PHASE II
INVESTIGATION REPORT

AREA B: PARCEL B6
TRADEPOINT ATLANTIC
SPARROWS POINT, MARYLAND

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1.0 INTRODUCTION

ARM Group Inc. (ARM), on behalf of EnviroAnalytics Group (EAG), 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 B6 (the Site). Parcel B6 is comprised of 148.5 acres of the approximately 3,100-acre former steel making facility (**Figure 1**). The Site is bounded to the north by Interstate 695, to the south by the main Employee Services and Human Resources Building (within the northern section of Parcel B3), to the east by the former Maintenance of Way Yard (Parcel A10 beyond Wharf Road) and Sparrows Point Road, and to the west by portions of the Finishing Mills Area (Parcel B22) and the New Cold Mill Complex (Parcel A4; northern section beyond the Tin Mill Canal (TMC) only). The TMC (designated as Parcel B16) runs through Parcel B6, splitting it into two large sections.

The Phase II Investigation was performed in accordance with procedures outlined in the Phase II Investigation Work Plan – Area B: Parcel B6, as well as associated comment response letters. This Work Plan (Revision 2 dated May 12, 2016) was submitted to the agencies for review, and subsequent comment response letters outlining various revisions to the Work Plan were submitted to the agencies dated August 30, 2016 and November 28, 2016. The requirements given in the most recent comment response letter (November 28, 2016) have been implemented in the field. Approval of the Parcel B6 Work Plan was received following review of this letter by the Maryland Department of the Environment (MDE) and the United States Environmental Protection Agency (USEPA) on February 16, 2017. The investigation coordinated by the Parcel B6 Work Plan was conducted 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 B6 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 USEPA on September 12, 2014.

This revised Phase II Investigation Report is being submitted in response to comments received from the MDE and USEPA primarily regarding the Screening Level Risk Assessment (SLRA) procedure presented in Section 6.0. The most recent previous version of this Phase II

Investigation Report (Revision 1) was submitted to the agencies on May 9, 2017. A transmittal and response letter listing the significant updates made to the Phase II Investigation Report accompanies this document.

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 B6 was formerly occupied in part by the Hot Strip Mill. Several iron and steel work processes were completed within the boundary of Parcel B6. Descriptions of the facilities and processes within the Hot Strip Mill are provided below:

Hot Strip Mill:

Slabs were transferred to the Hot Strip Mill, often following preparation steps which could include slitting (to alter the size) or scarfing (to remove surface defects). Prepared slabs were transported to reheat furnaces, where they were heated and soaked until achieving a rolling temperature of approximately 2,200 degrees F. Heated slabs left the furnace and were descaled with high pressure water to remove iron oxides, then rolled into hot bands of specific size and gauge. The bands were water cooled and coiled for sale or further processing. The furnaces used a combination of natural gas, No. 6 fuel oil, and/or on-specification used oil.

1.2. OBJECTIVES

The objective of this Phase II Investigation was to fully characterize the nature and extent of contamination at the Site. 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. A summary table of the site investigation locations, including the boring identification numbers and the analyses performed, is provided as **Appendix A**. A human health SLRA was prepared to identify constituents and pathways of potential concern and to evaluate the significance of any observed impacts or elevated concentrations with respect to the potential future use of the Site.

As specified in the Parcel B6 Work Plan, groundwater at the Site was investigated as described in the separate Finishing Mills Groundwater Investigation Work Plan (dated July 7, 2016), the draft of which was approved by the agencies via email on June 28, 2016, prior to receipt of the final Work Plan. A separate Finishing Mills Groundwater Phase II Investigation Report was submitted (dated November 30, 2016) to discuss the findings of the groundwater investigation.

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 Environmental Site Assessment (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.

According to topographic maps provided by EAG, the Site is at an elevation of approximately 12 feet above mean sea level (amsl). Elevations in the parcel are fairly uniform between 9 and 15 feet over the majority of the parcel area. There are generally steep slopes from the surrounding roadways down to Parcel B6 with rapid decreases in elevation along the northern and eastern boundaries and in the northwest corner of the Site. Elevations appear to slope sharply downward to the adjacent TMC where it intersects with the parcel boundaries. According to Figure B-2 of the Stormwater Pollution Prevention Plan (SWPPP) Revision 5 dated June 1, 2017, stormwater from the majority of the Site is directed to the TMC, is discharged through National Pollution Discharge Elimination System (NPDES) Outfalls 114 and 214, and ultimately is discharged to Bear Creek through Outfall 014. However, runoff from a small area at the southern tip of the parcel is directed towards Outfall 017 located within Parcel B7.

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 approximately 67% natural soils 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 included slag fill materials overlying natural soils, which included fine-grained sediments (clays and silts) and coarse grained sediments (sands). Groundwater was encountered in the soil borings at depths ranging from 4 to 20 feet bgs across the Site. Soil boring logs are provided in **Appendix B**. Please note that unless otherwise indicated, 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 198 soil samples (all locations and boring depths) were collected for analysis between June 13, 2016 and January 10, 2017 as part of the Parcel B6 Phase II Investigation. This Phase II Investigation utilized methods and protocols that followed the procedures included in the Quality Assurance Project Plan (QAPP) dated October 2, 2015 (updated April 5, 2016) 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 Parcel B6 Work Plan dated May 12, 2016 (and per the approved Parcel B6 comment response letter with supplemental attachments dated November 28, 2016), and the QAPP.

All characterization activities were conducted under the site-specific health and safety plan (HASP) provided as Appendix B of the Work Plan.

3.1. SAMPLING 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 10.3.1).

Sampling targets included, as applicable, 1) Recognized Environmental Conditions (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. The following RECs were identified in the Parcel B6 Work Plan: Hot Strip Mill Cooling Tower (Finding 30, also listed as SWMU 65), Hot Strip Mill Basins / Hot Strip Mill Oil Skimmer System (RECs 1L and 1N, Findings 27 and 29, also listed as SWMUs 62 and 64), Hot Strip Mill Waste Oil Tank (REC 1M, Finding 28, also listed as SWMU 63), Former Fuel UST at Contractor's Village (REC 20, Finding 270), Apparent Historical Surface Impoundment – "G" Gate (REC 22, Finding 273), and TMC Oil Recovery Plant and Impoundment (REC 26, Finding 278). Additional information regarding these features is presented in the Parcel B6 Work Plan.

In addition to the listed RECs, the Hot Strip Mill was generally observed by Weaver Boos to be heavily stained with petroleum products, with varying ground surface conditions. This entire facility area was classified as a REC. All of the SWMUs within the Parcel B6 boundary are

cross-listed as RECs, and have been previously discussed. No additional AOCs were identified within the parcel boundary.

Four sets of historical steel mill plant 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 on to the ground. There were no drip legs identified inside the boundary of Parcel B6. A summary of the specific drawings covering the Site is presented in **Table 1**.

Additional Findings (non-RECs) from the Phase I ESA or features on the historical drawings which were identified as potential environmental concerns were also reviewed and targeted as applicable. Sampling target locations were identified if the historical site drawings depicted industrial activities or a specific feature at a location that may have been a source of environmental contamination that impacted the Site. Based on the review of plant drawings and Phase I ESA documents (or based on direct agency guidance for additional features), sampling targets were identified at the Site that included the following: Crane Repair Shop, Fuel Areas/Stations, Hydraulic Unit/Bulkfill, Lube Oil Houses/Shops, Pickler Tank, Descaling Pump House, Fuel Pump House, Reclaimed Pit, Scale Pits, Electric Substations, Fuel/Oil Tanks, Tank – Unknown Contents, Acid/Waste Acid Tanks, Waste Oil Pit, Furnaces, Furnace Hydraulic Control Room, Storage Yard, and Storage Buildings. ARM received a list and figure of former PCB-containing transformer equipment from Tradepoint Atlantic personnel. These possible PCB-containing equipment areas were targeted with additional soil borings.

A summary of the areas that were investigated, along with the applicable boring identification numbers and the analyses performed, has been provided as **Appendix A**. Additional sample locations were then added to fill in spatial gaps between proposed borings to provide complete coverage of the Site. During the completion of fieldwork it was necessary to shift some borings from the locations given in prior versions of the Work Plan, primarily due to access restrictions and/or refusal. However, the recent approved submission of the comment response letter dated November 28, 2016 provided the final locations of all Phase II borings (as noted in the letter). Only one additional field shift was necessary following this submission. Boring B6-005-SB was shifted approximately 46 feet north of the original sample location due to refusal, with a final northing/easting coordinate location in North American Datum (NAD) 1983 Maryland State Plane (US Feet) of 570396.04, 1462573.22.

The density of soil borings met the requirements set forth in QAPP Worksheet 17 – Sampling Design and Rationale. Parcel B6 contained a total of 75.1 acres without engineered barriers. Of the 72.9 acres with engineered barriers, 38.3 acres contained former building slabs and 34.6 acres

consisted of parking/roads. In accordance with the relevant sampling density requirements, a minimum of 35 soil borings were required to cover the area without engineered barriers, and a minimum of 17 soil borings were required to cover areas with barriers. A total of 52 borings were required to meet the density specification; however, 93 soil borings were completed during the Phase II Investigation.

3.2. SOIL INVESTIGATION

Continuous core soil borings were advanced at 93 locations across the Site to assess the presence or absence of soil contamination, and to assess the vertical distribution of any encountered contamination (**Figure 3**). The continuous core soil borings were advanced to depths between 4 and 20 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). At each location, 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**. Unless otherwise indicated, all USCS group symbols provided on the attached boring logs are from visual observations.

One shallow sample was collected from the 0 to 1 foot depth interval, and a deeper sample was collected from the 4 to 5 foot depth interval from each continuous core soil boring. One additional set of samples was also collected from the 9 to 10 foot depth interval if groundwater had not been encountered; however, these samples were held by the laboratory pending the analysis of the 0 to 1 and 4 to 5 foot depth interval samples, and were only analyzed for parameters that were detected in the 5 foot depth samples at concentrations above the Project Action Limits (PALs). 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 was above the water table, the sample from the deeper 4 to 5 foot interval was shifted to the alternate depth interval. It should be noted that soil samples were not collected from a depth that was below the water table. 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.

Down-hole soil sampling equipment was decontaminated after soil sampling had been concluded at a location, according to the procedures and methods referenced in **Field SOP Number 016** provided in Appendix A of the QAPP.

Soil samples were submitted to Pace Analytical Services, Inc. (PACE) and analyzed for Target Compound List (TCL) volatile organic compounds (VOCs) via USEPA Method 8260B, TCL semi-volatile organic compounds (SVOCs) via USEPA Methods 8270D and 8270D SIM, total petroleum hydrocarbon (TPH) diesel range organics (DRO) and gasoline range organics (GRO) via USEPA Methods 8015B and 8015D, Target Analyte List (TAL) Metals via 6010C and 7471C, hexavalent chromium via USEPA Method 7196A, and cyanide via USEPA Method

9012. Additionally, the shallow soil samples collected across the Site from the 0 to 1 foot bgs interval were also analyzed for polychlorinated biphenyls (PCBs) via USEPA Method 8082. Sample containers, preservatives, and holding times for the sample analyses are listed in the QAPP Worksheet 19 & 30 – Sample Containers, Preservation, and Holding Times.

Modified analysis requirements were applied to samples collected from borings B6-005-SB and B6-087-SB through B6-093-SB based on agency requests made for the greater Tradepoint Atlantic property during the implementation of fieldwork in Parcel B6. These identified sample locations were additionally analyzed for Oil & Grease via USEPA Method 9071. Furthermore, the requirements for analysis of VOCs were updated such that only samples with PID readings above 10 ppm were analyzed.

3.3. MANAGEMENT OF INVESTIGATION-DERIVED WASTE (IDW)

In accordance with **Field SOP Number 005** provided in Appendix A of the QAPP, potentially impacted materials, or IDW, generated during this Phase II Investigation were 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 from the Parcel B6 IDW soil drums for soil TCLP analysis. These composite samples included soils generated during the implementation of the separate Finishing Mills Groundwater Investigation within Parcel B6. Following this analysis, the waste soil was characterized as non-hazardous. A list of all results from the soil TCLP procedure can be found in **Table 2**, which indicates no exceedances of the TCLP criteria.

IDW drums containing aqueous materials were characterized by preparing composite samples from randomly selected drums. Each composite sample included aliquots from individual drums being staged on-site at the date of collection. A total of two composite samples were collected for TCLP analysis from relevant aqueous drums, including decontamination fluids generated during the implementation of the separate Finishing Mills Groundwater Investigation within Parcel B6. Following this analysis, the aqueous waste was characterized as non-hazardous. A list of all results from the aqueous TCLP procedure can be found in **Table 3**, which indicates no exceedances of TCLP criteria.

The parcel specific IDW drum log from the 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 work day 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 are summarized and compared to the PALs in **Table 4** (Organics) and **Table 5** (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

As provided on **Table 4**, several VOCs were identified above the laboratory's method detection limits (MDLs) in the soil samples collected from across the Site. However, no concentration of any detected VOC compound in any soil sample exceeded its PAL.

Table 4 provides a summary of SVOCs detected above the laboratory's MDLs in the soil samples collected from across the Site. The PALs for relevant polynuclear aromatic hydrocarbons (PAHs) have been adjusted upward based on revised toxicity data published in the USEPA RSL Composite Worker Soil Table. Therefore, exceedances for PAHs are based on the adjusted PALs rather than those presented in the QAPP. Two SVOCs, both PAHs, were detected above their respective PALs. These SVOCs were benzo[a]pyrene and naphthalene. Of the SVOC exceedances, benzo[a]pyrene exceeded the PAL in the largest number of samples (nine) with a maximum detection of 8 mg/kg in sample B6-037-SB-5. Naphthalene exceeded its PAL in only one sample (24.3 mg/kg in sample B6-011-SB-8). A summary of the PAL exceedance locations and results has been provided on **Figure S-1**.

Shallow soil samples collected across the Site from the 0 to 1 foot bgs interval were also analyzed for PCBs. **Table 4** provides a summary of the PCBs detected above the laboratory's MDLs. Aroclor 1242, Aroclor 1254, and total PCBs were the only PCB groups to exceed their respective PALs in multiple locations (six total) collected across the Site. None of the exceedances were above 50 mg/kg of total PCBs, with a maximum detection of 10.6 mg/kg in sample B6-061-SB-1 (which targeted a storage tank with unknown contents). These PAL exceedance locations and results have been provided on **Figure S-2**.

Table 4 provides a summary of the Oil & Grease and/or TPH-DRO/GRO detections for all Phase II Investigation soil borings. Oil & Grease was analyzed at eight sample locations (B6-005-SB and B6-087-SB through B6-093-SB). The highest detection of Oil & Grease was 2,820 mg/kg in sample B6-089-SB-1. GRO did not exceed the PAL, with a maximum detection of 129 mg/kg in sample B6-066-SB-5. DRO was detected above its PAL at three subsurface sample locations (B6-011-SB-8, B6-054-SB-4, and B6-066-SB-5). The maximum detection of DRO was 11,000 mg/kg in soil sample B6-066-SB-5, which targeted a former Waste Oil Pit. Evidence of possible non-aqueous phase liquid (NAPL) was noted in the soil cores associated with the elevated DRO detections at B6-011-SB and B6-066-SB. These observations are discussed in greater detail in Section 4.1.4. The PAL exceedance locations and results have been provided on **Figure S-3**.

4.1.2. Soil Conditions: Inorganic Constituents

Table 5 provides a summary of inorganic constituents detected above the laboratory's MDLs in the soil samples collected from across the Site. Six inorganic compounds (arsenic, manganese, lead, thallium, vanadium, and hexavalent chromium) were detected above their respective PALs. Arsenic was by far the most common inorganic exceedance (detected above the PAL in 140 soil samples), followed by manganese (detected above the PAL in 37 soil samples) and thallium (detected above the PAL in 22 soil samples). In comparison, the remaining inorganic compounds (lead, vanadium, and hexavalent chromium) were responsible for a total of only 12 exceedances of the applicable PALs. Hexavalent chromium was limited to a single isolated sample with a detected value only slightly above the PAL. A summary of the inorganic PAL exceedance locations and results has been provided on **Figure S-4**.

4.1.3. Soil Conditions: Results Summary

Table 4 and **Table 5** provide a summary of the detected organic compounds and inorganics in the soil samples submitted for laboratory analysis, and **Figure S-1** through **Figure S-4** present a summary of the soil sample results that exceeded the PALs. **Table 6** provides a summary of results for all PAL exceedances in soil, including detection frequencies and maximum results. **Table 7** indicates which soil impacts (PAL exceedances) are associated with the specific targets listed in the Parcel B6 Work Plan. There were no detections of VOCs above the applicable PALs. Exceedances in soil within Parcel B6 consisted of six inorganics (arsenic, manganese, lead, thallium, vanadium, and hexavalent chromium), two SVOCs (benzo[a]pyrene and naphthalene), three PCB groups (Aroclor 1242, Aroclor 1254, and total PCBs), and DRO. The soil analytical results are further evaluated in the SLRA provided in Section 6.0.

Arsenic was detected above the PAL in approximately 71% of the Phase II samples analyzed for this compound, with the highest detection (43.7 mg/kg) at B6-085-SB-8. Manganese was the next most common inorganic exceedance (20% of samples) with a maximum detection of 108,000 mg/kg, followed by thallium (12% of samples) with a maximum detection of 151

mg/kg. The exceedances of the remaining inorganics were relatively infrequent, and the maximum detections of lead, vanadium, and hexavalent chromium were all less than 4 times the PAL. Benzo[a]pyrene was the most common SVOC exceedance, and was detected above its PAL in approximately 10% of relevant Phase II samples. The maximum detection of benzo[a]pyrene was associated with sample B6-037-SB-5. Naphthalene was only detected above the PAL in a single isolated sample (B6-011-SB-8). PCBs (total) were detected above the PAL in six samples collected during the Phase II Investigation, with a maximum detection of 10.6 mg/kg (B6-061-SB-1). Aroclor 1242 was detected above its individual PAL at only one location, and Aroclor 1254 was detected above its individual PAL at two locations. There were three DRO soil PAL exceedances, all of which were less than 2 times the PAL (6,200 mg/kg). The maximum detection of DRO was 11,000 mg/kg in sample B6-066-SB-5, and this boring location exhibited evidence of NAPL contamination which has since been investigated.

4.1.4. Summary of NAPL Observations in Soil Cores

Soil cores were screened for evidence of possible NAPL contamination during the completion of the Phase II soil borings in Parcel B6. During soil core screening, several sample locations had physical evidence of possible product which was noted on the soil boring logs. The locations with physical evidence of possible product (visible sheens or NAPL) included B6-011-SB, B6-039-SB, B6-056-SB, B6-066-SB, B6-068-SB, and B6-087-SB. These borings with physical observations of sheen or free product are highlighted on **Figure S-3**, which also displays the analytical PAL exceedances of DRO in the parcel. The physical observations of NAPL (as indicated on the boring logs) and relevant analytical data were as follows:

- B6-011-SB: A black viscous liquid (NAPL) with a sheen was observed in the soil core from 8 to 10 feet bgs. A soil sample was collected from an intermediate interval (7 to 8 feet), just above the observed impacts and the groundwater table. The intermediate sample had detected DRO at 7,340 mg/kg.
- B6-039-SB: Black product was observed in the soil core accompanied by strong odors at 8 feet bgs, just below encountered groundwater (7.5 feet bgs). The intermediate sample was collected from 4 to 5 feet bgs, within an additional interval which had observations of strong odors. The intermediate sample had detected DRO at 4.4 mg/kg.
- B6-056-SB: A visible sheen accompanied by a strong odor was observed at 7 feet bgs in the soil core, and apparent product was seen from 7 to 10 feet bgs. Groundwater was encountered at approximately 8.5 feet bgs. The intermediate soil sample was collected from 7 to 8 feet bgs, within the impacted interval. The intermediate sample had detected DRO at 1,430 mg/kg.
- B6-066-SB: Trace product accompanied by strong odors was observed at 4 feet bgs. Product was present from approximately 5 to 10 feet bgs in the soil core sleeve and soils were noted with a slightly viscous sheen at 10 feet bgs. An intermediate soil sample was

collected from the 4 to 5 foot bgs interval. The intermediate sample had detected DRO at 11,000 mg/kg.

- B6-068-SB: A trace sheen and possible trace product were observed in the soil core at approximately 9 feet bgs. The sheen was accompanied by slight odors. Groundwater was observed at approximately 4.5 feet bgs. Due to encountered groundwater, the intermediate sample was collected from the 3 to 4 foot bgs interval, above the observed impacts. The intermediate sample interval had detected DRO at 191 mg/kg.
- B6-087-SB: A sheen was observed just below observed groundwater in the soil core from 8.7 to 10 feet bgs. No visible free phase product was observed, and no odors were noted. Due to encountered groundwater, the intermediate sample was collected just above the observed impacts from 6.5 to 7.5 feet bgs. The intermediate sample interval had detected DRO at 5.4 mg/kg. Oil & Grease was also analyzed at this boring location, with a detection of 332 mg/kg in the corresponding intermediate sample.

Based on the physical observations of product at the six locations identified above (B6-011-SB, B6-039-SB, B6-056-SB, B6-066-SB, B6-068-SB, and B6-087-SB), temporary screening piezometers were installed to delineate and assess the potential mobility of free-phase product (NAPL) to groundwater. The piezometer installations at these identified locations are discussed in greater detail in Section 4.2.2, along with a description of NAPL gauging events and any subsequent recommendations for delineation and/or further action.

No physical evidence of product was noted in the soil core of boring B6-054-SB; however, moderate odors and elevated PID readings were noted at a depth of 4 feet bgs. This interval was sampled, and subsequently returned a DRO result of 6,840 mg/kg, slightly above the PAL of 6,200 mg/kg. While no physical evidence of NAPL was noted during the Phase II Investigation, it should be acknowledged that the depth of equipment refusal (4 feet bgs) coupled with the elevated detection of DRO indicates that the possible presence of product at this location cannot be ruled out for lower soil depths. Along with the six location listed above, B6-054-SB should also be considered for proximity to proposed utilities in any future development plans.

4.2. GROUNDWATER CONDITIONS

4.2.1. Finishing Mills Groundwater Investigation

As specified in the approved Parcel B6 Work Plan, groundwater at the Site was investigated as described in the separate Finishing Mills Groundwater Investigation Work Plan (dated July 7, 2016). The Finishing Mills Groundwater Phase II Investigation Report (Revision 0 dated November 30, 2016) has been submitted to discuss the detailed findings of this groundwater investigation. Groundwater results obtained during the separate investigation were screened against the PALs established in the property-wide QAPP (or other direct guidance from the agencies) to determine exceedances. The complete findings of the groundwater investigation,

including detection summary tables and exceedance figures, were provided in the Phase II Investigation Report. A figure summarizing the shallow aqueous PAL exceedances (for all classes of compounds) in the vicinity of Parcel B6 is provided in **Appendix E**. The groundwater analytical results obtained from the intermediate and lower hydrogeologic zones are not relevant for this Parcel B6 Phase II Investigation, but can be reviewed in the separate groundwater report.

Regarding the shallow groundwater exceedances, some of the PALs have been updated since the submission of the Finishing Mills Groundwater Phase II Investigation Report. In particular, the aqueous screening levels for some PAH constituents have been adjusted upward. Similar to the evaluation of soil data, the PALs for relevant PAHs have been modified based on revised toxicity data published in the USEPA RSL Resident Tapwater Table. Aqueous PAL exceedances in the shallow groundwater in the vicinity of Parcel B6 consisted of two VOCs (chloroform and 1,1-dichloroethane), five SVOCs (benz[a]anthracene, naphthalene, pentachlorophenol, 1,1-biphenyl, and 1,4-dioxane), 10 total/dissolved metals (chromium, hexavalent chromium, iron, lead, manganese, thallium, vanadium, cobalt, nickel, and arsenic), DRO, and GRO. For simplicity, the inorganic PAL exceedances shown on the figure do not include duplicate exceedances of total and dissolved metals at relevant sample locations. If both total and dissolved concentrations exceeded the PAL for a specific compound, the value for total metals is displayed on the figure for each sample. As exceptions, three groundwater sample locations (FM-008-PZS, FM-015-PZS, and TM10-PZM007) were resampled as dissolved hexavalent chromium via method 7196A because the original hexavalent chromium results with high turbidities were noted to be suspect. In addition, FM-008-PZS was again resampled using low-flow techniques to be re-analyzed by method 7196A and by an alternative method (7199). The specific details of the resampling events are provided in the Finishing Mills Groundwater Phase II Investigation Report.

Each permanent well or temporary groundwater sample collection point sampled during the Finishing Mills Groundwater Investigation was checked for the potential presence of NAPL using an oil-water interface probe prior to sampling. During these checks, NAPL was not detected in any of the groundwater sample points.

Groundwater data were also screened to determine whether any individual sample results, or cumulative results summed by sample location, may exceed the USEPA Vapor Intrusion (VI) Screening Levels (Target Cancer Risk (TCR) of 1E-5 and Target Hazard Quotient (THQ) of 1) as determined by the Vapor Intrusion Screening Level (VISL) Calculator version 3.5 (https://www.epa.gov/vaporintrusion/vapor-intrusion-screening-levels-visls). The aqueous PALs specified in the QAPP are based upon drinking water use, which is not a potential exposure pathway for groundwater at the Site. There were no potential VI risks identified from the shallow groundwater sampling points located in the vicinity of Parcel B6. Total cyanide had previously been identified as a potential VI hazard in the Finishing Mills Phase II Investigation Report at several locations, but the screening level for cyanide has since been adjusted upward by the USEPA, eliminating this concern.

4.2.2. Summary of NAPL Observations in Piezometers

Based on the field observations of potential NAPL in the associated soil cores, temporary screening piezometers were installed at six locations (B6-011-SB, B6-039-SB, B6-056-SB, B6-066-SB, B6-068-SB, and B6-087-SB) to determine the potential mobility of free-phase product to groundwater. Temporary groundwater monitoring points B6-011-PZ, B6-056-PZ, and B6-066-PZ were installed on June 15, June 16, and July 5, 2016, respectively, to assess NAPL-bearing soils. Additional temporary groundwater monitoring points B6-039-PZ and B6-087-SB were installed on March 6, 2017, and one additional monitoring point B6-068-PZ was installed on March 10, 2017, to assess trace/minor indications of NAPL. In accordance with the requirements of the Parcel B6 Work Plan and the QAPP, each temporary piezometer was installed according to the specifications identified in **Field SOP Number 028** (Direct Push Installation and Construction of Temporary Groundwater Sample Collection Points). NAPL measurements were completed immediately, 48 hours, and at least 30 days after each installation using an oil-water interface probe. The exact dates and product thickness measurements from these required delineation gauging events are presented in **Appendix F**. This appendix also displays the construction details (total depth, screen intervals, etc.) specific to each temporary screening piezometer.

NAPL was identified in B6-066-PZ, screened from 3 to 13 feet bgs, and determined to be approximately 5.04 feet thick approximately 48 hours after installation. Although NAPL was not detected in this piezometer during the 30-day gauging event, measureable product was again observed during several subsequent gauging events. Trace product was also observed in the casing of B6-011-PZ during a gauging event on August 26, 2016, approximately 2 months after the initial installation. Based on this trace detection, a supplemental measurement was completed on March 15, 2017. During this follow-up event, accumulated NAPL was identified in B6-011-PZ, screened from 5 to 15 feet bgs, and determined to be approximately 0.10 feet thick. Based on these detections, additional actions were implemented to delineate the extent of potentially mobile NAPL at piezometers B6-066-PZ and B6-011-PZ.

Following the completion of supplemental delineation activities in the vicinity of B6-011-PZ, EAG proposed to excavate the NAPL impacts which had been documented in this area. The MDE approved a Work Plan dated June 1, 2017 (Delineation Activities and Proposed Excavation of NAPL at B6-011-SB) to complete the proposed response actions. Approval was received from the MDE on June 5, 2017. This Work Plan also served as a Delineation Completion Report for the identified impacts, and provided soil boring logs and a figure indicating the extent of the completed NAPL delineation among other relevant documentation. At this time, EAG has implemented the response actions outlined in the Work Plan. The MDE will be provided with a Response Action Completion Report which will describe the completed excavation activities in the vicinity of B6-011-PZ.

NAPL delineation has also been determined to be complete in the vicinity of B6-066-PZ, but no additional response actions have yet been implemented. Response actions to address the NAPL impacts which have been documented in this area will be coordinated with the MDE under a Work Plan to be submitted for approval in the future. The Work Plan may also serve as a Delineation Completion Report (as was the case with B6-011-PZ), and would therefore include supplemental borings logs with soil core observations for all delineation borings/piezometers, figures indicating the extent of each delineation, and detailed NAPL thickness measurements from delineation piezometers. Manual product removal or additional active remediation to remove the NAPL mass in the vicinity B6-066-PZ may be required depending on future development needs.

No additional action was warranted at any of the remaining piezometer locations since evidence of NAPL has not been identified in the groundwater. Abandonment of the piezometers at B6-039-PZ, B6-056-PZ, B6-068-PZ, and B6-087-PZ is appropriate. Each piezometer will be gauged a final time on the abandonment date to confirm that NAPL has not accumulated in the casing.

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, TAL-Metals, hexavalent chromium, cyanide, TPH-DRO/GRO, or 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 most current USEPA RSLs) or based on other direct guidance from the agencies, to identify the presence of exceedances in each environmental medium.

Quality control (QC) samples were collected during field studies to evaluate field/laboratory variability. A summary of QA/QC samples associated with this investigation has been included as **Appendix G**. The following QC samples were submitted for analysis to support the data validation:

- Trip Blank – at a rate of one per day
  - Soil – VOCs only
- Blind Field Duplicate – at a rate of one per twenty samples
  - 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
  - Soil – VOCs, SVOCs, Metals, TPH-DRO, TPH-GRO, Oil & Grease, Hexavalent Chromium, and Cyanide

The 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 Chain of Custody forms 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 and/or checked once per day. The logs have been provided in **Appendix C** (PID calibration log).

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 50% of the environmental sample analyses performed by PACE and supporting Level IV Data Package information by Environmental Data Quality Inc. (EDQI).

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 QAPP dated October 2, 2015 (updated 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.

Data validation has been completed for a representative 50% of all sample results, and the DVRs provided by EDQI have been included as electronic attachments. The USEPA has previously specified that results flagged with a "JB" qualifier are erroneous, and any such results should be revised to display the "B" qualifier only. EDQI reviews and corrects any "JB" qualified results during the data validation procedure. Therefore, any result originally flagged with a "JB" qualifier in the laboratory certificate is reported as a "B" qualified non-detect result in this Phase II Investigation Report. ARM has reviewed all non-validated laboratory reports (those which were not designated to be reviewed by EDQI), and applied the same validation correction to any relevant "JB" qualified results. 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 soil results that were rejected during data validation have been 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 collection of soil 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 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 H**. This evaluation of completeness includes only the representative 50% of sample results which were randomly selected for validation.

In soils, the completeness goal (90%) was met for all compounds except methyl acetate, antimony, bromomethane, and 1,4-dioxane. Since methyl acetate had a completeness ratio very close to the 90% goal (84%) and only 2 low-level detections were noted in the complete soil dataset, this compound is not considered to represent a significant data gap. Similarly, antimony had a completeness score of 72%, but of the five antimony detections (two validated values) all were significantly below the PAL (maximum detection of 90.3 mg/kg compared to the PAL of 470 mg/kg). A large proportion of the bromomethane soil dataset was rejected (completeness ratio of 8% with 81 rejected results), and the full validated dataset for 1,4-dioxane was rejected, but there were no detections of either compound in soil throughout Parcel B6. Based on the infrequency and low magnitude of detections for each of the compounds below the 90% goal, methyl acetate, antimony, bromomethane, and 1,4-dioxane do not appear to be represent significant data gaps.

Overall, the soil data can be used as intended, and no significant data gaps were identified. While a limited set of compounds did not meet the completeness goal of 90%, these compounds do not appear to be significant contaminants at the Site.

6.0 HUMAN HEALTH SCREENING LEVEL RISK ASSESSMENT (SLRA)

6.1. ANALYSIS PROCESS

A human health Screening Level Risk Assessment (SLRA) has been conducted for soils to further evaluate the Site conditions in support of the design of necessary response measures. The SLRA included the following evaluation process:

Identification of Exposure Units (EUs): Three EUs were identified for the Site, as indicated in **Figure 4**. The three EUs (EU1 through EU3) are comprised of 51.6 acres, 48.5 acres, and 48.4 acres, respectively. These EUs were established in the comment response letter dated November 28, 2016 for the Parcel B6 Work Plan which was approved by the agencies.

Identification of Constituents of Potential Concern (COPCs): Compounds that are present at concentrations at or above the USEPA RSLs set at a target cancer risk of 1E-6 or target non-cancer Hazard Quotient (HQ) of 0.1 were identified as COPCs to be included in the SLRA. A COPC screening analysis is provided in **Table 9** to identify compounds above the relevant screening levels in Parcel B6.

Exposure Point Concentrations (EPCs): The COPC soil datasets for each EU were divided into surface (0 to 1 foot) and subsurface (>1 foot) depths for estimation of potential EPCs. An evaluation of pooled surface and subsurface soil data was also performed. Thus, for Parcel B6 there are three soil datasets associated with each EU. A statistical analysis was performed for each COPC dataset using the ProUCL software (version 5.0) developed by the USEPA to determine representative reasonable maximum exposure (RME) values for the EPC for each constituent. The RME value is typically the 95% Upper Confidence Limit (UCL) of the mean. For lead, the arithmetic mean for each depth category was calculated for comparison to the Adult Lead Model (ALM)-based values, and any individual results exceeding 10,000 would be delineated for possible excavation and removal (if applicable). For PCBs, all results equaling or exceeding 50 mg/kg would be delineated for excavation and removal (if applicable).

Risk Ratios: The surface soil EPCs, subsurface soil EPCs, and pooled soil EPCs were compared to the USEPA RSLs for the Composite Industrial Worker. Risk ratios were calculated with a cancer risk of 1E-6 and a non-cancer HQ of 1. The risk ratios for the carcinogens were summed to develop a screening level estimate of the baseline cumulative cancer risk. The risk ratios for the non-carcinogens were segregated and summed by target organ to develop a screening level estimate of the baseline cumulative non-cancer hazard. There is no potential for human exposure to groundwater for a

Composite Worker since groundwater is not used on the Tradepoint Atlantic property (and is not proposed to be utilized).

Assessment of Lead: For lead, the arithmetic mean concentrations for surface soils, subsurface soils, and pooled soils for each EU were compared to the applicable RSL (800 mg/kg) as an initial screening. If the mean concentrations for the EU were below the applicable RSL, the EU was identified as requiring no further action for lead. If a mean concentration exceeded the RSL, the mean values were compared to calculated ALM values (ALM Version dated 6/21/2009 updated with the 5/17/2017 OLEM Directive) with inputs of 1.8 for the geometric standard deviation and a blood baseline lead level of 0.6 ug/dL. The ALM calculation generates a soil lead concentration of 2,518 mg/kg, which is the most conservative (i.e., lowest) concentration which would yield a probability of 5% of a blood lead concentration of 10 ug/dL. If the arithmetic mean concentrations for the EU were below 2,518 mg/kg, the EU was identified as requiring no further action for lead. The lead averages and ALM screening levels are presented for surface, subsurface, and pooled soils in **Table 10**. For lead, any results equaling or exceeding 10,000 mg/kg would be identified to be delineated for possible excavation and removal (if applicable).

Assessment of Oil & Grease and TPH-DRO/GRO: EPCs were not calculated for Oil & Grease or TPH-DRO/GRO. Instead, the individual results were compared to the PAL set to a HQ of 1 (6,200 mg/kg). Oil & Grease was analyzed at eight boring locations (B6-005-SB and B6-087-SB through B6-093-SB), and none of the Oil & Grease detections exceeded the PAL. Three subsurface samples (B6-011-SB-8, B6-054-SB-4, and B6-066-SB-5) exceeded the DRO PAL with a maximum detection of 11,000 mg/kg at location B6-066-SB-5. There were no detections of GRO that exceeded the PAL. Six borings (B6-011-SB, B6-039-SB, B6-056-SB, B6-066-SB, B6-068-SB, and B6-087-SB) had physical evidence of possible NAPL in the soil cores which are assumed to represent exceedances of the TPH-DRO/GRO PAL (unless analytical data for the corresponding intervals indicate otherwise). An evaluation of the potential for product mobility based on these detections and response actions is presented following the SLRA in Section 7.2.

Risk Characterization Approach: For each EU, if the baseline risk ratio for each non-carcinogenic COPC or cumulative target organ does not exceed 1 (with the exception of lead), and the sum of the risk ratios for the carcinogenic COPCs does not exceed a cumulative cancer risk of 1E-5, then a no further action determination will be recommended. The primary EPC comparison to determine the need for possible remedial action will be the Composite Worker comparison to the surface soil EPCs. However, no further action will only be approvable if subsurface soil EPCs are also compared to the Composite Worker RSLs, and the cancer and non-cancer risk estimates are equal to or

less than 1E-5 and 1, respectively. Pooled soil data have also been evaluated and included for discussion.

If the baseline estimate of cumulative cancer risk exceeds 1E-5, but is less than or equal to 1E-4, then capping of the EU will be considered to be an acceptable remedy for the Composite Worker. The efficacy of capping for elevated non-cancer hazard will be evaluated in terms of the magnitude of the exceedance and other factors such as bioavailability of the COPC. Similarly, for lead, if the ALM results indicate that the mean concentrations would present a 5% to 10% probability of a blood concentration of 10 ug/dL for the EU, then capping of the EU would be an acceptable presumptive remedy. The mean soil lead concentrations corresponding to ALM probabilities of 5% and 10% are 2,518 mg/kg, and 3,216 mg/kg, respectively. If capping of the identified area is not proposed, additional more detailed quantitative evaluation of risk will be required for the EU. This supplemental risk evaluation may include a selective removal (excavation) remedy to reduce site-wide risks/hazards to acceptable levels.

The USEPA's acceptable risk range is between 1E-6 and 1E-4. If the sum of the risk ratios for carcinogens exceeds a cumulative cancer risk of 1E-4, further analysis of site conditions will be required including the consideration of toxicity reduction in any proposal for a remedy. The magnitude of non-carcinogen hazard exceedances and bioavailability of the COPC will also dictate further analysis of site conditions including consideration of toxicity reduction in any proposal for a remedy. In addition, if the ALM indicates that the mean concentrations would present a >10% probability of a blood concentration of 10 ug/dL for the EU, further analysis of site conditions including toxicity reduction will be completed such that the probability would be reduced to less than 10% after toxicity reduction, but before capping.

6.2. PARCEL B6 SLRA RESULTS AND RISK CHARACTERIZATION

The soil data were divided into three datasets (surface, subsurface, and pooled) for each EU in Parcel B6 to evaluate potential current and future exposure scenarios. The current Composite Worker will be exposed only to surface soils. However, if construction activities were to result in the placement of subsurface material over existing surface soils, a future Composite Worker could be exposed to a mixture of surface and subsurface soils.

The results for antimony and hexavalent chromium were removed from the overall soil dataset for risk assessment because these compounds were very infrequently detected in Parcel B6 (evaluated based on frequency of detection for the entire Parcel B6 soil dataset). Antimony was only detected in 2.5% of the (validated) samples analyzed for this compound, and hexavalent chromium was only detected in 2.2% of the applicable samples. If the detection frequency of an analyte is less than 5% in a dataset with a minimum of 20 samples, the COPC can be eliminated from the risk assessment assuming the detections are not extremely high (based on agency

discretion). A single detection that is extremely high could require delineation rather than elimination. In this case it is reasonable to remove antimony and hexavalent chromium from the risk assessment based on the relatively low magnitudes of the maximum detections. Total PCBs have been included in the risk ratio analysis, but Aroclor 1242 and Aroclor 1254 were omitted from the carcinogenic risk assessment to avoid double-counting the carcinogenic risk associated with PCBs. The total PCB values include the sum of both mixtures, and the carcinogenic screening level for total PCBs is as conservative as either of the PCB mixtures. Aroclor 1254 was included for the purpose of evaluating non-cancer hazard only. All remaining COPCs listed in **Table 9** have been retained for the risk assessment.

EPCs were calculated for each soil dataset (i.e., surface, subsurface, and pooled surface/subsurface) for each EU. ProUCL output tables (with computed UCLs) derived from the data for each COPC in soils are provided as electronic attachments, with computations presented and EPCs calculated for COPCs within each of the relevant datasets (surface, subsurface, and pooled) for each EU. The ProUCL input tables are also included as electronic attachments. The results were evaluated to identify any samples that may require additional assessment or special management based on the risk characterization approach. The calculated EPCs for the surface and subsurface exposure scenarios are provided in **Table 11**. The supplemental EPCs generated from the pooled surface and subsurface soils are also included in the EPC table.

As indicated above, the EPCs for lead are the average (i.e., arithmetic mean) values for each dataset. A lead evaluation spreadsheet, providing the computations used to determine lead averages for each dataset in each EU, is also included as an electronic attachment. The average lead concentrations are presented for each dataset in **Table 10**, which indicates that neither surface, subsurface, nor pooled soils exceeded an average lead value of 800 mg/kg for any EU. The screening criterion for lead was set at an EU arithmetic mean of 800 mg/kg based on the RSL, with a secondary limit of 2,518 mg/kg based on the May 2017 updated ALM developed by the USEPA (corresponding to a 5% probability of a blood lead level of 10 ug/dL). There were no locations where detections of lead exceeded 10,000 mg/kg, the designated threshold at which delineation would be required.

None of the detections of PCBs exceeded the mandatory excavation criterion of 50 mg/kg in any of the EUs in Parcel B6.

Composite Worker Assessment:

Risk ratios for the estimates of potential EPCs for the Composite Worker scenario are shown in **Table 12** (surface), **Table 13** (subsurface), and **Table 14** (pooled surface and subsurface soils). The results are summarized as follows:

Worker Scenario	Exposure Unit	Medium	Hazard Index (>1)	Total Cancer Risk
Composite Worker	EU1 (51.6 ac.)	Surface Soil	Dermal System = 6	4E-6
		Subsurface Soil	Dermal System = 5	7E-6
		Surface & Subsurface Soil	Dermal System = 2	4E-6
	EU2 (48.5 ac.)	Surface Soil	none	5E-6
		Subsurface Soil	Dermal System = 2	5E-6
		Surface & Subsurface Soil	none	5E-6
	EU3 (48.4 ac.)	Surface Soil	none	5E-6
		Subsurface Soil	none	3E-6
		Surface & Subsurface Soil	none	5E-6

The current Composite Worker will be exposed only to surface soils. The risk ratios indicated that the cumulative cancer risks for potential Composite Worker exposures to surface soil in each EU were less than the risk level of 1E-5 identified in the Risk Characterization Approach for no further action. When the non-cancer risks were segregated and summed by target organ for cumulative Hazard Index (HI), only the dermal system was elevated (HI=6) in EU1. The primary contributor to the hazard for the dermal system was thallium (HQ=6), which was evaluated using a maximum value in the surface soil dataset for this EU. No other target organs exceeded a cumulative HI of 1 in surface soils for any EU.

Future construction activities were assumed to result in the placement of subsurface material over existing surface soils exposing a future Composite Worker to a mixture of surface and subsurface soils. This exposure scenario is dependent on any future development proposed for the parcel. The risk ratios indicated that the cumulative cancer risks for the Composite Worker exposures to subsurface soil were less than the acceptable limit for no further action (1E-5) in each EU. Elevated hazards above the HI of 1 were calculated for subsurface exposures for the dermal system in EU1 (HI=5) and EU2 (HI=2). These elevated subsurface hazards for the dermal system were caused by the cumulative effect of thallium (HQ=4 and HQ=1 in EU1 and EU2, respectively) and vanadium (HQ=0.5 and HQ=0.9 in EU1 and EU2, respectively). Supplemental analyses evaluating the exposures to pooled soils (which may be applicable depending on future proposed development) resulted in similar values for carcinogenic risk and non-carcinogenic hazard, although some hazards were mitigated after pooling (EU2).

Based on this assessment, mitigative action or further quantitative risk assessment is warranted for EU1. The risk ratios in this EU indicated that capping or selective removal may be acceptable remedies for the elevated surface hazard posed by the presence of metals (primarily thallium). Based on this assessment, additional unacceptable hazards to a future Composite Worker may be encountered in two EUs (EU1 and EU2) if intrusive activities which relocate subsurface soils to the surface were to occur. Institutional controls to ensure proper oversight and management of any future construction activity that includes disturbances of the existing subsurface soil below 1-foot bgs could be protective of future Composite Workers by limiting potential exposures to subsurface soil which may be impacted above the acceptable risk criteria. Alternatively, a selective removal remedy would be appropriate to address the subsurface non-cancer hazard. The cumulative non-cancer hazards associated with thallium are examined in greater detail in the Thallium Removal/Capping Assessment below.

Thallium Removal/Capping Assessment:

The only elevated non-cancer hazard for the current Composite Worker exposure scenario was due to thallium in surface soils in EU1 (dermal system HI=6). The thallium hazard in EU1 was evaluated using a maximum value in the surface soil dataset for this EU, because the ProUCL output stated that there was not enough data (with three detected values) to compute "meaningful or reliable statistics and estimates". Capping of thallium-impacted areas in EU1 would be an appropriate remedy to address potential Composite Worker exposures to surface soil. Alternatively, the excavation and removal of thallium impacts in select areas would be adequate to reduce the EU1 cumulative non-cancer hazard to an acceptable level at the surface. If a response measure (removal or capping) is not planned, further analysis including a more detailed risk assessment that addresses the dermal system hazard may be warranted in a Response and Development Work Plan.

The current non-cancer HI for the dermal system is 6 for the Composite Worker exposure to surface soils in EU1. The acceptable HI level for no further action is 1. The non-cancer hazard for the dermal system in this EU was driven primarily by elevated thallium; therefore, this compound was evaluated to determine whether selective removal or capping could mitigate the hazard. The thallium result from sample B6-033-SB-1 (i.e., the maximum surface detection in EU1 of 71.6 mg/kg which was used as the EPC) was replaced with a proposed maximum concentration of the soil to remain in place and uncapped (assumed as the third highest detection of thallium in the EU1 surface dataset of 9.0 mg/kg). The revised risk ratios using this modified EPC resulted in an acceptable HI for the dermal system.

Thus, the non-cancer hazard in surface soils could be adequately addressed for the Composite Worker by removing or capping thallium-impacted material in EU1. Many possible combinations of selective removal or capping remedies could be implemented to achieve necessary cleanup goals. In addition, since a maximum value was used as the thallium EPC in the EU1 surface exposure scenario, additional data collection could influence the selection of any

future corrective remedy. Potential future risks to the Composite Worker from the subsurface soil in EU1 and EU2 can be addressed by institutional controls to ensure proper notification and management of soils which may be disturbed at the Site, or could also be addressed via localized removal/capping.

7.0 FINDINGS AND RECOMMENDATIONS

The objective of this Phase II Investigation was to fully characterize the nature and extent of contamination at the Site. During the Phase II Investigation, a total of 198 soil samples (all locations/depths) were collected and analyzed to define the nature and extent of contamination in Parcel B6. The sampling and analysis plan for the parcel was developed to target specific features which represented a potential release of hazardous substances and/or petroleum products to the environment. Soil boring samples were analyzed for TCL-VOCs, TCL-SVOCs, TPH-DRO/GRO, TAL-Metals, hexavalent chromium, and cyanide. Select samples collected most recently (B6-005-SB and B6-087-SB through B6-093-SB) were additionally analyzed for Oil & Grease. Shallow soil samples from across the site (0 to 1 foot bgs) were analyzed for PCBs.

7.1. 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.

Lead and PCB concentrations are below the levels that would warrant evaluation of a mandatory removal remedy. None of the individual lead detections exceeded the mandatory delineation threshold of 10,000 mg/kg. The average lead concentrations in the surface, subsurface, and pooled (surface and subsurface) soils are below the 800 mg/kg RSL in every EU, indicating that no further action is needed with respect to lead. Six soil sample locations exceeded the PAL for total PCBs; however, no total PCB concentrations were identified in Parcel B6 above the 50 mg/kg level that would warrant evaluation of a removal remedy. The exceedances were relatively minor, and the maximum detection of PCBs (total) was 10.6 mg/kg at sample location B6-061-SB.

While Oil & Grease was not analyzed at every location in the parcel (and no exceedances of the Oil & Grease PAL were noted), adequate TPH-DRO/GRO data was available to indicate that TPH contamination does not appear to be significant across most of the Site. There were no detections of GRO above the PAL. DRO exceeded its PAL in three soil samples, all of which had detections which were less than 2 times the PAL. The maximum detection of DRO was 11,000 mg/kg in sample B6-066-SB-5, which targeted a former Waste Oil Pit. Locations impacted by elevated TPH represent areas where free product (NAPL) could potentially mobilize, particularly along utility corridors. Two of the soil cores associated with DRO exceedances (B6-011-SB and B6-066-SB) exhibited evidence of NAPL contamination, along with four other soil cores across the parcel (B6-039-SB, B6-056-SB, B6-068-SB, and B6-087-SB). Locations which warranted consideration for further action based on TPH detections and/or evidence of possible NAPL are discussed in the following section.

There were no soil PAL exceedances or concerns related to VOCs at the Site. The remaining PAL exceedances in soil consisted of six inorganics (arsenic, manganese, lead, thallium, vanadium, and hexavalent chromium) and two SVOCs (benzo[a]pyrene and naphthalene). Arsenic was the most common inorganic exceedance, and was detected above the PAL in the majority of soil samples analyzed at the Site (140 total). The maximum detection of arsenic was 43.7 mg/kg at sample location B6-085-SB-8. Benzo[a]pyrene exceeded the PAL in the largest number of samples (nine) of either SVOC. The maximum benzo[a]pyrene exceedance (8 mg/kg) was identified in soil sample B6-037-SB-5 (targeting the TMC Oil Recovery Plant and Impoundment). The naphthalene exceedance was isolated to one soil sample (B6-011-SB-8) with a detection of 24.3 mg/kg.

7.2. NON-AQUEOUS PHASE LIQUID

There were three samples (from three individual borings) where DRO was detected above the screening level of 6,200 mg/kg. These samples include the following: B6-011-SB-8 at 7,340 mg/kg, B6-054-SB-4 at 6,840 mg/kg, and B6-066-SB-5 at 11,000 mg/kg. Elevated TPH-DRO/GRO concentrations could be indicative of the potential presence of free-phase NAPL. Soil cores were screened for evidence of possible NAPL contamination during the completion of the Phase II soil borings in Parcel B6. The field observations were noted on the boring logs, and several sample locations had visible sheens or NAPL noted in the soil cores. Six boring locations had physical evidence of possible product in the cores, including B6-011-SB, B6-039-SB, B6-056-SB, B6-066-SB, B6-068-SB, and B6-087-SB.

TPH/Oil & Grease detections in excess of 6,200 mg/kg must be 1) delineated for excavation; or 2) assessed in a detailed manner relative to any future development plans (plotted in comparison to all proposed utilities and water conveyance systems); and 3) evaluated for potential NAPL mobility. In addition, the agencies have stated that locations with concentrations in the low percent range are best considered for excavation.

Temporary piezometers were installed at three soil boring locations (B6-011-SB, B6-056-SB, and B6-066-SB) following visual observation of NAPL-bearing soils in these soil cores during the field investigation. Two of the piezometer installation locations (B6-011-SB and B6-066-SB) also exhibited elevated detections of DRO above the soil PAL as documented above. Piezometer installations were subsequently completed at the remaining three borings with trace impacts or minor indications of NAPL (B6-039-SB, B6-068-SB, and B6-087-SB). No physical evidence of product was noted in the soil core of boring B6-054-SB; however, moderate odors and elevated PID readings were noted at 4 feet bgs (the depth of equipment refusal which returned a slightly elevated DRO result). While no physical evidence of NAPL was noted in this soil core, it should be acknowledged that the depth of refusal coupled with the elevated detection of DRO indicates that the possible presence of product at B6-054-SB cannot be ruled out for lower soil depths.

The purpose of the delineation piezometers at the six locations with physical evidence of NAPL was to assess the potential presence in and/or mobility of free product to groundwater. An oil-water interface probe was used to check each piezometer (B6-011-PZ, B6-039-PZ, B6-056-PZ, B6-066-PZ, B6-068-PZ, and B6-087-PZ) for the presence of NAPL immediately after installation, 48 hours after installation, and again after at least 30 days. NAPL was not detected in B6-039-PZ, B6-056-PZ, B6-068-PZ, or B6-087-PZ during these checks, and no delineation activities were warranted. As no measureable product was identified, no significant mobile product is apparent in the soil and all four of these piezometers will be abandoned in accordance with the Maryland abandonment standards as stated in COMAR 26.04.04.34 through 36. Each piezometer will be gauged a final time on the abandonment date to confirm that NAPL has not accumulated in the casing.

Measureable NAPL was recorded at piezometers B6-011-PZ and B6-066-PZ. The delineation of NAPL has been completed in both of these areas. Following the completion of delineation in the vicinity of B6-011-PZ, EAG proposed to excavate the NAPL impacts which had been documented in this area. The MDE approved a Work Plan dated June 1, 2017 for this purpose, and EAG has completed the remedial excavation activities outlined in the Work Plan. The MDE will be provided with a Response Action Completion Report which will describe the completed excavation activities in the vicinity of B6-011-PZ. No additional response actions have yet been proposed or implemented in the vicinity of B6-066-PZ. Response actions to address these NAPL impacts will be coordinated with the MDE under a Work Plan to be submitted for approval in the future. Manual product removal or active remediation to remove the NAPL in the vicinity B6-066-PZ may be required depending on future development needs.

The permanent groundwater monitoring wells and piezometers installed within Parcel B6 for groundwater sampling (during the separate Finishing Mills Groundwater Investigation) did not show any evidence of NAPL. However, the proximity of all DRO-impacted borings and NAPL delineation piezometers to proposed utilities should be evaluated in any future development planning for Parcel B6. Appropriate protocols should be documented in a Response and Development Work Plan (as necessary) to prevent the mobilization of any product if future utilities are proposed in the vicinity of these impacts.

7.3. HUMAN HEALTH SCREENING LEVEL RISK ASSESSMENT

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. Findings from the Finishing Mills Groundwater Investigation which include the groundwater data obtained within Parcel B6 are presented in the Finishing Mills Groundwater Phase II Investigation Report (Revision 0) dated November 30, 2017, which was submitted to the agencies for review. An aqueous PAL exceedance figure is provided in **Appendix E** to indicate the locations of any shallow groundwater exceedances from the Finishing Mills Groundwater Investigation. The

groundwater data were screened to determine whether any cumulative (or individual) sample results exceeded the USEPA VI TCR (carcinogen) or THQ (non-carcinogen) Screening Levels. Among the samples obtained during the separate Finishing Mills Groundwater Investigation, there were no potential VI risks identified from the permanent monitoring wells located in the vicinity of Parcel B6. Total cyanide had previously been identified as a potential VI risk in the Finishing Mills Groundwater Phase II Investigation Report, but the screening level for cyanide has since been adjusted upward by the USEPA, eliminating this concern.

The current Composite Worker will be exposed to surface soils. The risk ratios indicated that the cumulative cancer risks for the Composite Worker scenario were less than the regulatory risk level of 1E-5 for all three EUs. When the non-cancer risks were segregated and summed by target organ, a cumulative HI of 1 was exceeded for the dermal system evaluated for Composite Worker exposure to surface soils in EU1. The main contributor to non-cancer hazard in surface soils in EU1 was thallium. Since the cumulative HI exceeded 1 for the dermal system in surface soil, additional action is required to address potential risks to a Composite Worker performing duties in EU1. The removal (via excavation and off-site disposal) or capping of thallium impacted areas in EU1 would be an appropriate remedy to address potential Composite Worker exposures to surface soil in this EU, by reducing the dermal system HI to an acceptable level. If the soil impacted with elevated thallium in EU1 is to remain in place and uncapped, the hazard related to thallium would require further evaluation in a Response and Development Work Plan for any development or permanent occupancy of this EU.

For a potential future Composite Worker exposure to subsurface soils, the risk ratios indicated that the cumulative cancer risks for the Composite Worker scenario were acceptable (less than 1E-5) for all three EUs. Elevated subsurface hazards above the HI of 1 were calculated for the dermal system in EU1 and EU2, primarily due to elevated thallium. Based on this assessment, additional unacceptable hazards to a future Composite Worker may be encountered if soil disturbances occur that relocate subsurface soils in EU1 or EU2 to the surface. Institutional controls to ensure proper oversight and management of any future construction activity that includes disturbances of the existing subsurface soil below 1-foot bgs would be protective of future Composite Workers by limiting potential exposures to subsurface soil in EU1 and EU2 which may be impacted above the acceptable risk criteria. Potential risks associated with any proposed future intrusive construction activities that would disturb subsurface soil should be addressed in a Response and Development Work Plan for that work.

7.4. RECOMMENDATIONS

Sufficient remedial investigation data has been collected to evaluate the nature and extent of possible constituents of concern in Parcel B6. The presence and absence of soil impacts within Parcel B6 have been adequately described and further investigation is not warranted, with the exception of ongoing NAPL delineation/response activities in some areas of the Site. Based on

the evaluation of surface risk presented in the SLRA, portions of the Site are not currently suitable for use by industrial workers; remedial and/or further action is required to support occupancy and use of the parcel via the following:

- Based on the risk assessment presented in this Phase II Investigation Report, the future use of the parcel should be restricted as follows:
    - Deed restriction for industrial Site use; no portion of the Site should be used for agricultural, recreational, or residential purposes. A supplemental SLRA in a project-specific Response and Development Work Plan will be required prior to commercial use of any portion of Parcel B6.
    - Deed restriction on groundwater use; no subsurface water or groundwater should be extracted from aquifers for any purpose.
- Elevated surface soil impacts (thallium) in EU1 causing elevated non-cancer hazard for the dermal system (HI=6) should be remediated either by capping or a selective removal remedy via excavation to provide Composite Worker protection. If the soil impacted with thallium is to remain in place and uncapped in EU1, the hazard related to thallium would require further evaluation in a Response and Development Work Plan for any development or permanent occupancy of this EU as it is currently defined.
- Institutional controls should be implemented for the protection of Composite Workers and Construction Workers to ensure proper oversight and management of any future construction activity that includes disturbances of the existing soil. These institutional controls will necessarily include a written notice to the MDE of any future soil disturbance activities, proper management and characterization of any material disturbed at the Site, and may require health and safety requirements for any excavations of substantial time periods. Construction Worker risks will be evaluated in site-specific Response and Development Work Plans.
- Soil boring locations with physical evidence of possible NAPL and/or elevated TPH detections (B6-011-SB, B6-039-SB, B6-054-SB, B6-056-SB, B6-066-SB, B6-068-SB, and B6-087-SB) should be considered for proximity to proposed utilities in any future development plans. Due to equipment refusal, the presence or absence of NAPL at B6-054-SB below a depth of 4 feet bgs could not be assessed. If future utilities are proposed in the vicinity of these borings, appropriate protocols for the mitigation of potential product mobility should be specified in a Response and Development Work Plan.
- Delineation of NAPL has been completed in the vicinity of piezometer B6-011-PZ. Following delineation, NAPL excavation activities were implemented in this area under a Work Plan approved by the MDE. This Work Plan also served as a Delineation

Completion Report for the identified impacts. The MDE will be provided with a Response Action Completion Report which will describe the completed excavation activities in the vicinity of B6-011-PZ.

- Delineation of NAPL has been completed in the vicinity of piezometer B6-066-PZ. No additional response actions have yet been proposed or implemented in this area. Response actions to address the NAPL impacts will be coordinated with the MDE under a Work Plan to be submitted for approval in the future. This Work Plan may also serve as a Delineation Completion Report for the identified impacts (as was the case with B6-011-PZ), or a separate Delineation Completion Report may be submitted based on scheduling requirements. Manual product removal or active remediation to remove the NAPL in the vicinity B6-066-PZ may be required depending on future development needs. Documentation of any future response actions at B6-066-PZ will ultimately be reported to the MDE in a Response Action Completion Report.

8.0 REFERENCES

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FIGURES

Tradepoint Atlantic
Area A and Area B Parcels

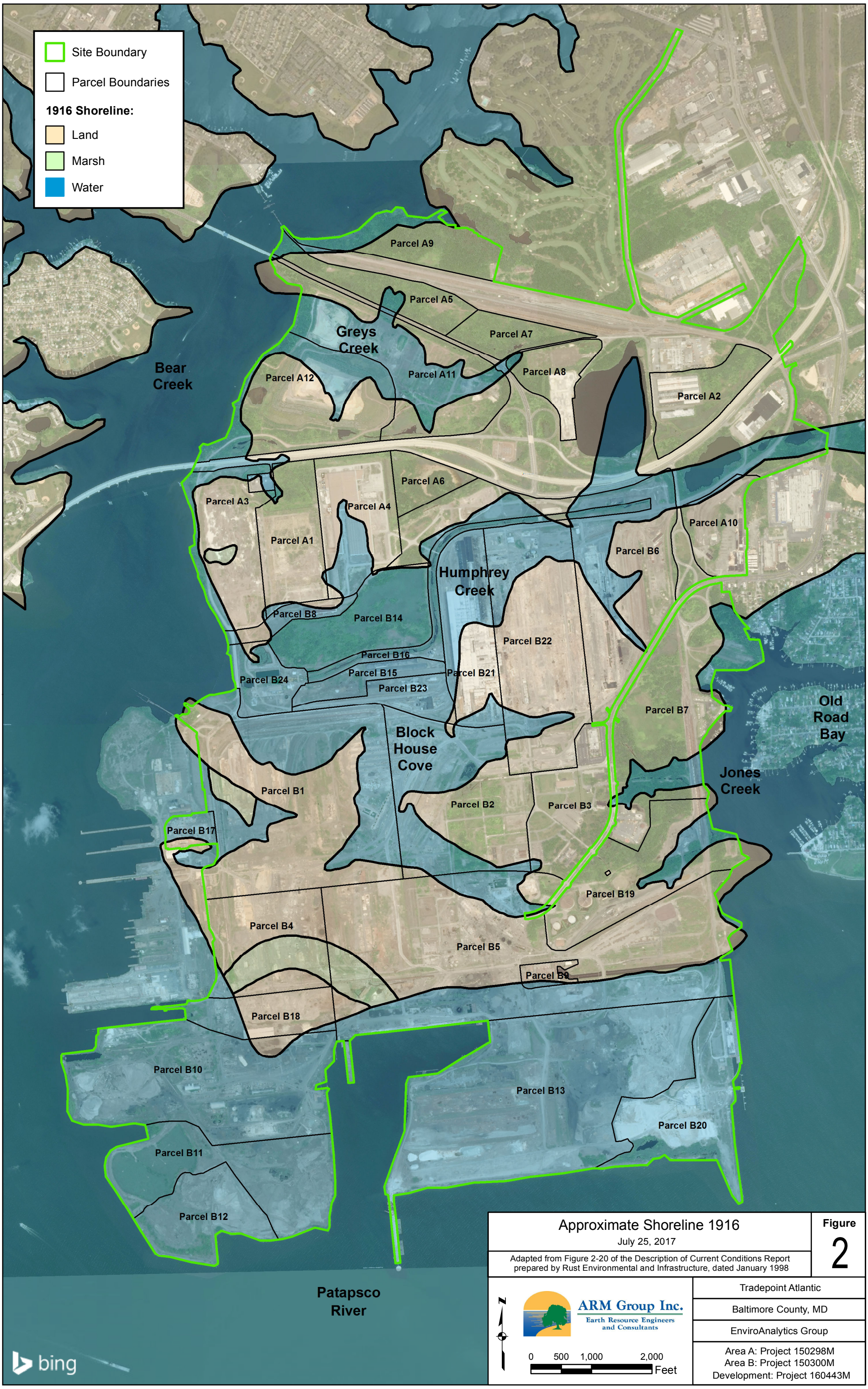
July 25, 2017

Figure 1

ARM Group Inc.
Earth Resource Engineers and Consultants

0 500 1,000 2,000 Feet

Tradepoint Atlantic
Baltimore County, MD
EnviroAnalytics Group
Area A: Project 150298M Area B: Project 150300M Development: Project 160443M



Approximate Shoreline 1916

July 25, 2017

Adapted from Figure 2-20 of the Description of Current Conditions Report prepared by Rust Environmental and Infrastructure, dated January 1998

Figure 2

ARM Group Inc.
Earth Resource Engineers and Consultants

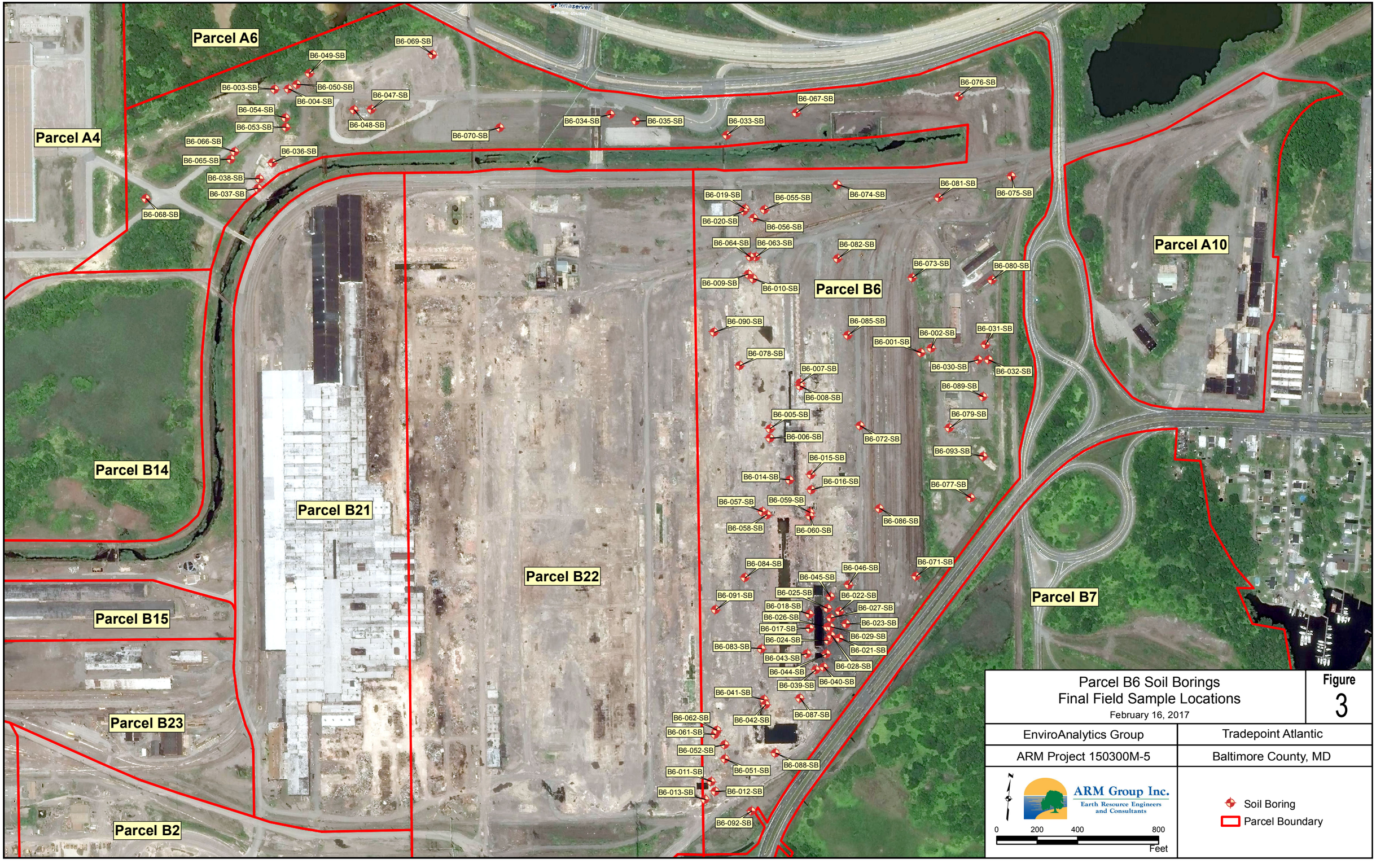
0 500 1,000 2,000 Feet

Tradepoint Atlantic

Baltimore County, MD

EnviroAnalytics Group

Area A: Project 150298M
Area B: Project 150300M
Development: Project 160443M


Parcel A6
Parcel A4
Parcel A10
Parcel B6
Parcel B14
Parcel B21
Parcel B22
Parcel B7
Parcel B15
Parcel B23
Parcel B2
B6-069-SB
B6-049-SB
B6-003-SB
B6-050-SB
B6-004-SB
B6-047-SB
B6-054-SB
B6-053-SB
B6-048-SB
B6-070-SB
B6-034-SB
B6-035-SB
B6-033-SB
B6-067-SB
B6-076-SB
B6-066-SB
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B6-036-SB
B6-038-SB
B6-037-SB
B6-068-SB
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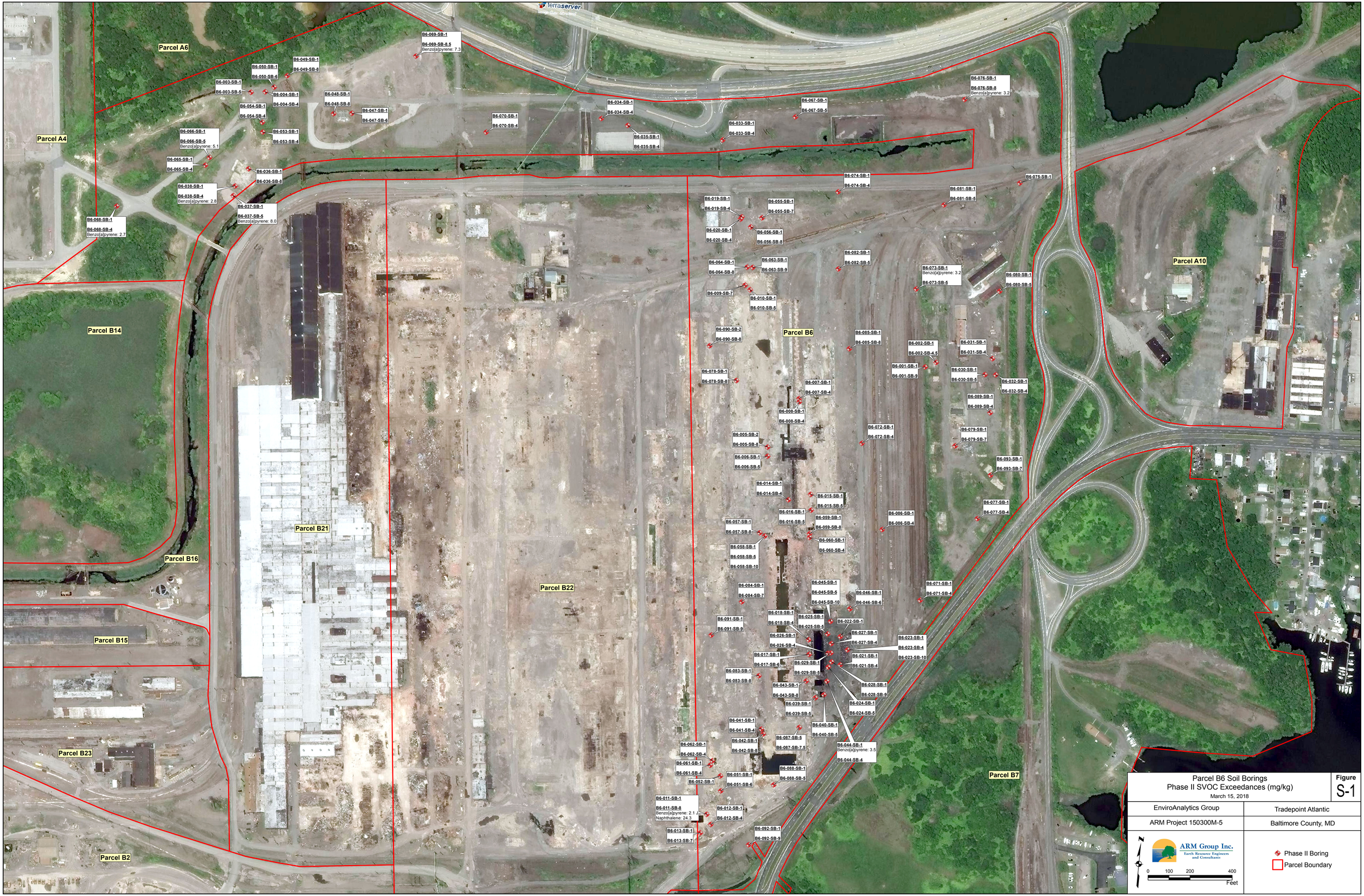
B6-041-SB
B6-087-SB
B6-042-SB
B6-062-SB
B6-061-SB
B6-052-SB
B6-088-SB
B6-051-SB
B6-011-SB
B6-013-SB
B6-012-SB
B6-092-SB
Parcel B6 Soil Borings
Final Field Sample Locations
February 16, 2017
Figure
3
EnviroAnalytics Group
Tradepoint Atlantic
ARM Project 150300M-5
Baltimore County, MD
ARM Group Inc.
Earth Resource Engineers and Consultants
0
200
400
800
Feet
Soil Boring
Parcel Boundary



Parcel B6 Soil Borings
Phase II SVOC Exceedances (mg/kg)
March 15, 2018

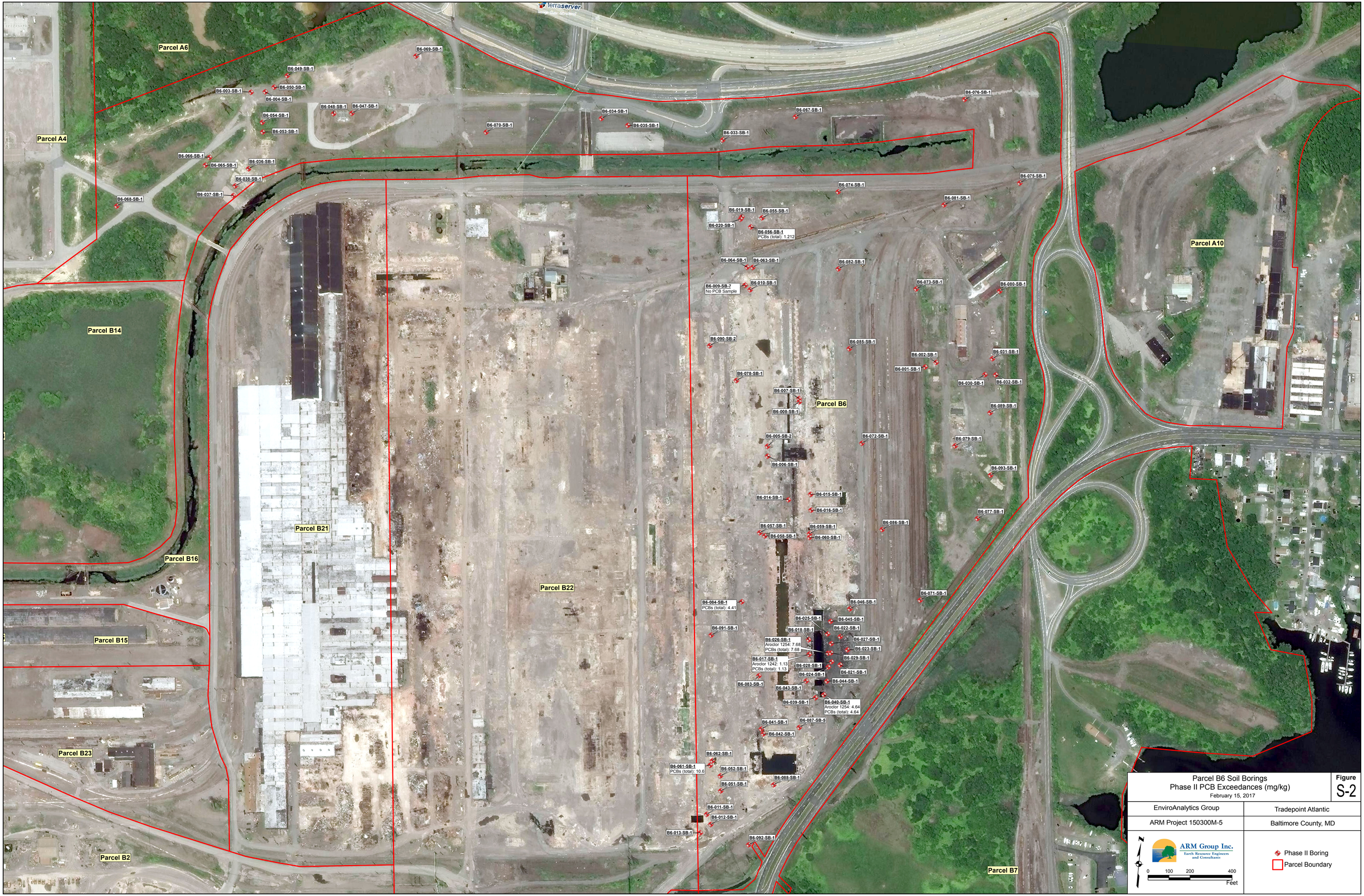
Figure S-1

EnviroAnalytics Group	Tradepoint Atlantic
ARM Project 150300M-5	Baltimore County, MD

ARM Group Inc.
Earth Resource Engineers and Consultants

0 100 200 400 Feet

Phase II Boring
Parcel Boundary



Parcel B6 Soil Borings
Phase II PCB Exceedances (mg/kg)
February 15, 2017

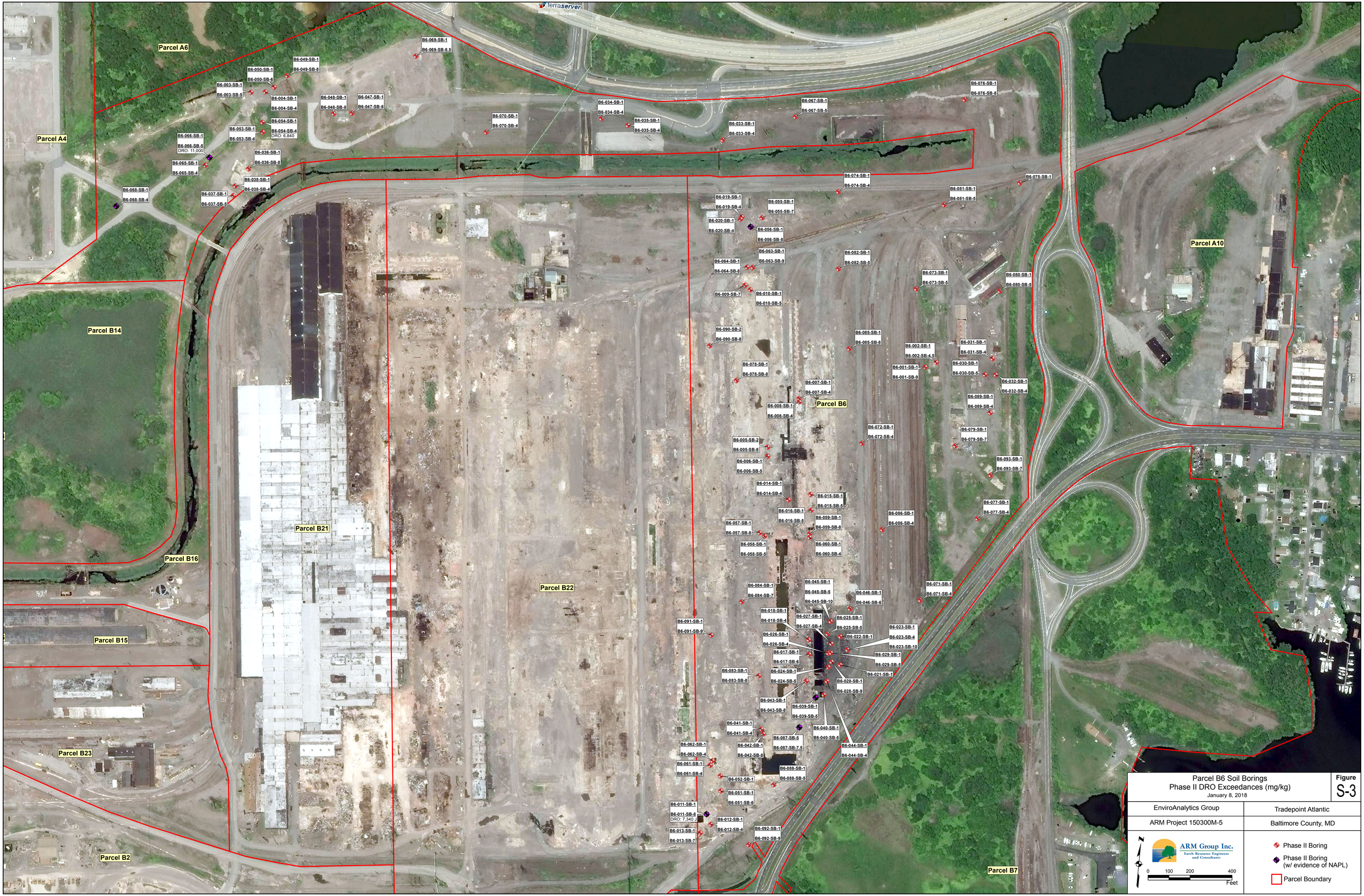
Figure
S-2

EnviroAnalytics Group	Tradepoint Atlantic
ARM Project 150300M-5	Baltimore County, MD

ARM Group Inc.
Earth Resource Engineers and Consultants

0 100 200 400
Feet

Phase II Boring
Parcel Boundary



Parcel B6 Soil Borings
Phase II DRO Exceedances (mg/kg)
January 8, 2018

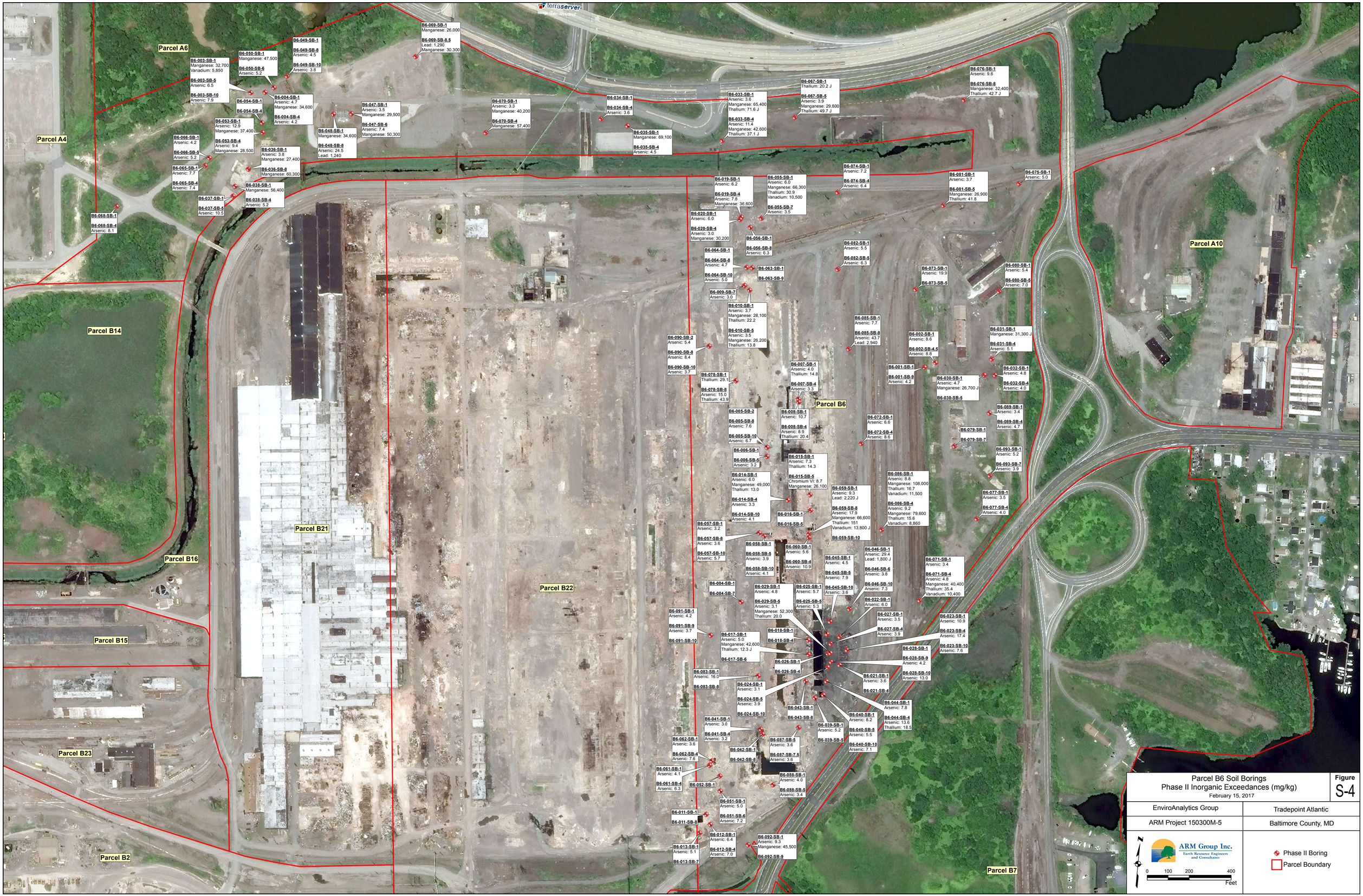
Figure S-3

EnviroAnalytics Group	Tradepoint Atlantic
ARM Project 150300M-5	Baltimore County, MD

ARM Group Inc.
Earth Resource Engineers and Consultants

0 100 200 400 Feet

- Phase II Boring
- Phase II Boring (w/ evidence of NAPL)
- Parcel Boundary



Parcel B6 Soil Borings
Phase II Inorganic Exceedances (mg/kg)
February 15, 2017

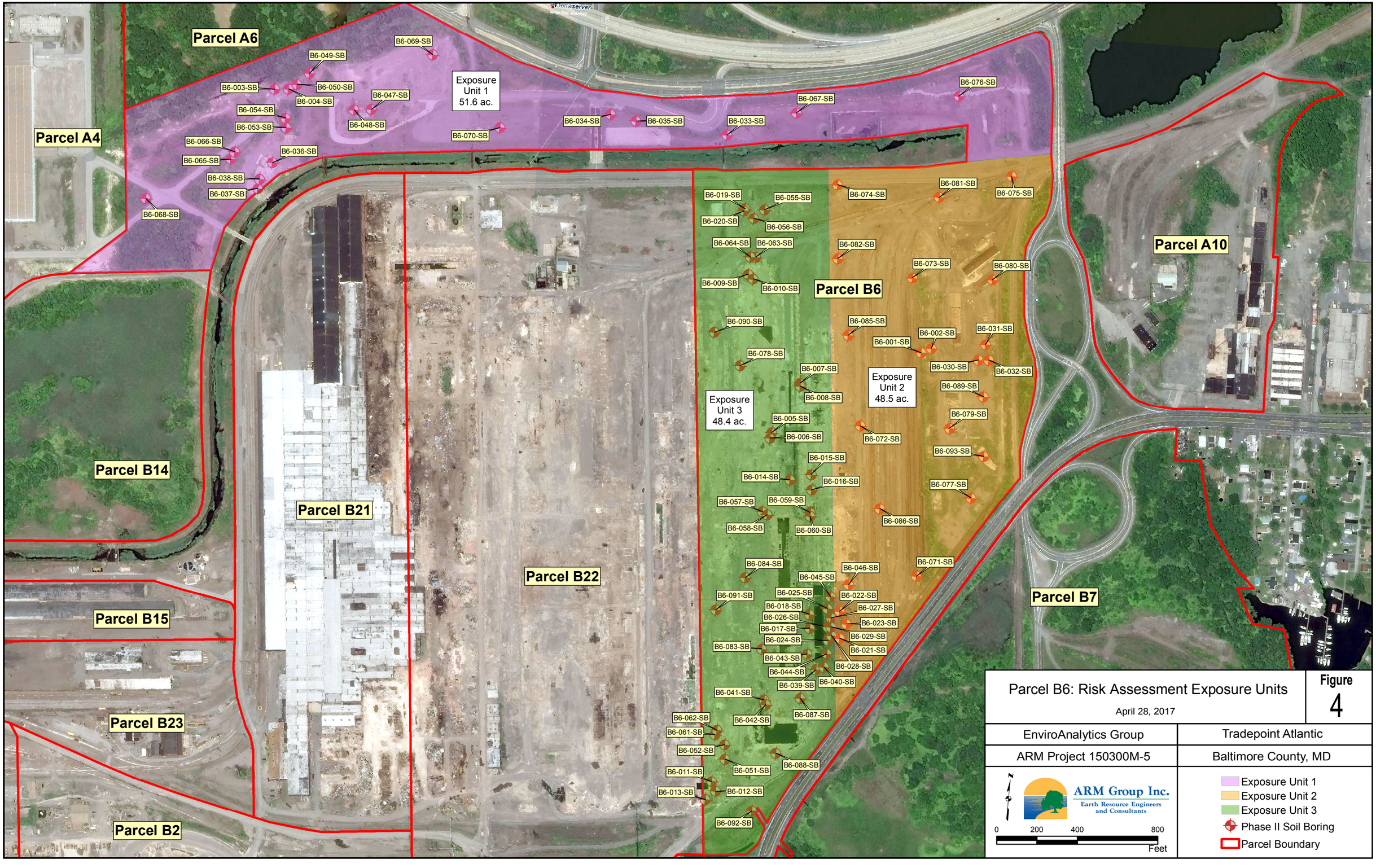
Figure S-4

EnviroAnalytics Group	Tradepoint Atlantic
ARM Project 150300M-5	Baltimore County, MD

ARM Group Inc.
Earth Resource Engineers and Consultants

0 100 200 400
Feet

Phase II Boring
Parcel Boundary



Parcel B6: Risk Assessment Exposure Units

April 28, 2017

Figure 4

EnviroAnalytics Group	Tradepoint Atlantic
ARM Project 150300M-5	Baltimore County, MD

TABLES

TABLE 1
HISTORICAL SITE DRAWING DETAILS

Set Name	Typical Features Shown	Drawing Number	Original Date Drawn	Latest Revision Date
Plant Arrangement	Roads, water bodies, building/structure footprints, electric lines, above-ground pipelines (e.g.: steam, nitrogen, etc.)	5034	6/23/1958	3/19/1982
		5035	9/1/1958	3/19/1982
		5040	6/15/1958	3/19/1982
		5041	6/15/1958	3/19/1982
		5042	*Unknown*	3/11/1982
		5045	9/21/1959	3/19/1982
		5046	9/21/1959	3/19/1982
		5047	1/17/1966	3/11/1958
		5050	*Unknown*	3/18/1982
		5051	6/1/1960	3/19/1982
		5052	6/30/1959	3/11/1982
Plant Index	Roads, water bodies, demolished buildings/structures, electric lines, above-ground pipelines	5134	*Unknown*	1/8/2008
		5135	*Unknown*	7/11/2008
		5140	*Unknown*	8/15/2008
		5141	*Unknown*	9/27/2010
		5142	*Unknown*	11/10/2008
		5145	*Unknown*	8/18/2008
		5146	*Unknown*	8/18/2008
		5147	*Unknown*	11/10/2008
		5150	*Unknown*	8/18/2008
		5151	*Unknown*	2/21/2008
		5152	*Unknown*	2/25/2008
Plant Sewer Lines	Same as above plus trenches, sumps, underground piping (includes pipe materials)	5534	8/28/1959	3/19/1976
		5535	*Unknown*	5/28/1976
		5540	6/15/1958	7/14/1991
		5541	9/6/1959	10/6/1993
		5542	9/11/1959	3/18/1976
		5545	9/21/1959	6/6/1985
		5546	10/15/1959	6/9/1993
		5547	9/16/1959	3/15/1976
		5550	9/16/1959	3/5/1976
		5551	9/16/1959	3/5/1976
		5552	9/16/1959	3/9/1976
Drip Legs	Coke Oven Gas Drip Legs Locations	5886B	*Unknown*	Sept. 1988
		5888	*Unknown*	Sept. 1988

TABLE 2
TCLP RESULTS FOR SOLID IDW

Location ID	Parameter	Result (mg/L)	TCLP Limit (mg/L)	TCLP Exceedance	Laboratory Flag	Laboratory LOQ (mg/L)
B6 Waste Chara. (10/7/16)	1,1-Dichloroethene	0.05	0.7	no	U	0.05
	1,2-Dichloroethane	0.05	0.5	no	U	0.05
	1,4-Dichlorobenzene	0.5	7.5	no	U	0.5
	2,4,5-Trichlorophenol	5	400	no	U	5
	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)	5	200	no	U	5
	2-Methylphenol	2	200	no	U	2
	3&4-Methylphenol(m&p Cresol)	2	200	no	U	2
	Arsenic	0.0065	5	no	J	0.05
	Barium	0.21	100	no	J	1
	Benzene	0.05	0.5	no	U	0.05
	Cadmium	0.00059	1	no	J	0.05
	Carbon tetrachloride	0.05	0.5	no	U	0.05
	Chlorobenzene	1	100	no	U	1
	Chloroform	0.5	6	no	U	0.5
	Chromium	0.0015	5	no	JB	0.05
	Hexachlorobenzene	0.1	0.13	no	U	0.1
	Hexachloroethane	0.5	3	no	U	0.5
	Lead	0.05	5	no	U	0.05
	Mercury	0.001	0.2	no	U	0.001
	Nitrobenzene	0.1	2	no	U	0.1
	Pentachlorophenol	5	100	no	U	5
	Selenium	0.0091	1	no	JB	0.1
	Silver	0.05	5	no	U	0.05
	Tetrachloroethene	0.05	0.7	no	U	0.05
	Trichloroethene	0.05	0.5	no	U	0.05
	Vinyl chloride	0.05	0.2	no	U	0.05

TABLE 2
TCLP RESULTS FOR SOLID IDW

Location ID	Parameter	Result (mg/L)	TCLP Limit (mg/L)	TCLP Exceedance	Laboratory Flag	Laboratory LOQ (mg/L)
B6 Waste Disposal (2/2/17)	1,1-Dichloroethene	0.05	0.7	no	U	0.05
	1,2-Dichloroethane	0.05	0.5	no	U	0.05
	1,4-Dichlorobenzene	0.5	7.5	no	U	0.5
	2,4,5-Trichlorophenol	5	400	no	U	5
	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)	5	200	no	U	5
	2-Methylphenol	2	200	no	U	2
	3&4-Methylphenol(m&p Cresol)	2	200	no	U	2
	Arsenic	0.011	5	no	J	0.05
	Barium	0.098	100	no	J	1
	Benzene	0.05	0.5	no	U	0.05
	Cadmium	0.0025	1	no	J	0.05
	Carbon tetrachloride	0.05	0.5	no	U	0.05
	Chlorobenzene	1	100	no	U	1
	Chloroform	0.5	6	no	U	0.5
	Chromium	0.0036	5	no	JB	0.05
	Hexachlorobenzene	0.1	0.13	no	U	0.1
	Hexachloroethane	0.5	3	no	U	0.5
	Lead	0.02	5	no	J	0.1
	Mercury	0.001	0.2	no	U	0.001
	Nitrobenzene	0.1	2	no	U	0.1
	Pentachlorophenol	5	100	no	U	5
	Selenium	0.1	1	no	U	0.1
	Silver	0.05	5	no	U	0.05
	Tetrachloroethene	0.05	0.7	no	U	0.05
	Trichloroethene	0.05	0.5	no	U	0.05
	Vinyl chloride	0.05	0.2	no	U	0.05

J: The positive result reported for this analyte is a quantitative estimate below the laboratory PQL

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

B: The compound/analyte was not detected substanitally above the level of the associated mehod blank/preparation or field blank

TCLP: Toxicity Characterization Leaching Potential

LOQ: Limit of Quantitation

TABLE 3
TCLP RESULTS FOR LIQUID IDW

Location ID	Parameter	Result (mg/L)	TCLP Limit (mg/L)	TCLP Exceedance	Laboratory Flag	Laboratory LOQ (mg/L)
Water Disposal (2/2/17)	1,1-Dichloroethene	0.001	0.7	no	U	0.001
	1,2-Dichloroethane	0.001	0.5	no	U	0.001
	1,4-Dichlorobenzene	0.001	7.5	no	U	0.001
	2-Butanone (MEK)	0.01	200	no	U	0.01
	Arsenic	0.005	5	no	U	0.005
	Barium	0.0564	100	no		0.01
	Benzene	0.0019	0.5	no		0.001
	Cadmium	0.003	1	no	U	0.003
	Carbon tetrachloride	0.001	0.5	no	U	0.001
	Chlorobenzene	0.001	100	no	U	0.001
	Chloroform	0.0009	6	no	J	0.001
	Chromium	0.0021	5	no	J	0.005
	Lead	0.005	5	no	U	0.005
	Mercury	0.0002	0.2	no	U	0.0002
	Selenium	0.008	1	no	U	0.008
	Silver	0.006	5	no	U	0.006
	Tetrachloroethene	0.001	0.7	no	U	0.001
	Trichloroethene	0.001	0.5	no	U	0.001
	Vinyl chloride	0.001	0.2	no	U	0.001
Water Disposal (7/22/17)	1,1-Dichloroethene	0.001	0.7	no	U	0.001
	1,2-Dichloroethane	0.001	0.5	no	U	0.001
	1,4-Dichlorobenzene	0.001	7.5	no	U	0.001
	2-Butanone (MEK)	0.01	200	no	U	0.01
	Arsenic	0.005	5	no	U	0.005
	Barium	0.0466	100	no		0.01
	Benzene	0.001	0.5	no	U	0.001
	Cadmium	0.003	1	no	U	0.003
	Carbon tetrachloride	0.001	0.5	no	U	0.001
	Chlorobenzene	0.001	100	no	U	0.001
	Chloroform	0.001	6	no	U	0.001
	Chromium	0.0011	5	no	J	0.005
	Lead	0.005	5	no	U	0.005
	Mercury	0.0002	0.2	no	U	0.0002
	Selenium	0.008	1	no	U	0.008
	Silver	0.006	5	no	U	0.006
	Tetrachloroethene	0.0035	0.7	no		0.001
	Trichloroethene	0.003	0.5	no		0.001
	Vinyl chloride	0.001	0.2	no	U	0.001

J: The positive result reported for this analyte is a quantitative estimate below the laboratory PQL
U: The analyte was not detected in the sample. The numeric value represents the sample LOQ
TCLP: Toxicity Characterization Leaching Procedure
LOQ: Limit of Quantitation

Table 4
Summary of Organics Detected in Soil
Parcel B6
Tradepoint Atlantic
Sparrows Point, Maryland

Parameter	Units	PAL	B6-001-SB-1	B6-001-SB-9	B6-002-SB-1	B6-002-SB-4.5	B6-003-SB-1*	B6-003-SB-5*	B6-004-SB-1*	B6-004-SB-4*	B6-005-SB-2*	B6-005-SB-8*	B6-006-SB-1*	B6-006-SB-5*	B6-007-SB-1	B6-007-SB-4	B6-008-SB-1	B6-008-SB-4	B6-009-SB-7	B6-010-SB-1	B6-010-SB-5	B6-011-SB-1	B6-011-SB-8
Volatile Organic Compounds																							
1,2,3-Trichlorobenzene	mg/kg	930	0.0062 U	0.0057 U	0.0071 U	0.0052 U	0.0057 U	0.0061 U	0.0061 U	0.006 U	0.0072 U	0.0058 U	0.0055 U	0.0059 U	0.0081 U	0.0051 U	0.0058 U	0.0053 U	0.0054 U	0.0053 U	0.0059 U	0.0046 U	0.0061 U
1,2-Dichlorobenzene	mg/kg	9,300	0.0062 U	0.0057 U	0.0071 U	0.0052 U	0.0057 U	0.0061 U	0.0061 U	0.006 U	0.0072 U	0.0058 U	0.0055 U	0.0059 U	0.0081 U	0.0051 U	0.0058 U	0.0053 U	0.0054 U	0.0053 U	0.0059 U	0.0046 U	0.0061 U
1,2-Dichloroethane	mg/kg	2	0.0062 U	0.0057 U	0.0071 U	0.0052 U	0.0057 U	0.0061 U	0.0061 U	0.006 U	0.0072 U	0.0058 U	0.0055 U	0.0059 U	0.0081 U	0.0051 U	0.0058 U	0.0053 U	0.0054 U	0.0053 U	0.0059 U	0.0046 U	0.0061 U
1,2-Dichloroethene (Total)	mg/kg	2,300	0.012 U	0.011 U	0.014 U	0.01 U	0.011 U	0.012 U	0.012 U	0.012 U	0.014 U	0.012 U	0.011 U	0.012 U	0.016 U	0.01 U	0.012 U	0.011 U	0.011 U	0.011 U	0.012 U	0.0092 U	0.012 U
1,3-Dichlorobenzene	mg/kg		0.0062 U	0.0057 U	0.0071 U	0.0052 U	0.0057 U	0.0061 U	0.0061 U	0.006 U	0.0072 U	0.0058 U	0.0055 U	0.0059 U	0.0081 U	0.0051 U	0.0058 U	0.0053 U	0.0054 U	0.0053 U	0.0059 U	0.0046 U	0.0061 U
1,4-Dichlorobenzene	mg/kg	11	0.0062 U	0.0057 U	0.0071 U	0.0052 U	0.0057 U	0.0061 U	0.0061 U	0.006 U	0.0072 U	0.0058 U	0.0055 U	0.0059 U	0.0081 U	0.0051 U	0.0058 U	0.0053 U	0.0054 U	0.0053 U	0.0059 U	0.0046 U	0.0061 U
2-Butanone (MEK)	mg/kg	190,000	0.012 U	0.011 U	**0.0046 J**	0.01 U	0.011 U	0.012 U	0.012 U	0.012 U	0.014 U	0.012 U	0.011 U	0.012 U	0.016 U	**0.006 J**	0.012 U	0.011 U	0.011 U	0.011 U	0.012 U	0.0092 U	0.012 U
2-Hexanone	mg/kg	1,300	0.012 U	0.011 U	0.014 U	0.01 U	0.011 U	0.012 U	0.012 U	0.012 U	0.014 U	0.012 U	0.011 U	0.012 U	0.016 U	0.01 U	0.012 U	0.011 U	0.011 U	0.011 U	0.012 U	0.0092 U	0.012 U
4-Methyl-2-pentanone (MIBK)	mg/kg	56,000	0.012 U	0.011 U	0.014 U	0.01 U	0.011 U	0.012 U	0.012 U	0.012 U	0.014 U	0.012 U	0.011 U	0.012 U	0.016 U	0.01 U	0.012 U	0.011 U	0.011 U	0.011 U	0.012 U	0.0092 UJ	0.012 UJ
Acetone	mg/kg	670,000	0.012 U	0.011 U	0.014 U	0.01 U	**0.0069 J**	**0.0096 J**	**0.0081 J**	0.012 U	**0.012 J**	0.012 U	0.011 U	0.012 U	0.016 U	**0.024**	0.012 U	0.011 U	0.011 U	0.011 U	0.012 U	0.0092 UJ	**0.014 J**
Benzene	mg/kg	5.1	0.0062 U	0.0057 U	**0.0037 J**	0.0052 U	0.0057 U	0.0061 U	0.0061 U	0.006 U	0.0072 U	0.0058 U	0.0055 U	0.0059 U	0.0081 U	0.0051 U	0.0058 U	0.0053 U	0.0054 U	0.0053 U	0.0059 U	0.0046 U	**0.037**
cis-1,2-Dichloroethene	mg/kg	2,300	0.0062 U	0.0057 U	0.0071 U	0.0052 U	0.0057 U	0.0061 U	0.0061 U	0.006 U	0.0072 U	0.0058 U	0.0055 U	0.0059 U	0.0081 U	0.0051 U	0.0058 U	0.0053 U	0.0054 U	0.0053 U	0.0059 U	0.0046 U	0.0061 U
Cyclohexane	mg/kg	27,000	0.012 U	0.011 U	0.014 U	0.01 U	0.011 U	0.012 U	0.012 U	0.012 U	0.014 U	0.012 U	0.011 U	0.012 U	0.016 U	0.01 U	0.012 U	0.011 U	0.011 U	0.011 U	0.012 U	0.0092 UJ	**0.023 J**
Ethylbenzene	mg/kg	25	0.0062 U	0.0057 U	0.0071 U	0.0052 U	0.0057 U	0.0061 U	0.0061 U	0.006 U	0.0072 U	0.0058 U	0.0055 U	0.0059 U	0.0081 U	0.0051 U	0.0058 U	0.0053 U	0.0054 U	0.0053 U	0.0059 U	0.0046 U	**0.19**
Isopropylbenzene	mg/kg	9,900	0.0062 U	0.0057 U	0.0071 U	0.0052 U	0.0057 U	0.0061 U	0.0061 U	0.006 U	0.0072 U	0.0058 U	0.0055 U	0.0059 U	0.0081 U	0.0051 U	0.0058 U	0.0053 U	0.0054 U	0.0053 U	0.0059 U	0.0046 U	**0.02 J**
Methyl Acetate	mg/kg	1,200,000	0.062 U	0.057 U	0.071 U	0.052 U	0.057 U	0.061 U	0.061 U	0.06 U	0.072 U	0.058 U	0.055 U	0.059 U	0.081 U	0.051 U	0.058 U	0.053 U	0.054 U	0.053 U	0.059 U	0.046 U	0.061 U
Methylene Chloride	mg/kg	1,000	0.0062 U	0.0057 U	0.0071 U	0.0052 U	0.0057 U	0.0061 U	0.0061 U	0.0057 B	0.0072 U	0.0058 U	0.0055 U	0.0059 U	0.0081 U	0.0051 U	0.0058 U	0.0053 U	0.0054 U	0.0053 U	0.0059 U	0.0046 U	0.0061 U
Styrene	mg/kg	35,000	0.0062 U	0.0057 U	0.0071 U	0.0052 U	0.0057 U	0.0061 U	0.0061 U	0.006 U	0.0072 U	0.0058 U	0.0055 U	0.0059 U	0.0081 U	0.0051 U	0.0058 U	0.0053 U	0.0054 U	0.0053 U	0.0059 U	0.0046 U	**0.01**
Tetrachloroethene	mg/kg	100	0.0062 U	0.0057 U	0.0071 U	0.0052 U	0.0057 U	0.0061 U	0.0061 U	0.006 U	0.0072 U	0.0058 U	0.0055 U	0.0059 U	0.0081 U	0.0051 U	0.0058 U	0.0053 U	0.0054 U	0.0053 U	0.0059 U	0.0046 UJ	**0.0066 J**
Toluene	mg/kg	47,000	0.0062 U	0.0057 U	0.0071 U	0.0052 U	0.0057 U	0.0061 U	0.0061 U	0.006 U	0.0072 U	0.0058 U	0.0055 U	0.0059 U	0.0081 U	0.0051 U	0.0058 U	0.0053 U	0.0054 U	0.0053 U	0.0059 U	0.0046 U	**0.14**
Trichloroethene	mg/kg	6	0.0062 U	0.0057 U	0.0071 U	0.0052 U	0.0057 U	0.0061 U	0.0061 U	0.006 U	0.0072 U	0.0058 U	0.0055 U	0.0059 U	0.0081 U	0.0051 U	0.0058 U	0.0053 U	0.0054 U	0.0053 U	0.0059 U	0.0046 U	0.0061 U
Xylenes	mg/kg	2,800	0.019 U	0.017 U	0.021 U	0.016 U	0.017 U	0.018 U	0.018 U	0.018 U	0.022 U	0.018 U	0.017 U	0.018 U	0.024 U	0.015 U	0.017 U	0.016 U	0.016 U	0.016 U	0.018 U	0.014 U	**0.67**
Semi-Volatile Organic Compounds^																							
1,1-Biphenyl	mg/kg	200	0.07 U	0.083 U	0.081 U	0.082 U	0.072 U	0.071 U	0.072 U	0.072 U	0.071 U	0.078 U	0.073 U	0.072 U	**0.051 J**	0.074 U	0.075 U	0.078 U	**0.031 J**	0.07 U	0.071 U	0.069 U	**0.4 J**
1,2,4,5-Tetrachlorobenzene	mg/kg	350	0.07 U	0.083 U	0.081 U	0.082 U	0.072 U	0.071 U	0.072 U	0.072 U	0.071 U	0.078 U	0.073 U	0.072 U	0.076 U	0.074 U	0.075 U	0.078 U	0.081 U	0.07 U	0.071 U	0.069 U	0.084 U
2,4-Dimethylphenol	mg/kg	16,000	0.07 U	0.083 R	0.081 U	0.082 U	0.072 U	0.071 U	0.072 U	0.072 U	0.071 U	0.078 U	0.073 U	0.072 U	0.076 U	**0.027 J**	0.075 U	0.078 U	0.081 U	0.07 U	0.071 U	0.069 U	0.084 U
2,6-Dinitrotoluene	mg/kg	1.5	0.07 U	0.083 U	0.081 U	0.082 U	0.072 U	0.071 U	0.072 U	0.072 U	0.071 U	0.078 U	0.073 U	0.072 U	0.076 U	0.074 U	0.075 U	0.078 U	0.081 U	0.07 U	0.071 U	0.069 U	0.084 U
2-Chloronaphthalene	mg/kg	60,000	0.07 U	0.083 U	0.081 U	0.082 U	0.072 U	0.071 U	0.072 U	0.072 U	0.071 U	0.078 U	0.073 U	0.072 U	0.076 U	0.074 U	0.075 U	0.078 U	0.081 U	0.07 U	0.071 U	0.069 U	0.084 U
2-Methylnaphthalene	mg/kg	3,000	**0.017**	0.0084 U	**0.0034 J**	0.0085 U	**0.027 J**	**0.045**	**0.042**	**0.031**	**0.033**	**0.3**	0.073 U	0.072 U	**0.38**	**0.039 J**	0.076 U	**0.029**	**0.096**	**0.0087**	0.072 U	**0.0048 J**	**43.8**
2-Methylphenol	mg/kg	41,000	0.07 U	0.083 R	0.081 U	0.082 U	0.072 U	0.071 U	0.072 U	0.072 U	0.071 U	0.078 U	0.073 U	0.072 U	0.076 U	0.074 U	0.075 U	0.078 U	0.081 U	0.07 U	0.071 U	0.069 U	0.084 U
3&4-Methylphenol(m&p Cresol)	mg/kg	41,000	0.14 U	0.17 R	0.16 U	0.16 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.16 U	0.15 U	0.14 U	0.15 U	0.15 U	0.15 U	0.16 U	0.16 U	0.14 U	0.14 U	0.14 U	0.17 U
3,3'-Dichlorobenzidine	mg/kg	5.1	0.07 U	0.083 U	0.081 U	0.082 U	0.072 U	0.071 U	0.072 U	0.072 U	0.071 U	0.078 U	0.073 U	0.072 U	0.076 UJ	0.074 UJ	0.075 UJ	0.078 U	0.081 UJ	0.07 UJ	0.071 UJ	0.069 UJ	**0.15 J**
4-Chloroaniline	mg/kg	11	0.07 U	0.083 U	0.081 U	0.082 U	0.072 U	0.071 U	0.072 U	0.072 U	0.071 U	0.078 U	0.073 U	0.072 U	0.076 U	0.074 U	0.075 U	0.078 U	0.081 U	0.07 U	0.071 U	0.069 U	0.084 U
Acenaphthene	mg/kg	45,000	**0.0026 J**	**0.00071 J**	**0.0011 J**	0.0085 U	**0.063 J**	**0.064**	**0.068**	**0.073**	**0.004 J**	**0.0094 J**	**0.016 J**	**0.045 J**	**0.21**	0.075 U	0.076 U	**0.0035 J**	**0.011**	**0.00069 J**	0.072 U	**0.002 J**	**5.6**
Acenaphthylene	mg/kg	45,000	**0.0062 J**	**0.0016 J**	**0.0016 J**	0.0085 U	**0.016 J**	**0.0036 J**	**0.0051 J**	**0.0048 J**	**0.0041 J**	**0.0089 J**	**0.013 J**	**0.045 J**	**0.074 J**	0.075 U	**0.012 J**	**0.078**	**0.055**	**0.0076**	**0.0063 J**	**0.008**	**1.6**
Acetophenone	mg/kg	120,000	0.07 U	0.083 U	0.081 U	0.082 U	0.072 U	0.071 U	0.072 U	0.072 U	0.071 U	0.078 U	0.073 U	0.072 U	0.076 U	0.074 U	0.075 U	0.078 U	0.081 U	0.07 U	0.071 U	0.069 U	0.084 U
Anthracene	mg/kg	230,000	**0.017**	**0.002 J**	**0.0055 J**	**0.0013 J**	**0.042 J**	**0.026**	**0.026**	**0.033**	**0.0099**	**0.021 J**	**0.095**	**0.27**	**0.49**	0.075 U	**0.011 J**	**0.061**	**0.099**	**0.0081**	0.072 U	**0.0094**	**4.2**
Benz[a]anthracene	mg/kg	21.0	**0.047**	**0.0017 J**	**0.023**	**0.0043 J**	**0.22**	**0.14**	**0.16**	**0.19**	**0.026**	**0.084**	**0.3**	**1.3**	**1.3**	**0.019 J**	**0.083**	**0.38**	**0.3**	**0.027**	**0.046 J**	**0.072**	**1.9**
Benzaldehyde	mg/kg	120,000	0.07 UJ	0.083 UJ	0.081 UJ	0.082 UJ	0.072 U	0.071 U	0.072 U	0.072 U	0.071 U	0.078 U	0.073 U	**0.018 J**	**0.047 J**	**0.03 J**	0.075 UJ	0.078 UJ	0.081 UJ	0.07 UJ	0.071 UJ	0.069 UJ	0.084 UJ
Benzo[a]pyrene	mg/kg	2.10	**0.043**	0.0084 U	**0.018**	**0.0029 J**	**0.32**	**0.25**	**0.29**	**0.31**	**0.022**	**0.064 J**	**0.2**	**1.2**	**1.3**	**0.01 J**	**0.068 J**	**0.49**	**0.36**	**0.029**	**0.041 J**	**0.085 J**	**2.1 J**
Benzo[b]fluoranthene	mg/kg	21.0	**0.12**	**0.0019 J**	**0.043**	**0.0075 J**	**0.44**	**0.34**	**0.42**	**0.59**	**0.059**	**0.13**	**0.91**	**2.7**	**2.8**	**0.028 J**	**0.17**	**1.2**	**0.76**	**0.087**	**0.11**	**0.2 J**	**1.7 J**
Benzo[g,h,i]perylene	mg/kg		**0.021**	0.0084 U	**0.0072 J**	**0.0012 J**	**0.14**	**0.12**	**0.18**	**0.18**	**0.021**	**0.094**	**0.22**	**0.92**	**0.52**	**0.013 J**	**0.031 J**	**0.19**	**0.15**	**0.018**	**0.029 J**	**0.029 J**	**0.32 J**
Benzo[k]fluoranthene	mg/kg	210	**0.1**	**0.0016 J**	**0.038**	**0.0061 J**	**0.24**	**0.16**	**0.17**	**0.59**	**0.047**	**0.098**	**0.79**	**2.4**	**2.4**	**0.026 J**	**0.15**	**1**	**0.66**	**0.076**	**0.092**	**0.17 J**	**1.7 J**
bis(2-Ethylhexyl)phthalate	mg/kg	160	**0.028 J**	0.083 U	0.081 U	0.082 U	0.072 U	0.071 U	0.072 U	0.072 U	0.071 U	0.078 U	**0.65**	**0.048 J**	0.076 UJ	0.074 UJ	0.029 B	0.078 U	0.081 UJ	0.017 B	0.071 UJ	**0.018 J**	**0.36 J**
Caprolactam	mg/kg	400,000	0.18 U	0.21 U	0.2 U	0.21 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.2 U	0.18 U	0.18 U	0.19 U	0.19 U	0.19 U	0.2 U	0.2 U	0.18 U	0.18 U	0.17 U	0.21 U
Carbazole	mg/kg		0.07 U	0.083 U	0.081 U	**0.063 J**	0.072 U	0.071 U	**0.018 J**	**0.024 J**	0.071 U	0.078 U	**0.04 J**	**0.35**	**0.11**	0.074 U	0.075 U	**0.03 J**	**0.04 J**	0.07 U	0.071 U	0.069 U	0.084 UJ
Chrysene	mg/kg	2,100	**0.043**	**0.0011 J**	**0.022**	**0.004 J**	**0.27**	**0.16**	**0.2**	**0.23**	**0.048**	**0.073 J**	**0.53**	**1.2**	**1.3**	**0.01 J**	**0.069 J**	**0.44**	**0.28**	**0.035**	**0.036 J**	**0.067**	**5.7**
Dibenz[a,h]anthracene	mg/kg	2.10	**0.0069 J**	0.0084 U	**0.0046 J**	0.0085 U	**0.053 J**	**0.046**	**0.065**	**0.065**	**0.0069 J**	0.078 U	**0.061 J**	**0.25**	**0.19**	0.075 U	0.076 U	**0.065**	**0.066**	**0.0069 J**	0.072 U	**0.0092 J**	**0.22 J**
Diethylphthalate	mg/kg	660,000	0.07 U	0.083 U	0.081 U	0.082 U	0.072 U	0.071 U	0.072 U	0.072 U	0.071 U	0.078 U	0.073 U	0.072 U	0.076 U	0.074 U	0.075 U	0.078 U	0.081 U	0.07 U	0.071 U	0.069 U	0.084 U
Di-n-butylphthalate	mg/kg	82,000	**0.05 J**	0.083 U	0.081 U	0.082 U	0.072 U	0.071 U	0.072 U	0.072 U	0.071 U	0.078 U	0.073 U	0.072 U	0.076 U	0.074 U	0.075 U	0.078 U	0.081 U	0.07 U	0.071 U	0.069 U	0.084 UJ
Di-n-ocytlphthalate	mg/kg	8,200	0.07 U	0.083 U	0.081 U	0.082 U	0.072 U	0.071 U	0.072 U	0.072 U	0.071 U	0.078 U	0.073 U	0.072 U	0.076 UJ	0.074 UJ	0.075 UJ	0.078 U	0.081 UJ	0.07 UJ	0.071 UJ	0.069 UJ	0.084 UJ
Fluoranthene	mg/kg	30,000	**0.07**	**0.0039 J**	**0.042**	**0.0064 J**	**0.17**	**0.14**	**0.22**	**0.24**	**0.071**	**0.1**	**1.3**	**2.3**	**3.1**	**0.017 J**	**0.13**	**0.39**	**0.4**	**0.034**	**0.041 J**	**0.072**	**1.1**
Fluorene	mg/kg	30,000	**0.0023 J**	0.0084 U	**0.0014 J**	0.0085 U	**0.0088 J**	**0.0096**	**0.0091**	**0.01**	**0.0047 J**	**0.012 J**	**0.024 J**	**0.035 J**	**0.24**	0.075 U	0.076 U	**0.0062 J**	**0.053**	**0.0012 J**	0.072 U	**0.0012 J**	**5.3**
Hexachloroethane	mg/kg	8.00	0.07 U	0.083 U	0.081 U	0.082 U	0.072 U	0.071 U	0.072 U	0.072 U	0.071 U	0.078 U	0.073 U	0.072 U	0.076 U	0.074 U	0.075 U	0.078 U	0.081 U	0.07 U	0.071 U	0.069 U	0.084 U
Indeno[1,2,3-c,d]pyrene	mg/kg	21.0	**0.02**	0.0084 U	**0.007 J**	**0.0012 J**	**0.14**	**0.12**	**0.18**	**0.18**	**0.016**	**0.048 J**	**0.19**	**0.74**	**0.47**	0.075 U	**0.026 J**	**0.19**	**0.16**	**0.018**	**0.026 J**	**0.024 J**	0.42 UJ
Naphthalene	mg/kg	17.0	**0.012**	0.0084 U	0.0055 B	0.0023 B	**0.023 J**	**0.05**	**0.054**	**0.044**	**0.055**	**0.19**	0.073 U	0.072 U	**0.27**	0.025 B	0.025 B	**0.04**	**0.28**	**0.018**	0.026 B	**0.0071**	**24.3**
N-Nitroso-di-n-propylamine	mg/kg	0.33	0.07 U	0.083 U	0.081 U	0.082 U	0.072 U	0.071 U	0.072 U	0.072 U	0.071 U	0.078 U	0.073 U	0.072 U	0.076 U	0.074 U	0.075 U	0.078 U	0.081 U	0.07 U	0.071 U	0.069 U	0.084 U
N-Nitrosodiphenylamine	mg/kg	470	0.07 U	0.083 U	0.081 U	0.082 U	0.072 U	0.071 U	0.072 U	0.072 U	0.071 U	0.078 U	**0.015 J**	0.072 U	0.076 U	0.074 U	0.075 U	0.078 U	0.081 U	0.07 U	0.071 U	0.069 U	0.084 UJ
Pentachlorophenol	mg/kg	4.00	0.18 U	0.21 R	0.2 U	0.21 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.2 U	0.18 U	0.18 U	0.19 U	0.19 U	0.19 U	0.2 U	0.2 U	0.18 U	0.18 U	0.17 U	0.21 UJ
Phenanthrene	mg/kg		**0.049**	**0.007 J**	**0.025**	**0.0036 J**	**0.095**	**0.075**	**0.13**	**0.15**	**0.077**	**0.21**	**0.46**	**0.85**	**2.3**	**0.013 J**	**0.062 J**	**0.13**	**0.37**	**0.028**	**0.034 J**	**0.024**	**16.3**
Phenol	mg/kg	250,000	0.07 U	0.083 R	0.081 U	0.082 U	0.072 U	0.071 U	0.072 U	0.072 U	0.071 U	0.078 U	0.073 U	0.072 U	0.076 U	0.074 U	0.075 U	0.078 U	0.081 U	0.07 U	0.071 U	0.069 U	0.084 U
Pyrene	mg/kg	23,000	**0.06**	**0.0028 J**	**0.037**	**0.0056 J**	**0.17**	**0.14**	**0.17**	**0.22**	**0.049**	**0.11**	**0.96**	**2.3**	**2.6**	**0.021 J**	**0.11**	**0.33**	**0.28**	**0.026**	**0.03 J**	**0.063**	**8.3**
PCBs																							
Aroclor 1242	mg/kg	0.97	**0.067**	N/A	0.054 U	N/A	0.0538 U	N/A	**0.0335 J**	N/A	0.018 U	N/A	0.0525 U	N/A	0.0582 U	N/A	0.0568 U	N/A	N/A	0.0521 U	N/A	0.0556 U	N/A
Aroclor 1248	mg/kg	0.94	0.0524 U	N/A	0.054 U	N/A	0.0538 U	N/A	0.0522 U	N/A	0.018 U	N/A	0.0525 U	N/A	0.0582 U	N/A	0.0568 U	N/A	N/A	0.0521 U	N/A	0.0556 U	N/A
Aroclor 1254	mg/kg	0.97	0.0524 U	N/A	0.054 U	N/A	0.0538 U	N/A	**0.0347 J**	N/A	0.018 U	N/A	0.0525 U	N/A	0.0582 U	N/A	**0.0793**	N/A	N/A	0.0521 U	N/A	0.0556 U	N/A
Aroclor 1260	mg/kg	0.99	0.0524 U	N/A	0.054 U	N/A	0.0538 U	N/A	0.0522 U	N/A	**0.0096 J**	N/A	0.0525 U	N/A	0.0582 U	N/A	0.0568 U	N/A	N/A	0.0521 U	N/A	0.0556 U	N/A
Aroclor 1262	mg/kg		0.0524 U	N/A	0.054 U	N/A	0.0538 U	N/A	0.0522 U	N/A	0.018 U	N/A	0.0525 U	N/A	0.0582 U	N/A	0.0568 U	N/A	N/A	0.0521 U	N/A	**0.0714**	N/A
Aroclor 1268	mg/kg		0.0524 U	N/A	0.054 U	N/A	0.0538 U	N/A	0.0522 U	N/A	0.018 U	N/A	0.0525 U	N/A	0.0582 U	N/A	**0.151**	N/A	N/A	0.0521 U	N/A	0.0556 U	N/A
PCBs (total)	mg/kg	0.97	**0.067**	N/A	0.054 U	N/A	0.0538 U	N/A	**0.0682**	N/A	0.13 U	N/A	0.0525 U	N/A	0.0582 U	N/A	**0.2303**	N/A	N/A	0.0521 U	N/A	**0.0714**	N/A
TPH/Oil and Grease																							
Diesel Range Organics	mg/kg	6,200	**31.8 J**	**17.3 J**	**36.4 J**	**23.3 J**	**84.9**	**53.2**	**95.7**	**86.4**	15.6 B	51.3 B	**151**	**653**	**635 J**	**266 J**	**83.3 J**	**44.6 J**	**47 J**	**17.7 J**	**20.8 J**	**11.3 J**	**7,340 J**
Gasoline Range Organics	mg/kg	6,200	12.5 U	11 U	14.2 U	9.5 U	15.3 U	9 U	14.3 U	11.3 U	21.7 U	12.3 U	12.8 U	13.3 U	12.1 U	11.2 U	12.2 U	11.6 U	11.5 U	11.1 U	12.3 U	10.4 U	**13.6**
Oil and Grease	mg/kg	6,200	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**553**	**653**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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

J: The positive result reported for this analyte is a quantitative estimate.
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 ot confirm or disprove the presence of this compound/analyte in the 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.
N/A: This parameter was not analyzed for this sample.

Table 4
Summary of Organics Detected in Soil
Parcel B6
Tradepoint Atlantic
Sparrows Point, Maryland

Parameter	Units	PAL	B6-012-SB-1	B6-012-SB-4	B6-013-SB-1*	B6-013-SB-7*	B6-014-SB-1*	B6-014-SB-4*	B6-015-SB-1	B6-015-SB-5	B6-016-SB-1	B6-016-SB-5	B6-017-SB-1	B6-017-SB-6	B6-018-SB-1	B6-018-SB-4	B6-019-SB-1*	B6-019-SB-4*	B6-020-SB-1*	B6-020-SB-4*	B6-021-SB-1*	B6-021-SB-4*	B6-022-SB-1
Volatile Organic Compounds																							
1,2,3-Trichlorobenzene	mg/kg	930	0.0054 U	0.0055 U	0.0049 U	0.005 U	0.0061 U	0.0076 U	0.005 U	0.0054 UJ	0.0056 UJ	0.0061 UJ	0.0057 U	0.0049 U	0.0091 U	0.0054 U	0.0046 U	0.0053 U	0.0047 U	0.0048 U	0.0057 U	0.0049 U	0.0047 U
1,2-Dichlorobenzene	mg/kg	9,300	0.0054 U	0.0055 U	0.0049 U	0.005 U	0.0061 U	0.0076 U	0.005 U	0.0054 U	0.0056 U	0.0061 U	0.0057 U	0.0049 U	0.0091 U	0.0054 U	0.0046 U	0.0053 U	0.0047 U	0.0048 U	0.0057 U	0.0049 U	0.0047 U
1,2-Dichloroethane	mg/kg	2	0.0054 U	0.0055 U	0.0049 U	0.005 U	0.0061 U	0.0076 U	0.005 U	0.0054 U	0.0056 U	0.0061 U	0.0057 U	0.0049 U	0.0091 U	0.0054 U	0.0046 U	0.0053 U	0.0047 U	0.0048 U	0.0057 U	0.0049 U	0.0047 U
1,2-Dichloroethene (Total)	mg/kg	2,300	0.011 U	0.011 U	0.0099 U	0.01 U	0.012 U	0.015 U	0.0099 U	0.011 U	0.011 U	0.012 U	0.011 U	0.0098 U	0.018 U	0.011 U	0.0092 U	0.011 U	0.0095 U	0.0096 U	0.011 U	0.0099 U	0.0095 U
1,3-Dichlorobenzene	mg/kg		0.0054 U	0.0055 U	0.0049 U	0.005 U	0.0061 U	0.0076 U	0.005 U	0.0054 U	0.0056 U	0.0061 U	0.0057 U	0.0049 U	0.0091 U	0.0054 U	0.0046 U	0.0053 U	0.0047 U	0.0048 U	0.0057 U	0.0049 U	0.0047 U
1,4-Dichlorobenzene	mg/kg	11	0.0054 U	0.0055 U	0.0049 U	0.005 U	0.0061 U	0.0076 U	0.005 U	0.0054 U	0.0056 U	0.0061 U	0.0057 U	0.0049 U	0.0091 U	0.0054 U	0.0046 U	0.0053 U	0.0047 U	0.0048 U	0.0057 U	0.0049 U	0.0047 U
2-Butanone (MEK)	mg/kg	190,000	0.011 U	0.011 U	0.0099 U	0.01 U	0.012 U	0.015 U	0.0099 U	0.011 U	0.011 U	0.012 U	**0.0072 J**	0.0098 U	0.018 U	0.011 U	**0.0077 J**	**0.003 J**	0.0095 U	**0.0041 J**	0.011 U	0.0099 U	0.0095 U
2-Hexanone	mg/kg	1,300	0.011 U	0.011 U	0.0099 U	0.01 U	0.012 U	0.015 U	0.0099 U	0.011 U	0.011 U	0.012 U	0.011 UJ	0.0098 U	0.018 U	0.011 U	0.0092 U	0.011 U	0.0095 U	0.0096 U	0.011 U	0.0099 U	0.0095 U
4-Methyl-2-pentanone (MIBK)	mg/kg	56,000	0.011 UJ	0.011 UJ	0.0099 U	0.01 U	0.012 U	0.015 U	0.0099 U	0.011 U	0.011 U	0.012 U	0.011 U	0.0098 U	0.018 U	0.011 U	0.0092 U	0.011 U	0.0095 U	0.0096 U	0.011 U	0.0099 U	0.0095 U
Acetone	mg/kg	670,000	0.01 B	0.011 UJ	**0.0056 J**	0.01 U	0.012 U	0.015 U	0.0099 U	0.011 U	0.011 U	0.012 U	**0.024 J**	**0.042 J**	0.018 UJ	0.011 UJ	**0.039**	0.011 U	0.0095 U	**0.011**	**0.0078 J**	0.0099 U	0.0095 UJ
Benzene	mg/kg	5.1	0.0054 U	0.0055 U	0.0049 U	0.005 U	0.0061 U	0.0076 U	0.005 U	0.0054 U	0.0056 U	0.0061 U	0.0057 U	0.0049 U	0.0091 U	0.0054 U	0.0046 U	**0.0021 J**	0.0047 U	0.0048 U	0.0057 U	0.0049 U	0.0047 U
cis-1,2-Dichloroethene	mg/kg	2,300	0.0054 U	0.0055 U	0.0049 U	0.005 U	0.0061 U	0.0076 U	0.005 U	0.0054 U	0.0056 U	0.0061 U	0.0057 U	0.0049 U	0.0091 U	0.0054 U	0.0046 U	0.0053 U	0.0047 U	0.0048 U	0.0057 U	0.0049 U	0.0047 U
Cyclohexane	mg/kg	27,000	0.011 UJ	0.011 UJ	0.0099 U	0.01 U	0.012 U	0.015 U	0.0099 U	0.011 U	0.011 U	0.012 U	0.011 U	0.0098 U	0.018 U	0.011 U	0.0092 U	0.011 U	0.0095 U	0.0096 U	0.011 U	0.0099 U	0.0095 U
Ethylbenzene	mg/kg	25	0.0054 U	0.0055 U	0.0049 U	0.005 U	0.0061 U	0.0076 U	0.005 U	0.0054 U	0.0056 U	0.0061 U	0.0057 U	0.0049 U	0.0091 U	0.0054 U	**0.00094 J**	0.0053 U	0.0047 U	0.0048 U	0.0057 U	0.0049 U	0.0047 U
Isopropylbenzene	mg/kg	9,900	0.0054 U	0.0055 U	0.0049 U	0.005 U	0.0061 U	0.0076 U	0.005 U	0.0054 U	0.0056 U	0.0061 U	0.0057 U	0.0049 U	0.0091 U	0.0054 U	0.0046 U	0.0053 U	0.0047 U	0.0048 U	0.0057 U	0.0049 U	0.0047 U
Methyl Acetate	mg/kg	1,200,000	0.054 U	0.055 U	0.049 U	0.05 U	0.061 U	0.076 U	0.05 U	0.054 U	0.056 U	0.061 U	0.057 R	0.049 R	0.091 U	0.054 U	0.046 U	0.053 U	0.047 U	0.048 U	0.057 U	0.049 U	0.047 U
Methylene Chloride	mg/kg	1,000	0.0054 U	0.0055 U	0.0049 U	0.005 U	0.0061 U	0.0076 U	0.005 U	0.0054 U	0.0056 U	0.0061 U	0.0057 U	**0.0095**	0.0091 U	0.0054 U	0.0046 U	0.0053 U	0.0047 U	0.0048 U	0.0057 U	0.0049 U	0.0047 U
Styrene	mg/kg	35,000	0.0054 U	0.0055 U	0.0049 U	0.005 U	0.0061 U	0.0076 U	0.005 U	0.0054 U	0.0056 U	0.0061 U	0.0057 U	0.0049 U	0.0091 U	0.0054 U	0.0046 U	0.0053 U	0.0047 U	0.0048 U	0.0057 U	0.0049 U	0.0047 U
Tetrachloroethene	mg/kg	100	0.0054 UJ	0.0055 UJ	0.0049 U	0.005 U	0.0061 U	0.0076 U	0.005 U	0.0054 U	0.0056 U	0.0061 U	0.0057 U	0.0049 U	0.0091 U	0.0054 U	0.0046 U	0.0053 U	0.0047 U	0.0048 U	0.0057 U	0.0049 U	0.0047 U
Toluene	mg/kg	47,000	0.0054 U	0.0055 U	0.0049 U	0.005 U	0.0061 U	0.0076 U	0.005 U	0.0054 U	0.0056 U	0.0061 U	0.0057 U	0.0049 U	0.0091 U	0.0054 U	0.0046 U	**0.0017 J**	0.0047 U	0.0048 U	0.0057 U	0.0049 U	0.0047 U
Trichloroethene	mg/kg	6	0.0054 U	0.0055 U	0.0049 U	0.005 U	0.0061 U	0.0076 U	0.005 U	0.0054 U	0.0056 U	0.0061 U	0.0057 U	0.0049 U	0.0091 U	0.0054 U	0.0046 U	0.0053 U	0.0047 U	0.0048 U	0.0057 U	0.0049 U	0.0047 U
Xylenes	mg/kg	2,800	0.016 U	0.016 U	0.015 U	0.015 U	0.018 U	0.023 U	0.015 U	0.016 U	0.017 U	0.018 U	0.017 U	0.015 U	0.027 U	0.016 U	**0.0037 J**	0.016 U	0.014 U	0.014 U	0.017 U	0.015 U	0.014 U
Semi-Volatile Organic Compounds^																							
1,1-Biphenyl	mg/kg	200	0.078 U	0.081 U	**0.026 J**	0.079 U	**0.037 J**	0.08 U	0.077 U	0.071 U	0.072 U	0.071 U	0.073 U	0.074 U	0.085 U	0.071 U	0.071 U	0.071 U	**0.024 J**	0.07 U	0.077 U	0.077 U	0.071 U
1,2,4,5-Tetrachlorobenzene	mg/kg	350	0.078 U	0.081 U	0.076 U	0.079 U	0.077 U	0.08 U	0.077 U	0.071 U	0.072 U	0.071 U	0.073 U	0.074 U	0.085 U	0.071 U	0.071 U	0.071 U	0.071 U	0.07 U	0.077 U	0.077 U	0.071 U
2,4-Dimethylphenol	mg/kg	16,000	0.078 U	0.081 U	0.076 U	0.079 U	0.077 U	0.08 U	0.077 U	0.071 U	0.072 U	0.071 U	0.073 U	0.074 U	0.085 U	0.071 U	0.071 U	0.071 U	0.071 U	0.07 U	0.077 U	0.077 U	0.071 UJ
2,6-Dinitrotoluene	mg/kg	1.5	0.078 U	0.081 U	0.076 U	0.079 U	0.077 U	0.08 U	0.077 U	0.071 U	0.072 U	0.071 U	0.073 U	**0.024 J**	0.085 U	0.071 U	0.071 U	0.071 U	0.071 U	0.07 U	0.077 U	0.077 U	0.071 U
2-Chloronaphthalene	mg/kg	60,000	0.078 U	0.081 U	0.076 U	0.079 U	0.077 U	0.08 U	0.077 U	0.071 U	0.072 U	0.071 U	0.073 U	0.074 U	0.085 U	0.071 U	0.071 U	0.071 U	0.071 U	0.07 U	0.077 U	0.077 U	0.071 U
2-Methylnaphthalene	mg/kg	3,000	0.078 U	**0.019**	**0.021 J**	0.0079 U	**0.028**	**0.028**	0.077 U	**0.0085**	0.072 U	0.0072 U	0.073 U	0.076 U	0.0085 U	0.007 U	0.071 U	**0.018**	**0.052 J**	0.071 U	0.078 U	0.0079 U	0.072 U
2-Methylphenol	mg/kg	41,000	0.078 U	0.081 U	0.076 U	0.079 U	0.077 U	0.08 U	0.077 U	0.071 U	0.072 U	0.071 U	0.073 U	0.074 U	0.085 U	0.071 U	0.071 U	0.071 U	0.071 U	0.07 U	0.077 U	0.077 U	0.071 UJ
3&4-Methylphenol(m&p Cresol)	mg/kg	41,000	0.15 U	0.16 U	0.15 U	0.16 U	0.15 U	0.16 U	0.15 U	0.14 U	0.14 U	0.14 U	0.15 U	0.15 U	0.17 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.15 U	0.15 U	0.14 UJ
3,3'-Dichlorobenzidine	mg/kg	5.1	0.078 UJ	0.081 U	0.076 U	0.079 U	0.077 U	0.08 U	0.077 UJ	0.071 U	0.072 UJ	0.071 U	0.073 UJ	0.074 U	0.085 U	0.071 U	0.071 U	0.071 U	0.071 U	0.07 U	0.077 U	0.077 U	0.071 UJ
4-Chloroaniline	mg/kg	11	0.078 U	0.081 U	0.076 U	0.079 U	0.077 U	0.08 U	0.077 U	0.071 U	0.072 U	0.071 U	0.073 U	0.074 U	0.085 U	0.071 U	0.071 U	0.071 U	0.071 U	0.07 U	0.077 U	0.077 U	0.071 U
Acenaphthene	mg/kg	45,000	0.078 U	**0.0099**	**0.0054 J**	0.0079 U	**0.00071 J**	**0.0015 J**	0.077 U	**0.00057 J**	0.072 U	0.0072 U	0.073 U	0.076 U	0.0085 U	0.007 U	**0.0046 J**	**0.025**	**0.018 J**	**0.039 J**	0.078 U	0.0079 U	0.072 U
Acenaphthylene	mg/kg	45,000	**0.0098 J**	**0.022**	**0.012 J**	0.0079 U	**0.024**	**0.02**	**0.013 J**	**0.00081 J**	0.072 U	0.0072 U	0.073 U	0.076 U	0.0085 U	0.007 U	0.071 U	**0.012**	**0.035 J**	**0.0066 J**	**0.0074 J**	0.0079 U	**0.0086 J**
Acetophenone	mg/kg	120,000	0.078 U	0.081 U	0.076 U	0.079 U	0.077 U	0.08 U	0.077 U	0.071 U	0.072 U	0.071 U	0.073 U	0.074 U	0.085 U	0.071 U	0.071 U	0.071 U	0.071 U	0.07 U	0.077 U	0.077 U	**0.028 J**
Anthracene	mg/kg	230,000	**0.024 J**	**0.074**	**0.037 J**	0.0079 U	**0.041**	**0.016**	**0.01 J**	**0.023**	0.072 U	0.0072 U	0.073 U	0.076 U	**0.0011 J**	0.007 U	**0.024 J**	**0.14**	**0.12**	**0.22**	**0.014 J**	0.0079 U	**0.0086 J**
Benz[a]anthracene	mg/kg	21.0	**0.074 J**	**0.19**	**0.095**	**0.0011 J**	**0.25**	**0.11**	**0.076 J**	**0.072**	**0.027 J**	0.0072 U	0.073 U	0.076 U	0.0085 U	0.007 U	**0.093**	**0.71**	**0.31**	**0.76**	**0.074 J**	0.0079 U	**0.043 J**
Benzaldehyde	mg/kg	120,000	0.078 UJ	**0.019 J**	0.076 U	0.079 U	0.077 U	0.08 U	0.077 UJ	0.071 UJ	0.072 UJ	0.071 UJ	**0.026 J**	0.074 UJ	0.085 U	0.071 U	0.071 U	0.071 U	**0.019 J**	0.07 U	0.077 U	0.077 U	**0.1 J**
Benzo[a]pyrene	mg/kg	2.10	**0.1**	**0.17 J**	**0.075 J**	0.0079 U	**0.21**	**0.13**	**0.061 J**	**0.047**	**0.019 J**	0.0072 U	**0.0096 J**	0.076 U	0.0085 U	0.007 U	**0.09**	**0.69**	**0.29**	**0.62**	**0.059 J**	0.0079 U	**0.035 J**
Benzo[b]fluoranthene	mg/kg	21.0	**0.21**	**0.46 J**	**0.21**	**0.00062 J**	**0.62**	**0.22**	**0.15**	**0.16**	**0.063 J**	**0.00057 J**	**0.015 J**	**0.0062 J**	**0.0023 J**	**0.0021 J**	**0.19**	**1**	**0.59**	**1.3**	**0.15**	0.0079 U	**0.063 J**
Benzo[g,h,i]perylene	mg/kg		**0.092**	**0.041 J**	**0.058 J**	0.0079 U	**0.2**	**0.11**	**0.026 J**	**0.019**	**0.009 J**	0.0072 U	0.073 U	0.076 U	0.0085 U	0.007 U	**0.082**	**0.39**	**0.2**	**0.29**	**0.039 J**	0.0079 U	**0.011 J**
Benzo[k]fluoranthene	mg/kg	210	**0.18**	**0.4 J**	**0.18**	0.0079 U	**0.54**	**0.096**	**0.13**	**0.14**	**0.054 J**	0.0072 U	0.073 U	0.076 U	**0.002 J**	**0.0021 J**	**0.17**	**0.38**	**0.52**	**1.1**	**0.13**	0.0079 U	**0.057 J**
bis(2-Ethylhexyl)phthalate	mg/kg	160	**0.26 J**	0.081 U	**0.16**	0.079 U	0.077 U	0.08 U	0.024 B	0.071 U	**0.28 J**	0.071 U	**0.39 J**	0.038 B	0.085 U	0.071 U	**0.12**	0.071 U	0.071 U	**0.41**	**0.019 J**	0.077 U	**0.043 J**
Caprolactam	mg/kg	400,000	0.19 U	0.2 U	0.19 U	0.2 U	0.19 U	0.2 U	0.19 U	0.18 U	0.18 U	0.18 U	0.18 U	0.19 U	0.21 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.19 U	0.19 U	0.18 U
Carbazole	mg/kg		0.078 UJ	0.081 U	**0.023 J**	0.079 U	**0.044 J**	**0.025 J**	0.077 U	0.071 U	0.072 U	0.071 U	0.073 U	0.074 U	0.085 U	0.071 U	0.071 U	**0.062 J**	**0.066 J**	**0.035 J**	0.077 U	0.077 U	0.071 U
Chrysene	mg/kg	2,100	**0.062 J**	**0.15**	**0.1**	0.0079 U	**0.34**	**0.14**	**0.056 J**	**0.072**	**0.024 J**	0.0072 U	**0.0065 J**	0.076 U	**0.0012 J**	**0.0011 J**	**0.11**	**0.63**	**0.27**	**0.7**	**0.068 J**	0.0079 U	**0.028 J**
Dibenz[a,h]anthracene	mg/kg	2.10	0.078 U	**0.019 J**	0.077 U	0.0079 U	**0.068**	**0.04**	0.077 U	**0.0075**	0.072 U	0.0072 U	0.073 U	0.076 U	0.0085 U	0.007 U	**0.035 J**	**0.14**	**0.058 J**	**0.099**	**0.016 J**	0.0079 U	0.072 UJ
Diethylphthalate	mg/kg	660,000	0.078 U	0.081 U	0.076 U	0.079 U	0.077 U	0.08 U	0.077 U	0.071 U	0.072 U	0.071 U	0.073 U	0.074 U	0.085 U	0.071 U	**0.18**	0.071 U	**2.5**	0.07 U	0.077 U	0.077 U	0.071 U
Di-n-butylphthalate	mg/kg	82,000	0.078 UJ	0.081 U	0.076 U	0.079 U	0.077 U	0.08 U	0.077 U	0.071 U	0.072 U	0.071 U	0.073 U	0.074 U	0.085 U	0.071 U	0.071 U	0.071 U	0.071 U	0.07 U	0.077 U	0.077 U	**0.071**
Di-n-ocytlphthalate	mg/kg	8,200	0.078 UJ	0.081 U	0.076 U	0.079 U	0.077 U	0.08 U	0.077 UJ	0.071 U	0.072 UJ	0.071 U	0.073 UJ	0.074 UJ	0.085 U	0.071 U	0.071 U	0.071 U	0.071 U	0.07 U	0.077 U	0.077 U	0.071 UJ
Fluoranthene	mg/kg	30,000	**0.12**	**0.34**	**0.16**	**0.0005 J**	**0.59**	**0.17**	**0.11**	**0.16**	**0.029 J**	**0.00057 J**	**0.016 J**	**0.0069 J**	**0.0018 J**	**0.0023 J**	**0.13**	**1.3**	**0.6**	**1.3**	**0.089**	0.0079 U	**0.039 J**
Fluorene	mg/kg	30,000	0.078 U	**0.015**	0.077 U	0.0079 U	**0.00068 J**	**0.0014 J**	0.077 U	0.0074 U	0.072 U	0.0072 U	0.073 U	0.076 U	0.0085 U	0.007 U	0.071 U	**0.02**	**0.035 J**	**0.03 J**	0.078 U	0.0079 U	0.072 U
Hexachloroethane	mg/kg	8.00	0.078 U	0.081 U	0.076 U	0.079 U	0.077 U	0.08 U	0.077 U	0.071 U	0.072 U	0.071 U	0.073 U	0.074 U	0.085 U	0.071 U	0.071 U	0.071 U	0.071 U	0.07 U	0.077 U	0.077 U	0.071 U
Indeno[1,2,3-c,d]pyrene	mg/kg	21.0	**0.034 J**	**0.044 J**	**0.036 J**	0.0079 U	**0.19**	**0.11**	**0.023 J**	**0.02**	0.072 U	0.0072 U	0.073 U	0.076 U	0.0085 U	0.007 U	**0.056 J**	**0.37**	**0.17**	**0.26**	**0.032 J**	0.0079 U	0.072 UJ
Naphthalene	mg/kg	17.0	0.019 B	**0.042**	**0.04 J**	0.0079 U	**0.11**	**0.072**	0.026 B	**0.015**	0.072 U	0.0072 U	0.073 U	0.076 U	0.0085 U	0.007 U	0.071 U	**0.029**	**0.095**	**0.021 J**	0.078 U	0.0079 U	0.072 U
N-Nitroso-di-n-propylamine	mg/kg	0.33	0.078 U	0.081 U	0.076 U	0.079 U	0.077 U	0.08 U	0.077 U	0.071 U	0.072 U	0.071 U	0.073 U	0.074 U	0.085 U	0.071 U	0.071 U	0.071 U	0.071 U	0.07 U	0.077 U	0.077 U	0.071 U
N-Nitrosodiphenylamine	mg/kg	470	0.078 UJ	0.081 U	0.076 U	0.079 U	0.077 U	0.08 U	0.077 U	0.071 U	0.072 U	0.071 U	0.073 U	0.074 U	0.085 U	0.071 U	0.071 U	0.071 U	0.071 U	0.07 U	0.077 U	0.077 U	0.071 U
Pentachlorophenol	mg/kg	4.00	0.19 UJ	0.2 U	**0.041 J**	0.2 U	0.19 U	0.2 U	0.19 U	0.18 U	0.18 U	0.18 U	0.18 U	0.19 U	0.21 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.19 U	0.19 U	0.18 UJ
Phenanthrene	mg/kg		**0.051 J**	**0.22**	**0.1**	0.0079 U	**0.35**	**0.14**	**0.045 J**	**0.11**	**0.015 J**	**0.00057 J**	**0.0068 J**	**0.0089 J**	**0.0027 J**	**0.0016 J**	**0.05 J**	**0.47**	**0.46**	**0.61**	**0.069 J**	0.0079 U	**0.0087 J**
Phenol	mg/kg	250,000	0.078 U	0.081 U	0.076 U	0.079 U	0.077 U	0.08 U	0.077 U	0.071 U	0.072 U	0.071 U	0.073 U	0.074 U	0.085 U	0.071 U	0.071 U	0.071 U	0.071 U	0.07 U	0.077 U	0.077 U	0.071 UJ
Pyrene	mg/kg	23,000	**0.2**	**0.28**	**0.15**	0.0079 U	**0.33**	**0.16**	**0.089**	**0.11**	**0.031 J**	0.0072 U	**0.019 J**	**0.0078 J**	**0.0023 J**	**0.0024 J**	**0.12**	**1.1**	**0.46**	**1**	**0.073 J**	0.0079 U	**0.037 J**
PCBs																							
Aroclor 1242	mg/kg	0.97	0.0577 U	N/A	0.0532 U	N/A	0.057 U	N/A	0.0586 U	N/A	0.0528 U	N/A	**1.13**	N/A	0.0527 U	N/A	0.0547 U	N/A	0.0532 U	N/A	0.058 U	N/A	0.0558 U
Aroclor 1248	mg/kg	0.94	0.0577 U	N/A	0.0532 U	N/A	0.057 U	N/A	0.0586 U	N/A	0.0528 U	N/A	0.0577 U	N/A	0.0527 U	N/A	0.0547 U	N/A	0.0532 U	N/A	0.058 U	N/A	0.0558 U
Aroclor 1254	mg/kg	0.97	**0.255**	N/A	**0.557**	N/A	0.057 U	N/A	**0.114**	N/A	**0.289**	N/A	0.0577 U	N/A	0.0527 U	N/A	**0.0756**	N/A	0.0532 U	N/A	0.058 U	N/A	0.0558 U
Aroclor 1260	mg/kg	0.99	0.0577 U	N/A	0.0532 U	N/A	0.057 U	N/A	0.0586 U	N/A	0.0528 U	N/A	0.0577 U	N/A	0.0527 U	N/A	0.0547 U	N/A	0.0532 U	N/A	0.058 U	N/A	0.0558 U
Aroclor 1262	mg/kg		**0.348**	N/A	0.0532 U	N/A	0.057 U	N/A	0.0586 U	N/A	**0.157**	N/A	0.0577 U	N/A	0.0527 U	N/A	**0.0559**	N/A	**0.0453 J**	N/A	**0.111**	N/A	**0.0466 J**
Aroclor 1268	mg/kg		0.0577 U	N/A	**0.0372 J**	N/A	0.057 U	N/A	**0.0357 J**	N/A	0.0528 U	N/A	0.0577 U	N/A	0.0527 U	N/A	0.0547 U	N/A	0.0532 U	N/A	0.058 U	N/A	0.0558 U
PCBs (total)	mg/kg	0.97	**0.603**	N/A	**0.5942**	N/A	0.057 U	N/A	**0.1497**	N/A	**0.446**	N/A	**1.13**	N/A	0.0527 U	N/A	**0.1315**	N/A	**0.0453 J**	N/A	**0.111**	N/A	**0.0466 J**
TPH/Oil and Grease																							
Diesel Range Organics	mg/kg	6,200	**120 J**	**5.3 J**	**123**	**5.8 J**	**39.6**	**62.6**	**162 J**	**22.1 J**	**47.1 J**	**5.8 J**	**98.4 J**	**47.1 J**	**43.7 J**	**12.7 J**	**67**	**50.6**	**96.2**	**367**	**32.9**	N/A	**248 J**
Gasoline Range Organics	mg/kg	6,200	11.2 U	13.2 U	12.8 U	9.4 U	11.5 U	12.6 U	9.6 U	10.9 U	11 U	14 U	10.5 U	10.3 U	16.1 U	11.4 U	9.8 U	11.1 U	10.5 U	10.4 U	11 U	N/A	9.3 U
Oil and Grease	mg/kg	6,200	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	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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

J: The positive result reported for this analyte is a quantitative estimate.
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 ot confirm or disprove the presence of this compound/analyte in the 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.
N/A: This parameter was not analyzed for this sample.

Table 4
Summary of Organics Detected in Soil
Parcel B6
Tradepoint Atlantic
Sparrows Point, Maryland

Parameter	Units	PAL	B6-023-SB-1	B6-023-SB-4	B6-023-SB-10	B6-024-SB-1*	B6-024-SB-5*	B6-025-SB-1	B6-025-SB-5	B6-026-SB-1*	B6-026-SB-4*	B6-027-SB-1	B6-027-SB-4	B6-028-SB-1*	B6-028-SB-9*	B6-029-SB-1*	B6-029-SB-5*	B6-030-SB-1	B6-030-SB-5	B6-031-SB-1	B6-031-SB-4	B6-032-SB-1	B6-032-SB-4
Volatile Organic Compounds																							
1,2,3-Trichlorobenzene	mg/kg	930	0.0032 U	0.0064 U	N/A	0.0061 U	0.0048 U	0.0035 U	0.0052 U	0.0055 U	0.0054 U	0.0063 U	0.0048 U	0.0059 U	0.005 U	0.0067 U	0.0062 U	0.0052 U	0.0052 U	0.0053 U	0.0049 U	0.0055 UJ	0.0047 UJ
1,2-Dichlorobenzene	mg/kg	9,300	0.0032 U	0.0064 U	N/A	0.0061 U	0.0048 U	0.0035 U	0.0052 U	0.0055 U	0.0054 U	0.0063 U	0.0048 U	0.0059 U	0.005 U	0.0067 U	0.0062 U	0.0052 U	0.0052 U	0.0053 U	0.0049 U	0.0055 U	0.0047 U
1,2-Dichloroethane	mg/kg	2	0.0032 U	0.0064 U	N/A	0.0061 U	0.0048 U	0.0035 U	0.0052 U	0.0055 U	0.0054 U	0.0063 U	0.0048 U	0.0059 U	0.005 U	0.0067 U	0.0062 U	0.0052 U	0.0052 U	0.0053 U	0.0049 U	0.0055 U	0.0047 U
1,2-Dichloroethene (Total)	mg/kg	2,300	0.0064 U	0.013 U	N/A	0.012 U	0.0095 U	0.0071 U	0.01 U	0.011 U	0.011 U	0.013 U	0.0096 U	0.012 U	0.01 U	0.013 U	0.012 U	0.01 U	0.01 U	0.011 U	0.0098 U	0.011 U	0.0094 U
1,3-Dichlorobenzene	mg/kg		0.0032 U	0.0064 U	N/A	0.0061 U	0.0048 U	0.0035 U	0.0052 U	0.0055 U	0.0054 U	0.0063 U	0.0048 U	0.0059 U	0.005 U	0.0067 U	0.0062 U	0.0052 U	0.0052 U	0.0053 U	0.0049 U	0.0055 U	0.0047 U
1,4-Dichlorobenzene	mg/kg	11	0.0032 U	0.0064 U	N/A	0.0061 U	0.0048 U	0.0035 U	0.0052 U	0.0055 U	0.0054 U	0.0063 U	0.0048 U	0.0059 U	0.005 U	0.0067 U	0.0062 U	0.0052 U	0.0052 U	0.0053 U	0.0049 U	0.0055 U	0.0047 U
2-Butanone (MEK)	mg/kg	190,000	0.0064 U	0.013 U	N/A	0.012 U	0.0095 U	0.0071 U	0.01 U	0.011 U	**0.0029 J**	0.013 U	0.0096 U	0.012 U	0.01 U	0.013 U	0.012 U	0.01 U	0.01 U	**0.008 J**	0.0098 U	**0.0031 J**	**0.0065 J**
2-Hexanone	mg/kg	1,300	0.0064 U	0.013 U	N/A	0.012 U	0.0095 U	0.0071 U	0.01 U	0.011 U	0.011 U	0.013 U	0.0096 U	0.012 U	0.01 U	0.013 U	0.012 U	0.01 U	0.01 U	0.011 U	0.0098 U	0.011 U	0.0094 U
4-Methyl-2-pentanone (MIBK)	mg/kg	56,000	0.0064 U	0.013 U	N/A	0.012 U	0.0095 U	0.0071 U	0.01 U	0.011 U	0.011 U	0.013 U	0.0096 U	0.012 U	0.01 U	0.013 U	0.012 U	0.01 U	0.01 U	0.011 U	0.0098 U	0.011 U	0.0094 U
Acetone	mg/kg	670,000	0.0064 UJ	0.013 UJ	N/A	**0.0075 J**	**0.019**	0.0071 UJ	0.01 UJ	**0.016**	**0.028**	0.013 UJ	0.0096 UJ	0.012 U	**0.0093 J**	**0.02**	0.012 U	0.01 U	0.01 U	**0.036**	0.0098 U	0.011 U	**0.018**
Benzene	mg/kg	5.1	0.0032 U	0.0064 U	N/A	0.0061 U	0.0048 U	0.0035 U	0.0052 U	0.0055 U	0.0054 U	0.0063 U	0.0048 U	0.0059 U	0.005 U	0.0067 U	0.0062 U	0.0052 U	0.0052 U	0.0053 U	0.0049 U	0.0055 U	0.0047 U
cis-1,2-Dichloroethene	mg/kg	2,300	0.0032 U	0.0064 U	N/A	0.0061 U	0.0048 U	0.0035 U	0.0052 U	0.0055 U	0.0054 U	0.0063 U	0.0048 U	0.0059 U	0.005 U	0.0067 U	0.0062 U	0.0052 U	0.0052 U	0.0053 U	0.0049 U	0.0055 U	0.0047 U
Cyclohexane	mg/kg	27,000	0.0064 U	0.013 U	N/A	0.012 U	0.0095 U	0.0071 U	0.01 U	0.011 U	0.011 U	0.013 U	0.0096 U	0.012 U	0.01 U	0.013 U	0.012 U	0.01 U	0.01 U	0.011 U	0.0098 U	0.011 U	0.0094 U
Ethylbenzene	mg/kg	25	0.0032 U	**0.002 J**	N/A	0.0061 U	0.0048 U	0.0035 U	0.0052 U	0.0055 U	0.0054 U	0.0063 U	0.0048 U	0.0059 U	0.005 U	0.0067 U	0.0062 U	0.0052 U	0.0052 U	0.0053 U	0.0049 U	0.0055 U	0.0047 U
Isopropylbenzene	mg/kg	9,900	0.0032 U	0.0064 U	N/A	0.0061 U	0.0048 U	0.0035 U	0.0052 U	0.0055 U	0.0054 U	0.0063 U	0.0048 U	0.0059 U	0.005 U	0.0067 U	0.0062 U	0.0052 U	0.0052 U	0.0053 U	0.0049 U	0.0055 U	0.0047 U
Methyl Acetate	mg/kg	1,200,000	0.032 U	0.064 U	N/A	0.061 U	0.048 U	0.035 U	**0.0024 J**	0.055 U	0.054 U	0.063 U	0.048 U	0.059 U	0.05 U	0.067 U	0.062 U	0.052 U	0.052 U	0.053 U	0.049 U	0.055 U	0.047 U
Methylene Chloride	mg/kg	1,000	0.0032 U	0.0064 U	N/A	0.0061 U	0.0048 U	0.0035 U	0.0052 U	0.0055 U	0.0054 U	0.0063 U	0.0048 U	0.0059 U	0.005 U	0.0067 U	0.0062 U	0.0052 U	0.0052 U	0.0053 U	0.0049 U	0.0055 U	0.0047 U
Styrene	mg/kg	35,000	0.0032 U	0.0064 U	N/A	0.0061 U	0.0048 U	0.0035 U	0.0052 U	0.0055 U	0.0054 U	0.0063 U	0.0048 U	0.0059 U	0.005 U	0.0067 U	0.0062 U	0.0052 U	0.0052 U	0.0053 U	0.0049 U	0.0055 U	0.0047 U
Tetrachloroethene	mg/kg	100	0.0032 U	0.0064 U	N/A	0.0061 U	0.0048 U	0.0035 U	0.0052 U	0.0055 U	0.0054 U	0.0063 U	0.0048 U	0.0059 U	0.005 U	0.0067 U	0.0062 U	0.0052 U	0.0052 U	0.0053 U	0.0049 U	0.0055 U	0.0047 U
Toluene	mg/kg	47,000	0.0032 U	**0.0061 J**	N/A	0.0061 U	0.0048 U	0.0035 U	0.0052 U	0.0055 U	0.0054 U	0.0063 U	0.0048 U	0.0059 U	0.005 U	0.0067 U	0.0062 U	0.0052 U	0.0052 U	0.0053 U	0.0049 U	0.0055 U	0.0047 U
Trichloroethene	mg/kg	6	0.0032 U	0.0064 U	N/A	0.0061 U	0.0048 U	0.0035 U	0.0052 U	0.0055 U	0.0054 U	0.0063 U	0.0048 U	0.0059 U	0.005 U	0.0067 U	0.0062 U	0.0052 U	0.0052 U	0.0053 U	0.0049 U	0.0055 U	0.0047 U
Xylenes	mg/kg	2,800	0.0096 U	**0.013 J**	N/A	0.018 U	0.014 U	0.011 U	0.015 U	0.016 U	0.016 U	0.019 U	0.014 U	0.018 U	0.015 U	0.02 U	0.019 U	0.016 U	0.015 U	0.016 U	0.015 U	0.017 U	0.014 U
Semi-Volatile Organic Compounds^																							
1,1-Biphenyl	mg/kg	200	0.069 U	**0.044 J**	N/A	0.071 U	0.083 U	**0.069 J**	0.072 U	0.072 U	0.078 U	0.072 U	0.073 U	0.07 U	0.071 U	0.072 U	0.074 U	**0.1**	0.078 U	0.072 U	0.08 U	**0.022 J**	0.076 U
1,2,4,5-Tetrachlorobenzene	mg/kg	350	0.069 U	0.075 U	N/A	0.071 U	0.083 U	0.071 U	0.072 U	0.072 U	0.078 U	0.072 U	0.073 U	0.07 U	0.071 U	0.072 U	0.074 U	0.071 U	0.078 U	0.072 U	0.08 U	0.07 U	0.076 U
2,4-Dimethylphenol	mg/kg	16,000	0.069 U	**0.075**	N/A	0.071 U	0.083 U	**0.1**	0.072 U	0.072 U	0.078 U	0.072 R	0.073 U	0.07 U	0.071 U	0.072 U	0.074 U	**0.024 J**	0.078 U	0.072 R	0.08 U	**0.13**	**0.03 J**
2,6-Dinitrotoluene	mg/kg	1.5	0.069 U	0.075 U	N/A	0.071 U	0.083 U	0.071 U	0.072 U	0.072 U	0.078 U	0.072 U	0.073 U	0.07 U	0.071 U	0.072 U	0.074 U	0.071 U	0.078 U	0.072 U	0.08 U	0.07 U	0.076 U
2-Chloronaphthalene	mg/kg	60,000	0.069 U	0.075 U	N/A	0.071 U	0.083 U	0.071 U	0.072 U	0.072 U	0.078 U	0.072 U	0.073 U	0.07 U	0.071 U	0.072 U	0.074 U	0.071 U	0.078 U	0.072 U	0.08 U	0.07 U	0.076 U
2-Methylnaphthalene	mg/kg	3,000	0.07 U	**0.25**	N/A	**0.0024 J**	0.0084 U	0.072 U	0.074 U	0.071 U	**0.0075 J**	0.072 U	**0.025**	0.071 U	0.0072 U	0.36 U	0.0074 U	**0.44**	0.0078 UJ	**0.002 J**	**0.0074 J**	**0.17**	**0.0056 J**
2-Methylphenol	mg/kg	41,000	0.069 U	0.075 U	N/A	0.071 U	0.083 U	**0.11**	0.072 U	0.072 U	0.078 U	0.072 R	0.073 U	0.07 U	0.071 U	0.072 U	0.074 U	0.071 U	0.078 U	0.072 R	0.08 U	0.07 U	0.076 U
3&4-Methylphenol(m&p Cresol)	mg/kg	41,000	0.14 U	**0.033 J**	N/A	0.14 U	0.17 U	**0.18**	0.14 U	0.14 U	0.16 U	0.14 R	0.15 U	0.14 U	0.14 U	0.14 U	0.15 U	0.14 U	0.16 U	0.14 R	0.16 U	**0.039 J**	0.15 U
3,3'-Dichlorobenzidine	mg/kg	5.1	0.069 UJ	0.075 UJ	N/A	0.071 U	0.083 U	0.071 UJ	0.072 UJ	0.072 U	0.078 U	0.072 UJ	0.073 U	0.07 U	0.071 U	0.072 U	0.074 U	0.071 U	0.078 U	0.072 U	0.08 U	0.07 U	0.076 U
4-Chloroaniline	mg/kg	11	0.069 U	0.075 U	N/A	0.071 U	0.083 U	0.071 U	0.072 U	0.072 U	0.078 U	0.072 U	0.073 U	**0.051 J**	0.071 U	**0.071 J**	0.074 U	0.071 U	0.078 U	0.072 U	0.08 U	0.07 U	0.076 U
Acenaphthene	mg/kg	45,000	0.07 U	**0.073 J**	N/A	**0.0005 J**	0.0084 U	**0.0061 J**	0.074 U	0.071 U	**0.015**	0.072 U	**0.011**	0.071 U	0.0072 U	0.36 U	**0.0012 J**	**0.021**	0.0078 U	0.0072 U	**0.033**	**0.011**	**0.08**
Acenaphthylene	mg/kg	45,000	0.07 U	**0.11**	N/A	**0.00076 J**	0.0084 U	**0.026 J**	**0.042 J**	0.071 U	0.0078 U	0.072 U	**0.022**	0.071 U	0.0072 U	0.36 U	**0.0012 J**	**0.014**	0.0078 U	0.0072 U	0.0081 U	**0.0096**	**0.023**
Acetophenone	mg/kg	120,000	0.069 U	0.075 U	N/A	0.071 U	0.083 U	**0.29**	0.072 U	0.072 U	0.078 U	0.072 U	0.073 U	0.07 U	0.071 U	0.072 U	0.074 U	0.071 U	0.078 U	0.072 U	0.08 U	0.07 U	0.076 U
Anthracene	mg/kg	230,000	0.07 U	**0.44**	N/A	**0.0015 J**	0.0084 U	**0.035 J**	**0.013 J**	0.071 U	**0.019**	0.072 U	**0.076 J**	0.071 U	0.0072 U	0.36 U	**0.0032 J**	**0.056**	0.0078 UJ	**0.0011 J**	**0.032**	**0.026**	**0.094**
Benz[a]anthracene	mg/kg	21.0	**0.016 J**	**1.6**	N/A	**0.0057 J**	0.0084 U	**0.076**	**0.12**	0.071 U	**0.0092**	0.072 U	**0.13 J**	0.071 U	0.0072 U	0.36 U	**0.017**	**0.078**	0.0078 U	**0.0019 J**	**0.002 J**	**0.033**	0.0077 U
Benzaldehyde	mg/kg	120,000	0.069 UJ	**0.13 J**	N/A	0.071 U	0.083 U	**0.68 J**	**0.023 J**	0.072 U	0.078 U	0.072 UJ	**0.017 J**	0.07 U	0.071 U	0.072 U	0.074 U	**0.044 J**	0.078 UJ	0.072 UJ	0.08 UJ	0.07 UJ	0.076 UJ
Benzo[a]pyrene	mg/kg	2.10	**0.01 J**	**1.4 J**	0.0082 U	**0.0069 J**	0.0084 U	**0.076 J**	**0.18 J**	0.071 U	**0.0056 J**	**0.0096 J**	**0.11 J**	**0.011 J**	0.0072 U	**0.055 J**	**0.011**	**0.069**	0.0078 U	0.0072 U	**0.0012 J**	**0.033**	0.0077 U
Benzo[b]fluoranthene	mg/kg	21.0	**0.022 J**	**3.4 J**	0.0082 U	**0.015**	0.0084 U	**0.17 J**	**0.36 J**	**0.0072 J**	**0.013**	**0.015 J**	**0.23 J**	**0.021 J**	**0.0014 J**	**0.071 J**	**0.03**	**0.25**	0.0078 U	**0.0029 J**	**0.0038 J**	**0.13**	**0.0019 J**
Benzo[g,h,i]perylene	mg/kg		0.07 UJ	**0.35 J**	N/A	**0.006 J**	0.0084 U	**0.068 J**	**0.065 J**	0.071 U	**0.0021 J**	**0.011 J**	**0.043**	**0.012 J**	0.0072 U	0.36 U	**0.0059 J**	**0.048**	0.0078 U	0.0072 U	0.0081 U	**0.018**	0.0077 U
Benzo[k]fluoranthene	mg/kg	210	**0.02 J**	**3 J**	N/A	**0.013**	0.0084 U	**0.15 J**	**0.32 J**	0.071 U	**0.011**	0.072 UJ	**0.2 J**	**0.02 J**	**0.0012 J**	0.36 U	**0.026**	**0.22**	0.0078 U	**0.0026 J**	**0.0032 J**	**0.12**	**0.0018 J**
bis(2-Ethylhexyl)phthalate	mg/kg	160	**0.015 J**	0.075 UJ	N/A	0.071 U	0.083 U	0.071 UJ	0.072 UJ	**0.028 J**	0.078 U	**0.032 J**	0.073 U	**0.091**	0.071 U	**0.086**	0.074 U	**0.056 J**	0.078 U	0.072 U	0.08 U	**0.032 J**	0.076 U
Caprolactam	mg/kg	400,000	0.17 U	0.19 U	N/A	0.18 U	0.21 U	0.18 U	0.18 U	0.18 U	0.2 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.19 U	0.18 U	0.2 U	0.18 U	0.2 U	0.18 U	0.19 U
Carbazole	mg/kg		0.069 U	**0.15**	N/A	0.071 U	0.083 U	0.071 U	0.072 U	0.072 U	0.078 U	0.072 U	**0.049 J**	0.07 U	0.071 U	0.072 U	0.074 U	**0.022 J**	0.078 U	0.072 U	0.08 U	0.07 U	0.076 U
Chrysene	mg/kg	2,100	**0.0085 J**	**1.2**	N/A	**0.0043 J**	0.0084 U	**0.049 J**	**0.096**	0.071 U	**0.0064 J**	**0.0089 J**	**0.12 J**	**0.0092 J**	**0.00071 J**	0.36 U	**0.014**	**0.13**	0.0078 U	**0.002 J**	**0.005 J**	**0.064**	**0.0042 J**
Dibenz[a,h]anthracene	mg/kg	2.10	0.07 UJ	**0.16 J**	N/A	**0.0014 J**	0.0084 U	0.072 UJ	**0.018 J**	0.071 U	0.0078 U	0.072 UJ	**0.017**	0.071 U	0.0072 U	0.36 U	**0.0021 J**	**0.015**	0.0078 U	0.0072 U	0.0081 U	**0.006 J**	0.0077 U
Diethylphthalate	mg/kg	660,000	0.069 U	0.075 U	N/A	0.071 U	0.083 U	0.071 U	0.072 U	0.072 U	0.078 U	0.072 U	0.073 U	0.07 U	0.071 U	0.072 U	0.074 U	0.071 U	0.078 U	0.072 U	0.08 U	0.07 U	0.076 U
Di-n-butylphthalate	mg/kg	82,000	0.069 U	0.075 U	N/A	0.071 U	0.083 U	0.071 U	0.072 U	**0.06 J**	0.078 U	0.072 U	0.073 U	**0.021 J**	0.071 U	0.072 U	0.074 U	0.071 U	0.078 U	0.072 U	0.08 U	0.07 U	0.076 U
Di-n-ocytlphthalate	mg/kg	8,200	0.069 UJ	0.075 UJ	N/A	0.071 U	0.083 U	0.071 UJ	0.072 UJ	0.072 U	0.078 U	0.072 UJ	0.073 U	0.07 U	0.071 U	0.072 U	0.074 U	0.071 UJ	0.078 UJ	0.072 U	0.08 U	0.07 UJ	0.076 U
Fluoranthene	mg/kg	30,000	**0.013 J**	**2.1**	N/A	**0.0072**	**0.00063 J**	**0.1**	**0.1**	0.071 U	**0.023**	**0.01 J**	**0.32 J**	**0.017 J**	**0.0013 J**	0.36 U	**0.029**	**0.13**	0.0078 U	**0.0045 J**	**0.013**	**0.055**	**0.006 J**
Fluorene	mg/kg	30,000	0.07 U	**0.13**	N/A	0.0071 U	0.0084 U	**0.0076 J**	0.074 U	0.071 U	**0.013**	0.072 U	**0.047**	0.071 U	0.0072 U	0.36 U	**0.00093 J**	**0.045**	0.0078 U	0.0072 U	**0.01**	**0.024**	**0.094**
Hexachloroethane	mg/kg	8.00	0.069 U	0.075 U	N/A	0.071 U	0.083 U	0.071 U	0.072 U	0.072 U	0.078 U	0.072 U	0.073 U	0.07 U	0.071 U	0.072 U	0.074 U	0.071 U	0.078 U	0.072 U	0.08 U	0.07 U	0.076 U
Indeno[1,2,3-c,d]pyrene	mg/kg	21.0	0.07 UJ	**0.38 J**	N/A	**0.0039 J**	0.0084 U	**0.031 J**	**0.057 J**	0.071 U	**0.002 J**	0.072 UJ	**0.043**	0.071 U	0.0072 U	0.36 U	**0.0054 J**	**0.045**	0.0078 U	0.0072 U	0.0081 U	**0.016**	0.0077 U
Naphthalene	mg/kg	17.0	0.07 U	**0.35**	N/A	**0.0019 J**	0.0084 U	0.032 B	0.02 B	0.071 U	**0.0069 J**	0.072 U	**0.04 J**	0.071 U	0.0072 U	0.36 U	**0.0034 J**	**0.2**	0.0078 U	0.0072 U	0.0062 B	**0.063**	**0.011**
N-Nitroso-di-n-propylamine	mg/kg	0.33	0.069 U	0.075 U	N/A	0.071 U	0.083 U	0.071 U	0.072 U	0.072 U	0.078 U	0.072 U	0.073 U	0.07 U	0.071 U	0.072 U	0.074 U	0.071 U	0.078 U	0.072 U	0.08 U	0.07 U	0.076 U
N-Nitrosodiphenylamine	mg/kg	470	0.069 U	0.075 U	N/A	0.071 U	0.083 U	0.071 U	0.072 U	0.072 U	0.078 U	0.072 U	0.073 U	0.07 U	0.071 U	0.072 U	0.074 U	**0.055 J**	0.078 U	0.072 U	0.08 U	**0.026 J**	0.076 U
Pentachlorophenol	mg/kg	4.00	0.17 U	0.19 U	N/A	0.18 U	0.21 U	0.18 U	0.18 U	0.18 U	0.2 U	0.18 R	0.18 UJ	0.18 U	0.18 U	0.18 U	0.19 U	0.18 U	0.2 U	0.18 R	0.2 U	0.18 U	0.19 U
Phenanthrene	mg/kg		**0.0092 J**	**1.2**	N/A	**0.0067 J**	**0.0012 J**	**0.041 J**	**0.023 J**	0.071 U	**0.036**	**0.0094 J**	**0.3 J**	**0.013 J**	**0.0013 J**	0.36 U	**0.014**	**0.32**	0.0078 U	**0.0054 J**	**0.04**	**0.12**	**0.23**
Phenol	mg/kg	250,000	0.069 U	0.075 U	N/A	0.071 U	0.083 U	**0.22**	0.072 U	0.072 U	0.078 U	0.072 R	0.073 U	**0.019 J**	0.071 U	0.072 U	0.074 U	0.071 U	0.078 U	0.072 R	0.08 U	0.07 U	0.076 U
Pyrene	mg/kg	23,000	**0.011 J**	**1.8**	N/A	**0.0059 J**	0.0084 U	**0.082**	**0.1**	0.071 U	**0.021**	**0.011 J**	**0.22 J**	**0.022 J**	**0.0011 J**	**0.091 J**	**0.022**	**0.2**	0.0078 U	**0.0041 J**	**0.044**	**0.076**	**0.031**
PCBs																							
Aroclor 1242	mg/kg	0.97	0.05 U	N/A	N/A	0.053 U	N/A	0.0527 U	N/A	0.256 U	N/A	0.0587 U	N/A	0.0535 U	N/A	0.0535 U	N/A	0.0527 U	N/A	0.0545 U	N/A	0.0522 U	N/A
Aroclor 1248	mg/kg	0.94	0.05 U	N/A	N/A	0.053 U	N/A	0.0527 U	N/A	0.256 U	N/A	0.0587 U	N/A	0.0535 U	N/A	0.0535 U	N/A	0.0527 U	N/A	0.0545 U	N/A	0.0522 U	N/A
Aroclor 1254	mg/kg	0.97	0.05 U	N/A	N/A	0.053 U	N/A	**0.107**	N/A	**7.68**	N/A	0.0587 U	N/A	**0.0454 J**	N/A	**0.0804**	N/A	0.0527 U	N/A	0.0545 U	N/A	0.0522 U	N/A
Aroclor 1260	mg/kg	0.99	0.05 U	N/A	N/A	0.053 U	N/A	0.0527 U	N/A	0.256 U	N/A	0.0587 U	N/A	0.0535 U	N/A	0.0535 U	N/A	0.0527 U	N/A	0.0545 U	N/A	0.0522 U	N/A
Aroclor 1262	mg/kg		0.05 U	N/A	N/A	0.053 U	N/A	0.0527 U	N/A	0.256 U	N/A	0.0587 U	N/A	0.0535 U	N/A	0.0535 U	N/A	0.0527 U	N/A	0.0545 U	N/A	0.0522 U	N/A
Aroclor 1268	mg/kg		0.05 U	N/A	N/A	0.053 U	N/A	0.0527 U	N/A	0.256 U	N/A	0.0587 U	N/A	0.0535 U	N/A	0.0535 U	N/A	0.0527 U	N/A	0.0545 U	N/A	0.0522 U	N/A
PCBs (total)	mg/kg	0.97	0.05 U	N/A	N/A	0.053 U	N/A	**0.107**	N/A	**7.68**	N/A	0.0587 U	N/A	**0.0454 J**	N/A	**0.0804**	N/A	0.0527 U	N/A	0.0545 U	N/A	0.0522 U	N/A
TPH/Oil and Grease																							
Diesel Range Organics	mg/kg	6,200	**40.1 J**	**653 J**	**4.1 J**	**10.3**	**5.6 J**	**211 J**	**27.7 J**	**61.5**	**93.4**	**69.7 J**	**31.5 J**	**99.6**	**7.6**	**432**	**14.6**	**463 J**	**5.1 J**	**15.3 J**	**245 J**	**433 J**	**553 J**
Gasoline Range Organics	mg/kg	6,200	6.6 U	**17.3**	N/A	13.8 U	10.4 U	8.3 U	11.6 U	12.8 U	9.9 U	12.3 U	10.6 U	10.8 U	10.1 U	11 U	14 U	9 U	10.5 U	10.4 U	9.7 U	8.8 U	**20.3**
Oil and Grease	mg/kg	6,200	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	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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

J: The positive result reported for this analyte is a quantitative estimate.
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 ot confirm or disprove the presence of this compound/analyte in the 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.
N/A: This parameter was not analyzed for this sample.

Table 4
Summary of Organics Detected in Soil
Parcel B6
Tradepoint Atlantic
Sparrows Point, Maryland

Parameter	Units	PAL	B6-033-SB-1	B6-033-SB-4	B6-034-SB-1*	B6-034-SB-4*	B6-035-SB-1*	B6-035-SB-4*	B6-036-SB-1*	B6-036-SB-8*	B6-037-SB-1*	B6-037-SB-5*	B6-038-SB-1*	B6-038-SB-4*	B6-039-SB-1*	B6-039-SB-5*	B6-040-SB-1*	B6-040-SB-5*	B6-041-SB-1	B6-041-SB-4	B6-042-SB-1	B6-042-SB-8	B6-043-SB-1
Volatile Organic Compounds																							
1,2,3-Trichlorobenzene	mg/kg	930	0.0061 U	0.0054 U	0.0061 U	0.0051 U	0.0056 U	0.0052 U	0.0055 U	0.0049 U	0.0055 U	0.0056 U	0.0068 U	0.0049 U	0.0056 U	0.0049 U	0.0036 U	0.0054 U	0.0042 U	0.0055 U	0.0054 U	0.0068 U	0.0058 U
1,2-Dichlorobenzene	mg/kg	9,300	0.0061 U	0.0054 U	0.0061 U	0.0051 U	0.0056 U	0.0052 U	**0.004 J**	0.0049 U	0.0055 U	0.0056 U	**0.013**	**0.0029 J**	0.0056 U	0.0049 U	0.0036 U	0.0054 U	0.0042 U	0.0055 U	0.0054 U	0.0068 U	0.0058 U
1,2-Dichloroethane	mg/kg	2	0.0061 U	0.0054 U	0.0061 U	0.0051 U	0.0056 U	0.0052 U	0.0055 U	0.0049 U	0.0055 U	0.0056 U	0.0068 U	0.0049 U	**0.002 J**	0.0049 U	0.0036 U	0.0054 U	0.0042 U	0.0055 U	0.0054 U	0.0068 U	0.0058 U
1,2-Dichloroethene (Total)	mg/kg	2,300	0.012 U	0.011 U	0.012 U	0.01 U	0.011 U	0.01 U	0.011 U	0.0098 U	0.011 U	0.011 U	0.014 U	**0.005 J**	0.011 U	0.0099 U	0.0072 U	0.011 U	0.0085 U	0.011 U	0.011 U	0.014 U	0.012 U
1,3-Dichlorobenzene	mg/kg		0.0061 U	0.0054 U	0.0061 U	0.0051 U	0.0056 U	0.0052 U	0.0055 U	0.0049 U	0.0055 U	0.0056 U	0.0068 U	0.0049 U	0.0056 U	0.0049 U	0.0036 U	0.0054 U	0.0042 U	0.0055 U	0.0054 U	0.0068 U	0.0058 U
1,4-Dichlorobenzene	mg/kg	11	0.0061 U	0.0054 U	0.0061 U	0.0051 U	0.0056 U	0.0052 U	0.0055 U	0.0049 U	0.0055 U	0.0056 U	0.0068 U	0.0049 U	0.0056 U	0.0049 U	0.0036 U	0.0054 U	0.0042 U	0.0055 U	0.0054 U	0.0068 U	0.0058 U
2-Butanone (MEK)	mg/kg	190,000	0.012 UJ	0.011 UJ	0.012 U	0.01 U	0.011 U	0.01 U	**0.0024 J**	0.0098 U	0.011 U	**0.0043 J**	0.014 U	0.0099 U	0.011 U	0.0099 U	0.0072 U	0.011 U	0.0085 U	0.011 U	0.011 U	0.014 U	0.012 U
2-Hexanone	mg/kg	1,300	0.012 UJ	0.011 UJ	0.012 U	0.01 U	0.011 U	0.01 U	0.011 U	0.0098 U	0.011 U	0.011 U	0.014 U	0.0099 U	0.011 U	0.0099 U	0.0072 U	0.011 U	0.0085 U	0.011 U	0.011 U	0.014 U	0.012 U
4-Methyl-2-pentanone (MIBK)	mg/kg	56,000	0.012 U	0.011 U	0.012 U	0.01 U	0.011 U	0.01 U	0.011 U	0.0098 U	0.011 U	0.011 U	0.014 U	0.0099 U	0.011 U	0.0099 U	0.0072 U	0.011 U	0.0085 UJ	0.011 UJ	0.011 UJ	0.014 UJ	0.012 U
Acetone	mg/kg	670,000	0.012 UJ	0.011 UJ	0.012 U	0.011 B	0.011 U	0.0072 B	**0.016**	0.007 B	**0.019**	**0.026**	**0.017**	0.0056 B	0.011 U	**0.011**	0.0072 U	**0.01 J**	0.0072 B	0.011 UJ	**0.016 J**	0.0093 B	0.012 UJ
Benzene	mg/kg	5.1	0.0061 U	0.0054 U	0.0061 U	0.0051 U	0.0056 U	0.0052 U	0.0055 U	0.0049 U	0.0055 U	**0.0072**	0.0068 U	0.0049 U	0.0056 U	0.0049 U	0.0036 U	0.0054 U	0.0042 U	0.0055 U	0.0054 U	**0.0033 J**	0.0058 U
cis-1,2-Dichloroethene	mg/kg	2,300	0.0061 U	0.0054 U	0.0061 U	0.0051 U	0.0056 U	0.0052 U	0.0055 U	0.0049 U	0.0055 U	0.0056 U	0.0068 U	**0.0045 J**	0.0056 U	0.0049 U	0.0036 U	0.0054 U	0.0042 U	0.0055 U	0.0054 U	0.0068 U	0.0058 U
Cyclohexane	mg/kg	27,000	0.012 U	0.011 U	0.012 U	0.01 U	0.011 U	0.01 U	0.011 U	0.0098 U	0.011 U	0.011 U	0.014 U	0.0099 U	0.011 U	0.0099 U	0.0072 U	0.011 U	0.0085 UJ	0.011 UJ	0.011 UJ	0.014 UJ	0.012 U
Ethylbenzene	mg/kg	25	0.0061 U	0.0054 U	0.0061 U	0.0051 U	0.0056 U	0.0052 U	0.0055 U	0.0049 U	0.0055 U	0.0056 U	0.0068 U	0.0049 U	0.0056 U	0.0049 U	0.0036 U	0.0054 U	0.0042 U	0.0055 U	0.0054 U	0.0068 U	0.0058 U
Isopropylbenzene	mg/kg	9,900	0.0061 U	0.0054 U	0.0061 U	0.0051 U	0.0056 U	0.0052 U	0.0055 U	0.0049 U	0.0055 U	0.0056 U	0.0068 U	0.0049 U	0.0056 U	0.0049 U	0.0036 U	0.0054 U	0.0042 U	0.0055 U	0.0054 U	0.0068 U	0.0058 U
Methyl Acetate	mg/kg	1,200,000	0.061 R	0.054 R	0.061 U	0.051 U	0.056 U	0.052 U	0.055 U	0.049 U	0.055 U	0.056 U	0.068 U	0.049 U	0.056 U	0.049 U	0.036 U	0.054 U	0.042 U	0.055 U	0.054 U	0.068 U	0.058 U
Methylene Chloride	mg/kg	1,000	0.0061 U	0.0054 U	0.0061 U	0.0051 U	0.0056 U	0.0052 U	0.0055 U	0.0049 U	0.0055 U	0.0056 U	0.0068 U	0.0049 U	0.0056 U	0.0049 U	0.0036 U	0.0054 U	0.0042 U	0.0055 U	0.0054 U	0.0068 U	0.0058 U
Styrene	mg/kg	35,000	0.0061 U	0.0054 U	0.0061 U	0.0051 U	0.0056 U	0.0052 U	0.0055 U	0.0049 U	0.0055 U	0.0056 U	0.0068 U	0.0049 U	0.0056 U	0.0049 U	0.0036 U	0.0054 U	0.0042 U	0.0055 U	0.0054 U	0.0068 U	0.0058 U
Tetrachloroethene	mg/kg	100	0.0061 U	0.0054 U	0.0061 U	0.0051 U	0.0056 U	0.0052 U	**0.0058**	**0.0041 J**	0.0055 U	0.0056 U	**0.011**	**0.0074**	0.0056 U	0.0049 U	0.0036 U	0.0054 U	0.0042 UJ	0.0055 UJ	0.0054 UJ	0.0068 UJ	0.0058 U
Toluene	mg/kg	47,000	0.0061 U	0.0054 U	0.0061 U	0.0051 U	0.0056 U	0.0052 U	0.0055 U	0.0049 U	0.0055 U	**0.0019 J**	0.0068 U	0.0049 U	0.0056 U	0.0049 U	0.0036 U	0.0054 U	0.0042 U	0.0055 U	0.0054 U	**0.0055 J**	0.0058 U
Trichloroethene	mg/kg	6	0.0061 U	0.0054 U	0.0061 U	0.0051 U	0.0056 U	0.0052 U	0.0055 U	0.0049 U	0.0055 U	0.0056 U	0.0068 U	**0.0042 J**	0.0056 U	0.0049 U	0.0036 U	0.0054 U	0.0042 U	0.0055 U	0.0054 U	0.0068 U	0.0058 U
Xylenes	mg/kg	2,800	0.018 U	0.016 U	0.018 U	0.015 U	0.017 U	0.016 U	0.016 U	0.015 U	0.017 U	**0.0063 J**	**0.0047 J**	0.015 U	**0.0038 J**	0.015 U	0.011 U	0.016 U	0.013 U	0.016 U	0.016 U	0.02 U	0.017 U
Semi-Volatile Organic Compounds^																							
1,1-Biphenyl	mg/kg	200	0.085 U	**0.031 J**	0.075 U	0.09 U	0.071 U	**0.031 J**	**0.066 J**	0.073 U	0.072 U	**0.092 J**	0.082 U	**0.18**	0.075 U	0.078 U	0.068 U	0.083 U	0.076 U	0.077 U	0.071 U	0.075 U	0.07 U
1,2,4,5-Tetrachlorobenzene	mg/kg	350	0.085 U	0.078 U	0.075 U	0.09 U	0.071 U	0.077 U	0.076 U	0.073 U	0.072 U	0.37 U	0.082 U	0.079 U	0.075 U	0.078 U	0.068 U	0.083 U	0.076 U	0.077 U	0.071 U	0.075 U	0.07 U
2,4-Dimethylphenol	mg/kg	16,000	0.085 U	0.078 U	0.075 U	0.09 U	0.071 U	0.077 U	0.076 U	0.073 U	0.072 U	0.37 U	**0.021 J**	0.079 U	0.075 U	0.078 U	0.068 U	0.083 U	0.076 U	0.077 UJ	0.071 U	0.075 U	0.07 U
2,6-Dinitrotoluene	mg/kg	1.5	0.085 U	0.078 U	0.075 U	0.09 U	0.071 U	0.077 U	0.076 U	0.073 U	0.072 U	0.37 U	0.082 U	0.079 U	0.075 U	0.078 U	**0.028 J**	0.083 U	0.076 U	0.077 U	0.071 U	0.075 U	0.07 U
2-Chloronaphthalene	mg/kg	60,000	0.085 U	0.078 U	0.075 U	0.09 U	0.071 U	0.077 U	0.076 U	0.073 U	0.072 U	0.37 U	0.082 U	0.079 U	0.075 U	0.078 U	0.068 U	0.083 U	0.076 U	0.077 U	0.071 U	0.075 U	0.07 U
2-Methylnaphthalene	mg/kg	3,000	**0.028**	**0.098**	0.074 U	0.009 U	**0.02 J**	**0.24**	**0.19**	**0.015**	**0.071 J**	**6.6**	**0.064 J**	**2.2**	0.075 U	0.0079 U	**1.2**	**0.0031 J**	0.076 U	0.077 U	0.07 U	**0.0065 J**	0.0068 U
2-Methylphenol	mg/kg	41,000	0.085 U	0.078 U	0.075 U	0.09 U	0.071 U	0.077 U	0.076 U	0.073 U	0.072 U	0.37 U	0.082 U	0.079 U	0.075 U	0.078 U	0.068 U	0.083 U	0.076 U	0.077 UJ	0.071 U	0.075 U	0.07 U
3&4-Methylphenol(m&p Cresol)	mg/kg	41,000	0.17 U	0.16 U	0.15 U	0.18 U	0.14 U	0.15 U	0.15 U	0.15 U	0.14 U	**0.59 J**	0.16 U	**0.021 J**	0.15 U	0.16 U	0.14 U	0.17 U	0.15 U	0.15 UJ	0.14 U	0.15 U	0.14 U
3,3'-Dichlorobenzidine	mg/kg	5.1	0.085 U	0.078 U	0.075 U	0.09 U	0.071 U	0.077 U	0.076 U	0.073 U	0.072 U	0.37 U	0.082 U	0.079 U	0.075 U	0.078 U	0.068 U	0.083 U	0.076 UJ	0.077 UJ	0.071 UJ	0.075 U	0.07 U
4-Chloroaniline	mg/kg	11	0.085 U	0.078 U	0.075 U	0.09 U	0.071 U	0.077 U	0.076 U	0.073 U	0.072 U	0.37 U	0.082 U	0.079 U	0.075 U	0.078 U	0.068 U	0.083 U	0.076 U	0.077 U	0.071 U	0.075 U	0.07 U
Acenaphthene	mg/kg	45,000	**0.022**	**0.062**	**0.0068 J**	0.009 U	**0.0062 J**	**0.065 J**	**0.022 J**	**0.0023 J**	**0.011 J**	**0.86**	0.084 U	**0.71**	**0.0082 J**	0.0079 U	**0.071**	**0.0007 J**	0.076 U	**0.0054 J**	0.07 U	**0.0011 J**	0.0068 U
Acenaphthylene	mg/kg	45,000	**0.0033 J**	**0.031**	**0.0063 J**	0.009 U	**0.0065 J**	**0.11**	**0.16**	**0.0046 J**	**0.014 J**	**2.3**	**0.13**	0.08 U	0.075 U	0.0079 U	**0.059 J**	**0.00067 J**	0.076 U	0.077 U	0.07 U	0.0076 U	0.0068 U
Acetophenone	mg/kg	120,000	0.085 U	0.078 U	0.075 U	0.09 U	0.071 U	**0.023 J**	0.076 U	0.073 U	0.072 U	0.37 U	0.082 U	0.079 U	0.075 U	0.078 U	0.068 U	0.083 U	0.076 U	0.077 U	**0.07 J**	0.075 U	0.07 U
Anthracene	mg/kg	230,000	**0.045**	**0.22**	**0.015 J**	0.009 U	**0.015 J**	**0.31**	**0.12**	**0.011**	**0.048 J**	**2.6**	**0.04 J**	**2**	**0.021 J**	0.0079 U	**0.049 J**	**0.0019 J**	**0.011 J**	**0.019 J**	0.07 U	**0.0098**	0.0068 U
Benz[a]anthracene	mg/kg	21.0	**0.19**	**1.1**	**0.025 J**	0.009 U	**0.035 J**	**1**	**0.29**	**0.045**	**0.14**	**6.6**	**0.025 J**	**3.1**	**0.15**	**0.0029 J**	**0.024 J**	**0.0072 J**	**0.054 J**	**0.086**	0.07 U	**0.15**	**0.0058 J**
Benzaldehyde	mg/kg	120,000	0.085 UJ	0.078 UJ	0.075 U	0.09 U	0.071 U	**0.02 J**	**0.018 J**	0.073 U	0.072 U	**0.035 J**	**0.23**	0.075 U	0.078 U	**0.036 J**	0.083 U	**0.017 J**	0.077 UJ	**0.042 J**	0.075 UJ	0.07 UJ	
Benzo[a]pyrene	mg/kg	2.10	**0.11**	**0.79**	**0.019 J**	0.009 U	**0.019 J**	**0.97**	**0.36**	**0.054**	**0.14**	**8**	**0.02 J**	**2.8**	**0.14**	**0.0015 J**	**0.011 J**	**0.0053 J**	**0.035 J**	**0.11**	**0.012 J**	**0.14**	**0.0045 J**
Benzo[b]fluoranthene	mg/kg	21.0	**0.21**	**1.4**	**0.057 J**	0.009 U	**0.03 J**	**1.4**	**0.58**	**0.086**	**0.27**	**20**	**0.028 J**	**6.2**	**0.3**	**0.0034 J**	**0.034 J**	**0.011**	**0.11**	**0.23**	**0.034 J**	**0.28**	**0.012**
Benzo[g,h,i]perylene	mg/kg		**0.035**	**0.28**	**0.015 J**	0.009 U	**0.011 J**	**0.25**	**0.25**	**0.034**	**0.081**	**3.6**	**0.13**	**1.2**	**0.13**	0.0079 U	**0.011 J**	**0.004 J**	**0.046 J**	**0.11**	**0.028 J**	**0.061**	**0.0045 J**
Benzo[k]fluoranthene	mg/kg	210	**0.082**	**0.53**	**0.014 J**	0.009 U	**0.016 J**	**0.46**	**0.27**	**0.04**	**0.27**	**20.3**	**0.029 J**	**6.2**	**0.26**	**0.003 J**	**0.03 J**	**0.0099**	**0.095**	**0.2**	**0.03 J**	**0.25**	**0.011**
bis(2-Ethylhexyl)phthalate	mg/kg	160	0.085 U	0.078 U	0.075 U	0.09 U	**0.026 J**	0.077 U	**0.041 J**	0.073 U	**0.015 J**	**0.68**	**0.18**	**0.32**	**0.043 J**	0.078 U	**0.069**	0.083 U	**0.24 J**	0.077 UJ	**0.15 J**	0.075 U	0.07 U
Caprolactam	mg/kg	400,000	0.21 U	0.2 U	0.19 U	0.23 U	0.18 U	0.19 U	0.19 U	0.18 U	0.18 U	0.92 U	0.2 U	0.2 U	0.19 U	0.2 U	0.17 U	0.21 U	0.19 U	0.19 U	0.18 U	0.19 U	0.18 U
Carbazole	mg/kg		**0.4**	**0.092**	0.075 U	0.09 U	0.071 U	**0.16**	**0.041 J**	0.073 U	0.072 U	0.37 U	0.082 U	**0.13**	0.075 U	0.078 U	**0.15**	0.083 U	0.076 U	0.077 U	0.071 U	0.075 U	0.07 U
Chrysene	mg/kg	2,100	**0.21**	**1.1**	**0.063 J**	0.009 U	**0.021 J**	**0.81**	**0.32**	**0.057**	**0.17**	**7**	**0.013 J**	**3.2**	**0.14**	**0.0019 J**	**0.057 J**	**0.0055 J**	**0.065 J**	**0.089**	0.07 U	**0.13**	**0.0056 J**
Dibenz[a,h]anthracene	mg/kg	2.10	**0.014**	**0.12**	0.074 U	0.009 U	0.072 U	**0.11**	**0.077 J**	**0.012**	**0.022 J**	**0.89**	0.084 U	**0.48**	**0.028 J**	0.0079 U	0.069 U	**0.0013 J**	0.076 U	**0.032 J**	0.07 U	**0.022**	0.0068 U
Diethylphthalate	mg/kg	660,000	0.085 U	0.078 U	0.075 U	0.09 U	0.071 U	0.077 U	0.076 U	0.073 U	0.072 U	0.37 U	0.082 U	0.079 U	0.075 U	0.078 U	0.068 U	0.083 U	0.076 U	0.077 U	0.071 U	0.075 U	0.07 U
Di-n-butylphthalate	mg/kg	82,000	0.085 U	0.078 U	0.075 U	0.09 U	0.071 U	0.077 U	0.076 U	0.073 U	0.072 U	0.37 U	**0.024 J**	0.079 U	0.075 U	0.078 U	**0.99**	0.083 U	0.076 U	0.077 U	0.071 U	0.075 U	0.07 U
Di-n-ocytlphthalate	mg/kg	8,200	0.085 UJ	0.078 UJ	0.075 U	0.09 U	0.071 U	0.077 U	0.076 U	0.073 U	0.072 U	0.37 U	0.082 U	0.079 U	0.075 U	0.078 U	0.068 U	0.083 U	0.076 UJ	0.077 UJ	0.071 UJ	0.075 U	0.07 U
Fluoranthene	mg/kg	30,000	**0.74**	**2.9**	**0.02 J**	**0.00078 J**	**0.031 J**	**1.6**	**0.49**	**0.076**	**0.31**	**7.2**	**0.015 J**	**8**	**0.27**	**0.0032 J**	**0.098**	**0.012**	**0.09**	**0.11**	**0.008 J**	**0.19**	**0.0092**
Fluorene	mg/kg	30,000	**0.011**	**0.08**	**0.013 J**	0.009 U	**0.012 J**	**0.059 J**	**0.019 J**	**0.0017 J**	**0.019 J**	**1.5**	**0.011 J**	**1.1**	0.075 U	0.0079 U	**0.14**	**0.00088 J**	0.076 U	0.077 U	0.07 U	**0.00095 J**	0.0068 U
Hexachloroethane	mg/kg	8.00	0.085 U	0.078 U	0.075 U	0.09 U	0.071 U	0.077 U	0.076 U	0.073 U	0.072 U	0.37 U	0.082 U	0.079 U	0.075 U	0.078 U	0.068 U	0.083 U	0.076 U	0.077 U	0.071 U	0.075 U	0.07 U
Indeno[1,2,3-c,d]pyrene	mg/kg	21.0	**0.038**	**0.29**	0.074 U	0.009 U	**0.012 J**	**0.29**	**0.23**	**0.032**	**0.074**	**3.1**	**0.013 J**	**1.3**	**0.097**	0.0079 U	0.069 U	**0.0031 J**	**0.032 J**	**0.082**	0.07 U	**0.059**	**0.0031 J**
Naphthalene	mg/kg	17.0	**0.057**	**0.83**	0.074 U	0.009 U	0.072 U	**0.33**	**0.88**	**0.048**	**0.067 J**	**3.5**	**0.082 J**	**6.6**	0.075 U	0.0079 U	**0.97**	**0.0061 J**	0.076 U	0.077 U	0.07 U	0.0069 B	0.0068 U
N-Nitroso-di-n-propylamine	mg/kg	0.33	0.085 U	0.078 U	0.075 U	0.09 U	0.071 U	0.077 U	0.076 U	0.073 U	0.072 U	0.37 U	0.082 U	0.079 U	0.075 U	0.078 U	0.068 U	0.083 U	0.076 U	0.077 U	0.071 U	0.075 U	0.07 U
N-Nitrosodiphenylamine	mg/kg	470	0.085 U	0.078 U	0.075 U	0.09 U	0.071 U	0.077 U	0.076 U	0.073 U	0.072 U	0.37 U	0.082 U	0.079 U	0.075 U	0.078 U	0.068 U	0.083 U	0.076 U	0.077 U	0.071 U	0.075 U	0.07 U
Pentachlorophenol	mg/kg	4.00	0.21 U	0.2 U	0.19 U	0.23 U	0.18 U	0.19 U	0.19 U	0.18 U	0.18 U	0.92 U	0.2 U	0.2 U	**0.036 J**	0.2 U	0.17 U	0.21 U	0.19 U	0.19 UJ	0.18 U	0.19 U	0.18 U
Phenanthrene	mg/kg		**0.34**	**0.85**	**0.034 J**	**0.0008 J**	**0.03 J**	**0.78**	**0.43**	**0.054**	**0.19**	**5.2**	**0.046 J**	**8.7**	**0.11**	**0.0018 J**	**0.34**	**0.0082**	**0.03 J**	**0.04 J**	0.07 U	**0.04**	**0.0037 J**
Phenol	mg/kg	250,000	0.085 U	0.078 U	0.075 U	0.09 U	0.071 U	0.077 U	**0.14**	0.073 U	0.072 U	0.37 U	**0.035 J**	**0.021 J**	0.075 U	0.078 U	0.068 U	0.083 U	0.076 U	0.077 UJ	0.071 U	0.075 U	0.07 U
Pyrene	mg/kg	23,000	**0.58**	**2.6**	**0.04 J**	0.009 U	**0.029 J**	**1.3**	**0.42**	**0.062**	**0.31**	**9.8**	**0.029 J**	**6.3**	**0.24**	**0.0027 J**	**0.077**	**0.0098**	**0.074 J**	**0.11**	**0.023 J**	**0.16**	**0.008**
PCBs																							
Aroclor 1242	mg/kg	0.97	0.0591 U	N/A	0.0553 U	N/A	0.0542 U	N/A	**0.054 J**	N/A	0.0578 U	N/A	0.0581 U	N/A	0.054 U	N/A	0.155 U	N/A	0.056 U	N/A	0.0539 U	N/A	0.0518 U
Aroclor 1248	mg/kg	0.94	0.0591 U	N/A	0.0553 U	N/A	0.0542 U	N/A	0.056 U	N/A	0.0578 U	N/A	0.0581 U	N/A	0.054 U	N/A	0.155 U	N/A	0.056 U	N/A	0.0539 U	N/A	0.0518 U
Aroclor 1254	mg/kg	0.97	0.0591 U	N/A	0.0553 U	N/A	0.0542 U	N/A	0.056 U	N/A	0.0578 U	N/A	0.0581 U	N/A	**0.0416 J**	N/A	**4.64**	N/A	0.056 U	N/A	0.0539 U	N/A	0.0518 U
Aroclor 1260	mg/kg	0.99	0.0591 U	N/A	0.0553 U	N/A	0.0542 U	N/A	**0.0842**	N/A	0.0578 U	N/A	**0.163**	N/A	0.054 U	N/A	0.155 U	N/A	0.056 U	N/A	0.0539 U	N/A	0.0518 U
Aroclor 1262	mg/kg		0.0591 U	N/A	0.0553 U	N/A	0.0542 U	N/A	0.056 U	N/A	0.0578 U	N/A	0.0581 U	N/A	**0.122**	N/A	0.155 U	N/A	**0.0731**	N/A	**0.284**	N/A	0.0518 U
Aroclor 1268	mg/kg		0.0591 U	N/A	0.0553 U	N/A	0.0542 U	N/A	0.056 U	N/A	0.0578 U	N/A	0.0581 U	N/A	0.054 U	N/A	0.155 U	N/A	0.056 U	N/A	0.0539 U	N/A	0.0518 U
PCBs (total)	mg/kg	0.97	0.0591 U	N/A	0.0553 U	N/A	0.0542 U	N/A	**0.1382**	N/A	0.0578 U	N/A	**0.163**	N/A	**0.1636**	N/A	**4.64**	N/A	**0.0731**	N/A	**0.284**	N/A	0.0518 U
TPH/Oil and Grease																							
Diesel Range Organics	mg/kg	6,200	**28 J**	**313 J**	**227**	8.9 U	**80.8**	**231**	**200**	**35.4**	**65.3**	**2,790**	**468**	**899**	**34.9**	**4.4 J**	**166**	**43.5**	**269 J**	**217 J**	**659 J**	**8.1 J**	**14 J**
Gasoline Range Organics	mg/kg	6,200	15.6 U	14.2 U	12.1 U	10.8 U	10.8 U	11.7 U	11 U	9 U	9.8 U	10.8 U	11.7 U	12.2 U	11.9 U	**20.8**	6.8 U	11.7 U	8.9 U	11 U	12 U	13.8 U	12.2 U
Oil and Grease	mg/kg	6,200	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	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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

J: The positive result reported for this analyte is a quantitative estimate.
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 ot confirm or disprove the presence of this compound/analyte in the 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.
N/A: This parameter was not analyzed for this sample.

Table 4
Summary of Organics Detected in Soil
Parcel B6
Tradepoint Atlantic
Sparrows Point, Maryland

Parameter	Units	PAL	B6-043-SB-8	B6-044-SB-1*	B6-044-SB-4*	B6-045-SB-1	B6-045-SB-5	B6-045-SB-10	B6-046-SB-1	B6-046-SB-6	B6-047-SB-1*	B6-047-SB-6*	B6-048-SB-1*	B6-048-SB-8*	B6-049-SB-1*	B6-049-SB-8*	B6-050-SB-1*	B6-050-SB-6*	B6-051-SB-1	B6-051-SB-6	B6-052-SB-1	B6-053-SB-1*	B6-053-SB-4*
Volatile Organic Compounds																							
1,2,3-Trichlorobenzene	mg/kg	930	0.0059 U	0.0034 U	0.0053 U	0.0039 U	0.0058 U	N/A	0.0055 U	0.0055 U	0.0047 U	0.0059 U	0.0052 U	**0.0031 J**	0.0055 U	0.005 U	0.0061 U	0.0053 U	0.0051 U	0.0051 U	0.0054 U	0.0051 U	0.0056 U
1,2-Dichlorobenzene	mg/kg	9,300	0.0059 U	0.0034 U	0.0053 U	0.0039 U	0.0058 U	N/A	0.0055 U	0.0055 U	0.0047 U	0.0059 U	0.0052 U	0.0066 U	0.0055 U	0.005 U	0.0061 U	0.0053 U	0.0051 U	0.0051 U	0.0054 U	0.0051 U	0.0056 U
1,2-Dichloroethane	mg/kg	2	0.0059 U	0.0034 U	0.0053 U	0.0039 U	0.0058 U	N/A	0.0055 U	0.0055 U	0.0047 U	0.0059 U	0.0052 U	0.0066 U	0.0055 U	0.005 U	0.0061 U	0.0053 U	0.0051 U	0.0051 U	0.0054 U	0.0051 U	0.0056 U
1,2-Dichloroethene (Total)	mg/kg	2,300	0.012 U	0.0069 U	0.011 U	0.0078 U	0.012 U	N/A	0.011 U	0.011 U	0.0095 U	0.012 U	0.01 U	0.013 U	0.011 U	0.0099 U	0.012 U	0.011 U	0.01 U	0.01 U	0.011 U	0.01 U	0.011 U
1,3-Dichlorobenzene	mg/kg		0.0059 U	0.0034 U	0.0053 U	0.0039 U	0.0058 U	N/A	0.0055 U	0.0055 U	0.0047 U	0.0059 U	0.0052 U	0.0066 U	0.0055 U	0.005 U	0.0061 U	0.0053 U	0.0051 U	0.0051 U	0.0054 U	0.0051 U	0.0056 U
1,4-Dichlorobenzene	mg/kg	11	0.0059 U	0.0034 U	0.0053 U	0.0039 U	0.0058 U	N/A	0.0055 U	0.0055 U	0.0047 U	0.0059 U	0.0052 U	0.0066 U	0.0055 U	0.005 U	0.0061 U	0.0053 U	0.0051 U	0.0051 U	0.0054 U	0.0051 U	0.0056 U
2-Butanone (MEK)	mg/kg	190,000	0.012 U	**0.058**	0.011 U	0.0078 U	**0.0067 J**	N/A	0.011 U	**0.0051 J**	0.0095 U	0.012 U	0.01 U	**0.0068 J**	0.011 U	0.0099 U	0.012 U	0.011 U	0.01 U	0.01 U	0.011 U	0.01 U	0.011 U
2-Hexanone	mg/kg	1,300	0.012 U	**0.0088**	0.011 U	0.0078 U	0.012 U	N/A	0.011 U	0.011 U	0.0095 U	0.012 U	0.01 U	0.013 U	0.011 U	0.0099 U	0.012 U	0.011 U	0.01 U	0.01 U	0.011 U	0.01 U	0.011 U
4-Methyl-2-pentanone (MIBK)	mg/kg	56,000	0.012 U	**0.0046 J**	0.011 U	0.0078 U	0.012 U	N/A	0.011 U	0.011 U	0.0095 U	0.012 U	0.01 U	0.013 U	0.011 U	0.0099 U	0.012 U	0.011 U	0.01 UJ	0.01 UJ	0.011 UJ	0.01 U	0.011 U
Acetone	mg/kg	670,000	0.012 UJ	**0.2**	**0.0074 J**	0.0078 UJ	**0.032 J**	N/A	0.011 UJ	**0.052 J**	0.0084 B	0.0097 B	0.0078 B	**0.032**	0.011 U	0.0084 B	**0.01 J**	**0.0059 J**	0.009 B	**0.023 J**	0.0066 B	0.01 U	**0.0068 J**
Benzene	mg/kg	5.1	0.0059 U	0.0034 U	0.0053 U	0.0039 U	0.0058 U	N/A	0.0055 U	0.0055 U	0.0047 U	**0.0016 J**	**0.0025 J**	0.0066 U	0.0055 U	0.005 U	**0.0023 J**	0.0053 U	0.0051 U	0.0051 U	0.0054 U	0.0051 U	**0.0056**
cis-1,2-Dichloroethene	mg/kg	2,300	0.0059 U	0.0034 U	0.0053 U	0.0039 U	0.0058 U	N/A	0.0055 U	0.0055 U	0.0047 U	0.0059 U	0.0052 U	0.0066 U	0.0055 U	0.005 U	0.0061 U	0.0053 U	0.0051 U	0.0051 U	0.0054 U	0.0051 U	0.0056 U
Cyclohexane	mg/kg	27,000	0.012 U	0.0069 U	0.011 U	0.0078 U	0.012 U	N/A	0.011 U	0.011 U	0.0095 U	0.012 U	0.01 U	0.013 U	0.011 U	0.0099 U	0.012 U	0.011 U	0.01 UJ	0.01 UJ	0.011 UJ	0.01 U	0.011 U
Ethylbenzene	mg/kg	25	0.0059 U	0.0034 U	0.0053 U	0.0039 U	0.0058 U	N/A	0.0055 U	0.0055 U	0.0047 U	0.0059 U	0.0052 U	0.0066 U	0.0055 U	0.005 U	0.0061 U	0.0053 U	0.0051 U	0.0051 U	0.0054 U	0.0051 U	0.0056 U
Isopropylbenzene	mg/kg	9,900	0.0059 U	0.0034 U	0.0053 U	0.0039 U	0.0058 U	N/A	0.0055 U	0.0055 U	0.0047 U	0.0059 U	0.0052 U	0.0066 U	0.0055 U	0.005 U	0.0061 U	0.0053 U	0.0051 U	0.0051 U	0.0054 U	0.0051 U	0.0056 U
Methyl Acetate	mg/kg	1,200,000	0.059 U	0.034 U	0.053 U	0.039 U	0.058 U	N/A	0.055 U	0.055 U	0.047 U	0.059 U	0.052 U	0.066 U	0.055 U	0.05 U	0.061 U	0.053 U	0.051 U	0.051 U	0.054 U	0.051 U	0.056 U
Methylene Chloride	mg/kg	1,000	0.0059 U	0.0034 U	0.0053 U	0.0039 U	0.0058 U	N/A	0.0055 U	0.0055 U	0.0047 U	0.0059 U	0.0052 U	0.0066 U	0.0053 B	0.005 U	0.0063 B	0.0053 U	0.0051 U	0.0051 U	0.0054 U	0.0051 U	0.0056 U
Styrene	mg/kg	35,000	0.0059 U	0.0034 U	0.0053 U	0.0039 U	0.0058 U	N/A	0.0055 U	0.0055 U	0.0047 U	0.0059 U	0.0052 U	0.0066 U	0.0055 U	0.005 U	0.0061 U	0.0053 U	0.0051 U	0.0051 U	0.0054 U	0.0051 U	0.0056 U
Tetrachloroethene	mg/kg	100	0.0059 U	0.0034 U	0.0053 U	0.0039 U	0.0058 U	N/A	0.0055 U	0.0055 U	0.0047 U	0.0059 U	0.0052 U	0.0066 U	0.0055 U	0.005 U	0.0061 U	0.0053 U	0.0051 UJ	0.0051 UJ	0.0054 UJ	0.0051 U	0.0056 U
Toluene	mg/kg	47,000	0.0059 U	**0.0024 J**	0.0053 U	0.0039 U	0.0058 U	N/A	0.0055 U	0.0055 U	0.0047 U	**0.0019 J**	**0.0028 J**	0.0066 U	0.0055 U	0.005 U	0.0061 U	0.0053 U	0.0051 U	0.0051 U	0.0054 U	0.0051 U	**0.0047 J**
Trichloroethene	mg/kg	6	0.0059 U	0.0034 U	0.0053 U	0.0039 U	0.0058 U	N/A	0.0055 U	0.0055 U	0.0047 U	0.0059 U	0.0052 U	0.0066 U	0.0055 U	0.005 U	0.0061 U	0.0053 U	0.0051 U	0.0051 U	0.0054 U	0.0051 U	0.0056 U
Xylenes	mg/kg	2,800	0.018 U	0.01 U	0.016 U	0.012 U	0.017 U	N/A	0.017 U	0.016 U	0.014 U	0.018 U	0.015 U	0.02 U	0.016 U	0.015 U	0.018 U	0.016 U	0.015 U	0.015 U	0.016 U	0.015 U	0.017 U
Semi-Volatile Organic Compounds^																							
1,1-Biphenyl	mg/kg	200	0.072 U	0.36 U	0.073 U	0.07 U	**0.13**	N/A	0.076 U	0.084 U	**0.02 J**	0.076 U	**0.033 J**	**0.97**	0.074 U	0.086 U	0.072 U	0.074 U	0.079 U	0.081 U	0.08 U	**0.036 J**	**0.095**
1,2,4,5-Tetrachlorobenzene	mg/kg	350	0.072 U	0.36 U	0.073 U	0.07 U	0.085 U	N/A	0.076 U	0.084 U	0.072 U	0.076 U	0.075 U	0.1 U	0.074 U	0.086 U	0.072 U	0.074 U	0.079 U	0.081 U	0.08 U	0.074 U	0.072 U
2,4-Dimethylphenol	mg/kg	16,000	0.072 U	0.36 U	0.073 U	0.07 U	0.085 U	N/A	0.076 UJ	0.084 U	0.072 U	0.076 U	0.075 U	**0.021 J**	0.074 U	0.086 U	0.072 U	0.074 U	0.079 U	0.081 U	0.08 U	0.074 U	**0.015 J**
2,6-Dinitrotoluene	mg/kg	1.5	0.072 U	0.36 U	0.073 U	0.07 U	0.085 U	N/A	0.076 U	0.084 U	0.072 U	0.076 U	0.075 U	0.1 U	0.074 U	0.086 U	0.072 U	0.074 U	0.079 U	0.081 U	0.08 U	0.074 U	0.072 U
2-Chloronaphthalene	mg/kg	60,000	0.072 U	0.36 U	0.073 U	0.07 U	0.085 U	N/A	0.076 U	0.084 U	0.072 U	0.076 U	0.075 U	0.1 U	0.074 U	0.086 U	0.072 U	0.074 U	0.079 U	0.081 U	0.08 U	0.074 U	0.072 U
2-Methylnaphthalene	mg/kg	3,000	0.0073 U	0.37 U	0.074 U	0.007 U	**0.55**	N/A	**0.038**	**0.0023 J**	**0.18**	**0.035 J**	**0.41**	**0.7**	**0.0045 J**	0.0086 U	**0.016**	**0.016**	0.0079 U	0.008 U	0.08 U	**0.14**	**0.29**
2-Methylphenol	mg/kg	41,000	0.072 U	0.36 U	0.073 U	0.07 U	**0.051 J**	N/A	0.076 UJ	0.084 U	0.072 U	0.076 U	0.075 U	0.1 U	0.074 U	0.086 U	0.072 U	0.074 U	0.079 U	0.081 U	0.08 U	0.074 U	**0.018 J**
3&4-Methylphenol(m&p Cresol)	mg/kg	41,000	0.14 U	0.72 U	0.15 U	0.14 U	**0.027 J**	N/A	**0.02 J**	0.17 U	0.14 U	0.15 U	0.15 U	**0.047 J**	0.15 U	0.17 U	0.14 U	0.15 U	0.16 U	0.16 U	0.16 U	0.15 U	**0.054 J**
3,3'-Dichlorobenzidine	mg/kg	5.1	0.072 U	0.36 U	0.073 U	0.07 U	0.085 UJ	N/A	0.076 U	0.084 U	0.072 U	0.076 U	0.075 U	0.1 U	0.074 U	0.086 U	0.072 U	0.074 U	0.079 U	0.081 U	0.08 UJ	0.074 U	0.072 U
4-Chloroaniline	mg/kg	11	0.072 U	0.36 U	0.073 U	0.07 U	0.085 U	N/A	0.076 U	0.084 U	0.072 U	0.076 U	0.075 U	0.1 U	0.074 U	0.086 U	0.072 U	0.074 U	0.079 U	0.081 U	0.08 U	0.074 U	0.072 U
Acenaphthene	mg/kg	45,000	0.0073 U	**0.99**	**0.021 J**	0.007 U	**0.56**	N/A	**0.0033 J**	**0.0017 J**	**0.013 J**	**0.018 J**	**0.01**	**0.024**	**0.0027 J**	0.0086 U	**0.025**	**0.0058 J**	0.0079 U	0.008 U	0.08 U	**0.0099 J**	**0.06 J**
Acenaphthylene	mg/kg	45,000	0.0073 U	0.37 U	0.074 U	**0.0028 J**	**1.2**	N/A	**0.026**	0.0084 U	**0.018 J**	**0.057 J**	**0.017**	**0.049**	**0.00076 J**	0.0086 U	**0.0025 J**	**0.018**	0.0079 U	**0.00066 J**	0.08 U	**0.24**	**0.62**
Acetophenone	mg/kg	120,000	0.072 U	0.36 U	0.073 U	0.07 U	**0.15**	N/A	0.076 U	0.084 U	**0.025 J**	0.076 U	**0.018 J**	**0.085 J**	0.074 U	0.086 U	0.072 U	0.074 U	0.079 U	0.081 U	0.08 U	0.074 U	**0.029 J**
Anthracene	mg/kg	230,000	**0.0013 J**	**0.19 J**	**0.0099 J**	**0.0029 J**	**1.2**	N/A	**0.022**	0.0084 U	**0.038 J**	**0.28**	**0.043**	**0.9**	**0.0022 J**	0.0086 U	**0.0099**	**0.038**	**0.0016 J**	**0.0014 J**	**0.039 J**	**0.18**	**0.87**
Benz[a]anthracene	mg/kg	21.0	**0.01**	**1.6**	**0.079**	**0.0084**	**2.2**	N/A	**0.036**	**0.0037 J**	**0.087**	**1.5**	**0.16**	**0.42**	**0.014**	0.0086 U	**0.069**	**0.1**	**0.0029 J**	**0.0034 J**	**0.1**	**0.57**	**2.1**
Benzaldehyde	mg/kg	120,000	0.072 UJ	0.36 U	0.073 U	0.07 UJ	**0.22 J**	N/A	**0.021 J**	0.084 UJ	**0.034 J**	0.076 U	**0.032 J**	**0.067 J**	0.074 U	0.086 U	0.072 U	0.074 U	0.079 UJ	0.081 UJ	0.08 UJ	**0.026 J**	**0.037 J**
Benzo[a]pyrene	mg/kg	2.10	**0.0093**	**3.5**	**0.13**	**0.0084 J**	**1.4 J**	0.0078 U	**0.03**	**0.0022 J**	**0.086**	**1**	**0.22**	**0.22**	**0.016**	0.0086 U	**0.11**	**0.11**	**0.0076 J**	**0.0073 J**	**0.085**	**0.67**	**1.7**
Benzo[b]fluoranthene	mg/kg	21.0	**0.021**	**5.2**	**0.22**	**0.026 J**	**4.1 J**	0.0078 U	**0.094**	**0.0061 J**	**0.1**	**1.5**	**0.24**	**0.54**	**0.02**	0.0086 U	**0.22**	**0.16**	**0.019**	**0.017**	**0.18**	**0.99**	**2.6**
Benzo[g,h,i]perylene	mg/kg		**0.008**	**2.4**	**0.1**	**0.0046 J**	**0.42 J**	N/A	**0.031**	**0.002 J**	**0.063 J**	**0.42**	**0.14**	**0.079**	**0.012**	0.0086 U	**0.063**	**0.047**	**0.0029 J**	**0.0028 J**	**0.053 J**	**0.33**	**0.76**
Benzo[k]fluoranthene	mg/kg	210	**0.018**	**4.6**	**0.19**	**0.023 J**	**3.5 J**	N/A	**0.082**	**0.0053 J**	**0.045 J**	**0.48**	**0.083**	**0.49**	**0.0084**	0.0086 U	**0.23**	**0.21**	**0.016**	**0.015**	**0.16**	**0.47**	**1.4**
bis(2-Ethylhexyl)phthalate	mg/kg	160	0.072 U	**0.46**	**0.021 J**	0.07 U	0.085 UJ	N/A	0.076 U	0.084 U	**0.033 J**	0.076 U	0.075 U	0.1 U	0.074 U	0.086 U	0.072 U	0.074 U	**0.055 J**	**0.049 J**	**0.99 J**	**0.031 J**	**0.034 J**
Caprolactam	mg/kg	400,000	0.18 U	0.91 U	0.18 U	0.17 U	0.21 U	N/A	0.19 U	0.21 U	0.18 U	0.19 U	0.19 U	0.25 U	0.19 U	0.22 U	0.18 U	0.19 U	0.2 U	0.2 U	0.2 U	0.19 U	0.18 U
Carbazole	mg/kg		0.072 U	0.36 U	0.073 U	0.07 U	**0.076 J**	N/A	**0.028 J**	0.084 U	0.072 U	**0.12**	**0.026 J**	0.1 U	**0.019 J**	0.086 U	0.072 U	0.074 U	0.079 U	0.081 U	0.08 U	**0.091**	**0.26**
Chrysene	mg/kg	2,100	**0.0087**	**1.4**	**0.072 J**	**0.0067 J**	**1.5**	N/A	**0.075**	**0.0029 J**	**0.088**	**1.1**	**0.16**	**0.55**	**0.012**	0.0086 U	**0.11**	**0.11**	**0.0079**	**0.0071 J**	**0.099**	**0.58**	**1.9**
Dibenz[a,h]anthracene	mg/kg	2.10	**0.0029 J**	**0.66**	**0.028 J**	**0.0019 J**	**0.15 J**	N/A	**0.011**	0.0084 U	**0.023 J**	**0.2**	**0.048**	**0.037**	**0.0027 J**	0.0086 U	**0.024**	**0.017**	0.0079 U	0.008 U	0.08 U	**0.12**	**0.32**
Diethylphthalate	mg/kg	660,000	0.072 U	0.36 U	0.073 U	0.07 U	0.085 U	N/A	0.076 U	0.084 U	**0.019 J**	0.076 U	0.075 U	0.1 U	0.074 U	0.086 U	0.072 U	0.074 U	0.079 U	0.081 U	0.08 U	0.074 U	0.072 U
Di-n-butylphthalate	mg/kg	82,000	0.072 U	0.36 U	0.073 U	0.07 U	0.085 U	N/A	0.076 U	0.084 U	0.072 U	0.076 U	0.075 U	0.1 U	0.074 U	0.086 U	0.072 U	0.074 U	0.079 U	0.081 U	0.08 U	0.074 U	0.072 U
Di-n-ocytlphthalate	mg/kg	8,200	0.072 U	0.36 U	0.073 U	0.07 UJ	0.085 UJ	N/A	0.076 UJ	0.084 U	0.072 U	0.076 U	0.075 U	0.1 U	0.074 U	0.086 U	0.072 U	0.074 U	0.079 U	0.081 U	0.08 UJ	0.074 U	0.072 U
Fluoranthene	mg/kg	30,000	**0.015**	**1.5**	**0.072 J**	**0.011**	**5.5**	N/A	**0.082**	**0.0059 J**	**0.11**	**1.9**	**0.21**	**1.2**	**0.017**	0.0086 U	**0.1**	**0.19**	**0.0084**	**0.0078 J**	**0.17**	**0.74**	**3.7**
Fluorene	mg/kg	30,000	0.0073 U	**0.088 J**	0.074 U	0.007 U	**0.91**	N/A	**0.0066 J**	**0.0014 J**	**0.017 J**	**0.024 J**	**0.0095**	**0.46**	**0.00085 J**	0.0086 U	**0.0041 J**	**0.022**	0.0079 U	0.008 U	0.08 U	**0.027 J**	**0.31**
Hexachloroethane	mg/kg	8.00	0.072 U	0.36 U	0.073 U	0.07 U	0.085 U	N/A	0.076 U	0.084 U	0.072 U	0.076 U	0.075 U	0.1 U	0.074 U	0.086 U	0.072 U	0.074 U	0.079 U	0.081 U	0.08 U	0.074 U	0.072 U
Indeno[1,2,3-c,d]pyrene	mg/kg	21.0	**0.0059 J**	**2**	**0.081**	**0.0038 J**	**0.49 J**	N/A	**0.022**	**0.0016 J**	**0.047 J**	**0.46**	**0.13**	**0.076**	**0.01**	0.0086 U	**0.065**	**0.048**	**0.0025 J**	**0.0022 J**	**0.037 J**	**0.33**	**0.82**
Naphthalene	mg/kg	17.0	0.0025 B	**0.092 J**	0.074 U	0.007 U	**3.1**	N/A	**0.1**	0.0047 B	**0.15**	**0.042 J**	**0.37**	**0.69**	**0.0054 J**	0.0086 U	**0.02**	**0.051**	0.0079 U	0.008 U	0.08 U	**0.48**	**1.1**
N-Nitroso-di-n-propylamine	mg/kg	0.33	0.072 U	0.36 U	0.073 U	0.07 U	0.085 U	N/A	0.076 U	0.084 U	0.072 U	0.076 U	0.075 U	0.1 U	0.074 U	0.086 U	0.072 U	0.074 U	0.079 U	0.081 U	0.08 U	0.074 U	0.072 U
N-Nitrosodiphenylamine	mg/kg	470	0.072 U	0.36 U	0.073 U	0.07 U	0.085 U	N/A	0.076 U	0.084 U	0.072 U	0.076 U	0.075 U	0.1 U	0.074 U	0.086 U	0.072 U	0.074 U	0.079 U	0.081 U	0.08 U	0.074 U	0.072 U
Pentachlorophenol	mg/kg	4.00	0.18 U	0.91 U	0.18 U	0.17 U	0.21 U	N/A	0.19 UJ	0.21 U	0.18 U	0.19 U	0.19 U	0.25 U	0.19 U	0.22 U	0.18 U	0.19 U	0.2 U	0.2 U	0.2 U	0.19 U	0.18 U
Phenanthrene	mg/kg		**0.0071 J**	**0.61**	**0.045 J**	**0.0064 J**	**5.7**	N/A	**0.16**	**0.0053 J**	**0.13**	**0.92**	**0.2**	**1.5**	**0.0085**	0.0086 U	**0.05**	**0.13**	**0.0027 J**	**0.003 J**	**0.055 J**	**0.36**	**2.4**
Phenol	mg/kg	250,000	0.072 U	0.36 U	0.073 U	0.07 U	**0.082 J**	N/A	0.076 UJ	0.084 U	0.072 U	0.076 U	0.075 U	**0.03 J**	0.074 U	0.086 U	0.072 U	0.074 U	0.079 U	0.081 U	0.08 U	**0.018 J**	**0.056 J**
Pyrene	mg/kg	23,000	**0.013**	**1.5**	**0.07 J**	**0.0094**	**4.4**	N/A	**0.069**	**0.0048 J**	**0.09**	**1.4**	**0.17**	**1.1**	**0.014**	0.0086 U	**0.085**	**0.15**	**0.015**	**0.013**	**0.18**	**0.59**	**3**
PCBs																							
Aroclor 1242	mg/kg	0.97	N/A	0.053 U	N/A	0.059 U	N/A	N/A	0.0568 U	N/A	0.0556 U	N/A	**0.162**	N/A	0.0574 U	N/A	0.0616 U	N/A	0.0612 U	N/A	**0.143**	0.055 U	N/A
Aroclor 1248	mg/kg	0.94	N/A	0.053 U	N/A	0.059 U	N/A	N/A	0.0568 U	N/A	0.0556 U	N/A	0.0548 U	N/A	0.0574 U	N/A	0.0616 U	N/A	0.0612 U	N/A	0.0606 U	0.055 U	N/A
Aroclor 1254	mg/kg	0.97	N/A	0.053 U	N/A	**0.299**	N/A	N/A	0.0568 U	N/A	0.0556 U	N/A	0.0548 U	N/A	0.0574 U	N/A	0.0616 U	N/A	0.0612 U	N/A	**0.107**	0.055 U	N/A
Aroclor 1260	mg/kg	0.99	N/A	0.053 U	N/A	0.059 U	N/A	N/A	0.0568 U	N/A	0.0556 U	N/A	0.0548 U	N/A	0.0574 U	N/A	**0.121**	N/A	0.0612 U	N/A	0.0606 U	0.055 U	N/A
Aroclor 1262	mg/kg		N/A	0.053 U	N/A	0.059 U	N/A	N/A	0.0568 U	N/A	0.0556 U	N/A	0.0548 U	N/A	0.0574 U	N/A	0.0616 U	N/A	0.0612 U	N/A	0.0606 U	0.055 U	N/A
Aroclor 1268	mg/kg		N/A	0.053 U	N/A	0.059 U	N/A	N/A	0.0568 U	N/A	0.0556 U	N/A	0.0548 U	N/A	0.0574 U	N/A	0.0616 U	N/A	0.0612 U	N/A	**0.348**	0.055 U	N/A
PCBs (total)	mg/kg	0.97	N/A	0.053 U	N/A	**0.299**	N/A	N/A	0.0568 U	N/A	0.0556 U	N/A	**0.162**	N/A	0.0574 U	N/A	**0.121**	N/A	0.0612 U	N/A	**0.598**	0.055 U	N/A
TPH/Oil and Grease																							
Diesel Range Organics	mg/kg	6,200	**8.7 J**	**251**	**43.6**	**32.8 J**	**807 J**	7.9 UJ	**64.8 J**	**10.6 J**	**196**	**97.3**	**938**	**5,240**	**11.5**	**4.2 J**	**122**	**75.5**	**191 J**	**99.4 J**	**150 J**	**146**	**183**
Gasoline Range Organics	mg/kg	6,200	12.8 U	11.8 U	9.8 U	8.3 U	10.7 U	N/A	11.1 U	10.3 U	10 U	11.6 U	13 U	14.3 U	11 U	10.8 U	13.3 U	11.5 U	9.9 U	10.6 U	11.6 U	11.9 U	**12.8 J**
Oil and Grease	mg/kg	6,200	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	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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

J: The positive result reported for this analyte is a quantitative estimate.
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 ot confirm or disprove the presence of this compound/analyte in the 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.
N/A: This parameter was not analyzed for this sample.

Table 4
Summary of Organics Detected in Soil
Parcel B6
Tradepoint Atlantic
Sparrows Point, Maryland

Parameter	Units	PAL	B6-054-SB-1*	B6-054-SB-4*	B6-055-SB-1*	B6-055-SB-7*	B6-056-SB-1	B6-056-SB-8	B6-057-SB-1*	B6-057-SB-8*	B6-058-SB-1*	B6-058-SB-5*	B6-058-SB-10*	B6-059-SB-1	B6-059-SB-8	B6-060-SB-1	B6-060-SB-4	B6-061-SB-1	B6-061-SB-4	B6-062-SB-1	B6-062-SB-4	B6-063-SB-1	B6-063-SB-9
Volatile Organic Compounds																							
1,2,3-Trichlorobenzene	mg/kg	930	0.0062 U	0.38 U	0.0046 U	0.0052 U	0.0046 U	0.0067 UJ	0.0058 U	0.005 U	0.0064 U	0.0057 U	N/A	0.0057 UJ	0.005 UJ	0.0048 UJ	0.0068 UJ	0.005 U	0.0047 U	0.0063 U	0.0071 U	0.0068 U	0.005 U
1,2-Dichlorobenzene	mg/kg	9,300	0.0062 U	0.38 U	0.0046 U	0.0052 U	0.0046 U	0.0067 U	0.0058 U	0.005 U	0.0064 U	0.0057 U	N/A	0.0057 U	0.005 U	0.0048 U	0.0068 U	0.005 U	0.0047 U	0.0063 U	0.0071 U	0.0068 U	0.005 U
1,2-Dichloroethane	mg/kg	2	0.0062 U	0.38 U	0.0046 U	0.0052 U	0.0046 U	0.0067 U	0.0058 U	0.005 U	0.0064 U	0.0057 U	N/A	0.0057 U	0.005 U	0.0048 U	0.0068 U	0.005 U	0.0047 U	0.0063 U	0.0071 U	0.0068 U	0.005 U
1,2-Dichloroethene (Total)	mg/kg	2,300	0.012 U	0.77 U	0.0092 U	0.01 U	0.0092 U	0.013 U	0.012 U	0.01 U	0.013 U	0.011 U	N/A	0.011 U	0.01 U	0.0096 U	0.014 U	0.0099 U	0.0095 U	0.013 U	0.014 U	0.014 U	0.01 U
1,3-Dichlorobenzene	mg/kg		0.0062 U	0.38 U	0.0046 U	0.0052 U	0.0046 U	0.0067 U	0.0058 U	0.005 U	0.0064 U	0.0057 U	N/A	0.0057 U	0.005 U	0.0048 U	0.0068 U	0.005 U	0.0047 U	0.0063 U	0.0071 U	0.0068 U	0.005 U
1,4-Dichlorobenzene	mg/kg	11	0.0062 U	0.38 U	0.0046 U	0.0052 U	0.0046 U	0.0067 U	0.0058 U	0.005 U	0.0064 U	0.0057 U	N/A	0.0057 U	0.005 U	0.0048 U	0.0068 U	0.005 U	0.0047 U	0.0063 U	0.0071 U	0.0068 U	0.005 U
2-Butanone (MEK)	mg/kg	190,000	0.012 U	0.77 U	0.0092 U	0.01 U	0.0092 U	0.013 U	0.012 U	0.01 U	0.013 U	0.011 U	N/A	0.011 U	0.01 U	0.0096 U	**0.0049 J**	0.0099 U	0.0095 U	0.013 U	0.014 U	0.014 U	0.01 U
2-Hexanone	mg/kg	1,300	0.012 U	0.77 U	0.0092 U	0.01 U	0.0092 U	0.013 U	0.012 U	0.01 U	0.013 U	0.011 U	N/A	0.011 U	0.01 U	0.0096 U	0.014 U	0.0099 U	0.0095 U	0.013 U	0.014 U	0.014 U	0.01 U
4-Methyl-2-pentanone (MIBK)	mg/kg	56,000	0.012 U	0.77 U	0.0092 U	0.01 U	0.0092 U	0.013 U	0.012 U	0.01 U	0.013 U	0.011 U	N/A	0.011 U	0.01 U	0.0096 U	0.014 U	0.0099 UJ	0.0095 UJ	0.013 UJ	0.014 UJ	0.014 U	0.01 U
Acetone	mg/kg	670,000	**0.0066 J**	0.77 U	0.0092 U	0.01 U	0.0092 UJ	**0.01 J**	0.012 U	0.01 U	**0.012 J**	**0.014**	N/A	0.011 U	0.01 U	0.0096 U	0.014 U	0.0099 UJ	0.0081 B	**0.018 J**	0.0098 B	0.014 UJ	0.01 UJ
Benzene	mg/kg	5.1	0.0062 U	0.38 U	0.0046 U	**0.0015 J**	0.0046 U	0.0067 U	0.0058 U	0.005 U	0.0064 U	0.0057 U	N/A	0.0057 U	0.005 U	0.0048 U	0.0068 U	0.005 U	0.0047 U	0.0063 U	0.0071 U	0.0068 U	0.005 U
cis-1,2-Dichloroethene	mg/kg	2,300	0.0062 U	0.38 U	0.0046 U	0.0052 U	0.0046 U	0.0067 U	0.0058 U	0.005 U	0.0064 U	0.0057 U	N/A	0.0057 U	0.005 U	0.0048 U	0.0068 U	0.005 U	0.0047 U	0.0063 U	0.0071 U	0.0068 U	0.005 U
Cyclohexane	mg/kg	27,000	0.012 U	0.77 U	0.0092 U	0.01 U	0.0092 U	**0.007 J**	0.012 U	0.01 U	0.013 U	0.011 U	N/A	0.011 U	0.01 U	0.0096 U	0.014 U	0.0099 UJ	0.0095 UJ	0.013 UJ	0.014 UJ	0.014 U	0.01 U
Ethylbenzene	mg/kg	25	0.0062 U	0.38 U	0.0046 U	0.0052 U	0.0046 U	**0.015**	0.0058 U	0.005 U	0.0064 U	0.0057 U	N/A	0.0057 U	0.005 U	0.0048 U	0.0068 U	0.005 U	0.0047 U	0.0063 U	0.0071 U	0.0068 U	0.005 U
Isopropylbenzene	mg/kg	9,900	0.0062 U	0.38 U	0.0046 U	0.0052 U	0.0046 U	**0.055**	0.0058 U	0.005 U	0.0064 U	0.0057 U	N/A	0.0057 U	0.005 U	0.0048 U	0.0068 U	0.005 U	0.0047 U	0.0063 U	0.0071 U	0.0068 U	0.005 U
Methyl Acetate	mg/kg	1,200,000	0.062 U	**0.46 J**	0.046 U	0.052 U	0.046 U	0.067 U	0.058 U	0.05 U	0.064 U	0.057 U	N/A	0.057 U	0.05 U	0.048 U	0.068 U	0.05 U	0.047 U	0.063 U	0.071 U	0.068 U	0.05 U
Methylene Chloride	mg/kg	1,000	0.0062 U	0.5 B	0.0046 U	0.0052 U	0.0046 U	0.0067 U	0.0058 U	0.005 U	0.0064 U	0.0057 U	N/A	0.0057 U	0.005 U	0.0048 U	0.0068 U	0.005 U	0.0047 U	0.0063 U	0.0071 U	0.0068 U	0.005 U
Styrene	mg/kg	35,000	0.0062 U	0.38 U	0.0046 U	0.0052 U	0.0046 U	0.0067 U	0.0058 U	0.005 U	0.0064 U	0.0057 U	N/A	0.0057 U	0.005 U	0.0048 U	0.0068 U	0.005 U	0.0047 U	0.0063 U	0.0071 U	0.0068 U	0.005 U
Tetrachloroethene	mg/kg	100	0.0062 U	0.38 U	0.0046 U	0.0052 U	0.0046 U	0.0067 U	0.0058 U	0.005 U	0.0064 U	0.0057 U	N/A	0.0057 U	0.005 U	0.0048 U	0.0068 U	0.005 UJ	0.0047 UJ	0.0063 UJ	0.0071 UJ	0.0068 U	0.005 U
Toluene	mg/kg	47,000	0.0062 U	0.38 U	0.0046 U	0.0052 U	0.0046 U	0.0067 U	0.0058 U	0.005 U	0.0064 U	0.0057 U	N/A	0.0057 U	0.005 U	0.0048 U	0.0068 U	0.005 U	0.0047 U	0.0063 U	0.0071 U	0.0068 U	0.005 U
Trichloroethene	mg/kg	6	0.0062 U	0.38 U	0.0046 U	0.0052 U	0.0046 U	0.0067 U	0.0058 U	0.005 U	0.0064 U	0.0057 U	N/A	0.0057 U	0.005 U	0.0048 U	0.0068 U	0.005 U	0.0047 U	0.0063 U	0.0071 U	0.0068 U	0.005 U
Xylenes	mg/kg	2,800	0.019 U	1.1 U	0.014 U	0.016 U	0.014 U	**0.039**	0.017 U	0.015 U	0.019 U	0.017 U	N/A	0.017 U	0.015 U	0.014 U	0.021 U	0.015 U	0.014 U	0.019 U	0.021 U	0.021 U	**0.0029 J**
Semi-Volatile Organic Compounds^																							
1,1-Biphenyl	mg/kg	200	0.076 U	0.78 U	0.071 U	**0.031 J**	0.072 U	**0.039 J**	0.077 U	0.081 U	0.082 U	**0.017 J**	N/A	0.076 U	0.072 U	0.079 U	**0.027 J**	0.069 U	0.079 U	0.079 U	0.086 U	0.073 U	0.082 U
1,2,4,5-Tetrachlorobenzene	mg/kg	350	0.076 U	0.78 U	0.071 U	0.081 U	0.072 U	0.083 U	0.077 U	0.081 U	0.082 U	0.08 U	N/A	0.076 U	0.072 U	0.079 U	0.076 U	0.069 U	0.079 U	0.079 U	0.086 U	0.073 U	0.082 U
2,4-Dimethylphenol	mg/kg	16,000	0.076 U	0.78 U	0.071 U	0.081 U	0.072 UJ	0.083 U	0.077 U	0.081 U	0.082 U	**0.077 J**	N/A	0.076 U	0.072 U	0.079 U	0.076 U	0.069 U	0.079 U	0.079 U	0.086 U	0.073 U	0.082 U
2,6-Dinitrotoluene	mg/kg	1.5	0.076 U	0.78 U	0.071 U	0.081 U	0.072 U	0.083 U	0.077 U	0.081 U	0.082 U	0.08 U	N/A	0.076 U	0.072 U	0.079 U	0.076 U	0.069 U	0.079 U	0.079 U	0.086 U	0.073 U	0.082 U
2-Chloronaphthalene	mg/kg	60,000	0.076 U	0.78 U	0.071 U	0.081 U	0.072 U	0.083 U	0.077 U	0.081 U	0.082 U	0.08 U	N/A	0.076 U	0.072 U	0.079 U	0.076 U	0.069 U	0.079 U	0.079 U	0.086 U	0.073 U	0.082 U
2-Methylnaphthalene	mg/kg	3,000	**0.0023 J**	**1.2**	0.073 U	**0.057**	0.071 U	**0.081**	**0.006 J**	0.0082 U	0.0084 U	**0.029 J**	N/A	**0.1**	0.0073 U	**0.0041 J**	**0.068**	**0.037 J**	0.081 U	0.08 U	0.088 U	0.074 U	**0.14**
2-Methylphenol	mg/kg	41,000	0.076 U	0.78 U	0.071 U	0.081 U	0.072 UJ	0.083 U	0.077 U	0.081 U	0.082 U	**0.042 J**	N/A	**0.02 J**	0.072 U	0.079 U	0.076 U	0.069 U	0.079 U	0.079 U	0.086 U	0.073 U	0.082 U
3&4-Methylphenol(m&p Cresol)	mg/kg	41,000	0.15 U	1.6 U	0.14 U	0.16 U	0.14 UJ	0.17 U	0.15 U	0.16 U	0.16 U	**0.1 J**	N/A	**0.045 J**	0.14 U	0.16 U	0.15 U	0.14 U	0.16 U	0.16 U	0.17 U	0.15 U	0.16 U
3,3'-Dichlorobenzidine	mg/kg	5.1	0.076 U	0.78 U	0.071 U	0.081 U	0.072 UJ	0.083 UJ	0.077 U	0.081 U	0.082 U	0.08 U	N/A	0.076 UJ	0.072 U	0.079 UJ	0.076 UJ	0.069 UJ	0.079 UJ	0.079 UJ	0.086 UJ	0.073 UJ	0.082 U
4-Chloroaniline	mg/kg	11	0.076 U	0.78 U	0.071 U	0.081 U	0.072 U	0.083 U	0.077 U	0.081 U	0.082 U	0.08 U	N/A	0.076 U	0.072 U	0.079 U	0.076 U	0.069 U	0.079 U	0.079 U	0.086 U	0.073 U	0.082 U
Acenaphthene	mg/kg	45,000	0.0075 U	**0.44**	0.073 U	**0.027**	0.071 U	**0.25**	0.0078 U	0.0082 U	0.0084 U	**0.025 J**	N/A	0.075 U	0.0073 U	0.0079 U	**0.0095**	0.07 U	0.081 U	0.08 U	0.088 U	0.074 U	**0.032**
Acenaphthylene	mg/kg	45,000	0.0075 U	**0.14**	**0.0063 J**	**0.088**	**0.0097 J**	**0.11**	**0.0044 J**	0.0082 U	0.0084 U	**0.015 J**	N/A	**0.0079 J**	**0.00078 J**	**0.0055 J**	**0.16**	0.07 U	**0.0093 J**	**0.011 J**	**0.049 J**	0.074 U	**0.085**
Acetophenone	mg/kg	120,000	0.076 U	0.78 U	0.071 U	0.081 U	0.072 U	0.083 U	0.077 U	0.081 U	0.082 U	0.08 U	N/A	0.076 U	0.072 U	0.079 U	0.076 U	0.069 U	0.079 U	**0.038 J**	0.086 U	0.073 U	0.082 U
Anthracene	mg/kg	230,000	**0.0015 J**	0.079 U	**0.016 J**	**0.17**	**0.013 J**	**0.57**	**0.0024 J**	0.0082 U	0.0084 U	**0.17**	N/A	**0.036 J**	**0.0011 J**	**0.004 J**	**0.14**	**0.018 J**	**0.025 J**	**0.023 J**	**0.055 J**	**0.0075 J**	**0.19**
Benz[a]anthracene	mg/kg	21.0	0.0075 U	**0.03 J**	**0.088**	**0.64**	**0.056 J**	**0.8**	**0.0089**	0.0082 U	0.0084 U	**0.4**	N/A	**0.1**	**0.0089**	**0.039**	**0.48**	**0.03 J**	**0.064 J**	**0.044 J**	**0.18**	**0.034 J**	**0.21**
Benzaldehyde	mg/kg	120,000	0.076 U	0.78 U	0.071 U	0.081 U	0.072 U	0.083 U	0.077 U	0.081 U	0.082 U	0.08 U	N/A	**0.018 J**	0.072 UJ	0.079 UJ	**0.039 J**	0.069 UJ	0.079 UJ	**0.045 J**	0.086 UJ	0.073 U	0.082 U
Benzo[a]pyrene	mg/kg	2.10	0.0075 U	**0.024 J**	**0.088**	**0.72**	**0.057 J**	**0.73**	**0.0077 J**	0.0082 U	0.0084 U	**0.37**	**0.0012 J**	**0.082**	**0.0066 J**	**0.042**	**0.63**	**0.049 J**	**0.072 J**	**0.076 J**	**0.22**	**0.018 J**	**0.17**
Benzo[b]fluoranthene	mg/kg	21.0	**0.0013 J**	**0.034 J**	**0.18**	**1.4**	**0.17**	**1.5**	**0.017**	0.0082 U	**0.001 J**	**0.77**	N/A	**0.2**	**0.022**	**0.092**	**2.2**	**0.11**	**0.12**	**0.15**	**0.56**	**0.04 J**	**0.24**
Benzo[g,h,i]perylene	mg/kg		0.0075 U	0.079 U	**0.054 J**	**0.32**	**0.055 J**	**0.26**	**0.0056 J**	0.0082 U	0.0084 U	**0.15**	N/A	**0.039 J**	**0.0024 J**	**0.015**	**0.2**	**0.034 J**	**0.061 J**	**0.1**	**0.066 J**	**0.02 J**	**0.088**
Benzo[k]fluoranthene	mg/kg	210	**0.0013 J**	**0.034 J**	**0.16**	**1.2**	**0.17**	**1.3**	**0.017**	0.0082 U	0.0084 U	**0.67**	N/A	**0.17**	**0.019**	**0.08**	**1.9**	**0.1**	**0.11**	**0.13**	**0.49**	**0.015 J**	**0.12**
bis(2-Ethylhexyl)phthalate	mg/kg	160	0.076 U	0.78 U	0.071 U	0.081 U	0.022 B	0.083 UJ	0.077 U	0.081 U	0.082 U	0.08 U	N/A	0.029 B	0.072 U	0.079 UJ	0.076 UJ	**0.29 J**	0.079 UJ	**0.12 J**	0.086 UJ	0.073 UJ	0.082 U
Caprolactam	mg/kg	400,000	0.19 U	2 U	0.18 U	0.2 U	0.18 U	0.21 U	0.19 U	0.2 U	0.21 U	0.2 U	N/A	0.19 U	0.18 U	0.2 U	0.19 U	0.17 U	0.2 U	0.2 U	0.22 U	0.18 U	0.21 U
Carbazole	mg/kg		0.076 U	0.78 U	0.071 U	**0.12**	0.072 U	**0.03 J**	0.077 U	0.081 U	0.082 U	**0.042 J**	N/A	0.076 U	0.072 U	0.079 U	**0.021 J**	0.069 U	0.079 U	0.079 U	0.086 U	0.073 U	**0.071 J**
Chrysene	mg/kg	2,100	**0.00069 J**	**0.087**	**0.085**	**0.6**	**0.097**	**0.76**	**0.012**	0.0082 U	**0.0012 J**	**0.39**	N/A	**0.11**	**0.01**	**0.032**	**0.62**	**0.077**	**0.049 J**	**0.09**	**0.18**	**0.027 J**	**0.2**
Dibenz[a,h]anthracene	mg/kg	2.10	0.0075 U	0.079 U	**0.024 J**	**0.12**	**0.014 J**	**0.14**	**0.0019 J**	0.0082 U	0.0084 U	**0.056 J**	N/A	**0.015 J**	**0.0016 J**	**0.0048 J**	**0.11**	0.07 U	0.081 U	0.08 U	**0.04 J**	0.074 U	**0.033**
Diethylphthalate	mg/kg	660,000	0.076 U	0.78 U	0.071 U	0.081 U	0.072 U	0.083 U	0.077 U	0.081 U	0.082 U	0.08 U	N/A	0.076 U	0.072 U	0.079 U	0.076 U	0.069 U	0.079 U	0.079 U	0.086 U	0.073 U	0.082 U
Di-n-butylphthalate	mg/kg	82,000	**0.022 J**	0.78 U	0.071 U	0.081 U	0.072 U	0.083 U	0.077 U	0.081 U	0.082 U	0.08 U	N/A	0.076 U	0.072 U	0.079 U	0.076 U	0.069 U	0.079 U	0.079 U	0.086 U	0.073 U	0.082 U
Di-n-octylphthalate	mg/kg	8,200	0.076 U	0.078 U	0.071 U	0.081 U	0.072 UJ	0.083 UJ	0.077 U	0.081 U	0.082 U	0.08 U	N/A	0.076 UJ	0.072 U	0.079 UJ	0.076 UJ	0.069 UJ	0.079 UJ	0.079 UJ	0.086 UJ	0.073 UJ	0.082 U
Fluoranthene	mg/kg	30,000	**0.001 J**	**0.044 J**	**0.11**	**1.1**	**0.11**	**1.2**	**0.018**	0.0082 U	**0.0019 J**	**0.84**	N/A	**0.14**	**0.014**	**0.058**	**0.58**	**0.07 J**	**0.063 J**	**0.07 J**	**0.21**	**0.037 J**	**0.62**
Fluorene	mg/kg	30,000	0.0075 U	**0.64**	0.073 U	**0.071**	0.071 U	**0.37**	**0.00071 J**	0.0082 U	0.0084 U	**0.029 J**	N/A	0.075 U	0.0073 U	0.0079 U	**0.012**	0.07 U	0.081 U	0.08 U	0.088 U	0.074 U	**0.15**
Hexachloroethane	mg/kg	8.00	0.076 U	0.78 U	0.071 U	0.081 U	0.072 U	**0.13**	0.077 U	0.081 U	0.082 U	0.08 U	N/A	0.076 U	0.072 U	0.079 U	0.076 U	0.069 U	0.079 U	0.079 U	0.086 U	0.073 U	0.082 U
Indeno[1,2,3-c,d]pyrene	mg/kg	21.0	0.0075 U	0.079 U	**0.045 J**	**0.32**	**0.047 J**	**0.3**	**0.0052 J**	0.0082 U	0.0084 U	**0.13**	N/A	**0.029 J**	**0.0025 J**	**0.014**	**0.23**	**0.017 J**	**0.022 J**	**0.021 J**	**0.069 J**	**0.014 J**	**0.088**
Naphthalene	mg/kg	17.0	**0.0024 J**	**0.19**	0.073 U	**0.4**	0.023 B	**0.28**	**0.0067 J**	0.0082 U	0.0084 U	**0.07 J**	N/A	**0.084**	0.002 B	0.0053 B	**0.038**	0.07 U	0.03 B	0.02 B	0.045 B	0.028 B	**2.5**
N-Nitroso-di-n-propylamine	mg/kg	0.33	0.076 U	0.78 U	0.071 U	0.081 U	0.072 U	0.083 U	0.077 U	0.081 U	0.082 U	0.08 U	N/A	0.076 U	0.072 U	0.079 U	0.076 U	0.069 U	0.079 U	0.079 U	0.086 U	0.073 U	0.082 U
N-Nitrosodiphenylamine	mg/kg	470	0.076 U	0.78 U	0.071 U	0.081 U	0.072 U	0.083 U	0.077 U	0.081 U	0.082 U	0.08 U	N/A	0.076 U	0.072 U	0.079 U	0.076 U	0.069 U	0.079 U	0.079 U	0.086 U	0.073 U	0.082 U
Pentachlorophenol	mg/kg	4.00	0.19 U	2 U	0.18 U	0.2 U	0.18 UJ	0.21 U	0.19 U	0.2 U	0.21 U	0.2 U	N/A	0.19 U	0.18 U	0.2 U	0.19 U	0.17 U	0.2 U	0.2 U	0.22 U	0.18 U	0.21 U
Phenanthrene	mg/kg		**0.003 J**	**1.3**	**0.043 J**	**0.45**	**0.045 J**	**1**	**0.013**	0.0082 U	**0.0023 J**	**0.43**	N/A	**0.16**	**0.0072 J**	**0.016**	**0.19**	**0.039 J**	**0.035 J**	**0.045 J**	**0.067 J**	**0.03 J**	**0.78**
Phenol	mg/kg	250,000	0.076 U	0.78 U	0.071 U	0.081 U	0.072 UJ	0.083 U	0.077 U	0.081 U	0.082 U	**0.15**	N/A	**0.049 J**	0.072 U	0.079 U	0.076 U	0.069 U	0.079 U	0.079 U	0.086 U	0.073 U	0.082 U
Pyrene	mg/kg	23,000	**0.0091**	**1.7**	**0.092**	**1**	**0.094**	**1.1**	**0.014**	0.0082 U	**0.0012 J**	**0.6**	N/A	**0.12**	**0.0091**	**0.053**	**0.74**	**0.069 J**	**0.11**	**0.097**	**0.2**	**0.037 J**	**0.43**
PCBs																							
Aroclor 1242	mg/kg	0.97	0.054 U	N/A	0.0557 U	N/A	0.0543 U	N/A	0.0632 U	N/A	0.054 U	N/A	N/A	0.0547 U	N/A	0.0614 U	N/A	0.272 U	N/A	0.056 U	N/A	0.0534 U	N/A
Aroclor 1248	mg/kg	0.94	0.054 U	N/A	0.0557 U	N/A	0.0543 U	N/A	0.0632 U	N/A	0.054 U	N/A	N/A	0.0547 U	N/A	0.0614 U	N/A	0.272 U	N/A	**0.0695**	N/A	0.0534 U	N/A
Aroclor 1254	mg/kg	0.97	0.054 U	N/A	**0.0407 J**	N/A	**0.142**	N/A	0.0632 U	N/A	0.054 U	N/A	N/A	0.0547 U	N/A	0.0614 U	N/A	0.272 U	N/A	**0.0737**	N/A	0.0534 U	N/A
Aroclor 1260	mg/kg	0.99	0.054 U	N/A	0.0557 U	N/A	0.0543 U	N/A	0.0632 U	N/A	0.054 U	N/A	N/A	0.0547 U	N/A	0.0614 U	N/A	0.272 U	N/A	0.056 U	N/A	0.0534 U	N/A
Aroclor 1262	mg/kg		0.054 U	N/A	0.0557 U	N/A	0.0543 U	N/A	0.0632 U	N/A	0.054 U	N/A	N/A	0.0547 U	N/A	0.0614 U	N/A	0.272 U	N/A	**0.528**	N/A	0.0534 U	N/A
Aroclor 1268	mg/kg		0.054 U	N/A	**0.101**	N/A	**1.07**	N/A	0.0632 U	N/A	0.054 U	N/A	N/A	0.0547 U	N/A	0.0614 U	N/A	**10.6**	N/A	0.056 U	N/A	**0.0375 J**	N/A
PCBs (total)	mg/kg	0.97	0.054 U	N/A	**0.1417**	N/A	**1.212**	N/A	0.0632 U	N/A	0.054 U	N/A	N/A	0.0547 U	N/A	0.0614 U	N/A	**10.6**	N/A	**0.6712**	N/A	**0.0375 J**	N/A
TPH/Oil and Grease																							
Diesel Range Organics	mg/kg	6,200	**124**	**6,840**	**20.3**	**100**	**52.8 J**	**1,430 J**	**45**	**4.4 J**	**16.5**	**222**	N/A	**32.2 J**	**11.3 J**	**29.2 J**	**43.8 J**	**136 J**	**86.3 J**	**367 J**	**73.5 J**	**144 J**	**24 J**
Gasoline Range Organics	mg/kg	6,200	12.4 U	**67.2**	10.5 U	9.8 U	9.3 U	**12.5**	10.8 U	9.5 U	16 U	11.4 U	N/A	13.4 U	10.4 U	12.3 U	12.7 U	9.8 U	9.2 U	12.6 U	13.4 U	10.4 U	10.1 U
Oil and Grease	mg/kg	6,200	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	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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

J: The positive result reported for this analyte is a quantitative estimate.
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 ot confirm or disprove the presence of this compound/analyte in the 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.
N/A: This parameter was not analyzed for this sample.

Table 4
Summary of Organics Detected in Soil
Parcel B6
Tradepoint Atlantic
Sparrows Point, Maryland

Parameter	Units	PAL	B6-064-SB-1	B6-064-SB-8	B6-065-SB-1*	B6-065-SB-4*	B6-066-SB-1*	B6-066-SB-5*	B6-067-SB-1	B6-067-SB-5	B6-068-SB-1*	B6-068-SB-4*	B6-069-SB-1*	B6-069-SB-8.5*	B6-070-SB-1*	B6-070-SB-4*	B6-071-SB-1*	B6-071-SB-4*	B6-072-SB-1*	B6-072-SB-4*	B6-073-SB-1	B6-073-SB-5
Volatile Organic Compounds																						
1,2,3-Trichlorobenzene	mg/kg	930	0.0055 U	0.0053 U	0.0065 U	0.006 U	0.0049 U	0.25 U	0.0051 U	0.0059 U	0.0057 U	0.0051 U	0.0045 U	0.0051 U	0.0081 U	0.0049 U	0.0055 U	0.0054 U	0.004 U	0.0047 U	0.0062 UJ	0.0046 U
1,2-Dichlorobenzene	mg/kg	9,300	0.0055 U	0.0053 U	0.0065 U	0.006 U	0.0049 U	**0.53**	0.0051 U	0.0059 U	0.0057 U	0.0051 U	0.0045 U	0.0051 U	0.0081 U	0.0049 U	0.0055 U	0.0054 U	0.004 U	0.0047 U	0.0062 UJ	0.0046 U
1,2-Dichloroethane	mg/kg	2	0.0055 U	0.0053 U	0.0065 U	0.006 U	0.0049 U	0.25 U	0.0051 U	0.0059 U	0.0057 U	0.0051 U	0.0045 U	0.0051 U	0.0081 U	0.0049 U	0.0055 U	0.0054 U	0.004 U	0.0047 U	0.0062 U	0.0046 U
1,2-Dichloroethene (Total)	mg/kg	2,300	0.011 U	0.011 U	0.013 U	0.012 U	0.0099 U	0.5 U	0.01 U	0.012 U	0.011 U	0.01 U	0.009 U	0.01 U	0.016 U	0.0097 U	0.011 U	0.011 U	0.008 U	0.0095 U	0.012 U	0.0093 U
1,3-Dichlorobenzene	mg/kg		0.0055 U	0.0053 U	0.0065 U	0.006 U	0.0049 U	**0.11 J**	0.0051 U	0.0059 U	0.0057 U	0.0051 U	0.0045 U	0.0051 U	0.0081 U	0.0049 U	0.0055 U	0.0054 U	0.004 U	0.0047 U	0.0062 UJ	0.0046 U
1,4-Dichlorobenzene	mg/kg	11	0.0055 U	0.0053 U	0.0065 U	0.006 U	0.0049 U	**0.5**	0.0051 U	0.0059 U	0.0057 U	0.0051 U	0.0045 U	0.0051 U	0.0081 U	0.0049 U	0.0055 U	0.0054 U	0.004 U	0.0047 U	0.0062 UJ	0.0046 U
2-Butanone (MEK)	mg/kg	190,000	0.011 U	0.011 U	0.013 U	0.012 U	0.0099 U	0.5 U	0.01 UJ	0.012 UJ	0.011 U	0.01 U	0.009 U	0.01 U	0.016 U	0.0097 U	0.011 U	0.011 U	0.008 U	0.0095 U	0.012 U	0.0093 U
2-Hexanone	mg/kg	1,300	0.011 U	0.011 U	0.013 U	0.012 U	0.0099 U	0.5 U	0.01 UJ	0.012 UJ	0.011 U	0.01 U	0.009 U	0.01 U	0.016 U	0.0097 U	0.011 U	0.011 U	0.008 U	0.0095 U	0.012 U	0.0093 U
4-Methyl-2-pentanone (MIBK)	mg/kg	56,000	0.011 U	0.011 U	0.013 U	0.012 U	0.0099 U	0.5 U	0.01 U	0.012 U	0.011 U	0.01 U	0.009 U	0.01 U	0.016 U	0.0097 U	0.011 U	0.011 U	0.008 U	0.0095 U	0.012 U	0.0093 U
Acetone	mg/kg	670,000	0.011 UJ	0.011 UJ	0.013 U	0.012 U	0.0099 U	0.35 B	0.01 UJ	0.012 UJ	0.011 U	0.012 B	0.0077 B	0.0062 B	**0.013 J**	0.011 B	0.011 U	0.011 U	0.008 U	0.0095 U	0.012 UJ	0.0093 UJ
Benzene	mg/kg	5.1	0.0055 U	0.0053 U	0.0065 U	0.006 U	0.0049 U	0.25 U	0.0051 U	0.0059 U	0.0057 U	0.0051 U	0.0045 U	0.0051 U	0.0081 U	0.0049 U	0.0055 U	0.0054 U	0.004 U	0.0047 U	0.0062 U	0.0046 U
cis-1,2-Dichloroethene	mg/kg	2,300	0.0055 U	0.0053 U	0.0065 U	0.006 U	0.0049 U	0.25 U	0.0051 U	0.0059 U	0.0057 U	0.0051 U	0.0045 U	0.0051 U	0.0081 U	0.0049 U	0.0055 U	0.0054 U	0.004 U	0.0047 U	0.0062 U	0.0046 U
Cyclohexane	mg/kg	27,000	0.011 U	0.011 U	0.013 U	0.012 U	0.0099 U	**0.38 J**	0.01 U	0.012 U	0.011 U	0.01 U	0.009 U	0.01 U	0.016 U	0.0097 U	0.011 U	0.011 U	0.008 U	0.0095 U	0.012 U	0.0093 U
Ethylbenzene	mg/kg	25	0.0055 U	0.0053 U	0.0065 U	0.006 U	0.0049 U	**0.14 J**	0.0051 U	**0.0013 J**	0.0057 U	0.0051 U	0.0045 U	0.0051 U	0.0081 U	0.0049 U	0.0055 U	0.0054 U	0.004 U	0.0047 U	0.0062 U	0.0046 U
Isopropylbenzene	mg/kg	9,900	0.0055 U	0.0053 U	0.0065 U	0.006 U	0.0049 U	**0.95**	0.0051 U	0.0059 U	0.0057 U	0.0051 U	0.0045 U	0.0051 U	0.0081 U	0.0049 U	0.0055 U	0.0054 U	0.004 U	0.0047 U	0.0062 U	0.0046 U
Methyl Acetate	mg/kg	1,200,000	0.055 U	0.053 U	0.065 U	0.06 U	0.049 U	2.5 U	0.051 R	0.059 R	0.057 U	0.051 U	0.045 U	0.051 U	0.081 U	0.049 U	0.055 U	0.054 U	0.04 U	0.047 U	0.062 U	0.046 U
Methylene Chloride	mg/kg	1,000	0.0055 U	0.0053 U	0.0065 U	0.006 U	0.0049 U	0.33 B	0.0051 U	0.0059 U	0.0057 U	0.0051 U	0.0045 U	0.0047 B	0.0081 U	0.0049 U	0.0055 U	0.0054 U	0.004 U	0.0047 U	0.0062 U	0.0046 U
Styrene	mg/kg	35,000	0.0055 U	0.0053 U	0.0065 U	0.006 U	0.0049 U	0.25 U	0.0051 U	0.0059 U	0.0057 U	0.0051 U	0.0045 U	0.0051 U	0.0081 U	0.0049 U	0.0055 U	0.0054 U	0.004 U	0.0047 U	0.0062 U	0.0046 U
Tetrachloroethene	mg/kg	100	0.0055 U	0.0053 U	0.0065 U	0.006 U	0.0049 U	0.25 U	0.0051 U	0.0059 U	0.0057 U	0.0051 U	0.0045 U	0.0051 U	0.0081 U	0.0049 U	0.0055 U	0.0054 U	0.004 U	0.0047 U	0.0062 U	0.0046 U
Toluene	mg/kg	47,000	0.0055 U	0.0053 U	0.0065 U	0.006 U	0.0049 U	0.25 U	0.0051 U	**0.0025 J**	0.0057 U	0.0051 U	0.0045 U	0.0051 U	0.0081 U	0.0049 U	0.0055 U	0.0054 U	0.004 U	0.0047 U	0.0062 U	0.0046 U
Trichloroethene	mg/kg	6	0.0055 U	0.0053 U	0.0065 U	0.006 U	0.0049 U	0.25 U	0.0051 U	0.0059 U	0.0057 U	0.0051 U	0.0045 U	0.0051 U	0.0081 U	0.0049 U	0.0055 U	0.0054 U	0.004 U	0.0047 U	0.0062 U	0.0046 U
Xylenes	mg/kg	2,800	0.016 U	0.016 U	0.02 U	0.018 U	0.015 U	**1.3**	0.015 U	**0.0062 J**	0.017 U	0.015 U	0.013 U	0.015 U	0.024 U	0.015 U	0.017 U	0.016 U	0.012 U	0.014 U	0.019 U	0.014 U
Semi-Volatile Organic Compounds^																						
1,1-Biphenyl	mg/kg	200	0.076 U	0.084 U	0.08 U	**0.02 J**	**0.024 J**	**6.4**	0.074 U	0.078 U	0.073 U	0.08 U	0.077 U	**0.37**	0.092 U	0.074 U	0.072 U	0.073 U	**0.029 J**	0.079 U	**0.27**	0.079 U
1,2,4,5-Tetrachlorobenzene	mg/kg	350	0.076 U	0.084 U	0.08 U	0.081 U	0.074 U	0.76 U	0.074 U	0.078 U	0.073 U	0.08 U	0.077 U	0.075 U	0.092 U	0.074 U	**0.065 J**	0.073 U	**0.076**	0.079 U	0.077 U	0.079 U
2,4-Dimethylphenol	mg/kg	16,000	0.076 R	0.084 U	0.08 U	0.081 U	0.074 U	0.76 U	0.074 U	0.078 U	0.073 U	0.08 U	0.077 U	**0.029 J**	0.092 U	0.074 U	0.072 U	0.073 U	0.074 U	0.079 U	**0.11**	0.079 U
2,6-Dinitrotoluene	mg/kg	1.5	0.076 U	0.084 U	0.08 U	0.081 U	0.074 U	0.76 U	0.074 U	0.078 U	0.073 U	0.08 U	0.077 U	0.075 U	0.092 U	0.074 U	0.072 U	0.073 U	0.074 U	0.079 U	0.077 U	0.079 U
2-Chloronaphthalene	mg/kg	60,000	0.076 U	0.084 U	0.08 U	0.081 U	0.074 U	0.76 U	0.074 U	0.078 U	0.073 U	0.08 U	0.077 U	0.075 U	0.092 U	0.074 U	0.072 U	0.073 U	**0.21**	0.079 U	0.077 U	0.079 U
2-Methylnaphthalene	mg/kg	3,000	0.077 U	**0.014**	**0.1**	**0.16**	**0.063 J**	**8.1**	**0.027**	**0.043 J**	**0.0026 J**	**0.033 J**	**0.0061 J**	**0.58**	**0.041 J**	**0.02**	**0.015**	**0.012**	**0.058 J**	**0.019**	**7.5**	0.0079 U
2-Methylphenol	mg/kg	41,000	0.076 R	0.084 U	0.08 U	0.081 U	0.074 U	0.076 U	0.074 U	0.078 U	0.073 U	0.08 U	0.077 U	**0.023 J**	0.092 U	0.074 U	0.072 U	0.073 U	0.074 U	0.079 U	**0.11**	0.079 U
3&4-Methylphenol(m&p Cresol)	mg/kg	41,000	0.15 R	0.17 U	0.16 U	0.16 U	0.15 U	**0.24**	0.15 U	0.15 U	0.15 U	0.16 U	0.15 U	**0.077 J**	0.18 U	0.15 U	0.14 U	0.14 U	**0.019 J**	**0.026 J**	**0.22**	0.16 U
3,3'-Dichlorobenzidine	mg/kg	5.1	0.076 UJ	0.084 U	0.08 U	0.081 U	0.074 U	0.76 U	0.074 U	0.078 UJ	0.073 U	0.08 U	0.077 U	0.075 U	0.092 U	0.074 U	0.072 U	0.073 U	0.074 U	0.079 U	0.077 UJ	0.079 U
4-Chloroaniline	mg/kg	11	0.076 U	0.084 U	0.08 U	0.081 U	0.074 U	0.76 U	0.074 U	0.078 U	0.073 U	0.08 U	0.077 U	0.075 U	0.092 U	0.074 U	0.072 U	0.073 U	0.074 U	0.079 U	0.077 U	0.079 U
Acenaphthene	mg/kg	45,000	**0.014 J**	**0.026 J**	**0.019 J**	**0.019 J**	0.15 U	**8.1**	**0.02**	**0.033 J**	**0.0009 J**	**0.093**	**0.0017 J**	**0.58**	**0.01 J**	**0.0061 J**	**0.0049 J**	**0.0024 J**	0.074 U	**0.0058 J**	**0.12**	0.0079 U
Acenaphthylene	mg/kg	45,000	**0.038 J**	**0.0023 J**	**0.047 J**	**0.073 J**	**0.12 J**	**2.4**	**0.0065 J**	**0.022 J**	**0.0012 J**	**0.26**	**0.0095**	**1.8**	**0.018 J**	**0.012**	**0.15**	**0.21**	**0.019 J**	**0.0062 J**	**0.27**	0.0079 U
Acetophenone	mg/kg	120,000	0.076 U	0.084 U	0.08 U	0.081 U	0.074 U	0.76 U	0.074 U	0.078 U	0.073 U	0.08 U	0.077 U	**0.044 J**	0.092 U	0.074 U	0.072 U	0.073 U	0.074 U	0.079 U	**0.16**	0.079 U
Anthracene	mg/kg	230,000	**0.032 J**	**0.037 J**	**0.094**	**0.14**	**0.054 J**	**9**	**0.074**	**0.098**	**0.0047 J**	**0.97**	**0.015**	**4.5**	**0.027 J**	**0.048**	**0.15**	**0.19**	**0.022 J**	**0.04**	**0.9**	**0.0014 J**
Benz[a]anthracene	mg/kg	21.0	**0.38**	**0.047 J**	**0.35**	**0.49**	**0.22**	**5.8**	**0.16 J**	**0.42**	**0.02**	**2.7**	**0.12**	**9.2**	**0.096**	**0.13**	**0.25**	**0.73**	0.074 U	**0.067**	**3.6**	**0.0017 J**
Benzaldehyde	mg/kg	120,000	0.076 U	0.084 U	0.08 U	**0.03 J**	**0.024 J**	0.076 U	0.074 UJ	0.078 UJ	0.073 U	**0.028 J**	0.077 U	**0.047 J**	**0.026 J**	0.074 U	**0.022 J**	0.073 U	**0.041 J**	0.079 U	**0.45**	0.079 U
Benzo[a]pyrene	mg/kg	2.10	**0.31**	**0.039 J**	**0.34**	**0.49**	**0.35**	**5.1**	**0.13 J**	**0.46**	**0.02**	**2.7**	**0.07**	**7.3**	**0.066 J**	**0.1**	**0.37**	**0.57**	**0.033 J**	**0.056**	**3.2**	0.0079 U
Benzo[b]fluoranthene	mg/kg	21.0	**0.68**	**0.058 J**	**0.66**	**0.98**	**0.55**	**9.9**	**0.24 J**	**0.73**	**0.03**	**4.5**	**0.12**	**8.4**	**0.088 J**	**0.14**	**1.1**	**1.1**	**0.087**	**0.12**	**5.3**	**0.0018 J**
Benzo[g,h,i]perylene	mg/kg		**0.24**	**0.021 J**	**0.1**	**0.13**	**0.4**	**1.8**	**0.068**	**0.24**	**0.012**	**1.6**	**0.042**	**2.4**	**0.03 J**	**0.045**	**0.23**	**0.38**	**0.027 J**	**0.027**	**1.4**	0.0079 U
Benzo[k]fluoranthene	mg/kg	210	**0.27**	**0.024 J**	**0.6**	**0.9**	**0.48**	**8.6**	**0.091 J**	**0.29**	**0.014**	**1.8**	**0.044**	**3.1**	**0.038 J**	**0.058**	**0.93**	**0.45**	**0.075**	**0.1**	**2.1**	**0.0015 J**
bis(2-Ethylhexyl)phthalate	mg/kg	160	0.076 UJ	0.084 U	0.08 U	0.081 U	**0.23**	**4**	0.074 U	0.023 B	0.073 U	0.08 U	0.077 U	**0.026 J**	0.092 U	0.074 U	**0.022 J**	0.073 U	0.074 U	0.079 U	0.077 UJ	0.079 U
Caprolactam	mg/kg	400,000	0.19 U	0.21 U	0.2 U	0.2 U	0.19 U	1.9 U	0.19 U	0.19 U	0.18 U	0.2 U	0.19 U	0.19 U	0.23 U	0.19 U	0.18 U	0.18 U	0.19 U	0.2 U	0.19 U	0.2 U
Carbazole	mg/kg		0.076 U	0.084 U	0.08 U	**0.032 J**	0.074 U	**0.42 J**	**0.043 J**	**0.038 J**	0.073 U	**0.24**	0.077 U	**0.83**	0.092 U	0.074 U	**0.095**	**0.11**	0.074 U	**0.035 J**	**0.4**	0.079 U
Chrysene	mg/kg	2,100	**0.55**	**0.046 J**	**0.28**	**0.42**	**0.21**	**6.2**	**0.18 J**	**0.47**	**0.02**	**2.9**	**0.11**	**6.3**	**0.056 J**	**0.11**	**0.35**	**0.78**	**0.053 J**	**0.064**	**4.5**	**0.0011 J**
Dibenz[a,h]anthracene	mg/kg	2.10	**0.065 J**	**0.0072 J**	**0.043 J**	**0.048 J**	**0.068 J**	**0.6**	**0.024**	**0.083**	**0.0043 J**	**0.68**	**0.012**	**0.9**	**0.015 J**	**0.014**	**0.084**	**0.13**	0.074 U	**0.01**	**0.78**	0.0079 U
Diethylphthalate	mg/kg	660,000	0.076 U	0.084 U	0.08 U	0.081 U	0.074 U	0.76 U	0.074 U	0.017 B	0.073 U	0.08 U	0.077 U	0.075 U	0.092 U	0.074 U	0.072 U	0.073 U	0.074 U	0.079 U	0.077 U	0.079 U
Di-n-butylphthalate	mg/kg	82,000	0.076 U	0.084 U	0.08 U	0.081 U	**0.02 J**	**0.36 J**	0.074 U	0.078 U	0.073 U	0.08 U	0.077 U	0.075 U	0.092 U	0.074 U	0.072 U	0.073 U	0.074 U	0.079 U	0.077 U	0.079 U
Di-n-ocytlphthalate	mg/kg	8,200	0.076 UJ	0.084 U	0.08 U	0.081 U	0.074 U	0.076 U	0.074 UJ	0.078 UJ	0.073 U	0.08 U	0.077 U	0.075 U	0.092 U	0.074 U	0.072 U	0.073 U	0.074 U	0.079 U	0.077 UJ	0.079 U
Fluoranthene	mg/kg	30,000	**0.71**	**0.11 J**	**0.5**	**0.68**	**0.18**	**13.2**	**0.4 J**	**0.73**	**0.031**	**6.2**	**0.16**	**11.6**	**0.086 J**	**0.24**	**0.33**	**1.3**	**0.057 J**	**0.15**	**4.6**	**0.0025 J**
Fluorene	mg/kg	30,000	**0.0078 J**	**0.033 J**	**0.028 J**	**0.021 J**	**0.017 J**	**10.6**	**0.013**	**0.028 J**	**0.0012 J**	**0.25**	**0.0015 J**	**2.4**	**0.016 J**	**0.0091**	**0.0075**	**0.015**	0.074 U	**0.022**	**0.22**	0.0079 U
Hexachloroethane	mg/kg	8.00	0.076 U	0.084 U	0.08 U	0.081 U	0.074 U	0.076 U	0.074 U	0.078 U	0.073 U	0.08 U	0.077 U	0.075 U	0.092 U	0.074 U	0.072 U	0.073 U	0.074 U	0.079 U	**0.057 J**	0.079 U
Indeno[1,2,3-c,d]pyrene	mg/kg	21.0	**0.2**	**0.02 J**	**0.12**	**0.14**	**0.22**	**1.7**	**0.066**	**0.23**	**0.012**	**1.6**	**0.04**	**2.8**	**0.03 J**	**0.049**	**0.22**	**0.38**	**0.022 J**	**0.024**	**1.4**	0.0079 U
Naphthalene	mg/kg	17.0	0.023 B	**0.049 J**	**0.073 J**	**0.14**	**0.068 J**	**10.5**	**0.031 J**	0.074 B	**0.0055 J**	**0.046 J**	**0.0068 J**	**1.5**	**0.03 J**	**0.063**	**0.037**	**0.037**	**0.057 J**	**0.047**	**5.1**	0.0079 U
N-Nitroso-di-n-propylamine	mg/kg	0.33	0.076 U	0.084 U	0.08 U	0.081 U	0.074 U	0.076 U	0.074 U	0.078 U	0.073 U	0.08 U	0.077 U	0.075 U	0.092 U	0.074 U	0.072 U	0.073 U	0.074 U	0.079 U	0.077 U	0.079 U
N-Nitrosodiphenylamine	mg/kg	470	0.076 U	0.084 U	0.08 U	0.081 U	0.074 U	0.76 U	0.074 U	0.078 U	0.073 U	0.08 U	0.077 U	0.075 U	0.092 U	0.074 U	0.072 U	0.073 U	0.074 U	0.079 U	0.077 U	0.079 U
Pentachlorophenol	mg/kg	4.00	0.19 R	0.21 UJ	0.2 U	0.2 U	0.19 U	1.9 U	0.19 U	0.19 U	0.18 U	0.2 U	0.19 U	0.19 U	0.23 U	0.19 U	0.18 U	0.18 U	0.19 U	0.2 U	0.19 U	0.2 U
Phenanthrene	mg/kg		**0.21**	**0.15 J**	**0.26**	**0.37**	**0.11 J**	**30**	**0.22 J**	**0.34**	**0.015**	**2.5**	**0.052**	**10.5**	**0.052 J**	**0.13**	**0.082**	**0.2**	**0.084**	**0.13**	**6.5**	**0.0034 J**
Phenol	mg/kg	250,000	0.076 R	0.084 U	0.08 U	0.081 U	**0.031 J**	**0.71**	0.074 U	0.078 U	0.073 U	0.08 U	0.077 U	**0.099**	0.092 U	0.074 U	0.072 U	**0.018 J**	0.074 U	0.079 U	**0.11**	0.079 U
Pyrene	mg/kg	23,000	**0.95**	**0.085 J**	**0.41**	**0.64**	**0.24**	**13.4**	**0.31 J**	**0.64**	**0.026**	**5.3**	**0.12**	**8.7**	**0.099**	**0.26**	**0.35**	**1.8**	**0.049 J**	**0.12**	**3.7**	**0.0019 J**
PCBs																						
Aroclor 1242	mg/kg	0.97	0.0532 U	N/A	0.0592 U	N/A	0.0575 U	N/A	0.054 U	N/A	0.0526 U	N/A	0.0585 U	N/A	0.0615 U	N/A	0.0569 U	N/A	0.0534 U	N/A	0.0539 U	N/A
Aroclor 1248	mg/kg	0.94	0.0532 U	N/A	0.0592 U	N/A	0.0575 U	N/A	0.054 U	N/A	0.0526 U	N/A	0.0585 U	N/A	0.0615 U	N/A	0.0569 U	N/A	0.0534 U	N/A	0.0539 U	N/A
Aroclor 1254	mg/kg	0.97	0.0532 U	N/A	0.0592 U	N/A	0.0575 U	N/A	0.054 U	N/A	0.0526 U	N/A	0.0585 U	N/A	0.0615 U	N/A	0.0569 U	N/A	0.0534 U	N/A	0.0539 U	N/A
Aroclor 1260	mg/kg	0.99	0.0532 U	N/A	**0.631**	N/A	**0.104**	N/A	0.054 U	N/A	0.0526 U	N/A	0.0585 U	N/A	0.0615 U	N/A	**0.537**	N/A	0.0534 U	N/A	0.0539 U	N/A
Aroclor 1262	mg/kg		0.0532 U	N/A	0.0592 U	N/A	0.0575 U	N/A	0.054 U	N/A	0.0526 U	N/A	0.0585 U	N/A	0.0615 U	N/A	0.0569 U	N/A	**0.0689**	N/A	**0.134**	N/A
Aroclor 1268	mg/kg		**0.096**	N/A	0.0592 U	N/A	0.0575 U	N/A	0.054 U	N/A	0.0526 U	N/A	0.0585 U	N/A	0.0615 U	N/A	0.0569 U	N/A	0.0534 U	N/A	0.0539 U	N/A
PCBs (total)	mg/kg	0.97	**0.096**	N/A	**0.631**	N/A	**0.104**	N/A	0.054 U	N/A	0.0526 U	N/A	0.0585 U	N/A	0.0615 U	N/A	**0.537**	N/A	**0.0689**	N/A	**0.134**	N/A
TPH/Oil and Grease																						
Diesel Range Organics	mg/kg	6,200	**37.2 J**	**5 J**	**35.1**	**117**	**280**	**11,000**	**32.8 J**	**92.4 J**	**14.9**	**191**	**25.6**	**1,200**	**152**	**51.6**	**40**	**43.8**	**22.2**	**28.2**	**270 J**	8 UJ
Gasoline Range Organics	mg/kg	6,200	12.3 U	10.9 U	15.5 U	11.3 U	11.2 U	**129**	11.1 U	13.2 U	10.8 U	9.6 U	8.5 U	11.6 U	14 U	9.7 U	10.6 U	12 U	9.2 U	11.2 U	**17.1**	10.8 U
Oil and Grease	mg/kg	6,200	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	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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

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

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 ot confirm or disprove the presence of this compound/analyte in the 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.

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

Table 4
Summary of Organics Detected in Soil
Parcel B6
Tradepoint Atlantic
Sparrows Point, Maryland

Parameter	Units	PAL	B6-074-SB-1*	B6-074-SB-4*	B6-075-SB-1	B6-076-SB-1	B6-076-SB-8	B6-077-SB-1	B6-077-SB-4	B6-078-SB-1	B6-078-SB-8	B6-079-SB-1	B6-079-SB-7	B6-080-SB-1	B6-080-SB-5	B6-081-SB-1	B6-081-SB-5	B6-082-SB-1*	B6-082-SB-5*	B6-083-SB-1*	B6-083-SB-8*	B6-084-SB-1*	B6-084-SB-7*
Volatile Organic Compounds																							
1,2,3-Trichlorobenzene	mg/kg	930	0.0082 U	0.0052 U	0.0053 UJ	0.0053 U	0.0054 U	0.0059 U	0.0044 U	0.0064 U	0.0069 U	0.0056 U	0.0048 U	0.005 U	0.0049 U	0.0063 U	0.0067 UJ	0.0069 U	0.005 U	0.0035 U	0.0047 U	0.0045 U	0.0052 U
1,2-Dichlorobenzene	mg/kg	9,300	0.0082 U	0.0052 U	0.0053 UJ	0.0053 U	0.0054 U	0.0059 U	0.0044 U	0.0064 U	0.0069 U	0.0056 U	0.0048 U	0.005 U	0.0049 U	0.0063 U	0.0067 UJ	0.0069 U	0.005 U	0.0035 U	0.0047 U	0.0045 U	0.0052 U
1,2-Dichloroethane	mg/kg	2	0.0082 U	0.0052 U	0.0053 U	0.0053 U	0.0054 U	0.0059 U	0.0044 U	0.0064 U	0.0069 U	0.0056 U	0.0048 U	0.005 U	0.0049 U	0.0063 U	0.0067 UJ	0.0069 U	0.005 U	0.0035 U	0.0047 U	0.0045 U	0.0052 U
1,2-Dichloroethene (Total)	mg/kg	2,300	0.016 U	0.01 U	0.011 U	0.011 U	0.011 U	0.012 U	0.0089 U	0.013 U	0.014 U	0.011 U	0.0096 U	0.01 U	0.0099 U	0.013 U	0.013 UJ	0.014 U	0.01 U	0.007 U	0.0095 U	0.0091 U	0.01 U
1,3-Dichlorobenzene	mg/kg		0.0082 U	0.0052 U	0.0053 UJ	0.0053 U	0.0054 U	0.0059 U	0.0044 U	0.0064 U	0.0069 U	0.0056 U	0.0048 U	0.005 U	0.0049 U	0.0063 U	0.0067 UJ	0.0069 U	0.005 U	0.0035 U	0.0047 U	0.0045 U	0.0052 U
1,4-Dichlorobenzene	mg/kg	11	0.0082 U	0.0052 U	0.0053 UJ	0.0053 U	0.0054 U	0.0059 U	0.0044 U	0.0064 U	0.0069 U	0.0056 U	0.0048 U	0.005 U	0.0049 U	0.0063 U	0.0067 UJ	0.0069 U	0.005 U	0.0035 U	0.0047 U	0.0045 U	0.0052 U
2-Butanone (MEK)	mg/kg	190,000	0.016 U	**0.0054 J**	0.011 U	0.011 UJ	0.011 UJ	0.012 U	**0.0064 J**	0.013 U	**0.0035 J**	0.011 U	0.0096 U	0.01 U	0.0099 U	0.013 U	0.013 UJ	0.014 U	0.01 U	0.007 U	0.0095 U	0.0091 U	0.01 U
2-Hexanone	mg/kg	1,300	0.016 U	0.01 U	0.011 U	0.011 UJ	0.011 UJ	0.012 U	0.0089 U	0.013 U	0.014 U	0.011 U	0.0096 U	0.01 U	0.0099 U	0.013 U	0.013 UJ	0.014 U	0.01 U	0.007 U	0.0095 U	0.0091 U	0.01 U
4-Methyl-2-pentanone (MIBK)	mg/kg	56,000	0.016 U	0.01 U	0.011 U	0.011 U	0.011 U	0.012 U	0.0089 U	0.013 U	0.014 U	0.011 U	0.0096 U	0.01 U	0.0099 U	0.013 U	0.013 UJ	0.014 U	0.01 U	0.007 U	0.0095 U	0.0091 U	0.01 U
Acetone	mg/kg	670,000	0.016 U	**0.021**	0.011 UJ	0.011 UJ	0.011 UJ	0.012 U	**0.018**	0.013 U	0.014 U	0.011 U	**0.0059 J**	0.01 UJ	0.0099 UJ	0.013 UJ	0.013 UJ	0.014 U	0.01 U	**0.0095**	0.0095 U	0.0091 U	**0.0051 J**
Benzene	mg/kg	5.1	0.0082 U	0.0052 U	0.0053 U	0.0053 U	0.0054 U	0.0059 U	0.0044 U	0.0064 U	0.0069 U	0.0056 U	0.0048 U	0.005 U	0.0049 U	0.0063 U	0.0067 UJ	0.0069 U	0.005 U	0.0035 U	0.0047 U	0.0045 U	0.0052 U
cis-1,2-Dichloroethene	mg/kg	2,300	0.0082 U	0.0052 U	0.0053 U	0.0053 U	0.0054 U	0.0059 U	0.0044 U	0.0064 U	0.0069 U	0.0056 U	0.0048 U	0.005 U	0.0049 U	0.0063 U	0.0067 UJ	0.0069 U	0.005 U	0.0035 U	0.0047 U	0.0045 U	0.0052 U
Cyclohexane	mg/kg	27,000	0.016 U	0.01 U	0.011 U	0.011 U	0.011 U	0.012 U	0.0089 U	0.013 U	0.014 U	0.011 U	0.0096 U	0.01 U	0.0099 U	0.013 U	0.013 UJ	0.014 U	0.01 U	0.007 U	0.0095 U	0.0091 U	0.01 U
Ethylbenzene	mg/kg	25	0.0082 U	**0.0013 J**	0.0053 U	0.0053 U	**0.28**	0.0059 U	0.0044 U	0.0064 U	0.0069 U	0.0056 U	0.0048 U	0.005 U	0.0049 U	0.0063 U	0.0067 UJ	0.0069 U	0.005 U	0.0035 U	0.0047 U	0.0045 U	0.0052 U
Isopropylbenzene	mg/kg	9,900	0.0082 U	0.0052 U	0.0053 U	0.0053 U	0.0054 U	0.0059 U	0.0044 U	0.0064 U	0.0069 U	0.0056 U	0.0048 U	0.005 U	0.0049 U	0.0063 U	0.0067 UJ	0.0069 U	0.005 U	0.0035 U	0.0047 U	0.0045 U	0.0052 U
Methyl Acetate	mg/kg	1,200,000	0.082 U	0.052 U	0.053 U	0.053 R	0.054 R	0.059 U	0.044 U	0.064 U	0.069 U	0.056 U	0.048 U	0.05 U	0.049 U	0.063 U	0.067 UJ	0.069 U	0.05 U	0.035 U	0.047 U	0.045 U	0.052 U
Methylene Chloride	mg/kg	1,000	0.0082 U	0.0052 U	0.0053 U	0.0053 U	0.0054 U	0.0059 U	0.0044 U	0.0064 U	0.0069 U	0.0056 U	0.0048 U	0.005 U	0.0049 U	0.0063 U	0.0067 UJ	0.0069 U	0.005 U	0.0035 U	0.0047 U	0.0045 U	0.0052 U
Styrene	mg/kg	35,000	0.0082 U	0.0052 U	0.0053 U	0.0053 U	0.0054 U	0.0059 U	0.0044 U	0.0064 U	0.0069 U	0.0056 U	0.0048 U	0.005 U	0.0049 U	0.0063 U	0.0067 UJ	0.0069 U	0.005 U	0.0035 U	0.0047 U	0.0045 U	0.0052 U
Tetrachloroethene	mg/kg	100	0.0082 U	0.0052 U	0.0053 U	0.0053 U	0.0054 U	0.0059 U	0.0044 U	0.0064 U	0.0069 U	0.0056 U	0.0048 U	0.005 U	0.0049 U	0.0063 U	0.0067 UJ	0.0069 U	0.005 U	0.0035 U	0.0047 U	0.0045 U	0.0052 U
Toluene	mg/kg	47,000	0.0082 U	**0.002 J**	0.0053 U	0.0053 U	**0.0077**	0.0059 U	**0.0015 J**	0.0064 U	0.0069 U	0.0056 U	0.0048 U	0.005 U	0.0049 U	0.0063 U	0.0067 UJ	0.0069 U	0.005 U	0.0035 U	0.0047 U	0.0045 U	0.0052 U
Trichloroethene	mg/kg	6	0.0082 U	0.0052 U	0.0053 U	0.0053 U	0.0054 U	0.0059 U	0.0044 U	0.0064 U	0.0069 U	0.0056 U	0.0048 U	0.005 U	0.0049 U	0.0063 U	0.0067 UJ	0.0069 U	0.005 U	0.0035 U	0.0047 U	0.0045 U	0.0052 U
Xylenes	mg/kg	2,800	0.025 U	**0.011 J**	0.016 U	0.016 U	**1**	0.018 U	0.013 U	0.019 U	0.021 U	0.017 U	0.014 U	0.015 U	0.015 U	0.019 U	0.02 UJ	0.021 U	0.015 U	0.01 U	0.014 U	0.014 U	0.016 U
Semi-Volatile Organic Compounds^																							
1,1-Biphenyl	mg/kg	200	0.1 U	0.08 U	**0.066 J**	**0.017 J**	**0.04 J**	0.069 U	0.078 U	0.073 U	**0.028 J**	0.08 U	0.076 U	0.083 U	0.078 U	0.075 U	0.081 U	0.075 U	0.081 U	0.07 U	0.082 U	0.074 U	0.077 U
1,2,4,5-Tetrachlorobenzene	mg/kg	350	0.1 U	0.08 U	0.07 U	0.076 U	0.077 U	0.069 U	0.078 U	0.073 U	0.074 U	0.08 U	0.076 U	0.083 U	0.078 U	0.075 U	0.081 U	0.075 U	0.081 U	0.07 U	0.082 U	0.074 U	0.077 U
2,4-Dimethylphenol	mg/kg	16,000	0.1 U	0.08 U	0.07 U	0.076 U	**0.033 J**	0.069 U	0.078 U	0.073 U	0.074 U	0.08 U	0.076 U	0.083 U	0.078 U	0.075 U	0.081 U	0.075 U	0.081 U	0.07 U	0.082 U	0.074 U	0.077 U
2,6-Dinitrotoluene	mg/kg	1.5	0.1 U	0.08 U	0.07 U	0.076 U	0.077 U	0.069 U	0.078 U	0.073 U	0.074 U	0.08 U	0.076 U	0.083 U	0.078 U	0.075 U	0.081 U	0.075 U	0.081 U	0.07 U	0.082 U	0.074 U	0.077 U
2-Chloronaphthalene	mg/kg	60,000	0.1 U	0.08 U	0.07 U	0.076 U	0.077 U	0.069 U	0.078 U	0.073 U	0.074 U	0.08 U	0.076 U	0.083 U	0.078 U	0.075 U	0.081 U	0.075 U	0.081 U	0.07 U	0.082 U	0.074 U	0.077 U
2-Methylnaphthalene	mg/kg	3,000	0.01 U	**0.0028 J**	**0.53**	**0.052 J**	**0.27**	**0.056**	0.0079 U	**0.027 J**	**0.19**	**0.014**	0.0076 U	0.0082 U	0.0079 U	**0.013**	**0.012**	**0.013**	0.0082 U	**0.02**	0.0082 U	0.075 U	0.0078 U
2-Methylphenol	mg/kg	41,000	0.1 U	0.08 U	0.07 U	0.076 U	**0.015 J**	0.069 U	0.078 U	0.073 U	0.074 U	0.08 U	0.076 U	0.083 U	0.078 U	0.075 U	0.081 U	0.075 U	0.081 U	0.07 U	0.082 U	0.074 U	0.077 U
3&4-Methylphenol(m&p Cresol)	mg/kg	41,000	0.2 U	0.16 U	0.14 U	0.15 U	**0.045 J**	0.14 U	0.15 U	0.15 U	0.15 U	0.16 U	0.15 U	0.17 U	0.16 U	0.15 U	0.16 U	0.15 U	0.16 U	0.14 U	0.16 U	0.15 U	0.15 U
3,3'-Dichlorobenzidine	mg/kg	5.1	0.1 U	0.08 U	0.07 UJ	0.076 UJ	0.077 UJ	0.069 U	0.078 U	0.073 U	0.074 UJ	0.08 U	0.076 U	0.083 U	0.078 U	0.075 U	0.081 U	0.075 U	0.081 U	0.07 U	0.082 U	0.074 U	0.077 U
4-Chloroaniline	mg/kg	11	0.1 U	0.08 U	0.07 U	0.076 U	0.077 U	0.069 U	0.078 U	0.073 U	0.074 U	0.08 U	0.076 U	0.083 U	0.078 U	0.075 U	0.081 U	0.075 U	0.081 U	0.07 U	0.082 U	0.074 U	0.077 U
Acenaphthene	mg/kg	45,000	**0.0014 J**	**0.0018 J**	**0.0093 J**	**0.024 J**	**0.95**	**0.0023 J**	0.0079 U	**0.0016 J**	**0.063**	**0.0037 J**	0.0076 U	0.0082 U	0.0079 U	**0.0026 J**	**0.0017 J**	**0.0018 J**	0.0082 U	**0.0013 J**	0.0082 U	0.075 U	0.0078 U
Acenaphthylene	mg/kg	45,000	0.01 U	**0.0015 J**	**0.057 J**	**0.039 J**	0.078 U	**0.074**	0.0079 U	**0.026**	**0.11**	**0.019**	0.0076 U	0.0082 U	0.0079 U	**0.0074**	**0.0087**	**0.0066 J**	0.0082 U	**0.007**	0.0082 U	0.075 U	0.0078 U
Acetophenone	mg/kg	120,000	0.1 U	0.08 U	**0.03 J**	0.076 U	0.077 U	**0.017 J**	0.078 U	0.073 U	0.074 U	0.08 U	0.076 U	0.083 U	0.078 U	0.075 U	0.081 U	0.075 U	0.081 U	0.07 U	0.082 U	0.074 U	0.077 U
Anthracene	mg/kg	230,000	**0.0053 J**	**0.0055 J**	**0.057 J**	**0.34**	**0.27**	**0.045 J**	0.0079 U	**0.034**	**0.17**	**0.013**	**0.001 J**	0.0082 U	0.0079 U	**0.0092**	**0.011**	**0.01**	**0.0015 J**	**0.0046 J**	0.0082 U	**0.013 J**	0.0078 U
Benz[a]anthracene	mg/kg	21.0	**0.0042 J**	**0.012**	**0.2**	**1.8**	**1.5**	**0.23 J**	0.0079 U	**0.18 J**	**0.51**	**0.095**	0.0076 U	0.0082 U	0.0079 U	**0.036**	**0.022**	**0.041**	**0.0058 J**	**0.0049 J**	0.0082 U	0.075 U	0.0078 U
Benzaldehyde	mg/kg	120,000	**0.028 J**	0.08 U	**0.085**	0.076 UJ	0.077 UJ	0.069 UJ	0.078 UJ	0.073 UJ	**0.026 J**	0.08 UJ	0.076 UJ	0.083 U	0.078 U	0.075 U	0.081 U	0.075 U	0.081 U	0.07 U	0.082 U	0.074 U	0.077 U
Benzo[a]pyrene	mg/kg	2.10	**0.0023 J**	**0.0089**	**0.22**	**1.3**	**3.2**	**0.28 J**	0.0079 U	**0.16 J**	**0.51**	**0.078**	0.0076 U	0.0082 U	0.0079 U	**0.041**	**0.03**	**0.036**	**0.0044 J**	**0.0034 J**	0.0082 U	**0.015 J**	0.0078 U
Benzo[b]fluoranthene	mg/kg	21.0	**0.0063 J**	**0.022**	**0.52**	**2.7**	**3.9**	**0.54 J**	0.0079 U	**0.4 J**	**1.1**	**0.17**	0.0076 U	0.0082 U	0.0079 U	**0.085**	**0.069**	**0.093**	**0.0096**	**0.024**	0.0082 U	**0.032 J**	0.0078 U
Benzo[g,h,i]perylene	mg/kg		**0.0014 J**	**0.0049 J**	**0.21**	**0.24**	**1.6**	**0.21 J**	0.0079 U	**0.11 J**	**0.21**	**0.043**	0.0076 U	0.0082 U	0.0079 U	**0.035**	**0.033**	**0.027**	**0.0023 J**	**0.0045 J**	0.0082 U	0.075 U	0.0078 U
Benzo[k]fluoranthene	mg/kg	210	**0.0055 J**	**0.019**	**0.53**	**2.5**	**1.7**	**0.47 J**	0.0079 U	**0.35 J**	**0.94**	**0.15**	0.0076 U	0.0082 U	0.0079 U	**0.085**	**0.025**	**0.081**	**0.0083**	**0.021**	0.0082 U	**0.019 J**	0.0078 U
bis(2-Ethylhexyl)phthalate	mg/kg	160	0.1 U	0.08 U	0.04 B	0.076 UJ	0.077 UJ	0.069 U	0.078 U	0.073 U	0.074 UJ	0.08 U	**0.11**	0.083 U	0.078 U	0.075 U	0.081 U	0.075 U	0.081 U	0.07 U	0.082 U	**0.24**	0.077 U
Caprolactam	mg/kg	400,000	0.25 U	0.2 U	0.18 U	0.19 U	0.19 U	0.17 U	0.19 U	0.18 U	0.19 U	0.2 U	0.19 U	0.21 U	0.2 U	0.19 U	0.2 U	0.19 U	0.2 U	0.18 U	0.2 U	0.18 U	0.19 U
Carbazole	mg/kg		0.1 U	0.08 U	**0.027 J**	**0.24**	**0.16**	0.069 U	0.078 U	**0.036 J**	**0.07 J**	0.08 U	0.076 U	0.083 U	0.078 U	0.075 U	0.081 U	0.075 U	0.081 U	0.07 U	0.082 U	0.074 U	0.077 U
Chrysene	mg/kg	2,100	**0.0034 J**	**0.011**	**0.32**	**1.3**	**1.5**	**0.23 J**	0.0079 U	**0.2 J**	**0.46**	**0.087**	0.0076 U	0.0082 U	0.0079 U	**0.043**	**0.037**	**0.04**	**0.0057 J**	**0.023**	0.0082 U	**0.033 J**	0.0078 U
Dibenz[a,h]anthracene	mg/kg	2.10	0.01 U	**0.002 J**	**0.065 J**	**0.099**	**0.59**	**0.069 J**	0.0079 U	**0.037 J**	**0.09**	**0.014**	0.0076 U	0.0082 U	0.0079 U	**0.011**	**0.0097**	**0.009**	**0.0016 J**	**0.0013 J**	0.0082 U	0.075 U	0.0078 U
Diethylphthalate	mg/kg	660,000	0.1 U	0.08 U	0.07 U	0.076 U	0.077 U	0.069 U	0.078 U	0.073 U	0.074 U	0.08 U	0.076 U	0.083 U	0.078 U	0.075 U	0.081 U	0.075 U	0.081 U	0.07 U	0.082 U	0.074 U	0.077 U
Di-n-butylphthalate	mg/kg	82,000	0.1 U	0.08 U	0.07 U	0.076 U	0.077 U	0.069 U	0.078 U	0.073 U	0.074 U	0.08 U	0.076 U	0.083 U	0.078 U	0.075 U	0.081 U	0.075 U	0.081 U	0.07 U	0.082 U	0.074 U	0.077 U
Di-n-octylphthalate	mg/kg	8,200	0.1 U	0.08 U	0.07 UJ	0.076 UJ	0.077 UJ	0.069 U	0.078 U	0.073 UJ	0.074 UJ	0.08 U	0.076 U	0.083 U	0.078 U	0.075 U	0.081 U	0.075 U	0.081 U	0.07 U	0.082 U	0.074 U	0.077 U
Fluoranthene	mg/kg	30,000	**0.009 J**	**0.022**	**0.29**	**3.4**	**1.4**	**0.27 J**	0.0079 U	**0.41 J**	**0.98**	**0.18**	**0.0011 J**	0.0082 U	0.0079 U	**0.062**	**0.031**	**0.058**	**0.0069 J**	**0.021**	0.0082 U	**0.053 J**	**0.00071 J**
Fluorene	mg/kg	30,000	**0.0039 J**	**0.0033 J**	**0.015 J**	**0.022 J**	**0.13**	**0.0095**	0.0079 U	**0.0022 J**	**0.084**	**0.005 J**	0.0076 U	0.0082 U	0.0079 U	**0.0019 J**	**0.0027 J**	**0.0018 J**	0.0082 U	**0.0033 J**	0.0082 U	0.075 U	0.0078 U
Hexachloroethane	mg/kg	8.00	0.1 U	0.08 U	0.07 U	0.076 U	0.077 U	0.069 U	0.078 U	0.073 U	0.074 U	0.08 U	0.076 U	0.083 U	0.078 U	0.075 U	0.081 U	0.075 U	0.081 U	0.07 U	0.082 U	0.074 U	0.077 U
Indeno[1,2,3-c,d]pyrene	mg/kg	21.0	**0.0015 J**	**0.0044 J**	**0.18**	**0.28**	**1.7**	**0.19 J**	0.0079 U	**0.099 J**	**0.22**	**0.042**	0.0076 U	0.0082 U	0.0079 U	**0.03**	**0.028**	**0.022**	**0.0021 J**	**0.0032 J**	0.0082 U	0.075 U	0.0078 U
Naphthalene	mg/kg	17.0	**0.024**	**0.021**	**0.34**	**0.17**	**0.28**	**0.094**	0.0079 U	**0.025 J**	**0.45**	**0.011**	0.0076 U	0.0082 U	0.0031 B	**0.014**	**0.012**	**0.0064 J**	0.0082 U	**0.045**	0.0082 U	0.075 U	0.0078 U
N-Nitroso-di-n-propylamine	mg/kg	0.33	0.1 U	0.08 U	0.07 U	0.076 U	0.077 U	0.069 U	0.078 U	0.073 U	0.074 U	0.08 U	0.076 U	0.083 U	0.078 U	0.075 U	0.081 U	0.075 U	0.081 U	0.07 U	0.082 U	0.074 U	0.077 U
N-Nitrosodiphenylamine	mg/kg	470	0.1 U	0.08 U	0.07 U	0.076 U	0.077 U	0.069 U	0.078 U	0.073 U	0.074 U	0.08 U	0.076 U	0.083 U	0.078 U	0.075 U	0.081 U	0.075 U	0.081 U	0.07 U	0.082 U	0.074 U	0.077 U
Pentachlorophenol	mg/kg	4.00	0.25 U	0.2 U	0.18 U	0.19 U	0.19 U	0.17 U	0.19 U	0.18 UJ	0.19 U	0.2 U	0.19 U	0.21 U	0.2 U	0.19 U	0.2 U	0.19 U	0.2 U	0.18 U	0.2 U	0.18 U	0.19 U
Phenanthrene	mg/kg		**0.015**	**0.016**	**0.43**	**1.2**	**0.82**	**0.09**	0.0079 U	**0.11**	**0.65**	**0.052**	**0.0045 J**	0.0082 U	**0.00067 J**	**0.032**	**0.027**	**0.035**	**0.0037 J**	**0.019**	0.0082 U	**0.035 J**	**0.00097 J**
Phenol	mg/kg	250,000	0.1 U	**0.64**	0.07 U	0.076 U	**0.029 J**	0.069 U	0.078 U	0.073 UJ	0.074 U	0.08 U	0.076 U	0.083 U	0.078 U	0.075 U	0.081 U	0.075 U	0.081 U	0.07 U	0.082 U	0.074 U	0.077 U
Pyrene	mg/kg	23,000	**0.0063 J**	**0.016**	**0.27**	**2.6**	**1.4**	**0.22 J**	0.0079 U	**0.28 J**	**0.74**	**0.16**	**0.001 J**	0.0082 U	0.0079 U	**0.053**	**0.029**	**0.051**	**0.0064 J**	**0.021**	0.0082 U	**0.036 J**	0.0078 U
PCBs																							
Aroclor 1242	mg/kg	0.97	0.0704 U	N/A	0.0517 U	0.058 U	N/A	0.0565 U	N/A	0.0574 U	N/A	0.0555 U	N/A	0.0577 U	N/A	0.055 U	N/A	0.054 U	N/A	0.05 U	N/A	0.157 U	N/A
Aroclor 1248	mg/kg	0.94	0.0704 U	N/A	0.0517 U	0.058 U	N/A	0.0565 U	N/A	0.0574 U	N/A	0.0555 U	N/A	0.0577 U	N/A	0.055 U	N/A	0.054 U	N/A	0.05 U	N/A	0.157 U	N/A
Aroclor 1254	mg/kg	0.97	0.0704 U	N/A	0.0517 U	**0.0983**	N/A	0.0565 U	N/A	0.0574 U	N/A	0.0555 U	N/A	0.0577 U	N/A	0.055 U	N/A	0.054 U	N/A	**0.1**	N/A	0.157 U	N/A
Aroclor 1260	mg/kg	0.99	0.0704 U	N/A	0.0517 U	0.058 U	N/A	0.0565 U	N/A	0.0574 U	N/A	0.0555 U	N/A	0.0577 U	N/A	0.055 U	N/A	0.054 U	N/A	0.05 U	N/A	0.157 U	N/A
Aroclor 1262	mg/kg		0.0704 U	N/A	0.0517 U	0.058 U	N/A	0.0565 U	N/A	0.0574 U	N/A	0.0555 U	N/A	0.0577 U	N/A	0.055 U	N/A	0.054 U	N/A	**0.125**	N/A	0.157 U	N/A
Aroclor 1268	mg/kg		0.0704 U	N/A	0.0517 U	0.058 U	N/A	0.0565 U	N/A	0.0574 U	N/A	0.0555 U	N/A	0.0577 U	N/A	0.055 U	N/A	0.054 U	N/A	0.05 U	N/A	**4.41**	N/A
PCBs (total)	mg/kg	0.97	0.0704 U	N/A	0.0517 U	**0.0983**	N/A	0.0565 U	N/A	0.0574 U	N/A	0.0555 U	N/A	0.0577 U	N/A	0.055 U	N/A	0.054 U	N/A	**0.225**	N/A	**4.41**	N/A
TPH/Oil and Grease																							
Diesel Range Organics	mg/kg	6,200	**29**	**11.2**	**62.5 J**	**75.6 J**	**150 J**	**60 J**	**4.9 J**	**19.2 J**	**50.1 J**	**41.3 J**	**46.7 J**	8.2 UJ	7.9 UJ	**10.8 J**	**23.8 J**	**13.2**	**3.8 J**	**40.7**	8.1 U	**63.5**	7.7 U
Gasoline Range Organics	mg/kg	6,200	16.5 U	10.4 U	10.5 U	11.6 U	**20.6**	11.1 U	9 U	14.7 U	11.3 U	11.4 U	10.7 U	10.2 U	9 U	16 U	13.7 U	10.3 U	12 U	10.3 U	10.6 U	8.4 U	10.2 U
Oil and Grease	mg/kg	6,200	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	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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

J: The positive result reported for this analyte is a quantitative estimate.
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 ot confirm or disprove the presence of this compound/analyte in the 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.
N/A: This parameter was not analyzed for this sample.

Table 4
Summary of Organics Detected in Soil
Parcel B6
Tradepoint Atlantic
Sparrows Point, Maryland

Parameter	Units	PAL	B6-085-SB-1*	B6-085-SB-8*	B6-086-SB-1*	B6-086-SB-4*	B6-087-SB-5*	B6-087-SB-7.5*	B6-088-SB-1	B6-088-SB-5	B6-089-SB-1	B6-089-SB-4	B6-090-SB-2	B6-090-SB-8	B6-091-SB-1	B6-091-SB-9	B6-092-SB-1*	B6-092-SB-9*	B6-093-SB-1*	B6-093-SB-7*
Volatile Organic Compounds																				
1,2,3-Trichlorobenzene	mg/kg	930	0.0058 U	0.0058 U	0.0055 U	0.011 U	N/A	N/A	N/A	0.0056 U	0.0052 U	0.005 U	0.0066 U	0.0044 U	N/A	0.0054 U	0.005 U	0.005 U	0.0044 U	0.0049 U
1,2-Dichlorobenzene	mg/kg	9,300	0.0058 U	0.0058 U	0.0055 U	0.011 U	N/A	N/A	N/A	0.0056 U	0.0052 U	**0.00085 J**	0.0066 U	0.0044 U	N/A	0.0054 U	0.005 U	0.005 U	0.0044 U	0.0049 U
1,2-Dichloroethane	mg/kg	2	0.0058 U	0.0058 U	0.0055 U	0.011 U	N/A	N/A	N/A	0.0056 U	0.0052 U	0.005 U	0.0066 U	0.0044 U	N/A	0.0054 U	0.005 U	0.005 U	0.0044 U	0.0049 U
1,2-Dichloroethene (Total)	mg/kg	2,300	0.012 U	0.012 U	0.011 U	0.022 U	N/A	N/A	N/A	0.011 U	0.01 U	0.01 U	0.013 U	0.0089 U	N/A	0.011 U	0.01 U	0.01 U	0.0089 U	0.0098 U
1,3-Dichlorobenzene	mg/kg		0.0058 U	0.0058 U	0.0055 U	0.011 U	N/A	N/A	N/A	0.0056 U	0.0052 U	0.005 U	0.0066 U	0.0044 U	N/A	0.0054 U	0.005 U	0.005 U	0.0044 U	0.0049 U
1,4-Dichlorobenzene	mg/kg	11	0.0058 U	0.0058 U	0.0055 U	0.011 U	N/A	N/A	N/A	0.0056 U	0.0052 U	0.005 U	0.0066 U	0.0044 U	N/A	0.0054 U	0.005 U	0.005 U	0.0044 U	0.0049 U
2-Butanone (MEK)	mg/kg	190,000	0.012 U	0.012 U	0.011 U	0.022 U	N/A	N/A	N/A	0.011 U	0.01 U	**0.0073 J**	**0.0033 J**	0.0089 U	N/A	0.011 U	**0.0048 J**	0.01 U	0.0089 U	**0.0023 J**
2-Hexanone	mg/kg	1,300	0.012 U	0.012 U	0.011 U	0.022 U	N/A	N/A	N/A	0.011 U	0.01 U	0.01 U	0.013 U	0.0089 U	N/A	0.011 U	0.01 U	0.01 U	0.0089 U	0.0098 U
4-Methyl-2-pentanone (MIBK)	mg/kg	56,000	0.012 U	0.012 U	0.011 U	0.022 U	N/A	N/A	N/A	0.011 U	0.01 U	0.01 U	0.013 U	0.0089 U	N/A	0.011 U	0.01 U	0.01 U	0.0089 U	0.0098 U
Acetone	mg/kg	670,000	0.012 U	0.012 U	0.011 U	0.022 U	N/A	N/A	N/A	0.011 U	0.01 U	**0.055 J**	0.016 B	0.015 B	N/A	0.0085 B	0.02 B	0.01 U	0.0089 U	0.014 B
Benzene	mg/kg	5.1	0.0058 U	0.0058 U	0.0055 U	0.011 U	N/A	N/A	N/A	0.0056 U	0.0052 U	0.005 U	0.0066 U	0.0044 U	N/A	0.0054 U	0.005 U	0.005 U	0.0044 U	0.0049 U
cis-1,2-Dichloroethene	mg/kg	2,300	0.0058 U	0.0058 U	0.0055 U	0.011 U	N/A	N/A	N/A	0.0056 U	0.0052 U	0.005 U	0.0066 U	0.0044 U	N/A	0.0054 U	0.005 U	0.005 U	0.0044 U	0.0049 U
Cyclohexane	mg/kg	27,000	0.012 U	0.012 U	0.011 U	0.022 U	N/A	N/A	N/A	0.011 U	0.01 U	0.01 U	0.013 U	0.0089 U	N/A	0.011 U	0.01 U	0.01 U	0.0089 U	0.0098 U
Ethylbenzene	mg/kg	25	0.0058 U	0.0058 U	0.0055 U	0.011 U	N/A	N/A	N/A	**0.0012 J**	0.0052 U	0.005 U	0.0066 U	0.0044 U	N/A	0.0054 U	**0.0042 J**	0.005 U	0.0044 U	0.0049 U
Isopropylbenzene	mg/kg	9,900	0.0058 U	0.0058 U	0.0055 U	0.011 U	N/A	N/A	N/A	0.0056 U	0.0052 U	0.005 U	0.0066 U	0.0044 U	N/A	0.0054 U	0.005 U	0.005 U	0.0044 U	0.0049 U
Methyl Acetate	mg/kg	1,200,000	0.058 U	0.058 U	0.055 U	0.11 U	N/A	N/A	N/A	0.056 R	0.052 R	0.05 R	0.066 R	0.044 R	N/A	0.054 R	0.05 U	0.05 U	0.044 U	0.049 U
Methylene Chloride	mg/kg	1,000	0.0058 U	0.0058 U	0.0055 U	0.011 U	N/A	N/A	N/A	0.0056 U	0.0052 U	0.005 U	0.0066 U	0.0044 U	N/A	0.0054 U	0.005 U	0.005 U	0.0044 U	0.0049 U
Styrene	mg/kg	35,000	0.0058 U	0.0058 U	0.0055 U	0.011 U	N/A	N/A	N/A	0.0056 U	0.0052 U	0.005 U	0.0066 U	0.0044 U	N/A	0.0054 U	0.005 U	0.005 U	0.0044 U	0.0049 U
Tetrachloroethene	mg/kg	100	0.0058 U	0.0058 U	0.0055 U	0.011 U	N/A	N/A	N/A	0.0056 U	0.0052 U	0.005 U	0.0066 U	0.0044 U	N/A	0.0054 U	0.005 U	0.005 U	0.0044 U	0.0049 U
Toluene	mg/kg	47,000	0.0058 U	0.0058 U	0.0055 U	0.011 U	N/A	N/A	N/A	0.0056 U	0.0052 U	0.005 U	0.0066 U	0.0044 U	N/A	0.0054 U	0.005 U	0.005 U	0.0044 U	0.0049 U
Trichloroethene	mg/kg	6	0.0058 U	0.0058 U	0.0055 U	0.011 U	N/A	N/A	N/A	0.0056 U	0.0052 U	0.005 U	0.0066 U	0.0044 U	N/A	0.0054 U	0.005 U	0.005 U	0.0044 U	0.0049 U
Xylenes	mg/kg	2,800	0.017 U	0.017 U	0.017 U	0.033 U	N/A	N/A	N/A	**0.0066 J**	0.016 U	0.015 U	0.02 U	0.013 U	N/A	0.016 U	**0.023**	0.015 U	**0.0049 J**	0.015 U
Semi-Volatile Organic Compounds^																				
1,1-Biphenyl	mg/kg	200	0.075 U	**0.03 J**	0.068 U	0.073 U	0.075 U	0.078 U	0.074 U	0.072 U	**0.028 J**	**0.15**	**0.059 J**	0.077 U	0.07 U	0.083 U	0.069 U	0.079 U	0.073 U	0.076 U
1,2,4,5-Tetrachlorobenzene	mg/kg	350	0.075 U	0.078 U	0.068 U	**0.062 J**	0.075 U	0.078 U	0.074 U	0.072 U	0.073 U	0.084 U	0.082 U	0.077 U	0.07 U	0.083 U	0.069 U	0.079 U	0.073 U	0.076 U
2,4-Dimethylphenol	mg/kg	16,000	0.075 U	0.078 U	0.068 U	0.073 U	0.075 U	0.078 U	0.074 U	0.072 U	**0.016 J**	0.084 U	0.082 UJ	0.077 U	0.07 U	0.083 UJ	0.069 U	0.079 U	0.073 U	0.076 U
2,6-Dinitrotoluene	mg/kg	1.5	0.075 U	0.078 U	0.068 U	0.073 U	0.075 U	0.078 U	0.074 U	0.072 U	0.073 U	0.084 U	0.082 U	0.077 U	0.07 U	0.083 U	0.069 U	0.079 U	0.073 U	0.076 U
2-Chloronaphthalene	mg/kg	60,000	0.075 U	0.078 U	0.068 U	0.073 U	0.075 U	0.078 U	0.074 U	0.072 U	0.073 U	0.084 U	0.082 U	0.077 U	0.07 U	0.083 U	0.069 U	0.079 U	0.073 U	0.076 U
2-Methylnaphthalene	mg/kg	3,000	**0.1**	**0.13**	**0.0033 J**	**0.022**	**0.0058 J**	**0.0082**	0.075 U	0.0072 U	**0.07**	**0.64**	**0.54**	**0.0025 J**	0.069 U	0.0081 U	**0.042**	0.008 U	**0.13**	**0.0075 J**
2-Methylphenol	mg/kg	41,000	0.075 U	0.078 U	0.068 U	0.073 U	0.075 U	0.078 U	0.074 U	0.072 U	0.073 U	0.084 U	0.082 UJ	0.077 U	0.07 U	0.083 U	0.069 U	0.079 U	0.073 U	0.076 U
3&4-Methylphenol(m&p Cresol)	mg/kg	41,000	0.15 U	**0.021 J**	0.14 U	0.15 U	0.15 U	0.16 U	0.15 U	0.14 U	0.15 U	0.17 U	0.16 UJ	0.15 U	0.14 U	0.17 U	0.14 U	0.16 U	0.15 U	0.15 U
3,3'-Dichlorobenzidine	mg/kg	5.1	0.075 U	0.078 U	0.068 U	0.073 U	0.075 U	0.078 U	0.074 UJ	0.072 U	0.073 UJ	0.084 U	0.082 UJ	0.077 U	0.07 UJ	0.083 U	0.069 U	0.079 U	0.073 U	0.076 U
4-Chloroaniline	mg/kg	11	0.075 U	0.078 U	0.068 U	0.073 U	0.075 U	0.078 U	0.074 U	0.072 U	0.073 U	0.084 U	0.082 U	0.077 U	0.07 U	0.083 U	0.069 U	0.079 U	0.073 U	0.076 U
Acenaphthene	mg/kg	45,000	**0.004 J**	**0.0073 J**	**0.00066 J**	**0.00081 J**	**0.0038 J**	**0.0013 J**	0.075 U	0.0072 U	**0.0038 J**	**0.12**	**0.012**	**0.0031 J**	**0.0045 J**	0.0081 U	**0.0042 J**	0.008 U	**0.0084 J**	**0.0045 J**
Acenaphthylene	mg/kg	45,000	**0.018**	**0.0071 J**	**0.0039 J**	**0.022**	**0.0029 J**	**0.0025 J**	0.075 U	**0.0038 J**	**0.015**	**0.037**	**0.024**	**0.0029 J**	**0.0079 J**	0.0081 U	**0.0096**	0.008 U	**0.018 J**	**0.0012 J**
Acetophenone	mg/kg	120,000	0.075 U	0.078 U	0.068 U	0.073 U	0.075 U	0.078 U	**0.095 J**	0.072 U	**0.022 J**	0.084 U	**0.055 J**	0.077 U	0.07 U	0.083 U	0.069 U	0.079 U	**0.022 J**	0.076 U
Anthracene	mg/kg	230,000	**0.033**	**0.035**	**0.0044 J**	**0.012**	**0.013**	**0.0037 J**	**0.0083 J**	**0.0009 J**	**0.022**	**0.22**	**0.094**	**0.0035 J**	**0.016 J**	0.0081 U	**0.014**	0.008 U	**0.014 J**	**0.0054 J**
Benz[a]anthracene	mg/kg	21.0	**0.13**	**0.066**	**0.0073**	**0.0081**	**0.044**	**0.015**	**0.027 J**	**0.011**	**0.059**	**0.0074 J**	**0.41**	**0.024**	**0.11**	0.0081 U	**0.033**	0.008 U	**0.083**	0.0076 U
Benzaldehyde	mg/kg	120,000	**0.019 J**	**0.056 J**	0.068 U	0.073 U	0.075 U	0.078 U	**0.018 J**	0.072 UJ	**0.05 J**	0.084 UJ	**0.053 J**	0.077 UJ	0.07 UJ	0.083 UJ	0.069 U	0.079 U	**0.022 J**	0.076 U
Benzo[a]pyrene	mg/kg	2.10	**0.14**	**0.054**	**0.0077**	**0.0098**	**0.034**	**0.014**	**0.066 J**	**0.013**	**0.051**	**0.0077 J**	**0.34 J**	**0.019**	**0.11**	0.0081 U	**0.023**	0.008 U	**0.067 J**	0.0076 U
Benzo[b]fluoranthene	mg/kg	21.0	**0.3**	**0.16**	**0.032**	**0.026**	**0.054**	**0.025**	**0.13**	**0.029**	**0.21**	**0.025**	**0.78 J**	**0.044**	**0.25**	**0.00073 J**	**0.096**	**0.00069 J**	**0.15**	0.0076 U
Benzo[g,h,i]perylene	mg/kg		**0.074**	**0.036**	**0.0094**	**0.0085**	**0.023**	**0.013**	**0.04 J**	**0.0039 J**	**0.025**	**0.0035 J**	**0.1 J**	**0.0054 J**	**0.043 J**	0.0081 U	**0.016**	0.008 U	**0.036 J**	0.0076 U
Benzo[k]fluoranthene	mg/kg	210	**0.26**	**0.14**	**0.028**	**0.023**	**0.02**	**0.0087**	**0.11**	**0.024**	**0.18**	**0.021**	**0.68 J**	**0.037**	**0.21**	0.0081 U	**0.075**	0.008 U	**0.11**	0.0076 U
bis(2-Ethylhexyl)phthalate	mg/kg	160	0.075 U	0.078 U	0.068 U	0.073 U	0.075 U	0.078 U	**0.75 J**	0.072 U	**0.077 J**	**0.029 J**	0.082 UJ	0.077 U	**0.036 J**	0.083 U	**0.19**	0.079 U	**0.039 J**	0.076 U
Caprolactam	mg/kg	400,000	0.19 U	0.19 U	0.17 U	0.18 U	0.19 U	0.2 U	0.19 U	0.18 U	0.18 U	0.21 U	0.21 U	0.19 U	0.17 U	0.21 U	0.17 U	0.2 U	**0.021 J**	0.19 U
Carbazole	mg/kg		0.075 U	0.078 U	0.068 U	0.073 U	0.075 U	0.078 U	0.074 U	0.072 U	0.073 U	0.084 U	**0.099**	0.077 U	**0.041 J**	0.083 U	0.069 U	0.079 U	0.073 U	0.076 U
Chrysene	mg/kg	2,100	**0.15**	**0.15**	**0.014**	**0.017**	**0.045**	**0.019**	**0.14**	**0.0081**	**0.099**	**0.014**	**0.38**	**0.022**	**0.11**	0.0081 U	**0.12**	0.008 U	**0.073 J**	0.0076 U
Dibenz[a,h]anthracene	mg/kg	2.10	**0.027**	**0.017**	**0.0027 J**	**0.0019 J**	**0.0064 J**	**0.003 J**	**0.017 J**	**0.0012 J**	**0.0076**	0.0084 U	**0.044 J**	**0.0024 J**	**0.013 J**	0.0081 U	**0.0057 J**	0.008 U	**0.012 J**	0.0076 U
Diethylphthalate	mg/kg	660,000	0.075 U	0.078 U	0.068 U	0.073 U	0.075 U	0.078 U	0.074 U	0.072 U	0.073 U	0.084 U	0.082 U	0.077 U	0.07 U	0.083 U	0.069 U	0.079 U	0.073 U	0.076 U
Di-n-butylphthalate	mg/kg	82,000	0.075 U	0.078 U	0.068 U	0.073 U	**0.048 J**	**0.11**	**0.026 J**	0.072 U	0.073 U	0.084 U	0.082 U	0.077 U	0.07 U	0.083 U	0.069 U	0.079 U	**0.037 J**	0.076 U
Di-n-ocytlphthalate	mg/kg	8,200	0.075 U	0.078 U	0.068 U	0.073 U	0.075 U	0.078 U	0.074 UJ	0.072 UJ	0.073 UJ	0.084 UJ	0.082 UJ	0.077 UJ	0.07 UJ	0.083 UJ	**0.019 J**	0.079 U	**0.04 J**	0.076 U
Fluoranthene	mg/kg	30,000	**0.21**	**0.12**	**0.013**	**0.023**	**0.11**	**0.033**	**0.035 J**	**0.0061 J**	**0.15**	**0.031**	**0.65**	**0.034**	**0.19**	**0.00052 J**	**0.1**	**0.00061 J**	**0.1**	**0.00065 J**
Fluorene	mg/kg	30,000	**0.0082**	**0.017**	**0.0006 J**	**0.0022 J**	**0.0051 J**	**0.0014 J**	0.075 U	0.0072 U	**0.0091**	**0.31**	**0.017**	**0.0011 J**	0.069 U	0.0081 U	**0.0053 J**	0.008 U	**0.0071 J**	**0.0073 J**
Hexachloroethane	mg/kg	8.00	0.075 U	0.078 U	0.068 U	0.073 U	0.075 U	0.078 U	0.074 U	0.072 U	0.073 U	0.084 U	0.082 U	0.077 U	0.07 U	0.083 U	0.069 U	0.079 U	0.073 U	0.076 U
Indeno[1,2,3-c,d]pyrene	mg/kg	21.0	**0.068**	**0.026**	**0.0074**	**0.0056 J**	**0.02**	**0.01**	**0.014 J**	**0.0044 J**	**0.028**	**0.0033 J**	**0.12 J**	**0.0058 J**	**0.038 J**	0.0081 U	**0.014**	0.008 U	**0.033 J**	0.0076 U
Naphthalene	mg/kg	17.0	**0.069**	**0.067**	**0.0029 J**	**0.053**	**0.007 J**	**0.0072 J**	0.075 U	**0.0045 J**	**0.077**	**0.087**	**0.39**	**0.0046 J**	0.069 U	0.0081 U	**0.057**	0.008 U	**0.11**	**0.0031 J**
N-Nitroso-di-n-propylamine	mg/kg	0.33	0.075 U	0.078 U	0.068 U	0.073 U	0.075 U	0.078 U	0.074 U	0.072 U	0.073 U	0.084 U	0.082 U	0.077 U	0.07 U	0.083 U	0.069 U	0.079 U	**0.056 J**	0.076 U
N-Nitrosodiphenylamine	mg/kg	470	0.075 U	**0.029 J**	0.068 U	0.073 U	0.075 U	0.078 U	0.074 U	0.072 U	**0.027 J**	0.084 U	0.082 U	0.077 U	0.07 U	0.083 U	0.069 U	0.079 U	0.073 U	0.076 U
Pentachlorophenol	mg/kg	4.00	0.19 U	0.19 U	0.17 U	0.18 U	0.19 U	0.2 U	0.19 U	0.18 U	0.18 U	0.21 U	0.21 UJ	0.19 U	0.17 U	0.21 U	0.17 U	0.2 U	0.18 U	0.19 U
Phenanthrene	mg/kg		**0.16**	**0.21**	**0.0079**	**0.064**	**0.077**	**0.031**	0.022 B	0.0029 B	**0.093**	**0.82**	**0.59**	**0.013**	**0.075**	0.0081 U	**0.077**	**0.00062 J**	**0.095**	**0.022**
Phenol	mg/kg	250,000	0.075 U	**0.021 J**	0.068 U	0.073 U	0.075 U	0.078 U	0.074 U	0.072 U	0.073 U	0.084 U	0.082 UJ	0.077 U	0.07 U	0.083 U	0.069 U	0.079 U	0.073 U	0.076 U
Pyrene	mg/kg	23,000	**0.18**	**0.099**	**0.013**	**0.02**	**0.09**	**0.028**	**0.085**	**0.0062 J**	**0.14**	**0.13**	**0.47**	**0.032**	**0.16**	0.0081 U	**0.08**	0.008 U	**0.089**	**0.0015 J**
PCBs																				
Aroclor 1242	mg/kg	0.97	0.0546 U	N/A	0.0536 U	N/A	0.019 U	N/A	0.0565 U	N/A	0.0551 U	N/A	0.064 U	N/A	0.05 U	N/A	0.0537 U	N/A	0.0607 U	N/A
Aroclor 1248	mg/kg	0.94	0.0546 U	N/A	0.0536 U	N/A	0.019 U	N/A	0.0565 U	N/A	0.0551 U	N/A	0.064 U	N/A	0.05 U	N/A	0.0537 U	N/A	0.0607 U	N/A
Aroclor 1254	mg/kg	0.97	0.0546 U	N/A	0.0536 U	N/A	0.019 U	N/A	0.0565 U	N/A	0.0551 U	N/A	0.064 U	N/A	0.05 U	N/A	0.0537 U	N/A	**0.434**	N/A
Aroclor 1260	mg/kg	0.99	0.0546 U	N/A	0.0536 U	N/A	0.019 U	N/A	0.0565 U	N/A	0.0551 U	N/A	0.064 U	N/A	0.05 U	N/A	0.0537 U	N/A	**0.439**	N/A
Aroclor 1262	mg/kg		0.0546 U	N/A	0.0536 U	N/A	0.019 U	N/A	0.0565 U	N/A	0.0551 U	N/A	0.064 U	N/A	0.05 U	N/A	0.0537 U	N/A	0.0607 U	N/A
Aroclor 1268	mg/kg		0.0546 U	N/A	**0.072**	N/A	0.019 U	N/A	0.0565 U	N/A	0.0551 U	N/A	**0.0412 J**	N/A	**0.0584**	N/A	0.0537 U	N/A	0.0607 U	N/A
PCBs (total)	mg/kg	0.97	0.0546 U	N/A	**0.072**	N/A	0.13 U	N/A	0.0565 U	N/A	0.0551 U	N/A	**0.0412 J**	N/A	**0.0584**	N/A	0.0537 U	N/A	**0.873**	N/A
TPH/Oil and Grease																				
Diesel Range Organics	mg/kg	6,200	**31.6**	**50.9**	**4.3 J**	**35.7**	11.1 B	5.4 B	**452**	**11.8**	**560**	**259**	**117**	**6.9 J**	**14.5**	**4.4 J**	**71.5**	4.8 B	**75.6**	6 B
Gasoline Range Organics	mg/kg	6,200	9.1 U	10 U	13 U	23.7 U	13.9 U	11 U	11.6 U	9.6 U	11.2 U	**18.7**	14.3 U	9.4 U	8.9 U	9.9 U	9.4 U	8.9 U	12.2 U	9.9 U
Oil and Grease	mg/kg	6,200	N/A	N/A	N/A	N/A	**573**	**331**	**420**	**473**	**2,820**	**725**	**1,700**	**832**	**1,710**	**379**	**500**	**216**	**602**	**318**

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

J: The positive result reported for this analyte is a quantitative estimate.
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 ot confirm or disprove the presence of this compound/analyte in the sample.

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Table 5
Summary of Inorganics Detected in Soil
Parcel B6
Tradepoint Atlantic
Sparrows Point, Maryland

Parameter	Units	PAL	B6-001-SB-1	B6-001-SB-9	B6-002-SB-1	B6-002-SB-4.5	B6-003-SB-1*	B6-003-SB-5*	B6-003-SB-10	B6-004-SB-1*
Metals										
Aluminum	mg/kg	1,100,000	**25,900**	**12,700**	**21,700**	**14,800**	**8,600**	**4,050**	N/A	**6,010**
Antimony	mg/kg	470	2.3 UJ	2.9 UJ	2.8 UJ	2.8 UJ	2.4 U	2.8 U	N/A	2.6 U
Arsenic	mg/kg	3	1.9 U	**4.2**	**8.6**	**8.8**	2 U	**6.5**	**7.9**	**4.7**
Barium	mg/kg	220,000	**233 J**	**52 J**	**252 J**	**59.4 J**	**70.1**	**37**	N/A	**50.2**
Beryllium	mg/kg	2,300	**3.7**	**0.33 J**	**2**	**0.96**	**0.28 J**	0.95 U	N/A	0.88 U
Cadmium	mg/kg	980	0.58 B	0.2 B	0.87 B	0.28 B	0.57 B	0.62 B	N/A	0.96 B
Chromium	mg/kg	120,000	**842**	**20.7**	**37.7**	**28.6**	**1,150**	**616**	N/A	**909**
Chromium VI	mg/kg	6.3	0.33 B	0.4 B	0.34 B	0.39 B	0.56 B	0.52 B	N/A	0.38 B
Cobalt	mg/kg	350	3.9 U	**3.3 J**	**13.3**	**8.8**	**1.8 J**	**6.9**	N/A	**5.5**
Copper	mg/kg	47,000	**12.5**	**7.4**	**149**	**24**	**21.6**	**161**	N/A	**55.2**
Iron	mg/kg	820,000	**100,000**	**19,800**	**24,900**	**23,800**	**199,000**	**262,000**	N/A	**210,000**
Lead	mg/kg	800	**19.6**	**6.7**	**50.2**	**24.2**	**35.6**	**91.9**	N/A	**129**
Manganese	mg/kg	26,000	**17,800 J**	**176 J**	**3,480 J**	**203 J**	**32,700**	**19,000**	N/A	**34,600**
Mercury	mg/kg	350	0.1 U	**0.021 J**	**0.09 J**	**0.036 J**	**0.0075 J**	**0.018 J**	N/A	**0.029 J**
Nickel	mg/kg	22,000	**11.1**	**8.5 J**	**37.8**	**23.9**	**14.3**	**33.4**	N/A	**31.2**
Selenium	mg/kg	5,800	3.1 U	3.8 U	3.7 U	3.8 U	3.1 U	3.8 U	N/A	3.5 U
Silver	mg/kg	5,800	2.3 U	2.9 U	2.8 U	2.8 U	2.4 U	2.8 U	N/A	2.6 U
Thallium	mg/kg	12	7.8 U	9.6 U	9.3 U	9.5 U	7.9 U	9.5 U	N/A	8.8 U
Vanadium	mg/kg	5,800	**466 J**	**28.6 J**	**61.2 J**	**48.1 J**	**5,850**	**2,780**	N/A	**4,360**
Zinc	mg/kg	350,000	**81.7**	**43.2**	**323**	**85.3**	**59.3**	**179**	N/A	**196**
Other										
Cyanide	mg/kg	150	**0.8 J+**	0.76 U	**0.19 J+**	0.73 U	**0.2 J**	**0.35 J**	N/A	**0.33 J**

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Table 5
Summary of Inorganics Detected in Soil
Parcel B6
Tradepoint Atlantic
Sparrows Point, Maryland

Parameter	Units	PAL	B6-004-SB-4*	B6-005-SB-2*	B6-005-SB-8*	B6-005-SB-10*	B6-006-SB-1*	B6-006-SB-5*	B6-007-SB-1	B6-007-SB-4
Metals										
Aluminum	mg/kg	1,100,000	**3,270**	**26,500**	**26,300**	N/A	**29,300**	**18,300**	**29,000**	**23,800**
Antimony	mg/kg	470	2.3 U	2.6 U	3 U	N/A	2.6 U	2.5 U	2.9 R	2.3 R
Arsenic	mg/kg	3	**4.2**	**2.7**	**7.6**	**6.7**	2.2 U	**3.2**	**4**	**3.3**
Barium	mg/kg	220,000	**26.5**	**409**	**390**	N/A	**282**	**227**	**726 J**	**417 J**
Beryllium	mg/kg	2,300	0.76 U	**2.2**	**2.5**	N/A	**5.5**	**2**	**2.2**	**2.1**
Cadmium	mg/kg	980	0.41 B	**0.29 J**	**6**	N/A	1.3 U	**0.2 J**	1.3 B	0.46 B
Chromium	mg/kg	120,000	**350**	**74.6**	**54.7**	N/A	**25.6**	**42.6**	**138**	**98.5**
Chromium VI	mg/kg	6.3	0.43 B	0.47 B	0.29 B	N/A	0.3 B	0.26 B	0.83 B	0.32 B
Cobalt	mg/kg	350	**5.3**	**6.4**	**7**	N/A	**1 J**	**3.4 J**	**7.5**	**6.3**
Copper	mg/kg	47,000	**48.4**	**15.7**	**145**	N/A	**13.1**	**77.9**	**46.6 J**	**25.4 J**
Iron	mg/kg	820,000	**150,000**	**45,400**	**38,500**	N/A	**5,580**	**64,800**	**48,100 J**	**20,800 J**
Lead	mg/kg	800	**55.1**	**8.5**	**207**	N/A	**6.2**	**51.7**	**254 J**	**104 J**
Manganese	mg/kg	26,000	**11,900**	**5,420**	**4,330**	N/A	**1,560**	**2,550**	**15,100**	**5,730**
Mercury	mg/kg	350	**0.014 J**	0.098 U	**0.0089 J**	N/A	0.11 U	**0.0054 J**	**0.0075 J-**	0.11 UJ
Nickel	mg/kg	22,000	**24.3**	**15.7**	**31.7**	N/A	**8.1 J**	**16.5**	**23.2 J**	**25.6 J**
Selenium	mg/kg	5,800	3.1 U	3.5 U	4 U	N/A	3.5 U	3.3 U	3.8 U	3 U
Silver	mg/kg	5,800	2.3 U	**0.88 J**	**1.2 J**	N/A	2.6 U	2.5 U	2.9 U	2.3 U
Thallium	mg/kg	12	7.6 U	8.7 U	10.1 U	N/A	8.8 U	8.2 U	**14.8**	**3.8 J**
Vanadium	mg/kg	5,800	**1,680**	**161**	**105**	N/A	**11.5**	**63.7**	**1,320 J**	**247 J**
Zinc	mg/kg	350,000	**156**	**18.2**	**3,670**	N/A	**13.6**	**91.9**	**342 J**	**83.4 J**
Other										
Cyanide	mg/kg	150	**0.26 J**	**0.31 J**	**0.63 J**	N/A	**0.89**	**0.2 J**	**0.97**	**0.47 J**

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Table 5
Summary of Inorganics Detected in Soil
Parcel B6
Tradepoint Atlantic
Sparrows Point, Maryland

Parameter	Units	PAL	B6-008-SB-1	B6-008-SB-4	B6-009-SB-7	B6-010-SB-1	B6-010-SB-5	B6-011-SB-1	B6-011-SB-8	B6-012-SB-1	B6-012-SB-4
Metals											
Aluminum	mg/kg	1,100,000	**25,700**	**25,600**	**32,300**	**7,000**	**8,500**	**43,000**	**32,300**	**32,700**	**13,700**
Antimony	mg/kg	470	2.6 R	3.1 R	2.4 R	2.3 R	2.4 R	2.3 UJ	3.2 UJ	2.8 UJ	2.7 UJ
Arsenic	mg/kg	3	**10.7**	**8.9**	**3**	**3.7**	**3.5**	1.9 U	**2.7 J**	**6.4**	**7**
Barium	mg/kg	220,000	**394 J**	**440 J**	**240 J**	**116 J**	**139 J**	**383 J**	**452 J**	**494 J**	**82.4 J**
Beryllium	mg/kg	2,300	**1.7**	**1.8**	**2.2**	**0.16 J**	**0.47 J**	**7.3**	**5.1**	**3.4**	**0.49 J**
Cadmium	mg/kg	980	0.67 B	1.1 B	0.63 B	0.66 B	1 B	0.31 B	0.53 B	0.89 B	0.73 B
Chromium	mg/kg	120,000	**262**	**564**	**43.5**	**661**	**545**	**35.6**	**37.9**	**250**	**52.9**
Chromium VI	mg/kg	6.3	0.77 B	0.97 B	0.48 B	0.42 B	0.34 B	0.33 B	0.41 B	0.42 B	0.53 B
Cobalt	mg/kg	350	**22.8**	**25.8**	**5.3**	**3.1 J**	**3.2 J**	**0.29 J**	**2.8 J**	**7.7**	**5.8**
Copper	mg/kg	47,000	**58.5 J**	**117 J**	**131 J**	**65.8 J**	**47.9 J**	**3.5 J**	**15.9**	**200**	**23.1**
Iron	mg/kg	820,000	**56,200 J**	**92,800 J**	**32,500 J**	**122,000 J**	**114,000 J**	**14,700**	**19,900**	**74,000**	**19,200**
Lead	mg/kg	800	**320 J**	**357 J**	**68.8 J**	**34.9 J**	**44.5 J**	**6.4 J**	**23.2 J**	**136 J**	**107 J**
Manganese	mg/kg	26,000	**6,460**	**13,100**	**2,620**	**28,100**	**26,200**	**3,400**	**3,860**	**9,240**	**1,900**
Mercury	mg/kg	350	**0.019 J-**	**0.01 J-**	**0.057 J-**	**0.024 J-**	**0.022 J-**	0.1 U	0.13 U	**0.073 J**	**0.02 J**
Nickel	mg/kg	22,000	**81.6 J**	**161 J**	**18.1 J**	**17.6 J**	**12.6 J**	**3.3 J**	**42.7**	**152**	**14.3**
Selenium	mg/kg	5,800	3.5 U	4.1 U	3.2 U	3 U	3.2 U	2.1 B	**2.9 J**	3.8 U	3.6 U
Silver	mg/kg	5,800	2.6 U	**1.1 J**	2.4 U	2.3 U	2.4 U	2.3 U	3.2 U	2.8 U	2.7 U
Thallium	mg/kg	12	**6.3 J**	**20.4**	8 U	**22.2**	**13.8**	7.5 U	10.7 U	9.4 U	9.1 U
Vanadium	mg/kg	5,800	**585 J**	**1,730 J**	**195 J**	**1,870 J**	**1,120 J**	**27.3 J**	**64.3 J**	**135 J**	**139 J**
Zinc	mg/kg	350,000	**232 J**	**332 J**	**116 J**	**174 J**	**260 J**	**13 J**	**52 J**	**211 J**	**382 J**
Other											
Cyanide	mg/kg	150	**1.1**	**1.2**	**0.22 J**	**0.25 J**	**0.28 J**	**0.84 J+**	**0.23 J+**	**0.77 J+**	**0.11 J+**

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Table 5
Summary of Inorganics Detected in Soil
Parcel B6
Tradepoint Atlantic
Sparrows Point, Maryland

Parameter	Units	PAL	B6-013-SB-1*	B6-013-SB-7*	B6-014-SB-1*	B6-014-SB-4*	B6-014-SB-10*	B6-015-SB-1	B6-015-SB-5	B6-016-SB-1
Metals										
Aluminum	mg/kg	1,100,000	**20,400**	**10,000**	**17,500**	**38,100**	**35,900**	**20,000**	**6,360**	**38,600**
Antimony	mg/kg	470	**90.3**	2.7 U	2.9 U	2.9 U	3 U	2.7 R	2.3 R	2.8 R
Arsenic	mg/kg	3	**5.1**	**2.7**	**6**	**3.3**	**4.1**	**7.3**	**2.6**	**2.1 J**
Barium	mg/kg	220,000	**138**	**39.6**	**414**	**1,020**	**1,550**	**371 J**	**49.5 J**	**347 J**
Beryllium	mg/kg	2,300	**1.1**	**0.43 J**	**1.9**	**3.4**	**3.1**	**1.4**	0.77 U	**6.7**
Cadmium	mg/kg	980	**1.2 J**	1.4 U	**0.55 J**	**0.21 J**	0.56 B	1.1 B	0.3 B	0.86 B
Chromium	mg/kg	120,000	**748**	**29.7**	**636**	**88.7**	**31.6**	**415**	**1,100**	**146**
Chromium VI	mg/kg	6.3	0.94 B	0.24 B	0.37 B	0.35 B	N/A	0.51 B	**8.7**	0.4 B
Cobalt	mg/kg	350	**4.3 J**	**3.7 J**	**5**	**6.7**	**5.6**	**39.2**	3.8 U	**2.4 J**
Copper	mg/kg	47,000	**176**	**8.2**	**48.2**	**40**	**35.8**	**68.1 J**	**14.5 J**	**44.8 J**
Iron	mg/kg	820,000	**170,000**	**14,200**	**75,900**	**44,700**	**27,800**	**71,900 J**	**174,000 J**	**49,200 J**
Lead	mg/kg	800	**240**	**13.3**	**61.3**	**60.3**	**160**	**392 J**	**3.6 J**	**113 J**
Manganese	mg/kg	26,000	**18,400**	**136**	**49,000**	**8,220**	**8,040**	**9,290**	**26,100**	**4,740**
Mercury	mg/kg	350	**0.73**	**0.014 J**	**0.027 J**	**0.0025 J**	N/A	**0.004 J-**	0.1 UJ	0.11 UJ
Nickel	mg/kg	22,000	**57.6**	**7.2 J**	**39.6**	**20.6**	**9.7 J**	**145 J**	**11 J**	**16.4 J**
Selenium	mg/kg	5,800	3.8 U	3.7 U	3.8 U	**2.9 J**	**5.6**	3.6 U	3.1 U	3.7 U
Silver	mg/kg	5,800	**1.3 J**	2.7 U	**0.74 J**	2.9 U	3 U	2.7 U	**1.9 J**	2.8 U
Thallium	mg/kg	12	**6 J**	9.1 U	**13**	9.7 U	10 U	**14.3**	**8.2**	9.3 U
Vanadium	mg/kg	5,800	**459**	**32**	**804**	**269**	**69.8**	**1,330 J**	**677 J**	**48.4 J**
Zinc	mg/kg	350,000	**372**	**30.8**	**141**	**66.8**	**160**	**300 J**	**9.5 J**	**92.7 J**
Other										
Cyanide	mg/kg	150	0.26 B	0.58 U	**0.25 J**	**1.1**	N/A	**1.1**	**0.14 J**	**2.2**

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

Table 5
Summary of Inorganics Detected in Soil
Parcel B6
Tradepoint Atlantic
Sparrows Point, Maryland

Parameter	Units	PAL	B6-016-SB-5	B6-017-SB-1	B6-017-SB-6	B6-018-SB-1	B6-018-SB-4	B6-019-SB-1*	B6-019-SB-4*	B6-020-SB-1*
Metals										
Aluminum	mg/kg	1,100,000	**40,700**	**18,600**	**41,500**	**55,900**	**49,000**	**24,900**	**14,200**	**26,000**
Antimony	mg/kg	470	2.3 R	2.8 R	2.5 R	3 UJ	2.5 UJ	2.6 U	2.4 U	2.6 U
Arsenic	mg/kg	3	**1.8 J**	**5**	2.1 U	2.5 U	2.1 U	**6.2**	**7.8**	**6**
Barium	mg/kg	220,000	**373 J**	**239 J**	**490 J**	**474 J**	**412 J**	**199**	**169**	**307**
Beryllium	mg/kg	2,300	**7.8**	**2.3**	**4.5**	**10**	**8.2**	**2.5**	**1.8**	**4**
Cadmium	mg/kg	980	0.2 B	0.74 B	0.41 B	0.26 B	0.27 B	1.3 B	**8.3**	1.4 B
Chromium	mg/kg	120,000	**10.1**	**553**	**96.2**	**20.2 J**	**20.2 J**	**730**	**1,410**	**487**
Chromium VI	mg/kg	6.3	0.34 B	0.22 B	0.4 B	0.51 B	0.43 B	0.46 B	0.67 B	0.72 B
Cobalt	mg/kg	350	**0.24 J**	**3 J**	**1.3 J**	**0.44 J**	**0.34 J**	**4.7**	**13.9**	**3.1 J**
Copper	mg/kg	47,000	3.9 U	**57.4 J**	**19.4 J**	**2.4 J**	4.1 U	**55.8**	**205**	**75.2**
Iron	mg/kg	820,000	**1,270 J**	**91,700 J**	**31,900 J**	**6,080**	**6,170**	**132,000**	**152,000**	**61,800**
Lead	mg/kg	800	2 U	**19.6 J**	**10 J**	**5.1**	**4.6**	**126**	**466**	**91.6**
Manganese	mg/kg	26,000	**2,070**	**42,600**	**8,100**	**3,210**	**3,000**	**17,600**	**36,600**	**17,800**
Mercury	mg/kg	350	0.1 UJ	**0.019 J**	0.11 U	0.12 R	0.099 R	**0.007 J**	**0.028 J**	**0.045 J**
Nickel	mg/kg	22,000	7.8 UJ	**24.6 J**	**5.9 J**	10.1 U	8.3 U	**42.5**	**58.3**	**53.5**
Selenium	mg/kg	5,800	3.1 U	3.8 UJ	3.3 UJ	**4.9**	**2.9 J**	3.5 U	3.2 U	3.4 U
Silver	mg/kg	5,800	2.3 U	2.8 U	2.5 U	3 U	2.5 U	**1.4 J**	**2.4 J**	2.6 U
Thallium	mg/kg	12	7.8 U	**12.3 J**	8.2 U	10.1 U	8.3 U	8.7 U	**4.6 J**	8.5 U
Vanadium	mg/kg	5,800	**5.6**	**954**	**112**	**13.5**	**11.9**	**660**	**3,700**	**1,110**
Zinc	mg/kg	350,000	0.63 B	**36.1 J**	**14.6 J**	5 B	4 B	**301**	**3,160**	**331**
Other										
Cyanide	mg/kg	150	**1.9**	**1.7**	**0.71**	**3.1 J**	**1.4 J**	**1.3**	**0.63 J**	**0.67**

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

Table 5
Summary of Inorganics Detected in Soil
Parcel B6
Tradepoint Atlantic
Sparrows Point, Maryland

Parameter	Units	PAL	B6-020-SB-4*	B6-021-SB-1*	B6-021-SB-4*	B6-022-SB-1	B6-023-SB-1	B6-023-SB-4	B6-023-SB-10	B6-024-SB-1*
Metals										
Aluminum	mg/kg	1,100,000	**23,400**	**30,400**	**9,730**	**21,200**	**3,790**	**20,400**	N/A	**52,600**
Antimony	mg/kg	470	2.4 U	2.6 U	3 U	2.4 UJ	2.3 UJ	2.5 UJ	N/A	2.3 U
Arsenic	mg/kg	3	**3**	**3.6**	**2.4 J**	**6**	**10.9**	**17.4**	**7.6**	**3.1**
Barium	mg/kg	220,000	**269**	**236**	**42.2**	**154**	**45.3**	**366**	N/A	**513**
Beryllium	mg/kg	2,300	**3.3**	**5.8**	**0.19 J**	**2.7**	**0.72 J**	**1.5**	N/A	**9.8**
Cadmium	mg/kg	980	**2.6**	0.5 B	1.5 U	0.68 B	0.27 B	**3.1**	N/A	0.42 B
Chromium	mg/kg	120,000	**645**	**416**	**14.2**	**355**	**112**	**145**	N/A	**24.1**
Chromium VI	mg/kg	6.3	0.62 B	0.55 B	0.56 B	**1.3 J-**	0.34 B	0.68 B	N/A	0.39 B
Cobalt	mg/kg	350	**1.5 J**	**1.2 J**	**2.6 J**	**3.1 J**	**8.4**	**13**	N/A	**1.4 J**
Copper	mg/kg	47,000	**35**	**21**	**6.2**	**40.7 J**	**68.4 J**	**199 J**	N/A	**10.8**
Iron	mg/kg	820,000	**86,100**	**53,500**	**13,900**	**176,000**	**232,000**	**85,100**	N/A	**50,500**
Lead	mg/kg	800	**104**	**31.2**	**6.1**	**13.8 J**	**2.5 J**	**498 J**	N/A	**8.7**
Manganese	mg/kg	26,000	**30,200**	**10,200**	**66.1**	**9,190**	**1,290**	**5,550**	N/A	**2,940**
Mercury	mg/kg	350	**0.0061 J**	**0.0029 J**	**0.011 J**	**0.0021 J-**	**0.01 J-**	**0.075 J-**	N/A	0.11 U
Nickel	mg/kg	22,000	**16**	**29.7**	**6.3 J**	**53.9**	**138**	**33**	N/A	**12.4**
Selenium	mg/kg	5,800	3.2 U	**2.3 J**	3.9 U	3.3 U	3.1 U	3.4 U	N/A	3 U
Silver	mg/kg	5,800	**0.75 J**	2.6 U	3 U	**1.1 J**	**2.6**	2.5 U	N/A	2.3 U
Thallium	mg/kg	12	7.9 U	**5.3 J**	9.9 U	**4.6 J**	7.8 UJ	**7.4 J**	N/A	7.6 U
Vanadium	mg/kg	5,800	**1,870**	**166**	**72.4**	**176**	**7.2**	**554**	N/A	**12.5**
Zinc	mg/kg	350,000	**603**	**60.7**	**18**	**96.5 J**	**24.6 J**	**1,180 J**	N/A	**24.7**
Other										
Cyanide	mg/kg	150	**0.22 J**	**0.43 J**	0.62 U	**0.27 J-**	**0.3 J-**	**2 J-**	N/A	**1.9**

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Table 5
Summary of Inorganics Detected in Soil
Parcel B6
Tradepoint Atlantic
Sparrows Point, Maryland

Parameter	Units	PAL	B6-024-SB-5*	B6-024-SB-10	B6-025-SB-1	B6-025-SB-5	B6-026-SB-1*	B6-026-SB-4*	B6-027-SB-1	B6-027-SB-4
Metals										
Aluminum	mg/kg	1,100,000	**14,000**	N/A	**11,200**	**4,840**	**36,700**	**11,900**	**45,400**	**21,900**
Antimony	mg/kg	470	3 U	N/A	2.5 UJ	2.4 UJ	2.4 U	3 U	2.7 UJ	2.6 UJ
Arsenic	mg/kg	3	**3.9**	2.2 U	**5.7**	**5.3**	**2.8**	2.5 U	**3.5**	**3.9**
Barium	mg/kg	220,000	**57**	N/A	**129**	**61.8**	**298**	**58.2**	**304**	**268**
Beryllium	mg/kg	2,300	**0.87 J**	N/A	**1.3**	**0.66 J**	**6.9**	**0.55 J**	**7**	**2.8**
Cadmium	mg/kg	980	1.5 U	N/A	0.68 B	0.48 B	0.41 B	1.5 U	0.42 B	0.45 B
Chromium	mg/kg	120,000	**25.3**	N/A	**718**	**116**	**74.7**	**200**	**121**	**327**
Chromium VI	mg/kg	6.3	0.49 B	N/A	0.84 B	0.35 B	0.35 B	0.38 B	0.43 B	0.35 B
Cobalt	mg/kg	350	**5.9**	N/A	**3.8 J**	**3.4 J**	**1.6 J**	**6.8**	**1.1 J**	**2.7 J**
Copper	mg/kg	47,000	**11.2**	N/A	**47.7 J**	**37 J**	**19**	**8.7**	**17.6 J**	**37.2 J**
Iron	mg/kg	820,000	**24,300**	N/A	**202,000**	**95,100**	**79,700**	**17,200**	**56,200**	**48,000**
Lead	mg/kg	800	**12.8**	N/A	**27 J**	**18.9 J**	**8.7**	**15.5**	**11.4 J**	**43.4 J**
Manganese	mg/kg	26,000	**197**	N/A	**14,800**	**2,060**	**4,500**	**3,160**	**6,290**	**22,500**
Mercury	mg/kg	350	**0.017 J**	N/A	**0.029 J-**	**0.01 J-**	0.11 U	**0.016 J**	0.11 UJ	**0.079 J-**
Nickel	mg/kg	22,000	**15**	N/A	**62**	**41.9**	**17.7**	**12.9**	**25.2**	**12.8**
Selenium	mg/kg	5,800	4.1 U	N/A	3.3 U	3.2 U	3.2 U	4 U	3.5 U	3.4 U
Silver	mg/kg	5,800	3 U	N/A	**1.2 J**	**0.77 J**	2.4 U	3 U	2.7 U	2.6 U
Thallium	mg/kg	12	10.1 U	N/A	**5.5 J**	8 UJ	8.1 U	**5.9 J**	8.8 UJ	**9.4 J**
Vanadium	mg/kg	5,800	**45.2**	N/A	**245**	**64.6**	**37.3**	**669**	**99.1**	**383**
Zinc	mg/kg	350,000	**50**	N/A	**69.6 J**	**63.2 J**	**26.3**	**53.2**	**20.2 J**	**69.1 J**
Other										
Cyanide	mg/kg	150	0.6 U	N/A	**0.28 J-**	**0.12 J-**	**0.12 J**	**0.18 J**	**0.5 J-**	**2.2 J-**

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Table 5
Summary of Inorganics Detected in Soil
Parcel B6
Tradepoint Atlantic
Sparrows Point, Maryland

Parameter	Units	PAL	B6-028-SB-1*	B6-028-SB-9*	B6-028-SB-10	B6-029-SB-1*	B6-029-SB-5*	B6-030-SB-1	B6-030-SB-5	B6-031-SB-1
Metals										
Aluminum	mg/kg	1,100,000	**46,700**	**4,540**	N/A	**37,500**	**22,100**	**17,700**	**13,700**	**18,400**
Antimony	mg/kg	470	2.5 U	2.4 U	N/A	2.5 U	2.7 U	2.5 UJ	2.9 UJ	2.6 UJ
Arsenic	mg/kg	3	**2.4**	**4.2**	**13**	**4.8**	**3.1**	**4.7**	**2.5**	2.2 U
Barium	mg/kg	220,000	**405**	**19.5**	N/A	**311**	**351**	**203 J**	**36.7 J**	**66.4 J**
Beryllium	mg/kg	2,300	**9.1**	**0.23 J**	N/A	**8.8**	**2.9**	**1.8**	**0.46 J**	0.88 U
Cadmium	mg/kg	980	0.44 B	1.2 U	N/A	0.5 B	0.48 B	**1.9**	1.5 U	0.58 B
Chromium	mg/kg	120,000	**52.3**	**55.8**	N/A	**53.1**	**429**	**808**	**16.7**	**1,220**
Chromium VI	mg/kg	6.3	0.42 B	0.34 B	N/A	0.35 B	0.39 B	0.46 B	0.52 B	**3.9 J-**
Cobalt	mg/kg	350	**0.77 J**	**1 J**	N/A	**1.9 J**	**1.3 J**	**3.4 J**	**3.8 J**	4.4 U
Copper	mg/kg	47,000	**22.4**	**11.8**	N/A	**57.8**	**32.2**	**47.5**	**4.5 J**	**29.8**
Iron	mg/kg	820,000	**30,000**	**37,900**	N/A	**57,900**	**65,500**	**104,000**	**13,600**	**187,000**
Lead	mg/kg	800	**18.7**	**3.7**	N/A	**71.7**	**15.5**	**74.6**	**9.8**	2.2 UJ
Manganese	mg/kg	26,000	**4,040**	**952**	N/A	**2,800**	**52,300**	**26,700 J**	**80.4 J**	**31,300 J**
Mercury	mg/kg	350	0.1 U	**0.0037 J**	N/A	0.11 U	0.1 U	**0.027 J**	0.11 U	0.1 U
Nickel	mg/kg	22,000	**31.8**	**8.4**	N/A	**48.8**	**12.2**	**25.2**	**9 J**	**16.8**
Selenium	mg/kg	5,800	3.4 U	3.2 U	N/A	3.3 U	3.7 U	3.3 U	3.9 U	3.5 U
Silver	mg/kg	5,800	2.5 U	2.4 U	N/A	2.5 U	2.7 U	**1.4 J**	2.9 U	**0.74 J**
Thallium	mg/kg	12	8.5 U	8 U	N/A	8.4 U	**20**	**4.5 J**	9.7 U	8.8 U
Vanadium	mg/kg	5,800	**23.5**	**28.3**	N/A	**12.9**	**528**	**4,190 J**	**23.4 J**	**723 J**
Zinc	mg/kg	350,000	**22.1**	**19.1**	N/A	**45.5**	**29**	**199**	**26.2**	**125**
Other										
Cyanide	mg/kg	150	**1.2**	0.62 U	N/A	**0.038 J**	**0.56 J**	**0.66 J+**	0.71 U	**0.06 J+**

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Table 5
Summary of Inorganics Detected in Soil
Parcel B6
Tradepoint Atlantic
Sparrows Point, Maryland

Parameter	Units	PAL	B6-031-SB-4	B6-032-SB-1	B6-032-SB-4	B6-033-SB-1	B6-033-SB-4	B6-034-SB-1*	B6-034-SB-4*	B6-035-SB-1*
Metals										
Aluminum	mg/kg	1,100,000	**17,900**	**20,400**	**11,200**	**7,210**	**16,900**	**44,200**	**16,900**	**17,000**
Antimony	mg/kg	470	2.4 UJ	2.4 UJ	2.7 UJ	3.2 R	2.6 R	2.5 U	3.1 U	2.8 U
Arsenic	mg/kg	3	**5.1**	**4.8**	**4**	**3.6**	**11.4**	2.1 U	**3.6**	2.3 U
Barium	mg/kg	220,000	**45.1 J**	**293 J**	**58.3 J**	**95.1 J**	**298 J**	**643**	**60.2**	**241**
Beryllium	mg/kg	2,300	**0.51 J**	**2.6**	**0.86 J**	**0.29 J**	**1.5**	**5.9**	**0.35 J**	**1**
Cadmium	mg/kg	980	0.2 B	**3.1**	1.3 U	1.4 B	**4.7**	0.4 B	1.5 U	1.3 B
Chromium	mg/kg	120,000	**29.3**	**435**	**12.5**	**1,490**	**867**	**8.9**	**20.8**	**1,330**
Chromium VI	mg/kg	6.3	0.34 B	0.5 B	0.32 B	0.5 B	0.46 B	0.36 B	0.48 B	0.46 B
Cobalt	mg/kg	350	**4.8**	**7.8**	**9.6**	**5.3**	**18.4**	**1.9 J**	**2 J**	**7.6**
Copper	mg/kg	47,000	**10.2**	**57.3**	**5.2**	**94.3 J**	**139 J**	**7.7**	**5.9**	**70.6**
Iron	mg/kg	820,000	**24,300**	**79,800**	**11,100**	**165,000 J**	**115,000 J**	**14,200**	**18,200**	**157,000**
Lead	mg/kg	800	**10.2**	**102**	**9.1**	**61.5 J**	**237 J**	**3.5**	**13.9**	**58.1**
Manganese	mg/kg	26,000	**190 J**	**14,800 J**	**151 J**	**65,400**	**42,600**	**7,520**	**61.2**	**69,100**
Mercury	mg/kg	350	0.11 U	**0.011 J**	**0.032 J**	**0.0037 J**	**0.06 J**	0.11 U	**0.022 J**	0.1 U
Nickel	mg/kg	22,000	**12**	**24.6**	**12.6**	**119 J**	**35.9 J**	**1.7 J**	**5.9 J**	**16.4**
Selenium	mg/kg	5,800	3.2 U	3.2 U	3.5 U	4.2 UJ	3.5 UJ	**4.1**	4.1 U	3.7 U
Silver	mg/kg	5,800	2.4 U	2.4 U	2.7 U	3.2 U	2.6 U	2.5 U	3.1 U	2.8 U
Thallium	mg/kg	12	8 U	7.9 U	8.9 U	**71.6 J**	**37.1 J**	8.3 U	10.2 U	9.2 U
Vanadium	mg/kg	5,800	**33.7 J**	**1,710 J**	**19.9 J**	**5,280**	**2,930**	**39.9**	**26.4**	**3,920**
Zinc	mg/kg	350,000	**36.1**	**306**	**33.3**	**157 J**	**1,030 J**	**3.4 J**	**17.3**	**152**
Other										
Cyanide	mg/kg	150	0.73 U	**0.4 J+**	**0.086 J+**	**0.85**	**1.6**	**0.45 J**	0.66 U	**0.076 J**

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Table 5
Summary of Inorganics Detected in Soil
Parcel B6
Tradepoint Atlantic
Sparrows Point, Maryland

Parameter	Units	PAL	B6-035-SB-4*	B6-036-SB-1*	B6-036-SB-8*	B6-037-SB-1*	B6-037-SB-5*	B6-038-SB-1*	B6-038-SB-4*	B6-039-SB-1*
Metals										
Aluminum	mg/kg	1,100,000	**17,700**	**14,300**	**8,430**	**19,700**	**11,400**	**23,400**	**17,800**	**39,200**
Antimony	mg/kg	470	2.7 U	3 U	2.6 U	3 U	2.7 U	3.2 U	2.5 U	2.9 U
Arsenic	mg/kg	3	**4.5**	**3.8**	2.2 U	2.5 U	**10.5**	2.6 U	**5.2**	**5.2**
Barium	mg/kg	220,000	**220**	**204**	**178**	**166**	**130**	**472**	**269**	**541**
Beryllium	mg/kg	2,300	**1.4**	**1.3**	0.87 U	**1.6**	**0.83 J**	**1.8**	**1.3**	**4**
Cadmium	mg/kg	980	1.8 B	**2.8**	**4.1**	0.88 B	**2.3**	1.3 B	1.7 B	0.61 B
Chromium	mg/kg	120,000	**103**	**603**	**1,360**	**787**	**593**	**599**	**189**	**57.2**
Chromium VI	mg/kg	6.3	0.42 B	0.47 B	0.47 B	0.43 B	0.26 B	0.81 B	0.43 B	0.36 B
Cobalt	mg/kg	350	**10.1**	**7.4**	**3.6 J**	**1.3 J**	**7.6**	**4.5 J**	**14.5**	**3 J**
Copper	mg/kg	47,000	**458**	**63.6**	**60.3**	**30.7**	**117**	**40.6**	**81.3**	**27.2**
Iron	mg/kg	820,000	**45,600**	**98,400**	**131,000**	**140,000**	**158,000**	**74,100**	**90,500**	**19,200**
Lead	mg/kg	800	**204**	**165**	**295**	**31.5**	**484**	**59.3**	**152**	**193**
Manganese	mg/kg	26,000	**4,820**	**27,400**	**60,300**	**18,400**	**20,000**	**56,400**	**9,020**	**7,980**
Mercury	mg/kg	350	**0.088 J**	**0.062 J**	**0.048 J**	**0.0099 J**	**0.072 J**	**0.064 J**	**0.41**	0.1 U
Nickel	mg/kg	22,000	**21.7**	**24.2**	**13.2**	**17.9**	**54.7**	**14.4**	**37.8**	**15.6**
Selenium	mg/kg	5,800	2.6 B	4 U	3.5 U	4 U	3.6 U	4.2 U	3.3 U	3.9 U
Silver	mg/kg	5,800	2.7 U	3 U	2.6 U	3 U	2.7 U	3.2 U	2.5 U	2.9 U
Thallium	mg/kg	12	9.1 U	10.1 U	8.7 U	10 U	9.1 U	10.6 U	8.2 U	**4.7 J**
Vanadium	mg/kg	5,800	**188**	**1,280**	**3,460**	**492**	**315**	**1,660**	**528**	**205**
Zinc	mg/kg	350,000	**836**	**712**	**611**	**150**	**642**	**168**	**582**	**98**
Other										
Cyanide	mg/kg	150	**1.1**	**3.1**	**0.43 J**	**0.41 J**	**0.7**	**0.78**	**1.4**	**0.28 J**

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

Table 5
Summary of Inorganics Detected in Soil
Parcel B6
Tradepoint Atlantic
Sparrows Point, Maryland

Parameter	Units	PAL	B6-039-SB-5*	B6-040-SB-1*	B6-040-SB-5*	B6-040-SB-10	B6-041-SB-1	B6-041-SB-4	B6-042-SB-1	B6-042-SB-8
Metals										
Aluminum	mg/kg	1,100,000	**14,100**	**5,610**	**24,300**	N/A	**19,400**	**25,900**	**20,200**	**35,600**
Antimony	mg/kg	470	2.7 U	**1.6 J**	2.9 U	N/A	2.8 UJ	2.9 UJ	2.7 UJ	2.8 UJ
Arsenic	mg/kg	3	**2 J**	**8.2**	**5.5**	**7.1**	**3**	**3.2**	**2 J**	**2.2 J**
Barium	mg/kg	220,000	**85**	**83.7**	**276**	N/A	**278 J**	**233 J**	**330 J**	**626 J**
Beryllium	mg/kg	2,300	**0.48 J**	**0.79 J**	**2**	N/A	**1.3**	**4.2**	**2.4**	**3.1**
Cadmium	mg/kg	980	1.3 U	1.3 B	0.39 B	N/A	0.92 B	0.45 B	0.73 B	0.4 B
Chromium	mg/kg	120,000	**33.3**	**262**	**87.9**	N/A	**566**	**47.5**	**82.8**	**22.5**
Chromium VI	mg/kg	6.3	0.52 B	0.49 B	0.5 B	N/A	0.67 B	0.36 B	**1.2 J-**	0.31 B
Cobalt	mg/kg	350	**6**	**11.3**	**5.6**	N/A	**4.7**	**3.9 J**	**9.9**	**2.4 J**
Copper	mg/kg	47,000	**9.8**	**152**	**18.1**	N/A	**67.4**	**17.5**	**152**	**17.2**
Iron	mg/kg	820,000	**15,300**	**383,000**	**44,400**	N/A	**245,000**	**15,700**	**72,900**	**14,600**
Lead	mg/kg	800	**9.2**	**227**	**24**	N/A	**99.5 J**	**18 J**	**293 J**	**9.4 J**
Manganese	mg/kg	26,000	**388**	**3,160**	**4,680**	N/A	**14,600**	**1,570**	**3,610**	**8,360**
Mercury	mg/kg	350	**0.0055 J**	**0.61**	**0.0035 J**	N/A	**0.12**	**0.027 J**	**0.063 J**	0.11 U
Nickel	mg/kg	22,000	**14.8**	**121**	**14.8**	N/A	**46.2**	**9.4 J**	**38.8**	**7.3 J**
Selenium	mg/kg	5,800	3.5 U	3.3 U	**2.2 J**	N/A	3.7 U	3.9 U	3.6 U	3.7 U
Silver	mg/kg	5,800	2.7 U	**4.3**	2.9 U	N/A	**1.6 J**	2.9 U	2.7 U	2.8 U
Thallium	mg/kg	12	8.8 U	8.2 U	**5.3 J**	N/A	9.3 U	9.6 U	9 U	9.3 U
Vanadium	mg/kg	5,800	**30.6**	**46.6**	**393**	N/A	**325 J**	**42.1 J**	**147 J**	**159 J**
Zinc	mg/kg	350,000	**37.2**	**255**	**44.1**	N/A	**234 J**	**67.7 J**	**72.3 J**	**12.2 J**
Other										
Cyanide	mg/kg	150	0.65 U	0.5 U	**0.2 J**	N/A	**0.29 J-**	**0.23 J-**	**0.36 J-**	**0.25 J+**

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Table 5
Summary of Inorganics Detected in Soil
Parcel B6
Tradepoint Atlantic
Sparrows Point, Maryland

Parameter	Units	PAL	B6-043-SB-1	B6-043-SB-8	B6-044-SB-1*	B6-044-SB-4*	B6-045-SB-1	B6-045-SB-5	B6-045-SB-10	B6-046-SB-1
Metals										
Aluminum	mg/kg	1,100,000	**45,800**	**51,700**	**25,000**	**10,400**	**36,900**	**16,200**	N/A	**18,500**
Antimony	mg/kg	470	2.4 UJ	2.5 UJ	2.3 U	2.6 U	2.5 UJ	3.1 UJ	N/A	2.7 UJ
Arsenic	mg/kg	3	**2.6**	**2.3**	**7.8**	**13.6**	**4.5**	**7.9**	**3.6**	**29.4**
Barium	mg/kg	220,000	**467**	**508**	**284**	**147**	**359**	**161**	N/A	**357**
Beryllium	mg/kg	2,300	**8.9**	**9.6**	**4.4**	**1.2**	**7.1**	**1.3**	N/A	**2.1**
Cadmium	mg/kg	980	0.31 B	0.5 B	0.88 B	0.84 B	0.66 B	1.4 B	N/A	**11.1**
Chromium	mg/kg	120,000	**17.3**	**21**	**365**	**850**	**61.8**	**50.1**	N/A	**1,050**
Chromium VI	mg/kg	6.3	0.42 B	0.35 B	0.22 B	0.44 B	0.46 B	0.45 B	N/A	0.41 B
Cobalt	mg/kg	350	4.1 U	**0.57 J**	**6.7**	**11.8**	**2.9 J**	**6.8**	N/A	**128**
Copper	mg/kg	47,000	**3.3 J**	**9.1 J**	**84.6**	**127**	**25.2 J**	**57.9 J**	N/A	**669 J**
Iron	mg/kg	820,000	**7,520**	**9,720**	**181,000**	**228,000**	**111,000**	**33,500**	N/A	**221,000**
Lead	mg/kg	800	**6.5 J**	**26.7 J**	**50.5**	**227**	**8.7 J**	**149 J**	N/A	**1,800 J**
Manganese	mg/kg	26,000	**2,790**	**3,040**	**6,490**	**14,300**	**3,240**	**1,390**	N/A	**8,330**
Mercury	mg/kg	350	0.1 UJ	0.11 UJ	**0.013 J**	**0.0025 J**	0.1 UJ	**0.44 J-**	N/A	**0.065 J**
Nickel	mg/kg	22,000	**1.9 J**	**6.2 J**	**82.5**	**76.3**	**32.2**	**17.8**	N/A	**1,010**
Selenium	mg/kg	5,800	**2 J**	3.3 U	3.1 U	3.5 U	**3 J**	4.1 U	N/A	3.6 U
Silver	mg/kg	5,800	2.4 U	2.5 U	**0.86 J**	**0.96 J**	2.5 U	3.1 U	N/A	**4.7**
Thallium	mg/kg	12	8.1 UJ	8.2 UJ	**6.9 J**	**18.5**	8.2 UJ	10.3 UJ	N/A	**5.7 J**
Vanadium	mg/kg	5,800	**20.1**	**15.9**	**472**	**1,480**	**15.2**	**136**	N/A	**195**
Zinc	mg/kg	350,000	**8.7 J**	**30.3 J**	**121**	**239**	**622 J**	**769 J**	N/A	**6,260 J**
Other										
Cyanide	mg/kg	150	**1.3 J-**	**0.48 J-**	**0.37 J**	**0.41 J**	**0.84 J-**	**0.69 J-**	N/A	**0.65 J-**

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Table 5
Summary of Inorganics Detected in Soil
Parcel B6
Tradepoint Atlantic
Sparrows Point, Maryland

Parameter	Units	PAL	B6-046-SB-6	B6-046-SB-10	B6-047-SB-1*	B6-047-SB-6*	B6-048-SB-1*	B6-048-SB-8*	B6-049-SB-1*	B6-049-SB-8*
Metals										
Aluminum	mg/kg	1,100,000	**23,600**	N/A	**7,290**	**12,300**	**8,290**	**20,400**	**37,500**	**19,400**
Antimony	mg/kg	470	3.1 UJ	N/A	2.5 U	2.8 U	2.7 U	2.1 B	2.5 U	2.8 U
Arsenic	mg/kg	3	**3.8**	**7.3**	**3.5**	**7.4**	2.2 U	**24.5**	**2.5**	**4.5**
Barium	mg/kg	220,000	**86**	N/A	**68.2**	**162**	**88**	**696**	**334**	**38.8**
Beryllium	mg/kg	2,300	**0.63 J**	N/A	**0.32 J**	**0.27 J**	0.9 U	**2**	**6.1**	**0.83 J**
Cadmium	mg/kg	980	0.18 B	N/A	0.73 B	1.6 B	0.81 B	**15.2**	1.4 B	1.4 U
Chromium	mg/kg	120,000	**31.1**	N/A	**759**	**1,190**	**669**	**406**	**27.4**	**28.5**
Chromium VI	mg/kg	6.3	0.35 B	N/A	0.52 B	0.5 B	0.45 B	0.73 B	0.35 B	0.47 B
Cobalt	mg/kg	350	**4.1 J**	N/A	**5.6**	**10.8**	**1.3 J**	**34.8**	**4.1 J**	**5.3**
Copper	mg/kg	47,000	**13.5 J**	N/A	**35.6**	**105**	**29.3**	**248**	**29.3**	**13.8**
Iron	mg/kg	820,000	**22,000**	N/A	**173,000**	**119,000**	**96,800**	**296,000**	**42,400**	**25,000**
Lead	mg/kg	800	**24.5 J**	N/A	**23**	**164**	**18.5**	**1,240**	**20.3**	**14.4**
Manganese	mg/kg	26,000	**127**	N/A	**29,500**	**50,300**	**34,600**	**15,200**	**3,350**	**97**
Mercury	mg/kg	350	**0.059 J-**	N/A	**0.007 J**	**0.021 J**	**0.026 J**	**0.44**	0.11 U	**0.0083 J**
Nickel	mg/kg	22,000	**10.7**	N/A	**18**	**24.3**	**7.7 J**	**136**	**12.1**	**13.9**
Selenium	mg/kg	5,800	4.2 U	N/A	3.3 U	3.7 U	3.6 U	4.5 U	**2.7 J**	3.7 U
Silver	mg/kg	5,800	3.1 U	N/A	2.5 U	2.8 U	2.7 U	**1.2 J**	2.5 U	2.8 U
Thallium	mg/kg	12	10.4 UJ	N/A	8.3 U	9.3 U	9 U	11.3 U	8.5 U	9.3 U
Vanadium	mg/kg	5,800	**48.4**	N/A	**2,610**	**2,310**	**2,990**	**1,670**	**95.8**	**34.4**
Zinc	mg/kg	350,000	**45.7 J**	N/A	**153**	**280**	**52.8**	**6,700**	**154**	**50.6**
Other										
Cyanide	mg/kg	150	0.76 UJ	N/A	**0.59**	**1.5**	**0.49 J**	**7**	**0.33 J**	0.79 U

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Table 5
Summary of Inorganics Detected in Soil
Parcel B6
Tradepoint Atlantic
Sparrows Point, Maryland

Parameter	Units	PAL	B6-049-SB-10*	B6-050-SB-1*	B6-050-SB-6*	B6-051-SB-1	B6-051-SB-6	B6-052-SB-1	B6-053-SB-1*	B6-053-SB-4*
Metals										
Aluminum	mg/kg	1,100,000	N/A	**4,390**	**14,100**	**17,000**	**7,940**	**22,300**	**8,400**	**6,350**
Antimony	mg/kg	470	N/A	2.2 U	3.2 U	**2.2 J**	**3.4 J**	3 UJ	3.2 U	2.5 U
Arsenic	mg/kg	3	**3.8**	1.8 U	**5.2**	**5**	**7.2**	**2.2 J**	**12.9**	**9.4**
Barium	mg/kg	220,000	N/A	**45.1**	**109**	**65.1 J**	**25.3 J**	**96.1 J**	**72**	**60.2**
Beryllium	mg/kg	2,300	N/A	0.73 U	**0.55 J**	**0.36 J**	**0.43 J**	**0.43 J**	**0.24 J**	0.82 U
Cadmium	mg/kg	980	N/A	0.6 B	**2.4**	0.18 B	1.4 U	0.93 B	1.3 B	1 B
Chromium	mg/kg	120,000	N/A	**912**	**325**	**32.5**	**18.8**	**347**	**734**	**771**
Chromium VI	mg/kg	6.3	N/A	0.44 B	0.43 B	0.52 B	0.71 B	0.56 B	0.45 B	0.39 B
Cobalt	mg/kg	350	N/A	**0.75 J**	**13.2**	**3.4 J**	**2.2 J**	**3.4 J**	**141**	**145**
Copper	mg/kg	47,000	N/A	**26**	**34.4**	**8.5**	**6.9**	**94.8**	**369**	**383**
Iron	mg/kg	820,000	N/A	**182,000**	**48,900**	**13,700**	**21,800**	**78,000**	**186,000**	**108,000**
Lead	mg/kg	800	N/A	**39.2**	**149**	**87.7 J**	**100 J**	**122 J**	**99.7**	**82.6**
Manganese	mg/kg	26,000	N/A	**47,500**	**10,000**	**105**	**108**	**8,410**	**37,400**	**28,500**
Mercury	mg/kg	350	N/A	**0.0097 J**	**0.14**	**0.0093 J**	**0.016 J**	**0.18**	**0.29**	**0.2**
Nickel	mg/kg	22,000	N/A	**12.3**	**21.9**	**11.8**	**8.6 J**	**27.5**	**39.6**	**36.4**
Selenium	mg/kg	5,800	N/A	2.9 U	4.3 U	4 U	3.8 U	4 U	**6.4**	3.3 U
Silver	mg/kg	5,800	N/A	2.2 U	3.2 U	3 U	2.9 U	3 U	3.2 U	2.5 U
Thallium	mg/kg	12	N/A	7.3 U	10.7 U	9.9 U	9.5 U	9.9 U	10.7 U	8.2 U
Vanadium	mg/kg	5,800	N/A	**5,470**	**1,010**	**31.5 J**	**17.3 J**	**184 J**	**4,360**	**3,430**
Zinc	mg/kg	350,000	N/A	**110**	**510**	**31.3 J**	**25.5 J**	**171 J**	**365**	**278**
Other										
Cyanide	mg/kg	150	N/A	**0.3 J**	**0.098 J**	0.72 U	0.7 U	**0.47 J+**	**0.61**	**1.3**

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Table 5
Summary of Inorganics Detected in Soil
Parcel B6
Tradepoint Atlantic
Sparrows Point, Maryland

Parameter	Units	PAL	B6-054-SB-1*	B6-054-SB-4*	B6-055-SB-1*	B6-055-SB-7*	B6-056-SB-1	B6-056-SB-8	B6-057-SB-1*	B6-057-SB-8*
Metals										
Aluminum	mg/kg	1,100,000	**45,700**	**41,800**	**10,800**	**14,100**	**33,100**	**21,100**	**23,500**	**13,400**
Antimony	mg/kg	470	2.4 U	2.5 U	2.3 U	2.9 U	2.7 UJ	3.2 UJ	2.7 U	2.7 U
Arsenic	mg/kg	3	2 U	2.1 U	**6**	**3.5**	2.3 U	**6.3**	**3.2**	**3.6**
Barium	mg/kg	220,000	**386**	**463**	**296**	**94.6**	**289 J**	**216 J**	**278**	**46**
Beryllium	mg/kg	2,300	**7.5**	**7.5**	0.78 U	**0.78 J**	**4.4**	**1.7**	**1.5**	**0.7 J**
Cadmium	mg/kg	980	0.21 B	0.25 B	1 B	0.41 B	0.52 B	0.71 B	**0.14 J**	1.3 U
Chromium	mg/kg	120,000	**6.6**	**5.8**	**1,370**	**35.7**	**324 J**	**64.5 J**	**25**	**22.4**
Chromium VI	mg/kg	6.3	0.36 B	0.33 B	0.9 B	0.44 B	0.51 B	0.34 B	0.32 B	0.39 B
Cobalt	mg/kg	350	**1.2 J**	**0.97 J**	**2.1 J**	**8.4**	**2.3 J**	**7.5**	**4.4 J**	**6.5**
Copper	mg/kg	47,000	**8.9**	**2.1 J**	**52**	**29.7**	**25.4 J**	**40.1 J**	**15.6**	**7.4**
Iron	mg/kg	820,000	**22,000**	**5,830**	**93,900**	**21,900**	**63,000**	**26,800**	**18,400**	**18,700**
Lead	mg/kg	800	2 U	**3.9**	**44.8**	**69.9**	**38.7 J**	**109 J**	**15.1**	**9.7**
Manganese	mg/kg	26,000	**4,080**	**4,050**	**66,300**	**500**	**8,200**	**3,180**	**2,530**	**79.4**
Mercury	mg/kg	350	0.11 U	0.11 U	**0.0098 J**	**0.039 J**	**0.015 J**	**0.057 J**	**0.026 J**	**0.044 J**
Nickel	mg/kg	22,000	**1.7 J**	8.2 U	**26.3**	**20.3**	**29.8 J**	**19.1 J**	**8 J**	**11.9**
Selenium	mg/kg	5,800	**3.3**	3.3 U	3.1 U	3.9 U	3.6 U	4.2 U	3.6 U	3.6 U
Silver	mg/kg	5,800	2.4 U	2.5 U	**13.4**	2.9 U	2.7 U	3.2 U	2.7 U	2.7 U
Thallium	mg/kg	12	7.9 U	8.2 U	**30.9**	9.8 U	**5.9 J**	10.6 U	9 U	8.9 U
Vanadium	mg/kg	5,800	**43**	**36.1**	**10,500**	**71.4**	**428 J**	**147 J**	**85**	**30.2**
Zinc	mg/kg	350,000	4 U	**1.9 J**	**79.7**	**135**	**98.6 J**	**226 J**	**35**	**39.2**
Other										
Cyanide	mg/kg	150	**0.27 J**	**0.28 J**	**1.4**	**0.18 J**	0.25 B	0.43 B	**0.59 J**	0.74 U

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

Table 5
Summary of Inorganics Detected in Soil
Parcel B6
Tradepoint Atlantic
Sparrows Point, Maryland

Parameter	Units	PAL	B6-057-SB-10*	B6-058-SB-1*	B6-058-SB-5*	B6-058-SB-10*	B6-059-SB-1	B6-059-SB-8	B6-059-SB-10	B6-060-SB-1
Metals										
Aluminum	mg/kg	1,100,000	**22,300**	**50,300**	**22,300**	N/A	**23,800**	**7,740**	N/A	**18,200**
Antimony	mg/kg	470	3.4 U	2.6 U	2.8 U	N/A	2.8 R	2.7 R	N/A	2.9 R
Arsenic	mg/kg	3	**5.7**	2.2 U	**3.9**	**4.1**	**9.3**	**17.9**	**2.3 J**	**5.6**
Barium	mg/kg	220,000	**62.7**	**429**	**225**	N/A	**291 J**	**256 J**	N/A	**243 J**
Beryllium	mg/kg	2,300	**0.72 J**	**8.6**	**1.3**	N/A	**2.4**	0.88 U	N/A	**1.2**
Cadmium	mg/kg	980	1.7 U	**0.14 J**	**0.27 J**	N/A	0.83 B	0.91 B	N/A	0.39 B
Chromium	mg/kg	120,000	**34.5**	**42.7**	**67.6**	N/A	**96.7**	**2,310**	N/A	**35.1**
Chromium VI	mg/kg	6.3	N/A	0.35 B	0.39 B	N/A	0.37 B	0.87 B	N/A	0.42 B
Cobalt	mg/kg	350	**7.3**	**1.7 J**	**7.7**	N/A	**8.9**	**14.6**	N/A	**8.4**
Copper	mg/kg	47,000	**10.3**	**6.6**	**34.8**	N/A	**82.2 J**	**369 J**	N/A	**38.5 J**
Iron	mg/kg	820,000	**22,000**	**51,700**	**27,000**	N/A	**57,600 J**	**195,000 J**	N/A	**42,100 J**
Lead	mg/kg	800	**11.7**	**4.9**	**103**	N/A	**2,220 J**	**25.7 J**	N/A	**45.1 J**
Manganese	mg/kg	26,000	**71.5**	**3,260**	**1,680**	N/A	**4,230**	**66,600**	**5,740**	**1,930**
Mercury	mg/kg	350	N/A	0.12 U	0.12 U	N/A	**0.034 J-**	**0.0022 J-**	N/A	**0.044 J-**
Nickel	mg/kg	22,000	**14.1**	**9.4**	**103**	N/A	**27.6 J**	**90.1 J**	N/A	**27 J**
Selenium	mg/kg	5,800	4.5 U	**3.7**	3.7 U	N/A	3.8 U	3.5 U	N/A	3.9 U
Silver	mg/kg	5,800	3.4 U	2.6 U	2.8 U	N/A	2.8 U	**16.6 J**	N/A	2.9 U
Thallium	mg/kg	12	11.3 U	8.7 U	9.2 U	N/A	9.4 U	**151**	8.8 U	9.7 U
Vanadium	mg/kg	5,800	**51.9**	**17.3**	**81.6**	N/A	**237 J**	**13,800 J**	**222 J**	**84.9 J**
Zinc	mg/kg	350,000	**42.9**	5.2 B	**87.1**	N/A	**278 J**	**37.3 J**	N/A	**67.5 J**
Other										
Cyanide	mg/kg	150	N/A	**1.7**	**0.66 J**	N/A	**0.82**	**0.38 J**	N/A	0.65 U

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Table 5
Summary of Inorganics Detected in Soil
Parcel B6
Tradepoint Atlantic
Sparrows Point, Maryland

Parameter	Units	PAL	B6-060-SB-4	B6-061-SB-1	B6-061-SB-4	B6-062-SB-1	B6-062-SB-4	B6-063-SB-1	B6-063-SB-9	B6-064-SB-1	B6-064-SB-8
Metals											
Aluminum	mg/kg	1,100,000	**19,700**	**20,400**	**10,800**	**21,300**	**32,500**	**28,700**	**12,800**	**34,400**	**16,400**
Antimony	mg/kg	470	2.8 R	2.7 UJ	2.9 UJ	3 UJ	3.1 UJ	2.4 UJ	3.1 UJ	2.8 UJ	3.2 UJ
Arsenic	mg/kg	3	**10.9**	**4.1**	**6.3**	**3.6**	**7.6**	2 U	**2.7**	2.3 U	**4.7**
Barium	mg/kg	220,000	**240 J**	**258 J**	**99.6 J**	**274 J**	**650 J**	**588 J**	**69.8 J**	**246 J**	**87.9 J**
Beryllium	mg/kg	2,300	**1.6**	**2.6**	**0.81 J**	**2.2**	**3.2**	**2.3**	**0.75 J**	**1.6**	**1.1**
Cadmium	mg/kg	980	0.67 B	**3.3**	0.21 B	1.1 B	1.1 B	0.46 B	0.24 B	0.48 B	0.19 B
Chromium	mg/kg	120,000	**68.6**	**443**	**24.3**	**32.5**	**75.4**	**108 J**	**28.7 J**	**584 J**	**37.9 J**
Chromium VI	mg/kg	6.3	0.41 B	0.47 B	0.39 B	0.38 B	0.43 B	0.4 B	0.39 B	0.41 B	0.45 B
Cobalt	mg/kg	350	**11.4**	**3 J**	**5.3**	**3.9 J**	**5.6**	**2.1 J**	**12**	**1.2 J**	**9.5**
Copper	mg/kg	47,000	**241 J**	**59.8**	**9.8**	**16.6**	**38.6**	**10.6 J**	**17.1 J**	**28.8 J**	**16.4 J**
Iron	mg/kg	820,000	**90,600 J**	**105,000**	**18,900**	**18,200**	**38,100**	**14,100**	**19,200**	**146,000**	**20,200**
Lead	mg/kg	800	**104 J**	**191 J**	**33.7 J**	**60.6 J**	**113 J**	**13.7 J**	**29.2 J**	**11.5 J**	**19.8 J**
Manganese	mg/kg	26,000	**2,950**	**11,100**	**577**	**2,920**	**6,780**	**8,680**	**457**	**21,800**	**299**
Mercury	mg/kg	350	**0.0042 J-**	**0.081 J**	**0.021 J**	0.12 U	**0.098 J**	0.11 U	**0.02 J**	**0.013 J**	**0.024 J**
Nickel	mg/kg	22,000	**38.6 J**	**35.8**	**10.6**	**10.4**	**19.2**	**6.3 J**	**25.8 J**	**21.6 J**	**22.6 J**
Selenium	mg/kg	5,800	3.7 U	3.6 U	3.9 U	4 U	3.5 B	3.1 U	4.1 U	3.7 U	4.3 U
Silver	mg/kg	5,800	**0.8 J**	2.7 U	2.9 U	3 U	3.1 U	2.4 U	3.1 U	**1.6 J**	3.2 U
Thallium	mg/kg	12	9.2 U	8.9 U	9.8 U	10 U	10.3 U	**4.3 J**	10.2 U	**4.7 J**	10.7 U
Vanadium	mg/kg	5,800	**144 J**	**333 J**	**40.7 J**	**68 J**	**287 J**	**403 J**	**72.6 J**	**478 J**	**50.9 J**
Zinc	mg/kg	350,000	**371 J**	**265 J**	**71.6 J**	**132 J**	**156 J**	**60.1 J**	**105 J**	**50.1 J**	**53.1 J**
Other											
Cyanide	mg/kg	150	**0.41 J**	**0.19 J+**	**0.064 J+**	**0.19 J+**	**0.57 J+**	0.46 B	0.085 B	0.23 B	0.6 B

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Table 5
Summary of Inorganics Detected in Soil
Parcel B6
Tradepoint Atlantic
Sparrows Point, Maryland

Parameter	Units	PAL	B6-064-SB-10*	B6-065-SB-1*	B6-065-SB-4*	B6-066-SB-1*	B6-066-SB-5*	B6-067-SB-1	B6-067-SB-5	B6-068-SB-1*
Metals										
Aluminum	mg/kg	1,100,000	N/A	**29,300**	**24,100**	**34,600**	**25,600**	**12,400**	**13,000**	**17,500**
Antimony	mg/kg	470	N/A	2.9 U	2.7 U	2.5 U	2.6 U	2.8 R	2.5 R	2.7 U
Arsenic	mg/kg	3	**5**	**7.7**	**7.4**	**4.2**	**5.2**	2.3 U	**3.9**	2.2 U
Barium	mg/kg	220,000	N/A	**270**	**226**	**385**	**378**	**106 J**	**170 J**	**106**
Beryllium	mg/kg	2,300	N/A	**1.7**	**1.7**	**4.6**	**3.3**	**1.3**	**0.71 J**	**1.2**
Cadmium	mg/kg	980	N/A	**2.5**	**2.6**	1.1 B	1.3 B	1.1 B	**12.1**	0.35 B
Chromium	mg/kg	120,000	N/A	**155**	**192**	**102**	**104**	**1,120**	**1,270**	**89**
Chromium VI	mg/kg	6.3	N/A	0.38 B	0.43 B	0.36 B	0.58 B	0.45 B	0.82 B	0.34 B
Cobalt	mg/kg	350	N/A	**9.8**	**10.8**	**4.6**	**5.5**	**2.2 J**	**10.3**	**3.6 J**
Copper	mg/kg	47,000	N/A	**80.1**	**94.9**	**106**	**73.9**	**41.6 J**	**175 J**	**11.2**
Iron	mg/kg	820,000	N/A	**53,200**	**57,300**	**44,700**	**53,400**	**211,000 J**	**124,000 J**	**22,100**
Lead	mg/kg	800	N/A	**190**	**203**	**116**	**154**	**68.7 J**	**421 J**	**15.9**
Manganese	mg/kg	26,000	N/A	**3,820**	**4,450**	**4,190**	**4,890**	**23,100**	**29,800**	**2,760**
Mercury	mg/kg	350	N/A	**0.16**	**0.1 J**	**0.012 J**	**0.0059 J**	**0.022 J**	0.11 U	**0.019 J**
Nickel	mg/kg	22,000	N/A	**42.6**	**47**	**19.3**	**25.8**	**32.9 J**	**46.2 J**	**9.2**
Selenium	mg/kg	5,800	N/A	2.6 B	3.5 U	3.3 U	3.5 U	3.7 UJ	3.4 UJ	3.6 U
Silver	mg/kg	5,800	N/A	2.9 U	2.7 U	2.5 U	2.6 U	2.8 U	2.5 U	2.7 U
Thallium	mg/kg	12	N/A	9.8 U	8.8 U	8.3 U	8.6 U	**20.2 J**	**49.7 J**	9 U
Vanadium	mg/kg	5,800	N/A	**108**	**162**	**135**	**138**	**1,580**	**4,830**	**435**
Zinc	mg/kg	350,000	N/A	**455**	**454**	**286**	**225**	**197 J**	**1,530 J**	**45.5**
Other										
Cyanide	mg/kg	150	N/A	**4.6**	**3.6**	**0.65 J**	**0.42 J**	**0.49 J**	**2.7**	**0.098 J**

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Table 5
Summary of Inorganics Detected in Soil
Parcel B6
Tradepoint Atlantic
Sparrows Point, Maryland

Parameter	Units	PAL	B6-068-SB-4*	B6-069-SB-1*	B6-069-SB-8.5*	B6-070-SB-1*	B6-070-SB-4*	B6-071-SB-1*	B6-071-SB-4*	B6-072-SB-1*
Metals										
Aluminum	mg/kg	1,100,000	**18,600**	**13,700**	**12,600**	**22,500**	**7,800**	**36,900**	**16,100**	**13,500**
Antimony	mg/kg	470	2.8 U	2.8 U	2.3 U	3.4 U	2.4 U	2.8 U	2.5 U	2.6 U
Arsenic	mg/kg	3	**8.1**	2.3 U	1.9 U	**3.3**	2 U	**3.4**	**4.8**	**6.6**
Barium	mg/kg	220,000	**155**	**82.5**	**167**	**349**	**122**	**756**	**306**	**172**
Beryllium	mg/kg	2,300	**1.6**	**0.9 J**	0.77 U	**2.4**	0.81 U	**4.1**	0.84 U	**1.1**
Cadmium	mg/kg	980	0.77 B	1 B	**9.6**	**1.9**	**1.9**	0.56 B	0.65 B	0.48 B
Chromium	mg/kg	120,000	**50.7**	**907**	**1,730**	**506**	**1,200**	**118**	**1,930**	**64.5**
Chromium VI	mg/kg	6.3	0.48 B	0.73 B	0.67 B	0.54 B	0.53 B	0.34 B	1.1 B	0.36 B
Cobalt	mg/kg	350	**7.7**	4.6 U	**4.2**	**6.5**	**3.7 J**	**6.2**	**0.58 J**	**9.6**
Copper	mg/kg	47,000	**74.5**	**15.7**	**86.5**	**50.4**	**50.3**	**37.1**	**43.6**	**41.7**
Iron	mg/kg	820,000	**35,000**	**163,000**	**116,000**	**68,800**	**97,900**	**65,800**	**205,000**	**34,000**
Lead	mg/kg	800	**121**	**16.6**	**1,290**	**82.9**	**112**	**13.9**	**101**	**19.8**
Manganese	mg/kg	26,000	**1,420**	**26,000**	**30,300**	**40,200**	**57,400**	**10,100**	**40,400**	**997**
Mercury	mg/kg	350	**0.11 J**	**0.0039 J**	**0.087 J**	**0.027 J**	**0.029 J**	**0.0063 J**	**0.0064 J**	**0.011 J**
Nickel	mg/kg	22,000	**24.9**	**12.6**	**22.1**	**21.9**	**16.8**	**25.5**	**15**	**39.4**
Selenium	mg/kg	5,800	3.7 U	3.7 U	3.1 U	4.5 U	3.2 U	3.7 U	3.4 U	3.5 U
Silver	mg/kg	5,800	2.8 U	2.8 U	2.3 U	3.4 U	2.4 U	2.8 U	**4.6**	2.6 U
Thallium	mg/kg	12	9.3 U	9.2 U	7.7 U	11.2 U	8.1 U	9.2 U	**35.4**	8.8 U
Vanadium	mg/kg	5,800	**83.5**	**1,090**	**3,770**	**1,740**	**2,940**	**538**	**10,400**	**169**
Zinc	mg/kg	350,000	**326**	**76.8**	**853**	**376**	**316**	**22.4**	**179**	**69.4**
Other										
Cyanide	mg/kg	150	**0.52 J**	**0.22 J**	**0.47 J**	**0.75**	**1.1**	**1.2**	**0.95**	**0.43 J**

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Table 5
Summary of Inorganics Detected in Soil
Parcel B6
Tradepoint Atlantic
Sparrows Point, Maryland

Parameter	Units	PAL	B6-072-SB-4*	B6-073-SB-1	B6-073-SB-5	B6-074-SB-1*	B6-074-SB-4*	B6-075-SB-1	B6-076-SB-1	B6-076-SB-8
Metals										
Aluminum	mg/kg	1,100,000	**13,800**	**10,500**	**20,100**	**14,900**	**13,700**	**27,200**	**16,300**	**8,750**
Antimony	mg/kg	470	2.5 U	2.9 UJ	2.6 UJ	3.5 U	3 U	2.4 UJ	2.7 R	2.8 R
Arsenic	mg/kg	3	**8.6**	**19.9**	2.1 U	**7.2**	**6.4**	**5**	**9.6**	**2.2 J**
Barium	mg/kg	220,000	**123**	**171 J**	**236 J**	**25.7**	**64.3**	**275 J**	**222 J**	**68.5 J**
Beryllium	mg/kg	2,300	**0.98**	**0.83 J**	**0.99**	**0.84 J**	**1.2**	**3.9**	**1.5**	**0.43 J**
Cadmium	mg/kg	980	1.2 B	**1.7**	0.16 B	0.46 B	0.42 B	**1.5**	**4.4**	0.88 B
Chromium	mg/kg	120,000	**91.9**	**487 J**	**20.2 J**	**25.3**	**34.1**	**342 J**	**505**	**1,070**
Chromium VI	mg/kg	6.3	0.19 B	0.46 B	0.38 B	0.42 B	0.43 B	0.38 B	0.46 B	0.51 B
Cobalt	mg/kg	350	**15.6**	**66.8**	**2.8 J**	**7.1**	**10**	**5.5**	**11.4**	**2.4 J**
Copper	mg/kg	47,000	**67.3**	**239 J**	**9.8 J**	**16.3**	**23.2**	**59.3 J**	**118 J**	**90 J**
Iron	mg/kg	820,000	**66,300**	**95,400**	**10,900**	**27,600**	**41,700**	**85,800**	**112,000 J**	**172,000 J**
Lead	mg/kg	800	**429**	**194 J**	**13.1 J**	**11.7**	**34.4**	**113 J**	**511 J**	**87.2 J**
Manganese	mg/kg	26,000	**1,620**	**1,320**	**496**	**315**	**581**	**12,400**	**12,500**	**32,400**
Mercury	mg/kg	350	**0.045 J**	**0.92**	**0.034 J**	**0.03 J**	**0.023 J**	0.099 U	**0.12**	**0.019 J**
Nickel	mg/kg	22,000	**56.6**	**545 J**	**7.4 J**	**18.6**	**24.4**	**22.3 J**	**41.7 J**	**28.3 J**
Selenium	mg/kg	5,800	3.4 U	3.8 U	3.4 U	4.7 U	4 U	2.3 B	3.5 UJ	3.7 UJ
Silver	mg/kg	5,800	**0.79 J**	**1.5 J**	2.6 U	3.5 U	3 U	2.4 U	2.7 U	2.8 U
Thallium	mg/kg	12	8.5 U	9.5 U	8.6 U	11.7 U	9.9 U	**3.9 J**	**9 J**	**42.7 J**
Vanadium	mg/kg	5,800	**235**	**45.5 J**	**25.2 J**	**29.6**	**50**	**388 J**	**765**	**3,850**
Zinc	mg/kg	350,000	**570**	**414 J**	**22.5 J**	**49.4**	**112**	**288 J**	**1,720 J**	**197 J**
Other										
Cyanide	mg/kg	150	**0.45 J**	**2.1 J-**	0.72 UJ	**0.054 J**	**0.12 J**	**0.6 J-**	**1.5**	**0.55 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.
* Indicates non-validated data
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 high.
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 compound/analyte in the sample.

Table 5
Summary of Inorganics Detected in Soil
Parcel B6
Tradepoint Atlantic
Sparrows Point, Maryland

Parameter	Units	PAL	B6-077-SB-1	B6-077-SB-4	B6-078-SB-1	B6-078-SB-8	B6-079-SB-1	B6-079-SB-7	B6-080-SB-1	B6-080-SB-5	B6-081-SB-1
Metals											
Aluminum	mg/kg	1,100,000	**14,400**	**12,900**	**24,900**	**10,900**	**16,100**	**10,400**	**15,700**	**16,800**	**41,300**
Antimony	mg/kg	470	2.4 UJ	2.8 UJ	2.7 R	2.7 R	3.1 UJ	2.5 UJ	3 UJ	2.7 UJ	2.8 UJ
Arsenic	mg/kg	3	**3.5**	**4**	**2.5**	**15**	**2.8**	2.1 U	**5.4**	**7**	**3.7**
Barium	mg/kg	220,000	**275 J**	**46 J**	**288 J**	**227 J**	**116 J**	**24.1 J**	**54.6 J**	**140 J**	**354 J**
Beryllium	mg/kg	2,300	**1.3**	**0.35 J**	**1.7**	0.91 U	**0.81 J**	**0.21 J**	**0.48 J**	**0.87 J**	**6.2**
Cadmium	mg/kg	980	**1.3**	1.4 U	0.45 B	**2.7**	0.55 B	1.3 U	1.5 U	1.3 U	1.1 B
Chromium	mg/kg	120,000	**69.8**	**16.7**	**518**	**605**	**32.3**	**10**	**22 J**	**30.8 J**	**200 J**
Chromium VI	mg/kg	6.3	0.42 B	0.37 B	0.78 B	0.87 B	0.34 B	0.41 B	0.39 B	0.46 B	0.4 B
Cobalt	mg/kg	350	**9.6**	**3.8 J**	**2.5 J**	**11.7**	**7.2**	**2.8 J**	**3.5 J**	**3.9 J**	**2.7 J**
Copper	mg/kg	47,000	**22.1**	**5.3**	**36.9 J**	**172 J**	**24.2**	**3 J**	**7.1 J**	**11.8 J**	**27.3 J**
Iron	mg/kg	820,000	**16,200**	**15,500**	**41,700 J**	**132,000 J**	**18,900**	**8,750**	**21,500**	**29,900**	**59,700**
Lead	mg/kg	800	**63.3**	**8.5**	**25.7 J**	**565 J**	**58.6**	**6.1**	**9 J**	**11.8 J**	**50 J**
Manganese	mg/kg	26,000	**3,690 J**	**96.1 J**	**17,700**	**12,800**	**657 J**	**47.9 J**	**61.7**	**65.2**	**5,340**
Mercury	mg/kg	350	**0.017 J**	**0.014 J**	**0.012 J-**	**0.059 J-**	**0.019 J**	0.11 U	**0.015 J**	0.11 U	0.11 U
Nickel	mg/kg	22,000	**24.4**	**8.7 J**	**8.9 J**	**35.5 J**	**15.6**	**9.3**	**9.4 J**	**11.4 J**	**12.5 J**
Selenium	mg/kg	5,800	3.3 U	3.7 U	3.5 U	3.6 U	4.1 U	3.4 U	4 U	3.6 U	**3.7 J**
Silver	mg/kg	5,800	2.4 U	2.8 U	**0.74 J**	**2.5 J**	3.1 U	2.5 U	3 U	2.7 U	2.8 U
Thallium	mg/kg	12	8.1 U	9.2 U	**29.1**	**43.9**	10.2 U	8.4 U	9.9 U	9 U	9.3 U
Vanadium	mg/kg	5,800	**250 J**	**24.9 J**	**2,980 J**	**4,450 J**	**43.6 J**	**10.1 J**	**35.2 J**	**43.4 J**	**359 J**
Zinc	mg/kg	350,000	**175**	**28.2**	**37.7 J**	**676 J**	**127**	**20.6**	**34.9 J**	**35.5 J**	**187 J**
Other											
Cyanide	mg/kg	150	**0.82 J+**	0.62 U	**0.58 J**	**0.52 J**	0.66 U	**0.054 J+**	0.75 UJ	0.71 UJ	0.29 B

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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 compound/analyte in the sample.

Table 5
Summary of Inorganics Detected in Soil
Parcel B6
Tradepoint Atlantic
Sparrows Point, Maryland

Parameter	Units	PAL	B6-081-SB-5	B6-082-SB-1*	B6-082-SB-5*	B6-083-SB-1*	B6-083-SB-8*	B6-084-SB-1*	B6-084-SB-7*
Metals									
Aluminum	mg/kg	1,100,000	**32,500**	**18,700**	**11,200**	**16,900**	**12,400**	**17,600**	**4,890**
Antimony	mg/kg	470	3.1 UJ	2.5 U	2.9 U	2.7 U	2.8 U	2.3 U	2.5 U
Arsenic	mg/kg	3	**2.3 J**	**5.5**	**6.3**	**16**	2.3 U	**2.1**	2.1 U
Barium	mg/kg	220,000	**1,010 J**	**190**	**56.2**	**233**	**60.3**	**200**	**21.8**
Beryllium	mg/kg	2,300	**3.7**	**1.3**	**0.53 J**	**2.1**	**0.69 J**	**2.1**	**0.19 J**
Cadmium	mg/kg	980	1 B	1.3 B	1.5 U	**0.92 J**	1.4 U	**0.43 J**	1.3 U
Chromium	mg/kg	120,000	**1,070 J**	**41**	**20**	**102**	**28.6**	**444**	**21.3**
Chromium VI	mg/kg	6.3	0.75 B	0.41 B	0.83 B	0.3 B	0.4 B	0.36 B	0.37 B
Cobalt	mg/kg	350	**2.9 J**	**12.4**	**4.8 J**	**34.6**	**7.8**	**2.3 J**	**1.9 J**
Copper	mg/kg	47,000	**23.9 J**	**42.8**	**14.9**	**196**	**7.5**	**67.2**	**5.7**
Iron	mg/kg	820,000	**72,900**	**52,100**	**21,900**	**246,000**	**7,980**	**194,000**	**14,900**
Lead	mg/kg	800	**47.5 J**	**244**	**12**	**19.3**	**10.3**	**109**	**7.1**
Manganese	mg/kg	26,000	**26,900**	**2,440**	**129**	**2,980**	**162**	**10,300**	**246**
Mercury	mg/kg	350	**0.0088 J**	**0.018 J**	**0.008 J**	0.1 U	**0.033 J**	**0.0036 J**	**0.0076 J**
Nickel	mg/kg	22,000	**13.1 J**	**25.4**	**14.8**	**122**	**20.7**	**22.9**	**4.6 J**
Selenium	mg/kg	5,800	4.1 U	3.4 U	3.9 U	3.6 U	3.7 U	3.1 U	3.4 U
Silver	mg/kg	5,800	**1.1 J**	2.5 U	2.9 U	**2.2 J**	2.8 U	**1.7 J**	2.5 U
Thallium	mg/kg	12	**41.8**	8.5 U	9.7 U	8.9 U	9.3 U	7.8 U	8.4 U
Vanadium	mg/kg	5,800	**4,120 J**	**123**	**24**	**55.3**	**25.3**	**210**	**15.4**
Zinc	mg/kg	350,000	**92.8 J**	**478**	**34.7**	**25.4**	**48.4**	**85.9**	**14**
Other									
Cyanide	mg/kg	150	**0.7 J-**	**0.27 J**	0.74 U	**0.42 J**	0.75 U	0.27 B	0.7 U

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

Table 5
Summary of Inorganics Detected in Soil
Parcel B6
Tradepoint Atlantic
Sparrows Point, Maryland

Parameter	Units	PAL	B6-085-SB-1*	B6-085-SB-8*	B6-086-SB-1*	B6-086-SB-4*	B6-087-SB-5*	B6-087-SB-7.5*	B6-088-SB-1
Metals									
Aluminum	mg/kg	1,100,000	**24,500**	**11,800**	**8,190**	**7,630**	**12,800**	**9,230**	**11,000**
Antimony	mg/kg	470	2.3 U	2.8 U	2.7 U	2.5 U	2.8 U	2.6 U	2.6 UJ
Arsenic	mg/kg	3	**7.7**	**43.7**	**8.8**	**9.2**	**3.6**	**3.6**	**4**
Barium	mg/kg	220,000	**428**	**403**	**343**	**327**	**150**	**77.9**	**75.8 J**
Beryllium	mg/kg	2,300	**2.2**	**0.75 J**	0.89 U	0.84 U	**1.3**	**0.8 J**	**0.77 J**
Cadmium	mg/kg	980	1 B	**8.8**	1 B	1.5 B	1.4 U	1.3 U	0.6 B
Chromium	mg/kg	120,000	**248**	**1,600**	**2,840**	**2,100**	**41.6**	**13.1**	**156 J**
Chromium VI	mg/kg	6.3	0.45 B	0.29 B	1.1 B	2.5 B	0.37 B	0.44 B	0.22 B
Cobalt	mg/kg	350	**8.2**	**173**	**2.7 J**	**4.5**	**2.5 J**	**3.8 J**	**4.8**
Copper	mg/kg	47,000	**73.3**	**720**	**73.1**	**76.9**	**14.9**	**18.3**	**31.1**
Iron	mg/kg	820,000	**77,500**	**333,000**	**122,000**	**110,000**	**13,900**	**12,100**	**24,500**
Lead	mg/kg	800	**168**	**2,940**	**18.7**	**33.4**	**5**	**5.7**	**32.8 J**
Manganese	mg/kg	26,000	**11,900**	**7,840**	**108,000**	**79,600**	**3,100**	**843**	**2,260**
Mercury	mg/kg	350	**0.0085 J**	**0.079 J**	**0.0034 J**	0.11 U	0.097 U	**0.0061 J**	**0.017 J**
Nickel	mg/kg	22,000	**36.7**	**1,460**	**35.2**	**44.2**	**6.2 J**	**8.5 J**	**18.6**
Selenium	mg/kg	5,800	3 U	3.7 U	3.6 U	3.4 U	3.7 U	3.5 U	3.5 UJ
Silver	mg/kg	5,800	2.3 U	**7.3**	**10.7**	**8.4**	2.8 U	2.6 U	2.6 U
Thallium	mg/kg	12	7.6 U	9.2 U	**16.7**	**15.6**	9.3 U	8.8 U	8.7 U
Vanadium	mg/kg	5,800	**250**	**344**	**11,500**	**8,860**	**73.6**	**27.6**	**104 J**
Zinc	mg/kg	350,000	**319**	**7,360**	**61.7**	**134**	**26.9**	**74.1**	**206 J**
Other									
Cyanide	mg/kg	150	**0.49 J**	**1.3**	0.55 U	**0.1 J**	**0.62 J**	**0.23 J**	**0.4 J**

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Table 5
Summary of Inorganics Detected in Soil
Parcel B6
Tradepoint Atlantic
Sparrows Point, Maryland

Parameter	Units	PAL	B6-088-SB-5	B6-089-SB-1	B6-089-SB-4	B6-090-SB-2	B6-090-SB-8	B6-090-SB-10*	B6-091-SB-1
Metals									
Aluminum	mg/kg	1,100,000	**46,300**	**32,000**	**20,400**	**17,700**	**10,300**	N/A	**27,500**
Antimony	mg/kg	470	2.5 UJ	2.3 UJ	3.1 UJ	3.1 UJ	3 UJ	N/A	2.4 UJ
Arsenic	mg/kg	3	**3.4**	**3.4**	**4.7**	**5.4**	**8.4**	**3.7**	**4.2**
Barium	mg/kg	220,000	**419 J**	**279 J**	**58.5 J**	**535 J**	**40.4 J**	N/A	**422 J**
Beryllium	mg/kg	2,300	**8.4**	**4.6**	**0.63 J**	**1.1**	**0.56 J**	N/A	**4.5**
Cadmium	mg/kg	980	0.22 B	0.8 B	1.6 U	0.42 B	1.5 U	N/A	0.43 B
Chromium	mg/kg	120,000	**15.3 J**	**269 J**	**24.9 J**	**45.5 J**	**18.6 J**	N/A	**133 J**
Chromium VI	mg/kg	6.3	0.38 B	0.4 B	0.25 B	0.35 B	0.37 B	N/A	0.29 B
Cobalt	mg/kg	350	**0.43 J**	**10.5**	**3.3 J**	**6**	**9.6**	N/A	**13.5**
Copper	mg/kg	47,000	**1.7 J**	**16.7**	**10.7**	**56.5**	**6.6**	N/A	**82.4**
Iron	mg/kg	820,000	**7,530**	**50,700**	**18,900**	**24,300**	**25,100**	N/A	**132,000**
Lead	mg/kg	800	**3.9 J**	**45.5 J**	**12.5 J**	**165 J**	**8.2 J**	N/A	**20.2 J**
Manganese	mg/kg	26,000	**2,490**	**17,600**	**74.5**	**1,040**	**135**	N/A	**8,830**
Mercury	mg/kg	350	0.11 U	0.11 U	**0.049 J**	0.12 U	**0.011 J**	N/A	0.1 U
Nickel	mg/kg	22,000	**1.8 J**	**12.4**	**9.2 J**	**22.1**	**8.9 J**	N/A	**34.7**
Selenium	mg/kg	5,800	3.4 UJ	3.1 UJ	4.1 UJ	4.2 UJ	4 UJ	N/A	3.2 UJ
Silver	mg/kg	5,800	2.5 U	2.3 U	3.1 U	3.1 U	3 U	N/A	2.4 U
Thallium	mg/kg	12	8.5 U	**4.9 J**	10.4 U	10.5 U	10 U	N/A	8.1 U
Vanadium	mg/kg	5,800	**10.9 J**	**330 J**	**41.4 J**	**144 J**	**20.3 J**	N/A	**95.8 J**
Zinc	mg/kg	350,000	**5.8 J**	**109 J**	**40.9 J**	**105 J**	**32 J**	N/A	**24.7 J**
Other									
Cyanide	mg/kg	150	**0.77**	**1**	**0.11 J**	**2.2**	**0.64 J**	N/A	**0.41 J**

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Table 5
Summary of Inorganics Detected in Soil
Parcel B6
Tradepoint Atlantic
Sparrows Point, Maryland

Parameter	Units	PAL	B6-091-SB-9	B6-091-SB-10*	B6-092-SB-1*	B6-092-SB-9*	B6-093-SB-1*	B6-093-SB-7*
Metals								
Aluminum	mg/kg	1,100,000	**12,700**	N/A	**14,900**	**13,100**	**38,100**	**11,700**
Antimony	mg/kg	470	2.8 UJ	N/A	2.3 U	3.3 U	2.3 U	2.7 U
Arsenic	mg/kg	3	**3.7**	2.2 U	**9.3**	2.7 U	**5.2**	**3.9**
Barium	mg/kg	220,000	**28.7 J**	N/A	**199**	**33.3**	**488**	**38.4**
Beryllium	mg/kg	2,300	**0.49 J**	N/A	**0.92**	**0.34 J**	**5.2**	**0.42 J**
Cadmium	mg/kg	980	1.4 U	N/A	**2.5**	1.6 U	**2.3**	0.14 B
Chromium	mg/kg	120,000	**26.7 J**	N/A	**1,220**	**15.8**	**135**	**11.6**
Chromium VI	mg/kg	6.3	1.1 B	N/A	0.8 B	0.52 B	0.39 B	0.86 B
Cobalt	mg/kg	350	**4.8**	N/A	**10**	**3 J**	**7.7**	**2.3 J**
Copper	mg/kg	47,000	**8.6**	N/A	**138**	**3.1 J**	**77.6**	**3.5 J**
Iron	mg/kg	820,000	**18,200**	N/A	**195,000**	**5,900**	**84,200**	**17,800**
Lead	mg/kg	800	**12.7 J**	N/A	**241**	**8.3**	**450**	**9.1**
Manganese	mg/kg	26,000	**76.1**	N/A	**45,500**	**85.5**	**9,290**	**37.2**
Mercury	mg/kg	350	**0.0024 J**	N/A	**0.032 J**	0.12 U	**0.0046 J**	**0.0066 J**
Nickel	mg/kg	22,000	**10.9**	N/A	**54.1**	**7.8 J**	**32.9**	7 B
Selenium	mg/kg	5,800	3.7 UJ	N/A	3 U	4.3 U	**2.3 J**	3.7 U
Silver	mg/kg	5,800	2.8 U	N/A	**1.1 J**	3.3 U	2.3 U	2.7 U
Thallium	mg/kg	12	9.3 U	N/A	7.5 U	10.8 U	7.8 U	9.2 U
Vanadium	mg/kg	5,800	**20.6 J**	N/A	**3,040**	**33.1**	**297**	**16.4**
Zinc	mg/kg	350,000	**36.7 J**	N/A	**614**	**23.6**	**2,410**	**16.9**
Other								
Cyanide	mg/kg	150	0.75 U	N/A	**0.61 J**	0.57 U	**0.44 J**	0.69 U

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Table 6
SUMMARY OF SOIL PAL EXCEEDANCES

Parameter	CAS #	Frequency of Detections (%)	Sample ID of Max Result	Max Result	PAL Solid	Unit
Aroclor 1242	53469-21-9	6	B6-017-SB-1	1.13	0.97	mg/kg
Aroclor 1254	11097-69-1	23	B6-026-SB-1	7.68	0.97	mg/kg
Arsenic	7440-38-2	83	B6-085-SB-8	43.7	3	mg/kg
Benzo[a]pyrene	50-32-8	84	B6-037-SB-5	8	2.1	mg/kg
Chromium VI	18540-29-9	2	B6-015-SB-5	8.7	6.3	mg/kg
Diesel Range Organics	DRO	93	B6-066-SB-5	11,000	6,200	mg/kg
Lead	7439-92-1	98	B6-085-SB-8	2,940	800	mg/kg
Manganese	7439-96-5	100	B6-086-SB-1	108,000	26,000	mg/kg
Naphthalene	91-20-3	58	B6-011-SB-8	24.3	17	mg/kg
PCBs (total)	1336-36-3	48	B6-061-SB-1	10.6	0.97	mg/kg
Thallium	7440-28-0	24	B6-059-SB-8	151	12	mg/kg
Vanadium	7440-62-2	100	B6-059-SB-8	13,800	5,800	mg/kg

TABLE 7
SOIL PAL EXCEEDANCES FOR SPECIFIC TARGETS

Target Feature	Boring ID	Sample Depth (ft)	Parameter	PAL (mg/kg)	Result (mg/kg)	Final Flag
Crane Repair Shop	B6-001-SB	9	Arsenic	3	4.2	
	B6-002-SB	1	Arsenic	3	8.6	
		4.5	Arsenic	3	8.8	
Fuel Areas / Stations	B6-003-SB	1	Manganese	26,000	32,700	
		1	Vanadium	5,800	5,850	
		5	Arsenic	3	6.5	
		10	Arsenic	3	7.9	
	B6-004-SB	1	Arsenic	3	4.7	
		1	Manganese	26,000	34,600	
		4	Arsenic	3	4.2	
Hydraulic Unit / Bulkfill	B6-005-SB	8	Arsenic	3	7.6	
		10	Arsenic	3	6.7	
	B6-006-SB	5	Arsenic	3	3.2	
Lube Oil Houses/Shops	B6-007-SB	1	Arsenic	3	4	
		1	Thallium	12	14.8	
		4	Arsenic	3	3.3	
	B6-008-SB	1	Arsenic	3	10.7	
		4	Arsenic	3	8.9	
		4	Thallium	12	20.4	
Pickler Tank	B6-009-SB	7	Arsenic	3	3	
	B6-010-SB	1	Arsenic	3	3.7	
		1	Manganese	26,000	28,100	
		1	Thallium	12	22.2	
		5	Arsenic	3	3.5	
		5	Manganese	26,000	26,200	
		5	Thallium	12	13.8	
Possible PCB-Contaminated Areas	B6-011-SB	8	Benzo[a]pyrene	2.1	2.1	J
		8	Diesel Range Organics	6,200	7,340	J
		8	Naphthalene	17	24.3	
	B6-012-SB	1	Arsenic	3	6.4	
		4	Arsenic	3	7	
	B6-013-SB	1	Arsenic	3	5.1	
	B6-014-SB	1	Arsenic	3	6	
		1	Manganese	26,000	49,000	
		1	Thallium	12	13	
		4	Arsenic	3	3.3	
		10	Arsenic	3	4.1	
	B6-015-SB	1	Arsenic	3	7.3	
		1	Thallium	12	14.3	
		5	Chromium VI	6.3	8.7	
		5	Manganese	26,000	26,100	

TABLE 7
SOIL PAL EXCEEDANCES FOR SPECIFIC TARGETS

Target Feature	Boring ID	Sample Depth (ft)	Parameter	PAL (mg/kg)	Result (mg/kg)	Final Flag
Descaling Pump House	B6-017-SB	1	Aroclor 1242	0.97	1.13	
		1	Arsenic	3	5	
		1	Manganese	26,000	42,600	
		1	PCBs (total)	0.97	1.13	
		1	Thallium	12	12.3	J
Fuel Pump House	B6-019-SB	1	Arsenic	3	6.2	
		4	Arsenic	3	7.8	
		4	Manganese	26,000	36,600	
	B6-020-SB	1	Arsenic	3	6	
		4	Arsenic	3	3	
		4	Manganese	26,000	30,200	
Hot Strip Mill Cooling Tower	B6-021-SB	1	Arsenic	3	3.6	
	B6-022-SB	1	Arsenic	3	6	
	B6-023-SB	1	Arsenic	3	10.9	
		4	Arsenic	3	17.4	
		10	Arsenic	3	7.6	
Hot Strip Mill Basins / Hot Strip Mill Oil Skimmer System	B6-024-SB	1	Arsenic	3	3.1	
		5	Arsenic	3	3.9	
	B6-025-SB	1	Arsenic	3	5.7	
		5	Arsenic	3	5.3	
	B6-026-SB	1	Aroclor 1254	0.97	7.68	
		1	PCBs (total)	0.97	7.68	
Hot Strip Mill Waste Oil Tank	B6-027-SB	1	Arsenic	3	3.5	
		4	Arsenic	3	3.9	
	B6-028-SB	9	Arsenic	3	4.2	
		10	Arsenic	3	13	
	B6-029-SB	1	Arsenic	3	4.8	
		5	Arsenic	3	3.1	
		5	Manganese	26,000	52,300	
		5	Thallium	12	20	
Former Fuel UST at Contractor's Village	B6-030-SB	1	Arsenic	3	4.7	
		1	Manganese	26,000	26,700	J
	B6-031-SB	1	Manganese	26,000	31,300	J
		4	Arsenic	3	5.1	
	B6-032-SB	1	Arsenic	3	4.8	
		4	Arsenic	3	4	

TABLE 7
SOIL PAL EXCEEDANCES FOR SPECIFIC TARGETS

Target Feature	Boring ID	Sample Depth (ft)	Parameter	PAL (mg/kg)	Result (mg/kg)	Final Flag
Apparent Historical Surface Impoundment ("G" Gate)	B6-033-SB	1	Arsenic	3	3.6	
		1	Manganese	26,000	65,400	
		1	Thallium	12	71.6	J
		4	Arsenic	3	11.4	
		4	Manganese	26,000	42,600	
		4	Thallium	12	37.1	J
	B6-034-SB	4	Arsenic	3	3.6	
	B6-035-SB	1	Manganese	26,000	69,100	
		4	Arsenic	3	4.5	
TMC Oil Recovery Plant and Impoundment	B6-036-SB	1	Arsenic	3	3.8	
		1	Manganese	26,000	27,400	
		8	Manganese	26,000	60,300	
	B6-037-SB	5	Arsenic	3	10.5	
		5	Benzo[a]pyrene	2.1	8	
	B6-038-SB	1	Manganese	26,000	56,400	
		4	Arsenic	3	5.2	
		4	Benzo[a]pyrene	2.1	2.8	
Reclaimed Pit	B6-039-SB	1	Arsenic	3	5.2	
	B6-040-SB	1	Aroclor 1254	0.97	4.64	
		1	Arsenic	3	8.2	
		1	PCBs (total)	0.97	4.64	
		5	Arsenic	3	5.5	
		10	Arsenic	3	7.1	
Scale Pits	B6-041-SB	1	Arsenic	3	3	
		4	Arsenic	3	3.2	
	B6-044-SB	1	Arsenic	3	7.8	
		1	Benzo[a]pyrene	2.1	3.5	
		4	Arsenic	3	13.6	
		4	Thallium	12	18.5	
Electric Sub-Stations	B6-045-SB	1	Arsenic	3	4.5	
		5	Arsenic	3	7.9	
		10	Arsenic	3	3.6	
	B6-046-SB	1	Arsenic	3	29.4	
		1	Lead	800	1,800	J
		6	Arsenic	3	3.8	
		10	Arsenic	3	7.3	
	B6-047-SB	1	Arsenic	3	3.5	
		1	Manganese	26,000	29,500	
		6	Arsenic	3	7.4	
		6	Manganese	26,000	50,300	
	B6-048-SB	1	Manganese	26,000	34,600	
		8	Arsenic	3	24.5	
		8	Lead	800	1,240	
	B6-049-SB	8	Arsenic	3	4.5	
		10	Arsenic	3	3.8	
	B6-050-SB	1	Manganese	26,000	47,500	
		6	Arsenic	3	5.2	

TABLE 7
SOIL PAL EXCEEDANCES FOR SPECIFIC TARGETS

Target Feature	Boring ID	Sample Depth (ft)	Parameter	PAL (mg/kg)	Result (mg/kg)	Final Flag
Fuel/Oil Tanks	B6-051-SB	1	Arsenic	3	5	
		6	Arsenic	3	7.2	
	B6-053-SB	1	Arsenic	3	12.9	
		1	Manganese	26,000	37,400	
		4	Arsenic	3	9.4	
		4	Manganese	26,000	28,500	
	B6-054-SB	4	Diesel Range Organics	6,200	6,840	
	B6-055-SB	1	Arsenic	3	6	
		1	Manganese	26,000	66,300	
		1	Thallium	12	30.9	
		1	Vanadium	5,800	10,500	
		7	Arsenic	3	3.5	
	B6-056-SB	1	PCBs (total)	0.97	1.212	
		8	Arsenic	3	6.3	
	B6-057-SB	1	Arsenic	3	3.2	
		8	Arsenic	3	3.6	
		10	Arsenic	3	5.7	
	B6-058-SB	5	Arsenic	3	3.9	
		10	Arsenic	3	4.1	
	B6-059-SB	1	Arsenic	3	9.3	
		1	Lead	800	2,220	J
		8	Arsenic	3	17.9	
		8	Manganese	26,000	66,600	
		8	Thallium	12	151	
		8	Vanadium	5,800	13,800	J
	B6-060-SB	1	Arsenic	3	5.6	
		4	Arsenic	3	10.9	
Tanks - Unknown Contents	B6-061-SB	1	Arsenic	3	4.1	
		1	PCBs (total)	0.97	10.6	
		4	Arsenic	3	6.3	
	B6-062-SB	1	Arsenic	3	3.6	
		4	Arsenic	3	7.6	
Acid/Waste Acid Tanks	B6-064-SB	8	Arsenic	3	4.7	
		10	Arsenic	3	5	
Waste Oil Pit	B6-065-SB	1	Arsenic	3	7.7	
		4	Arsenic	3	7.4	
	B6-066-SB	1	Arsenic	3	4.2	
		5	Arsenic	3	5.2	
		5	Benzo[a]pyrene	2.1	5.1	
		5	Diesel Range Organics	6,200	11,000	
Furnaces	B6-087-SB	5	Arsenic	3	3.6	
		7.5	Arsenic	3	3.6	
Furnace Hydraulic Control Room	B6-088-SB	1	Arsenic	3	4	
		5	Arsenic	3	3.4	
Storage Yard	B6-089-SB	1	Arsenic	3	3.4	
		4	Arsenic	3	4.7	
Storage Buildings	B6-093-SB	1	Arsenic	3	5.2	
		7	Arsenic	3	3.9	

J: The positive result reported is a quantitative estimate.

EnviroAnalytics Group

Parcel B6 - Table 8

Rejected Results for Soil

Parameter	Result	Units	PAL	Exceeds PAL?	Flag
Sample: *B6-001-SB-1*					
1,4-Dioxane	0.12	mg/kg	24	no	R
Bromomethane	0.0062	mg/kg	30	no	R
Sample: *B6-001-SB-9*					
1,4-Dioxane	0.11	mg/kg	24	no	R
2,3,4,6-Tetrachlorophenol	0.083	mg/kg	25,000	no	R
2,4,5-Trichlorophenol	0.21	mg/kg	82,000	no	R
2,4,6-Trichlorophenol	0.083	mg/kg	210	no	R
2,4-Dichlorophenol	0.083	mg/kg	2,500	no	R
2,4-Dimethylphenol	0.083	mg/kg	16,000	no	R
2,4-Dinitrophenol	0.21	mg/kg	1,600	no	R
2-Chlorophenol	0.083	mg/kg	5,800	no	R
2-Methylphenol	0.083	mg/kg	41,000	no	R
3&4-Methylphenol(m&p Cresol)	0.17	mg/kg	41,000	no	R
Bromomethane	0.0057	mg/kg	30	no	R
Pentachlorophenol	0.21	mg/kg	4	no	R
Phenol	0.083	mg/kg	250,000	no	R
Sample: *B6-002-SB-1*					
1,4-Dioxane	0.14	mg/kg	24	no	R
Bromomethane	0.0071	mg/kg	30	no	R
Sample: *B6-002-SB-4.5*					
1,4-Dioxane	0.1	mg/kg	24	no	R
Bromomethane	0.0052	mg/kg	30	no	R
Sample: *B6-007-SB-1*					
1,4-Dioxane	0.16	mg/kg	24	no	R
Antimony	2.9	mg/kg	470	no	R
Bromomethane	0.0081	mg/kg	30	no	R

Rejected Results for Soil

Parameter	Result	Units	PAL	Exceeds PAL?	Flag
Sample:	***B6-007-SB-4***				
1,4-Dioxane	0.1	mg/kg	24	no	R
Antimony	2.3	mg/kg	470	no	R
Bromomethane	0.0051	mg/kg	30	no	R
Sample:	***B6-008-SB-1***				
1,4-Dioxane	0.12	mg/kg	24	no	R
Antimony	2.6	mg/kg	470	no	R
Bromomethane	0.0058	mg/kg	30	no	R
Sample:	***B6-008-SB-4***				
1,4-Dioxane	0.11	mg/kg	24	no	R
Antimony	3.1	mg/kg	470	no	R
Bromomethane	0.0053	mg/kg	30	no	R
Sample:	***B6-009-SB-7***				
1,4-Dioxane	0.11	mg/kg	24	no	R
Antimony	2.4	mg/kg	470	no	R
Bromomethane	0.0054	mg/kg	30	no	R
Sample:	***B6-010-SB-1***				
1,4-Dioxane	0.11	mg/kg	24	no	R
Antimony	2.3	mg/kg	470	no	R
Bromomethane	0.0053	mg/kg	30	no	R
Sample:	***B6-010-SB-5***				
1,4-Dioxane	0.12	mg/kg	24	no	R
Antimony	2.4	mg/kg	470	no	R
Bromomethane	0.0059	mg/kg	30	no	R
Sample:	***B6-011-SB-1***				
1,4-Dioxane	0.092	mg/kg	24	no	R
Bromomethane	0.0046	mg/kg	30	no	R

Rejected Results for Soil

Parameter	Result	Units	PAL	Exceeds PAL?	Flag
Sample:	***B6-011-SB-8***				
1,4-Dioxane	0.12	mg/kg	24	no	R
Bromomethane	0.0061	mg/kg	30	no	R
Sample:	***B6-012-SB-1***				
1,4-Dioxane	0.11	mg/kg	24	no	R
Bromomethane	0.0054	mg/kg	30	no	R
Sample:	***B6-012-SB-4***				
1,4-Dioxane	0.11	mg/kg	24	no	R
Bromomethane	0.0055	mg/kg	30	no	R
Sample:	***B6-015-SB-1***				
1,4-Dioxane	0.099	mg/kg	24	no	R
Antimony	2.7	mg/kg	470	no	R
Bromomethane	0.005	mg/kg	30	no	R
Sample:	***B6-015-SB-5***				
1,4-Dioxane	0.11	mg/kg	24	no	R
Antimony	2.3	mg/kg	470	no	R
Bromomethane	0.0054	mg/kg	30	no	R
Sample:	***B6-016-SB-1***				
1,4-Dioxane	0.11	mg/kg	24	no	R
Antimony	2.8	mg/kg	470	no	R
Bromomethane	0.0056	mg/kg	30	no	R
Sample:	***B6-016-SB-5***				
1,4-Dioxane	0.12	mg/kg	24	no	R
Antimony	2.3	mg/kg	470	no	R
Bromomethane	0.0061	mg/kg	30	no	R
Sample:	***B6-017-SB-1***				
1,4-Dioxane	0.11	mg/kg	24	no	R
Antimony	2.8	mg/kg	470	no	R

Rejected Results for Soil

Parameter	Result	Units	PAL	Exceeds PAL?	Flag
Sample: ***B6-017-SB-1***					
Bromomethane	0.0057	mg/kg	30	no	R
Methyl Acetate	0.057	mg/kg	1,200,000	no	R
Sample: ***B6-017-SB-6***					
1,4-Dioxane	0.098	mg/kg	24	no	R
Antimony	2.5	mg/kg	470	no	R
Methyl Acetate	0.049	mg/kg	1,200,000	no	R
Sample: ***B6-018-SB-1***					
1,4-Dioxane	0.18	mg/kg	24	no	R
Bromomethane	0.0091	mg/kg	30	no	R
Mercury	0.12	mg/kg	350	no	R
Sample: ***B6-018-SB-4***					
1,4-Dioxane	0.11	mg/kg	24	no	R
Bromomethane	0.0054	mg/kg	30	no	R
Mercury	0.099	mg/kg	350	no	R
Sample: ***B6-022-SB-1***					
1,4-Dioxane	0.095	mg/kg	24	no	R
Bromomethane	0.0047	mg/kg	30	no	R
Sample: ***B6-023-SB-1***					
1,4-Dioxane	0.064	mg/kg	24	no	R
Bromomethane	0.0032	mg/kg	30	no	R
Sample: ***B6-023-SB-4***					
1,4-Dioxane	0.13	mg/kg	24	no	R
Bromomethane	0.0064	mg/kg	30	no	R
Sample: ***B6-025-SB-1***					
1,4-Dioxane	0.071	mg/kg	24	no	R
Bromomethane	0.0035	mg/kg	30	no	R

Parameter	Result	Units	PAL	Exceeds PAL?	Flag
Sample:	***B6-025-SB-5***				
1,4-Dioxane	0.1	mg/kg	24	no	R
Bromomethane	0.0052	mg/kg	30	no	R
Sample:	***B6-027-SB-1***				
1,4-Dioxane	0.13	mg/kg	24	no	R
2,3,4,6-Tetrachlorophenol	0.072	mg/kg	25,000	no	R
2,4,5-Trichlorophenol	0.18	mg/kg	82,000	no	R
2,4,6-Trichlorophenol	0.072	mg/kg	210	no	R
2,4-Dichlorophenol	0.072	mg/kg	2,500	no	R
2,4-Dimethylphenol	0.072	mg/kg	16,000	no	R
2,4-Dinitrophenol	0.18	mg/kg	1,600	no	R
2-Chlorophenol	0.072	mg/kg	5,800	no	R
2-Methylphenol	0.072	mg/kg	41,000	no	R
3&4-Methylphenol(m&p Cresol)	0.14	mg/kg	41,000	no	R
Bromomethane	0.0063	mg/kg	30	no	R
Pentachlorophenol	0.18	mg/kg	4	no	R
Phenol	0.072	mg/kg	250,000	no	R
Sample:	***B6-027-SB-4***				
1,4-Dioxane	0.096	mg/kg	24	no	R
2,4-Dinitrophenol	0.18	mg/kg	1,600	no	R
Bromomethane	0.0048	mg/kg	30	no	R
Sample:	***B6-030-SB-1***				
1,4-Dioxane	0.1	mg/kg	24	no	R
Bromomethane	0.0052	mg/kg	30	no	R
Sample:	***B6-030-SB-5***				
1,4-Dioxane	0.1	mg/kg	24	no	R
Bromomethane	0.0052	mg/kg	30	no	R
Sample:	***B6-031-SB-1***				
1,4-Dioxane	0.11	mg/kg	24	no	R
2,3,4,6-Tetrachlorophenol	0.072	mg/kg	25,000	no	R

Parameter	Result	Units	PAL	Exceeds PAL?	Flag
Sample:	***B6-031-SB-1***				
2,4,5-Trichlorophenol	0.18	mg/kg	82,000	no	R
2,4,6-Trichlorophenol	0.072	mg/kg	210	no	R
2,4-Dichlorophenol	0.072	mg/kg	2,500	no	R
2,4-Dimethylphenol	0.072	mg/kg	16,000	no	R
2,4-Dinitrophenol	0.18	mg/kg	1,600	no	R
2-Chlorophenol	0.072	mg/kg	5,800	no	R
2-Methylphenol	0.072	mg/kg	41,000	no	R
3&4-Methylphenol(m&p Cresol)	0.14	mg/kg	41,000	no	R
Bromomethane	0.0053	mg/kg	30	no	R
Pentachlorophenol	0.18	mg/kg	4	no	R
Phenol	0.072	mg/kg	250,000	no	R
Sample:	***B6-031-SB-4***				
1,4-Dioxane	0.098	mg/kg	24	no	R
Bromomethane	0.0049	mg/kg	30	no	R
Sample:	***B6-032-SB-1***				
1,4-Dioxane	0.11	mg/kg	24	no	R
Bromomethane	0.0055	mg/kg	30	no	R
Sample:	***B6-032-SB-4***				
1,4-Dioxane	0.094	mg/kg	24	no	R
Bromomethane	0.0047	mg/kg	30	no	R
Sample:	***B6-033-SB-1***				
1,4-Dioxane	0.12	mg/kg	24	no	R
Antimony	3.2	mg/kg	470	no	R
Bromomethane	0.0061	mg/kg	30	no	R
Methyl Acetate	0.061	mg/kg	1,200,000	no	R
Sample:	***B6-033-SB-4***				
1,4-Dioxane	0.11	mg/kg	24	no	R
Antimony	2.6	mg/kg	470	no	R
Bromomethane	0.0054	mg/kg	30	no	R

Rejected Results for Soil

Parameter	Result	Units	PAL	Exceeds PAL?	Flag
Sample: ***B6-033-SB-4***					
Methyl Acetate	0.054	mg/kg	1,200,000	no	R
Sample: ***B6-041-SB-1***					
1,4-Dioxane	0.085	mg/kg	24	no	R
Bromomethane	0.0042	mg/kg	30	no	R
Sample: ***B6-041-SB-4***					
1,4-Dioxane	0.11	mg/kg	24	no	R
Bromomethane	0.0055	mg/kg	30	no	R
Sample: ***B6-042-SB-1***					
1,4-Dioxane	0.11	mg/kg	24	no	R
Bromomethane	0.0054	mg/kg	30	no	R
Sample: ***B6-042-SB-8***					
1,4-Dioxane	0.14	mg/kg	24	no	R
Bromomethane	0.0068	mg/kg	30	no	R
Sample: ***B6-043-SB-1***					
1,4-Dioxane	0.12	mg/kg	24	no	R
Bromomethane	0.0058	mg/kg	30	no	R
Sample: ***B6-043-SB-8***					
1,4-Dioxane	0.12	mg/kg	24	no	R
Bromomethane	0.0059	mg/kg	30	no	R
Sample: ***B6-045-SB-1***					
1,4-Dioxane	0.078	mg/kg	24	no	R
Bromomethane	0.0039	mg/kg	30	no	R
Sample: ***B6-045-SB-5***					
1,4-Dioxane	0.12	mg/kg	24	no	R
Bromomethane	0.0058	mg/kg	30	no	R

Rejected Results for Soil

Parameter	Result	Units	PAL	Exceeds PAL?	Flag
Sample: ***B6-046-SB-1***					
1,4-Dioxane	0.11	mg/kg	24	no	R
Bromomethane	0.0055	mg/kg	30	no	R
Sample: ***B6-046-SB-6***					
1,4-Dioxane	0.11	mg/kg	24	no	R
Bromomethane	0.0055	mg/kg	30	no	R
Sample: ***B6-051-SB-1***					
1,4-Dioxane	0.1	mg/kg	24	no	R
Bromomethane	0.0051	mg/kg	30	no	R
Sample: ***B6-051-SB-6***					
1,4-Dioxane	0.1	mg/kg	24	no	R
Bromomethane	0.0051	mg/kg	30	no	R
Sample: ***B6-052-SB-1***					
1,4-Dioxane	0.11	mg/kg	24	no	R
Bromomethane	0.0054	mg/kg	30	no	R
Sample: ***B6-056-SB-1***					
1,4-Dioxane	0.092	mg/kg	24	no	R
Bromomethane	0.0046	mg/kg	30	no	R
Sample: ***B6-056-SB-8***					
1,4-Dioxane	0.13	mg/kg	24	no	R
Bromomethane	0.0067	mg/kg	30	no	R
Sample: ***B6-059-SB-1***					
1,4-Dioxane	0.11	mg/kg	24	no	R
Antimony	2.8	mg/kg	470	no	R
Bromomethane	0.0057	mg/kg	30	no	R
Sample: ***B6-059-SB-8***					
1,4-Dioxane	0.1	mg/kg	24	no	R

Rejected Results for Soil

Parameter	Result	Units	PAL	Exceeds PAL?	Flag
Sample:	***B6-059-SB-8***				
Antimony	2.7	mg/kg	470	no	R
Bromomethane	0.005	mg/kg	30	no	R
Sample:	***B6-060-SB-1***				
1,4-Dioxane	0.096	mg/kg	24	no	R
Antimony	2.9	mg/kg	470	no	R
Bromomethane	0.0048	mg/kg	30	no	R
Sample:	***B6-060-SB-4***				
1,4-Dioxane	0.14	mg/kg	24	no	R
Antimony	2.8	mg/kg	470	no	R
Bromomethane	0.0068	mg/kg	30	no	R
Sample:	***B6-061-SB-1***				
1,4-Dioxane	0.099	mg/kg	24	no	R
Bromomethane	0.005	mg/kg	30	no	R
Sample:	***B6-061-SB-4***				
1,4-Dioxane	0.095	mg/kg	24	no	R
2,4-Dinitrophenol	0.2	mg/kg	1,600	no	R
Bromomethane	0.0047	mg/kg	30	no	R
Sample:	***B6-062-SB-1***				
1,4-Dioxane	0.13	mg/kg	24	no	R
Bromomethane	0.0063	mg/kg	30	no	R
Sample:	***B6-062-SB-4***				
1,4-Dioxane	0.14	mg/kg	24	no	R
Bromomethane	0.0071	mg/kg	30	no	R
Sample:	***B6-063-SB-1***				
1,4-Dioxane	0.14	mg/kg	24	no	R
Bromomethane	0.0068	mg/kg	30	no	R

Rejected Results for Soil

Parameter	Result	Units	PAL	Exceeds PAL?	Flag
Sample:	***B6-063-SB-9***				
1,4-Dioxane	0.1	mg/kg	24	no	R
Bromomethane	0.005	mg/kg	30	no	R
Sample:	***B6-064-SB-1***				
1,4-Dioxane	0.11	mg/kg	24	no	R
2,3,4,6-Tetrachlorophenol	0.076	mg/kg	25,000	no	R
2,4,5-Trichlorophenol	0.19	mg/kg	82,000	no	R
2,4,6-Trichlorophenol	0.076	mg/kg	210	no	R
2,4-Dichlorophenol	0.076	mg/kg	2,500	no	R
2,4-Dimethylphenol	0.076	mg/kg	16,000	no	R
2,4-Dinitrophenol	0.19	mg/kg	1,600	no	R
2-Chlorophenol	0.076	mg/kg	5,800	no	R
2-Methylphenol	0.076	mg/kg	41,000	no	R
3&4-Methylphenol(m&p Cresol)	0.15	mg/kg	41,000	no	R
Bromomethane	0.0055	mg/kg	30	no	R
Pentachlorophenol	0.19	mg/kg	4	no	R
Phenol	0.076	mg/kg	250,000	no	R
Sample:	***B6-064-SB-8***				
1,4-Dioxane	0.11	mg/kg	24	no	R
2,4-Dinitrophenol	0.21	mg/kg	1,600	no	R
Bromomethane	0.0053	mg/kg	30	no	R
Sample:	***B6-067-SB-1***				
1,1,2,2-Tetrachloroethane	0.0051	mg/kg	2.7	no	R
1,4-Dioxane	0.1	mg/kg	24	no	R
2,4-Dinitrophenol	0.19	mg/kg	1,600	no	R
Antimony	2.8	mg/kg	470	no	R
Bromomethane	0.0051	mg/kg	30	no	R
Methyl Acetate	0.051	mg/kg	1,200,000	no	R
Sample:	***B6-067-SB-5***				
1,4-Dioxane	0.12	mg/kg	24	no	R
Antimony	2.5	mg/kg	470	no	R

Rejected Results for Soil

Parameter	Result	Units	PAL	Exceeds PAL?	Flag
Sample: ***B6-067-SB-5***					
Bromomethane	0.0059	mg/kg	30	no	R
Methyl Acetate	0.059	mg/kg	1,200,000	no	R
Sample: ***B6-073-SB-1***					
1,4-Dioxane	0.12	mg/kg	24	no	R
Bromomethane	0.0062	mg/kg	30	no	R
Sample: ***B6-073-SB-5***					
1,4-Dioxane	0.093	mg/kg	24	no	R
Bromomethane	0.0046	mg/kg	30	no	R
Sample: ***B6-075-SB-1***					
1,4-Dioxane	0.11	mg/kg	24	no	R
Bromomethane	0.0053	mg/kg	30	no	R
Sample: ***B6-076-SB-1***					
1,4-Dioxane	0.11	mg/kg	24	no	R
Antimony	2.7	mg/kg	470	no	R
Bromomethane	0.0053	mg/kg	30	no	R
Methyl Acetate	0.053	mg/kg	1,200,000	no	R
Sample: ***B6-076-SB-8***					
1,4-Dioxane	0.11	mg/kg	24	no	R
Antimony	2.8	mg/kg	470	no	R
Bromomethane	0.0054	mg/kg	30	no	R
Methyl Acetate	0.054	mg/kg	1,200,000	no	R
Sample: ***B6-077-SB-1***					
1,4-Dioxane	0.12	mg/kg	24	no	R
Bromomethane	0.0059	mg/kg	30	no	R
Sample: ***B6-077-SB-4***					
1,4-Dioxane	0.089	mg/kg	24	no	R
Bromomethane	0.0044	mg/kg	30	no	R

Rejected Results for Soil

Parameter	Result	Units	PAL	Exceeds PAL?	Flag
Sample:	***B6-078-SB-1***				
1,4-Dioxane	0.13	mg/kg	24	no	R
2,3,4,6-Tetrachlorophenol	0.073	mg/kg	25,000	no	R
2,4-Dinitrophenol	0.18	mg/kg	1,600	no	R
Antimony	2.7	mg/kg	470	no	R
Bromomethane	0.0064	mg/kg	30	no	R
Sample:	***B6-078-SB-8***				
1,4-Dioxane	0.14	mg/kg	24	no	R
Antimony	2.7	mg/kg	470	no	R
Bromomethane	0.0069	mg/kg	30	no	R
Sample:	***B6-079-SB-1***				
1,4-Dioxane	0.11	mg/kg	24	no	R
Bromomethane	0.0056	mg/kg	30	no	R
Sample:	***B6-079-SB-7***				
1,4-Dioxane	0.096	mg/kg	24	no	R
Bromomethane	0.0048	mg/kg	30	no	R
Sample:	***B6-080-SB-1***				
1,4-Dioxane	0.1	mg/kg	24	no	R
Bromomethane	0.005	mg/kg	30	no	R
Sample:	***B6-080-SB-5***				
1,4-Dioxane	0.099	mg/kg	24	no	R
Bromomethane	0.0049	mg/kg	30	no	R
Sample:	***B6-081-SB-1***				
1,4-Dioxane	0.13	mg/kg	24	no	R
Bromomethane	0.0063	mg/kg	30	no	R
Sample:	***B6-081-SB-5***				
1,4-Dioxane	0.13	mg/kg	24	no	R
Bromomethane	0.0067	mg/kg	30	no	R

Rejected Results for Soil

Parameter	Result	Units	PAL	Exceeds PAL?	Flag
Sample:	***B6-088-SB-5***				
1,4-Dioxane	0.11	mg/kg	24	no	R
Methyl Acetate	0.056	mg/kg	1,200,000	no	R
Sample:	***B6-089-SB-1***				
1,4-Dioxane	0.1	mg/kg	24	no	R
Methyl Acetate	0.052	mg/kg	1,200,000	no	R
Sample:	***B6-089-SB-4***				
1,4-Dioxane	0.1	mg/kg	24	no	R
Methyl Acetate	0.05	mg/kg	1,200,000	no	R
Sample:	***B6-090-SB-2***				
1,4-Dioxane	0.13	mg/kg	24	no	R
Methyl Acetate	0.066	mg/kg	1,200,000	no	R
Sample:	***B6-090-SB-8***				
1,4-Dioxane	0.089	mg/kg	24	no	R
Methyl Acetate	0.044	mg/kg	1,200,000	no	R
Sample:	***B6-091-SB-9***				
1,4-Dioxane	0.11	mg/kg	24	no	R
Methyl Acetate	0.054	mg/kg	1,200,000	no	R

Table 9 - Parcel B6
COPC Screening Analysis

Parameter	CAS#	Location of Max Result	Max Detection (mg/kg)	Final Flag	Min Detection (mg/kg)	Average Detection (mg/kg)	Total Samples	Frequency of Detection (%)	Cancer TR=1E-06 (mg/kg)	Non-Cancer HQ=0.1 (mg/kg)	COPC?
1,1-Biphenyl	92-52-4	B6-066-SB-5	6.4		0.017	0.26	182	21.43	410	20	no
1,2,3-Trichlorobenzene	87-61-6	B6-048-SB-8	0.0031	J	0.0031	0.003	178	0.56		93	no
1,2,4,5-Tetrachlorobenzene	95-94-3	B6-072-SB-1	0.076		0.062	0.07	182	1.65		35	no
1,2-Dichlorobenzene	95-50-1	B6-066-SB-5	0.53		0.00085	0.11	178	2.81		930	no
1,2-Dichloroethane	107-06-2	B6-039-SB-1	0.002	J	0.002	0.002	178	0.56	2	14	no
1,3-Dichlorobenzene	541-73-1	B6-066-SB-5	0.11	J	0.11	0.11	178	0.56			no
1,4-Dichlorobenzene	106-46-7	B6-066-SB-5	0.5		0.5	0.50	178	0.56	11	2,500	no
2,4-Dimethylphenol	105-67-9	B6-032-SB-1	0.13		0.015	0.05	178	7.87		1,600	no
2,6-Dinitrotoluene	606-20-2	B6-040-SB-1	0.028	J	0.024	0.03	182	1.10	1.5	25	no
2-Butanone (MEK)	78-93-3	B6-044-SB-1	0.058		0.0023	0.007	178	13.48		19,000	no
2-Chloronaphthalene	91-58-7	B6-072-SB-1	0.21		0.21	0.21	182	0.55		6,000	no
2-Hexanone	591-78-6	B6-044-SB-1	0.0088		0.0088	0.009	178	0.56		130	no
2-Methylnaphthalene	91-57-6	B6-011-SB-8	43.8		0.002	0.73	182	60.44		300	no
2-Methylphenol	95-48-7	B6-073-SB-1 & B6-025-SB-1	0.11		0.015	0.05	178	4.49		4,100	no
3,3'-Dichlorobenzidine	91-94-1	B6-011-SB-8	0.15	J	0.15	0.15	182	0.55	5.1		no
4-Chloroaniline	106-47-8	B6-029-SB-1	0.071	J	0.051	0.06	182	1.10	11	330	no
4-Methyl-2-pentanone (MIBK)	108-10-1	B6-044-SB-1	0.0046	J	0.0046	0.005	178	0.56		14,000	no
Acenaphthene	83-32-9	B6-066-SB-5	8.1		0.0005	0.18	182	63.19		4,500	no
Acenaphthylene	208-96-8	B6-066-SB-5	2.4		0.00066	0.11	182	68.68			no
Acetone	67-64-1	B6-044-SB-1	0.2		0.0051	0.02	178	26.97		67,000	no
Acetophenone	98-86-2	B6-025-SB-1	0.29		0.017	0.07	182	9.89		12,000	no
Aluminum	7429-90-5	B6-018-SB-1	55,900		3,270	20,844	184	100.00		110,000	no
Anthracene	120-12-7	B6-066-SB-5	9		0.0009	0.24	182	81.87		23,000	no
Antimony	7440-36-0	B6-013-SB-1	90.3		1.6	24.4	159	2.52		47	YES (NC)
Aroclor 1242	53469-21-9	B6-017-SB-1	1.13		0.0335	0.26	93	6.45	0.95		YES (C)
Aroclor 1248	12672-29-6	B6-062-SB-1	0.0695		0.0695	0.07	93	1.08	0.95		no
Aroclor 1254	11097-69-1	B6-026-SB-1	7.68		0.0347	0.73	93	22.58	0.97	1.5	YES (C/NC)
Aroclor 1260	11096-82-5	B6-065-SB-1	0.631		0.0096	0.26	93	8.60	0.99		no
Arsenic	7440-38-2	B6-085-SB-8	43.7		1.8	6.10	198	82.83	3	48	YES (C)
Barium	7440-39-3	B6-014-SB-10	1,550		19.5	247	184	100.00		22,000	no
Benz[a]anthracene	56-55-3	B6-069-SB-8.5	9.2		0.0011	0.45	182	82.97	21		no
Benzaldehyde	100-52-7	B6-025-SB-1	0.68	J	0.017	0.07	182	25.27	820	12,000	no
Benzene	71-43-2	B6-011-SB-8	0.037		0.0015	0.007	178	5.62	5.1	42	no

Table 9 - Parcel B6
COPC Screening Analysis

Parameter	CAS#	Location of Max Result	Max Detection (mg/kg)	Final Flag	Min Detection (mg/kg)	Average Detection (mg/kg)	Total Samples	Frequency of Detection (%)	Cancer TR=1E-06 (mg/kg)	Non-Cancer HQ=0.1 (mg/kg)	COPC?
Benzo[a]pyrene	50-32-8	B6-037-SB-5	8		0.0012	0.43	185	83.78	2.1	22	YES (C)
Benzo[b]fluoranthene	205-99-2	B6-037-SB-5	20		0.00057	0.74	184	91.85	21		no
Benzo[g,h,i]perylene	191-24-2	B6-037-SB-5	3.6		0.0012	0.21	182	80.77			no
Benzo[k]fluoranthene	207-08-9	B6-037-SB-5	20.3		0.0012	0.60	182	87.36	210		no
Beryllium	7440-41-7	B6-018-SB-1	10		0.16	2.42	184	90.76	6,900	230	no
bis(2-Ethylhexyl)phthalate	117-81-7	B6-066-SB-5	4		0.015	0.24	182	28.57	160	1,600	no
Cadmium	7440-43-9	B6-048-SB-8	15.2		0.14	3.45	184	20.65	9,300	98	no
Caprolactam	105-60-2	B6-093-SB-1	0.021	J	0.021	0.02	182	0.55		40,000	no
Carbazole	86-74-8	B6-069-SB-8.5	0.83		0.018	0.11	182	28.57			no
Chromium	7440-47-3	B6-086-SB-1	2,840		5.8	368	184	100.00		180,000	no
Chromium VI	18540-29-9	B6-015-SB-5	8.7		1.2	3.78	182	2.20	6.3	350	YES (C)
Chrysene	218-01-9	B6-037-SB-5	7		0.00069	0.43	182	88.46	2,100		no
cis-1,2-Dichloroethene	156-59-2	B6-038-SB-4	0.0045	J	0.0045	0.005	178	0.56		230	no
Cobalt	7440-48-4	B6-085-SB-8	173		0.24	9.66	184	97.28	1,900	35	YES (NC)
Copper	7440-50-8	B6-085-SB-8	720		1.7	66.0	184	98.91		4,700	no
Cyanide	57-12-5	B6-048-SB-8	7		0.038	0.78	182	79.12		120	no
Cyclohexane	110-82-7	B6-066-SB-5	0.38	J	0.007	0.14	178	1.69		2,700	no
Dibenz[a,h]anthracene	53-70-3	B6-069-SB-8.5	0.9		0.0012	0.09	182	63.19	2.1		no
Diethylphthalate	84-66-2	B6-020-SB-1	2.5		0.019	0.90	182	1.65		66,000	no
Di-n-butylphthalate	84-74-2	B6-040-SB-1	0.99		0.02	0.14	182	7.14		8,200	no
Di-n-ocytlphthalate	117-84-0	B6-093-SB-1	0.04	J	0.019	0.03	182	1.10		820	no
Ethylbenzene	100-41-4	B6-076-SB-8	0.28		0.00094	0.06	178	5.62	25	2,000	no
Fluoranthene	206-44-0	B6-066-SB-5	13.2		0.0005	0.65	182	94.51		3,000	no
Fluorene	86-73-7	B6-066-SB-5	10.6		0.0006	0.24	182	59.89		3,000	no
Hexachloroethane	67-72-1	B6-056-SB-8	0.13		0.057	0.09	182	1.10	8	46	no
Indeno[1,2,3-c,d]pyrene	193-39-5	B6-037-SB-5	3.1		0.0012	0.21	182	75.82	21		no
Iron	7439-89-6	B6-040-SB-1	383,000		1,270	77,426	184	100.00		82,000	YES (NC)
Isopropylbenzene	98-82-8	B6-066-SB-5	0.95		0.02	0.34	178	1.69		990	no
Lead^	7439-92-1	B6-085-SB-8	2,940		2.5	139	184	98.37		800	YES (NC)
Manganese	7439-96-5	B6-086-SB-1	108,000		37.2	13,149	185	100.00		2,600	YES (NC)
Mercury	7439-97-6	B6-073-SB-1	0.92		0.0021	0.06	180	74.44		35	no
Methyl Acetate	79-20-9	B6-054-SB-4	0.46	J	0.0024	0.23	164	1.22		120,000	no
Methylene Chloride	75-09-2	B6-017-SB-6	0.0095		0.0095	0.01	178	0.56	1,000	320	no

Table 9 - Parcel B6
COPC Screening Analysis

Parameter	CAS#	Location of Max Result	Max Detection (mg/kg)	Final Flag	Min Detection (mg/kg)	Average Detection (mg/kg)	Total Samples	Frequency of Detection (%)	Cancer TR=1E-06 (mg/kg)	Non-Cancer HQ=0.1 (mg/kg)	COPC?
Naphthalene	91-20-3	B6-011-SB-8	24.3		0.0019	0.66	182	57.69	17	59	YES (C)
Nickel	7440-02-0	B6-085-SB-8	1,460		1.7	45.3	184	97.28	64,000	2,200	no
N-Nitroso-di-n-propylamine	621-64-7	B6-093-SB-1	0.056	J	0.056	0.06	182	0.55	0.33		no
N-Nitrosodiphenylamine	86-30-6	B6-030-SB-1	0.055	J	0.015	0.03	182	2.75	470		no
PCBs (total)*	1336-36-3	B6-061-SB-1	10.6		0.0375	0.85	93	48.39	0.94		YES (C)
Pentachlorophenol	87-86-5	B6-013-SB-1	0.041	J	0.036	0.04	178	1.12	4	280	no
Phenanthrene	85-01-8	B6-066-SB-5	30		0.00057	0.71	182	92.31			no
Phenol	108-95-2	B6-066-SB-5	0.71		0.018	0.13	178	10.67		25,000	no
Pyrene	129-00-0	B6-066-SB-5	13.4		0.001	0.66	182	91.21		2,300	no
Selenium	7782-49-2	B6-053-SB-1	6.4		2	3.43	184	8.70		580	no
Silver	7440-22-4	B6-059-SB-8	16.6	J	0.74	2.92	184	20.11		580	no
Styrene	100-42-5	B6-011-SB-8	0.01		0.01	0.01	178	0.56		3,500	no
Tetrachloroethene	127-18-4	B6-038-SB-1	0.011		0.0041	0.007	178	2.81	100	39	no
Thallium	7440-28-0	B6-059-SB-8	151		3.8	19.6	185	23.78		1.2	YES (NC)
Toluene	108-88-3	B6-011-SB-8	0.14		0.0015	0.01	178	7.30		4,700	no
Trichloroethene	79-01-6	B6-038-SB-4	0.0042	J	0.0042	0.004	178	0.56	6	1.9	no
Vanadium	7440-62-2	B6-059-SB-8	13,800	J	5.6	1,039	185	100.00		580	YES (NC)
Xylenes	1330-20-7	B6-066-SB-5	1.3		0.0029	0.21	178	8.43		250	no
Zinc	7440-66-6	B6-085-SB-8	7,360		1.9	352	184	97.28		35,000	no

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

COPC = Constituent of Potential Concern
C = Compound was identified as a cancer COPC
NC = Compound was identified as a non-cancer COPC
TR = Target Risk
HQ = Hazard Quotient

*PCBs (total) unclude the sum of all detected aroclor mixtures, including those without regional screening levels (e.g. Aroclor 1262, Aroclor 1268) which are not displayed.
^The COPC screening level for lead was not adjusted to the HQ=0.1 because lead is not assessed in the SLRA. The 800 mg/kg PAL is relevant to the Adult Lead Model procedure.

Table 10 - Parcel B6
Assessment of Lead

Exposure Unit	Surface/Sub-Surface	Arithmetic Mean (mg/kg)
EU1 (51.6 ac.)	Surface	83.2
	Sub-Surface	265
	Pooled	174
EU2 (48.5 ac.)	Surface	155
	Sub-Surface	202
	Pooled	177
EU3 (48.4 ac.)	Surface	136
	Sub-Surface	73.4
	Pooled	102

Adult Lead Model (ALM) Risk Levels	
Soil Concentration (mg/kg)	Probability of Blood Concentration of 10 ug/dL
2,518 mg/kg	5%
3,216 mg/kg	10%

Table 11 - Parcel B6
Soil Exposure Point Concentrations

			EPCs - Surface Soils					
Parameter	Cancer COPC Screening Level (mg/kg)	Non-Cancer COPC Screening Level (mg/kg)	EPC Type Exposure Unit 1	EPC Exposure Unit 1 (mg/kg)	EPC Type Exposure Unit 2	EPC Exposure Unit 2 (mg/kg)	EPC Type Exposure Unit 3	EPC Exposure Unit 3 (mg/kg)
Arsenic	3.00	48.0	95% GROS Adjusted Gamma UCL	**11.1**	95% GROS Adjusted Gamma UCL	**12.8**	95% GROS Adjusted Gamma UCL	**5.51**
Cobalt	1,900	35.0	97.5% KM (Chebyshev) UCL	**51.8**	97.5% KM (Chebyshev) UCL	**50.9**	95% KM (Chebyshev) UCL	11.1
Iron		82,000	95% Student's-t UCL	**141,400**	95% Student's-t UCL	**109,100**	95% Adjusted Gamma UCL	**113,200**
Manganese		2,600	95% Student's-t UCL	**35,343**	95% Adjusted Gamma UCL	**23,298**	95% Adjusted Gamma UCL	**15,534**
Thallium		1.20	Maximum Value	**71.6**	95% KM (% Bootstrap) UCL	**6.37**	95% KM (% Bootstrap) UCL	**9.39**
Vanadium		580	95% Student's-t UCL	**2,862**	95% Chebyshev (Mean, Sd) UCL	**3,197**	95% Chebyshev (Mean, Sd) UCL	**1,747**
PCBs (total)	0.94		95% KM (% Bootstrap) UCL	0.15	95% KM (BCA) UCL	0.20	97.5% KM (Chebyshev) UCL	**2.73**
Aroclor 1254	NE	1.50	Maximum Value	0.098	Maximum Value	0.43	95% KM (BCA) UCL	0.79
Benzo[a]pyrene	2.10	22.0	95% KM (Chebyshev) UCL	0.51	99% KM (Chebyshev) UCL	1.58	95% KM (Chebyshev) UCL	0.52
Naphthalene	17	59.0	95% KM (Chebyshev) UCL	0.33	99% KM (Chebyshev) UCL	2.48	95% Adjusted Gamma KM-UCL	0.13

Bold indicates EPC higher than lowest COPC SL
COPC = Constituent of Potential Concern
NE = Not Evaluated. Aroclor 1254 was included for non-cancer hazard only. The carcinogenic risk is evaluated with total PCBs.

Table 11 - Parcel B6
Soil Exposure Point Concentrations

			EPCs - Sub-Surface Soils					
Parameter	Cancer COPC Screening Level (mg/kg)	Non-Cancer COPC Screening Level (mg/kg)	EPC Type Exposure Unit 1	EPC Exposure Unit 1 (mg/kg)	EPC Type Exposure Unit 2	EPC Exposure Unit 2 (mg/kg)	EPC Type Exposure Unit 3	EPC Exposure Unit 3 (mg/kg)
Arsenic	3.00	48.0	95% GROS Adjusted Gamma UCL	**13.6**	95% KM (Chebyshev) UCL	**15.2**	95% KM (Chebyshev) UCL	**6.76**
Cobalt	1,900	35.0	95% Chebyshev (Mean, Sd) UCL	**44.5**	95% Chebyshev (Mean, Sd) UCL	**48.3**	95% KM (Chebyshev) UCL	8.54
Iron		82,000	95% Student's-t UCL	**134,300**	95% Chebyshev (Mean, Sd) UCL	**130,400**	95% H-UCL	63,643
Manganese		2,600	95% Student's-t UCL	**27,962**	97.5% Chebyshev (Mean, Sd) UCL	**34,220**	95% Adjusted Gamma UCL	**11,052**
Thallium		1.20	Maximum Value	**49.7**	95% KM (t) UCL	**14.8**	95% KM (BCA) UCL	**15.8**
Vanadium		580	95% Adjusted Gamma UCL	**3,086**	97.5% Chebyshev (Mean, Sd) UCL	**5,215**	95% H-UCL	**952**
PCBs (total)	0.94		N/A	N/A	N/A	N/A	Maximum Value	0.041
Aroclor 1254	NE	1.50	N/A	N/A	N/A	N/A	N/A	N/A
Benzo[a]pyrene	2.10	22.0	95% KM (Chebyshev) UCL	**3.98**	99% KM (Chebyshev) UCL	0.78	95% KM (Chebyshev) UCL	0.47
Naphthalene	17	59.0	95% KM (Chebyshev) UCL	3.76	95% GROS Adjusted Gamma UCL	0.11	99% KM (Chebyshev) UCL	5.45

Bold indicates EPC higher than lowest COPC SL
COPC = Constituent of Potential Concern
N/A indicates no detections
NE = Not Evaluated. Aroclor 1254 was included for non-cancer hazard only. The carcinogenic risk is evaluated with total PCBs.

Table 11 - Parcel B6
Soil Exposure Point Concentrations

			EPCs - Pooled Soils					
Parameter	Cancer COPC Screening Level (mg/kg)	Non-Cancer COPC Screening Level (mg/kg)	EPC Type Exposure Unit 1	EPC Exposure Unit 1 (mg/kg)	EPC Type Exposure Unit 2	EPC Exposure Unit 2 (mg/kg)	EPC Type Exposure Unit 3	EPC Exposure Unit 3 (mg/kg)
Arsenic	3.00	48.0	95% KM (BCA) UCL	**6.12**	95% KM (Chebyshev) UCL	**11.9**	95% KM (BCA) UCL	**5.31**
Cobalt	1,900	35.0	95% KM (Chebyshev) UCL	33.3	95% KM (Chebyshev) UCL	**35.0**	95% KM (Chebyshev) UCL	8.66
Iron		82,000	95% Student's-t UCL	**129,400**	95% H-UCL	**102,600**	95% H-UCL	**89,304**
Manganese		2,600	95% Student's-t UCL	**29,366**	95% Adjusted Gamma UCL	**17,596**	95% Approximate Gamma UCL	**11,940**
Thallium		1.20	95% KM (t) UCL	**15.6**	95% KM (% Bootstrap) UCL	**9.30**	95% Approximate Gamma KM-UCL	**12.2**
Vanadium		580	95% Adjusted Gamma UCL	**2,739**	95% Chebyshev (Mean, Sd) UCL	**2,829**	95% Chebyshev (Mean, Sd) UCL	**1,463**
PCBs (total)	0.94		95% KM (% Bootstrap) UCL	0.15	95% KM (BCA) UCL	0.20	97.5% KM (Chebyshev) UCL	**2.57**
Aroclor 1254	NE	1.50	Maximum Value	0.098	Maximum Value	0.43	95% KM (BCA) UCL	0.71
Benzo[a]pyrene	2.10	22.0	97.5% KM (Chebyshev) UCL	**2.74**	97.5% KM (Chebyshev) UCL	0.64	97.5% KM (Chebyshev) UCL	0.50
Naphthalene	17	59.0	97.5% KM (Chebyshev) UCL	2.55	97.5% KM (Chebyshev) UCL	0.89	97.5% KM (Chebyshev) UCL	1.97

Bold indicates EPC higher than lowest COPC SL
COPC = Constituent of Potential Concern
NE = Not Evaluated. Aroclor 1254 was included for non-cancer hazard only. The carcinogenic risk is evaluated with total PCBs.

Table 12 - Parcel B6
Surface Soils
Composite Worker Risk Ratios

Parameter	Target Organ	EU 1 (51.6 ac.)					EU 2 (48.5 ac.)				
			Composite Worker					Composite Worker			
			RSLs		Risk Estimates			RSLs		Risk Estimates	
		EPC mg/kg	Cancer	Non-Cancer	Risk	HQ	EPC mg/kg	Cancer	Non-Cancer	Risk	HQ
Arsenic	**Cardiovascular; Dermal**	11.1	3.00	480	4E-06	0.02	12.8	3.00	480	4E-06	0.03
Cobalt	**Thyroid**	51.8	1,900	350	3E-08	0.1	50.9	1,900	350	3E-08	0.1
Iron	**Gastrointestinal**	141,400		820,000		0.2	109,100		820,000		0.1
Manganese	**Nervous**	35,343		26,000		1	23,298		26,000		0.9
Thallium	**Dermal**	**71.6**		12.0		6	6.37		12.0		0.5
Vanadium	**Dermal**	2,862		5,800		0.5	3,197		5,800		0.6
PCBs (total)		0.15	0.94		2E-07		0.20	0.94		2E-07	
Aroclor 1254	**Dermal; Immune; Ocular**	**0.098**	NE	15.0		0.007	**0.43**	NE	15.0		0.03
Benzo[a]pyrene	**Developmental**	0.51	2.10	220	2E-07	0.002	1.58	2.10	220	8E-07	0.007
Naphthalene	**Nervous; Respiratory**	0.33	17.0	590	2E-08	0.0006	2.48	17.0	590	1E-07	0.004
					4E-06	↓				**5E-06**	↓

Bold indicates maximum values was used instead of UCL due to too few detections

RSLs were obtained from the EPA Regional Screening Levels at https://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search

NE = Not Evaluated. Aroclor 1254 was included for non-cancer hazard only. The carcinogenic risk is evaluated with total PCBs.

Total HI	Cardiovascular	0
	Dermal	6
	Thyroid	0
	Gastrointestinal	0
	Nervous	1
	Immune	0
	Ocular	0
	Developmental	0
	Respiratory	0

Total HI	Cardiovascular	0
	Dermal	1
	Thyroid	0
	Gastrointestinal	0
	Nervous	1
	Immune	0
	Ocular	0
	Developmental	0
	Respiratory	0

Table 12 - Parcel B6
Surface Soils
Composite Worker Risk Ratios

Parameter	Target Organ	EU 3 (48.4 ac.)				
			Composite Worker			
			RSLs		Risk Estimates	
		EPC mg/kg	Cancer	Non-Cancer	Risk	HQ
Arsenic	**Cardiovascular; Dermal**	5.51	3.00	480	2E-06	0.01
Cobalt	**Thyroid**	11.1	1,900	350	6E-09	0.03
Iron	**Gastrointestinal**	113,200		820,000		0.1
Manganese	**Nervous**	15,534		26,000		0.6
Thallium	**Dermal**	9.39		12.0		0.8
Vanadium	**Dermal**	1,747		5,800		0.3
PCBs (total)		2.73	0.94		3E-06	
Aroclor 1254	**Dermal; Immune; Ocular**	0.79	NE	15.0		0.05
Benzo[a]pyrene	**Developmental**	0.52	2.10	220	2E-07	0.002
Naphthalene	**Nervous; Respiratory**	0.13	17.0	590	8E-09	0.0002
					5E-06	↓

Bold indicates maximum values was used instead of UCL due to too few detections

RSLs were obtained from the EPA Regional Screening Levels at https://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search

NE = Not Evaluated. Aroclor 1254 was included for non-cancer hazard only. The carcinogenic risk is evaluated with total PCBs.

Total HI	Cardiovascular	0
	Dermal	1
	Thyroid	0
	Gastrointestinal	0
	Nervous	1
	Immune	0
	Ocular	0
	Developmental	0
	Respiratory	0

Table 13 - Parcel B6
Sub-Surface Soils
Composite Worker Risk Ratios

Parameter	Target Organ	EU 1 (51.6 ac.)					EU 2 (48.5 ac.)				
			Composite Worker					Composite Worker			
			RSLs		Risk Estimates			RSLs		Risk Estimates	
		EPC mg/kg	Cancer	Non-Cancer	Risk	HQ	EPC mg/kg	Cancer	Non-Cancer	Risk	HQ
Arsenic	**Cardiovascular; Dermal**	13.6	3.00	480	5E-06	0.03	15.2	3.00	480	5E-06	0.03
Cobalt	**Thyroid**	44.5	1,900	350	2E-08	0.1	48.3	1,900	350	3E-08	0.1
Iron	**Gastrointestinal**	134,300		820,000		0.2	130,400		820,000		0.2
Manganese	**Nervous**	27,962		26,000		1	34,220		26,000		1
Thallium	**Dermal**	**49.7**		12.0		4	14.8		12.0		1
Vanadium	**Dermal**	3,086		5,800		0.5	5,215		5,800		0.9
PCB (total)		N/A	0.94				N/A	0.94			
Benzo[a]pyrene	**Developmental**	3.98	2.10	220	2E-06	0.02	0.78	2.10	220	4E-07	0.004
Naphthalene	**Nervous; Respiratory**	3.76	17.0	590	2E-07	0.006	0.11	17.0	590	6E-09	0.0002
					7E-06	↓				**5E-06**	↓

N/A indicates not detections in specified EU

Bold indicates maximum values was used instead of UCL due to too few detections

RSLs were obtained from the EPA Regional Screening Levels at https://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search

Total HI	Cardiovascular	0
	Dermal	5
	Thyroid	0
	Gastrointestinal	0
	Nervous	1
	Developmental	0
	Respiratory	0

Total HI	Cardiovascular	0
	Dermal	2
	Thyroid	0
	Gastrointestinal	0
	Nervous	1
	Developmental	0
	Respiratory	0

Table 13 - Parcel B6
Sub-Surface Soils
Composite Worker Risk Ratios

Parameter	Target Organ	EU 3 (48.4 ac.)				
			Composite Worker			
			RSLs		Risk Estimates	
		EPC mg/kg	Cancer	Non-Cancer	Risk	HQ
Arsenic	**Cardiovascular; Dermal**	6.76	3.00	480	2E-06	0.01
Cobalt	**Thyroid**	8.54	1,900	350	4E-09	0.02
Iron	**Gastrointestinal**	63,643		820,000		0.08
Manganese	**Nervous**	11,052		26,000		0.4
Thallium	**Dermal**	15.8		12.0		1
Vanadium	**Dermal**	952		5,800		0.2
PCB (total)		**0.041**	0.94		4E-08	
Benzo[a]pyrene	**Developmental**	0.47	2.10	220	2E-07	0.002
Naphthalene	**Nervous; Respiratory**	5.45	17.0	590	3E-07	0.009
					3E-06	↓

N/A indicates not detections in specified EU

Bold indicates maximum values was used instead of UCL due to too few detections

RSLs were obtained from the EPA Regional Screening Levels at https://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search

Total HI	Cardiovascular	0
	Dermal	1
	Thyroid	0
	Gastrointestinal	0
	Nervous	0
	Developmental	0
	Respiratory	0

Table 14 - Parcel B6
Pooled Soils
Composite Worker Risk Ratios

Parameter	Target Organ	EU 1 (51.6 ac.)					EU 2 (48.5 ac.)				
			Composite Worker					Composite Worker			
			RSLs		Risk Estimates			RSLs		Risk Estimates	
		EPC mg/kg	Cancer	Non-Cancer	Risk	HQ	EPC mg/kg	Cancer	Non-Cancer	Risk	HQ
Arsenic	**Cardiovascular; Dermal**	6.12	3.00	480	2E-06	0.01	11.9	3.00	480	4E-06	0.02
Cobalt	**Thyroid**	33.3	1,900	350	2E-08	0.1	35.0	1,900	350	2E-08	0.1
Iron	**Gastrointestinal**	129,400		820,000		0.2	102,600		820,000		0.1
Manganese	**Nervous**	29,366		26,000		1	17,596		26,000		0.7
Thallium	**Dermal**	15.6		12.0		1	9.30		12.0		0.8
Vanadium	**Dermal**	2,739		5,800		0.5	2,829		5,800		0.5
PCBs (total)		0.15	0.94		2E-07		0.20	0.94		2E-07	
Aroclor 1254	**Dermal; Immune; Ocular**	**0.098**	NE	15.0		0.007	**0.43**	NE	15.0		0.03
Benzo[a]pyrene	**Developmental**	2.74	2.10	220	1E-06	0.01	0.64	2.10	220	3E-07	0.003
Naphthalene	**Nervous; Respiratory**	2.55	17.0	590	2E-07	0.004	0.89	17.0	590	5E-08	0.002
					4E-06	↓				**5E-06**	↓

Bold indicates maximum values was used instead of UCL due to too few detections

RSLs were obtained from the EPA Regional Screening Levels at https://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search

NE = Not Evaluated. Aroclor 1254 was included for non-cancer hazard only. The carcinogenic risk is evaluated with total PCBs.

Total HI	Cardiovascular	0
	Dermal	2
	Thyroid	0
	Gastrointestinal	0
	Nervous	1
	Immune	0
	Ocular	0
	Developmental	0
	Respiratory	0

Total HI	Cardiovascular	0
	Dermal	1
	Thyroid	0
	Gastrointestinal	0
	Nervous	1
	Immune	0
	Ocular	0
	Developmental	0
	Respiratory	0

Table 14 - Parcel B6
Pooled Soils
Composite Worker Risk Ratios

Parameter	Target Organ	EU 3 (48.4 ac.)				
			Composite Worker			
			RSLs		Risk Estimates	
		EPC mg/kg	Cancer	Non-Cancer	Risk	HQ
Arsenic	**Cardiovascular; Dermal**	5.31	3.00	480	2E-06	0.01
Cobalt	**Thyroid**	8.66	1,900	350	5E-09	0.02
Iron	**Gastrointestinal**	89,304		820,000		0.1
Manganese	**Nervous**	11,940		26,000		0.5
Thallium	**Dermal**	12.2		12.0		1
Vanadium	**Dermal**	1,463		5,800		0.3
PCBs (total)		2.57	0.94		3E-06	
Aroclor 1254	**Dermal; Immune; Ocular**	0.71	NE	15.0		0.05
Benzo[a]pyrene	**Developmental**	0.50	2.10	220	2E-07	0.002
Naphthalene	**Nervous; Respiratory**	1.97	17.0	590	1E-07	0.003
					5E-06	↓

Bold indicates maximum values was used instead of UCL due to too few detections

RSLs were obtained from the EPA Regional Screening Levels at https://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search

NE = Not Evaluated. Aroclor 1254 was included for non-cancer hazard only. The carcinogenic risk is evaluated with total PCBs.

Total HI	Cardiovascular	0
	Dermal	1
	Thyroid	0
	Gastrointestinal	0
	Nervous	0
	Immune	0
	Ocular	0
	Developmental	0
	Respiratory	0

APPENDIX A

Parcel B6 Sampling Plan Summary
Former Sparrows Point Steel Mill
Sparrows Point, Maryland

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
Crane Repair Shop		Drawing 5047	Investigate potential impacts related to the crane repair shop (potential leaks or releases).	2	B6-001 and B6-002	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, PCBs (0-1')
Fuel Areas/ Stations		Drawing 5050	Investigate potential impacts related to the fuel areas and stations (potential leaks or releases).	2	B6-003 and B6-004	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, PCBs (0-1')
Hydraulic Unit/ Bulkfill		Drawing 5146	Investigate potential impacts related to the hydraulic unit and bulkfill (potential leaks or releases).	2	B6-005 and B6-006	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, PCBs (0-1')
Lube Oil Houses/Shops		Drawing 5146	Investigate potential impacts related to lube oil houses and shops (potential leaks or releases).	2	B6-007 and B6-008	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, PCBs (0-1')
Pickler Tank		Drawing 5046	Investigate potential impacts related to the pickler tank (potential leaks or releases).	2	B6-009 and B6-010	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, PCBs (0-1')
Possible PCB-Contaminated Areas		PCB Site Inventory Data/Map	Investigate potential impacts related to the storage and operation of PCB-containing equipment (potential leaks or releases).	6	B6-011 through B6-016	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, PCBs (0-1')
Descaling Pump House		Drawing 5141	Investigate potential impacts related to the descaling pump house (potential leaks or releases).	2	B6-017 and B6-018	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, PCBs (0-1')
Fuel Pump House		Drawing 5051	Investigate potential impacts related to pump houses used for fuel (potential leaks or releases).	2	B6-019 and B6-020	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, PCBs (0-1')

Parcel B6 Sampling Plan Summary
Former Sparrows Point Steel Mill
Sparrows Point, Maryland

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
Hot Strip Mill Cooling Tower	REC (unidentified), Finding 30/ SWMU 65	Drawing 5041	Wastewater from the Hot Strip Mill Basins was discharged to the cooling tower. If the cooling tower was unable to accept the wastewater volume, the Tin Mill Canal acted as the overflow. Heavy oil and grease impacted scale was observed on the tower and surrounding ground during the site visit. No specific recommendations for further action were given regarding SWMU 65.	3	B6-021 through B6-023	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, PCBs (0-1')
Hot Strip Mill Basins / Hot Strip Mill Oil Skimmer System	REC 1L, 1N, Finding 27, 29/ SWMU 62, 64	DCC Figure 3-1/ Drawing 5041	The basins and oil skimmer system associated with the Hot Strip Mill were located to the east of the Finishing Mills Area. The settling basins removed mill scale from the process wastewater so it could be recycled (sent to Coke Point for metals recovery). The oil skimmer system was located directly above the settling basins, and recovered waste oil from the basins. The waste oil was temporarily stored in the waste oil tank (SWMU 63) before being sent to the PORI Area (SWMUs 71 to 73). During the 1991 VSI, a pile of mill scale was observed on the ground adjacent to the north basin. Mill scale was also observed on the surrounding ground and on the basin walls, which were in poor condition. Further evaluation was proposed regarding SWMU 62/64.	3	B6-024 through B6-026	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, PCBs (0-1')
Hot Strip Mill Waste Oil Tank	REC 1M, Finding 28/ SWMU 63	DCC Figure 3-1/ Drawing 5041	The waste oil tank temporarily held waste oil which had been recovered from the settling basins by the oil skimmer system (SWMUs 62, 64). After storage, the oil was transferred to the PORI Area (SWMUs 71 to 73), where the waste oil was further reclaimed. Further evaluation was proposed regarding SWMU 63.	3	B6-027 through B6-029	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, PCBs (0-1')
Former Fuel UST at Contractor's Village	REC 20, Finding 270	REC Location Map	During a site visit, an area of storage buildings included in the former Contractor's Village was observed east of the rail yards. The area was formerly used by contractors for equipment storage and repairs. A diesel fuel UST was formerly located along the eastern edge of the Contractor's Village. The UST was removed, and it is unclear whether any leaks or staining were observed in the surrounding soil.	3	B6-030 through B6-032	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, PCBs (0-1')
Apparent Historical Surface Impoundment ("G" Gate)	REC 22, Finding 273	REC Location Map/ Drawing 5051	A small irregular shaped image which may have been a pond was visible on aerial photography, in the area just north of the Tin Mill Canal. The pond was located just east of the "G" Gate along the south side of Route 158, in an area converted to a vehicle parking lot. The pond appeared to discharge a dark plume to the surface waters of the remnant Humphrey Creek. It is unclear what materials were present in the discharge.	3	B6-033 through B6-035	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, PCBs (0-1')

Parcel B6 Sampling Plan Summary
Former Sparrows Point Steel Mill
Sparrows Point, Maryland

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
TMC Oil Recovery Plant and Impoundment	REC 26, Finding 278	REC Location Map/ Drawing 5050	Based on a review of aerial photography, a small oil recovery plant was located just north of the Tin Mill Canal, with a small rectangular surface impoundment located just to the southwest. The impoundment appeared to be diked to separate it from the adjoining surface waters of the Humphrey Creek. The area may have contained petroleum products and/or potentially hazardous substances.	3	B6-036 through B6-038	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, PCBs (0-1')
Reclaimed Pit		Drawing 5141	Investigate potential impacts related to the reclaimed pit (potential leaks or releases).	2	B6-039 and B6-040	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, PCBs (0-1')
Scale Pits		Drawings 5041 and 5141	Investigate potential impacts related to the scale pits (potential leaks or releases).	4	B6-041 through B6-044	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, PCBs (0-1')
Electric Sub-Stations		Drawings 5041 and 5050	Investigate potential impacts related to electric sub-stations (potential leaks or releases).	6	B6-045 through B6-050	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, PCBs (0-1')
Fuel/Oil Tanks		Drawings 5041, 5050, 5051, and 5146	Investigate potential impacts related to fuel and oil tanks (potential leaks or releases).	10	B6-051 through B6-060	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, PCBs (0-1')
Tanks - Unknown Contents		Drawing 5041	Investigate potential impacts related to tanks containing unknown substances (potential leaks or releases).	2	B6-061 and B6-062	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, PCBs (0-1')
Acid/Waste Acid Tanks		Drawing 5051	Investigate potential impacts related to acid and waste acid tanks (potential leaks or releases).	2	B6-063 and B6-064	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, PCBs (0-1')
Waste Oil Pit		Drawing 5050	Investigate potential impacts related to the waste oil pit (potential leaks or releases).	2	B6-065 and B6-066	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, PCBs (0-1')

Parcel B6 Sampling Plan Summary
Former Sparrows Point Steel Mill
Sparrows Point, Maryland

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
Parcel B6 Coverage			Investigate potential impacts related to unknown historical activities, and characterize soil in areas not previously sampled.	20	B6-067 through B6-086	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, PCBs (0-1')
Furnaces		Drawings 5041 and 5141	MDE Request. Investigate potential impacts related to the furnaces (potential leaks or releases).	1	B6-087	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')
Furnace Hydraulic Control Room		Drawing 5141	MDE Request. Investigate potential impacts related to the furnace hydraulic control room (potential leaks or releases).	1	B6-088	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')
Storage Yard		Drawing 5147	MDE Request. Investigate potential impacts related to the storage yard (potential leaks or releases).	1	B6-089	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')
Parcel B6 Coverage (additional)			MDE Request. Investigate potential impacts related to unknown historical activities, and characterize soil in areas not previously sampled.	3	B6-090 through B6-092	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')
Storage Buildings		Drawing 5147	MDE Request. Investigate potential impacts related to the former storage buildings (potential leaks or releases).	1	B6-093	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')
			Total:	93				

Soil Borings Sampling Density Requirements (from Worksheet 17 - Sampling Design and Rationale)
No Engineered Barrier (71-100 acres): 1 boring per 2.5 acres with no less than 35.
Engineered Barrier (71-100 acres): 1 boring per 5 acres with no less than 17.
No Engineered Barrier (75.1 acres) = **35 borings required, 45 proposed**
Engineered Barrier (72.9 acres) = **17 borings required, 48 proposed**
Parking/Roads (34.6 acres)
Buildings (38.3 acres)

VOCs - Volatile Organic Compounds (Target Compound List)
SVOCs - Semivolatile Organic Compounds (Target Compound List)
Metals - (Target Analyte List plus Hexavalent Chromium and Cyanide)
PCBs - Polychlorinated Biphenyls
DRO/GRO - Diesel Range Organics/Gasoline Range Organics
O&G - Oil and Grease
*VOCs (B6-087 through B6-093) only if PID reading >10 ppm
bgs - Below Ground Surface

APPENDIX B

ARM Group Inc.
Engineers and Scientists

Boring ID: B6-001-SB

(page 1 of 1)

Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-5-3
Project Description	: Sparrows Point - Parcel B6
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: M. Replogle, E.I.T.
Drilling Company	: Green Services, Inc.
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 06/15/2016
Weather	: 80s, Sunny
Northing (US ft)	: 570846.35
Easting (US ft)	: 1463282.66

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0						
		-	B6-001-SB-1	(0-3') SILT with GRAVEL, soft, light gray, dry, non plastic, non cohesive	ML	Small roots and grass at surface
		-				
	50	1.9				
				(3-3.3') SILTY SAND with GRAVEL. loose, brown, moist, non plastic, non cohesive	SM	
		11.5		(3.3-7') SLAG GRAVEL, loose, brown grading to gray, wet, non plastic, non cohesive	GW	
		0.80				
5						
		0.7				
		1.1				
	100					
		3.5		(7-8.5') SILT, firm, light gray and reddish yellow mottled, dry, cohesive	ML	
		6.2	B6-001-SB-9	(8.5-9') SILT, soft, light gray and reddish yellow mottled, wet, cohesive	ML	Wet at 8.6' bgs
				End of Boring		
10						

Total Borehole Depth: 9' bgs.

Boring terminated at 9' bgs due to water.

ARM Group Inc.
Engineers and Scientists

Boring ID: B6-002-SB

(page 1 of 1)

Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-5-3
Project Description	: Sparrows Point - Parcel B6
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: M. Repogle, E.I.T.
Drilling Company	: Green Services, Inc.
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 06/15/2016
Weather	: 70s, Cloudy
Northing (US ft)	: 570873.04
Easting (US ft)	: 1463331.70

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0						
		-	B6-002-SB-1	(0-1') CONCRETE, loose, white, dry	-	
		-		(1-3.5') SILTY SAND with GRAVEL, loose, brown, dry, non plastic, non cohesive	SP	
	70	0.0				
		0.0	B6-002-SB-4.5	(3.5-4.5') CLAY, soft, very pale brown, moist, cohesive, high plasticity	CL	
		0.0		(4.5-5') SLAG GRAVEL, loose, brown, wet, non plastic, non cohesive	GW	Wet at 4.5' bgs
5				(5-7.5') CLAY, very soft to soft, light grayish olive, wet, cohesive, high plasticity	CL	
		-				
		0.0				
	90	0.0				
		0.0		(7.5-10') CLAY, hard, reddish yellow and very pale brown mottling, dry, cohesive, high plasticity	CL	
		0.0				
		0.0				Boring terminated at 10' bgs due to water
10				End of Boring		

Total Borehole Depth: 10' bgs.

Boring terminated at 10' bgs due to water

ARM Group Inc.
Engineers and Scientists

Boring ID: B6-003-SB

(page 1 of 1)

Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-5-3
Project Description	: Sparrows Point - Parcel B6
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: M. Repogle, E.I.T.
Drilling Company	: Green Services, Inc
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 06/30/2016
Weather	: 80s, Sunny
Northing (US ft)	: 571840.31
Easting (US ft)	: 1459967.10

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		-	B6-003-SB-1	(0-1') ASPHALT, loose, black, dry, non plastic, non cohesive	NA	
		10.5		(1-4.5') SANDY SILT with SLAG GRAVEL and metallic speckled rock, soft, brown and gray, dry, non plastic, non cohesive	ML	
	80	20.6				
		18.1				
		35.2	B6-003-SB-5			
5				(4.5-6') SILTY SAND with SLAG GRAVEL, yellowish brown, very moist, non plastic, non cohesive	SM	
		3.9				
		8.8		(6-10') CLAYEY SILT, very firm, very pale brown and reddish yellow, dry, low plasticity, cohesive	ML	
	100	8.5				
		9.5				
		3.5	B6-003-SB-10			
10				(10-10.5') SANDY CLAY, soft, pale brown, very moist, medium plasticity, cohesive	CL	Wet at 10.5' bgs
		11.2		(10.5-11') SAND with CLAY, medium dense, strong brown, wet, non plastic, no cohesion	SP	
		20.7		(11-11.5') SANDY CLAY, soft, strong brown, wet, low plasticity, cohesive	CL	
	100	22.3		(11.5-15) CLAY with trace SAND, very firm, strong brown and light gray, moist, medium plasticity, cohesive	CL	
		19.2				
		7.1				
15				End of boring		

Total Borehole Depth: 15' bgs.

Boring terminated at 15' bgs due to water.

ARM Group Inc.
Engineers and Scientists

Boring ID: B6-004-SB

(page 1 of 1)

Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-5-3
Project Description	: Sparrows Point - Parcel B6
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: M. Repogle, E.I.T.
Drilling Company	: Green Services, Inc
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 06/30/2016
Weather	: 80s, Sunny
Northing (US ft)	: 571847.79
Easting (US ft)	: 1460034.40

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		-	B6-004-SB-1	(0-1') ASPHALT, loose, gray, dry, non plastic, non cohesive	-	
		4.8		(1-1.5') SLAG GRAVEL, loose, light gray and brown, dry, non plastic, non cohesive	GP	
	85	31.8		(1.5-4.5') SAND and SLAG GRAVEL, loose, gray and brown, dry, non plastic, non cohesive	GP/SP	
		25.6	B6-004-SB-4			
		1.8				
5				(4.5-5') SAND, fine to coarse grained, loose, yellowish brown, dry, non plastic, non cohesive	SW	
				End of Boring		
10						

Total Borehole Depth: 5' bgs.

Boring terminate at 5' bgs due to water

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ARM Group Inc.
Engineers and Scientists

Boring ID: B6-005-SB

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Client	: EnviroAnalytics Group	Date	: 01/09/2017
ARM Project No.	: 150300M-5-3	Weather	: 20s, Cloudy
Project Description	: Sparrows Point - Parcel B6		
Site Location	: Sparrows Point, MD		
ARM Representative	: L. Perrin		
Checked by	: M. Replogle, E.I.T.	Northing (US ft)	: 570396.04
Drilling Company	: Green Services, Inc.	Easting (US ft)	: 1462573.22
Driller	: Don Marchese		
Drilling Equipment	: Geoprobe 7822DT		

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		-		(0-1') CONCRETE, medium dense, gray, dry, no plasticity, no cohesion	NA	
		-	B6-005-SB-2	(1-4') SLAG GRAVEL and SAND, medium dense, grayish brown		
	70	-			SW/GW	
		55.9				
		5.2		(4-4.1') CONCRETE, medium dense, gray, dry, no plasticity, no cohesion	NA	
5		-		(4.1-7.5') GRAVELLY SAND, fine to coarse, medium dense, strong brown, gray, and reddish yellow, dry, no plasticity, no cohesion	SW/GW	
		3.2				
	90	16.1	B6-005-SB-8	(7.5-8') SAND, fine to coarse, trace GLASS, medium dense, red, yellow, and strong brown, dry, no plasticity, no cohesion	SW	
		0.0		(8-11.8') CLAY, very firm, but soft 9-9.5', brownish yellow, dry to moist, high plasticity, cohesive		
		0.0	B6-005-SB-10			
10		-			CL	
		-				
				(11.8-12.4') SANDY GRAVEL, medium dense, brown, wet, no plasticity, no cohesion	SW/GW	Wet at 11.8' bgs
	64	0.1		(12.4-15') CLAY with SAND grading to SANDY CLAY, with some GRAVEL, dense, pale brown, moist to very moist, high plasticity, cohesive		
		0.1			CL	
		0.1				
15				End of Boring		

Total Borehole Depth: 10' bgs.

Boring terminated at 15' bgs due to water

ARM Group Inc.
Engineers and Scientists

Boring ID: B6-006-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-5-3
Project Description	: Sparrows Point - Parcel B6
Site Location	: Sparrows Point, MD
ARM Representative	: J. Yaple, P.G.
Checked by	: M. Repogle, E.I.T.
Drilling Company	: Green Services, Inc.
Driller	: Kevin Pumphrey
Drilling Equipment	: Geoprobe 7822DT

Date	: 06/16/2016
Weather	: 70s, Cloudy
Northing (US ft)	: 570352.74
Easting (US ft)	: 1462577.67

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0						
		-	B6-006-SB-1	(0-1') CONCRETE, loose, dry	-	Refusal at 2' on first 2 attempts
		-		(1-8') SILTY SAND and GRAVEL, fine to coarse, loose, gray and brown, dry, angular, non plastic, non cohesive, some SLAG throughout		
	47	-				
		2.2				
		204.2	B6-006-SB-5		SM/GW	
5						
		-				
	30	-				
		<0.3				
				End of Boring		
10						

Total Borehole Depth: 8' bgs.

Boring terminated at 8' bgs due to water.

ARM Group Inc.
Engineers and Scientists

Boring ID: B6-007-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-5-3
Project Description	: Sparrows Point - Parcel B6
Site Location	: Sparrows Point, MD
ARM Representative	: J. Yaple, P.G.
Checked by	: M. Replogle, E.I.T.
Drilling Company	: Green Services, Inc
Driller	: Kevin Pumphrey
Drilling Equipment	: Geoprobe 7822DT

Date	: 06/17/2016
Weather	: 70s, Sunny
Northing (US ft)	: 570639.05
Easting (US ft)	: 1462700.34

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		-	B6-007-SB-1	(0-9.5') GRAVEL and SAND with some SILT and CLAY and SLAG, fine to coarse, loose, dark gray to blue gray to dark brown, dry to wet, non plastic, non cohesive		Fill (non native)
		-				~30% slag 0-9.5' bgs
	65	158.9				
		68.8	B6-007-SB-4			
		14.2			GW/SW	
5						Wet at 5' bgs
		-				
		66.4				
	75	21.2				
		7.0				
		6.2				
				(9.5-10') SILTY CLAY, soft, gray-green, wet, cohesive, medium plasticity	SM/GW	
10				End of Boring		

Total Borehole Depth: 10' bgs.

Boring terminated at 10' bgs due to water.

ARM Group Inc.
Engineers and Scientists

Boring ID: B6-008-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-5-3
Project Description	: Sparrows Point - Parcel B6
Site Location	: Sparrows Point, MD
ARM Representative	: J. Yaple, P.G.
Checked by	: M. Replogle, E.I.T.
Drilling Company	: Green Services, Inc.
Driller	: Kevin Pumphrey
Drilling Equipment	: Geoprobe 7822DT

Date	: 06/17/2016
Weather	: 70s, Sunny
Northing (US ft)	: 570624.00
Easting (US ft)	: 1462702.34

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		-	B6-008-SB-1	(0-7') GRAVEL and SAND with some SLAG, fine to coarse, angular, loose, dark gray to blue gray to dark brown, dry to wet, non plastic, non cohesive		Fill (non native) ~30% slag
		0.5				
	80	3.7				
		49.6	B6-008-SB-4		GW/SW	
		2.0				
5						Wet at 5' bgs
		0.8				
	100	1.0				
				(7-8') SILTY CLAY, soft, gray-green, wet, cohesive, medium plasticity		
		0.5			CL	Boring refusal at 8' bgs
				End of Boring		
10						

Total Borehole Depth: 8' bgs.

Boring terminated at 8' bgs due to water.

ARM Group Inc.
Engineers and Scientists

Boring ID: B6-009-SB

(page 1 of 1)

Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-5-3
Project Description	: Sparrows Point - Parcel B6
Site Location	: Sparrows Point, MD
ARM Representative	: J. Yaple, P.G.
Checked by	: M. Replogle, E.I.T.
Drilling Company	: Green Services, Inc.
Driller	: Kevin Pumphrey
Drilling Equipment	: Geoprobe 7822DT

Date	: 06/17/2016
Weather	: 60s, Sunny
Northing (US ft)	: 571151.65
Easting (US ft)	: 1462392.91

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0						
		-		(0-1') CONCRETE, hard, dry	-	1st attempt refusal at 4' bgs
		-		(1-3') VOID	-	Driller reports void Initial near surface sample not collected due to excessive slag gravel.
	40	-				
		0.1		(3-8') GRAVEL, loose, gray, angular, coarse, dry to moist, grading to SAND and CLAY, non plastic, non cohesive	GW	
		0.0				
5		0.2				
		9.7	B6-009-SB-7			
	93	3.8				
		0.1		(8-9') SAND with trace SILT, loose, tan, wet, cohesive	SP	Wet at 8' bgs
		0.1		(9-10') CLAY with trace fine SAND, soft, gray green, wet, cohesive, medium plasticity	CL	
10				End of Boring		

Total Borehole Depth: 10' bgs.

Boring terminated at 10' bgs due to water.

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ARM Group Inc.
Engineers and Scientists

Boring ID: B6-010-SB

(page 1 of 1)

Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-5-3
Project Description	: Sparrows Point - Parcel B6
Site Location	: Sparrows Point, MD
ARM Representative	: J. Yaple, P.G.
Checked by	: M. Replogle, E.I.T.
Drilling Company	: Green Services, Inc.
Driller	: Kevin Pumphrey
Drilling Equipment	: Geoprobe 7822DT

Date	: 06/17/2016
Weather	: 60s, Mostly Sunny
Northing (US ft)	: 571131.85
Easting (US ft)	: 1462419.22

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0						
		-	B6-010-SB-1	(0-1') CONCRETE, hard, dry	-	1st attempt refusal at 1' bgs
		-		(1-7') SAND and GRAVEL with some SLAG, fine to coarse, angular, loose, dark gray to dark brown to blue gray to tan, dry to wet, non plastic, non cohesive		
	50	-				
		3.9				
		14.8	B6-010-SB-5		SW/GW	
5						
		2.0				
		24.3				Wet at 6.5' bgs
				(7-10') CLAY, soft, gray-green, wet, cohesive, high plasticity		
	100	13.3				
		7.5			CL	
		1.7				
10				End of Boring		

Total Borehole Depth: 10' bgs.

Boring terminated due to water at 10' bgs.

ARM Group Inc.
Engineers and Scientists

Boring ID: B6-011-SB

(page 1 of 1)

Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-5-3
Project Description	: Sparrows Point - Parcel B6
Site Location	: Sparrows Point, MD
ARM Representative	: J. Yaple, P.G.
Checked by	: M. Replogle, E.I.T.
Drilling Company	: Green Services, Inc.
Driller	: Ali Berenbrok - Tim Niblett
Drilling Equipment	: Geoprobe 7822DT

Date	: 06/15/2016
Weather	: 60s, Mostly Cloudy
Northing (US ft)	: 568630.10
Easting (US ft)	: 1462452.78

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		-	B6-011-SB-1	(0-10') SILTY SAND and GRAVEL, fine to coarse grained, angular to subangular, medium dense, light brown to dark brown, dry to 8'	SM/GW	
	83	0.5				
		21.2				
		14.6				
		7.6				
5		0.4				
		4.3				
	90	12.9	B6-011-SB-8			Wet at 8' bgs Viscous liquid, black with sheen 8-10' bgs
		-				
		-				
10		-		(10-15') No recovery due to loose GRAVEL		
		-				
	0	-				
		-				
		-				
15				End of Boring		

Total Borehole Depth: 15' bgs.

Boring terminated due to water and lack of recovery at 15' bgs

ARM Group Inc.
Engineers and Scientists

Boring ID: B6-012-SB

(page 1 of 1)

Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-5-3
Project Description	: Sparrows Point - Parcel B6
Site Location	: Sparrows Point, MD
ARM Representative	: J. Yaple, P.G.
Checked by	: M. Replogle, E.I.T.
Drilling Company	: Green Services, Inc
Driller	: Ali Berenbrok - Tim Niblett
Drilling Equipment	: Geoprobe 7822DT

Date	: 06/15/2016
Weather	: 80s, Sunny
Northing (US ft)	: 568583.80
Easting (US ft)	: 1462476.49

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		-	B6-012-SB-1	(0-1') CONCRETE, hard, dry	-	
	87	17.1 48.7		(1-3.5') SAND and GRAVEL, fine to small, loose, tan and gray, dry, non plastic, non cohesive	SW/GW	
		105.1	B6-012-SB-4	(3.5-4.5') CLAY, soft, tan and light brown, dry, cohesive, medium plasticity	CL	
5		38.2 -		(4.5-8.5') SILTY SAND, fine to medium grained, medium dense, light tan and yellow, moist, cohesive	SM	
	80	5.0 17.1				
		0.3		(8.5-10') CLAY, very soft, light gray to dark gray, wet, cohesive, high plasticity	CL	Wet at 8.5' bgs
10		15.8		End of Boring		

Total Borehole Depth: 10' bgs.

Boring terminated due to water at 10' bgs.

ARM Group Inc.
Engineers and Scientists

Boring ID: B6-013-SB

(page 1 of 1)

Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-5-3
Project Description	: Sparrows Point - Parcel B6
Site Location	: Sparrows Point, MD
ARM Representative	: J. Yaple, P.G.
Checked by	: M. Replogle, E.I.T.
Drilling Company	: Green Services, Inc.
Driller	: Ali Berenbrok - Tim Niblett
Drilling Equipment	: Geoprobe 7822DT

Date	: 06/16/2016
Weather	: 70s, Cloudy
Northing (US ft)	: 568538.40
Easting (US ft)	: 1462430.65

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0						
	82	-	B6-013-SB-1	(0-3') SILTY SAND with trace SLAG, fine to medium grained, medium dense, dark gray to dark brown, dry, non plastic, non cohesive	SM	
		1.1				
		2.8				
		0.8		(3-5') SAND, fine grained, medium dense, tan-green to tan and reddish yellow, moist, non cohesive, non plastic	SP	
		0.6				
5	100	2.3		(5-8.5') CLAY with trace SAND, medium stiff, tan matrix with reddish yellow and brown mottling, moist, cohesive, medium plasticity	CL	
		8.0	B6-013-SB-7			
		7.0				
		0.8				Wet at 8.5' bgs
		2.1		(8.5-15') CLAY, soft, tan with some reddish yellow and brown mottling, wet, high plasticity, cohesive	CL	Boring terminated due to water at 15' bgs
10	80	-				
		<0.1				
		<0.1				
		<0.2				
		<0.2				
15				End of Boring		

Total Borehole Depth: 15' bgs.

Boring terminated due to water at 15' bgs.

ARM Group Inc.
Engineers and Scientists

Boring ID: B6-014-SB

(page 1 of 1)

Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-5-3
Project Description	: Sparrows Point - Parcel B6
Site Location	: Sparrows Point, MD
ARM Representative	: J. Yaple, P.G.
Checked by	: M. Replogle, E.I.T.
Drilling Company	: Green Services, Inc
Driller	: Kevin Pumphrey
Drilling Equipment	: Geoprobe 7822DT

Date	: 06/16/2016
Weather	: 70s, Cloudy
Northing (US ft)	: 570155.91
Easting (US ft)	: 1462695.73

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		-	B6-014-SB-1	(0-1') CONCRETE, hard, dry	-	
		-		(1-15') SILTY SAND and GRAVEL with trace SILT and SLAG, fine to coarse grained, loose, dark gray to dark brown, dry to 12' bgs, wet at 12' bgs, non plastic, non cohesive		
	60	11.2				
		189.7	B6-014-SB-4			
		66.3				
5		-				
		-				
	50	-			SM/GM	
		4.8				
		8.0	B6-014-SB-10			
10		-				
		-				
	50	33.2				Wet at 12' bgs
		16.8				
		1.9				
15				End of Boring		

Total Borehole Depth: 15' bgs.

Boring terminated due to water at 15' bgs.

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ARM Group Inc.
Engineers and Scientists

Boring ID: B6-015-SB

(page 1 of 1)

Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-5-3
Project Description	: Sparrows Point - Parcel B6
Site Location	: Sparrows Point, MD
ARM Representative	: J. Yaple, P.G.
Checked by	: M. Replogle, E.I.T.
Drilling Company	: Green Services, Inc
Driller	: Kevin Pumphrey
Drilling Equipment	: Geoprobe 7822DT

Date	: 06/17/2016
Weather	: 70s, Sunny
Northing (US ft)	: 570192.00
Easting (US ft)	: 1462798.63

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0	87	-	B6-015-SB-1	(0-7') SILTY SAND and GRAVEL with trace SLAG, fine to coarse, loose, dark gray, dry, angular, non plastic, non cohesive	SM/GW	
		6.3				
		0.3				
		0.4				
		0.8	B6-015-SB-5			
5	62	-				
		-				
		6.4		(7-9') SAND and GRAVEL, coarse, loose, light tan to white, dry to 8.0' bgs then wet, cohesive	SW/GW	Wet at 8' bgs
		8.1				
				End of Boring		
10						

Total Borehole Depth: 9' bgs.

Boring terminated due to refusal and water at 9' bgs.

ARM Group Inc.
Engineers and Scientists

Boring ID: B6-016-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-5-3
Project Description	: Sparrows Point - Parcel B6
Site Location	: Sparrows Point, MD
ARM Representative	: J. Yaple, P.G.
Checked by	: M. Replogle, E.I.T.
Drilling Company	: Green Services, Inc
Driller	: Kevin Pumphrey
Drilling Equipment	: Geoprobe 7822DT

Date	: 06/17/2016
Weather	: 70s, Sunny
Northing (US ft)	: 570116.99
Easting (US ft)	: 1462807.99

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		-	B6-016-SB-1	(0-10') SAND and GRAVEL with trace SILT and SLAG, loose, gray green, dark brown, and light brown, dry to 9' bgs, then wet, non plastic, non cohesive		
		0.3				
	77	0.3				
		1.1				
		<0.2	B6-016-SB-5			
5		-			SM/GW	
		0.6				
	80	0.7				
		0.6				
		0.4				Wet at 9' bgs
10				End of Boring		

Total Borehole Depth: 10' bgs.

Boring terminated due to water at 10' bgs.

ARM Group Inc.
Engineers and Scientists

Boring ID: B6-017-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-5-3
Project Description	: Sparrows Point - Parcel B6
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: M. Replogle, E.I.T.
Drilling Company	: Green Services, Inc.
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 07/06/2016
Weather	: 80s, Sunny
Northing (US ft)	: 569433.06
Easting (US ft)	: 1462864.36

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		-	B6-017-SB-1	0-0.5') CONCRETE, loose, white, dry, non plastic, non cohesive	-	
		-		(0.5-2.5') SAND, fine to medium grained, loose, brown, dry, non plastic, non cohesive	SP	
	70	5.7		(2.5-3.5') SLAG, GRAVEL and SAND sized, loose, pale brown and gray, dry, non plastic, non cohesive	GP/SP	
		3.5		(3.5-4.1') SAND, loose, brown, dry, non plastic, non cohesive	SP	
		8.4		(4.1-10') SLAG, SAND and GRAVEL sized, loose, brown and light gray, dry grading to moist, non plastic, non cohesive	GP/SP	
5		62.4	B6-017-SB-6			
		12.3				
	100	17.0				Blue tinted slag
		18.3				
		4.2				
10		-		(10-13') SLAG, GRAVEL and SAND sized, with SILT, loose, brown and light gray, non plastic, non cohesive	GP/SP	
		0.5				
	80	0.4				Wet at 12.5' bgs
		0.4		(13-13.3') SILT, soft, gray, moist, cohesive, low plasticity	ML	
				(13.3-13.7') SLAG, GRAVEL and SAND sized, loose, gray, wet, non plastic, non cohesive	GP/SP	
		0.1		(13.7-14.7') SILT, soft, gray, moist, cohesive, low plasticity	ML	
15				(14.7-15') SLAG, GRAVEL and SAND sized, loose, gray, wet, non plastic, non cohesive	GP/SP	
				End of Boring		

Total Borehole Depth: 15' bgs.

Boring terminated due to water at 15' bgs.

ARM Group Inc.
Engineers and Scientists

Boring ID: B6-018-SB

(page 1 of 1)

Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-5-3
Project Description	: Sparrows Point - Parcel B6
Site Location	: Sparrows Point, MD
ARM Representative	: J. Yaple, P.G.
Checked by	: M. Replogle, E.I.T.
Drilling Company	: Green Services, Inc.
Driller	: Kevin Pumphrey
Drilling Equipment	: Geoprobe 7822DT

Date	: 06/20/2016
Weather	: 80s, Sunny
Northing (US ft)	: 569501.90
Easting (US ft)	: 1462855.49

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		-	B6-018-SB-1	(0-1') CONCRETE, hard, dry	-	
		-		(1-7') SAND with trace SILT and coarse GRAVEL, fine to coarse, loose, light gray to brown, dry, non plastic, non cohesive		
	57	9.2				
		7.9	B6-018-SB-4		SW	
		1.4				
5		-				
		5.8				
				(7-8.5') SILT, stiff, reddish yellow and tan, dry, non plastic, non cohesive	ML	
	83	6.8				
		4.7		(8.5-10') CLAY with trace SAND and GRAVEL, soft, reddish yellow and tan, wet, cohesive, high plasticity		Wet at 8.5' bgs
		16.7			CL	
10				End of Boring		

Total Borehole Depth: 10' bgs.

Boring terminated due to water at 10' bgs.

ARM Group Inc.
Engineers and Scientists

Boring ID: B6-019-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-5-3
Project Description	: Sparrows Point - Parcel B6
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: M. Replogle, E.I.T.
Drilling Company	: Green Services, Inc.
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 06/17/2016
Weather	: 70s, Cloudy
Northing (US ft)	: 571473.33
Easting (US ft)	: 1462346.63

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0						
	60	-	B6-019-SB-1	(0-3.8') SANDY SILT with small SLAG GRAVEL, soft, brown, dry, non plastic, non cohesive	ML	
		-				
		3.9				
		18.5	B6-019-SB-4			
				(3.8-4.2') CLAY, soft, very pale brown, moist, cohesive, low plasticity	CL	
		13.7		(4.2-5') SANDY GRAVEL, loose, brown and gray, dry, non plastic, non cohesive	GW	
5				(5-7.5') SAND AND GRAVEL SIZED fill, loose, yellow and dark brown, dry grading to moist, non plastic, non cohesive	-	
		-				
		0.3				
	80	0.2		(7.5-10') BRICK and SLAG GRAVEL, loose, yellow and dark brown and light gray, wet, non plastic, non cohesive	-	Wet at 7.5' bgs
		0.0				
		0.0				
10				End of Boring		

Total Borehole Depth: 10' bgs.

Boring terminated due to water at 10' bgs.

ARM Group Inc.
Engineers and Scientists

Boring ID: B6-020-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-5-3
Project Description	: Sparrows Point - Parcel B6
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: M. Replogle, E.I.T.
Drilling Company	: Green Services, Inc.
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 06/17/2016
Weather	: 70s, Sunny
Northing (US ft)	: 571462.69
Easting (US ft)	: 1462341.28

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0						
	70	-	B6-020-SB-1	(0-3.8') SILT with SLAG GRAVEL and SAND, soft, dark brown, dry, non plastic, non cohesive	ML	
		-				
		8.6				
		11.8	B6-020-SB-4			
				(3.8-4.3') CLAY, hard, very pale brown, dry, cohesive, low plasticity	CL	
		4.2		(4.3-5') SLAG, GRAVEL and SAND sized, loose, gray and brown, moist, non plastic, non cohesive	GP/SP	
5				(5-7') SAND and SLAG GRAVEL, loose, brown, dry, non plastic, non cohesive	SP/GP	
		-				
		0.1				
				(7-7.5') SANDY CLAY, soft, brown and pale brown, moist, cohesive, medium plasticity	CL	
	70	0.7		(7.5-10') SLAG and FILL, GRAVEL and SAND sized, loose, yellow gray and black, non plastic, non cohesive		Wet at 7.5' bgs
		0.6			SP/GP	
		0.2				
10				End of Boring		

Total Borehole Depth: 10' bgs.

Boring terminated due to water at 10' bgs.

ARM Group Inc.
Engineers and Scientists

Boring ID: B6-021-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-5-3
Project Description	: Sparrows Point - Parcel B6
Site Location	: Sparrows Point, MD
ARM Representative	: B. Gehman
Checked by	: M. Replogle, E.I.T.
Drilling Company	: Green Services, Inc.
Driller	: Kevin Pumphrey
Drilling Equipment	: Geoprobe 7822DT

Date	: 06/13/2016
Weather	: 70s, Sunny
Northing (US ft)	: 569397.76
Easting (US ft)	: 1463015.88

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		0.6	B6-021-SB-1	(0-2') SANDY GRAVEL with SILT, loose, gray, dry, non plastic, non cohesive	SW/GW	
		0.6				
	90	0.1		(2-4') SANDY GRAVEL with SILT, loose, tan to gray, dry, non plastic, non cohesive	SW/GW	
		4.3	B6-021-SB-4			
		0.1		(4-4.8') Fine grained SAND, light brown, wet, non plastic, non cohesive	SC	
5				(4.8-5') CLAYEY SAND, light brown, fine grained, moist, cohesive, low plasticity	SP-SC	
		0.3		(5-10') CLAY with some SAND, stiff, gray, reddish yellow, and brown, slightly moist, cohesive, high plasticity		
		0.0				
	100	0.0			CL	
		0.0				
		0.0	B6-021-SB-10			
10		-		(10-13') CLAY, soft, gray, very moist, cohesive, high plasticity	CL	
		-				
	100	-				
		-		(13-15') SANDY CLAY, stiff, gray, reddish yellow, and brown, with coarse SAND at 13' bgs, cohesive, medium plasticity	CL	Wet at 13' bgs
		-				
15				End of Boring		

Total Borehole Depth: 15' bgs.

Boring terminated due to water at 15' bgs.

ARM Group Inc.
Engineers and Scientists

Boring ID: B6-022-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-5-3
Project Description	: Sparrows Point - Parcel B6
Site Location	: Sparrows Point, MD
ARM Representative	: B. Gehman
Checked by	: M. Replogle, E.I.T.
Drilling Company	: Green Services, Inc.
Driller	: Ali Berenbrok - Tim Niblett
Drilling Equipment	: Geoprobe 7822DT

Date	: 06/14/2016
Weather	: 70s, Sunny
Northing (US ft)	: 569531.35
Easting (US ft)	: 1463003.51

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0						
	84	-	B6-022-SB-1	(0-2') SLAG GRAVEL with SAND, loose, black to dark gray, non plastic, non cohesive	SW/GW	
		2.6				
		2.2		(2-3') GRAVELLY SAND, loose, tan to brown, dry, non plastic, non cohesive	GW/SW	
		0.0		(3-3.5') CINDERS, black, very moist	-	
		0.0		(3.5-4.5') SANDY GRAVEL, loose, gray, dry, non plastic, non cohesive	SW/GW	Wet at 4' bgs
5		4.9		(4.5-6') GRAVEL with SAND, loose, black, wet, non plastic, non cohesive	GW	
	100	0.0		(6-7.5') SANDY CLAY, soft, olive gray, wet, cohesive, medium plasticity	CL	
		0.0		(7.5-10') SANDY CLAY, SAND content increasing with depth, stiff, brown and reddish yellow to gray, very moist to wet, cohesive, medium plasticity	CL	
		0.0				
		0.0				
10				End of Boring		

Total Borehole Depth: 10' bgs.

Boring terminated due to water at 10' bgs.

ARM Group Inc.
Engineers and Scientists

Boring ID: B6-023-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-5-3
Project Description	: Sparrows Point - Parcel B6
Site Location	: Sparrows Point, MD
ARM Representative	: B. Gehman
Checked by	: M. Replogle, E.I.T.
Drilling Company	: Green Services, Inc.
Driller	: Ali Berenbrok - Tim Niblett
Drilling Equipment	: Geoprobe 7822DT

Date	: 06/14/2016
Weather	: 70s, Sunny
Northing (US ft)	: 569471.81
Easting (US ft)	: 1463043.63

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0						
	100	1.4	B6-023-SB-1	(0-4.5') GRAVELLY SAND with SILT, black to light gray, loose, dry to moist, some SLAG, non plastic, non cohesive	GW/SW	
		2.9				
		6.2				
		105.8	B6-023-SB-4			Odor at 4' bgs
		0.0				
5				(4.5-5') SANDY CLAY, stiff, light gray, slightly moist, cohesive, low plasticity	CL	
	70	-		(5-10') SANDY CLAY, stiff to very stiff (9.2'), light gray to reddish yellow to brown, slightly moist, cohesive, high plasticity	CL	
		-				
		11.1				
		10.7				
		2.5	B6-023-SB-10			
10						Wet at 10' bgs
	100	-		(10-14') SAND, fine grained, loose, dark gray, wet, cohesive, non plastic	SP	
		-				
		-				
		-				
		-		(14-15') CLAY, soft, gray, wet, cohesive, high plasticity	CL	
15				End of Boring		

Total Borehole Depth: 15' bgs.

Boring terminated due to water at 15' bgs.

ARM Group Inc.
Engineers and Scientists

Boring ID: B6-024-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-5-3
Project Description	: Sparrows Point - Parcel B6
Site Location	: Sparrows Point, MD
ARM Representative	: B. Gehman
Checked by	: M. Replogle, E.I.T.
Drilling Company	: Green Services, Inc
Driller	: Kevin Pumphrey
Drilling Equipment	: Geoprobe 7822DT

Date	: 06/13/2016
Weather	: 70s, Sunny
Northing (US ft)	: 569381.73
Easting (US ft)	: 1462960.48

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0						
	100	0.4	B6-024-SB-1	(0-3') GRAVELLY SAND, loose, light brown to tan, dry, non plastic, non cohesive	GW/SW	
		0.6				
		29.7				
		1.3		(3-3.5') GRAVELLY SAND, black, wet, strong odor, non plastic, non cohesive	GW/SW	Product odor at 3' bgs
				(3.5-4.5') SAND, fine grained, tan, moist, non plastic, non cohesive	SP	
		0.1	B6-023-SB-5	(4.5-5.0') SANDY CLAY, reddish yellow, moist, cohesive, medium plasticity	CL	
5	100	0.0		(5-10') CLAY with SAND, stiff, tan to light gray, cohesive, medium to high plasticity	CH/CL	
		0.0				
		0.0				
		0.0				
		0.1	B6-023-SB-10			
10	100	-		(10-14') CLAY, soft, tan to light gray with reddish yellow mottling, cohesive, high plasticity	CL	
		-				
		-				
		-				
		-		(14-15') CLAY, very soft, tan with reddish yellow mottling, wet, cohesive, high plasticity	CL	Wet at 14' bgs
15				End of Boring		

Total Borehole Depth: 15' bgs.

Boring terminated due to water at 15' bgs.

ARM Group Inc.
Engineers and Scientists

Boring ID: B6-025-SB

(page 1 of 1)

Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-5-3
Project Description	: Sparrows Point - Parcel B6
Site Location	: Sparrows Point, MD
ARM Representative	: B. Gehman
Checked by	: M. Replogle, E.I.T.
Drilling Company	: Green Services, Inc.
Driller	: Ali Berenbrok - Tim Niblett
Drilling Equipment	: Geoprobe 7822DT

Date	: 06/14/2016
Weather	: 70s, Sunny
Northing (US ft)	: 569538.68
Easting (US ft)	: 1462942.67

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0	86	-	B6-025-SB-1	(0-3') SANDY GRAVEL with SILT, loose, dark brown, non plastic, non cohesive	GW-GM	Clay spot at 2.8' bgs
		0.3				
		1.5				
		0.5		(3-4.5') SLAG GRAVEL with SAND, black, dry, non plastic, non cohesive		
		0.0	B6-025-SB-5	(4.5-5') Fine grained SAND, dark tan, very moist, non plastic, non cohesive	SP	
5	70	-		(5-9.5') Fine grained SAND, light brown to light gray, very moist to wet, non plastic, non cohesive	SP	Wet at 8' bgs
		0.4				
		0.7				
		0.1				
		0.1		(9.5-10') CLAY with some SAND, stiff, tan to light gray, high plasticity, cohesive	CL	
10				End of Boring		

Total Borehole Depth: 10' bgs.

Boring terminated due to water at 10' bgs.

ARM Group Inc.
Engineers and Scientists

Boring ID: B6-026-SB

(page 1 of 1)

Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-5-3
Project Description	: Sparrows Point - Parcel B6
Site Location	: Sparrows Point, MD
ARM Representative	: B. Gehman
Checked by	: M. Replogle, E.I.T.
Drilling Company	: Green Services, Inc.
Driller	: Ali Berenbrok - Tim Niblett
Drilling Equipment	: Geoprobe 7822DT

Date	: 06/13/2016
Weather	: 70s, Sunny
Northing (US ft)	: 569447.73
Easting (US ft)	: 1462953.28

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0						
	94	20.8	B6-026-SB-1	(0-2') SANDY GRAVEL, loose, dark gray to light gray, slightly moist, non plastic, non cohesive	SW/GW	
		53.2				
				(2-2.5') GRAVEL, black, wet, non plastic, non cohesive	GW	Strong odor 2-2.5' bgs
		250.2		(2.5-4.0') SANDY CLAY, very stiff, gray to reddish yellow and brown, cohesive, medium plasticity	CL	
		141.8				
		37.8	B6-026-SB-5	(4-5') SAND, gray to reddish yellow and brown, very moist, non plastic, non cohesive, odor	SW	
5	24	-		(5-10') Fine grained SAND, light gray, very moist, non plastic, non cohesive		
		-				
		-				
		4.8				
		14.6				Wet at 10' bgs
10				End of Boring		

Total Borehole Depth: 10' bgs.

Boring terminated due to water at 10' bgs.

ARM Group Inc.
Engineers and Scientists

Boring ID: B6-027-SB

(page 1 of 1)

Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-5-3
Project Description	: Sparrows Point - Parcel B6
Site Location	: Sparrows Point, MD
ARM Representative	: B. Gehman
Checked by	: M. Replogle, E.I.T.
Drilling Company	: Green Services, Inc.
Driller	: Ali Berenbrok - Tim Niblett
Drilling Equipment	: Geoprobe 7822DT

Date	: 06/14/2016
Weather	: 70s, Sunny
Northing (US ft)	: 569494.30
Easting (US ft)	: 1462964.25

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0						
		2.9	B6-027-SB-1	(0-2') GRAVELLY SAND, loose, brown to dark brown, dry, non plastic, non cohesive	SW/GW	
		4.6				
	100	35.2		(2-2.2') CLAY with some SAND, very stiff, dark tan, cohesive, medium plasticity	CL	
		18.31	B6-027-SB-4	(2.2-4.5') GRAVELLY SAND with CONCRETE GRAVEL, loose, brown to dark brown, dry, non plastic, non cohesive	SW/GW	
		29.1		(4.5-5') SAND, fine grained, dense, light gray, slightly moist, low plasticity, cohesive	CL	
5		1.0		(5-8.5') SAND, fine grained, dense, light gray, slightly moist, non plastic, cohesive	SP	
		206				
	100	14.4				
		0.4				Wet at 8.5' bgs
		0.1		(8.5-10') SAND, fine grained, loose, light gray to reddish yellow, wet, non plastic, cohesive	SP	
10		-		(10-14') SAND, fine grained, light brown, saturated with free water, non plastic, cohesive	SP	
		-				
	50	-				
		-				
		-		(14-15') SANDY CLAY, gray to light brown, wet, cohesive, medium plasticity, cohesive	CL	
15				End of Boring		

Total Borehole Depth: 15' bgs.

Boring terminated due to water at 15' bgs.

ARM Group Inc.
Engineers and Scientists

Boring ID: B6-028-SB

(page 1 of 1)

Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-5-3
Project Description	: Sparrows Point - Parcel B6
Site Location	: Sparrows Point, MD
ARM Representative	: B. Gehman
Checked by	: M. Replogle, E.I.T.
Drilling Company	: Green Services, Inc
Driller	: Kevin Pumphrey
Drilling Equipment	: Geoprobe 7822DT

Date	: 06/13/2016
Weather	: 70s, Sunny
Northing (US ft)	: 569408.31
Easting (US ft)	: 1462974.22

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		-	B6-028-SB-1	(0-2.5') SANDY GRAVEL, loose, dark gray, dry, non plastic, non cohesive	SW/GW	
	100	-		(2.5-4') SANDY GRAVEL, loose, tan to light gray, dry, non plastic, non cohesive	SW/GW	
		-		(4-5') Fine grained SAND, stiff to loose, slightly loose, non plastic, non cohesive	SP	
5		-		(5-9.5') Fine grained SAND, tan to dark brown to reddish yellow and brown, moist, non plastic, non cohesive	SP	
	50	-				
		31.9	B6-028-SB-9			
		12.1	B6-028-SB-10			
10				(9.5-10') SANDY CLAY, gray to reddish yellow and brown, moist, medium plasticity, cohesive	CL	
		-		(10-15') CLAY with some SAND, soft, tan to reddish yellow and brown, very moist, high plasticity, cohesive	CL	
	90	-				Wet at 14' bgs
		-				
		-				
15				End of Boring		

Total Borehole Depth: 15' bgs.

Boring terminated due to water at 15' bgs.

ARM Group Inc.
Engineers and Scientists

Boring ID: B6-029-SB

(page 1 of 1)

Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-5-3
Project Description	: Sparrows Point - Parcel B6
Site Location	: Sparrows Point, MD
ARM Representative	: B. Gehman
Checked by	: M. Replogle, E.I.T.
Drilling Company	: Green Services, Inc.
Driller	: Ali Berenbrok - Tim Niblett
Drilling Equipment	: Geoprobe 7822DT

Date	: 06/13/2016
Weather	: 70s, Sunny
Northing (US ft)	: 569450.25
Easting (US ft)	: 1462967.15

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0						
	80	-	B6-029-SB-1	(0-1.5') SLAG GRAVEL, loose, black, dry, non plastic, non cohesive	GW	
		0.9		(1.5-2.0') SANDY GRAVEL, loose, light tan, dry, non plastic, non cohesive	SW/GW	
		2.4		(2-3') SANDY GRAVEL, loose, dark gray, dry, non plastic, non cohesive	SW/GW	
		7.2		(3-5') SANDY GRAVEL with some SLAG, light gray, non plastic, non cohesive	SW/GW	
		22.3	B6-029-SB-5			
5						Odor 2-8' bgs
	60	-		(5-7.5') SANDY CLAY, very stiff, gray, slightly moist, cohesive, medium plasticity	CL	
		-				
		3.7		(7.5-10') SAND, fine grained, slightly dense, dark gray to reddish yellow and brown, very moist to wet, non plastic, cohesive	SP	
		4.4				Wet at 9' bgs
		0.0				
10				End of Boring		

Total Borehole Depth: 10' bgs.

Boring terminated due to water at 10' bgs.

ARM Group Inc.
Engineers and Scientists

Boring ID: B6-030-SB

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Client	: EnviroAnalytics Group	Date	: 06/15/2016
ARM Project No.	: 150300M-5-3	Weather	: 70s, Rainy
Project Description	: Sparrows Point - Parcel B6		
Site Location	: Sparrows Point, MD		
ARM Representative	: L. Perrin		
Checked by	: M. Replogle, E.I.T.	Northing (US ft)	: 570837.57
Drilling Company	: Green Services, Inc.	Easting (US ft)	: 1463568.84
Driller	: Don Marchese		
Drilling Equipment	: Geoprobe 7822DT		

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0						
		-	B6-030-SB-1	(0-2') SILT with GRAVEL and SAND, soft, brown grading to dark brown, non plastic, non cohesive	ML	
		0.0				Moderate sweet odor
	90	0.0		(2-3') CLAY, soft, very dark gray, moist, high plasticity, cohesive	CL	
		0.0		(3-5') CLAY, firm to hard, gray grading to pale brown to reddish yellow, moist, grades to SANDY CLAY at depth, medium plasticity, cohesive	CL	
		0.0	B6-030-SB-5			
5						
		-		(5-10') SAND, medium dense to loose, very pale brown and reddish yellow, moist to wet, non plastic cohesive		
		0.0				
	80	0.0			SP	
		0.0				Wet at 8' bgs
		0.0				
10				End of Boring		

Total Borehole Depth: 10' bgs.

Boring terminated due to water at 10' bgs.

ARM Group Inc.
Engineers and Scientists

Boring ID: B6-031-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-5-3
Project Description	: Sparrows Point - Parcel B6
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: M. Replogle, E.I.T.
Drilling Company	: Green Services, Inc.
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 06/15/2016
Weather	: 70s, Cloudy
Northing (US ft)	: 570917.11
Easting (US ft)	: 1463596.71

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0						
	83	-	B6-031-SB-1	(0-3') SILT with GRAVEL grading to SANDY SILT with GRAVEL, soft, dark brown, dry, non plastic, non cohesive	ML/SM	
		0.0				
		163				
		228	B6-031-SB-4	(3-3.3') GRAVEL, loose, very pale brown, moist, non plastic, non cohesive	GP	
		40.3		(3.3-7.5') CLAY, hard, very pale brown, dry to moist, medium plasticity, cohesive	CL	
5		-				
		0.0				
	80	0.0		(7.5-10') SAND, medium dense, reddish yellow and light grayish olive, very moist to wet, non plastic, non cohesive	SP	
		0.0				
		0.0				Wet at 9.5' bgs
10				End of Boring		

Total Borehole Depth: 10' bgs.

Boring terminated due to water at 10' bgs.

ARM Group Inc.
Engineers and Scientists

Boring ID: B6-032-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-5-3
Project Description	: Sparrows Point - Parcel B6
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: M. Replogle, E.I.T.
Drilling Company	: Green Services, Inc.
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 06/15/2016
Weather	: 70s, Rainy
Northing (US ft)	: 570841.97
Easting (US ft)	: 1463619.49

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0						
	93	-	B6-032-SB-1	(0-2.5') SILT with GRAVEL grading to SANDY SILT with GRAVEL, soft, brown to dark brown and gray, dry, non plastic, non cohesive	ML/SM	
		0.0				
		69.4		(2.5-4.3') CLAY grading to SANDY CLAY, soft to firm, very dark gray grading to pale brown, moist to very moist, high plasticity, cohesive	CH/SC	
		68.8	B6-032-SB-4			
		18.0		(4.3-5') SAND, loose, pale brown, very moist, non plastic, non cohesive	SP	
5		-		(5-7.5') SAND, dense to medium dense, reddish yellow grading to very pale brown, moist to wet, non plastic, non cohesive	SP	Wet at 7' bgs Light odor in sand
		12.5				
	100	12.8		(7.5-10') CLAY, very firm, light gray and reddish yellow mottling, moist, high plasticity, cohesive	CL	
		0.0				
		0.0				
10				End of Boring		

Total Borehole Depth: 10' bgs.

Boring terminated due to water at 10' bgs.

ARM Group Inc.
Engineers and Scientists

Boring ID: B6-033-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-5-3
Project Description	: Sparrows Point - Parcel B6
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: M. Replogle, E.I.T.
Drilling Company	: Green Services, Inc.
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 07/06/2016
Weather	: 80s, Sunny
Northing (US ft)	: 571828.88
Easting (US ft)	: 1462221.30

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0						
		-	B6-033-SB-1	(0-1.5') SILT with SAND, soft, brown to dark brown with trace oxidation and small SLAG GRAVEL, dry, non plastic, non cohesive	ML	
		4.6		(1.5-2') SLAG GRAVEL and SAND, loose, brown but blue tinted SLAG, dry, non plastic, non cohesive	GP/SP	
	80	1.8		(2-4.5') SAND with SILT and small GRAVEL, loose, brown grading to dark red, dry grading to moist, non plastic, non cohesive	SW	
		5.7	B6-033-SB-4			
		3.5		(4.5-5') SAND with GRAVEL and SILT, loose, dark red, wet, non plastic, non cohesive	SW	Wet at 4.5' bgs
5				(5-7') SLAG and BRICK with SILT, SAND and GRAVEL sized, loose, dark red, wet, non plastic, non cohesive		
	100	-			GP/SP	
		-				
				End of Boring		
10						

Total Borehole Depth: 7' bgs.

Boring terminated due to refusal at 7' bgs.

ARM Group Inc.
Engineers and Scientists

Boring ID: B6-034-SB

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Client	: EnviroAnalytics Group	Date	: 07/05/2016
ARM Project No.	: 150300M-5-3	Weather	: 80s, Sunny
Project Description	: Sparrows Point - Parcel B6		
Site Location	: Sparrows Point, MD		
ARM Representative	: L. Perrin		
Checked by	: M. Replogle, E.I.T.	Northing (US ft)	: 571875.19
Drilling Company	: Green Services, Inc.	Easting (US ft)	: 1461636.84
Driller	: Don Marchese		
Drilling Equipment	: Geoprobe 7822DT		

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0				(0-0.2') ASPHALT, loose, gray dry, non plastic, non cohesive	NA	
		-	B6-034-SB-1	(0.2-2.5') SLAG, GRAVEL and SAND sized, loose, brown, moist, non plastic, non cohesive	GW	
		8.1				
	80	19.7		(2.5-3') SAND, fine to medium grained, loose, reddish yellow, dry, non plastic, non cohesive	SW	
			B6-034-SB-4	(3-3.5') CLAY with SAND, very firm, reddish yellow, dry, low plasticity, cohesive	CL	
		14.5		(3.5-4') GRAVELLY SAND, loose, reddish yellow, wet, non plastic, non cohesive	SW	
				(4-5') SANDY CLAY, soft, reddish yellow, moist, cohesive, low plasticity	CL	
		1.2				
5				(5-6.5') SAND with CLAY, very firm, reddish yellow, moist, non plastic, non cohesive	SC	
		0.9				
	100	-		(6.5-7.5') SANDY CLAY, very soft, reddish yellow, wet, low plasticity, cohesive	CL	Wet at 6.5' bgs
		1.4		(7.5-8') SLAG, GRAVEL and SAND sized, loose, gray, wet, non plastic, non cohesive	GP/SP	
				End of Boring		

Total Borehole Depth: 8' bgs.

Boring terminated due to water and refusal at 8' bgs.

ARM Group Inc.
Engineers and Scientists

Boring ID: B6-035-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-5-3
Project Description	: Sparrows Point - Parcel B6
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: M. Replogle, E.I.T.
Drilling Company	: Green Services, Inc.
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 07/05/2016
Weather	: 80s, Sunny
Northing (US ft)	: 571854.89
Easting (US ft)	: 1461765.26

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0				(0-0.3') ASPHALT, loose, gray, dry, non plastic, non cohesive	-	
		1.1	B6-035-SB-1	(0.3-2.5') SLAG, GRAVEL and SAND sized, loose, brown grading to red at depth, moist, non plastic, non cohesive	GP/SP	
		4.4				
	100	315.8		(2.5-3') SILT with GRAVEL, firm, yellowish brown, dry, non plastic, non cohesive	ML	
		111.3	B6-035-SB-4	(3-5') SILT with SLAG GRAVEL, soft, dark brown, yellowish brown and black, dry, non plastic, non cohesive	ML	5" piece of asphalt and 3" wood fragment at 4' bgs
		18.5				
5		-		(5-9') SANDY SILT with SLAG GRAVEL and some lenses of firm CLAY, soft, brown, reddish yellow and gray, dry, non plastic, non cohesive	ML	
		-				
	80	4.5				
		37.8				
		13.3		(9-10') SLAG GRAVEL with SAND, loose, reddish yellow and gray, wet, non plastic, non cohesive	GP	Wet at 9' bgs
10				End of Boring		

Total Borehole Depth: 10' bgs.

Boring terminated due to water at 10' bgs.

ARM Group Inc.
Engineers and Scientists

Boring ID: B6-036-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-5-3
Project Description	: Sparrows Point - Parcel B6
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: M. Replogle, E.I.T.
Drilling Company	: Green Services, Inc.
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 06/30/2016
Weather	: 80s, Sunny
Northing (US ft)	: 571476.74
Easting (US ft)	: 1459990.66

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		-	B6-036-SB-1	(0-0.75') CONCRETE, loose, white dry	NA	
		-		(0.75-3') SILT, soft, pale brown, dry, low plasticity, cohesive	ML	
	70	340.7				
		155.7		(3-9.5') SAND and SLAG GRAVEL, loose, brown, dry to very moist, non plastic, non cohesive	SP/GP	
		27.4				
5		-				
		-				
	70	233.6	B6-036-SB-8			
		108.8				
		41.1				Wet at 9.5' bgs Slight odor
				(9.5-10') SANDY GRAVEL, loose, gray and brown, wet, non plastic, non cohesive	GP	
10				End of Boring		

Total Borehole Depth: 10' bgs.

Boring terminated due to water at 10' bgs.

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ARM Group Inc.
Engineers and Scientists

Boring ID: B6-037-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-5-3
Project Description	: Sparrows Point - Parcel B6
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: M. Replogle, E.I.T.
Drilling Company	: Green Services, Inc.
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 06/30/2016
Weather	: 80s, Sunny
Northing (US ft)	: 571342.03
Easting (US ft)	: 1459930.94

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0	85	-	B6-037-SB-1	(0-3.8') SILTY GRAVEL with SAND, loose, brown, dry to very moist, non plastic, non cohesive	GW-GM	Very strong odor, no sheen
		1.3				
		8.4				
		2.1				
		6.8	B6-037-SB-5	(3.8-5') SILT with GRAVEL, soft, black, moist, non plastic, non cohesive	ML	
5	80	-		(5-8') SILTY SAND with GRAVEL, loose, dark brown to black, wet, non plastic, non cohesive	SM	Wet at 5' bgs
		-				
		-				
		-		(8-10') SANDY GRAVEL, loose, brown, wet, non plastic, non cohesive	GP/SP	
		-				
10				End of Boring		

Total Borehole Depth: 10' bgs.

Boring terminated due to water at 10' bgs.

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ARM Group Inc.
Engineers and Scientists

Boring ID: B6-038-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-5-3
Project Description	: Sparrows Point - Parcel B6
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: M. Replogle, E.I.T.
Drilling Company	: Green Services, Inc.
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 06/30/2016
Weather	: 80s, Sunny
Northing (US ft)	: 571389.26
Easting (US ft)	: 1459935.06

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0						
	90	-	B6-038-SB-1	(0-0.5') CONCRETE, loose, white, dry, non plastic, non cohesive	NA	
		255.7		(0.5-3') SILT with SLAG GRAVEL and SAND, soft, brown and gray, dry, non plastic, non cohesive	ML	
		224.4				
		397.2	B6-038-SB-4	(3-3.5') SILT with SLAG GRAVEL and SAND, soft, brown and gray, dry, low plasticity, cohesive	ML	
		87.7		(3.5-5') BRICK, SAND and GRAVEL-sized fragments, loose, brown and red and gray, dry, non plastic, non cohesive	NA	
5						
	70	-		(5-9') SAND with BRICK and SLAG GRAVEL, loose, brown and red and gray, very moist, non plastic, non cohesive	SW	Moderate odor Wet at 9' bgs
		32.4				
		35.8				
		100.2				
		40.5		(9-10') SLAG GRAVEL with SILT, loose, gray, wet, non plastic, non cohesive	GP/SP	
10				End of Boring		

Total Borehole Depth: 10' bgs.

Boring terminated due to water at 10' bgs.

ARM Group Inc.
Engineers and Scientists

Boring ID: B6-039-SB

(page 1 of 1)

Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-5-3
Project Description	: Sparrows Point - Parcel B6
Site Location	: Sparrows Point, MD
ARM Representative	: B. Gehman
Checked by	: M. Replogle, E.I.T.
Drilling Company	: Green Services, Inc.
Driller	: Kevin Pumphrey
Drilling Equipment	: Geoprobe 7822DT

Date	: 06/13/2016
Weather	: 60s, Sunny
Northing (US ft)	: 569231.05
Easting (US ft)	: 1462914.15

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0	92	-	B6-039-SB-1	(0-3.5') GRAVELLY SAND, loose, brown, dry, non plastic, non cohesive	GW/SW	
		20.4				
		32.0				
		18.2		(3.5-4') SLAG GRAVEL with SAND, gray and dark gray, dry to slightly moist, non plastic, non cohesive	GW	
		12.7	B6-039-SB-5	(4-5') SANDY CLAY with GRAVEL, tan, very moist, medium plasticity, cohesive	CL	Strong odor at 4.5' bgs
5	90	-		(5-7.5') GRAVELLY SAND, loose, brown, dry, non plastic, non cohesive	GW/SW	Wet at 7.5' bgs
		3.1				
		4.6		(7.5-8') SANDY GRAVEL, white, wet, non plastic, cohesive	SW/GW	
				(8-8.5') CLAYEY SAND, black, wet, low plasticity, cohesive	SC	Product at 8' bgs, strong odor and black
		20.7		(8.5-10') SLAG GRAVEL with SAND, light gray, wet, non plastic, non cohesive	GW	
		0.8				
10				End of Boring		

Total Borehole Depth: 10' bgs.

Boring terminated due to water at 10' bgs.

ARM Group Inc.
Engineers and Scientists

Boring ID: B6-040-SB

(page 1 of 1)

Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-5-3
Project Description	: Sparrows Point - Parcel B6
Site Location	: Sparrows Point, MD
ARM Representative	: B. Gehman
Checked by	: M. Replogle, E.I.T.
Drilling Company	: Green Services, Inc.
Driller	: Kevin Pumphrey
Drilling Equipment	: Geoprobe 7822DT

Date	: 06/13/2016
Weather	: 60s, Sunny
Northing (US ft)	: 569248.54
Easting (US ft)	: 1462952.66

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0						
	90	0.2	B6-040-SB-1	(0-3') SANDY GRAVEL with SILT, loose, black to tan, dry, non plastic, non cohesive	SW/GW	
		1.0				
		6.1				
		12.5		(3-4') SLAG GRAVEL with some SAND, loose, very moist, non plastic, non cohesive	GW	
		0.8	B6-040-SB-5	(4-5') CLAY with reddish yellow mottles and some SAND, very stiff, tan, chigh plasticity, cohesive	CL	
5						
	100	1.2		(5-7.5') SANDY CLAY, slightly dense, gray, slightly moist, medium plasticity, cohesive	CL	
		2.2				
		0.9		(7.5-8') GRAVEL with some CLAY, gray to black, wet, non plastic, cohesive	GW	
		0.4		(8-10') SANDY CLAY, slightly dense, gray, slightly moist, medium plasticity	CL	
		0.1	B6-040-SB-10			
10						
	0	-		(10-11') No return, refusal - possible concrete		Boring refusal at 11' bgs
				End of Boring		

Total Borehole Depth: 11' bgs.

Boring terminated due to refusal at 11' bgs.

ARM Group Inc.
Engineers and Scientists

Boring ID: B6-041-SB

(page 1 of 1)

Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-5-3
Project Description	: Sparrows Point - Parcel B6
Site Location	: Sparrows Point, MD
ARM Representative	: J. Yaple, P.G.
Checked by	: M. Replogle, E.I.T.
Drilling Company	: Green Services, Inc.
Driller	: Ali Berenbrok - Tim Niblett
Drilling Equipment	: Geoprobe 7822DT

Date	: 06/15/2016
Weather	: 70s, Rainy
Northing (US ft)	: 569058.05
Easting (US ft)	: 1462671.97

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		-	B6-041-SB-1	(0-8.5') SILTY SAND with GRAVEL, loose, light brown, dark brown, blue-gray, dry, non plastic, non cohesive, traces of SLAG throughout		
		0.9				
	82	1.3				
		2.4	B6-041-SB-4			
		<0.1			SM	SILT/CLAY lense at 4-4.5' bgs
5		-				
		-				SILT/CLAY lense at 7-7.5' bgs
	67	1.3				
		4.9				Wet at 8.5' bgs
		0.2		(8.5-15') SLAG GRAVEL, very loose, blue gray, wet, non plastic, non cohesive		
10		-				
		-			GW	
	40	-				
		<0.1				
15		<0.1		End of Boring		

Total Borehole Depth: 15' bgs.

Boring terminated due to water at 10' bgs.

ARM Group Inc.
Engineers and Scientists

Boring ID: B6-042-SB

(page 1 of 1)

Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-5-3
Project Description	: Sparrows Point - Parcel B6
Site Location	: Sparrows Point, MD
ARM Representative	: J. Yaple, P.G.
Checked by	: M. Replogle, E.I.T.
Drilling Company	: Green Services, Inc.
Driller	: Ali Berenbrok - Tim Niblett
Drilling Equipment	: Geoprobe 7822DT

Date	: 06/15/2016
Weather	: 70s, Rainy
Northing (US ft)	: 569036.02
Easting (US ft)	: 1462683.48

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0						
	60	-	B6-042-SB-1	(0-8.5') SLAG, SAND and GRAVEL-sized, very loose, light brown, dark brown, blue-gray, dry, non plastic, non cohesive	SM/GW	
		-				
		2.8				
		4.8				
		0.6				
5		-				
		-				
	60	8.4	B6-042-SB-8			
		8.4		(8.5-10') SLAG, GRAVEL-sized, very loose, light blue-gray, wet, non plastic, non cohesive, some SLAG	GW	Wet at 8.5' bgs
		4.6				
10				End of Boring		

Total Borehole Depth: 10' bgs.

Boring terminated due to water at 10' bgs.

ARM Group Inc.
Engineers and Scientists

Boring ID: B6-043-SB

(page 1 of 1)

Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-5-3
Project Description	: Sparrows Point - Parcel B6
Site Location	: Sparrows Point, MD
ARM Representative	: B. Gehman
Checked by	: M. Replogle, E.I.T.
Drilling Company	: Green Services, Inc
Driller	: Ali Berenbrok - Tim Niblett
Drilling Equipment	: Geoprobe 7822DT

Date	: 06/14/2016
Weather	: 80s, Sunny
Northing (US ft)	: 569305.47
Easting (US ft)	: 1462862.90

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0						
		-	B6-043-SB-1	(0-0.5') CONCRETE, loose, white, dry	NA	
				(0.5-5') SANDY GRAVEL SLAG, loose, light brown, dry, non plastic, non cohesive		
		-				
	50	19.4			GW	
		8.4				
		8.8				
5				(5-10') SANDY GRAVEL SLAG, loose, brown to light gray, dry to moist, non plastic, non cohesive		
		4.3				
		4.0				
	84	22.5	B6-043-SB-8		GW	
		12.8				
		0.0				
10				(10-13') SANDY GRAVEL, loose, brown to light gray, wet, non plastic, non cohesive		
		-				
	29	-			GW	
		-				Wet at 12.5' bgs
				(13-13.5') GRAVEL with SAND SLAG, very dense, grayish blue, dry to wet, non plastic, non cohesive		
				End of Boring		
15						

Total Borehole Depth: 13.5' bgs.

Boring terminated due to refusal at 13.5' bgs.

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ARM Group Inc.
Engineers and Scientists

Boring ID: B6-044-SB

(page 1 of 1)

Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-5-3
Project Description	: Sparrows Point - Parcel B6
Site Location	: Sparrows Point, MD
ARM Representative	: B. Gehman
Checked by	: M. Replogle, E.I.T.
Drilling Company	: Green Services, Inc.
Driller	: Kevin Pumphrey
Drilling Equipment	: Geoprobe 7822DT

Date	: 06/13/2016
Weather	: 70s, Sunny
Northing (US ft)	: 569315.33
Easting (US ft)	: 1462960.62

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0	86	-	B6-044-SB-1	(0-5') SANDY GRAVEL with SILT and a very stiff/plastic CLAYEY zone at 4.5', loose, brown to black, dry, non plastic, non cohesive	GW-GM	
		2.0				
		22.8				
		281.1	B6-044-SB-4			Moist at 4' bgs
		19.9				
5	100	0.6		(5-8') CLAY with some SAND, very stiff, reddish yellow and gray to brown, moist, medium plasticity to high plasticity, cohesive	CL/CH	
		9.8				
		0.6				
		21.7		(8-8.5') GRAVEL, light gray to gray, very moist, non plastic, non cohesive	GW	
				(8.5-9.5') CLAY with some SAND, very stiff, reddish yellow and gray to brown, moist, medium plasticity to high plasticity, cohesive	CL/CH	
		0.1				Wet at 9.5' bgs
10				(9.5-10') CLAYEY GRAVEL, loose, dark gray, wet, non plastic, non cohesive	GC	
				End of Boring		

Total Borehole Depth: 10' bgs.

Boring terminated due to water at 10' bgs.

ARM Group Inc.
Engineers and Scientists

Boring ID: B6-045-SB

(page 1 of 1)

Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-5-3
Project Description	: Sparrows Point - Parcel B6
Site Location	: Sparrows Point, MD
ARM Representative	: B. Gehman
Checked by	: M. Replogle, E.I.T.
Drilling Company	: Green Services, Inc.
Driller	: Ali Berenbrok - Tim Niblett
Drilling Equipment	: Geoprobe 7822DT

Date	: 06/14/2016
Weather	: 70s, Sunny
Northing (US ft)	: 569598.49
Easting (US ft)	: 1462951.06

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		4.3	B6-045-SB-1	(0-1') SANDY GRAVEL, loose, light to dark gray, dry, non plastic, non cohesive	GW	
		5.6		(1-2') SANDY SILT, very stiff, gray to brown and yellowish red, dry, low plasticity, cohesive	ML	
	100	1.7		(2-4.5') SANDY GRAVEL with SLAG and BRICK, light gray to brown, non plastic, non cohesive	GW	
		0.6				
		0.4	B6-045-SB-5	(4.5-5') CLAYEY GRAVEL, soft, black, wet, non plastic, non cohesive	GC	Wet zone at 4.5' bgs (perched)
5		0.9		(5-7.5') CLAY with some SAND, soft, olive gray, very moist, medium plasticity, cohesive	CL	Odor at 5'
		0.2				Wet zone in clay at 7' bgs
	80	2.3		(7.5-10') CLAY with some SAND, very stiff, reddish yellow and brown to gray, slightly moist, high plasticity, cohesive	CL	
		3.2				
		0.0	B6-045-SB-10			
10		-		(10-15') CLAY with some SAND, soft, reddish yellow and brown to gray, wet, cohesive, high plasticity	CL	
	40	-				
		-				Wet at 15' bgs
		-				
15				End of Boring		

Total Borehole Depth: 15' bgs.

Boring terminated due to water at 15' bgs.

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ARM Group Inc.
Engineers and Scientists

Boring ID: B6-046-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-5-3
Project Description	: Sparrows Point - Parcel B6
Site Location	: Sparrows Point, MD
ARM Representative	: B. Gehman
Checked by	: M. Replogle, E.I.T.
Drilling Company	: Green Services, Inc.
Driller	: Ali Berenbrok - Tim Niblett
Drilling Equipment	: Geoprobe 7822DT

Date	: 06/14/2016
Weather	: 70s, Sunny
Northing (US ft)	: 569666.88
Easting (US ft)	: 1463036.05

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0						
	94	4.2	B6-046-SB-1	(0-2') GRAVELLY SAND with CINDER BALLAST and SLAG at 1.8', loose, dark brown, dry, non plastic, non cohesive	SW	
		17.4				
		22.2		(2-5') SANDY CLAY, gray to reddish yellow to brown, slightly moist, medium plasticity, cohesive	CL	
		1.9				
		0.2				
5	100	7.1	B6-046-SB-6	(5-6') SANDY CLAY, olive gray, slightly moist, medium plasticity, cohesive	CL	
		2.7		(6-7') SAND, tan to dark brown to black, very moist, non plastic, non cohesive	SW	
		0.0		(7-8.5') SANDY CLAY, very soft, gray to dark tan, sticky, medium plasticity, cohesive	CL	Wet zone in clay at 7' bgs
		0.7				
		0.0	B6-046-SB-10	(8.5-20') CLAY, hard to stiff, gray to brown and reddish yellow, slightly moist to wet at bottom, medium plasticity, cohesive	CL	
10	100	-				
		-				
		-				
		-				
		-				
15	100	-				
		-				
		-				
		-				Wet at 20' bgs
20				End of Boring		

Total Borehole Depth: 20' bgs.

Boring terminated due to water at 10' bgs.

ARM Group Inc.
Engineers and Scientists

Boring ID: B6-047-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-5-3
Project Description	: Sparrows Point - Parcel B6
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: M. Replogle, E.I.T.
Drilling Company	: Green Services, Inc.
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 07/05/2016
Weather	: 80s, Sunny
Northing (US ft)	: 571786.69
Easting (US ft)	: 1460453.97

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0	86	-	B6-047-SB-1	(0-3') SANDY SILT with some SLAG GRAVEL, soft, dark gray and brown, moist, non plastic, non cohesive	ML	Trace oxidation
		9.1				
		7.5				
		23.4		(3-3.5') SILTY SAND, loose, dark brown, wet, non plastic, non cohesive	SM	
		5.0		(3.5-5') SILT with SAND and small SLAG GRAVEL, soft, red, brown and pale brown, dry, non plastic, non cohesive	ML	
5	100	26.0	B6-047-SB-6	(5-6') SILTY SAND with SLAG GRAVEL and BRICK, loose, red and brown, dry, non plastic, non cohesive	SM	
		30.4		(6-6.3') SILTY CLAY, firm, moist, low plasticity, cohesive	CL	
				(6.3-6.9') CONCRETE, loose, pale yellow, dry, non plastic, non cohesive	-	
				(6.9-7.5') SILTY SAND, loose, pale yellow, dry, non plastic, non cohesive	SP	
		19.8		(7.5-8') SILT, firm, brown, moist, low plasticity, cohesive	ML	
				(8-8.5') SILT, soft, brown, dry, non plastic, non cohesive	ML	
		20.2		(8.5-9') CLAY, very firm, pale brown and strong brown mottling, dry, low plasticity, cohesive	CL	
				(9-9.5') SILT, firm, dark brown, dry to moist, low plasticity, cohesive	ML	
		10.5		(9.5-10') SILT, soft, dark brown, wet, low plasticity, cohesive	ML	Wet at 9.5' bgs
10				End of Boring		

Total Borehole Depth: 10' bgs.

Boring terminated due to water at 10' bgs.

ARM Group Inc.
Engineers and Scientists

Boring ID: B6-048-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-5-3
Project Description	: Sparrows Point - Parcel B6
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: M. Replogle, E.I.T.
Drilling Company	: Green Services, Inc.
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 07/05/2016
Weather	: 80s, Sunny
Northing (US ft)	: 571776.07
Easting (US ft)	: 1460368.15

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0						
	80	5.0	B6-048-SB-1	(0-0.5') SLAG GRAVEL, loose, moist, non plastic, non cohesive	GP	
		3.8		(0.5-3') SANDY SILT, soft, very dark brown, dry, non plastic, non cohesive	ML	
		2.2				
		2.0		(3-5') SILT with large SLAG GRAVEL, soft, dark brown, very moist, low plasticity, cohesive	ML	
		-				
5		0.9		(5-6.5') SILTY SLAG GRAVEL, loose, brown and red, moist, non plastic, non cohesive	GP-GM	
		6.0		(6.5-7') SLAG GRAVEL, loose, gray, very moist, non plastic, non cohesive	GP	
	90	11.7	B6-048-SB-8	(7-8') SILT, soft, very dark brown, very moist, low plasticity, cohesive	ML	Wet at 8' bgs
		10.9		(8-10') SLAG GRAVEL with SILT, loose, dark brown and gray, wet, non plastic, non cohesive	GP	
		6.3				
10				End of Boring		

Total Borehole Depth: 10' bgs.

Boring terminated due to water at 10' bgs.

ARM Group Inc.
Engineers and Scientists

Boring ID: B6-049-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-5-3
Project Description	: Sparrows Point - Parcel B6
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: M. Replogle, E.I.T.
Drilling Company	: Green Services, Inc.
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 07/05/2016
Weather	: 80s, Sunny
Northing (US ft)	: 571934.62
Easting (US ft)	: 1460131.00

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		8.6	B6-049-SB-1	(0-2.5') GRAVELLY SILT with SAND, soft, brown, very moist, non plastic, non cohesive	ML	
		75.2				
	60	55.2		(2.5-5.5') SLAG GRAVEL, with SILT, loose, gray and brown, wet, non plastic, non cohesive	GP	
		-				
		-				
5		4.1		(5.5-5.7') SILTY CLAY, firm, strong brown, dry, medium plasticity, cohesive	CL	
		5.5		(5.7-5.8') SLAG GRAVEL, loose, brown, very moist, non plastic, non cohesive	GP	
	100	19.8	B6-049-SB-8	(5.8-9') CLAY, very firm, strong brown and pale brown mottling, dry, medium plasticity, cohesive	CL	
		0.3				
		0.7	B6-049-SB-10	(9-10') CLAY, soft, strong brown and pale brown mottling, moist, medium plasticity, cohesive	CL	
10		-		(10-12') CLAY, soft, pale brown and strong brown mottling, very moist, medium plasticity, cohesive	CL	
		-				
	100	-		(12-15') CLAY, very soft, pale brown, wet, medium plasticity, cohesive	CL	Wet at 12' bgs
		-				
		-				
15				End of Boring		

Total Borehole Depth: 15' bgs.

Boring terminated due to water at 15' bgs.

ARM Group Inc.
Engineers and Scientists

Boring ID: B6-050-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-5-3
Project Description	: Sparrows Point - Parcel B6
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: M. Replogle, E.I.T.
Drilling Company	: Green Services, Inc.
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 06/30/2016
Weather	: 80s, Sunny
Northing (US ft)	: 571874.28
Easting (US ft)	: 1460074.28

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0				(0-0.2') ASPHALT, loose, gray, dry, non plastic, non cohesive	-	
		-	B6-050-SB-1	(0.2-2') SLAG GRAVEL, loose, pale brown, dry, non plastic, non cohesive	GP	
		5.3				
	78	10.3		(2-3') SAND with SLAG GRAVEL, loose, brown, dry, non plastic, non cohesive	SP	
		14.3		(3-5.4') SLAG, GRAVEL-sized, loose, gray, very moist, non plastic, non cohesive	GP	
		1.8				
5	100	0.6	B6-050-SB-6	(5.4-6') SILT with trace SLAG GRAVEL, firm, pale brown, dry, non plastic, non cohesive	ML	Boring refusal at 6' bgs
				End of Boring		
10						

Total Borehole Depth: 6' bgs.

Boring terminated due to refusal at 6' bgs.

ARM Group Inc.
Engineers and Scientists

Boring ID: B6-051-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-5-3
Project Description	: Sparrows Point - Parcel B6
Site Location	: Sparrows Point, MD
ARM Representative	: J. Yaple, P.G.
Checked by	: M. Replogle, E.I.T.
Drilling Company	: Green Services, Inc.
Driller	: Ali Berenbrok - Tim Niblett
Drilling Equipment	: Geoprobe 7822DT

Date	: 06/15/2016
Weather	: 70s, Cloudy, Rainy
Northing (US ft)	: 568746.80
Easting (US ft)	: 1462508.43

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0						
		-	B6-051-SB-1	(0-1') CONCRETE, hard, dry	-	
		3.2		(1-2.5') SILT, very stiff, tan, dry, non plastic, cohesive	ML	
	83	0.8		(2.5-3') SAND, medium grained, loose, yellowish brown, moist, non plastic, non cohesive	SP	
		1.8		(3-7') CLAY with trace SAND, stiff, tan, dry to moist, medium plasticity, cohesive		
		1.2				
5					CL	
		2.7	B6-051-SB-6			
		0.6				
	100	0.7		(7-10') CLAY, medium stiff, brown with reddish yellow oxidation, moist to wet, high plasticity, cohesive		
		<0.2			CL	
		<0.2				Wet at 9.5' bgs
10				End of Boring		

Total Borehole Depth: 10' bgs.

Boring terminated due to water at 10' bgs.

ARM Group Inc.
Engineers and Scientists

Boring ID: B6-052-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-5-3
Project Description	: Sparrows Point - Parcel B6
Site Location	: Sparrows Point, MD
ARM Representative	: J. Yaple, P.G.
Checked by	: M. Replogle, E.I.T.
Drilling Company	: Green Services, Inc.
Driller	: Ali Berenbrok - Tim Niblett
Drilling Equipment	: Geoprobe 7822DT

Date	: 06/15/2016
Weather	: 70s, Cloudy, Rainy
Northing (US ft)	: 568817.70
Easting (US ft)	: 1462500.14

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0						
		-	B6-052-SB-1	(0-1') CONCRETE, hard, dry	-	
		2.5		(1-4') SILT, medium stiff, reddish yellow, dry, low plasticity, cohesive		
	83	2.1			ML	
		0.6				
		<0.2		(4-5') SAND with trace SILT, fine to medium grained, medium dense, pale brown, wet, non plastic, non cohesive	SP	Wet at 4' bgs
5						
		2.9		(5-10') SILTY CLAY with trace SAND, very soft, pale brown with reddish yellow oxidation, wet, medium plasticity, cohesive		
	93	0.8			CL	
		0.6				
		0.3				
		<0.2				
10				End of Boring		

Total Borehole Depth: 10' bgs.

Boring terminated due to water at 10' bgs.

ARM Group Inc.
Engineers and Scientists

Boring ID: B6-053-SB

(page 1 of 1)

Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-5-3
Project Description	: Sparrows Point - Parcel B6
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: M. Replogle, E.I.T.
Drilling Company	: Green Services, Inc.
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 06/30/2016
Weather	: 80s, Sunny
Northing (US ft)	: 571656.78
Easting (US ft)	: 571656.78

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		-	B6-053-SB-1	(0-0.5') ORGANIC SILT, soft, very pale brown, dry, low plasticity, cohesive	OL	
				(0.5-4') SAND with SLAG GRAVEL, loose, brown, dry, non plastic, non cohesive	SW	
		6.7				
	63	2.2				
		5.5	B6-053-SB-4			
				End of Boring		
5						

Total Borehole Depth: 4' bgs.

Boring terminated due to refusal at 4' bgs.

ARM Group Inc.
Engineers and Scientists

Boring ID: B6-054-SB

(page 1 of 1)

Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-5-3
Project Description	: Sparrows Point - Parcel B6
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: M. Replogle, E.I.T.
Drilling Company	: Green Services, Inc.
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 06/30/2016
Weather	: 80s, Sunny
Northing (US ft)	: 571702.83
Easting (US ft)	: 1460034.69

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0	75	-	B6-054-SB-1	(0-3') SILT with SAND and SLAG GRAVEL, soft, light gray grading to brown, dry to very moist, non plastic, non cohesive	ML	Moderate odor
		8.9				
		76.0				
		558.6	B6-054-SB-4	(3-4') SANDY GRAVEL, loose, brown and gray, very moist to wet, non plastic, non cohesive	SP	
				End of Boring		
5						
10						

Total Borehole Depth: 4' bgs.

Boring terminated due to refusal at 4' bgs.

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ARM Group Inc.
Engineers and Scientists

Boring ID: B6-055-SB

Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-5-3
Project Description	: Sparrows Point - Parcel B6
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: M. Replogle, E.I.T.
Drilling Company	: Green Services, Inc.
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 06/17/2016
Weather	: 70s, Sunny
Northing (US ft)	: 571477.60
Easting (US ft)	: 1462442.62

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0						
		0.2	B6-055-SB-1	(0-2') SANDY SILT with SLAG GRAVEL, soft, brown, dry but wet at very top, non plastic, non cohesive	ML	
		3.1				
	93	4.1		(2-5') CLAY with small SLAG GRAVEL throughout, very firm, pale brown, dry, low plasticity, cohesive	CL	
		3.3				
		2.9				
5				(5-7.5') CLAY, very firm, gray, dry, medium plasticity, cohesive	CL	
		1.8				
		2.2	B6-055-SB-7			
	100	7.0		(7.5-8.5') SANDY CLAY, very soft, brownish gray, wet, medium plasticity, cohesive	CL	Wet at 7.5' bgs
		8.0		(8.5-10') CLAY, soft, brownish gray, very moist, high plasticity, cohesive	CH	
		8.0				
10				End of Boring		

Total Borehole Depth: 10' bgs.

Boring terminated due to water at 10' bgs.

ARM Group Inc.
Engineers and Scientists

Boring ID: B6-056-SB

(page 1 of 1)

Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-5-3
Project Description	: Sparrows Point - Parcel B6
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: M. Replogle, E.I.T.
Drilling Company	: Green Services, Inc.
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 06/16/2016
Weather	: 80s, Cloudy
Northing (US ft)	: 571429.98
Easting (US ft)	: 1462393.57

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0						
		-	B6-056-SB-1	(0-2.5') SAND and SLAG GRAVEL, loose, brown, wet to dry, non plastic, non cohesive	GP/SP	
		-				
	70	1.4		(2.5-3') BRICK and CONCRETE GRAVEL, loose, yellow and gray, dry, non plastic, non cohesive	GP	Glass present
		0.5		(3-3.8') SILT grading to SAND, soft to loose, black grading to pale brown, moist, non plastic, non cohesive	ML/SP	
		0.0		(3.8-5') BRICK GRAVEL and SAND, loose, red and yellow and gray, non plastic, non cohesive	-	
5		-		(5-7') BRICK GRAVEL and SAND with some CLAY, loose, red and yellow and gray, very moist, non plastic, non cohesive	-	
		3.5				
	70	34.8	B6-056-SB-8	(7-10') GRAVELLY CLAY, very soft, gray, black, and red, very moist to wet, high plasticity, cohesive	CL	Sheen, strong odor Apparent product from 7-10' bgs Wet at 8.5' bgs
		33.3				
		0.7				
10		-		(10-15') CLAY, soft, grayish green, very moist, high plasticity, cohesive	CL	
		-				
	50	0.0				
		0.0				
		0.0				
15				End of Boring		

Total Borehole Depth: 15' bgs.

Boring terminated due to water and piezometer installation at 15' bgs.

ARM Group Inc.
Engineers and Scientists

Boring ID: B6-057-SB

(page 1 of 1)

Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-5-3
Project Description	: Sparrows Point - Parcel B6
Site Location	: Sparrows Point, MD
ARM Representative	: J. Yaple, P.G.
Checked by	: M. Replogle, E.I.T.
Drilling Company	: Green Services, Inc.
Driller	: Kevin Pumphrey
Drilling Equipment	: Geoprobe 7822DT

Date	: 06/16/2016
Weather	: 70s, Cloudy
Northing (US ft)	: 569986.62
Easting (US ft)	: 1462575.11

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		-	B6-057-SB-1	(0-1') CONCRETE, hard, dry	-	1st attempt refusal at 3' bgs
		5.3		(1-3') SILTY SAND and GRAVEL, fine to medium grained, dense, reddish yellow, dry, non plastic, non cohesive	SM/GW	
	83	3.9				
		2.7		(3-7') Fine grained SAND, dense, reddish yellow, dry, cohesive		
		1.2				
5		3.2			SP/SM	
		3.9				
	100	9.0	B6-057-SB-8	(7-12.5') SILT, medium soft, reddish yellow, dry to moist, non plastic, cohesive		
		1.6				
		1.2	B6-057-SB-10		ML	
10		<0.2				
		<0.2				
	100	<0.2				Saturated at 12.5' bgs
				(12.5-13') SAND, fine grained, loose, reddish yellow, wet, non plastic, cohesive	SP	
		<0.2		(13-15') CLAY, soft, reddish-yellow and gray, wet, medium plasticity, cohesive	CL	
		<0.2				
15				End of Boring		

Total Borehole Depth: 15' bgs.

Boring terminated due to water at 15' bgs.

ARM Group Inc.
Engineers and Scientists

Boring ID: B6-058-SB

(page 1 of 1)

Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-5-3
Project Description	: Sparrows Point - Parcel B6
Site Location	: Sparrows Point, MD
ARM Representative	: J. Yaple, P.G.
Checked by	: M. Replogle, E.I.T.
Drilling Company	: Green Services, Inc
Driller	: Kevin Pumphrey
Drilling Equipment	: Geoprobe 7822DT

Date	: 06/16/2016
Weather	: 70s, Cloudy
Northing (US ft)	: 569973.78
Easting (US ft)	: 1462600.55

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		-	B6-058-SB-1	(0-3.5') SAND and GRAVEL, fine to coarse, loose, dry, non plastic, non cohesive	SW/GW	
		2.6				
	70	1.2				
		2.2				
		6.3	B6-058-SB-5	(3.5-8.5') SILTY SAND with GRAVEL, fine to medium grained, angular, loose, gray-green and reddish yellow, dry to wet, cohesive	SM/GW	
5		-				
		-				
	43	-				
		5.9				
		2.7	B6-058-SB-10	(8.5-10') CLAYEY SILT, soft, pale brown with brown, wet to moist, medium plasticity, cohesive	ML	
10		<0.2		(10-13.5') SILT, stiff, pale brown, moist, low plasticity, cohesive	ML	
		<0.2				
	100	<0.2				
		<0.2				
		<0.2		(13.5-15') SILTY CLAY, very soft, gray-green and pale brown, moist then wet, medium plasticity, cohesive	CL	Wet at 14' bgs
15				End of Boring		

Total Borehole Depth: 15' bgs.

Boring terminated due to water at 10' bgs.

ARM Group Inc.
Engineers and Scientists

Boring ID: B6-059-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-5-3
Project Description	: Sparrows Point - Parcel B6
Site Location	: Sparrows Point, MD
ARM Representative	: J. Yaple, P.G.
Checked by	: M. Replogle, E.I.T.
Drilling Company	: Green Services, Inc.
Driller	: Kevin Pumphrey
Drilling Equipment	: Geoprobe 7822DT

Date	: 06/16/2016
Weather	: 70s, Sunny
Northing (US ft)	: 570004.88
Easting (US ft)	: 1462810.99

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		-	B6-059-SB-1	(0-1') CONCRETE, hard, dry	-	
		-		(1-9') SILTY SAND and GRAVEL with ~15% SLAG, fine to coarse grained, angular, medium dense, dark brown, dark gray, gray-green, dry to moist, non plastic, non cohesive		
	63	5.2				
		28.5				
		7.6				
5		-			SM/GW	
		-				
	38	65.3	B6-059-SB-8			
		43.6				
		2.3	B6-059-SB-10	(9-15') SILTY SAND with trace GRAVEL, fine to coarse grained, dense, reddish yellow, dark brown, gray, moist to wet, non plastic, cohesive		
10		-				
		0.8			SM	
	73	1.7				Wet at 12.5' bgs
		0.6				
		0.3				
15				End of Boring		

Total Borehole Depth: 15' bgs.

Boring terminated due to water at 15' bgs.

ARM Group Inc.
Engineers and Scientists

Boring ID: B6-060-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-5-3
Project Description	: Sparrows Point - Parcel B6
Site Location	: Sparrows Point, MD
ARM Representative	: J. Yaple, P.G.
Checked by	: M. Replogle, E.I.T.
Drilling Company	: Green Services, Inc.
Driller	: Kevin Pumphrey
Drilling Equipment	: Geoprobe 7822DT

Date	: 06/17/2016
Weather	: 70s, Sunny
Northing (US ft)	: 569987.09
Easting (US ft)	: 1462812.50

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		-	B6-060-SB-1	(0-1') CONCRETE, hard, dry	-	Fill material 0-13' bgs
		-		(1-9') SILTY SAND and GRAVEL with trace SILT and SLAG, fine to coarse, loose, dark brown and brown, dry to moist, non plastic, non cohesive		
	48	-				
		11.3	B6-060-SB-4			
		1.6				
5		-			SM/GM	
		-				
	43	-				
		7.1				
		10.8		(9-10') CONCRETE, hard, gray-green, dry	-	
10		-		(10-13') CLAYEY GRAVEL, angular, soft to loose, pale brown and brown, dry to wet, medium plasticity, cohesive		
		0.2			GC	
	66					Wet at 12' bgs
		0.3				
				End of Boring		

Total Borehole Depth: 13' bgs.

Boring terminated due to refusal at 13' bgs.

ARM Group Inc.
Engineers and Scientists

Boring ID: B6-061-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-5-3
Project Description	: Sparrows Point - Parcel B6
Site Location	: Sparrows Point, MD
ARM Representative	: J. Yaple, P.G.
Checked by	: M. Replogle, E.I.T.
Drilling Company	: Green Services, Inc.
Driller	: Ali Berenbrok - Tim Niblett
Drilling Equipment	: Geoprobe 7822DT

Date	: 06/15/2016
Weather	: 70s, Cloudy, Rain
Northing (US ft)	: 568863.50
Easting (US ft)	: 1462446.45

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		-	B6-061-SB-1	(0-3.5') SILTY SAND fine grained with trace well rounded GRAVEL, very loose, dark brown, non plastic, non cohesive	SM	1st attempt hit void 2-5' bgs 2nd attempt-completed at 20' to the west
	70	-				
		2.1				
		4.2	B6-061-SB-4			
				(3.5-4.5') SANDY SILT, soft, gray-green and brown, dry, non plastic, non cohesive	ML	
		2.5				Saturated at 4.5' bgs
5				(4.5-8.5') SILTY SAND with trace GRAVEL, fine to medium grained, loose, dark brown and pale brown, wet, non plastic, cohesive	SM	
		-				
		10.2				
	80	9.9				
		4.1				
				(8.5-10') SILTY CLAY, soft, brownish and gray-green, wet, medium plasticity, cohesive	CL	
		1.8				
10				End of Boring		

Total Borehole Depth: 10' bgs.

Boring terminated due to water at 10' bgs.

ARM Group Inc.
Engineers and Scientists

Boring ID: B6-062-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-5-3
Project Description	: Sparrows Point - Parcel B6
Site Location	: Sparrows Point, MD
ARM Representative	: J. Yaple, P.G.
Checked by	: M. Replogle, E.I.T.
Drilling Company	: Green Services, Inc.
Driller	: Ali Berenbrok - Tim Niblett
Drilling Equipment	: Geoprobe 7822DT

Date	: 06/15/2016
Weather	: 70s, Cloudy
Northing (US ft)	: 568886.21
Easting (US ft)	: 1462455.12

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0						
	85	-	B6-062-SB-1	(0-4.5') SILTY SAND, fine to coarse grained with trace GRAVEL, loose, dark brown and dark gray, dry, non plastic, non cohesive	SM	Fill material (0-4.5' bgs)
		4.1				
		4.6				
		4.7	B6-062-SB-4			
		1.2				
5				(4.5-6') SILT with some SAND, soft, tan and reddish yellow, moist to wet, non plastic, cohesive	ML	Wet at 5' bgs
		<0.2				
		<0.2		(6-10') CLAY, very soft, brown with yellowish red oxidation, wet, high plasticity, cohesive		
	100	<0.2			CL	
		<0.2				
		<0.2				
10				End of Boring		

Total Borehole Depth: 10' bgs.

Boring terminated due to water at 10' bgs.

ARM Group Inc.
Engineers and Scientists

Boring ID: B6-063-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-5-3
Project Description	: Sparrows Point - Parcel B6
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: M. Replogle, E.I.T.
Drilling Company	: Green Services, Inc.
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 06/16/2016
Weather	: 80s, Cloudy
Northing (US ft)	: 571239.79
Easting (US ft)	: 1462420.94

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		-	B6-063-SB-1	(0-1.5') SAND and GRAVEL, loose, very dark brown, moist, non plastic, non cohesive	GP/SP	
		6.4		(1.5-2') SAND, loose, reddish yellow, very moist, non plastic, non cohesive	SP	
	90	22.5		(2-3') SLAG, SAND and GRAVEL-sized, loose, gray and brown, moist, non plastic, non cohesive	GP/SP	
		68.4		(3-3.3') SILT, firm, pale brown, moist, non plastic, non cohesive	ML	
		0.1		(3.3-4') SLAG GRAVEL, loose, gray and brown, moist, non plastic, non cohesive	GP/SP	
5		2.0		(4-5.5') SILT with SLAG GRAVEL, firm, pale brown, moist, non plastic, non cohesive	ML	
		5.6		(5.5-7') SLAG GRAVEL, loose, very dark brown and gray, moist to very moist, non plastic, non cohesive	SP/GP	
	100	9.0		(7-10') CLAY, firm to soft, greenish gray, moist, sandy at depth, medium to high plasticity, cohesive	CL/CH	
		9.8	B6-063-SB-9			
		0.1				
10		-		(10-12') SANDY CLAY grading to CLAY, soft, greenish gray, very moist, high plasticity, cohesive	CL	Sludge-type odor
		0.0				
	80	0.0		(12-12.5') SLAG GRAVEL, loose, greenish gray, wet, non plastic, non cohesive	GP	Wet at 12' bgs
		0.0		(12.5-15') CLAY, soft to very soft, greenish gray, wet, high plasticity, cohesive	CL	
		0.0				
15				End of Boring		

Total Borehole Depth: 15' bgs.

Boring terminated due to water at 15' bgs.

ARM Group Inc.
Engineers and Scientists

Boring ID: B6-064-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-5-3
Project Description	: Sparrows Point - Parcel B6
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: M. Replogle, E.I.T.
Drilling Company	: Green Services, Inc.
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 06/16/2016
Weather	: 80s, Cloudy
Northing (US ft)	: 571237.74
Easting (US ft)	: 1462394.43

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		-	B6-064-SB-1	(0-2') SAND and SLAG GRAVEL SLAG, loose, dark brown, moist, non plastic, non cohesive	GP/SP	
		0.0				
	80	0.0		(2-2.5') SILT with SAND, soft, brown, dry, non plastic, non cohesive	ML	
		2.7		(2.5-4') SLAG GRAVEL, loose, gray and brown, dry, non plastic, non cohesive	GP/SP	
		0.0		(4-5') SLAG GRAVEL, loose, black, strong brown and trace white, moist	GP/SP	
5		0.2		(5-5.8') BRICK GRAVEL, loose, yellow, dry, non plastic, non cohesive	-	
		1.7		(5.8-10') CLAY, firm to soft, greenish gray and reddish yellow mottled, moist, medium plasticity, cohesive	CL	
	100	2.3	B6-064-SB-8			
		1.2				
		0.0	B6-064-SB-10			
10		-		(10-15') CLAY, very firm but soft at 12', greenish gray, moist to wet, medium plasticity, cohesive	CL	
	87	0.0				
		0.0				
		0.0				Wet at 15' bgs
15		0.0		End of Boring		

Total Borehole Depth: 15' bgs.

Boring terminated due to water at 15' bgs.

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ARM Group Inc.
Engineers and Scientists

Boring ID: B6-065-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-5-3
Project Description	: Sparrows Point - Parcel B6
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: M. Replogle, E.I.T.
Drilling Company	: Green Services, Inc.
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 07/05/16
Weather	: 80s, Sunny
Northing (US ft)	: 571473.63
Easting (US ft)	: 1459784.47

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		-	B6-065-SB-1	(0-1') ORGANIC SILT, soft, brown, dry, non plastic, non cohesive		Small roots present
	90	4.5		(1-3') SILT with SAND, firm to sfot, brown, dry, low plasticity, cohesive	ML	
		6.0				
		9.3	B6-065-SB-4	(3-3.3') CONCRETE, loose, white, dry, non plastic, non cohesive	NA	
				(3.3-3.7') SILT, firm, reddish yellow, dry, low plasticity, cohesive	ML	
				(3.7-4.5') SANDY SILT, soft, dark brown, moist, non plastic, non cohesive	ML	
		7.4		(4.5-6') SANDY GRAVEL, loose, dark brown, wet, non plastic, non cohesive	GP/SP	Wet at 4.5' bgs
5		5.1				
		3.5		(6-7') SILT with SAND, very firm, greenish brown, moist, low plasticity, cohesive	MC	
	100	6.0		(7-9') SANDY GRAVEL, loose, brown, wet, non plastic, non cohesive	GP/SP	
		8.4				
				End of Boring		
10						

Total Borehole Depth: 9' bgs.

Boring terminated due to refusal at 9' bgs.

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ARM Group Inc.
Engineers and Scientists

Boring ID: B6-066-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-5-3
Project Description	: Sparrows Point - Parcel B6
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: M. Replogle, E.I.T.
Drilling Company	: Green Services, Inc.
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 07/5/16
Weather	: 80s, Sunny
Northing (US ft)	: 571512.31
Easting (US ft)	: 1459800.72

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		2.2	B6-066-SB-1	(0-0.7') ORGANIC CLAY, soft, brown, moist, low plasticity, cohesive	OL	Grass and small roots present
				(0.7-1') CLAY with SAND, soft, brown, moist, low plasticity, cohesive	CL	
		5.7		(1-1.2') BRICK GRAVEL, loose, yellow, dry, non plastic, non cohesive	-	
	94	82.6		(1.2-4.5') SILT with GRAVEL and SAND, soft, brown grading to dark brown, dry grading to moist, non plastic, non cohesive	ML	
		40.0				
		510.8	B6-066-SB-5	(4.5-5') SILT with SAND, soft, black, very moist to wet, non plastic, non cohesive	ML	Strong oil odor, trace product
5		20.7		(5-6.5') SANDY GRAVEL, loose, black, wet, non plastic, non cohesive	GP/SP	Wet at 5' bgs Product present throughout sleeve and in clay
		7.1		(6.5-9.5') CLAY, very soft, olive green and black, wet, high plasticity, cohesive	CL	
	100	-				Strong odor and slightly viscous with sheen
		-				
		-				
10				(9.5-10') SANDY GRAVEL, loose, black, wet, non plastic, non cohesive	GP/SP	
		-		(10-13') CLAY with some SLAG GRAVEL, very soft, dark gray to black, wet, high plasticity, cohesive	CL	Strong odor
	100	-				
		-				
				End of Boring		

Total Borehole Depth: 13' bgs.

Boring terminated due to water and piezometer installation at 13' bgs.

ARM Group Inc.
Engineers and Scientists

Boring ID: B6-067-SB

(page 1 of 1)

Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-5-3
Project Description	: Sparrows Point - Parcel B6
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: M. Replogle, E.I.T.
Drilling Company	: Green Services, Inc.
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 07/06/16
Weather	: 80s, Sunny
Northing (US ft)	: 571971.11
Easting (US ft)	: 1462554.66

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0						
	90	-	B6-067-SB-1	(0-1.2') ORGANIC SILT, soft, dark brown, moist, non plastic, non cohesive	OL	Grass and small roots present
		2.8		(1.2-2.2') SILT with SAND, soft, dark brown, dry, non plastic, non cohesive	ML	
		15.9		(2.2-4') SLAG GRAVEL with SAND, GRAVEL and SAND sized, loose, gray, dry, non plastic, non cohesive	GP/SP	
		29.6				
		200.7	B6-067-SB-5	(4-4.7') SLAG GRAVEL with SILT, GRAVEL and SAND sized, with large WOOD fragment, loose, brown and gray, very moist, non plastic, non cohesive	GP/SP	Moderate odor
5				(4.7-7.7') SILT type material, firm, white, moist, non low plasticity, cohesive	ML	
		-				
		-				
	50	26.6				
				(7.7-8') SLAG GRAVEL and SAND, loose, brown, dry, non plastic, non cohesive	-	
		110.1		(8-8.5') CLAY, soft, brown with yellowish brown mottling, medium plasticity, cohesive	CL	Wet at 8.5' bgs
				(8.5-9') SAND with GRAVEL, loose, dark brown and pale brown, wet, non plastic, non cohesive	SP	
		14.1		(9-10') CLAY, soft to firm, grayish brown, moist, medium plasticity, cohesive	CL	
10				End of Boring		

Total Borehole Depth: 10' bgs.

Boring terminated due to water at 10' bgs.

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ARM Group Inc.
Engineers and Scientists

Boring ID: B6-068-SB

(page 1 of 1)

Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-5-3
Project Description	: Sparrows Point - Parcel B6
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: M. Replogle, E.I.T.
Drilling Company	: Green Services, Inc.
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 06/30/2016
Weather	: 80s, Sunny
Northing (US ft)	: 571239.34
Easting (US ft)	: 1459383.21

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0						
		4.3	B6-068-SB-1	(0-1') SILTY SAND with quartzite GRAVEL, loose, very pale brown, dry, non plastic, non cohesive	SP	
		1.8		(1-2.5') SANDY SILT, soft, very pale brown, dry, low plasticity, cohesive	ML	
	100	1.2		(2.5-3') SANDY CLAY, soft, pale brown, moist, cohesive, medium plasticity	CL	
		38.4	B6-068-SB-4	(3-3.5') CLAYEY SAND with GRAVEL, loose, pale brown, very moist, non plastic, non cohesive	SW	
				(3.5-4.5') CLAY, hard, pale brown and light gray, dry, medium plasticity, cohesive	CL	
		30.4		(4.5-5.5') GRAVELLY SAND with SILT, loose, very dark brown, wet, non plastic, non cohesive	SP/GP	Wet at 4.5' bgs
5		-		(5.5-6) WOOD fragments with SILT, wet	-	
		-		(6-9.5') SILTY CLAY with SAND and GRAVEL, very firm, dark brown, moist to wet, low plasticity, cohesive	CL	Trace sheen, odor, possible product
	100	-				
		-				
		-				
				(9.5-10') SANDY GRAVEL with SILT, loose, very dark brown, wet, non plastic, non cohesive	GP	
10				End of Boring		

Total Borehole Depth: 10' bgs.

Boring terminated due to water at 10' bgs.

ARM Group Inc.
Engineers and Scientists

Boring ID: B6-069-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-5-3
Project Description	: Sparrows Point - Parcel B6
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: M. Replogle, E.I.T.
Drilling Company	: Green Services, Inc.
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 07/05/2016
Weather	: 80s, Sunny
Northing (US ft)	: 572086.11
Easting (US ft)	: 1460731.04

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0	84	0.5	B6-069-SB-1	(0-3') SILT with some SLAG GRAVEL, soft, brown, moist to dry, non plastic, non cohesive	ML	
		1.1				
		5.7				
		3.0		(3-4') SILTY BRICK and SLAG GRAVEL, loose, brown, yellow and reddish yellow, non plastic, non cohesive	GP/GM	
		0.5		(4-5') GRAVELLY CLAY, large BRICK at bottom, soft, brown with trace reddish yellow, moist, low plasticity, cohesive	CL	
5	50	-		(5-8.5') SILTY SAND with SLAG and BRICK GRAVEL, soft, brown with trace yellow, moist, non plastic, non cohesive	SM	
		-				
		4.5	B6-069-SB-8.5			
		16.1		(8.5-9.5') SANDY GRAVEL with SILT, loose, dark brown, wet, non plastic, non cohesive	SP/GP	Wet at 8.5' bgs
		24.5		(9.5-10') SANDY SILT with SLAG GRAVEL, soft, dark brown, wet, non plastic, non cohesive	ML	
10				End of Boring		

Total Borehole Depth: 10' bgs.

Boring terminated due to water at 10' bgs.

ARM Group Inc.
Engineers and Scientists

Boring ID: B6-070-SB

(page 1 of 1)

Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-5-3
Project Description	: Sparrows Point - Parcel B6
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: M. Replogle, E.I.T.
Drilling Company	: Green Services, Inc.
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 07/05/2016
Weather	: 80s, Sunny
Northing (US ft)	: 571757.84
Easting (US ft)	: 1461098.10

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0						
		0.9	B6-070-SB-1	(0-1') SLAG and BRICK GRAVEL with SILT, loose, brown and yellow, dry, non plastic, non cohesive	GP	
		28.9		(1-6.5') SILT with SLAG and BRICK GRAVEL and trace SAND, soft, brown and gray, dry, non plastic, non cohesive	ML	
	94	543.8				
		66.3	B6-070-SB-4			
		13.7				
5		-				
		1.2		(6.5-7') SILTY CLAY with GRAVEL, firm, pale brown and reddish yellow mottling, moist, low plasticity, cohesive	CL	
	80	14.4		(7-8') SANDY GRAVEL, loose, brown and dark gray, wet, non plastic, non cohesive	GP/SP	
		63.5		(8-9') SILTY CLAY, firm, grayish brown, moist to dry, low plasticity, cohesive	CL	
		70.0		(9-9.8') CLAY, soft, grayish brown, moist then wet, low plasticity, cohesive	CL	Wet at 9.5' bgs
10				(9.8-10') SANDY GRAVEL, loose, dark brown, wet, non plastic, non cohesive	SP/GP	
				End of Boring		

Total Borehole Depth: 10' bgs.

Boring terminated due to water at 10' bgs.

ARM Group Inc.
Engineers and Scientists

Boring ID: B6-071-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-5-3
Project Description	: Sparrows Point - Parcel B6
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: M. Replogle, E.I.T.
Drilling Company	: Green Services, Inc.
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 06/17/2016
Weather	: 80s, Sunny
Northing (US ft)	: 569740.43
Easting (US ft)	: 1463364.83

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0						
	80	-	B6-071-SB-1	(0-1.4') SILT with SAND, soft, dark brown, moist, non plastic, non cohesive	ML	
		0.2		(1.4-1.8') CONCRETE, loose, gray, dry, non plastic, non cohesive	NA	
		1.1		(1.8-10') SAND and SLAG GRAVEL, loose, gray and brown, dry to wet at bottom, non plastic, non cohesive		
		3.1	B6-071-SB-4			
		1.3				
5		-			SP/GP	
		-				
	60	0.3				
		1.9				Wet at 9' bgs
		0.9				
10				End of Boring		

Total Borehole Depth: 10' bgs.

Boring terminated due to water at 10' bgs.

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ARM Group Inc.
Engineers and Scientists

Boring ID: B6-072-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-5-3
Project Description	: Sparrows Point - Parcel B6
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: M. Replogle, E.I.T.
Drilling Company	: Green Services, Inc.
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 06/17/2016
Weather	: 80s, Sunny
Northing (US ft)	: 570457.03
Easting (US ft)	: 1463017.37

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0						
	100	0.5	B6-072-SB-1	(0-0.3') SILT with SAND, soft, brown, dry, non plastic, non cohesive	ML	
				(0.3-0.7') CINDER BALLAST, loose, black, moist, non plastic, non cohesive	-	
		1.0		(0.7-1.3') SILT with SAND, soft, brown, dry, non plastic, non cohesive	ML	
				(1.3-2') CINDER BALLAST, loose, black, moist, non plastic, non cohesive	-	
		1.3		(2-4') SILT grading to CLAY, firm, brownish gray, dry, low plasticity, cohesive	ML/CL	
		1.5	B6-072-SB-4			
		0.6		(4-5') CLAY, very firm, brownish gray, dry, medium plasticity, cohesive	CL	
5						
	50	-		(5-7.6') CLAY, very soft, dark gray, moist, high plasticity, cohesive	CL	
		-				
		0.1		(7.6-10') SLAG GRAVEL, large, loose, light gray, moist to wet, non plastic, non cohesive	GP	Wet at 9' bgs
		0.2				
		0.2				
10				End of Boring		

Total Borehole Depth: 10' bgs.

Boring terminated due to water at 10' bgs.

ARM Group Inc.
Engineers and Scientists

Boring ID: B6-073-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-5-3
Project Description	: Sparrows Point - Parcel B6
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: M. Replogle, E.I.T.
Drilling Company	: Green Services, Inc.
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 06/167/2016
Weather	: 80s, Cloudy
Northing (US ft)	: 571211.18
Easting (US ft)	: 1463204.49

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0						
		-	B6-073-SB-1	(0-2.2') SILT with SAND anad GRAVEL, loose, black, dry, non plastic, non cohesive	ML	
		0.0				
	80	0.2		(2.2-2.7') SILT, very firm, pale brown and reddish yellow, dry, low plasticity, cohesive	ML	
				(2.7-3.5') SLAG GRAVEL, loose, gray and light gray, moist, non plastic, non cohesive	GP/SP	
		0.5		(3.5-4.9') CLAY, hard, light gray and reddish yellow mottling, dry, high plasticity, cohesive	CL	
		0.3	B6-073-SB-5			
5				(4.9-5.5') SAND, loose, pale brown, wet, non plastic, non cohesive	SP	Wet at 5' bgs
		-		(5.5-10') CLAY, very firm, light gray and reddish yellow mottling, dry, high plasticity, cohesive	CL	
		0.3				
	100	0.0				
		0.9				
		0.0				
10				End of Boring		

Total Borehole Depth: 10' bgs.

Boring terminated due to water at 10' bgs.

ARM Group Inc.
Engineers and Scientists

Boring ID: B6-074-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-5-3
Project Description	: Sparrows Point - Parcel B6
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: M. Replogle, E.I.T.
Drilling Company	: Green Services, Inc.
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 06/17/2016
Weather	: 70s, Cloudy
Northing (US ft)	: 571635.97
Easting (US ft)	: 1462790.95

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0						
	100	0.4	B6-074-SB-1	(0-1.5') SILT, firm, brown, dry, low plasticity, cohesive	ML	
		0.5		(1.5-2.5') SILTY SLAG GRAVEL, loose, dark gray, dry, non plastic, non cohesive	GP-GM	
		1.5		(2.5-8') SILT, soft to firm, gray, dry to moist, low plasticity, cohesive	ML	Slight odor
		3.0	B6-074-SB-4			
		1.3				
5		0.3				
		0.5				
	100	0.2				Wet at 8' bgs
		0.2		(8-9') CLAYEY SILT, very soft, dark gray, wet, low plasticity, cohesive	ML	
		0.1		(9-10') CLAY, soft, gray, very moist, medium plasticity, cohesive	CL	Wood fragments
10				End of Boring		

Total Borehole Depth: 10' bgs.

Boring terminated due to water at 10' bgs.

ARM Group Inc.
Engineers and Scientists

Boring ID: B6-075-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-5-3
Project Description	: Sparrows Point - Parcel B6
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: M. Replogle, E.I.T.
Drilling Company	: Green Services, Inc.
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 06/16/2016
Weather	: 80s, Cloudy
Northing (US ft)	: 571760.13
Easting (US ft)	: 1463645.90

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0	60	-	B6-075-SB-1	(0-2.5') SAND and SLAG GRAVEL, loose, brown, dry, non plastic, non cohesive	SP/GP	
		-				
		0.3		(2.5-5') SLAG, fine to coarse, loose, gray to dark gray, dry to moist, non plastic, non cohesive	SP/GP	
		4.4				
		0.5	No sample due to large diameter slag			
5	70	-		(5-7') SLAG, coarse, loose, gray, dry, non plastic, non cohesive	GP	Wet at 7' bgs
		0.8				
		0.0		(7-8') CLAY, very soft, pale brown, wet, high plasticity, cohesive	CL	
		0.0		(8-10') CLAY, hard, pale brown with reddish yellow mottling, dry, high plasticity, cohesive	CL	
		0.0				
10				End of Boring		

Total Borehole Depth: 10' bgs.

Boring terminated due to water at 10' bgs.

ARM Group Inc.
Engineers and Scientists

Boring ID: B6-076-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-5-3
Project Description	: Sparrows Point - Parcel B6
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: M. Replogle, E.I.T.
Drilling Company	: Green Services, Inc.
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 07/06/2016
Weather	: 80s, Sunny
Northing (US ft)	: 572130.46
Easting (US ft)	: 1463347.57

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0						
		-	B6-076-SB-1	(0-0.5') ORGANIC SILT with SAND, soft, brown, moist, non plastic, non cohesive	OL	
				(0.5-5.5') SANDY SILT, soft, brown then very dark gray then brown, dry, non plastic, non cohesive		Small grass and roots present
		2.5				
	80	2.4			ML	Metallic shimmer
		0.8				
						Yellow brick and metallic SLAG at 4' bgs
		9.1				
5						
		35.9		(5.5-7') SILT, very firm, yellowish brown, dry, low plasticity, cohesive	ML	
		20.4				
	100	105.2	B6-076-SB-8	(7-8') SILT, very firm, yellowish brown, dry, low plasticity, cohesive	ML	Wet at 8' bgs
		9.7		(8-10') SLAG GRAVEL and SAND, loose, dark brown, wet, non plastic, non cohesive	GP/SP	
		3.3				
10				End of Boring		

Total Borehole Depth: 10' bgs.

Boring terminated due to water at 10' bgs.

ARM Group Inc.
Engineers and Scientists

Boring ID: B6-077-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-5-3
Project Description	: Sparrows Point - Parcel B6
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: M. Replogle, E.I.T.
Drilling Company	: Green Services, Inc.
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 06/15/2016
Weather	: 70s, Cloudy, Rainy
Northing (US ft)	: 570152.57
Easting (US ft)	: 1463598.20

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0						
	80	-	B6-077-SB-1	(0-0.7') SILT with GRAVEL, soft, very pale brown, dry, non plastic, non cohesive	ML	
		9.8		(0.7-2.5') SILT with large GRAVEL, firm, brown, dry, non plastic, non cohesive	ML	
		0.0		(2.5-3.5') CLAY with SILT, soft, very dark gray, moist, medium plasticity, cohesive	CL	
		0.0	B6-077-SB-4	(3.5-4.3') CLAY grading to SANDY CLAY, very soft, pale brown, moist to wet, high plasticity to low plasticity, cohesive	CH/CL	Wet at 4' bgs
		0.0		(4.3-4.7') SAND, loose, pale brown, wet, non plastic, non cohesive	SP	
5				(4.7-5') SANDY CLAY, soft, pale brown, very moist, high plasticity, cohesive	CL	
		0.8		(5-5.8') SAND, loose, pale brown, wet, non plastic, non cohesive	SP	
	100	0.5		(5.8-10') SANDY CLAY grading to CLAY, hard, pale brown and light gray mottling, dry, high plasticity, cohesive	CL	
		0.1				
		0.1				
		0.1				
10				End of Boring		

Total Borehole Depth: 10' bgs.

Boring terminated due to water at 10' bgs.

ARM Group Inc.
Engineers and Scientists

Boring ID: B6-078-SB

(page 1 of 1)

Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-5-3
Project Description	: Sparrows Point - Parcel B6
Site Location	: Sparrows Point, MD
ARM Representative	: J. Yaple, P.G.
Checked by	: M. Replogle, E.I.T.
Drilling Company	: Green Services, Inc.
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 06/17/2016
Weather	: 60s, Cloudy
Northing (US ft)	: 570696.75
Easting (US ft)	: 1462395.62

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		0.8	B6-078-SB-1	(0-1') CONCRETE, hard, dry	NA	
		1.7		(1-9') SAND and GRAVEL with SILT and CLAY, fine to coarse, subangular, medium dense, tan, gray-green, red, dark gray, dry, non plastic, non cohesive		
	92	2.4				
		16.1				
		29.5				
5		-			SW/GW	
		17.7				
	82	34.9	B6-078-SB-8			
		24.7				
		2.1		(9-15') CLAY, very soft, gray-green, moist to wet, high plasticity, cohesive		Wet at 9.5' bgs
10		-				
		-			CL	
	40	-				
		<0.1				
15		<0.1				
				End of Boring		

Total Borehole Depth: 15' bgs.

Boring terminated due to water at 15' bgs.

ARM Group Inc.
Engineers and Scientists

Boring ID: B6-079-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-5-3
Project Description	: Sparrows Point - Parcel B6
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: M. Replogle, E.I.T.
Drilling Company	: Green Services, Inc.
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 06/15/2016
Weather	: 70s, Cloudy
Northing (US ft)	: 570487.23
Easting (US ft)	: 1463459.59

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0						
		-	B6-079-SB-1	(0-0.5') CONCRETE, loose, gray, dry, non plastic, non cohesive	NA	
				(0.5-2.5') SILT, soft grading to very firm, brownish gray and dark gray, dry, non plastic, non cohesive		
		97.5			ML	
	93	49.8		(2.5-4.7') CLAY with SILT, firm, pale brown, moist, high plasticity, cohesive		
		0.0			CL	
		0.0				
5				(4.7-5') CLAYEY SAND, firm, reddish yellow, moist, non plastic, non cohesive	SP	
		-		(5-6.2') CLAY, very soft, pale brown and gray, very moist, high plasticity, cohesive	CL	
		9.6	B6-079-SB-7	(6.2-9.5') SAND, soft to medium dense, very pale grown,to pale brown with reddish yellow staining, moist to wet, non plastic, non cohesive		Wet at 7' bgs
	90	21.3			SP	
		0.0				
		14.0				
10				(9.5-10') SANDY CLAY grading to CLAY, soft, light gray, moist, high plasticity, cohesive	CL	
				End of Boring		

Total Borehole Depth: 10' bgs.

Boring terminated due to water at 10' bgs.

ARM Group Inc.
Engineers and Scientists

Boring ID: B6-080-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-5-3
Project Description	: Sparrows Point - Parcel B6
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: M. Replogle, E.I.T.
Drilling Company	: Green Services, Inc.
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 06/16/2016
Weather	: 70s, Cloudy
Northing (US ft)	: 571239.99
Easting (US ft)	: 1463600.74

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0	40	-	B6-080-SB-1	(0-3.5') SLAG GRAVEL, loose, brown, dry, non plastic, non cohesive	GP	
		-				
		-				
		0.0		(3.5-5') CLAY, hard, pale brown and reddish yellow, dry, high plasticity, cohesive	CL	
		0.0				
5	100	0.0	B6-080-SB-6	(5-8') CLAY grading to SANDY CLAY, very frim grading to very soft, dry then wet, medium plasticity, cohesive	CL	Wet at 7.5' bgs
		0.0				
		0.0				
		0.0		(8-10') SAND, medium dense, pale brown, wet, non plastic, non cohesive	SP	
		0.0				
10				End of Boring		

Total Borehole Depth: 10' bgs.

Boring terminated due to water at 10' bgs.

ARM Group Inc.
Engineers and Scientists

Boring ID: B6-081-SB

(page 1 of 1)

Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-5-3
Project Description	: Sparrows Point - Parcel B6
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: M. Replogle, E.I.T.
Drilling Company	: Green Services, Inc.
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 06/16/2016
Weather	: 80s, Cloudy
Northing (US ft)	: 571621.60
Easting (US ft)	: 1463297.54

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		-	B6-081-SB-1	(0-0.5') SLAG GRAVEL, loose, dark brown, very moist, non plastic, non cohesive	GP	
				(0.5-5.5') SAND and SLAG GRAVEL, loose, grayish brown and gray, dry to moist, non plastic, non cohesive		
		-				
	50	0.0			SP/GP	
		0.8				
		26.5	B6-081-SB-5			
5		0.4		(5.5-6.5') SAND and SLAG GRAVEL with CLAY, loose, grayish brown and gray, wet, non plastic, non cohesive	SP/GP	Wet at 5.5' bgs
		0.3		(6.9-9') CLAY with SAND, very soft, black grading to pale brown and brownish yellow, wet, high plasticity, cohesive		
	100	0.0			CL	
		0.1				
		0.0		(9-10') CLAY, very firm, reddish yellow and pale brown, dry, high plasticity, cohesive	CL	
10				End of Boring		

Total Borehole Depth: 10' bgs.

Boring terminated due to water at 10' bgs.

ARM Group Inc.
Engineers and Scientists

Boring ID: B6-082-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-5-3
Project Description	: Sparrows Point - Parcel B6
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: M. Replogle, E.I.T.
Drilling Company	: Green Services, Inc.
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 06/17/2016
Weather	: 80s, Sunny
Northing (US ft)	: 571271.36
Easting (US ft)	: 1462827.07

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0						
		0.1	B6-082-SB-1	(0-0.5') SILTY SAND and GRAVEL, loose, dark brown, dry, non plastic, non cohesive	SM	
				(0.5-3') SILT grading to CLAY, hard, pale brown and reddish yellow grading to brown, low plasticity, cohesive	ML/CL	
		0.2				
	100	0.2				
				(3-3.3') SLAG GRAVEL, loose, light gray, dry, non plastic, non cohesive	GP	
		0.1		(3.3-4.5') CLAY, hard, reddish yellow, dry, low plasticity, cohesive	CL	Intermittent black coarse sand layer
		0.1	B6-082-SB-5	(4.5-5') SAND, medium grained, loose, strong brown, wet, non plastic, non cohesive	SP	
5				(5-5.8') SAND, medium grained, loose, strong brown, wet, non plastic, non cohesive	SP	Wet at 5.7' bgs
		-		(5.8-7') SANDY CLAY, very soft, black and grayish brown, wet, low plasticity, cohesive	CL	
		0.8				
	87	0.1		(7-8') SANDY CLAY, hard, reddish yellow, dry, low plasticity, cohesive	CL	
				(8-8.5') SANDY CLAY, very soft, reddish yellow, dry, low plasticity, cohesive	CL	
		0.2		(8.5-10') CLAY with SAND, hard, reddish yellow and light gray mottles, dry, low plasticity, cohesive	CL	
		0.1				
10				End of Boring		

Total Borehole Depth: 10' bgs.

Boring terminated due to water at 10' bgs.

ARM Group Inc.
Engineers and Scientists

Boring ID: B6-083-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-5-3
Project Description	: Sparrows Point - Parcel B6
Site Location	: Sparrows Point, MD
ARM Representative	: J. Yaple, P.G.
Checked by	: M. Replogle, E.I.T.
Drilling Company	: Green Services, Inc.
Driller	: Kevin Pumphrey
Drilling Equipment	: Geoprobe 7822DT

Date	: 06/16/2016
Weather	: 70s, Cloudy, Rainy
Northing (US ft)	: 569309.02
Easting (US ft)	: 1462636.78

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0						
	100	0.3	B6-083-SB-1	(0-3') Fine SAND and coarse GRAVEL with trace SLAG, loose, dark brown and dark gray, dry, non plastic, non cohesive	SW/GW	
		0.5				
		2.4				
		3.0		(3-5.5') SANDY SILT with GRAVEL and some SAND, medium soft, tan brown and dark gray, non plastic, non cohesive	ML	
		2.4				
5		-		(5.5-6.5') GRAVEL with SAND and some SLAG, loose, dark gray and dark brown, dry, non plastic, non cohesive	GW	
		53.2		(6.5-10') CLAY, soft, gray-green and tan, moist to wet, high plasticity, cohesive		
	100	88.3	B6-083-SB-8		CL	
		59.0				
		0.9				Wet at 9' bgs
10				End of Boring		

Total Borehole Depth: 10' bgs.

Boring terminated due to water at 10' bgs.

ARM Group Inc.
Engineers and Scientists

Boring ID: B6-084-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-5-3
Project Description	: Sparrows Point - Parcel B6
Site Location	: Sparrows Point, MD
ARM Representative	: J. Yaple, P.G.
Checked by	: M. Replogle, E.I.T.
Drilling Company	: Green Services, Inc.
Driller	: Kevin Pumphrey
Drilling Equipment	: Geoprobe 7822DT

Date	: 06/16/2016
Weather	: 70s, Cloudy
Northing (US ft)	: 569651.91
Easting (US ft)	: 1462521.52

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		3.4	B6-084-SB-1	(0-1') SAND and GRAVEL, fine to coarse, angular, loose, light tan and white and black, dry, non plastic, non cohesive	SW/GW	
	100	1.4 0.4 0.0 0.0		(1-7') Fine SAND with trace SILT, very dense to loose, reddish yellow and tan, dry to moist, non plastic, non cohesive	SP	
5		2.5				
		6.3	B6-084-SB-7			
	100	6.3 6.3 3.7		(7-15') CLAY, soft, tan-gray with trace red-yellow mottles to 13', moist to wet, high plasticity, cohesive	CL	
10		1.4				Wet at 12' bgs
	100	0.2 0.0 0.0				
15		0.0		End of Boring		Boring terminated at 15' bgs due to water

Total Borehole Depth: 15' bgs.

Boring terminated due to water at 15' bgs.

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ARM Group Inc.
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Boring ID: B6-085-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-5-3
Project Description	: Sparrows Point - Parcel B6
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: M. Repogle, E.I.T.
Drilling Company	: Green Services, Inc.
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 06/17/2016
Weather	: 80s, Sunny
Northing (US ft)	: 570897.96
Easting (US ft)	: 1462914.54

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0						
		-	B6-085-SB-1	(0-0.2') SILT, organic, soft, brown, dry, low plasticity, cohesive	OL	Small roots
				(0.2-2.5') GRAVELLY SILT, loose, brown and gray, dry, non plastic, non cohesive	ML	
		0.2				
	90	1.0		(2.5-3.5') SILT, very firm, grayish brown, dry, low plasticity, cohesive	ML	
		0.8		(3.5-5') SANDY SILT, soft, yellowish red, dry, non plastic, non cohesive	ML	
		0.1				
5				(5-7.5') SANDY SILT with small GRAVEL, soft, yellowish red, dry, non plastic, non cohesive	ML	
		-				
		-				
	60	7.5	B6-085-SB-8	(7.5-10') SILT grading to fine to medium grained SAND, soft to medium dense, dark brown, moist to wet, non plastic, non cohesive	ML/SW	Wet at 9' bgs
		7.4				
		4.8				
10				End of Boring		

Total Borehole Depth: 10' bgs.

Boring terminated due to water at 10' bgs.

ARM Group Inc.
Engineers and Scientists

Boring ID: B6-086-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-5-3
Project Description	: Sparrows Point - Parcel B6
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: M. Repogle, E.I.T.
Drilling Company	: Green Services, Inc.
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 06/17/2016
Weather	: 80s, Sunny
Northing (US ft)	: 570057.80
Easting (US ft)	: 1463153.27

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0						
	60	-	B6-086-SB-1	(0-3.5') SILT with SAND and GRAVEL, loose, black to grayish brown, dry, non plastic, non cohesive	ML	Small roots
		-				
		0.5				
		1.2	B6-086-SB-4			
		0.6		(3.5-5') SANDY SLAG GRAVEL, loose, light gray to gray, dry, non plastic, non cohesive	GP/SP	
5		-		(5-10') SLAG GRAVEL, fine to coarse, loose, gray and brown, wet, non plastic, non cohesive		
		-				
	50	0.8			GP	Wet at 7.5' bgs
		1.0				
		0.1				
10				End of Boring		

Total Borehole Depth: 10' bgs.

Boring terminated due to water at 10' bgs.

ARM Group Inc.
Engineers and Scientists

Boring ID: B6-087-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-5-3
Project Description	: Sparrows Point - Parcel B6
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: M. Repogle, E.I.T.
Drilling Company	: Green Services, Inc.
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 01/10/2017
Weather	: 30s, Cloudy
Northing (US ft)	: 569093.24
Easting (US ft)	: 1462850.77

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0						
	20	-		(0-4.5') CONCRETE, hard, gray, dry, non plastic, non cohesive		Cored through 4' of concrete (truline)
		-				
		-				
		-				
		7.5	B6-087-SB-5			
5				(4.5-7.5') SAND, fine to medium grained, dense, yellowish brown, moist, no plasticity, no cohesion		... (4.5-5') Sand may be moist due to driller placing water in boring
		-			SW	
		-				
			B6-087-SB-7.5			
	78	1.6		(7.5-10') SLAG, large GRAVEL, SAND-sized, medium dense, brownish gray and brown, dry then wet at 8', non plastic, non cohesive		
		1.4			GP	Wet at 8.7' bgs Heavy sheen in water (8.7-10') No visible product
		2.0				
10				End of Boring		

Total Borehole Depth: 10' bgs.

Boring terminated due to water at 10' bgs.

ARM Group Inc.
Engineers and Scientists

Boring ID: B6-088-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-5-3
Project Description	: Sparrows Point - Parcel B6
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: M. Repogle, E.I.T.
Drilling Company	: Green Services, Inc.
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 09/19/2016
Weather	: 80s, Rainy
Northing (US ft)	: 568800.2977
Easting (US ft)	: 1462756.232

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0						
		-	B6-088-SB-1	(0-0.2') SAND, dense, very pale brown, moist, no plasticity, no cohesion	SW	
					NA	
				(0.2-0.4') CONCRETE, loose, white, dry, no plasticity, no cohesion	SW	
		-		(0.4-1') SAND, dense, very pale brown, moist, no plasticity, no cohesion	CL	Strong sweet odor around concrete
				(1-2') CLAY, hard, pale yellow, dry, low plasticity, cohesive		
	70	7.6		(2-3.5') SAND, dense, very pale brown, moist, no plasticity, no cohesion	SW	
		2.4		(3.5-4') CLAY, medium stiff, brown, dry, low plasticity, cohesive	CL	
		16.8	B6-088-SB-5	(4-8') SLAG, SAND and GRAVEL-sized, loose, grayish brown, dry, no plasticity, no cohesion	SW/GW	
5		-				
		-				
	50	0.0				
		-		(8-8.5') SAND, medium dense, light brownish gray, moist, no plasticity, no cohesion	SW	
				(8.5-10') SAND, loose to medium dense, light brownish gray, wet, no plasticity, no cohesion	SW	Wet at 8.5' bgs
		-				
10				End of boring		

Total Borehole Depth: 10' bgs.

Boring terminated due to water at 10' bgs.

ARM Group Inc.
Engineers and Scientists

Boring ID: B6-089-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-5-3
Project Description	: Sparrows Point - Parcel B6
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: M. Repogle, E.I.T.
Drilling Company	: Green Services, Inc.
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 09/19/2016
Weather	: 80s, Rainy
Northing (US ft)	: 570659.28
Easting (US ft)	: 1463610.45

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		23.8	B6-089-SB-1	(0-0.8') GRAVELLY SILT with SAND, soft, brown, moist, no plasticity, no cohesion	ML	
		66.8		(0.8-2.5') SLAG, SAND and GRAVEL-sized, medium dense, gray and light gray, dry, no plasticity, no cohesion	SW/GW	Moderate odor throughout; predominately at 1-3' bgs
	100	232.1		(2.5-3') CLAYEY SILT with SLAG GRAVEL, medium stiff, black, moist to dry, low plasticity, cohesive	ML	
		148.4	B6-089-SB-4	(3-4') CLAY, hard, gray and yellowish brown mottling, high plasticity, cohesive	CL	
		125.6		(4-6.8') CLAY with SILT, hard, brownish gray and reddish yellow mottling, medium plasticity, cohesive	CL	
5		64.8				
		-				
	100	-		(6.8-8') SAND, dense, light brownish gray, wet, no plasticity, no cohesion	SW	Wet at 6.8' bgs
		-		(8-9') CLAYEY SAND, dense, yellowish red, very moist, no plasticity, no cohesion	SW-SC	
		-		(9-10') CLAY with a one inch SAND layer at 9.6', very firm, brownish gray and reddish yellow mottling, moist, high plasticity, cohesive	CL	
10				End of boring		

Total Borehole Depth: 10' bgs.

Boring terminated due to water at 10' bgs.

ARM Group Inc.
Engineers and Scientists

Boring ID: B6-090-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-5-3
Project Description	: Sparrows Point - Parcel B6
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: M. Repogle, E.I.T.
Drilling Company	: Green Services, Inc.
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 09/19/2016
Weather	: 80s, Rainy
Northing (US ft)	: 570849.50
Easting (US ft)	: 1462253.23

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0				(0-0.2') SILT, hard, brown, dry, no plasticity, no cohesion	ML	SB-2 collected from 0-0.2' + 1.2-2' bgs
		-		(0.2-1.2') CONCRETE, SAND and GRAVEL-sized, loose, white, dry, no plasticity, no cohesion	NA	
		104.5	B6-090-SB-2	(1.2-3') SAND with CONCRETE GRAVEL, loose, pale brown, dry, no plasticity, no cohesion	SW	
	90	48.5				
		15.5		(3-3.5') SILTY SAND with CONCRETE GRAVEL, loose, dark brown, moist, no plasticity, no cohesion	SM	
					ML	
		0.6		(3.5-3.9') SILT, medium dense, reddish yellow, dry, no plasticity, no cohesion	SW/GW	
5				(3.9-5') SLAG, SAND and GRAVEL-sized, loose, grayish brown and gray, dry, no plasticity, no cohesion		
		-		(5-7.5') SILTY SAND, very fine grained, medium dense, yellowish red, moist, no plasticity, no cohesion	SW	
		17.5				
	90	24.9	B6-090-SB-8	(7.5-9') CLAY with SAND, soft, grayish brown, moist, low plasticity, cohesive	CL	
		3.5				
		10.1	B6-090-SB-10	(9-9.4') SILTY SAND, loose, dark brown, dry, no plasticity, no cohesion	SM	
10				(9.4-12.5') SANDY CLAY, soft, grayish brown, moist, low plasticity, cohesive	CL	
		-				
		0.6				
	70	-				Wet at 12.5' bgs
		-		(12.5-14') SAND, loose grading to medium dense, gray to brownish gray, wet then very moist 13.5-14', no plasticity, no cohesion	SW	
		-		(14-14.5') SLAG, SAND-sized, dense, very dark brown and black, dry, no plasticity, no cohesion	SW	
15				(14.5-15') CLAYEY SAND, medium dense, grayish brown, very moist, no plasticity, no cohesion	SW-SC	
				End of boring		

Total Borehole Depth: 15' bgs.

Boring terminated due to water at 15' bgs.

ARM Group Inc.
Engineers and Scientists

Boring ID: B6-091-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-5-3
Project Description	: Sparrows Point - Parcel B6
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: M. Repogle, E.I.T.
Drilling Company	: Green Services, Inc.
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 09/19/2016
Weather	: 80s, Rainy
Northing (US ft)	: 569479.80
Easting (US ft)	: 1462392.41

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0						
		2.6	B6-091-SB-1	(0-1.5') SANDY SILT, soft, brownish gray, dry, no plasticity, no cohesion	ML	
		8.9		(1.5-1.7') SLAG GRAVEL, large, loose, light gray, dry, no plasticity, no cohesion	GP	
	100	4.5		(1.7-5') SILT with CLAY grading to CLAYEY SILT, hard, grayish brown with yellowish brown at 3-4', dry, low plasticity, cohesive	ML	
		5.9				
		1.1				
5		4.2		(5-6.5') SILTY CLAY, hard, brownish gray, dry, low plasticity, cohesive	CL	
		10.1		(6.5-7.5') SAND, dense, yellowish red, moist, no plasticity, no cohesion	SW	
	100	5.6		(7.5-18') CLAY, very firm (7.5-10') then firm to soft (10-18'), brownish gray with reddish yellow mottling, moist but very moist (9.8-10'), high plasticity, cohesive	CH	
		12.8	B6-091-SB-9			
		10.6	B6-091-SB-10			
10		0.0				
		0.0				
	100	0.0				
		0.0				
		0.0				
15		0.0				
		0.0				
	100	0.0				
		0.0		(18-20') CLAY, soft, gray, very moist, high plasticity, cohesive	CL	No water encountered Boring terminated at 20' bgs due to maximum allowable depth
		0.0				
20				End of boring		

Total Borehole Depth: 20' bgs.

Boring terminated due to water at 20' bgs.

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ARM Group Inc.
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Boring ID: B6-092-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-5-3
Project Description	: Sparrows Point - Parcel B6
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: M. Repogle, E.I.T.
Drilling Company	: Green Services, Inc.
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 09/21/2016
Weather	: 80s, Sunny
Northing (US ft)	: 568504.06
Easting (US ft)	: 1462664.96

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0						
	84	-	B6-092-SB-1	(0-2.1') SLAG, SILT to GRAVEL-sized, medium dense, brown and gray, dry, no plasticity, no cohesion	ML/GW	Trace oxidation
		11.5				
		8.7		(2.1-5') CLAY with trace SLAG GRAVEL, hard, gray (2.1-2.5') then grayish brown and reddish yellow mottling, low plasticity low plasticity grading to high plasticity, cohesive	CL/CH	
		3.1				
		0.0				
5	100	0.7		(5-9') CLAY, soft to very soft then hard at 7.7' +, brownish gray with reddish yellow mottling from 6-9', moist to very moist then dry at 7.7' +, high plasticity, cohesive	CL	
		8.5				
		7.2				
		51.3	B6-092-SB-9			
		49.9		(9-10') SAND, very fine to medium grained, dense to loose, pale brown, wet, no plasticity, no cohesion	SW	Wet at 9' bgs
10				End of boring		

Total Borehole Depth: 10' bgs.

Boring terminated due to water at 10' bgs.

ARM Group Inc.
Engineers and Scientists

Boring ID: B6-093-SB

(page 1 of 1)

Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-5-3
Project Description	: Sparrows Point - Parcel B6
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: M. Repogle, E.I.T.
Drilling Company	: Green Services, Inc.
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 09/21/2016
Weather	: 80s, Sunny
Northing (US ft)	: 570364.50
Easting (US ft)	: 1463641.00

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0						
		92.2	B6-093-SB-1	(0-0.3') ORGANIC SILT with SAND, loose, brown, moist, no plasticity, no cohesion	OL	Organic matter
				(0.3-1.5') SILTY SAND with SLAG (SAND and GRAVEL-sized), loose, brown and gray, dry to moist, no plasticity, no cohesion, SLAG increases with depth	SM	
		126.4		(1.5-2.5') CLAY, firm, grayish brown, moist, high plasticity, cohesive	CL	
	100	146.3		(2.5-3.1') SANDY CLAY, soft, reddish yellow, moist, medium plasticity, cohesive	CL	
		106.7		(3.1-3.8') SAND, very fine to medium grained, dense, very moist to wet, very pale brown and light yellowish brown, no plasticity, no cohesion	SW	
				(3.8-6.6') CLAY, hard, light gray, pale brown and reddish yellow, dry, medium plasticity, cohesive		
		0.4				
5					CL	
		39.5				
		178.5	B6-093-SB-7			
				(6.6-7') SAND, fine grained, dense, light gray and reddish yellow, moist, no plasticity, no cohesion	SW	Wet at 7' bgs
	100	-		(7-10') SAND, very fine to medium grained, dense to loose, light gray, very pale brown, and reddish yellow; wet, no plasticity, no cohesion		
		-			SW	
		-				
10				End of boring		

Total Borehole Depth: 10' bgs.

Boring terminated due to water at 10' bgs.

APPENDIX C

PID CALIBRATION LOG

PROJECT NAME: Area B, Parcel B6 Phase II	SAMPLER NAME: L. Perrin, N. Kurtz, J. Yaple, and B. Gehman	
PROJECT NUMBER: 150300M-5	DATE: June 13, 2016	PAGE 1 of 1

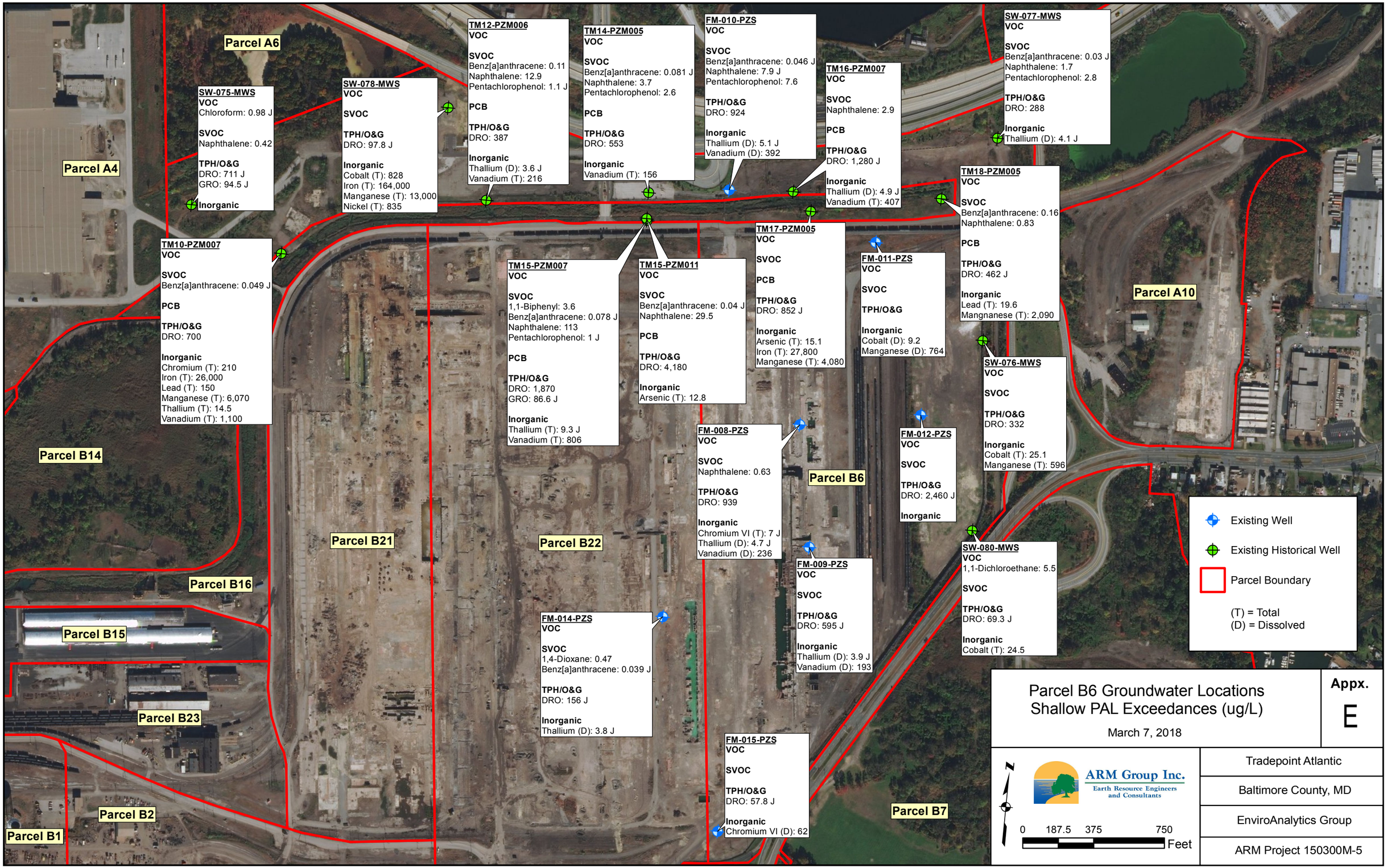
DATE/TIME	SAMPLER INITIALS	PID SERIAL #	FRESH AIR CAL	STANDARD	STANDARD CONCENTRATION	METER READING	COMMENTS
6/13/2016 7:30	NK	592-913262	0.0	Isobutylene	100 ppm	100.0	-
6/14/2016 7:30	NK	592-913262	0.0	Isobutylene	100 ppm	99.8	-
6/15/2016 7:30	BG	592-913262	0.0	Isobutylene	100 ppm	100.0	-
6/15/2016 7:30	BG	R3617	0.0	Isobutylene	100 ppm	109.0	-
6/16/2016 7:15	BG	592-913262	0.0	Isobutylene	100 ppm	100.0	-
6/16/2016 9:30	BG	592-908317	0.0	Isobutylene	100 ppm	100.0	-
6/17/2016 7:25	BG	592-908317	0.0	Isobutylene	100 ppm	100.0	-
6/17/2016 7:25	LP	592-913262	0.0	Isobutylene	100 ppm	100.0	-
6/20/2016 7:22	JTY	592-913262	0.0	Isobutylene	100 ppm	100.0	-
6/30/2016 8:08	NK	592-913262	0.0	Isobutylene	100 ppm	100.1	-
7/5/2016 8:20	NK	592-913262	0.0	Isobutylene	100 ppm	100.1	-
7/6/2016 8:13	NK	592-913262	0.0	Isobutylene	100 ppm	100.4	-
7/12/2016 8:30	NK	592-913262	0.0	Isobutylene	100 ppm	100.0	-
7/20/2016 7:45	NK	592-913262	0.0	Isobutylene	100 ppm	99.9	-
7/22/2016 8:10	NK	592-913262	0.0	Isobutylene	100 ppm	101.2	-
7/25/2016 8:15	LP	592-913262	0.0	Isobutylene	100 ppm	100.0	-
7/26/2016 8:00	NK	592-913262	0.0	Isobutylene	100 ppm	98.8	-
9/19/2016 8:40	LP	592-913262	0.0	Isobutylene	100 ppm	100.0	-
9/20/2016 8:20	LP	592-913262	0.0	Isobutylene	100 ppm	100.1	-
9/21/2016 8:20	NK	592-913262	0.0	Isobutylene	100 ppm	100.0	-
1/9/2017 8:55	LP	592-913262	0.0	Isobutylene	100 ppm	100.3	-
1/10/2017 8:27	LP	592-913262	0.0	Isobutylene	100 ppm	99.7	-
1/13/2017 8:00	LP	592-913262	0.0	Isobutylene	100 ppm	100.0	-
1/16/2017 8:05	LP	592-913262	0.0	Isobutylene	100 ppm	100.0	-

APPENDIX D

Parcel B6 - IDW Drum Log

Drum Identification Number	Designation	Activity/Phase	Parcel	Contents	Open Date
524-Soil-6/13/16-B6	Non-haz.	Parcel B6	Parcel B6	Soil	6/13/2016
525-Liners-6/13/16-B6	Non-haz.	Parcel B6	Parcel B6	Liners	6/13/2016
526-PPE-6/13/16-B6	Non-haz.	Parcel B6	Parcel B6	PPE	6/13/2016
527-Decon Water-6/13/16-B6	Non-haz.	Parcel B6	Parcel B6	Decon Water	6/13/2016
528-Nitric Acid-6/13/16-B6	Non-haz.	Parcel B6	Parcel B6	Nitric Acid	6/13/2016
532-Soil-6/13/16-B6	Non-haz.	Parcel B6	Parcel B6	Soil	6/13/2016
533-Soil-6/15/16-B6	Non-haz.	Parcel B6	Parcel B6	Soil	6/15/2016
534-Liners-6/15/16-B6	Non-haz.	Parcel B6	Parcel B6	Liners	6/15/2016
536-Soil-6/16/16-B6	Non-haz.	Parcel B6	Parcel B6	Soil	6/16/2016
537-PPE-6/16/16-B6	Non-haz.	Parcel B6	Parcel B6	PPE	6/16/2016
538-Soil-6/17/16-B6	Non-haz.	Parcel B6	Parcel B6	Soil	6/17/2016
602-S-6/10/16-B6	Non-haz.	FMGW-Phase II	Parcel B6	Drill Cuttings	6/10/2016
603-S-6/13/16-B6	Non-haz.	FMGW-Phase II	Parcel B6	Drill Cuttings	6/13/2016
604-S-6/15/16-B6	Non-haz.	FMGW-Phase II	Parcel B6	Drill Cuttings	6/15/2016
605-S-6/16/16-B6	Non-haz.	FMGW-Phase II	Parcel B6	Drill Cuttings	6/16/2016
606-S-6/16/16-B6	Non-haz.	FMGW-Phase II	Parcel B6	Drill Cuttings	6/16/2016
607-S-6/17/16-B6	Non-haz.	FMGW-Phase II	Parcel B6	Drill Cuttings	6/17/2016
608-S-6/21/16-B6	Non-haz.	FMGW-Phase II	Parcel B6	Drill Cuttings	6/21/2016
609-S-6/22/16-B6	Non-haz.	FMGW-Phase II	Parcel B6	Drill Cuttings	6/22/2016
612-S-6/24-16-B6	Non-haz.	FMGW-Phase II	Parcel B6	Drill Cuttings	6/24/2016
613-S-6/27/16-B6	Non-haz.	FMGW-Phase II	Parcel B6	Drill Cuttings	6/27/2016
614-S-6/27/16-B6	Non-haz.	FMGW-Phase II	Parcel B6	Drill Cuttings	6/27/2016
615-W-6/28/16-B6/21/22	Non-haz.	FMGW-Phase II	Parcel B6/21/22	Decon Water	6/28/2016
616-W-6/28/16-B6/21/22	Non-haz.	FMGW-Phase II	Parcel B6/21/22	Decon Water	6/28/2016
617-W-6/28/16-B6/21/22	Non-haz.	FMGW-Phase II	Parcel B6/21/22	Decon Water	6/28/2016
618-W-6/28/16-B6/21/22	Non-haz.	FMGW-Phase II	Parcel B6/21/22	Decon Water	6/28/2016
619-W-6/28/16-B6/21/22	Non-haz.	FMGW-Phase II	Parcel B6/21/22	Decon Water	6/28/2016
620-W-6/28/16-B6/21/22	Non-haz.	FMGW-Phase II	Parcel B6/21/22	Decon Water	6/28/2016
621-W-6/28/16-B6/21/22	Non-haz.	FMGW-Phase II	Parcel B6/21/22	Decon Water	6/28/2016
622-W-6/28/16-B6/21/22	Non-haz.	FMGW-Phase II	Parcel B6/21/22	Decon Water	6/28/2016
623-W-6/28/16-B6/21/22	Non-haz.	FMGW-Phase II	Parcel B6/21/22	Decon Water	6/28/2016
624-W-6/28/16-B6/21/22	Non-haz.	FMGW-Phase II	Parcel B6/21/22	Decon Water	6/28/2016
625-W-6/28/16-B6/21/22	Non-haz.	FMGW-Phase II	Parcel B6/21/22	Decon Water	6/28/2016
626-W-6/28/16-B6/21/22	Non-haz.	FMGW-Phase II	Parcel B6/21/22	Decon Water	6/28/2016
627-W-6/28/16-B6/21/22	Non-haz.	FMGW-Phase II	Parcel B6/21/22	Decon Water	6/28/2016
628-S-6/29/16-B6	Non-haz.	FMGW-Phase II	Parcel B6	Drill Cuttings	6/29/2016
629-W-6/29/16-B6/21/22	Non-haz.	FMGW-Phase II	Parcel B6/21/22	Decon Water	6/29/2016
630-W-6/29/16-B6/21/22	Non-haz.	FMGW-Phase II	Parcel B6/21/22	Decon Water	6/29/2016
631-W-6/29/16-B6/21/22	Non-haz.	FMGW-Phase II	Parcel B6/21/22	Decon Water	6/29/2016
632-W-6/29/16-B6/21/22	Non-haz.	FMGW-Phase II	Parcel B6/21/22	Decon Water	6/29/2016
633-W-6/29/16-B6/21/22	Non-haz.	FMGW-Phase II	Parcel B6/21/22	Decon Water	6/29/2016
634-W-6/29/16-B6/21/22	Non-haz.	FMGW-Phase II	Parcel B6/21/22	Decon Water	6/29/2016
635-W-6/29/16-B6/21/22	Non-haz.	FMGW-Phase II	Parcel B6/21/22	Decon Water	6/29/2016
636-W-6/29/16-B6/21/22	Non-haz.	FMGW-Phase II	Parcel B6/21/22	Decon Water	6/29/2016
637-W-6/29/16-B6/21/22	Non-haz.	FMGW-Phase II	Parcel B6/21/22	Decon Water	6/29/2016
638-W-6/29/16-B6/21/22	Non-haz.	FMGW-Phase II	Parcel B6/21/22	Decon Water	6/29/2016
639-W-6/29/16-B6/21/22	Non-haz.	FMGW-Phase II	Parcel B6/21/22	Decon Water	6/29/2016
640-S-6/29/16-B6/16	Non-haz.	FMGW-Phase II	Parcel B6/21/22	Drill Cuttings	6/29/2016

APPENDIX E


Parcel A6
Parcel A4
Parcel A10
Parcel B14
Parcel B21
Parcel B22
Parcel B6
Parcel B16
Parcel B15
Parcel B23
Parcel B2
Parcel B1
Parcel B7
SW-075-MWS
VOC
Chloroform: 0.98 J
SVOC
Naphthalene: 0.42
TPH/O&G
DRO: 711 J
GRO: 94.5 J
Inorganic
SW-078-MWS
VOC
SVOC
TPH/O&G
DRO: 97.8 J
Inorganic
Cobalt (T): 828
Iron (T): 164,000
Manganese (T): 13,000
Nickel (T): 835
TM12-PZM006
VOC
SVOC
Benz[a]anthracene: 0.11
Naphthalene: 12.9
Pentachlorophenol: 1.1 J
PCB
TPH/O&G
DRO: 387
Inorganic
Thallium (D): 3.6 J
Vanadium (T): 216
TM14-PZM005
VOC
SVOC
Benz[a]anthracene: 0.081 J
Naphthalene: 3.7
Pentachlorophenol: 2.6
PCB
TPH/O&G
DRO: 553
Inorganic
Vanadium (T): 156
FM-010-PZS
VOC
SVOC
Benz[a]anthracene: 0.046 J
Naphthalene: 7.9 J
Pentachlorophenol: 7.6
TPH/O&G
DRO: 924
Inorganic
Thallium (D): 5.1 J
Vanadium (D): 392
TM16-PZM007
VOC
SVOC
Naphthalene: 2.9
PCB
TPH/O&G
DRO: 1,280 J
Inorganic
Thallium (D): 4.9 J
Vanadium (T): 407
SW-077-MWS
VOC
SVOC
Benz[a]anthracene: 0.03 J
Naphthalene: 1.7
Pentachlorophenol: 2.8
TPH/O&G
DRO: 288
Inorganic
Thallium (D): 4.1 J
TM10-PZM007
VOC
SVOC
Benz[a]anthracene: 0.049 J
PCB
TPH/O&G
DRO: 700
Inorganic
Chromium (T): 210
Iron (T): 26,000
Lead (T): 150
Manganese (T): 6,070
Thallium (T): 14.5
Vanadium (T): 1,100
TM15-PZM007
VOC
SVOC
1,1-Biphenyl: 3.6
Benz[a]anthracene: 0.078 J
Naphthalene: 113
Pentachlorophenol: 1 J
PCB
TPH/O&G
DRO: 1,870
GRO: 86.6 J
Inorganic
Thallium (T): 9.3 J
Vanadium (T): 806
TM15-PZM011
VOC
SVOC
Benz[a]anthracene: 0.04 J
Naphthalene: 29.5
PCB
TPH/O&G
DRO: 4,180
Inorganic
Arsenic (T): 12.8
TM17-PZM005
VOC
SVOC
PCB
TPH/O&G
DRO: 852 J
Inorganic
Arsenic (T): 15.1
Iron (T): 27,800
Manganese (T): 4,080
FM-011-PZS
VOC
SVOC
TPH/O&G
Inorganic
Cobalt (D): 9.2
Manganese (D): 764
TM18-PZM005
VOC
SVOC
Benz[a]anthracene: 0.16
Naphthalene: 0.83
PCB
TPH/O&G
DRO: 462 J
Inorganic
Lead (T): 19.6
Mangnanese (T): 2,090
SW-076-MWS
VOC
SVOC
TPH/O&G
DRO: 332
Inorganic
Cobalt (T): 25.1
Manganese (T): 596
FM-008-PZS
VOC
SVOC
Naphthalene: 0.63
TPH/O&G
DRO: 939
Inorganic
Chromium VI (T): 7 J
Thallium (D): 4.7 J
Vanadium (D): 236
FM-012-PZS
VOC
SVOC
TPH/O&G
DRO: 2,460 J
Inorganic
FM-009-PZS
VOC
SVOC
TPH/O&G
DRO: 595 J
Inorganic
Thallium (D): 3.9 J
Vanadium (D): 193
SW-080-MWS
VOC
1,1-Dichloroethane: 5.5
SVOC
TPH/O&G
DRO: 69.3 J
Inorganic
Cobalt (T): 24.5
FM-014-PZS
VOC
SVOC
1,4-Dioxane: 0.47
Benz[a]anthracene: 0.039 J
TPH/O&G
DRO: 156 J
Inorganic
Thallium (D): 3.8 J
FM-015-PZS
VOC
SVOC
TPH/O&G
DRO: 57.8 J
Inorganic
Chromium VI (D): 62
Existing Well
Existing Historical Well
Parcel Boundary
(T) = Total
(D) = Dissolved
Parcel B6 Groundwater Locations
Shallow PAL Exceedances (ug/L)
March 7, 2018
Appx.
E
ARM Group Inc.
Earth Resource Engineers and Consultants
0 187.5 375 750
Feet
Tradepoint Atlantic
Baltimore County, MD
EnviroAnalytics Group
ARM Project 150300M-5

APPENDIX F

NAPL Gauging Measurements and
Temporary Screening Piezometer Construction Details
Parcel B6 Phase II Investigation

Piezometer ID	Installation Date	NAPL Thickness (feet)						Delineation Recommended?
		0-Hour	Date	≥48-Hour	Date	≥30-Day	Date	
B6-011-PZ	6/15/2016	0	6/15/2016	0	6/18/2016	trace*	8/26/2016	YES
B6-039-PZ	3/6/2017	0	3/6/2017	0	3/8/2017	0	4/13/2017	no
B6-056-PZ	6/16/2016	0	6/16/2016	NM	NM	0	8/26/2016	no
B6-066-PZ	7/5/2016	trace	7/5/2016	5.04	7/7/2016	0^	8/26/2016	YES
B6-068-PZ	3/10/2017	0	3/10/2017	0	3/13/2017	0	4/13/2017	no
B6-087-PZ	3/6/2017	0	3/6/2017	0	3/8/2017	0	4/13/2017	no

*Due to a trace measurement in B6-011-PZ on 8/26/16, this piezometer was gauged again on 3/15/2017 and 0.1 ft of NAPL had accumulated.
^Measureable NAPL was observed in B6-066-PZ during several subsequent gauging events.
NM = Not Measured. A 48-hour measurement is not available for B6-056-PZ.

Piezometer ID	Construction Details		
	Total Depth (Feet bgs)	Screen Interval (Feet bgs)	Riser Stick-Up (Feet)
B6-011-PZ	15	5-15	3.50
B6-039-PZ	16	6-16	1.30
B6-056-PZ	15	5-15	3.25
B6-066-PZ	13	3-13	2.25
B6-068-PZ	25	5-25	3.60
B6-087-PZ	14	4-14	1.49

bgs = below ground surface

APPENDIX G

QA/QC Tracking Log (Soil)

Trip Blank:	Date:	Sample IDs		
TB1	6/13/2016	1) B6-039-SB-1		
		2) B6-039-SB-5		
		3) B6-040-SB-1		
		4) B6-040-SB-5		
		5) B6-040-SB-10		
		6) B6-044-SB-1		
		7) B6-044-SB-4	Duplicate:	B6-039-SB-5
		8) B6-024-SB-1	Date:	6/13/2016
		9) B6-024-SB-5	MS/MSD:	B6-040-SB-5
		10) B6-024-SB-10	Date:	6/13/2016
		11) B6-021-SB-1	Field Blank:	
		12) B6-021-SB-4	Date:	6/13/2016
		13) B6-021-SB-10	Eq. Blank:	
		14) B6-028-SB-1	Date:	6/13/2016
TB2		15) B6-028-SB-9		
		16) B6-028-SB-10		
		17) B6-026-SB-1		
		18) B6-026-SB-4		
		19) B6-026-SB-10		
		20) B6-029-SB-1		

Trip Blank:	Date:	Sample IDs		
TB1 - NK	6/15/2016	1) B6-042-SB-1		
		2) B6-042-SB-8		
		3) B6-052-SB-1		
		4) B6-061-SB-1		
		5) B6-061-SB-4		
		6) B6-062-SB-1		
		7) B6-062-SB-4	Duplicate:	B6-062-SB-1
		8) B6-051-SB-1	Date:	6/15/2016
		9) B6-051-SB-6	MS/MSD:	B6-061-SB-4
		10) B6-011-SB-1	Date:	6/15/2016
		11) B6-011-SB-8	Field Blank:	
		12) B6-012-SB-1	Date:	6/15/2016
		13) B6-012-SB-4	Eq. Blank:	
TB1 - NK	6/16/2016	14) B6-013-SB-1	Date:	6/15/2016
		15) B6-013-SB-7		
		16) B6-083-SB-1		
		17) B6-083-SB-8		
		18) B6-058-SB-1		
		19) B6-058-SB-7		
		20) B6-058-SB-10		

TB2	6/13/2016	1) B6-029-SB-5		
TB1 - NK	6/14/2016	2) B6-027-SB-1		
		3) B6-027-SB-4		
		4) B6-025-SB-1		
		5) B6-025-SB-5		
		6) B6-022-SB-1		
		7) B6-023-SB-1	Duplicate:	B6-025-SB-1
		8) B6-023-SB-4	Date:	6/14/2016
		9) B6-023-SB-10	MS/MSD:	B6-027-SB-4
		10) B6-045-SB-1	Date:	6/14/2016
		11) B6-045-SB-5	Field Blank:	
		12) B6-045-SB-10	Date:	6/14/2016
		13) B6-046-SB-1	Eq. Blank:	
		14) B6-046-SB-6	Date:	6/14/2016
		15) B6-046-SB-10		
TB2 - NK		16) B6-043-SB-1		
		17) B6-043-SB-8		
		18) B6-043-SB-10		
TB1 - NK	6/15/2016	19) B6-041-SB-1		
		20) B6-041-SB-4		

Trip Blank:	Date:	Sample IDs		
TB1 - NK	6/16/2016	1) B6-084-SB-1		
		2) B6-084-SB-7		
		3) B6-084-SB-10		
		4) B6-057-SB-1		
		5) B6-057-SB-8		
		6) B6-057-SB-10		
		7) B6-006-SB-1	Duplicate:	B6-008-SB-1
TB2 - NK		8) B6-006-SB-5	Date:	6/17/2016
		9) B6-014-SB-1	MS/MSD:	B6-057-SB-8
		10) B6-014-SB-4	Date:	6/16/2016
		11) B6-014-SB-10	Field Blank:	
		12) B6-078-SB-1	Date:	6/16/2016
		13) B6-078-SB-8	Eq. Blank:	
		14) B6-010-SB-1	Date:	6/16/2016
TB1 - NK	6/17/2016	15) B6-010-SB-5		
		16) B6-009-SB-7		
		17) B6-007-SB-1		
		18) B6-007-SB-4		
		19) B6-008-SB-1		
		20) B6-008-SB-4		

QA/QC Tracking Log (Soil)

Trip Blank:	Date:	Sample IDs		
TB1 - NK	6/17/2016	1) B6-015-SB-1		
		2) B6-015-SB-5		
		3) B6-016-SB-1		
		4) B6-016-SB-5		
		5) B6-059-SB-1		
		6) B6-059-SB-8		
		7) B6-059-SB-10	Duplicate 2:	B6-059-SB-8
TB1	6/20/2016	8) B6-018-SB-1	Date:	6/17/2016
		9) B6-018-SB-4	MS/MSD:	B6-053-SB-4
TB1 - NK	6/30/2016	10) B6-068-SB-1	Date:	6/30/2016
		11) B6-068-SB-4	Field Blank:	
		12) B6-037-SB-1	Date:	6/17/2016
		13) B6-037-SB-5	Eq. Blank:	
		14) B6-036-SB-1	Date:	6/17/2016
		15) B6-036-SB-8		
		16) B6-053-SB-1		
		17) B6-053-SB-4		
		18) B6-054-SB-1		
		19) B6-054-SB-4		
		20) B6-038-SB-1		

Trip Blank:	Date:	Sample IDs		
	1/10/2017	1) B6-087-SB-5		
		2) B6-087-SB-7.5		
		3)		
		4)		
		5)		
		6)		
		7)	Duplicate:	B6-087-SB-5
		8)	Date:	1/10/2017
		9)	MS/MSD:	B6-087-SB-7.5
		10)	Date:	1/10/2017
		11)	Field Blank:	
		12)	Date:	1/10/2017
		13)	Eq. Blank:	
		14)	Date:	1/10/2017
		15)		
		16)		
		17)		
		18)		
		19)		
		20)		

TB1 - NK	6/30/2016	1) B6-038-SB-4		
		2) B6-003-SB-1		
		3) B6-003-SB-5		
TB2 - NK		4) B6-003-SB-10		
		5) B6-004-SB-1		
		6) B6-004-SB-4		
		7) B6-050-SB-1	Duplicate 1:	B6-048-SB-1
		8) B6-050-SB-6	Date:	7/5/2016
TB1 - NK	7/5/2016	9) B6-049-SB-1	MS/MSD:	B6-049-SB-8
		10) B6-049-SB-8	Date:	7/5/2016
		11) B6-049-SB-10	Field Blank:	
		12) B6-048-SB-1	Date:	7/5/2016
		13) B6-048-SB-8	Eq. Blank:	
		14) B6-047-SB-1	Date:	7/5/2016
		15) B6-047-SB-6		
		16) B6-069-SB-1		
		17) B6-069-SB-8.5		
		18) B6-070-SB-1		
		19) B6-070-SB-4		
		20) B6-034-SB-1		

		1) B6-087-SB-5		
		2) B6-087-SB-7.5		
		3)		
		4)		
		5)		
		6)		
		7)	Duplicate:	B6-087-SB-5
		8)	Date:	1/10/2017
		9)	MS/MSD:	B6-087-SB-7.5
		10)	Date:	1/10/2017
		11)	Field Blank:	
		12)	Date:	1/10/2017
		13)	Eq. Blank:	
		14)	Date:	1/10/2017
		15)		
		16)		
		17)		
		18)		
		19)		
		20)		

QA/QC Tracking Log (Soil)

Trip Blank:	Date:	Sample IDs		
TB1 - BG	6/15/2016	1) B6-077-SB-1		
		2) B6-077-SB-4		
		3) B6-079-SB-1		
		4) B6-079-SB-7		
		5) B6-030-SB-1		
		6) B6-030-SB-5		
		7) B6-032-SB-1	Duplicate BG:	B6-077-SB-4
		8) B6-032-SB-4	Date:	6/15/2016
		9) B6-031-SB-1	MS/MSD:	B6-030-SB-5
		10) B6-031-SB-4	Date:	6/15/2016
		11) B6-002-SB-1	Field Blank BG:	
		12) B6-002-SB-4.5	Date:	6/15/2016
		13) B6-001-SB-1	Eq. Blank BG:	
		14) B6-001-SB-9	Date:	6/15/2016
TB1 - BG	6/16/2016	15) B6-080-SB-1		
		16) B6-080-SB-5		
		17) B6-075-SB-1		
		18) B6-081-SB-1		
		19) B6-081-SB-5		
		20) B6-073-SB-1		

Trip Blank:	Date:	Sample IDs		
TB1 - BG	6/17/2016	1) B6-085-SB-8		
		2) B6-072-SB-1		
		3) B6-072-SB-4		
TB2 - BG		4) B6-086-SB-1		
		5) B6-086-SB-4		
		6) B6-071-SB-1		
		7) B6-071-SB-4	Duplicate BG:	B6-072-SB-4
TB1 - NK	7/5/2016	8) B6-034-SB-1	Date:	6/17/2016
TB2 - NK		9) B6-035-SB-1	MS/MSD:	B6-065-SB-4
		10) B6-035-SB-4	Date:	7/5/2016
		11) B6-066-SB-1	Field Blank BG:	
		12) B6-066-SB-5	Date:	6/17/2016
		13) B6-065-SB-1	Eq. Blank BG:	
		14) B6-065-SB-4	Date:	6/17/2016
TB	7/6/2016	15) B6-017-SB-1		
		16) B6-017-SB-6		
		17) B6-017-SB-10		
		18) B6-076-SB-1		
		19) B6-076-SB-8		
		20) B6-067-SB-1		

TB1 - BG	6/16/2016	1) B6-073-SB-5		
		2) B6-064-SB-1		
		3) B6-064-SB-8		
		4) B6-064-SB-10		
		5) B6-063-SB-1		
		6) B6-063-SB-9		
		7) B6-063-SB-10	Duplicate:	B6-073-SB-5
		8) B6-056-SB-1	Date:	6/16/16.
		9) B6-056-SB-8	MS/MSD:	B6-064-SB-8
TB1 - BG	6/17/2016	10) B6-019-SB-1	Date:	6/16/2016
		11) B6-019-SB-4	Field Blank BG:	
		12) B6-020-SB-1	Date:	6/16/2016
		13) B6-020-SB-4	Eq. Blank BG:	
		14) B6-055-SB-1	Date:	6/16/2016
		15) B6-055-SB-7.5		
		16) B6-074-SB-1		
		17) B6-074-SB-4		
		18) B6-082-SB-1		
		19) B6-082-SB-5		
		20) B6-085-SB-1		

TB	7/6/2016	1) B6-067-SB-5		
		2) B6-033-SB-1		
		3) B6-033-SB-4		
	9/19/2016	4) B6-088-SB-1		
TB1		5) B6-088-SB-5		
		6) B6-091-SB-1		
TB1		7) B6-091-SB-9	Duplicate:	B6-033-SB-1
TB1		8) B6-091-SB-10	Date:	7/6/2016
TB1		9) B6-090-SB-2	MS/MSD:	B6-067-SB-1
TB1		10) B6-090-SB-8	Date:	7/6/2016
TB1		11) B6-090-SB-10	Field Blank:	
TB1		12) B6-089-SB-1	Date:	7/6/2016
TB1		13) B6-089-SB-4	Eq. Blank:	
TB1	9/21/2016	14) B6-092-SB-1	Date:	7/6/2016
TB1		15) B6-092-SB-9		
TB1		16) B6-093-SB-1		
TB1		17) B6-093-SB-7		
TB1	1/9/2017	18) B6-009-SB-1		
TB1		19) B6-009-SB-8		
		20) B6-009-SB-10		

APPENDIX H

EVALUATION OF DATA COMPLETENESS
Percentage of Non-Rejected Results vs. Total Results
(Only data which underwent validation are included)

Parameter	Parameter Group	Matrix	Unit	Number of Validated Results	Detections	Number of Rejected Results	Number of Non-rejected Results	Completeness
Cyanide	CN	Soil	mg/kg	90	69	0	90	100.00%
Aluminum	Metal	Soil	mg/kg	90	90	0	90	100.00%
Antimony	Metal	Soil	mg/kg	90	2	25	65	72.22%
Arsenic	Metal	Soil	mg/kg	98	85	0	98	100.00%
Barium	Metal	Soil	mg/kg	90	90	0	90	100.00%
Beryllium	Metal	Soil	mg/kg	90	86	0	90	100.00%
Cadmium	Metal	Soil	mg/kg	90	12	0	90	100.00%
Chromium	Metal	Soil	mg/kg	90	90	0	90	100.00%
Chromium VI	Metal	Soil	mg/kg	90	4	0	90	100.00%
Cobalt	Metal	Soil	mg/kg	90	86	0	90	100.00%
Copper	Metal	Soil	mg/kg	90	88	0	90	100.00%
Iron	Metal	Soil	mg/kg	90	90	0	90	100.00%
Lead	Metal	Soil	mg/kg	90	88	0	90	100.00%
Manganese	Metal	Soil	mg/kg	91	91	0	91	100.00%
Mercury	Metal	Soil	mg/kg	90	61	2	88	97.78%
Nickel	Metal	Soil	mg/kg	90	87	0	90	100.00%
Selenium	Metal	Soil	mg/kg	90	6	0	90	100.00%
Silver	Metal	Soil	mg/kg	90	17	0	90	100.00%
Thallium	Metal	Soil	mg/kg	91	30	0	91	100.00%
Vanadium	Metal	Soil	mg/kg	91	91	0	91	100.00%
Zinc	Metal	Soil	mg/kg	90	87	0	90	100.00%
Aroclor 1016	PCB	SOIL	mg/kg	46	0	0	46	100.00%
Aroclor 1221	PCB	SOIL	mg/kg	46	0	0	46	100.00%
Aroclor 1232	PCB	SOIL	mg/kg	46	0	0	46	100.00%
Aroclor 1242	PCB	SOIL	mg/kg	46	3	0	46	100.00%
Aroclor 1248	PCB	SOIL	mg/kg	46	1	0	46	100.00%
Aroclor 1254	PCB	SOIL	mg/kg	46	10	0	46	100.00%
Aroclor 1260	PCB	SOIL	mg/kg	46	0	0	46	100.00%
Aroclor 1262	PCB	SOIL	mg/kg	46	8	0	46	100.00%
Aroclor 1268	PCB	SOIL	mg/kg	46	9	0	46	100.00%
PCBs (total)	PCB	SOIL	mg/kg	46	22	0	46	100.00%
1,1-Biphenyl	SVOC	Soil	mg/kg	90	19	0	90	100.00%
1,2,4,5-Tetrachlorobenzene	SVOC	Soil	mg/kg	90	0	0	90	100.00%
2,3,4,6-Tetrachlorophenol	SVOC	Soil	mg/kg	90	0	5	85	94.44%
2,4,5-Trichlorophenol	SVOC	Soil	mg/kg	90	0	4	86	95.56%
2,4,6-Trichlorophenol	SVOC	Soil	mg/kg	90	0	4	86	95.56%
2,4-Dichlorophenol	SVOC	Soil	mg/kg	90	0	4	86	95.56%
2,4-Dimethylphenol	SVOC	Soil	mg/kg	90	9	4	86	95.56%
2,4-Dinitrophenol	SVOC	Soil	mg/kg	90	0	9	81	90.00%
2,4-Dinitrotoluene	SVOC	Soil	mg/kg	90	0	0	90	100.00%
2,6-Dinitrotoluene	SVOC	Soil	mg/kg	90	1	0	90	100.00%
2-Chloronaphthalene	SVOC	Soil	mg/kg	90	0	0	90	100.00%
2-Chlorophenol	SVOC	Soil	mg/kg	90	0	4	86	95.56%
2-Methylnaphthalene	SVOC	Soil	mg/kg	90	47	0	90	100.00%
2-Methylphenol	SVOC	Soil	mg/kg	90	5	4	86	95.56%
2-Nitroaniline	SVOC	Soil	mg/kg	90	0	0	90	100.00%
3&4-Methylphenol(m&p Cresol)	SVOC	Soil	mg/kg	90	8	4	86	95.56%
3,3'-Dichlorobenzidine	SVOC	Soil	mg/kg	90	1	0	90	100.00%
4-Chloroaniline	SVOC	Soil	mg/kg	90	0	0	90	100.00%
4-Nitroaniline	SVOC	Soil	mg/kg	90	0	0	90	100.00%
Acenaphthene	SVOC	Soil	mg/kg	90	47	0	90	100.00%
Acenaphthylene	SVOC	Soil	mg/kg	90	58	0	90	100.00%
Acetophenone	SVOC	Soil	mg/kg	90	11	0	90	100.00%
Anthracene	SVOC	Soil	mg/kg	90	73	0	90	100.00%
Benz[a]anthracene	SVOC	Soil	mg/kg	90	76	0	90	100.00%

EVALUATION OF DATA COMPLETENESS
Percentage of Non-Rejected Results vs. Total Results
(Only data which underwent validation are included)

Parameter	Parameter Group	Matrix	Unit	Number of Validated Results	Detections	Number of Rejected Results	Number of Non-rejected Results	Completeness
Benzaldehyde	SVOC	Soil	mg/kg	90	23	0	90	100.00%
Benzo[a]pyrene	SVOC	Soil	mg/kg	92	76	0	92	100.00%
Benzo[b]fluoranthene	SVOC	Soil	mg/kg	92	85	0	92	100.00%
Benzo[g,h,i]perylene	SVOC	Soil	mg/kg	90	73	0	90	100.00%
Benzo[k]fluoranthene	SVOC	Soil	mg/kg	90	80	0	90	100.00%
bis(2-chloroethoxy)methane	SVOC	Soil	mg/kg	90	0	0	90	100.00%
bis(2-Chloroethyl)ether	SVOC	Soil	mg/kg	90	0	0	90	100.00%
bis(2-Chloroisopropyl)ether	SVOC	Soil	mg/kg	90	0	0	90	100.00%
bis(2-Ethylhexyl)phthalate	SVOC	Soil	mg/kg	90	23	0	90	100.00%
Caprolactam	SVOC	Soil	mg/kg	90	0	0	90	100.00%
Carbazole	SVOC	Soil	mg/kg	90	24	0	90	100.00%
Chrysene	SVOC	Soil	mg/kg	90	81	0	90	100.00%
Dibenz[a,h]anthracene	SVOC	Soil	mg/kg	90	51	0	90	100.00%
Diethylphthalate	SVOC	Soil	mg/kg	90	0	0	90	100.00%
Di-n-butylphthalate	SVOC	Soil	mg/kg	90	3	0	90	100.00%
Di-n-ocytlphthalate	SVOC	Soil	mg/kg	90	0	0	90	100.00%
Fluoranthene	SVOC	Soil	mg/kg	90	86	0	90	100.00%
Fluorene	SVOC	Soil	mg/kg	90	43	0	90	100.00%
Hexachlorobenzene	SVOC	Soil	mg/kg	90	0	0	90	100.00%
Hexachlorobutadiene	SVOC	Soil	mg/kg	90	0	0	90	100.00%
Hexachlorocyclopentadiene	SVOC	Soil	mg/kg	90	0	0	90	100.00%
Hexachloroethane	SVOC	Soil	mg/kg	90	2	0	90	100.00%
Indeno[1,2,3-c,d]pyrene	SVOC	Soil	mg/kg	90	67	0	90	100.00%
Isophorone	SVOC	Soil	mg/kg	90	0	0	90	100.00%
Naphthalene	SVOC	Soil	mg/kg	90	39	0	90	100.00%
Nitrobenzene	SVOC	Soil	mg/kg	90	0	0	90	100.00%
N-Nitroso-di-n-propylamine	SVOC	Soil	mg/kg	90	0	0	90	100.00%
N-Nitrosodiphenylamine	SVOC	Soil	mg/kg	90	3	0	90	100.00%
Pentachlorophenol	SVOC	Soil	mg/kg	90	0	4	86	95.56%
Phenanthrene	SVOC	Soil	mg/kg	90	83	0	90	100.00%
Phenol	SVOC	Soil	mg/kg	90	5	4	86	95.56%
Pyrene	SVOC	Soil	mg/kg	90	84	0	90	100.00%
Diesel Range Organics	TPH	Soil	mg/kg	92	88	0	92	100.00%
Gasoline Range Organics	TPH	Soil	mg/kg	90	7	0	90	100.00%
Oil and Grease	TPH	Soil	mg/kg	8	8	0	8	100.00%
1,1,1-Trichloroethane	VOC	Soil	mg/kg	88	0	0	88	100.00%
1,1,2,2-Tetrachloroethane	VOC	Soil	mg/kg	88	0	1	87	98.86%
1,1,2-Trichloro-1,2,2-Trifluoroethane	VOC	Soil	mg/kg	88	0	0	88	100.00%
1,1,2-Trichloroethane	VOC	Soil	mg/kg	88	0	0	88	100.00%
1,1-Dichloroethane	VOC	Soil	mg/kg	88	0	0	88	100.00%
1,1-Dichloroethene	VOC	Soil	mg/kg	88	0	0	88	100.00%
1,2,3-Trichlorobenzene	VOC	Soil	mg/kg	88	0	0	88	100.00%
1,2,4-Trichlorobenzene	VOC	Soil	mg/kg	88	0	0	88	100.00%
1,2-Dibromo-3-chloropropane	VOC	Soil	mg/kg	88	0	0	88	100.00%
1,2-Dibromoethane	VOC	Soil	mg/kg	88	0	0	88	100.00%
1,2-Dichlorobenzene	VOC	Soil	mg/kg	88	1	0	88	100.00%
1,2-Dichloroethane	VOC	Soil	mg/kg	88	0	0	88	100.00%
1,2-Dichloroethene (Total)	VOC	Soil	mg/kg	88	0	0	88	100.00%
1,2-Dichloropropane	VOC	Soil	mg/kg	88	0	0	88	100.00%
1,3-Dichlorobenzene	VOC	Soil	mg/kg	88	0	0	88	100.00%
1,4-Dichlorobenzene	VOC	Soil	mg/kg	88	0	0	88	100.00%
2-Butanone (MEK)	VOC	Soil	mg/kg	88	13	0	88	100.00%
2-Hexanone	VOC	Soil	mg/kg	88	0	0	88	100.00%
4-Methyl-2-pentanone (MIBK)	VOC	Soil	mg/kg	88	0	0	88	100.00%
Acetone	VOC	Soil	mg/kg	88	15	0	88	100.00%

EVALUATION OF DATA COMPLETENESS
Percentage of Non-Rejected Results vs. Total Results
(Only data which underwent validation are included)

Parameter	Parameter Group	Matrix	Unit	Number of Validated Results	Detections	Number of Rejected Results	Number of Non-rejected Results	Completeness
Benzene	VOC	Soil	mg/kg	88	3	0	88	100.00%
Bromodichloromethane	VOC	Soil	mg/kg	88	0	0	88	100.00%
Bromoform	VOC	Soil	mg/kg	88	0	0	88	100.00%
Bromomethane	VOC	Soil	mg/kg	88	0	81	7	7.95%
Carbon disulfide	VOC	Soil	mg/kg	88	0	0	88	100.00%
Carbon tetrachloride	VOC	Soil	mg/kg	88	0	0	88	100.00%
Chlorobenzene	VOC	Soil	mg/kg	88	0	0	88	100.00%
Chloroethane	VOC	Soil	mg/kg	88	0	0	88	100.00%
Chloroform	VOC	Soil	mg/kg	88	0	0	88	100.00%
Chloromethane	VOC	Soil	mg/kg	88	0	0	88	100.00%
cis-1,2-Dichloroethene	VOC	Soil	mg/kg	88	0	0	88	100.00%
cis-1,3-Dichloropropene	VOC	Soil	mg/kg	88	0	0	88	100.00%
Cyclohexane	VOC	Soil	mg/kg	88	2	0	88	100.00%
Dibromochloromethane	VOC	Soil	mg/kg	88	0	0	88	100.00%
Dichlorodifluoromethane	VOC	Soil	mg/kg	88	0	0	88	100.00%
Ethylbenzene	VOC	Soil	mg/kg	88	6	0	88	100.00%
Isopropylbenzene	VOC	Soil	mg/kg	88	2	0	88	100.00%
Methyl Acetate	VOC	Soil	mg/kg	88	1	14	74	84.09%
Methyl tert-butyl ether (MTBE)	VOC	Soil	mg/kg	88	0	0	88	100.00%
Methylene Chloride	VOC	Soil	mg/kg	88	1	0	88	100.00%
Styrene	VOC	Soil	mg/kg	88	1	0	88	100.00%
Tetrachloroethene	VOC	Soil	mg/kg	88	1	0	88	100.00%
Toluene	VOC	Soil	mg/kg	88	6	0	88	100.00%
trans-1,2-Dichloroethene	VOC	Soil	mg/kg	88	0	0	88	100.00%
trans-1,3-Dichloropropene	VOC	Soil	mg/kg	88	0	0	88	100.00%
Trichloroethene	VOC	Soil	mg/kg	88	0	0	88	100.00%
Trichlorofluoromethane	VOC	Soil	mg/kg	88	0	0	88	100.00%
Vinyl chloride	VOC	Soil	mg/kg	88	0	0	88	100.00%
Xylenes	VOC	Soil	mg/kg	88	7	0	88	100.00%
1,4-Dioxane	VOC/SVOC	Soil	mg/kg	88	0	88	0	0.00%

Data validation has been completed for a representative 50% of all samples