Cooler	
B	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1533898-01A	Glass 500ml/16oz unpreserved	B	N/A	2.4	Y	Absent	-
L1533898-01X	Plastic 120ml HNO3 preserved spl	B	<2	2.4	Y	Absent	PB-CI(180)
L1533898-01X9	Tumble Vessel	B	N/A	2.4	Y	Absent	-

*Values in parentheses indicate holding time in days

Project Name:	ST. ES EAST CAMPUS	**Lab Number:**	L1533898
Project Number:	38677-007	**Report Date:**	12/29/15

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.
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

1	- The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

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.

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.

Data Qualifiers

A	- Spectra identified as "Aldol Condensation Product".
B	- The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

Report Format: Data Usability Report

Project Name:	ST. ES EAST CAMPUS	**Lab Number:**	L1533898
Project Number:	38677-007	**Report Date:**	12/29/15

Data Qualifiers

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

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.

J - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the reporting limit (RL) for the sample.

Report Format: Data Usability Report

Project Name:	ST. ES EAST CAMPUS	**Lab Number:**	L1533898
Project Number:	38677-007	**Report Date:**	12/29/15

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

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.

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility
EPA 524.2: 1,2-Dibromo-3-chloropropane, 1,2-Dibromoethane, m/p-xylene, o-xylene
EPA 624: 2-Butanone (MEK), 1,4-Dioxane, tert-Amylmethyl Ether, tert-Butyl Alcohol, m/p-xylene, o-xylene
EPA 625: Aniline, Benzoic Acid, Benzyl Alcohol, 4-Chloroaniline, 3-Methylphenol, 4-Methylphenol.
EPA 1010A: NPW: Ignitability
EPA 6010C: NPW: Strontium; SCM: Strontium
EPA 8151A: NPW: 2,4-DB, Dicamba, Dichloroprop, MCPA, MCPP; SCM: 2,4-DB, Dichloroprop, MCPA, MCPP
EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene, Isopropanol; SCM: Iodomethane (methyl iodide), Methyl methacrylate (soil); 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D: NPW: Pentachloronitrobenzene, 1-Methylnaphthalene, Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Pentachloronitrobenzene, 1-Methylnaphthalene, Dimethylnaphthalene,1,4-Diphenylhydrazine.
EPA 9010: NPW: Amenable Cyanide Distillation, Total Cyanide Distillation
EPA 9038: NPW: Sulfate
EPA 9050A: NPW: Specific Conductance
EPA 9056: NPW: Chloride, Nitrate, Sulfate
EPA 9065: NPW: Phenols
EPA 9251: NPW: Chloride
SM3500: NPW: Ferrous Iron
SM4500: NPW: Amenable Cyanide, Dissolved Oxygen; SCM: Total Phosphorus, TKN, NO2, NO3.
SM5310C: DW: Dissolved Organic Carbon

Mansfield Facility
EPA 8270D: NPW: Biphenyl; SCM: Biphenyl
EPA 2540D: TSS
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.

The following analytes are included in our Massachusetts DEP Scope of Accreditation, Westborough Facility:

Drinking Water
EPA 200.8: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl; **EPA 200.7**: Ba,Be,Ca,Cd,Cr,Cu,Na; **EPA 245.1:** Mercury;
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, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B**
EPA 332: Perchlorate.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, Enterolert-QT.**

Non-Potable Water
EPA 200.8: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn;
EPA 200.7: Al,Sb,As,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Mo,Ni,K,Se,Ag,Na,Sr,Ti,Tl,V,Zn;
EPA 245.1, SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2340B, SM2320B, SM4500CL-E, SM4500F-BC, SM426C, SM4500NH3-BH, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, SM4500P-B, E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, SM14 510AC, 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 I, 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, SM9222D-MF**.

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

L1533898 LT 12/22/15

CHAIN OF CUSTODY

PAGE_____ OF _____

ALPHA ANALYTICAL

WESTBORO, MA TEL: 508-898-9220 FAX: 508-898-9193

MANSFIELD, MA TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab: 12/16/15

ALPHA Job #: L1533065

Client Information

Client: Haley + Aldrich

Address: 7926 Jones Branch dr. Ste 870 McLEAN, VA

Phone: 703 336 7200

Fax:

Email: Kwright-ng@haleyaldrich.com

☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: St. Es East Campus

Project Location: Washington DC

Project #: 38677-007

Project Manager: Kristen Wright Ng

ALPHA Quote #:

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved!)

Date Due: 5-7 days Time:

Report Information - Data Deliverables

☐ FAX ☐ EMAIL

☐ ADEx ☐ Add'l Deliverables

Billing Information

☒ Same as Client info PO #:

Regulatory Requirements/Report Limits

State /Fed Program	Criteria

Other Project Specific Requirements/Comments/Detection Limits:

Use Project-specific pricing

SAMPLE HANDLING

Filtration_____
☐ Done
☐ Not needed
☐ Lab to do

Preservation
☐ Lab to do
(Please specify below)

TCLP-PB

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	Total solids	VOC's by 8260	TPH-GRO	TPH-DRO	TPH-ORO	PAH's by 8270	PCBs by 8082	RCRA 8 metals	Porta + Dioxins	TCLP-PB	Sample Specific Comments	TOTAL # BOTTLES
33898-01	B201-1215-0805-0-5	12/15/15	08:05	S	CT	X	X	X	X	X	X	X	X			6 jars	
-01	B201-1215-0825-5-10	12/15/15	08:25	S	CT	X	X	X	X	X	X	X	X		X	6 jars	
-03	B201-1215-0840-12+14	12/15/15	08:40	S	CT	X	X	X	X	X	X	X	X			6 jars	
-04	B202-1215-0915-0-5	12/15/15	09:15	S	CT	X	X	X	X	X	X	X	X			6 jars	
-05	B202-1215-0925-5-10	12/15/15	09:25	S	CT	X	X	X	X	X	X	X	X			6 jars	
-06	B202-1215-0930-10-15	12/15/15	09:30	S	CT	X	X	X	X	X	X	X	X			6 jars	
-07	B203-1215-1040-0-5	12/15/15	10:40	S	CT	X	X	X	X	X	X	X	X				
-08	B203-1215-1045-5-10	12/15/15	10:45	S	CT	X	X	X	X	X	X	X	X				
-09	B203-1215-1050-10-15	12/15/15	10:50	S	CT	X	X	X	X	X	X	X	X				

Container Type													
Preservative													

Relinquished By:	Date/Time	Received By:	Date/Time
Christian Tschuben	12/15/15 14:00	AHC	12/15/15 14:00
	12/15/15 1730		12/15/15 1730
	12/15/15 2000		12-15-15 2000
	12/16/15 0000	Graham Phillips	12/16/15 0000

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

FORM NO: 01-01 (rev. 14-OCT-07)

ANALYTICAL REPORT

Lab Number:	L1533547
Client:	Haley & Aldrich 7926 Jones Branch Drive Suite 870 McLean, VA 22102-3363
ATTN:	Kristen Wright-Ng
Phone:	(703) 336-6234
Project Name:	ST. E'S EAST CAMPUS
Project Number:	38677-007
Report Date:	12/28/15

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), NY (11148), CT (PH-0574), NH (2003), NJ NELAP (MA935), RI (LAO00065), ME (MA00086), PA (68-03671), VA (460195), MD (348), IL (200077), NC (666), TX (T104704476), DOD (L2217), USDA (Permit #P-330-11-00240).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007

Lab Number: L1533547
Report Date: 12/28/15

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1533547-01	FIELD BLANK	WATER	WASHINGTON, D.C.	12/17/15 11:30	12/17/15
L1533547-02	TRIP BLANK	WATER	WASHINGTON, D.C.	12/17/15 11:45	12/17/15

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1533547
Project Number: 38677-007 **Report Date:** 12/28/15

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 all of the requirements of NELAC, for all NELAC accredited parameters. 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:	ST. E'S EAST CAMPUS	**Lab Number:**	L1533547
Project Number:	38677-007	**Report Date:**	12/28/15

Case Narrative (continued)

Gasoline Range Organics

A laboratory duplicate and matrix spike could not be performed due to the sample being a Field Blank.

Metals

L1533547-01: The Field Blank has a concentration above the reporting limit for barium. The results were confirmed.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Kelly Stenstrom

Title: Technical Director/Representative

Date: 12/28/15

ORGANICS

VOLATILES

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1533547

Project Number: 38677-007 **Report Date:** 12/28/15

SAMPLE RESULTS

Lab ID:	L1533547-01	Date Collected:	12/17/15 11:30
Client ID:	FIELD BLANK	Date Received:	12/17/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Water		
Analytical Method:	1,8260C		
Analytical Date:	12/26/15 11:54		
Analyst:	MM		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Dichlorodifluoromethane	ND		ug/l	5.0	--	1
Chloromethane	ND		ug/l	2.5	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
Bromomethane	ND		ug/l	1.0	--	1
Chloroethane	ND		ug/l	1.0	--	1
Trichlorofluoromethane	ND		ug/l	2.5	--	1
1,1-Dichloroethene	ND		ug/l	0.50	--	1
Carbon disulfide	ND		ug/l	5.0	--	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		ug/l	2.5	--	1
Methylene chloride	ND		ug/l	2.5	--	1
Acetone	ND		ug/l	5.0	--	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	--	1
Methyl Acetate	ND		ug/l	2.0	--	1
Methyl tert butyl ether	ND		ug/l	1.0	--	1
1,1-Dichloroethane	ND		ug/l	0.75	--	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	--	1
1,2-Dichloroethene, Total	ND		ug/l	0.50	--	1
Cyclohexane	ND		ug/l	10	--	1
Bromochloromethane	ND		ug/l	2.5	--	1
Chloroform	ND		ug/l	0.75	--	1
Carbon tetrachloride	ND		ug/l	0.50	--	1
1,1,1-Trichloroethane	ND		ug/l	0.50	--	1
2-Butanone	ND		ug/l	5.0	--	1
Benzene	ND		ug/l	0.50	--	1
1,2-Dichloroethane	ND		ug/l	0.50	--	1
Methyl cyclohexane	ND		ug/l	10	--	1
Trichloroethene	ND		ug/l	0.50	--	1
1,2-Dichloropropane	ND		ug/l	1.0	--	1
Bromodichloromethane	ND		ug/l	0.50	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	--	1

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1533547

Project Number: 38677-007 **Report Date:** 12/28/15

SAMPLE RESULTS

Lab ID: L1533547-01 Date Collected: 12/17/15 11:30

Client ID: FIELD BLANK Date Received: 12/17/15

Sample Location: WASHINGTON, D.C. Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Toluene	ND		ug/l	0.75	--	1
Tetrachloroethene	ND		ug/l	0.50	--	1
4-Methyl-2-pentanone	ND		ug/l	5.0	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	--	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	--	1
1,1,2-Trichloroethane	ND		ug/l	0.75	--	1
Dibromochloromethane	ND		ug/l	0.50	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Chlorobenzene	ND		ug/l	0.50	--	1
Ethylbenzene	ND		ug/l	0.50	--	1
p/m-Xylene	ND		ug/l	1.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
Xylenes, Total	ND		ug/l	1.0	--	1
Styrene	ND		ug/l	1.0	--	1
Bromoform	ND		ug/l	2.0	--	1
Isopropylbenzene	ND		ug/l	0.50	--	1
1,3-Dichlorobenzene	ND		ug/l	2.5	--	1
1,4-Dichlorobenzene	ND		ug/l	2.5	--	1
1,2-Dichlorobenzene	ND		ug/l	2.5	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	--	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	94		70-130
4-Bromofluorobenzene	119		70-130
Dibromofluoromethane	114		70-130

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007
Lab Number: L1533547
Report Date: 12/28/15

SAMPLE RESULTS

Lab ID:	L1533547-01	Date Collected:	12/17/15 11:30
Client ID:	FIELD BLANK	Date Received:	12/17/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Water		
Analytical Method:	1,8260C-SIM(M)		
Analytical Date:	12/26/15 11:54		
Analyst:	MM		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS-SIM - Westborough Lab						
1,4-Dioxane	ND		ug/l	3.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.10	--	1

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1533547

Project Number: 38677-007 **Report Date:** 12/28/15

SAMPLE RESULTS

Lab ID:	L1533547-02	Date Collected:	12/17/15 11:45
Client ID:	TRIP BLANK	Date Received:	12/17/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Water		
Analytical Method:	1,8260C		
Analytical Date:	12/26/15 12:23		
Analyst:	MM		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Dichlorodifluoromethane	ND		ug/l	5.0	--	1
Chloromethane	ND		ug/l	2.5	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
Bromomethane	ND		ug/l	1.0	--	1
Chloroethane	ND		ug/l	1.0	--	1
Trichlorofluoromethane	ND		ug/l	2.5	--	1
1,1-Dichloroethene	ND		ug/l	0.50	--	1
Carbon disulfide	ND		ug/l	5.0	--	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		ug/l	2.5	--	1
Methylene chloride	ND		ug/l	2.5	--	1
Acetone	ND		ug/l	5.0	--	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	--	1
Methyl Acetate	ND		ug/l	2.0	--	1
Methyl tert butyl ether	ND		ug/l	1.0	--	1
1,1-Dichloroethane	ND		ug/l	0.75	--	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	--	1
1,2-Dichloroethene, Total	ND		ug/l	0.50	--	1
Cyclohexane	ND		ug/l	10	--	1
Bromochloromethane	ND		ug/l	2.5	--	1
Chloroform	ND		ug/l	0.75	--	1
Carbon tetrachloride	ND		ug/l	0.50	--	1
1,1,1-Trichloroethane	ND		ug/l	0.50	--	1
2-Butanone	ND		ug/l	5.0	--	1
Benzene	ND		ug/l	0.50	--	1
1,2-Dichloroethane	ND		ug/l	0.50	--	1
Methyl cyclohexane	ND		ug/l	10	--	1
Trichloroethene	ND		ug/l	0.50	--	1
1,2-Dichloropropane	ND		ug/l	1.0	--	1
Bromodichloromethane	ND		ug/l	0.50	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	--	1

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1533547

Project Number: 38677-007 **Report Date:** 12/28/15

SAMPLE RESULTS

Lab ID: L1533547-02 Date Collected: 12/17/15 11:45

Client ID: TRIP BLANK Date Received: 12/17/15

Sample Location: WASHINGTON, D.C. Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Toluene	ND		ug/l	0.75	--	1
Tetrachloroethene	ND		ug/l	0.50	--	1
4-Methyl-2-pentanone	ND		ug/l	5.0	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	--	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	--	1
1,1,2-Trichloroethane	ND		ug/l	0.75	--	1
Dibromochloromethane	ND		ug/l	0.50	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Chlorobenzene	ND		ug/l	0.50	--	1
Ethylbenzene	ND		ug/l	0.50	--	1
p/m-Xylene	ND		ug/l	1.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
Xylenes, Total	ND		ug/l	1.0	--	1
Styrene	ND		ug/l	1.0	--	1
Bromoform	ND		ug/l	2.0	--	1
Isopropylbenzene	ND		ug/l	0.50	--	1
1,3-Dichlorobenzene	ND		ug/l	2.5	--	1
1,4-Dichlorobenzene	ND		ug/l	2.5	--	1
1,2-Dichlorobenzene	ND		ug/l	2.5	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	--	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	106		70-130
Toluene-d8	94		70-130
4-Bromofluorobenzene	110		70-130
Dibromofluoromethane	113		70-130

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007
Lab Number: L1533547
Report Date: 12/28/15

SAMPLE RESULTS

Lab ID:	L1533547-02	Date Collected:	12/17/15 11:45
Client ID:	TRIP BLANK	Date Received:	12/17/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Water		
Analytical Method:	1,8260C-SIM(M)		
Analytical Date:	12/26/15 12:23		
Analyst:	MM		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS-SIM - Westborough Lab						
1,4-Dioxane	ND		ug/l	3.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.10	--	1

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1533547

Project Number: 38677-007 **Report Date:** 12/28/15

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C-SIM(M)
Analytical Date: 12/26/15 11:25
Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01-02 Batch: WG853132-3					
1,4-Dioxane	ND		ug/l	3.0	--
1,1,2,2-Tetrachloroethane	ND		ug/l	0.10	--

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1533547

Project Number: 38677-007 **Report Date:** 12/28/15

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 12/26/15 11:25
Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG853135-3					
Dichlorodifluoromethane	ND		ug/l	5.0	--
Chloromethane	ND		ug/l	2.5	--
Vinyl chloride	ND		ug/l	1.0	--
Bromomethane	ND		ug/l	1.0	--
Chloroethane	ND		ug/l	1.0	--
Trichlorofluoromethane	ND		ug/l	2.5	--
1,1-Dichloroethene	ND		ug/l	0.50	--
Carbon disulfide	ND		ug/l	5.0	--
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		ug/l	2.5	--
Methylene chloride	ND		ug/l	2.5	--
Acetone	ND		ug/l	5.0	--
trans-1,2-Dichloroethene	ND		ug/l	0.75	--
Methyl Acetate	ND		ug/l	2.0	--
Methyl tert butyl ether	ND		ug/l	1.0	--
1,1-Dichloroethane	ND		ug/l	0.75	--
cis-1,2-Dichloroethene	ND		ug/l	0.50	--
1,2-Dichloroethene, Total	ND		ug/l	0.50	--
Cyclohexane	ND		ug/l	10	--
Bromochloromethane	ND		ug/l	2.5	--
Chloroform	ND		ug/l	0.75	--
Carbon tetrachloride	ND		ug/l	0.50	--
1,1,1-Trichloroethane	ND		ug/l	0.50	--
2-Butanone	ND		ug/l	5.0	--
Benzene	ND		ug/l	0.50	--
1,2-Dichloroethane	ND		ug/l	0.50	--
Methyl cyclohexane	ND		ug/l	10	--
Trichloroethene	ND		ug/l	0.50	--
1,2-Dichloropropane	ND		ug/l	1.0	--
Bromodichloromethane	ND		ug/l	0.50	--

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1533547

Project Number: 38677-007 **Report Date:** 12/28/15

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 12/26/15 11:25
Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG853135-3					
cis-1,3-Dichloropropene	ND		ug/l	0.50	--
Toluene	ND		ug/l	0.75	--
Tetrachloroethene	ND		ug/l	0.50	--
4-Methyl-2-pentanone	ND		ug/l	5.0	--
trans-1,3-Dichloropropene	ND		ug/l	0.50	--
1,3-Dichloropropene, Total	ND		ug/l	0.50	--
1,1,2-Trichloroethane	ND		ug/l	0.75	--
Dibromochloromethane	ND		ug/l	0.50	--
1,2-Dibromoethane	ND		ug/l	2.0	--
2-Hexanone	ND		ug/l	5.0	--
Chlorobenzene	ND		ug/l	0.50	--
Ethylbenzene	ND		ug/l	0.50	--
p/m-Xylene	ND		ug/l	1.0	--
o-Xylene	ND		ug/l	1.0	--
Xylenes, Total	ND		ug/l	1.0	--
Styrene	ND		ug/l	1.0	--
Bromoform	ND		ug/l	2.0	--
Isopropylbenzene	ND		ug/l	0.50	--
1,3-Dichlorobenzene	ND		ug/l	2.5	--
1,4-Dichlorobenzene	ND		ug/l	2.5	--
1,2-Dichlorobenzene	ND		ug/l	2.5	--
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	--
1,2,4-Trichlorobenzene	ND		ug/l	2.5	--
1,2,3-Trichlorobenzene	ND		ug/l	2.5	--

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1533547

Project Number: 38677-007 **Report Date:** 12/28/15

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 12/26/15 11:25
Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG853135-3					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	94		70-130
4-Bromofluorobenzene	122		70-130
Dibromofluoromethane	110		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: ST. E'S EAST CAMPUS

Project Number: 38677-007

Lab Number: L1533547

Report Date: 12/28/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-02 Batch: WG853132-1 WG853132-2								
1,4-Dioxane	114		86		70-130	**28**	Q	25
1,1,2,2-Tetrachloroethane	126		112		70-130	12		25

Lab Control Sample Analysis
Batch Quality Control

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007
Lab Number: L1533547
Report Date: 12/28/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG853135-1 WG853135-2								
Dichlorodifluoromethane	106		105		36-147	1		20
Chloromethane	112		112		64-130	0		20
Vinyl chloride	109		106		55-140	3		20
Bromomethane	99		101		39-139	2		20
Chloroethane	126		127		55-138	1		20
Trichlorofluoromethane	110		111		62-150	1		20
1,1-Dichloroethene	108		106		61-145	2		20
Carbon disulfide	101		101		51-130	0		20
1,1,2-Trichloro-1,2,2-Trifluoroethane	108		106		70-130	2		20
Methylene chloride	118		113		70-130	4		20
Acetone	89		80		58-148	11		20
trans-1,2-Dichloroethene	106		106		70-130	0		20
Methyl Acetate	83		88		70-130	6		20
Methyl tert butyl ether	81		83		63-130	2		20
1,1-Dichloroethane	105		104		70-130	1		20
cis-1,2-Dichloroethene	102		105		70-130	3		20
Cyclohexane	102		102		70-130	0		20
Bromochloromethane	101		102		70-130	1		20
Chloroform	106		103		70-130	3		20
Carbon tetrachloride	100		99		63-132	1		20
1,1,1-Trichloroethane	100		101		67-130	1		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007
Lab Number: L1533547
Report Date: 12/28/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG853135-1 WG853135-2								
2-Butanone	75		81		63-138	8		20
Benzene	101		101		70-130	0		20
1,2-Dichloroethane	102		103		70-130	1		20
Methyl cyclohexane	100		101		70-130	1		20
Trichloroethene	98		101		70-130	3		20
1,2-Dichloropropane	105		106		70-130	1		20
Bromodichloromethane	99		100		67-130	1		20
cis-1,3-Dichloropropene	95		94		70-130	1		20
Toluene	96		97		70-130	1		20
Tetrachloroethene	95		92		70-130	3		20
4-Methyl-2-pentanone	73		75		59-130	3		20
trans-1,3-Dichloropropene	85		84		70-130	1		20
1,1,2-Trichloroethane	91		92		70-130	1		20
Dibromochloromethane	88		86		63-130	2		20
1,2-Dibromoethane	88		86		70-130	2		20
2-Hexanone	66		68		57-130	3		20
Chlorobenzene	98		95		75-130	3		20
Ethylbenzene	100		99		70-130	1		20
p/m-Xylene	101		98		70-130	3		20
o-Xylene	100		100		70-130	0		20
Styrene	100		98		70-130	2		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007
Lab Number: L1533547
Report Date: 12/28/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG853135-1 WG853135-2								
Bromoform	76		80		54-136	5		20
Isopropylbenzene	**137**	Q	**140**	Q	70-130	2		20
1,1,2,2-Tetrachloroethane	86		87		67-130	1		20
1,3,5-Trimethylbenzene	99		101		64-130	2		20
1,2,4-Trimethylbenzene	101		104		70-130	3		20
1,3-Dichlorobenzene	96		100		70-130	4		20
1,4-Dichlorobenzene	98		99		70-130	1		20
1,2-Dichlorobenzene	96		98		70-130	2		20
1,2-Dibromo-3-chloropropane	70		73		41-144	4		20
1,2,4-Trichlorobenzene	90		91		70-130	1		20
Naphthalene	76		82		70-130	8		20
1,2,3-Trichlorobenzene	91		99		70-130	8		20
tert-Butyl Alcohol	**52**	Q	82		70-130	**45**	Q	20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	94		93		70-130
Toluene-d8	97		95		70-130
4-Bromofluorobenzene	93		98		70-130
Dibromofluoromethane	100		102		70-130

SEMIVOLATILES

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007
Lab Number: L1533547
Report Date: 12/28/15

SAMPLE RESULTS

Lab ID: L1533547-01
Client ID: FIELD BLANK
Sample Location: WASHINGTON, D.C.
Matrix: Water
Analytical Method: 1,8270D
Analytical Date: 12/23/15 03:02
Analyst: PS

Date Collected: 12/17/15 11:30
Date Received: 12/17/15
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 12/20/15 20:47

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Naphthalene	ND		ug/l	2.0	--	1
2-Methylnaphthalene	ND		ug/l	2.0	--	1
2-Chloronaphthalene	ND		ug/l	2.0	--	1
Acenaphthylene	ND		ug/l	2.0	--	1
Acenaphthene	ND		ug/l	2.0	--	1
Fluorene	ND		ug/l	2.0	--	1
Phenanthrene	ND		ug/l	2.0	--	1
Anthracene	ND		ug/l	2.0	--	1
Fluoranthene	ND		ug/l	2.0	--	1
Pyrene	ND		ug/l	2.0	--	1
Benzo(a)anthracene	ND		ug/l	2.0	--	1
Chrysene	ND		ug/l	2.0	--	1
Benzo(b)fluoranthene	ND		ug/l	2.0	--	1
Benzo(k)fluoranthene	ND		ug/l	2.0	--	1
Benzo(a)pyrene	ND		ug/l	2.0	--	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	--	1
Dibenzo(a,h)anthracene	ND		ug/l	2.0	--	1
Benzo(ghi)perylene	ND		ug/l	2.0	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	76		23-120
2-Fluorobiphenyl	86		15-120
4-Terphenyl-d14	102		41-149

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007

Lab Number: L1533547
Report Date: 12/28/15

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 12/22/15 20:17
Analyst: PS

Extraction Method: EPA 3510C
Extraction Date: 12/20/15 20:47

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG851562-1					
Naphthalene	ND		ug/l	2.0	--
2-Methylnaphthalene	ND		ug/l	2.0	--
2-Chloronaphthalene	ND		ug/l	2.0	--
Acenaphthylene	ND		ug/l	2.0	--
Acenaphthene	ND		ug/l	2.0	--
Fluorene	ND		ug/l	2.0	--
Phenanthrene	ND		ug/l	2.0	--
Anthracene	ND		ug/l	2.0	--
Fluoranthene	ND		ug/l	2.0	--
Pyrene	ND		ug/l	2.0	--
Benzo(a)anthracene	ND		ug/l	2.0	--
Chrysene	ND		ug/l	2.0	--
Benzo(b)fluoranthene	ND		ug/l	2.0	--
Benzo(k)fluoranthene	ND		ug/l	2.0	--
Benzo(a)pyrene	ND		ug/l	2.0	--
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	--
Dibenzo(a,h)anthracene	ND		ug/l	2.0	--
Benzo(ghi)perylene	ND		ug/l	2.0	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	40		21-120
Phenol-d6	28		10-120
Nitrobenzene-d5	63		23-120
2-Fluorobiphenyl	76		15-120
2,4,6-Tribromophenol	68		10-120
4-Terphenyl-d14	92		41-149

Lab Control Sample Analysis
Batch Quality Control

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007
Lab Number: L1533547
Report Date: 12/28/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG851562-2 WG851562-3								
Benzaldehyde	69		74		40-140	7		30
Phenol	34		38		12-110	11		30
Bis(2-chloroethyl)ether	70		75		40-140	7		30
2-Chlorophenol	73		78		27-123	7		30
2-Methylphenol	64		69		30-130	8		30
Bis(2-chloroisopropyl)ether	69		73		40-140	6		30
Acetophenone	79		84		39-129	6		30
n-Nitrosodi-n-propylamine	76		83		29-132	9		30
3-Methylphenol/4-Methylphenol	63		69		30-130	9		30
Hexachloroethane	59		61		40-140	3		30
Nitrobenzene	74		78		40-140	5		30
Isophorone	78		85		40-140	9		30
2-Nitrophenol	84		92		30-130	9		30
2,4-Dimethylphenol	66		64		30-130	3		30
Bis(2-chloroethoxy)methane	77		82		40-140	6		30
2,4-Dichlorophenol	85		92		30-130	8		30
1,2,4-Trichlorobenzene	67		70		30-130	4		30
Naphthalene	72		76		40-140	5		30
4-Chloroaniline	68		76		40-140	11		30
Hexachlorobutadiene	63		66		40-140	5		30
Caprolactam	26		29		10-130	11		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007
Lab Number: L1533547
Report Date: 12/28/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG851562-2 WG851562-3								
p-Chloro-m-cresol	83		90		23-97	8		30
2-Methylnaphthalene	76		81		40-140	6		30
Hexachlorocyclopentadiene	65		70		40-140	7		30
1,2,4,5-Tetrachlorobenzene	70		74		2-134	6		30
2,4,6-Trichlorophenol	95		105		30-130	10		30
2,4,5-Trichlorophenol	84		94		30-130	11		30
Biphenyl	75		80		40-140	6		30
2-Chloronaphthalene	76		82		40-140	8		30
2-Nitroaniline	83		92		52-143	10		30
Dimethyl phthalate	81		90		40-140	11		30
2,6-Dinitrotoluene	89		101		40-140	13		30
Acenaphthylene	81		89		45-123	9		30
3-Nitroaniline	68		76		25-145	11		30
Acenaphthene	76		83		37-111	9		30
2,4-Dinitrophenol	**139**	Q	**144**	Q	20-130	4		30
4-Nitrophenol	46		52		10-80	12		30
2,4-Dinitrotoluene	95		**106**	Q	24-96	11		30
Dibenzofuran	80		87		40-140	8		30
2,3,4,6-Tetrachlorophenol	83		88		54-145	6		30
Diethyl phthalate	83		90		40-140	8		30
Fluorene	81		88		40-140	8		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007
Lab Number: L1533547
Report Date: 12/28/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG851562-2 WG851562-3								
4-Chlorophenyl phenyl ether	78		85		40-140	9		30
4-Nitroaniline	77		81		51-143	5		30
4,6-Dinitro-o-cresol	149		164		20-164	10		30
NDPA/DPA	76		82		40-140	8		30
4-Bromophenyl phenyl ether	79		85		40-140	7		30
Hexachlorobenzene	79		86		40-140	8		30
Pentachlorophenol	87		94		9-103	8		30
Atrazine	93		102		40-140	9		30
Phenanthrene	80		87		40-140	8		30
Anthracene	82		90		40-140	9		30
Carbazole	84		90		55-144	7		30
Di-n-butylphthalate	85		94		40-140	10		30
Fluoranthene	85		92		40-140	8		30
Pyrene	83		90		26-127	8		30
Butyl benzyl phthalate	87		95		40-140	9		30
3,3'-Dichlorobenzidine	44		48		40-140	9		30
Benzo(a)anthracene	79		90		40-140	13		30
Chrysene	80		88		40-140	10		30
Bis(2-Ethylhexyl)phthalate	86		96		40-140	11		30
Di-n-octylphthalate	84		94		40-140	11		30
Benzo(b)fluoranthene	85		93		40-140	9		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007
Lab Number: L1533547
Report Date: 12/28/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG851562-2 WG851562-3								
Benzo(k)fluoranthene	83		94		40-140	12		30
Benzo(a)pyrene	84		95		40-140	12		30
Indeno(1,2,3-cd)Pyrene	84		90		40-140	7		30
Dibenzo(a,h)anthracene	84		93		40-140	10		30
Benzo(ghi)perylene	82		92		40-140	11		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	47		52		21-120
Phenol-d6	35		40		10-120
Nitrobenzene-d5	73		80		23-120
2-Fluorobiphenyl	80		87		15-120
2,4,6-Tribromophenol	83		92		10-120
4-Terphenyl-d14	82		90		41-149

PETROLEUM HYDROCARBONS

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007
Lab Number: L1533547
Report Date: 12/28/15

SAMPLE RESULTS

Lab ID: L1533547-01
Client ID: FIELD BLANK
Sample Location: WASHINGTON, D.C.
Matrix: Water
Analytical Method: 1,8015C(M)
Analytical Date: 12/22/15 11:02
Analyst: KD

Date Collected: 12/17/15 11:30
Date Received: 12/17/15
Field Prep: Not Specified
Extraction Method:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Gasoline Range Organics - Westborough Lab						
Gasoline Range Organics	ND		ug/l	50	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,1,1-Trifluorotoluene	102		70-130
4-Bromofluorobenzene	109		70-130

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1533547

Project Number: 38677-007 **Report Date:** 12/28/15

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8015C(M)
Analytical Date: 12/22/15 09:44
Analyst: KD

Parameter	Result	Qualifier	Units	RL	MDL
Gasoline Range Organics - Westborough Lab for sample(s): 01 Batch: WG852440-3					
Gasoline Range Organics	ND		ug/l	50	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,1,1-Trifluorotoluene	97		70-130
4-Bromofluorobenzene	104		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: ST. E'S EAST CAMPUS

Project Number: 38677-007

Lab Number: L1533547

Report Date: 12/28/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Gasoline Range Organics - Westborough Lab Associated sample(s): 01 Batch: WG852440-1 WG852440-2								
Gasoline Range Organics	92		91		80-120	1		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,1,1-Trifluorotoluene	102		101		70-130
4-Bromofluorobenzene	108		107		70-130

METALS

Project Name:	ST. E'S EAST CAMPUS	**Lab Number:**	L1533547
Project Number:	38677-007	**Report Date:**	12/28/15

SAMPLE RESULTS

Lab ID:	L1533547-01	Date Collected:	12/17/15 11:30
Client ID:	FIELD BLANK	Date Received:	12/17/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Water		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Arsenic, Total	ND		ug/l	0.5000	--	1	12/19/15 15:24	12/23/15 13:05	EPA 3005A	1,6020A	TT
Barium, Total	0.8921		ug/l	0.5000	--	1	12/19/15 15:24	12/23/15 13:05	EPA 3005A	1,6020A	TT
Cadmium, Total	ND		ug/l	0.2000	--	1	12/19/15 15:24	12/23/15 13:05	EPA 3005A	1,6020A	TT
Chromium, Total	ND		ug/l	1.000	--	1	12/19/15 15:24	12/23/15 13:05	EPA 3005A	1,6020A	TT
Lead, Total	ND		ug/l	1.000	--	1	12/19/15 15:24	12/23/15 13:05	EPA 3005A	1,6020A	TT
Mercury, Total	ND		ug/l	0.2000	--	1	12/21/15 09:30	12/22/15 16:53	EPA 7470A	1,7470A	DB
Selenium, Total	ND		ug/l	5.00	--	1	12/19/15 15:24	12/23/15 13:05	EPA 3005A	1,6020A	TT
Silver, Total	ND		ug/l	0.4000	--	1	12/19/15 15:24	12/23/15 13:05	EPA 3005A	1,6020A	TT

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1533547

Project Number: 38677-007 **Report Date:** 12/28/15

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 01 Batch: WG851403-1										
Arsenic, Total	ND		ug/l	0.5000	--	1	12/19/15 15:24	12/22/15 15:33	1,6020A	TT
Barium, Total	ND		ug/l	0.5000	--	1	12/19/15 15:24	12/22/15 15:33	1,6020A	TT
Cadmium, Total	ND		ug/l	0.2000	--	1	12/19/15 15:24	12/22/15 15:33	1,6020A	TT
Chromium, Total	ND		ug/l	1.000	--	1	12/19/15 15:24	12/22/15 15:33	1,6020A	TT
Lead, Total	ND		ug/l	1.000	--	1	12/19/15 15:24	12/22/15 15:33	1,6020A	TT
Selenium, Total	ND		ug/l	5.00	--	1	12/19/15 15:24	12/22/15 15:33	1,6020A	TT
Silver, Total	ND		ug/l	0.4000	--	1	12/19/15 15:24	12/22/15 15:33	1,6020A	TT

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 01 Batch: WG851644-1										
Mercury, Total	ND		ug/l	0.2000	--	1	12/21/15 09:30	12/22/15 16:50	1,7470A	DB

Prep Information

Digestion Method: EPA 7470A

Lab Control Sample Analysis
Batch Quality Control

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007

Lab Number: L1533547
Report Date: 12/28/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01 Batch: WG851403-2								
Arsenic, Total	93		-		80-120	-		
Barium, Total	88		-		80-120	-		
Cadmium, Total	100		-		80-120	-		
Chromium, Total	89		-		80-120	-		
Lead, Total	90		-		80-120	-		
Selenium, Total	105		-		80-120	-		
Silver, Total	95		-		80-120	-		
Total Metals - Westborough Lab Associated sample(s): 01 Batch: WG851644-2								
Mercury, Total	102		-		80-120	-		

Matrix Spike Analysis
Batch Quality Control

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007

Lab Number: L1533547
Report Date: 12/28/15

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG851403-4 QC Sample: L1533679-01 Client ID: MS Sample												
Arsenic, Total	ND	120	114.3	95		-	-		75-125	-		20
Barium, Total	40.77	2000	1870	91		-	-		75-125	-		20
Cadmium, Total	ND	51	52.10	102		-	-		75-125	-		20
Chromium, Total	3.135	200	184.1	90		-	-		75-125	-		20
Lead, Total	ND	510	458.5	90		-	-		75-125	-		20
Selenium, Total	ND	120	100	83		-	-		75-125	-		20
Silver, Total	ND	50	45.27	90		-	-		75-125	-		20
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG851644-4 QC Sample: L1533547-01 Client ID: FIELD BLANK												
Mercury, Total	ND	5	4.390	88		-	-		75-125	-		20

Lab Duplicate Analysis
Batch Quality Control

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007

Lab Number: L1533547
Report Date: 12/28/15

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG851403-3 QC Sample: L1533679-01 Client ID: DUP Sample						
Arsenic, Total	ND	ND	ug/l	NC		20
Barium, Total	40.77	37.50	ug/l	8		20
Cadmium, Total	ND	ND	ug/l	NC		20
Chromium, Total	3.135	1.978	ug/l	**45**	Q	20
Lead, Total	ND	ND	ug/l	NC		20
Selenium, Total	ND	ND	ug/l	NC		20
Silver, Total	ND	ND	ug/l	NC		20
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG851644-3 QC Sample: L1533547-01 Client ID: FIELD BLANK						
Mercury, Total	ND	ND	ug/l	NC		20

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007

Lab Number: L1533547
Report Date: 12/28/15

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information	Custody Seal
Cooler	
A	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1533547-01A	Vial HCl preserved	A	N/A	4.3	Y	Absent	PA-8260-SIM(14),PA-8260(14)
L1533547-01B	Vial HCl preserved	A	N/A	4.3	Y	Absent	PA-8260-SIM(14),PA-8260(14)
L1533547-01B1	Vial HCl preserved	A	N/A	4.3	Y	Absent	PA-8260-SIM(14),PA-8260(14)
L1533547-01C	Vial HCl preserved	A	N/A	4.3	Y	Absent	PA-TPH-GRO(14)
L1533547-01D	Vial HCl preserved	A	N/A	4.3	Y	Absent	PA-TPH-GRO(14)
L1533547-01D1	Vial HCl preserved	A	N/A	4.3	Y	Absent	PA-TPH-GRO(14)
L1533547-01E	Plastic 250ml HNO3 preserved	A	<2	4.3	Y	Absent	CD-6020T-PPB(180),CR-6020T-PPB(180),HG-T-PPB(28),BA-6020T-PPB(180),AG-6020T-PPB(180),AS-6020T-PPB(180),PB-6020T-PPB(180),SE-6020T-PPB(180)
L1533547-01F	Amber 1000ml unpreserved	A	7	4.3	Y	Absent	PA-8270(7)
L1533547-02A	Vial HCl preserved	A	N/A	4.3	Y	Absent	PA-8260-SIM(14),PA-8260(14)
L1533547-02B	Vial HCl preserved	A	N/A	4.3	Y	Absent	PA-8260-SIM(14),PA-8260(14)

*Values in parentheses indicate holding time in days

Project Name:	ST. E'S EAST CAMPUS	**Lab Number:**	L1533547
Project Number:	38677-007	**Report Date:**	12/28/15

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.
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

1	- The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

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.

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.

Data Qualifiers

A	- Spectra identified as "Aldol Condensation Product".
B	- The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

Report Format: Data Usability Report

Project Name:	ST. E'S EAST CAMPUS	**Lab Number:**	L1533547
Project Number:	38677-007	**Report Date:**	12/28/15

Data Qualifiers

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

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.

J - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the reporting limit (RL) for the sample.

Report Format: Data Usability Report

Project Name:	ST. E'S EAST CAMPUS	**Lab Number:**	L1533547
Project Number:	38677-007	**Report Date:**	12/28/15

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

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.

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility
EPA 524.2: 1,2-Dibromo-3-chloropropane, 1,2-Dibromoethane, m/p-xylene, o-xylene
EPA 624: 2-Butanone (MEK), 1,4-Dioxane, tert-Amylmethyl Ether, tert-Butyl Alcohol, m/p-xylene, o-xylene
EPA 625: Aniline, Benzoic Acid, Benzyl Alcohol, 4-Chloroaniline, 3-Methylphenol, 4-Methylphenol.
EPA 1010A: NPW: Ignitability
EPA 6010C: NPW: Strontium; SCM: Strontium
EPA 8151A: NPW: 2,4-DB, Dicamba, Dichloroprop, MCPA, MCPP; SCM: 2,4-DB, Dichloroprop, MCPA, MCPP
EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene, Isopropanol; SCM: Iodomethane (methyl iodide), Methyl methacrylate (soil); 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D: NPW: Pentachloronitrobenzene, 1-Methylnaphthalene, Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Pentachloronitrobenzene, 1-Methylnaphthalene, Dimethylnaphthalene,1,4-Diphenylhydrazine.
EPA 9010: NPW: Amenable Cyanide Distillation, Total Cyanide Distillation
EPA 9038: NPW: Sulfate
EPA 9050A: NPW: Specific Conductance
EPA 9056: NPW: Chloride, Nitrate, Sulfate
EPA 9065: NPW: Phenols
EPA 9251: NPW: Chloride
SM3500: NPW: Ferrous Iron
SM4500: NPW: Amenable Cyanide, Dissolved Oxygen; SCM: Total Phosphorus, TKN, NO2, NO3.
SM5310C: DW: Dissolved Organic Carbon

Mansfield Facility
EPA 8270D: NPW: Biphenyl; SCM: Biphenyl
EPA 2540D: TSS
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.

The following analytes are included in our Massachusetts DEP Scope of Accreditation, Westborough Facility:

Drinking Water
EPA 200.8: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl; **EPA 200.7**: Ba,Be,Ca,Cd,Cr,Cu,Na; **EPA 245.1:** Mercury;
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, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B**
EPA 332: Perchlorate.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, Enterolert-QT.**

Non-Potable Water
EPA 200.8: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn;
EPA 200.7: Al,Sb,As,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Mo,Ni,K,Se,Ag,Na,Sr,Ti,Tl,V,Zn;
EPA 245.1, SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2340B, SM2320B, SM4500CL-E, SM4500F-BC, SM426C, SM4500NH3-BH, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, SM4500P-B, E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, SM14 510AC, 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 I, 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, SM9222D-MF**.

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

CHAIN OF CUSTODY

PAGE_____ OF _____

ALPHA ANALYTICAL
WESTBORO, MA TEL: 508-898-9220 FAX: 508-898-9193
MANSFIELD, MA TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab: 12/17/15

ALPHA Job #: L1533917

Client Information

Client: Haley + Aldrich
Address: 7926 Jones Branch Dr Ste McLean VA
Phone: 703 336 7200
Fax:
Email: kwright-ng@haleyaldrich.com
☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: Ste E's East Campus
Project Location: Washington, D.C.
Project #: 38677-007
Project Manager: Kristen Wright-Ng
ALPHA Quote #:

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved!)
Date Due: 5-7 days Time:

Report Information - Data Deliverables

☐ FAX ☐ EMAIL
☐ ADEx ☐ Add'l Deliverables

Billing Information

☒ Same as Client info PO #:

Regulatory Requirements/Report Limits

State /Fed Program	Criteria

Other Project Specific Requirements/Comments/Detection Limits:

Use project-specific pricing

SAMPLE HANDLING

Filtration_____
☐ Done
☐ Not needed
☐ Lab to do
Preservation
☐ Lab to do
(Please specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	Totals Solids	VOCs by 8260	TPH-DRO	TPH-GRO	TPH-ORO	PAHs by 8270	PCBs by 8082	RCRA 8 metals	Trans + Dioxins				Sample Specific Comments	TOTAL # BOTTLES
	~~EB 12/16/15~~	~~12/16/15~~	~~16:15~~		~~CT~~														
	~~FB 12/16/15~~	~~12/16/15~~	~~16:20~~		~~CT~~		X	X	X	X	X	X	X						
33547-01	FIELD BLANK	12/17/15	11:30	WATER	CT		X	X	X	X	X	X	X					8 Jars	
-02	TRIP BLANK	12/17/15	11:45		CT		X											Trip Blank 2 vials 1/2 day	

Container Type	
Preservative	

Relinquished By:	Date/Time	Received By:	Date/Time
Christian Tschabelin	12/17/15 14:00	[illegible]	12/17/15 1400
[illegible]	12/17/15 1900	[illegible]	12/17/15 1900
[illegible]	12/17/15 0025	Albert Willem	12-18-15 0025
Albert Willem	12-18-15		

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

FORM NO: 01-01 (rev. 14-OCT-07)

ANALYTICAL REPORT

Lab Number:	L1533409
Client:	Haley & Aldrich 7926 Jones Branch Drive Suite 870 McLean, VA 22102-3363
ATTN:	Kristen Wright-Ng
Phone:	(703) 336-6234
Project Name:	ST. E'S EAST CAMPUS
Project Number:	38677-007
Report Date:	01/04/16

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), NY (11148), CT (PH-0574), NH (2003), NJ NELAP (MA935), RI (LAO00065), ME (MA00086), PA (68-03671), VA (460195), MD (348), IL (200077), NC (666), TX (T104704476), DOD (L2217), USDA (Permit #P-330-11-00240).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007

Lab Number: L1533409
Report Date: 01/04/16

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1533409-01	B207-1215-1420-0-5	SOIL	WASHINGTON, D.C.	12/15/15 14:20	12/16/15
L1533409-02	B207-1215-1425-5-10	SOIL	WASHINGTON, D.C.	12/15/15 14:25	12/16/15
L1533409-03	B207-1215-1430-10-15	SOIL	WASHINGTON, D.C.	12/15/15 14:30	12/16/15
L1533409-04	B208-1216-0815-0-5	SOIL	WASHINGTON, D.C.	12/16/15 08:15	12/16/15
L1533409-05	B208-1216-0825-5-10	SOIL	WASHINGTON, D.C.	12/16/15 08:25	12/16/15
L1533409-06	B208-1216-0835-10-15	SOIL	WASHINGTON, D.C.	12/16/15 08:35	12/16/15
L1533409-07	B209-1216-0910-0-5	SOIL	WASHINGTON, D.C.	12/16/15 09:10	12/16/15
L1533409-08	B209-1216-0920-5-10	SOIL	WASHINGTON, D.C.	12/16/15 09:20	12/16/15
L1533409-09	B209-1216-0930-10-15	SOIL	WASHINGTON, D.C.	12/16/15 09:30	12/16/15
L1533409-10	DUP121615	SOIL	WASHINGTON, D.C.	12/16/15 15:30	12/16/15
L1533409-11	B210-1216-1010-0-5	SOIL	WASHINGTON, D.C.	12/16/15 10:10	12/16/15
L1533409-12	B210-1216-1020-5-10	SOIL	WASHINGTON, D.C.	12/16/15 10:20	12/16/15
L1533409-13	B210-1216-1030-10-15	SOIL	WASHINGTON, D.C.	12/16/15 10:30	12/16/15
L1533409-14	B211-1216-1120-0-5	SOIL	WASHINGTON, D.C.	12/16/15 11:20	12/16/15
L1533409-15	B211-1216-1130-5-8	SOIL	WASHINGTON, D.C.	12/16/15 11:30	12/16/15
L1533409-16	B213-1216-1255-0-5	SOIL	WASHINGTON, D.C.	12/16/15 12:55	12/16/15
L1533409-17	B213-1216-1315-5-10	SOIL	WASHINGTON, D.C.	12/16/15 00:00	12/16/15
L1533409-18	B214-1216-1405-0-5	SOIL	WASHINGTON, D.C.	12/16/15 14:05	12/16/15
L1533409-19	B214-1216-1415-5-10	SOIL	WASHINGTON, D.C.	12/16/15 14:15	12/16/15
L1533409-20	TB-121615	WATER	WASHINGTON, D.C.	12/16/15 14:50	12/16/15
L1533409-21	B215-1216-1505-0-5	SOIL	WASHINGTON, D.C.	12/16/15 15:05	12/16/15
L1533409-22	B215-1216-1510-5-10	SOIL	WASHINGTON, D.C.	12/16/15 15:10	12/16/15
L1533409-23	B215-1216-1515-10-15	SOIL	WASHINGTON, D.C.	12/16/15 15:15	12/16/15
L1533409-24	B216-1215-1545-0-5	SOIL	WASHINGTON, D.C.	12/16/15 15:45	12/16/15

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1533409-25	B216-1215-1550-5-10	SOIL	WASHINGTON, D.C.	12/16/15 15:50	12/16/15

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1533409
Project Number: 38677-007 **Report Date:** 01/04/16

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 all of the requirements of NELAC, for all NELAC accredited parameters. 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:	ST. E'S EAST CAMPUS	**Lab Number:**	L1533409
Project Number:	38677-007	**Report Date:**	01/04/16

Case Narrative (continued)

Report Submission

This report replaces the report issued December 23, 2015. The extraneous chain of custody page has been removed.

Volatile Organics

The WG851611-4 MS recovery, performed on L1533409-18, is below the acceptance criteria for acetone (0%) due to the concentration of this compound falling below the reported detection limit.

PCBs

The WG851347-3 LCSD recoveries, associated with L1533409-01 through -14, are above the acceptance criteria for aroclor 1016 (145%) and aroclor 1260 (149%); however, the associated samples are non-detect for these target analytes. The results of the original analysis are reported.

Metals

L1533409-05: The sample has elevated detection limits for selenium and silver due to the dilution required by matrix interferences encountered during analysis.

L1533409-06: The sample has elevated detection limits for cadmium, selenium and silver due to the dilution required by matrix interferences encountered during analysis.

L1533409-07: The sample has an elevated detection limit for cadmium due to the dilution required by matrix interferences encountered during analysis.

L1533409-22 and -23: The sample has an elevated detection limit for lead due to the dilution required by matrix interferences encountered during analysis.

The WG850895-3/-4 MS/MSD recoveries, performed on L1533409-18, are outside the acceptance criteria for mercury (177%/174%). A post digestion spike was performed and was within acceptance criteria.

The WG850927-3/-4 MS/MSD recoveries, performed on L1533409-18, are outside the acceptance criteria for arsenic (62%/50%), barium (70%/64%), cadmium (64%/55%), chromium (54%/27%), lead (66%/54%), selenium (58%/56%), and silver (MSD 68%). A post digestion spike was performed and yielded unacceptable recoveries for arsenic (72%), barium (70%), cadmium (64%), chromium (65%), lead (64%), selenium (71%), and silver

Project Name:	ST. E'S EAST CAMPUS	**Lab Number:**	L1533409
Project Number:	38677-007	**Report Date:**	01/04/16

Case Narrative (continued)

(12%). This has been attributed to sample matrix.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Kelly Stenstrom

Title: Technical Director/Representative Date: 01/04/16

ORGANICS

VOLATILES

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1533409

Project Number: 38677-007 **Report Date:** 01/04/16

SAMPLE RESULTS

Lab ID:	L1533409-01	Date Collected:	12/15/15 14:20
Client ID:	B207-1215-1420-0-5	Date Received:	12/16/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Soil		
Analytical Method:	1,8260C		
Analytical Date:	12/21/15 11:00		
Analyst:	BN		
Percent Solids:	84%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS-5035 - Westborough Lab						
Dichlorodifluoromethane	ND		mg/kg	0.0092	--	1
Chloromethane	ND		mg/kg	0.0046	--	1
Vinyl chloride	ND		mg/kg	0.0018	--	1
Bromomethane	ND		mg/kg	0.0018	--	1
Chloroethane	ND		mg/kg	0.0018	--	1
Trichlorofluoromethane	ND		mg/kg	0.0046	--	1
1,1-Dichloroethene	ND		mg/kg	0.00092	--	1
Carbon disulfide	ND		mg/kg	0.0092	--	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		mg/kg	0.018	--	1
Methylene chloride	ND		mg/kg	0.0046	--	1
Acetone	ND		mg/kg	0.033	--	1
trans-1,2-Dichloroethene	ND		mg/kg	0.0014	--	1
Methyl Acetate	ND		mg/kg	0.0037	--	1
Methyl tert butyl ether	ND		mg/kg	0.0018	--	1
1,1-Dichloroethane	ND		mg/kg	0.0014	--	1
cis-1,2-Dichloroethene	ND		mg/kg	0.00092	--	1
1,2-Dichloroethene, Total	ND		mg/kg	0.00092	--	1
Cyclohexane	ND		mg/kg	0.018	--	1
Bromochloromethane	ND		mg/kg	0.0046	--	1
Chloroform	ND		mg/kg	0.0014	--	1
Carbon tetrachloride	ND		mg/kg	0.00092	--	1
1,1,1-Trichloroethane	ND		mg/kg	0.00092	--	1
2-Butanone	ND		mg/kg	0.0092	--	1
Benzene	ND		mg/kg	0.00092	--	1
1,2-Dichloroethane	ND		mg/kg	0.00092	--	1
Methyl cyclohexane	ND		mg/kg	0.0037	--	1
Trichloroethene	ND		mg/kg	0.00092	--	1
1,2-Dichloropropane	ND		mg/kg	0.0032	--	1
Bromodichloromethane	ND		mg/kg	0.00092	--	1
1,4-Dioxane	ND		mg/kg	0.092	--	1

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1533409

Project Number: 38677-007 **Report Date:** 01/04/16

SAMPLE RESULTS

Lab ID: L1533409-01 Date Collected: 12/15/15 14:20

Client ID: B207-1215-1420-0-5 Date Received: 12/16/15

Sample Location: WASHINGTON, D.C. Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS-5035 - Westborough Lab						
cis-1,3-Dichloropropene	ND		mg/kg	0.00092	--	1
Toluene	ND		mg/kg	0.0014	--	1
4-Methyl-2-pentanone	ND		mg/kg	0.0092	--	1
Tetrachloroethene	ND		mg/kg	0.00092	--	1
trans-1,3-Dichloropropene	ND		mg/kg	0.00092	--	1
1,3-Dichloropropene, Total	ND		mg/kg	0.00092	--	1
1,1,2-Trichloroethane	ND		mg/kg	0.0014	--	1
Dibromochloromethane	ND		mg/kg	0.00092	--	1
1,2-Dibromoethane	ND		mg/kg	0.0037	--	1
2-Hexanone	ND		mg/kg	0.0092	--	1
Chlorobenzene	ND		mg/kg	0.00092	--	1
Ethylbenzene	ND		mg/kg	0.00092	--	1
p/m-Xylene	ND		mg/kg	0.0018	--	1
o-Xylene	ND		mg/kg	0.0018	--	1
Xylenes, Total	ND		mg/kg	0.0018	--	1
Styrene	ND		mg/kg	0.0018	--	1
Bromoform	ND		mg/kg	0.0037	--	1
Isopropylbenzene	ND		mg/kg	0.00092	--	1
1,1,2,2-Tetrachloroethane	ND		mg/kg	0.00092	--	1
1,3-Dichlorobenzene	ND		mg/kg	0.0046	--	1
1,4-Dichlorobenzene	ND		mg/kg	0.0046	--	1
1,2-Dichlorobenzene	ND		mg/kg	0.0046	--	1
1,2-Dibromo-3-chloropropane	ND		mg/kg	0.0046	--	1
1,2,4-Trichlorobenzene	ND		mg/kg	0.0046	--	1
1,2,3-Trichlorobenzene	ND		mg/kg	0.0046	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	98		70-130

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1533409

Project Number: 38677-007 **Report Date:** 01/04/16

SAMPLE RESULTS

Lab ID:	L1533409-02	Date Collected:	12/15/15 14:25
Client ID:	B207-1215-1425-5-10	Date Received:	12/16/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Soil		
Analytical Method:	1,8260C		
Analytical Date:	12/20/15 12:47		
Analyst:	BN		
Percent Solids:	88%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS-5035 - Westborough Lab						
Dichlorodifluoromethane	ND		mg/kg	0.0095	--	1
Chloromethane	ND		mg/kg	0.0047	--	1
Vinyl chloride	ND		mg/kg	0.0019	--	1
Bromomethane	ND		mg/kg	0.0019	--	1
Chloroethane	ND		mg/kg	0.0019	--	1
Trichlorofluoromethane	ND		mg/kg	0.0047	--	1
1,1-Dichloroethene	ND		mg/kg	0.00095	--	1
Carbon disulfide	ND		mg/kg	0.0095	--	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		mg/kg	0.019	--	1
Methylene chloride	ND		mg/kg	0.0047	--	1
Acetone	ND		mg/kg	0.034	--	1
trans-1,2-Dichloroethene	ND		mg/kg	0.0014	--	1
Methyl Acetate	ND		mg/kg	0.0038	--	1
Methyl tert butyl ether	ND		mg/kg	0.0019	--	1
1,1-Dichloroethane	ND		mg/kg	0.0014	--	1
cis-1,2-Dichloroethene	ND		mg/kg	0.00095	--	1
1,2-Dichloroethene, Total	ND		mg/kg	0.00095	--	1
Cyclohexane	ND		mg/kg	0.019	--	1
Bromochloromethane	ND		mg/kg	0.0047	--	1
Chloroform	ND		mg/kg	0.0014	--	1
Carbon tetrachloride	ND		mg/kg	0.00095	--	1
1,1,1-Trichloroethane	ND		mg/kg	0.00095	--	1
2-Butanone	ND		mg/kg	0.0095	--	1
Benzene	ND		mg/kg	0.00095	--	1
1,2-Dichloroethane	ND		mg/kg	0.00095	--	1
Methyl cyclohexane	ND		mg/kg	0.0038	--	1
Trichloroethene	ND		mg/kg	0.00095	--	1
1,2-Dichloropropane	ND		mg/kg	0.0033	--	1
Bromodichloromethane	ND		mg/kg	0.00095	--	1
1,4-Dioxane	ND		mg/kg	0.095	--	1

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1533409

Project Number: 38677-007 **Report Date:** 01/04/16

SAMPLE RESULTS

Lab ID: L1533409-02 Date Collected: 12/15/15 14:25

Client ID: B207-1215-1425-5-10 Date Received: 12/16/15

Sample Location: WASHINGTON, D.C. Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS-5035 - Westborough Lab						
cis-1,3-Dichloropropene	ND		mg/kg	0.00095	--	1
Toluene	ND		mg/kg	0.0014	--	1
4-Methyl-2-pentanone	ND		mg/kg	0.0095	--	1
Tetrachloroethene	ND		mg/kg	0.00095	--	1
trans-1,3-Dichloropropene	ND		mg/kg	0.00095	--	1
1,3-Dichloropropene, Total	ND		mg/kg	0.00095	--	1
1,1,2-Trichloroethane	ND		mg/kg	0.0014	--	1
Dibromochloromethane	ND		mg/kg	0.00095	--	1
1,2-Dibromoethane	ND		mg/kg	0.0038	--	1
2-Hexanone	ND		mg/kg	0.0095	--	1
Chlorobenzene	ND		mg/kg	0.00095	--	1
Ethylbenzene	ND		mg/kg	0.00095	--	1
p/m-Xylene	ND		mg/kg	0.0019	--	1
o-Xylene	ND		mg/kg	0.0019	--	1
Xylenes, Total	ND		mg/kg	0.0019	--	1
Styrene	ND		mg/kg	0.0019	--	1
Bromoform	ND		mg/kg	0.0038	--	1
Isopropylbenzene	ND		mg/kg	0.00095	--	1
1,1,2,2-Tetrachloroethane	ND		mg/kg	0.00095	--	1
1,3-Dichlorobenzene	ND		mg/kg	0.0047	--	1
1,4-Dichlorobenzene	ND		mg/kg	0.0047	--	1
1,2-Dichlorobenzene	ND		mg/kg	0.0047	--	1
1,2-Dibromo-3-chloropropane	ND		mg/kg	0.0047	--	1
1,2,4-Trichlorobenzene	ND		mg/kg	0.0047	--	1
1,2,3-Trichlorobenzene	ND		mg/kg	0.0047	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	113		70-130
Toluene-d8	94		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	100		70-130

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1533409

Project Number: 38677-007 **Report Date:** 01/04/16

SAMPLE RESULTS

Lab ID:	L1533409-03	Date Collected:	12/15/15 14:30
Client ID:	B207-1215-1430-10-15	Date Received:	12/16/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Soil		
Analytical Method:	1,8260C		
Analytical Date:	12/20/15 13:13		
Analyst:	BN		
Percent Solids:	92%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS-5035 - Westborough Lab						
Dichlorodifluoromethane	ND		mg/kg	0.0085	--	1
Chloromethane	ND		mg/kg	0.0042	--	1
Vinyl chloride	ND		mg/kg	0.0017	--	1
Bromomethane	ND		mg/kg	0.0017	--	1
Chloroethane	ND		mg/kg	0.0017	--	1
Trichlorofluoromethane	ND		mg/kg	0.0042	--	1
1,1-Dichloroethene	ND		mg/kg	0.00085	--	1
Carbon disulfide	ND		mg/kg	0.0085	--	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		mg/kg	0.017	--	1
Methylene chloride	ND		mg/kg	0.0042	--	1
Acetone	ND		mg/kg	0.031	--	1
trans-1,2-Dichloroethene	ND		mg/kg	0.0013	--	1
Methyl Acetate	ND		mg/kg	0.0034	--	1
Methyl tert butyl ether	ND		mg/kg	0.0017	--	1
1,1-Dichloroethane	ND		mg/kg	0.0013	--	1
cis-1,2-Dichloroethene	ND		mg/kg	0.00085	--	1
1,2-Dichloroethene, Total	ND		mg/kg	0.00085	--	1
Cyclohexane	ND		mg/kg	0.017	--	1
Bromochloromethane	ND		mg/kg	0.0042	--	1
Chloroform	ND		mg/kg	0.0013	--	1
Carbon tetrachloride	ND		mg/kg	0.00085	--	1
1,1,1-Trichloroethane	ND		mg/kg	0.00085	--	1
2-Butanone	ND		mg/kg	0.0085	--	1
Benzene	ND		mg/kg	0.00085	--	1
1,2-Dichloroethane	ND		mg/kg	0.00085	--	1
Methyl cyclohexane	ND		mg/kg	0.0034	--	1
Trichloroethene	ND		mg/kg	0.00085	--	1
1,2-Dichloropropane	ND		mg/kg	0.0030	--	1
Bromodichloromethane	ND		mg/kg	0.00085	--	1
1,4-Dioxane	ND		mg/kg	0.085	--	1

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1533409

Project Number: 38677-007 **Report Date:** 01/04/16

SAMPLE RESULTS

Lab ID: L1533409-03 Date Collected: 12/15/15 14:30

Client ID: B207-1215-1430-10-15 Date Received: 12/16/15

Sample Location: WASHINGTON, D.C. Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS-5035 - Westborough Lab						
cis-1,3-Dichloropropene	ND		mg/kg	0.00085	--	1
Toluene	ND		mg/kg	0.0013	--	1
4-Methyl-2-pentanone	ND		mg/kg	0.0085	--	1
Tetrachloroethene	ND		mg/kg	0.00085	--	1
trans-1,3-Dichloropropene	ND		mg/kg	0.00085	--	1
1,3-Dichloropropene, Total	ND		mg/kg	0.00085	--	1
1,1,2-Trichloroethane	ND		mg/kg	0.0013	--	1
Dibromochloromethane	ND		mg/kg	0.00085	--	1
1,2-Dibromoethane	ND		mg/kg	0.0034	--	1
2-Hexanone	ND		mg/kg	0.0085	--	1
Chlorobenzene	ND		mg/kg	0.00085	--	1
Ethylbenzene	ND		mg/kg	0.00085	--	1
p/m-Xylene	ND		mg/kg	0.0017	--	1
o-Xylene	ND		mg/kg	0.0017	--	1
Xylenes, Total	ND		mg/kg	0.0017	--	1
Styrene	ND		mg/kg	0.0017	--	1
Bromoform	ND		mg/kg	0.0034	--	1
Isopropylbenzene	ND		mg/kg	0.00085	--	1
1,1,2,2-Tetrachloroethane	ND		mg/kg	0.00085	--	1
1,3-Dichlorobenzene	ND		mg/kg	0.0042	--	1
1,4-Dichlorobenzene	ND		mg/kg	0.0042	--	1
1,2-Dichlorobenzene	ND		mg/kg	0.0042	--	1
1,2-Dibromo-3-chloropropane	ND		mg/kg	0.0042	--	1
1,2,4-Trichlorobenzene	ND		mg/kg	0.0042	--	1
1,2,3-Trichlorobenzene	ND		mg/kg	0.0042	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	113		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	102		70-130

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1533409

Project Number: 38677-007 **Report Date:** 01/04/16

SAMPLE RESULTS

Lab ID:	L1533409-04	Date Collected:	12/16/15 08:15
Client ID:	B208-1216-0815-0-5	Date Received:	12/16/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Soil		
Analytical Method:	1,8260C		
Analytical Date:	12/20/15 13:40		
Analyst:	BN		
Percent Solids:	84%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS-5035 - Westborough Lab						
Dichlorodifluoromethane	ND		mg/kg	0.0097	--	1
Chloromethane	ND		mg/kg	0.0049	--	1
Vinyl chloride	ND		mg/kg	0.0019	--	1
Bromomethane	ND		mg/kg	0.0019	--	1
Chloroethane	ND		mg/kg	0.0019	--	1
Trichlorofluoromethane	ND		mg/kg	0.0049	--	1
1,1-Dichloroethene	ND		mg/kg	0.00097	--	1
Carbon disulfide	ND		mg/kg	0.0097	--	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		mg/kg	0.019	--	1
Methylene chloride	ND		mg/kg	0.0049	--	1
Acetone	ND		mg/kg	0.035	--	1
trans-1,2-Dichloroethene	ND		mg/kg	0.0015	--	1
Methyl Acetate	ND		mg/kg	0.0039	--	1
Methyl tert butyl ether	ND		mg/kg	0.0019	--	1
1,1-Dichloroethane	ND		mg/kg	0.0015	--	1
cis-1,2-Dichloroethene	ND		mg/kg	0.00097	--	1
1,2-Dichloroethene, Total	ND		mg/kg	0.00097	--	1
Cyclohexane	ND		mg/kg	0.019	--	1
Bromochloromethane	ND		mg/kg	0.0049	--	1
Chloroform	ND		mg/kg	0.0015	--	1
Carbon tetrachloride	ND		mg/kg	0.00097	--	1
1,1,1-Trichloroethane	ND		mg/kg	0.00097	--	1
2-Butanone	ND		mg/kg	0.0097	--	1
Benzene	ND		mg/kg	0.00097	--	1
1,2-Dichloroethane	ND		mg/kg	0.00097	--	1
Methyl cyclohexane	ND		mg/kg	0.0039	--	1
Trichloroethene	ND		mg/kg	0.00097	--	1
1,2-Dichloropropane	ND		mg/kg	0.0034	--	1
Bromodichloromethane	ND		mg/kg	0.00097	--	1
1,4-Dioxane	ND		mg/kg	0.097	--	1

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1533409

Project Number: 38677-007 **Report Date:** 01/04/16

SAMPLE RESULTS

Lab ID: L1533409-04 Date Collected: 12/16/15 08:15

Client ID: B208-1216-0815-0-5 Date Received: 12/16/15

Sample Location: WASHINGTON, D.C. Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS-5035 - Westborough Lab						
cis-1,3-Dichloropropene	ND		mg/kg	0.00097	--	1
Toluene	ND		mg/kg	0.0015	--	1
4-Methyl-2-pentanone	ND		mg/kg	0.0097	--	1
Tetrachloroethene	ND		mg/kg	0.00097	--	1
trans-1,3-Dichloropropene	ND		mg/kg	0.00097	--	1
1,3-Dichloropropene, Total	ND		mg/kg	0.00097	--	1
1,1,2-Trichloroethane	ND		mg/kg	0.0015	--	1
Dibromochloromethane	ND		mg/kg	0.00097	--	1
1,2-Dibromoethane	ND		mg/kg	0.0039	--	1
2-Hexanone	ND		mg/kg	0.0097	--	1
Chlorobenzene	ND		mg/kg	0.00097	--	1
Ethylbenzene	ND		mg/kg	0.00097	--	1
p/m-Xylene	ND		mg/kg	0.0019	--	1
o-Xylene	ND		mg/kg	0.0019	--	1
Xylenes, Total	ND		mg/kg	0.0019	--	1
Styrene	ND		mg/kg	0.0019	--	1
Bromoform	ND		mg/kg	0.0039	--	1
Isopropylbenzene	ND		mg/kg	0.00097	--	1
1,1,2,2-Tetrachloroethane	ND		mg/kg	0.00097	--	1
1,3-Dichlorobenzene	ND		mg/kg	0.0049	--	1
1,4-Dichlorobenzene	ND		mg/kg	0.0049	--	1
1,2-Dichlorobenzene	ND		mg/kg	0.0049	--	1
1,2-Dibromo-3-chloropropane	ND		mg/kg	0.0049	--	1
1,2,4-Trichlorobenzene	ND		mg/kg	0.0049	--	1
1,2,3-Trichlorobenzene	ND		mg/kg	0.0049	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	114		70-130
Toluene-d8	94		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	100		70-130

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1533409

Project Number: 38677-007 **Report Date:** 01/04/16

SAMPLE RESULTS

Lab ID:	L1533409-05	Date Collected:	12/16/15 08:25
Client ID:	B208-1216-0825-5-10	Date Received:	12/16/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Soil		
Analytical Method:	1,8260C		
Analytical Date:	12/20/15 14:06		
Analyst:	BN		
Percent Solids:	96%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS-5035 - Westborough Lab						
Dichlorodifluoromethane	ND		mg/kg	0.0072	--	1
Chloromethane	ND		mg/kg	0.0036	--	1
Vinyl chloride	ND		mg/kg	0.0014	--	1
Bromomethane	ND		mg/kg	0.0014	--	1
Chloroethane	ND		mg/kg	0.0014	--	1
Trichlorofluoromethane	ND		mg/kg	0.0036	--	1
1,1-Dichloroethene	ND		mg/kg	0.00072	--	1
Carbon disulfide	ND		mg/kg	0.0072	--	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		mg/kg	0.014	--	1
Methylene chloride	ND		mg/kg	0.0036	--	1
Acetone	ND		mg/kg	0.026	--	1
trans-1,2-Dichloroethene	ND		mg/kg	0.0011	--	1
Methyl Acetate	ND		mg/kg	0.0029	--	1
Methyl tert butyl ether	ND		mg/kg	0.0014	--	1
1,1-Dichloroethane	ND		mg/kg	0.0011	--	1
cis-1,2-Dichloroethene	ND		mg/kg	0.00072	--	1
1,2-Dichloroethene, Total	ND		mg/kg	0.00072	--	1
Cyclohexane	ND		mg/kg	0.014	--	1
Bromochloromethane	ND		mg/kg	0.0036	--	1
Chloroform	ND		mg/kg	0.0011	--	1
Carbon tetrachloride	ND		mg/kg	0.00072	--	1
1,1,1-Trichloroethane	ND		mg/kg	0.00072	--	1
2-Butanone	ND		mg/kg	0.0072	--	1
Benzene	ND		mg/kg	0.00072	--	1
1,2-Dichloroethane	ND		mg/kg	0.00072	--	1
Methyl cyclohexane	ND		mg/kg	0.0029	--	1
Trichloroethene	ND		mg/kg	0.00072	--	1
1,2-Dichloropropane	ND		mg/kg	0.0025	--	1
Bromodichloromethane	ND		mg/kg	0.00072	--	1
1,4-Dioxane	ND		mg/kg	0.072	--	1

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1533409

Project Number: 38677-007 **Report Date:** 01/04/16

SAMPLE RESULTS

Lab ID: L1533409-05 Date Collected: 12/16/15 08:25

Client ID: B208-1216-0825-5-10 Date Received: 12/16/15

Sample Location: WASHINGTON, D.C. Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS-5035 - Westborough Lab						
cis-1,3-Dichloropropene	ND		mg/kg	0.00072	--	1
Toluene	ND		mg/kg	0.0011	--	1
4-Methyl-2-pentanone	ND		mg/kg	0.0072	--	1
Tetrachloroethene	ND		mg/kg	0.00072	--	1
trans-1,3-Dichloropropene	ND		mg/kg	0.00072	--	1
1,3-Dichloropropene, Total	ND		mg/kg	0.00072	--	1
1,1,2-Trichloroethane	ND		mg/kg	0.0011	--	1
Dibromochloromethane	ND		mg/kg	0.00072	--	1
1,2-Dibromoethane	ND		mg/kg	0.0029	--	1
2-Hexanone	ND		mg/kg	0.0072	--	1
Chlorobenzene	ND		mg/kg	0.00072	--	1
Ethylbenzene	ND		mg/kg	0.00072	--	1
p/m-Xylene	ND		mg/kg	0.0014	--	1
o-Xylene	ND		mg/kg	0.0014	--	1
Xylenes, Total	ND		mg/kg	0.0014	--	1
Styrene	ND		mg/kg	0.0014	--	1
Bromoform	ND		mg/kg	0.0029	--	1
Isopropylbenzene	ND		mg/kg	0.00072	--	1
1,1,2,2-Tetrachloroethane	ND		mg/kg	0.00072	--	1
1,3-Dichlorobenzene	ND		mg/kg	0.0036	--	1
1,4-Dichlorobenzene	ND		mg/kg	0.0036	--	1
1,2-Dichlorobenzene	ND		mg/kg	0.0036	--	1
1,2-Dibromo-3-chloropropane	ND		mg/kg	0.0036	--	1
1,2,4-Trichlorobenzene	ND		mg/kg	0.0036	--	1
1,2,3-Trichlorobenzene	ND		mg/kg	0.0036	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	110		70-130
Toluene-d8	94		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	99		70-130

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1533409

Project Number: 38677-007 **Report Date:** 01/04/16

SAMPLE RESULTS

Lab ID:	L1533409-06	Date Collected:	12/16/15 08:35
Client ID:	B208-1216-0835-10-15	Date Received:	12/16/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Soil		
Analytical Method:	1,8260C		
Analytical Date:	12/20/15 14:32		
Analyst:	BN		
Percent Solids:	95%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS-5035 - Westborough Lab						
Dichlorodifluoromethane	ND		mg/kg	0.0092	--	1
Chloromethane	ND		mg/kg	0.0046	--	1
Vinyl chloride	ND		mg/kg	0.0018	--	1
Bromomethane	ND		mg/kg	0.0018	--	1
Chloroethane	ND		mg/kg	0.0018	--	1
Trichlorofluoromethane	ND		mg/kg	0.0046	--	1
1,1-Dichloroethene	ND		mg/kg	0.00092	--	1
Carbon disulfide	ND		mg/kg	0.0092	--	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		mg/kg	0.018	--	1
Methylene chloride	ND		mg/kg	0.0046	--	1
Acetone	ND		mg/kg	0.033	--	1
trans-1,2-Dichloroethene	ND		mg/kg	0.0014	--	1
Methyl Acetate	ND		mg/kg	0.0037	--	1
Methyl tert butyl ether	ND		mg/kg	0.0018	--	1
1,1-Dichloroethane	ND		mg/kg	0.0014	--	1
cis-1,2-Dichloroethene	ND		mg/kg	0.00092	--	1
1,2-Dichloroethene, Total	ND		mg/kg	0.00092	--	1
Cyclohexane	ND		mg/kg	0.018	--	1
Bromochloromethane	ND		mg/kg	0.0046	--	1
Chloroform	ND		mg/kg	0.0014	--	1
Carbon tetrachloride	ND		mg/kg	0.00092	--	1
1,1,1-Trichloroethane	ND		mg/kg	0.00092	--	1
2-Butanone	ND		mg/kg	0.0092	--	1
Benzene	ND		mg/kg	0.00092	--	1
1,2-Dichloroethane	ND		mg/kg	0.00092	--	1
Methyl cyclohexane	ND		mg/kg	0.0037	--	1
Trichloroethene	ND		mg/kg	0.00092	--	1
1,2-Dichloropropane	ND		mg/kg	0.0032	--	1
Bromodichloromethane	ND		mg/kg	0.00092	--	1
1,4-Dioxane	ND		mg/kg	0.092	--	1

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1533409

Project Number: 38677-007 **Report Date:** 01/04/16

SAMPLE RESULTS

Lab ID: L1533409-06 Date Collected: 12/16/15 08:35

Client ID: B208-1216-0835-10-15 Date Received: 12/16/15

Sample Location: WASHINGTON, D.C. Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS-5035 - Westborough Lab						
cis-1,3-Dichloropropene	ND		mg/kg	0.00092	--	1
Toluene	ND		mg/kg	0.0014	--	1
4-Methyl-2-pentanone	ND		mg/kg	0.0092	--	1
Tetrachloroethene	ND		mg/kg	0.00092	--	1
trans-1,3-Dichloropropene	ND		mg/kg	0.00092	--	1
1,3-Dichloropropene, Total	ND		mg/kg	0.00092	--	1
1,1,2-Trichloroethane	ND		mg/kg	0.0014	--	1
Dibromochloromethane	ND		mg/kg	0.00092	--	1
1,2-Dibromoethane	ND		mg/kg	0.0037	--	1
2-Hexanone	ND		mg/kg	0.0092	--	1
Chlorobenzene	ND		mg/kg	0.00092	--	1
Ethylbenzene	ND		mg/kg	0.00092	--	1
p/m-Xylene	ND		mg/kg	0.0018	--	1
o-Xylene	ND		mg/kg	0.0018	--	1
Xylenes, Total	ND		mg/kg	0.0018	--	1
Styrene	ND		mg/kg	0.0018	--	1
Bromoform	ND		mg/kg	0.0037	--	1
Isopropylbenzene	ND		mg/kg	0.00092	--	1
1,1,2,2-Tetrachloroethane	ND		mg/kg	0.00092	--	1
1,3-Dichlorobenzene	ND		mg/kg	0.0046	--	1
1,4-Dichlorobenzene	ND		mg/kg	0.0046	--	1
1,2-Dichlorobenzene	ND		mg/kg	0.0046	--	1
1,2-Dibromo-3-chloropropane	ND		mg/kg	0.0046	--	1
1,2,4-Trichlorobenzene	ND		mg/kg	0.0046	--	1
1,2,3-Trichlorobenzene	ND		mg/kg	0.0046	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	113		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	110		70-130
Dibromofluoromethane	91		70-130

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1533409

Project Number: 38677-007 **Report Date:** 01/04/16

SAMPLE RESULTS

Lab ID:	L1533409-07	Date Collected:	12/16/15 09:10
Client ID:	B209-1216-0910-0-5	Date Received:	12/16/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Soil		
Analytical Method:	1,8260C		
Analytical Date:	12/20/15 14:58		
Analyst:	BN		
Percent Solids:	84%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS-5035 - Westborough Lab						
Dichlorodifluoromethane	ND		mg/kg	0.0096	--	1
Chloromethane	ND		mg/kg	0.0048	--	1
Vinyl chloride	ND		mg/kg	0.0019	--	1
Bromomethane	ND		mg/kg	0.0019	--	1
Chloroethane	ND		mg/kg	0.0019	--	1
Trichlorofluoromethane	ND		mg/kg	0.0048	--	1
1,1-Dichloroethene	ND		mg/kg	0.00096	--	1
Carbon disulfide	ND		mg/kg	0.0096	--	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		mg/kg	0.019	--	1
Methylene chloride	ND		mg/kg	0.0048	--	1
Acetone	ND		mg/kg	0.035	--	1
trans-1,2-Dichloroethene	ND		mg/kg	0.0014	--	1
Methyl Acetate	ND		mg/kg	0.0038	--	1
Methyl tert butyl ether	ND		mg/kg	0.0019	--	1
1,1-Dichloroethane	ND		mg/kg	0.0014	--	1
cis-1,2-Dichloroethene	ND		mg/kg	0.00096	--	1
1,2-Dichloroethene, Total	ND		mg/kg	0.00096	--	1
Cyclohexane	ND		mg/kg	0.019	--	1
Bromochloromethane	ND		mg/kg	0.0048	--	1
Chloroform	ND		mg/kg	0.0014	--	1
Carbon tetrachloride	ND		mg/kg	0.00096	--	1
1,1,1-Trichloroethane	ND		mg/kg	0.00096	--	1
2-Butanone	ND		mg/kg	0.0096	--	1
Benzene	ND		mg/kg	0.00096	--	1
1,2-Dichloroethane	ND		mg/kg	0.00096	--	1
Methyl cyclohexane	ND		mg/kg	0.0038	--	1
Trichloroethene	ND		mg/kg	0.00096	--	1
1,2-Dichloropropane	ND		mg/kg	0.0034	--	1
Bromodichloromethane	ND		mg/kg	0.00096	--	1
1,4-Dioxane	ND		mg/kg	0.096	--	1

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1533409

Project Number: 38677-007 **Report Date:** 01/04/16

SAMPLE RESULTS

Lab ID: L1533409-07 Date Collected: 12/16/15 09:10

Client ID: B209-1216-0910-0-5 Date Received: 12/16/15

Sample Location: WASHINGTON, D.C. Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS-5035 - Westborough Lab						
cis-1,3-Dichloropropene	ND		mg/kg	0.00096	--	1
Toluene	ND		mg/kg	0.0014	--	1
4-Methyl-2-pentanone	ND		mg/kg	0.0096	--	1
Tetrachloroethene	ND		mg/kg	0.00096	--	1
trans-1,3-Dichloropropene	ND		mg/kg	0.00096	--	1
1,3-Dichloropropene, Total	ND		mg/kg	0.00096	--	1
1,1,2-Trichloroethane	ND		mg/kg	0.0014	--	1
Dibromochloromethane	ND		mg/kg	0.00096	--	1
1,2-Dibromoethane	ND		mg/kg	0.0038	--	1
2-Hexanone	ND		mg/kg	0.0096	--	1
Chlorobenzene	ND		mg/kg	0.00096	--	1
Ethylbenzene	ND		mg/kg	0.00096	--	1
p/m-Xylene	ND		mg/kg	0.0019	--	1
o-Xylene	ND		mg/kg	0.0019	--	1
Xylenes, Total	ND		mg/kg	0.0019	--	1
Styrene	ND		mg/kg	0.0019	--	1
Bromoform	ND		mg/kg	0.0038	--	1
Isopropylbenzene	ND		mg/kg	0.00096	--	1
1,1,2,2-Tetrachloroethane	ND		mg/kg	0.00096	--	1
1,3-Dichlorobenzene	ND		mg/kg	0.0048	--	1
1,4-Dichlorobenzene	ND		mg/kg	0.0048	--	1
1,2-Dichlorobenzene	ND		mg/kg	0.0048	--	1
1,2-Dibromo-3-chloropropane	ND		mg/kg	0.0048	--	1
1,2,4-Trichlorobenzene	ND		mg/kg	0.0048	--	1
1,2,3-Trichlorobenzene	ND		mg/kg	0.0048	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	111		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	96		70-130

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1533409

Project Number: 38677-007 **Report Date:** 01/04/16

SAMPLE RESULTS

Lab ID:	L1533409-08	Date Collected:	12/16/15 09:20
Client ID:	B209-1216-0920-5-10	Date Received:	12/16/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Soil		
Analytical Method:	1,8260C		
Analytical Date:	12/20/15 15:25		
Analyst:	BN		
Percent Solids:	82%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS-5035 - Westborough Lab						
Dichlorodifluoromethane	ND		mg/kg	0.011	--	1
Chloromethane	ND		mg/kg	0.0054	--	1
Vinyl chloride	ND		mg/kg	0.0021	--	1
Bromomethane	ND		mg/kg	0.0021	--	1
Chloroethane	ND		mg/kg	0.0021	--	1
Trichlorofluoromethane	ND		mg/kg	0.0054	--	1
1,1-Dichloroethene	ND		mg/kg	0.0011	--	1
Carbon disulfide	ND		mg/kg	0.011	--	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		mg/kg	0.021	--	1
Methylene chloride	ND		mg/kg	0.0054	--	1
Acetone	ND		mg/kg	0.038	--	1
trans-1,2-Dichloroethene	ND		mg/kg	0.0016	--	1
Methyl Acetate	ND		mg/kg	0.0043	--	1
Methyl tert butyl ether	ND		mg/kg	0.0021	--	1
1,1-Dichloroethane	ND		mg/kg	0.0016	--	1
cis-1,2-Dichloroethene	ND		mg/kg	0.0011	--	1
1,2-Dichloroethene, Total	ND		mg/kg	0.0011	--	1
Cyclohexane	ND		mg/kg	0.021	--	1
Bromochloromethane	ND		mg/kg	0.0054	--	1
Chloroform	ND		mg/kg	0.0016	--	1
Carbon tetrachloride	ND		mg/kg	0.0011	--	1
1,1,1-Trichloroethane	ND		mg/kg	0.0011	--	1
2-Butanone	ND		mg/kg	0.011	--	1
Benzene	ND		mg/kg	0.0011	--	1
1,2-Dichloroethane	ND		mg/kg	0.0011	--	1
Methyl cyclohexane	ND		mg/kg	0.0043	--	1
Trichloroethene	ND		mg/kg	0.0011	--	1
1,2-Dichloropropane	ND		mg/kg	0.0037	--	1
Bromodichloromethane	ND		mg/kg	0.0011	--	1
1,4-Dioxane	ND		mg/kg	0.11	--	1

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1533409

Project Number: 38677-007 **Report Date:** 01/04/16

SAMPLE RESULTS

Lab ID: L1533409-08 Date Collected: 12/16/15 09:20

Client ID: B209-1216-0920-5-10 Date Received: 12/16/15

Sample Location: WASHINGTON, D.C. Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS-5035 - Westborough Lab						
cis-1,3-Dichloropropene	ND		mg/kg	0.0011	--	1
Toluene	ND		mg/kg	0.0016	--	1
4-Methyl-2-pentanone	ND		mg/kg	0.011	--	1
Tetrachloroethene	ND		mg/kg	0.0011	--	1
trans-1,3-Dichloropropene	ND		mg/kg	0.0011	--	1
1,3-Dichloropropene, Total	ND		mg/kg	0.0011	--	1
1,1,2-Trichloroethane	ND		mg/kg	0.0016	--	1
Dibromochloromethane	ND		mg/kg	0.0011	--	1
1,2-Dibromoethane	ND		mg/kg	0.0043	--	1
2-Hexanone	ND		mg/kg	0.011	--	1
Chlorobenzene	ND		mg/kg	0.0011	--	1
Ethylbenzene	ND		mg/kg	0.0011	--	1
p/m-Xylene	ND		mg/kg	0.0021	--	1
o-Xylene	ND		mg/kg	0.0021	--	1
Xylenes, Total	ND		mg/kg	0.0021	--	1
Styrene	ND		mg/kg	0.0021	--	1
Bromoform	ND		mg/kg	0.0043	--	1
Isopropylbenzene	ND		mg/kg	0.0011	--	1
1,1,2,2-Tetrachloroethane	ND		mg/kg	0.0011	--	1
1,3-Dichlorobenzene	ND		mg/kg	0.0054	--	1
1,4-Dichlorobenzene	ND		mg/kg	0.0054	--	1
1,2-Dichlorobenzene	ND		mg/kg	0.0054	--	1
1,2-Dibromo-3-chloropropane	ND		mg/kg	0.0054	--	1
1,2,4-Trichlorobenzene	ND		mg/kg	0.0054	--	1
1,2,3-Trichlorobenzene	ND		mg/kg	0.0054	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	114		70-130
Toluene-d8	93		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	101		70-130

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1533409

Project Number: 38677-007 **Report Date:** 01/04/16

SAMPLE RESULTS

Lab ID:	L1533409-09	Date Collected:	12/16/15 09:30
Client ID:	B209-1216-0930-10-15	Date Received:	12/16/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Soil		
Analytical Method:	1,8260C		
Analytical Date:	12/20/15 15:51		
Analyst:	BN		
Percent Solids:	80%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS-5035 - Westborough Lab						
Dichlorodifluoromethane	ND		mg/kg	0.012	--	1
Chloromethane	ND		mg/kg	0.0059	--	1
Vinyl chloride	ND		mg/kg	0.0023	--	1
Bromomethane	ND		mg/kg	0.0023	--	1
Chloroethane	ND		mg/kg	0.0023	--	1
Trichlorofluoromethane	ND		mg/kg	0.0059	--	1
1,1-Dichloroethene	ND		mg/kg	0.0012	--	1
Carbon disulfide	ND		mg/kg	0.012	--	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		mg/kg	0.023	--	1
Methylene chloride	ND		mg/kg	0.0059	--	1
Acetone	0.22		mg/kg	0.042	--	1
trans-1,2-Dichloroethene	ND		mg/kg	0.0018	--	1
Methyl Acetate	ND		mg/kg	0.0047	--	1
Methyl tert butyl ether	ND		mg/kg	0.0023	--	1
1,1-Dichloroethane	ND		mg/kg	0.0018	--	1
cis-1,2-Dichloroethene	ND		mg/kg	0.0012	--	1
1,2-Dichloroethene, Total	ND		mg/kg	0.0012	--	1
Cyclohexane	ND		mg/kg	0.023	--	1
Bromochloromethane	ND		mg/kg	0.0059	--	1
Chloroform	ND		mg/kg	0.0018	--	1
Carbon tetrachloride	ND		mg/kg	0.0012	--	1
1,1,1-Trichloroethane	ND		mg/kg	0.0012	--	1
2-Butanone	ND		mg/kg	0.012	--	1
Benzene	ND		mg/kg	0.0012	--	1
1,2-Dichloroethane	ND		mg/kg	0.0012	--	1
Methyl cyclohexane	ND		mg/kg	0.0047	--	1
Trichloroethene	ND		mg/kg	0.0012	--	1
1,2-Dichloropropane	ND		mg/kg	0.0041	--	1
Bromodichloromethane	ND		mg/kg	0.0012	--	1
1,4-Dioxane	ND		mg/kg	0.12	--	1

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1533409

Project Number: 38677-007 **Report Date:** 01/04/16

SAMPLE RESULTS

Lab ID: L1533409-09 Date Collected: 12/16/15 09:30

Client ID: B209-1216-0930-10-15 Date Received: 12/16/15

Sample Location: WASHINGTON, D.C. Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS-5035 - Westborough Lab						
cis-1,3-Dichloropropene	ND		mg/kg	0.0012	--	1
Toluene	ND		mg/kg	0.0018	--	1
4-Methyl-2-pentanone	ND		mg/kg	0.012	--	1
Tetrachloroethene	ND		mg/kg	0.0012	--	1
trans-1,3-Dichloropropene	ND		mg/kg	0.0012	--	1
1,3-Dichloropropene, Total	ND		mg/kg	0.0012	--	1
1,1,2-Trichloroethane	ND		mg/kg	0.0018	--	1
Dibromochloromethane	ND		mg/kg	0.0012	--	1
1,2-Dibromoethane	ND		mg/kg	0.0047	--	1
2-Hexanone	ND		mg/kg	0.012	--	1
Chlorobenzene	ND		mg/kg	0.0012	--	1
Ethylbenzene	ND		mg/kg	0.0012	--	1
p/m-Xylene	ND		mg/kg	0.0023	--	1
o-Xylene	ND		mg/kg	0.0023	--	1
Xylenes, Total	ND		mg/kg	0.0023	--	1
Styrene	ND		mg/kg	0.0023	--	1
Bromoform	ND		mg/kg	0.0047	--	1
Isopropylbenzene	ND		mg/kg	0.0012	--	1
1,1,2,2-Tetrachloroethane	ND		mg/kg	0.0012	--	1
1,3-Dichlorobenzene	ND		mg/kg	0.0059	--	1
1,4-Dichlorobenzene	ND		mg/kg	0.0059	--	1
1,2-Dichlorobenzene	ND		mg/kg	0.0059	--	1
1,2-Dibromo-3-chloropropane	ND		mg/kg	0.0059	--	1
1,2,4-Trichlorobenzene	ND		mg/kg	0.0059	--	1
1,2,3-Trichlorobenzene	ND		mg/kg	0.0059	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	112		70-130
Toluene-d8	94		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	101		70-130

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1533409

Project Number: 38677-007 **Report Date:** 01/04/16

SAMPLE RESULTS

Lab ID:	L1533409-10	Date Collected:	12/16/15 15:30
Client ID:	DUP121615	Date Received:	12/16/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Soil		
Analytical Method:	1,8260C		
Analytical Date:	12/20/15 16:17		
Analyst:	BN		
Percent Solids:	89%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS-5035 - Westborough Lab						
Dichlorodifluoromethane	ND		mg/kg	0.011	--	1
Chloromethane	ND		mg/kg	0.0053	--	1
Vinyl chloride	ND		mg/kg	0.0021	--	1
Bromomethane	ND		mg/kg	0.0021	--	1
Chloroethane	ND		mg/kg	0.0021	--	1
Trichlorofluoromethane	ND		mg/kg	0.0053	--	1
1,1-Dichloroethene	ND		mg/kg	0.0011	--	1
Carbon disulfide	ND		mg/kg	0.011	--	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		mg/kg	0.021	--	1
Methylene chloride	ND		mg/kg	0.0053	--	1
Acetone	0.062		mg/kg	0.038	--	1
trans-1,2-Dichloroethene	ND		mg/kg	0.0016	--	1
Methyl Acetate	ND		mg/kg	0.0042	--	1
Methyl tert butyl ether	ND		mg/kg	0.0021	--	1
1,1-Dichloroethane	ND		mg/kg	0.0016	--	1
cis-1,2-Dichloroethene	ND		mg/kg	0.0011	--	1
1,2-Dichloroethene, Total	ND		mg/kg	0.0011	--	1
Cyclohexane	ND		mg/kg	0.021	--	1
Bromochloromethane	ND		mg/kg	0.0053	--	1
Chloroform	ND		mg/kg	0.0016	--	1
Carbon tetrachloride	ND		mg/kg	0.0011	--	1
1,1,1-Trichloroethane	ND		mg/kg	0.0011	--	1
2-Butanone	ND		mg/kg	0.011	--	1
Benzene	ND		mg/kg	0.0011	--	1
1,2-Dichloroethane	ND		mg/kg	0.0011	--	1
Methyl cyclohexane	ND		mg/kg	0.0042	--	1
Trichloroethene	ND		mg/kg	0.0011	--	1
1,2-Dichloropropane	ND		mg/kg	0.0037	--	1
Bromodichloromethane	ND		mg/kg	0.0011	--	1
1,4-Dioxane	ND		mg/kg	0.11	--	1

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1533409

Project Number: 38677-007 **Report Date:** 01/04/16

SAMPLE RESULTS

Lab ID: L1533409-10 Date Collected: 12/16/15 15:30

Client ID: DUP121615 Date Received: 12/16/15

Sample Location: WASHINGTON, D.C. Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS-5035 - Westborough Lab						
cis-1,3-Dichloropropene	ND		mg/kg	0.0011	--	1
Toluene	ND		mg/kg	0.0016	--	1
4-Methyl-2-pentanone	ND		mg/kg	0.011	--	1
Tetrachloroethene	ND		mg/kg	0.0011	--	1
trans-1,3-Dichloropropene	ND		mg/kg	0.0011	--	1
1,3-Dichloropropene, Total	ND		mg/kg	0.0011	--	1
1,1,2-Trichloroethane	ND		mg/kg	0.0016	--	1
Dibromochloromethane	ND		mg/kg	0.0011	--	1
1,2-Dibromoethane	ND		mg/kg	0.0042	--	1
2-Hexanone	ND		mg/kg	0.011	--	1
Chlorobenzene	ND		mg/kg	0.0011	--	1
Ethylbenzene	ND		mg/kg	0.0011	--	1
p/m-Xylene	ND		mg/kg	0.0021	--	1
o-Xylene	ND		mg/kg	0.0021	--	1
Xylenes, Total	ND		mg/kg	0.0021	--	1
Styrene	ND		mg/kg	0.0021	--	1
Bromoform	ND		mg/kg	0.0042	--	1
Isopropylbenzene	ND		mg/kg	0.0011	--	1
1,1,2,2-Tetrachloroethane	ND		mg/kg	0.0011	--	1
1,3-Dichlorobenzene	ND		mg/kg	0.0053	--	1
1,4-Dichlorobenzene	ND		mg/kg	0.0053	--	1
1,2-Dichlorobenzene	ND		mg/kg	0.0053	--	1
1,2-Dibromo-3-chloropropane	ND		mg/kg	0.0053	--	1
1,2,4-Trichlorobenzene	ND		mg/kg	0.0053	--	1
1,2,3-Trichlorobenzene	ND		mg/kg	0.0053	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	112		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	100		70-130

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1533409

Project Number: 38677-007 **Report Date:** 01/04/16

SAMPLE RESULTS

Lab ID:	L1533409-11	Date Collected:	12/16/15 10:10
Client ID:	B210-1216-1010-0-5	Date Received:	12/16/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Soil		
Analytical Method:	1,8260C		
Analytical Date:	12/20/15 16:43		
Analyst:	BN		
Percent Solids:	85%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS-5035 - Westborough Lab						
Dichlorodifluoromethane	ND		mg/kg	0.010	--	1
Chloromethane	ND		mg/kg	0.0052	--	1
Vinyl chloride	ND		mg/kg	0.0021	--	1
Bromomethane	ND		mg/kg	0.0021	--	1
Chloroethane	ND		mg/kg	0.0021	--	1
Trichlorofluoromethane	ND		mg/kg	0.0052	--	1
1,1-Dichloroethene	ND		mg/kg	0.0010	--	1
Carbon disulfide	ND		mg/kg	0.010	--	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		mg/kg	0.021	--	1
Methylene chloride	ND		mg/kg	0.0052	--	1
Acetone	ND		mg/kg	0.037	--	1
trans-1,2-Dichloroethene	ND		mg/kg	0.0015	--	1
Methyl Acetate	ND		mg/kg	0.0041	--	1
Methyl tert butyl ether	ND		mg/kg	0.0021	--	1
1,1-Dichloroethane	ND		mg/kg	0.0015	--	1
cis-1,2-Dichloroethene	ND		mg/kg	0.0010	--	1
1,2-Dichloroethene, Total	ND		mg/kg	0.0010	--	1
Cyclohexane	ND		mg/kg	0.021	--	1
Bromochloromethane	ND		mg/kg	0.0052	--	1
Chloroform	ND		mg/kg	0.0015	--	1
Carbon tetrachloride	ND		mg/kg	0.0010	--	1
1,1,1-Trichloroethane	ND		mg/kg	0.0010	--	1
2-Butanone	ND		mg/kg	0.010	--	1
Benzene	ND		mg/kg	0.0010	--	1
1,2-Dichloroethane	ND		mg/kg	0.0010	--	1
Methyl cyclohexane	ND		mg/kg	0.0041	--	1
Trichloroethene	ND		mg/kg	0.0010	--	1
1,2-Dichloropropane	ND		mg/kg	0.0036	--	1
Bromodichloromethane	ND		mg/kg	0.0010	--	1
1,4-Dioxane	ND		mg/kg	0.10	--	1

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1533409

Project Number: 38677-007 **Report Date:** 01/04/16

SAMPLE RESULTS

Lab ID: L1533409-11 Date Collected: 12/16/15 10:10

Client ID: B210-1216-1010-0-5 Date Received: 12/16/15

Sample Location: WASHINGTON, D.C. Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS-5035 - Westborough Lab						
cis-1,3-Dichloropropene	ND		mg/kg	0.0010	--	1
Toluene	ND		mg/kg	0.0015	--	1
4-Methyl-2-pentanone	ND		mg/kg	0.010	--	1
Tetrachloroethene	ND		mg/kg	0.0010	--	1
trans-1,3-Dichloropropene	ND		mg/kg	0.0010	--	1
1,3-Dichloropropene, Total	ND		mg/kg	0.0010	--	1
1,1,2-Trichloroethane	ND		mg/kg	0.0015	--	1
Dibromochloromethane	ND		mg/kg	0.0010	--	1
1,2-Dibromoethane	ND		mg/kg	0.0041	--	1
2-Hexanone	ND		mg/kg	0.010	--	1
Chlorobenzene	ND		mg/kg	0.0010	--	1
Ethylbenzene	ND		mg/kg	0.0010	--	1
p/m-Xylene	ND		mg/kg	0.0021	--	1
o-Xylene	ND		mg/kg	0.0021	--	1
Xylenes, Total	ND		mg/kg	0.0021	--	1
Styrene	ND		mg/kg	0.0021	--	1
Bromoform	ND		mg/kg	0.0041	--	1
Isopropylbenzene	ND		mg/kg	0.0010	--	1
1,1,2,2-Tetrachloroethane	ND		mg/kg	0.0010	--	1
1,3-Dichlorobenzene	ND		mg/kg	0.0052	--	1
1,4-Dichlorobenzene	ND		mg/kg	0.0052	--	1
1,2-Dichlorobenzene	ND		mg/kg	0.0052	--	1
1,2-Dibromo-3-chloropropane	ND		mg/kg	0.0052	--	1
1,2,4-Trichlorobenzene	ND		mg/kg	0.0052	--	1
1,2,3-Trichlorobenzene	ND		mg/kg	0.0052	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	114		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	101		70-130

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1533409

Project Number: 38677-007 **Report Date:** 01/04/16

SAMPLE RESULTS

Lab ID:	L1533409-12	Date Collected:	12/16/15 10:20
Client ID:	B210-1216-1020-5-10	Date Received:	12/16/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Soil		
Analytical Method:	1,8260C		
Analytical Date:	12/20/15 17:10		
Analyst:	BN		
Percent Solids:	95%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS-5035 - Westborough Lab						
Dichlorodifluoromethane	ND		mg/kg	0.0085	--	1
Chloromethane	ND		mg/kg	0.0042	--	1
Vinyl chloride	ND		mg/kg	0.0017	--	1
Bromomethane	ND		mg/kg	0.0017	--	1
Chloroethane	ND		mg/kg	0.0017	--	1
Trichlorofluoromethane	ND		mg/kg	0.0042	--	1
1,1-Dichloroethene	ND		mg/kg	0.00085	--	1
Carbon disulfide	ND		mg/kg	0.0085	--	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		mg/kg	0.017	--	1
Methylene chloride	ND		mg/kg	0.0042	--	1
Acetone	ND		mg/kg	0.030	--	1
trans-1,2-Dichloroethene	ND		mg/kg	0.0013	--	1
Methyl Acetate	ND		mg/kg	0.0034	--	1
Methyl tert butyl ether	ND		mg/kg	0.0017	--	1
1,1-Dichloroethane	ND		mg/kg	0.0013	--	1
cis-1,2-Dichloroethene	ND		mg/kg	0.00085	--	1
1,2-Dichloroethene, Total	ND		mg/kg	0.00085	--	1
Cyclohexane	ND		mg/kg	0.017	--	1
Bromochloromethane	ND		mg/kg	0.0042	--	1
Chloroform	ND		mg/kg	0.0013	--	1
Carbon tetrachloride	ND		mg/kg	0.00085	--	1
1,1,1-Trichloroethane	ND		mg/kg	0.00085	--	1
2-Butanone	ND		mg/kg	0.0085	--	1
Benzene	ND		mg/kg	0.00085	--	1
1,2-Dichloroethane	ND		mg/kg	0.00085	--	1
Methyl cyclohexane	ND		mg/kg	0.0034	--	1
Trichloroethene	ND		mg/kg	0.00085	--	1
1,2-Dichloropropane	ND		mg/kg	0.0030	--	1
Bromodichloromethane	ND		mg/kg	0.00085	--	1
1,4-Dioxane	ND		mg/kg	0.085	--	1

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1533409

Project Number: 38677-007 **Report Date:** 01/04/16

SAMPLE RESULTS

Lab ID: L1533409-12 Date Collected: 12/16/15 10:20

Client ID: B210-1216-1020-5-10 Date Received: 12/16/15

Sample Location: WASHINGTON, D.C. Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS-5035 - Westborough Lab						
cis-1,3-Dichloropropene	ND		mg/kg	0.00085	--	1
Toluene	ND		mg/kg	0.0013	--	1
4-Methyl-2-pentanone	ND		mg/kg	0.0085	--	1
Tetrachloroethene	ND		mg/kg	0.00085	--	1
trans-1,3-Dichloropropene	ND		mg/kg	0.00085	--	1
1,3-Dichloropropene, Total	ND		mg/kg	0.00085	--	1
1,1,2-Trichloroethane	ND		mg/kg	0.0013	--	1
Dibromochloromethane	ND		mg/kg	0.00085	--	1
1,2-Dibromoethane	ND		mg/kg	0.0034	--	1
2-Hexanone	ND		mg/kg	0.0085	--	1
Chlorobenzene	ND		mg/kg	0.00085	--	1
Ethylbenzene	ND		mg/kg	0.00085	--	1
p/m-Xylene	ND		mg/kg	0.0017	--	1
o-Xylene	ND		mg/kg	0.0017	--	1
Xylenes, Total	ND		mg/kg	0.0017	--	1
Styrene	ND		mg/kg	0.0017	--	1
Bromoform	ND		mg/kg	0.0034	--	1
Isopropylbenzene	ND		mg/kg	0.00085	--	1
1,1,2,2-Tetrachloroethane	ND		mg/kg	0.00085	--	1
1,3-Dichlorobenzene	ND		mg/kg	0.0042	--	1
1,4-Dichlorobenzene	ND		mg/kg	0.0042	--	1
1,2-Dichlorobenzene	ND		mg/kg	0.0042	--	1
1,2-Dibromo-3-chloropropane	ND		mg/kg	0.0042	--	1
1,2,4-Trichlorobenzene	ND		mg/kg	0.0042	--	1
1,2,3-Trichlorobenzene	ND		mg/kg	0.0042	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	113		70-130
Toluene-d8	94		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	100		70-130

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1533409

Project Number: 38677-007 **Report Date:** 01/04/16

SAMPLE RESULTS

Lab ID:	L1533409-13	Date Collected:	12/16/15 10:30
Client ID:	B210-1216-1030-10-15	Date Received:	12/16/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Soil		
Analytical Method:	1,8260C		
Analytical Date:	12/20/15 17:36		
Analyst:	BN		
Percent Solids:	88%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS-5035 - Westborough Lab						
Dichlorodifluoromethane	ND		mg/kg	0.0085	--	1
Chloromethane	ND		mg/kg	0.0042	--	1
Vinyl chloride	ND		mg/kg	0.0017	--	1
Bromomethane	ND		mg/kg	0.0017	--	1
Chloroethane	ND		mg/kg	0.0017	--	1
Trichlorofluoromethane	ND		mg/kg	0.0042	--	1
1,1-Dichloroethene	ND		mg/kg	0.00085	--	1
Carbon disulfide	ND		mg/kg	0.0085	--	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		mg/kg	0.017	--	1
Methylene chloride	ND		mg/kg	0.0042	--	1
Acetone	ND		mg/kg	0.031	--	1
trans-1,2-Dichloroethene	ND		mg/kg	0.0013	--	1
Methyl Acetate	ND		mg/kg	0.0034	--	1
Methyl tert butyl ether	ND		mg/kg	0.0017	--	1
1,1-Dichloroethane	ND		mg/kg	0.0013	--	1
cis-1,2-Dichloroethene	ND		mg/kg	0.00085	--	1
1,2-Dichloroethene, Total	ND		mg/kg	0.00085	--	1
Cyclohexane	ND		mg/kg	0.017	--	1
Bromochloromethane	ND		mg/kg	0.0042	--	1
Chloroform	ND		mg/kg	0.0013	--	1
Carbon tetrachloride	ND		mg/kg	0.00085	--	1
1,1,1-Trichloroethane	ND		mg/kg	0.00085	--	1
2-Butanone	ND		mg/kg	0.0085	--	1
Benzene	ND		mg/kg	0.00085	--	1
1,2-Dichloroethane	ND		mg/kg	0.00085	--	1
Methyl cyclohexane	ND		mg/kg	0.0034	--	1
Trichloroethene	ND		mg/kg	0.00085	--	1
1,2-Dichloropropane	ND		mg/kg	0.0030	--	1
Bromodichloromethane	ND		mg/kg	0.00085	--	1
1,4-Dioxane	ND		mg/kg	0.085	--	1

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1533409

Project Number: 38677-007 **Report Date:** 01/04/16

SAMPLE RESULTS

Lab ID: L1533409-13 Date Collected: 12/16/15 10:30

Client ID: B210-1216-1030-10-15 Date Received: 12/16/15

Sample Location: WASHINGTON, D.C. Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS-5035 - Westborough Lab						
cis-1,3-Dichloropropene	ND		mg/kg	0.00085	--	1
Toluene	ND		mg/kg	0.0013	--	1
4-Methyl-2-pentanone	ND		mg/kg	0.0085	--	1
Tetrachloroethene	ND		mg/kg	0.00085	--	1
trans-1,3-Dichloropropene	ND		mg/kg	0.00085	--	1
1,3-Dichloropropene, Total	ND		mg/kg	0.00085	--	1
1,1,2-Trichloroethane	ND		mg/kg	0.0013	--	1
Dibromochloromethane	ND		mg/kg	0.00085	--	1
1,2-Dibromoethane	ND		mg/kg	0.0034	--	1
2-Hexanone	ND		mg/kg	0.0085	--	1
Chlorobenzene	ND		mg/kg	0.00085	--	1
Ethylbenzene	ND		mg/kg	0.00085	--	1
p/m-Xylene	ND		mg/kg	0.0017	--	1
o-Xylene	ND		mg/kg	0.0017	--	1
Xylenes, Total	ND		mg/kg	0.0017	--	1
Styrene	ND		mg/kg	0.0017	--	1
Bromoform	ND		mg/kg	0.0034	--	1
Isopropylbenzene	ND		mg/kg	0.00085	--	1
1,1,2,2-Tetrachloroethane	ND		mg/kg	0.00085	--	1
1,3-Dichlorobenzene	ND		mg/kg	0.0042	--	1
1,4-Dichlorobenzene	ND		mg/kg	0.0042	--	1
1,2-Dichlorobenzene	ND		mg/kg	0.0042	--	1
1,2-Dibromo-3-chloropropane	ND		mg/kg	0.0042	--	1
1,2,4-Trichlorobenzene	ND		mg/kg	0.0042	--	1
1,2,3-Trichlorobenzene	ND		mg/kg	0.0042	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	113		70-130
Toluene-d8	94		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	101		70-130

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1533409

Project Number: 38677-007 **Report Date:** 01/04/16

SAMPLE RESULTS

Lab ID:	L1533409-14	Date Collected:	12/16/15 11:20
Client ID:	B211-1216-1120-0-5	Date Received:	12/16/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Soil		
Analytical Method:	1,8260C		
Analytical Date:	12/20/15 18:02		
Analyst:	BN		
Percent Solids:	83%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS-5035 - Westborough Lab						
Dichlorodifluoromethane	ND		mg/kg	0.010	--	1
Chloromethane	ND		mg/kg	0.0051	--	1
Vinyl chloride	ND		mg/kg	0.0020	--	1
Bromomethane	ND		mg/kg	0.0020	--	1
Chloroethane	ND		mg/kg	0.0020	--	1
Trichlorofluoromethane	ND		mg/kg	0.0051	--	1
1,1-Dichloroethene	ND		mg/kg	0.0010	--	1
Carbon disulfide	ND		mg/kg	0.010	--	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		mg/kg	0.020	--	1
Methylene chloride	ND		mg/kg	0.0051	--	1
Acetone	ND		mg/kg	0.037	--	1
trans-1,2-Dichloroethene	ND		mg/kg	0.0015	--	1
Methyl Acetate	ND		mg/kg	0.0041	--	1
Methyl tert butyl ether	ND		mg/kg	0.0020	--	1
1,1-Dichloroethane	ND		mg/kg	0.0015	--	1
cis-1,2-Dichloroethene	ND		mg/kg	0.0010	--	1
1,2-Dichloroethene, Total	ND		mg/kg	0.0010	--	1
Cyclohexane	ND		mg/kg	0.020	--	1
Bromochloromethane	ND		mg/kg	0.0051	--	1
Chloroform	ND		mg/kg	0.0015	--	1
Carbon tetrachloride	ND		mg/kg	0.0010	--	1
1,1,1-Trichloroethane	ND		mg/kg	0.0010	--	1
2-Butanone	ND		mg/kg	0.010	--	1
Benzene	ND		mg/kg	0.0010	--	1
1,2-Dichloroethane	ND		mg/kg	0.0010	--	1
Methyl cyclohexane	ND		mg/kg	0.0041	--	1
Trichloroethene	ND		mg/kg	0.0010	--	1
1,2-Dichloropropane	ND		mg/kg	0.0036	--	1
Bromodichloromethane	ND		mg/kg	0.0010	--	1
1,4-Dioxane	ND		mg/kg	0.10	--	1

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1533409

Project Number: 38677-007 **Report Date:** 01/04/16

SAMPLE RESULTS

Lab ID: L1533409-14 Date Collected: 12/16/15 11:20

Client ID: B211-1216-1120-0-5 Date Received: 12/16/15

Sample Location: WASHINGTON, D.C. Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS-5035 - Westborough Lab						
cis-1,3-Dichloropropene	ND		mg/kg	0.0010	--	1
Toluene	ND		mg/kg	0.0015	--	1
4-Methyl-2-pentanone	ND		mg/kg	0.010	--	1
Tetrachloroethene	ND		mg/kg	0.0010	--	1
trans-1,3-Dichloropropene	ND		mg/kg	0.0010	--	1
1,3-Dichloropropene, Total	ND		mg/kg	0.0010	--	1
1,1,2-Trichloroethane	ND		mg/kg	0.0015	--	1
Dibromochloromethane	ND		mg/kg	0.0010	--	1
1,2-Dibromoethane	ND		mg/kg	0.0041	--	1
2-Hexanone	ND		mg/kg	0.010	--	1
Chlorobenzene	ND		mg/kg	0.0010	--	1
Ethylbenzene	ND		mg/kg	0.0010	--	1
p/m-Xylene	ND		mg/kg	0.0020	--	1
o-Xylene	ND		mg/kg	0.0020	--	1
Xylenes, Total	ND		mg/kg	0.0020	--	1
Styrene	ND		mg/kg	0.0020	--	1
Bromoform	ND		mg/kg	0.0041	--	1
Isopropylbenzene	ND		mg/kg	0.0010	--	1
1,1,2,2-Tetrachloroethane	ND		mg/kg	0.0010	--	1
1,3-Dichlorobenzene	ND		mg/kg	0.0051	--	1
1,4-Dichlorobenzene	ND		mg/kg	0.0051	--	1
1,2-Dichlorobenzene	ND		mg/kg	0.0051	--	1
1,2-Dibromo-3-chloropropane	ND		mg/kg	0.0051	--	1
1,2,4-Trichlorobenzene	ND		mg/kg	0.0051	--	1
1,2,3-Trichlorobenzene	ND		mg/kg	0.0051	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	114		70-130
Toluene-d8	93		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	100		70-130

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1533409

Project Number: 38677-007 **Report Date:** 01/04/16

SAMPLE RESULTS

Lab ID:	L1533409-15	Date Collected:	12/16/15 11:30
Client ID:	B211-1216-1130-5-8	Date Received:	12/16/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Soil		
Analytical Method:	1,8260C		
Analytical Date:	12/20/15 18:29		
Analyst:	BN		
Percent Solids:	82%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS-5035 - Westborough Lab						
Dichlorodifluoromethane	ND		mg/kg	0.0087	--	1
Chloromethane	ND		mg/kg	0.0043	--	1
Vinyl chloride	ND		mg/kg	0.0017	--	1
Bromomethane	ND		mg/kg	0.0017	--	1
Chloroethane	ND		mg/kg	0.0017	--	1
Trichlorofluoromethane	ND		mg/kg	0.0043	--	1
1,1-Dichloroethene	ND		mg/kg	0.00087	--	1
Carbon disulfide	ND		mg/kg	0.0087	--	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		mg/kg	0.017	--	1
Methylene chloride	ND		mg/kg	0.0043	--	1
Acetone	ND		mg/kg	0.031	--	1
trans-1,2-Dichloroethene	ND		mg/kg	0.0013	--	1
Methyl Acetate	ND		mg/kg	0.0035	--	1
Methyl tert butyl ether	ND		mg/kg	0.0017	--	1
1,1-Dichloroethane	ND		mg/kg	0.0013	--	1
cis-1,2-Dichloroethene	ND		mg/kg	0.00087	--	1
1,2-Dichloroethene, Total	ND		mg/kg	0.00087	--	1
Cyclohexane	ND		mg/kg	0.017	--	1
Bromochloromethane	ND		mg/kg	0.0043	--	1
Chloroform	ND		mg/kg	0.0013	--	1
Carbon tetrachloride	ND		mg/kg	0.00087	--	1
1,1,1-Trichloroethane	ND		mg/kg	0.00087	--	1
2-Butanone	ND		mg/kg	0.0087	--	1
Benzene	ND		mg/kg	0.00087	--	1
1,2-Dichloroethane	ND		mg/kg	0.00087	--	1
Methyl cyclohexane	ND		mg/kg	0.0035	--	1
Trichloroethene	ND		mg/kg	0.00087	--	1
1,2-Dichloropropane	ND		mg/kg	0.0030	--	1
Bromodichloromethane	ND		mg/kg	0.00087	--	1
1,4-Dioxane	ND		mg/kg	0.087	--	1

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1533409

Project Number: 38677-007 **Report Date:** 01/04/16

SAMPLE RESULTS

Lab ID: L1533409-15 Date Collected: 12/16/15 11:30

Client ID: B211-1216-1130-5-8 Date Received: 12/16/15

Sample Location: WASHINGTON, D.C. Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS-5035 - Westborough Lab						
cis-1,3-Dichloropropene	ND		mg/kg	0.00087	--	1
Toluene	ND		mg/kg	0.0013	--	1
4-Methyl-2-pentanone	ND		mg/kg	0.0087	--	1
Tetrachloroethene	ND		mg/kg	0.00087	--	1
trans-1,3-Dichloropropene	ND		mg/kg	0.00087	--	1
1,3-Dichloropropene, Total	ND		mg/kg	0.00087	--	1
1,1,2-Trichloroethane	ND		mg/kg	0.0013	--	1
Dibromochloromethane	ND		mg/kg	0.00087	--	1
1,2-Dibromoethane	ND		mg/kg	0.0035	--	1
2-Hexanone	ND		mg/kg	0.0087	--	1
Chlorobenzene	ND		mg/kg	0.00087	--	1
Ethylbenzene	ND		mg/kg	0.00087	--	1
p/m-Xylene	ND		mg/kg	0.0017	--	1
o-Xylene	ND		mg/kg	0.0017	--	1
Xylenes, Total	ND		mg/kg	0.0017	--	1
Styrene	ND		mg/kg	0.0017	--	1
Bromoform	ND		mg/kg	0.0035	--	1
Isopropylbenzene	ND		mg/kg	0.00087	--	1
1,1,2,2-Tetrachloroethane	ND		mg/kg	0.00087	--	1
1,3-Dichlorobenzene	ND		mg/kg	0.0043	--	1
1,4-Dichlorobenzene	ND		mg/kg	0.0043	--	1
1,2-Dichlorobenzene	ND		mg/kg	0.0043	--	1
1,2-Dibromo-3-chloropropane	ND		mg/kg	0.0043	--	1
1,2,4-Trichlorobenzene	ND		mg/kg	0.0043	--	1
1,2,3-Trichlorobenzene	ND		mg/kg	0.0043	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	111		70-130
Toluene-d8	94		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	99		70-130

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1533409

Project Number: 38677-007 **Report Date:** 01/04/16

SAMPLE RESULTS

Lab ID:	L1533409-16	Date Collected:	12/16/15 12:55
Client ID:	B213-1216-1255-0-5	Date Received:	12/16/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Soil		
Analytical Method:	1,8260C		
Analytical Date:	12/20/15 16:12		
Analyst:	BN		
Percent Solids:	88%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS-5035 - Westborough Lab						
Dichlorodifluoromethane	ND		mg/kg	0.010	--	1
Chloromethane	ND		mg/kg	0.0053	--	1
Vinyl chloride	ND		mg/kg	0.0021	--	1
Bromomethane	ND		mg/kg	0.0021	--	1
Chloroethane	ND		mg/kg	0.0021	--	1
Trichlorofluoromethane	ND		mg/kg	0.0053	--	1
1,1-Dichloroethene	ND		mg/kg	0.0010	--	1
Carbon disulfide	ND		mg/kg	0.010	--	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		mg/kg	0.021	--	1
Methylene chloride	ND		mg/kg	0.0053	--	1
Acetone	ND		mg/kg	0.038	--	1
trans-1,2-Dichloroethene	ND		mg/kg	0.0016	--	1
Methyl Acetate	ND		mg/kg	0.0042	--	1
Methyl tert butyl ether	ND		mg/kg	0.0021	--	1
1,1-Dichloroethane	ND		mg/kg	0.0016	--	1
cis-1,2-Dichloroethene	ND		mg/kg	0.0010	--	1
1,2-Dichloroethene, Total	ND		mg/kg	0.0010	--	1
Cyclohexane	ND		mg/kg	0.021	--	1
Bromochloromethane	ND		mg/kg	0.0053	--	1
Chloroform	ND		mg/kg	0.0016	--	1
Carbon tetrachloride	ND		mg/kg	0.0010	--	1
1,1,1-Trichloroethane	ND		mg/kg	0.0010	--	1
2-Butanone	ND		mg/kg	0.010	--	1
Benzene	ND		mg/kg	0.0010	--	1
1,2-Dichloroethane	ND		mg/kg	0.0010	--	1
Methyl cyclohexane	ND		mg/kg	0.0042	--	1
Trichloroethene	ND		mg/kg	0.0010	--	1
1,2-Dichloropropane	ND		mg/kg	0.0037	--	1
Bromodichloromethane	ND		mg/kg	0.0010	--	1
1,4-Dioxane	ND		mg/kg	0.10	--	1

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1533409

Project Number: 38677-007 **Report Date:** 01/04/16

SAMPLE RESULTS

Lab ID: L1533409-16 Date Collected: 12/16/15 12:55

Client ID: B213-1216-1255-0-5 Date Received: 12/16/15

Sample Location: WASHINGTON, D.C. Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS-5035 - Westborough Lab						
cis-1,3-Dichloropropene	ND		mg/kg	0.0010	--	1
Toluene	ND		mg/kg	0.0016	--	1
4-Methyl-2-pentanone	ND		mg/kg	0.010	--	1
Tetrachloroethene	ND		mg/kg	0.0010	--	1
trans-1,3-Dichloropropene	ND		mg/kg	0.0010	--	1
1,3-Dichloropropene, Total	ND		mg/kg	0.0010	--	1
1,1,2-Trichloroethane	ND		mg/kg	0.0016	--	1
Dibromochloromethane	ND		mg/kg	0.0010	--	1
1,2-Dibromoethane	ND		mg/kg	0.0042	--	1
2-Hexanone	ND		mg/kg	0.010	--	1
Chlorobenzene	ND		mg/kg	0.0010	--	1
Ethylbenzene	ND		mg/kg	0.0010	--	1
p/m-Xylene	ND		mg/kg	0.0021	--	1
o-Xylene	ND		mg/kg	0.0021	--	1
Xylenes, Total	ND		mg/kg	0.0021	--	1
Styrene	ND		mg/kg	0.0021	--	1
Bromoform	ND		mg/kg	0.0042	--	1
Isopropylbenzene	ND		mg/kg	0.0010	--	1
1,1,2,2-Tetrachloroethane	ND		mg/kg	0.0010	--	1
1,3-Dichlorobenzene	ND		mg/kg	0.0053	--	1
1,4-Dichlorobenzene	ND		mg/kg	0.0053	--	1
1,2-Dichlorobenzene	ND		mg/kg	0.0053	--	1
1,2-Dibromo-3-chloropropane	ND		mg/kg	0.0053	--	1
1,2,4-Trichlorobenzene	ND		mg/kg	0.0053	--	1
1,2,3-Trichlorobenzene	ND		mg/kg	0.0053	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	98		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	97		70-130

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1533409

Project Number: 38677-007 **Report Date:** 01/04/16

SAMPLE RESULTS

Lab ID:	L1533409-17	Date Collected:	12/16/15 00:00
Client ID:	B213-1216-1315-5-10	Date Received:	12/16/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Soil		
Analytical Method:	1,8260C		
Analytical Date:	12/20/15 17:15		
Analyst:	BN		
Percent Solids:	83%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS-5035 - Westborough Lab						
Dichlorodifluoromethane	ND		mg/kg	0.0098	--	1
Chloromethane	ND		mg/kg	0.0049	--	1
Vinyl chloride	ND		mg/kg	0.0020	--	1
Bromomethane	ND		mg/kg	0.0020	--	1
Chloroethane	ND		mg/kg	0.0020	--	1
Trichlorofluoromethane	ND		mg/kg	0.0049	--	1
1,1-Dichloroethene	ND		mg/kg	0.00098	--	1
Carbon disulfide	ND		mg/kg	0.0098	--	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		mg/kg	0.020	--	1
Methylene chloride	ND		mg/kg	0.0049	--	1
Acetone	ND		mg/kg	0.035	--	1
trans-1,2-Dichloroethene	ND		mg/kg	0.0015	--	1
Methyl Acetate	ND		mg/kg	0.0039	--	1
Methyl tert butyl ether	ND		mg/kg	0.0020	--	1
1,1-Dichloroethane	ND		mg/kg	0.0015	--	1
cis-1,2-Dichloroethene	ND		mg/kg	0.00098	--	1
1,2-Dichloroethene, Total	ND		mg/kg	0.00098	--	1
Cyclohexane	ND		mg/kg	0.020	--	1
Bromochloromethane	ND		mg/kg	0.0049	--	1
Chloroform	ND		mg/kg	0.0015	--	1
Carbon tetrachloride	ND		mg/kg	0.00098	--	1
1,1,1-Trichloroethane	ND		mg/kg	0.00098	--	1
2-Butanone	ND		mg/kg	0.0098	--	1
Benzene	ND		mg/kg	0.00098	--	1
1,2-Dichloroethane	ND		mg/kg	0.00098	--	1
Methyl cyclohexane	ND		mg/kg	0.0039	--	1
Trichloroethene	ND		mg/kg	0.00098	--	1
1,2-Dichloropropane	ND		mg/kg	0.0034	--	1
Bromodichloromethane	ND		mg/kg	0.00098	--	1
1,4-Dioxane	ND		mg/kg	0.098	--	1

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1533409

Project Number: 38677-007 **Report Date:** 01/04/16

SAMPLE RESULTS

Lab ID: L1533409-17 Date Collected: 12/16/15 00:00

Client ID: B213-1216-1315-5-10 Date Received: 12/16/15

Sample Location: WASHINGTON, D.C. Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS-5035 - Westborough Lab						
cis-1,3-Dichloropropene	ND		mg/kg	0.00098	--	1
Toluene	ND		mg/kg	0.0015	--	1
4-Methyl-2-pentanone	ND		mg/kg	0.0098	--	1
Tetrachloroethene	ND		mg/kg	0.00098	--	1
trans-1,3-Dichloropropene	ND		mg/kg	0.00098	--	1
1,3-Dichloropropene, Total	ND		mg/kg	0.00098	--	1
1,1,2-Trichloroethane	ND		mg/kg	0.0015	--	1
Dibromochloromethane	ND		mg/kg	0.00098	--	1
1,2-Dibromoethane	ND		mg/kg	0.0039	--	1
2-Hexanone	ND		mg/kg	0.0098	--	1
Chlorobenzene	ND		mg/kg	0.00098	--	1
Ethylbenzene	ND		mg/kg	0.00098	--	1
p/m-Xylene	ND		mg/kg	0.0020	--	1
o-Xylene	ND		mg/kg	0.0020	--	1
Xylenes, Total	ND		mg/kg	0.0020	--	1
Styrene	ND		mg/kg	0.0020	--	1
Bromoform	ND		mg/kg	0.0039	--	1
Isopropylbenzene	ND		mg/kg	0.00098	--	1
1,1,2,2-Tetrachloroethane	ND		mg/kg	0.00098	--	1
1,3-Dichlorobenzene	ND		mg/kg	0.0049	--	1
1,4-Dichlorobenzene	ND		mg/kg	0.0049	--	1
1,2-Dichlorobenzene	ND		mg/kg	0.0049	--	1
1,2-Dibromo-3-chloropropane	ND		mg/kg	0.0049	--	1
1,2,4-Trichlorobenzene	ND		mg/kg	0.0049	--	1
1,2,3-Trichlorobenzene	ND		mg/kg	0.0049	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	106		70-130
Dibromofluoromethane	98		70-130

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1533409

Project Number: 38677-007 **Report Date:** 01/04/16

SAMPLE RESULTS

Lab ID:	L1533409-18	Date Collected:	12/16/15 14:05
Client ID:	B214-1216-1405-0-5	Date Received:	12/16/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Soil		
Analytical Method:	1,8260C		
Analytical Date:	12/20/15 17:42		
Analyst:	BN		
Percent Solids:	86%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS-5035 - Westborough Lab						
Dichlorodifluoromethane	ND		mg/kg	0.0092	--	1
Chloromethane	ND		mg/kg	0.0046	--	1
Vinyl chloride	ND		mg/kg	0.0018	--	1
Bromomethane	ND		mg/kg	0.0018	--	1
Chloroethane	ND		mg/kg	0.0018	--	1
Trichlorofluoromethane	ND		mg/kg	0.0046	--	1
1,1-Dichloroethene	ND		mg/kg	0.00092	--	1
Carbon disulfide	ND		mg/kg	0.0092	--	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		mg/kg	0.018	--	1
Methylene chloride	ND		mg/kg	0.0046	--	1
Acetone	ND		mg/kg	0.033	--	1
trans-1,2-Dichloroethene	ND		mg/kg	0.0014	--	1
Methyl Acetate	ND		mg/kg	0.0037	--	1
Methyl tert butyl ether	ND		mg/kg	0.0018	--	1
1,1-Dichloroethane	ND		mg/kg	0.0014	--	1
cis-1,2-Dichloroethene	ND		mg/kg	0.00092	--	1
1,2-Dichloroethene, Total	ND		mg/kg	0.00092	--	1
Cyclohexane	ND		mg/kg	0.018	--	1
Bromochloromethane	ND		mg/kg	0.0046	--	1
Chloroform	ND		mg/kg	0.0014	--	1
Carbon tetrachloride	ND		mg/kg	0.00092	--	1
1,1,1-Trichloroethane	ND		mg/kg	0.00092	--	1
2-Butanone	ND		mg/kg	0.0092	--	1
Benzene	ND		mg/kg	0.00092	--	1
1,2-Dichloroethane	ND		mg/kg	0.00092	--	1
Methyl cyclohexane	ND		mg/kg	0.0037	--	1
Trichloroethene	ND		mg/kg	0.00092	--	1
1,2-Dichloropropane	ND		mg/kg	0.0032	--	1
Bromodichloromethane	ND		mg/kg	0.00092	--	1
1,4-Dioxane	ND		mg/kg	0.092	--	1

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1533409

Project Number: 38677-007 **Report Date:** 01/04/16

SAMPLE RESULTS

Lab ID: L1533409-18 Date Collected: 12/16/15 14:05

Client ID: B214-1216-1405-0-5 Date Received: 12/16/15

Sample Location: WASHINGTON, D.C. Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS-5035 - Westborough Lab						
cis-1,3-Dichloropropene	ND		mg/kg	0.00092	--	1
Toluene	ND		mg/kg	0.0014	--	1
4-Methyl-2-pentanone	ND		mg/kg	0.0092	--	1
Tetrachloroethene	ND		mg/kg	0.00092	--	1
trans-1,3-Dichloropropene	ND		mg/kg	0.00092	--	1
1,3-Dichloropropene, Total	ND		mg/kg	0.00092	--	1
1,1,2-Trichloroethane	ND		mg/kg	0.0014	--	1
Dibromochloromethane	ND		mg/kg	0.00092	--	1
1,2-Dibromoethane	ND		mg/kg	0.0037	--	1
2-Hexanone	ND		mg/kg	0.0092	--	1
Chlorobenzene	ND		mg/kg	0.00092	--	1
Ethylbenzene	ND		mg/kg	0.00092	--	1
p/m-Xylene	ND		mg/kg	0.0018	--	1
o-Xylene	ND		mg/kg	0.0018	--	1
Xylenes, Total	ND		mg/kg	0.0018	--	1
Styrene	ND		mg/kg	0.0018	--	1
Bromoform	ND		mg/kg	0.0037	--	1
Isopropylbenzene	ND		mg/kg	0.00092	--	1
1,1,2,2-Tetrachloroethane	ND		mg/kg	0.00092	--	1
1,3-Dichlorobenzene	ND		mg/kg	0.0046	--	1
1,4-Dichlorobenzene	ND		mg/kg	0.0046	--	1
1,2-Dichlorobenzene	ND		mg/kg	0.0046	--	1
1,2-Dibromo-3-chloropropane	ND		mg/kg	0.0046	--	1
1,2,4-Trichlorobenzene	ND		mg/kg	0.0046	--	1
1,2,3-Trichlorobenzene	ND		mg/kg	0.0046	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	97		70-130

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1533409

Project Number: 38677-007 **Report Date:** 01/04/16

SAMPLE RESULTS

Lab ID:	L1533409-19	Date Collected:	12/16/15 14:15
Client ID:	B214-1216-1415-5-10	Date Received:	12/16/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Soil		
Analytical Method:	1,8260C		
Analytical Date:	12/20/15 16:39		
Analyst:	BN		
Percent Solids:	86%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS-5035 - Westborough Lab						
Dichlorodifluoromethane	ND		mg/kg	0.0095	--	1
Chloromethane	ND		mg/kg	0.0048	--	1
Vinyl chloride	ND		mg/kg	0.0019	--	1
Bromomethane	ND		mg/kg	0.0019	--	1
Chloroethane	ND		mg/kg	0.0019	--	1
Trichlorofluoromethane	ND		mg/kg	0.0048	--	1
1,1-Dichloroethene	ND		mg/kg	0.00095	--	1
Carbon disulfide	ND		mg/kg	0.0095	--	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		mg/kg	0.019	--	1
Methylene chloride	ND		mg/kg	0.0048	--	1
Acetone	ND		mg/kg	0.034	--	1
trans-1,2-Dichloroethene	ND		mg/kg	0.0014	--	1
Methyl Acetate	ND		mg/kg	0.0038	--	1
Methyl tert butyl ether	ND		mg/kg	0.0019	--	1
1,1-Dichloroethane	ND		mg/kg	0.0014	--	1
cis-1,2-Dichloroethene	ND		mg/kg	0.00095	--	1
1,2-Dichloroethene, Total	ND		mg/kg	0.00095	--	1
Cyclohexane	ND		mg/kg	0.019	--	1
Bromochloromethane	ND		mg/kg	0.0048	--	1
Chloroform	ND		mg/kg	0.0014	--	1
Carbon tetrachloride	ND		mg/kg	0.00095	--	1
1,1,1-Trichloroethane	ND		mg/kg	0.00095	--	1
2-Butanone	ND		mg/kg	0.0095	--	1
Benzene	ND		mg/kg	0.00095	--	1
1,2-Dichloroethane	ND		mg/kg	0.00095	--	1
Methyl cyclohexane	ND		mg/kg	0.0038	--	1
Trichloroethene	ND		mg/kg	0.00095	--	1
1,2-Dichloropropane	ND		mg/kg	0.0033	--	1
Bromodichloromethane	ND		mg/kg	0.00095	--	1
1,4-Dioxane	ND		mg/kg	0.095	--	1

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1533409

Project Number: 38677-007 **Report Date:** 01/04/16

SAMPLE RESULTS

Lab ID: L1533409-19 Date Collected: 12/16/15 14:15

Client ID: B214-1216-1415-5-10 Date Received: 12/16/15

Sample Location: WASHINGTON, D.C. Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS-5035 - Westborough Lab						
cis-1,3-Dichloropropene	ND		mg/kg	0.00095	--	1
Toluene	ND		mg/kg	0.0014	--	1
4-Methyl-2-pentanone	ND		mg/kg	0.0095	--	1
Tetrachloroethene	ND		mg/kg	0.00095	--	1
trans-1,3-Dichloropropene	ND		mg/kg	0.00095	--	1
1,3-Dichloropropene, Total	ND		mg/kg	0.00095	--	1
1,1,2-Trichloroethane	ND		mg/kg	0.0014	--	1
Dibromochloromethane	ND		mg/kg	0.00095	--	1
1,2-Dibromoethane	ND		mg/kg	0.0038	--	1
2-Hexanone	ND		mg/kg	0.0095	--	1
Chlorobenzene	ND		mg/kg	0.00095	--	1
Ethylbenzene	ND		mg/kg	0.00095	--	1
p/m-Xylene	ND		mg/kg	0.0019	--	1
o-Xylene	ND		mg/kg	0.0019	--	1
Xylenes, Total	ND		mg/kg	0.0019	--	1
Styrene	ND		mg/kg	0.0019	--	1
Bromoform	ND		mg/kg	0.0038	--	1
Isopropylbenzene	ND		mg/kg	0.00095	--	1
1,1,2,2-Tetrachloroethane	ND		mg/kg	0.00095	--	1
1,3-Dichlorobenzene	ND		mg/kg	0.0048	--	1
1,4-Dichlorobenzene	ND		mg/kg	0.0048	--	1
1,2-Dichlorobenzene	ND		mg/kg	0.0048	--	1
1,2-Dibromo-3-chloropropane	ND		mg/kg	0.0048	--	1
1,2,4-Trichlorobenzene	ND		mg/kg	0.0048	--	1
1,2,3-Trichlorobenzene	ND		mg/kg	0.0048	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	94		70-130
Dibromofluoromethane	108		70-130

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1533409

Project Number: 38677-007 **Report Date:** 01/04/16

SAMPLE RESULTS

Lab ID:	L1533409-20	Date Collected:	12/16/15 14:50
Client ID:	TB-121615	Date Received:	12/16/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Water		
Analytical Method:	1,8260C		
Analytical Date:	12/22/15 00:27		
Analyst:	PK		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Dichlorodifluoromethane	ND		ug/l	5.0	--	1
Chloromethane	ND		ug/l	2.5	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
Bromomethane	ND		ug/l	1.0	--	1
Chloroethane	ND		ug/l	1.0	--	1
Trichlorofluoromethane	ND		ug/l	2.5	--	1
1,1-Dichloroethene	ND		ug/l	0.50	--	1
Carbon disulfide	ND		ug/l	5.0	--	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		ug/l	2.5	--	1
Methylene chloride	ND		ug/l	2.5	--	1
Acetone	ND		ug/l	5.0	--	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	--	1
Methyl Acetate	ND		ug/l	2.0	--	1
Methyl tert butyl ether	ND		ug/l	1.0	--	1
1,1-Dichloroethane	ND		ug/l	0.75	--	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	--	1
1,2-Dichloroethene, Total	ND		ug/l	0.50	--	1
Cyclohexane	ND		ug/l	10	--	1
Bromochloromethane	ND		ug/l	2.5	--	1
Chloroform	ND		ug/l	0.75	--	1
Carbon tetrachloride	ND		ug/l	0.50	--	1
1,1,1-Trichloroethane	ND		ug/l	0.50	--	1
2-Butanone	ND		ug/l	5.0	--	1
Benzene	ND		ug/l	0.50	--	1
1,2-Dichloroethane	ND		ug/l	0.50	--	1
Methyl cyclohexane	ND		ug/l	10	--	1
Trichloroethene	ND		ug/l	0.50	--	1
1,2-Dichloropropane	ND		ug/l	1.0	--	1
Bromodichloromethane	ND		ug/l	0.50	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	--	1

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1533409

Project Number: 38677-007 **Report Date:** 01/04/16

SAMPLE RESULTS

Lab ID: L1533409-20 Date Collected: 12/16/15 14:50

Client ID: TB-121615 Date Received: 12/16/15

Sample Location: WASHINGTON, D.C. Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Toluene	ND		ug/l	0.75	--	1
Tetrachloroethene	ND		ug/l	0.50	--	1
4-Methyl-2-pentanone	ND		ug/l	5.0	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	--	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	--	1
1,1,2-Trichloroethane	ND		ug/l	0.75	--	1
Dibromochloromethane	ND		ug/l	0.50	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Chlorobenzene	ND		ug/l	0.50	--	1
Ethylbenzene	ND		ug/l	0.50	--	1
p/m-Xylene	ND		ug/l	1.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
Xylenes, Total	ND		ug/l	1.0	--	1
Styrene	ND		ug/l	1.0	--	1
Bromoform	ND		ug/l	2.0	--	1
Isopropylbenzene	ND		ug/l	0.50	--	1
1,3-Dichlorobenzene	ND		ug/l	2.5	--	1
1,4-Dichlorobenzene	ND		ug/l	2.5	--	1
1,2-Dichlorobenzene	ND		ug/l	2.5	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	--	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	94		70-130

Project Name: ST. E'S EAST CAMPUS
Project Number: 38677-007
Lab Number: L1533409
Report Date: 01/04/16

SAMPLE RESULTS

Lab ID:	L1533409-20	Date Collected:	12/16/15 14:50
Client ID:	TB-121615	Date Received:	12/16/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Water		
Analytical Method:	1,8260C-SIM(M)		
Analytical Date:	12/22/15 00:27		
Analyst:	PK		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS-SIM - Westborough Lab						
1,4-Dioxane	ND		ug/l	3.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.10	--	1

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1533409

Project Number: 38677-007 **Report Date:** 01/04/16

SAMPLE RESULTS

Lab ID:	L1533409-21	Date Collected:	12/16/15 15:05
Client ID:	B215-1216-1505-0-5	Date Received:	12/16/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Soil		
Analytical Method:	1,8260C		
Analytical Date:	12/20/15 17:07		
Analyst:	BN		
Percent Solids:	84%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS-5035 - Westborough Lab						
Dichlorodifluoromethane	ND		mg/kg	0.0092	--	1
Chloromethane	ND		mg/kg	0.0046	--	1
Vinyl chloride	ND		mg/kg	0.0018	--	1
Bromomethane	ND		mg/kg	0.0018	--	1
Chloroethane	ND		mg/kg	0.0018	--	1
Trichlorofluoromethane	ND		mg/kg	0.0046	--	1
1,1-Dichloroethene	ND		mg/kg	0.00092	--	1
Carbon disulfide	ND		mg/kg	0.0092	--	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		mg/kg	0.018	--	1
Methylene chloride	ND		mg/kg	0.0046	--	1
Acetone	ND		mg/kg	0.033	--	1
trans-1,2-Dichloroethene	ND		mg/kg	0.0014	--	1
Methyl Acetate	ND		mg/kg	0.0037	--	1
Methyl tert butyl ether	ND		mg/kg	0.0018	--	1
1,1-Dichloroethane	ND		mg/kg	0.0014	--	1
cis-1,2-Dichloroethene	ND		mg/kg	0.00092	--	1
1,2-Dichloroethene, Total	ND		mg/kg	0.00092	--	1
Cyclohexane	ND		mg/kg	0.018	--	1
Bromochloromethane	ND		mg/kg	0.0046	--	1
Chloroform	ND		mg/kg	0.0014	--	1
Carbon tetrachloride	ND		mg/kg	0.00092	--	1
1,1,1-Trichloroethane	ND		mg/kg	0.00092	--	1
2-Butanone	ND		mg/kg	0.0092	--	1
Benzene	ND		mg/kg	0.00092	--	1
1,2-Dichloroethane	ND		mg/kg	0.00092	--	1
Methyl cyclohexane	ND		mg/kg	0.0037	--	1
Trichloroethene	ND		mg/kg	0.00092	--	1
1,2-Dichloropropane	ND		mg/kg	0.0032	--	1
Bromodichloromethane	ND		mg/kg	0.00092	--	1
1,4-Dioxane	ND		mg/kg	0.092	--	1

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1533409

Project Number: 38677-007 **Report Date:** 01/04/16

SAMPLE RESULTS

Lab ID: L1533409-21 Date Collected: 12/16/15 15:05

Client ID: B215-1216-1505-0-5 Date Received: 12/16/15

Sample Location: WASHINGTON, D.C. Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS-5035 - Westborough Lab						
cis-1,3-Dichloropropene	ND		mg/kg	0.00092	--	1
Toluene	ND		mg/kg	0.0014	--	1
4-Methyl-2-pentanone	ND		mg/kg	0.0092	--	1
Tetrachloroethene	ND		mg/kg	0.00092	--	1
trans-1,3-Dichloropropene	ND		mg/kg	0.00092	--	1
1,3-Dichloropropene, Total	ND		mg/kg	0.00092	--	1
1,1,2-Trichloroethane	ND		mg/kg	0.0014	--	1
Dibromochloromethane	ND		mg/kg	0.00092	--	1
1,2-Dibromoethane	ND		mg/kg	0.0037	--	1
2-Hexanone	ND		mg/kg	0.0092	--	1
Chlorobenzene	ND		mg/kg	0.00092	--	1
Ethylbenzene	ND		mg/kg	0.00092	--	1
p/m-Xylene	ND		mg/kg	0.0018	--	1
o-Xylene	ND		mg/kg	0.0018	--	1
Xylenes, Total	ND		mg/kg	0.0018	--	1
Styrene	ND		mg/kg	0.0018	--	1
Bromoform	ND		mg/kg	0.0037	--	1
Isopropylbenzene	ND		mg/kg	0.00092	--	1
1,1,2,2-Tetrachloroethane	ND		mg/kg	0.00092	--	1
1,3-Dichlorobenzene	ND		mg/kg	0.0046	--	1
1,4-Dichlorobenzene	ND		mg/kg	0.0046	--	1
1,2-Dichlorobenzene	ND		mg/kg	0.0046	--	1
1,2-Dibromo-3-chloropropane	ND		mg/kg	0.0046	--	1
1,2,4-Trichlorobenzene	ND		mg/kg	0.0046	--	1
1,2,3-Trichlorobenzene	ND		mg/kg	0.0046	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	91		70-130
Dibromofluoromethane	110		70-130

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1533409

Project Number: 38677-007 **Report Date:** 01/04/16

SAMPLE RESULTS

Lab ID:	L1533409-22	Date Collected:	12/16/15 15:10
Client ID:	B215-1216-1510-5-10	Date Received:	12/16/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Soil		
Analytical Method:	1,8260C		
Analytical Date:	12/20/15 17:34		
Analyst:	BN		
Percent Solids:	84%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS-5035 - Westborough Lab						
Dichlorodifluoromethane	ND		mg/kg	0.010	--	1
Chloromethane	ND		mg/kg	0.0051	--	1
Vinyl chloride	ND		mg/kg	0.0020	--	1
Bromomethane	ND		mg/kg	0.0020	--	1
Chloroethane	ND		mg/kg	0.0020	--	1
Trichlorofluoromethane	ND		mg/kg	0.0051	--	1
1,1-Dichloroethene	ND		mg/kg	0.0010	--	1
Carbon disulfide	ND		mg/kg	0.010	--	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		mg/kg	0.020	--	1
Methylene chloride	ND		mg/kg	0.0051	--	1
Acetone	ND		mg/kg	0.036	--	1
trans-1,2-Dichloroethene	ND		mg/kg	0.0015	--	1
Methyl Acetate	ND		mg/kg	0.0040	--	1
Methyl tert butyl ether	ND		mg/kg	0.0020	--	1
1,1-Dichloroethane	ND		mg/kg	0.0015	--	1
cis-1,2-Dichloroethene	ND		mg/kg	0.0010	--	1
1,2-Dichloroethene, Total	ND		mg/kg	0.0010	--	1
Cyclohexane	ND		mg/kg	0.020	--	1
Bromochloromethane	ND		mg/kg	0.0051	--	1
Chloroform	ND		mg/kg	0.0015	--	1
Carbon tetrachloride	ND		mg/kg	0.0010	--	1
1,1,1-Trichloroethane	ND		mg/kg	0.0010	--	1
2-Butanone	ND		mg/kg	0.010	--	1
Benzene	ND		mg/kg	0.0010	--	1
1,2-Dichloroethane	ND		mg/kg	0.0010	--	1
Methyl cyclohexane	ND		mg/kg	0.0040	--	1
Trichloroethene	ND		mg/kg	0.0010	--	1
1,2-Dichloropropane	ND		mg/kg	0.0035	--	1
Bromodichloromethane	ND		mg/kg	0.0010	--	1
1,4-Dioxane	ND		mg/kg	0.10	--	1

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1533409

Project Number: 38677-007 **Report Date:** 01/04/16

SAMPLE RESULTS

Lab ID: L1533409-22 Date Collected: 12/16/15 15:10

Client ID: B215-1216-1510-5-10 Date Received: 12/16/15

Sample Location: WASHINGTON, D.C. Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS-5035 - Westborough Lab						
cis-1,3-Dichloropropene	ND		mg/kg	0.0010	--	1
Toluene	ND		mg/kg	0.0015	--	1
4-Methyl-2-pentanone	ND		mg/kg	0.010	--	1
Tetrachloroethene	ND		mg/kg	0.0010	--	1
trans-1,3-Dichloropropene	ND		mg/kg	0.0010	--	1
1,3-Dichloropropene, Total	ND		mg/kg	0.0010	--	1
1,1,2-Trichloroethane	ND		mg/kg	0.0015	--	1
Dibromochloromethane	ND		mg/kg	0.0010	--	1
1,2-Dibromoethane	ND		mg/kg	0.0040	--	1
2-Hexanone	ND		mg/kg	0.010	--	1
Chlorobenzene	ND		mg/kg	0.0010	--	1
Ethylbenzene	ND		mg/kg	0.0010	--	1
p/m-Xylene	ND		mg/kg	0.0020	--	1
o-Xylene	ND		mg/kg	0.0020	--	1
Xylenes, Total	ND		mg/kg	0.0020	--	1
Styrene	ND		mg/kg	0.0020	--	1
Bromoform	ND		mg/kg	0.0040	--	1
Isopropylbenzene	ND		mg/kg	0.0010	--	1
1,1,2,2-Tetrachloroethane	ND		mg/kg	0.0010	--	1
1,3-Dichlorobenzene	ND		mg/kg	0.0051	--	1
1,4-Dichlorobenzene	ND		mg/kg	0.0051	--	1
1,2-Dichlorobenzene	ND		mg/kg	0.0051	--	1
1,2-Dibromo-3-chloropropane	ND		mg/kg	0.0051	--	1
1,2,4-Trichlorobenzene	ND		mg/kg	0.0051	--	1
1,2,3-Trichlorobenzene	ND		mg/kg	0.0051	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	94		70-130
Dibromofluoromethane	107		70-130

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1533409

Project Number: 38677-007 **Report Date:** 01/04/16

SAMPLE RESULTS

Lab ID:	L1533409-23	Date Collected:	12/16/15 15:15
Client ID:	B215-1216-1515-10-15	Date Received:	12/16/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Soil		
Analytical Method:	1,8260C		
Analytical Date:	12/20/15 18:02		
Analyst:	BN		
Percent Solids:	86%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS-5035 - Westborough Lab						
Dichlorodifluoromethane	ND		mg/kg	0.0077	--	1
Chloromethane	ND		mg/kg	0.0038	--	1
Vinyl chloride	ND		mg/kg	0.0015	--	1
Bromomethane	ND		mg/kg	0.0015	--	1
Chloroethane	ND		mg/kg	0.0015	--	1
Trichlorofluoromethane	ND		mg/kg	0.0038	--	1
1,1-Dichloroethene	ND		mg/kg	0.00077	--	1
Carbon disulfide	ND		mg/kg	0.0077	--	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		mg/kg	0.015	--	1
Methylene chloride	ND		mg/kg	0.0038	--	1
Acetone	ND		mg/kg	0.028	--	1
trans-1,2-Dichloroethene	ND		mg/kg	0.0012	--	1
Methyl Acetate	ND		mg/kg	0.0031	--	1
Methyl tert butyl ether	ND		mg/kg	0.0015	--	1
1,1-Dichloroethane	ND		mg/kg	0.0012	--	1
cis-1,2-Dichloroethene	ND		mg/kg	0.00077	--	1
1,2-Dichloroethene, Total	ND		mg/kg	0.00077	--	1
Cyclohexane	ND		mg/kg	0.015	--	1
Bromochloromethane	ND		mg/kg	0.0038	--	1
Chloroform	ND		mg/kg	0.0012	--	1
Carbon tetrachloride	ND		mg/kg	0.00077	--	1
1,1,1-Trichloroethane	ND		mg/kg	0.00077	--	1
2-Butanone	ND		mg/kg	0.0077	--	1
Benzene	ND		mg/kg	0.00077	--	1
1,2-Dichloroethane	ND		mg/kg	0.00077	--	1
Methyl cyclohexane	ND		mg/kg	0.0031	--	1
Trichloroethene	ND		mg/kg	0.00077	--	1
1,2-Dichloropropane	ND		mg/kg	0.0027	--	1
Bromodichloromethane	ND		mg/kg	0.00077	--	1
1,4-Dioxane	ND		mg/kg	0.077	--	1

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1533409

Project Number: 38677-007 **Report Date:** 01/04/16

SAMPLE RESULTS

Lab ID: L1533409-23 Date Collected: 12/16/15 15:15

Client ID: B215-1216-1515-10-15 Date Received: 12/16/15

Sample Location: WASHINGTON, D.C. Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS-5035 - Westborough Lab						
cis-1,3-Dichloropropene	ND		mg/kg	0.00077	--	1
Toluene	ND		mg/kg	0.0012	--	1
4-Methyl-2-pentanone	ND		mg/kg	0.0077	--	1
Tetrachloroethene	ND		mg/kg	0.00077	--	1
trans-1,3-Dichloropropene	ND		mg/kg	0.00077	--	1
1,3-Dichloropropene, Total	ND		mg/kg	0.00077	--	1
1,1,2-Trichloroethane	ND		mg/kg	0.0012	--	1
Dibromochloromethane	ND		mg/kg	0.00077	--	1
1,2-Dibromoethane	ND		mg/kg	0.0031	--	1
2-Hexanone	ND		mg/kg	0.0077	--	1
Chlorobenzene	ND		mg/kg	0.00077	--	1
Ethylbenzene	ND		mg/kg	0.00077	--	1
p/m-Xylene	ND		mg/kg	0.0015	--	1
o-Xylene	ND		mg/kg	0.0015	--	1
Xylenes, Total	ND		mg/kg	0.0015	--	1
Styrene	ND		mg/kg	0.0015	--	1
Bromoform	ND		mg/kg	0.0031	--	1
Isopropylbenzene	ND		mg/kg	0.00077	--	1
1,1,2,2-Tetrachloroethane	ND		mg/kg	0.00077	--	1
1,3-Dichlorobenzene	ND		mg/kg	0.0038	--	1
1,4-Dichlorobenzene	ND		mg/kg	0.0038	--	1
1,2-Dichlorobenzene	ND		mg/kg	0.0038	--	1
1,2-Dibromo-3-chloropropane	ND		mg/kg	0.0038	--	1
1,2,4-Trichlorobenzene	ND		mg/kg	0.0038	--	1
1,2,3-Trichlorobenzene	ND		mg/kg	0.0038	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	107		70-130

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1533409

Project Number: 38677-007 **Report Date:** 01/04/16

SAMPLE RESULTS

Lab ID:	L1533409-24	Date Collected:	12/16/15 15:45
Client ID:	B216-1215-1545-0-5	Date Received:	12/16/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Soil		
Analytical Method:	1,8260C		
Analytical Date:	12/20/15 18:29		
Analyst:	BN		
Percent Solids:	87%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS-5035 - Westborough Lab						
Dichlorodifluoromethane	ND		mg/kg	0.0094	--	1
Chloromethane	ND		mg/kg	0.0047	--	1
Vinyl chloride	ND		mg/kg	0.0019	--	1
Bromomethane	ND		mg/kg	0.0019	--	1
Chloroethane	ND		mg/kg	0.0019	--	1
Trichlorofluoromethane	ND		mg/kg	0.0047	--	1
1,1-Dichloroethene	ND		mg/kg	0.00094	--	1
Carbon disulfide	ND		mg/kg	0.0094	--	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		mg/kg	0.019	--	1
Methylene chloride	ND		mg/kg	0.0047	--	1
Acetone	ND		mg/kg	0.034	--	1
trans-1,2-Dichloroethene	ND		mg/kg	0.0014	--	1
Methyl Acetate	ND		mg/kg	0.0038	--	1
Methyl tert butyl ether	ND		mg/kg	0.0019	--	1
1,1-Dichloroethane	ND		mg/kg	0.0014	--	1
cis-1,2-Dichloroethene	ND		mg/kg	0.00094	--	1
1,2-Dichloroethene, Total	ND		mg/kg	0.00094	--	1
Cyclohexane	ND		mg/kg	0.019	--	1
Bromochloromethane	ND		mg/kg	0.0047	--	1
Chloroform	ND		mg/kg	0.0014	--	1
Carbon tetrachloride	ND		mg/kg	0.00094	--	1
1,1,1-Trichloroethane	ND		mg/kg	0.00094	--	1
2-Butanone	ND		mg/kg	0.0094	--	1
Benzene	ND		mg/kg	0.00094	--	1
1,2-Dichloroethane	ND		mg/kg	0.00094	--	1
Methyl cyclohexane	ND		mg/kg	0.0038	--	1
Trichloroethene	ND		mg/kg	0.00094	--	1
1,2-Dichloropropane	ND		mg/kg	0.0033	--	1
Bromodichloromethane	ND		mg/kg	0.00094	--	1
1,4-Dioxane	ND		mg/kg	0.094	--	1

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1533409

Project Number: 38677-007 **Report Date:** 01/04/16

SAMPLE RESULTS

Lab ID: L1533409-24 Date Collected: 12/16/15 15:45

Client ID: B216-1215-1545-0-5 Date Received: 12/16/15

Sample Location: WASHINGTON, D.C. Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS-5035 - Westborough Lab						
cis-1,3-Dichloropropene	ND		mg/kg	0.00094	--	1
Toluene	ND		mg/kg	0.0014	--	1
4-Methyl-2-pentanone	ND		mg/kg	0.0094	--	1
Tetrachloroethene	ND		mg/kg	0.00094	--	1
trans-1,3-Dichloropropene	ND		mg/kg	0.00094	--	1
1,3-Dichloropropene, Total	ND		mg/kg	0.00094	--	1
1,1,2-Trichloroethane	ND		mg/kg	0.0014	--	1
Dibromochloromethane	ND		mg/kg	0.00094	--	1
1,2-Dibromoethane	ND		mg/kg	0.0038	--	1
2-Hexanone	ND		mg/kg	0.0094	--	1
Chlorobenzene	ND		mg/kg	0.00094	--	1
Ethylbenzene	ND		mg/kg	0.00094	--	1
p/m-Xylene	ND		mg/kg	0.0019	--	1
o-Xylene	ND		mg/kg	0.0019	--	1
Xylenes, Total	ND		mg/kg	0.0019	--	1
Styrene	ND		mg/kg	0.0019	--	1
Bromoform	ND		mg/kg	0.0038	--	1
Isopropylbenzene	ND		mg/kg	0.00094	--	1
1,1,2,2-Tetrachloroethane	ND		mg/kg	0.00094	--	1
1,3-Dichlorobenzene	ND		mg/kg	0.0047	--	1
1,4-Dichlorobenzene	ND		mg/kg	0.0047	--	1
1,2-Dichlorobenzene	ND		mg/kg	0.0047	--	1
1,2-Dibromo-3-chloropropane	ND		mg/kg	0.0047	--	1
1,2,4-Trichlorobenzene	ND		mg/kg	0.0047	--	1
1,2,3-Trichlorobenzene	ND		mg/kg	0.0047	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	94		70-130
Dibromofluoromethane	109		70-130

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1533409

Project Number: 38677-007 **Report Date:** 01/04/16

SAMPLE RESULTS

Lab ID:	L1533409-25	Date Collected:	12/16/15 15:50
Client ID:	B216-1215-1550-5-10	Date Received:	12/16/15
Sample Location:	WASHINGTON, D.C.	Field Prep:	Not Specified
Matrix:	Soil		
Analytical Method:	1,8260C		
Analytical Date:	12/20/15 18:57		
Analyst:	BN		
Percent Solids:	83%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS-5035 - Westborough Lab						
Dichlorodifluoromethane	ND		mg/kg	0.010	--	1
Chloromethane	ND		mg/kg	0.0053	--	1
Vinyl chloride	ND		mg/kg	0.0021	--	1
Bromomethane	ND		mg/kg	0.0021	--	1
Chloroethane	ND		mg/kg	0.0021	--	1
Trichlorofluoromethane	ND		mg/kg	0.0053	--	1
1,1-Dichloroethene	ND		mg/kg	0.0010	--	1
Carbon disulfide	ND		mg/kg	0.010	--	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		mg/kg	0.021	--	1
Methylene chloride	ND		mg/kg	0.0053	--	1
Acetone	ND		mg/kg	0.038	--	1
trans-1,2-Dichloroethene	ND		mg/kg	0.0016	--	1
Methyl Acetate	ND		mg/kg	0.0042	--	1
Methyl tert butyl ether	ND		mg/kg	0.0021	--	1
1,1-Dichloroethane	ND		mg/kg	0.0016	--	1
cis-1,2-Dichloroethene	ND		mg/kg	0.0010	--	1
1,2-Dichloroethene, Total	ND		mg/kg	0.0010	--	1
Cyclohexane	ND		mg/kg	0.021	--	1
Bromochloromethane	ND		mg/kg	0.0053	--	1
Chloroform	ND		mg/kg	0.0016	--	1
Carbon tetrachloride	ND		mg/kg	0.0010	--	1
1,1,1-Trichloroethane	ND		mg/kg	0.0010	--	1
2-Butanone	ND		mg/kg	0.010	--	1
Benzene	ND		mg/kg	0.0010	--	1
1,2-Dichloroethane	ND		mg/kg	0.0010	--	1
Methyl cyclohexane	ND		mg/kg	0.0042	--	1
Trichloroethene	ND		mg/kg	0.0010	--	1
1,2-Dichloropropane	ND		mg/kg	0.0037	--	1
Bromodichloromethane	ND		mg/kg	0.0010	--	1
1,4-Dioxane	ND		mg/kg	0.10	--	1

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1533409

Project Number: 38677-007 **Report Date:** 01/04/16

SAMPLE RESULTS

Lab ID: L1533409-25 Date Collected: 12/16/15 15:50

Client ID: B216-1215-1550-5-10 Date Received: 12/16/15

Sample Location: WASHINGTON, D.C. Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS-5035 - Westborough Lab						
cis-1,3-Dichloropropene	ND		mg/kg	0.0010	--	1
Toluene	ND		mg/kg	0.0016	--	1
4-Methyl-2-pentanone	ND		mg/kg	0.010	--	1
Tetrachloroethene	ND		mg/kg	0.0010	--	1
trans-1,3-Dichloropropene	ND		mg/kg	0.0010	--	1
1,3-Dichloropropene, Total	ND		mg/kg	0.0010	--	1
1,1,2-Trichloroethane	ND		mg/kg	0.0016	--	1
Dibromochloromethane	ND		mg/kg	0.0010	--	1
1,2-Dibromoethane	ND		mg/kg	0.0042	--	1
2-Hexanone	ND		mg/kg	0.010	--	1
Chlorobenzene	ND		mg/kg	0.0010	--	1
Ethylbenzene	ND		mg/kg	0.0010	--	1
p/m-Xylene	ND		mg/kg	0.0021	--	1
o-Xylene	ND		mg/kg	0.0021	--	1
Xylenes, Total	ND		mg/kg	0.0021	--	1
Styrene	ND		mg/kg	0.0021	--	1
Bromoform	ND		mg/kg	0.0042	--	1
Isopropylbenzene	ND		mg/kg	0.0010	--	1
1,1,2,2-Tetrachloroethane	ND		mg/kg	0.0010	--	1
1,3-Dichlorobenzene	ND		mg/kg	0.0053	--	1
1,4-Dichlorobenzene	ND		mg/kg	0.0053	--	1
1,2-Dichlorobenzene	ND		mg/kg	0.0053	--	1
1,2-Dibromo-3-chloropropane	ND		mg/kg	0.0053	--	1
1,2,4-Trichlorobenzene	ND		mg/kg	0.0053	--	1
1,2,3-Trichlorobenzene	ND		mg/kg	0.0053	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	107		70-130

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1533409

Project Number: 38677-007 **Report Date:** 01/04/16

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 12/20/15 09:45
Analyst: BN

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS-5035 - Westborough Lab for sample(s): 02-15 Batch: WG851607-3					
Dichlorodifluoromethane	ND		mg/kg	0.010	--
Chloromethane	ND		mg/kg	0.0050	--
Vinyl chloride	ND		mg/kg	0.0020	--
Bromomethane	ND		mg/kg	0.0020	--
Chloroethane	ND		mg/kg	0.0020	--
Trichlorofluoromethane	ND		mg/kg	0.0050	--
1,1-Dichloroethene	ND		mg/kg	0.0010	--
Carbon disulfide	ND		mg/kg	0.010	--
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		mg/kg	0.020	--
Methylene chloride	ND		mg/kg	0.0050	--
Acetone	ND		mg/kg	0.036	--
trans-1,2-Dichloroethene	ND		mg/kg	0.0015	--
Methyl Acetate	ND		mg/kg	0.0040	--
Methyl tert butyl ether	ND		mg/kg	0.0020	--
1,1-Dichloroethane	ND		mg/kg	0.0015	--
cis-1,2-Dichloroethene	ND		mg/kg	0.0010	--
1,2-Dichloroethene, Total	ND		mg/kg	0.0010	--
Cyclohexane	ND		mg/kg	0.020	--
Bromochloromethane	ND		mg/kg	0.0050	--
Chloroform	ND		mg/kg	0.0015	--
Carbon tetrachloride	ND		mg/kg	0.0010	--
1,1,1-Trichloroethane	ND		mg/kg	0.0010	--
2-Butanone	ND		mg/kg	0.010	--
Benzene	ND		mg/kg	0.0010	--
1,2-Dichloroethane	ND		mg/kg	0.0010	--
Methyl cyclohexane	ND		mg/kg	0.0040	--
Trichloroethene	ND		mg/kg	0.0010	--
1,2-Dichloropropane	ND		mg/kg	0.0035	--
Bromodichloromethane	ND		mg/kg	0.0010	--

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1533409

Project Number: 38677-007 **Report Date:** 01/04/16

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 12/20/15 09:45
Analyst: BN

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS-5035 - Westborough Lab for sample(s): 02-15 Batch: WG851607-3					
1,4-Dioxane	ND		mg/kg	0.10	--
cis-1,3-Dichloropropene	ND		mg/kg	0.0010	--
Toluene	ND		mg/kg	0.0015	--
4-Methyl-2-pentanone	ND		mg/kg	0.010	--
Tetrachloroethene	ND		mg/kg	0.0010	--
trans-1,3-Dichloropropene	ND		mg/kg	0.0010	--
1,3-Dichloropropene, Total	ND		mg/kg	0.0010	--
1,1,2-Trichloroethane	ND		mg/kg	0.0015	--
Dibromochloromethane	ND		mg/kg	0.0010	--
1,2-Dibromoethane	ND		mg/kg	0.0040	--
2-Hexanone	ND		mg/kg	0.010	--
Chlorobenzene	ND		mg/kg	0.0010	--
Ethylbenzene	ND		mg/kg	0.0010	--
p/m-Xylene	ND		mg/kg	0.0020	--
o-Xylene	ND		mg/kg	0.0020	--
Xylenes, Total	ND		mg/kg	0.0020	--
Styrene	ND		mg/kg	0.0020	--
Bromoform	ND		mg/kg	0.0040	--
Isopropylbenzene	ND		mg/kg	0.0010	--
1,1,2,2-Tetrachloroethane	ND		mg/kg	0.0010	--
1,3-Dichlorobenzene	ND		mg/kg	0.0050	--
1,4-Dichlorobenzene	ND		mg/kg	0.0050	--
1,2-Dichlorobenzene	ND		mg/kg	0.0050	--
1,2-Dibromo-3-chloropropane	ND		mg/kg	0.0050	--
1,2,4-Trichlorobenzene	ND		mg/kg	0.0050	--
1,2,3-Trichlorobenzene	ND		mg/kg	0.0050	--

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1533409

Project Number: 38677-007 **Report Date:** 01/04/16

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 12/20/15 09:45
Analyst: BN

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS-5035 - Westborough Lab for sample(s): 02-15 Batch: WG851607-3					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	105		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	98		70-130

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1533409

Project Number: 38677-007 **Report Date:** 01/04/16

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 12/20/15 09:47
Analyst: BN

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS-5035 - Westborough Lab for sample(s): 17-18 Batch: WG851611-3					
Dichlorodifluoromethane	ND		mg/kg	0.010	--
Chloromethane	ND		mg/kg	0.0050	--
Vinyl chloride	ND		mg/kg	0.0020	--
Bromomethane	ND		mg/kg	0.0020	--
Chloroethane	ND		mg/kg	0.0020	--
Trichlorofluoromethane	ND		mg/kg	0.0050	--
1,1-Dichloroethene	ND		mg/kg	0.0010	--
Carbon disulfide	ND		mg/kg	0.010	--
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		mg/kg	0.020	--
Methylene chloride	ND		mg/kg	0.0050	--
Acetone	ND		mg/kg	0.036	--
trans-1,2-Dichloroethene	ND		mg/kg	0.0015	--
Methyl Acetate	ND		mg/kg	0.0040	--
Methyl tert butyl ether	ND		mg/kg	0.0020	--
1,1-Dichloroethane	ND		mg/kg	0.0015	--
cis-1,2-Dichloroethene	ND		mg/kg	0.0010	--
1,2-Dichloroethene, Total	ND		mg/kg	0.0010	--
Cyclohexane	ND		mg/kg	0.020	--
Bromochloromethane	ND		mg/kg	0.0050	--
Chloroform	ND		mg/kg	0.0015	--
Carbon tetrachloride	ND		mg/kg	0.0010	--
1,1,1-Trichloroethane	ND		mg/kg	0.0010	--
2-Butanone	ND		mg/kg	0.010	--
Benzene	ND		mg/kg	0.0010	--
1,2-Dichloroethane	ND		mg/kg	0.0010	--
Methyl cyclohexane	ND		mg/kg	0.0040	--
Trichloroethene	ND		mg/kg	0.0010	--
1,2-Dichloropropane	ND		mg/kg	0.0035	--
Bromodichloromethane	ND		mg/kg	0.0010	--

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1533409

Project Number: 38677-007 **Report Date:** 01/04/16

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 12/20/15 09:47
Analyst: BN

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS-5035 - Westborough Lab for sample(s): 17-18 Batch: WG851611-3					
1,4-Dioxane	ND		mg/kg	0.10	--
cis-1,3-Dichloropropene	ND		mg/kg	0.0010	--
Toluene	ND		mg/kg	0.0015	--
4-Methyl-2-pentanone	ND		mg/kg	0.010	--
Tetrachloroethene	ND		mg/kg	0.0010	--
trans-1,3-Dichloropropene	ND		mg/kg	0.0010	--
1,3-Dichloropropene, Total	ND		mg/kg	0.0010	--
1,1,2-Trichloroethane	ND		mg/kg	0.0015	--
Dibromochloromethane	ND		mg/kg	0.0010	--
1,2-Dibromoethane	ND		mg/kg	0.0040	--
2-Hexanone	ND		mg/kg	0.010	--
Chlorobenzene	ND		mg/kg	0.0010	--
Ethylbenzene	ND		mg/kg	0.0010	--
p/m-Xylene	ND		mg/kg	0.0020	--
o-Xylene	ND		mg/kg	0.0020	--
Xylenes, Total	ND		mg/kg	0.0020	--
Styrene	ND		mg/kg	0.0020	--
Bromoform	ND		mg/kg	0.0040	--
Isopropylbenzene	ND		mg/kg	0.0010	--
1,1,2,2-Tetrachloroethane	ND		mg/kg	0.0010	--
1,3-Dichlorobenzene	ND		mg/kg	0.0050	--
1,4-Dichlorobenzene	ND		mg/kg	0.0050	--
1,2-Dichlorobenzene	ND		mg/kg	0.0050	--
1,2-Dibromo-3-chloropropane	ND		mg/kg	0.0050	--
1,2,4-Trichlorobenzene	ND		mg/kg	0.0050	--
1,2,3-Trichlorobenzene	ND		mg/kg	0.0050	--

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1533409

Project Number: 38677-007 **Report Date:** 01/04/16

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 12/20/15 09:47
Analyst: BN

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS-5035 - Westborough Lab for sample(s): 17-18 Batch: WG851611-3					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	96		70-130

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1533409

Project Number: 38677-007 **Report Date:** 01/04/16

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 12/20/15 09:51
Analyst: BN

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS-5035 - Westborough Lab for sample(s): 16,19,21-25 Batch: WG851615-3					
Dichlorodifluoromethane	ND		mg/kg	0.010	--
Chloromethane	ND		mg/kg	0.0050	--
Vinyl chloride	ND		mg/kg	0.0020	--
Bromomethane	ND		mg/kg	0.0020	--
Chloroethane	ND		mg/kg	0.0020	--
Trichlorofluoromethane	ND		mg/kg	0.0050	--
1,1-Dichloroethene	ND		mg/kg	0.0010	--
Carbon disulfide	ND		mg/kg	0.010	--
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		mg/kg	0.020	--
Methylene chloride	ND		mg/kg	0.0050	--
Acetone	ND		mg/kg	0.036	--
trans-1,2-Dichloroethene	ND		mg/kg	0.0015	--
Methyl Acetate	ND		mg/kg	0.0040	--
Methyl tert butyl ether	ND		mg/kg	0.0020	--
1,1-Dichloroethane	ND		mg/kg	0.0015	--
cis-1,2-Dichloroethene	ND		mg/kg	0.0010	--
1,2-Dichloroethene, Total	ND		mg/kg	0.0010	--
Cyclohexane	ND		mg/kg	0.020	--
Bromochloromethane	ND		mg/kg	0.0050	--
Chloroform	ND		mg/kg	0.0015	--
Carbon tetrachloride	ND		mg/kg	0.0010	--
1,1,1-Trichloroethane	ND		mg/kg	0.0010	--
2-Butanone	ND		mg/kg	0.010	--
Benzene	ND		mg/kg	0.0010	--
1,2-Dichloroethane	ND		mg/kg	0.0010	--
Methyl cyclohexane	ND		mg/kg	0.0040	--
Trichloroethene	ND		mg/kg	0.0010	--
1,2-Dichloropropane	ND		mg/kg	0.0035	--
Bromodichloromethane	ND		mg/kg	0.0010	--

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1533409

Project Number: 38677-007 **Report Date:** 01/04/16

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 12/20/15 09:51
Analyst: BN

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS-5035 - Westborough Lab for sample(s): 16,19,21-25 Batch: WG851615-3					
1,4-Dioxane	ND		mg/kg	0.10	--
cis-1,3-Dichloropropene	ND		mg/kg	0.0010	--
Toluene	ND		mg/kg	0.0015	--
4-Methyl-2-pentanone	ND		mg/kg	0.010	--
Tetrachloroethene	ND		mg/kg	0.0010	--
trans-1,3-Dichloropropene	ND		mg/kg	0.0010	--
1,3-Dichloropropene, Total	ND		mg/kg	0.0010	--
1,1,2-Trichloroethane	ND		mg/kg	0.0015	--
Dibromochloromethane	ND		mg/kg	0.0010	--
1,2-Dibromoethane	ND		mg/kg	0.0040	--
2-Hexanone	ND		mg/kg	0.010	--
Chlorobenzene	ND		mg/kg	0.0010	--
Ethylbenzene	ND		mg/kg	0.0010	--
p/m-Xylene	ND		mg/kg	0.0020	--
o-Xylene	ND		mg/kg	0.0020	--
Xylenes, Total	ND		mg/kg	0.0020	--
Styrene	ND		mg/kg	0.0020	--
Bromoform	ND		mg/kg	0.0040	--
Isopropylbenzene	ND		mg/kg	0.0010	--
1,1,2,2-Tetrachloroethane	ND		mg/kg	0.0010	--
1,3-Dichlorobenzene	ND		mg/kg	0.0050	--
1,4-Dichlorobenzene	ND		mg/kg	0.0050	--
1,2-Dichlorobenzene	ND		mg/kg	0.0050	--
1,2-Dibromo-3-chloropropane	ND		mg/kg	0.0050	--
1,2,4-Trichlorobenzene	ND		mg/kg	0.0050	--
1,2,3-Trichlorobenzene	ND		mg/kg	0.0050	--

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1533409

Project Number: 38677-007 **Report Date:** 01/04/16

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 12/20/15 09:51
Analyst: BN

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS-5035 - Westborough Lab for sample(s): 16,19,21-25 Batch: WG851615-3					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	91		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	94		70-130
Dibromofluoromethane	101		70-130

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1533409

Project Number: 38677-007 **Report Date:** 01/04/16

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 12/21/15 09:15
Analyst: BN

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS-5035 - Westborough Lab for sample(s): 01 Batch: WG851736-3					
Dichlorodifluoromethane	ND		mg/kg	0.010	--
Chloromethane	ND		mg/kg	0.0050	--
Vinyl chloride	ND		mg/kg	0.0020	--
Bromomethane	ND		mg/kg	0.0020	--
Chloroethane	ND		mg/kg	0.0020	--
Trichlorofluoromethane	ND		mg/kg	0.0050	--
1,1-Dichloroethene	ND		mg/kg	0.0010	--
Carbon disulfide	ND		mg/kg	0.010	--
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		mg/kg	0.020	--
Methylene chloride	ND		mg/kg	0.0050	--
Acetone	ND		mg/kg	0.036	--
trans-1,2-Dichloroethene	ND		mg/kg	0.0015	--
Methyl Acetate	ND		mg/kg	0.0040	--
Methyl tert butyl ether	ND		mg/kg	0.0020	--
1,1-Dichloroethane	ND		mg/kg	0.0015	--
cis-1,2-Dichloroethene	ND		mg/kg	0.0010	--
1,2-Dichloroethene, Total	ND		mg/kg	0.0010	--
Cyclohexane	ND		mg/kg	0.020	--
Bromochloromethane	ND		mg/kg	0.0050	--
Chloroform	ND		mg/kg	0.0015	--
Carbon tetrachloride	ND		mg/kg	0.0010	--
1,1,1-Trichloroethane	ND		mg/kg	0.0010	--
2-Butanone	ND		mg/kg	0.010	--
Benzene	ND		mg/kg	0.0010	--
1,2-Dichloroethane	ND		mg/kg	0.0010	--
Methyl cyclohexane	ND		mg/kg	0.0040	--
Trichloroethene	ND		mg/kg	0.0010	--
1,2-Dichloropropane	ND		mg/kg	0.0035	--
Bromodichloromethane	ND		mg/kg	0.0010	--

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1533409

Project Number: 38677-007 **Report Date:** 01/04/16

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 12/21/15 09:15
Analyst: BN

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS-5035 - Westborough Lab for sample(s): 01 Batch: WG851736-3					
1,4-Dioxane	ND		mg/kg	0.10	--
cis-1,3-Dichloropropene	ND		mg/kg	0.0010	--
Toluene	ND		mg/kg	0.0015	--
4-Methyl-2-pentanone	ND		mg/kg	0.010	--
Tetrachloroethene	ND		mg/kg	0.0010	--
trans-1,3-Dichloropropene	ND		mg/kg	0.0010	--
1,3-Dichloropropene, Total	ND		mg/kg	0.0010	--
1,1,2-Trichloroethane	ND		mg/kg	0.0015	--
Dibromochloromethane	ND		mg/kg	0.0010	--
1,2-Dibromoethane	ND		mg/kg	0.0040	--
2-Hexanone	ND		mg/kg	0.010	--
Chlorobenzene	ND		mg/kg	0.0010	--
Ethylbenzene	ND		mg/kg	0.0010	--
p/m-Xylene	ND		mg/kg	0.0020	--
o-Xylene	ND		mg/kg	0.0020	--
Xylenes, Total	ND		mg/kg	0.0020	--
Styrene	ND		mg/kg	0.0020	--
Bromoform	ND		mg/kg	0.0040	--
Isopropylbenzene	ND		mg/kg	0.0010	--
1,1,2,2-Tetrachloroethane	ND		mg/kg	0.0010	--
1,3-Dichlorobenzene	ND		mg/kg	0.0050	--
1,4-Dichlorobenzene	ND		mg/kg	0.0050	--
1,2-Dichlorobenzene	ND		mg/kg	0.0050	--
1,2-Dibromo-3-chloropropane	ND		mg/kg	0.0050	--
1,2,4-Trichlorobenzene	ND		mg/kg	0.0050	--
1,2,3-Trichlorobenzene	ND		mg/kg	0.0050	--

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1533409

Project Number: 38677-007 **Report Date:** 01/04/16

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 12/21/15 09:15
Analyst: BN

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS-5035 - Westborough Lab for sample(s): 01 Batch: WG851736-3					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	95		70-130

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1533409

Project Number: 38677-007 **Report Date:** 01/04/16

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C-SIM(M)
Analytical Date: 12/22/15 00:02
Analyst: PK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 20 Batch: WG851986-3					
1,4-Dioxane	ND		ug/l	3.0	--
1,1,2,2-Tetrachloroethane	ND		ug/l	0.10	--

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1533409

Project Number: 38677-007 **Report Date:** 01/04/16

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 12/22/15 00:02
Analyst: PK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 20 Batch: WG851988-3					
Dichlorodifluoromethane	ND		ug/l	5.0	--
Chloromethane	ND		ug/l	2.5	--
Vinyl chloride	ND		ug/l	1.0	--
Bromomethane	ND		ug/l	1.0	--
Chloroethane	ND		ug/l	1.0	--
Trichlorofluoromethane	ND		ug/l	2.5	--
1,1-Dichloroethene	ND		ug/l	0.50	--
Carbon disulfide	ND		ug/l	5.0	--
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		ug/l	2.5	--
Methylene chloride	ND		ug/l	2.5	--
Acetone	ND		ug/l	5.0	--
trans-1,2-Dichloroethene	ND		ug/l	0.75	--
Methyl Acetate	ND		ug/l	2.0	--
Methyl tert butyl ether	ND		ug/l	1.0	--
1,1-Dichloroethane	ND		ug/l	0.75	--
cis-1,2-Dichloroethene	ND		ug/l	0.50	--
1,2-Dichloroethene, Total	ND		ug/l	0.50	--
Cyclohexane	ND		ug/l	10	--
Bromochloromethane	ND		ug/l	2.5	--
Chloroform	ND		ug/l	0.75	--
Carbon tetrachloride	ND		ug/l	0.50	--
1,1,1-Trichloroethane	ND		ug/l	0.50	--
2-Butanone	ND		ug/l	5.0	--
Benzene	ND		ug/l	0.50	--
1,2-Dichloroethane	ND		ug/l	0.50	--
Methyl cyclohexane	ND		ug/l	10	--
Trichloroethene	ND		ug/l	0.50	--
1,2-Dichloropropane	ND		ug/l	1.0	--
Bromodichloromethane	ND		ug/l	0.50	--

Project Name: ST. E'S EAST CAMPUS **Lab Number:** L1533409

Project Number: 38677-007 **Report Date:** 01/04/16

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 12/22/15 00:02
Analyst: PK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 20 Batch: WG851988-3					
cis-1,3-Dichloropropene	ND		ug/l	0.50	--
Toluene	ND		ug/l	0.75	--
Tetrachloroethene	ND		ug/l	0.50	--
4-Methyl-2-pentanone	ND		ug/l	5.0	--
trans-1,3-Dichloropropene	ND		ug/l	0.50	--
1,3-Dichloropropene, Total	ND		ug/l	0.50	--
1,1,2-Trichloroethane	ND		ug/l	0.75	--
Dibromochloromethane	ND		ug/l	0.50	--
1,2-Dibromoethane	ND		ug/l	2.0	--
2-Hexanone	ND		ug/l	5.0	--
Chlorobenzene	ND		ug/l	0.50	--
Ethylbenzene	ND		ug/l	0.50	--
p/m-Xylene	ND		ug/l	1.0	--
o-Xylene	ND		ug/l	1.0	--
Xylenes, Total	ND		ug/l	1.0	--
Styrene	ND		ug/l	1.0	--
Bromoform	ND		ug/l	2.0	--
Isopropylbenzene	ND		ug/l	0.50	--
1,3-Dichlorobenzene	ND		ug/l	2.5	--
1,4-Dichlorobenzene	ND		ug/l	2.5	--
1,2-Dichlorobenzene	ND		ug/l	2.5	--
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	--
1,2,4-Trichlorobenzene	ND		ug/l	2.5	--
1,2,3-Trichlorobenzene	ND		ug/l	2.5	--