# PHASE II INVESTIGATION REPORT

# AREA B: PARCEL B11 TRADEPOINT ATLANTIC SPARROWS POINT, MARYLAND

### Prepared For:



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### 1.0 INTRODUCTION

ARM Group LLC (ARM), on behalf of Tradepoint Atlantic, has completed a Phase II Investigation of a portion of the Tradepoint Atlantic property (formerly Sparrows Point Terminal, LLC) that has been designated as Area B: Parcel B11 (the Site). Parcel B11 is comprised of 92.1 acres of the approximately 3,100-acre former steel making facility (**Figure 1**). Parcel B11 is positioned within the approximately 308-acre Coke Point Area (CPA) of the Tradepoint Atlantic property. The Site is bounded to the north by the historic Coke Oven Area (COA) within Parcel B10, and to the south by the Coke Point Landfill (CPLF) within Parcel B12.

The Phase II Investigation was performed in accordance with procedures outlined in the approved Phase II Investigation Work Plan for Area B: Parcel B11. This Work Plan (Revision 0 dated March 11, 2020) and an associated Comment Response Letter (dated June 25, 2020) were collectively approved by the Maryland Department of the Environment (MDE) and the United States Environmental Protection Agency (USEPA) via email on July 8, 2020. The Work Plan was implemented in compliance with requirements pursuant to the following:

- Administrative Consent Order (ACO) between Tradepoint Atlantic (formerly Sparrows Point Terminal, LLC) and the MDE effective September 12, 2014; and
- Settlement Agreement and Covenant Not to Sue (SA) between Tradepoint Atlantic (formerly Sparrows Point Terminal, LLC) and the USEPA effective November 25, 2014.

An application to enter the full Tradepoint Atlantic property (3,100 acres) into the Maryland Department of the Environment Voluntary Cleanup Program (MDE-VCP) was submitted to the MDE and delivered on June 27, 2014. The property's current and anticipated future use is Tier 3 (Industrial) and plans for the property include demolition and redevelopment over the next several years. Parcel B11 is also part of the acreage that remains subject to the requirements of the Multimedia Consent Decree between Bethlehem Steel Corporation, the USEPA, and the MDE (effective October 8, 1997) as documented in correspondence received from the USEPA on September 12, 2014.

### 1.1. SITE HISTORY

From the late 1800s until 2012, the production and manufacturing of steel was conducted at Sparrows Point. Iron and steel production operations and processes at Sparrows Point included raw material handling, coke production, sinter production, iron production, steel production, and semi-finished and finished product preparation. In 1970, Sparrows Point was the largest steel facility in the United States, producing hot and cold rolled sheets, coated materials, pipes, plates, and rod and wire. The steel making operations at Sparrows Point ceased in fall 2012.



Parcel B11 is positioned within the CPA on the Tradepoint Atlantic property, bounded to the north by the historic COA and to the south by the CPLF. The western portion of Parcel B11 is occupied by the historic Mud Disposal Area (identified as such on historical drawings), which has also been identified as the Dredged Material Containment Facility (DMCF). According to historic aerial imagery in the Phase I Environmental Site Assessment (ESA) prepared by Weaver Boos Consultants dated May 19, 2014, the area began receiving dredged material in the mid-1960s. The DMCF was previously investigated by Hillis-Carnes Engineering Associates (HCEA); therefore, the 27.9-acre DMCF was excluded for the purpose of this Phase II Investigation.

Kinder Morgan Terminals historically occupied a portion of the Site. According to its website, Kinder Morgan's activities included bulk storage of coke, pumice gypsum, granulated slag, ferro alloys, manganese ore, ferro silicon, steel coils, and break bulk cargos.

During the steel plant operations, Fritz Enterprises occupied a slag processing plant at the Site. The slag processing plant activities included the excavation of slag materials from the subsurface that were then processed through a portable screener to recover metal. MCM Construction Inc. (MCM) requested to take over the metal reclamation activities in the southern portion of the Sparrows Point property in October 2015. Additional slag reclamation is currently underway at the Site, and regrading activities are anticipated to be completed within 1 to 2 years.

### 1.2. OBJECTIVES

The objective of this Phase II Investigation was to characterize the nature and extent of soil contamination at the Site. A summary table of the site investigation locations, including the sample identification numbers and the analyses performed, is provided as **Appendix A**. This report includes a summary of the work performed, including the environmental setting, site investigation methods, analytical results and data usability assessment, and findings and recommendations.

As specified in the approved Parcel B11 Work Plan, groundwater was not assessed as part of this Phase II Investigation. The CPLF and COA are both subject to an ongoing groundwater monitoring program. Results from each sampling event are reported to the MDE within routine monitoring reports. The most recent Coke Point and Greys Landfills Semi-Annual Groundwater Monitoring Report for Spring 2020 is dated September 11, 2020. The most recent Coke Oven Interim Measures 2019 Progress Report is dated January 31, 2020. Extensive groundwater sampling also occurred during the CPA Corrective Measures Study (CMS), as reported in the Coke Point Area Corrective Measures Study Investigation Report dated October 22, 2020.



### 2.0 ENVIRONMENTAL SETTING

### 2.1. LAND USE AND SURFACE FEATURES

The Tradepoint Atlantic property consists of the former Sparrows Point steel mill. According to the Phase I ESA prepared by Weaver Boos dated May 19, 2014, the property is zoned Manufacturing Heavy-Industrial Major (MH-IM). Surrounding property zoning classifications (beyond Tradepoint Atlantic) include the following: Manufacturing Light (ML); Resource Conservation (RC); Density Residential (DR); Business Roadside (BR); Business Major (BM); Business Local (BL); and Residential Office (RO). Light industrial and commercial properties are located northeast of the property and northwest of the property across Bear Creek. Residential areas of Edgemere and Fort Howard are located northeast of the property across Jones Creek and to the southeast across Old Road Bay, respectively. Residential and commercial areas of Dundalk are located northwest of the property across Bear Creek.

The base elevation of the Site is between approximately 10 and 14 feet above mean sea level (amsl) and relatively flat, but numerous large stockpiles are located in the eastern half of the Site at higher elevations. As regrading continues in the CPA, the proposed final ground surface elevation for Parcel B11 is 12 feet amsl, except in areas where the current grade is already below this elevation. The base elevation in the DMCF in the western half of the Site is approximately 18 to 19 feet amsl, with an elevated slag berm surrounding the facility. The eastern and western edges of the Site slope down to meet the surrounding water bodies of Bear Creek, the Turning Basin, and the Patapsco River (at 0 feet amsl). According to Figure B-2 of the Stormwater Pollution Prevention Plan (SWPPP) Revision 8 dated April 30, 2020, surface water runoff from the western half of the Site is discharged into the Turning Basin and the Patapsco River. A gravel filter berm surrounds the shoreline perimeter of the CPA.

### 2.2. REGIONAL GEOLOGY

The Site is located within the Atlantic Coastal Plain Physiographic Province (Coastal Plain). The western boundary of the Coastal Plain is the "Fall Line", which separates the Coastal Plain from the Piedmont Plateau Province. The Fall Line runs from northeast to southwest along the western boundary of the Chesapeake Bay, passing through Elkton (MD), Havre de Grace (MD), Baltimore City (MD), and Laurel (MD). The eastern boundary of the Coastal Plain is the off-shore Continental Shelf.

The unconsolidated sediments beneath the Site belong to the Talbot Formation (Pleistocene), which is then underlain by the Cretaceous formations which comprise the Potomac Group (Patapsco Formation, Arundel Formation, and the Patuxent Formation). The Potomac Group formations are comprised of unconsolidated sediments of varying thicknesses and types, which



may be several hundred feet to several thousand feet thick. These unconsolidated formations may overlie deeper Mesozoic and/or Precambrian bedrock. Depth to bedrock is approximately 700 feet within the Site.

### 2.3. SITE GEOLOGY

Groundcover at the Site is comprised of 100% non-native fill materials (i.e., slag), based on the approximate shoreline of the Sparrows Point Peninsula in 1916, as shown on **Figure 2** (adapted from Figure 2-20 in the Description of Current Conditions (DCC) Report prepared by Rust Environment and Infrastructure dated January 1998).

In general, the encountered subsurface geology was comprised of non-native fill materials including slag, sand, brick, and gravel, with only minor observations of clay and other components. Shallow groundwater was observed in soil cores at depths from 4 to 14 feet below ground surface (bgs) across the Site; however, groundwater was not encountered at every location. Soil boring observation logs are provided in **Appendix B**. All Unified Soil Classification System (USCS) group symbols provided on the attached boring logs are from visual observations, and not from laboratory testing.



### 3.0 SITE INVESTIGATION

A total of 74 soil samples (from 33 boring locations) were collected for analysis between August 10 and October 19, 2020 as part of the Parcel B11 Phase II Investigation. This Phase II Investigation utilized methods and protocols that followed the procedures included in the Quality Assurance Project Plan (QAPP) dated April 5, 2016 which was approved by the agencies to support the investigation and remediation of the Tradepoint Atlantic property. Information regarding the project organization, field activities and sampling methods, sampling equipment, sample handling and management procedures, the selected laboratory and analytical methods, quality control and quality assurance procedures, investigation-derived waste (IDW) management methods, and reporting requirements are described in detail in the approved Parcel B11 Work Plan and the QAPP.

All site characterization activities were conducted under the property-wide Health and Safety Plan (HASP) provided as Appendix D of the approved Work Plan.

### 3.1. SAMPLE TARGET IDENTIFICATION

Previous activities within and around the buildings and facilities located on the Tradepoint Atlantic property may have been historical sources of environmental contamination. If present, source areas were identified as targets for sampling through a careful review of historical documents. When a sampling target was identified, a boring was placed at or next to its location using Geographic Information Systems (GIS) software (ArcMap Version 10.6).

Sampling targets included, as applicable, 1) RECs shown on the REC Location Map provided in Weaver Boos' Phase I ESA, 2) additional findings (non-RECs) from the Phase I ESA which were identified as potential environmental concerns, and 3) Solid Waste Management Units (SWMUs) and Areas of Concern (AOCs) identified from the DCC Report prepared by Rust Environment and Infrastructure. There were no RECs, SWMUs, or AOCs identified at the Site based on the information provided in the Phase I ESA or DCC Report.

Four sets of historical drawings were also reviewed to identify potential sampling targets for the Site. These drawings included the 5000 Set (Plant Arrangement), the 5100 Set (Plant Index), the 5500 Set (Plant Sewer Lines), and a set of drawings indicating coke oven gas distribution drip leg locations. Drip legs are points throughout the distribution system where coke oven gas condensate was removed from the gas pipelines. The condensate from the drip legs was typically discharged to drums, although it is possible some spilled out of the drums and onto the ground. There were no drip legs identified inside the boundary of Parcel B11.

A summary of the specific drawings covering the Site is presented in **Table 1**. Sampling target locations were identified if the historical drawings depicted industrial activities or a specific feature at a location that may have been a source of environmental contamination that potentially impacted



the Site. Based on the review of plant drawings, additional non-REC sampling targets were identified at the Site which included the following: Transformer Pad, Scrap Reclaiming Pit, and Scrap Screening Station. All of the targeted features have been previously demolished. Additional sample locations were distributed to provide complete coverage of the Site and fill in areas with insufficient coverage (perimeter of the DMCF and material stockpile areas). A summary table of the investigation plan, along with the applicable boring identification numbers and the analyses performed, has been provided as **Appendix A**.

During the completion of fieldwork, it was necessary to shift several borings from the approved locations given in the Work Plan, primarily due to equipment refusal and access restrictions caused by the presence of large stockpiles. **Table 2** provides the identification numbers of the field adjusted borings, the coordinates of the proposed and final locations, and the distance/direction of the field shifts. By necessity, three borings (B11-023-SB, B11-026-SB, and B11-027-SB) were shifted slightly outside of Parcel B11 onto the adjacent Parcel B12.

The density of soil borings met the requirements set forth in QAPP Worksheet 17 – Sampling Design and Rationale. Parcel B11 contains a total of 92.1 acres. The 27.9-acre DMCF was previously investigated by HCEA; therefore, the facility was excluded when calculating the sampling density requirements for this Phase II Investigation. The total remaining area of the Site (64.2 acres) was evaluated according to the sampling density requirements for areas without engineered barriers. In accordance with the relevant sampling density requirements, a minimum of 33 soil borings were required to cover the area without engineered barriers. A total of 33 soil borings were completed during the Phase II Investigation.

### 3.2. SOIL INVESTIGATION

Continuous core soil borings were advanced at 33 locations across Parcel B11 to assess the presence or absence of soil contamination, and to assess the vertical distribution of any encountered contamination (**Figure 3**). The 33 continuous core soil borings were advanced to a maximum depth of 21 feet bgs using the Geoprobe® MC-7 Macrocore soil sampler (surface to 10 feet bgs) and the Geoprobe® D-22 Dual-Tube Sampler (depths >10 feet bgs) and/or the Terra Sonic International: TSi 150CC. The sonic drill rig was used at select borings that had previously encountered equipment refusal when using the conventional Geoprobe®. At each of the 33 boring locations, each soil core was visually inspected and screened with a hand-held photoionization detector (PID) prior to logging soil types. Soil boring logs have been included as **Appendix B**, and the PID calibration log has been included as **Appendix C**. The USCS group symbols provided on the attached boring logs are based on visual observations (not laboratory testing).

In each boring, one shallow sample was collected from the 0 to 1 foot depth interval. If unsuitable surface cover materials (such as concrete or asphalt pavement) were present, the first 1 foot of soil beneath this layer would be collected as the shallow sample; however, no such cover materials were observed on Parcel B11. An underlying sample was collected from the 4 to 5 foot depth



interval from each continuous core soil boring, but could be adjusted based on field observations. If the PID or other field observations indicated contamination to exist at a depth greater than 3 feet bgs but less than 9 feet bgs, and above the water table, the sample from the deeper 4 to 5 foot interval was shifted to the alternate depth interval. One additional set of soil samples was also collected from the 9 to 10 foot depth interval if groundwater had not been encountered. The 10-foot bgs samples were held by the laboratory prior to analysis in accordance with the requirements given in the Parcel B11 Work Plan. These project-specific requirements for the analysis of 10-foot bgs samples are further described below. It should be noted that soil samples were not collected from a depth that was below the water table.

In several cases, the top sampling interval (typ. 0 to 1 foot bgs) was adjusted downward due to the planned regrading activities on the Site. If the top sampling interval was shifted, the underlying sample intervals were adjusted accordingly. The sample interval adjustments were conducted in accordance with the procedures described in the Parcel B11 Work Plan Comment Response Letter dated June 25, 2020. The proposed final ground surface elevation for Parcel B11 is 12 feet amsl, except in areas where the current grade is already below this elevation. Therefore, the thickness of the material that is proposed to be reclaimed at each sample location was used to determine the depth of the uppermost sample interval. For example, a location with a current elevation of 14 feet amsl would have its uppermost sample collected in the interval from 2 to 3 feet bgs. All soil collection procedures were implemented as usual, accounting for the adjusted sample depths. Please note that no sample interval adjustments were made for the borings targeting the perimeter of the DMCF (even if the elevation exceeds 12 feet amsl) because it is not anticipated that the slag reclamation will impact the berm surrounding the DMCF.

Soil sampling activities were conducted in accordance with the procedures and methods referenced in Field Standard Operating Procedure (SOP) Numbers 008, 009, 012, and 013 provided in Appendix A of the QAPP. Sample containers, preservatives, and holding times for the sample analyses are listed in the QAPP Worksheet 19 & 30 – Sample Containers, Preservation, and Holding Times. Down-hole soil sampling equipment was decontaminated after soil sampling had been concluded at each location, according to the procedures and methods referenced in Field SOP Number 016 provided in Appendix A of the QAPP.

Each soil sample collected during this investigation was submitted to Pace Analytical Services, Inc. (PACE) for analysis. As stated above, the deep samples (typ. 10-foot bgs) were held prior to analysis in accordance with the Parcel B11 Work Plan requirements. Excluding these deep samples, the remaining soil samples were analyzed for Target Compound List (TCL) semi-volatile organic compounds (SVOCs) via USEPA Method 8270, Oil & Grease via USEPA Method 9071, total petroleum hydrocarbon (TPH) diesel range organics (DRO) and gasoline range organics (GRO) via USEPA Method 8015, Target Analyte List (TAL) Metals via USEPA Methods 6010 and 7471, hexavalent chromium via USEPA Method 7196, and cyanide via USEPA Method 9012. Shallow soil samples collected across the Site were analyzed for polychlorinated biphenyls (PCBs)



via USEPA Method 8082. Samples from any depth interval with a sustained PID reading of greater than 10 ppm were also analyzed for TCL volatile organic compounds (VOCs) via USEPA Method 8260. The soil samples were also submitted to Alpha Analytical, Inc. (Alpha) for analysis of polynuclear aromatic hydrocarbons (PAHs) via USEPA Method 8270 SIM.

If the PID reading from the deep sampling interval was less than 10 ppm, all parameters were held by the laboratory pending the analysis of the overlying 0 to 1 and 4 to 5 foot bgs (or field adjusted) samples. If the deep sampling interval exhibited a sustained PID reading of 10 ppm or greater, the sample was released to be analyzed for VOCs, SVOCs, TPH-DRO, TPH-GRO, and Oil & Grease. However, the samples for metals and cyanide were still held by the laboratory pending the analysis of the 0 to 1 and 4 to 5 foot bgs interval samples. If the preliminary laboratory results from the 4 to 5 foot bgs interval indicated exceedances of the Project Action Limits (PALs) for any constituents, the held sample from the deep interval was then released to be analyzed for those constituents that exhibited PAL exceedances in the overlying sample.

### 3.3. MANAGEMENT OF INVESTIGATION-DERIVED WASTE (IDW)

In accordance with **Field SOP Number 005** provided in Appendix A of the QAPP, IDW generated during this Phase II Investigation was containerized in 55-gallon (DOT-UN1A2) drums. The types of IDW that were generated during this Phase II Investigation included the following:

- soil cuttings generated from soil borings;
- decontamination fluids; and
- used personal protective equipment

Following the completion of field activities, two composite samples were gathered with aliquots from the Parcel B11 Phase II IDW soil drums for waste characterization. Two composite samples were required because the investigation was performed in two distinct phases (Geoprobe<sup>®</sup> and sonic drill rig) that both generated soil waste from the Site. Following the analysis, the waste soil from both investigation phases was characterized as non-hazardous. A list of all results from the soil waste characterization procedure can be found in **Table 3**. IDW drums containing aqueous materials (including aqueous waste generated during the Parcel B11 Phase II Investigation) were characterized by preparing composite samples from randomly selected drums. The composite samples included aliquots from several individual drums that were chosen as a subset of the aqueous drums being staged on-site at the date of collection. Based on this analysis, the aqueous waste was also characterized as non-hazardous. A list of all results from the aqueous waste characterization procedure can be found in **Table 4**.

The parcel-specific IDW drum log from this Phase II Investigation is included as **Appendix D**. All IDW procedures were carried out in accordance with methods referenced in the QAPP Worksheet 21 – Field SOPs and Appendix A of the QAPP.



### 4.0 ANALYTICAL RESULTS

### 4.1. SOIL CONDITIONS

Soil analytical results were screened against PALs established in the property-wide QAPP (or other direct guidance from the agencies; i.e., TPH/Oil & Grease) to determine PAL exceedances. PALs are generally based on the USEPA's Regional Screening Levels (RSLs) for the Composite Worker exposure to soil. The Composite Worker is defined by the USEPA as a long-term receptor exposed during the workday who is a full-time employee that spends most of the workday conducting maintenance activities (which typically involve on-site exposures to surface soils) outdoors.

The analytical results for the detected parameters in soil are summarized and compared to the PALs in **Table 5** (Organics) and **Table 6** (Inorganics). The laboratory Certificates of Analysis (including Chains of Custody) and Data Validation Reports (DVRs) have been included as electronic attachments. The DVRs contain a glossary of qualifiers for the final flags assigned to individual results in the attached summary tables.

### 4.1.1. Soil Conditions: Organic Compounds

**Table 5** provides a summary of VOCs detected above the laboratory's method detection limits (MDLs) in the soil samples collected from across the Site. Only samples which exhibited PID readings greater than 10 ppm were analyzed for VOCs. There were no VOCs detected above their respective PALs.

**Table 5** provides a summary of SVOCs detected above the laboratory's MDLs in the soil samples collected from across the Site. The PALs for relevant PAHs have been adjusted upward based on revised toxicity data published in the USEPA RSL Composite Worker Soil Table. Therefore, any soil exceedances for PAHs are based on the adjusted PALs rather than those presented in the QAPP. Three PAHs (benz[a]anthracene, benzo[a]pyrene, and naphthalene) were identified at concentrations above (or equal to) their respective PALs. Benz[a]anthracene was detected equal to its PAL of 21 mg/kg in only one sample (B11-026-SB-1). Benzo[a]pyrene was detected above its PAL of 2.1 mg/kg in 12 samples with a maximum detection of 14 mg/kg in B11-026-SB-1. Naphthalene was detected above its PAL of 8.6 mg/kg in four samples with a maximum detection of 61 mg/kg in B11-026-SB-9. The SVOC PAL exceedances are shown on **Figure 4**.

Shallow soil samples collected across the Site from the 0 to 1 foot bgs (or field adjusted) interval were analyzed for PCBs. **Table 5** provides a summary of PCBs detected above the laboratory's MDLs. There were no PCBs detected above their respective PALs.

**Table 5** provides a summary of the TPH/Oil & Grease detections above the laboratory's MDLs in the soil samples collected from across the Site. There were no PAL exceedances of TPH-GRO. Oil & Grease exceeded the PAL of 6,200 mg/kg in three soil samples (B11-026-SB-9, B11-026-SB-9).



SB-10, and B11-027-SB-5) with a maximum detection of 24,800 mg/kg in B11-026-SB-9. TPH-DRO exceeded the PAL of 6,200 mg/kg in two soil samples (B11-026-SB-9 and B11-026-SB-10) with a maximum detection of 24,500 mg/kg in B11-026-SB-10. Soil boring B11-026-SB exhibited the most significant TPH/Oil & Grease exceedances; the single exceedance at B11-027-SB was an Oil & Grease detection of 7,590 mg/kg (only slightly above the PAL). The TPH/Oil & Grease PAL exceedances are shown on **Figure 5**.

Evidence of non-aqueous phase liquid (NAPL) was also documented in soil boring B11-026-SB via the observation of a product sheen below groundwater. This soil boring with evidence of NAPL is highlighted along with the analytical PAL exceedances on **Figure 5**. No physical evidence of NAPL was observed in any other soil borings completed during this investigation. In accordance with the Parcel B11 Work Plan requirements, a NAPL screening piezometer with a screen interval from 11 to 21 feet bgs was installed as B11-026-PZ. The screening piezometer was then checked for the potential presence of NAPL using an oil-water interface probe. After 1 week of equilibration time, 1.85 feet of light NAPL (LNAPL) had accumulated in the piezometer casing. Additional NAPL delineation activities are ongoing in the area of B11-026-PZ. The delineation findings will be reported to the MDE in a separate NAPL Completion Report.

### 4.1.2. Soil Conditions: Inorganic Constituents

**Table 6** provides a summary of inorganic constituents detected above the laboratory's MDLs in the soil samples collected from across the Site. Five inorganic constituents (arsenic, lead, manganese, thallium, and vanadium) were detected above their respective PALs. Arsenic was detected above (or equal to) its PAL of 3 mg/kg in 37 total soil samples analyzed for this constituent with a maximum detection of 25.9 mg/kg in B11-015-SB-5. Lead was detected above its PAL of 800 mg/kg in one sample (B11-027-SB-1) with a detection of 1,080 mg/kg. Manganese was detected above its PAL of 26,000 mg/kg in 17 samples with a maximum detection of 64,800 mg/kg in B11-011-SB-2. Thallium was detected above its PAL of 12 mg/kg in 31 samples with a maximum detection of 85.4 mg/kg in B11-018-SB-8. Vanadium was detected above its PAL of 5,800 mg/kg in three samples with a maximum detection of 9,980 mg/kg in B11-011-SB-2. The inorganic PAL exceedances are shown on **Figure 6**.

### 4.1.3. Soil Conditions: Results Summary

**Table 5** and **Table 6** provide a summary of the detected organic compounds and inorganics in the soil samples submitted for laboratory analysis, while **Figure 4** through **Figure 6** present the soil sample results that exceeded the PALs. PAL exceedances in soil within Parcel B11 were limited to three PAHs (benz[a]anthracene, benzo[a]pyrene, and naphthalene), Oil & Grease, TPH-DRO, and five metals (arsenic, lead, manganese, thallium, and vanadium). **Table 7** provides a summary of results for all PAL exceedances in soil, including maximum values and detection frequencies. VOCs, PCBs, and TPH-GRO were not detected above their respective PALs and are not considered to be significant soil contaminants in Parcel B11.



Lead, PCBs, and TPH/Oil & Grease are subject to special requirements as designated by the agencies: lead results above 10,000 mg/kg are subject to additional delineation (and possible excavation), PCB results above 50 mg/kg are subject to delineation and excavation, and TPH/Oil & Grease results above 6,200 mg/kg should be evaluated for the potential presence and mobility of NAPL in any future development planning:

- There were no locations where detections of lead exceeded 10,000 mg/kg, the designated threshold at which delineation would be required.
- There were no locations where detections of PCBs exceeded 50 mg/kg, the designated threshold at which delineation and excavation would be required.
- There were no PAL exceedances of TPH-GRO in any of the soil samples collected at the Site. Oil & Grease had three PAL exceedances and TPH-DRO had two PAL exceedances, all of which were identified at two boring locations (B11-026-SB and B11-027-SB). Evidence of NAPL was also documented at location B11-026-SB, which exhibited the most significant TPH/Oil & Grease PAL exceedances. Additional NAPL delineation activities are ongoing at B11-026-SB, and the delineation findings will be reported to the MDE in a separate NAPL Completion Report. No physical evidence of NAPL was observed in any other soil borings completed during this investigation. B11-026-SB and B11-027-SB should be considered for proximity to proposed utilities in any future development plans.

### 4.2. Groundwater Conditions – Coke Point Investigations

As specified in the approved Parcel B11 Work Plan, groundwater was not assessed as part of this Phase II Investigation. The CPLF and COA are both subject to an ongoing groundwater monitoring program. Results from each sampling event for the CPLF and COA are reported to the MDE within routine monitoring reports. The most recent Coke Point and Greys Landfills Semi-Annual Groundwater Monitoring Report for Spring 2020 is dated September 11, 2020. The most recent Coke Oven Interim Measures 2019 Progress Report is dated January 31, 2020. Extensive groundwater sampling also occurred during the CPA CMS, as reported in the Coke Point Area Corrective Measures Study Investigation Report dated October 22, 2020. The complete findings from these separate groundwater investigations are provided in the referenced reports.

The COA to the north of the Site has several operational interim measures remediation cells. A portion of one of the COA remediation cells (Cell 5) extends onto Parcel B11. As documented within the Parcel B11 Work Plan Comment Response Letter dated June 25, 2020, the MDE has noted that depending on future development plans and the final grade of the Site, soil gas sampling may be required to evaluate potential vapor intrusion (VI) risks/hazards.



### 5.0 DATA USABILITY ASSESSMENT

The approved property-wide QAPP specified a process for evaluating data usability in the context of meeting project goals. Specifically, the goal of the Phase II Investigation is to determine if potentially hazardous substances or petroleum products (VOCs, SVOCs, PCBs, metals, cyanide, or TPH/Oil & Grease) are present in Site media (soil) at concentrations that could pose an unacceptable risk to Site receptors. Individual results are compared to the PALs established in the QAPP (i.e., the USEPA RSLs) or based on other direct guidance from the agencies, to identify exceedances in each environmental medium.

Quality assurance and quality control (QA/QC) samples were collected during the field studies to evaluate field/laboratory variability. A summary of QA/QC samples associated with this investigation has been included as **Appendix E**. The following QA/QC samples were required by the QAPP to support the data validation:

- Trip Blank at a rate of one per cooler with VOC samples per day
  - o Soil VOCs only
- Blind Field Duplicate at a rate of one per twenty samples
  - o Soil VOCs, SVOCs, Metals, TPH-DRO, TPH-GRO, Oil & Grease, PCBs, hexavalent chromium, and cyanide
- Matrix Spike/Matrix Spike Duplicate at a rate of one per twenty samples
  - Soil VOCs, SVOCs, Metals, TPH-DRO, TPH-GRO, Oil & Grease, PCBs, and hexavalent chromium
- Field Blank and Equipment Blank at a rate of one per twenty samples
  - o Soil VOCs, SVOCs, Metals, TPH-DRO, TPH-GRO, Oil & Grease, hexavalent chromium, and cyanide

The QA/QC samples were collected and analyzed in accordance with the QAPP Worksheet 12 – Measurement Performance Criteria, QAPP Worksheet 20 – Field Quality Control, and QAPP Worksheet 28 – Analytical Quality Control and Corrective Action.

### **5.1. DATA VERIFICATION**

A verification review was performed on documentation generated during sample collection and analysis. The verification included a review of field log books, field data sheets, and Chains of Custody to ensure that all planned samples were collected, and to ensure consistency with the field methods and decontamination procedures specified in the QAPP Worksheet 21 – Field SOPs and Appendix A of the QAPP. In addition, calibration logs were reviewed to ensure that field equipment was calibrated at the beginning of each day and re-checked as needed. The PID calibration log has been provided in **Appendix C**.



The laboratory deliverables were reviewed to ensure that all records specified in the QAPP as well as necessary signatures and dates are present. Sample receipt records were reviewed to ensure that the sample condition upon receipt was noted, and any missing/broken sample containers (if any) were noted and reported according to plan. The data packages were compared to the Chains of Custody to verify that results were provided for all collected samples. The data package case narratives were reviewed to ensure that all exceptions (if any) are described.

### 5.2. DATA VALIDATION

USEPA Stage 2B data validation was completed for a representative 30% (minimum) of the environmental sample analyses performed by PACE and Alpha and supporting Level IV Data Package information by Environmental Data Quality Inc. (EDQI). The DVRs provided by EDQI have been included as electronic attachments.

Sample analyses have undergone an analytical quality assurance review to ensure adherence to the required protocols. The Stage 2B review was performed as outlined in "Guide for Labeling Externally Validated Laboratory Analytical Data for Superfund Use", EPA-540-R-08-005. Results have been validated or qualified according to general guidance provided in "USEPA National Functional Guidelines for Inorganic Superfund Data Review (ISM02.1)", USEPA October 2013. Region III references this guidance for validation requirements. This document specifies procedures for validating data generated for Contract Laboratory Program (CLP) analyses. The approved property-wide QAPP dated April 5, 2016 and the quality control requirements specified in the methods and associated acceptance criteria were also used to evaluate the non-CLP data.

The PACE-Greensburg (PA) laboratory facility implements quality assurance and reporting requirements through the TNI certification program with the State of Pennsylvania; which is accepted by Maryland. Since late-January 2017, these requirements include the flagging of contaminants with a "B" qualifier when an analyte is detected in an associated laboratory method blank, regardless of the level of the contaminant detected in the sample. A method blank is analyzed at a rate of one blank for each 20 sample analytical batch. The USEPA has previously specified that results flagged with the "B" qualifier do not represent legitimate detections. They have also specified that results flagged with a "JB" qualifier are invalid, and any such results should be revised to display the "B" qualifier only.

Although elevated sample results may be "B" qualified by the laboratory as non-detects (due to low-level blank detections), EDQI corrects any erroneous "B" qualifiers during the data validation procedure to avoid under-reporting analytical detections. EDQI removes the "B" qualifiers for relevant samples according to the guidance given in the table below. Therefore, a result originally flagged with a "B" qualifier in the laboratory certificate may be reported as a legitimate detection without this qualifier. Likewise, a result originally flagged with a "JB" qualifier in the laboratory



certificate may be reported as a "J" qualifier if the erroneous "B" qualifier can be eliminated, but would be reported as a "B" qualified non-detect result if the original "B" qualifier is legitimate.

Blank Result	Sample Result	Qualifying Action
Result less than RL	Result less than RL	Result is Qualified "B"
Result less than RL	Result greater than RL	Remove "B"
Result greater than RL	Result less than Blank Result	Result is Qualified "B"
Result greater than KL	Result greater than Blank Result	Remove "B"

RL = Reporting Limit

As directed by EDQI, ARM has reviewed all non-validated laboratory reports (those which were not designated to be reviewed by EDQI), and applied the same validation corrections to any relevant "B" or "JB" qualified results. This review of the non-validated data ensures that any elevated detections of parameters, including those which may exceed the PALs, are not mistakenly reported as non-detect values simply because they did not undergo the formal validation procedure by EDQI. ARM has also revised the non-validated results to eliminate any laboratory-specific, non-standardized qualifiers (L2, 6c, ip, 4c, etc.), which are customarily removed by EDQI during the validation procedure.

### **5.3. DATA USABILITY**

The data were evaluated with respect to the quality control elements of precision, bias, representativeness, comparability, completeness, and sensitivity relative to data quality indicators and performance measurement criteria outlined in QAPP Worksheet 12 – Measurement Performance Criteria. The following discussion details deviation from the performance measurement criteria, and the impact on data quality and usability.

The measurement performance criteria of precision and bias were evaluated in the data validation process as described in the DVRs provided as electronic attachments. Where appropriate, potential limitations in the results have been indicated through final data flags. These flags indicate whether particular data points were quantitative estimates, biased high/low, associated with blank contamination, etc. Individual data flags are provided with the results in the detection summary tables. A qualifier code glossary is included with each DVR provided by EDQI. Particular results may have been marked with the "R" flag if the result was deemed to be unreliable and was not included in any further data evaluation. The analytical soil results that were rejected during data validation are provided in **Table 8**. A discussion of data completeness (the proportion of valid data) is included below.

Representativeness is a measure of how accurately and precisely the data describe the Site conditions. Representativeness of the samples submitted for analysis was ensured by adherence



to standard sampling techniques and protocols, as well as appropriate sample preservation prior to analysis. Sampling was conducted in accordance with the QAPP Worksheet 21 – Field SOPs and Appendix A of the QAPP. Specific Field SOPs applicable to the assessment of representativeness include **Field SOP Numbers 008, 009, 010, 011, 017, and 024**. Review of the field notes and laboratory sample receipt records indicated that sample collection at the Site was representative, with no significant deviations from the SOPs.

Comparability describes the degree of confidence in comparing two sets of data. Comparability is maintained across multiple datasets by the use of consistent sampling and analytical methods across multiple project phases. Comparability of sample results was ensured through the use of approved standard sampling and analysis methods outlined in the QAPP. QA/QC protocols help to maintain the comparability of datasets, and in this case were assessed via blind duplicates, blank samples, and spiked samples, where applicable. No significant deviations from the QAPP were noted in the dataset.

Sensitivity is a determination of whether the analytical methods and quantitation limits will satisfy the requirements of the project. The laboratory reports were reviewed to verify that reporting limits met the quantitation limits for specific analytes provided in QAPP Worksheet #15 – Project Action Limits and Laboratory-Specific Detection/Quantitation Limits. In general, the laboratory reporting limits met the detection and quantitation limits specified in the QAPP.

Completeness is expressed as a ratio of the number of valid data points to the total number of analytical data results. Non-usable ("R" flagged) data results were determined through the data validation process. The approved QAPP specifies that the completeness of data is assessed by professional judgement, but should be greater than or equal to 90%. Data completeness for each compound is provided in **Appendix F**. This evaluation of completeness includes only the representative 30% (minimum) of sample results which were randomly selected for validation.

A total of 13 analytes did not meet the completeness goal of 90% for soils. Among these compounds, 11 acid-extractable SVOCs (2,3,4,6-tetrachlorophenol, 2,4,5-triclorophenol, 2,4,6-trichlorophenol, 2,4-dichlorophenol, 2,4-dimethylphenol, 2,4-dinitrophenol, 2-chlorophenol, 2-methylphenol, 3&4-methylpenol, pentachlorophenol, and phenol) had completeness ratios between 60% and 80%. The rejection of some acid-extractable SVOC data has not been uncommon on the property due to the highly alkaline conditions typical of slag fill. Hexavalent chromium (83%) and 1,4-dioxane (0%) also had completeness ratios below 90%. The rejection of the results for 1,4-dioxane has not been uncommon for solid matrix data obtained from the Tradepoint Atlantic property. None of these 13 listed compounds with a data completeness ratio below 90% had PAL exceedances in any soil samples. Overall, the soil data can be used as intended and no significant data gaps were identified.



### 6.0 FINDINGS AND RECOMMENDATIONS

The objective of this Parcel B11 Phase II Investigation was to characterize the nature and extent of soil contamination at the Site. During the Phase II Investigation, a total of 74 soil samples (from 33 boring locations) were collected and analyzed. The sampling and analysis plan for the parcel was developed to target specific features that represented a potential release of hazardous substances and/or petroleum products to the environment, as well as providing general site coverage. Soil samples were analyzed for VOCs, SVOCs, TPH-DRO/GRO, Oil & Grease, TAL-Metals, hexavalent chromium, cyanide, and/or PCBs in accordance with the requirements of the parcel-specific soil sampling plan.

### **6.1. SOIL**

The concentrations of constituents in the soil have been characterized by the Phase II Investigation to provide estimates of exposure point concentrations to support risk assessment.

PCB concentrations are below levels that would warrant delineation and evaluation of a removal remedy (50 mg/kg). Additionally, lead concentrations were below the mandatory delineation threshold (10,000 mg/kg). No further action is required with respect to PCBs or lead at the Site. There were no soil PAL exceedances identified for VOCs, PCBs, or TPH-GRO, indicating that these compounds are not significant contaminants in soil at the Site.

PAL exceedances in soil within Parcel B11 were limited to three PAHs (benz[a]anthracene, benzo[a]pyrene, and naphthalene), five metals (arsenic, lead, manganese, thallium, and vanadium), Oil & Grease, and TPH-DRO. The maximum detections of the PAH exceedances were 21 mg/kg for benz[a]anthracene in B11-026-SB-1, 14 mg/kg for benzo[a]pyrene in B11-026-SB-1, and 61 mg/kg for naphthalene in B11-026-SB-9. The maximum detections of the metals exceedances were 25.9 mg/kg for arsenic in B11-015-SB-5, 1,080 mg/kg for lead in B11-027-SB-1, 64,800 mg/kg for manganese in B11-011-SB-2, 85.4 mg/kg for thallium in B11-018-SB-8, and 9,980 mg/kg for vanadium in B11-011-SB-2. Oil & Grease had a maximum detection of 24,800 mg/kg in B11-026-SB-10. TPH/Oil & Grease PAL exceedances were documented in only two soil borings (B11-026-SB and B11-027-SB) which should be considered for proximity to any future proposed utilities.

Soil boring B11-026-SB exhibited the most significant TPH/Oil & Grease and SVOC PAL exceedances. A NAPL product sheen was also documented below groundwater at B11-026-SB. No physical evidence of NAPL was observed in any other soil borings completed during this investigation. Based on the observed sheen, a NAPL screening piezometer was installed as B11-026-PZ. After 1 week of equilibration time, 1.85 feet of LNAPL accumulated in the piezometer casing. Additional NAPL delineation activities are ongoing at B11-026-SB, and the delineation findings will be reported to the MDE in a separate NAPL Completion Report.



### 6.2. GROUNDWATER

Groundwater is not used on the Tradepoint Atlantic property (and is not proposed to be utilized); therefore, there is no potential for direct human exposure for a Composite Worker. In the event that future construction/excavation leads to a potential Construction Worker exposure to groundwater, health and safety plans should be implemented to limit exposure risk.

The CPLF and COA are both subject to an ongoing groundwater monitoring program. Results from each sampling event for the CPLF and COA are reported to the MDE within routine monitoring reports. The most recent Coke Point and Greys Landfills Semi-Annual Groundwater Monitoring Report for Spring 2020 is dated September 11, 2020. The most recent Coke Oven Interim Measures 2019 Progress Report is dated January 31, 2020. Extensive groundwater sampling also occurred during the CPA CMS, as reported in the Coke Point Area Corrective Measures Study Investigation Report dated October 22, 2020. The complete findings from these separate investigations, which include the groundwater data obtained in the vicinity of Parcel B11, are provided in the referenced reports.

The COA to the north of the Site has several operational interim measures remediation cells. A portion of one of the COA remediation cells (Cell 5) extends onto Parcel B11. As documented within the Parcel B11 Work Plan Comment Response Letter dated June 25, 2020, the MDE has noted that depending on future development plans and the final grade of the Site, soil gas sampling may be required to evaluate potential VI risks/hazards.

### 6.3. RECOMMENDATIONS

Sufficient remedial investigation data has been collected to evaluate the nature and extent of possible constituents of concern in Parcel B11. The presence and absence of soil impacts within Parcel B11 have been adequately described and further investigation at the Site is not warranted to characterize overall conditions. Recommendations for the Site are as follows:

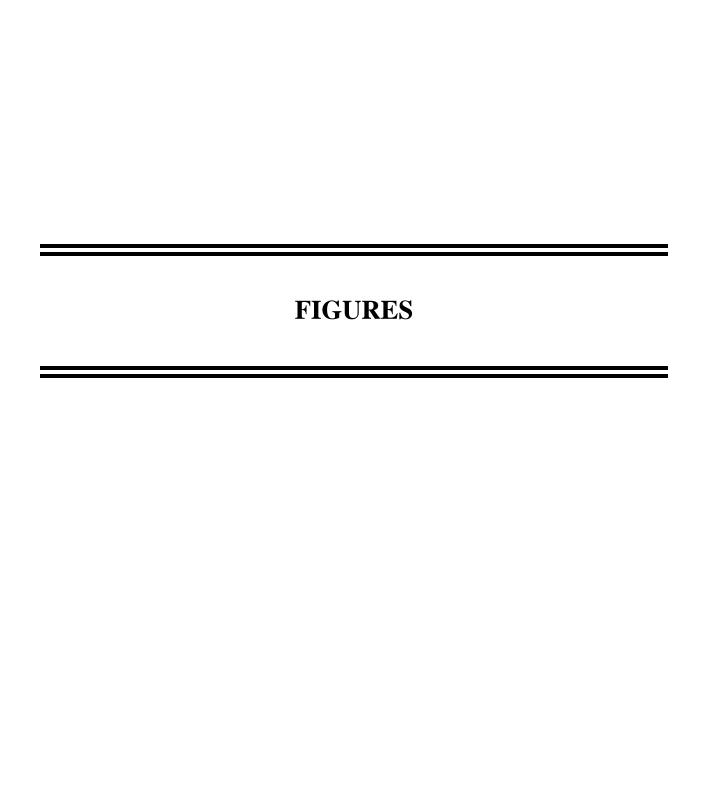
- The soil borings with elevated TPH/Oil & Grease concentrations and/or evidence of NAPL (B11-026-SB and B11-027-SB) should be considered for proximity to proposed utilities in any future development plans. If future utilities are proposed in the vicinity of these borings, appropriate protocols for the mitigation of potential product (NAPL) mobility should be specified in a project-specific Response and Development Work Plan.
- Measurable LNAPL has accumulated in the NAPL screening piezometer B11-026-PZ.
   Additional NAPL delineation activities are ongoing in this area, and the findings will be reported to the MDE in a separate NAPL Completion Report.
- The MDE has noted that depending on future development plans and the final grade of Parcel B11, soil gas sampling may be required to evaluate potential VI risks/hazards.



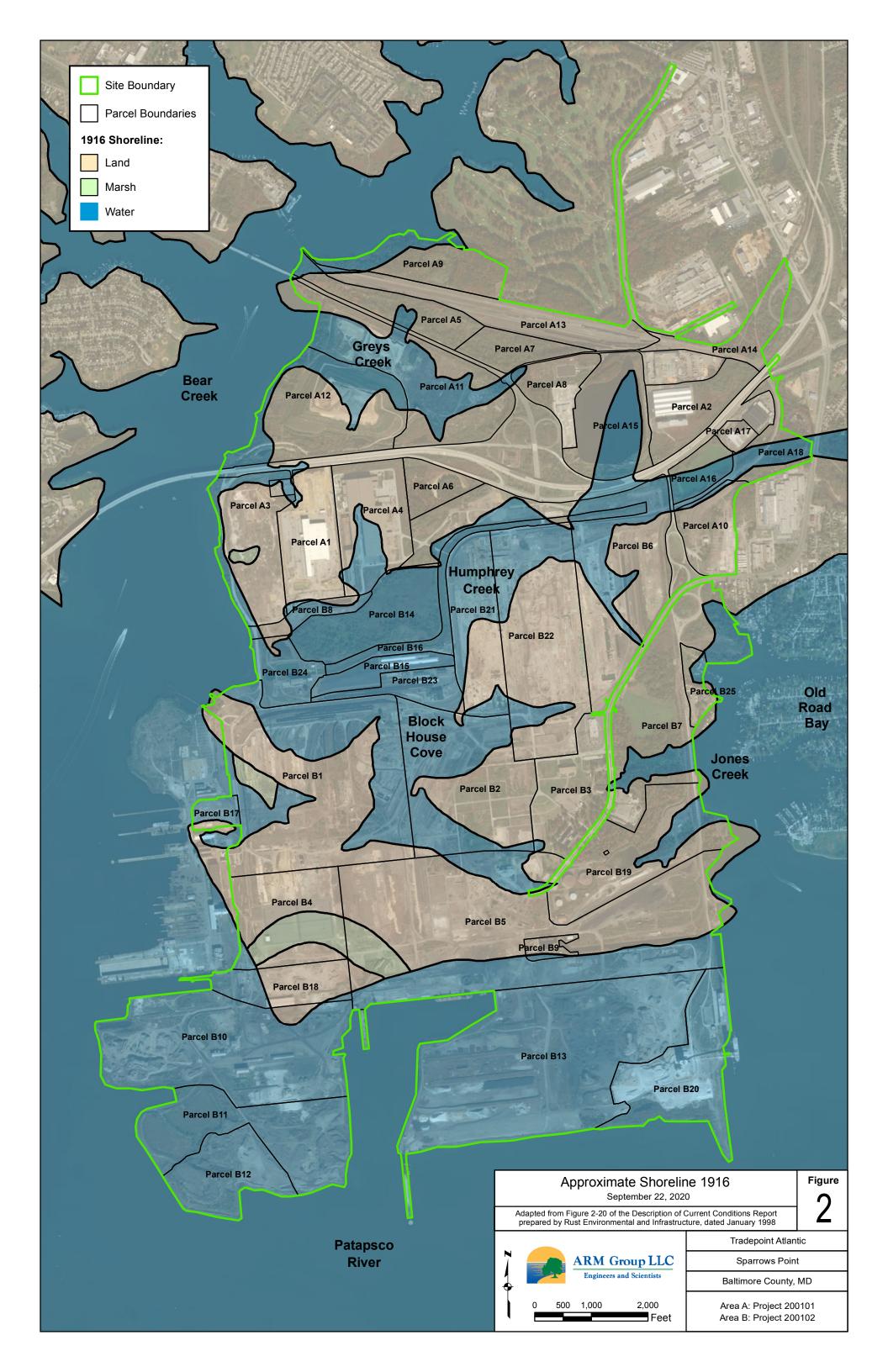
### 7.0 REFERENCES

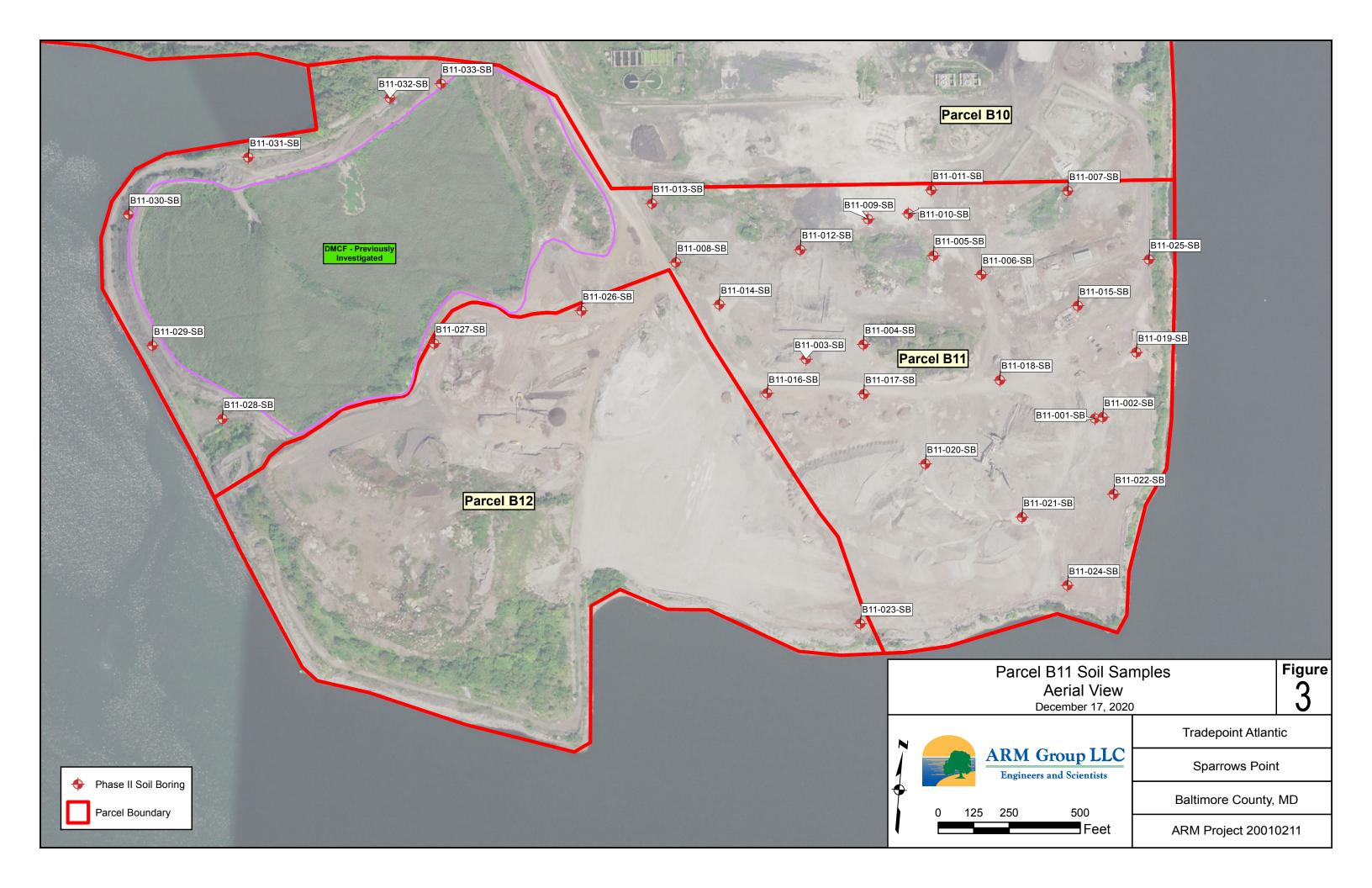
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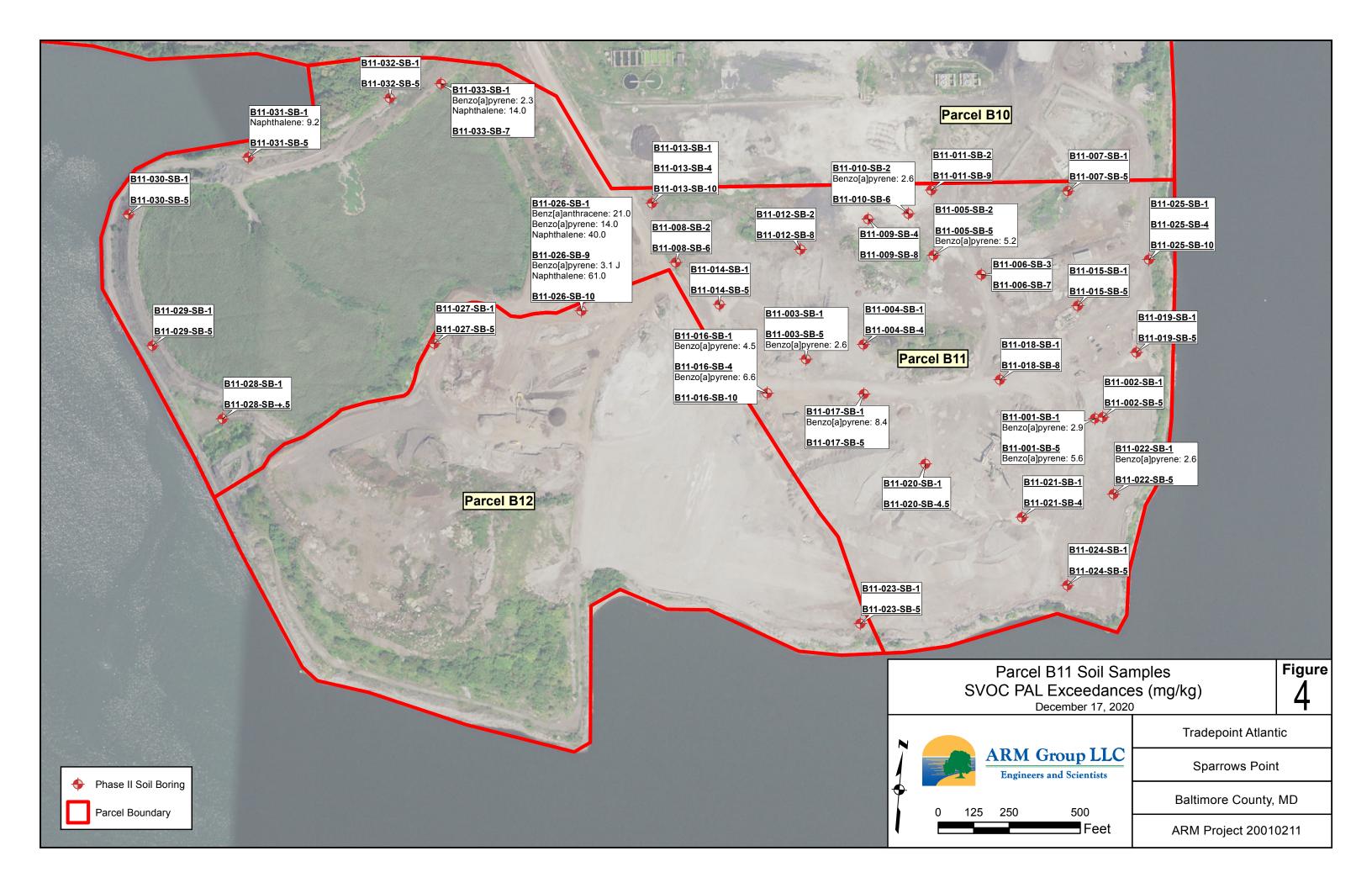


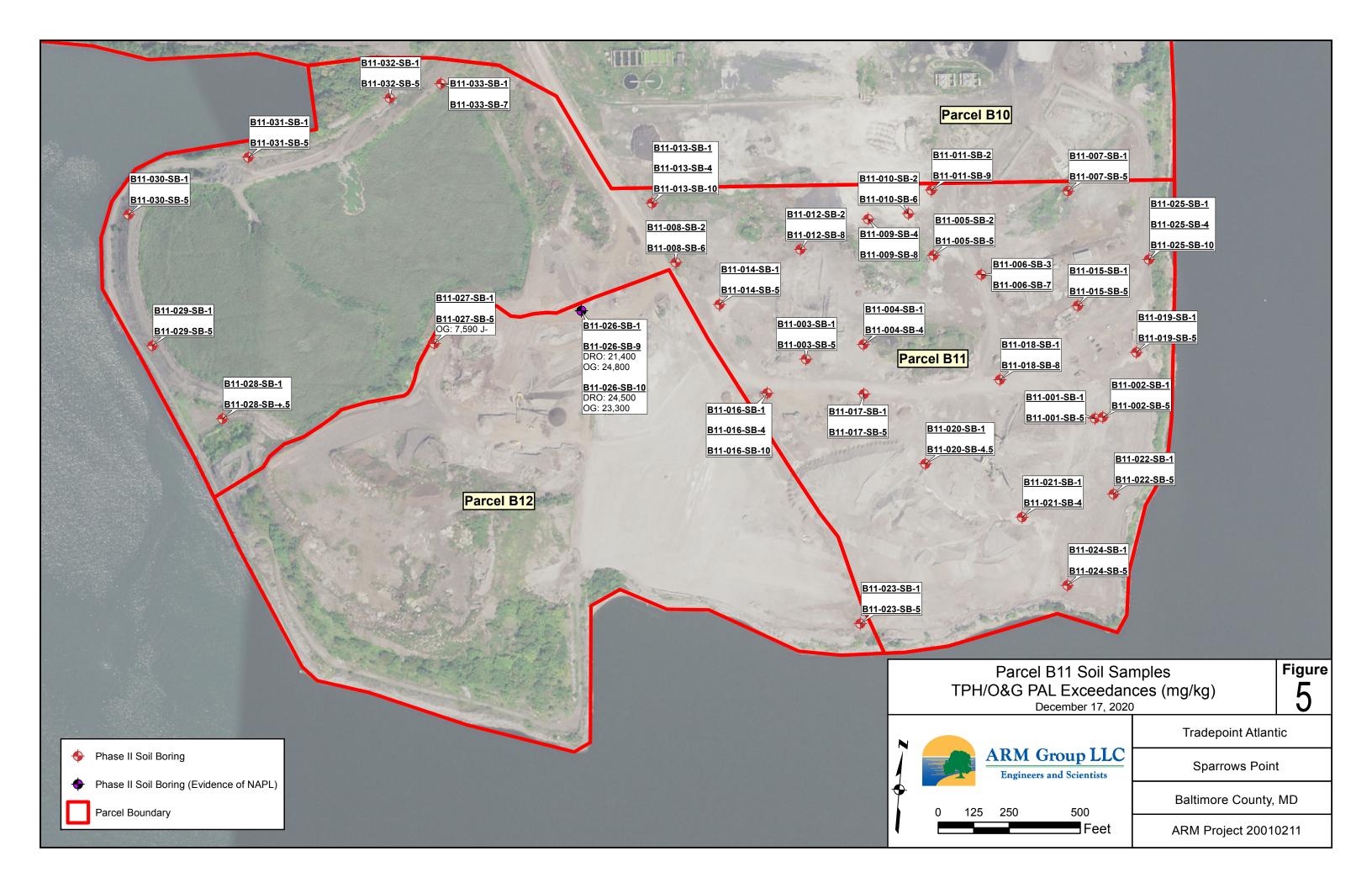


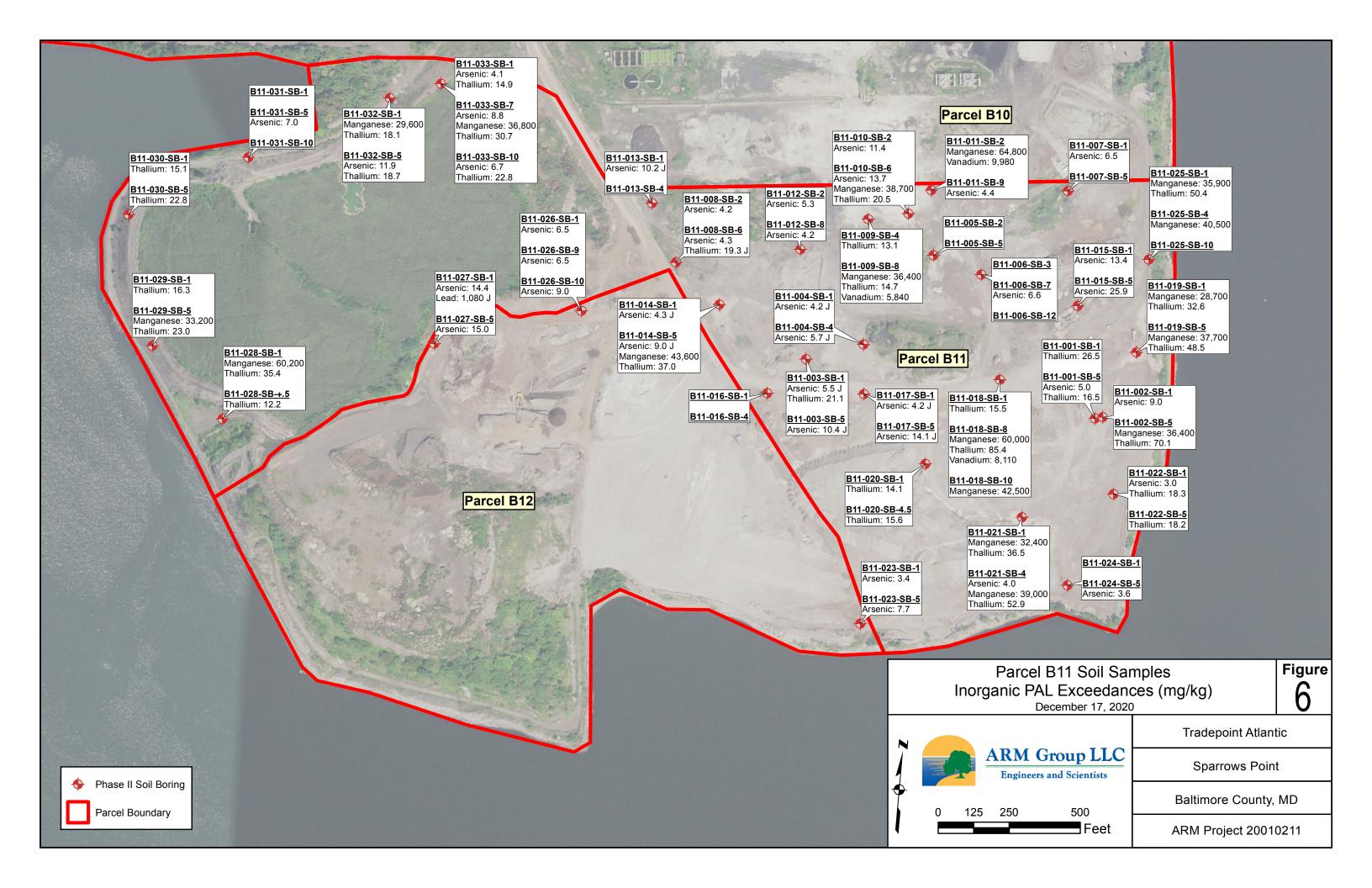












# **TABLES**

Table 1 - Parcel B11 Historical Site Drawing Details

Set Name	Typical Features Shown	<u>Drawing</u> <u>Number</u>	Original Date Drawn	<u>Latest</u> <u>Revision Date</u>
	Roads, water bodies,	5001	3/1/1961	1/8/1982
Plant Arrangement	building/structure footprints, electric lines, above-ground pipelines	5002	10/22/1958	1/8/1982
	(e.g.: steam, nitrogen, etc.)	5007	10/22/1958	1/8/1982
	Roads, water bodies, demolished	5101	Unknown	3/6/2008
Plant Index	buildings/structures, electric lines,	5102	Unknown	3/7/2008
211.0011	above-ground pipelines	5107	Unknown	8/18/2008
	Same as above plus trenches,	5501	3/1/1961	3/9/1982
Plant Sewer Lines	sumps, underground piping	5502	5/21/1975	2/24/1982
Sever Enios	(includes pipe materials)	5507	8/25/1959	2/24/1982
Drip Legs	Coke Oven Gas Drip Leg Locations	5885B	Unknown	Sept. 1988

**Table 2 - Parcel B11 Field Shifted Boring Locations** 

		Proposed	Location*	Final Lo	Relocation		
<u>Location ID</u>	Sample Target	Northing	<u>Easting</u>	Northing	<u>Easting</u>	Distance & Dire	
B11-003-SB	Scrap Reclaiming Pit	561,004	1,457,006	560,759	1,456,906	265	SW
B11-004-SB	Scrap Reclaiming Pit	561,006	1,457,208	560,827	1,457,103	208	SW
B11-008-SB	Scrap Screening Station	561,276	1,456,845	561,058	1,456,419	479	SW
B11-021-SB	Site-Wide / Material Stockpiles	560,274	1,457,726	560,270	1,457,713	14	W
B11-023-SB	Site-Wide / Material Stockpiles	559,860	1,457,347	559,846	1,457,178	169	W
B11-026-SB	Site-Wide / DMCF Perimeter	560,946	1,455,920	560,859	1,456,102	202	SE
B11-027-SB	Site-Wide / DMCF Perimeter	560,748	1,455,585	560,699	1,455,596	50	S
B11-031-SB	Site-Wide / DMCF Perimeter	561,215	1,454,887	561,295	1,454,886	81	N
B11-032-SB	Site-Wide / DMCF Perimeter	561,446	1,455,370	561,546	1,455,365	101	N
B11-033-SB	Site-Wide / DMCF Perimeter	561,657	1,455,582	561,613	1,455,539	61	SW

<sup>\*</sup>Reported northings and eastings are not survey accurate. Coordinates are reported in NAD 1983 Maryland State Plane (US feet). DMCF = Dredge Material Containment Facility

Table 3 - Parcel B11 Characterization Results for Solid IDW

Sample ID	<u>Parameter</u>	Result (mg/L)	TCLP Limit (mg/L)	TCLP Exceedance	<u>Laboratory</u> <u>Flag</u>	LOQ (mg/L)
	1,1-Dichloroethene	0.023	0.7	no	U	0.023
	1,2-Dichloroethane	0.023	0.5	no	U	0.023
	1,4-Dichlorobenzene	0.023	7.5	no	U	0.023
	2,4,5-Trichlorophenol	0.1	400	no	U	0.1
	2,4,6-Trichlorophenol	0.1	2	no	U	0.1
	2,4-Dinitrotoluene	0.1	0.13	no	U	0.1
	2-Butanone (MEK)	0.046	200	no	U	0.046
	2-Methylphenol	0.1	200	no	U	0.1
	3&4-Methylphenol(m&p Cresol)	0.2	200	no	U	0.2
	Arsenic	0.5	5	no	U	0.5
	Barium	10	100	no	U	10
	Benzene	0.023	0.5	no	U	0.023
B11/B17	Cadmium	0.1	1	no	U	0.1
IDW	Carbon tetrachloride	0.023	0.5	no	U	0.023
10/8/20	Chlorobenzene	0.023	100	no	U	0.023
10/8/20	Chloroform	0.023	6	no	U	0.023
	Chromium	0.5	5	no	U	0.5
	Hexachlorobenzene	0.1	0.13	no	U	0.1
	Hexachloroethane	0.1	3	no	U	0.1
	Lead	0.5	5	no	U	0.5
	Mercury	0.02	0.2	no	U	0.02
	Nitrobenzene	0.1	2	no	U	0.1
	Pentachlorophenol	0.5	100	no	U	0.5
	Selenium	0.1	1	no	U	0.1
	Silver	0.5	5	no	U	0.5
	Tetrachloroethene	0.023	0.7	no	U	0.023
	Trichloroethene	0.023	0.5	no	U	0.023
	Vinyl chloride	0.023	0.2	no	U	0.023

Table 3 - Parcel B11 Characterization Results for Solid IDW

Sample ID	<u>Parameter</u>	Result (mg/L)	TCLP Limit (mg/L)	TCLP Exceedance	Laboratory Flag	LOQ (mg/L)
	1,1-Dichloroethene	0.016	0.7	no	U	0.016
	1,2-Dichloroethane	0.016	0.5	no	U	0.016
	1,4-Dichlorobenzene	0.016	7.5	no	U	0.016
	2,4,5-Trichlorophenol	0.1	400	no	U	0.1
	2,4,6-Trichlorophenol	0.1	2	no	U	0.1
	2,4-Dinitrotoluene	0.1	0.13	no	U	0.1
	2-Butanone (MEK)	0.031	200	no	U	0.031
	2-Methylphenol	0.1	200	no	U	0.1
	3&4-Methylphenol(m&p Cresol)	0.2	200	no	U	0.2
	Arsenic	0.5	5	no	U	0.5
	Barium	10	100	no	U	10
	Benzene	0.016	0.5	no	U	0.016
	Cadmium	0.1	1	no	U	0.1
B11 IDW	Carbon tetrachloride	0.016	0.5	no	U	0.016
11/20/20	Chlorobenzene	0.016	100	no	U	0.016
	Chloroform	0.016	6	no	U	0.016
	Chromium	0.5	5	no	U	0.5
	Hexachlorobenzene	0.1	0.13	no	U	0.1
	Hexachloroethane	0.1	3	no	U	0.1
	Lead	0.5	5	no	U	0.5
	Mercury	0.02	0.2	no	U	0.02
	Nitrobenzene	0.1	2	no	U	0.1
	Pentachlorophenol	0.5	100	no	U	0.5
	Selenium	0.1	1	no	U	0.1
	Silver	0.5	5	no	U	0.5
	Tetrachloroethene	0.016	0.7	no	U	0.016
	Trichloroethene	0.016	0.5	no	U	0.016
	Vinyl chloride	0.016	0.2	no	U	0.016

U: The analyte was not detected in the sample. This numeric value represents the sample LOQ.

TCLP: Toxicity Characteristic Leaching Procedure

LOQ: Limit of Quantitation

Table 4 - Parcel B11 Characterization Results for Liquid IDW

Sample ID	<u>Parameter</u>	Result (mg/L)	TCLP Limit (mg/L)	TCLP Exceedance	<u>Laboratory</u> <u>Flag</u>	LOQ (mg/L)
	1,1-Dichloroethene	0.005	0.7	no	U	0.005
	1,2-Dichloroethane	0.005	0.5	no	U	0.005
	1,4-Dichlorobenzene	0.005	7.5	no	U	0.005
	2,4,5-Trichlorophenol	0.001	400	no	U	0.001
	2,4,6-Trichlorophenol	0.001	2	no	U	0.001
	2,4-Dinitrotoluene	0.001	0.13	no	U	0.001
	2-Butanone (MEK)	0.025	200	no	U	0.025
	2-Methylphenol	0.001	200	no	U	0.001
	4-Methylphenol(p Cresol)	0.001	200	no	U	0.001
	Arsenic	0.005	5	no	U	0.005
	Benzene	0.001	0.5	no	U	0.001
	Cadmium	0.038	1	no		0.005
Liquid	Carbon tetrachloride	0.005	0.5	no	U	0.005
IDW	Chlorobenzene	0.005	100	no	U	0.005
10/8/20	Chloroform	0.005	6	no	U	0.005
	Chromium	0.005	5	no	U	0.005
	Hexachlorobenzene	0.001	0.13	no	U	0.001
	Hexachloroethane	0.001	3	no	U	0.001
	Lead	0.005	5	no	U	0.005
	Mercury	0.001	0.2	no	U	0.001
	Nitrobenzene	0.001	2	no	U	0.001
	Pentachlorophenol	0.005	100	no	U	0.005
	Selenium	0.005	1	no	U	0.005
	Silver	0.005	5	no	U	0.005
	Tetrachloroethene	0.005	0.7	no	U	0.005
	Trichloroethene	0.005	0.5	no	U	0.005
	Vinyl chloride	0.001	0.2	no	U	0.001

Table 4 - Parcel B11 Characterization Results for Liquid IDW

Sample ID	<u>Parameter</u>	Result (mg/L)	TCLP Limit (mg/L)	TCLP Exceedance	<u>Laboratory</u> <u>Flag</u>	LOQ (mg/L)
	1,1-Dichloroethene	0.005	0.7	no	U	0.005
	1,2-Dichloroethane	0.005	0.5	no	U	0.005
	1,4-Dichlorobenzene	0.005	7.5	no	U	0.005
	2,4,5-Trichlorophenol	0.001	400	no	U	0.001
	2,4,6-Trichlorophenol	0.001	2	no	U	0.001
	2,4-Dinitrotoluene	0.001	0.13	no	U	0.001
	2-Butanone (MEK)	0.025	200	no	U	0.025
	2-Methylphenol	0.001	200	no	U	0.001
	4-Methylphenol(p Cresol)	0.001	200	no	U	0.001
	Arsenic	0.005	5	no	U	0.005
	Benzene	0.001	0.5	no	U	0.001
	Cadmium	0.022	1	no		0.005
Liquid	Carbon tetrachloride	0.005	0.5	no	U	0.005
IDW	Chlorobenzene	0.005	100	no	U	0.005
11/20/20	Chloroform	0.005	6	no	U	0.005
	Chromium	0.018	5	no		0.005
	Hexachlorobenzene	0.001	0.13	no	U	0.001
	Hexachloroethane	0.001	3	no	U	0.001
	Lead	0.015	5	no		0.005
	Mercury	0.001	0.2	no	U	0.001
	Nitrobenzene	0.001	2	no	U	0.001
	Pentachlorophenol	0.005	100	no	U	0.005
	Selenium	0.005	1	no	U	0.005
	Silver	0.005	5	no	U	0.005
	Tetrachloroethene	0.005	0.7	no	U	0.005
	Trichloroethene	0.005	0.5	no	U	0.005
	Vinyl chloride	0.001	0.2	no	U	0.001

U: The analyte was not detected in the sample. The numeric value represents the sample LOQ.

TCLP: Toxicity Characteristic Leaching Procedure

LOQ: Limit of Quantitation

### Table 5 - Parcel B11 Summary of Organics Detected in Soil

	П	1	711 001 07 11	744 004 07 FI	744 000 07 41	D11 002 0D 51	711 000 07 1	711 000 07 5	T11 001 0T 1	711 001 07 1	D44 00# 0D 44	744 00 5 67 51	D11 001 0D 0		T11 00= 0T 1	D11 00 0 0 0
Parameter	Units	PAL	B11-001-SB-1* 8/13/2020	B11-001-SB-5* 8/13/2020	B11-002-SB-1* 8/13/2020	B11-002-SB-5* 8/13/2020	B11-003-SB-1 8/11/2020	B11-003-SB-5 8/11/2020	B11-004-SB-1 8/11/2020	B11-004-SB-4 8/11/2020	B11-005-SB-2* 8/13/2020	B11-005-SB-5* 10/7/2020	B11-006-SB-3 8/17/2020	B11-006-SB-7 8/17/2020	B11-007-SB-1 8/18/2020	B11-007-SB-5
Volatile Organic Compounds	<u>II</u>		8/13/2020	8/13/2020	8/13/2020	8/13/2020	8/11/2020	8/11/2020	8/11/2020	8/11/2020	8/13/2020	10/7/2020	8/17/2020	8/17/2020	8/18/2020	8/18/2020
1,1,1-Trichloroethane	ma/ka	36,000	N/A	N/A	N/A	N/A	N/A	N/A	0.0043 U	0.0046 U	N/A	0.0044 U	N/A	0.005 U	N/A	N/A
1,1-Dichloroethane	mg/kg mg/kg	16	N/A N/A	N/A	N/A	N/A N/A	N/A	N/A	0.0043 U	0.0046 U	N/A	0.0044 U	N/A	0.005 U	N/A	N/A N/A
2-Butanone (MEK)	mg/kg	190,000	N/A N/A	N/A	N/A	N/A N/A	N/A	N/A N/A	0.0043 U 0.0086 UJ	0.0046 U 0.0092 UJ	N/A	0.0088 U	N/A	0.003 U	N/A	N/A N/A
Acetone	mg/kg	670,000	N/A N/A	N/A	N/A	N/A N/A	N/A	N/A	0.0086 U	0.0092 UJ	N/A	0.0088 U	N/A	0.01 B	N/A	N/A N/A
Benzene	mg/kg	5.1	N/A	N/A	N/A	N/A	N/A	N/A	0.0043 U	0.0046 U	N/A	0.0044 U	N/A	0.005 U	N/A	N/A
Carbon disulfide	mg/kg	3,500	N/A	N/A	N/A	N/A	N/A	N/A	0.0043 U	0.0046 U	N/A	0.0044 U	N/A	0.005 UJ	N/A	N/A
Cyclohexane	mg/kg	27,000	N/A	N/A	N/A	N/A	N/A	N/A	0.0086 U	0.0092 U	N/A	0.0088 U	N/A	0.01 UJ	N/A	N/A
Ethylbenzene	mg/kg	25	N/A	N/A	N/A	N/A	N/A	N/A	0.0043 U	0.0046 U	N/A	0.0044 U	N/A	0.005 U	N/A	N/A
Isopropylbenzene	mg/kg	9,900	N/A	N/A	N/A	N/A	N/A	N/A	0.0043 U	0.0046 U	N/A	0.0044 U	N/A	0.005 U	N/A	N/A
Methyl Acetate	mg/kg	1,200,000	N/A	N/A	N/A	N/A	N/A	N/A	0.043 U	0.046 U	N/A	0.044 U	N/A	0.0033 J	N/A	N/A
Toluene	mg/kg	47,000	N/A	N/A	N/A	N/A	N/A	N/A	0.0043 U	0.0046 U	N/A	0.0044 U	N/A	0.005 U	N/A	N/A
Xylenes	mg/kg	2,800	N/A	N/A	N/A	N/A	N/A	N/A	0.013 U	0.014 U	N/A	0.013 U	N/A	0.015 U	N/A	N/A
Semi-Volatile Organic Compounds^				-				-							-	
1,1-Biphenyl	mg/kg	200	0.24 J	0.23 J	0.17 J	0.072 U	0.72 U	0.2 J	0.078	0.74 U	0.028 J	0.022 J	0.038 J	0.04 J	0.04 J	0.074 U
1,2,4,5-Tetrachlorobenzene	mg/kg	350	0.74 U	0.74 U	0.36 U	0.072 U	0.72 U	0.75 U	0.073 U	0.74 U	0.071 U	0.073 U	0.073 U	0.042 J	0.075 U	0.074 U
2,4-Dimethylphenol	mg/kg	16,000	0.74 U	0.74 U	0.36 U	0.072 U	0.72 U	0.75 U	0.073 R	0.74 U	0.071 U	0.073 U	0.073 UJ	0.074 R	0.075 UJ	0.074 R
2,4-Dinitrotoluene	mg/kg	7.4	0.74 U	0.74 U	0.36 U	0.072 U	0.72 U	0.75 U	0.073 U	0.74 U	0.071 U	0.073 U	0.073 U	0.074 U	0.075 U	0.074 U
2-Chloronaphthalene	mg/kg	60,000	0.74 U	0.74 U	0.36 U	0.072 U	0.72 U	0.75 U	0.073 U	0.74 U	0.071 U	0.073 U	0.073 U	0.074 U	0.075 U	0.074 U
2-Chlorophenol	mg/kg	5,800	0.74 U	0.74 U	0.36 U	0.072 U	0.72 U	0.75 U	0.073 R	0.74 U	0.071 U	0.073 U	0.073 UJ	0.074 R	0.075 UJ	0.074 R
2-Methylnaphthalene	mg/kg	3,000	1.9	2.1	0.32	0.023	0.036	0.12	0.059	0.02	0.43	0.092	0.4	0.068	0.57	0.028
2-Methylphenol	mg/kg	41,000	0.74 U	0.74 U	0.36 U	0.072 U	0.72 U	0.75 U	0.073 R	0.74 U	0.071 U	0.073 U	0.073 UJ	0.074 R	0.075 UJ	0.074 R
3&4-Methylphenol(m&p Cresol)	mg/kg	41,000	1.5 U	1.5 U	0.72 U	0.14 U	1.4 U	1.5 U	0.15 R	1.5 U	0.14 U	0.15 U	0.15 UJ	0.15 R	0.15 UJ	0.15 R
Acenaphthene	mg/kg	45,000	0.13	0.15	0.041	0.0085 U	0.019	0.039	0.014	0.0018 J	0.0032 J	0.078	0.16	0.031	0.04	0.0081
Acenaphthylene	mg/kg	45,000	0.56	1.6	0.16	0.0043 J	0.023	0.12	0.094	0.019	0.017	1.5	0.24	0.022	0.052	0.034
Acetophenone	mg/kg	120,000	0.74 U	0.74 U	0.36 U	0.072 U	0.72 U	0.75 U	0.034 J	0.74 U	0.018 J	0.073 U	0.031 J	0.074 U	0.021 J	0.074 U
Anthracene	mg/kg	230,000	0.68	1.7	0.27	0.004 J	0.034	0.16	0.49	0.02	0.021	1.2	0.78	0.051	0.12	0.048
Benz[a]anthracene	mg/kg	21	2.5	5.7	0.76	0.049	0.36	1.6	0.71	0.15	0.072	3.1	0.22	0.21	0.78	0.23
Benzaldehyde	mg/kg	120,000	0.74 U	0.74 U	0.36 U	0.021 J	0.72 U	0.75 U	0.028 J	0.74 U	0.019 J	0.073 U	0.025 J	0.024 J	0.023 J	0.029 J
Benzo[a]pyrene	mg/kg	2.1	2.9	5.6	0.71	0.015	0.61	2.6	0.52	0.11	0.05	5.2	0.11	0.22	0.88	0.23
Benzo[b]fluoranthene	mg/kg	21	3.5	6.7	1.1	0.03	0.7	2.8	0.75	0.15	0.058	5.6	0.16	0.22	0.74	0.24
Benzo[g,h,i]perylene	mg/kg	210	2	3.7	0.48	0.014	0.43	1.7	0.32	0.064	0.029	4.8	0.058 J	0.16	0.37	0.14
Benzo[k]fluoranthene	mg/kg	210	1.3	2.6	0.37	0.0094	0.21	0.62	0.24	0.049	0.027	2.1	0.066 J	0.078	0.2	0.078
bis(2-Ethylhexyl)phthalate	mg/kg	160	0.74 U	0.74 U	0.36 U	0.072 U	0.72 U	0.75 U	0.024 B	0.74 UJ	0.039 J	0.03 J	0.049 B	0.074 U	0.036 J	0.021 B
Caprolactam	mg/kg	400,000	1.9 U	1.9 U <b>0.36 J</b>	0.9 U <b>0.12 J</b>	0.18 U 0.072 U	1.8 U 0.72 U	1.9 U	0.18 U	1.9 U 0.74 U	0.18 U 0.071 U	0.18 U <b>0.094</b>	0.18 U	0.18 U 0.074 U	0.047 J 0.038 J	0.19 U 0.074 U
Carbazole Chrysene	mg/kg mg/kg	2,100	0.32 J 2.6	5.1	0.12 J	0.072 0	0.72 0	0.26 J 1.7	0.11	0.74 0	0.071 0	3.1	0.019 J 0.23	0.074 0	0.038 J 0.71	0.074 0
Dibenz[a,h]anthracene		2,100	0.62	0.92	0.12	0.04 0.0032 J	0.093	0.27	0.086	0.099	0.055 0.0066 J	0.83	0.25 0.015 J	0.036	0.71	0.034
Di-n-butylphthalate	mg/kg mg/kg	82.000	0.02 0.74 U	0.92 0.21 J	0.12 0.36 U	0.0032 J	0.72 U	0.75 U	0.073 U	0.018 0.2 B	0.0000 3	0.021 J	0.013 J 0.073 U	0.074 U	0.13 0.075 U	0.034 0.074 U
Fluoranthene	mg/kg	30,000	4	12	1.9	0.072 0	0.72 0	1.6	0.073 0	0.2 B	0.070	7.1	1.9	0.074 0	0.56	0.074 0
Fluorene	mg/kg	30,000	0.19	0.56	0.054	0.028 0.0085 U	0.0079	0.038	0.068	0.0024 J	0.072	0.4	0.23	0.0099	0.027	0.0088
Hexachloroethane	mg/kg	8	0.74 U	0.74 U	0.36 U	0.072 U	0.72 U	0.75 U	0.073 U	0.74 U	0.071 U	0.073 U	0.073 U	0.074 U	0.075 U	0.074 U
Indeno[1,2,3-c,d]pyrene	mg/kg	21	2	3.9	0.44	0.011	0.36	1.7	0.3	0.058	0.023	5.7	0.061 J	0.1	0.31	0.11
Naphthalene	mg/kg	8.6	2.5	3.5	1.7	0.024	0.084	0.43	0.15	0.018	0.44	0.21	0.6	0.16	0.42	0.056
Nitrobenzene	mg/kg	22	0.74 U	0.74 U	0.36 U	0.072 U	0.72 U	0.75 U	0.073 U	0.74 U	0.071 U	0.073 U	0.073 U	0.074 U	0.075 U	0.074 U
N-Nitrosodiphenylamine	mg/kg	470	0.74 U	0.74 U	0.36 U	0.072 U	0.72 U	0.75 U	0.073 U	0.74 U	0.071 U	0.073 U	0.073 U	0.074 U	0.075 U	0.074 U
Phenanthrene	mg/kg		2.9	7.7	1.5	0.016	0.093	0.51	0.3	0.045	0.15	3.4	2.8	0.2	0.53	0.15
Phenol	mg/kg	250,000	0.74 U	0.74 U	0.36 U	0.072 U	0.72 U	0.75 U	0.073 R	0.74 U	0.071 U	0.073 U	0.073 UJ	0.074 R	0.075 UJ	0.074 R
Pyrene	mg/kg	23,000	3.6	10	1.5	0.026	0.26	1.8	0.79	0.14	0.062	6.8	1.5	0.25	0.98	0.28
PCBs																
Aroclor 1248	mg/kg	0.94	0.092 U	N/A	0.018 U	N/A	0.089 UJ	N/A	0.018 UJ	N/A	0.017 J	N/A	0.018 U	N/A	0.057 J	N/A
Aroclor 1254	mg/kg	0.97	0.092 U	N/A	0.018 U	N/A	0.089 U	N/A	0.018 U	N/A	0.018 U	N/A	0.018 U	N/A	0.095 U	N/A
Aroclor 1260	mg/kg	0.99	0.092 U	N/A	0.018 U	N/A	0.089 U	N/A	0.018 U	N/A	0.018 U	N/A	0.018 U	N/A	0.095 U	N/A
PCBs (total)	mg/kg	0.97	0.83 U	N/A	0.16 U	N/A	0.8 U	N/A	0.16 U	N/A	0.16 U	N/A	0.17 U	N/A	0.85 U	N/A
TPH/Oil & Grease																
Diesel Range Organics	mg/kg	6,200	367	323	220	42.8	93.8	205	125	93.9	52	182	50	80.9	99.4	135
Gasoline Range Organics	mg/kg	6,200	11.8 U	7.7 J	9.3 U	11.1 U	10.7 U	10.3 U	11.1 U	10.7 U	10.1 U	9.2 U	11 U	9.7 U	11.2 U	12.5 U
Oil & Grease	mg/kg	6,200	708	317	1,510	215 U	418	278	523	1,370	214 U	365	122 J-	517 J-	257 J-	246 J-

### **Bold indicates detection**

Values in red indicate a detection exceedance of the Project Action Limit (PAL)

N/A: This parameter was not analyzed for this sample.

<sup>\*</sup> Indicates non-validated data

<sup>^</sup> PAH compounds were analyzed via SIM

J: The positive result reported for this analyte is a quantitative estimate.

J-: The positive result reported for this analyte is a quantitative estimate but may be biased low.

R: The result for this analyte is unreliable. Additional data is needed of confirm or disprove the presence of this compound/analyte in the sample.

B: This analyte was not detected substantially above the level of the associated method blank/preparation or field blank.

U: This analyte was not detected in the sample. The numeric value represents the sample quantitation/detection limit.

 $UJ: This \ analyte \ was \ not \ detected \ in \ the \ sample. \ The \ actual \ quantitation/detection \ limit \ may \ be \ higher \ than \ reported.$ 

Number   Color   Col	F	1	<u> </u>	D11 000 CD 2	D11 000 CD 6	D11 000 CD 4*	B11-009-SB-8*	D11 010 CD 2*	D11 010 CD 6*	D11 011 CD 2*	D11 011 CD 0*	D11 012 CD 2*	D11 012 CD 9*	D11 012 CD 1	D11 012 CD 4*	D11 012 CD 10*	D11 014 CD 1
Note   Company	Parameter	Units	PAL	B11-008-SB-2	B11-008-SB-6	B11-009-SB-4*		B11-010-SB-2*	B11-010-SB-6*	B11-011-SB-2*	B11-011-SB-9*	B11-012-SB-2*	B11-012-SB-8*	B11-013-SB-1	B11-013-SB-4*	B11-013-SB-10*	B11-014-SB-1
March   Marc	Volatile Organic Compounds			8/17/2020	8/17/2020	10/7/2020	10/7/2020	10/7/2020	10/7/2020	10/0/2020	10/0/2020	10/7/2020	10/7/2020	8/11/2020	10/3/2020	10/3/2020	8/11/2020
11   Contention	8 1	mø/kø	36,000	N/A	N/A	0.0043 U	0.0048 U	0.0044 U	0.0062 U	0.0036 U	0.0034 U	0.0047 U	0.0043 U	N/A	0.0041 U	0.0043 U	N/A
Seminary Mark   1965	7 7		,														
Member   M	2-Butanone (MEK)		190,000	N/A	N/A	0.0086 U	0.0097 U	0.0089 U	0.012 U	0.0072 U	0.0068 U	0.0094 U	0.0087 U	N/A	0.0081 U	0.0086 U	N/A
Commoniste	Acetone	mg/kg	670,000	N/A	N/A	0.0075 J	0.011	0.015	0.014	0.0082	0.0099	0.013	0.0062 J	N/A	0.0091	0.018	N/A
Continues	Benzene	mg/kg	5.1	N/A	N/A	0.0043 U	0.0048 U	0.0044 U	0.0062 U	0.0036 U	0.0034 U	0.0047 U	0.0043 U	N/A	0.0041 U	0.0043 U	N/A
Secretary   Secr	Carbon disulfide	mg/kg	3,500	N/A	N/A	0.0015 J	0.0022 J	0.0044 U	0.003 J	0.0018 J	0.002 J	0.0016 J	0.0043 U	N/A	0.0016 J	0.0043 U	N/A
Page	Cyclohexane	mg/kg	27,000	N/A	N/A	0.0086 U	0.0097 U	0.0017 J	0.012 U	0.0072 U	0.0068 U	0.0026 J	0.0087 U	N/A	0.0081 U	0.0086 U	N/A
March   Marc	Ethylbenzene	mg/kg															N/A
Table   Page	Isopropylbenzene	mg/kg															
No.   Control	Methyl Acetate	- 2															
Note   Content																	
1.18   plens    marks   20	· ·	mg/kg	2,800	N/A	N/A	0.013 U	0.015 U	0.013 U	0.019 U	0.011 U	0.01 U	0.014 U	0.013 U	N/A	0.012 U	0.013 U	N/A
13.4.5 Translatement	9 1	II - I				T				I			T			T	
2-Monophyshord   molys   16,007   07 U   0.08 U   0.07	. 1																
2.4 Demonshares   mg/sg   7.4   0.7   0.68   0.07   0.0	7 7 7																
Collectopedunder	· · · · · · · · · · · · · · · · · · ·		-,														
Conference   mg/sg   5.800   0.71   0.05   0.072   0.075   0.076   0.060   0.060   0.076   0.076   0.074   0.073   0.070   0.008   0.55   0.008   0.075   0.008   0.075   0.008   0.075   0.008   0.075   0.008   0.075   0.008   0.075   0.008   0.008   0.075   0.008   0.																	
Seeks			,														
2.Methylphosol   mg/kg   4   1,000   0.71   0.081   0.071   0.071   0.072			,														
New Part	·																
Accomplatione   mg/kg   45,000   0.089   0.0896   0.08963   0.0875   0.085   0.0858   0.00853   0.0875   0.0855   0.0	- V 1		,														<del>                                     </del>
Accomplative			,														
New Year   120,000   0.7   0.68 U   0.072 U   0.070 U			- ,														
Authorseme   mg/bg   20100   0.946   0.039   0.027   0.11   1.5   0.59   0.011   0.00899   0.092   0.094   0.0972   0.0973   0.1   0.2   0.2   0.3   0.2   0.2   0.0   0.2   0.0   0.2   0.0   0.2   0.0   0.2   0.0   0.2   0.0   0.2   0.0																	
Sear-Industraces $mg/kg$ 21 0.78 0.21 0.081 0.4 2.6 1.6 0.3 0.02 0.1 0.1 0.14 0.3 0.035 0.31 0.78 0.78 0.79 0.79 0.79 0.79 0.79 0.79 0.79 0.79	Anthracene			0.046													
Benzel Destroace	Benz[a]anthracene	mg/kg	21	0.78	0.21	0.081	0.4	2.6	1.6	0.03	0.02		0.14	0.43	0.035	0.34	0.78
Braze  Diplocamentence   mg/kg   21   1.8   9.77   9.11   9.5   3.3   1.8   9.043   9.033   9.12   9.25   9.66   9.66   9.68   9.88	Benzaldehyde	mg/kg	120,000	0.7 U	0.68 U	0.072 U	0.07 U	0.72 U	0.096 U	0.069 U	0.015 J	0.072	0.74 U	0.024 J	0.071 U	0.025 J	0.74 U
Bernof Jahrschere	Benzo[a]pyrene	mg/kg	2.1	1.6	0.16	0.053	0.38	2.6	1.4	0.034	0.024	0.086	0.19	0.27	0.026	0.22	0.66
Bezon   Bezo	Benzo[b]fluoranthene	mg/kg	21	1.8	0.27	0.11	0.5	3.3	1.8	0.043	0.033	0.12	0.25	0.36	0.06	0.45	0.83
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Benzo[g,h,i]perylene	mg/kg			0.13	0.043	0.25	1.8	0.81	0.023	0.019	0.059		0.17	0.032		
Caprolacian	Benzo[k]fluoranthene	mg/kg															
Carbosole	bis(2-Ethylhexyl)phthalate																
Chrysene			400,000														
Dibertal_planthracene   mg/kg   2.1   0.2   0.034   0.012   0.065   0.44   0.24   0.0082   0.0094   0.015   0.028   0.042   0.0085   0.040   0.0094																	-
Den-burylphthalate																	
Flooranthene   mg/kg   30,000   0.67   0.23   0.23   0.89   5.7   3.7   0.067   0.038   0.3   0.19   0.53   0.1   0.4   1.7																	
Fluorene	7 1																
Hexachlorochane																	-
Indeno(1,2,3-c,d)pyrene   mg/kg   21   0.96   0.11   0.05   0.33   2.2   1.2   0.025   0.02   0.072   0.14   0.16   0.04   0.3   0.36			,							0100100							
Naphthalene																	
Nitrobenzene Mgkg 22 0.7 U 0.68 U 0.072 U 0.07 U 0.72 U 0.096 U 0.069 U 0.068 U 0.07 U 0.74 U 0.074 U 0.074 U 0.071 U 0.068 U 0.74 U 0.74 U 0.074 U 0.	2 / / 317																
N-Nitrosodiphenylamine mg/kg 470 0.7 U 0.68 U 0.07 U 0.07 U 0.7 U 0.09 U 0.09 U 0.068 U 0.1 0.74 U 0.07 U 0.07 U 0.01 U 0.02 U 0.01 U 0.02 U 0	*																
Phenanthrene   mg/kg   25,000   0.17   0.19   0.11   0.4   3.8   1.8   0.057   0.035   0.44   0.15   0.21   0.044   0.55   0.84     Phenol   mg/kg   25,000   0.7   0.68 U   0.072 U   0.07 U   0.07 U   0.096 U   0.096 U   0.069 U   0.039 J   0.07 U   0.74 U   0.074 U   0.074 U   0.071 U   0.068 U   0.74 U     Pyrene   mg/kg   23,000   0.77   0.18   0.19   0.72   4.7   2.9   0.06   0.041   0.23   0.17   0.42   0.081   0.41   1.7     PCBs																	
Phenol mg/kg 250,000 0.7 U 0.68 U 0.072 U 0.07 U 0.096 U 0.069 U 0.039 J 0.07 U 0.74 U 0.074 U 0.074 U 0.071 U 0.068 U 0.74 U 0.074 U	Phenanthrene		.,,														
Pyrene mg/kg 23,000 0.77 0.18 0.19 0.72 4.7 2.9 0.06 0.041 0.23 0.17 0.42 0.081 0.41 1.7  PCBS  Arcolor 1248 mg/kg 0.94 0.085 U N/A 0.018 U N/A 0.018 U N/A 0.003 J N/A 0.017 U N/A 0.088 U N/A 0.019 U N/A 0.019 U N/A 0.014 J N/A 0.094 U N/A 0.015 U N/A 0.017 U N/A 0.088 U N/A 0.019 U N/A 0.019 U N/A 0.094 U N/A 0.016 U N/A 0.017 U N/A 0.017 U N/A 0.017 U N/A 0.018 U N/A 0.018 U N/A 0.018 U N/A 0.018 U N/A 0.017 U N/A 0.017 U N/A 0.017 U N/A 0.018 U N/A 0.038 U N/A 0.019 U N/A 0.038 U N/A 0.019 U N/A 0.094 U N/A 0.018 U N/A 0.018 U N/A 0.018 U N/A 0.017 U N/A 0.017 U N/A 0.14 N/A 0.019 U N/A N/A 0.23 D N/A 0.018 U N/A 0.018 U N/A 0.018 U N/A 0.018 U N/A 0.003 J N/A 0.007 J N/A 0.007 J N/A 0.14 N/A 0.17 U N/A N/A 0.37 U N/A 0.37 U N/A 0.38 U N/A 0.018 U N/A 0.018 U N/A 0.018 U N/A 0.018 U N/A 0.017 U N/A 0.017 U N/A 0.14 N/A 0.17 U N/A N/A 0.37 U N/A 0.37 U N/A 0.38 U N/A 0.007 J N/A 0.007 J N/A 0.007 J N/A 0.007 J N/A 0.018 U N/A 0.018 U N/A 0.018 U N/A 0.008 U N/A 0.007 J N/A 0.007 J N/A 0.018 U N/A 0.018 U N/A 0.018 U N/A 0.008 U N/A 0.007 J N/A 0.017 U N/A 0.14 N/A 0.17 U N/A N/A N/A 0.37 U N/A 0.37 U N/A 0.018 U N/A 0.018 U N/A 0.018 U N/A 0.008 U N/A 0.007 J N/A 0.007 J N/A 0.14 N/A 0.17 U N/A 0.17 U N/A 0.37 U N/A 0.37 U N/A 0.018 U N/A 0.018 U N/A 0.008 U N/A 0.007 J N/A 0.007 J N/A 0.007 J N/A 0.14 N/A 0.17 U N/A 0.17 U N/A 0.37 U N/A 0.38 U N/A 0.008 U N/A 0.007 J N/A 0.007 J N/A 0.007 J N/A 0.007 J N/A 0.008 U N/A 0.018 U N/A 0.018 U N/A 0.008 U N/A 0.007 J N/A 0.007 J N/A 0.017 U N/A 0.14 N/A 0.17 U N/A 0.17 U N/A 0.37 U N/A 0.37 U N/A 0.018 U N/A 0.008 U N/A 0.007 J N/A 0.007 J N/A 0.017 U N/A 0.14 N/A 0.17 U N/A 0.18 U N/A 0.37 U N/A 0.008 U N/A 0.008 U N/A 0.007 J N/A 0.007 J N/A 0.017 U N/A 0.14 N/A 0.14 N/A 0.19 U N/A 0.19 U N/A 0.37 U N/A 0.008 U N/A 0.007 J N/A 0.008 U N/A 0.007 J N/A 0.008 U N/A 0.008 U N/A 0.009 U N/	Phenol		250,000														
PCBs Aroclor 1248	Pyrene		23,000	1												1	
Aroclor 1254 mg/kg 0.97 0.085 U N/A 0.018 U N/A 0.09 U N/A 0.0071 J N/A 0.088 U N/A 0.019 U N/A 0.094 U N/A 0.094 U N/A 0.0071 J N/A 0.088 U N/A 0.019 U N/A 0.094 U N/A 0.094 U N/A 0.0126 U N/A 0.018 U N/A 0.018 U N/A 0.018 U N/A 0.018 U N/A 0.017 U N/A 0.017 U N/A 0.017 U N/A 0.019 U N/A 0.019 U N/A 0.019 U N/A 0.037 J N/A 0.0071 J N/A 0.0071 J N/A 0.014 N/A 0.17 U N/A N/A 0.07 J N/A 0.07 J N/A 0.07 J N/A 0.0071 J N/A 0.0071 J N/A 0.0071 J N/A 0.018 U N/A 0.07 J N/A 0.07 J N/A 0.0071 J N/A 0.0071 J N/A 0.0071 J N/A 0.018 U N/A 0.07 J N/A 0.07 J N/A 0.07 J N/A 0.0071 J N/A 0.0071 J N/A 0.0071 J N/A 0.019 U N/A N/A 0.07 J N/A 0.07 J N/A 0.0071 J N/A 0.0071 J N/A 0.0071 J N/A 0.018 U N/A 0.07 J N/A 0.07 J N/A 0.0071 J N/A 0.0071 J N/A 0.018 U N/A 0.019 U N/A 0.023 N/A 0.0071 J N/A 0.0071 J N/A 0.019 U N/A 0.019 U N/A 0.037 J N/A 0.0071 J N/A 0.0071 J N/A 0.019 U N/A 0.019 U N/A 0.037 J N/A 0.0071 J N/A 0.0071 J N/A 0.019 U N/A 0.019 U N/A 0.037 J N/A 0.0071 J N/A 0.0071 J N/A 0.019 U N/A 0.019 U N/A 0.019 U N/A 0.094 U N/A 0.094 U N/A 0.019 U N/A 0.019 U N/A 0.019 U N/A 0.019 U N/A 0.094 U N/A 0.019 U N/A 0	PCBs	<u>,, , , , , , , , , , , , , , , , , , ,</u>															
Aroclor 1254 mg/kg 0.97 0.085 U N/A 0.018 U N/A 0.09 U N/A 0.0071 J N/A 0.088 U N/A 0.019 U N/A 0.094 U N/A 0.094 U N/A 0.0071 J N/A 0.088 U N/A 0.019 U N/A 0.094 U N/A 0.094 U N/A 0.0126 U N/A 0.018 U N/A 0.018 U N/A 0.018 U N/A 0.018 U N/A 0.017 U N/A 0.017 U N/A 0.017 U N/A 0.019 U N/A 0.019 U N/A 0.019 U N/A 0.037 J N/A 0.0071 J N/A 0.0071 J N/A 0.014 N/A 0.17 U N/A N/A 0.07 J N/A 0.07 J N/A 0.07 J N/A 0.0071 J N/A 0.0071 J N/A 0.0071 J N/A 0.018 U N/A 0.07 J N/A 0.07 J N/A 0.0071 J N/A 0.0071 J N/A 0.0071 J N/A 0.018 U N/A 0.07 J N/A 0.07 J N/A 0.07 J N/A 0.0071 J N/A 0.0071 J N/A 0.0071 J N/A 0.019 U N/A N/A 0.07 J N/A 0.07 J N/A 0.0071 J N/A 0.0071 J N/A 0.0071 J N/A 0.018 U N/A 0.07 J N/A 0.07 J N/A 0.0071 J N/A 0.0071 J N/A 0.018 U N/A 0.019 U N/A 0.023 N/A 0.0071 J N/A 0.0071 J N/A 0.019 U N/A 0.019 U N/A 0.037 J N/A 0.0071 J N/A 0.0071 J N/A 0.019 U N/A 0.019 U N/A 0.037 J N/A 0.0071 J N/A 0.0071 J N/A 0.019 U N/A 0.019 U N/A 0.037 J N/A 0.0071 J N/A 0.0071 J N/A 0.019 U N/A 0.019 U N/A 0.019 U N/A 0.094 U N/A 0.094 U N/A 0.019 U N/A 0.019 U N/A 0.019 U N/A 0.019 U N/A 0.094 U N/A 0.019 U N/A 0	Aroclor 1248	mg/kg	0.94	0.085 U	N/A	0.018 U	N/A	0.063 J	N/A	0.017 U	N/A	0.088 U	N/A	0.019 UJ	N/A	N/A	0.14 J
Aroclor 1260 mg/kg 0.99 0.085 U N/A 0.018 U N/A 0.09 U N/A 0.017 U N/A 0.017 U N/A 0.017 U N/A 0.019 U N/A 0.23 PCBs (total) mg/kg 0.97 0.77 U N/A 0.018 U N/A 0.018 U N/A 0.063 J N/A 0.0071 J N/A 0.0071 J N/A 0.14 N/A 0.17 U N/A 0.17 U N/A N/A 0.37 J  TPH/Oil & Grease Diesel Range Organics mg/kg 6.200 105 67.3 J 47.4 123 205 258 90.5 173 316 117 62.1 34.8 123 186 Gasoline Range Organics mg/kg 6.200 8.7 U 8 U 9.3 U 18.5 U 9.1 U 12.9 U 7.6 U 6.5 U 8.5 J 6.6 J 12.1 U 9.7 U 10.7 U 9.9 U	Aroclor 1254		0.97					0.09 U									
PCBs (total) mg/kg 0.97 0.77 U N/A 0.018 U N/A 0.063 J N/A 0.0071 J N/A 0.0071 J N/A 0.14 N/A 0.17 U N/A N/A 0.37 J  TPH/Oil & Grease  Diesel Range Organics mg/kg 6,200 1.05 67.3 J 47.4 1.23 2.05 2.58 90.5 1.73 3.16 1.17 62.1 34.8 1.23 186  Gasoline Range Organics mg/kg 6,200 8.7 U 8 U 9.3 U 18.5 U 9.1 U 12.9 U 7.6 U 6.5 U 8.5 J 6.6 J 12.1 U 9.7 U 10.7 U 9.9 U	Aroclor 1260		0.99	0.085 U		0.018 U		0.09 U		0.017 U		0.14		0.019 U			0.23
Diesel Range Organics mg/kg 6,200 105 67.3 J 47.4 123 205 258 90.5 173 316 117 62.1 34.8 123 186 Gasoline Range Organics mg/kg 6,200 8.7 U 8 U 9.3 U 18.5 U 9.1 U 12.9 U 7.6 U 6.5 U 8.5 J 6.6 J 12.1 U 9.7 U 10.7 U 9.9 U	PCBs (total)		0.97	0.77 U	N/A	0.018 U	N/A	0.063 J	N/A	0.0071 J	N/A	0.14	N/A	0.17 U	N/A	N/A	0.37 J
Gasoline Range Organics mg/kg 6,200 8.7 U 8 U 9.3 U 18.5 U 9.1 U 12.9 U 7.6 U 6.5 U 8.5 J 6.6 J 12.1 U 9.7 U 10.7 U 9.9 U	TPH/Oil & Grease																
Gasoline Range Organics mg/kg 6,200 8.7 U 8 U 9.3 U 18.5 U 9.1 U 12.9 U 7.6 U 6.5 U 8.5 J 6.6 J 12.1 U 9.7 U 10.7 U 9.9 U	Diesel Range Organics	mg/kg	6,200	105	67.3 J	47.4	123	205	258	90.5	173	316	117	62.1	34.8	123	186
Oil & Grease mg/kg 6,200 413 J- 456 J- 131 J 250 572 620 157 J 419 372 466 136 J 218 U 151 J 789	Gasoline Range Organics	mg/kg	6,200	8.7 U	8 U		18.5 U	9.1 U	12.9 U	7.6 U	6.5 U	8.5 J	6.6 J	12.1 U	9.7 U	10.7 U	9.9 U
	Oil & Grease	mg/kg	6,200	413 J-	456 J-	131 J	250	572	620	157 J	419	372	466	136 J	218 U	151 J	789

#### **Bold indicates detection**

Values in red indicate a detection exceedance of the Project Action Limit (PAL)

- \* Indicates non-validated data
- ^ PAH compounds were analyzed via SIM

N/A: This parameter was not analyzed for this sample.

- J: The positive result reported for this analyte is a quantitative estimate.
- J-: The positive result reported for this analyte is a quantitative estimate but may be biased low.
- R: The result for this analyte is unreliable. Additional data is needed of confirm or disprove the presence of this compound/analyte in the sample.
- $B: This \ analyte \ was \ not \ detected \ substantially \ above \ the \ level \ of \ the \ associated \ method \ blank/preparation \ or \ field \ blank.$
- U: This analyte was not detected in the sample. The numeric value represents the sample quantitation/detection limit.
- $UJ: This \ analyte \ was \ not \ detected \ in \ the \ sample. \ The \ actual \ quantitation/detection \ limit \ may \ be \ higher \ than \ reported.$

	1		B11-014-SB-5	B11-015-SB-1*	B11-015-SB-5*	B11-016-SB-1	B11-016-SB-4*	B11-016-SB-10*	B11-017-SB-1	B11-017-SB-5	B11-018-SB-1*	B11-018-SB-8*	B11-019-SB-1*	B11-019-SB-5*	B11-020-SB-1	B11-020-SB-4.5
Parameter	Units	PAL	8/11/2020	8/13/2020	8/13/2020	8/11/2020	10/6/2020	10/6/2020	8/11/2020	8/11/2020	8/12/2020	8/12/2020	8/12/2020	8/12/2020	8/11/2020	8/11/2020
Volatile Organic Compounds			0,11,11	0.10.10.1	0,12,120	0,72,72,020			3, 11, 10, 10	0, 11, 10, 10	0, 12, 2020	0,12,20	0,12,202	0, 22, 232	0, 11, 10, 10	0, 22, 2020
1,1,1-Trichloroethane	mg/kg	36,000	N/A	N/A	N/A	N/A	0.005 U	0.0036 U	N/A	N/A	N/A	0.0041 U	N/A	N/A	N/A	N/A
1,1-Dichloroethane	mg/kg	16	N/A	N/A	N/A	N/A	0.005 U	0.0036 U	N/A	N/A	N/A	0.0041 U	N/A	N/A	N/A	N/A
2-Butanone (MEK)	mg/kg	190,000	N/A	N/A	N/A	N/A	0.01 U	0.0073 U	N/A	N/A	N/A	0.0082 U	N/A	N/A	N/A	N/A
Acetone	mg/kg	670,000	N/A	N/A	N/A	N/A	0.0078 J	0.0064 J	N/A	N/A	N/A	0.0051 B	N/A	N/A	N/A	N/A
Benzene	mg/kg	5.1	N/A	N/A	N/A	N/A	0.28	0.026	N/A	N/A	N/A	0.0041 U	N/A	N/A	N/A	N/A
Carbon disulfide	mg/kg	3,500	N/A	N/A	N/A	N/A	0.0044 J	0.0036 U	N/A	N/A	N/A	0.0041 U	N/A	N/A	N/A	N/A
Cyclohexane	mg/kg	27,000	N/A	N/A	N/A	N/A	0.01 U	0.0073 U	N/A	N/A	N/A	0.0082 U	N/A	N/A	N/A	N/A
Ethylbenzene	mg/kg	25	N/A	N/A	N/A	N/A	0.005 U	0.0036 U	N/A	N/A	N/A	0.0041 U	N/A	N/A	N/A	N/A
Isopropylbenzene	mg/kg	9,900	N/A	N/A	N/A	N/A	0.005 U	0.0036 U	N/A	N/A	N/A	0.0041 U	N/A	N/A	N/A	N/A
Methyl Acetate	mg/kg	1,200,000	N/A	N/A	N/A	N/A	0.05 U	0.036 U	N/A	N/A	N/A	0.0032 J	N/A	N/A	N/A	N/A
Toluene	mg/kg	47,000	N/A	N/A	N/A	N/A	0.0087	0.0082	N/A	N/A	N/A	0.0041 U	N/A	N/A	N/A	N/A
Xylenes	mg/kg	2,800	N/A	N/A	N/A	N/A	0.015 U	0.0045 J	N/A	N/A	N/A	0.012 U	N/A	N/A	N/A	N/A
Semi-Volatile Organic Compounds^	1	1														
1,1-Biphenyl	mg/kg	200	0.047 J	0.75 U	0.77 U	0.77 U	0.72 U	0.069 U	0.036 J	0.067 U	0.1	0.041 J	0.34 U	0.073 U	0.22 J	0.075 U
1,2,4,5-Tetrachlorobenzene	mg/kg	350	0.072 U	0.75 U	0.77 U	0.77 U	0.72 U	0.069 U	0.07 U	0.067 U	0.072 U	0.066 U	0.34 U	0.073 U	0.71 U	0.075 U
2,4-Dimethylphenol	mg/kg	16,000	0.072 U	0.75 U	0.77 U	0.77 U	0.72 U	0.069 U	0.07 R	0.067 U	0.072 U	0.066 U	0.34 U	0.073 U	0.71 U	0.075 R
2,4-Dinitrotoluene	mg/kg	7.4	0.072 U	0.75 U	0.77 U	0.77 U	0.72 U	0.069 U	0.07 U	0.067 U	0.072 U	0.066 U	0.34 U	0.073 U	0.71 U	0.075 U
2-Chloronaphthalene	mg/kg	60,000	0.072 U	0.75 U	0.77 U	0.77 U	0.72 U	0.069 U	0.07 U	0.067 U	0.072 U	0.066 U	0.34 U	0.073 U	0.71 U	0.075 U
2-Chlorophenol	mg/kg	5,800	0.072 U	0.75 U	0.77 U	0.77 U	0.72 U	0.069 U	0.07 R	0.067 U	0.072 U	0.066 U	0.34 U	0.073 U	0.71 U	0.075 R
2-Methylnaphthalene	mg/kg	3,000	0.031	0.2	0.75	0.081	0.036 J	0.0061 J	0.69	0.005 J	0.25	0.92	0.13	0.038	0.15	0.0062 J
2-Methylphenol	mg/kg	41,000	0.072 U	0.75 U	0.77 U	0.77 U	0.72 U	0.069 U	0.07 R	0.067 U	0.072 U	0.066 U	0.34 U	0.073 U	0.71 U	0.075 R
3&4-Methylphenol(m&p Cresol)	mg/kg	41,000	0.14 U	1.5 U	1.5 U	1.5 U	1.4 U	0.14 U	0.14 R	0.13 U	0.14 U	0.13 U	0.68 U	0.15 U	1.4 U	0.15 R
Acenaphthene	mg/kg	45,000	0.039	0.04	0.35	0.048	0.41	0.0023 J	0.3	0.007 U	0.033	0.014 U	0.48	0.0024 J	0.019	0.0072 U
Acetaphthylene	mg/kg	45,000 120,000	<b>0.018</b> 0.072 U	0.048	0.034	<b>0.021</b> 0.77 U	<b>0.019 J</b> 0.72 U	0.0078 U 0.069 U	3.1 0.019 J	<b>0.0086</b> 0.067 U	<b>0.073</b> 0.072 U	0.014 U	<b>0.03</b> 0.34 U	<b>0.028</b> 0.073 U	0.086	<b>0.0034 J</b> 0.075 U
Acetophenone Anthracene	mg/kg mg/kg	230.000	0.072 0	0.75 U <b>0.16</b>	0.77 U <b>0.14</b>	0.77 0	0.72 0	0.069 U 0.0017 J	6.3	0.067 U 0.0061 J	0.072 0	0.066 U 0.014 U	0.34 U	0.073 0	0.71 U <b>0.14</b>	0.073 U
Benz[a]anthracene	mg/kg	230,000	0.039	0.16	0.14	2	2.7	0.0017 3	8.9	0.0061 3	0.61	0.014 U	0.17	0.031	0.14	0.00373
Benzaldehyde	mg/kg	120,000	0.72 0.072 U	0.75 U	0.77 U	0.77 U	0.72 U	0.069 U	0.018 J	0.041 0.067 U	0.072 U	0.066 U	0.34 U	0.073 U	0.07 0.71 U	0.019 0.075 U
Benzo[a]pyrene	mg/kg	2.1	1.3	0.73 0	0.17	4.5	6.6	0.009 0	8.4	0.007 6	0.072 0	0.000 U	1.5	0.073 0	0.6	0.073
Benzo[b]fluoranthene	mg/kg	21	1.4	1	0.22	5.1	6.6	0.014	11	0.013	0.48	0.0028 J	1.6	0.38	0.96	0.013
Benzo[g,h,i]perylene	mg/kg	21	0.96	0.48	0.095	3.1	5	0.0073 J	4.9	0.016	0.38	0.0047 J	1.1	0.15	0.4	0.0096
Benzo[k]fluoranthene	mg/kg	210	0.45	0.35	0.088	1.3	2.3	0.0073 J	3.2	0.0084	0.24	0.0029 J	0.65	0.13	0.22	0.0064 J
bis(2-Ethylhexyl)phthalate	mg/kg	160	0.023 B	0.75 U	0.77 U	0.77 U	0.72 U	0.015 J	0.02 B	0.073 J	0.015 J	0.066 U	0.073 J	0.073 U	0.71 UJ	0.018 J
Caprolactam	mg/kg	400.000	0.18 U	1.9 U	1.9 U	1.9 U	1.8 U	0.17 U	0.17 U	0.17 U	0.18 U	0.17 U	0.85 U	0.18 U	1.8 U	0.19 U
Carbazole	mg/kg	,	0.083	0.75 U	0.77 U	0.77 U	0.33 J	0.069 U	0.022 J	0.067 U	0.051 J	0.066 U	0.34 U	0.073 U	0.71 U	0.075 U
Chrysene	mg/kg	2,100	0.68	0.67	0.19	2.3	2.8	0.011	8.4	0.012	0.54	0.01 J	0.67	0.31	0.53	0.011
Dibenz[a,h]anthracene	mg/kg	2.1	0.2	0.11	0.022	0.66	1	0.0016 J	1.2	0.0028 J	0.092	0.014 U	0.44	0.042	0.092	0.0021 J
Di-n-butylphthalate	mg/kg	82,000	0.072 U	0.75 U	0.77 U	0.77 U	0.72 U	0.069 U	0.07 U	0.091 J	0.072 U	0.066 U	0.34 U	0.073 U	0.71 U	0.075 U
Fluoranthene	mg/kg	30,000	0.47	0.57	0.29	1.3	2.6	0.015	24	0.016	0.7	0.023	0.7	0.22	1.2	0.023
Fluorene	mg/kg	30,000	0.01	0.016	0.096	0.012	0.078	0.0043 J	4.1	0.0011 J	0.028	0.014 U	0.062	0.0036 J	0.019	0.0072 U
Hexachloroethane	mg/kg	8	0.072 U	0.75 U	0.77 U	0.77 U	0.72 U	0.069 U	0.07 U	0.067 U	0.072 U	0.066 U	0.34 U	0.073 U	0.71 U	0.075 U
Indeno[1,2,3-c,d]pyrene	mg/kg	21	0.98	0.4	0.087	3.1	6	0.0075 J	5.6	0.011	0.33	0.0031 J	1	0.14	0.34	0.0079
Naphthalene	mg/kg	8.6	0.08	0.27	1.7	0.14	0.071 J	0.064	4	0.0092	0.88	0.14	0.21	0.075	1.3	0.025
Nitrobenzene	mg/kg	22	0.072 U	0.75 U	0.77 U	0.77 U	0.72 U	0.069 U	0.07 U	0.067 U	0.072 U	0.066 U	0.34 U	0.073 U	0.71 U	0.075 U
N-Nitrosodiphenylamine	mg/kg	470	0.072 U	0.75 U	0.77 U	0.77 U	0.72 U	0.069 U	0.07 U	0.067 U	0.072 U	0.25	0.34 U	0.073 U	0.71 U	0.075 U
Phenanthrene	mg/kg		0.13	0.32	0.44	0.24	0.62	0.0091	28	0.011	0.62	0.31	0.55	0.071	1	0.018
Phenol	mg/kg	250,000	0.072 U	0.75 U	0.77 U	0.77 U	0.72 U	0.069 U	0.07 R	0.067 U	0.072 U	0.066 U	0.34 U	0.073 U	0.71 U	0.075 R
Pyrene	mg/kg	23,000	0.56	0.6	0.23	1.7	2.7	0.014	17	0.014	0.53	0.021	0.65	0.33	1	0.018
PCBs															_	
Aroclor 1248	mg/kg	0.94	N/A	0.019 U	N/A	0.034	N/A	N/A	0.018 UJ	N/A	0.032	N/A	0.086 U	N/A	0.018 UJ	N/A
Aroclor 1254	mg/kg	0.97	N/A	0.019 U	N/A	0.019 U	N/A	N/A	0.018 U	N/A	0.018 U	N/A	0.086 U	N/A	0.018 U	N/A
Aroclor 1260	mg/kg	0.99	N/A	0.019 U	N/A	0.026	N/A	N/A	0.018 U	N/A	0.018 U	N/A	0.086 U	N/A	0.018 U	N/A
PCBs (total)	mg/kg	0.97	N/A	0.17 U	N/A	0.06 J	N/A	N/A	0.16 U	N/A	0.16 U	N/A	0.78 U	N/A	0.16 U	N/A
TPH/Oil & Grease	1															
Diesel Range Organics	mg/kg	6,200	114	153	69	149	180	31.5	73.3	58	81.7	1,060	134	38.6	112	21.7
Gasoline Range Organics	mg/kg	6,200	10.4 U	13.1 U	9.5 U	12.3 U	6.4 J	8.3 U	7.5 U	6.8 U	11.3 U	10.9 U	9.6 U	11.4 U	10.6 U	5.3 U
Oil & Grease	mg/kg	6,200	461	154 J	660	415	1,170	211 U	582	1,740	145 J	364	650	121 J	194 J	227 U

**Bold indicates detection** 

Values in red indicate a detection exceedance of the Project Action Limit (PAL)

- \* Indicates non-validated data
- ^ PAH compounds were analyzed via SIM

N/A: This parameter was not analyzed for this sample.

- J: The positive result reported for this analyte is a quantitative estimate.
- J-: The positive result reported for this analyte is a quantitative estimate but may be biased low.
- R: The result for this analyte is unreliable. Additional data is needed of confirm or disprove the presence of this compound/analyte in the sample.
- $B: This \ analyte \ was \ not \ detected \ substantially \ above \ the \ level \ of \ the \ associated \ method \ blank/preparation \ or \ field \ blank.$
- U: This analyte was not detected in the sample. The numeric value represents the sample quantitation/detection limit.
- $UJ: This \ analyte \ was \ not \ detected \ in \ the \ sample. \ The \ actual \ quantitation/detection \ limit \ may \ be \ higher \ than \ reported.$

	1	1	B11-021-SB-1*	B11-021-SB-4*	B11-022-SB-1*	B11-022-SB-5*	B11-023-SB-1	B11-023-SB-5	B11-024-SB-1*	B11-024-SB-5*	B11-025-SB-1*	B11-025-SB-4*	B11-025-SB-10*	B11-026-SB-1	B11-026-SB-9*	B11-026-SB-10*
Parameter	Units	PAL	8/12/2020	8/12/2020	8/12/2020	8/12/2020	8/18/2020	8/18/2020	8/12/2020	10/19/2020	8/12/2020	10/6/2020	10/6/2020	8/18/2020	10/19/2020	10/19/2020
Volatile Organic Compounds			0/12/2020	0/12/2020	0/12/2020	0,12,2020	6/16/2020	6/16/2020	0/12/2020	10/17/2020	0,12,2020	10/0/2020	10/0/2020	0/10/2020	10/15/2020	10/19/2020
1,1,1-Trichloroethane	mg/kg	36,000	0.0045 U	0.004 U	0.0044 U	0.0048 U	N/A	N/A	N/A	0.0037 U	0.0049 U	0.0038 U	0.006 U	N/A	0.046	0.01
1,1-Dichloroethane	mg/kg	16	0.0045 U	0.004 U	0.0044 U	0.0048 U	N/A	N/A	N/A	0.0037 U	0.0049 U	0.0038 U	0.006 U	N/A	0.0072	0.0055 U
2-Butanone (MEK)	mg/kg	190,000	0.009 U	0.0081 U	0.0088 U	0.0096 U	N/A	N/A	N/A	0.0074 U	0.0097 U	0.0077 U	0.012 U	N/A	0.006 J	0.011 U
Acetone	mg/kg	670,000	0.009 U	0.0081 U	0.0096 B	0.0095 B	N/A	N/A	N/A	0.0028 J	0.0097 U	0.0087	0.015	N/A	0.064	0.019
Benzene	mg/kg	5.1	0.0045 U	0.004 U	0.0044 U	0.0048 U	N/A	N/A	N/A	0.0037 U	0.0049 U	0.014	0.006 U	N/A	0.0092	0.0043 J
Carbon disulfide	mg/kg	3,500	0.0045 U	0.004 U	0.0044 U	0.0048 U	N/A	N/A	N/A	0.0018 J	0.0049 U	0.0014 J	0.0046 J	N/A	0.0048 U	0.0055 U
Cyclohexane	mg/kg	27,000	0.009 U	0.0081 U	0.0088 U	0.0096 U	N/A	N/A	N/A	0.0074 U	0.0097 U	0.0077 U	0.012 U	N/A	0.0042 J	0.011 U
Ethylbenzene	mg/kg	25	0.0045 U	0.004 U	0.0044 U	0.0048 U	N/A	N/A	N/A	0.0037 U	0.0049 U	0.0038 U	0.006 U	N/A	0.0067	0.0055 U
Isopropylbenzene	mg/kg	9,900	0.0045 U	0.004 U	0.0044 U	0.0048 U	N/A	N/A	N/A	0.0037 U	0.0049 U	0.0038 U	0.006 U	N/A	0.0048 U	0.0016 J
Methyl Acetate	mg/kg	1,200,000	0.0018 J	0.0032 J	0.0042 J	0.006 J	N/A	N/A	N/A	0.037 U	0.049 U	0.038 U	0.06 U	N/A	0.048 U	0.055 U
Toluene	mg/kg	47,000	0.0045 U	0.004 U	0.0044 U	0.0048 U	N/A	N/A	N/A	0.0037 U	0.0049 U	0.0029 J	0.006 U	N/A	0.025	0.0055 U
Xylenes	mg/kg	2,800	0.014 U	0.012 U	0.013 U	0.014 U	N/A	N/A	N/A	0.011 U	0.015 U	0.011 U	0.018 U	N/A	0.036	0.017 U
Semi-Volatile Organic Compounds^																
1,1-Biphenyl	mg/kg	200	0.22	0.068 U	0.15 J	0.21 J	0.21	0.71 U	0.068 J	0.71 U	0.072	0.12	0.073 U	0.077 J	63	74.7
1,2,4,5-Tetrachlorobenzene	mg/kg	350	0.019 J	0.018 J	0.7 U	0.72 U	0.072 U	0.71 U	0.07 U	0.71 U	0.098	0.073 U	0.073 U	0.073 U	3.8 U	7.7 U
2,4-Dimethylphenol	mg/kg	16,000	0.07 U	0.068 U	0.7 U	0.72 U	0.072 R	0.71 U	0.07 U	0.71 U	0.071 U	0.022 J	0.073 U	0.073 UJ	4.2	7.7 U
2,4-Dinitrotoluene	mg/kg	7.4	0.07 U	0.068 U	0.7 U	0.72 U	0.072 U	0.71 U	0.07 U	0.71 U	0.071 U	0.073 U	0.073 U	0.073 U	3.8 U	7.7 U
2-Chloronaphthalene	mg/kg	60,000	0.07 U	0.068 U	0.7 U	0.72 U	0.072 U	0.71 U	0.07 U	0.71 U	0.23	0.073 U	0.073 U	0.073 U	3.8 U	7.7 U
2-Chlorophenol	mg/kg	5,800	0.07 U	0.068 U	0.7 U	0.72 U	0.072 R	0.71 U	0.07 U	0.71 U	0.052 J	0.073 U	0.073 U	0.073 UJ	3.8 U	7.7 U
2-Methylnaphthalene	mg/kg	3,000	0.15	0.0022 J	0.46	0.14	0.08	0.092	0.044	0.014 J	0.26	0.31	0.032	10	60	16
2-Methylphenol	mg/kg	41,000	0.07 U	0.068 U	0.7 U	0.72 U	0.072 R	0.71 U	0.07 U	0.71 U	0.071 U	0.016 J	0.073 U	0.073 UJ	1.6 J	7.7 U
3&4-Methylphenol(m&p Cresol)	mg/kg	41,000	0.025 J	0.14 U	1.4 U	1.4 U	0.022 J	1.4 U	0.14 U	1.4 U	0.14 U	0.025 J	0.02 J	0.035 J	3 J	15.3 U
Acenaphthene	mg/kg	45,000	0.092	0.0018 J	0.28	0.2	0.039	0.049	0.0054 J	0.016 J	0.012	0.17	0.21	0.7	110	45
Acenaphthylene	mg/kg	45,000	0.03 0.029 J	0.0072 U	0.68	<b>0.098</b> 0.72 U	<b>0.019</b> 0.072 U	0.028	0.037	0.0044 J	0.14	0.062 0.055 J	0.0028 J	7.1	2.8 J	0.96 J
Acetophenone	mg/kg	120,000 230,000	0.029 J	0.068 U <b>0.0019 J</b>	0.7 U <b>0.48</b>	0.72 0	0.072 0	0.71 U	0.07 U <b>0.083</b>	0.71 U	0.065 J	0.055 J 0.085	0.073 U <b>0.025</b>	0.073 U 14	3.8 U 91	7.7 U <b>39</b>
Anthracene Benz[a]anthracene	mg/kg mg/kg	230,000	0.25	0.0019 J	3	1.1	0.062	0.15 0.57	0.083	0.015 J 0.68	0.13	0.085	0.025	21	18	7.5
Benzaldehyde	mg/kg	120,000	0.75 0.038 J	0.068 U	0.7 U	0.72 U	0.072 U	0.57 0.71 U	0.7 0.07 U	0.71 U	0.18	0.054 J	0.20 0.073 U	0.073 UJ	3.8 U	7.7 U
Benzo[a]pyrene	mg/kg	2.1	1.3	0.028	2.6	1.5	0.42	0.48	0.52	1.3	0.4	0.59	0.53	14	3.1 J	1.1 J
Benzo[b]fluoranthene	mg/kg	21	1.2	0.029	3.4	1.8	0.49	0.67	0.86	1.5	0.58	0.6	0.55	17	4.5 J	1.6 J
Benzo[g,h,i]perylene	mg/kg		1.3	0.028	1.8	1.1	0.29	0.31	0.63	1	0.28	0.45	0.39	4	0.8 J	0.42 J
Benzo[k]fluoranthene	mg/kg	210	0.52	0.016	1.5	0.74	0.18	0.19	0.44	0.46	0.17	0.23	0.17	7.1	1 J	0.4 J
bis(2-Ethylhexyl)phthalate	mg/kg	160	0.048 J	0.068 U	0.7 U	0.72 U	0.089	0.71 U	0.025 J	0.71 U	0.018 J	0.037 J	0.021 J	0.022 J	0.98 J	7.7 U
Caprolactam	mg/kg	400,000	0.18 U	0.17 U	1.8 U	1.8 U	0.18 U	1.8 U	0.18 U	1.8 U	0.18 U	0.039 J	0.18 U	0.18 U	9.6 U	19.2 U
Carbazole	mg/kg		0.14	0.068 U	0.24 J	0.26 J	3.6	0.71 U	0.065 J	0.71 U	0.071 U	0.21	0.064 J	0.76 J	28	24.7
Chrysene	mg/kg	2,100	0.67	0.014	2.2	0.95	0.3	0.46	0.54	0.74	0.38	0.3	0.2	15	14	5.9
Dibenz[a,h]anthracene	mg/kg	2.1	0.3	0.0052 J	0.41	0.39	0.067	0.069	0.19	0.18	0.07	0.11	0.087	2	7.6 U	3.8 U
Di-n-butylphthalate	mg/kg	82,000	0.07 U	0.068 U	0.7 U	0.72 U	0.072 U	0.71 U	0.07 U	0.71 U	0.071 U	0.041 J	0.073 U	0.073 U	3.8 U	7.7 U
Fluoranthene	mg/kg	30,000	0.81	0.012	4.1	1	0.46	0.93	0.54	0.65	0.62	0.37	0.18	43	86	34
Fluorene	mg/kg	30,000	0.065	0.0072 U	0.16	0.039	0.01	0.024	0.0039 J	0.035 U	0.024	0.059	0.021	10	120	47
Hexachloroethane	mg/kg	8	0.07 U	0.068 U	0.7 U	0.72 U	0.072 U	0.71 U	0.07 U	0.71 U	0.071 U	0.073 U	0.073 U	0.073 U	3.8 U	7.7 U
Indeno[1,2,3-c,d]pyrene	mg/kg	21	0.95	0.023	1.6	0.95	0.24	0.25	0.47	1.1	0.25	0.58	0.46	6.3	7.6 U	3.8 U
Naphthalene	mg/kg	8.6	0.5	0.0058 J	1.1	0.53	0.084	0.15	0.24	0.048	0.49	3.6	0.049	40	61	7.4
Nitrobenzene	mg/kg	22	0.07 U	0.068 U	0.7 U	0.72 U	0.072 U	0.71 U	0.07 U	0.71 U	0.038 J	0.073 U	0.073 U	0.073 U	3.8 U	7.7 U
N-Nitrosodiphenylamine	mg/kg	470	0.07 U	0.068 U	0.7 U	0.72 U	0.072 U	0.71 U	0.07 U	0.71 U	0.071 U	0.015 J	0.073 U	0.073 U	3.8 U	32
Phenanthrene	mg/kg	250 000	0.52	0.0062 J	1.6	0.65	0.29	0.68	0.38	0.12	0.55	0.23	0.099	46	500	200
Phenol Primary a	mg/kg	250,000	0.028 J	0.068 U	0.7 U	0.72 U	0.06 J	0.71 U	0.07 U	0.71 U	0.041 J	0.073 U	0.073 U	0.027 J	1.7 J	7.7 U
Pyrene	mg/kg	23,000	0.8	0.01	3.6	1.1	0.39	0.81	0.52	0.73	0.5	0.33	0.19	28	95	40
PCBs		0.04	0.010.11	NT/A	0.000 11	NT/A	0.00.111	NT/A	0.010.11	NT/A	0.000 11	NT/A	NT/A	0.004.777	NT/A	NT/A
Arcelor 1248	mg/kg	0.94	0.018 U	N/A	0.089 U	N/A	0.09 UJ	N/A	0.018 U	N/A	0.088 U	N/A	N/A	0.094 UJ	N/A	N/A
Arcelor 1260	mg/kg	0.97	0.018 U	N/A	0.089 U	N/A	0.09 U	N/A	0.24	N/A	0.088 U	N/A	N/A	0.094 U	N/A	N/A
Aroclor 1260	mg/kg	0.99 0.97	0.15 0.15 J	N/A N/A	0.089 U 0.8 U	N/A N/A	0.09 U 0.81 U	N/A N/A	0.018 U <b>0.24</b>	N/A N/A	0.088 U 0.79 U	N/A N/A	N/A N/A	0.094 U 0.85 U	N/A N/A	N/A
PCBs (total) TPH/Oil & Grease	mg/kg	0.97	0.15 J	IN/A	U.8 U	IN/A	0.81 U	IN/A	U.24	IN/A	0.79 U	IN/A	IN/A	U.83 U	IN/A	N/A
Diesel Range Organics	mg/kg	6,200	296	17.2	391	309	193	398	58.2	348	127	179	77.9	128	21,400	24,500
Gasoline Range Organics	mg/kg mg/kg	6,200	9.7 U	9.6 U	10.3 U	10.5 U	193 10.3 U	10.4 U	10.7 U	8.4 U	127 10.7 U	8.6 U	9.9 U	8.1 U	21,400 14 J	9.8 U
Oil & Grease	mg/kg mg/kg	6,200	286	208 U	955	886	351 J-	10.4 U 1,400 J-	213 U	1,210	10.7 U	185 J	225 U	8.1 U 295 J-	24,800	23,300
On & Olease	mg/kg	0,200	200	200 U	פפע	000	331 J-	1,400 J-	213 U	1,410	154 J	105 J	223 U	493 J-	<i>4</i> 4,000	43,300

**Bold indicates detection** 

Values in red indicate a detection exceedance of the Project Action Limit (PAL)

N/A: This parameter was not analyzed for this sample.

J: The positive result reported for this analyte is a quantitative estimate.

<sup>\*</sup> Indicates non-validated data

<sup>^</sup> PAH compounds were analyzed via SIM

J-: The positive result reported for this analyte is a quantitative estimate but may be biased low.

R: The result for this analyte is unreliable. Additional data is needed of confirm or disprove the presence of this compound/analyte in the sample.

 $B: This \ analyte \ was \ not \ detected \ substantially \ above \ the \ level \ of \ the \ associated \ method \ blank/preparation \ or \ field \ blank.$ 

U: This analyte was not detected in the sample. The numeric value represents the sample quantitation/detection limit.

 $UJ: This \ analyte \ was \ not \ detected \ in \ the \ sample. \ The \ actual \ quantitation/detection \ limit \ may \ be \ higher \ than \ reported.$ 

	1	<u> </u>	B11-027-SB-1	B11-027-SB-5	B11-028-SB-1*	B11-028-SB-7.5*	B11-029-SB-1*	B11-029-SB-5*	B11-030-SB-1*	B11-030-SB-5*	B11-031-SB-1*	B11-031-SB-5*	B11-032-SB-1*	B11-032-SB-5*	B11-033-SB-1*	B11-033-SB-7*
Parameter	Units	PAL	8/18/2020	8/18/2020	8/10/2020	8/10/2020	8/10/2020	8/10/2020	8/10/2020	8/10/2020	8/10/2020	10/5/2020	8/10/2020	8/10/2020	8/10/2020	8/10/2020
Volatile Organic Compounds			0,10,2020	0,10,2020	6/16/2020	0,10,2020	0,10,2020	0,10,2020	0,10,2020	0/10/2020	6,16,2626	10/5/2020	0,10,2020	6/16/2020	0/10/2020	0/10/2020
1,1,1-Trichloroethane	mg/kg	36,000	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0055 U
1,1-Dichloroethane	mg/kg	16	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0055 U
2-Butanone (MEK)	mg/kg	190,000	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.011 U
Acetone	mg/kg	670,000	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.013
Benzene	mg/kg	5.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0055 U
Carbon disulfide	mg/kg	3,500	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0055 U
Cyclohexane	mg/kg	27,000	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.011 U
Ethylbenzene	mg/kg	25	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0055 U
Isopropylbenzene	mg/kg	9,900	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0055 U
Methyl Acetate	mg/kg	1,200,000	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.055 U
Toluene	mg/kg	47,000	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0055 U
Xylenes	mg/kg	2,800	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.017 U
Semi-Volatile Organic Compounds^	<b>"</b> -	II				1			I							
1,1-Biphenyl	mg/kg	200	0.23 J	0.19 J	0.02 J	0.28 J	0.68 U	0.072 U	0.72 U	0.16 J	0.15	0.034 J	0.77 U	0.72 U	0.51 J	0.16 J
1,2,4,5-Tetrachlorobenzene	mg/kg	350	0.78 U	0.81 U	0.072 U	0.79 U	0.68 U	0.072 U	0.72 U	0.7 U	0.071 U	0.068 U	0.77 U	0.72 U	0.74 U	0.73 U
2,4-Dimethylphenol	mg/kg	16,000	0.78 U	0.81 U	0.072 U	0.79 U	0.68 U	0.072 U	0.72 U	0.7 U	0.019 J	0.068 U	0.77 U	0.72 U	0.74 U	0.73 U
2,4-Dinitrotoluene	mg/kg	7.4	0.78 U 0.78 U	0.81 U	0.072 U	0.79 U 0.79 U	0.68 U 0.68 U	0.072 U	0.72 U 0.72 U	0.7 U	0.071 U	0.068 U	0.77 U	0.72 U	0.74 U	0.73 U
2-Chloronaphthalene	mg/kg	60,000 5,800	0.78 U 0.78 U	0.81 U 0.81 U	0.072 U 0.072 U	0.79 U 0.79 U	0.68 U	0.072 U 0.072 U	0.72 U 0.72 U	0.7 U 0.7 U	0.071 U 0.071 U	0.068 U 0.068 U	0.77 U 0.77 U	0.72 U 0.72 U	0.74 U 0.74 U	0.73 U 0.73 U
2-Chlorophenol 2-Methylnaphthalene	mg/kg mg/kg	3,000	0.78 U	0.81 U	0.072 U <b>0.041</b>	0.79 U <b>0.34</b>	0.68 U 0.04	0.072 U 0.0071 U	0.72 U 0.0065 J	0.7 U 0.0061 J	0.071 U <b>0.46</b>	0.068 U 0.082	0.77 U <b>0.02</b>	0.72 U 0.0077 J	2.6	0.73 U <b>0.41</b>
2-Methylphenol	mg/kg mg/kg	41.000	0.13 0.78 U	0.13 0.81 U	0.041 0.072 U	0.34 0.79 U	0.04 0.68 U	0.0071 U 0.072 U	0.72 U	0.0061 J 0.7 U	0.46 0.014 J	0.082 0.068 U	0.02 0.77 U	0.0077 J 0.72 U	0.74 U	0.41 0.73 U
3&4-Methylphenol(m&p Cresol)	mg/kg	41,000	1.6 U	1.6 U	0.072 U	1.6 U	1.4 U	0.072 U	1.4 U	1.4 U	0.014 J 0.022 J	0.008 U	1.5 U	1.4 U	1.5 U	1.5 U
Acenaphthene	mg/kg	45,000	0.02	0.055	0.0053 J	0.38	0.013 J	0.0071 U	0.0074 U	0.0072 U	0.039 J	0.0097 J	0.0078 U	0.0078 U	0.24	0.086
Acenaphthylene	mg/kg	45,000	0.11	0.1	0.03	0.025 J	0.064	0.0014 J	0.003 J	0.0072 U	0.13 J	0.058	0.0058 J	0.0032 J	0.5	0.25
Acetophenone	mg/kg	120,000	0.78 U	0.81 U	0.072 U	0.79 U	0.68 U	0.072 U	0.72 U	0.7 U	0.076	0.016 J	0.77 U	0.72 U	0.74 U	0.73 U
Anthracene	mg/kg	230,000	0.11	0.14	0.03	0.2	0.03 J	0.0011 J	0.0023 J	0.0072 U	0.15	0.066	0.0062 J	0.0063 J	1.3	0.31
Benz[a]anthracene	mg/kg	21	0.56	0.77	0.23	1	0.65	0.016	0.023	0.0051 J	0.68	0.28	0.034	0.026	3.2	1.6
Benzaldehyde	mg/kg	120,000	0.78 U	0.81 U	0.072 U	0.79 U	0.68 U	0.072 U	0.72 U	0.7 U	0.099	0.026 J	0.77 U	0.72 U	0.74 U	0.73 U
Benzo[a]pyrene	mg/kg	2.1	0.51	0.66	0.27	1.7	1	0.024	0.021	0.0018 J	0.7	0.43	0.019	0.018	2.3	1.3
Benzo[b]fluoranthene	mg/kg	21	0.63	0.82	0.36	1.9	1.1	0.03	0.026	0.0038 J	0.86	0.52	0.028	0.036	3.8	1.8
Benzo[g,h,i]perylene	mg/kg		0.29	0.37	0.18	1.2	0.75	0.018	0.018	0.0019 J	0.53	0.34	0.017	0.013	2.1	0.85
Benzo[k]fluoranthene	mg/kg	210	0.21	0.26	0.12	0.7	0.39	0.011	0.01	0.0013 J	0.32	0.19	0.0097	0.012	1.1	0.54
bis(2-Ethylhexyl)phthalate	mg/kg	160	0.78 U	0.23 J	0.015 J	0.79 U	0.68 U	0.02 J	0.72 U	0.7 U	0.03 J	0.017 J	0.77 U	0.72 U	0.74 U	0.73 U
Caprolactam	mg/kg	400,000	2 U	2 U	0.18 U	2 U	1.7 U	0.18 U	1.8 U	1.8 U	0.18 U	0.026 J	1.9 U	1.8 U	1.8 U	1.8 U
Carbazole	mg/kg		0.47 J	0.81 U	0.049 J	0.27 J	0.68 U	0.072 U	0.72 U	0.7 U	0.13	0.03 J	0.77 U	0.72 U	0.3 J	0.18 J
Chrysene	mg/kg	2,100	0.35	0.56	0.21	1.1	0.67	0.014	0.015	0.0036 J	0.56	0.34	0.018	0.031	2.7	1.1
Dibenz[a,h]anthracene	mg/kg	2.1	0.081	0.081	0.04	0.26	0.16	0.0034 J	0.0032 J	0.0072 U	0.11 J	0.063	0.0034 J	0.0035 J	0.46	0.22
Di-n-butylphthalate	mg/kg	82,000	0.78 U	0.81 U	0.021 J	0.79 U	0.68 U	0.058 J	0.72 U	0.7 U	0.057 J	0.068 U	0.77 U	0.72 U	0.74 U	0.73 U
Fluorana	mg/kg	30,000	0.57	0.99	0.23	1.2	0.55 0.0058 J	<b>0.013</b> 0.0071 U	<b>0.014</b> 0.0074 U	0.0038 J 0.0072 U	0.84 0.026 J	0.54	0.026	0.033 0.00093 J	6.3	1.8
Fluorene Hexachloroethane	mg/kg mg/kg	30,000	<b>0.022</b> 0.78 U	<b>0.05</b> 0.81 U	<b>0.003 J</b> 0.072 U	<b>0.2</b> 0.79 U	0.0058 J 0.68 U	0.0071 U 0.072 U	0.0074 U 0.72 U	0.0072 U 0.7 U	0.026 J 0.071 U	0.018 J 0.068 U	<b>0.0011 J</b> 0.77 U	0.00093 J 0.72 U	<b>0.13 J</b> 0.74 U	<b>0.065</b> 0.73 U
Indeno[1,2,3-c,d]pyrene	mg/kg mg/kg	21	0.78 U	0.81 U	0.072 0	0.79 U <b>0.99</b>	0.68 U	0.072 0	0.72 0	0.7 U 0.0015 J	0.071 0	0.068 U	0.770	0.72 0	1.7	0.73 U 0.77
Naphthalene	mg/kg	8.6	0.32	0.56	0.16	0.21	0.12	0.013 0.0048 J	0.013	0.0015 J 0.0022 J	9.2	0.22	0.013	0.012	1.7	1.6
Nitrobenzene	mg/kg	22	0.78 U	0.81 U	0.072 U	0.79 U	0.68 U	0.072 U	0.72 U	0.0022 J 0.7 U	0.071 U	0.068 U	0.77 U	0.72 U	0.74 U	0.73 U
N-Nitrosodiphenylamine	mg/kg	470	0.78 U	0.81 U	0.072 U	0.79 U	0.68 U	0.072 U	0.72 U	0.7 U	0.071 U	0.068 U	0.77 U	0.72 U	0.74 U	0.73 U
Phenanthrene	mg/kg	.,,	0.33	0.38	0.14	0.91	0.14	0.01	0.0089	0.0026 J	0.74	0.36	0.033	0.02	5.8	1.1
Phenol	mg/kg	250,000	0.78 U	0.81 U	0.072 U	0.79 U	0.68 U	0.072 U	0.72 U	0.7 U	0.071 U	0.068 U	0.77 U	0.72 U	0.74 U	0.73 U
Pyrene	mg/kg	23,000	0.5	1.1	0.22	1.2	0.6	0.012	0.013	0.0028 J	0.7	0.46	0.02	0.036	5.4	1.9
PCBs																
Aroclor 1248	mg/kg	0.94	0.097 UJ	N/A	0.018 U	N/A	0.017 U	N/A	0.018 U	N/A	0.018 U	N/A	0.02 U	N/A	0.091 U	N/A
Aroclor 1254	mg/kg	0.97	0.097 U	N/A	0.018 U	N/A	0.017 U	N/A	0.018 U	N/A	0.018 U	N/A	0.02 U	N/A	0.091 U	N/A
Aroclor 1260	mg/kg	0.99	0.097 U	N/A	0.018 U	N/A	0.017 U	N/A	0.018 U	N/A	0.018 U	N/A	0.02 U	N/A	0.091 U	N/A
PCBs (total)	mg/kg	0.97	0.87 U	N/A	0.16 U	N/A	0.16 U	N/A	0.16 U	N/A	0.16 U	N/A	0.18 U	N/A	0.82 U	N/A
TPH/Oil & Grease																
Diesel Range Organics	mg/kg	6,200	356	855	23.5	333	40.9	26.4	30.7	58.3	115	84.8	60.5	362	188	118
Gasoline Range Organics	mg/kg	6,200	9.8 U	13.7 U	12.7 U	10.2 U	10.7 U	10.7 U	9.5 U	10.1 U	7.8 U	9.8 U	10 U	8.6 U	11.1 U	11.1 U
Oil & Grease	mg/kg	6,200	6,150 J-	7,590 J-	216 U	173 J	210 U	216 U	218 U	211 U	216 U	116 J	238 U	533	468	221 J
			. ,	, , , , , , ,												

**Bold indicates detection** 

Values in red indicate a detection exceedance of the Project Action Limit (PAL)

- \* Indicates non-validated data
- ^ PAH compounds were analyzed via SIM

N/A: This parameter was not analyzed for this sample.

- J: The positive result reported for this analyte is a quantitative estimate.
- J-: The positive result reported for this analyte is a quantitative estimate but may be biased low.
- R: The result for this analyte is unreliable. Additional data is needed of confirm or disprove the presence of this compound/analyte in the sample.
- $B: This \ analyte \ was \ not \ detected \ substantially \ above \ the \ level \ of \ the \ associated \ method \ blank/preparation \ or \ field \ blank.$
- U: This analyte was not detected in the sample. The numeric value represents the sample quantitation/detection limit.
- $UJ: This \ analyte \ was \ not \ detected \ in \ the \ sample. \ The \ actual \ quantitation/detection \ limit \ may \ be \ higher \ than \ reported.$

Table 6 - Parcel B11
Summary of Inorganics Detected in Soil

Donomaton	Liuita	PAL	B11-001-SB-1*	B11-001-SB-5*	B11-002-SB-1*	B11-002-SB-5*	B11-003-SB-1	B11-003-SB-5	B11-004-SB-1	B11-004-SB-4
Parameter	Units	PAL	8/13/2020	8/13/2020	8/13/2020	8/13/2020	8/11/2020	8/11/2020	8/11/2020	8/11/2020
Metals										
Aluminum	mg/kg	1,100,000	6,530	7,410	7,890	4,490	10,400 J	14,100 J	20,500 J	27,500 J
Antimony	mg/kg	470	6.4	5.3	3.8	4.7	2.7 U	2.3 J	2.7 U	3
Arsenic	mg/kg	3	2.3 U	5	9	2.2 U	5.5 J	10.4 J	4.2 J	5.7 J
Barium	mg/kg	220,000	80.7	64.7	68.3	40.4	129	172	87.1	262
Beryllium	mg/kg	2,300	0.65 J	0.79 J	0.55 J	1.1	1.1	0.97	0.47 J	3.6
Cadmium	mg/kg	980	0.73 J	0.91 J	0.91 J	0.74 J	2.9	1.4	1.4	2
Chromium	mg/kg	120,000	929	862	535	1,090	617 J	226 J	606 J	58.2 J
Chromium VI	mg/kg	6.3	1.1 U	1.1 U	1.1 U	1.1 U	0.98 B	0.9 B	0.97 B	0.83 B
Cobalt	mg/kg	350	4.6	6.4	6.6	4.4 U	7.9	14	5	5.4
Copper	mg/kg	47,000	52.9	64.7	63.3	85.3	80.3	134	48.8	47.6
Iron	mg/kg	820,000	147,000	176,000	279,000	163,000	151,000 J	114,000 J	188,000 J	27,200 J
Lead	mg/kg	800	69.6	63.4	47.9	33.3	120	136	93.3	264
Manganese	mg/kg	26,000	23,900	16,900	13,400	36,400	22,700	6,330	15,800	2,070
Mercury	mg/kg	350	0.18	0.14	0.15	0.0065 J	0.059 J	0.074 J	0.049 J	0.096 J
Nickel	mg/kg	22,000	23.6	37.5	51.3	11.4	35.3	44	45	19
Selenium	mg/kg	5,800	3.7 U	3.5 U	3.4 U	3.5 U	3.6 U	3.6 U	3.7 U	3.6 U
Silver	mg/kg	5,800	2.7 U	2.6 U	2.6 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U
Thallium	mg/kg	12	26.5	16.5	6.2 J	70.1	21.1	4.6 J	10.3	9.1 U
Vanadium	mg/kg	5,800	1,850	1,010	314	5,530	1,440 J	247 J	469 J	79.8 J
Zinc	mg/kg	350,000	363	331	184	163	416	314	220	529
Other										
Cyanide	mg/kg	150	2.3	2.4	1.5	0.22 J	0.64 J	1.8	0.28 J-	2.4

# Values in red indicate a detection exceedance of the Project Action Limit (PAL)

N/A: This parameter was not analyzed for this sample.

U: This analyte was not detected in the sample. The numeric value represents the sample quantitation/detection limit.

UJ: This analyte was not detected in the sample. The actual quantitation/detection limit may be higher than reported.

J: The positive result reported for this analyte is a quantitative estimate.

J-: The positive result reported for this analyte is a quantitative estimate but may be biased low.

B: This analyte was not detected substantially above the level of the associated method blank/preparation or field blank.

<sup>\*</sup> Indicates non-validated data

Table 6 - Parcel B11
Summary of Inorganics Detected in Soil

D	T.L	DAI	B11-005-SB-2*	B11-005-SB-5*	B11-006-SB-3	B11-006-SB-7	B11-006-SB-12	B11-007-SB-1	B11-007-SB-5	B11-008-SB-2
Parameter	Units	PAL	8/13/2020	10/7/2020	8/17/2020	8/17/2020	8/17/2020	8/18/2020	8/18/2020	8/17/2020
Metals										
Aluminum	mg/kg	1,100,000	6,080	29,000	7,020	9,970	N/A	16,100	21,200	10,100
Antimony	mg/kg	470	2.5 U	2.6 U	2.6 UJ	2.7 UJ	N/A	2.7 UJ	2.7 UJ	2.5 UJ
Arsenic	mg/kg	3	2.1 U	2.2 U	2.8	6.6	2.4 U	6.5	2.9	4.2
Barium	mg/kg	220,000	36.5	91.9	51 J	75.4 J	N/A	202 J	124 J	95.8 J
Beryllium	mg/kg	2,300	0.24 J	0.71 J	0.38 J	0.27 J	N/A	2.1	0.45 J	0.99
Cadmium	mg/kg	980	0.34 J	0.89 J	5.4	0.64 J	N/A	8.4	3.6	0.86 J
Chromium	mg/kg	120,000	24.6	365	140	377	N/A	296	663	604
Chromium VI	mg/kg	6.3	1.1 U	1.1 U	0.7 B	0.74 B	N/A	1.1 R	1.2 R	1 UJ
Cobalt	mg/kg	350	1.9 J	6.4	2.8 J	6.9	N/A	8.4	8.8	9.6
Copper	mg/kg	47,000	5.9	41.1	25 J	36.7 J	N/A	38.5 J	65.1 J	59.7 J
Iron	mg/kg	820,000	9,490	89,900	42,200	234,000	N/A	185,000	158,000	146,000
Lead	mg/kg	800	16.9	205	75 J	20.9 J	N/A	85.2 J	148 J	55.9 J
Manganese	mg/kg	26,000	470	10,400	3,010	11,400	N/A	7,650	18,000	12,800
Mercury	mg/kg	350	0.0064 J	0.064 J	0.058 J	0.056 J	N/A	0.05 J	0.16	0.097 J
Nickel	mg/kg	22,000	13.1	66.2	21.7	83.4	N/A	61.4	87.6	25.1
Selenium	mg/kg	5,800	3.4 U	3.5 U	3.5 U	3.6 U	N/A	3.6 U	3.6 U	3.3 U
Silver	mg/kg	5,800	2.5 U	2.6 U	2.6 U	0.68 J	N/A	2.7 U	0.61 J	2.5 U
Thallium	mg/kg	12	8.4 U	8.8 U	8.7 UJ	4.3 J-	N/A	3.3 J-	8.1 J-	10.9 J
Vanadium	mg/kg	5,800	21.9	198	96.9	209	N/A	153	362	681
Zinc	mg/kg	350,000	75.7	179	22,100	236	N/A	233	599	171
Other										
Cyanide	mg/kg	150	0.16 J	0.97 J	0.19 J-	1 J-	N/A	1.2 J-	2.3 J-	2.3 J-

# Values in red indicate a detection exceedance of the Project Action Limit (PAL)

N/A: This parameter was not analyzed for this sample.

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UJ: This analyte was not detected in the sample. The actual quantitation/detection limit may be higher than reported.

J: The positive result reported for this analyte is a quantitative estimate.

J-: The positive result reported for this analyte is a quantitative estimate but may be biased low.

B: This analyte was not detected substantially above the level of the associated method blank/preparation or field blank.

<sup>\*</sup> Indicates non-validated data

Table 6 - Parcel B11
Summary of Inorganics Detected in Soil

D .	TT :	DAI	B11-008-SB-6	B11-009-SB-4*	B11-009-SB-8*	B11-010-SB-2*	B11-010-SB-6*	B11-011-SB-2*	B11-011-SB-9*
Parameter	Units	PAL	8/17/2020	10/7/2020	10/7/2020	10/7/2020	10/7/2020	10/6/2020	10/6/2020
Metals									
Aluminum	mg/kg	1,100,000	11,500	8,410	11,300	17,900	13,500	8,350	4,640
Antimony	mg/kg	470	2.5 UJ	16.1	15.5	2.8	13.2	16.3	2.5 U
Arsenic	mg/kg	3	4.3	2.2 U	2.1 U	11.4	13.7	2.1 U	4.4
Barium	mg/kg	220,000	97.4 J	205	280	283	266	268	70.4
Beryllium	mg/kg	2,300	0.73 J	1.1	1.5	1.8	1.6	2.8	0.37 J
Cadmium	mg/kg	980	1.5	2.1	3.3	1.8	4.3	0.72 J	0.49 J
Chromium	mg/kg	120,000	797	1,460	1,390	407	1,750	2,210	358
Chromium VI	mg/kg	6.3	0.82 B	0.98 J	1 J	1.1 U	1.1 J	0.72 J	1.1 U
Cobalt	mg/kg	350	5.9	9.1	13.5	19.9	45.9	3.9 J	19
Copper	mg/kg	47,000	63.2 J	72.4	149	110	509	75.4	185
Iron	mg/kg	820,000	188,000	134,000	173,000	120,000	473,000	177,000	260,000
Lead	mg/kg	800	103 J	118	344	80.2	448	28.8	27.5
Manganese	mg/kg	26,000	18,600	25,300	36,400	15,700	38,700	64,800	6,220
Mercury	mg/kg	350	0.052 J	0.026 J	0.043 J	0.35	0.14	0.1 U	0.011 J
Nickel	mg/kg	22,000	47.7	28.5	46.2	86.2	234	26.7	93.7
Selenium	mg/kg	5,800	3.3 U	3.5 U	3.4 U	3.4 U	4.5 U	3.3 U	3.3 U
Silver	mg/kg	5,800	2.5 U	2.6 U	2.5 U	2.5 U	3.3 U	2.5 U	2.5 U
Thallium	mg/kg	12	19.3 J	13.1	14.7	8.5 U	20.5	7.6 J	8.3 U
Vanadium	mg/kg	5,800	1,270	4,610	5,840	230	5,570	9,980	380
Zinc	mg/kg	350,000	485	297	504	314	709	103	55.7
Other									
Cyanide	mg/kg	150	0.83 J-	1.2	0.44 J	2.5	1.2	0.63 J	0.57 J

# Values in red indicate a detection exceedance of the Project Action Limit (PAL)

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U: This analyte was not detected in the sample. The numeric value represents the sample quantitation/detection limit.

UJ: This analyte was not detected in the sample. The actual quantitation/detection limit may be higher than reported.

J: The positive result reported for this analyte is a quantitative estimate.

J-: The positive result reported for this analyte is a quantitative estimate but may be biased low.

B: This analyte was not detected substantially above the level of the associated method blank/preparation or field blank.

<sup>\*</sup> Indicates non-validated data

Table 6 - Parcel B11
Summary of Inorganics Detected in Soil

ъ.	TT 1.	DAY	B11-012-SB-2*	B11-012-SB-8*	B11-013-SB-1	B11-013-SB-4*	B11-014-SB-1	B11-014-SB-5	B11-015-SB-1*
Parameter	Units	PAL	10/7/2020	10/7/2020	8/11/2020	10/5/2020	8/11/2020	8/11/2020	8/13/2020
Metals									
Aluminum	mg/kg	1,100,000	15,700	10,500	11,500 J	7,390	18,200 J	11,000 J	8,330
Antimony	mg/kg	470	6.2	13.7	4.6	6.7	2.8 U	2.7 U	5.8
Arsenic	mg/kg	3	5.3	4.2	10.2 J	2.1 U	4.3 J	9 J	13.4
Barium	mg/kg	220,000	242	192	37.9	113	199	148	80.9
Beryllium	mg/kg	2,300	1.6	1.2	0.36 J	1.7	1.9	1.1	0.6 J
Cadmium	mg/kg	980	2.3	3.2	0.66 J	1.5	1.1 J	3.5	0.67 J
Chromium	mg/kg	120,000	693	1,330	417 J	1,080	225 J	936 J	338
Chromium VI	mg/kg	6.3	1.1 U	0.91 J	1.1 B	0.76 J	0.83 B	0.92 B	1.1 U
Cobalt	mg/kg	350	28.9	21.2	7.7	6.8	5.3	58.9	9
Copper	mg/kg	47,000	115	130	40.5	65.5	42.1	227	67.8
Iron	mg/kg	820,000	143,000	191,000	311,000 J	144,000	78,500 J	164,000 J	330,000
Lead	mg/kg	800	144	217	12	87.4	146	155	32.7
Manganese	mg/kg	26,000	22,200	25,200	12,900	22,400	11,200	43,600	9,940
Mercury	mg/kg	350	0.05 J	0.082 J	0.044 J	0.032 J	1.4	0.055 J	0.073 J
Nickel	mg/kg	22,000	51.8	114	60.3	18.3	19.5	29.8	60.5
Selenium	mg/kg	5,800	3.4 U	3.5 U	3.8 U	3.4 U	3.7 U	3.6 U	3.5 U
Silver	mg/kg	5,800	2.5 U	2.6 U	2.8 U	2.5 U	2.8 U	2.7 U	2.6 U
Thallium	mg/kg	12	8.4 U	10.9	8.2 J	6 J	6.5 J	37	5.8 J
Vanadium	mg/kg	5,800	1,230	3,940	457 J	4,820	361 J	2,270 J	264
Zinc	mg/kg	350,000	524	608	68.2	270	259	938	129
Other									
Cyanide	mg/kg	150	1.5	0.64 J	0.81 J-	0.77 J	1.3 J-	0.41 J-	0.84 J

# Values in red indicate a detection exceedance of the Project Action Limit (PAL)

N/A: This parameter was not analyzed for this sample.

U: This analyte was not detected in the sample. The numeric value represents the sample quantitation/detection limit.

UJ: This analyte was not detected in the sample. The actual quantitation/detection limit may be higher than reported.

J: The positive result reported for this analyte is a quantitative estimate.

J-: The positive result reported for this analyte is a quantitative estimate but may be biased low.

B: This analyte was not detected substantially above the level of the associated method blank/preparation or field blank.

<sup>\*</sup> Indicates non-validated data

Table 6 - Parcel B11 Summary of Inorganics Detected in Soil

ъ.	***	DAY	B11-015-SB-5*	B11-016-SB-1	B11-016-SB-4*	B11-017-SB-1	B11-017-SB-5	B11-018-SB-1*	B11-018-SB-8*
Parameter	Units	PAL	8/13/2020	8/11/2020	10/6/2020	8/11/2020	8/11/2020	8/12/2020	8/12/2020
Metals									
Aluminum	mg/kg	1,100,000	4,710	8,520 J	20,300	16,000 J	1,260 J	13,200	6,240
Antimony	mg/kg	470	4.6	2.9 U	2.7 U	2.6 U	13.1	2.6 U	2.4 U
Arsenic	mg/kg	3	25.9	2.4 U	2.3 U	4.2 J	14.1 J	2.1 U	2 U
Barium	mg/kg	220,000	40.6	41.8	175	55.5	73.1	195	94.1
Beryllium	mg/kg	2,300	0.22 J	0.22 J	2.8	0.29 J	0.85 U	1.1	1.9
Cadmium	mg/kg	980	0.58 J	0.65 J	0.34 J	0.74 J	0.3 J	1.1 J	0.63 J
Chromium	mg/kg	120,000	321	1,080 J	51.7	719 J	245 J	1,390	1,600
Chromium VI	mg/kg	6.3	1.2 U	1 B	1 J	1.2 J-	0.67 B	0.74 J	1
Cobalt	mg/kg	350	8.9	2.5 J	2.6 J	7	17.1	3.1 J	0.84 J
Copper	mg/kg	47,000	59.7	33.4	18.5	60.8	115	50	60.6
Iron	mg/kg	820,000	386,000	192,000 J	41,200	300,000 J	542,000 J	163,000	189,000
Lead	mg/kg	800	13.6	15.7	9.5	15.6	2.1 U	36.5	7.9
Manganese	mg/kg	26,000	10,700	20,200	2,070	17,100	2,760	25,400	60,000
Mercury	mg/kg	350	0.0096 J	0.027 J	0.015 J	0.016 J	0.0065 J	0.022 J	0.095 U
Nickel	mg/kg	22,000	69.7	24.9	5.7 J	57.7	136	35.8	14.5
Selenium	mg/kg	5,800	3.7 U	3.8 U	3.6 U	3.4 U	3.1 J	3.4 U	3.2 U
Silver	mg/kg	5,800	2.8 U	2.9 U	2.7 U	2.6 U	1.7 J	2.6 U	2.4 U
Thallium	mg/kg	12	4.4 J	11.2	9 U	11.1	8.5 U	15.5	85.4
Vanadium	mg/kg	5,800	203	487 J	133	627 J	21.7 J	651	8,110
Zinc	mg/kg	350,000	79.5	92.5	25.1	180	50	158	41.4
Other									
Cyanide	mg/kg	150	0.93	1.4 J-	2.1	0.86 J-	0.22 J-	0.89 J	0.35 J

# Values in red indicate a detection exceedance of the Project Action Limit (PAL)

N/A: This parameter was not analyzed for this sample.

U: This analyte was not detected in the sample. The numeric value represents the sample quantitation/detection limit.

UJ: This analyte was not detected in the sample. The actual quantitation/detection limit may be higher than reported.

J: The positive result reported for this analyte is a quantitative estimate.

J-: The positive result reported for this analyte is a quantitative estimate but may be biased low.

B: This analyte was not detected substantially above the level of the associated method blank/preparation or field blank.

<sup>\*</sup> Indicates non-validated data

Table 6 - Parcel B11
Summary of Inorganics Detected in Soil

D .	TT '.	DAI	B11-018-SB-10*	B11-019-SB-1*	B11-019-SB-5*	B11-020-SB-1	B11-020-SB-4.5	B11-021-SB-1*	B11-021-SB-4*
Parameter	Units	PAL	8/12/2020	8/12/2020	8/12/2020	8/11/2020	8/11/2020	8/12/2020	8/12/2020
Metals									
Aluminum	mg/kg	1,100,000	N/A	9,380	8,510	9,690 J	20,500 J	6,750	5,830
Antimony	mg/kg	470	N/A	2.4 U	2.6 U	2.6 U	2.7 U	2.4 U	2.4 U
Arsenic	mg/kg	3	N/A	2	2.2 U	2.2 U	2.3 U	2 U	4
Barium	mg/kg	220,000	N/A	85.4	72.6	103	42.3	117	93.2
Beryllium	mg/kg	2,300	N/A	1.3	1.4	0.54 J	0.26 J	1.1	1.2
Cadmium	mg/kg	980	N/A	0.73 J	0.81 J	0.74 J	0.47 J	0.83 J	1.3
Chromium	mg/kg	120,000	N/A	787	969	967 J	955 J	987	1,960
Chromium VI	mg/kg	6.3	N/A	0.76 J	1.1 J	0.8 B	0.83 B	0.67 J	1.8
Cobalt	mg/kg	350	N/A	3.4 J	1.1 J	2.6 J	0.59 J	2.2 J	3.7 J
Copper	mg/kg	47,000	N/A	40.5	30.3	37.1	17.1	52	58.2
Iron	mg/kg	820,000	N/A	176,000	187,000	203,000 J	141,000 J	185,000	196,000
Lead	mg/kg	800	N/A	42.6	31.1	32.4	4.4	22.4	47.3
Manganese	mg/kg	26,000	42,500	28,700	37,700	20,400	22,300	32,400	39,000
Mercury	mg/kg	350	N/A	0.033 J	0.018 J	0.04 J	0.11 U	0.1 U	0.1 U
Nickel	mg/kg	22,000	N/A	16.5	10.4	25.7	12.8	15.9	20.4
Selenium	mg/kg	5,800	N/A	3.3 U	3.5 U	3.5 U	3.6 U	3.3 U	3.2 U
Silver	mg/kg	5,800	N/A	2.4 U	2.6 U	2.6 U	2.7 U	2.4 U	2.4 U
Thallium	mg/kg	12	11.5	32.6	48.5	14.1	15.6	36.5	52.9
Vanadium	mg/kg	5,800	3,890	2,470	5,050	774 J	748 J	3,290	4,690
Zinc	mg/kg	350,000	N/A	127	67.5	205	45.9	137	249
Other									
Cyanide	mg/kg	150	N/A	1.1	0.27 J	1.2	0.32 J	1.2	1.4

# Values in red indicate a detection exceedance of the Project Action Limit (PAL)

N/A: This parameter was not analyzed for this sample.

- U: This analyte was not detected in the sample. The numeric value represents the sample quantitation/detection limit.
- UJ: This analyte was not detected in the sample. The actual quantitation/detection limit may be higher than reported.
- J: The positive result reported for this analyte is a quantitative estimate.
- J-: The positive result reported for this analyte is a quantitative estimate but may be biased low.
- B: This analyte was not detected substantially above the level of the associated method blank/preparation or field blank.
- R: The result for this analyte is unreliable. Additional data is needed to confirm or disprove the presence of this analyte.

<sup>\*</sup> Indicates non-validated data

Table 6 - Parcel B11 Summary of Inorganics Detected in Soil

D .	TT '.	DAI	B11-022-SB-1*	B11-022-SB-5*	B11-023-SB-1	B11-023-SB-5	B11-024-SB-1*	B11-024-SB-5*	B11-025-SB-1*
Parameter	Units	PAL	8/12/2020	8/12/2020	8/18/2020	8/18/2020	8/12/2020	10/19/2020	8/12/2020
Metals									
Aluminum	mg/kg	1,100,000	8,140	9,010	16,200	9,290	4,270	7,200	6,400
Antimony	mg/kg	470	2.6 U	2.7 U	2.5 UJ	2.6 UJ	2.6 U	2.5 U	2.6 U
Arsenic	mg/kg	3	3	2.3 U	3.4	7.7	2.1 U	3.6	2.2 U
Barium	mg/kg	220,000	80.5	69.2	124 J	94.4 J	44.6	158	52.9
Beryllium	mg/kg	2,300	0.79 J	0.7 J	1.5	0.68 J	0.22 J	0.52 J	1.2
Cadmium	mg/kg	980	1.1 J	1.1 J	0.84 J	0.71 J	0.7 J	0.75 J	0.66 J
Chromium	mg/kg	120,000	725	1,080	587	272	311	954	1,010
Chromium VI	mg/kg	6.3	1.1 U	1.1 U	0.78 B	0.74 B	1 U	1.1 U	1 U
Cobalt	mg/kg	350	6.1	5.4	3.4 J	6.9	2 J	6.4	1.5 J
Copper	mg/kg	47,000	2,280	86	125 J	115 J	36.5	81.1	40.4
Iron	mg/kg	820,000	186,000	168,000	102,000	160,000	86,000	213,000	160,000
Lead	mg/kg	800	294	256	56.3 J	61.6 J	39.4	42.5	38.3
Manganese	mg/kg	26,000	18,500	17,500	21,200	9,490	6,490	16,500	35,900
Mercury	mg/kg	350	0.059 J	0.044 J	0.085 J	1	0.01 J	0.0064 J	0.026 J
Nickel	mg/kg	22,000	51.2	48.6	22	46.7	12.9	114	16.5
Selenium	mg/kg	5,800	3.4 U	3.7 U	3.4 U	3.4 U	3.4 U	3.3 U	3.5 U
Silver	mg/kg	5,800	2.6 U	2.7 U	2.5 U	2.6 U	2.6 U	2.5 U	2.6 U
Thallium	mg/kg	12	18.3	18.2	11 J	4.7 J-	4.7 J	8.5	50.4
Vanadium	mg/kg	5,800	1,520	1,570	457	225	249	366	4,080
Zinc	mg/kg	350,000	255	330	350	248	274	367	103
Other									
Cyanide	mg/kg	150	2	1.8	0.93 J-	0.95 J-	0.68 J	0.61 J	0.32 J

# Values in red indicate a detection exceedance of the Project Action Limit (PAL)

N/A: This parameter was not analyzed for this sample.

U: This analyte was not detected in the sample. The numeric value represents the sample quantitation/detection limit.

UJ: This analyte was not detected in the sample. The actual quantitation/detection limit may be higher than reported.

J: The positive result reported for this analyte is a quantitative estimate.

J-: The positive result reported for this analyte is a quantitative estimate but may be biased low.

B: This analyte was not detected substantially above the level of the associated method blank/preparation or field blank.

<sup>\*</sup> Indicates non-validated data

Table 6 - Parcel B11
Summary of Inorganics Detected in Soil

Б	TT 1.	DAY	B11-025-SB-4*	B11-025-SB-10*	B11-026-SB-1	B11-026-SB-9*	B11-026-SB-10*	B11-027-SB-1	B11-027-SB-5
Parameter	Units	PAL	10/6/2020	10/6/2020	8/18/2020	10/19/2020	10/19/2020	8/18/2020	8/18/2020
Metals									
Aluminum	mg/kg	1,100,000	9,120	N/A	18,600	8,360	N/A	5,930	6,280
Antimony	mg/kg	470	10.5	N/A	2.7 UJ	2.8 U	N/A	4.3 J	5.7 J
Arsenic	mg/kg	3	2.3 U	N/A	6.5	6.5	9	14.4	15
Barium	mg/kg	220,000	74.2	N/A	179 J	113	N/A	141 J	58.5 J
Beryllium	mg/kg	2,300	1.3	N/A	2.2	0.82 J	N/A	0.5 J	0.59 J
Cadmium	mg/kg	980	1.3 J	N/A	0.68 J	1 J	N/A	1.6	1.5
Chromium	mg/kg	120,000	1,390	N/A	405	23.1	N/A	279	300
Chromium VI	mg/kg	6.3	1.1 U	N/A	1.1 R	1.1 U	N/A	1.2 R	0.81 B
Cobalt	mg/kg	350	1.8 J	N/A	4.9	10.1	N/A	12.5	14
Copper	mg/kg	47,000	48	N/A	33 J	28.7	N/A	80.2 J	108 J
Iron	mg/kg	820,000	169,000	N/A	149,000	17,500	N/A	318,000	337,000
Lead	mg/kg	800	141	N/A	115 J	84.6	N/A	1,080 J	86.5 J
Manganese	mg/kg	26,000	40,500	18,900	11,500	335	N/A	6,910	5,490
Mercury	mg/kg	350	0.022 J	N/A	0.036 J	0.056 J	N/A	0.13	0.11 J
Nickel	mg/kg	22,000	10.4	N/A	32.2	12.9	N/A	125	135
Selenium	mg/kg	5,800	3.7 U	N/A	3.6 U	3.7 U	N/A	3.7 U	3.9 U
Silver	mg/kg	5,800	2.7 U	N/A	2.7 U	2.8 U	N/A	1.3 J	1.5 J
Thallium	mg/kg	12	3.1 J	N/A	6.4 J-	9.2 U	N/A	9.1 UJ	4.2 J-
Vanadium	mg/kg	5,800	3,610	N/A	298	32.8	N/A	163	145
Zinc	mg/kg	350,000	138	N/A	123	244	N/A	517	610
Other									
Cyanide	mg/kg	150	2.1	N/A	1.8 J-	1 J	N/A	1.5 J-	1.7 J-

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N/A: This parameter was not analyzed for this sample.

- U: This analyte was not detected in the sample. The numeric value represents the sample quantitation/detection limit.
- UJ: This analyte was not detected in the sample. The actual quantitation/detection limit may be higher than reported.
- J: The positive result reported for this analyte is a quantitative estimate.
- J-: The positive result reported for this analyte is a quantitative estimate but may be biased low.
- B: This analyte was not detected substantially above the level of the associated method blank/preparation or field blank.
- R: The result for this analyte is unreliable. Additional data is needed to confirm or disprove the presence of this analyte.

<sup>\*</sup> Indicates non-validated data

Table 6 - Parcel B11
Summary of Inorganics Detected in Soil

ъ.	TT :	DAT	B11-028-SB-1*	B11-028-SB-7.5*	B11-029-SB-1*	B11-029-SB-5*	B11-030-SB-1*	B11-030-SB-5*	B11-031-SB-1*
Parameter	Units	PAL	8/10/2020	8/10/2020	8/10/2020	8/10/2020	8/10/2020	8/10/2020	8/10/2020
Metals									
Aluminum	mg/kg	1,100,000	6,800	15,500	6,810	3,890	6,690	4,260	13,000
Antimony	mg/kg	470	3.1 U	3.1 U	2.9 U	3.1 U	2.8 U	3 U	3.1 U
Arsenic	mg/kg	3	2.6 U	2.6 U	2.4 U	2.6 U	2.3 U	2.5 U	2.6 U
Barium	mg/kg	220,000	65.7	137	79.6	42.2	69.8	60.3	41.8
Beryllium	mg/kg	2,300	0.68 J	1.3	0.39 J	0.25 J	0.46 J	0.37 J	0.52 J
Cadmium	mg/kg	980	0.8 J	0.82 J	0.69 J	0.52 J	0.74 J	0.78 J	1.1 J
Chromium	mg/kg	120,000	1,500	988	883	761	837	561	756
Chromium VI	mg/kg	6.3	0.85 J	0.83 J	0.73 J	1.2	0.71 J	0.93 J	0.73 J
Cobalt	mg/kg	350	5.1 U	5.9	3 J	5.2 U	4.8	2.1 J	3.7 J
Copper	mg/kg	47,000	28.5	62.5	46.9	24.5	45.8	29.8	35.8
Iron	mg/kg	820,000	187,000	130,000	199,000	169,000	182,000	198,000	125,000
Lead	mg/kg	800	14	44.1	32.3	4.3	36.4	15.5	90.8
Manganese	mg/kg	26,000	60,200	18,100	19,400	33,200	20,400	19,800	16,200
Mercury	mg/kg	350	0.1 U	0.034 J	0.061 J	0.11 U	0.035 J	0.1 U	0.1
Nickel	mg/kg	22,000	14.2	23.8	19.5	14.3	20.6	21.9	16.2
Selenium	mg/kg	5,800	4.1 U	4.1 U	3.9 U	4.2 U	3.7 U	4.1 U	4.1 U
Silver	mg/kg	5,800	3.1 U	3.1 U	2.9 U	3.1 U	2.8 U	3 U	3.1 U
Thallium	mg/kg	12	35.4	12.2	16.3	23	15.1	22.8	11.1
Vanadium	mg/kg	5,800	1,390	637	988	1,130	843	1,760	635
Zinc	mg/kg	350,000	139	159	105	66.1	213	80.9	304
Other									
Cyanide	mg/kg	150	1.2	1.3	1.2	0.22 J	0.68 J	0.29 J	4.1

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UJ: This analyte was not detected in the sample. The actual quantitation/detection limit may be higher than reported.

J: The positive result reported for this analyte is a quantitative estimate.

J-: The positive result reported for this analyte is a quantitative estimate but may be biased low.

B: This analyte was not detected substantially above the level of the associated method blank/preparation or field blank.

<sup>\*</sup> Indicates non-validated data

Table 6 - Parcel B11
Summary of Inorganics Detected in Soil

	**	70.4	B11-031-SB-5*	B11-031-SB-10*	B11-032-SB-1*	B11-032-SB-5*	B11-033-SB-1*	B11-033-SB-7*	B11-033-SB-10
Parameter	Units	PAL	10/5/2020	10/5/2020	8/10/2020	8/10/2020	8/10/2020	8/10/2020	8/10/2020
Metals									
Aluminum	mg/kg	1,100,000	12,800	N/A	16,700	9,940	32,000	14,400	N/A
Antimony	mg/kg	470	9.3	N/A	3.2 U	3.2 U	3.1 U	3.2 U	N/A
Arsenic	mg/kg	3	7	2.1 U	2.7 U	11.9	4.1	8.8	6.7
Barium	mg/kg	220,000	90.4	N/A	38.4	256	79.1	100	N/A
Beryllium	mg/kg	2,300	0.44 J	N/A	0.18 J	0.85 J	0.54 J	1.1 J	N/A
Cadmium	mg/kg	980	0.55 J	N/A	0.88 J	1.9	1.1 J	1.8	N/A
Chromium	mg/kg	120,000	681	N/A	1,270	590	665	983	N/A
Chromium VI	mg/kg	6.3	1 U	N/A	0.8 J	1.1 U	0.78 J	0.75 J	N/A
Cobalt	mg/kg	350	2.1 J	N/A	2.2 J	21.8	10.6	34.4	N/A
Copper	mg/kg	47,000	47.2	N/A	29.8	156	71.1	126	N/A
Iron	mg/kg	820,000	158,000	N/A	180,000	168,000	147,000	172,000	N/A
Lead	mg/kg	800	24.7	N/A	19.3	225	75.9	142	N/A
Manganese	mg/kg	26,000	20,200	N/A	29,600	20,700	22,300	36,800	23,900
Mercury	mg/kg	350	0.013 J	N/A	0.0095 J	0.085 J	0.085 J	0.56	N/A
Nickel	mg/kg	22,000	19.1	N/A	13.7	115	43	43.1	N/A
Selenium	mg/kg	5,800	3.4 U	N/A	4.2 U	4.3 U	4.1 U	4.2 U	N/A
Silver	mg/kg	5,800	2.6 U	N/A	3.2 U	3.2 U	3.1 U	3.2 U	N/A
Thallium	mg/kg	12	8.6 U	N/A	18.1	18.7	14.9	30.7	22.8
Vanadium	mg/kg	5,800	659	N/A	903	1,070	723	1,790	N/A
Zinc	mg/kg	350,000	161	N/A	74.2	444	350	484	N/A
Other									
Cyanide	mg/kg	150	0.66 J	N/A	0.5 J	0.7 J	2.6	2.3	N/A

# Values in red indicate a detection exceedance of the Project Action Limit (PAL)

N/A: This parameter was not analyzed for this sample.

U: This analyte was not detected in the sample. The numeric value represents the sample quantitation/detection limit.

UJ: This analyte was not detected in the sample. The actual quantitation/detection limit may be higher than reported.

J: The positive result reported for this analyte is a quantitative estimate.

J-: The positive result reported for this analyte is a quantitative estimate but may be biased low.

B: This analyte was not detected substantially above the level of the associated method blank/preparation or field blank.

<sup>\*</sup> Indicates non-validated data

Table 7 - Parcel B11 Summary of Soil PAL Exceedances

<u>Parameter</u>	<u>CAS#</u>	Frequency of Detections (%)*	Frequency of Exceedances (%)*	Sample ID of Max Result	Max Result (mg/kg)	PAL Solid (mg/kg)
Arsenic	7440-38-2	57%	53%	B11-015-SB-5	25.9	3
Benz[a]anthracene	56-55-3	100%	1%	B11-026-SB-1	21	21
Benzo[a]pyrene	50-32-8	100%	17%	B11-026-SB-1	14	2.1
Diesel Range Organics	DRO	100%	3%	B11-026-SB-10	24,500	6,200
Lead	7439-92-1	98%	2%	B11-027-SB-1	1,080	800
Manganese	7439-96-5	100%	25%	B11-011-SB-2	64,800	26,000
Naphthalene	91-20-3	100%	6%	B11-026-SB-9	61	8.6
Oil & Grease	O&G	79%	4%	B11-026-SB-9	24,800	6,200
Thallium	7440-28-0	82%	46%	B11-018-SB-8	85.4	12
Vanadium	7440-62-2	100%	4%	B11-011-SB-2	9,980	5,800

<sup>\*</sup>Frequency of detections and exceedances calculated as a percentage based on the total number of samples analyzed for the parameter (excluding any rejected data results).

Table 8 - Parcel B11 Rejected Analytical Results

1,4-Dioxane	Sample ID	<u>Parameter</u>	Result	PAL	Exceeds
B11-004-SB-1   1.4-Dioxane   0.073   25,000   no   2.3.4.6-Tertachlorophenol   0.073   2.10   no   2.4.6-Trichlorophenol   0.073   2.10   no   2.4-Dimitrophenol   0.073   2.500   no   2.4-Dimitrophenol   0.073   2.500   no   2.4-Dimitrophenol   0.073   16,000   no   2.4-Dimitrophenol   0.073   16,000   no   2.4-Dimitrophenol   0.073   16,000   no   2.4-Dimitrophenol   0.073   5,800   no   2.4-Dimitrophenol   0.073   41,000   no   2.4-Dimitrophenol   0.073   41,000   no   2.4-Dimitrophenol   0.18   4   no   Phenol   0.073   25,000   no   2.4-Dimitrophenol   0.18   4   no   Phenol   0.073   25,000   no   2.4-Dimitrophenol   0.073   25,000   no   2.4-Dimitrophenol   0.18   4   no   2.3.4.6-Tetrachlorophenol   0.074   25,000   no   2.4.5-Trichlorophenol   0.074   25,000   no   2.4.5-Trichlorophenol   0.074   2.500   no   2.4.5-Trichlorophenol   0.074   2.500   no   2.4-Dimitrophenol   0.074   2.500   no   2.4-Dimitr	_		(mg/kg)	(mg/kg)	PAL?
2,4,5-Trichlorophenol   0.18   82,000   no   2,4,6-Trichlorophenol   0.073   210   no   2,4-Dichlorophenol   0.073   2,500   no   2,4-Dichlorophenol   0.073   16,000   no   2,4-Dimethylphenol   0.18   1,600   no   2,4-Dimethylphenol   0.18   1,600   no   2,4-Dimethylphenol   0.073   5,800   no   2,4-Dimethylphenol   0.073   5,800   no   2,4-Dimethylphenol   0.073   41,000   no   2,4-Dimethylphenol   0.073   41,000   no   2,4-Dimethylphenol   0.15   41,000   no   2,4-Dimethylphenol   0.073   250,000   no   2,4-Dimethylphenol   0.073   250,000   no   2,3,4,6-Tetrachlorophenol   0.18   4   no   2,3,4,6-Tetrachlorophenol   0.18   1,600   no   2,4-Dimethylphenol   0.18   4   no   2,3,4,6-Tetrachlorophenol   0.18   4   no   2,3,4,6-Tetrachlorophenol   0.18   4   no   2,3,4,6-Tetrachlorophenol   0.18   82,000   no   2,4,5-Trichlorophenol   0.074   25,000   no   2,4,5-Trichlorophenol   0.074   21,000   no   2,4-Dimethylphenol   0.074   21,000   no   2,4-Dimethylphenol   0.074   2,500   no   2,4-Dimethylphenol   0.074   3,800   no   2,4-Dimethylphenol   0.074   41,000   no   2,4-Dimethylphenol   0.074   3,800   no   2,4-Dimethylphenol   0.074   25,000   no   2,4-Dimethylphenol   0.074   2,500   no   2,4-Dimethylpheno					
B11-004-SB-1					
2,4-Dichlorophenol   0.073   2,500   no					no
B11-004-SB-1					no
B11-004-SB-1		<u> </u>		,	no
2,4-Dinitrophenol   0.18   1,600   no	B11-004-SB-1	· • • • • • • • • • • • • • • • • • • •		·	no
2-Methylphenol   0.073   41,000   no	211 00 . 22 1	-		·	no
3&4-Methylphenol(m&p Cresol)   0.15   41,000   no		-		,	no
Pentachlorophenol   D.18		2-Methylphenol	0.073	41,000	no
Phenol   0.073   250,000   no		3&4-Methylphenol(m&p Cresol)	0.15	41,000	no
B11-004-SB-4		Pentachlorophenol	0.18	4	no
2,3,4,6-Tetrachlorophenol   0.073   25,000   no		Phenol	0.073	250,000	no
B11-006-SB-3   2,4-Dinitrophenol   0.18   1,600   no	B11-004-SB-4	1,4-Dioxane	0.092	24	no
Pentachlorophenol   0.18		2,3,4,6-Tetrachlorophenol	0.073	25,000	no
1,4-Dioxane	B11-006-SB-3	2,4-Dinitrophenol	0.18	1,600	no
B11-006-SB-7		Pentachlorophenol	0.18	4	no
B11-006-SB-7		1,4-Dioxane	0.1	24	no
B11-006-SB-7		2,3,4,6-Tetrachlorophenol	0.074	25,000	no
B11-006-SB-7		2,4,5-Trichlorophenol	0.18	82,000	no
B11-006-SB-7			0.074	210	no
B11-006-SB-7		*	0.074	2,500	no
2,4-Dinitrophenol   0.18   1,600   no	D11 004 GD 7	*	0.074	·	no
2-Chlorophenol   0.074   5,800   no	B11-006-SB-/		0.18		no
2-Methylphenol   0.074   41,000   no   3&4-Methylphenol(m&p Cresol)   0.15   41,000   no   Pentachlorophenol   0.18   4   no   Phenol   0.074   250,000   no   Phenol   0.074   250,000   no   2,3,4,6-Tetrachlorophenol   0.074   25,000   no   2,4,5-Trichlorophenol   0.19   82,000   no   2,4,6-Trichlorophenol   0.074   210   no   2,4-Dichlorophenol   0.074   2,500   no   2,4-Dimethylphenol   0.074   2,500   no   2,4-Dimethylphenol   0.074   16,000   no   2,4-Dimethylphenol   0.074   16,000   no   2,4-Dimethylphenol   0.074   5,800   no   2-Methylphenol   0.074   41,000   no   3&4-Methylphenol(m&p Cresol)   0.15   41,000   no   Chromium VI   1.2   6.3   no   Pentachlorophenol   0.19   4   no   No   Pentachlorophenol   0.19   0.19   4   No   Pentachlorophenol   0.19   0		•	0.074	5,800	no
3&4-Methylphenol(m&p Cresol)   0.15   41,000   no		<u> </u>	0.074	·	no
Pentachlorophenol   0.18   4   no		* 1		,	no
Phenol   0.074   250,000   no					no
B11-007-SB-1   Chromium VI   1.1   6.3   no				250,000	no
B11-007-SB-5     2,3,4,6-Tetrachlorophenol   0.074   25,000   no   2,4,5-Trichlorophenol   0.019   82,000   no   2,4,6-Trichlorophenol   0.074   210   no   2,4-Dichlorophenol   0.074   2,500   no   2,4-Dimethylphenol   0.074   16,000   no   2,4-Dinitrophenol   0.19   1,600   no   2,4-Dinitrophenol   0.19   1,600   no   2-Chlorophenol   0.074   5,800   no   2-Methylphenol   0.074   41,000   no   3&4-Methylphenol(m&p Cresol)   0.15   41,000   no   Chromium VI   1.2   6.3   no   Pentachlorophenol   0.19   4   no	B11-007-SB-1	Chromium VI			no
B11-007-SB-5    2,4,5-Trichlorophenol					no
B11-007-SB-5   2,4,6-Trichlorophenol   0.074   210   no   2,4-Dichlorophenol   0.074   2,500   no   2,4-Dimethylphenol   0.074   16,000   no   2,4-Dinitrophenol   0.19   1,600   no   2,4-Dinitrophenol   0.074   5,800   no   2-Chlorophenol   0.074   41,000   no   2-Methylphenol   0.074   41,000   no   3&4-Methylphenol(m&p Cresol)   0.15   41,000   no   Chromium VI   1.2   6.3   no   Pentachlorophenol   0.19   4   no   no					
2,4-Dichlorophenol   0.074   2,500   no				·	
B11-007-SB-5  2,4-Dimethylphenol					
Description		*			
2-Chlorophenol 0.074 5,800 no 2-Methylphenol 0.074 41,000 no 3&4-Methylphenol(m&p Cresol) 0.15 41,000 no Chromium VI 1.2 6.3 no Pentachlorophenol 0.19 4 no		, i		·	
2-Methylphenol       0.074       41,000       no         3&4-Methylphenol(m&p Cresol)       0.15       41,000       no         Chromium VI       1.2       6.3       no         Pentachlorophenol       0.19       4       no	B11-007-SB-5	•			
3&4-Methylphenol(m&p Cresol)         0.15         41,000         no           Chromium VI         1.2         6.3         no           Pentachlorophenol         0.19         4         no		*		·	
Chromium VI 1.2 6.3 no Pentachlorophenol 0.19 4 no				·	
Pentachlorophenol 0.19 4 no		71 \ 1			
<u> </u>					
1 1111/4 1 / 1111/1 1 11A		Phenol	0.074	250,000	no

Table 8 - Parcel B11 Rejected Analytical Results

2,3,4,6-Tetrachlorophenol   0.07   25,000   no	Sample ID	<u>Parameter</u>	Result (mg/kg)	PAL (mg/kg)	Exceeds PAL?
Record   Company   Compa		2246 T. 11 1 1			
Recommendation		1		-	
B11-017-SB-1					
B11-017-SB-1		*			
B11-017-SB-1		-		-	
2-Chlorophenol   0.07   5,800   no	D11 017 0D 1	- 1		-	
2-Methylphenol   0.07	B11-017-SB-1	· •		,	no
S&4-Methylphenol(m&p Cresol)   0.14   41,000   no		*		· ·	no
Pentachlorophenol   0.17		V 1		·	no
Phenol   0.07   250,000   no					no
B11-017-SB-5   2,4-Dinitrophenol   0.17   1,600   no		<u> </u>			no
2,3,4,6-Tetrachlorophenol   0.075   25,000   no   2,4,5-Trichlorophenol   0.19   82,000   no   2,4,6-Trichlorophenol   0.075   210   no   2,4-Dichlorophenol   0.075   2,500   no   2,4-Dimethylphenol   0.075   16,000   no   2,4-Dimethylphenol   0.075   16,000   no   2,4-Dimethylphenol   0.075   16,000   no   2,4-Dimitrophenol   0.075   5,800   no   2-Chlorophenol   0.075   5,800   no   2-Methylphenol   0.075   41,000   no   3&4-Methylphenol   0.075   41,000   no   3&4-Methylphenol   0.19   4   no   Pentachlorophenol   0.19   4   no   Pentachlorophenol   0.075   250,000   no   2,3,4,6-Tetrachlorophenol   0.075   250,000   no   2,4,5-Trichlorophenol   0.072   25,000   no   2,4,6-Trichlorophenol   0.072   25,000   no   2,4-Dichlorophenol   0.072   2,500   no   2,4-Dimethylphenol   0.072   2,500   no   2,4-Dimitrophenol   0.072   16,000   no   2,4-Dimitrophenol   0.072   5,800   no   2,4-Dimitrophenol   0.072   41,000   no   2-Methylphenol   0.072   41,000   no   2-Methylphenol   0.072   41,000   no   2,4-Dimitrophenol   0.072   41,000   no   2,4-Dimitrophenol   0.073   25,000   no   2,4-Dimitrophenol   0.07			0.07	250,000	no
Application	B11-017-SB-5	•	0.17	1,600	no
A-6-Trichlorophenol   0.075   210   no		2,3,4,6-Tetrachlorophenol	0.075	25,000	no
B11-020-SB-4.5   2,4-Dichlorophenol   0.075   2,500   no   2,4-Dimethylphenol   0.075   16,000   no   2,4-Dimitrophenol   0.19   1,600   no   2-Chlorophenol   0.075   5,800   no   2-Methylphenol   0.075   41,000   no   3&4-Methylphenol(m&p Cresol)   0.15   41,000   no   no   2-Methylphenol   0.075   250,000   no   no   2,3,4,6-Tetrachlorophenol   0.072   25,000   no   2,4,5-Trichlorophenol   0.072   25,000   no   2,4,5-Trichlorophenol   0.072   210   no   2,4-Dichlorophenol   0.072   2,500   no   2,4-Dichlorophenol   0.072   2,500   no   2,4-Dimitrophenol   0.072   2,500   no   2,4-Dimitrophenol   0.072   2,500   no   2,4-Dimitrophenol   0.072   16,000   no   2,4-Dimitrophenol   0.072   5,800   no   2,4-Dimitrophenol   0.072   5,800   no   2,4-Dimitrophenol   0.072   41,000   no   2,4-Dimitrophenol   0.072   41,000   no   2,4-Dimitrophenol   0.072   41,000   no   2,4-Dimitrophenol   0.072   41,000   no   2,4-Dimitrophenol   0.18   4   no   2,3,4,6-Tetrachlorophenol   0.073   25,000   no   2,4-Dimitrophenol   0.18   4   no   2,4-Dimitrophenol   0.18   1,600   no   2,4-		2,4,5-Trichlorophenol	0.19	82,000	no
B11-020-SB-4.5   2,4-Dimethylphenol   0.075   16,000   no   2,4-Dinitrophenol   0.19   1,600   no   2-Chlorophenol   0.075   5,800   no   2-Methylphenol   0.075   41,000   no   3&4-Methylphenol(m&p Cresol)   0.15   41,000   no   no   Pentachlorophenol   0.19   4   no   Phenol   0.075   250,000   no   no   2,3,4,6-Tetrachlorophenol   0.19   4   no   no   2,4,5-Trichlorophenol   0.18   82,000   no   2,4,5-Trichlorophenol   0.18   82,000   no   2,4-Dichlorophenol   0.072   210   no   2,4-Dichlorophenol   0.072   2,500   no   2,4-Dinitrophenol   0.072   2,500   no   2,4-Dinitrophenol   0.072   16,000   no   2,4-Dinitrophenol   0.072   16,000   no   2,4-Dinitrophenol   0.072   5,800   no   2-Chlorophenol   0.072   5,800   no   2-Methylphenol   0.072   41,000   no   2-Methylphenol   0.072   41,000   no   2-Methylphenol   0.18   4   no   2,3,4,6-Tetrachlorophenol   0.18   1,600   no   2,4-Dinitrophenol   0.18   1,600		2,4,6-Trichlorophenol	0.075	210	no
B11-020-SB-4.5		2,4-Dichlorophenol	0.075	2,500	no
2-Chlorophenol   0.075   5,800   no		2,4-Dimethylphenol	0.075	16,000	no
2-Methylphenol   0.075   41,000   no   3&4-Methylphenol(m&p Cresol)   0.15   41,000   no   Pentachlorophenol   0.19   4   no   Phenol   0.075   250,000   no   2,3,4,6-Tetrachlorophenol   0.072   25,000   no   2,4,5-Trichlorophenol   0.18   82,000   no   2,4,6-Trichlorophenol   0.072   210   no   2,4-Dichlorophenol   0.072   2,500   no   2,4-Dimethylphenol   0.072   2,500   no   2,4-Dimethylphenol   0.072   16,000   no   2,4-Dimitrophenol   0.18   1,600   no   2,4-Dimitrophenol   0.072   5,800   no   2,4-Dimitrophenol   0.072   5,800   no   2,4-Dimitrophenol   0.072   41,000   no   2,4-Dimitrophenol   0.18   4   no   2,3,4,6-Tetrachlorophenol   0.18   4   no   2,3,4,6-Tetrachlorophenol   0.18   1,600   no   2,4-Dimitrophenol   0.18   1,600   no   2,4-Dimi	B11-020-SB-4.5	2,4-Dinitrophenol	0.19	1,600	no
3&4-Methylphenol(m&p Cresol)   0.15   41,000   no		2-Chlorophenol	0.075	5,800	no
Pentachlorophenol   0.19   4   no   Phenol   0.075   250,000   no   0.075   250,000   no   0.075   250,000   no   0.075   250,000   no   0.072   25,000   no   0.072   25,000   no   0.072   24,5-Trichlorophenol   0.18   82,000   no   0.072   210   no   0.072   2,500   no   0.072   2,500   no   0.072   2,500   no   0.072   2,500   no   0.072   16,000   no   0.073   16,000		2-Methylphenol	0.075	41,000	no
Phenol   0.075   250,000   no		3&4-Methylphenol(m&p Cresol)	0.15	41,000	no
2,3,4,6-Tetrachlorophenol   0.072   25,000   no			0.19	4	no
2,4,5-Trichlorophenol   0.18   82,000   no		Phenol	0.075	250,000	no
B11-023-SB-1   2,4,6-Trichlorophenol   0.072   210   no   2,4-Dichlorophenol   0.072   2,500   no   2,4-Dimethylphenol   0.072   16,000   no   2,4-Dinitrophenol   0.18   1,600   no   2,4-Dinitrophenol   0.072   5,800   no   2-Methylphenol   0.072   41,000   no   2-Methylphenol   0.072   41,000   no   2,3,4,6-Tetrachlorophenol   0.18   4   no   2,3,4,6-Tetrachlorophenol   0.18   1,600   no   2,4-Dinitrophenol   0.18   1,600   no   2,4-Dinitr		2,3,4,6-Tetrachlorophenol	0.072	25,000	no
B11-023-SB-1   2,4,6-Trichlorophenol   0.072   210   no   2,4-Dichlorophenol   0.072   2,500   no   2,4-Dimethylphenol   0.072   16,000   no   2,4-Dinitrophenol   0.18   1,600   no   2,4-Dinitrophenol   0.072   5,800   no   2-Methylphenol   0.072   41,000   no   2-Methylphenol   0.072   41,000   no   2,3,4,6-Tetrachlorophenol   0.18   4   no   2,3,4,6-Tetrachlorophenol   0.18   1,600   no   2,4-Dinitrophenol   0.18   1,600   no   2,4-Dinitr		2,4,5-Trichlorophenol	0.18	82,000	no
B11-023-SB-1			0.072	210	no
2,4-Dinitrophenol   0.18   1,600   no		2,4-Dichlorophenol	0.072	2,500	no
2-Chlorophenol   0.072   5,800   no	B11-023-SB-1	2,4-Dimethylphenol	0.072	16,000	no
2-Chlorophenol   0.072   5,800   no		2,4-Dinitrophenol	0.18	1,600	no
2-Methylphenol   0.072   41,000   no					no
Pentachlorophenol   0.18   4   no					no
B11-026-SB-1		V 1			
2,4-Dinitrophenol   0.18   1,600   no		*			
Chromium VI 1.1 6.3 no Pentachlorophenol 0.18 4 no	D11 00 1 00 1	1		-	
Pentachlorophenol 0.18 4 no	B11-026-SB-1	*		,	
1					
	B11-027-SB-1	Chromium VI	1.2	6.3	no

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# APPENDIX A

11

### Parcel B11 Sampling Plan Summary Former Sparrows Point Steel Mill Sparrows Point, Maryland

Table 1 - Soil Sampling Summary

Source Area/ Description	REC & Finding/ SWMU/ AOC	Figure or Drawing of Reference	Rationale	Number of Locations	Sample Locations	Boring Depth	Sample Depth	Analytical Parameters: Soil Samples
Transformer Pad	N/A	Drawing 5102	Investigate potential impacts related to tranformer pad (potential leaks or releases).	7   70 feet or		0-1', 4-5', 9-10' bgs. 4-5' interval may be adjusted in the field based on observations or field screening.	VOC^, SVOC, Metals, DRO/GRO, O&G, PCBs (0-1')	
Scrap Reclaiming Pit	N/A	Drawing 5002, Drawing 5102, and Drawing 5502	Investigate potential impacts related to historical scrap reclamation activities.	5	5 through 20 feet or the field based of the field b		0-1', 4-5', 9-10' bgs. 4-5' interval may be adjusted in the field based on observations or field screening.	VOC^, SVOC, Metals, DRO/GRO, O&G, PCBs (0-1')
Scrap Screening Station	N/A	Drawing 5002, Drawing 5102, and Drawing 5502	Investigate potential impacts related to historical scrap screening activities.	2	B11-008 and B11-009	Total depth of 20 feet or groundwater.	0-1', 4-5', 9-10' bgs. 4-5' interval may be adjusted in the field based on observations or field screening.	VOC^, SVOC, Metals, DRO/GRO, O&G, PCBs (0-1')
Site-Wide/ Material Stockpiles	N/A	Aerial Imagery and Site Visit	Investigate potential impacts related to current material stockpiling activities.	16	B11-010 Total depth of through 20 feet or groundwater.		0-1', 4-5', 9-10' bgs. 4-5' interval may be adjusted in the field based on observations or field screening.	VOC^, SVOC, Metals, DRO/GRO, O&G, PCBs (0-1')
Site-Wide/ Dredge Material Containment Facility Perimeter	N/A	Drawing 5002, Drawing 5102, Drawing 5502, and Aerial Imagery	Investigate potential impacts related to historical mud/dredge disposal activities.	8	X I through 1 70 teet or 1		0-1', 4-5', 9-10' bgs. 4-5' interval may be adjusted in the field based on observations or field screening.	VOC^, SVOC, Metals, DRO/GRO, O&G, PCBs (0-1')
			Total:	33				

Soil Borings Sampling Density Requirements (from Worksheet 17 - Sampling Design and Rationale)

No Engineered Barrier (41-70 acres): 1 boring per 2 acres with no less than 27 borings.

Mud Storage Impoundment: 27.9 acres (excluded from sampling density calculations)

Engineered Barrier (N/A)

No Engineered Barrier (64.2 acres) = 33 Borings Required, 33 Completed

VOCs - Volatile Organic Compounds (Target Compound List)

^VOCs are only collected if the PID reading exceeds 10 ppm

SVOCs - Semivolatile Organic Compounds (Target Compound List)

Metals - (Target Analyte List plus Hexavalent Chromium and Cyanide)

O&G - Oil & Grease

DRO/GRO - Diesel Range Organics/Gasoline Range Organics

PCBs - Polychlorinated Biphenyls

bgs - Below Ground Surface

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APPENDIX B

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Boring ID: B11-001-SB

12-21-2020 \\mdfs01\Projects\EnviroAnalytics Group\20010211 EAG Parcel B11\Boring Logs\2\_bor Logs\B11-001-SB.bor

Client : Tradepoint Atlantic

ARM Project No. : 20010211

Project Description : Sparrows Point - Parcel B11 Site Location : Sparrows Point, MD

ARM Representative : L. Perrin Checked by : M. Hritz, E.I.T.

Drilling Company : GSI Driller : D. Marchese

**Drilling Equipment** : Geoprobe 7822DT Date : 08/13/2020

Weather : Rainy, 90's

Northing (US ft) : 560638.51

Easting (US ft) : 1457938.51

			(page 1	of 1)			
Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval		DESCRIPTION	nscs	REMARKS
0				(0-7 5') N	lon-native SAND with some SLAG GRAVEL, mediun	n l	
_		0.0	B11-001-SB-1	dense, ve non-plast	ery dark brown, dry then wet at 7.4' bgs, iic, non-cohesive	"	
1-							
٦		0.0					
2-	90	0.0					
3-	90	0.0					
		0.0					
4-						SW/GW	
-		0.0	B11-001-SB-5				
5							
_		-					
6-							
7-		0.0					
´ ]	82	0.0					Wet at 7.4' bgs
8-				SAND, m	SLAG, SAND and GRAVEL-sized with non-native dedium dense to dense, very dark brown, wet, cic, non-cohesive		
+		21.2				GW/SW	
9-						3007300	
-		1.3					
10				End of Bo	oring		<u> </u>
,							
11-			bgs due to water				



Boring ID: B11-002-SB

Client : Tradepoint Atlantic

ARM Project No. : 20010211

Project Description : Sparrows Point - Parcel B11 Site Location : Sparrows Point, MD

ARM Representative : L. Perrin Checked by : M. Hritz, E.I.T.

Drilling Equipment : Geoprobe 7822DT Date : 08/13/2020

Weather : Rainy, 90's

Northing (US ft) : 560645.39

Drilling Company	: GSI	Easting (US ft)	: 1457965.70
Driller	: D. Marchese		

			(page 1	of 1)						
Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval		DESCRIPTION	nscs	REMARKS			
0-				(0-10') SI	AG, SAND and GRAVEL-sized with non-native		<u> </u>			
-		0.2	B11-002-SB-1	SAND, m yellow an	ledium dense, very dark brown and gray with trace d white, dry, non-plastic, non-cohesive	•				
1-										
4		1.5								
2-										
-	92	11.5								
3-										
-		0.0								
4-										
4		0.0	B11-002-SB-5							
5						GW/SW				
-		-								
6-										
4		0.0								
7-										
-	80	0.0								
8-										
-		5.7								
9-							Wet at 9' bgs			
-		0.0								
10-				F., 1. (5)						
				End of Bo	oring					
11-	11—									
	rehole D	epth: 10'	bgs due to water							

12-21-2020 \\mdfs01\Projects\EnviroAnalytics Group\20010211 EAG Parcel B11\Boring Logs\2\_bor Logs\B11-002-SB.bor



Boring ID: B11-003-SB

12-21-2020 \\mdfs01\Projects\EnviroAnalytics Group\20010211 EAG Parcel B11\Boring Logs\2\_bor Logs\B11-003-SB.bor

Client : Tradepoint Atlantic

ARM Project No. : 20010211

Project Description : Sparrows Point - Parcel B11
Site Location : Sparrows Point, MD

ARM Representative : L. Perrin
Checked by : M. Hritz, E.I.T.

Drilling Company : GSI
Driller : D. Marchese

Drilling Equipment : Geoprobe 7822DT

Date : 08/11/2020 Weather : Sunny, 100's

Northing (US ft) : 560758.83 Easting (US ft) : 1456905.72

			(page 1	of 1)						
Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval		DESCRIPTION	nscs	REMARKS			
0-				(0.40') N	on-native SAND with SLAG/BRICK GRAVEL and					
1-		0.0	B11-003-SB-1	trace SIL with trace non-cohe	T, loose to medium dense, brown to grayish brown e gray and red, dry then wet at 8.5' bgs, non-plastic	1,				
		0.0								
2-										
-	86	0.0								
3-										
		0.2								
		0.2								
4-										
-		0.0	B11-003-SB-5							
5—						SW/G\	V			
1		-								
6-										
_		0.0								
7-										
/ ]										
-	80	1.6								
8-										
		0.0					Wet at 8.5' bgs			
		0					1			
9-										
-		0.0								
10				End of D	oring					
				End of Bo	oring					
11-										
Total Bo	rehole De	epth: 10'	bgs due to water							



Boring ID: B11-004-SB

(page 1 of 1)

Client : Tradepoint Atlantic

ARM Project No. : 20010211

Project Description : Sparrows Point - Parcel B11 Site Location : Sparrows Point, MD

ARM Representative : L. Perrin Checked by : M. Hritz, E.I.T.

Drilling Company : GSI Driller : D. Marchese

**Drilling Equipment** : Geoprobe 7822DT Date : 08/11/2020

Weather : Sunny, 100's

Northing (US ft) : 560826.90

Easting (US ft) : 1457102.84

			(page i				
Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval		DESCRIPTION	nscs	REMARKS
0				(0-2.5') N	Ion-native SAND and SLAG, SAND and		
-		1206	B11-004-SB-1	GRAVÉL	-sized, medium dense, brown and grayish brown, plastic, non-cohesive		
1-		1007				SW/GW	
2-							
3-	92	15.2		BRICK/Ś	Non-native SAND with CLAY and trace LAG GRAVEL, medium dense, pale brown and ry, non-plastic, non-cohesive		
		318.9	B11-004-SB-4	, brown, di	y, non-piastic, non-conesive	SW-SC	
4-							
=		2820		(4.2-5.1')	ASPHALT	NA	
5-		353.3		GRAVEL	Non-native SAND and SLAG, SAND andsized, medium dense, brown and gray, dry, tic, non-cohesive		
6-				Поп-ріаз	iic, non-coriesive		
7-		61.0				sw/gw	
′	71	0.3					
8-							
9-		0.0		GRAVEL	Non-native SAND, BRICK, SAND-sized, and ., loose to medium dense, strong brown to brown, -plastic, non-cohesive	SW/GW	Wet at 8.5' bgs
		0.0		, , , , , , , , , , , , , , , , , , ,	piacito, fiori-cortocito		
†		l	<u> </u>	End of B	oring	I	
10-							

Total Borehole Depth: 9.5' bgs due to water and refusal.



Boring ID: B11-005-SB

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Client : Tradepoint Atlantic

ARM Project No. : 20010211

Project Description : Sparrows Point - Parcel B11 Site Location : Sparrows Point, MD

ARM Representative : L. Perrin Checked by : M. Hritz, E.I.T. : GSI/Connelly Drilling Company

Driller : D. Marchese; R. Mohler

Drilling Equipment : Geoprobe 7822DT/Sonic Date : 08/13/2020; 10/07/2020

Weather : Rainy, 90's;

Northing (US ft) : 561161.73

Easting (US ft) : 1457321.45

			(page 1	of 1)			
Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval		DESCRIPTION	nscs	REMARKS
0-				(0-0.6') S	AND with SILT and trace SLAG GRAVEL, loose,	SW-SM	1' bgs is starting 0' elevation due
, 1		0.0		dark brov	vn, dry, non-plastic, non-cohesive		to slag removal
1-		0.0	B11-005-SB-2	dense, pa (1.2-3') N	Non-native SILTY SAND, very fine to fine, mediur ale brown, dry, non-plastic, non-cohesive lon-native SAND with SLAG/BRICK GRAVEL and		
2-	90	116.0		trace SIL	T, loose to medium dense, brown to grayish brown e gray and red, dry then wet at 8.5' bgs, non-plasti	n Isw/Gw	
3-		240.9		GRAVEL brownish	on native SAND and SLAG, SAND and -sized, medium dense, dark brown and light gray with trace yellow, dry, non-plastic,		
4-		273.6	B11-005-SB-5	non-cohe	sive, trace BRICK and some SILT		
5 <del>-</del> - 6-		12.4					
-		80.9				SW/GW	
7-	100	82.8					
8-		45.8					
9-		114.3					West and 400 hours
10 -		-		(10-15') S brown, w	SLAG, SAND and GRAVEL-sized, loose, dark et, non-plastic, non-cohesive		- Wet at 10' bgs
12-		-					
13-	100	-				GW/SW	
14 —		-					
15		-					
-				End of Bo	oring		
16-							
Гotal Вс	rehole D	epth: 15'	bgs due to water				



Boring ID: B11-006-SB

Client : Tradepoint Atlantic

ARM Project No. : 20010211

Project Description : Sparrows Point - Parcel B11 Site Location : Sparrows Point, MD

ARM Representative : L. Perrin Checked by : M. Hritz, E.I.T.

Drilling Company : GSI

Driller : A. Berenbrok-Niblett **Drilling Equipment** : Geoprobe 7822DT

Date : 08/17/2020

Weather : Sunny, 80's

Northing (US ft) : 561108.81

Easting (US ft) : 1457494.83

-	Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	JI 1)	DESCRIP	TION		nscs	REMARKS
12-21-2020 \mdfs01\Projects\EnviroAnalytics Group\20010211 EAG Parcel B11\Boring Logs\2_bor Logs\B11-006-SB.bor	0- 1- 2- 3- 3- 4- 5- 6- 7- 8- 8- 10- 11- 12- 13- 14-	96	1.0	B11-006-SB-7 B11-006-SB-12	SLAG GF medium of 0-3' bas.	on-native SAND, very fine RAVEL, SILT, and BRICK, lense, dark brown to brow dry then wet at 13' bgs, no llic grains throughout	SAND and GRAVEL-siz	1	SW/GW	2' bgs is starting 0' elevation due to slag removal  Wet at 13' bgs
rojects\EnviroA	15 <del>-</del>		1.5		End of Bo	pring				
12-21-2020 \\mdfs01\\F	Total Borehole Depth: 15' bgs due to water.									



Boring ID: B11-007-SB

Client : Tradepoint Atlantic

ARM Project No. : 20010211

Project Description : Sparrows Point - Parcel B11 Site Location : Sparrows Point, MD

ARM Representative : L. Perrin Checked by : M. Hritz, E.I.T.

**Drilling Equipment** : Geoprobe 7822DT Date : 08/18/2020

Weather : Sunny, 80's

Northing (US ft) : 561428.89 : 1457773.72

**Drilling Company** : GSI Easting (US ft) Driller : A. Berenbrok-Niblett

			(page 1	of 1)	Diming Equipment : Goopless 102251		
Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval		DESCRIPTION	nscs	REMARKS
0-				(0 7') No.	n-native SAND and SLAG, SAND and		<u>'</u>
_		-	B11-007-SB-1	GRAVEL dry then i	rialive SAND and SLAG, SAND and sized, medium dense, dark brown with dark gray, noist at 6.8' bgs, non-plastic, non-cohesive, trace uster at 3' bgs	,	
1-							
_		7.5					
2-							
_	80	0.0					
3-							No water encountered
-		0.0				SW/GW	
4-							
_		0.0	B11-007-SB-5				
5-							
4 — 5 —		-					
6-	80						
-		0.2					
7-							
				End of Bo	pring		
-							
8-							
Total Bo	orehole D	enth: 7' h	as due to refusal:	e			

Total Borehole Depth: 7' bgs due to refusals.

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Boring ID: B11-008-SB

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Client : Tradepoint Atlantic

ARM Project No. : 20010211

Project Description : Sparrows Point - Parcel B11
Site Location : Sparrows Point, MD

ARM Representative : L. Perrin
Checked by : M. Hritz, E.I.T.

Drilling Company : GSI

Driller : A. Berenbrok-Niblett
Drilling Equipment : Geoprobe 7822DT

Date : 08/18/2020 Weather : Sunny, 80's

Northing (US ft) : 561058.42

Easting (US ft) : 1456418.68

			(page 1	of 1)											
Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval		DESCRIPTION	nscs	REMARKS								
0				(0-6') Nor	n-native SAND with some fine SLAC CRAVE	· · · · · · · · · · · · · · · · · · ·	<u> </u>								
_		0.0		medium of yellow, dr	n-native SAND with some fine SLAG GRAVEL, dense to loose, dark brown with dark gray and trac ry, non-plastic, non-cohesive, trace BRICK at 4.5' e piece of WOOD at 1' bgs	е	1' bgs is starting 0' elevation due to slag removal								
1-															
-		0.0	B11-008-SB-2												
2-															
-	92	0.0													
3-						SW/GP	No water encountered								
-		1.7													
4-															
-		0.3													
5															
	100	0.0	B11-008-SB-6												
6				End of Bo	aring .										
				⊏iiu 0i B0	Julig										
-															
7-					7—										

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Boring ID: B11-009-SB

Client : Tradepoint Atlantic

ARM Project No. : 20010211

Project Description : Sparrows Point - Parcel B11 Site Location : Sparrows Point, MD

ARM Representative : L. Perrin Checked by : M. Hritz, E.I.T.

Drilling Company : Connelly Driller : R. Mohler **Drilling Equipment** : Sonic

Date : 10/07/2020

Weather : Sunny 70's

Northing (US ft) : 561268.86

Easting (US ft) : 1457081.50

Page   Page				(page 1	of 1)			
1	Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval		DESCRIPTION	nscs	REMARKS
5.9   19.4   7- 100   23.3   B11-009-SB-8   8- 17.0   9- 22.2   10   0.8   (10-15') SLAG, SAND and GRAVEL-sized, medium dense, dark brown to very dark brown, wet, non-plastic, non-cohesive, WOOD fragments at 12' bgs   SW/GW   13- 100   20.9   13- 100   20.9   End of Boring   End of Boring	1- 2- 3-	80	4.5 19.0 14.0	B11-009-SB-4	to coarse	, dense to medium dense, very dark brown with	ne	3' bgs is starting 0' elevation due to slag removal
11 - 100 20.9 113 - 100 End of Boring	- 6- 7- - 8- - 9-	100	19.4 23.3 17.0	B11-009-SB-8			SW/GW	
End of Boring	11— 12— 13— 14—	100	18.7 20.9		dark brov	vn to very dark brown, wet, non-plastic,		
	-				End of Bo	oring		

Total Borehole Depth: 15' bgs due to water.

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Boring ID: B11-010-SB

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Client : Tradepoint Atlantic

ARM Project No. : 20010211

Project Description : Sparrows Point - Parcel B11

Site Location : Sparrows Point, MD ARM Representative : L. Perrin Checked by : M. Hritz, E.I.T.

**Drilling Equipment** : Sonic Date : 10/07/2020

Weather : Sunny 70's

Northing (US ft) : 561300.38

Drilling Company	: Connelly	Easting (US ft)	: 1457220.67
Driller	: R. Mohler		

			(page 1	or r)			
Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval		DESCRIPTION	nscs	REMARKS
0-				(0-1') Noi	n-native SAND, very fine to medium, with some		1' bgs is starting 0' elevation due
1-		-	SLAG GF	RAVEL, fine, loose to medium dense, brown, dry, ic, non-cohesive,	SW/GP	to slag removal	
' 2-		-	B11-010-SB-2	GRAVEL	on-native SAND with SILT and SLAG, SAND and -sized, medium dense, dark brown then grayish th light gray at 4' bgs, dry, non-plastic,		
3-	60	3.2		non-cohe	sive, some WOOD fragments at 8' bgs		
-		27.7					
4		72.7					
5-		354.4	B11-010-SB-6			SW/GW	
6-		147.8					
7 <del>-</del>	100	52.8					
8-		56.0					
9-		87.7					
10 <del>-</del>		36.4		(10-15') S	SLAG/FILL, SAND and GRAVEL-sized, loose, dark th trace yellow, wet, non-plastic, non-cohesive	k	Wet at 10' bgs
11-		36.2			,,, <u></u> ,		
12-	100	85.6				SW/GW	
13-	100					3007000	
14-		179.8					
15		155.3					
15				End of Bo	pring		
16-							
	rehole D	enth: 15'	bas due to water				

Total Borehole Depth: 15' bgs due to water.

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Boring ID: B11-011-SB

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Client : Tradepoint Atlantic

ARM Project No. : 20010211

Project Description : Sparrows Point - Parcel B11 : Sparrows Point, MD

Site Location ARM Representative : L. Perrin Checked by : M. Hritz, E.I.T.

Drilling Company : Connelly Driller : R. Mohler **Drilling Equipment** : Sonic

Date : 10/07/2020

Weather : Sunny 80's

Northing (US ft) : 561389.45

Easting (US ft) : 1457293.85

			(page 1	of 1)						
Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval		DESCRIPTION	nscs	REMARKS			
0				(0-11') No	on-native SAND, very fine to medium, with SILT and	1	1' bgs is starting 0' elevation due			
1		0.7		some SL	AG GRAVEL, fine to coarse, medium dense, very to black, dry then wet at 10.5' bgs, non-plastic,		to slag removal			
1-		13.0	B11-011-SB-2	non-cohe	sive					
2-										
	100	4.0								
3-		0.5								
4-		0.0								
4		26.8								
5						SW-SM				
6-		-				300-300				
4		4.3								
7-										
8-	80	8.3								
Ŭ		37.0	B11-011-SB-9							
9-										
10		36.6								
10-		2.9					Wet at 10.5' bgs			
11-				(11-15') 5	SLAG, SAND and GRAVEL-sized, with some SILT,		_			
40		4.3		loose, da	rk brownish gray, wet, non-plastic, non-cohesive, nount increases with depth					
12-	100	9.0		g. a. 7 0, an						
13-	. 30	2.0				SW/GW				
-		55.9								
14		5.6								
15		5.0								
4				End of Bo	oring					
16-	16—									
Total Bo	rehole D	epth: 15'	bgs due to water							



Boring ID: B11-012-SB

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Client : Tradepoint Atlantic

ARM Project No. : 20010211

Project Description : Sparrows Point - Parcel B11

Site Location : Sparrows Point, MD ARM Representative : L. Perrin Checked by : M. Hritz, E.I.T. Drilling Company : Connelly

Driller : R. Mohler **Drilling Equipment** : Sonic

Date : 10/07/2020-10/08/2020

Weather : Sunny 80's

Northing (US ft) : 561141.59

Easting (US ft) : 1456852.11

			(page 1	of 1)			
Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval		DESCRIPTION	USCS	REMARKS
0-				(O 2!) Na	n-native SAND with SILT and SLAG GRAVEL,		
1-		59.7			dense, dark brown, dry, non-plastic, non-cohesive		1' bgs is starting 0' elevation due to slag removal
2-		80.1	B11-012-SB-2			SW/GW	
	100	382.8					
3-	100	302.0					
4-		1201		non-nativ brown, ar	_AG, SAND and GRAVEL-sized, with some re SAND, loose to medium dense, light gray, dark and grayish brown, then brown to dark brown at 10'		
-		82.0		bgs, dry t	then wet at 10' bgs, non-plastic, non-cohesive		
5-							
6-		57.8					
6-		50.7					
: 7-		30.7					
	100	207.0	B11-012-SB-8			SW/GW	
8-							
-		76.8					
9-							
_		152.8					
10-		00.4					Wet at 10' bgs
11-		26.4					
''-		171.9					
   12 <i>-</i>				(40 (=))			
-	100	226.4		(12-15') S   brown, w	SLAG, SAND snd GRAVEL-sized, loose, dark et, non-plastic, non-cohesive		
13-							
-		228.1				SW/GW	
14-							
		189.6					
15-		ı		End of Bo	oring	1	
7- 7- 8- 9- 10- 11- 12- 13- 15- 16-							

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Total Borehole Depth: 15' bgs due to water.



Boring ID: B11-013-SB

Client : Tradepoint Atlantic

ARM Project No. : 20010211

Project Description : Sparrows Point - Parcel B11 Site Location : Sparrows Point, MD

ARM Representative : L. Perrin Checked by : M. Hritz, E.I.T. : GSI/Connelly Drilling Company

Driller : D. Marchese/R. Mohler Drilling Equipment : Geoprobe 7822DT/Sonic Date : 08/11/2020; 10/05/2020 Weather : Sunny, 100's; Sunny 70's

Northing (US ft) : 561257.73 Easting (US ft) : 1456317.15

			(page 1	of 1)	Similing Equipment : Geophers (0225)//eeme		
Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval		DESCRIPTION	USCS	REMARKS
0-				(0-0 4') S	ILTY SAND with GRAVEL, loose, dark brown, dry,	SM	Light amount of organics
-		7.3	B11-013-SB-1	non-plast	ic, non-cohesive	_/	Light amount of organico
1-		7.5		dense, da	on-native SAND and SLAG GRAVEL, medium ark brown with trace black and gray, dry, ic, non-cohesive, metallic grains throughout	SW/GW	
2- - 3-	100	13.8		medium o	on-native SAND with SLAG GRAVEL, fine to coarse, dense to dense, dark brown, dry then moist at 4.5-5' dry, non-plastic, non-cohesive, trace SILT		
3-		33.6	B11-013-SB-4				
4-							
5		6.5					
5-		3.1					
6-						SW/GW	
7-		5.3					
'	100	5.6					
8-							
9-		7.9					
_		14.9	B11-013-SB-10				
10				(10-15') S	SLAG, SAND and GRAVEL-sized, medium dense,		Wet at 10' bgs
11-		11.1		grayish b non-cohe	rown to brownish gray, wet, non-plastic, sive		
-		14.4					
12-	465	0.5				0.4.40.11	
13-	100	3.8				SW/GW	
		12.7					
14-		07.0					
15		27.3					
-				End of Bo	oring		
16-							

Total Borehole Depth: 15' bgs due to water.

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Boring ID: B11-014-SB

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Client : Tradepoint Atlantic

ARM Project No. : 20010211

: Sparrows Point - Parcel B11 **Project Description** Site Location : Sparrows Point, MD

ARM Representative : L. Perrin Checked by : M. Hritz, E.I.T.

**Drilling Company** : GSI Driller **Drilling Equipment** : Geoprobe 7822DT

: D. Marchese

Date : 08/11/2020 Weather : Sunny, 100's

Northing (US ft)

: 560923.66 : 1456584.73 Easting (US ft)

PID Reading (PPM) Sample No/Interval Recovery Depth (ft.) **DESCRIPTION** USCS **REMARKS** 0 (0-9.8') Non-native SAND with SLAG/BRICK GRAVEL, medium dense to dense, brown and red with some yellow, B11-014-SB-1 dry then wet at 9.8' bgs, non-plastic, non-cohesive 0.0 2 84 0.0 3 0.3 4 B11-014-SB-5 1.1 SW/GW 5 4.8 7-80 1.5 8 0.1 9. 0.3 Wet at 9.8' bgs (9.8-11') Non-native SAND and GRAVEL with SILT, medium 10 dense, red, wet, non-plastic, non-cohesive SW/GW 100 11 End of Boring Total Borehole Depth: 11' bgs due to refusals and water.

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Boring ID: B11-015-SB

Client : Tradepoint Atlantic

ARM Project No. : 20010211

Project Description : Sparrows Point - Parcel B11 Site Location : Sparrows Point, MD

ARM Representative : L. Perrin Checked by : M. Hritz, E.I.T.

Drilling Company : GSI Driller : D. Marchese

Drilling Equipment : Geoprobe 7822DT Date : 08/13/2020

Weather : Sunny, 90's

Northing (US ft) : 561029.27

Easting (US ft) : 1457844.21

			(page 1	of 1)			
Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval		DESCRIPTION	nscs	REMARKS
0-				(0-2.2') S	LAG, SAND and GRAVEL, medium dense, brown	to	l
				dark brov	vn, dry, non-plastic, non-cohesive		
-		-	B11-015-SB-1				
1-						SW/GW	
-		0.1					
2-							
-	86	56.9		(2.2-5') N dense, ve non-cohe	lon-native SILTY SAND with trace GRAVEL, mediu ery dark brown and very dark gray, dry, non-plastic, esive, metallic grains throughout	ım ,	
3-							No water encountered
-		0.0				SM	
						Olvi	
4-							
-		0.0	B11-015-SB-5				
5							
				End of Bo	oring		
6-							
	bl. D	41 E1 I-	ge due to refueal	_			

Total Borehole Depth: 5' bgs due to refusals.

12-21-2020 \\mdfs01\Projects\EnviroAnalytics Group\20010211 EAG Parcel B11\Boring Logs\2\_bor Logs\B11-015-SB.bor



Boring ID: B11-016-SB

(page 1 of 1)

Client : Tradepoint Atlantic

ARM Project No. : 20010211

Project Description : Sparrows Point - Parcel B11 Site Location : Sparrows Point, MD

ARM Representative : L. Perrin Checked by : M. Hritz, E.I.T. : GSI/Connelly Drilling Company

Driller : D. Marchese/R. Mohler

Drilling Equipment : Geoprobe 7822DT/Sonic Date : 08/11/2020; 10/06/2020

Weather : Sunny, 100's; Sunny 70's

Northing (US ft) : 560626.42

Easting (US ft) : 1456780.22

			(page 1	of 1)									
Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval		DESCRIPTION	nscs	REMARKS						
0-				(0-1') No	n-native SAND with some SLAG GRAVEL, loose to	)							
_		0.0 B11-016-SB-1	medium o	nedium dense, brown to dark brown, dry, non-plastic, on-cohesive, trace SILT at surface, metallic grains									
1-	100	67.1		throughou (1-10') No	on-native SAND, very fine to medium, with some RAVEL, fine to coarse, grayish brown with some								
2-		97.6		light gray	, dry, non-plastic, non-cohesive								
3-													
-		391.4	B11-016-SB-4										
4-		317.2											
5-		317.2											
-		15.4				sw/gw							
6-													
7-		35.5											
	100	56.0											
8-													
9-		13.5											
9-		50.1	B11-016-SB-10										
10 —				(10-15') 9	SLAG/FILL, SAND and GRAVEL-sized, with some		Wet at 10' bgs						
-		2.8		SILT, loo	se to medium dense, very dark brown with trace yellow, wet, non-plastic, non-cohesive								
11 –		2.8		g. a., aa	yo,, p.a, coco								
12-													
-	100	25.2				GW/SW							
13-		29.7											
14 —		23.1											
-		25.6											
15—			l	End of Bo	pring		l						
16 <i>-</i>													
	orehole D	epth: 15'	tal Borehole Depth: 15' bgs due to water.										

Total Borehole Depth: 15' bgs due to water.

12-21-2020 \\mdfs01\Projects\EnviroAnalytics Group\20010211 EAG Parcel B11\Boring Logs\2\_bor Logs\B11-016-SB.bor



Boring ID: B11-017-SB

(page 1 of 1)

Client : Tradepoint Atlantic

ARM Project No. : 20010211

Project Description : Sparrows Point - Parcel B11 Site Location : Sparrows Point, MD

ARM Representative : L. Perrin Checked by : M. Hritz, E.I.T.

Drilling Company : GSI Driller : D. Marchese

Drilling Equipment : Geoprobe 7822DT Date : 08/11/2020 Weather : Sunny, 100's

Northing (US ft)

: 560654.34

Easting (US ft) : 1457119.36

			(page 1	of 1)			
Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval		DESCRIPTION	nscs	REMARKS
0- 1- 2-	86	0.0	B11-017-SB-1	(0-5.4') N GRAVEL very dark grains thi	on-native SAND, very fine to fine, with trace SLAG and some SILT, medium dense, brown grading to brown, dry, non-plastic, non-cohesive, metallic coughout	SW	
3- 4- 5-		0.0	B11-017-SB-5				
6- 7-		0.0		SAND, m	SLAG, SAND and GRAVEL-sized, and non-native redium dense, brown, dark brown, and gray with low and trace red, dry then wet at 9.2' bgs, ic, non-cohesive, some BRICK at 9' bgs		
8- 8-	84	0.0				sw/gw	
9- - 10-		0.1					Wet at 9.2' bgs
- 11 -				End of Bo	oring		
	rehole D	epth: 10'	bgs due to water				

Total Borehole Depth: 10' bgs due to water.

12-21-2020 \\mdfs01\Projects\EnviroAnalytics Group\20010211 EAG Parcel B11\Boring Logs\2\_bor Logs\B11-017-SB.bor



Boring ID: B11-018-SB

12-21-2020 \\mdfs01\Projects\EnviroAnalytics Group\20010211 EAG Parcel B11\Boring Logs\2\_bor Logs\B11-018-SB.bor

Client : Tradepoint Atlantic

ARM Project No. : 20010211

Project Description : Sparrows Point - Parcel B11
Site Location : Sparrows Point, MD

ARM Representative : L. Perrin
Checked by : M. Hritz, E.I.T.
Drilling Company : GSI

Driller : D. Marchese
Drilling Equipment : Geoprobe 7822DT

Date : 08/12/2020 Weather : Cloudy, 90's

Northing (US ft) : 560744.71

Easting (US ft) : 1457593.02

			(page 1	of 1)	Drilling Equipment : Geoprobe 7822D1		
Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval		DESCRIPTION	nscs	REMARKS
0-				(0_11') N/	on-native SAND and SLAG/BRICK, SAND and		<u> </u>
1-		-	B11-018-SB-1	GRAVEL brown an bgs, dry,	-sized with trace CLAY at 6.5' bgs, medium dense d grayish brown then dark brown with yellow at 6' non-plastic, non-cohesive	,	
_		0.1					
2-							
- ]	92	0.1					
3-	~ <b>-</b>	J.,					
		0.1					
4-							
		0.1					
5							
		7.3				SW/GW	
6-						311/311	
		0.8					
7-							
	100	22.8	B11-018-SB-8				
8-							
		1.7					
9-							
4		0.3	B11-018-SB-10				
10							
_	100	0.3					Wet at 10.4' bgs
11							
_				End of Bo	onng		
12-							
	rehole D	epth: 11'	bgs due to water.				



Boring ID: B11-019-SB

Client : Tradepoint Atlantic

ARM Project No. : 20010211

Project Description : Sparrows Point - Parcel B11
Site Location : Sparrows Point, MD

ARM Representative : L. Perrin
Checked by : M. Hritz, E.I.T.

Drilling Company : GSI
Driller : D. Marchese

Drilling Equipment : Geoprobe 7822DT

Date : 08/12/2020 Weather : Cloudy, 90's

Northing (US ft) : 560883.77

Easting (US ft) : 1458063.46

	Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval		DESCRIP	TION		nscs	REMARKS
bor Logs\B11-019-SB.bor	0- 1- 2- 3- 4- 5-	86	- 1.7 9.3 3.6	B11-019-SB-1	(0-6.2') N with some dark brownon-cohe	on-native SAND with SLA(e from SILT 0-0.5' bgs, me on with trace yellow at 6' bg sive	G/BRICK GRAVEL and dium dense, brown to gs, dry, non-plastic,		N/GW	
12-21-2020 \mdfs01\Projects\EnviroAnalytics Group\20010211 EAG Parcel B11\Boring Logs\2_bor Logs\B11-019-SB.bor	6- 7- 8- 9-	82	0.9 3.0 1.6		(6.2-10') dense to then wet	SLAG/BRICK, SAND and 0 dense, dark brown with tra at 7.5' bgs, non-plastic, no	GRAVEL-sized, medium ce gray and yellow, dry n-cohesive		W/GW	Wet at 7.5' bgs
12-21-2020 \\mdfs01\\Projects\Enviro	10	orehole Do	epth: 10'	bgs due to water	End of Bo	oring		1		



Boring ID: B11-020-SB

(page 1 of 1)

Client : Tradepoint Atlantic

ARM Project No. : 20010211

Project Description : Sparrows Point - Parcel B11 Site Location : Sparrows Point, MD

ARM Representative : L. Perrin Checked by : M. Hritz, E.I.T.

**Drilling Equipment** : Geoprobe 7822DT Date : 08/11/2020

Weather : Cloudy, 100's

Northing (US ft) : 560427.18

Drilling Company : GSI Easting (US ft) : 1457357.33 Driller : D. Marchese

			(page 1	of 1)			
Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval		DESCRIPTION	nscs	REMARKS
0-				(0-4 5') N	on-native SAND, very fine to medium, with some		
-		0.1	B11-020-SB-1	fine SLAC	on-native SAND, very fine to medium, with some G GRAVEL, medium dense, grayish brown and gray olastic, non-cohesive,	′,	
1-							
-		0.1					
2-							No water encountered
-	89	1.1				SW/GP	
3-							
-		0.0					
4-		0.0	B11-020-SB-4.5				
,							
-			1	End of Bo	pring	1	
5-							
	orehole De	epth: 4.5'	bgs due to refus	als.			

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Boring ID: B11-021-SB

(page 1 of 1)

Client : Tradepoint Atlantic

ARM Project No. : 20010211

Project Description : Sparrows Point - Parcel B11 Site Location : Sparrows Point, MD

ARM Representative : L. Perrin Checked by : M. Hritz, E.I.T. Drilling Company : GSI

Driller : D. Marchese

Drilling Equipment : Geoprobe 7822DT Date : 08/12/2020

Weather : Cloudy, 100's

Northing (US ft) : 560269.88

Easting (US ft) : 1457712.78

			(page 1	of 1)					
Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval		DESCRIPTION	nscs	REMARKS		
0			·	(0-3 5') N	lon-native SAND with some SLAG/BRICK GRAVEL,	<u>'</u>			
1-		-	B11-021-SB-1	fine to co	arse, and some SILT, medium dense, dark brown e gray and yellow, dry, non-plastic, non-cohesive				
']									
1		-				SW/GW			
2-									
-	70	423.1							
3-									
+		399.4	B11-021-SB-4	(3.5-10')	SLAG/BRICK GRAVEL. fine to coarse, medium				
4-				dense to non-cohe	SLAG/BRICK GRAVEL, fine to coarse, medium dense, dark brown to dark gray, wet, non-plastic, esive		Wet at 4' bgs		
-		157.7							
5									
		-							
6-									
		16.6							
7-		10.0				GW			
' ]	00	2.2							
	82	3.9							
8-									
1		25.9							
9-									
+		44.7							
10	10 End of Boring								
+									
11-									
Total Bo	rehole D	epth: 10'	bgs due to water						

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Boring ID: B11-022-SB

(page 1 of 1)

Client : Tradepoint Atlantic

ARM Project No. : 20010211

Project Description : Sparrows Point - Parcel B11 Site Location : Sparrows Point, MD

ARM Representative : L. Perrin Checked by : M. Hritz, E.I.T.

Drilling Company : GSI Driller : D. Marchese

Drilling Equipment : Geoprobe 7822DT Date : 08/12/2020

Weather : Sunny, 90's

Northing (US ft) : 560379.57

Easting (US ft) : 1458027.40

0-				(page 1	of 1)			
Comparison of	Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval		DESCRIPTION	NSCS	REMARKS
GRAVEL-sized, medium dense, dark brown, dry then moist at 6.5' bgs, non-plastic, non-cohesive  1 -	0-			!	(0-6 5') N	on-native SAND and SLAC SAND and		
2- 82 1.0 3- 0.5 4- 20.1 B11-022-SB-5 5- 12.5 6- 2.0 (6.5-10') SLAG, SAND and GRAVEL-sized, with non-native SAND, medium dense to dense, dark brown to very dark brown, wet at 7' bgs, non-plastic, non-cohesive  Wet at 7' bgs  SW/GW	1_		-	B11-022-SB-1	GRAVEL 6.5' bgs,	-sized, medium dense, dark brown, dry then moist at non-plastic, non-cohesive		
2	'							
3 -	1		369.7					
3 -	2-							
0.5   SW/GW   SW/GW	-	82	1.0					
4 - 20.1 B11-022-SB-5  12.5 6 - 2.0 (6.5-10') SLAG, SAND and GRAVEL-sized, with non-native SAND, medium dense to dense, dark brown to very dark brown, wet at 7' bgs, non-plastic, non-cohesive  Wet at 7' bgs  SW/GW	3-							
20.1 B11-022-SB-5  12.5  6-  2.0  7-  8-  1.7  8-  0.7  0.7	4		0.5				SW/GW	
20.1 B11-022-SB-5  12.5  6-  2.0  7-  8-  0.7  0.7  0.7	4_							
5 12.5 6 2.0 7 2.0 (6.5-10') SLAG, SAND and GRAVEL-sized, with non-native SAND, medium dense to dense, dark brown to very dark brown, wet at 7' bgs, non-plastic, non-cohesive  Wet at 7' bgs  SW/GW	,		00.4	D44 000 0D 5				
12.5 6- 2.0 7- 84 1.7 8- 0.7 9- 0.7	1		20.1	B11-022-SB-5				
6 - 2.0 (6.5-10') SLAG, SAND and GRAVEL-sized, with non-native SAND, medium dense to dense, dark brown to very dark brown, wet at 7' bgs, non-plastic, non-cohesive  Wet at 7' bgs  Wet at 7' bgs  SW/GW	5-							
2.0 (6.5-10') SLAG, SAND and GRAVEL-sized, with non-native SAND, medium dense to dense, dark brown to very dark brown, wet at 7' bgs, non-plastic, non-cohesive  Wet at 7' bgs  SW/GW  1.7  9  0.7	-		12.5					
7 - 84 1.7 (6.5-10') SLAG, SAND and GRAVEL-sized, with non-native SAND, medium dense to dense, dark brown to very dark brown, wet at 7' bgs, non-plastic, non-cohesive  SW/GW  SW/GW	6-							
SAND, medium dense to dense, dark brown to very dark brown, wet at 7' bgs, non-plastic, non-cohesive  Wet at 7' bgs  Wet at 7' bgs  SW/GW  SW/GW	4		2.0		(6 E 10!)	SLAC SAND and CDAVEL sized with non-native		
- 84 1.7 8- 0.7 9- 0.7	7-				SAND, m	edium dense to dense, dark brown to very dark		Wet at 7' bgs
8- - 0.7 9- - 0.7		84	17		DIOWII, W	et at 7 bgs, non-plastic, non-conesive		
9 — 0.7 10 — 0.7		04	1.7					
9- 0.7	8-						SW/GW	
0.7	+		0.7					
	9-							
	-		0.7					
End of Poring	10				End of D	aring		
End of Boring					⊏iiu 0i B0	ning		
	11							
tal Borehole Depth: 10' bgs due to water.	11 –	robel - D	onth: 10'	hao duo te weter				

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Boring ID: B11-023-SB

Client : Tradepoint Atlantic

ARM Project No. : 20010211

Project Description : Sparrows Point - Parcel B11 Site Location : Sparrows Point, MD

ARM Representative : L. Perrin Checked by : M. Hritz, E.I.T.

Drilling Company : GSI

Driller : A. Berenbrok-Niblett **Drilling Equipment** : Geoprobe 7822DT

Date : 08/18/2020 Weather : Sunny, 80's

Northing (US ft) Easting (US ft)

: 559846.34 : 1457178.30

				(page 1	of 1)	Drilling Equipment . Geoplobe 7822D1		
	Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval		DESCRIPTION	nscs	REMARKS
ľ	0-				(0-6 8') N	on-native SAND with SLAG/BRICK GRAVEL,		
	4		-	B11-023-SB-1	medium o	dense, brown with trace gray and yellow, dry, ic, non-cohesive		
	1-				non-piasi	ic, non-conesive		
	.		0.3					
			0.3					
	2-							
	1	92	0.3					
	3-							
	-		0.4				SW/GW	
5	4-							
	-		0.2	B11-023-SB-5				
70-110	5-							
Foga	-		-					
200	6-							
ig rog	-		0.3					
	7-				(6.8-10')	SLAG and non-native GRAVEL, fine to coarse, with		
2		90	0.1		dark brov	AG, SAND-sized and trace SILT, medium dense, vn, moist then wet at 8' bgs, non-plastic,		
	8-				non-cohe	sive		Wet at 8' bgs
	٦		0.4				GW/SW	wordt o bys
202			0.4					
5	9-							
	1		0.9					
2	10			ı	End of Bo	pring		
) Jecusiii	+							
1 2	11-							
έľ								

12-21-2020 \\mdfs01\Projects\EnviroAnalytics Group\20010211 EAG Parcel B11\Boring Logs\2\_bor Logs\B11-023-SB.bor

Total Borehole Depth: 10' bgs due to water.



Boring ID: B11-024-SB

(page 1 of 1)

Client : Tradepoint Atlantic

ARM Project No. : 20010211

Project Description : Sparrows Point - Parcel B11 Site Location : Sparrows Point, MD

ARM Representative : L. Perrin Checked by : M. Hritz, E.I.T. : GSI/Connelly Drilling Company

Driller

Drilling Equipment : Geoprobe 7822DT/Sonic Date : 08/12/2020; 10/19/2020

Weather : Sunny, 90's; Overcast 60's

Northing (US ft) : 560045.43

Easting (US ft) : 1457893.25 : Don Marchese/R. Mohler

			(page 1	of 1)			
Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval		DESCRIPTION	nscs	REMARKS
0-		0.3	B11-024-SB-1	(0-0.8') N SILT den	Ion-native SAND with SLAG GRAVEL and some use, loose to medium dense, brown, dry, non-plastic,	SW/GW	
1- - 2-		1.4		1 \	SAND, fine to coarse, yellow, dry, non-plastic,	sw	
- 3-	100	2.9		(2.7-3') N	Ion-native SAND and SLAG GRAVEL, dark brown,	SW/GW	
4- -		14.3 11.0	B11-024-SB-5	dry, non- (3-7') SL	plastic, non-cohesive AG, SAND and GRAVEL-sized, with SILT, loose, y, non-plastic, non-cohesive, lens of clay 6.5-6.7'		
5- - 6-		4.8				SW/GW	
7-	<u> </u> 	0.0					
-	100	0.0		(7-8') CL cohesive	AY with SILT, firm, black, moist, low plasticity,	CL	
8- - 9-		0.0		to GRAV	LAG, SAND and GRAVEL-sized, with SILT, grading EL, brownish black grading to gray, loose, moist at 9' bgs, non-plastic, non-cohesive		Wet at 9' bgs
- 10-		2.7					
- 11 –		0.0					
12-		0.0				SW/GW	
-	100	8.3					
13- - 14-		23.5					
- 15—		-					
- 15				End of B	oring		
16-		45°	haradaa t				
i otal B	orehole D	epth: 15'	bgs due to water				

Total Borehole Depth: 15' bgs due to water.



Boring ID: B11-025-SB

12-21-2020 \\mdfs01\Projects\EnviroAnalytics Group\20010211 EAG Parcel B11\Boring Logs\2\_bor Logs\B11-025-SB.bor

(page 1 of 1)

Client : Tradepoint Atlantic

ARM Project No. : 20010211

Project Description : Sparrows Point - Parcel B11 Site Location : Sparrows Point, MD

ARM Representative : L. Perrin Checked by : M. Hritz, E.I.T.

Drilling Company : GSI

Driller : Don Marchese; R. Mohler Drilling Equipment : Geoprobe 7822DT; Sonic

Date : 08/12/2020; 10/6/2020

Weather : Sunny, 90's

Northing (US ft) : 561213.08

Easting (US ft) : 1458079.53

			(page 1	or 1)			
Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval		DESCRIPTION	nscs	REMARKS
0-				(0-0 5) SI	LTY SAND with trace SLAG GRAVEL, loose to	SM	
		384.4	B11-025-SB-1	medium (	dense, very dark brown, dry, non-plastic,	Sivi	
1- - 2-		349.0		(0.5-10') GRAVEL brown at	Non-native SAND and SLAG, SAND and -sized, medium dense, light grayish brown then dark 1.5' bgs, dry then very moist at 9' bgs, non-plastic,	<u> </u>	
-	100	9.0		non-cohe	sive		
3-		11.8	B11-025-SB-4				
4-		8.7					
5						SW/GW	
-		3.4				311/311	
6- -		9.2					
7-	400	0.7					
8-	100	3.7					
-		7.2					
9-		17.5	B11-025-SB-10				
10-		17.5	B11-020-0B-10		THE CRAVEL locate deals are sich brown west		Wet at 10' bgs
-		2.3		non-plast	FILL GRAVEL, loose, dark grayish brown, wet, ic, non-cohesive, angular	GW	
11- - 12-		3.6		GRAVEL dark brov	FILL, SAND-sized, medium to very coarse, and -sized, fine to coarse, loose to medium dense, very vn with some yellow, wet, non-plastic,		
	100	6.7		non-cohe	sive, gravel size and quantity decreases with depth		
13-		1.0				SW/GP	
14		1.0					
+		3.0					
15		1	1	End of Bo	oring		<u> </u>
16-							
	orehole D	epth: 15'	bgs due to water	-			



Boring ID: B11-026-SB

Client : Tradepoint Atlantic

ARM Project No. : 20010211

Project Description : Sparrows Point - Parcel B11
Site Location : Sparrows Point, MD

ARM Representative : L. Perrin/ J. Barna
Checked by : M. Hritz, E.I.T.
Drilling Company : GSI/Connelly

R. Mohler

Date : 08/18/2020; 10/19/2020

Weather : Sunny, 80's

Northing (US ft) : 560859.08 Easting (US ft) : 1456102.47

Drilling Company : GSI/Connelly Easting (US ft) : 1456102.4

Driller : A. Berenbrok-Niblett/

			(page 1	of 1)	Drilling Equipment	: Geoprobe 7822DT/ Sor	nic		
Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval		DESC	RIPTION		USCS	REMARKS
0- 1- 2-		1.0 0.6 59.6	B11-026-SB-1	SAND, m	nedium dense to dens	AVEL-sized, with non-nase, grayish brown with liv, non-plastic, non-cohe	ight	SW/GW	
3- 4- -	100	32.5 58.1		(2.5-8') S loose, bla	SLAG, SAND and GR. ack, dry, no plasticity,	AVEL-sized, with some no cohesion	SILT,		Trace wood at 4' bgs
5— 6— 7—	100	50.9 57.4 144.1						SW/GW	
8- 9- - 10-		402.9 149.8	B11-026-SB-9 B11-026-SB-10			ck, dry, low plasticity, co		CL	
- 11 – - 12 –	100	172.2 155.8 303.8		(10-21') S loose, bla cohesion	ack, dry then wet at 1	AVEL-sized, with some 4' bgs, no plasticity, no	e SILT,		
13— 14— - 15—		445.0 356.5							Wet at 14' bgs
16 — 17 —	100	- - -						SW/GW	Product sheen from 14-21' bgs
18— 19— - 20—	15-	-							
21 <del>-</del> 22 <del>-</del> 22 <del>-</del>	100	-		End of Bo	oring				

Total Borehole Depth: 21' bgs due to product piezometer and water.



Boring ID: B11-027-SB

Client : Tradepoint Atlantic

ARM Project No. : 20010211

Project Description : Sparrows Point - Parcel B11 Site Location : Sparrows Point, MD

ARM Representative : L. Perrin Checked by : M. Hritz, E.I.T.

Drilling Company : GSI

Driller : A. Berenbrok-Niblett **Drilling Equipment** : Geoprobe 7822DT

Date : 08/16/2020 Weather : Sunny, 80's

Northing (US ft) : 560698.77

Easting (US ft) : 1455596.25

			(page 1	of 1)			
Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval		DESCRIPTION	USCS	REMARKS
0-				(0, 0!) N	" CAND " LODAVE		
-		-	B11-027-SB-1	fine to co	n-native SAND, very fine to medium, and GRAVEL, arse, with some BRICK, medium dense, brown, ve n-plastic, non-cohesive	ry	
1-							
-		-				SW/GW	
2-							
-	40	-					
3-				(3-5') CL/ plasticity,	AY, very firm, very dark gray, dry to moist, medium cohesive		
-		1.2					
4-						CL	Trace to slight odor from 3-7' bgs
-		2.2	B11-027-SB-5				
5—				(5-7') Noi	n-native SAND, very fine to medium, and GRAVEL arse, medium dense, very dark brown, wet,	,	
-		4.8		non-plast	clic, non-cohesive		
6-	100					SW/GW	Wet at 6' bgs
-		0.2					
7							
				End of Bo	oring		
1							
8-							
Total Pa	nahala D	onth: 7' h	as due to refusal	and water			

Total Borehole Depth: 7' bgs due to refusal and water.

12-21-2020 \\mdfs01\Projects\EnviroAnalytics Group\20010211 EAG Parcel B11\Boring Logs\2\_bor Logs\B11-027-SB.bor



Boring ID: B11-028-SB

(page 1 of 1)

Client : Tradepoint Atlantic

ARM Project No. : 20010211

Project Description : Sparrows Point - Parcel B11 Site Location : Sparrows Point, MD

ARM Representative : L. Perrin Checked by : M. Hritz, E.I.T.

Drilling Company : GSI

Driller : Don Marchese **Drilling Equipment** : Geoprobe 7822DT Date : 08/10/2020 Weather : Sunny, 100's

Northing (US ft)

: 560370.02 Easting (US ft) : 1454875.33

			(page 1	of 1)			
Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval		DESCRIPTION	nscs	REMARKS
0-				(0-8 2') N	on-native SAND, and SLAG, SAND and		
1-		-	B11-028-SB-1	GRAVEL	-sized, medium dense to dense, dark brown and rown, dry then very moist at 7.5' bgs, non-plastic,		
		_					
2-							
_ ]	74	0.1					
3-							
		0.1					
4-		0.1					
Ĭ		0.1				SW/GW	
5		0.1					
		0.4					
6-		0.4					
		0.4					
_		0.1	D44 000 0D 7.5				
7-			B11-028-SB-7.5				
	100	9.2					Wet at 7.5' bgs
8-				(8.2-10')	SILT with some SAND grading to SILT, soft, dark		
1		0.3		brown the	en black at 9.5' bgs, very moist, low plasticity,		
9-						ML	Oil-like odor 9-10' bgs
		0.6					
10			1	End of Bo	oring		
+							
11-							

12-21-2020 \\mdfs01\Projects\EnviroAnalytics Group\20010211 EAG Parcel B11\Boring Logs\2\_bor Logs\B11-028-SB.bor



Boring ID: B11-029-SB

Client : Tradepoint Atlantic

ARM Project No. : 20010211

Project Description : Sparrows Point - Parcel B11 Site Location : Sparrows Point, MD

ARM Representative : L. Perrin Checked by : M. Hritz, E.I.T.

Drilling Company : GSI

Driller : Don Marchese **Drilling Equipment** : Geoprobe 7822DT Date : 08/10/2020 Weather : Sunny, 100's

Northing (US ft)

: 560604.55 Easting (US ft) : 1454606.83

			(page 1	of 1)			
Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval		DESCRIPTION	nscs	REMARKS
0-		-	B11-029-SB-1	(0-0.7') N GRAVEL	on-native SAND with SILT and some SLAG , loose, dark brown, dry, non-plastic, non-cohesive	e sw	
1-				(0.7-8.5') dark gray bgs, non-	SLAG, SAND and GRAVEL-sized, medium dense rish brown and grayish brown, dry then wet at 8.4' plastic, non-cohesive	9,	
2-		0.1					
-	86	0.1					
3-		0.0					
4-							
5-		0.0	B11-029-SB-5			SW/GW	
-		0.1					
6- - 7-	100	0.1					
-		0.0					
8-		0.0		End of Bo	pring		Wet at 8.4' bgs
9-					5		

12-21-2020 \\mdfs01\Projects\EnviroAnalytics Group\20010211 EAG Parcel B11\Boring Logs\2\_bor Logs\B11-029-SB.bor

Total Borehole Depth: 8.5' bgs due to refusal and water.



Boring ID: B11-030-SB

(page 1 of 1)

Client : Tradepoint Atlantic

ARM Project No. : 20010211

Project Description : Sparrows Point - Parcel B11 Site Location : Sparrows Point, MD

ARM Representative : L. Perrin Checked by : M. Hritz, E.I.T.

Drilling Company : GSI

Driller : Don Marchese Drilling Equipment : Geoprobe 7822DT Date : 08/10/2020

Weather : Sunny, 100's

Northing (US ft) : 561058.37

Easting (US ft) : 1454483.47

			(page 1	of 1)			
Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval		DESCRIPTION	nscs	REMARKS
0-				(0-4') Noi	n-native SAND with SLAG GRAVEL, very fine to		
-		-	B11-030-SB-1	medium,	medium dense, brown and gray, dry, non-plastic,		
1-				TION-CONC	Sive		
		0.0					
		0.0					
2-						SW/GW	
+	86	0.0					
3-							
4		0.0					
4-				(4.401) 01	AC CAND and CDAVEL sized and investors do		
5 <del></del>		0.1	B11-030-SB-5	dense, br moist to v non-cohe	LAG, SAND and GRAVEL-sized, medium dense to rown to grayish brown with strong brown, dry then very moist at 7.1' bgs then wet at 8' bgs, non-plastic, sive		
		0.1					
_ ]		0.1					
6-							
-		0.1					
7-						SW/GW	
-	90	0.1					
8-							Wet at 8' bgs
		1.0					
9-							
3		0.7					
1		0.7					
10			ı	End of Bo	oring	1	
+							
11-							
Total Bo	rehole D	epth: 10'	bgs due to water				

12-21-2020 \\mdfs01\Projects\EnviroAnalytics Group\20010211 EAG Parcel B11\Boring Logs\2\_bor Logs\B11-030-SB.bor



Boring ID: B11-031-SB

(page 1 of 1)

Client : Tradepoint Atlantic

ARM Project No. : 20010211

Project Description : Sparrows Point - Parcel B11 Site Location : Sparrows Point, MD

ARM Representative : L. Perrin Checked by : M. Hritz, E.I.T.

Drilling Company : GSI

Driller : Don Marchese; R. Mohler **Drilling Equipment** : Geoprobe 7822DT/Sonic

Date : 08/10/2020; 10/05/2020

Weather : Sunny, 100's; Sunny 70's

Northing (US ft) : 561295.21

Easting (US ft) : 1454886.46

				(page 1	of 1)			
	Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval		DESCRIPTION	nscs	REMARKS
ſ	0-				(0.3') Nor	n-native SAND, very fine to fine, with some		
	+		0.0	B11-031-SB-1	SLAG/BF	RICK GRAVEL, very dark brown with trace yellow		
	1-				and gray,	dry, non-plastic, non-cohesive		
	-		0.0				SW/GW	
	2-							
	أ م	96	0.0					
	3-		5.4		GRAVEL	on-native SAND, fine to coarse, with SLAG/BRICK , fine to coarse, dry then moist 7.5-10' bgs, ic, non-cohesive, with some SILT		
	4-		4.0	B11-031-SB-5	p.acc			
	5		4.0	B11-031-3B-3				
			-					
5	6-							
2	4		-					
2	7-						SW/GW	
2	4	50	-					Very large metallic fragment at 7.5' bgs
מייםס-ויס-ויםיפעטם ומקבאיפעטם עניים מיים מיים ויסיום ויסיום ויסיום ויסיום ויסיום ויסיום ויסיום ויסיום ויסיום וי	8-							7.0 bgs
1			4.7					
9 1	9-		1.0	B11-031-SB-10				
5	10		1.0	B11-031-3B-10				
			-					
5	11-				(11 <sub>-</sub> 15') S	SLAG, SAND and GRAVEL-sized with SILT, dark		Wet at 11' bgs
)	-		-		brown, w	et, non-plastic, non-cohesive		
	12-							
2	40	80	-				0.440	
5	13		1.4				GW/SW	
al yellos	14-		1.4					
godesiani Miloni ai yuda oʻloda 1200 iloz			9.6					
3	15				End of Bo	pring		
200	+				EIIU OI BO	oring		
202	16-							
5 I								

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Total Borehole Depth: 15' bgs due to water.



Boring ID: B11-032-SB

(page 1 of 1)

Client : Tradepoint Atlantic

ARM Project No. : 20010211

Project Description : Sparrows Point - Parcel B11 Site Location : Sparrows Point, MD

ARM Representative : L. Perrin Checked by : M. Hritz, E.I.T.

Drilling Company : GSI

Driller : Don Marchese **Drilling Equipment** : Geoprobe 7822DT Date : 08/10/2020 Weather : Sunny, 100's

Northing (US ft) Easting (US ft)

: 561546.41 : 1455364.86

			(page 1				
Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval		DESCRIPTION	nscs	REMARKS
0-				(0.51) 1.1	" OAND 5 / LOLAG ODA/51		1
-		0.0	B11-032-SB-1	(0-5') No with trace non-plas	n-native SAND, fine to coarse, and SLAG GRAVEL e SILT, medium dense, brown to grayish brown, dry, tic, non-cohesive		
1-							No water encountered
-		0.1					
2-							
-	80	1.2				SW/GW	
3-							
-		0.0					
4-							
		0.0	B11-032-SB-5				
5				End of B	oring		
-				LIIQ OI D	oring		
6-							

12-21-2020 \\mdfs01\Projects\EnviroAnalytics Group\20010211 EAG Parcel B11\Boring Logs\2\_bor Logs\B11-032-SB.bor

Total Borehole Depth: 5' bgs due to refusals.



Boring ID: B11-033-SB

12-21-2020 \\mdfs01\Projects\EnviroAnalytics Group\20010211 EAG Parcel B11\Boring Logs\2\_bor Logs\B11-033-SB.bor

(page 1 of 1)

Client : Tradepoint Atlantic

ARM Project No. : 20010211

Project Description : Sparrows Point - Parcel B11
Site Location : Sparrows Point, MD

ARM Representative : L. Perrin
Checked by : M. Hritz, E.I.T.

Drilling Company : GSI

Driller : Don Marchese
Drilling Equipment : Geoprobe 7822DT

Date : 08/10/2020 Weather : Sunny, 100's

Northing (US ft)

: 561612.90

Easting (US ft) : 1455539.34

				(page 1	of 1)			
	Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval		DESCRIPTION	nscs	REMARKS
	0- - 1-		-	B11-033-SB-1	(0-12') No GRAVEL red, gray,	on-native SAND, very fine to coarse, and SLAG , dark brown and grayish brown with trace white, and yellow, dry, non-plastic, non-cohesive		
	_		0.0					
	2-	80	0.0					
	3- -		0.5					
	4-		0.0					
	5-		-				CIAVICIA	A Name of the state of the stat
	6- -		29.7	B11-033-SB-7			SW/GW	No water encountered
	7- -	84	2.8					
	8-		1.3					
	9- - 10-		0.0	B11-033-SB-10				
5000	-	400	0.0					
200 (100 100 100 100 100 100 100 100 100	11 <i>-</i>	100	0.0					
	12 <del>-</del>			<u> </u>	End of Bo	oring		
_	13 – Total Bo	orehole D	epth: 12'	bgs due to refusa	als.			
: [	i otal DC	VICTIOIS D	opui. 12	aga due lo reida	41J.			

## **APPENDIX C**

#### Parcel B11 - PID Calibration Log

PROJECT NAME	: Area B, Paro	cel B11 Phase II		SAMPLER NAME: L. Perrin/J. Barna						
PROJECT NUMB	BER: 2001021	1		DATE: Augus	t 2020 - October 2020	PAGE 1 of 1				
DATE/TIME	SAMPLER INITIALS	PID SERIAL#	FRESH AIR CAL	STANDARD	STANDARD CONCENTRATION	METER READING	COMMENTS			
8/10/2020 9:30	LLP	592-916391	0.0	Isobutylene	100 ppm	100.0	-			
8/11/2020 8:25	LLP	592-916391	0.0	Isobutylene	100 ppm	100.0	-			
8/12/2020 7:50	LLP	592-916391	0.0	Isobutylene	100 ppm	100.3	-			
8/13/2020 7:50	LLP	592-916391	0.0	Isobutylene	100 ppm	100.3	-			
8/17/2020 8:15	LLP	592-916391	0.0	Isobutylene	100 ppm	100.6	-			
8/18/2020 8:30	LLP	592-916391	0.0	Isobutylene	100 ppm	99.9	-			
10/5/2020 11:15	LLP	592-916391	0.0	Isobutylene	100 ppm	100.1	-			
10/6/2020 8:30	LLP	592-910776	0.0	Isobutylene	100 ppm	100.0	-			
10/7/2020 9:00	LLP	592-910776	0.0	Isobutylene	100 ppm	100.1	-			
10/8/2020 8:15	LLP	592-910776	0.0	Isobutylene	100 ppm	100.3				
10/19/2020 8:20	JMB	592-910776	0.0	Isobutylene	100 ppm	98.0	-			

## **APPENDIX D**

#### Parcel B11 - IDW Drum Log

Drum Identification Number	Designation	Activity/Phase	Contents	Open Date
1418-Soil-8/10/20-B11	Non-Haz	Parcel B11 Phase II Investigation	Soil	8/10/2020
1419-Decon Water-8/10/20-B11	Non-Haz	Parcel B11 Phase II Investigation	Water	8/10/2020
1431-Soil-10/5/20-B11/B17	Non-Haz	Parcel B11 Phase II Investigation	Soil	10/5/2020
1432-Soil-10/5/20-B11	Non-Haz	Parcel B11 Phase II Investigation	Soil	10/5/2020
1433-Decon Water-10/5/20-B11/B17/B9	Non-Haz	Parcel B11 Phase II Investigation	Water	10/5/2020
1442-Soil-10/19/2020-B11	Non-Haz	Parcel B11 Phase II Investigation	Soil	10/19/2020
1446-Decon Water-10/19/2020-B20/A15/B11	Non-Haz	Parcel B11 Phase II Investigation	Water	10/19/2020

# **APPENDIX E**

### QA/QC Tracking Log

Trip				Trip			
Blank:	<u>Date:</u>	Sample IDs:		<u>Blank:</u>	<u>Date:</u>	Sample IDs:	1
		1) B11-033-SB-1				1) B11-015-SB-5	-
		2) B11-033-SB-7	QA/QC for non-PAH Soil Data			2) B11-005-SB-2	QA/QC for non-PAH Soil Data
		3) B11-033-SB-10	non-r Arr Son Data			3) B11-006-SB-3	- Holl-FAIT Soll Data
		4) B11-032-SB-1			0.47/2020	4) B11-006-SB-7	
		5) B11-032-SB-5	•	TB 1	8/17/2020	5) B11-006-SB-12	
TB 1	8/10/2020	6) B11-031-SB-1				6) B11-008-SB-2	
		7) B11-030-SB-1	Duplicate: B11-014-SB-5			7) B11-008-SB-6	Duplicate: B11-006-SB-7
		8) B11-030-SB-5	Date: 8/11/2020			8) B11-026-SB-1	Date: 8/17/2020
		9) B11-029-SB-1	MS/MSD: B11-017-SB-5			9) B11-027-SB-1	MS/MSD: B11-008-SB-6
		10) B11-029-SB-5	Date: 8/11/2020			10) B11-027-SB-5	Date: 8/17/2020
		11) B11-028-SB-1	Field Blank:	TB 1	8/18/2020	11) B11-023-SB-1	Field Blank:
		12) B11-028-SB-7.5	Date: 8/11/2020			12) B11-023-SB-5	Date: 8/17/2020
		13) B11-014-SB-1	<u>Eq. Blank:</u>			13) B11-007-SB-1	Eq. Blank:
		14) B11-014-SB-5	Date: 8/11/2020			14) B11-007-SB-5	Date: 8/17/2020
		15) B11-013-SB-1				15) B11-031-SB-5	
TB 1	8/11/2020	16) B11-016-SB-1		TB 1	10/5/2020	16) B11-031-SB-10	
151	0/11/2020	17) B11-017-SB-1		151	10/3/2020	17) B11-013-SB-4	
		18) B11-017-SB-5				18) B11-013-SB-10	
		19) B11-004-SB-1		TB 1	10/6/2020	19) B11-016-SB-4	
		20) B11-004-SB-4			10/0/2020	20) B11-016-SB-10	
	-						
		1) B11-003-SB-1				1) B11-025-SB-4	
		2) B11-003-SB-5	QA/QC for			2) B11-025-SB-10	QA/QC for
		3) B11-020-SB-1	non-PAH Soil Data			3) B11-011-SB-2	non-PAH Soil Data
		4) B11-020-SB-4.5				4) B11-011-SB-9	
		5) B11-021-SB-1				5) B11-005-SB-5	
		6) B11-021-SB-4				6) B11-010-SB-2	
		7) B11-018-SB-1	Duplicate: B11-018-SB-8			7) B11-010-SB-6	Duplicate: B11-005-SB-5
		8) B11-018-SB-8	Date: 8/12/2020	TB 1	10/7/2020	8) B11-009-SB-4	Date: 10/7/2020
		9) B11-018-SB-10	MS/MSD: B11-001-SB-5			9) B11-009-SB-8	MS/MSD: B11-026-SB-9
TB 1	8/12/2020	10) B11-019-SB-1	Date: 8/13/2020			10) B11-012-SB-2	Date: 10/19/2020
		11) B11-019-SB-5	Field Blank:			11) B11-012-SB-8	Field Blank:
		12) B11-022-SB-1	Date: 8/12/2020			12) B11-026-SB-9	Date: 10/8/2020
		13) B11-022-SB-5	Eq. Blank:	TB 1	10/19/2020	13) B11-026-SB-10	Eq. Blank:
		14) B11-024-SB-1	Date: 8/12/2020			14) B11-024-SB-5	Date: 10/8/2020
		15) B11-025-SB-1				15)	
		16) B11-001-SB-1				16)	
		17) B11-001-SB-5				17)	]
TB1	8/13/2020	18) B11-002-SB-1				18)	]
		19) B11-002-SB-5				19)	]
		20) B11-015-SB-1				20)	]

Soil samples with a sustained PID reading of 10 ppm or greater were collected for VOCs. VOC samples were placed in a cooler with a trip blank.

### QA/QC Tracking Log

<u>Trip</u> Blank:	Date:	Sample IDs:		<u>Trip</u> Blank:	Date:	Sample IDs:	
2	Date.	1) B11-033-SB-1			<u>Date.</u>	1) B11-015-SB-5	
		2) B11-033-SB-7	QA/QC for			2) B11-005-SB-2	QA/QC for
		3) B11-033-SB-10	PAH Soil Data			3) B11-006-SB-3	PAH Soil Data
		,					
		4) B11-032-SB-1		TB 1	8/17/2020		-
		5) B11-032-SB-5		151	0/17/2020	5) B11-006-SB-12	_
TB 1	8/10/2020	6) B11-031-SB-1	David No. 11 014 CD 5			6) B11-008-SB-2	D1'
		7) B11-030-SB-1	<u>Duplicate:</u> B11-014-SB-5			7) B11-008-SB-6	<u>Duplicate:</u> B11-006-SB-7
		8) B11-030-SB-5	Date: 8/11/2020			8) B11-026-SB-1	Date: 8/17/2020
		9) B11-029-SB-1	MS/MSD: B11-017-SB-5 Date: 8/11/2020			9) B11-027-SB-1	MS/MSD: B11-008-SB-6
		10) B11-029-SB-5		TB 1	8/18/2020	10) B11-027-SB-5	Date: 8/17/2020
		11) B11-028-SB-1	Field Blank:	161	6/16/2020	11) B11-023-SB-1	Field Blank:
		12) B11-028-SB-7.5	Date: 8/11/2020			12) B11-023-SB-5	Date: 8/17/2020
		13) B11-014-SB-1	Eq. Blank:			13) B11-007-SB-1	Eq. Blank:
		14) B11-014-SB-5	Date: 8/11/2020			14) B11-007-SB-5	Date: 8/17/2020
		15) B11-013-SB-1				15) B11-031-SB-5	
TB 1	8/11/2020	16) B11-016-SB-1		TB 1	10/5/2020	16) B11-031-SB-10	
		17) B11-017-SB-1				17) B11-013-SB-4	-
		18) B11-017-SB-5				18) B11-013-SB-10	=
		19) B11-004-SB-1		TB 1	10/6/2020	19) B11-016-SB-4	
		20) B11-004-SB-4				20) B11-016-SB-10	
1 1	Ī			l i	Ī		
		1) B11-003-SB-1				1) B11-025-SB-4	
		2) B11-003-SB-5	QA/QC for			2) B11-025-SB-10	QA/QC for
		3) B11-020-SB-1	PAH Soil Data			3) B11-011-SB-2	PAH Soil Data
		3) B11-020-SB-1 4) B11-020-SB-4.5				3) B11-011-SB-2 4) B11-011-SB-9	
		· ·					
		4) B11-020-SB-4.5				4) B11-011-SB-9	
		4) B11-020-SB-4.5 5) B11-021-SB-1				4) B11-011-SB-9 5) B11-005-SB-5	
		4) B11-020-SB-4.5 5) B11-021-SB-1 6) B11-021-SB-4	PAH Soil Data	TB 1	10/7/2020	4) B11-011-SB-9 5) B11-005-SB-5 6) B11-010-SB-2	PAH Soil Data
		4) B11-020-SB-4.5 5) B11-021-SB-1 6) B11-021-SB-4 7) B11-018-SB-1	PAH Soil Data  Duplicate: B11-018-SB-8	TB 1	10/7/2020	4) B11-011-SB-9 5) B11-005-SB-5 6) B11-010-SB-2 7) B11-010-SB-6	PAH Soil Data  Duplicate: B11-005-SB-5
TB 1	8/12/2020	4) B11-020-SB-4.5 5) B11-021-SB-1 6) B11-021-SB-4 7) B11-018-SB-1 8) B11-018-SB-8	PAH Soil Data    Duplicate: B11-018-SB-8     Date: 8/12/2020	TB 1	10/7/2020	4) B11-011-SB-9 5) B11-005-SB-5 6) B11-010-SB-2 7) B11-010-SB-6 8) B11-009-SB-4	PAH Soil Data  Duplicate: B11-005-SB-5 Date: 10/7/2020
TB 1	8/12/2020	4) B11-020-SB-4.5 5) B11-021-SB-1 6) B11-021-SB-4 7) B11-018-SB-1 8) B11-018-SB-8 9) B11-018-SB-10	PAH Soil Data    Duplicate: B11-018-SB-8     Date: 8/12/2020     MS/MSD: B11-001-SB-5	TB 1	10/7/2020	4) B11-011-SB-9 5) B11-005-SB-5 6) B11-010-SB-2 7) B11-010-SB-6 8) B11-009-SB-4 9) B11-009-SB-8	PAH Soil Data  Duplicate: B11-005-SB-5 Date: 10/7/2020  MS/MSD: B11-026-SB-9
TB 1	8/12/2020	4) B11-020-SB-4.5 5) B11-021-SB-1 6) B11-021-SB-4 7) B11-018-SB-1 8) B11-018-SB-8 9) B11-018-SB-10 10) B11-019-SB-1	Duplicate: B11-018-SB-8     Date: 8/12/2020     MS/MSD: B11-001-SB-5     Date: 8/13/2020	TB 1	10/7/2020	4) B11-011-SB-9 5) B11-005-SB-5 6) B11-010-SB-2 7) B11-010-SB-6 8) B11-009-SB-4 9) B11-009-SB-8 10) B11-012-SB-2	Duplicate: B11-005-SB-5     Date: 10/7/2020     MS/MSD: B11-026-SB-9     Date: 10/19/2020
TB 1	8/12/2020	4) B11-020-SB-4.5 5) B11-021-SB-1 6) B11-021-SB-4 7) B11-018-SB-1 8) B11-018-SB-8 9) B11-018-SB-10 10) B11-019-SB-1 11) B11-019-SB-5	PAH Soil Data	TB 1	10/7/2020	4) B11-011-SB-9 5) B11-005-SB-5 6) B11-010-SB-2 7) B11-010-SB-6 8) B11-009-SB-4 9) B11-009-SB-8 10) B11-012-SB-2 11) B11-012-SB-8 12) B11-026-SB-9	PAH Soil Data  Duplicate: B11-005-SB-5 Date: 10/7/2020  MS/MSD: B11-026-SB-9 Date: 10/19/2020  Field Blank:
TB 1	8/12/2020	4) B11-020-SB-4.5 5) B11-021-SB-1 6) B11-021-SB-4 7) B11-018-SB-1 8) B11-018-SB-8 9) B11-018-SB-10 10) B11-019-SB-1 11) B11-019-SB-1 12) B11-022-SB-1	Duplicate: B11-018-SB-8     Date: 8/12/2020     MS/MSD: B11-001-SB-5     Date: 8/13/2020     Field Blank:     Date: 8/12/2020			4) B11-011-SB-9 5) B11-005-SB-5 6) B11-010-SB-2 7) B11-010-SB-6 8) B11-009-SB-4 9) B11-009-SB-8 10) B11-012-SB-2 11) B11-012-SB-8 12) B11-026-SB-9	PAH Soil Data    Duplicate: B11-005-SB-5     Date: 10/7/2020     MS/MSD: B11-026-SB-9     Date: 10/19/2020     Field Blank:     Date: 10/8/2020
TB 1	8/12/2020	4) B11-020-SB-4.5 5) B11-021-SB-1 6) B11-021-SB-4 7) B11-018-SB-1 8) B11-018-SB-8 9) B11-018-SB-10 10) B11-019-SB-1 11) B11-019-SB-5 12) B11-022-SB-1 13) B11-022-SB-5	Duplicate: B11-018-SB-8     Date: 8/12/2020     MS/MSD: B11-001-SB-5     Date: 8/13/2020     Field Blank:     Date: 8/12/2020     Eq. Blank:			4) B11-011-SB-9 5) B11-005-SB-5 6) B11-010-SB-2 7) B11-010-SB-6 8) B11-009-SB-4 9) B11-009-SB-8 10) B11-012-SB-2 11) B11-012-SB-8 12) B11-026-SB-9 13) B11-026-SB-10	PAH Soil Data    Duplicate: B11-005-SB-5     Date: 10/7/2020     MS/MSD: B11-026-SB-9     Date: 10/19/2020     Field Blank:     Date: 10/8/2020     Eq. Blank:
TB 1	8/12/2020	4) B11-020-SB-4.5 5) B11-021-SB-1 6) B11-021-SB-4 7) B11-018-SB-1 8) B11-018-SB-8 9) B11-018-SB-10 10) B11-019-SB-1 11) B11-019-SB-5 12) B11-022-SB-1 13) B11-022-SB-5 14) B11-024-SB-1	Duplicate: B11-018-SB-8     Date: 8/12/2020     MS/MSD: B11-001-SB-5     Date: 8/13/2020     Field Blank:     Date: 8/12/2020     Eq. Blank:			4) B11-011-SB-9 5) B11-005-SB-5 6) B11-010-SB-2 7) B11-010-SB-6 8) B11-009-SB-4 9) B11-009-SB-8 10) B11-012-SB-2 11) B11-012-SB-8 12) B11-026-SB-9 13) B11-026-SB-10 14) B11-024-SB-5	PAH Soil Data    Duplicate: B11-005-SB-5     Date: 10/7/2020     MS/MSD: B11-026-SB-9     Date: 10/19/2020     Field Blank:     Date: 10/8/2020     Eq. Blank:
TB 1	8/12/2020	4) B11-020-SB-4.5 5) B11-021-SB-1 6) B11-018-SB-1 8) B11-018-SB-8 9) B11-018-SB-10 10) B11-019-SB-1 11) B11-019-SB-5 12) B11-022-SB-1 13) B11-022-SB-5 14) B11-024-SB-1 15) B11-025-SB-1	Duplicate: B11-018-SB-8     Date: 8/12/2020     MS/MSD: B11-001-SB-5     Date: 8/13/2020     Field Blank:     Date: 8/12/2020     Eq. Blank:			4) B11-011-SB-9 5) B11-005-SB-5 6) B11-010-SB-2 7) B11-010-SB-6 8) B11-009-SB-4 9) B11-009-SB-8 10) B11-012-SB-2 11) B11-012-SB-8 12) B11-026-SB-9 13) B11-026-SB-10 14) B11-024-SB-5 15)	PAH Soil Data    Duplicate: B11-005-SB-5     Date: 10/7/2020     MS/MSD: B11-026-SB-9     Date: 10/19/2020     Field Blank:     Date: 10/8/2020     Eq. Blank:
TB 1	8/12/2020 8/13/2020	4) B11-020-SB-4.5 5) B11-021-SB-1 6) B11-021-SB-4 7) B11-018-SB-1 8) B11-018-SB-10 10) B11-019-SB-1 11) B11-019-SB-5 12) B11-022-SB-1 13) B11-022-SB-1 14) B11-024-SB-1 15) B11-025-SB-1 16) B11-001-SB-1	Duplicate: B11-018-SB-8     Date: 8/12/2020     MS/MSD: B11-001-SB-5     Date: 8/13/2020     Field Blank:     Date: 8/12/2020     Eq. Blank:			4) B11-011-SB-9 5) B11-005-SB-5 6) B11-010-SB-2 7) B11-010-SB-6 8) B11-009-SB-4 9) B11-009-SB-8 10) B11-012-SB-2 11) B11-012-SB-8 12) B11-026-SB-9 13) B11-026-SB-10 14) B11-024-SB-5 15)	PAH Soil Data    Duplicate: B11-005-SB-5     Date: 10/7/2020     MS/MSD: B11-026-SB-9     Date: 10/19/2020     Field Blank:     Date: 10/8/2020     Eq. Blank:
		4) B11-020-SB-4.5 5) B11-021-SB-1 6) B11-021-SB-4 7) B11-018-SB-1 8) B11-018-SB-1 10) B11-019-SB-1 11) B11-019-SB-1 12) B11-022-SB-1 13) B11-022-SB-1 14) B11-024-SB-1 15) B11-025-SB-1 16) B11-001-SB-1 17) B11-001-SB-5	Duplicate: B11-018-SB-8     Date: 8/12/2020     MS/MSD: B11-001-SB-5     Date: 8/13/2020     Field Blank:     Date: 8/12/2020     Eq. Blank:			4) B11-011-SB-9 5) B11-005-SB-5 6) B11-010-SB-2 7) B11-010-SB-6 8) B11-009-SB-4 9) B11-009-SB-8 10) B11-012-SB-2 11) B11-012-SB-9 12) B11-026-SB-9 13) B11-026-SB-10 14) B11-024-SB-5 15) 16)	PAH Soil Data    Duplicate: B11-005-SB-5     Date: 10/7/2020     MS/MSD: B11-026-SB-9     Date: 10/19/2020     Field Blank:     Date: 10/8/2020     Eq. Blank:

## **APPENDIX F**

# **EVALUATION OF DATA COMPLETENESS Percentage of Non-Rejected Results vs Total Results**

Parameter	Parameter		Number of		Number of	Number of	
rarameter		Matrix	Validated	Detections	Dejected	Non rejected	Completeness
	Group	Matrix	Results	Detections	Rejected Results	Non-rejected Results	Completeness
Cyanide	CN	Soil	23	23	0	23	100.00%
Aluminum	Metal	Soil	23	23	0	23	100.00%
Antimony	Metal	Soil	23	6	0	23	100.00%
Arsenic	Metal	Soil	25	21	0	25	100.00%
Barium	Metal	Soil	23	23	0	23	100.00%
				23		23	
Beryllium	Metal	Soil	23		0		100.00%
Cadmium	Metal	Soil	23	23	0	23	100.00%
Chromium	Metal	Soil	23	23	0	23	100.00%
Chromium VI	Metal	Soil	23	1	4	19	82.61%
Cobalt	Metal	Soil	23	23	0	23	100.00%
Copper	Metal	Soil	23	23	0	23	100.00%
Iron	Metal	Soil	23	23	0	23	100.00%
Lead	Metal	Soil	23	22	0	23	100.00%
Manganese	Metal	Soil	24	24	0	24	100.00%
Mercury	Metal	Soil	23	22	0	23	100.00%
Nickel	Metal	Soil	23	23	0	23	100.00%
Selenium	Metal	Soil	23	1	0	23	100.00%
Silver	Metal	Soil	23	5	0	23	100.00%
Thallium	Metal	Soil	24	20	0	24	100.00%
Vanadium	Metal	Soil	23	23	0	23	100.00%
Zinc	Metal	Soil	23	23	0	23	100.00%
Aroclor 1016	PCB	Soil	13	0	0	13	100.00%
Aroclor 1221	PCB	Soil	13	0	0	13	100.00%
Aroclor 1232	PCB	Soil	13	0	0	13	100.00%
Aroclor 1242	PCB	Soil	13	0	0	13	100.00%
Aroclor 1248	PCB	Soil	13	3	0	13	100.00%
Aroclor 1254	PCB	Soil	13	0	0	13	100.00%
Aroclor 1260	PCB	Soil	13	2	0	13	100.00%
Aroclor 1262	PCB	Soil	13	0	0	13	100.00%
Aroclor 1268	PCB	Soil	13	0	0	13	100.00%
PCBs (total)	PCB	Soil	13	2	0	13	100.00%
1,1-Biphenyl	SVOC	Soil	23	13	0	23	100.00%
1,2,4,5-Tetrachlorobenzene	SVOC	Soil	23	1	0	23	100.00%
2,3,4,6-Tetrachlorophenol	SVOC	Soil	23	0	8	15	65.22%
2,4,5-Trichlorophenol	SVOC	Soil	23	0	6	17	73.91%
2,4,6-Trichlorophenol	SVOC	Soil	23	0	6	17	73.91%
2,4-Dichlorophenol	SVOC	Soil	23	0		17	73.91%
	SVOC		23	0	6	17	
2,4-Dimethylphenol		Soil			6		73.91%
2,4-Dinitrophenol	SVOC	Soil	23	0	9	14	60.87%
2,4-Dinitrotoluene	SVOC	Soil	23	0	0	23	100.00%
2,6-Dinitrotoluene	SVOC	Soil	23	0	0	23	100.00%
2-Chloronaphthalene	SVOC	Soil	23	0	0	23	100.00%
2-Chlorophenol	SVOC	Soil	23	0	6	17	73.91%
2-Methylnaphthalene	SVOC	Soil	23	23	0	23	100.00%
2-Methylphenol	SVOC	Soil	23	0	6	17	73.91%
2-Nitroaniline	SVOC	Soil	23	0	0	23	100.00%
3&4-Methylphenol(m&p Cresol)	SVOC	Soil	23	2	5	18	78.26%
3,3'-Dichlorobenzidine	SVOC	Soil	23	0	0	23	100.00%
4-Chloroaniline	SVOC	Soil	23	0	0	23	100.00%
4-Nitroaniline	SVOC	Soil	23	0	0	23	100.00%
Acenaphthene	SVOC	Soil	23	21	0	23	100.00%
Acenaphthylene	SVOC	Soil	23	23	0	23	100.00%
Acetophenone	SVOC	Soil	23	4	0	23	100.00%

# **EVALUATION OF DATA COMPLETENESS Percentage of Non-Rejected Results vs Total Results**

	_		NT 1 C		NT 1 C	NT 1 C	
Domomoton	Parameter	Matrix	Number of Validated	Datastiana	Number of	Number of	Commission
Parameter	Group	Matrix	Results	Detections	Rejected Results	Non-rejected Results	Completeness
Anthracene	SVOC	Soil	23	23	0	23	100.00%
Benz[a]anthracene	SVOC	Soil	23	23	0	23	100.00%
Benzaldehyde	SVOC	Soil	23	7	0	23	100.00%
Benzo[a]pyrene	SVOC	Soil	23	23	0	23	100.00%
Benzo[b]fluoranthene	SVOC	Soil	23	23	0	23	100.00%
Benzo[g,h,i]perylene	SVOC	Soil	23	23	0	23	100.00%
Benzo[k]fluoranthene	SVOC	Soil	23	23	0	23	100.00%
bis(2-chloroethoxy)methane	SVOC	Soil	23	0	0	23	100.00%
bis(2-Chloroethyl)ether	SVOC	Soil	23	0	0	23	100.00%
bis(2-Chloroisopropyl)ether	SVOC	Soil	23	0	0	23	100.00%
bis(2-Ethylhexyl)phthalate	SVOC	Soil	23	6	0	23	100.00%
Caprolactam	SVOC	Soil	23	1	0	23	100.00%
Carbazole	SVOC	Soil	23	9	0	23	100.00%
Chrysene	SVOC	Soil	23	23	0	23	100.00%
Dibenz[a,h]anthracene	SVOC	Soil	23	23	0	23	100.00%
Diethylphthalate	SVOC	Soil	23	0	0	23	100.00%
Di-n-butylphthalate	SVOC	Soil	23	1	0	23	100.00%
Di-n-ocytlphthalate	SVOC	Soil	23	0	0	23	100.00%
Fluoranthene	SVOC	Soil	23	23	0	23	100.00%
Fluorene	SVOC	Soil	23	22	0	23	100.00%
Hexachlorobenzene	SVOC	Soil	23	0	0	23	100.00%
Hexachlorobutadiene	SVOC	Soil	23	0	0	23	100.00%
Hexachlorocyclopentadiene	SVOC	Soil	23	0	0	23	100.00%
Hexachloroethane	SVOC	Soil	23	0	0	23	100.00%
Indeno[1,2,3-c,d]pyrene	SVOC	Soil	23	23	0	23	100.00%
Isophorone	SVOC	Soil	23	0	0	23	100.00%
Naphthalene	SVOC	Soil	23	23	0	23	100.00%
Nitrobenzene	SVOC	Soil	23	0	0	23	100.00%
N-Nitroso-di-n-propylamine	SVOC	Soil	23	0	0	23	100.00%
N-Nitrosodiphenylamine	SVOC	Soil	23	0	0	23	100.00%
Pentachlorophenol	SVOC	Soil	23	0	8	15	65.22%
Phenanthrene	SVOC	Soil	23	23	0	23	100.00%
Phenol	SVOC	Soil	23	2	5	18	78.26%
Pyrene	SVOC	Soil	23	23	0	23	100.00%
Diesel Range Organics	TPH	Soil	23	23	0	23	100.00%
Gasoline Range Organics	TPH	Soil	23	0	0	23	100.00%
Oil & Grease	TPH	Soil	23	22	0	23	100.00%
1,1,1-Trichloroethane	VOC	Soil	3	0	0	3	100.00%
1,1,2,2-Tetrachloroethane	VOC	Soil	3	0	0	3	100.00%
1,1,2-Trichloro-1,2,2-Trifluoroethane	VOC	Soil	3	0	0	3	100.00%
1,1,2-Trichloroethane	VOC	Soil	3	0	0	3	100.00%
1,1-Dichloroethane	VOC	Soil	3	0	0	3	100.00%
1,1-Dichloroethene	VOC	Soil	3	0	0	3	100.00%
1,2,3-Trichlorobenzene	VOC	Soil	3	0	0	3	100.00%
1,2,4-Trichlorobenzene	VOC	Soil	3	0	0	3	100.00%
1,2-Dibromo-3-chloropropane	VOC	Soil	3	0	0	3	100.00%
1,2-Dibromoethane	VOC	Soil	3	0	0	3	100.00%
1,2-Dichlorobenzene	VOC	Soil	3	0	0	3	100.00%
1,2-Dichloroethane	VOC	Soil	3	0	0	3	100.00%
1,2-Dichloroethene (Total)	VOC	Soil	3	0	0	3	100.00%
1,2-Dichloropropane	VOC	Soil	3	0	0	3	100.00%
1,3-Dichlorobenzene	VOC	Soil	3	0	0	3	100.00%
1,4-Dichlorobenzene	VOC	Soil	3	0	0	3	100.00%

# **EVALUATION OF DATA COMPLETENESS Percentage of Non-Rejected Results vs Total Results**

Parameter	Parameter Group	Matrix	Number of Validated Results	Detections	Number of Rejected Results	Number of Non-rejected Results	Completeness
2-Butanone (MEK)	VOC	Soil	3	0	0	3	100.00%
2-Hexanone	VOC	Soil	3	0	0	3	100.00%
4-Methyl-2-pentanone (MIBK)	VOC	Soil	3	0	0	3	100.00%
Acetone	VOC	Soil	3	0	0	3	100.00%
Benzene	VOC	Soil	3	0	0	3	100.00%
Bromodichloromethane	VOC	Soil	3	0	0	3	100.00%
Bromoform	VOC	Soil	3	0	0	3	100.00%
Bromomethane	VOC	Soil	3	0	0	3	100.00%
Carbon disulfide	VOC	Soil	3	0	0	3	100.00%
Carbon tetrachloride	VOC	Soil	3	0	0	3	100.00%
Chlorobenzene	VOC	Soil	3	0	0	3	100.00%
Chloroethane	VOC	Soil	3	0	0	3	100.00%
Chloroform	VOC	Soil	3	0	0	3	100.00%
Chloromethane	VOC	Soil	3	0	0	3	100.00%
cis-1,2-Dichloroethene	VOC	Soil	3	0	0	3	100.00%
cis-1,3-Dichloropropene	VOC	Soil	3	0	0	3	100.00%
Cyclohexane	VOC	Soil	3	0	0	3	100.00%
Dibromochloromethane	VOC	Soil	3	0	0	3	100.00%
Dichlorodifluoromethane	VOC	Soil	3	0	0	3	100.00%
Ethylbenzene	VOC	Soil	3	0	0	3	100.00%
Isopropylbenzene	VOC	Soil	3	0	0	3	100.00%
Methyl Acetate	VOC	Soil	3	1	0	3	100.00%
Methyl tert-butyl ether (MTBE)	VOC	Soil	3	0	0	3	100.00%
Methylene Chloride	VOC	Soil	3	0	0	3	100.00%
Styrene	VOC	Soil	3	0	0	3	100.00%
Tetrachloroethene	VOC	Soil	3	0	0	3	100.00%
Toluene	VOC	Soil	3	0	0	3	100.00%
trans-1,2-Dichloroethene	VOC	Soil	3	0	0	3	100.00%
trans-1,3-Dichloropropene	VOC	Soil	3	0	0	3	100.00%
Trichloroethene	VOC	Soil	3	0	0	3	100.00%
Trichlorofluoromethane	VOC	Soil	3	0	0	3	100.00%
Vinyl chloride	VOC	Soil	3	0	0	3	100.00%
Xylenes	VOC	Soil	3	0	0	3	100.00%
1,4-Dioxane	VOC/SVOC	Soil	3	0	3	0	0.00%

Data validation has been completed for a representative 30% of all samples