PHASE II INVESTIGATION
PRELIMINARY REPORT

AREA B: PARCEL B22
TRADEPOINT ATLANTIC
SPARROWS POINT, MARYLAND

Prepared For:

ENVIROANALYTICS GROUP
1650 Des Peres Road, Suite 230
Saint Louis, Missouri 63131

Prepared By:

ARM GROUP INC.
9175 Guilford Road
Suite 310
Columbia, Maryland 20146

ARM Project No. 150300M-20

Respectfully Submitted,

Eric S. Magdar
Senior Geologist

T. Neil Peters, P.E.
Vice President

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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 B22 (the Site). Parcel B22 is comprised of 130.8 acres of the approximately 3,100-acre former steel making facility (**Figure 1**). The Site is bounded to the west by the majority of the former Continuous Cold Tin Mill facilities (now designated as Parcel B21), to the north by the Tin Mill Canal, to the east by the majority of the former Hot Strip Mill facilities (now designated as Parcel B6), and to the south by the current Tradepoint Atlantic main offices and Parcels B2 and B3. The Site has been cleared of all significant vegetation and steel plant structures and is currently out of use, but is proposed for industrial redevelopment.

The Phase II Investigation was performed in accordance with procedures outlined in the Phase II Investigation Work Plan – Area B: Parcel B22. This Work Plan (dated June 2, 2016) was approved by the Maryland Department of the Environment and the United States Environmental Protection Agency via email on June 16, 2016 in compliance with requirements pursuant to the following:

- Administrative Consent Order (ACO) between Tradepoint Atlantic (formerly Sparrows Point Terminal, LLC) and the Maryland Department of the Environment (effective September 12, 2014); and

- Settlement Agreement and Covenant Not to Sue (SA) between Tradepoint Atlantic (formerly Sparrows Point Terminal, LLC) and the United States Environmental Protection Agency (effective November 25, 2014).

An application to enter the Tradepoint Atlantic property into the Maryland Department of the Environment Voluntary Cleanup Program (MDE-VCP) was submitted to MDE on September 10, 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 B22 (with the exception of 23 acres located furthest south) is also part of the acreage that remains subject to the requirements of the Multimedia Consent Decree between Bethlehem Steel Corporation, the United States Environmental Protection Agency (EPA), and the Maryland Department of the Environment (MDE) (effective October 8, 1997) as documented in correspondence received from EPA on September 12, 2014.

1.1. SITE HISTORY

From the late 1800s until 2012, the production and manufacturing of steel was conducted at Sparrows Point. Iron and steel production operations and processes at Sparrows Point included raw material handling, coke production, sinter production, iron production, steel production, and

semi-finished and finished product preparation. In 1970, Sparrows Point was the largest steel facility in the United States, producing hot and cold rolled sheets, coated materials, pipes, plates, and rod and wire. The steel making operations at Sparrows Point ceased in fall 2012.

Parcel B22 was formerly occupied by the following major facilities: the Continuous Cold Tin Mill (partial), the Hot Strip Mill Area (partial), and the Finishing Mills Area, each containing numerous steel product manufacturing operations. The parcel also included processing and shipping buildings and Palm Oil Recovery, Inc. (PORI) facilities. All buildings, with the exception of a few small shops, have been recently demolished or are in the process of being demolished. Several pits and basements across the Site have been filled-in, with others remaining open. The concrete slabs remain on grade.

Several iron and steel work processes were completed within the boundary of Parcel B22. Descriptions of the facilities and processes 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.

Tin Mill Facilities:

The No. 3 Pickler removed scale from steel bands received from the Hot Strip Mill by using both mechanical descaling and chemical descaling. Five pickling tanks were used to chemically descale the sheet with a sulfuric acid pickling solution. After picking, the strip was rinsed, dried, slit, oiled, and transferred to the 48" Tandem Mill for further processing. Acid emissions generated from the operation were vented through blowers located above tanks and sent to a scrubber.

The 48" Tandem Mill reduced the steel strip in thickness, produced a smooth/dense surface, and developed the required metallurgical properties. The Mill received product, uncoiled it, and processed it through roll stands. Coils were typically delivered to either the No. 6 Washer or the No. 5 Continuous Anneal operation, or shipped directly to customers. An oil/water emulsion was applied during rolling.

The No. 6 Washer was used to clean strips from the Tandem Mills with a caustic solution before annealing. The strip was first uncoiled and welded to the previous strip and fed into a caustic wash tank. After the caustic wash, the strip was fed into a scrubber tank equipped with

brushes for cleaning. The strip was then rinsed, dried, and rewound into a coil for transport to the Box Anneal Furnaces. The fumes generated from the caustic wash tank and from the water rinse in the No. 6 Washer were directed to a scrubber system.

The Box Annealing facility annealed coils to varying degrees of hardness determined by the customer's end use. Coils were stacked on a pedestal and capped by an inner cover. The portable Box Annealing furnace was placed over the base, and natural gas flow was started and ignited. The operation produced gasses from residual oils on the surface of the coils which were consumed in the furnace. Each furnace vented inside the building.

Depending on the customer's requirements for hardness and plating, cold-reduced strip may have required annealing. The No. 5 Continuous Anneal combined the caustic cleaning process with continuous annealing. The strip was uncoiled, welded to the previous strip and fed into a caustic wash tank. After the caustic wash, the strip was fed into a tank equipped with brushes for cleaning. The strip was rinsed, dried, and fed to the annealing furnace. After annealing, the strip was cooled and rewound into a coil for further processing. The fumes generated in the caustic washer were controlled by a scrubber.

Product from the No. 5 Continuous Anneal and the batch Box Annealing operation was delivered to the No. 6 Skin Pass Mill. The No. 6 Skin Pass Mill reduced the gauge, tempered the steel, and prepared the surface of the strip for finishing. For protecting product quality, the particulate generated in the process could be directed to a dust-collection system. Fugitive VOC emissions were generated during material-handling operations.

The No. 3 Duo Mill was used to reduce the thickness of the annealed strip and temper the steel. Materials used in the process included rolling oil and a rust-inhibitor solution. The mill was equipped with a fume-exhaust system that led to a mist eliminator.

Three Coil Preparation Lines were used in the Tin Mill Department to prepare the final product for packaging and shipping. These lines received coils from the plating lines and trimmed the coils or removed defective sections. A percentage of No. 5 Coil Preparation Line product was oiled for protection of the steel during storage and shipment. All coil-preparation lines could occasionally rewind coils as necessary for the other Tin Mill Operating Units.

The No. 1 Tin Plate Line applied a tin coating to a prepared coil. The strip first entered an alkaline cleaning section, which consisted of a caustic bath followed by a water rinse. The strip then passed through a sulfuric acid pickling bath and a water rinse to prepare the surface for coating. The alkaline cleaning, pickling, plating and chemical treatment areas were served by individual scrubbers. The strip then entered an electroplating bath where the strip was plated with tin. The strip was hot-rinsed, quenched and conveyed to the chemical-treatment area, where the strip surface was passivated with dichromate solution. The strip was then

cleaned and transported for shipment. The No. 2 Tin Plate Line also applied a tin coating to a prepared coil through a very similar process.

In the No. 8 Chrome Line, the strip was plated with chrome. The strip was first cleaned using caustic solution and then pickled using a sulfuric acid solution. Once the strip was rinsed, it was chrome plated. Inert anodes were used to plate chrome from chromic acid onto the strip. Chrome passivation was used as a second treatment stage. Emissions from the caustic bath, pickler, plating tanks, and chemical treatment tanks were directed to a scrubber.

Cold Sheet Mill Facilities:

Finished steel was produced in various portions of the Site at the Cold Sheet Mill. These mills generated various steel products, all to customer specifications, including cold-rolled sheets. Some of the products were galvanized, coated with corrosion-resistant alloys (i.e., galvalume or chrome), or tin- plated at the Coating Lines located in the Cold Sheet Mill and the Tin Mill.

The Pickling Line prepared hot bands from the Hot Strip Mill for further processing in the Tandem Mill. Steel was uncoiled, welded to the previous band and the scale broken before sending it through a continuous bath of sulfuric acid pickling solution. Acid flowed countercurrent with the strip and was removed at the entry end of the pickler. The strip was then rinsed and dried and may have been oiled and then re-coiled, or could be passed directly to the Tandem Mill.

The Tandem Mill reduced the thickness of the strip, produced a smooth, dense surface and developed the required metallurgical properties of the steel. It received strip directly from the pickling operation passing it through a five-stand continuous mill arrangement. After rolling, it was rewound into a coil for shipment to final customers, to the annealing operations, and/or coating operations.

Coating Lines:

No. 1 Galvanize Line process involved heat treating, chemical treatment, and coating with a molten zinc. Prepared coils were delivered to the coating lines in coil form. The sheet was uncoiled before entering the direct-fired natural-gas furnace for annealing. Residual oil and fines on the surface of the sheet steel were burned in the process. After the strip was annealed, it passed through an electrically heated holding furnace, which served as a soaking operation. The sheet then passed through a molten-metal coating bath. The coated strip passed through a wiper to control coating thickness before cooling. Depending on the end use of the strip, a chrome oxide layer may have been applied in a chrome passivation process to prevent oxidation. The strip was dried, and, depending on end use, could be oiled for downstream processing and prevention of oxidation. After chemical treatment, the strips were either shipped off the site or further processed.

The No. 2 Galvanize Line applied a zinc coating to a heat-treated and prepared coil from the Cold Sheet Mill. The strip was uncoiled and prepared by annealing and heat soaking prior to coating with molten zinc. From the coating bath, the coated strip passed through a wiper to control coating thickness before cooling. The strip was then passed through another annealing furnace before being cooled, leveled and conveyed to a chemical-treatment area where the strip could be passivated with dichromate solution. The strip was dried and oiled, then coiled and packaged for shipment.

The No. 3 Galvalume Line applied a zinc/aluminum coating to a heat-treated and prepared coil. Preparation may have consisted of strip caustic cleaning, preheating and annealing, then heat soaking prior to coating with molten zinc/aluminum. From the coating bath, the coated strip passed through a wiper to control coating thickness before cooling. The strip was leveled and conveyed to a chemical-treatment area where it could be coated with acrylic or passivated with dichromate solution. The strip was then dried and could be oiled or coiled before shipment.

The No. 4 Hot Dip Coating Line could make either galvanized and Galvalume product. Coils from the Tandem Mill were transferred to the No. 4 Hot Dip Coating Line where they were uncoiled. They may have been caustically cleaned to remove fines and oils, and were annealed in a furnace. The sheet was then coated with a mixture of liquid aluminum/zinc alloy or liquid zinc. Air knives controlled coating thickness by removing excess from the strip. The coated strip was then cooled and quenched. The strip could be chemically treated with dichromate solution or acrylic polymer. An electrically heated hot-air drier was used immediately after passivation. The strip was then oiled and/or recoiled prior to shipment off the site.

1.2. OBJECTIVES

The objective of this Phase II Investigation was to fully characterize the nature and extent of soil 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 number, if applicable, and the analyses performed is provided as **Appendix A**. As specified in the approved Work Plan for Parcel B22, 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. A separate report will be submitted to discuss the findings of the groundwater investigation.

To date, all non-validated analytical data for soils has been received and is provided herein. This *preliminary* report presents the findings and recommendations based on the non-validated data. Once all validated data (75% of the total analytical dataset) has been received, a final Phase II Report that discusses the findings of the data validation and includes applicable validation flags in data tables and figures will be submitted to the agencies.

2.0 ENVIRONMENTAL SETTING

2.1. LAND USE AND SURFACE FEATURES

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

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 11 and 13 feet over the majority of the central parcel area. Elevations across the Site appear to slope downward slightly to the north, with higher elevations between 13 and 16 feet typical near the southern end of the parcel and lower elevations between 9 and 11 feet amsl typical near the northern edge of the parcel. Beyond the northern edge, the parcel slopes sharply downward to the adjacent Tin Mill Canal. Elevations at the Site range from approximately 2 feet amsl within the PORI Lagoon up to approximately 16 feet amsl at several high points (open storage areas near the southern boundary). Surface runoff generally flows from the south to the north based on the observed elevations, but collects in low spots and open basements throughout the Site.

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 overly deeper Mesozoic and/or Precambrian bedrock.

2.3. SITE GEOLOGY

Groundcover at the Site is comprised of approximately 72% natural soils and 28% slag based on the approximate shoreline of the Sparrows Point Peninsula in 1916, as shown on **Figure 2** (Adapted from Figure 2-20 on the Description of Current Conditions Report (DCC) report prepared by Rust Environmental 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 observed within the soil cores at initial depths ranging from 1.5 to 18 feet below the ground surface (bgs) across the Site. In many cases a perched water table was indicated by the observation of two wet intervals with a dry (or moist) clay zone between the water bearing units. Soil boring logs are provided in **Appendix B**.

3.0 SITE INVESTIGATION

A total of 386 soil samples (all locations and boring depths) were collected for analysis between May 16, 2016 and June 6, 2016 as part of the Parcel B22 Phase II Investigation. This Phase II Investigation utilized methods and protocols that followed the procedures included in the Quality Assurance Project Plan (QAPP) dated April 5, 2016 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 B22 Work Plan dated June 2, 2016, and the QAPP.

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

3.1. SAMPLE TARGET IDENTIFICATION

Previous activities within and around the buildings and facilities located on the Tradepoint Atlantic property may have been historical sources of environmental contamination. If present, source areas were identified as targets for sampling through a careful review of historical documents. When a sampling target was identified, a boring was placed at or next to its location using GIS software (ArcMap Version 10.2.2).

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 Environmental and Infrastructure. The following RECs were identified in the Parcel B22 Work Plan: Coating Lines Blind Sumps (REC 1I, Finding 19, also listed as SWMU 54); Cold Sheet Mill Piping (REC 1J, Finding 23, also listed as SWMU 58); Tandem Mill Trench System (REC 1K, Finding 24, also listed as SWMU 59); PORI Oil/Water Separator (REC 1O, Finding 36, also listed as SWMU 71); PORI Holding Tank (REC 1P, Finding 37, also listed as SWMU 72); PORI Lagoon (REC 1Q, Finding 38, also listed as SWMU 73); Acid Tanks (REC 1V, Finding 53, also listed as AOC J); Tin Mill Sump (Acid Monitoring Area) (REC 1S, Finding 41, also listed as SWMU 86); Spent Pickle Liquor Tanks (REC 1W, Finding 58, also listed as AOC W); Spent Pickle Liquor Sump/Trench System (REC 1U, Finding 48, also listed as SWMU 198); and Hot Strip Mill Drum Handling Area (REC 1Y, Finding 60).

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 B22 boundary are cross-listed as RECs, and have been previously discussed. Additional AOCs were present within the parcel boundary, and were included as sampling targets. The following AOCs were identified within the parcel: Former 1991 PCB Spill Area (AOC A); Former PCB Spill Area (Sheet Mill) (AOC D); Truck Dock #9 Former Diesel Spill and Diesel Fuel UST Area (AOC K); Former Chromic Acid Spill Area (AOC S); Former Diesel Fuel UST (Cold Sheet Mill) (AOC T); and Former Spent Pickle Liquor Tanks (AOC V).

Four (4) 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. A summary of the specific drawings covering the Site is presented in **Table 1**. Sampling target locations were identified if the historical drawings depicted industrial activities or a specific feature at a location that may have been a source of environmental contamination that potentially impacted the Site.

Based on the review of plant drawings, sampling targets were identified at the Site that included the following: Electric Sub-Stations; Electric Transformer; Fuel Department; Fuel Station (Tractor); Grease Trap; Lube Oil Rooms/Shops; Oil Houses; Mech. Maintenance Shop; Fuel/Gas Pump Houses; SAH Sewer Pump Station; Scale Pits; Slab Storage Area; Acid Tanks Caustic Tanks; Fuel/Oil Tanks; Palm Oil Tanks; and Unknown Contents Tanks. ARM received a list and figure of former PCB-containing transformer equipment from Tradepoint Atlantic personnel, for inclusion as additional targets. A summary of the areas that were investigated, along with the boring identification numbers and the analyses performed, has been provided as **Appendix A**.

Additional sample locations were then added to fill in large spatial gaps between proposed borings to provide complete coverage of the Site. The density of soil borings met the requirements set forth in QAPP Worksheet 17 – Sampling Design and Rationale. Parcel B22 contained a total of approximately 130.8 acres: 26.6 acres without engineered barriers and 104.2 acres with engineered barriers (roads, parking, and building slabs). In accordance with the relevant sampling density requirements, a minimum of 18 soil borings were required to cover the area without engineered barriers, and a minimum of 20 soil borings were required to cover areas with engineered barriers. A total of 38 borings were required to meet the density specification; however, 179 soil borings were completed during the Phase II Investigation.

During the completion of fieldwork it was necessary to shift some borings from the approved locations given in the Work Plan primarily due to access restrictions, refusal, and/or utility conflicts. **Table 2** provides the identification numbers of the field adjusted borings, the rationale

for field adjustment, the coordinates of the proposed and final locations, and the distance/direction of the field shifts.

3.2. SOIL INVESTIGATION

Continuous core soil borings were advanced at 179 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 3 and 30 feet bgs, with an average depth of roughly 10 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 Photo Ionization 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**. 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.

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. If clean surface cover materials (such as paving or gravel) were present, the first 1 foot of fine-grained material beneath this layer was collected as the surface sample. 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 indicated by the PID response. 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 SOP Numbers 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, Target Analyte List (TAL) Metals via 6010C and 7471C, hexavalent chromium via USEPA Method 7196A, cyanide via USEPA Method 9012, and total petroleum hydrocarbon (TPH) diesel range organics (DRO) and gasoline range organics (GRO) via USEPA Methods 8015B and 8015D. 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.

3.3. MANAGEMENT OF INVESTIGATION-DERIVED WASTES (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, a composite sample was gathered from the Parcel B22 Phase II IDW soil drums for TCLP analysis. Following this analysis, the waste soil was characterized as non-hazardous. A list of all detections from the soil TCLP procedure can be found in **Table 3**, which indicates no exceedances of TCLP criteria.

IDW drums containing aqueous materials will also be characterized by preparing a composite sample from the Parcel B22 Phase II IDW aqueous drums. Following aqueous TCLP analysis, the aqueous waste will be characterized as either hazardous or non-hazardous. A list of all detections from the aqueous TCLP procedure will be given in **Table 4** once characterization data has been received.

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

The analytical results for the detected parameters are summarized and compared to the site-specific project action limits (PALs) in attached **Table 5** (Organics) **and Table 6** (Inorganics). The laboratory Certificates of Analysis (including Chains of Custody) are included as **Appendix E**. Data validation has not been completed at this time, but once validation has been completed the full Data Validation Reports will be included as **Appendix F**. The laboratory reports contain descriptions of the flags assigned to individual results in the attached summary tables (non-validated data).

4.1. SOIL CONDITIONS: ORGANIC COMPOUNDS

As provided on **Table 5**, VOCs were identified above the laboratory's method detection limits (MDLs) in the soil samples collected from across the Site. However, only one VOC compound (1,1-dichloroethane) was detected above its PAL. This compound was detected in sample B22-070-SB-1 at 44.7 mg/kg, compared to the PAL of 16 mg/kg. As only one exceedance was noted, a figure to indicate the location of VOC exceedances was not deemed necessary.

Table 5 provides a summary of SVOCs detected above the laboratory's MDLs in the soil samples collected from across the Site. Seven SVOCs, all polynuclear aromatic hydrocarbons (PAHs), were detected above their respective PALs. These SVOCs were benzo[a]anthracene, benzo[a]pyrene, benzo[b]fluoranthene, benzo[k]fluoranthene, dibenz[a,h]anthracene, indeno[1,2,3-c,d]pyrene, and naphthalene. Exceedances were noted at approximately half of the boring locations distributed throughout the parcel. Benzo[a]pyrene was the most common exceedance, with 115 individual detections in excess of the PAL (0.29 mg/kg). All remaining SVOCs had a combined total of 102 PAL exceedances. A summary of the SVOC exceedance locations has been provided on **Figure S-1**.

Shallow soil samples collected across the Site from the 0-1 foot bgs interval were analyzed for PCBs. **Table 5** provides a summary of the PCBs detected above the laboratory's MDLs. Four PCB mixtures (Aroclor 1242, Aroclor 1248, Aroclor 1254, and Aroclor 1260) and total PCBs were detected above the specified PALs. Other aroclors without designated PALs were also detected, which contributed to the exceedances for total PCBs. Exceedances were noted at roughly one-fifth of the boring locations in the parcel. A total of seven surface soil samples exceeded 10 mg/kg for total PCBs, with a maximum exceedance of 74.4 mg/kg observed in B22-028-SB-1. This boring location targeted a drip leg. A summary of the PCB exceedance locations has been provided on **Figure S-2**.

Table 5 provides a summary of the TPH-DRO/GRO detections above the laboratory's MDLs in the soil samples collected from across the Site. Only DRO was detected above its PAL (620 mg/kg), at 20 separate boring locations (25 total samples). The maximum detection of DRO was

39,100 mg/kg, identified in sample B22-162-SB-1 which targeted a storage tank with unknown contents. The second highest detection (8,400 mg/kg in B22-163-SB-5) was targeting the same feature. A summary of the TPH PAL exceedance locations has been provided on **Figure S-3**.

4.2. Soil Conditions: Inorganic Constituents

Table 6 provides a summary of inorganic constituents detected above the laboratory's MDLs in the soil samples collected from across the Site. 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, and was detected above the PAL in 77% of the soil samples analyzed for this compound. For comparison, manganese (the next most common exceedance) was detected above the PAL in 41 samples (or 12%). A summary of the inorganic exceedances has been provided on **Figure S-4**.

4.3. Soil Conditions: Results Summary

Constituents of potential concern (COPCs) were defined as any compound exhibiting at least one exceedance of its applicable PAL. **Table 7** provides a summary of results for all COPCs in soil. The table displays the detection frequency for each COPC and compares the maximum detected values for each compound to the applicable PALs. The maximum detections for six of the seven PAH compounds listed in the table were associated with two individual samples (B22-061-SB-1 and B22-119-SB-10). The maximum detections of lead and hexavalent chromium were also co-located in a single sample (B22-026-SB-1). The sampling plan defined in the Parcel B22 Work Plan was designed to target the specific features which represented a potential release of hazardous substances and/or petroleum products to the environment. **Table 8** indicates which soil impacts (PAL exceedances) are associated with the specific targets listed in the Parcel B22 Work Plan.

All soil data were screened to determine whether individual sample results may be indicative of the presence of discrete Hot Spots on the Site. Following the guidelines presented in the June 2008 Cleanup Standards for Soil and Groundwater prepared by the MDE, a potential Hot Spot would be identified if the result was 100 times the PAL (i.e., a lifetime cancer risk of 1E-4 or Hazard Index of 100). The MDE guidance indicates that all identified Hot Spots have to be addressed in accordance with a MDE approved Remedial Action Plan, with the expectation that treatment shall be used to remediate Hot Spot contamination, wherever practicable. On Parcel B22, benzo[a]pyrene exceeded this criterion at sample locations B22-061-SB-1, B22-080-SB-1, B22-119-SB-10, and B22-149-SB-8. Naphthalene also exceeded 100 times the PAL in sample B22-119-SB-10. The only inorganic compound to exceed 100 times the PAL was arsenic in sample B22-074-SB-1. The targets associated with borings B22-061-SB, B22-080-SB, B22-119-SB, B22-149-SB, and B22-074-SB were the Oil Houses, Possible PCB-Contaminated Area, PORI Lagoon, Caustic Tanks, and Mech. Maintenance Shop, respectively. The Hot Spot criterion for lead was set at a more stringent level of 2,000 mg/kg because the Hazard Index

concept is not strictly applicable to lead. There were five samples collected during the Phase II Investigation (B22-026-SB-1, B22-047-SB-1, B22-107-SB-1, B22-116-SB-8.5, and B22-175-SB-4) which exceeded this level for lead, with a variety of boring targets not directly linked to lead-containing process areas. These sample locations and results identified as potential Hot Spots are given in **Table 9**.

4.4. NON-AQUEOUS PHASE LIQUID

In the event that field observations indicated the potential presence of NAPL in soils during the completion of a soil boring, a temporary piezometer was installed in accordance with **Field SOP Number 028**. Field observations indicated the potential presence of NAPL in 12 soil borings during the field investigation (B22-033-SB, B22-034-SB, B22-057-SB, B22-067-SB, B22-106-SB, B22-111-SB, B22-119-SB, B22-128-SB, B22-129-SB, B22-153-SB, B22-161-SB, and B22-163-SB). At each location, the piezometer was installed and immediately checked for the presence of NAPL using an oil-water interface probe in accordance with **Field SOP Number 028**. If NAPL was not detected, the piezometer was allowed to equilibrate for at least 48 hours prior to a second measurement. Free-phase NAPL was identified in only one location, B22-128-PZ, during the 48-hour check (0.02 feet thick).

During the installation of B22-128-SB, indications of potential NAPL were observed from approximately 4 to 8 feet bgs. This location targeted the Hot Strip Mill Drum Handling Area (REC 1Y). Since NAPL was present in piezometer B22-128-PZ, additional temporary piezometers were installed to the north, south, east, and west of the detection point at distances of 25 feet. Each additional piezometer installed to delineate the NAPL was checked for the presence of product with an oil-water interface probe immediately after installation, and again 48 hours later. No measureable NAPL was detected in any of the delineation piezometers, and no additional installations were warranted following this event. The piezometers will be checked again after 30 days.

5.0 DATA USABILITY ASSESSMENT

The approved site-wide QAPP specified a process for evaluating data usability in the context of meeting project goals. Specifically, the goal of the Phase II Investigation is to determine if potentially hazardous substances or petroleum products (VOCs, SVOCs, PCBs, Metals, cyanide, or TPH-DRO/GRO) are present in Site media (soil) at concentrations that could pose an unacceptable risk to Site receptors. Individual results are compared to the Project Action Limits established in the QAPP (i.e., the most current USEPA RSLs) to identify the presence of constituents of potential concern 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, 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, 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, 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 (COC) 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 PID calibration log has been provided in **Appendix C**.

The laboratory deliverables were reviewed to ensure that all records specified in the QAPP as well as necessary signatures and dates are present. Sample receipt records were reviewed to ensure that the sample condition upon receipt was noted, and any missing/broken sample containers (if any) were noted and reported according to plan. The data packages were compared to the COCs 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 is currently being completed for the environmental sample analyses performed by PACE and supporting Level IV Data Package information by Environmental Data Quality Inc. (EDQI).

Sample analyses are undergoing an analytical quality assurance review to ensure adherence to the required protocols. The Stage 2B review will be performed as outlined in "Guide for Labeling Externally Validated Laboratory Analytical Data for Superfund Use", EPA-540-R-08-005. Results will be 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 April 5, 2016 and the quality control requirements specified in the methods and associated acceptance criteria are also used to evaluate the non-CLP data.

The Data Validation Reports (DVRs) for the soil data will be provided in **Appendix F** once they are completed by EDQI.

5.3. DATA USABILITY

The data will be 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 will be evaluated in the data validation process. These criteria will be described in the Data Validation Reports which will be included in **Appendix F**, once received. Where appropriate, potential limitations in the results will be indicated through final data flags. These flags will indicate whether particular data points were quantitative estimates, biased high/low, associated with blank contamination, etc. Individual validation flags will be provided with the results in the detection summary tables, which currently display the non-validated laboratory flags. A qualifier code glossary will be

included with each data validation report provided by EDQI. Particular results may be marked with the "R" flag if the result is deemed to be unreliable. A discussion of data completeness (the proportion of non-rejected data) will be included once the validation process has been completed. A summary of the rejected soil results will be provided on **Table 10** (if applicable) following the receipt of the validation results.

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 009, 010, 011, 017, 024, and 026**. Review of the field notes and laboratory sample receipt records indicated that collection of soil samples 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 data set.

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 will be 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 will be evaluated following the receipt of the validated results. Results from the completeness evaluation will be provided in **Appendix H**. The Parcel B22 Work Plan dated June 2, 2016 specifies that 75% of the complete soil sample analytical dataset will undergo data validation, therefore, only the samples which are submitted for validation will be included in the evaluation and discussion of data completeness.

6.0 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 386 soil samples (all locations and depths) were collected and analyzed to define the nature and extent of contamination in Parcel B22. 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 samples were analyzed for TCL-VOCs, TCL-SVOCs, TPH-DRO/GRO, TAL-Metals, hexavalent chromium, and cyanide. Shallow soil samples (0-1 foot bgs) were also analyzed for PCBs.

The Phase I ESA conducted by Weaver Boos identified several RECs at the Site, warranting the extensive field investigations conducted during this Phase II Investigation. The samples collected during this study have provided analytical data regarding current conditions at the Site, and facilitated the identification of potential contaminant releases. Soil conditions have been adequately characterized across the Site to support future risk assessments and associated response action planning, if necessary, as well as development planning. However, further focused investigation is recommended to better characterize conditions in several areas, as discussed below.

The concentrations of constituents in the soil have been characterized by the Phase II Investigation and provide estimates of exposure point concentrations to support risk assessment. COPCs in soil consisted of six inorganics (arsenic, manganese, lead, thallium, vanadium, and hexavalent chromium), seven SVOCs (benzo[a]anthracene, benzo[a]pyrene, benzo[b]fluoranthene, benzo[k]fluoranthene, dibenz[a,h]anthracene, indeno[1,2,3-c,d]pyrene, and naphthalene), five PCB groups (Aroclor 1242, Aroclor 1248, Aroclor 1254, and Aroclor 1260, and total PCBs), one VOC (1,1-dichloroethane), and TPH-DRO.

Of the six inorganic COPCs, thallium (B22-005-SB-4 and B22-175-SB-1) and vanadium (B22-161-SB-1 and B22-166-SB-1) only exceeded the PALs at two locations each. The two thallium exceedances targeted the Truck Dock #9 (AOC K) and a Possible PCB-Contaminated Area, whereas the two vanadium exceedances targeted a Palm Oil Tank and provided general site coverage. Lead exceeded its PAL in 16 samples, and five of those locations were identified as potential Hot Spots. Hexavalent chromium exceeded its PAL at 10 locations and manganese exceeded its PAL in 41 samples, but none of the detections exceeded the Hot Spot criteria. Arsenic was very widespread at the Site and exceeded its PAL in 297 samples (approximately 77% of the total soil samples analyzed for this compound). One arsenic sample (B22-074-SB-1 targeting a Mech. Maintenance Shop) was identified as a potential Hot Spot.

The only SVOC COPC that appeared to be isolated at an individual boring location on the parcel was naphthalene, which exceeded the PAL at B22-119-SB. The naphthalene detected at B22-

119-SB-10 was identified as a potential Hot Spot. All six of the other SVOC COPCs appear to be widespread throughout the parcel, each with a minimum of five exceedances. The most common SVOC exceedance was benzo[a]pyrene, which had 115 total exceedances of the PAL (approximately 32% of the total soil samples analyzed for this compound) and five individual samples identified as potential Hot Spots.

There were 38 exceedances of total PCBs throughout the parcel. Aroclors 1242, 1248, 1254, 1260, 1262 (no individual PAL), and 1268 (no individual PAL) contributed to this overall number of total PCB exceedances.

The VOC 1,1-dichloroethane was detected above the PAL at one isolated location (B22-070-SB) which targeted an Oil House. The detection of 44.7 mg/kg exceeded the PAL by less than a factor of three.

TPH-DRO exceeded its PAL in 25 samples throughout the parcel, with a maximum detection of 39,100 mg/kg identified in sample B22-162-SB-1, which targeted a storage tank with unknown contents. NAPL was noted in two of the borings that indicated exceedances of the PAL for DRO (B22-153-SB and B22-163-SB). NAPL investigation was conducted via the installation of a temporary piezometer in any boring where NAPL was observed within the soil core. No significant NAPL was identified within the parcel. Only a single piezometer (B22-128-PZ) contained any measureable NAPL (0.02 feet), and a very limited delineation area was necessary.

Based on the large number of samples collected in Parcel B22, there were relatively few PAL exceedances for PCBs, VOCs, and DRO. The low magnitudes of the exceedances (with no identified Hot Spots) indicated that these compound groups may not be significant contaminants at the Site. No further delineation is recommended in response to these COPC exceedances. SVOCs and inorganics in soil were responsible for a far greater number of PAL exceedances at the Site. Furthermore, the magnitudes of several exceedances were much larger than those associated with the compounds previously discussed.

On Parcel B22, four soil sample results for benzo[a]pyrene (B22-061-SB-1, B22-080-SB-1, B22-119-SB-10, and B22-149-SB-8), one soil sample results for arsenic (B22-074-SB-1), and one soil sample for naphthalene (B22-119-SB-10) exceeded 100 times the PAL, indicating the presence of potential Hot Spots which may require further delineation activities (**Table 9**). The targets associated with B22-061-SB, B22-074-SB, B22-080-SB, B22-119-SB, and B22-149-SB were Oil Houses, Mech. Maintenance Shop, Possible PCB-Contaminated Areas, PORI Lagoon, and Caustic Tanks, respectively. These locations are further described as follows:

- The benzo[a]pyrene at B22-149-SB that targets Caustic Tanks exceeds the Hot Spot criterion in the 7-8 ft sampling interval. This location also exceeds the PAL in the shallow sample (0-1 ft), but at a significantly reduced level. The nearby sample location B22-148-SB (also targeting the Caustic Tanks) also exceeds the PAL for benzo[a]pyrene

at all sample depths (0-1 ft, 5-6 ft, and 9-10 ft). The maximum detection of benzo[a]pyrene among these additional samples was 9.5 mg/kg, in sample B22-148-SB-10. As the Hot Spot sample occurs at a substantial depth with limited future exposure potential, this area is considered to be adequately defined for risk assessment and remedial design purposes and further investigation is not warranted;

- Naphthalene and benzo[a]pyrene are both considered possible Hot Spots at soil sample location B22-119-SB-10, which targets the PORI Lagoon. Both Hot Spots were limited to one sample at a depth of 10 feet, with concentrations less than the Hot Spot criterion in the two shallower soil samples in that boring. There were three additional soil borings that targeted the PORI Lagoon: B22-120-SB, B22-121-SB, and B22-174-SB. Benzo[a]pyrene and naphthalene both exceeded the PALs at several depth intervals at those locations; however, the detections were at significantly lower concentrations. The maximum detections of benzo[a]pyrene and naphthalene among the other samples were 1.3 mg/kg (less than five times the PAL) and 32.8 mg/kg (less than twice the PAL), respectively. As the Hot Spot sample occurs at a substantial depth with limited future exposure potential, this area is considered to be adequately defined for risk assessment and remedial design purposes and further investigation is not warranted;

- The benzo[a]pyrene at B22-080-SB which targeted a Possible PCB-Contaminated Area occurs within the shallow soil horizon (0-1 ft). The intermediate sample from this location (4-5 ft) had only a low "J" flagged detection of 0.0057 mg/kg. Two additional soil borings located 70 feet to the east (B22-075-SB and B22-076-SB), and two additional soil borings located 130 feet to the west (B22-003-SB and B22-004-SB) had only one low-level exceedance (0.61 mg/kg in B22-004-SB-1). Based on the surrounding analytical data and relatively low Hot Spot exceedance (35.5 mg/kg), this area is considered to be adequately defined for risk assessment and remedial design purposes and further investigation is not warranted;

- The benzo[a]pyrene at B22-061-SB-1 that targets an Oil House occurs within the shallow soil horizon (0-1 ft). The intermediate sample from this location (4-5 ft) had only a low "J" flagged detection of 0.009 mg/kg. Soil boring B22-072-SB also targeted the Oil House and had a significant PAL exceedance (13.7 mg/kg) in the shallow soil. Additional investigation of this soil Hot Spot associated with the benzo[a]pyrene concentration at the Oil House is recommended in order to define the maximum exposure concentrations and the lateral extent of this PAH contamination;

- The arsenic at B22-074-SB-1 occurs within the shallow soil horizon (0-1 ft). Additional investigation of this soil Hot Spot associated with the arsenic concentration at the Mech. Maintenance Shop is recommended in order to define the maximum exposure concentrations and the lateral extent of this metal contamination.

In addition to the SVOC and inorganic Hot Spots listed above, five soil sample results for lead (B22-026-SB-1, B22-047-SB-1, B22-107-SB-1, B22-116-SB-8.5, and B22-175-SB-4) exceeded 2,000 mg/kg, indicating the presence of Hot Spots which may require further delineation activities (**Table 9**). The targets associated with B22-026-SB, B22-047-SB, B22-107-SB, B22-116-SB, and B22-175-SB were Drip Legs, Electric Substations, Cold Sheet Mill Piping, PORI Holding Tank, and Possible PCB-Contaminated Areas, respectively. These locations are further described as follows:

- The lead exceedances at B22-116-SB and B22-175-SB were limited to one sample each, at sample depths of 8.5 feet and 4 feet, respectively. Negligible concentrations of lead were detected in the shallow samples from the same boring locations. These samples occur at a substantial depth with limited future exposure potential. Therefore, these areas are considered to be adequately defined for risk assessment and remedial design purposes and further investigation is not warranted;

- The lead contamination associated with the Cold Sheet Mill Piping (B22-107-SB), Electric Substation (B22-047-SB), and Drip Leg (B22-026-SB) occurs in the shallow soil horizon (0-1 ft). There were no lead PAL exceedances in the deeper samples at these locations. Based on the presence in shallow soil and the magnitude of the exceedances, additional investigation of these individual soil Hot Spots is recommended in order to define the maximum exposure concentrations and lateral extent of this metal contamination.

7.0 REFERENCES

ARM Group, Inc. (2016). *Phase II Investigation Work Plan Area B: Parcel B22.* Revision 1. June 2, 2016.

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State of Maryland Department of the Environment (2008). *Cleanup Standards for Soil and Groundwater*. Interim Final Guidance (Update No. 2.1). June 2008.

Weaver Boos Consultants (2014). *Phase I Environmental Site Assessment: Former RG Steel Facility*. Final Draft. May 19, 2014.

FIGURES



ARM Group Inc.
Earth Resource Engineers and Consultants

0 375 750 1,500 Feet

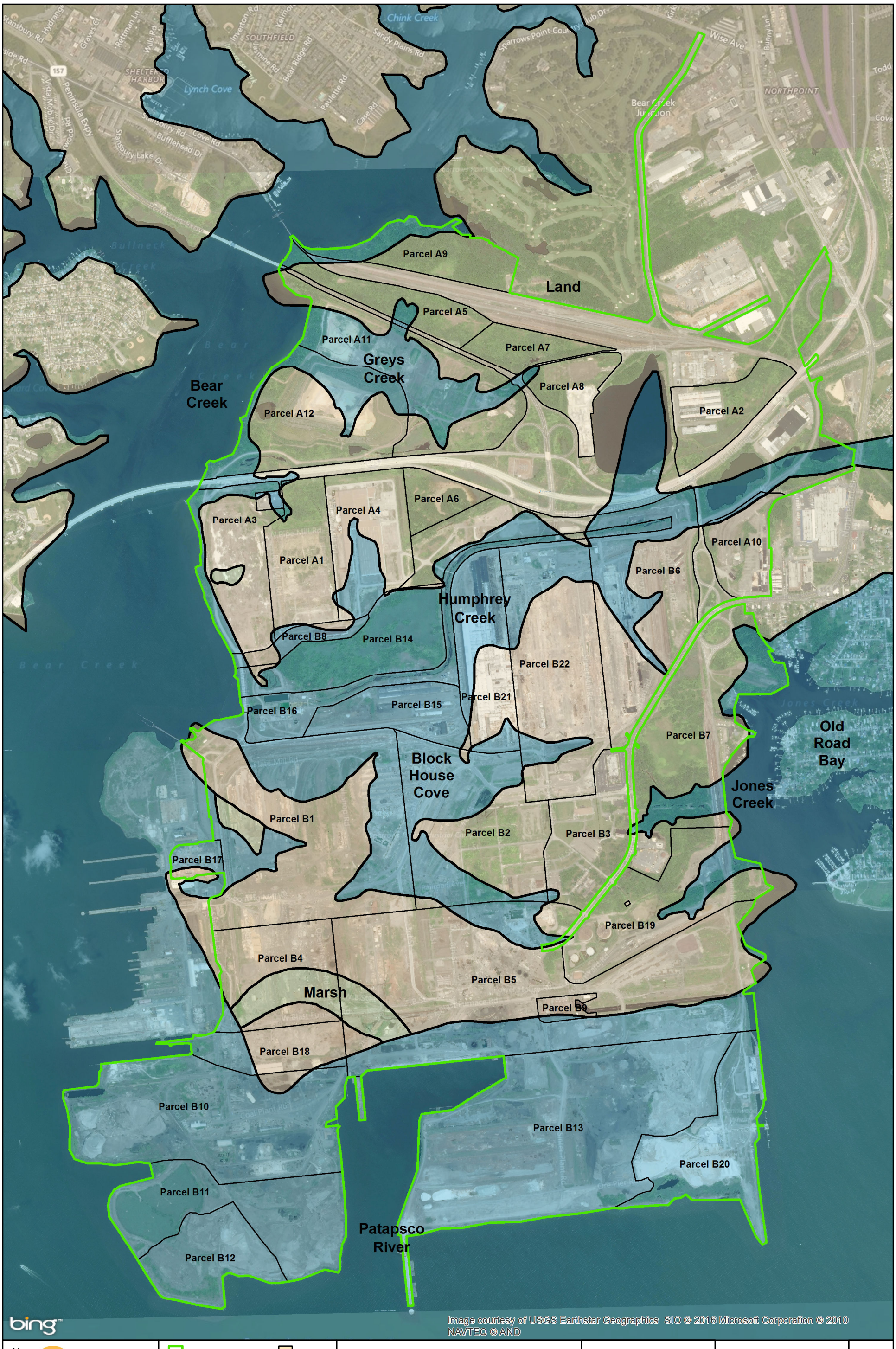
Site Boundary
Private Property
Area A Boundaries
Area B Boundaries

Tradepoint Atlantic
Area A and Area B Parcels

May 31, 2016

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

Figure 1


Chink Creek
Lynch Cove
Bear Creek
Greys Creek
Humphrey Creek
Block House Cove
Old Road Bay
Jones Creek
Patapsco River
Marsh
Land
Parcel A1
Parcel A2
Parcel A3
Parcel A4
Parcel A5
Parcel A6
Parcel A7
Parcel A8
Parcel A9
Parcel A10
Parcel A11
Parcel A12
Parcel B1
Parcel B2
Parcel B3
Parcel B4
Parcel B5
Parcel B6
Parcel B7
Parcel B8
Parcel B9
Parcel B10
Parcel B11
Parcel B12
Parcel B13
Parcel B14
Parcel B15
Parcel B16
Parcel B17
Parcel B18
Parcel B19
Parcel B20
Parcel B21
Parcel B22
Image courtesy of USGS Earthstar Geographics SIO © 2016 Microsoft Corporation © 2010 NAVTEQ © AND
bing
N
ARM Group Inc.
Earth Resource Engineers and Consultants
0 375 750 1,500
Feet
Site Boundary
Area A Boundaries
Area B Boundaries
Land
Marsh
Water
Approximate Shoreline in 1916
May 31, 2016
Adapted from Figure 2-5 of the Description of Current Conditions Report prepared by Rust Environmental and Infrastructure, dated January 1998
EnviroAnalytics Group
Area A: Project 150298M
Area B: Project 150300M
Tradepoint Atlantic
Baltimore County, MD
Figure
2

Parcel B16

B22-159-SB
B22-153-SB
B22-100-SB
B22-158-SB
B22-152-SB
B22-099-SB
B22-071-SB
B22-062-SB
B22-031-SB
B22-148-SB
B22-149-SB
B22-032-SB
B22-023-SB
B22-024-SB
B22-102-SB
B22-176-SB
B22-101-SB
B22-110-SB
B22-025-SB
B22-026-SB
B22-115-SB
B22-119-SB
B22-174-SB
B22-117-SB
B22-121-SB
B22-116-SB
B22-118-SB
B22-120-SB
B22-114-SB
B22-112-SB
B22-113-SB
B22-157-SB
B22-156-SB
B22-109-SB
B22-178-SB
B22-166-SB
B22-125-SB
B22-126-SB
B22-127-SB
B22-012-SB
B22-154-SB
B22-011-SB
B22-006-SB
B22-155-SB
B22-005-SB
B22-144-SB
B22-145-SB
B22-067-SB
B22-069-SB

Parcel B21

B22-030-SB
B22-029-SB
B22-028-SB
B22-027-SB
B22-033-SB
B22-034-SB
B22-106-SB
B22-111-SB
B22-059-SB
B22-097-SB
B22-060-SB
B22-096-SB
B22-098-SB
B22-054-SB
B22-053-SB
B22-036-SB
B22-035-SB
B22-107-SB
B22-014-SB
B22-013-SB
B22-108-SB
B22-095-SB
B22-090-SB
B22-094-SB
B22-162-SB
B22-163-SB
B22-051-SB
B22-052-SB
B22-167-SB
B22-068-SB
B22-070-SB
B22-088-SB
B22-089-SB
B22-087-SB
B22-168-SB
B22-169-SB
B22-085-SB
B22-086-SB
B22-084-SB

Parcel B6

Parcel B22

B22-164-SB
B22-165-SB
B22-038-SB
B22-037-SB
B22-064-SB
B22-065-SB
B22-015-SB
B22-016-SB
B22-043-SB
B22-047-SB
B22-058-SB
B22-057-SB
B22-017-SB
B22-018-SB
B22-104-SB
B22-161-SB
B22-160-SB
B22-150-SB
B22-151-SB
B22-147-SB
B22-146-SB
B22-092-SB
B22-093-SB
B22-091-SB
B22-105-SB
B22-003-SB
B22-004-SB
B22-103-SB
B22-074-SB
B22-050-SB
B22-049-SB
B22-080-SB
B22-076-SB
B22-075-SB
B22-135-SB
B22-134-SB
B22-002-SB
B22-001-SB
B22-081-SB
B22-083-SB
B22-082-SB
B22-136-SB
B22-133-SB
B22-066-SB
B22-063-SB
B22-073-SB
B22-022-SB
B22-021-SB
B22-009-SB
B22-010-SB
B22-008-SB
B22-042-SB
B22-045-SB
B22-007-SB
B22-019-SB
B22-020-SB
B22-044-SB
B22-046-SB
B22-072-SB
B22-061-SB
B22-039-SB
B22-039A-SB
B22-040-SB
B22-055-SB
B22-056-SB
B22-129-SB
B22-128-SB
B22-130-SB
B22-177-SB
B22-077-SB
B22-175-SB
B22-170-SB
B22-173-SB
B22-078-SB
B22-079-SB
B22-179-SB
B22-048-SB
B22-041-SB
B22-172-SB
B22-131-SB
B22-132-SB
B22-138-SB
B22-139-SB
B22-142-SB
B22-143-SB
B22-140-SB
B22-171-SB
B22-137-SB
B22-141-SB

Parcel B7

Parcel B2

Parcel B3

Parcel B22 Soil Borings
Final Field Sample Locations

June 28, 2016

Figure 3

EnviroAnalytics Group

ARM Project 150300M-20

Tradepoint Atlantic

Baltimore County, MD

ARM Group Inc.
Earth Resource Engineers and Consultants

0 62.5 125 250 Feet

Soil Boring

Parcel Boundary

Parcel B16

B22-100-SB-1
Benzo(a)pyrene: 0.35
B22-100-SB-6
Benzo(a)pyrene: 0.66
B22-100-SB-10
Benzo(a)pyrene: 0.47

B22-153-SB-1
B22-153-SB-4

B22-159-SB-1

B22-152-SB-1
B22-152-SB-6
Benzo(a)pyrene: 0.91

B22-119-SB-1
B22-119-SB-9
Naphthalene: 32.8
B22-119-SB-10
Benzo(a)pyrene: 84.9
Naphthalene: 2,040

B22-115-SB-1
B22-115-SB-8.5
Benzo(a)pyrene: 1.5

B22-117-SB-1
Benzo(a)pyrene: 1.2
B22-117-SB-4
Benzo(a)anthracene: 13.4
Benzo(a)pyrene: 10.7
Benzo(b)fluoranthene: 20.7
Dibenz(a,h)anthracene: 2.1
Indeno(1,2,3-cd)pyrene: 6.2
B22-117-SB-10

B22-178-SB-1
Benzo(a)pyrene: 0.34
B22-178-SB-6

B22-174-SB-1
Benzo(a)pyrene: 0.57
B22-174-SB-4
Benzo(a)pyrene: 0.52

B22-116-SB-1
Benzo(a)pyrene: 0.77
B22-116-SB-8.5

B22-166-SB-1
B22-166-SB-4

B22-071-SB-1
Benzo(a)pyrene: 0.94
B22-071-SB-4
Benzo(a)pyrene: 1.4

B22-158-SB-1
B22-158-SB-8

B22-099-SB-1
Benzo(a)pyrene: 1.6
Benzo(b)fluoranthene: 4.3
Dibenz(a,h)anthracene: 0.33
B22-099-SB-7
Benzo(a)pyrene: 0.98
B22-099-SB-9.5

B22-148-SB-1
Benzo(a)anthracene: 5.3
Benzo(a)pyrene: 4.6
Benzo(b)fluoranthene: 10.3
Dibenz(a,h)anthracene: 0.63
B22-148-SB-6
Benzo(a)pyrene: 0.54
B22-148-SB-10
Benzo(a)pyrene: 9.5

B22-121-SB-1
Benzo(a)pyrene: 0.47
B22-121-SB-9
Benzo(a)pyrene: 0.39
B22-121-SB-10
Benzo(a)pyrene: 0.9

B22-120-SB-1
Benzo(a)pyrene: 0.57
B22-120-SB-8
Benzo(a)pyrene: 1.3

B22-118-SB-1
Benzo(a)pyrene: 1.7
Benzo(b)fluoranthene: 3.8
Dibenz(a,h)anthracene: 0.31
B22-118-SB-9
Dibenz(a,h)anthracene: 0.31
B22-118-SB-10

B22-062-SB-1
B22-062-SB-4
Benzo(a)pyrene: 1.1

B22-031-SB-1
B22-031-SB-4
Benzo(a)pyrene: 0.49
B22-031-SB-10
Benzo(a)pyrene: 0.52

B22-032-SB-1
B22-032-SB-4
B22-032-SB-10

B22-149-SB-1
Benzo(a)anthracene: 4.2
Benzo(a)pyrene: 3.7
Benzo(b)fluoranthene: 8.5
Dibenz(a,h)anthracene: 0.5
B22-149-SB-8
Benzo(a)anthracene: 60.4
Benzo(a)pyrene: 47.1
Benzo(b)fluoranthene: 92.5
Benzo(k)fluoranthene: 89.3
Dibenz(a,h)anthracene: 5.2
Indeno(1,2,3-cd)pyrene: 13.2

B22-114-SB-1
B22-114-SB-8

B22-112-SB-1
Benzo(a)pyrene: 0.4
B22-112-SB-4
Benzo(a)pyrene: 0.56
B22-112-SB-10

B22-113-SB-1
B22-113-SB-4
Benzo(a)pyrene: 0.66

B22-125-SB-1
Benzo(a)pyrene: 0.38
B22-125-SB-4
Benzo(a)pyrene: 0.87
B22-125-SB-10

B22-126-SB-1
B22-126-SB-6

B22-012-SB-1
Benzo(a)pyrene: 2.6
Benzo(b)fluoranthene: 3.9
Dibenz(a,h)anthracene: 0.53
B22-012-SB-4

B22-011-SB-1
Benzo(a)pyrene: 1.3
B22-011-SB-4
Benzo(a)pyrene: 1.8
Benzo(b)fluoranthene: 3.5
Dibenz(a,h)anthracene: 0.36

B22-155-SB-1
Benzo(a)anthracene: 7.3
Benzo(a)pyrene: 6.0
Benzo(b)fluoranthene: 11.9
Dibenz(a,h)anthracene: 0.83
B22-155-SB-5

B22-127-SB-1
B22-127-SB-7

B22-144-SB-1
B22-144-SB-7
Benzo(a)anthracene: 5.5
Benzo(a)pyrene: 4.5
Benzo(b)fluoranthene: 9.2
Dibenz(a,h)anthracene: 0.52

B22-006-SB-1
Benzo(a)pyrene: 2.1
Benzo(b)fluoranthene: 3.8
Dibenz(a,h)anthracene: 0.3
B22-006-SB-7

B22-154-SB-1
Benzo(a)pyrene: 2.5
Benzo(b)fluoranthene: 4.7
Dibenz(a,h)anthracene: 0.38
B22-154-SB-5
Benzo(a)pyrene: 0.38

B22-023-SB-1
Benzo(a)pyrene: 0.43
B22-023-SB-9
Benzo(a)anthracene: 4.9
Benzo(a)pyrene: 3.5
Benzo(b)fluoranthene: 5.6
Dibenz(a,h)anthracene: 0.84
B22-023-SB-10
Benzo(a)pyrene: 0.57

B22-024-SB-1
B22-024-SB-4
Benzo(a)pyrene: 1.7
Benzo(b)fluoranthene: 3.6
Dibenz(a,h)anthracene: 0.41

B22-176-SB-1
Benzo(a)pyrene: 0.61
B22-176-SB-8
Benzo(a)pyrene: 2.2
Benzo(b)fluoranthene: 4.6
Dibenz(a,h)anthracene: 0.49

B22-157-SB-1

B22-005-SB-1
B22-005-SB-4
Benzo(a)pyrene: 2.1
Benzo(b)fluoranthene: 4.6
Dibenz(a,h)anthracene: 0.3
B22-005-SB-10
Benzo(a)pyrene: 0.8

B22-145-SB-1
B22-145-SB-4
Benzo(a)pyrene: 0.33
B22-145-SB-10

B22-156-SB-1
B22-156-SB-4.5

B22-101-SB-1
B22-101-SB-5

B22-102-SB-1
Benzo(a)pyrene: 0.76
B22-102-SB-5

B22-109-SB-1
B22-109-SB-4.5

B22-110-SB-1
B22-110-SB-4
Benzo(a)pyrene: 0.54

B22-067-SB-1
B22-067-SB-7

B22-069-SB-1
B22-069-SB-4

B22-025-SB-4

B22-026-SB-1
Benzo(a)pyrene: 0.88
B22-026-SB-9

B22-030-SB-1
B22-030-SB-5
Benzo(a)pyrene: 0.54
B22-030-SB-10

B22-106-SB-1
B22-106-SB-8.5

B22-033-SB-1

B22-111-SB-1
B22-111-SB-8

B22-028-SB-1

B22-029-SB-1
B22-029-SB-6
Benzo(a)pyrene: 1.2
Benzo(b)fluoranthene: 3.2

B22-034-SB-1

B22-068-SB-1
B22-068-SB-6

B22-027-SB-1
B22-027-SB-5

B22-059-SB-1
B22-059-SB-4
Benzo(a)pyrene: 0.42

B22-097-SB-1
B22-097-SB-9

B22-070-SB-1
B22-070-SB-9

B22-167-SB-1
B22-167-SB-5
B22-167-SB-10

B22-060-SB-1
B22-060-SB-4

B22-096-SB-1
Benzo(a)pyrene: 0.82
B22-096-SB-9

B22-098-SB-1
B22-098-SB-4

B22-088-SB-1
Benzo(a)pyrene: 0.34
B22-088-SB-6
Benzo(a)pyrene: 3.1
Benzo(b)fluoranthene: 5.6
Dibenz(a,h)anthracene: 0.43

B22-089-SB-1
B22-089-SB-5

B22-054-SB-1
B22-054-SB-4

B22-036-SB-1
B22-036-SB-4

B22-035-SB-1

B22-053-SB-1
B22-053-SB-8

B22-107-SB-1
Benzo(a)pyrene: 0.8
B22-107-SB-5

B22-087-SB-1
Benzo(a)pyrene: 0.32
B22-087-SB-5

B22-014-SB-1
Benzo(a)pyrene: 0.95
B22-014-SB-5

B22-013-SB-1
Benzo(a)anthracene: 11.4
Benzo(a)pyrene: 7.7
Benzo(b)fluoranthene: 14.6
Dibenz(a,h)anthracene: 0.91
B22-013-SB-4
Benzo(a)pyrene: 0.41

B22-108-SB-1
Benzo(a)pyrene: 0.68
B22-108-SB-5

B22-085-SB-1
Benzo(a)anthracene: 30.1
Benzo(a)pyrene: 23.7
Benzo(b)fluoranthene: 48.8
Benzo(k)fluoranthene: 42.4
Dibenz(a,h)anthracene: 3.2
Indeno(1,2,3-cd)pyrene: 8.2

B22-084-SB-1
Benzo(a)anthracene: 34.6
Benzo(a)pyrene: 24.5
Benzo(b)fluoranthene: 50.3
Benzo(k)fluoranthene: 43.7
Dibenz(a,h)anthracene: 4.8
Indeno(1,2,3-cd)pyrene: 11.7

B22-168-SB-1
B22-168-SB-4

B22-169-SB-1
B22-169-SB-4

B22-095-SB-1
B22-095-SB-6

B22-162-SB-1
Benzo(a)pyrene: 0.53
B22-162-SB-5

B22-163-SB-1
B22-163-SB-5

B22-090-SB-1
B22-090-SB-5

B22-094-SB-1
B22-094-SB-4

B22-086-SB-1
Benzo(a)pyrene: 1.0
Benzo(b)fluoranthene: 3.4
B22-086-SB-5

B22-051-SB-1
B22-051-SB-6

Parcel B22

B22-164-SB-1
B22-164-SB-6

B22-165-SB-1
B22-165-SB-4

B22-052-SB-1
Benzo(a)pyrene: 0.94
B22-052-SB-8

B22-015-SB-1
Benzo(a)pyrene: 0.31
B22-015-SB-4
Benzo(a)pyrene: 0.69

B22-043-SB-1
Benzo(a)pyrene: 0.55
B22-043-SB-4
Benzo(a)pyrene: 2.4
Benzo(b)fluoranthene: 5.4
B22-043-SB-10

B22-038-SB-1
Benzo(a)pyrene: 1.1

B22-064-SB-1
B22-064-SB-7

B22-037-SB-1

B22-065-SB-1
B22-065-SB-7

B22-016-SB-1
Benzo(a)pyrene: 0.67
B22-016-SB-5
Benzo(a)pyrene: 0.41

B22-017-SB-1
Benzo(a)pyrene: 0.31
B22-017-SB-6

B22-047-SB-1
Benzo(a)pyrene: 1.6
Benzo(b)fluoranthene: 3.4
B22-047-SB-5

B22-058-SB-1
B22-058-SB-7

B22-057-SB-1

B22-104-SB-1
B22-104-SB-4

B22-018-SB-1
B22-018-SB-6

B22-161-SB-1
B22-161-SB-4.5
Benzo(a)pyrene: 0.53

B22-160-SB-1

B22-150-SB-1
Benzo(a)pyrene: 0.32
B22-150-SB-5

B22-092-SB-1
B22-092-SB-4

B22-105-SB-1
B22-105-SB-4

B22-080-SB-1
Benzo(a)anthracene: 44.2
Benzo(a)pyrene: 35.3
Benzo(b)fluoranthene: 69.8
Benzo(k)fluoranthene: 60.6
Dibenz(a,h)anthracene: 2.7
Indeno(1,2,3-cd)pyrene: 8.8
B22-080-SB-5

B22-003-SB-1
B22-003-SB-4

B22-076-SB-1

B22-135-SB-1
B22-135-SB-8
Benzo(a)pyrene: 1.2

B22-002-SB-1
B22-002-SB-7

B22-091-SB-1
Benzo(a)pyrene: 0.7
B22-091-SB-4

B22-093-SB-1
B22-093-SB-5

B22-103-SB-1
B22-103-SB-4

B22-004-SB-1
Benzo(a)pyrene: 0.61
B22-004-SB-4

B22-075-SB-1
B22-075-SB-4

B22-134-SB-1
B22-134-SB-7
Benzo(a)pyrene: 0.3

B22-001-SB-1
Benzo(a)pyrene: 0.76
B22-001-SB-4
Benzo(a)pyrene: 0.62

B22-151-SB-1

B22-050-SB-1
Benzo(a)pyrene: 0.85
B22-050-SB-4.5

B22-074-SB-1

B22-081-SB-1
B22-081-SB-4

B22-136-SB-1
B22-136-SB-5
Benzo(a)pyrene: 1.5
Benzo(b)fluoranthene: 3.0

B22-066-SB-1
B22-066-SB-9

B22-146-SB-1
Benzo(a)anthracene: 5.5
Benzo(a)pyrene: 4.7
Benzo(b)fluoranthene: 10.8
Dibenz(a,h)anthracene: 0.63
B22-146-SB-5

B22-147-SB-1
Benzo(a)pyrene: 1.6
Benzo(b)fluoranthene: 3.5
B22-147-SB-5.5
Benzo(a)pyrene: 0.39

B22-049-SB-1
B22-049-SB-5

B22-082-SB-1
B22-082-SB-4

B22-083-SB-1
Benzo(a)pyrene: 0.42
B22-083-SB-4

B22-133-SB-1
B22-133-SB-5
Benzo(a)pyrene: 0.42

B22-063-SB-1
B22-063-SB-9

B22-122-SB-1
Benzo(a)pyrene: 0.53

B22-073-SB-1
Benzo(a)anthracene: 6.0
Benzo(a)pyrene: 5.1
Benzo(b)fluoranthene: 9.8
Dibenz(a,h)anthracene: 0.99
Indeno(1,2,3-cd)pyrene: 3.1
B22-073-SB-5

B22-009-SB-1
B22-009-SB-6

B22-022-SB-1
B22-022-SB-7

B22-021-SB-1
B22-021-SB-5

B22-008-SB-1
B22-008-SB-4

B22-019-SB-1
B22-019-SB-6

B22-123-SB-1
Benzo(a)pyrene: 0.91

B22-010-SB-1
Benzo(a)anthracene: 3.1
Benzo(a)pyrene: 2.4
Benzo(b)fluoranthene: 4.5
Dibenz(a,h)anthracene: 0.4
B22-010-SB-4
Benzo(a)pyrene: 1.4
Dibenz(a,h)anthracene: 0.42

B22-042-SB-1
B22-042-SB-4

B22-007-SB-1
B22-007-SB-4

B22-124-SB-1
B22-124-SB-4
Benzo(a)pyrene: 0.36

B22-020-SB-1
Benzo(a)pyrene: 1.2
B22-020-SB-4
Benzo(a)pyrene: 0.43
B22-020-SB-10

B22-045-SB-1

B22-046-SB-1
B22-046-SB-4

B22-072-SB-1
Benzo(a)anthracene: 9.5
Benzo(a)pyrene: 13.7
Benzo(b)fluoranthene: 25.3
Dibenz(a,h)anthracene: 2.0
Indeno(1,2,3-cd)pyrene: 5.0

B22-044-SB-1
B22-044-SB-4

B22-039-SB-1
B22-039-SB-4

B22-061-SB-1
Benzo(a)anthracene: 82.3
Benzo(a)pyrene: 72.0
Benzo(b)fluoranthene: 106
Benzo(k)fluoranthene: 46.0
Dibenz(a,h)anthracene: 9.6
Indeno(1,2,3-cd)pyrene: 26.0
B22-061-SB-5

B22-040-SB-1
B22-040-SB-4

B22-039A-SB-3

B22-055-SB-1
Benzo(a)pyrene: 0.57
B22-055-SB-8.5

B22-056-SB-1
B22-056-SB-5

B22-175-SB-1
Benzo(a)anthracene: 13.9
Benzo(a)pyrene: 11.1
Benzo(b)fluoranthene: 21.6
Dibenz(a,h)anthracene: 2.2
Indeno(1,2,3-cd)pyrene: 6.0
B22-175-SB-4
Benzo(a)anthracene: 19.0
Benzo(a)pyrene: 14.9
Benzo(b)fluoranthene: 31.1
Dibenz(a,h)anthracene: 3.0
Indeno(1,2,3-cd)pyrene: 7.6

B22-129-SB-1
B22-129-SB-4

B22-128-SB-1

B22-177-SB-1
B22-177-SB-5

B22-077-SB-1
B22-077-SB-5

B22-170-SB-1
Benzo(a)pyrene: 0.4
B22-170-SB-4

B22-130-SB-1
Benzo(a)pyrene: 0.43
B22-130-SB-4

B22-173-SB-1
B22-173-SB-4

B22-078-SB-1
Benzo(a)pyrene: 0.37
B22-078-SB-7.5

B22-079-SB-1
B22-079-SB-4

B22-179-SB-1
B22-179-SB-6

B22-048-SB-1
B22-048-SB-5

B22-041-SB-1
B22-041-SB-5

B22-172-SB-1
B22-172-SB-5

B22-131-SB-1
B22-131-SB-5

B22-132-SB-1
B22-132-SB-5

B22-138-SB-1
Benzo(a)pyrene: 0.5
B22-138-SB-8

B22-139-SB-1
B22-139-SB-4

B22-142-SB-1
B22-142-SB-5
Benzo(a)anthracene: 5.0
Benzo(a)pyrene: 4.7
Benzo(b)fluoranthene: 9.1
Dibenz(a,h)anthracene: 0.4

B22-143-SB-1
B22-143-SB-5

B22-140-SB-1
B22-140-SB-5

B22-171-SB-1
B22-171-SB-5

B22-137-SB-1
B22-137-SB-8

B22-141-SB-1
B22-141-SB-5

Parcel B21
Parcel B6
Parcel B7
Parcel B2
Parcel B3

Parcel B22 Soil Borings
Phase II SVOC Exceedances (mg/kg)
June 23, 2016

Figure
S-1

EnviroAnalytics Group
ARM Project 150300M-20
Tradepoint Atlantic
Baltimore County, MD

ARM Group Inc.
Earth Resource Engineers and Consultants

0 62.5 125 250
Feet

Soil Boring
Parcel Boundary

Parcel B16

Parcel B21

Parcel B22

Parcel B6

Parcel B7

Parcel B2

Parcel B3

B22-153-SB-1
Aroclor 1242: 1.01
PCB, Total: 1.0371

B22-159-SB-1

B22-100-SB-1

B22-152-SB-1

B22-099-SB-1

B22-071-SB-1

B22-158-SB-1

B22-062-SB-1

B22-031-SB-1

B22-148-SB-1
PCB, Total: 1.98

B22-149-SB-1

B22-032-SB-1
Aroclor 1248: 14.9
PCB, Total: 14.9

B22-023-SB-1

B22-024-SB-1

B22-176-SB-1

B22-102-SB-1

B22-101-SB-1

B22-110-SB-1
Aroclor 1248: 1.12
PCB, Total: 2.657

B22-026-SB-1

B22-115-SB-1

B22-174-SB-1
Aroclor 1254: 6.63
Aroclor 1260: 2.72
PCB, Total: 9.35

B22-119-SB-1

B22-117-SB-1

B22-116-SB-1

B22-118-SB-1

B22-121-SB-1

B22-120-SB-1

B22-114-SB-1

B22-112-SB-1

B22-113-SB-1

B22-157-SB-1

B22-156-SB-1

B22-109-SB-1

B22-178-SB-1

B22-166-SB-1

B22-125-SB-1

B22-126-SB-1

B22-127-SB-1

B22-012-SB-1

B22-011-SB-1

B22-155-SB-1

B22-006-SB-1
PCB, Total: 0.991

B22-154-SB-1

B22-005-SB-1
PCB, Total: 2.96

B22-144-SB-1
Aroclor 1248: 1.48
Aroclor 1254: 0.978
PCB, Total: 4.778

B22-145-SB-1
PCB, Total: 1.559

B22-067-SB-1

B22-069-SB-1

B22-030-SB-1

B22-029-SB-1

B22-028-SB-1
PCB, Total: 74.4

B22-027-SB-1

B22-033-SB-1

B22-034-SB-1

B22-106-SB-1

B22-111-SB-1

B22-097-SB-1

B22-059-SB-1

B22-060-SB-1

B22-096-SB-1

B22-098-SB-1

B22-054-SB-1

B22-053-SB-1
PCB, Total: 7.32

B22-036-SB-1

B22-035-SB-1

B22-107-SB-1

B22-014-SB-1

B22-013-SB-1
PCB, Total: 1.949

B22-108-SB-1

B22-085-SB-1

B22-084-SB-1

B22-086-SB-1

B22-095-SB-1

B22-090-SB-1

B22-162-SB-1

B22-163-SB-1
PCB, Total: 1.0

B22-094-SB-1
Aroclor 1254: 1.01
PCB, Total: 7.69

B22-051-SB-1

B22-052-SB-1

B22-164-SB-1

B22-165-SB-1

B22-038-SB-1
PCB, Total: 0.99

B22-037-SB-1
Aroclor 1254: 7.93
PCB, Total: 7.93

B22-064-SB-1

B22-065-SB-1
Aroclor 1248: 50.9
PCB, Total: 61.0

B22-058-SB-1

B22-057-SB-1

B22-104-SB-1

B22-167-SB-1

B22-068-SB-1
PCB, Total: 1.258

B22-070-SB-1
Aroclor 1254: 3.65
PCB, Total: 7.36

B22-089-SB-1

B22-088-SB-1

B22-087-SB-1

B22-015-SB-1

B22-016-SB-1

B22-043-SB-1

B22-047-SB-1
Aroclor 1254: 2.17
PCB, Total: 13.37

B22-017-SB-1

B22-018-SB-1

B22-160-SB-1

B22-161-SB-1

B22-150-SB-1
PCB, Total: 1.634

B22-151-SB-1

B22-147-SB-1

B22-146-SB-1

B22-092-SB-1
PCB, Total: 3.18

B22-093-SB-1

B22-091-SB-1

B22-050-SB-1
PCB, Total: 1.7124

B22-049-SB-1
PCB, Total: 1.03

B22-105-SB-1

B22-103-SB-1

B22-074-SB-1

B22-003-SB-1

B22-004-SB-1

B22-080-SB-1

B22-076-SB-1

B22-075-SB-1

B22-135-SB-1
PCB, Total: 2.04

B22-134-SB-1
PCB, Total: 2.6391

B22-002-SB-1

B22-001-SB-1

B22-001-SB-4

B22-081-SB-1

B22-082-SB-1

B22-083-SB-1

B22-136-SB-1

B22-133-SB-1

B22-066-SB-1

B22-063-SB-1
PCB, Total: 10.879

B22-073-SB-1

B22-022-SB-1

B22-021-SB-1

B22-009-SB-1

B22-010-SB-1

B22-008-SB-1

B22-019-SB-1
Aroclor 1242: 2.64
PCB, Total: 2.64

B22-020-SB-1

B22-007-SB-1

B22-122-SB-1

B22-123-SB-1

B22-124-SB-1
PCB, Total: 13.0

B22-042-SB-1
Aroclor 1248: 3.06
Aroclor 1260: 21.1
PCB, Total: 24.16

B22-045-SB-1
Aroclor 1248: 3.68
Aroclor 1254: 1.63
PCB, Total: 9.43

B22-044-SB-1

B22-046-SB-1

B22-061-SB-1

B22-072-SB-1

B22-039-SB-1
Aroclor 1248: 4.87
PCB, Total: 5.159

B22-040-SB-1
PCB, Total: 1.458

B22-055-SB-1

B22-056-SB-1

B22-128-SB-1
Aroclor 1254: 0.99
PCB, Total: 1.631

B22-129-SB-1
Aroclor 1254: 1.04
PCB, Total: 1.867

B22-130-SB-1
Aroclor 1254: 1.15
PCB, Total: 2.209

B22-177-SB-1

B22-077-SB-1

B22-175-SB-1
Aroclor 1254: 1.22
PCB, Total: 1.22

B22-170-SB-1

B22-173-SB-1

B22-078-SB-1

B22-079-SB-1

B22-179-SB-1

B22-048-SB-1

B22-041-SB-1

B22-172-SB-1

B22-131-SB-1

B22-132-SB-1

B22-138-SB-1

B22-139-SB-1

B22-142-SB-1

B22-143-SB-1

B22-140-SB-1
Aroclor 1242: 6.64
PCB, Total: 6.64

B22-171-SB-1

B22-137-SB-1

B22-141-SB-1

Parcel B22 Soil Borings
Phase II PCB Exceedances (mg/kg)

June 23, 2016

Figure S-2

EnviroAnalytics Group

ARM Project 150300M-20

Tradepoint Atlantic

Baltimore County, MD

ARM Group Inc.
Earth Resource Engineers and Consultants

0 62.5 125 250 Feet

Soil Boring

Parcel Boundary

Parcel B16

Parcel B21

Parcel B22

Parcel B6

Parcel B7

Parcel B2

Parcel B3

B22-153-SB-1
B22-153-SB-4
Diesel Range Organics: 2,630

B22-159-SB-1

B22-152-SB-1
Diesel Range Organics: 859
B22-152-SB-6
Diesel Range Organics: 6,610

B22-100-SB-1
B22-100-SB-6

B22-071-SB-1
B22-071-SB-4

B22-099-SB-1
B22-099-SB-7

B22-158-SB-1
B22-158-SB-8

B22-062-SB-1
B22-062-SB-4

B22-148-SB-1
B22-148-SB-6
Diesel Range Organics: 6,670
B22-148-SB-10
Diesel Range Organics: 835

B22-031-SB-1
B22-031-SB-4

B22-149-SB-1
B22-149-SB-8
Diesel Range Organics: 855

B22-032-SB-1
B22-032-SB-4

B22-023-SB-1
B22-023-SB-9

B22-024-SB-1
B22-024-SB-4

B22-102-SB-1
B22-102-SB-5

B22-176-SB-1
B22-176-SB-8

B22-101-SB-1
B22-101-SB-5

B22-110-SB-1
B22-110-SB-4

B22-025-SB-4

B22-026-SB-1
B22-026-SB-9

B22-030-SB-1
B22-030-SB-5

B22-029-SB-1
B22-029-SB-6

B22-028-SB-1

B22-027-SB-1
B22-027-SB-5

B22-059-SB-1
B22-059-SB-4

B22-097-SB-1
B22-097-SB-9

B22-096-SB-1
B22-096-SB-9

B22-060-SB-1
B22-060-SB-4

B22-098-SB-1
B22-098-SB-4

B22-054-SB-1
B22-054-SB-4

B22-053-SB-1
B22-053-SB-8

B22-036-SB-1
B22-036-SB-4

B22-035-SB-1

B22-014-SB-1
B22-014-SB-5

B22-108-SB-1
Diesel Range Organics: 813
B22-108-SB-5
Diesel Range Organics: 5,490

B22-013-SB-1
B22-013-SB-4

B22-095-SB-1
B22-095-SB-6

B22-163-SB-1
B22-163-SB-5
Diesel Range Organics: 8,400

B22-162-SB-1
Diesel Range Organics: 39,100
B22-162-SB-5

B22-090-SB-1
B22-090-SB-5

B22-094-SB-1
B22-094-SB-4

B22-164-SB-1
B22-164-SB-6

B22-165-SB-1
B22-165-SB-4

B22-051-SB-1
B22-051-SB-6

B22-052-SB-1
B22-052-SB-8

B22-085-SB-1
Diesel Range Organics: 1,200

B22-086-SB-1
B22-086-SB-5

B22-084-SB-1

B22-038-SB-1

B22-037-SB-1

B22-064-SB-1
B22-064-SB-7

B22-065-SB-1
B22-065-SB-7

B22-058-SB-1
B22-058-SB-7

B22-057-SB-1

B22-161-SB-1
B22-161-SB-4.5

B22-160-SB-1
Diesel Range Organics: 2,020

B22-150-SB-1
B22-150-SB-5

B22-151-SB-1

B22-092-SB-1
B22-092-SB-4

B22-091-SB-1
B22-091-SB-4

B22-093-SB-1
B22-093-SB-5

B22-147-SB-1
B22-147-SB-5.5

B22-146-SB-1
B22-146-SB-5

B22-050-SB-1
B22-050-SB-4.5

B22-049-SB-1
B22-049-SB-5

B22-074-SB-1

B22-073-SB-1
B22-073-SB-5

B22-009-SB-1
B22-009-SB-6

B22-022-SB-1
B22-022-SB-7

B22-021-SB-1
B22-021-SB-5

B22-010-SB-1
B22-010-SB-4

B22-122-SB-1

B22-123-SB-1

B22-124-SB-1
B22-124-SB-4

B22-061-SB-1
Diesel Range Organics: 1,480
B22-061-SB-5

B22-072-SB-1

B22-055-SB-1
B22-055-SB-8.5

B22-056-SB-1
B22-056-SB-5

B22-077-SB-1
B22-077-SB-5

B22-175-SB-1
Diesel Range Organics: 803
B22-175-SB-4

B22-078-SB-1
B22-078-SB-7.5

B22-079-SB-1
B22-079-SB-4

B22-048-SB-1
B22-048-SB-5

B22-041-SB-1
B22-041-SB-5

B22-173-SB-1
B22-173-SB-4

B22-131-SB-1
B22-131-SB-5

B22-132-SB-1
B22-132-SB-5

B22-171-SB-1
B22-171-SB-5

B22-138-SB-1
B22-138-SB-8

B22-139-SB-1
B22-139-SB-4

B22-142-SB-1
B22-142-SB-5

B22-143-SB-1
B22-143-SB-5

B22-137-SB-1
B22-137-SB-8

B22-115-SB-1
B22-115-SB-8.5

B22-119-SB-1
B22-119-SB-9

B22-174-SB-1
B22-174-SB-4

B22-121-SB-1
B22-121-SB-9

B22-120-SB-1
B22-120-SB-8

B22-112-SB-1
B22-112-SB-4

B22-113-SB-1
B22-113-SB-4

B22-157-SB-1

B22-156-SB-1
B22-156-SB-4.5

B22-109-SB-1
B22-109-SB-4.5

B22-106-SB-1
B22-106-SB-8.5

B22-111-SB-1
B22-111-SB-8

B22-117-SB-1
B22-117-SB-4

B22-116-SB-1
B22-116-SB-8.5

B22-118-SB-1
B22-118-SB-9

B22-125-SB-1
B22-125-SB-4
Diesel Range Organics: 786
B22-125-SB-10

B22-127-SB-1
B22-127-SB-7

B22-126-SB-1
B22-126-SB-6

B22-145-SB-1
B22-145-SB-4
Diesel Range Organics: 5,150
B22-145-SB-10

B22-144-SB-1
B22-144-SB-7

B22-067-SB-1
B22-067-SB-7

B22-069-SB-1
B22-069-SB-4

B22-178-SB-1
B22-178-SB-6

B22-166-SB-1
B22-166-SB-4

B22-012-SB-1
B22-012-SB-4

B22-011-SB-1
B22-011-SB-4

B22-006-SB-1
B22-006-SB-7

B22-155-SB-1
B22-155-SB-5

B22-154-SB-1
B22-154-SB-5

B22-005-SB-1
B22-005-SB-4

B22-068-SB-1
B22-068-SB-6

B22-070-SB-1
Diesel Range Organics: 6,620
B22-070-SB-9

B22-167-SB-1
B22-167-SB-5

B22-088-SB-1
B22-088-SB-6

B22-089-SB-1
B22-089-SB-5

B22-087-SB-1
B22-087-SB-5

B22-168-SB-1
B22-168-SB-4

B22-169-SB-1
B22-169-SB-4

B22-017-SB-1
B22-017-SB-6

B22-018-SB-1
B22-018-SB-6

B22-104-SB-1
B22-104-SB-4

B22-105-SB-1
B22-105-SB-4

B22-103-SB-1
Diesel Range Organics: 4,590
B22-103-SB-4
Diesel Range Organics: 1,720

B22-003-SB-1
B22-003-SB-4

B22-004-SB-1
B22-004-SB-4

B22-080-SB-1
B22-080-SB-5

B22-076-SB-1

B22-075-SB-1
B22-075-SB-4

B22-081-SB-1
B22-081-SB-4

B22-082-SB-1
B22-082-SB-4

B22-083-SB-1
B22-083-SB-4

B22-008-SB-1
B22-008-SB-4

B22-007-SB-1
B22-007-SB-4

B22-042-SB-1
B22-042-SB-4

B22-045-SB-1

B22-044-SB-1
B22-044-SB-4

B22-046-SB-1
B22-046-SB-4

B22-039-SB-1
B22-039-SB-4

B22-040-SB-1
B22-040-SB-4

B22-019-SB-1
B22-019-SB-6

B22-020-SB-1
B22-020-SB-4

B22-135-SB-1
B22-135-SB-8

B22-134-SB-1
B22-134-SB-7

B22-136-SB-1
B22-136-SB-5
Diesel Range Organics: 723

B22-133-SB-1
B22-133-SB-5

B22-002-SB-1
B22-002-SB-7

B22-001-SB-1
Diesel Range Organics: 1,220
B22-001-SB-4
Diesel Range Organics: 1,330

B22-066-SB-1
B22-066-SB-9

B22-063-SB-1
B22-063-SB-9
Diesel Range Organics: 1,030
B22-063-SB-10

B22-129-SB-1
B22-129-SB-4

B22-128-SB-1

B22-177-SB-1
B22-177-SB-5

B22-130-SB-1
B22-130-SB-4

B22-170-SB-1
B22-170-SB-4

B22-179-SB-1
B22-179-SB-6

B22-172-SB-1
B22-172-SB-5
Diesel Range Organics: 706

B22-043-SB-1
B22-043-SB-4

B22-047-SB-1
Diesel Range Organics: 715
B22-047-SB-5

Parcel B22 Soil Borings
Phase II TPH-DRO/GRO Exceedances (mg/kg)

June 23, 2016

Figure
S-3

EnviroAnalytics Group

ARM Project 150300M-20

Tradepoint Atlantic

Baltimore County, MD

ARM Group Inc.
Earth Resource Engineers and Consultants

0 62.5 125 250 Feet

Soil Boring

Parcel Boundary

Parcel B16

B22-153-SB-1
Arsenic: 5.1
Lead: 866
B22-153-SB-4
Arsenic: 9.8
Manganese: 27,400

B22-159-SB-1
Arsenic: 11.7
Manganese: 59,500

B22-100-SB-1
Arsenic: 9.1
B22-100-SB-6
Manganese: 29,100
B22-100-SB-10

B22-115-SB-1
Arsenic: 8.8
Manganese: 31,600
B22-115-SB-8.5
Arsenic: 13.3

B22-119-SB-1
B22-119-SB-9
Arsenic: 4.1
B22-119-SB-10
Arsenic: 6.2

B22-178-SB-1
Arsenic: 10.3
Manganese: 27,300
B22-178-SB-6
Arsenic: 7.5

B22-071-SB-1
Arsenic: 4.8
B22-071-SB-4
Arsenic: 6.6
Manganese: 40,800

B22-062-SB-1
Arsenic: 3.5
B22-062-SB-4
Arsenic: 4.9
Manganese: 29,400

B22-158-SB-1
Arsenic: 7.9
B22-158-SB-8
Arsenic: 9.7
Manganese: 41,100
B22-158-SB-10
Arsenic: 4.9
Manganese: 51,000

B22-099-SB-1
Arsenic: 16.7
B22-099-SB-7
Arsenic: 5.5
B22-099-SB-9.5
Arsenic: 16.0

B22-152-SB-1
Arsenic: 11.1
Manganese: 31,900
B22-152-SB-6
Arsenic: 13.7
Manganese: 37,900

B22-174-SB-1
Arsenic: 6.5
B22-174-SB-4
Arsenic: 9.8

B22-116-SB-1
Arsenic: 6.3
Manganese: 27,200
B22-116-SB-8.5
Arsenic: 3.4
Lead: 2,850

B22-117-SB-1
Arsenic: 9.9
B22-117-SB-4
Arsenic: 10.4
B22-117-SB-10
Arsenic: 8.4

B22-166-SB-1
Arsenic: 10.7
Manganese: 47,600
Vanadium: 9,940
B22-166-SB-4
Arsenic: 11.3
Manganese: 48,600

B22-148-SB-1
Arsenic: 8.2
Lead: 1,030
B22-148-SB-6
Arsenic: 40.8
B22-148-SB-10
Arsenic: 7.5

B22-121-SB-1
Arsenic: 11.0
B22-121-SB-9
Arsenic: 10.2
B22-121-SB-10
Arsenic: 20.5

B22-120-SB-1
Arsenic: 23.9
B22-120-SB-8
Arsenic: 3.2

B22-118-SB-1
Arsenic: 8.4
B22-118-SB-9
Arsenic: 4.3
Manganese: 41,400
B22-118-SB-10
Arsenic: 4.3
Manganese: 45,400

B22-031-SB-1
Arsenic: 11.4
Manganese: 51,900
B22-031-SB-4
Arsenic: 9.8
B22-031-SB-10
Arsenic: 22.8

B22-149-SB-1
Arsenic: 16.3
B22-149-SB-8
Arsenic: 24.0

B22-114-SB-1
B22-114-SB-8
Arsenic: 13.3
B22-114-SB-10
Arsenic: 5.6

B22-125-SB-1
Arsenic: 6.2
B22-125-SB-4
Arsenic: 6.5
B22-125-SB-10
Arsenic: 6.2

B22-012-SB-1
Arsenic: 6.0
B22-012-SB-4
Arsenic: 7.6

B22-011-SB-1
Arsenic: 7.7
B22-011-SB-4
Arsenic: 3.4
Manganese: 32,000

B22-112-SB-1
B22-112-SB-4
Arsenic: 4.2
B22-112-SB-10
Arsenic: 6.0

B22-113-SB-1
Chromium VI: 8.5
B22-113-SB-4
Arsenic: 6.8

B22-127-SB-1
Arsenic: 3.7
B22-127-SB-7

B22-126-SB-1
B22-126-SB-6
Arsenic: 6.8
B22-126-SB-10
Arsenic: 7.1

B22-155-SB-1
Arsenic: 3.4
B22-155-SB-5

B22-032-SB-1
Arsenic: 8.7
Manganese: 46,600
B22-032-SB-4
Arsenic: 3.8
B22-032-SB-10
Arsenic: 5.3

B22-023-SB-1
Arsenic: 21.4
B22-023-SB-9
Arsenic: 10.5
B22-023-SB-10

B22-006-SB-1
B22-006-SB-7
Arsenic: 3.8

B22-154-SB-1
Arsenic: 3.9
B22-154-SB-5

B22-024-SB-1
Arsenic: 5.9
B22-024-SB-4
Arsenic: 15.2

B22-176-SB-1
Arsenic: 4.4
B22-176-SB-8
Arsenic: 7.2

B22-157-SB-1
Arsenic: 5.1

B22-144-SB-1
B22-144-SB-7

B22-005-SB-1
Arsenic: 4.7
B22-005-SB-4
Arsenic: 10.1
Thallium: 15.4
B22-005-SB-10
Arsenic: 4.8

B22-102-SB-1
Arsenic: 7.7
B22-102-SB-5
Arsenic: 4.7

B22-101-SB-1
Arsenic: 7.5
B22-101-SB-5
Arsenic: 3.6

B22-156-SB-1
Manganese: 31,400
B22-156-SB-4.5
Arsenic: 5.8

B22-109-SB-1
Arsenic: 4.5
B22-109-SB-4.5
Arsenic: 3.2

B22-145-SB-1
Arsenic: 5.9
Lead: 900
B22-145-SB-4
Arsenic: 4.2
B22-145-SB-10
Arsenic: 3.3

B22-067-SB-1
B22-067-SB-7
Arsenic: 5.2
B22-067-SB-10
Arsenic: 5.0

B22-025-SB-4
Arsenic: 3.8

B22-110-SB-1
Arsenic: 5.2
Lead: 1,270
B22-110-SB-4
Arsenic: 33.5
Lead: 997

B22-069-SB-1
B22-069-SB-4
Arsenic: 7.5
B22-069-SB-10
Arsenic: 39.8

B22-026-SB-1
Arsenic: 16.3
Chromium VI: 29.5
Lead: 6,870
B22-026-SB-9
Arsenic: 11.7

B22-030-SB-1
Arsenic: 6.7
B22-030-SB-5
Arsenic: 5.9
B22-030-SB-10

B22-106-SB-1
B22-106-SB-8.5
Arsenic: 4.3

B22-033-SB-1
Arsenic: 4.8
Chromium VI: 12.5
Manganese: 29,400

B22-111-SB-1
Arsenic: 5.6
B22-111-SB-8
Arsenic: 3.2

B22-059-SB-1
Arsenic: 13.1
Lead: 1,230
B22-059-SB-4
Arsenic: 18.6
Lead: 976

B22-097-SB-1
Arsenic: 8.1
B22-097-SB-9
Arsenic: 20.9
Lead: 1,960

B22-028-SB-1
Lead: 816

B22-029-SB-1
B22-029-SB-6
Arsenic: 3.1

B22-027-SB-1
B22-027-SB-5

B22-034-SB-1
Arsenic: 3.7
Chromium VI: 10.8
Manganese: 27,500

B22-068-SB-1
Arsenic: 3.3
B22-068-SB-6

B22-070-SB-1
Arsenic: 4.3
B22-070-SB-9

B22-167-SB-1
Arsenic: 3.8
B22-167-SB-5
B22-167-SB-10
Arsenic: 12.3

B22-089-SB-1
Arsenic: 3.9
B22-089-SB-5

B22-088-SB-1
Arsenic: 28.7
Manganese: 46,000
B22-088-SB-6
Arsenic: 10.8
Manganese: 31,800

B22-087-SB-1
Arsenic: 5.2
B22-087-SB-5
Arsenic: 4.5
B22-087-SB-10

Parcel B21

Parcel B6

B22-060-SB-1
B22-060-SB-4
Arsenic: 8.7
Manganese: 43,800

B22-098-SB-1
Arsenic: 8.8
B22-098-SB-4
Arsenic: 11.6
Lead: 1,790
B22-098-SB-10
Arsenic: 6.7

B22-096-SB-1
Arsenic: 4.1
B22-096-SB-9
Arsenic: 4.1
B22-096-SB-10
Arsenic: 7.8

B22-054-SB-1
B22-054-SB-4
Arsenic: 3.3
B22-054-SB-10
Arsenic: 10.6

B22-036-SB-1
Arsenic: 4.4
Manganese: 27,000
B22-036-SB-4
Arsenic: 3.1
Manganese: 31,500

B22-107-SB-1
Arsenic: 9.0
Lead: 4,070
B22-107-SB-5
Arsenic: 4.4
B22-107-SB-10
Arsenic: 7.3

B22-053-SB-1
Arsenic: 19.1
Lead: 1,500
B22-053-SB-8
Arsenic: 5.9
B22-053-SB-10
Arsenic: 9.7

B22-035-SB-1
Arsenic: 5.9

B22-014-SB-1
Arsenic: 5.4
B22-014-SB-5
Arsenic: 4.3
B22-014-SB-10
Arsenic: 8.2

B22-108-SB-1
Arsenic: 5.1
B22-108-SB-5
Arsenic: 6.2

B22-013-SB-1
Arsenic: 3.7
B22-013-SB-4

B22-168-SB-1
B22-168-SB-4

B22-169-SB-1
B22-169-SB-4

B22-095-SB-1
Arsenic: 8.6
B22-095-SB-6
Arsenic: 3.9

B22-090-SB-1
B22-090-SB-5
Arsenic: 5.0

B22-086-SB-1
Arsenic: 4.0
B22-086-SB-5
Arsenic: 6.3
B22-086-SB-10
Arsenic: 23.8

B22-085-SB-1
Arsenic: 5.8

B22-084-SB-1
Arsenic: 10.6

B22-162-SB-1
Arsenic: 8.7
B22-162-SB-5
Arsenic: 3.9

B22-163-SB-1
Arsenic: 4.2
B22-163-SB-5
Arsenic: 7.8

B22-164-SB-1
Arsenic: 3.2
B22-164-SB-6
Arsenic: 6.0

B22-165-SB-1
Arsenic: 4.3
B22-165-SB-4
Arsenic: 5.5

B22-094-SB-1
B22-094-SB-4
Arsenic: 6.6

B22-051-SB-1
Arsenic: 14.0
B22-051-SB-6

B22-052-SB-1
B22-052-SB-8
Arsenic: 3.6

B22-038-SB-1
Arsenic: 11.3

Parcel B22

B22-015-SB-1
Arsenic: 5.5
B22-015-SB-4
Arsenic: 6.8

B22-016-SB-1
Arsenic: 7.5
B22-016-SB-5
Arsenic: 7.6

B22-017-SB-1
Arsenic: 4.1
B22-017-SB-6
Arsenic: 5.4
B22-017-SB-10
Arsenic: 5.0

B22-043-SB-1
Arsenic: 15.3
B22-043-SB-4

B22-047-SB-1
Arsenic: 14.2
Chromium VI: 17.0
Lead: 6,600
B22-047-SB-5
Arsenic: 6.7
B22-047-SB-10
Arsenic: 5.0

B22-037-SB-1
Arsenic: 4.2

B22-064-SB-1
B22-064-SB-7

B22-065-SB-1
B22-065-SB-7

B22-058-SB-1
B22-058-SB-7
Arsenic: 22.3
B22-058-SB-10
Arsenic: 4.4

B22-057-SB-1

B22-018-SB-1
Arsenic: 3.6
B22-018-SB-6
Arsenic: 19.2
B22-018-SB-10
Arsenic: 8.4

B22-161-SB-1
Arsenic: 6.0
Manganese: 36,500
Vanadium: 6,800
B22-161-SB-4.5
Arsenic: 5.0

B22-160-SB-1

B22-150-SB-1
B22-150-SB-5
Arsenic: 6.1

B22-104-SB-1
Arsenic: 6.1
B22-104-SB-4
Arsenic: 9.4

B22-105-SB-1
Arsenic: 4.2
B22-105-SB-4
Arsenic: 4.0
B22-105-SB-10
Arsenic: 7.7

B22-003-SB-1
Arsenic: 4.3
B22-003-SB-4
Arsenic: 5.7

B22-080-SB-1
Arsenic: 7.1
B22-080-SB-6
Arsenic: 18.9

B22-076-SB-1

B22-135-SB-1
Arsenic: 9.9
Chromium VI: 11.0
B22-135-SB-8
Arsenic: 8.5

B22-002-SB-1
Arsenic: 11.6
B22-002-SB-7
Arsenic: 7.6
B22-002-SB-10

B22-091-SB-1
Arsenic: 15.4
B22-091-SB-4
Arsenic: 5.7

B22-092-SB-1
B22-092-SB-4

B22-134-SB-1
Arsenic: 6.8
B22-134-SB-7
Arsenic: 6.4

B22-093-SB-1
Arsenic: 7.6
B22-093-SB-5
Arsenic: 6.6
B22-093-SB-10
Arsenic: 21.7

B22-103-SB-1
Arsenic: 6.9
B22-103-SB-4
Arsenic: 3.3

B22-004-SB-1
Arsenic: 3.8
B22-004-SB-4

B22-081-SB-1
Arsenic: 4.5
B22-081-SB-4
Arsenic: 6.2
B22-081-SB-10
Arsenic: 8.5

B22-075-SB-1
Arsenic: 3.7
B22-075-SB-4
Arsenic: 10.8

B22-136-SB-1
Arsenic: 3.1
B22-136-SB-5
Arsenic: 8.8

B22-066-SB-1
Arsenic: 6.4
B22-066-SB-9

B22-001-SB-1
Arsenic: 9.3
B22-001-SB-4
Arsenic: 17.6

B22-050-SB-1
Arsenic: 5.9
B22-050-SB-4.5
Arsenic: 3.7

B22-049-SB-1
B22-049-SB-5

B22-074-SB-1
Arsenic: 672

B22-083-SB-1
B22-083-SB-4

B22-133-SB-1
Arsenic: 3.2
B22-133-SB-5
Arsenic: 5.6

B22-063-SB-1
Arsenic: 8.3
Chromium VI: 7.2
B22-063-SB-9
Arsenic: 3.8
B22-063-SB-10

B22-146-SB-1
Arsenic: 13.0
B22-146-SB-5
Arsenic: 3.8

B22-147-SB-1
Arsenic: 7.9
B22-147-SB-5.5
Arsenic: 5.5

B22-073-SB-1
Arsenic: 13.4
B22-073-SB-5
Arsenic: 14.3

B22-022-SB-1
B22-022-SB-7

B22-021-SB-1
Arsenic: 6.4
B22-021-SB-5

B22-008-SB-1
B22-008-SB-4
Manganese: 26,700

B22-082-SB-1
Arsenic: 11.7
B22-082-SB-4

B22-019-SB-1
B22-019-SB-6
Arsenic: 25.3
B22-019-SB-10
Arsenic: 7.2

B22-122-SB-1
Arsenic: 14.5

B22-009-SB-1
B22-009-SB-6

B22-010-SB-1
Arsenic: 6.9
B22-010-SB-4
Arsenic: 11.2

B22-123-SB-1

B22-124-SB-1
Arsenic: 3.2
B22-124-SB-4
Arsenic: 12.4

B22-042-SB-1
Arsenic: 3.9
B22-042-SB-4
Arsenic: 4.8
B22-042-SB-10
Arsenic: 20.1

B22-045-SB-1
Arsenic: 12.0

B22-007-SB-1
B22-007-SB-4

B22-020-SB-1
Arsenic: 5.9
B22-020-SB-4
Arsenic: 110
B22-020-SB-10
Arsenic: 14.0

B22-061-SB-1
Arsenic: 11.1
B22-061-SB-5
Arsenic: 5.8

B22-072-SB-1
Arsenic: 6.6

B22-044-SB-1
Arsenic: 3.4
B22-044-SB-4

B22-046-SB-1
Arsenic: 4.9
Manganese: 52,300
B22-046-SB-4
Arsenic: 6.7

B22-039-SB-1
Arsenic: 4.4
B22-039-SB-4

B22-040-SB-1
B22-040-SB-4

B22-039A-SB-3
Arsenic: 4.8

B22-055-SB-1
Arsenic: 18.9
B22-055-SB-8.5
Arsenic: 5.9

B22-056-SB-1
B22-056-SB-5

B22-129-SB-1
Arsenic: 9.9
B22-129-SB-4
Arsenic: 4.7

B22-128-SB-1
Arsenic: 4.0
Manganese: 26,400

B22-177-SB-1
B22-177-SB-5
Arsenic: 5.5

B22-077-SB-1
Arsenic: 3.9
B22-077-SB-5

B22-175-SB-1
Thallium: 17.3
B22-175-SB-4
Arsenic: 5.8
Lead: 3,340

B22-170-SB-1
Arsenic: 3.9
B22-170-SB-4
Arsenic: 12.2

B22-130-SB-1
Arsenic: 9.8
Chromium VI: 11.7
Manganese: 29,100
B22-130-SB-4
Arsenic: 4.8

B22-173-SB-1
Arsenic: 5.6
B22-173-SB-4
Arsenic: 3.4

B22-078-SB-1
Arsenic: 8.3
B22-078-SB-7.5
Arsenic: 7.3

B22-079-SB-1
Arsenic: 7.1
B22-079-SB-4

B22-179-SB-1
B22-179-SB-6
Arsenic: 3.6

B22-172-SB-1
Arsenic: 5.9
B22-172-SB-5
Arsenic: 3.9

B22-041-SB-1
Arsenic: 9.5
Manganese: 71,600
B22-041-SB-5
Arsenic: 4.9
B22-041-SB-10
Arsenic: 5.3

B22-048-SB-1
Arsenic: 6.3
Manganese: 27,800
B22-048-SB-5
Arsenic: 5.2
B22-048-SB-10
Arsenic: 9.8

B22-131-SB-1
Arsenic: 5.1
B22-131-SB-5
Arsenic: 12.5

B22-132-SB-1
B22-132-SB-5
Arsenic: 11.8

B22-138-SB-1
Arsenic: 4.7
B22-138-SB-8
Arsenic: 4.9
B22-138-SB-10

B22-139-SB-1
Arsenic: 17.5
B22-139-SB-4
Arsenic: 8.8

Parcel B7

Parcel B2

Parcel B3

B22-143-SB-1
Arsenic: 5.3
Manganese: 30,600
B22-143-SB-5
Arsenic: 5.1
Manganese: 27,900
B22-143-SB-10
Arsenic: 4.0

B22-142-SB-1
Arsenic: 4.8
Manganese: 28,500
B22-142-SB-5
Manganese: 28,600

B22-140-SB-1
Chromium VI: 7.8
Manganese: 29,900
B22-140-SB-5
Arsenic: 6.0
B22-140-SB-10

B22-171-SB-1
Arsenic: 6.5
Chromium VI: 11.4
Manganese: 35,900
B22-171-SB-5
Arsenic: 14.0
B22-171-SB-10
Arsenic: 3.5

B22-137-SB-1
Arsenic: 5.5
Manganese: 30,400
B22-137-SB-8
Arsenic: 5.0

B22-141-SB-1
Arsenic: 4.2
B22-141-SB-5
Arsenic: 6.1

Parcel B1

Parcel B4

Parcel B5

Parcel B8

Parcel B9

Parcel B10

Parcel B11

Parcel B12

Parcel B13

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Parcel B1

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
		5045	9/21/1959	3/19/1982
		5046	9/21/1959	3/19/1982
		5050	*Unknown*	3/18/1982
		5051	6/1/1960	3/19/1982
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
		5145	*Unknown*	8/18/2008
		5146	*Unknown*	8/18/2008
		5150	*Unknown*	8/18/2008
		5151	*Unknown*	2/21/2008
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
		5545	9/21/1959	6/6/1985
		5546	10/15/1959	6/9/1993
		5550	9/16/1959	3/5/1976
		5551	9/16/1959	3/5/1976
Drip Legs	Coke Oven Gas Drip Legs Locations	5885B	*Unknown*	Sept. 1988
		5886B	*Unknown*	Sept. 1988

TABLE 2
FIELD SHIFTED BORING LOCATIONS

Location ID	Sample Target	Proposed Location¥		Final Location¥		Relocation Distance & Direction		Rationale
		Northing	Easting	Northing	Easting			
B22-001-SB	AOC A (Former PCB Spill Area)	569,197	1,462,302	569,199	1,462,331	30 ft	E	Shifted out of open pit
B22-002-SB	AOC A (Former PCB Spill Area)	569,247	1,462,297	569,251	1,462,328	32 ft	E	Shifted out of open pit
B22-013-SB	Drip Leg	569,889	1,461,353	569,885	1,461,349	6 ft	SW	Refusal
B22-014-SB	Drip Leg	569,925	1,461,345	569,936	1,461,346	11 ft	N	Refusal
B22-015-SB	Drip Leg	569,570	1,461,636	569,548	1,461,629	24 ft	SW	Access/Refusal
B22-016-SB	Drip Leg	569,546	1,461,639	569,525	1,461,632	22 ft	SW	Access/Refusal
B22-017-SB	Drip Leg	569,409	1,461,699	569,412	1,461,703	5 ft	NE	Refusal
B22-023-SB	Drip Leg	570,836	1,461,025	570,831	1,461,013	13 ft	SW	Refusal
B22-024-SB	Drip Leg	570,807	1,461,038	570,798	1,461,018	22 ft	SW	Refusal
B22-026-SB	Drip Leg	570,498	1,460,879	570,487	1,460,881	12 ft	S	Refusal
B22-027-SB	Drip Leg	570,325	1,461,078	570,324	1,461,074	3 ft	W	Access (during staking)
B22-028-SB	Drip Leg	570,332	1,461,023	570,331	1,461,007	16 ft	W	Refusal; poor recovery - only cement and rubble
B22-031-SB	Drip Leg	571,053	1,460,859	571,099	1,460,871	47 ft	N	Access (during staking)
B22-033-SB	Drip Leg	570,373	1,461,249	570,370	1,461,244	6 ft	SW	Refusal
B22-035-SB	Drip Leg	570,085	1,461,266	570,086	1,461,249	17 ft	E	Refusal
B22-036-SB	Drip Leg	570,079	1,461,283	570,116	1,461,300	40 ft	NE	Refusal
B22-038-SB	Drip Leg	569,520	1,461,238	569,518	1,461,243	5 ft	SE	Refusal
B22-039-SB	Drip Leg	568,690	1,461,769	568,704	1,461,770	14 ft	N	Void hit; Refusal
B22-039A-SB	Drip Leg	NA	NA	568,696	1,461,768	6 ft	N	Void hit; Refusal
B22-040-SB	Drip Leg	568,694	1,461,801	568,695	1,461,797	4 ft	W	Refusal
B22-051-SB	Fuel Department	569,657	1,461,365	569,651	1,461,362	6 ft	S	Refusal
B22-057-SB	Lube Oil Room	569,358	1,461,381	569,347	1,461,368	18 ft	SW	Refusal
B22-059-SB	Lube Shop	570,220	1,460,791	570,224	1,460,806	15 ft	E	Rubble stockpile; Refusal
B22-060-SB	Lube Shop	570,195	1,460,802	570,201	1,460,805	6 ft	SW	Refusal
B22-063-SB	Oil House	569,064	1,462,248	569,057	1,462,219	29 ft	W	Shifted out of basement/pit
B22-064-SB	Oil House	569,457	1,461,388	569,470	1,461,388	13 ft	N	Offset due to core barrel stuck in ground; Refusal
B22-065-SB	Oil House	569,440	1,461,391	569,455	1,461,388	15 ft	N	Refusal
B22-066-SB	Oil House	569,083	1,462,246	569,087	1,462,216	30 ft	W	Shifted out of basement/pit
B22-067-SB	Oil House	570,709	1,461,862	570,699	1,461,877	18 ft	SE	Refusal
B22-068-SB	Oil House	570,375	1,462,022	570,376	1,462,013	9 ft	W	Access issues due to concrete pad
B22-070-SB	Oil House	570,376	1,462,037	570,372	1,462,040	6 ft	SE	Access issues due to concrete pad
B22-073-SB	Mech. Maintenance Shop	569,003	1,461,323	568,975	1,461,314	29 ft	S	Refusal
B22-075-SB	Possible PCB-Contaminated Area	569,173	1,461,930	569,175	1,461,934	4 ft	E	Refusal
B22-076-SB	Possible PCB-Contaminated Area	569,236	1,461,931	569,223	1,461,932	13 ft	S	Refusal
B22-080-SB	Possible PCB-Contaminated Area	569,218	1,461,872	569,214	1,461,873	4 ft	S	Refusal
B22-081-SB	Possible PCB-Contaminated Area	569,087	1,461,911	569,074	1,461,900	17 ft	SW	Refsual
B22-082-SB	Possible PCB-Contaminated Area	569,031	1,461,918	569,041	1,461,905	17 ft	NW	Refusal
B22-084-SB	Possible PCB-Contaminated Area	569,719	1,461,550	569,722	1,461,547	4 ft	NW	Refusal
B22-086-SB	Possible PCB-Contaminated Area	569,685	1,461,461	569,706	1,461,462	22 ft	S	Metal beams in concrete; Refusal
B22-087-SB	Possible PCB-Contaminated Area	570,152	1,462,125	570,151	1,462,128	3 ft	SE	Refusal
B22-089-SB	Possible PCB-Contaminated Area	570,204	1,462,154	570,209	1,462,172	18 ft	E	Large/deep standing water on concrete slab
B22-090-SB	Possible PCB-Contaminated Area	569,705	1,461,159	569,681	1,461,175	29 ft	SE	Access (during staking)
B22-094-SB	Possible PCB-Contaminated Area	569,649	1,461,167	569,656	1,461,167	7 ft	N	Refusal
B22-095-SB	Possible PCB-Contaminated Area	569,674	1,461,093	569,706	1,461,130	49 ft	NE	Access (during staking)
B22-096-SB	Possible PCB-Contaminated Area	570,207	1,460,992	570,200	1,460,989	8 ft	SW	Concrete/metal trench
B22-097-SB	Possible PCB-Contaminated Area	570,243	1,460,916	570,251	1,460,907	13 ft	NW	Refusal
B22-099-SB	Pump House (Fuel Oil)	571,229	1,460,862	571,230	1,460,865	4 ft	E	Refusal
B22-105-SB	REC 1I and SWMU 54 (Coating Lines Blind Sumps)	569,210	1,461,484	569,213	1,461,488	5 ft	NE	Refusal
B22-108-SB	REC 1J and SWMU 58 (Cold Sheet Mill Piping)	569,905	1,461,445	569,898	1,461,454	12 ft	SE	Refusal
B22-109-SB	REC 1K and SWMU 59 (Tandem Mill Trench System)	570,702	1,461,382	570,708	1,461,384	6 ft	N	Refusal
B22-110-SB	REC 1K and SWMU 59 (Tandem Mill Trench System)	570,632	1,461,235	570,650	1,461,234	17 ft	N	Refusal
B22-116-SB	REC 1P and SWMU 72 (PORI Holding Tank)	571,216	1,461,389	571,236	1,461,393	20 ft	N	Refusal
B22-120-SB	REC 1Q and SWMU 73 (PORI Lagoon)	571,168	1,461,287	571,162	1,461,300	15 ft	SE	Reinforced concrete; Refusal
B22-126-SB	REC 1U and SWMU 198 (Spent Pickle Liquor Sump / Trench) & REC 1W and AOC W (Spent Pickle Liquor Tanks)	570,970	1,461,770	570,964	1,461,770	6 ft	S	Refusal
B22-129-SB	REC 1Y (Drum Handling Area)	568,645	1,462,281	568,628	1,462,280	17 ft	S	Refusal
B22-159-SB	Tank (Palm Oil)	571,301	1,460,786	571,311	1,460,784	10 ft	N	Refusal
B22-160-SB	Tank (Palm Oil)	569,159	1,460,938	569,159	1,460,919	18 ft	W	Refusal
B22-162-SB	Tank (Unknown)	569,612	1,460,966	569,623	1,460,964	11 ft	N	Refusal
B22-163-SB	Tank (Unknown)	569,610	1,460,989	569,621	1,460,987	11 ft	N	Refusal
B22-164-SB	Tank (Unknown)	569,563	1,461,109	569,560	1,461,110	3 ft	S	Access/Refusal
B22-165-SB	Tank (Unknown)	569,553	1,461,131	569,551	1,461,131	2 ft	S	Access/Refusal
B22-167-SB	Spatial Coverage	570,296	1,461,775	570,309	1,461,779	14 ft	NE	Refusal
B22-175-SB	Possible PCB-Contaminated Area - MDE Request	568,453	1,461,544	568,443	1,461,545	10 ft	S	Refusal
B22-176-SB	Pump Shelter (Gasoline) - MDE Request	570,731	1,461,173	570,734	1,461,180	7 ft	NE	Access/Refusal
B22-177-SB	Pump House/Pit - MDE Request	568,600	1,462,375	568,574	1,462,348	38 ft	SW	Access/Refusal
B22-178-SB	Pump Station - MDE Request	571,509	1,461,932	571,494	1,461,940	17 ft	S	Active utilities
B22-179-SB	Pump Station - MDE Request	568,361	1,462,080	568,362	1,462,045	34 ft	W	Access/Refusal

¥Reported northings and eastings are not survey accurate. Coordinates are reported in NAD 1983 Maryland State Plane (US feet).
NA = Not applicable

TABLE 3 TCLP DETECTIONS FOR SOLID IDW					
Parameter	**Result (mg/L)**	**TCLP Limit (mg/L)**	**TCLP Exceedance**	**Laboratory Flag**	**Laboratory LOQ (mg/L)**
Arsenic	0.0086	5	no	JB	0.05
Barium	0.21	100	no	JB	1
Cadmium	0.0011	1	no	JB	0.05
Chromium	0.0017	5	no	JB	0.05
Selenium	0.0056	1	no	JB	0.1

JB = The positive result reported for this analyte is an estimate with evidence of blank contamination
TCLP = Toxicity characteristic leaching procedure
LOQ = Limit of Quantitation

Space Reserved for Table 4 - TCLP Detections for Liquid IDW

(Pending Receipt of Waste Characterization Data)

Table 5
Summary of Organics Detected in Soil
Parcel B22
Tradepoint Atlantic
Sparrows Point, Maryland

Parameter	Units	PAL	B22-001-SB-1 Soil 6/2/2016		B22-001-SB-4 Soil 6/3/2016		B22-002-SB-1 Soil 6/4/2016		B22-002-SB-7 Soil 6/5/2016		B22-002-SB-10 Soil 6/6/2016		B22-003-SB-1 Soil 5/31/2016		B22-003-SB-4 Soil 5/31/2016		B22-004-SB-1 Soil 5/31/2016		B22-004-SB-4 Soil 5/31/2016		B22-005-SB-1 Soil 5/20/2016		B22-005-SB-4 Soil 5/20/2016		B22-005-SB-10 Soil 5/20/2016		B22-006-SB-1 Soil 5/20/2016		B22-006-SB-7 Soil 5/20/2016		B22-007-SB-1 Soil 5/31/2016		B22-007-SB-4 Soil 5/31/2016	
Volatile Organic Compounds																																			
1,1,1-Trichloroethane	mg/kg	36,000	0.0053	U	0.0045	U	0.0036	U	0.005	U			0.0056	U	0.0049	U	0.0049	U	0.0044	U	0.0044	U1c	0.0047	U1c			0.0046	U1c	0.0042	U1c	0.0054	U	0.0054	U		
1,1,2-Trichloroethane	mg/kg	5	0.0053	U	0.0045	U	0.0036	U	0.005	U			0.0056	U	0.0049	U	0.0049	U	0.0044	U	0.0044	U1c	0.0047	U1c			0.0046	U1c	0.0042	U1c	0.0054	U	0.0054	U		
1,1,2-Trichlorotrifluoroethane	mg/kg	170,000	0.053	U	0.045	U	0.036	U	0.05	U			0.056	U	0.049	U	0.049	U	0.044	U	0.044	U1c	0.047	U1c			0.046	U1c	0.042	U1c	0.054	U	0.054	U		
1,1-Dichloroethane	mg/kg	16	0.0053	U	0.0045	U	0.0036	U	0.005	UR1			0.0056	U	0.0049	U	0.0049	U	0.0044	U	0.0044	U1c	0.0047	U1c			0.0046	U1c	0.0042	U1c	0.0054	U	0.0054	U		
1,1-Dichloroethene	mg/kg	1,000	0.0053	U	0.0045	U	0.0036	U	0.005	U			0.0056	U	0.0049	U	0.0049	U	0.0044	U	0.0044	U1c	0.0047	U1c			0.0046	U1c	0.0042	U1c	0.0054	U	0.0054	U		
1,2,3-Trichlorobenzene	mg/kg	930	0.0053	U	0.0045	U	0.0036	U	0.005	UR1			0.0056	U	0.0049	U	0.0049	U	0.0044	U	0.0044	U1c	0.0047	U1c			0.0046	U1c	0.0042	U1c	0.0054	U	0.0054	U		
1,2,4-Trichlorobenzene	mg/kg	110	0.0053	U	0.0045	U	0.0036	U	0.005	UR1			0.0056	U	0.0049	U	0.0049	U	0.0044	U	0.0044	U1c	0.0047	U1c			0.0046	U1c	0.0042	U1c	0.0054	U	**0.0026**	J		
1,2-Dichloroethane	mg/kg	2	0.0053	U	0.0045	U	0.0036	U	0.005	U			0.0056	U	0.0049	U	0.0049	U	0.0044	U	0.0044	U1c	0.0047	U1c			0.0046	U1c	0.0042	U1c	0.0054	U	0.0054	U		
1,2-Dichloroethene (Total)	mg/kg	2,300	0.011	U	0.0091	U	0.0071	U	0.01	U			0.011	U	0.0098	U	0.0098	U	0.0089	U	0.0089	U	0.0094	U			0.0093	U	0.0083	U	0.011	U	0.011	U		
1,4-Dichlorobenzene	mg/kg	11	0.0053	U	0.0045	U	0.0036	U	0.005	UR1			0.0056	U	0.0049	U	0.0049	U	0.0044	U	0.0044	U1c	0.0047	U1c			0.0046	U1c	0.0042	U1c	0.0054	U	0.0054	U		
1,4-Dioxane	mg/kg	24	0.11	U	0.091	U	0.071	U	0.1	U			0.11	U	0.098	U	0.098	U	0.089	U	0.089	U1c	0.094	U1c			0.093	U1c	0.083	U1c	0.11	U	0.11	U		
2-Butanone (MEK)	mg/kg	190,000	**0.0047**	J	**0.025**		**0.0028**	J	0.01	U			0.011	U	0.0098	U	0.0098	U	0.0089	U	0.0089	U1c	**0.0046**	J1c			0.0093	U1c	0.0083	U1c	0.011	U	0.011	U		
2-Hexanone	mg/kg	1,300	0.011	UL3	**0.0029**	JL1	0.0071	UL3	0.01	UR1L3			0.011	UL3	0.0098	UL3	0.0098	UL3	0.0089	UL3	0.0089	UL31c	0.0094	UL31c			0.0093	UL31c	0.0083	UL31c	0.011	UL3	0.011	UL3		
4-Methyl-2-pentanone (MIBK)	mg/kg	56,000	0.011	U	0.0091	U	0.0071	U	0.01	U			0.011	U	0.0098	U	0.0098	U	0.0089	U	0.0089	U1c	0.0094	U1c			0.0093	U1c	0.0083	U1c	0.011	U	0.011	U		
Acetone	mg/kg	670,000	**0.027**		**0.14**		0.0071	U	**0.022**	R1			0.011	U	**0.0057**	J	0.0098	U	0.0089	U	**0.0081**	J1c	**0.019**	1c			**0.005**	J1c	**0.013**	B1c	0.011	U	**0.019**			
Benzene	mg/kg	5.1	0.0053	U	0.0045	U	0.0036	U	0.005	UR1			0.0056	U	0.0049	U	0.0049	U	0.0044	U	0.0044	U1c	0.0047	U1c			0.0046	U1c	0.0042	U1c	0.0054	U	0.0054	U		
Chlorobenzene	mg/kg	1,300	0.0053	U	0.0045	U	0.0036	U	0.005	U			0.0056	U	0.0049	U	0.0049	U	0.0044	U	0.0044	U1c	0.0047	U1c			0.0046	U1c	0.0042	U1c	0.0054	U	0.0054	U		
Chloroethane	mg/kg	57,000	0.0053	U	0.0045	U	0.0036	U	0.005	UR1			0.0056	U	0.0049	U	0.0049	U	0.0044	U	0.0044	U1c	0.0047	U1c			0.0046	U1c	0.0042	U1c	0.0054	U	0.0054	U		
Chloroform	mg/kg	1.4	0.0053	U	0.0045	U	0.0036	U	0.005	U			0.0056	U	0.0049	U	0.0049	U	0.0044	U	0.0044	U1c	0.0047	U1c			0.0046	U1c	0.0042	U1c	0.0054	U	0.0054	U		
cis-1,2-Dichloroethene	mg/kg	2,300	0.0053	U	0.0045	U	0.0036	U	0.005	U			0.0056	U	0.0049	U	0.0049	U	0.0044	U	0.0044	U1c	0.0047	U1c			0.0046	U1c	0.0042	U1c	0.0054	U	0.0054	U		
Cyclohexane	mg/kg	27,000	0.011	U	0.0091	U	0.0071	U	0.01	U			0.011	U	0.0098	U	0.0098	U	0.0089	U	0.0089	U1c	0.0094	U1c			0.0093	U1c	0.0083	U1c	0.011	U	0.011	U		
Ethylbenzene	mg/kg	25	0.0053	U	0.0045	U	0.0036	U	0.005	UR1			0.0056	U	0.0049	U	0.0049	U	0.0044	U	0.0044	U1c	0.0047	U1c			0.0046	U1c	0.0042	U1c	0.0054	U	0.0054	U		
Isopropylbenzene (Cumene)	mg/kg	9,900	0.0053	U	0.0045	U	0.0036	U	0.005	UR1			0.0056	U	0.0049	U	0.0049	U	0.0044	U	0.0044	U1c	0.0047	U1c			0.0046	U1c	0.0042	U1c	0.0054	U	0.0054	U		
Methyl acetate	mg/kg	1,200,000	0.053	U	0.045	U	0.036	U	0.05	U			0.056	U	0.049	U	0.049	U	0.044	U	0.044	U1c	0.047	U1c			0.046	U1c	0.042	U1c	0.054	U	0.054	U		
Methylene Chloride	mg/kg	1,000	0.0053	U	0.0045	U	0.0036	U	0.005	U			0.0056	U	0.0049	U	0.0049	U	0.0044	U	0.0044	U1c	0.0047	U1c			0.0046	U1c	0.0042	U1c	0.0054	U	0.0054	U		
Styrene	mg/kg	35,000	0.0053	U	0.0045	U	0.0036	U	0.005	UR1			0.0056	U	0.0049	U	0.0049	U	0.0044	U	0.0044	U1c	0.0047	U1c			0.0046	U1c	0.0042	U1c	0.0054	U	0.0054	U		
Tetrachloroethene	mg/kg	100	0.0053	U	0.0045	U	0.0036	U	0.005	U			0.0056	U	0.0049	U	0.0049	U	0.0044	U	0.0044	U1c	0.0047	U1c			0.0046	U1c	0.0042	U1c	0.0054	U	0.0054	U		
Toluene	mg/kg	47,000	0.0053	U	0.0045	U	0.0036	U	0.005	U			0.0056	U	0.0049	U	0.0049	U	0.0044	U	0.0044	U1c	0.0047	U1c			0.0046	U1c	0.0042	U1c	0.0054	U	0.0054	U		
trans-1,2-Dichloroethene	mg/kg	23,000	0.0053	U	0.0045	U	0.0036	U	0.005	U			0.0056	U	0.0049	U	0.0049	U	0.0044	U	0.0044	U1c	0.0047	U1c			0.0046	U1c	0.0042	U1c	0.0054	U	0.0054	U		
Trichloroethene	mg/kg	6	0.0053	U	0.0045	U	0.0036	U	0.005	UR1			0.0056	U	0.0049	U	0.0049	U	0.0044	U	0.0044	U1c	0.0047	U1c			0.0046	U1c	0.0042	U1c	0.0054	U	0.0054	U		
Trichlorofluoromethane	mg/kg	3,100	0.0053	U	0.0045	U	0.0036	U	0.005	U			0.0056	U	0.0049	U	0.0049	U	0.0044	U	0.0044	U1c	0.0047	U1c			0.0046	U1c	0.0042	U1c	0.0054	U	0.0054	U		
Vinyl chloride	mg/kg	1.7	0.0053	U	0.0045	U	0.0036	U	0.005	U			0.0056	U	0.0049	U	0.0049	U	0.0044	U	0.0044	U1c	0.0047	U1c			0.0046	U1c	0.0042	U1c	0.0054	U	0.0054	U		
Xylene (Total)	mg/kg	2,800	0.016	U	0.014	U	0.011	U	0.015	URS			0.017	U	0.015	U	0.015	U	0.013	U	0.013	U	0.014	U			0.014	U	0.012	U	0.016	U	0.016	U		
Semi-Volatile Organic Compounds*																																			
1,2,4,5-Tetrachlorobenzene	mg/kg	350	0.071	UL3	0.08	UL3	0.069	UL3	0.081	UM0L3			0.091	U	0.081	U	0.078	U	0.083	U	0.071	U	0.074	U			0.073	U	0.08	U	0.072	U	0.086	U		
2,4-Dimethylphenol	mg/kg	16,000	**0.13**		**0.061**	J	0.069	U	0.081	U			0.091	U	0.081	U	0.078	U	0.083	U	0.071	U	0.074	U			0.073	U	0.08	U	0.072	U	0.086	U		
2-Chloronaphthalene	mg/kg	60,000	0.071	U	**0.05**	J	0.069	U	0.081	UM1			0.091	U	0.081	U	0.078	U	0.083	U	0.071	U	0.074	U			0.073	U	0.08	U	0.072	U	0.086	U		
2-Methylnaphthalene	mg/kg	3,000	**0.026**	J	**0.21**		**0.064**	J	0.0082	U			**0.009**	J	**0.0022**	J	**0.056**		0.0084	U	0.071	U	**0.26**		**0.26**	IS	**0.13**		0.008	U	**0.0061**	J	**0.011**			
2-Methylphenol(o-Cresol)	mg/kg	41,000	**0.14**	L1	**0.036**	JL1	0.069	UL3	0.081	UL3			0.091	U	0.081	U	0.078	U	0.083	U	0.071	U	0.074	U			0.073	U	0.08	U	0.072	U	0.086	U		
2-Nitroaniline	mg/kg	8,000	0.18	U	0.2	U	0.17	U	0.2	UM1			0.23	U	0.2	U	0.2	U	0.21	U	0.18	U	0.19	U			0.18	U	0.2	U	0.18	U	0.22	U		
3&4-Methylphenol(m&p Cresol)	mg/kg	41,000	**0.24**	L1	**0.078**	JL1	0.14	UL3	0.16	UL3			0.18	U	0.16	U	0.16	U	0.17	U	0.14	U	**0.026**	J			0.14	U	0.16	U	0.14	U	0.17	U		
4-Nitroaniline	mg/kg	110	0.18	UL2	0.2	UL2	0.17	UL2	0.2	UL2CLM0			0.23	UL2	0.2	UL2	0.2	UL2	0.21	UL2	0.18	UL3	0.19	UL3			0.18	UL3	0.2	UL3	0.18	UL2	0.22	UL2		
Acenaphthene	mg/kg	45,000	0.07	U	**0.0081**	J	0.07	U	0.0082	U			**0.011**		**0.0035**	J	**0.16**		**0.0015**	J	**0.0056**	J	**0.26**		**0.18**	IS	**0.095**		**0.0011**	J	**0.0011**	J	**0.0077**	J		
Acenaphthylene	mg/kg	45,000	**0.019**	J	**0.056**	J	**0.014**	J	0.0082	U			0.0092	U	0.0082	U	**0.014**		0.0084	U	**0.022**	J	**0.38**		**0.38**	IS	**0.13**		**0.0012**	J	**0.0023**	J	**0.0052**	J		
Acetophenone	mg/kg	120,000	**0.089**	L1	**0.064**	JL1	0.069	UL3	0.081	UL3			0.091	U	0.081	U	0.078	U	0.083	U	0.071	U	0.074	U			**0.052**	J	0.08	U	0.072	U	0.086	U		
Anthracene	mg/kg	230,000	**0.0083**	J	**0.03**	J	**0.02**	J	0.0082	U			0.0092	U	**0.002**	J	**0.33**		**0.00081**	J	**0.03**	JB	**1.4**		**0.54**		**0.38**		**0.0047**	JB	**0.006**	J	**0.029**			
Benzaldehyde	mg/kg	120,000	**0.32**	L2	**0.11**	L2	0.069	UL2	0.081	UL2R1			0.091	U	0.081	U	0.078	U	0.083	U	0.071	UL2	**0.018**	JL2			**0.031**	JL2	0.08	UL2	0.072	U	0.086	U		
Benzo(a)anthracene	mg/kg	2.9	0.07	U	**0.081**		**0.045**	J	**0.0021**	J			0.0092	U	**0.0044**	J	**0.79**		**0.0015**	J	**0.1**	B	**2.8**		**1**		**2.2**		**0.011**	B	**0.022**		**0.09**			
Benzo(a)pyrene	mg/kg	0.29	**0.76**		**0.62**	IS	**0.036**	J	0.0082	U			0.0092	U	0.0082	U	**0.61**		0.0084	U	**0.15**		**2.1**		**0.8**	IS	**2.1**		**0.0087**		**0.023**		**0.07**			
Benzo(b)fluoranthene	mg/kg	2.9	**0.67**	ip	**0.59**	ISip	**0.12**	ip	**0.003**	Jip			**0.0051**	Jip	**0.0035**	Jip	**1.2**	ip	**0.001**	Jip	**0.41**	ip	**4.6**	ip	**1.8**	IS	**3.8**	ip	**0.018**	ip	**0.065**	ip	**0.17**	ip		
Benzo(g,h,i)perylene	mg/kg		0.07	U	0.08	UIS	**0.03**	J	0.0082	UM1			0.0092	U	0.0082	U	**0.31**		0.0084	U	**0.058**	J	**0.6**		**0.23**	IS	**0.76**		**0.0028**	J	**0.025**		**0.047**			
Benzo(k)fluoranthene	mg/kg	29	**0.58**	ip	**0.46**	ISip	**0.096**	ip	**0.0029**	Jip			**0.0043**	Jip	**0.0029**	Jip	**0.98**	ip	0.0084	Uip	**0.35**	ip	**4**	ip	**1.5**	IS	**3.2**	ip	**0.016**	ip	**0.055**	ip	**0.14**	ip		
Biphenyl (Diphenyl)	mg/kg	200	**0.015**	J	**0.038**	J	0.069	U	0.081	UM1			0.091	U	0.081	U	0.078	U	0.083	U	0.071	U	**0.15**				**0.13**		0.08	U	0.072	U	0.086	U		
bis(2-Ethylhexyl)phthalate	mg/kg	160	0.071	UISL2	0.08	UISL2	**0.019**	JL2	0.081	UL2M0			0.091	U	0.081	U	0.078	U	0.083	U	**0.03**	JISCL	0.074	UIS			**0.021**	JISCL	0.08	U	0.072	U	**0.026**	J		
Carbazole	mg/kg		0.071	UL2	0.08	UL2	0.069	UL2	0.081	UL2M0			0.091	U	0.081	U	**0.048**	J	0.083	U	**0.023**	J	**0.65**				**0.14**		0.08	U	0.072	U	0.086	U		
Chrysene	mg/kg	290	**1.2**		**1.2**		**0.057**	J	**0.0013**	J			**0.0053**	J	**0.0028**	J	**0.72**		**0.00074**	J	**0.16**		**2.2**		**1.2**		**2**		**0.0086**	B	**0.034**		**0.11**			
Dibenz(a,h)anthracene	mg/kg	0.29	0.07	U	0.08	UIS	0.07	U	0.0082	UM1			0.0092	U	0.0082	U	**0.11**		0.0084	U	**0.025**	J	**0.3**		**0.11**	IS	**0.3**		0.008	U	**0.0064**	J	**0.014**			
Diethylphthalate	mg/kg	660,000	0.071	U	0.08	U	0.069	U	0.081	U			0.091	U	0.081	U	0.078	U	0.083	U	0.071	UL3	0.074	UL3			0.073	UL3	0.08	UL3	0.072	U	0.086	U		
Di-n-butylphthalate	mg/kg	82,000	**0.022**	J	**0.038**	J	0.069	U	0.081	UM1			0.091	U	0.081	U	0.078	U	0.083	U	0.071	UL3	0.074	UL3			0.073	UL3	0.08	UL3	0.072	U	0.086	U		
Di-n-octylphthalate	mg/kg	8,200	0.071	UIS	0.08	UIS	0.069	UIS	0.081	UM1			0.091	U	0.081	U	0.078	UIS	0.083	U	0.071	UISL3	0.074	UISL3			0.073	UISL3	0.08	UL3	0.072	U	0.086	U		
Fluoranthene	mg/kg	30,000	**0.047**	J	**0.11**		**0.09**		**0.0029**	J			**0.025**		**0.022**		**1.9**		**0.0031**	J	**0.13**	B	**5.6**		**2.4**		**3.7**		**0.017**	B	**0.047**		**0.26**			
Fluorene	mg/kg	30,000	0.07	U	**0.028**	J	0.07	U	0.0082	U			**0.0031**	J	**0.001**	J	**0.14**		**0.001**	J	0.071	U	**0.79**		**0.46**	IS	**0.047**		**0.0023**	J	**0.00093**	J	**0.0059**	J		
Hexachlorobenzene	mg/kg	0.96	0.071	U	0.08	U	0.069	U	0.081	UM1			0.091	U	0.081	U	0.078	U	0.083	U	0.071	U	0.074	U			0.073	U	0.08	U	0.072	U	0.086	U		
Indeno(1,2,3-cd)pyrene	mg/kg	2.9	0.07	U	0.08	UIS	**0.022**	J	0.0082	UM1			0.0092	U	0.0082	U	**0.31**		0.0084	U	**0.062**	J	**0.73**		**0.24**	IS	**0.84**		**0.003**	J	**0.021**		**0.04**			
Naphthalene	mg/kg	17	**0.055**	J	**0.26**		**0.047**	J	0.0082	U			**0.016**		**0.0031**	J	**0.038**		0.0084	U	0.071	U	**1.1**		**1.9**	IS	**0.19**		**0.042**		**0.0091**		**0.025**			
N-Nitroso-di-n-propylamine	mg/kg	0.33	0.071	UL3	0.08	UL3	0.069	UL3	0.081	UL3			0.091	U	0.081	U	0.078	U	0.083	U	0.071	U	0.074	U			0.073	U	0.08	U	0.072	U	0.086	U		
N-Nitrosodiphenylamine	mg/kg	470	0.071	U	0.08	U	0.069	U	0.081	UM1			0.091	U	0.081	U	0.078	U	0.083	U	0.071	U	0.074	U			0.073	U	0.08	U	0.072	U	0.086	U		
Pentachlorophenol	mg/kg	4	0.18	U	0.2	U	0.17	U	0.2	UM1			0.23	U	0.2	U	0.2	U	0.21	U	0.18	UL3	0.19	UL3			0.18	UL3	0.2	UL3	0.18	U	0.22	U		
Phenanthrene	mg/kg		**0.046**	J	**0.15**		**0.11**		**0.0022**	J			**0.054**		**0.031**		**1.5**		**0.0068**	J	**0.048**	JB	**4.6**		**2**		**1.2**		**0.01**	B	**0.03**		**0.11**			
Phenol	mg/kg	250,000	**0.21**	L1	**0.059**	JL1	0.069	UL3	0.081	UL3			0.091	U	0.081	U	0.078	U	0.083	U	0.071	U	0.074	U			0.073	U	0.08	U	0.072	U	0.086	U		
Pyrene	mg/kg	23,000	**0.14**		**0.15**		**0.068**	J	**0.0021**	J			**0.021**		**0.015**		**1.6**		**0.0025**	J	**0.15**	B	**4.2**		**1.8**		**3.3**		**0.013**	B	**0.04**		**0.24**			
PCBs																																			
Aroclor 1242	mg/kg	0.97	0.0516	U	0.0541	U	0.0544	U					0.0577	U			0.0632	U			0.113	U					**0.625**				0.0571	U				
Aroclor 1248	mg/kg	0.94	0.0516	U	0.0541	U	0.0544	U					0.0577	U			0.0632	U			0.113	U					0.0632	U			**0.0496**	J				
Aroclor 1254	mg/kg	0.97	0.0516	U	0.0541	U	0.0544	U					0.0577	U			0.0632	U			0.113	U					0.0632	U			0.0571	U				
Aroclor 1260	mg/kg	0.99	0.0516	U	0.0541	U	0.0544	U					0.0577	U			0.0632	U			0.113	U					0.0632	U			0.0571	U				
Aroclor 1262	mg/kg		**0.0705**		0.0541	U	0.0544	U					0.0577	U			0.0632	U			0.113	U					0.0632	U			**0.0416**	J				
Aroclor 1268	mg/kg		0.0516	U	**0.179**		**0.071**						0.0577	U			**0.0467**	J			**2.96**						**0.366**				0.0571	U				
PCB, Total	mg/kg	0.97	**0.0705**		**0.179**		**0.071**						0.0577	U			**0.0467**	J			**2.96**						**0.991**				**0.0912**					
TPH/Oil and Grease																																			
Diesel Range Organics	mg/kg	620	**1,220**	L2	**1,330**	L2	**144**	L2	**10.1**	L2M0			9	UCHL2	8.2	UCHL2	**47.3**	L2	**3.2**	JCHL2	**70.7**	L2	**618**	L2			**127**	L2	**8.6**	L2	**12.3**	L2	**13.9**	L2		
Gasoline Range Organics	mg/kg	620	8.4	U	9.5	U	7.3	U	9.7	U			11	U	10.7	U	9.7	U	10.4	U	10.2	U	**7.8**	J			9.7	U	8.3	U	10.1	U	11.4	U		

Detections in bold

Blank spaces indicate that the parameter was not analyzed for this sample

*PAH compounds were analyzed via SIM

A glossary of laboratory flag keys can be viewed in the attached laboratory reports

Values in Red indicate an exceedance of the Project Action Limit (PAL)

Table 5
Summary of Organics Detected in Soil
Parcel B22
Tradepoint Atlantic
Sparrows Point, Maryland

Parameter	Units	PAL	B22-008-SB-1 Soil 5/31/2016		B22-008-SB-4 Soil 5/31/2016		B22-009-SB-1 Soil 5/31/2016		B22-009-SB-6 Soil 5/31/2016		B22-010-SB-1 Soil 5/31/2016		B22-010-SB-4 Soil 5/31/2016		B22-011-SB-1 Soil 5/20/2016		B22-011-SB-4 Soil 5/20/2016		B22-012-SB-1 Soil 5/19/2016		B22-012-SB-4 Soil 5/19/2016		B22-013-SB-1 Soil 5/26/2016		B22-013-SB-4 Soil 5/26/2016		B22-014-SB-1 Soil 5/26/2016		B22-014-SB-5 Soil 5/26/2016		B22-014-SB-10 Soil 5/26/2016		B22-015-SB-1 Soil 6/3/2016	
Volatile Organic Compounds																																				
1,1,1-Trichloroethane	mg/kg	36,000	0.0076	U	0.0051	U	0.0043	U	0.0065	U	0.0052	U	0.0051	U	0.0046	U1c	0.0055	U1c	0.0047	U	0.0062	U	0.0054	U	0.005	U	0.0047	U	0.0051	U			0.0046	U
1,1,2-Trichloroethane	mg/kg	5	0.0076	U	0.0051	U	0.0043	U	0.0065	U	0.0052	U	0.0051	U	0.0046	U1c	0.0055	U1c	0.0047	U	0.0062	U	0.0054	U	0.005	U	0.0047	U	0.0051	U			0.0046	U
1,1,2-Trichlorotrifluoroethane	mg/kg	170,000	0.076	U	0.051	U	0.043	U	0.065	U	0.052	U	0.051	U	0.046	U1c	0.055	U1c	0.047	U	0.062	U	0.054	U	0.05	U	0.047	U	0.051	U			0.046	U
1,1-Dichloroethane	mg/kg	16	0.0076	U	0.0051	U	0.0043	U	0.0065	U	0.0052	U	0.0051	U	0.0046	U1c	0.0055	U1c	0.0047	U	0.0062	U	0.0054	U	0.005	U	0.0047	U	0.0051	U			0.0046	U
1,1-Dichloroethene	mg/kg	1,000	0.0076	U	0.0051	U	0.0043	U	0.0065	U	0.0052	U	0.0051	U	0.0046	U1c	0.0055	U1c	0.0047	U	0.0062	U	0.0054	U	0.005	U	0.0047	U	0.0051	U			0.0046	U
1,2,3-Trichlorobenzene	mg/kg	930	0.0076	U	0.0051	U	0.0043	U	0.0065	U	0.0052	U	0.0051	U	0.0046	U1c	0.0055	U1c	0.0047	U	0.0062	U	0.0054	U	0.005	U	0.0047	U	0.0051	U			0.0046	U
1,2,4-Trichlorobenzene	mg/kg	110	0.0076	U	0.0051	U	0.0043	U	0.0065	U	0.0052	U	0.0051	U	0.0046	U1c	0.0055	U1c	0.0047	U	0.0062	U	0.0054	U	0.005	U	0.0047	U	0.0051	U			0.0046	U
1,2-Dichloroethane	mg/kg	2	0.0076	U	0.0051	U	0.0043	U	0.0065	U	0.0052	U	0.0051	U	0.0046	U1c	0.0055	U1c	0.0047	U	0.0062	U	0.0054	U	0.005	U	0.0047	U	0.0051	U			0.0046	U
1,2-Dichloroethene (Total)	mg/kg	2,300	0.015	U	0.01	U	0.0087	U	0.013	U	0.01	U	0.01	U	0.0092	U	0.011	U	0.0093	U	0.012	U	0.011	U	0.01	U	0.0095	U	0.01	U			0.0093	U
1,4-Dichlorobenzene	mg/kg	11	0.0076	U	0.0051	U	0.0043	U	0.0065	U	0.0052	U	0.0051	U	0.0046	U1c	0.0055	U1c	0.0047	U	0.0062	U	0.0054	U	0.005	U	0.0047	U	0.0051	U			0.0046	U
1,4-Dioxane	mg/kg	24	0.15	U	0.1	U	0.087	U	0.13	U	0.1	U	0.1	U	0.092	U1c	0.11	U1c	0.093	UL2	0.12	UL2	0.11	U	0.1	U	0.095	U	0.1	U			0.093	U
2-Butanone (MEK)	mg/kg	190,000	0.015	U	0.01	U	0.0087	U	0.013	U	0.01	U	0.01	U	0.0092	U1c	0.011	U1c	0.0093	U	0.012	U	0.011	U	0.01	U	0.0095	U	0.01	U			**0.0048**	J
2-Hexanone	mg/kg	1,300	0.015	UL3	0.01	UL3	0.0087	U	0.013	U	0.01	U	0.01	U	0.0092	UL31c	0.011	UL31c	0.0093	U	0.012	U	0.011	UL3	0.01	UL3	0.0095	UL3	0.01	U			0.0093	U
4-Methyl-2-pentanone (MIBK)	mg/kg	56,000	0.015	U	0.01	U	0.0087	U	0.013	U	0.01	U	0.01	U	0.0092	U1c	0.011	U1c	0.0093	U	0.012	U	0.011	UL3	0.01	UL3	0.0095	UL3	0.01	U			0.0093	U
Acetone	mg/kg	670,000	**0.026**		0.01	U	0.0087	U	0.013	U	0.01	U	0.01	U	**0.0049**	J1c	**0.011**	J1c	0.0093	U	0.012	U	**0.014**		0.01	U	0.0095	U	0.01	U			**0.12**	
Benzene	mg/kg	5.1	0.0076	U	0.0051	U	0.0043	U	0.0065	U	0.0052	U	0.0051	U	0.0046	U1c	**0.0057**	1c	0.0047	U	0.0062	U	0.0054	U	0.005	U	0.0047	U	0.0051	U			0.0046	U
Chlorobenzene	mg/kg	1,300	0.0076	U	0.0051	U	0.0043	U	0.0065	U	0.0052	U	0.0051	U	0.0046	U1c	0.0055	U1c	0.0047	U	0.0062	U	0.0054	U	0.005	U	0.0047	U	0.0051	U			0.0046	U
Chloroethane	mg/kg	57,000	0.0076	U	0.0051	U	0.0043	U	0.0065	U	0.0052	U	0.0051	U	0.0046	U1c	0.0055	U1c	0.0047	U	0.0062	U	0.0054	U	0.005	U	0.0047	U	0.0051	U			0.0046	U
Chloroform	mg/kg	1.4	0.0076	U	0.0051	U	0.0043	U	0.0065	U	0.0052	U	0.0051	U	0.0046	U1c	0.0055	U1c	0.0047	U	0.0062	U	0.0054	U	0.005	U	0.0047	U	0.0051	U			0.0046	U
cis-1,2-Dichloroethene	mg/kg	2,300	0.0076	U	0.0051	U	0.0043	U	0.0065	U	0.0052	U	0.0051	U	0.0046	U1c	0.0055	U1c	0.0047	U	0.0062	U	0.0054	U	0.005	U	0.0047	U	0.0051	U			0.0046	U
Cyclohexane	mg/kg	27,000	0.015	U	0.01	U	0.0087	U	0.013	U	0.01	U	0.01	U	0.0092	U1c	0.011	U1c	0.0093	U	0.012	U	0.011	U	0.01	U	0.0095	U	0.01	U			0.0093	U
Ethylbenzene	mg/kg	25	0.0076	U	0.0051	U	0.0043	U	0.0065	U	0.0052	U	0.0051	U	0.0046	U1c	0.0055	U1c	0.0047	U	0.0062	U	0.0054	U	0.005	U	0.0047	U	0.0051	U			0.0046	U
Isopropylbenzene (Cumene)	mg/kg	9,900	0.0076	U	0.0051	U	0.0043	U	0.0065	U	0.0052	U	0.0051	U	0.0046	U1c	0.0055	U1c	0.0047	U	0.0062	U	0.0054	U	0.005	U	0.0047	U	0.0051	U			0.0046	U
Methyl acetate	mg/kg	1,200,000	0.076	U	0.051	U	0.043	U	0.065	U	0.052	U	0.051	U	0.046	U1c	0.055	U1c	0.047	U	0.062	U	0.054	U	0.05	U	0.047	U	0.051	U			0.046	U
Methylene Chloride	mg/kg	1,000	0.0076	U	0.0051	U	0.0043	U	0.0065	U	0.0052	U	0.0051	U	0.0046	U1c	0.0055	U1c	0.0047	U	0.0062	U	0.0054	U	0.005	U	0.0047	U	0.0051	U			0.0046	U
Styrene	mg/kg	35,000	0.0076	U	0.0051	U	0.0043	U	0.0065	U	0.0052	U	0.0051	U	0.0046	U1c	0.0055	U1c	0.0047	U	0.0062	U	0.0054	UL2	0.005	UL2	0.0047	UL2	0.0051	U			0.0046	U
Tetrachloroethene	mg/kg	100	0.0076	U	0.0051	U	0.0043	U	0.0065	U	0.0052	U	0.0051	U	0.0046	U1c	0.0055	U1c	0.0047	U	0.0062	U	0.0054	U	0.005	U	0.0047	U	0.0051	U			0.0046	U
Toluene	mg/kg	47,000	0.0076	U	0.0051	U	0.0043	U	0.0065	U	0.0052	U	0.0051	U	0.0046	U1c	**0.0022**	J1c	0.0047	U	0.0062	U	0.0054	U	0.005	U	0.0047	U	0.0051	U			0.0046	U
trans-1,2-Dichloroethene	mg/kg	23,000	0.0076	U	0.0051	U	0.0043	U	0.0065	U	0.0052	U	0.0051	U	0.0046	U1c	0.0055	U1c	0.0047	U	0.0062	U	0.0054	U	0.005	U	0.0047	U	0.0051	U			0.0046	U
Trichloroethene	mg/kg	6	0.0076	U	0.0051	U	0.0043	U	0.0065	U	0.0052	U	0.0051	U	0.0046	U1c	0.0055	U1c	0.0047	U	0.0062	U	0.0054	U	0.005	U	0.0047	U	0.0051	U			0.0046	U
Trichlorofluoromethane	mg/kg	3,100	0.0076	U	0.0051	U	0.0043	U	0.0065	U	0.0052	U	0.0051	U	0.0046	U1c	0.0055	U1c	0.0047	U	0.0062	U	0.0054	U	0.005	U	0.0047	U	0.0051	U			0.0046	U
Vinyl chloride	mg/kg	1.7	0.0076	U	0.0051	U	0.0043	U	0.0065	U	0.0052	U	0.0051	U	0.0046	U1c	0.0055	U1c	0.0047	U	0.0062	U	0.0054	U	0.005	U	0.0047	U	0.0051	U			0.0046	U
Xylene (Total)	mg/kg	2,800	0.023	U	0.015	U	0.013	U	0.019	U	0.016	U	0.015	U	0.014	U	**0.019**		**0.0031**	J	0.019	U	0.016	U	0.015	U	0.014	U	0.015	U			0.014	U
Semi-Volatile Organic Compounds*																																				
1,2,4,5-Tetrachlorobenzene	mg/kg	350	0.089	U	0.072	U	0.072	U	0.074	U	0.075	U	0.077	U	0.072	U	0.075	U	0.071	UL3	0.078	UL3	0.074	U	0.083	U	0.076	U	0.082	U			0.073	UL3
2,4-Dimethylphenol	mg/kg	16,000	0.089	U	0.072	U	0.072	U	0.074	U	0.075	U	0.077	U	0.072	U	0.075	U	0.071	U	0.078	U	0.074	U	0.083	U	0.076	U	0.082	U			0.073	U
2-Chloronaphthalene	mg/kg	60,000	0.089	U	0.072	U	0.072	U	0.074	U	0.075	U	0.077	U	0.072	U	0.075	U	0.071	U	0.078	U	0.074	U	0.083	U	0.076	U	0.082	U			0.073	U
2-Methylnaphthalene	mg/kg	3,000	**0.03**		**0.0024**	J	0.073	U	**0.0032**	J	**0.22**		**0.044**		**0.1**		**0.2**		**0.2**		**0.0075**	J	**0.53**		**0.061**	IS	**0.15**		**0.022**				**0.065**	J
2-Methylphenol(o-Cresol)	mg/kg	41,000	0.089	U	0.072	U	0.072	U	0.074	U	0.075	U	0.077	U	0.072	U	0.075	U	0.071	UL3	0.078	UL3	0.074	U	0.083	U	0.076	U	0.082	U			0.073	U
2-Nitroaniline	mg/kg	8,000	0.22	U	0.18	U	0.18	U	0.19	U	0.19	U	0.19	U	0.18	U	0.19	U	0.18	UL3	0.19	UL3	0.19	U	0.21	U	0.19	U	0.21	U			0.18	U
3&4-Methylphenol(m&p Cresol)	mg/kg	41,000	0.18	U	0.14	U	0.14	U	0.15	U	0.15	U	0.15	U	0.14	U	0.15	U	0.14	UL3	0.15	UL3	0.15	U	0.17	U	0.15	U	0.16	U			0.15	UL3
4-Nitroaniline	mg/kg	110	0.22	UL2	0.18	UL2	0.18	U	0.19	U	0.19	U	0.19	U	0.18	UL3	0.19	UL3	0.18	UL3	0.19	UL3	0.19	U	0.21	U	0.19	U	0.21	U			0.18	UL2
Acenaphthene	mg/kg	45,000	**0.11**		**0.0014**	J	**0.046**	J	**0.001**	J	**0.3**		**0.26**		**0.14**		**0.17**		**0.16**		**0.0017**	J	**1.6**		**0.29**	IS	**0.018**	J	**0.0086**	IS			**0.018**	J
Acenaphthylene	mg/kg	45,000	**0.017**		**0.00059**	J	**0.013**	J	**0.0013**	J	**0.068**	J	**0.18**		**0.14**		**0.28**		**0.15**		**0.0054**	J	**0.037**	J	**0.0024**	JIS	**0.0096**	J	**0.0016**	JIS			**0.049**	J
Acetophenone	mg/kg	120,000	0.089	U	0.072	U	0.072	U	0.074	U	0.075	U	0.077	U	**0.047**	J	**0.062**	J	0.071	U	0.078	U	0.074	U	0.083	U	0.076	U	0.082	U			**0.029**	JL1
Anthracene	mg/kg	230,000	**0.12**		**0.0024**	J	**0.12**		**0.0097**		**0.92**		**0.87**		**0.3**		**0.53**		**0.57**		**0.018**		**4.1**		**0.5**	IS	**0.15**		**0.038**	IS			**0.11**	
Benzaldehyde	mg/kg	120,000	0.089	U	0.072	U	0.072	U	0.074	U	0.075	U	0.077	U	**0.023**	JL2	**0.021**	JL2	**0.036**	JL2	0.078	UL2	**0.022**	JL2	0.083	UL2	0.076	UL2	0.082	UL2			**0.058**	JL2
Benzo(a)anthracene	mg/kg	2.9	**0.14**		**0.0073**		**0.29**		**0.24**		**3.1**		**1.6**		**1.4**		**1.9**		**2.6**		**0.078**		**11.4**		**0.68**		**1.3**		**0.14**				**0.33**	
Benzo(a)pyrene	mg/kg	0.29	**0.11**		**0.0053**	J	**0.2**		**0.15**		**2.4**		**1.4**		**1.3**		**1.8**		**2.6**		**0.059**		**7.7**		**0.41**		**0.95**		**0.094**	IS			**0.31**	
Benzo(b)fluoranthene	mg/kg	2.9	**0.23**	ip	**0.013**	ip	**0.44**	ip	**0.29**	ip	**4.5**	ip	**2.8**	ip	**2.3**	ip	**3.5**	ip	**3.9**		**0.096**		**14.6**	ip	**0.83**	ip	**2.2**	ip	**0.22**	ISip			**0.82**	ip
Benzo(g,h,i)perylene	mg/kg		**0.071**		**0.0049**	J	**0.14**		**0.067**		**1.5**		**1.1**		**0.84**		**0.87**		**1.9**		**0.044**		**1.7**		**0.17**		**0.3**		**0.052**	IS			**0.18**	
Benzo(k)fluoranthene	mg/kg	29	**0.2**	ip	**0.011**	ip	**0.38**	ip	**0.25**	ip	**3.9**	ip	**2.4**	ip	**1.9**	ip	**2.9**	ip	**1.4**		**0.044**		**12.7**	ip	**0.72**	ip	**2.2**	ip	**0.19**	ISip			**0.72**	ip
Biphenyl (Diphenyl)	mg/kg	200	0.089	U	0.072	U	0.072	U	0.074	U	**0.028**	J	0.077	U	**0.065**	J	**0.077**		**0.093**		0.078	U	**0.095**		0.083	U	0.076	U	0.082	U			**0.034**	J
bis(2-Ethylhexyl)phthalate	mg/kg	160	0.089	U	0.072	U	0.072	U	0.074	U	**0.017**	JIS	0.077	U	**0.017**	JISCL	**0.052**	JISCL	0.071	UIS	**0.018**	JIS	**0.14**	IS	0.083	U	**0.028**	JIS	0.082	U			**0.26**	IS
Carbazole	mg/kg		0.089	U	0.072	U	0.072	U	0.074	U	**0.37**		**0.12**		**0.12**		**0.22**		**0.13**		0.078	U	**2**		**0.24**		**0.023**	J	0.082	U			**0.041**	J
Chrysene	mg/kg	290	**0.14**		**0.0086**		**0.27**		**0.21**		**2.5**		**1.7**		**1.2**		**1.9**		**3**		**0.089**		**11**		**0.6**		**1.4**		**0.12**				**0.39**	
Dibenz(a,h)anthracene	mg/kg	0.29	**0.02**		**0.0013**	J	**0.045**	J	**0.019**		**0.4**		**0.42**		**0.29**		**0.36**		**0.53**		**0.01**		**0.91**		**0.076**		**0.12**		**0.022**	IS			**0.052**	J
Diethylphthalate	mg/kg	660,000	0.089	U	0.072	U	0.072	U	0.074	U	0.075	U	0.077	U	0.072	UL3	0.075	UL3	0.071	UL3	0.078	UL3	0.074	U	0.083	U	0.076	U	0.082	U			0.073	U
Di-n-butylphthalate	mg/kg	82,000	0.089	U	0.072	U	0.072	U	**0.089**		0.075	U	0.077	U	0.072	UL3	0.075	UL3	0.071	UL3	0.078	UL3	**0.037**	J	0.083	U	0.076	U	0.082	U			0.073	U
Di-n-octylphthalate	mg/kg	8,200	0.089	U	0.072	U	0.072	UIS	0.074	UIS	0.075	UIS	0.077	U	0.072	UISL3	0.075	UISL3	0.071	UISL3	0.078	UISL3	0.074	UIS	0.083	U	0.076	UIS	0.082	U			0.073	UIS
Fluoranthene	mg/kg	30,000	**0.46**		**0.014**		**0.5**		**0.36**		**6.8**		**4.1**		**1.7**		**3.7**		**4.4**		**0.16**		**20.5**		**1.5**	IS	**2**		**0.24**	IS			**0.66**	
Fluorene	mg/kg	30,000	**0.079**		0.0072	U	**0.038**	J	**0.00095**	J	**0.33**		**0.36**		**0.054**		**0.16**		**0.054**	J	**0.0022**	J	**1.7**		**0.33**	IS	**0.014**	J	**0.0064**	JIS			**0.021**	J
Hexachlorobenzene	mg/kg	0.96	0.089	U	0.072	U	0.072	U	0.074	U	0.075	U	0.077	U	0.072	U	0.075	U	0.071	U	0.078	U	0.074	U	0.083	U	0.076	U	0.082	U			0.073	U
Indeno(1,2,3-cd)pyrene	mg/kg	2.9	**0.06**		**0.0035**	J	**0.11**		**0.056**		**1.2**		**1**		**0.82**		**0.97**		**1.7**	L2	**0.042**	L2	**1.9**		**0.16**		**0.31**		**0.048**	IS			**0.16**	
Naphthalene	mg/kg	17	**0.018**		**0.0027**	J	**0.023**	J	**0.0033**	J	**0.21**		**0.054**		**0.21**		**0.39**		**0.42**		**0.014**		**0.52**		**0.054**	IS	**0.12**		**0.027**				**0.21**	
N-Nitroso-di-n-propylamine	mg/kg	0.33	0.089	U	0.072	U	0.072	U	0.074	U	0.075	U	0.077	U	0.072	U	0.075	U	0.071	UL3	0.078	UL3	0.074	U	0.083	U	0.076	U	0.082	U			0.073	UL3
N-Nitrosodiphenylamine	mg/kg	470	0.089	U	0.072	U	0.072	U	0.074	U	0.075	U	0.077	U	0.072	U	0.075	U	0.071	U	0.078	U	0.074	U	0.083	U	0.076	U	0.082	U			0.073	UL3
Pentachlorophenol	mg/kg	4	0.22	U	0.18	U	0.18	U	0.19	U	0.19	U	0.19	U	0.18	UL3	0.19	UL3	0.18	UL3	0.19	UL3	0.19	UL3	0.21	UL3	0.19	UL3	0.21	UL3			0.18	UL2
Phenanthrene	mg/kg		**0.58**		**0.013**		**0.41**		**0.027**		**4.1**		**2.9**		**0.91**		**2.3**		**1.3**		**0.08**		**15.1**		**2.4**	IS	**0.5**		**0.11**	IS			**0.43**	
Phenol	mg/kg	250,000	0.089	U	0.072	U	0.072	U	0.074	U	0.075	U	0.077	U	0.072	U	0.075	U	0.071	UL3	0.078	UL3	0.074	U	0.083	U	0.076	U	0.082	U			0.073	UL3
Pyrene	mg/kg	23,000	**0.37**		**0.012**		**0.46**		**0.32**		**5.6**		**3.2**		**1.6**		**3.1**		**4.1**		**0.12**		**16.2**		**1.1**	IS	**1.8**		**0.18**	IS			**0.56**	
PCBs																																				
Aroclor 1242	mg/kg	0.97	0.0616	U			0.0541	U			0.054	U			0.0567	U			0.0651	U			0.0572	U			0.0585	U					0.0549	U
Aroclor 1248	mg/kg	0.94	0.0616	U			**0.0386**	J			**0.353**				**0.0421**	J			0.0651	U			**0.115**				0.0585	U					0.0549	U
Aroclor 1254	mg/kg	0.97	0.0616	U			0.0541	U			**0.232**				**0.105**				0.0651	U			**0.234**				0.0585	U					**0.28**	
Aroclor 1260	mg/kg	0.99	0.0616	U			0.0541	U			0.054	U			0.0567	U			0.0651	U			0.0572	U			0.0585	U					0.0549	U
Aroclor 1262	mg/kg		0.0616	U			**0.118**				**0.182**				**0.0631**				0.0651	U			**1.6**				0.0585	U					**0.367**	
Aroclor 1268	mg/kg		0.0616	U			0.0541	U			0.054	U			0.0567	U			0.0651	U			0.0572	U			0.0585	U					0.0549	U
PCB, Total	mg/kg	0.97	0.0616	U			**0.1566**				**0.767**				**0.2102**				0.0651	U			**1.949**				0.0585	U					**0.647**	
TPH/Oil and Grease																																				
Diesel Range Organics	mg/kg	620	**15.9**	L2	**6**	JCHL2	**27.1**	L2	**25.6**	L2	**149**	L2	**45.2**	L2	**117**	L2	**246**	L2	**103**	L2	**38.2**	L2	**437**	L2	**6.3**	JL2	**48.9**	L2	**16.2**	L2			**402**	L2
Gasoline Range Organics	mg/kg	620	11.4	U	10.3	U	11.3	U	14.8	U	11.4	U	10.7	U	9.1	U	11.1	U	14.6	U	12.3	U	11.2	U	9.8	U	10	U	10.3	U			9.2	U

Detections in bold

Blank spaces indicate that the parameter was not analyzed for this sample

*PAH compounds were analyzed via SIM

A glossary of laboratory flag keys can be viewed in the attached laboratory reports

Values in Red indicate an exceedance of the Project Action Limit (PAL)

Table 5
Summary of Organics Detected in Soil
Parcel B22
Tradepoint Atlantic
Sparrows Point, Maryland

Parameter	Units	PAL	B22-015-SB-4		B22-016-SB-1		B22-016-SB-5		B22-017-SB-1		B22-017-SB-6		B22-017-SB-10		B22-018-SB-1		B22-018-SB-6		B22-018-SB-10		B22-019-SB-1		B22-019-SB-6		B22-019-SB-10		B22-020-SB-1		B22-020-SB-4		B22-020-SB-10		B22-021-SB-1	
			Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
			6/3/2016		6/3/2016		6/3/2016		6/3/2016		6/3/2016		6/3/2016		6/3/2016		6/3/2016		6/3/2016		5/31/2016		5/31/2016		5/31/2016		5/31/2016		5/31/2016		5/31/2016		5/31/2016	
Volatile Organic Compounds																																		
1,1,1-Trichloroethane	mg/kg	36,000	0.0044	U	0.0045	U	0.0061	U	0.0049	U	0.0049	U			0.006	U	0.0051	U			0.0051	U	0.0048	U			0.0069	U	0.0047	U			0.0048	U
1,1,2-Trichloroethane	mg/kg	5	0.0044	U	0.0045	U	0.0061	U	0.0049	U	0.0049	U			0.006	U	0.0051	U			0.0051	U	0.0048	U			0.0069	U	0.0047	U			0.0048	U
1,1,2-Trichlorotrifluoroethane	mg/kg	170,000	0.044	U	0.045	U	0.061	U	0.049	U	0.049	U			0.06	U	0.051	U			0.051	U	0.048	U			0.069	U	0.047	U			0.048	U
1,1-Dichloroethane	mg/kg	16	0.0044	U	0.0045	U	0.0061	U	0.0049	U	**0.0052**				0.006	U	0.0051	U			0.0051	U	0.0048	U			0.0069	U	0.0047	U			0.0048	U
1,1-Dichloroethene	mg/kg	1,000	0.0044	U	0.0045	U	0.0061	U	0.0049	U	0.0049	U			0.006	U	0.0051	U			0.0051	U	0.0048	U			0.0069	U	0.0047	U			0.0048	U
1,2,3-Trichlorobenzene	mg/kg	930	0.0044	U	0.0045	U	0.0061	U	0.0049	U	0.0049	U			0.006	U	0.0051	U			0.0051	U	0.0048	U			0.0069	U	0.0047	U			0.0048	U
1,2,4-Trichlorobenzene	mg/kg	110	0.0044	U	0.0045	U	0.0061	U	0.0049	U	0.0049	U			0.006	U	0.0051	U			0.0051	U	0.0048	U			0.0069	U	0.0047	U			0.0048	U
1,2-Dichloroethane	mg/kg	2	0.0044	U	0.0045	U	0.0061	U	0.0049	U	0.0049	U			0.006	U	0.0051	U			0.0051	U	0.0048	U			0.0069	U	0.0047	U			0.0048	U
1,2-Dichloroethene (Total)	mg/kg	2,300	0.0088	U	0.0091	U	0.012	U	0.0098	U	0.0098	U			0.012	U	0.01	U			0.01	U	0.0096	U			0.014	U	0.0095	U			0.0096	U
1,4-Dichlorobenzene	mg/kg	11	0.0044	U	0.0045	U	0.0061	U	0.0049	U	0.0049	U			0.006	U	0.0051	U			0.0051	U	0.0048	U			0.0069	U	0.0047	U			0.0048	U
1,4-Dioxane	mg/kg	24	0.088	U	0.091	U	0.12	U	0.098	U	0.098	U			0.12	U	0.1	U			0.1	U	0.096	U			0.14	U	0.095	U			0.096	U
2-Butanone (MEK)	mg/kg	190,000	**0.0054**	J	0.0091	U	**0.0043**	J	0.0098	U	0.0098	U			0.012	U	0.01	U			0.01	U	0.0096	U			0.014	U	0.0095	U			0.0096	U
2-Hexanone	mg/kg	1,300	0.0088	U	0.0091	U	**0.0021**	J	0.0098	U	0.0098	U			0.012	U	0.01	U			0.01	UL3	0.0096	UL3			0.014	UL3	0.0095	UL3			0.0096	U
4-Methyl-2-pentanone (MIBK)	mg/kg	56,000	0.0088	U	0.0091	U	0.012	U	0.0098	U	0.0098	U			0.012	U	0.01	U			0.01	U	0.0096	U			0.014	U	0.0095	U			0.0096	U
Acetone	mg/kg	670,000	**0.12**		0.0091	U	**0.022**		0.0098	U	0.0098	U			0.012	U	0.01	U			**0.017**		**0.0085**	J			**0.0068**	J	**0.006**	J			0.0096	U
Benzene	mg/kg	5.1	0.0044	U	0.0045	U	0.0061	U	0.0049	U	0.0049	U			0.006	U	0.0051	U			0.0051	U	0.0048	U			0.0069	U	0.0047	U			0.0048	U
Chlorobenzene	mg/kg	1,300	0.0044	U	0.0045	U	0.0061	U	0.0049	U	0.0049	U			0.006	U	0.0051	U			0.0051	U	0.0048	U			0.0069	U	0.0047	U			0.0048	U
Chloroethane	mg/kg	57,000	0.0044	U	0.0045	U	0.0061	U	0.0049	U	0.0049	U			0.006	U	0.0051	U			0.0051	U	0.0048	U			0.0069	U	0.0047	U			0.0048	U
Chloroform	mg/kg	1.4	0.0044	U	0.0045	U	0.0061	U	0.0049	U	0.0049	U			0.006	U	0.0051	U			0.0051	U	0.0048	U			0.0069	U	0.0047	U			0.0048	U
cis-1,2-Dichloroethene	mg/kg	2,300	0.0044	U	0.0045	U	0.0061	U	0.0049	U	0.0049	U			0.006	U	0.0051	U			0.0051	U	0.0048	U			0.0069	U	0.0047	U			0.0048	U
Cyclohexane	mg/kg	27,000	0.0088	U	0.0091	U	0.012	U	0.0098	U	0.0098	U			0.012	U	0.01	U			0.01	U	0.0096	U			0.014	U	0.0095	U			0.0096	U
Ethylbenzene	mg/kg	25	0.0044	U	0.0045	U	0.0061	U	0.0049	U	0.0049	U			0.006	U	0.0051	U			0.0051	U	0.0048	U			0.0069	U	0.0047	U			0.0048	U
Isopropylbenzene (Cumene)	mg/kg	9,900	0.0044	U	0.0045	U	0.0061	U	0.0049	U	0.0049	U			0.006	U	0.0051	U			0.0051	U	0.0048	U			0.0069	U	0.0047	U			0.0048	U
Methyl acetate	mg/kg	1,200,000	0.044	U	0.045	U	0.061	U	0.049	U	0.049	U			0.06	U	0.051	U			0.051	U	0.048	U			0.069	U	0.047	U			0.048	U
Methylene Chloride	mg/kg	1,000	0.0044	U	0.0045	U	0.0061	U	0.0049	U	0.0049	U			0.006	U	0.0051	U			0.0051	U	0.0048	U			0.0069	U	0.0047	U			0.0048	U
Styrene	mg/kg	35,000	0.0044	U	0.0045	U	0.0061	U	0.0049	U	0.0049	U			0.006	U	0.0051	U			0.0051	U	0.0048	U			0.0069	U	0.0047	U			0.0048	U
Tetrachloroethene	mg/kg	100	0.0044	U	0.0045	U	0.0061	U	0.0049	U	0.0049	U			0.006	U	0.0051	U			0.0051	U	0.0048	U			0.0069	U	0.0047	U			0.0048	U
Toluene	mg/kg	47,000	0.0044	U	0.0045	U	0.0061	U	0.0049	U	0.0049	U			0.006	U	0.0051	U			0.0051	U	0.0048	U			0.0069	U	0.0047	U			0.0048	U
trans-1,2-Dichloroethene	mg/kg	23,000	0.0044	U	0.0045	U	0.0061	U	0.0049	U	0.0049	U			0.006	U	0.0051	U			0.0051	U	0.0048	U			0.0069	U	0.0047	U			0.0048	U
Trichloroethene	mg/kg	6	0.0044	U	0.0045	U	0.0061	U	0.0049	U	0.0049	U			0.006	U	0.0051	U			0.0051	U	0.0048	U			0.0069	U	0.0047	U			0.0048	U
Trichlorofluoromethane	mg/kg	3,100	0.0044	U	0.0045	U	0.0061	U	0.0049	U	0.0049	U			0.006	U	0.0051	U			0.0051	U	0.0048	U			0.0069	U	0.0047	U			0.0048	U
Vinyl chloride	mg/kg	1.7	0.0044	U	0.0045	U	0.0061	U	0.0049	U	0.0049	U			0.006	U	0.0051	U			0.0051	U	0.0048	U			0.0069	U	0.0047	U			0.0048	U
Xylene (Total)	mg/kg	2,800	0.013	U	0.014	U	0.018	U	0.015	U	0.015	U			0.018	U	0.015	U			0.015	U	0.014	U			0.021	U	0.014	U			0.014	U
Semi-Volatile Organic Compounds*																																		
1,2,4,5-Tetrachlorobenzene	mg/kg	350	0.078	UL3	0.075	UL3	0.079	UL3	0.078	UL3	0.084	UL3			0.082	UL3	0.086	UL3			0.078	U	0.081	U			0.074	U	0.076	U			0.079	U
2,4-Dimethylphenol	mg/kg	16,000	0.078	U	0.075	U	0.079	U	0.078	U	0.084	U			0.082	U	0.086	U			0.078	U	0.081	U			0.074	U	0.076	U			0.079	U
2-Chloronaphthalene	mg/kg	60,000	0.078	U	0.075	U	0.079	U	0.078	U	0.084	U			0.082	U	0.086	U			0.078	U	0.081	U			0.074	U	0.076	U			0.079	U
2-Methylnaphthalene	mg/kg	3,000	**0.27**		**0.26**		**0.2**		**0.16**		**0.012**	IS			0.0085	UIS	**0.0086**	IS			**0.0055**	J	**0.011**	R1			**0.1**		**0.025**	J			0.0079	U
2-Methylphenol(o-Cresol)	mg/kg	41,000	0.078	U	0.075	U	0.079	U	0.078	U	0.084	U			0.082	U	0.086	U			0.078	U	0.081	U			0.074	U	0.076	U			0.079	U
2-Nitroaniline	mg/kg	8,000	0.19	U	0.19	U	0.2	U	0.2	U	0.21	U			0.21	U	0.22	U			0.19	U	0.2	U			0.18	U	0.19	U			0.2	U
3&4-Methylphenol(m&p Cresol)	mg/kg	41,000	0.15	UL3	0.15	UL3	0.16	UL3	0.16	UL3	0.17	UL3			0.16	UL3	0.17	UL3			0.16	U	0.16	U			0.15	U	0.15	U			0.16	U
4-Nitroaniline	mg/kg	110	0.19	UL2	0.19	UL2	0.2	UL2	0.2	UL2	0.21	UL2			0.21	UL2	0.22	UL2			0.19	UL2	0.2	UL2CLM0			0.18	UL2	0.19	UL2			0.2	U
Acenaphthene	mg/kg	45,000	**0.04**		**0.035**		**0.036**		**0.13**		**0.016**				**0.0012**	J	**0.02**				**0.0054**	J	**0.01**	R1			**0.095**		**0.023**	J			0.0079	U
Acenaphthylene	mg/kg	45,000	**0.13**		**0.14**		**0.086**		**0.012**		0.0084	U			0.0085	U	**0.00088**	J			0.0077	U	**0.0014**	JR1			**0.026**	J	**0.029**	J			**0.0077**	J
Acetophenone	mg/kg	120,000	0.078	UL3	0.075	UL3	0.079	UL3	0.078	UL3	0.084	UL3			0.082	UL3	0.086	UL3			0.078	U	0.081	U			0.074	U	0.076	U			0.079	U
Anthracene	mg/kg	230,000	**0.27**		**0.25**		**0.2**		**0.16**		**0.026**				**0.0042**	J	**0.025**				**0.0057**	J	**0.026**	M1R1			**0.37**		**0.098**				0.0079	U
Benzaldehyde	mg/kg	120,000	**0.036**	JL2	**0.028**	JL2	**0.033**	JL2	0.078	UL2	0.084	UL2			0.082	UL2	0.086	UL2			0.078	U	0.081	UR1			0.074	U	0.076	U			0.079	U
Benzo(a)anthracene	mg/kg	2.9	**0.81**		**0.85**		**0.5**		**0.39**		**0.034**				**0.0073**	J	**0.028**				**0.012**		**0.078**	M1R1			**1.4**		**0.34**				0.0079	U
Benzo(a)pyrene	mg/kg	0.29	**0.69**		**0.67**		**0.41**		**0.31**		**0.016**				**0.0021**	J	**0.012**				**0.0047**	J	**0.021**	M1			**1.2**		**0.43**		0.0084	U	0.0079	U
Benzo(b)fluoranthene	mg/kg	2.9	**1.6**	ip	**1.2**	ip	**1**	ip	**0.64**	ip	**0.053**	ip			**0.0077**	JipB	**0.035**	ip			**0.024**	ip	**0.14**	ipM1R1			**2.5**	ip	**0.76**	ip			0.0079	U
Benzo(g,h,i)perylene	mg/kg		**0.35**		**0.33**		**0.27**		**0.15**		**0.0098**				**0.0012**	J	**0.0043**	J			**0.0059**	J	**0.027**	M1R1			**0.69**		**0.28**				0.0079	U
Benzo(k)fluoranthene	mg/kg	29	**1.5**	ip	**1.1**	ip	**0.91**	ip	**0.56**	ip	**0.046**	ip			**0.0067**	JipB	**0.031**	ip			**0.02**	ip	**0.12**	ipM1R1			**2.1**	ip	**0.64**	ip			0.0079	U
Biphenyl (Diphenyl)	mg/kg	200	**0.093**		**0.1**		**0.12**		**0.1**		0.084	U			0.082	U	0.086	U			0.078	U	0.081	U			**0.039**	J	0.076	U			0.079	U
bis(2-Ethylhexyl)phthalate	mg/kg	160	0.078	U	**0.024**	J	0.079	U	**0.039**	J	0.084	U			0.082	U	0.086	U			0.078	U	0.081	U			0.074	UIS	0.076	UIS			0.079	U
Carbazole	mg/kg		**0.13**		**0.11**		**0.15**		**0.075**	J	0.084	U			0.082	U	0.086	U			0.078	U	0.081	U			**0.063**	J	**0.029**	J			0.079	U
Chrysene	mg/kg	290	**0.78**		**0.85**		**0.58**		**0.36**		**0.029**				**0.0056**	J	**0.021**				**0.018**		**0.098**	M1R1			**1.4**		**0.3**				0.0079	U
Dibenz(a,h)anthracene	mg/kg	0.29	**0.12**		**0.11**		**0.088**		**0.05**		**0.0031**	J			0.0085	U	**0.002**	J			**0.0017**	J	**0.0091**	M1			**0.22**		**0.086**				0.0079	U
Diethylphthalate	mg/kg	660,000	0.078	U	0.075	U	0.079	U	0.078	U	0.084	U			0.082	U	0.086	U			0.078	U	0.081	U			0.074	U	0.076	U			0.079	U
Di-n-butylphthalate	mg/kg	82,000	0.078	U	0.075	U	0.079	U	0.078	U	0.084	U			0.082	U	0.086	U			0.078	U	0.081	U			0.074	U	0.076	U			0.079	U
Di-n-octylphthalate	mg/kg	8,200	0.078	UIS	**0.032**	JIS	0.079	U	**0.027**	JIS	0.084	U			0.082	U	0.086	UISM1			0.078	U	0.081	U			0.074	UIS	0.076	UIS			0.079	U
Fluoranthene	mg/kg	30,000	**2**		**1.7**		**1.4**		**1**		**0.11**				**0.021**		**0.11**	M1			**0.051**		**0.4**	M1R1			**3.5**		**0.64**				**0.00063**	J
Fluorene	mg/kg	30,000	**0.057**		**0.051**		**0.038**		**0.082**		**0.009**				**0.0009**	J	**0.013**				**0.0034**	J	**0.01**	R1			**0.048**	J	**0.022**	J			0.0079	U
Hexachlorobenzene	mg/kg	0.96	0.078	U	0.075	U	0.079	U	0.078	U	0.084	U			0.082	U	0.086	U			0.078	U	0.081	U			0.074	U	0.076	U			0.079	U
Indeno(1,2,3-cd)pyrene	mg/kg	2.9	**0.34**		**0.33**		**0.27**		**0.13**		**0.0094**				0.0085	U	**0.0043**	J			**0.0057**	J	**0.028**	M1R1			**0.65**		**0.26**				0.0079	U
Naphthalene	mg/kg	17	**0.85**		**0.93**		**0.76**		**0.18**		**0.0097**	IS			0.0085	UIS	**0.011**	IS			**0.0063**	J	**0.007**	JR1			**0.11**		**0.026**	J			0.0079	U
N-Nitroso-di-n-propylamine	mg/kg	0.33	0.078	UL3	0.075	UL3	0.079	UL3	0.078	UL3	0.084	UL3			**0.074**	JL1	0.086	UL3			0.078	U	0.081	U			0.074	U	0.076	U			0.079	U
N-Nitrosodiphenylamine	mg/kg	470	0.078	UL3	0.075	UL3	0.079	UL3	0.078	UL3	0.084	UL3			0.082	UL3	0.086	UM0L3			0.078	U	0.081	U			0.074	U	0.076	U			0.079	U
Pentachlorophenol	mg/kg	4	0.19	UL2	0.19	UL2	0.2	UL2	0.2	UL2	0.21	UL2			0.21	UL2	0.22	UL2M0			0.19	U	0.2	UM1			0.18	U	0.19	U			0.2	U
Phenanthrene	mg/kg		**1.6**		**1.2**		**1.3**		**0.92**		**0.11**				**0.016**		**0.1**				**0.055**		**0.52**	M1R1			**2.8**		**0.4**				**0.00081**	J
Phenol	mg/kg	250,000	0.078	UL3	0.075	UL3	0.079	UL3	0.078	UL3	0.084	UL3			0.082	UL3	0.086	UL3			0.078	U	0.081	U			**0.032**	J	0.076	U			0.079	U
Pyrene	mg/kg	23,000	**1.5**		**1.2**		**1**		**0.97**		**0.094**				**0.017**		**0.084**				**0.037**		**0.28**	M1R1			**3.2**		**0.55**				0.0079	U
PCBs																																		
Aroclor 1242	mg/kg	0.97			0.0582	U			0.0577	U					0.0666	U					**2.64**						**2.64**						0.0581	U
Aroclor 1248	mg/kg	0.94			0.0582	U			0.0577	U					0.0666	U					0.116	U					0.116	U					0.0581	U
Aroclor 1254	mg/kg	0.97			0.0582	U			0.0577	U					0.0666	U					0.116	U					0.116	U					0.0581	U
Aroclor 1260	mg/kg	0.99			0.0582	U			0.0577	U					0.0666	U					0.116	U					0.116	U					0.0581	U
Aroclor 1262	mg/kg				**0.0771**				0.0577	U					0.0666	U					0.116	U					0.116	U					0.0581	U
Aroclor 1268	mg/kg				0.0582	U			0.0577	U					0.0666	U					0.116	U					0.116	U					0.0581	U
PCB, Total	mg/kg	0.97			**0.0771**				0.0577	U					0.0666	U					**2.64**						**2.64**						0.0581	U
TPH/Oil and Grease																																		
Diesel Range Organics	mg/kg	620	**73.7**	L2	**82.9**	L2	**62.7**	L2	**137**	L2	**36.2**	L2			**5.1**	JL2	**119**	L2M0			**11.5**	L2	**57.1**	L2M0			**66.9**	L2	**19.8**	L2			**4.3**	JL2
Gasoline Range Organics	mg/kg	620	8.2	U	9.6	U	8.4	U	10.2	U	11	U			11.3	U	10.8	U			9.4	U	11.4	U			13.8	U	8.6	U			10.4	U

Detections in bold

Blank spaces indicate that the parameter was not analyzed for this sample

*PAH compounds were analyzed via SIM

A glossary of laboratory flag keys can be viewed in the attached laboratory reports

Values in Red indicate an exceedance of the Project Action Limit (PAL)

Table 5
Summary of Organics Detected in Soil
Parcel B22
Tradepoint Atlantic
Sparrows Point, Maryland

Parameter	Units	PAL	B22-021-SB-5 Soil 5/31/2016		B22-022-SB-1 Soil 5/31/2016		B22-022-SB-7 Soil 5/31/2016		B22-023-SB-1 Soil 5/23/2016		B22-023-SB-9 Soil 5/23/2016		B22-023-SB-10 Soil 5/23/2016		B22-024-SB-1 Soil 5/23/2016		B22-024-SB-4 Soil 5/23/2016		B22-025-SB-4 Soil 5/23/2016		B22-026-SB-1 Soil 5/23/2016		B22-026-SB-9 Soil 5/23/2016		B22-027-SB-1 Soil 5/24/2016		B22-027-SB-5 Soil 5/24/2016		B22-028-SB-1 Soil 5/24/2016		B22-029-SB-1 Soil 5/24/2016		B22-029-SB-6 Soil 5/24/2016		B22-030-SB-1 Soil 5/24/2016	
Volatile Organic Compounds																																						
1,1,1-Trichloroethane	mg/kg	36,000	0.005	U	0.0057	U	0.007	U	0.0049	U	0.0054	U			**0.087**		0.0063	U	0.0078	U	0.0056	U	0.0061	U	0.0064	U	0.0058	U	0.0066	U	0.0068	U	0.006	U	0.0079	U		
1,1,2-Trichloroethane	mg/kg	5	0.005	U	0.0057	U	0.007	U	0.0049	U	0.0054	U			0.005	U	0.0063	U	0.0078	U	0.0056	U	0.0061	U	0.0064	U	0.0058	U	0.0066	U	0.0068	U	0.006	U	0.0079	U		
1,1,2-Trichlorotrifluoroethane	mg/kg	170,000	0.05	U	0.057	U	0.07	U	0.049	U	0.054	U			0.05	U	0.063	U	0.078	U	0.056	U	0.061	U	0.064	U	0.058	U	0.066	U	0.068	U	0.06	U	0.079	U		
1,1-Dichloroethane	mg/kg	16	0.005	U	0.0057	U	0.007	U	0.0049	U	0.0054	U			0.005	U	0.0063	U	0.0078	U	0.0056	U	0.0061	U	0.0064	U	0.0058	U	0.0066	U	0.0068	U	0.006	U	0.0079	U		
1,1-Dichloroethene	mg/kg	1,000	0.005	U	0.0057	U	0.007	U	0.0049	U	0.0054	U			0.005	U	0.0063	U	0.0078	U	0.0056	U	0.0061	U	0.0064	U	0.0058	U	0.0066	U	0.0068	U	0.006	U	0.0079	U		
1,2,3-Trichlorobenzene	mg/kg	930	0.005	U	0.0057	U	0.007	U	0.0049	U	0.0054	U			0.005	U	0.0063	U	0.0078	U	0.0056	U	0.0061	U	0.0064	U	0.0058	U	0.0066	U	0.0068	U	0.006	U	0.0079	U		
1,2,4-Trichlorobenzene	mg/kg	110	0.005	U	0.0057	U	0.007	U	0.0049	U	0.0054	U			0.005	U	0.0063	U	0.0078	U	0.0056	U	0.0061	U	0.0064	U	0.0058	U	0.0066	U	0.0068	U	0.006	U	0.0079	U		
1,2-Dichloroethane	mg/kg	2	0.005	U	0.0057	U	0.007	U	0.0049	U	0.0054	U			0.005	U	0.0063	U	0.0078	U	0.0056	U	0.0061	U	0.0064	U	0.0058	U	0.0066	U	0.0068	U	0.006	U	0.0079	U		
1,2-Dichloroethene (Total)	mg/kg	2,300	0.01	U	0.011	U	0.014	U	0.0098	U	0.011	U			0.01	U	0.013	U	0.016	U	0.011	U	0.012	U	0.013	U	0.012	U	0.013	U	0.014	U	0.012	U	0.016	U		
1,4-Dichlorobenzene	mg/kg	11	0.005	U	0.0057	U	0.007	U	0.0049	U	0.0054	U			0.005	U	0.0063	U	0.0078	U	0.0056	U	0.0061	U	0.0064	U	0.0058	U	0.0066	U	0.0068	U	0.006	U	0.0079	U		
1,4-Dioxane	mg/kg	24	0.1	U	0.11	U	0.14	U	0.098	U	0.11	U			0.1	U	0.13	U	0.16	U	0.11	U	0.12	U	0.13	U	0.12	U	0.13	U	0.14	U	0.12	U	0.16	U		
2-Butanone (MEK)	mg/kg	190,000	0.01	U	0.011	U	0.014	U	0.0098	U	0.011	U			0.01	U	0.013	U	0.016	U	0.011	U	**0.0038**	J	0.013	U	0.012	U	0.013	U	0.014	U	0.012	U	0.016	U		
2-Hexanone	mg/kg	1,300	0.01	U	0.011	U	0.014	U	0.0098	UL3	0.011	UL3			0.01	UL3	0.013	UL3	0.016	UL3	0.011	UL3	0.012	UL3	0.013	UL3	0.012	UL3	0.013	UL3	0.014	UL3	0.012	UL3	0.016	UL3		
4-Methyl-2-pentanone (MIBK)	mg/kg	56,000	0.01	U	0.011	U	0.014	U	0.0098	U	0.011	U			0.01	U	0.013	U	0.016	U	0.011	U	0.012	U	0.013	U	0.012	U	0.013	U	0.014	U	0.012	U	0.016	U		
Acetone	mg/kg	670,000	0.01	U	0.011	U	0.014	U	0.0098	U	**0.0087**	J			0.01	U	0.013	U	0.016	U	0.011	U	0.012	U	0.013	U	0.012	U	0.013	U	0.014	U	0.012	U	0.016	U		
Benzene	mg/kg	5.1	0.005	U	0.0057	U	0.007	U	**0.002**	J	**0.0052**	J			0.005	U	0.0063	U	0.0078	U	0.0056	U	0.0061	U	**0.0022**	J	0.0058	U	0.0066	U	0.0068	U	0.006	U	**0.0035**	J		
Chlorobenzene	mg/kg	1,300	0.005	U	0.0057	U	0.007	U	0.0049	U	0.0054	U			0.005	U	0.0063	U	0.0078	U	0.0056	U	0.0061	U	0.0064	U	0.0058	U	0.0066	U	0.0068	U	0.006	U	0.0079	U		
Chloroethane	mg/kg	57,000	0.005	U	0.0057	U	0.007	U	0.0049	U	0.0054	U			0.005	U	0.0063	U	0.0078	U	0.0056	U	0.0061	U	0.0064	U	0.0058	U	0.0066	U	0.0068	U	0.006	U	0.0079	U		
Chloroform	mg/kg	1.4	0.005	U	0.0057	U	0.007	U	0.0049	U	0.0054	U			0.005	U	0.0063	U	0.0078	U	0.0056	U	0.0061	U	0.0064	U	0.0058	U	0.0066	U	0.0068	U	0.006	U	0.0079	U		
cis-1,2-Dichloroethene	mg/kg	2,300	0.005	U	0.0057	U	0.007	U	0.0049	U	0.0054	U			0.005	U	0.0063	U	0.0078	U	0.0056	U	0.0061	U	0.0064	U	0.0058	U	0.0066	U	0.0068	U	0.006	U	0.0079	U		
Cyclohexane	mg/kg	27,000	0.01	U	0.011	U	0.014	U	0.0098	U	0.011	U			0.01	U	0.013	U	0.016	U	0.011	U	0.012	U	0.013	U	0.012	U	0.013	U	0.014	U	0.012	U	0.016	U		
Ethylbenzene	mg/kg	25	0.005	U	0.0057	U	0.007	U	0.0049	U	**0.0053**	J			0.005	U	0.0063	U	0.0078	U	0.0056	U	0.0061	U	0.0064	U	0.0058	U	0.0066	U	0.0068	U	0.006	U	0.0079	U		
Isopropylbenzene (Cumene)	mg/kg	9,900	0.005	U	0.0057	U	0.007	U	0.0049	U	0.0054	U			0.005	U	0.0063	U	0.0078	U	0.0056	U	0.0061	U	0.0064	U	0.0058	U	0.0066	U	0.0068	U	0.006	U	0.0079	U		
Methyl acetate	mg/kg	1,200,000	0.05	U	0.057	U	0.07	U	0.049	U	0.054	U			0.05	U	0.063	U	0.078	U	0.056	U	0.061	U	0.064	U	0.058	U	0.066	U	0.068	U	0.06	U	0.079	U		
Methylene Chloride	mg/kg	1,000	0.005	U	0.0057	U	0.007	U	0.0049	U	0.0054	U			0.005	U	0.0063	U	0.0078	U	0.0056	U	0.0061	U	0.0064	U	0.0058	U	0.0066	U	0.0068	U	0.006	U	0.0079	U		
Styrene	mg/kg	35,000	0.005	U	0.0057	U	0.007	U	0.0049	U	0.0054	U			0.005	U	0.0063	U	0.0078	U	0.0056	U	0.0061	U	0.0064	U	0.0058	U	0.0066	U	0.0068	U	0.006	U	0.0079	U		
Tetrachloroethene	mg/kg	100	0.005	U	0.0057	U	0.007	U	0.0049	U	0.0054	U			0.005	U	0.0063	U	0.0078	U	0.0056	U	0.0061	U	0.0064	U	0.0058	U	0.0066	U	0.0068	U	0.006	U	0.0079	U		
Toluene	mg/kg	47,000	0.005	U	0.0057	U	0.007	U	0.0049	U	**0.0089**				**0.0016**	J	**0.0026**	J	0.0078	U	0.0056	U	**0.0025**	J	0.0064	U	0.0058	U	0.0066	U	0.0068	U	0.006	U	0.0079	U		
trans-1,2-Dichloroethene	mg/kg	23,000	0.005	U	0.0057	U	0.007	U	0.0049	U	0.0054	U			0.005	U	0.0063	U	0.0078	U	0.0056	U	0.0061	U	0.0064	U	0.0058	U	0.0066	U	0.0068	U	0.006	U	0.0079	U		
Trichloroethene	mg/kg	6	0.005	U	0.0057	U	0.007	U	0.0049	U	0.0054	U			0.005	U	0.0063	U	0.0078	U	0.0056	U	0.0061	U	0.0064	U	0.0058	U	0.0066	U	0.0068	U	0.006	U	0.0079	U		
Trichlorofluoromethane	mg/kg	3,100	0.005	U	0.0057	U	0.007	U	0.0049	U	0.0054	U			0.005	U	0.0063	U	0.0078	U	0.0056	U	0.0061	U	0.0064	U	0.0058	U	0.0066	U	0.0068	U	0.006	U	0.0079	U		
Vinyl chloride	mg/kg	1.7	0.005	U	0.0057	U	0.007	U	0.0049	U	0.0054	U			0.005	U	0.0063	U	0.0078	U	0.0056	U	0.0061	U	0.0064	U	0.0058	U	0.0066	U	0.0068	U	0.006	U	0.0079	U		
Xylene (Total)	mg/kg	2,800	0.015	U	0.017	U	0.021	U	0.015	U	**0.0056**	J			0.015	U	0.019	U	0.023	U	0.017	U	0.018	U	0.019	U	0.017	U	0.02	U	0.02	U	0.018	U	0.024	U		
Semi-Volatile Organic Compounds*																																						
1,2,4,5-Tetrachlorobenzene	mg/kg	350	0.084	U	0.075	U	0.071	UL3	0.078	U	0.072	U			0.077	U	0.077	U	0.07	U	0.076	U	0.074	U	0.079	UL3	0.072	UL3	0.077	UL3	0.073	UL3	0.074	UL3	0.073	UL3		
2,4-Dimethylphenol	mg/kg	16,000	0.084	U	0.075	U	0.071	U	0.078	U	0.072	U			0.077	U	0.077	U	**0.024**	J	0.076	U	0.074	U	0.079	U	0.072	U	0.077	U	0.073	U	0.074	U	0.073	U		
2-Chloronaphthalene	mg/kg	60,000	0.084	U	0.075	U	0.071	U	0.078	U	0.072	U			0.077	U	0.077	U	0.07	U	0.076	U	**0.06**	J	0.079	UL3	0.072	UL3	0.077	UL3	0.073	UL3	0.074	UL3	0.073	UL3		
2-Methylnaphthalene	mg/kg	3,000	0.017	U	0.0075	U	0.0072	U	**0.061**	J	**0.046**	J			**0.049**		**0.052**	J	**0.024**		**0.26**	IS	**0.02**		**0.0064**	J	**0.012**		0.078	U	0.0074	U	**0.04**		**0.12**			
2-Methylphenol(o-Cresol)	mg/kg	41,000	0.084	U	0.075	U	0.071	UL3	0.078	U	0.072	U			0.077	U	0.077	U	0.07	U	0.076	U	0.074	U	0.079	U	0.072	U	0.077	U	0.073	U	0.074	U	0.073	U		
2-Nitroaniline	mg/kg	8,000	0.21	U	0.19	U	0.18	U	0.2	U	0.18	U			0.19	U	0.19	U	0.17	U	0.19	U	0.19	U	0.2	UL3	0.18	UL3	0.19	UL3	0.18	UL3	0.19	UL3	0.18	UL3		
3&4-Methylphenol(m&p Cresol)	mg/kg	41,000	0.17	U	0.15	U	0.14	UL3	0.16	U	0.14	U			0.15	U	0.15	U	0.14	U	0.15	U	0.15	U	0.16	U	0.14	U	0.15	U	0.15	U	0.15	U	0.15	U		
4-Nitroaniline	mg/kg	110	0.21	U	0.19	U	0.18	UL2	0.2	U	0.18	U			0.19	U	0.19	U	0.17	U	0.19	U	0.19	U	0.2	UL3	0.18	UL3	0.19	UL3	0.18	UL3	0.19	UL3	0.18	UL3		
Acenaphthene	mg/kg	45,000	0.017	U	**0.00083**	J	0.0072	U	**0.0075**	J	**0.45**				**0.0077**	J	**0.15**		**0.011**		**0.012**		**0.0016**	J	0.008	U	**0.012**		0.078	U	0.0074	U	**0.042**		**0.0031**	J		
Acenaphthylene	mg/kg	45,000	0.017	U	**0.00071**	J	0.0072	U	**0.083**		**0.12**				**0.033**		**0.15**		**0.015**		**0.05**		**0.048**		0.008	U	**0.0018**	J	**0.03**	J	0.0074	U	**0.055**		**0.044**			
Acetophenone	mg/kg	120,000	0.084	U	0.075	U	0.071	UL3	0.078	U	0.072	U			0.077	U	0.077	U	0.07	U	**0.023**	J	0.074	U	0.079	U	0.072	U	**0.039**	J	0.073	U	0.074	U	0.073	U		
Anthracene	mg/kg	230,000	0.017	U	**0.0034**	J	0.0072	U	**0.13**		**2**				**0.068**		**0.92**		**0.028**		**0.22**		**0.017**		**0.0012**	J	**0.083**		**0.032**	J	**0.0016**	J	**0.37**		**0.046**			
Benzaldehyde	mg/kg	120,000	0.084	U	0.075	U	0.071	UL2	**0.49**	L2	0.072	UL2			**0.11**	L2	**0.035**	JL2	0.07	UL2	**0.058**	JL2	**0.019**	JL2	0.079	UL2	0.072	UL2	**0.064**	JL2	0.073	UL2	0.074	UL2	0.073	UL2		
Benzo(a)anthracene	mg/kg	2.9	0.017	U	**0.0063**	J	0.0072	U	**0.51**		4.9		**0.8**		**0.38**		**2.6**		**0.079**		**1.1**		**0.039**		**0.0044**	J	**0.13**		**0.074**	J	**0.011**		**2.2**		**0.25**			
Benzo(a)pyrene	mg/kg	0.29	0.017	U	**0.0045**	J	0.0072	U	0.43		3.5		0.57		**0.27**		1.7		**0.085**		0.88		**0.03**		**0.003**	J	**0.11**		**0.089**		**0.0099**		1.2		**0.19**			
Benzo(b)fluoranthene	mg/kg	2.9	0.017	U	**0.02**	ip	**0.0015**	Jip	**1**	ip	5.6		**1.3**	ip	**0.68**	ip	3.6	ip	**0.25**	ip	**1.5**		**0.073**	ip	**0.008**	ip	**0.28**	ip	**0.35**	ip	**0.029**	ip	3.2	ip	**0.57**	ip		
Benzo(g,h,i)perylene	mg/kg		0.017	U	**0.0052**	J	0.0072	U	**0.27**		**1.8**				**0.14**		**0.89**		**0.047**		**0.36**		**0.016**		**0.0016**	J	**0.048**		**0.073**	J	**0.0046**	J	**0.35**		**0.11**			
Benzo(k)fluoranthene	mg/kg	29	0.017	U	**0.017**	ip	**0.0014**	Jip	**0.87**	ip	**1.9**				**0.59**	ip	**3.1**	ip	**0.21**	ip	**0.49**		**0.063**	ip	**0.007**	Jip	**0.24**	ip	**0.31**	ip	**0.026**	ip	**3.2**	ip	**0.5**	ip		
Biphenyl (Diphenyl)	mg/kg	200	0.084	U	0.075	U	0.071	U	0.078	U	**0.047**	J			**0.021**	J	**0.036**	J	**0.022**	J	**0.031**	J	0.074	U	0.079	U	0.072	U	0.077	U	0.073	U	0.074	U	0.073	U		
bis(2-Ethylhexyl)phthalate	mg/kg	160	0.084	U	0.075	U	0.071	UL2	**0.14**	ISCL	0.072	UIS			**0.15**	ISCL	**0.049**	JISCL	**0.015**	JIS	0.076	UIS	0.074	UIS	0.079	U	0.072	U	**0.82**	IS	0.073	U	0.074	U	**0.019**	JIS		
Carbazole	mg/kg		0.084	U	0.075	U	0.071	UL2	**0.045**	J	**0.88**				**0.061**	J	**0.19**		0.07	U	**0.036**	J	0.074	U	0.079	U	**0.032**	J	**0.018**	J	0.073	U	**0.05**	J	0.073	U		
Chrysene	mg/kg	290	0.017	U	**0.019**		**0.00088**	J	**0.47**		**4.4**				**0.38**		**2.1**		**0.12**		**1**		**0.047**		**0.0046**	J	**0.14**		**0.26**		**0.015**		**1.4**		**0.3**			
Dibenz(a,h)anthracene	mg/kg	0.29	0.017	U	**0.0016**	J	0.0072	U	**0.11**		0.84		**0.16**		**0.068**		0.41		**0.021**		**0.16**		**0.0061**	J	0.008	U	**0.016**		**0.022**	J	**0.002**	J	**0.2**		**0.047**			
Diethylphthalate	mg/kg	660,000	0.084	U	0.075	U	0.071	U	0.078	U	0.072	U			0.077	U	0.077	U	0.07	U	0.076	U	0.074	U	0.079	UL3	0.072	UL3	0.077	UL3	0.073	UL3	0.074	UL3	0.073	UL3		
Di-n-butylphthalate	mg/kg	82,000	0.084	U	0.075	U	0.071	U	0.078	U	0.072	U			0.077	U	0.077	U	0.07	U	0.076	U	0.074	U	0.079	U	0.072	U	**0.095**		0.073	U	0.074	U	0.073	U		
Di-n-octylphthalate	mg/kg	8,200	0.084	U	0.075	U	0.071	U	**0.031**	JISCL	0.072	UIS			**0.05**	JISCL	0.077	UIS	0.07	UIS	0.076	UIS	0.074	UIS	0.079	U	0.072	U	0.077	UIS	0.073	U	0.074	UIS	0.073	UIS		
Fluoranthene	mg/kg	30,000	**0.0016**	J	**0.042**		**0.001**	J	**0.86**		**9.8**				**0.69**		**4.4**		**0.085**		**1.4**		**0.083**		**0.0069**	J	**0.37**		**0.29**		**0.019**		**3**		**0.41**			
Fluorene	mg/kg	30,000	0.017	U	0.0075	U	0.0072	U	**0.019**	J	**0.49**				**0.013**		**0.25**		**0.0055**	J	**0.008**		**0.0039**	J	0.008	U	**0.002**	J	0.078	U	0.0074	U	**0.083**		**0.0051**	J		
Hexachlorobenzene	mg/kg	0.96	0.084	U	0.075	U	0.071	U	0.078	U	0.072	U			0.077	U	0.077	U	0.07	U	0.076	U	0.074	U	0.079	UL3	0.072	UL3	0.077	UL3	0.073	UL3	0.074	UL3	0.073	UL3		
Indeno(1,2,3-cd)pyrene	mg/kg	2.9	0.017	U	**0.0033**	J	0.0072	U	**0.25**		**1.8**				**0.15**		**0.91**		**0.048**		**0.42**		**0.013**		**0.0012**	J	**0.05**		**0.046**	J	**0.0051**	J	**0.41**		**0.11**			
Naphthalene	mg/kg	17	**0.0064**	J	**0.0024**	J	0.0072	U	**0.1**		**0.043**	J			**0.16**		**0.1**		**0.043**		**0.24**	IS	**0.076**		**0.0039**	J	**0.0075**		0.078	U	0.0074	U	**0.067**		**0.14**			
N-Nitroso-di-n-propylamine	mg/kg	0.33	0.084	U	0.075	U	0.071	UL3	0.078	U	0.072	U			0.077	U	0.077	U	0.07	U	0.076	U	0.074	U	0.079	U	0.072	U	0.077	U	0.073	U	0.074	U	0.073	U		
N-Nitrosodiphenylamine	mg/kg	470	0.084	U	0.075	U	0.071	U	0.078	U	0.072	U			0.077	U	0.077	U	0.07	U	0.076	U	0.074	U	0.079	U	0.072	U	0.077	U	0.073	U	0.074	U	0.073	U		
Pentachlorophenol	mg/kg	4	0.21	U	0.19	U	0.18	U	0.2	UL3	0.18	UL3			0.19	UL3	0.19	UL3	0.17	UL3	0.19	UL3	0.19	UL3	0.2	UL3	0.18	UL3	0.19	UL3	0.18	UL3	0.19	UL3	0.18	UL3		
Phenanthrene	mg/kg		**0.0033**	J	**0.012**		**0.001**	J	**0.42**		**8.5**				**0.28**		**2.9**		**0.069**		**0.91**		**0.082**		**0.0059**	J	**0.32**		**0.13**		**0.008**		**1.1**		**0.22**			
Phenol	mg/kg	250,000	0.084	U	0.075	U	0.071	UL3	0.078	U	0.072	U			0.077	U	0.077	U	0.07	U	0.076	U	0.074	U	0.079	U	0.072	U	**0.025**	J	0.073	U	0.074	U	0.073	U		
Pyrene	mg/kg	23,000	0.017	U	**0.034**		0.0072	U	**0.75**		**7.2**				**0.52**		**3.2**		**0.072**		**1.1**		**0.072**		**0.0052**	J	**0.26**		**0.5**		**0.012**		**2.4**		**0.3**			
PCBs																																						
Aroclor 1242	mg/kg	0.97			0.057	U			0.0569	U					0.0667	U					0.0572	U			0.0647	U			1.82	U	0.0565	U			0.0571	U		
Aroclor 1248	mg/kg	0.94			0.057	U			0.0569	U					**0.0938**						0.0572	U			0.0647	U			1.82	U	0.0565	U			0.0571	U		
Aroclor 1254	mg/kg	0.97			0.057	U			**0.0424**	J					**0.0839**						0.0572	U			0.0647	U			1.82	U	0.0565	U			0.0571	U		
Aroclor 1260	mg/kg	0.99			0.057	U			0.0569	U					0.0667	U					0.0572	U			0.0647	U			1.82	U	0.0565	U			0.0571	U		
Aroclor 1262	mg/kg				0.057	U			0.0569	U					**0.115**						0.0572	U			0.0647	U			1.82	U	0.0565	U			0.0571	U		
Aroclor 1268	mg/kg				0.057	U			0.0569	U					0.0667	U					**0.432**				0.0647	U			**74.4**		**0.14**				**0.111**			
PCB, Total	mg/kg	0.97			0.057	U			**0.0424**	J					**0.2927**						**0.432**				0.0647	U			74.4		**0.14**				**0.111**			
TPH/Oil and Grease																																						
Diesel Range Organics	mg/kg	620	**4.7**	JL2	**45.5**	L2	**14.5**	L2	**138**	L2	**133**	L2			**71**	L2	**110**	L2	**134**	L2	**30.6**	L2	**26.1**	L2	**6.4**	JL2	**14.6**	L2	**560**	L2	**16**	L2	**44.8**	L2	**32.9**	L2		
Gasoline Range Organics	mg/kg	620	11.9	U	14.7	U	13.1	U	10.4	U	**20.4**				10.1	U	11.5	U	9.9	U	12.1	U	12.9	U	12.2	U	11.4	U	15.1	U	12.3	U	12.8	U	13.2	U		

Detections in bold

Blank spaces indicate that the parameter was not analyzed for this sample

*PAH compounds were analyzed via SIM

A glossary of laboratory flag keys can be viewed in the attached laboratory reports

Values in Red indicate an exceedance of the Project Action Limit (PAL)

Table 5
Summary of Organics Detected in Soil
Parcel B22
Tradepoint Atlantic
Sparrows Point, Maryland

Parameter	Units	PAL	B22-030-SB-5		B22-030-SB-10		B22-031-SB-1		B22-031-SB-4		B22-031-SB-10		B22-032-SB-1		B22-032-SB-4		B22-032-SB-10		B22-033-SB-1		B22-034-SB-1		B22-035-SB-1		B22-036-SB-1		B22-036-SB-4		B22-037-SB-1		B22-038-SB-1		B22-039A-SB-3	
			Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
			5/24/2016		5/24/2016		5/19/2016		5/19/2016		5/19/2016		5/23/2016		5/23/2016		5/23/2016		5/24/2016		5/25/2016		5/26/2016		5/26/2016		5/26/2016		6/3/2016		6/3/2016		6/1/2016	
Volatile Organic Compounds																																
1,1,1-Trichloroethane	mg/kg	36,000	0.0082	U			0.0056	U	0.0051	U			0.0054	U	0.0045	U			0.0048	U	0.0025	U	0.0051	U	0.0043	U	0.0046	U	0.0055	U1c	0.0046	U1c		
1,1,2-Trichloroethane	mg/kg	5	0.0082	U			0.0056	U	0.0051	U			0.0054	U	0.0045	U			0.0048	U	0.0025	U	0.0051	U	0.0043	U	0.0046	U	0.0055	U1c	0.0046	U1c		
1,1,2-Trichlorotrifluoroethane	mg/kg	170,000	0.082	U			0.056	U	0.051	U			0.054	U	0.045	U			0.048	U	0.025	U	0.051	U	0.043	U	0.046	U	0.055	U1c	0.046	U1c		
1,1-Dichloroethane	mg/kg	16	0.0082	U			0.0056	U	0.0051	U			0.0054	U	0.0045	U			0.0048	U	0.0025	U	0.0051	U	0.0043	U	0.0046	U	0.0055	U1c	0.0046	U1c		
1,1-Dichloroethene	mg/kg	1,000	0.0082	U			0.0056	U	0.0051	U			0.0054	U	0.0045	U			0.0048	U	0.0025	U	0.0051	U	0.0043	U	0.0046	U	0.0055	U1c	0.0046	U1c		
1,2,3-Trichlorobenzene	mg/kg	930	0.0082	U			0.0056	U	0.0051	U			0.0054	U	0.0045	U			0.0048	U	0.0025	U	0.0051	U	0.0043	U	0.0046	U	0.0055	U1c	0.0046	U1c		
1,2,4-Trichlorobenzene	mg/kg	110	0.0082	U			0.0056	U	0.0051	U			0.0054	U	0.0045	U			0.0048	U	0.0025	U	0.0051	U	0.0043	U	0.0046	U	0.0055	U1c	0.0046	U1c		
1,2-Dichloroethane	mg/kg	2	0.0082	U			0.0056	U	0.0051	U			0.0054	U	0.0045	U			0.0048	U	0.0025	U	0.0051	U	0.0043	U	0.0046	U	0.0055	U1c	0.0046	U1c		
1,2-Dichloroethene (Total)	mg/kg	2,300	0.016	U			0.011	U	0.01	U			0.011	U	0.009	U			0.0096	U	0.005	U	0.01	U	0.0086	U	0.0091	U	0.011	U	0.0092	U		
1,4-Dichlorobenzene	mg/kg	11	0.0082	U			0.0056	U	0.0051	U			0.0054	U	0.0045	U			0.0048	U	0.0025	U	0.0051	U	0.0043	U	0.0046	U	0.0055	U1c	0.0046	U1c		
1,4-Dioxane	mg/kg	24	0.16	U			0.11	U	0.1	U			0.11	U	0.09	U			0.096	U	0.05	U	0.1	U	0.086	U	0.091	U	0.11	U1c	0.092	U1c		
2-Butanone (MEK)	mg/kg	190,000	0.016	U			0.011	U	0.01	U			0.011	U	**0.0026**	J			0.0096	U	0.005	U	0.01	U	**0.003**	J	**0.0026**	J	0.011	U1c	0.0092	U1c		
2-Hexanone	mg/kg	1,300	0.016	UL3			0.011	UL3	0.01	UL3			0.011	UL3	0.009	UL3			0.0096	UL3	0.005	U	0.01	U	0.0086	UL3	0.0091	UL3	0.011	U1c	0.0092	U1c		
4-Methyl-2-pentanone (MIBK)	mg/kg	56,000	0.016	U			0.011	UL3	0.01	UL3			0.011	U	0.009	U			0.0096	U	0.005	U	0.01	U	0.0086	UL3	0.0091	UL3	0.011	U1c	0.0092	U1c		
Acetone	mg/kg	670,000	0.016	U			**0.0096**	J	**0.01**				0.011	U	0.009	U			0.0096	U	0.005	U	0.01	U	**0.034**		**0.057**		0.011	U1c	0.0092	U1c		
Benzene	mg/kg	5.1	0.0082	U			0.0056	U	0.0051	U			0.0054	U	0.0045	U			0.0048	U	0.0025	U	0.0051	U	**0.0019**	J	**0.0014**	J	0.0055	U1c	0.0046	U1c		
Chlorobenzene	mg/kg	1,300	0.0082	U			0.0056	U	0.0051	U			0.0054	U	0.0045	U			0.0048	U	0.0025	U	0.0051	U	0.0043	U	0.0046	U	0.0055	U1c	0.0046	U1c		
Chloroethane	mg/kg	57,000	0.0082	U			0.0056	U	0.0051	U			0.0054	U	0.0045	U			0.0048	U	0.0025	U	0.0051	U	0.0043	U	0.0046	U	0.0055	U1c	0.0046	U1c		
Chloroform	mg/kg	1.4	0.0082	U			0.0056	U	0.0051	U			0.0054	U	0.0045	U			0.0048	U	0.0025	U	0.0051	U	0.0043	U	0.0046	U	0.0055	U1c	0.0046	U1c		
cis-1,2-Dichloroethene	mg/kg	2,300	0.0082	U			0.0056	U	0.0051	U			0.0054	U	0.0045	U			0.0048	U	0.0025	U	0.0051	U	0.0043	U	0.0046	U	0.0055	U1c	0.0046	U1c		
Cyclohexane	mg/kg	27,000	0.016	U			0.011	U	0.01	U			0.011	U	0.009	U			0.0096	U	0.005	U	0.01	U	0.0086	U	0.0091	U	0.011	U1c	0.0092	U1c		
Ethylbenzene	mg/kg	25	0.0082	U			0.0056	U	0.0051	U			0.0054	U	**0.0022**	J			0.0048	U	0.0025	U	0.0051	U	0.0043	U	0.0046	U	0.0055	U1c	0.0046	U1c		
Isopropylbenzene (Cumene)	mg/kg	9,900	0.0082	U			0.0056	U	0.0051	U			0.0054	U	0.0045	U			0.0048	U	0.0025	U	0.0051	U	0.0043	U	0.0046	U	0.0055	U1c	0.0046	U1c		
Methyl acetate	mg/kg	1,200,000	0.082	U			0.056	U	0.051	U			0.054	U	0.045	U			0.048	U	0.025	U	0.051	U	0.043	U	0.046	U	0.055	U1c	0.046	U1c		
Methylene Chloride	mg/kg	1,000	0.0082	U			0.0056	U	0.0051	U			0.0054	U	0.0045	U			0.0048	U	0.0025	U	0.0051	U	0.0043	U	0.0046	U	0.0055	U1c	0.0046	U1c		
Styrene	mg/kg	35,000	0.0082	U			0.0056	U	0.0051	U			0.0054	U	0.0045	U			0.0048	U	0.0025	U	0.0051	U	0.0043	UL2	0.0046	UL2	0.0055	U1c	0.0046	U1c		
Tetrachloroethene	mg/kg	100	0.0082	U			0.0056	U	0.0051	U			0.0054	U	0.0045	U			0.0048	U	0.0025	U	0.0051	U	0.0043	U	0.0046	U	0.0055	U1c	0.0046	U1c		
Toluene	mg/kg	47,000	0.0082	U			0.0056	U	0.0051	U			0.0054	U	**0.0038**	J			0.0048	U	0.0025	U	0.0051	U	0.0043	U	0.0046	U	0.0055	U1c	0.0046	U1c		
trans-1,2-Dichloroethene	mg/kg	23,000	0.0082	U			0.0056	U	0.0051	U			0.0054	U	0.0045	U			0.0048	U	0.0025	U	0.0051	U	0.0043	U	0.0046	U	0.0055	U1c	0.0046	U1c		
Trichloroethene	mg/kg	6	0.0082	U			0.0056	U	0.0051	U			0.0054	U	0.0045	U			0.0048	U	0.0025	U	0.0051	U	0.0043	U	0.0046	U	0.0055	U1c	0.0046	U1c		
Trichlorofluoromethane	mg/kg	3,100	0.0082	U			0.0056	U	0.0051	U			0.0054	U	0.0045	U			0.0048	U	0.0025	U	0.0051	U	0.0043	U	0.0046	U	0.0055	U1c	0.0046	U1c		
Vinyl chloride	mg/kg	1.7	0.0082	U			0.0056	U	0.0051	U			0.0054	U	0.0045	U			0.0048	U	0.0025	U	0.0051	U	0.0043	U	0.0046	U	0.0055	U1c	0.0046	U1c		
Xylene (Total)	mg/kg	2,800	0.025	U			0.017	U	0.015	U			0.016	U	0.014	U			0.014	U	0.0075	U	0.015	U	0.013	U	0.014	U	0.016	U	0.014	U		
Semi-Volatile Organic Compounds*																																
1,2,4,5-Tetrachlorobenzene	mg/kg	350	**0.023**	JL1			0.07	U	0.071	U			0.069	U	0.072	UM1			0.074	UL3	0.073	U	0.077	U	0.072	U	0.076	U	0.075	U	0.073	U	0.088	UL3
2,4-Dimethylphenol	mg/kg	16,000	0.074	U			0.07	U	0.071	UM1			0.069	U	0.072	U			0.074	U	0.073	U	0.077	U	0.072	U	0.076	U	0.075	U	0.073	U	**10.9**	
2-Chloronaphthalene	mg/kg	60,000	0.074	UL3			0.07	U	0.071	U			0.069	U	0.072	U			0.074	UL3	0.073	U	0.077	U	0.072	U	0.076	U	0.075	U	0.073	U	0.088	UL3
2-Methylnaphthalene	mg/kg	3,000	**0.11**	IS			**0.059**		**0.15**	M1			**0.023**		**0.012**	R1			**0.0086**		**0.0062**	J	**0.0099**		**0.077**		**0.024**		0.076	U	**0.28**		0.43	U
2-Methylphenol(o-Cresol)	mg/kg	41,000	0.074	U			0.07	UL3	0.071	UL3			0.069	U	0.072	U			0.074	U	0.073	U	0.077	U	0.072	U	0.076	U	0.075	U	0.073	U	0.088	UL3
2-Nitroaniline	mg/kg	8,000	0.19	UL3			0.18	UL3	0.18	UL3			0.17	U	0.18	U			0.19	UL3	0.18	U	0.19	U	0.18	U	0.19	U	0.19	U	0.18	U	0.22	UL3
3&4-Methylphenol(m&p Cresol)	mg/kg	41,000	0.15	U			0.14	UL3	0.14	UL3			0.14	U	0.14	U			0.15	U	0.15	U	0.15	U	0.14	U	0.15	U	0.15	U	0.14	U	**14.3**	L1
4-Nitroaniline	mg/kg	110	0.19	UL3			0.18	U	0.18	UM1			0.17	U	0.18	UM1			0.19	UL3	0.18	UL3	0.19	U	0.18	U	0.19	U	0.19	U	0.18	UL2	0.22	U
Acenaphthene	mg/kg	45,000	**0.0036**	J			**0.013**		**0.011**				**0.001**	J	**0.0025**	J			**0.003**	J	**0.0013**	J	**0.0011**	J	**0.0057**	J	**0.0019**	J	0.076	U	**0.049**		**0.21**	J
Acenaphthylene	mg/kg	45,000	**0.055**				**0.039**		**0.15**	M1R1			**0.0063**	J	**0.014**				**0.0059**	J	**0.0014**	J	0.008	U	**0.0088**		**0.0044**	J	**0.019**	J	**0.24**		0.43	U
Acetophenone	mg/kg	120,000	0.074	U			0.07	U	0.071	U			0.069	U	0.072	U			0.074	U	0.073	U	0.077	U	0.072	U	0.076	U	0.075	U	**0.026**	J	0.088	U
Anthracene	mg/kg	230,000	**0.074**				**0.042**		**0.18**	M1R1			**0.016**		**0.031**	M1R1			**0.015**		**0.009**		**0.0099**		**0.023**		**0.012**		**0.039**	J	**0.34**		**0.13**	J
Benzaldehyde	mg/kg	120,000	**0.021**	JL2			0.07	UL2	0.071	UL2			0.069	UL2	0.072	UL2M0			0.074	UL2	0.073	UL2	0.077	UL2	0.072	UL2	0.076	UL2	0.075	UL2	0.073	UL2	0.088	UL2
Benzo(a)anthracene	mg/kg	2.9	**0.61**				**0.25**		**0.59**	M1			**0.049**		**0.19**	M1R1			**0.073**		**0.044**		**0.031**		**0.11**		**0.062**		**0.17**		**1.2**		0.43	U
Benzo(a)pyrene	mg/kg	0.29	**0.54**		0.0084	U	**0.22**		**0.49**	M1	**0.52**		**0.044**		**0.17**	M1R1	**0.023**		**0.09**		**0.059**		**0.033**		**0.12**		**0.066**		**0.15**		**1.1**		0.43	U
Benzo(b)fluoranthene	mg/kg	2.9	**1.3**	ip			**0.64**	ip	**1.3**	ip			**0.13**	ip	**0.36**	ipM1R1			**0.24**	ip	**0.12**	ip	**0.068**	ip	**0.24**	ip	**0.14**	ip	**0.42**	ip	**2**	ip	**0.47**	
Benzo(g,h,i)perylene	mg/kg		**0.24**				**0.16**		**0.24**	M1			**0.037**		**0.097**	M1			**0.067**		**0.052**		**0.017**		**0.082**		**0.047**		**0.096**		**0.75**		**0.07**	J
Benzo(k)fluoranthene	mg/kg	29	**1.2**	ip			**0.53**	ip	**1**	ipM1R1			**0.11**	ip	**0.32**	ipM1			**0.21**	ip	**0.11**	ip	**0.059**	ip	**0.24**	ip	**0.14**	ip	**0.35**	ip	**1.7**	ip	0.43	U
Biphenyl (Diphenyl)	mg/kg	200	0.074	U			0.07	U	**0.016**	J			0.069	U	0.072	U			0.074	U	0.073	U	0.077	U	0.072	U	0.076	U	0.075	U	**0.084**		0.088	UL3
bis(2-Ethylhexyl)phthalate	mg/kg	160	0.074	UIS			0.07	UL3	**0.019**	JISL1M0R1			0.069	U	0.072	UISM1			**0.022**	J	0.073	UL3	0.077	U	0.072	U	0.076	U	0.075	UISL2	0.073	U	**1.1**	ISL1
Carbazole	mg/kg		**0.037**	J			**0.019**	J	**0.038**	JM1			0.069	U	0.072	U			0.074	U	0.073	U	0.077	U	0.072	U	0.076	U	0.075	UL2	**0.13**		0.88	U
Chrysene	mg/kg	290	**0.58**				**0.38**		**0.6**	M1			**0.078**		**0.18**	M1R1			**0.1**		**0.05**		**0.026**		**0.13**		**0.08**		**0.18**		**1.1**		**1**	
Dibenz(a,h)anthracene	mg/kg	0.29	**0.096**				**0.069**		**0.12**	M1			**0.013**		**0.037**	R1			**0.02**		**0.011**		**0.0067**	J	**0.028**		**0.016**		**0.032**	J	**0.26**		0.43	U
Diethylphthalate	mg/kg	660,000	0.074	UL3			0.07	UL3	0.071	UL3			0.069	U	0.072	UM1			0.074	UL3	0.073	UL3	0.077	U	0.072	U	0.076	U	0.075	U	0.073	U	0.088	UL3
Di-n-butylphthalate	mg/kg	82,000	0.074	U			0.07	UL3	0.071	UL3			0.069	U	0.072	U			0.074	U	0.073	UL3	0.077	U	0.072	U	0.076	U	0.075	UL2	0.073	U	0.88	UL3
Di-n-octylphthalate	mg/kg	8,200	0.074	UIS			0.07	UL3	0.071	UISM0L3			0.069	U	0.072	UISM1			**0.023**	JIS	0.073	UL3	0.077	U	0.072	U	0.076	U	0.075	UIS	0.073	UIS	0.088	UISL3
Fluoranthene	mg/kg	30,000	**0.78**				**0.6**		**1**	M1			**0.12**		**0.36**	M1R1			**0.14**		**0.06**		**0.051**		**0.21**		**0.12**		**0.31**		**1.6**		**0.84**	
Fluorene	mg/kg	30,000	**0.0046**	J			**0.0089**		**0.023**				**0.0018**	J	**0.0054**	J			**0.0026**	J	**0.0011**	J	**0.0011**	J	**0.0096**		**0.0019**	J	0.076	U	**0.076**		**0.072**	J
Hexachlorobenzene	mg/kg	0.96	0.074	UL3			0.07	U	0.071	U			0.069	U	0.072	UM1			0.074	UL3	0.073	U	0.077	U	0.072	U	0.076	U	0.075	U	0.073	U	0.088	U
Indeno(1,2,3-cd)pyrene	mg/kg	2.9	**0.26**				**0.17**		**0.27**	M1			**0.032**		**0.092**	M1			**0.058**		**0.04**		**0.016**		**0.077**		**0.044**		**0.093**		**0.73**		0.43	U
Naphthalene	mg/kg	17	**0.11**	IS			**0.08**		**0.14**	M1			**0.11**		**0.021**	R1			**0.016**		**0.0098**		**0.014**		**0.13**		**0.028**		0.076	U	**0.07**		**0.3**	J
N-Nitroso-di-n-propylamine	mg/kg	0.33	0.074	U			0.07	U	0.071	U			0.069	U	0.072	U			0.074	U	0.073	U	0.077	U	0.072	U	0.076	U	0.075	U	0.073	U	0.088	UL3
N-Nitrosodiphenylamine	mg/kg	470	0.074	U			0.07	U	0.071	U			0.069	U	0.072	U			0.074	U	0.073	U	0.077	U	0.072	U	0.076	U	0.075	U	0.073	UL3	0.088	UL3
Pentachlorophenol	mg/kg	4	0.19	UL3			0.18	UL3	0.18	UM0L3			0.17	UL3	0.18	UM0L3			0.19	UL3	0.18	UL3	0.19	UL3	0.18	UL3	0.19	UL3	0.19	UL2	0.18	UL3	2.2	U
Phenanthrene	mg/kg		**0.28**				**0.14**		**0.39**	M1			**0.074**		**0.11**	M1R1			**0.055**		**0.029**		**0.029**		**0.16**		**0.086**		**0.11**		**1**		**0.86**	
Phenol	mg/kg	250,000	0.074	U			0.07	UL3	0.071	UL3			0.069	U	0.072	U			0.074	U	0.073	U	0.077	U	0.072	U	0.076	U	0.075	U	0.073	U	**14.4**	L1
Pyrene	mg/kg	23,000	**0.63**				**0.49**		**0.92**	M1			**0.089**		**0.3**	M1R1			**0.12**		**0.057**		**0.041**		**0.18**		**0.1**		**0.31**		**1.6**		**0.62**	
PCBs																																
Aroclor 1242	mg/kg	0.97					0.0605	U					0.567	U					0.0598	U	0.0533	U	0.0609	U	0.0553	U			0.279	U	0.0565	U		
Aroclor 1248	mg/kg	0.94					**0.042**	J					**14.9**						0.0598	U	0.0533	U	0.0609	U	0.0553	U			0.279	U	0.0565	U		
Aroclor 1254	mg/kg	0.97					**0.0703**						0.567	U					0.0598	U	0.0533	U	0.0609	U	0.0553	U			**7.93**		**0.311**			
Aroclor 1260	mg/kg	0.99					0.0605	U					0.567	U					0.0598	U	0.0533	U	0.0609	U	0.0553	U			0.279	U	0.0565	U		
Aroclor 1262	mg/kg						0.0605	U					0.567	U					0.0598	U	0.0533	U	0.0609	U	0.0553	U			0.279	U	0.0565	U		
Aroclor 1268	mg/kg						0.0605	U					0.567	U					0.0598	U	0.0533	U	**0.251**		**0.192**				0.279	U	**0.679**			
PCB, Total	mg/kg	0.97					**0.1123**						**14.9**						0.0598	U	0.0533	U	**0.251**		**0.192**				**7.93**		**0.99**			
TPH/Oil and Grease																																
Diesel Range Organics	mg/kg	620	**38.3**	L2			**153**	L2	**135**	L2M0			**28.3**	L2	**58.5**	L2M0R1			**41.5**	L2	**18.5**	L2	**7.7**	JL2	**33.5**	L2	**21.7**	L2	**15.1**	L2	**117**	L2		
Gasoline Range Organics	mg/kg	620	19.9	U			10.5	U	12.4	U			10.4	U	10.4	U			10.1	U	9.3	U	10.1	U	9	U	9	U	10.8	U	11.9	U		

Detections in bold

Blank spaces indicate that the parameter was not analyzed for this sample

*PAH compounds were analyzed via SIM

A glossary of laboratory flag keys can be viewed in the attached laboratory reports

Values in Red indicate an exceedance of the Project Action Limit (PAL)

Table 5
Summary of Organics Detected in Soil
Parcel B22
Tradepoint Atlantic
Sparrows Point, Maryland

Parameter	Units	PAL	B22-039-SB-1		B22-039-SB-4		B22-040-SB-1		B22-040-SB-4		B22-041-SB-1		B22-041-SB-5		B22-041-SB-10		B22-042-SB-1		B22-042-SB-4		B22-042-SB-10		B22-043-SB-1		B22-043-SB-4		B22-043-SB-10		B22-044-SB-1		B22-044-SB-4		B22-045-SB-1	
			Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
			6/1/2016		6/1/2016		6/1/2016		6/1/2016		5/17/2016		5/17/2016		5/17/2016		6/1/2016		6/1/2016		6/1/2016		5/18/2016		5/18/2016		5/18/2016		6/1/2016		6/1/2016		6/1/2016	
Volatile Organic Compounds																																		
1,1,1-Trichloroethane	mg/kg	36,000	0.0069	U	0.0072	U	0.0065	U	0.0071	U	0.0053	U	0.0046	U			0.0054	U	0.0054	U			0.0048	U1c	0.0064	U1c			0.0054	U	0.0052	U	0.0056	U
1,1,2-Trichloroethane	mg/kg	5	0.0069	U	0.0072	U	0.0065	U	0.0071	U	0.0053	U	0.0046	U			0.0054	U	0.0054	U			0.0048	U1c	0.0064	U1c			0.0054	U	0.0052	U	0.0056	U
1,1,2-Trichlorotrifluoroethane	mg/kg	170,000	0.069	U	0.072	U	0.065	U	0.071	U	0.053	U	0.046	U			0.054	U	0.054	U			0.048	U1c	0.064	U1c			0.054	U	0.052	U	0.056	U
1,1-Dichloroethane	mg/kg	16	0.0069	U	0.0072	U	0.0065	U	0.0071	U	0.0053	U	0.0046	U			0.0054	U	0.0054	U			0.0048	U1c	0.0064	U1c			0.0054	U	0.0052	U	0.0056	U
1,1-Dichloroethene	mg/kg	1,000	0.0069	U	0.0072	U	0.0065	U	0.0071	U	0.0053	U	0.0046	U			0.0054	U	0.0054	U			0.0048	U1c	0.0064	U1c			0.0054	U	0.0052	U	0.0056	U
1,2,3-Trichlorobenzene	mg/kg	930	0.0069	U	0.0072	U	0.0065	U	0.0071	U	0.0053	U	0.0046	U			0.0054	U	0.0054	U			0.0048	U1c	0.0064	U1c			0.0054	U	0.0052	U	0.0056	U
1,2,4-Trichlorobenzene	mg/kg	110	0.0069	U	0.0072	U	0.0065	U	0.0071	U	0.0053	U	0.0046	U			0.0054	U	0.0054	U			0.0048	U1c	0.0064	U1c			0.0054	U	0.0052	U	0.0056	U
1,2-Dichloroethane	mg/kg	2	0.0069	U	0.0072	U	0.0065	U	0.0071	U	0.0053	U	0.0046	U			0.0054	U	0.0054	U			0.0048	U1c	0.0064	U1c			0.0054	U	0.0052	U	0.0056	U
1,2-Dichloroethene (Total)	mg/kg	2,300	0.014	U	0.014	U	0.013	U	0.014	U	0.011	U	0.0093	U			0.011	U	0.011	U			0.0097	U	0.013	U			0.011	U	0.01	U	0.011	U
1,4-Dichlorobenzene	mg/kg	11	0.0069	U	0.0072	U	0.0065	U	0.0071	U	0.0053	U	0.0046	U			0.0054	U	0.0054	U			0.0048	U1c	0.0064	U1c			0.0054	U	0.0052	U	0.0056	U
1,4-Dioxane	mg/kg	24	0.14	UL2	0.14	UL2	0.13	UL2	0.14	UL2	0.11	U	0.093	U			0.11	UL2	0.11	UL2			0.097	U1c	0.13	U1c			0.11	UL2	0.1	UL2	0.11	UL2
2-Butanone (MEK)	mg/kg	190,000	0.014	U	0.014	U	0.013	U	0.014	U	0.011	U	0.0093	U			0.011	U	0.011	U			0.0097	U1c	0.013	U1c			0.011	U	0.01	U	0.011	U
2-Hexanone	mg/kg	1,300	0.014	UL3	0.014	UL3	0.013	UL3	0.014	UL3	0.011	UL3	0.0093	UL3			0.011	UL3	0.011	UL3			**0.0015**	JL11c	0.013	UL31c			0.011	UL3	0.01	UL3	0.011	UL3
4-Methyl-2-pentanone (MIBK)	mg/kg	56,000	0.014	U	0.014	U	0.013	U	0.014	U	0.011	U	0.0093	U			0.011	U	0.011	U			0.0097	U1c	0.013	U1c			0.011	U	0.01	U	0.011	U
Acetone	mg/kg	670,000	**0.01**	J	**0.012**	J	**0.017**		**0.016**		0.011	U	0.0093	U			**0.0075**	J	**0.013**				**0.0059**	J1c	**0.015**	1c			**0.046**		**0.024**		0.011	U
Benzene	mg/kg	5.1	0.0069	U	0.0072	U	0.0065	U	0.0071	U	0.0053	U	0.0046	U			**0.0024**	J	0.0054	U			**0.015**	1c	0.0064	U1c			0.0054	U	0.0052	U	0.0056	U
Chlorobenzene	mg/kg	1,300	0.0069	U	0.0072	U	0.0065	U	0.0071	U	0.0053	U	0.0046	U			0.0054	U	0.0054	U			0.0048	U1c	0.0064	U1c			0.0054	U	0.0052	U	0.0056	U
Chloroethane	mg/kg	57,000	0.0069	U	0.0072	U	0.0065	U	0.0071	U	0.0053	U	0.0046	U			0.0054	U	0.0054	U			0.0048	U1c	0.0064	U1c			0.0054	U	0.0052	U	0.0056	U
Chloroform	mg/kg	1.4	0.0069	U	0.0072	U	0.0065	U	0.0071	U	0.0053	U	0.0046	U			0.0054	U	0.0054	U			0.0048	U1c	0.0064	U1c			0.0054	U	0.0052	U	0.0056	U
cis-1,2-Dichloroethene	mg/kg	2,300	0.0069	U	0.0072	U	0.0065	U	0.0071	U	0.0053	U	0.0046	U			0.0054	U	0.0054	U			0.0048	U1c	0.0064	U1c			0.0054	U	0.0052	U	0.0056	U
Cyclohexane	mg/kg	27,000	0.014	U	0.014	U	0.013	U	0.014	U	0.011	U	0.0093	U			0.011	U	0.011	U			0.0097	U1c	0.013	U1c			0.011	U	0.01	U	0.011	U
Ethylbenzene	mg/kg	25	0.0069	U	0.0072	U	0.0065	U	0.0071	U	0.0053	U	0.0046	U			0.0054	U	0.0054	U			**0.0043**	J1c	0.0064	U1c			0.0054	U	0.0052	U	0.0056	U
Isopropylbenzene (Cumene)	mg/kg	9,900	0.0069	U	0.0072	U	0.0065	U	0.0071	U	0.0053	U	0.0046	U			0.0054	U	0.0054	U			0.0048	U1c	0.0064	U1c			0.0054	U	0.0052	U	0.0056	U
Methyl acetate	mg/kg	1,200,000	0.069	U	0.072	U	0.065	U	0.071	U	0.053	U	0.046	U			0.054	U	0.054	U			0.048	U1c	0.064	U1c			0.054	U	0.052	U	0.056	U
Methylene Chloride	mg/kg	1,000	0.0069	U	0.0072	U	0.0065	U	0.0071	U	0.0053	U	0.0046	U			0.0054	U	0.0054	U			0.0048	U1c	0.0064	U1c			0.0054	U	0.0052	U	0.0056	U
Styrene	mg/kg	35,000	0.0069	U	0.0072	U	0.0065	U	0.0071	U	0.0053	U	0.0046	U			0.0054	U	0.0054	U			0.0048	U1c	0.0064	U1c			0.0054	U	0.0052	U	0.0056	U
Tetrachloroethene	mg/kg	100	0.0069	U	0.0072	U	0.0065	U	0.0071	U	0.0053	U	0.0046	U			0.0054	U	0.0054	U			0.0048	U1c	0.0064	U1c			0.0054	U	0.0052	U	0.0056	U
Toluene	mg/kg	47,000	0.0069	U	0.0072	U	0.0065	U	0.0071	U	0.0053	U	0.0046	U			**0.0026**	J	0.0054	U			**0.017**	1c	0.0064	U1c			0.0054	U	0.0052	U	0.0056	U
trans-1,2-Dichloroethene	mg/kg	23,000	0.0069	U	0.0072	U	0.0065	U	0.0071	U	0.0053	U	0.0046	U			0.0054	U	0.0054	U			0.0048	U1c	0.0064	U1c			0.0054	U	0.0052	U	0.0056	U
Trichloroethene	mg/kg	6	0.0069	U	0.0072	U	0.0065	U	0.0071	U	0.0053	U	0.0046	U			0.0054	U	0.0054	U			0.0048	U1c	0.0064	U1c			0.0054	U	0.0052	U	0.0056	U
Trichlorofluoromethane	mg/kg	3,100	0.0069	U	0.0072	U	0.0065	U	0.0071	U	0.0053	U	0.0046	U			0.0054	U	0.0054	U			0.0048	U1c	0.0064	U1c			**0.0046**	J	0.0052	U	**0.0042**	J
Vinyl chloride	mg/kg	1.7	0.0069	U	0.0072	U	0.0065	U	0.0071	U	0.0053	U	0.0046	U			0.0054	U	0.0054	U			0.0048	U1c	0.0064	U1c			0.0054	U	0.0052	U	0.0056	U
Xylene (Total)	mg/kg	2,800	0.021	U	0.022	U	0.019	U	0.021	U	0.016	U	0.014	U			0.016	U	0.016	U			**0.0036**	J	0.019	U			0.016	U	0.016	U	0.017	U
Semi-Volatile Organic Compounds*																																		
1,2,4,5-Tetrachlorobenzene	mg/kg	350	0.071	UL3	0.076	UL3	0.075	UL3	0.074	UL3	0.07	U	0.082	U			**0.094**	L1	0.079	UL3			0.076	U	0.083	U			0.074	UL3	0.071	UL3	0.07	UL3
2,4-Dimethylphenol	mg/kg	16,000	0.071	U	0.076	U	**0.023**	J	0.074	U	0.07	U	0.082	U			0.072	U	0.079	U			**0.018**	J	0.083	U			0.074	U	0.071	U	0.07	U
2-Chloronaphthalene	mg/kg	60,000	0.071	UL3	0.076	UL3	0.075	UL3	0.074	UL3	0.07	U	0.082	U			0.072	UL3	0.079	UL3			0.076	U	0.083	U			0.074	UL3	0.071	UL3	0.07	UL3
2-Methylnaphthalene	mg/kg	3,000	**0.0031**	J	**0.0022**	J	0.077	U	0.0074	U	**0.0044**	J	**0.0025**	J			**0.022**	J	**0.0052**	J			**0.084**		**0.12**				**0.031**	J	**0.02**	J	**0.042**	J
2-Methylphenol(o-Cresol)	mg/kg	41,000	0.071	UL3	0.076	UL3	0.075	UL3	0.074	UL3	0.07	U	0.082	U			0.072	UL3	0.079	UL3			0.076	UL3	0.083	UL3			0.074	UL3	0.071	UL3	0.07	UL3
2-Nitroaniline	mg/kg	8,000	0.18	UL3	0.19	UL3	0.19	UL3	0.19	UL3	0.18	U	0.21	U			0.18	UL3	0.2	UL3			0.19	UL3	0.21	UL3			0.18	UL3	0.18	UL3	0.18	UL3
3&4-Methylphenol(m&p Cresol)	mg/kg	41,000	0.14	UL3	0.15	UL3	**0.027**	JL1	0.15	UL3	0.14	U	0.16	U			0.14	UL3	0.16	UL3			0.15	UL3	0.16	UL3			0.15	UL3	0.14	UL3	0.14	UL3
4-Nitroaniline	mg/kg	110	0.18	U	0.19	U	0.19	U	0.19	U	0.18	UL3	0.21	UL3			0.18	U	0.2	U			0.19	UL3	0.21	UL3			0.18	U	0.18	U	0.18	U
Acenaphthene	mg/kg	45,000	0.007	U	**0.0005**	J	**0.046**	J	**0.0017**	J	**0.0011**	J	0.0083	U			**0.014**	J	**0.0049**	J			**0.02**	J	**0.12**				**0.0078**	J	**0.0076**	J	**0.017**	J
Acenaphthylene	mg/kg	45,000	0.007	U	**0.0025**	J	**0.009**	J	0.0074	U	**0.0071**	J	**0.00068**	J			**0.028**	J	**0.0053**	J			**0.088**		**0.33**				**0.021**	J	**0.021**	J	**0.063**	J
Acetophenone	mg/kg	120,000	0.071	U	0.076	U	0.075	U	0.074	U	0.07	U	0.082	U			0.072	U	0.079	U			0.076	U	0.083	U			0.074	U	0.071	U	**0.063**	J
Anthracene	mg/kg	230,000	**0.0025**	J	**0.002**	J	**0.13**		**0.0056**	J	**0.01**		**0.0013**	J			**0.049**	J	**0.014**				**0.13**		**0.66**				**0.031**	J	**0.03**	J	**0.082**	
Benzaldehyde	mg/kg	120,000	0.071	UL2	0.076	UL2	0.075	UL2	0.074	UL2	0.07	UL2	0.082	UL2			0.072	UL2	0.079	UL2			0.076	UL2	0.083	UL2			0.074	UL2	0.071	UL2	**0.056**	JL2
Benzo(a)anthracene	mg/kg	2.9	**0.0063**	J	**0.011**		**0.34**		**0.016**		**0.045**		**0.0046**	JIS			**0.12**		**0.055**				**0.54**	M6	**2.1**				**0.077**		**0.078**		**0.21**	
Benzo(a)pyrene	mg/kg	0.29	**0.0048**	J	**0.0096**		**0.28**		**0.015**		**0.033**		**0.0038**	JIS			**0.11**		**0.05**				**0.55**	M6	**2.4**		0.0084	U	**0.068**	J	**0.061**	J	**0.26**	
Benzo(b)fluoranthene	mg/kg	2.9	**0.015**	ip	**0.02**	ip	**0.66**	ip	**0.032**	ip	**0.069**	ip	**0.0079**	JISip			**0.22**	ip	**0.1**	ip			**1.2**	ipM6	**5.4**	ip	0.0084	U	**0.12**	ip	**0.12**	ip	**0.52**	ip
Benzo(g,h,i)perylene	mg/kg		**0.0034**	J	**0.0047**	J	**0.14**		**0.0067**	J	**0.021**		**0.003**	JIS			**0.074**		**0.034**				**0.18**	M6R1	**0.54**				**0.041**	J	**0.04**	J	**0.2**	
Benzo(k)fluoranthene	mg/kg	29	**0.012**	ip	**0.016**	ip	**0.56**	ip	**0.027**	ip	**0.066**	ip	**0.0075**	JISip			**0.19**	ip	**0.084**	ip			**1.2**	ipM6	**5.2**	ip			**0.1**	ip	**0.1**	ip	**0.43**	ip
Biphenyl (Diphenyl)	mg/kg	200	0.071	UL3	0.076	UL3	0.075	UL3	0.074	UL3	0.07	U	0.082	U			0.072	UL3	0.079	UL3			0.076	UL3	**0.037**	JL1			0.074	UL3	0.071	UL3	0.07	UL3
bis(2-Ethylhexyl)phthalate	mg/kg	160	0.071	UL3	0.076	UL3	**0.26**	ISL1	0.074	UL3	0.07	U	0.082	U			**0.45**	ISL1	0.079	UL3			**0.028**	JISL1	0.083	UL3			**0.38**	ISL1	**0.019**	JISL1	**2.3**	ISL1
Carbazole	mg/kg		0.071	U	0.076	U	**0.093**		0.074	U	0.07	U	0.082	U			**0.039**	J	0.079	U			**0.04**	J	**0.13**				0.074	U	**0.018**	J	**0.018**	J
Chrysene	mg/kg	290	**0.0095**		**0.0097**		**0.38**		**0.018**		**0.046**		**0.006**	JIS			**0.13**		**0.06**				**0.62**	M6R1	**2.1**				**0.062**	J	**0.06**	J	**0.27**	
Dibenz(a,h)anthracene	mg/kg	0.29	**0.001**	J	**0.0017**	J	**0.045**	J	**0.0021**	J	**0.0071**	J	0.0083	UIS			**0.024**	J	**0.0099**				**0.086**	M6	**0.23**				**0.013**	J	**0.011**	J	**0.057**	J
Diethylphthalate	mg/kg	660,000	0.071	UL3	0.076	UL3	0.075	UL3	0.074	UL3	0.07	U	0.082	U			0.072	UL3	0.079	UL3			0.076	UL3	0.083	UL3			0.074	UL3	0.071	UL3	0.07	UL3
Di-n-butylphthalate	mg/kg	82,000	0.071	UL3	0.076	UL3	**0.073**	JL1	0.074	UL3	0.07	U	0.082	U			0.072	UL3	0.079	UL3			0.076	UL3	0.083	UL3			0.074	UL3	0.071	UL3	0.07	UL3
Di-n-octylphthalate	mg/kg	8,200	0.071	UISL3	0.076	UISL3	0.075	UISL3	0.074	UISL3	0.07	UL3	0.082	UL3			**0.11**	ISL1	0.079	UISL3			0.076	UISL3	0.083	UL3			0.074	UISL3	0.071	UISL3	0.07	UISL3
Fluoranthene	mg/kg	30,000	**0.022**		**0.016**		**0.92**		**0.038**		**0.095**		**0.0067**	J			**0.27**		**0.11**				**1.1**	M6	**5.6**				**0.15**		**0.13**		**0.45**	
Fluorene	mg/kg	30,000	0.007	U	0.0076	U	**0.04**	J	**0.0018**	J	**0.0024**	J	**0.0011**	J			**0.031**	J	**0.0051**	J			**0.056**	J	**0.37**				**0.025**	J	**0.027**	J	**0.035**	J
Hexachlorobenzene	mg/kg	0.96	0.071	U	0.076	U	0.075	U	0.074	U	0.07	U	0.082	U			**0.038**	J	0.079	U			0.076	U	0.083	U			0.074	U	0.071	U	0.07	U
Indeno(1,2,3-cd)pyrene	mg/kg	2.9	**0.0029**	J	**0.0043**	J	**0.13**		**0.0061**	J	**0.021**		**0.0026**	JIS			**0.065**	J	**0.03**				**0.2**	M6R1	**0.67**				**0.032**	J	**0.034**	J	**0.16**	
Naphthalene	mg/kg	17	**0.003**	J	**0.0034**	J	**0.02**	J	**0.002**	J	**0.0048**	J	**0.0063**	J			**0.15**		**0.0092**				**0.14**		**0.41**				**0.17**		**0.14**		**0.16**	
N-Nitroso-di-n-propylamine	mg/kg	0.33	0.071	UL3	0.076	UL3	0.075	UL3	0.074	UL3	0.07	U	0.082	U			0.072	UL3	0.079	UL3			0.076	U	0.083	U			0.074	UL3	0.071	UL3	0.07	UL3
N-Nitrosodiphenylamine	mg/kg	470	0.071	UL3	0.076	UL3	0.075	UL3	0.074	UL3	0.07	U	0.082	U			0.072	UL3	0.079	UL3			0.076	U	0.083	U			0.074	UL3	0.071	UL3	0.07	UL3
Pentachlorophenol	mg/kg	4	0.18	U	0.19	U	0.19	U	0.19	U	0.18	UL3	0.21	UL3			0.18	U	0.2	U			0.19	UL3	0.21	UL3			0.18	U	0.18	U	0.18	U
Phenanthrene	mg/kg		**0.018**		**0.0079**		**0.59**		**0.026**		**0.06**		**0.0076**	J			**0.22**		**0.064**				**0.45**	M6	**2**				**0.15**		**0.12**		**0.31**	
Phenol	mg/kg	250,000	0.071	UL3	0.076	UL3	**0.14**	L1	0.074	UL3	0.07	U	0.082	U			0.072	UL3	0.079	UL3			**0.019**	JL1	0.083	UL3			**0.24**	L1	**0.029**	JL1	**0.028**	JL1
Pyrene	mg/kg	23,000	**0.018**		**0.014**		**0.79**		**0.032**		**0.074**		**0.0065**	J			**0.23**		**0.1**				**0.92**	M6	**4.7**				**0.12**		**0.1**		**0.44**	
PCBs																																		
Aroclor 1242	mg/kg	0.97	0.174	U			0.0589	U			0.0594	U					0.537	U					0.0627	U					**0.603**				0.175	U
Aroclor 1248	mg/kg	0.94	**4.87**				**0.709**				0.0594	U					**3.06**						0.0627	U					0.0582	U			**3.68**	
Aroclor 1254	mg/kg	0.97	0.174	U			**0.47**				0.0594	U					0.537	U					**0.0851**						0.0582	U			**1.63**	
Aroclor 1260	mg/kg	0.99	0.174	U			**0.279**				0.0594	U					**21.1**						0.0627	U					0.0582	U			0.175	U
Aroclor 1262	mg/kg		**0.289**				0.0589	U			0.0594	U					0.537	U					0.0627	U					**0.0967**				**4.12**	
Aroclor 1268	mg/kg		0.174	U			0.0589	U			0.0594	U					0.537	U					**0.696**						0.0582	U			0.175	U
PCB, Total	mg/kg	0.97	**5.159**				**1.458**				0.0594	U					**24.16**						**0.7811**						**0.6997**				**9.43**	
TPH/Oil and Grease																																		
Diesel Range Organics	mg/kg	620	**11**	L2	**3.4**	JL2	**92.8**	L2	**6.6**	JL2	**31.4**	L2	**9.1**	L2			**99.6**	L2	**5.6**	JL2			**102**	L2	**197**	L2			**142**	L2	**22.6**	L2	**251**	L2
Gasoline Range Organics	mg/kg	620	15.7	U	18.6	U	12.3	U	17.1	U	11.5	U	9.4	U			11.5	U	9	U			10.2	U	13.6	U			11.1	U	11.4	U	10.8	U

Detections in bold

Blank spaces indicate that the parameter was not analyzed for this sample

*PAH compounds were analyzed via SIM

A glossary of laboratory flag keys can be viewed in the attached laboratory reports

Values in Red indicate an exceedance of the Project Action Limit (PAL)

Table 5
Summary of Organics Detected in Soil
Parcel B22
Tradepoint Atlantic
Sparrows Point, Maryland

Parameter	Units	PAL	B22-046-SB-1 Soil 6/1/2016		B22-046-SB-4 Soil 6/1/2016		B22-047-SB-1 Soil 5/18/2016		B22-047-SB-5 Soil 5/18/2016		B22-047-SB-10 Soil 5/18/2016		B22-048-SB-1 Soil 5/17/2016		B22-048-SB-5 Soil 5/17/2016		B22-048-SB-10 Soil 5/17/2016		B22-049-SB-1 Soil 6/2/2016		B22-049-SB-5 Soil 6/2/2016		B22-050-SB-1 Soil 6/2/2016		B22-050-SB-4.5 Soil 6/2/2016		B22-051-SB-1 Soil 5/26/2016		B22-051-SB-6 Soil 5/26/2016		B22-052-SB-1 Soil 5/26/2016		B22-052-SB-8 Soil 5/26/2016	
Volatile Organic Compounds																																		
1,1,1-Trichloroethane	mg/kg	36,000	0.0051	U	0.0058	U	0.0069	U	0.0051	U			0.0086	U	0.0057	U			0.0064	U	0.0052	U	0.0051	U	0.0052	U	0.0054	U	0.0053	U	0.0051	U	0.25	U1c
1,1,2-Trichloroethane	mg/kg	5	0.0051	UR1	0.0058	U	0.0069	U	0.0051	U			0.0086	U	0.0057	U			0.0064	U	0.0052	U	0.0051	U	0.0052	U	0.0054	U	0.0053	U	0.0051	U	0.25	U1c
1,1,2-Trichlorotrifluoroethane	mg/kg	170,000	0.051	U	0.058	U	0.069	U	0.051	U			0.086	U	0.057	U			0.064	U	0.052	U	0.051	U	0.052	U	0.054	U	0.053	U	0.051	U	2.5	U1c
1,1-Dichloroethane	mg/kg	16	0.0051	U	0.0058	U	0.0069	U	0.0051	U			0.0086	U	0.0057	U			0.0064	U	0.0052	U	0.0051	U	0.0052	U	0.0054	U	**0.0036**	J	0.0051	U	0.25	U1c
1,1-Dichloroethene	mg/kg	1,000	0.0051	U	0.0058	U	0.0069	U	0.0051	U			0.0086	U	0.0057	U			0.0064	U	0.0052	U	0.0051	U	0.0052	U	0.0054	U	**0.015**		0.0051	U	0.25	U1c
1,2,3-Trichlorobenzene	mg/kg	930	0.0051	U	0.0058	U	0.0069	U	0.0051	U			0.0086	U	0.0057	U			0.0064	U	0.0052	U	0.0051	U	0.0052	U	0.0054	U	0.0053	U	0.0051	U	0.25	U1c
1,2,4-Trichlorobenzene	mg/kg	110	0.0051	U	0.0058	U	0.0069	U	0.0051	U			0.0086	U	0.0057	U			0.0064	U	0.0052	U	0.0051	U	0.0052	U	0.0054	U	0.0053	U	0.0051	U	0.25	U1c
1,2-Dichloroethane	mg/kg	2	0.0051	U	0.0058	U	0.0069	U	0.0051	U			0.0086	U	0.0057	U			0.0064	U	0.0052	U	0.0051	U	0.0052	U	0.0054	U	**0.0049**	J	0.0051	U	0.25	U1c
1,2-Dichloroethene (Total)	mg/kg	2,300	0.01	U	0.012	U	0.014	U	0.01	U			0.017	U	0.011	U			0.013	U	0.01	U	0.01	U	0.01	U	0.011	U	0.011	U	0.01	U	0.51	U
1,4-Dichlorobenzene	mg/kg	11	0.0051	U	0.0058	U	0.0069	U	0.0051	U			0.0086	U	0.0057	U			0.0064	U	0.0052	U	0.0051	U	0.0052	U	**0.0041**	J	**0.0023**	J	0.0051	U	**5**	1c
1,4-Dioxane	mg/kg	24	0.1	UL2	0.12	UL2	0.14	U	0.1	U			0.17	U	0.11	U			0.13	U	0.1	U	0.1	U	0.1	U	0.11	U	0.11	U	0.1	U	5.1	U1c
2-Butanone (MEK)	mg/kg	190,000	0.01	U	0.012	U	0.014	U	0.01	U			0.017	U	0.011	U			0.013	U	0.01	U	0.01	U	0.01	U	0.011	U	0.011	U	0.01	U	0.51	U1c
2-Hexanone	mg/kg	1,300	0.01	UL3	0.012	UL3	0.014	U	0.01	U			0.017	UL3	0.011	UL3			0.013	U	0.01	U	0.01	U	0.01	U	0.011	UL3	0.011	UL3	0.01	UL3	0.51	UL31c
4-Methyl-2-pentanone (MIBK)	mg/kg	56,000	0.01	UR1	0.012	U	0.014	U	0.01	U			0.017	U	0.011	U			0.013	U	0.01	U	0.01	U	0.01	U	0.011	U	0.011	U	0.01	U	0.51	U1c
Acetone	mg/kg	670,000	**0.017**	M1R1	0.012	U	0.014	U	0.01	U			0.017	U	0.011	U			0.013	U	0.01	U	0.01	U	0.01	U	0.011	U	0.011	U	0.01	U	0.51	U1c
Benzene	mg/kg	5.1	0.0051	U	0.0058	U	0.0069	U	0.0051	U			0.0086	U	0.0057	U			0.0064	U	0.0052	U	0.0051	U	0.0052	U	0.0054	U	0.0053	U	0.0051	U	0.25	U1c
Chlorobenzene	mg/kg	1,300	0.0051	U	0.0058	U	0.0069	U	0.0051	U			0.0086	U	0.0057	U			0.0064	U	0.0052	U	0.0051	U	0.0052	U	0.0054	U	0.0053	U	0.0051	U	**0.27**	1c
Chloroethane	mg/kg	57,000	0.0051	UR1	0.0058	U	0.0069	U	0.0051	U			0.0086	U	0.0057	U			0.0064	U	0.0052	U	0.0051	U	0.0052	U	0.0054	U	0.0053	U	0.0051	U	0.25	U1c
Chloroform	mg/kg	1.4	0.0051	U	0.0058	U	0.0069	U	0.0051	U			0.0086	U	0.0057	U			0.0064	U	0.0052	U	0.0051	U	0.0052	U	0.0054	U	0.0053	U	0.0051	U	0.25	U1c
cis-1,2-Dichloroethene	mg/kg	2,300	0.0051	U	0.0058	U	0.0069	U	0.0051	U			0.0086	U	0.0057	U			0.0064	U	0.0052	U	0.0051	U	0.0052	U	0.0054	U	0.0053	U	0.0051	U	0.25	U1c
Cyclohexane	mg/kg	27,000	0.01	U	0.012	U	0.014	U	0.01	U			0.017	U	0.011	U			0.013	U	0.01	U	0.01	U	0.01	U	0.011	U	0.011	U	0.01	U	0.51	U1c
Ethylbenzene	mg/kg	25	0.0051	U	0.0058	U	0.0069	U	0.0051	U			0.0086	U	0.0057	U			0.0064	U	0.0052	U	0.0051	U	0.0052	U	0.0054	U	0.0053	U	0.0051	U	0.25	U1c
Isopropylbenzene (Cumene)	mg/kg	9,900	0.0051	U	0.0058	U	0.0069	U	0.0051	U			0.0086	U	0.0057	U			0.0064	U	0.0052	U	0.0051	U	0.0052	U	0.0054	U	0.0053	U	0.0051	U	0.25	U1c
Methyl acetate	mg/kg	1,200,000	0.051	U	0.058	U	0.069	U	0.051	U			0.086	U	0.057	U			0.064	U	0.052	U	0.051	U	0.052	U	0.054	U	0.053	U	0.051	U	2.5	U1c
Methylene Chloride	mg/kg	1,000	0.0051	U	0.0058	U	0.0069	U	0.0051	U			0.0086	U	0.0057	U			0.0064	U	0.0052	U	0.0051	U	0.0052	U	0.0054	U	0.0053	U	0.0051	U	0.25	U1c
Styrene	mg/kg	35,000	0.0051	U	0.0058	U	0.0069	U	0.0051	U			0.0086	U	0.0057	U			0.0064	U	0.0052	U	0.0051	U	0.0052	U	0.0054	UL2	0.0053	UL2	0.0051	UL2	0.25	U1c
Tetrachloroethene	mg/kg	100	0.0051	U	0.0058	U	0.0069	U	0.0051	U			0.0086	U	0.0057	U			0.0064	U	0.0052	U	0.0051	U	0.0052	U	0.0054	U	0.0053	U	0.0051	U	0.25	U1c
Toluene	mg/kg	47,000	0.0051	U	0.0058	U	0.0069	U	0.0051	U			0.0086	U	0.0057	U			0.0064	U	0.0052	U	0.0051	U	0.0052	U	0.0054	U	0.0053	U	0.0051	U	0.25	U1c
trans-1,2-Dichloroethene	mg/kg	23,000	0.0051	U	0.0058	U	0.0069	U	0.0051	U			0.0086	U	0.0057	U			0.0064	U	0.0052	U	0.0051	U	0.0052	U	0.0054	U	0.0053	U	0.0051	U	0.25	U1c
Trichloroethene	mg/kg	6	0.0051	UM1	0.0058	U	0.0069	U	0.0051	U			0.0086	U	0.0057	U			0.0064	U	0.0052	U	0.0051	U	0.0052	U	0.0054	U	0.0053	U	0.0051	U	0.25	U1c
Trichlorofluoromethane	mg/kg	3,100	0.0051	UR1	0.0058	U	0.0069	U	0.0051	U			0.0086	U	0.0057	U			0.0064	U	0.0052	U	0.0051	U	0.0052	U	0.0054	U	0.0053	U	0.0051	U	0.25	U1c
Vinyl chloride	mg/kg	1.7	0.0051	UR1	0.0058	U	0.0069	U	0.0051	U			0.0086	U	0.0057	U			0.0064	U	0.0052	U	0.0051	U	0.0052	U	0.0054	U	0.0053	U	0.0051	U	0.25	U1c
Xylene (Total)	mg/kg	2,800	0.015	U	0.017	U	0.021	U	0.015	U			0.026	U	0.017	U			0.019	U	0.016	U	0.015	U	0.016	U	0.016	U	0.016	U	0.015	U	0.76	U
Semi-Volatile Organic Compounds*																																		
1,2,4,5-Tetrachlorobenzene	mg/kg	350	0.071	UM0L3	0.09	UL3	0.077	U	0.084	U			0.072	U	0.08	U			0.071	U	0.073	U	0.073	U	0.085	UM1	0.075	UL3	0.082	UL3	0.081	UL3	0.085	UL3
2,4-Dimethylphenol	mg/kg	16,000	0.071	U	0.09	U	0.077	U	0.084	U			0.072	U	0.08	U			0.071	U	0.073	U	0.073	U	0.085	U	0.075	U	0.082	U	0.081	U	0.085	U
2-Chloronaphthalene	mg/kg	60,000	0.071	UM0L3	0.09	UL3	0.077	U	0.084	U			0.072	U	0.08	U			0.071	U	0.073	U	0.073	U	0.085	U	0.075	U	0.082	U	0.081	U	0.085	U
2-Methylnaphthalene	mg/kg	3,000	**0.038**	JM6	**0.0039**	J	**0.085**		**0.039**	J			**0.0089**		**0.0064**	J			0.0072	U	0.0074	U	**0.06**	J	**0.011**		**0.033**		0.0083	U	**0.057**		0.0086	U
2-Methylphenol(o-Cresol)	mg/kg	41,000	0.071	UL3	0.09	UL3	0.077	U	0.084	U			0.072	U	0.08	U			0.071	U	0.073	U	0.073	U	0.085	UM1	0.075	UL3	0.082	UL3	0.081	UL3	0.085	UL3
2-Nitroaniline	mg/kg	8,000	0.18	UL3	0.22	UL3	0.19	U	0.21	U			0.18	U	0.2	U			0.18	U	0.18	U	0.18	U	0.21	U	0.19	U	0.2	U	0.2	U	0.21	U
3&4-Methylphenol(m&p Cresol)	mg/kg	41,000	0.14	UL3	0.18	UL3	0.15	U	0.17	U			0.14	U	0.16	U			0.14	U	0.15	U	0.15	U	0.17	UM1R1	0.15	U	0.16	U	0.16	U	0.17	U
4-Nitroaniline	mg/kg	110	0.18	UM1	0.22	U	0.19	UL3	0.21	UL3			0.18	UL3	0.2	UL3			0.18	U	0.18	U	0.18	U	0.21	U	0.19	UL3	0.2	UL3	0.2	UL3	0.21	UL3
Acenaphthene	mg/kg	45,000	**0.0094**	J	**0.0011**	J	**0.16**		0.085	U			**0.0011**	J	**0.0025**	J			**0.0008**	J	0.0074	U	**0.2**		**0.053**	M1	**0.00081**	J	0.0083	U	**0.046**		**0.0029**	J
Acenaphthylene	mg/kg	45,000	**0.023**	J	**0.0026**	J	**0.11**		0.085	U			**0.0079**		**0.005**	J			**0.00069**	J	0.0074	U	**0.027**	J	**0.005**	J	**0.00091**	J	0.0083	U	**0.032**		**0.00075**	J
Acetophenone	mg/kg	120,000	0.071	U	0.09	U	**0.049**	J	0.084	U			0.072	U	0.08	U			0.071	U	0.073	U	0.073	U	0.085	UM1R1	0.075	U	0.082	U	0.081	U	0.085	U
Anthracene	mg/kg	230,000	**0.036**	JM6	**0.0041**	J	**0.57**		0.085	U			**0.0086**		**0.025**				**0.0038**	J	0.0074	U	**0.46**		**0.1**	M1	**0.0046**	J	**0.0022**	J	**0.24**		**0.0014**	J
Benzaldehyde	mg/kg	120,000	**0.035**	JL2M0	0.09	UL2	**0.08**	L2	0.084	UL2			0.072	UL2	0.08	UL2			0.071	UL2	0.073	UL2	0.073	UL2	0.085	UL2	0.075	UL2	0.082	UL2	0.081	UL2	0.085	UL2
Benzo(a)anthracene	mg/kg	2.9	**0.089**	M6	**0.028**		**1.9**		**0.039**	J			**0.042**		**0.12**				**0.012**		**0.0017**	J	**1.1**		**0.23**	M1	**0.014**		0.0083	U	**1.1**		0.0086	U
Benzo(a)pyrene	mg/kg	0.29	**0.067**	JM6	**0.028**		**1.6**		**0.026**	J			**0.04**		**0.084**				**0.01**		**0.00099**	J	**0.85**		**0.22**	M1	**0.011**		0.0083	U	**0.94**		0.0086	U
Benzo(b)fluoranthene	mg/kg	2.9	**0.14**	ipM6	**0.057**	ip	**3.4**	ip	**0.052**	Jip			**0.086**	ip	**0.16**	ip			**0.021**	ip	**0.0023**	Jip	**1.7**	ip	**0.41**	ipM1	**0.039**	ip	**0.00084**	Jip	**1.3**		0.0086	U
Benzo(g,h,i)perylene	mg/kg		**0.042**	JM6	**0.021**		**0.79**		**0.02**	J			**0.032**		**0.037**				**0.0044**	J	0.0074	U	**0.54**		**0.13**	M1	**0.011**		0.0083	U	**0.35**		0.0086	U
Benzo(k)fluoranthene	mg/kg	29	**0.12**	ipM6	**0.049**	ip	**3.3**	ip	**0.05**	Jip			**0.082**	ip	**0.15**	ip			**0.018**	ip	**0.0019**	Jip	**1.4**	ip	**0.34**	ipM1	**0.034**	ip	0.0083	U	**0.47**		0.0086	U
Biphenyl (Diphenyl)	mg/kg	200	0.071	UM0L3	0.09	UL3	0.077	U	0.084	U			0.072	U	0.08	U			0.071	U	0.073	U	0.073	U	0.085	U	0.075	U	0.082	U	0.081	U	0.085	U
bis(2-Ethylhexyl)phthalate	mg/kg	160	**1.2**	ISL1	0.09	UL3	**0.57**		**0.034**	JIS			0.072	U	0.08	U			**0.028**	JL2	0.073	UL2	**0.089**	ISL2	0.085	UL2	0.075	UL3	0.082	UL3	0.081	UISL3	**0.057**	JL1
Carbazole	mg/kg		0.071	UM1	0.09	U	**0.14**		0.084	U			0.072	U	0.08	U			0.071	UL2	0.073	UL2	**0.057**	JL2	**0.076**	JL2	0.075	U	0.082	U	**0.08**	J	0.085	U
Chrysene	mg/kg	290	**0.075**	M6	**0.026**		**2**		**0.026**	J			**0.048**		**0.11**				**0.01**		**0.0012**	J	**1.1**		**0.24**	M1	**0.025**		**0.00083**	J	**0.9**		0.0086	U
Dibenz(a,h)anthracene	mg/kg	0.29	**0.015**	JM6	**0.0054**	J	**0.23**		0.085	U			**0.0089**		**0.017**				**0.0015**	J	0.0074	U	**0.19**		**0.045**	M1	**0.0031**	J	0.0083	U	**0.17**		0.0086	U
Diethylphthalate	mg/kg	660,000	0.071	UM0L3	0.09	UL3	0.077	U	0.084	U			0.072	U	0.08	U			0.071	U	0.073	U	0.073	U	0.085	U	0.075	UL3	0.082	UL3	0.081	UL3	0.085	UL3
Di-n-butylphthalate	mg/kg	82,000	0.071	UM0L3	0.09	UL3	**0.27**		0.084	U			0.072	U	0.08	U			0.071	UL2	0.073	UL2	0.073	UL2	0.085	UL2	0.075	UL3	0.082	UL3	0.081	UL3	0.085	UL3
Di-n-octylphthalate	mg/kg	8,200	**0.18**	ISL1M0	0.09	UISL3	0.077	UISL3	0.084	UISL3			0.072	UL3	0.08	UL3			0.071	UIS	0.073	U	0.073	UIS	0.085	UM1	0.075	UL3	0.082	UL3	0.081	UISL3	0.085	UISL3
Fluoranthene	mg/kg	30,000	**0.16**	M6	**0.042**		**4**		**0.04**	J			**0.074**		**0.2**				**0.021**		**0.0021**	J	**2.5**		**0.59**	M1R1	**0.027**		**0.0032**	J	**2.5**		**0.0055**	J
Fluorene	mg/kg	30,000	**0.024**	JM6	0.0091	U	**0.17**		0.085	U			**0.0018**	J	**0.0056**	J			**0.00087**	J	0.0074	U	**0.16**		**0.045**	M1	**0.00086**	J	0.0083	U	**0.056**		**0.004**	J
Hexachlorobenzene	mg/kg	0.96	0.071	UM1	0.09	U	0.077	U	0.084	U			0.072	U	0.08	U			0.071	U	0.073	U	0.073	U	0.085	U	0.075	UL3	0.082	UL3	0.081	UL3	0.085	UL3
Indeno(1,2,3-cd)pyrene	mg/kg	2.9	**0.032**	JM6	**0.017**		**0.81**		**0.016**	J			**0.028**		**0.04**				**0.0041**	J	0.0074	U	**0.5**		**0.12**	M1	**0.0092**		0.0083	U	**0.38**		0.0086	U
Naphthalene	mg/kg	17	**0.17**		**0.0044**	J	**0.1**		**0.081**	J			**0.0084**		**0.011**				0.0072	U	0.0074	U	**0.13**		**0.023**		**0.026**		0.0083	U	**0.051**		0.0086	U
N-Nitroso-di-n-propylamine	mg/kg	0.33	0.071	UM0L3	0.09	UL3	0.077	U	0.084	U			0.072	U	0.08	U			0.071	U	0.073	U	0.073	U	0.085	UM1R1	0.075	U	0.082	U	0.081	U	0.085	U
N-Nitrosodiphenylamine	mg/kg	470	0.071	UM0L3	0.09	UL3	0.077	U	0.084	U			0.072	U	0.08	U			0.071	U	0.073	U	0.073	U	0.085	UM1	0.075	U	0.082	U	0.081	U	0.085	U
Pentachlorophenol	mg/kg	4	0.18	UM1	0.22	U	0.19	UL3	0.21	UL3			0.18	UL3	0.2	UL3			0.18	UL2	0.18	UL2	0.18	UL2	0.21	UL2M0	0.19	UL3	0.2	UL3	0.2	UL3	0.21	UL3
Phenanthrene	mg/kg		**0.17**	M6	**0.02**		**2.2**		**0.022**	J			**0.041**		**0.082**				**0.012**		**0.0013**	J	**2.2**		**0.46**	M1R1	**0.03**		**0.0046**	J	**0.94**		**0.0093**	J
Phenol	mg/kg	250,000	0.071	UL3	0.09	UL3	0.077	U	0.084	U			0.072	U	0.08	U			0.071	U	0.073	U	0.073	U	0.085	UM1	0.075	UL3	0.082	UL3	0.081	UL3	0.085	UL3
Pyrene	mg/kg	23,000	**0.13**	M6	**0.039**		**3.6**		**0.038**	J			**0.065**		**0.18**				**0.018**		**0.0018**	J	**2**		**0.47**	M1R1	**0.024**		**0.0023**	J	**1.5**		**0.0059**	J
PCBs																																		
Aroclor 1242	mg/kg	0.97	0.0533	U			0.59	U					**0.912**						0.0529	U			0.0541	U			0.0583	U			0.0626	U		
Aroclor 1248	mg/kg	0.94	**0.464**				0.59	U					0.0505	U					0.0529	U			0.0541	U			0.0583	U			0.0626	U		
Aroclor 1254	mg/kg	0.97	0.0533	U			**2.17**						0.0505	U					0.0529	U			**0.0624**				0.0583	U			0.0626	U		
Aroclor 1260	mg/kg	0.99	0.0533	U			0.59	U					0.0505	U					0.0529	U			0.0541	U			0.0583	U			0.0626	U		
Aroclor 1262	mg/kg		**0.0861**				0.59	U					0.0505	U					0.0529	U			0.0541	U			0.0583	U			**0.0455**	J		
Aroclor 1268	mg/kg		0.0533	U			**11.2**						0.0505	U					**1.03**				**1.65**				0.0583	U			0.0626	U		
PCB, Total	mg/kg	0.97	**0.5501**				**13.37**						**0.912**						**1.03**				**1.7124**				0.0583	U			**0.0455**	J		
TPH/Oil and Grease																																		
Diesel Range Organics	mg/kg	620	**58**	L2M0	**10.7**	L2	**715**	L2	**73.2**	L2			**8.2**	L2	**14.4**	L2			**9.4**	L2	**13.9**	L2	**44.4**	L2	**16.3**	L2	**19.1**	L2	8.2	UL2	**130**	L2	**311**	L2
Gasoline Range Organics	mg/kg	620	9.6	U	11.3	U	14.6	U	10.3	U			18.7	U	10.7	U			14.2	U	**43.2**		11.1	U	11.1	U	11.1	U	10.9	U	10.9	U	10	U

Detections in bold

Blank spaces indicate that the parameter was not analyzed for this sample

*PAH compounds were analyzed via SIM

A glossary of laboratory flag keys can be viewed in the attached laboratory reports

Values in Red indicate an exceedance of the Project Action Limit (PAL)

Table 5
Summary of Organics Detected in Soil
Parcel B22
Tradepoint Atlantic
Sparrows Point, Maryland

Parameter	Units	PAL	B22-053-SB-1		B22-053-SB-8		B22-053-SB-10		B22-054-SB-1		B22-054-SB-4		B22-054-SB-10		B22-055-SB-1		B22-055-SB-8.5		B22-056-SB-1		B22-056-SB-5		B22-057-SB-1		B22-058-SB-1		B22-058-SB-7		B22-058-SB-10		B22-059-SB-1		B22-059-SB-4	
			Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
			5/26/2016		5/26/2016		5/26/2016		5/26/2016		5/26/2016		5/26/2016		6/2/2016		6/2/2016		6/2/2016		6/2/2016		5/31/2016		5/31/2016		5/31/2016		5/31/2016		5/23/2016		5/23/2016	
Volatile Organic Compounds																																
1,1,1-Trichloroethane	mg/kg	36,000	0.0054	U	0.0049	U			0.0061	U	0.0052	U			**0.013**		0.0045	U	0.0069	U	0.0062	U	0.0058	U	0.0055	U	0.005	U			0.0082	U	0.0074	U
1,1,2-Trichloroethane	mg/kg	5	0.0054	U	0.0049	U			0.0061	U	0.0052	U			0.007	U	0.0045	U	0.0069	U	0.0062	U	0.0058	U	0.0055	U	0.005	U			0.0082	U	0.0074	U
1,1,2-Trichlorotrifluoroethane	mg/kg	170,000	0.054	U	0.049	U			0.061	U	0.052	U			0.07	U	0.045	U	0.069	U	0.062	U	0.058	U	0.055	U	0.05	U			0.082	U	0.074	U
1,1-Dichloroethane	mg/kg	16	**0.013**		0.0049	U			0.0061	U	0.0052	U			0.007	U	0.0045	U	**0.0085**		0.0062	U	0.0058	U	**0.01**		**0.033**				0.0082	U	0.0074	U
1,1-Dichloroethene	mg/kg	1,000	**0.0049**	J	0.0049	U			0.0061	U	0.0052	U			0.007	U	0.0045	U	0.0069	U	0.0062	U	0.0058	U	0.0055	U	0.005	U			0.0082	U	0.0074	U
1,2,3-Trichlorobenzene	mg/kg	930	0.0054	U	0.0049	U			0.0061	U	0.0052	UR1			0.007	U	0.0045	U	0.0069	U	0.0062	U	0.0058	U	0.0055	U	0.005	U			0.0082	U	0.0074	U
1,2,4-Trichlorobenzene	mg/kg	110	0.0054	U	0.0049	U			0.0061	U	0.0052	UR1			0.007	U	0.0045	U	0.0069	U	0.0062	U	0.0058	U	0.0055	U	0.005	U			0.0082	U	0.0074	U
1,2-Dichloroethane	mg/kg	2	0.0054	U	0.0049	U			0.0061	U	0.0052	U			0.007	U	0.0045	U	0.0069	U	0.0062	U	0.0058	U	0.0055	U	0.005	U			0.0082	U	0.0074	U
1,2-Dichloroethene (Total)	mg/kg	2,300	0.011	U	0.0099	U			0.012	U	0.01	U			0.014	U	0.0091	U	0.014	U	0.012	U	0.012	U	0.011	U	0.0099	U			0.016	U	0.015	U
1,4-Dichlorobenzene	mg/kg	11	0.0054	U	0.0049	U			0.0061	U	0.0052	U			0.007	U	0.0045	U	0.0069	U	0.0062	U	0.0058	U	0.0055	U	0.005	U			0.0082	U	0.0074	U
1,4-Dioxane	mg/kg	24	0.11	U	0.099	U			0.12	U	0.1	U			0.14	U	0.091	U	0.14	U	0.12	U	0.12	U	0.11	U	0.099	U			0.16	U	0.15	U
2-Butanone (MEK)	mg/kg	190,000	**0.0038**	J	0.0099	U			**0.0049**	J	**0.0047**	J			0.014	U	0.0091	U	0.014	U	0.012	U	0.012	U	0.011	U	0.0099	U			0.016	U	0.015	U
2-Hexanone	mg/kg	1,300	0.011	U	0.0099	UL3			0.012	UL3	0.01	UL3			0.014	U	0.0091	U	0.014	U	0.012	U	0.012	U	0.011	U	0.0099	U			0.016	UL3	0.015	UL3
4-Methyl-2-pentanone (MIBK)	mg/kg	56,000	0.011	U	0.0099	UL3			0.012	UL3	0.01	UL3			0.014	U	0.0091	U	0.014	U	0.012	U	0.012	U	0.011	U	0.0099	U			0.016	U	0.015	U
Acetone	mg/kg	670,000	**0.0073**	J	0.0099	U			**0.0062**	J	**0.054**	M1R1			0.014	U	**0.0087**	J	0.014	U	0.012	U	0.012	U	0.011	U	0.0099	U			0.016	U	0.015	U
Benzene	mg/kg	5.1	0.0054	U	0.0049	U			**0.052**		0.0052	U			0.007	U	0.0045	U	**0.002**	J	**0.0066**		0.0058	U	0.0055	U	0.005	U			0.0082	U	0.0074	U
Chlorobenzene	mg/kg	1,300	0.0054	U	0.0049	U			0.0061	U	0.0052	U			0.007	U	0.0045	U	0.0069	U	0.0062	U	0.0058	U	0.0055	U	0.005	U			0.0082	U	0.0074	U
Chloroethane	mg/kg	57,000	0.0054	U	0.0049	U			0.0061	U	0.0052	UM1R1			0.007	U	0.0045	U	0.0069	U	0.0062	U	0.0058	U	0.0055	U	0.005	U			0.0082	U	0.0074	U
Chloroform	mg/kg	1.4	0.0054	U	0.0049	U			0.0061	U	0.0052	U			0.007	U	0.0045	U	0.0069	U	0.0062	U	0.0058	U	0.0055	U	0.005	U			0.0082	U	0.0074	U
cis-1,2-Dichloroethene	mg/kg	2,300	0.0054	U	0.0049	U			0.0061	U	0.0052	U			0.007	U	0.0045	U	0.0069	U	0.0062	U	0.0058	U	0.0055	U	0.005	U			0.0082	U	0.0074	U
Cyclohexane	mg/kg	27,000	0.011	U	0.0099	U			**0.035**		0.01	U			0.014	U	0.0091	U	0.014	U	0.012	U	0.012	U	0.011	U	0.0099	U			0.016	U	0.015	U
Ethylbenzene	mg/kg	25	0.0054	U	0.0049	U			**0.0033**	J	0.0052	U			0.007	U	0.0045	U	0.0069	U	**0.0049**	J	0.0058	U	0.0055	U	0.005	U			0.0082	U	0.0074	U
Isopropylbenzene (Cumene)	mg/kg	9,900	0.0054	U	0.0049	U			0.0061	U	0.0052	U			0.007	U	0.0045	U	0.0069	U	0.0062	U	0.0058	U	0.0055	U	0.005	U			0.0082	U	0.0074	U
Methyl acetate	mg/kg	1,200,000	0.054	U	0.049	U			0.061	U	0.052	U			0.07	U	0.045	U	0.069	U	0.062	U	0.058	U	0.055	U	0.05	U			0.082	U	0.074	U
Methylene Chloride	mg/kg	1,000	0.0054	U	0.0049	U			0.0061	U	0.0052	U			0.007	U	0.0045	U	0.0069	U	0.0062	U	0.0058	U	0.0055	U	0.005	U			0.0082	U	0.0074	U
Styrene	mg/kg	35,000	0.0054	U	0.0049	UL2			0.0061	UL2	0.0052	UL2			0.007	U	0.0045	U	0.0069	U	0.0062	U	0.0058	U	0.0055	U	0.005	U			0.0082	U	0.0074	U
Tetrachloroethene	mg/kg	100	0.0054	U	0.0049	U			0.0061	U	0.0052	U			0.007	U	0.0045	U	0.0069	U	0.0062	U	0.0058	U	0.0055	U	**0.0087**				0.0082	U	0.0074	U
Toluene	mg/kg	47,000	0.0054	U	0.0049	U			**0.0049**	J	0.0052	U			0.007	U	0.0045	U	0.0069	U	**0.0055**	J	0.0058	U	0.0055	U	0.005	U			0.0082	U	0.0074	U
trans-1,2-Dichloroethene	mg/kg	23,000	0.0054	U	0.0049	U			0.0061	U	0.0052	U			0.007	U	0.0045	U	0.0069	U	0.0062	U	0.0058	U	0.0055	U	0.005	U			0.0082	U	0.0074	U
Trichloroethene	mg/kg	6	0.0054	U	0.0049	U			0.0061	U	0.0052	U			0.007	U	0.0045	U	0.0069	U	0.0062	U	0.0058	U	0.0055	U	0.005	U			0.0082	U	0.0074	U
Trichlorofluoromethane	mg/kg	3,100	0.0054	U	0.0049	U			0.0061	U	0.0052	UR1			0.007	U	0.0045	U	0.0069	U	0.0062	U	0.0058	U	0.0055	U	0.005	U			0.0082	U	0.0074	U
Vinyl chloride	mg/kg	1.7	0.0054	U	0.0049	U			0.0061	U	0.0052	U			0.007	U	0.0045	U	0.0069	U	0.0062	U	0.0058	U	0.0055	U	0.005	U			0.0082	U	0.0074	U
Xylene (Total)	mg/kg	2,800	0.016	U	0.015	U			**0.017**	J	0.016	U			0.021	U	**0.0055**	J	0.021	U	**0.0055**	J	0.018	U	0.016	U	0.015	U			0.025	U	0.022	U
Semi-Volatile Organic Compounds*																																
1,2,4,5-Tetrachlorobenzene	mg/kg	350	0.075	U	0.082	U			0.073	U	0.08	UM1			0.077	U	0.081	U	0.08	U	0.078	U	0.076	U	0.085	U	0.083	U			0.076	U	0.077	U
2,4-Dimethylphenol	mg/kg	16,000	0.075	U	0.082	U			0.073	U	0.08	U			**0.016**	J	0.081	U	0.08	U	0.078	U	0.076	U	0.085	U	0.083	U			0.076	U	0.077	U
2-Chloronaphthalene	mg/kg	60,000	0.075	U	0.082	U			0.073	U	0.08	U			0.077	U	0.081	U	0.08	U	0.078	U	0.076	U	0.085	U	0.083	U			0.076	U	0.077	U
2-Methylnaphthalene	mg/kg	3,000	**0.064**	J	0.0083	U			**0.27**		0.008	UR1			**0.12**		**0.0047**	JIS	**0.13**		0.0078	U	0.0077	UIS	0.0085	U	0.0081	U			0.077	UIS	**0.032**	
2-Methylphenol(o-Cresol)	mg/kg	41,000	0.075	U	0.082	U			0.073	U	0.08	U			0.077	U	0.081	U	0.08	U	0.078	U	0.076	U	0.085	U	0.083	U			0.076	U	0.077	U
2-Nitroaniline	mg/kg	8,000	0.19	U	0.21	U			0.18	U	0.2	UM1			0.19	U	0.2	U	0.2	U	0.2	U	0.19	U	0.21	U	0.21	U			0.19	U	0.19	U
3&4-Methylphenol(m&p Cresol)	mg/kg	41,000	0.15	U	0.16	U			0.15	U	0.16	UR1			0.15	U	0.16	U	0.16	U	0.16	U	0.15	U	0.17	U	0.16	U			0.15	U	0.15	U
4-Nitroaniline	mg/kg	110	0.19	U	0.21	U			0.18	U	0.2	UM1			0.19	U	0.2	U	0.2	U	0.2	U	0.19	U	0.21	U	0.21	U			0.19	U	0.19	U
Acenaphthene	mg/kg	45,000	0.075	U	0.0083	U			**0.0095**	J	0.008	UR1			**0.036**	J	**0.05**		**0.011**	J	**0.00066**	J	0.0077	U	0.0085	U	0.0081	U			**0.0057**	J	**0.018**	
Acenaphthylene	mg/kg	45,000	**0.014**	J	0.0083	U			**0.0088**	J	0.008	UR1			**0.23**		**0.0022**	J	**0.035**	J	0.0078	U	0.0077	U	0.0085	U	0.0081	U			**0.015**	J	**0.023**	
Acetophenone	mg/kg	120,000	**0.018**	J	0.082	U			0.073	U	0.08	UR1			**0.041**	J	0.081	U	0.08	U	0.078	U	0.076	U	0.085	U	0.083	U			0.076	U	0.077	U
Anthracene	mg/kg	230,000	**0.016**	J	0.0083	U			**0.018**	J	0.008	UR1			**0.23**		**0.04**		**0.063**	J	0.0078	U	**0.002**	J	0.0085	U	**0.00072**	J			**0.038**	J	**0.077**	
Benzaldehyde	mg/kg	120,000	**0.033**	JL2	0.082	UL2			0.073	UL2	0.08	UL2M0			**0.13**	L2	0.081	UL2	**0.08**	L2	0.078	UL2	0.076	U	0.085	U	0.083	U			0.076	UL2	0.077	UL2
Benzo(a)anthracene	mg/kg	2.9	**0.038**	J	**0.0023**	J			**0.055**	J	**0.0025**	J			**0.54**		**0.012**		**0.19**		0.0078	U	0.0077	U	0.0085	U	0.0081	U			**0.12**		**0.4**	
Benzo(a)pyrene	mg/kg	0.29	**0.039**	JIS	0.0083	U			**0.05**	JIS	**0.0013**	J			**0.57**		**0.01**		**0.23**		0.0078	U	0.0077	U	0.0085	U	0.0081	U			**0.14**	IS	**0.42**	
Benzo(b)fluoranthene	mg/kg	2.9	**0.19**	ISip	**0.0027**	Jip			**0.2**	ISip	**0.003**	J			**1.2**	ip	**0.02**	ip	**0.54**	ip	**0.0024**	Jip	**0.0016**	Jip	0.0085	U	0.0081	U			**0.32**	ISip	**0.76**	ip
Benzo(g,h,i)perylene	mg/kg		**0.049**	JIS	0.0083	U			**0.041**	JIS	0.008	U			**0.68**		**0.0048**	J	**0.18**		**0.00097**	J	0.0077	U	0.0085	U	0.0081	U			**0.078**	IS	**0.25**	
Benzo(k)fluoranthene	mg/kg	29	**0.19**	ISip	**0.0026**	Jip			**0.18**	ISip	**0.0029**	J			**0.87**	ip	**0.018**	ip	**0.47**	ip	**0.0021**	Jip	0.0077	Uip	0.0085	U	0.0081	U			**0.28**	ISip	**0.74**	ip
Biphenyl (Diphenyl)	mg/kg	200	0.075	U	0.082	U			**0.031**	J	0.08	U			**0.044**	J	0.081	U	**0.017**	J	0.078	U	0.076	U	0.085	U	0.083	U			0.076	U	0.077	U
bis(2-Ethylhexyl)phthalate	mg/kg	160	**0.15**	IS	0.082	U			**0.16**	IS	0.08	UM1			**0.047**	JIS	0.081	U	**0.39**	IS	0.078	U	0.076	U	0.085	U	0.083	U			0.076	UIS	**0.016**	JIS
Carbazole	mg/kg		0.075	U	0.082	U			0.073	U	0.08	U			**0.044**	J	0.081	U	**0.024**	J	0.078	U	0.076	U	0.085	U	0.083	U			0.076	U	0.077	U
Chrysene	mg/kg	290	**0.13**		**0.0013**	J			**0.17**		**0.0015**	J			**0.42**		**0.01**		**0.28**		**0.0015**	J	**0.001**	J	0.0085	U	0.0081	U			**0.13**		**0.48**	
Dibenz(a,h)anthracene	mg/kg	0.29	0.075	UIS	0.0083	U			0.073	UIS	0.008	U			**0.18**		**0.0013**	J	**0.057**	J	0.0078	U	0.0077	U	0.0085	U	0.0081	U			**0.024**	JIS	**0.061**	
Diethylphthalate	mg/kg	660,000	0.075	U	0.082	U			0.073	U	0.08	UM1			0.077	U	0.081	U	0.08	U	0.078	U	0.076	U	0.085	U	0.083	U			0.076	U	0.077	U
Di-n-butylphthalate	mg/kg	82,000	0.075	U	0.082	U			0.073	U	0.08	UM1			0.077	UL3	0.081	UL3	0.08	UL3	0.078	UL3	0.076	U	0.085	U	0.083	U			0.076	U	0.077	U
Di-n-octylphthalate	mg/kg	8,200	0.075	UIS	0.082	U			0.073	UIS	0.08	UM1			0.077	UISL3	0.081	UL3	**0.06**	JISL1	0.078	UISL3	0.076	U	0.085	U	0.083	U			0.076	UIS	0.077	UIS
Fluoranthene	mg/kg	30,000	**0.091**		**0.0015**	J			**0.15**		**0.0027**	J			**0.77**		**0.053**		**0.35**		**0.0027**	J	**0.0016**	J	**0.0011**	J	**0.00087**	J			**0.16**		**0.66**	
Fluorene	mg/kg	30,000	**0.0076**	J	0.0083	U			**0.02**	J	0.008	UR1			**0.039**	J	**0.045**		**0.012**	J	0.0078	U	0.0077	U	0.0085	U	0.0081	U			0.077	U	**0.013**	
Hexachlorobenzene	mg/kg	0.96	0.075	U	0.082	U			0.073	U	0.08	UM1			0.077	U	0.081	U	0.08	U	0.078	U	0.076	U	0.085	U	0.083	U			0.076	U	0.077	U
Indeno(1,2,3-cd)pyrene	mg/kg	2.9	**0.027**	JIS	0.0083	U			**0.019**	JIS	0.008	U			**0.52**		**0.0041**	J	**0.15**		0.0078	U	0.0077	U	0.0085	U	0.0081	U			**0.074**	JIS	**0.23**	
Naphthalene	mg/kg	17	**0.029**	J	0.0083	U			**0.093**		0.008	UM1R1			**0.11**		**0.02**	IS	**0.1**		**0.0024**	J	0.0077	UIS	0.0085	U	**0.0036**	JM1			**0.028**	JIS	**0.029**	
N-Nitroso-di-n-propylamine	mg/kg	0.33	0.075	U	0.082	U			0.073	U	0.08	UR1			0.077	U	0.081	U	0.08	U	0.078	U	0.076	U	0.085	U	0.083	U			0.076	U	0.077	U
N-Nitrosodiphenylamine	mg/kg	470	0.075	U	0.082	U			0.073	U	0.08	UM1			0.077	U	0.081	U	0.08	U	0.078	U	0.076	U	0.085	U	0.083	U			0.076	U	0.077	U
Pentachlorophenol	mg/kg	4	0.19	UL3	0.21	UL3			0.18	UL3	0.2	UM0L3			0.19	UL3	0.2	UL3	0.2	UL3	0.2	UL3	0.19	U	0.21	U	0.21	UM1			0.19	UL3	0.19	UL3
Phenanthrene	mg/kg		**0.073**	J	**0.00094**	J			**0.15**		**0.0014**	JR1			**0.56**		**0.15**		**0.25**		**0.0041**	J	**0.021**		**0.002**	J	**0.0021**	J			**0.11**		**0.47**	
Phenol	mg/kg	250,000	0.075	U	0.082	U			0.073	U	0.08	UR1			0.077	U	0.081	U	0.08	U	0.078	U	0.076	U	0.085	U	0.083	U			0.076	U	0.077	U
Pyrene	mg/kg	23,000	**0.089**		**0.0033**	J			**0.14**		**0.002**	J			**0.64**		**0.042**		**0.29**		**0.0016**	J	**0.0012**	J	0.0085	U	0.0081	U			**0.16**		**0.71**	
PCBs																																
Aroclor 1242	mg/kg	0.97	0.228	U					0.0518	U					0.0601	U			0.0611	U			0.0566	U	**0.044**	J					0.0547	U		
Aroclor 1248	mg/kg	0.94	0.228	U					0.0518	U					0.0601	U			0.0611	U			0.0566	U	0.0605	U					0.0547	U		
Aroclor 1254	mg/kg	0.97	0.228	U					0.0518	U					0.0601	U			0.0611	U			0.0566	U	0.0605	U					0.0547	U		
Aroclor 1260	mg/kg	0.99	0.228	U					0.0518	U					0.0601	U			0.0611	U			0.0566	U	0.0605	U					0.0547	U		
Aroclor 1262	mg/kg		0.228	U					0.0518	U					0.0601	U			**0.0429**	J			0.0566	U	0.0605	U					0.0547	U		
Aroclor 1268	mg/kg		**7.32**						**0.642**						0.0601	U			0.0611	U			0.0566	U	0.0605	U					**0.0844**			
PCB, Total	mg/kg	0.97	**7.32**						**0.642**						0.0601	U			**0.0429**	J			0.0566	U	**0.044**	J					**0.0844**			
TPH/Oil and Grease																																
Diesel Range Organics	mg/kg	620	**176**	L2	**4.7**	JL2			**280**	L2	8	UL2M0			**89.4**	L2	**15.9**	L2	**110**	L2	**9.7**	L2	**8.4**	L2	**21.7**	L2	**30.2**	L2M0R1			**40.7**	L2	**84.5**	L2
Gasoline Range Organics	mg/kg	620	14.4	U	10.4	U			11.4	U	11	U			11.8	U	9.7	U	15.4	U	13.1	U	11.8	U	10.7	U	9.7	U			17	U	18	U

Detections in bold

Blank spaces indicate that the parameter was not analyzed for this sample

*PAH compounds were analyzed via SIM

A glossary of laboratory flag keys can be viewed in the attached laboratory reports

Values in Red indicate an exceedance of the Project Action Limit (PAL)

Table 5
Summary of Organics Detected in Soil
Parcel B22
Tradepoint Atlantic
Sparrows Point, Maryland

Parameter	Units	PAL	B22-060-SB-1 Soil 5/23/2016		B22-060-SB-4 Soil 5/23/2016		B22-061-SB-1 Soil 6/2/2016		B22-061-SB-5 Soil 6/2/2016		B22-062-SB-1 Soil 5/18/2016		B22-062-SB-4 Soil 5/18/2016		B22-063-SB-1 Soil 6/2/2016		B22-063-SB-9 Soil 6/2/2016		B22-063-SB-10 Soil 6/2/2016		B22-064-SB-1 Soil 5/31/2016		B22-064-SB-7 Soil 5/31/2016		B22-065-SB-1 Soil 6/3/2016		B22-065-SB-7 Soil 6/3/2016		B22-066-SB-1 Soil 6/2/2016		B22-066-SB-9 Soil 6/2/2016		B22-067-SB-1 Soil 5/20/2016	
Volatile Organic Compounds																																		
1,1,1-Trichloroethane	mg/kg	36,000	0.0062	U	0.0051	U	0.0059	U	0.0082	U	0.0049	U	0.0062	U	0.0039	U	0.0057	U			0.0056	U	0.005	U	0.005	U1c	0.0046	U1c	0.0045	U	0.0066	U	0.0071	U1c
1,1,2-Trichloroethane	mg/kg	5	0.0062	U	0.0051	U	0.0059	U	0.0082	U	0.0049	U	0.0062	U	0.0039	U	0.0057	U			0.0056	U	0.005	U	0.005	U1c	0.0046	U1c	0.0045	U	0.0066	U	0.0071	U1c
1,1,2-Trichlorotrifluoroethane	mg/kg	170,000	0.062	U	0.051	U	0.059	U	0.082	U	0.049	U	0.062	U	0.039	U	0.057	U			0.056	U	0.05	U	0.05	U1c	0.046	U1c	0.045	U	0.066	U	0.071	U1c
1,1-Dichloroethane	mg/kg	16	0.0062	U	0.0051	U	0.0059	U	0.0082	U	0.0049	U	0.0062	U	0.0039	U	0.0057	U			0.0056	U	0.005	U	0.005	U1c	0.0046	U1c	0.0045	U	0.0066	U	0.0071	U1c
1,1-Dichloroethene	mg/kg	1,000	0.0062	U	0.0051	U	0.0059	U	0.0082	U	0.0049	U	0.0062	U	0.0039	U	0.0057	U			0.0056	U	0.005	U	0.005	U1c	0.0046	U1c	0.0045	U	0.0066	U	0.0071	U1c
1,2,3-Trichlorobenzene	mg/kg	930	**0.0015**	J	0.0051	U	0.0059	U	0.0082	U	0.0049	U	0.0062	U	0.0039	U	0.0057	U			0.0056	U	0.005	U	0.005	U1c	0.0046	U1c	0.0045	U	0.0066	U	0.0071	U1c
1,2,4-Trichlorobenzene	mg/kg	110	0.0062	U	0.0051	U	0.0059	U	0.0082	U	0.0049	U	0.0062	U	0.0039	U	0.0057	U			0.0056	U	0.005	U	0.005	U1c	0.0046	U1c	0.0045	U	0.0066	U	0.0071	U1c
1,2-Dichloroethane	mg/kg	2	0.0062	U	0.0051	U	0.0059	U	0.0082	U	0.0049	U	0.0062	U	0.0039	U	0.0057	U			0.0056	U	0.005	U	0.005	U1c	0.0046	U1c	0.0045	U	0.0066	U	0.0071	U1c
1,2-Dichloroethene (Total)	mg/kg	2,300	0.012	U	0.01	U	0.012	U	0.016	U	0.0098	U	0.012	U	0.0079	U	0.011	U			0.011	U	0.01	U	0.01	U	0.0092	U	0.0089	U	0.013	U	0.014	U
1,4-Dichlorobenzene	mg/kg	11	0.0062	U	0.0051	U	0.0059	U	0.0082	U	0.0049	U	0.0062	U	0.0039	U	0.0057	U			0.0056	U	0.005	U	0.005	U1c	0.0046	U1c	0.0045	U	0.0066	U	0.0071	U1c
1,4-Dioxane	mg/kg	24	0.12	U	0.1	U	0.12	U	0.16	U	0.098	U	0.12	U	0.079	U	0.11	U			0.11	U	0.1	U	0.1	U1c	0.092	U1c	0.089	U	0.13	U	0.14	U1c
2-Butanone (MEK)	mg/kg	190,000	0.012	U	0.01	U	0.012	U	0.016	U	0.0098	U	0.012	U	0.0079	U	**0.0064**	J			0.011	U	0.01	U	0.01	U1c	0.0092	U1c	0.0089	U	0.013	U	0.014	U1c
2-Hexanone	mg/kg	1,300	0.012	UL3	0.01	UL3	0.012	U	0.016	U	0.0098	U	0.012	U	0.0079	UL3	0.011	UL3			0.011	U	0.01	U	0.01	U1c	0.0092	U1c	0.0089	UL3	0.013	UL3	0.014	UL31c
4-Methyl-2-pentanone (MIBK)	mg/kg	56,000	0.012	U	0.01	U	0.012	U	0.016	U	0.0098	U	0.012	U	0.0079	U	0.011	U			0.011	U	0.01	U	0.01	U1c	0.0092	U1c	0.0089	U	0.013	U	0.014	U1c
Acetone	mg/kg	670,000	0.012	U	0.01	U	0.012	U	0.016	U	0.0098	U	0.012	U	**0.053**		**0.024**				0.011	U	0.01	U	0.01	U1c	**0.0056**	J1c	0.0089	U	0.013	U	0.014	U1c
Benzene	mg/kg	5.1	0.0062	U	0.0051	U	0.0059	U	0.0082	U	0.0049	U	0.0062	U	0.0039	U	0.0057	U			0.0056	U	0.005	U	0.005	U1c	0.0046	U1c	0.0045	U	0.0066	U	0.0071	U1c
Chlorobenzene	mg/kg	1,300	0.0062	U	0.0051	U	0.0059	U	0.0082	U	0.0049	U	0.0062	U	0.0039	U	0.0057	U			0.0056	U	0.005	U	0.005	U1c	0.0046	U1c	0.0045	U	0.0066	U	0.0071	U1c
Chloroethane	mg/kg	57,000	0.0062	U	0.0051	U	0.0059	U	0.0082	U	0.0049	U	0.0062	U	0.0039	U	0.0057	U			0.0056	U	0.005	U	0.005	U1c	0.0046	U1c	0.0045	U	0.0066	U	0.0071	U1c
Chloroform	mg/kg	1.4	0.0062	U	0.0051	U	0.0059	U	0.0082	U	0.0049	U	0.0062	U	0.0039	U	0.0057	U			0.0056	U	0.005	U	0.005	U1c	0.0046	U1c	0.0045	U	0.0066	U	0.0071	U1c
cis-1,2-Dichloroethene	mg/kg	2,300	0.0062	U	0.0051	U	0.0059	U	0.0082	U	0.0049	U	0.0062	U	0.0039	U	0.0057	U			0.0056	U	0.005	U	0.005	U1c	0.0046	U1c	0.0045	U	0.0066	U	0.0071	U1c
Cyclohexane	mg/kg	27,000	0.012	U	0.01	U	0.012	U	0.016	U	0.0098	U	0.012	U	0.0079	U	0.011	U			0.011	U	0.01	U	0.01	U1c	0.0092	U1c	0.0089	U	0.013	U	0.014	U1c
Ethylbenzene	mg/kg	25	**0.0047**	J	0.0051	U	0.0059	U	0.0082	U	0.0049	U	0.0062	U	0.0039	U	0.0057	U			0.0056	U	0.005	U	0.005	U1c	0.0046	U1c	0.0045	U	0.0066	U	0.0071	U1c
Isopropylbenzene (Cumene)	mg/kg	9,900	**0.0066**		0.0051	U	0.0059	U	0.0082	U	0.0049	U	0.0062	U	0.0039	U	**0.004**	J			0.0056	U	0.005	U	0.005	U1c	0.0046	U1c	0.0045	U	0.0066	U	0.0071	U1c
Methyl acetate	mg/kg	1,200,000	0.062	U	0.051	U	0.059	U	0.082	U	0.049	U	0.062	U	0.039	U	0.057	U			0.056	U	0.05	U	0.05	U1c	0.046	U1c	0.045	U	0.066	U	0.071	U1c
Methylene Chloride	mg/kg	1,000	0.0062	U	0.0051	U	0.0059	U	0.0082	U	0.0049	U	0.0062	U	0.0039	U	0.0057	U			0.0056	U	0.005	U	0.005	U1c	0.0046	U1c	0.0045	U	0.0066	U	0.0071	U1c
Styrene	mg/kg	35,000	0.0062	U	0.0051	U	0.0059	U	0.0082	U	0.0049	U	0.0062	U	0.0039	U	0.0057	U			0.0056	U	0.005	U	0.005	U1c	0.0046	U1c	0.0045	U	0.0066	U	0.0071	U1c
Tetrachloroethene	mg/kg	100	0.0062	U	0.0051	U	0.0059	U	0.0082	U	0.0049	U	0.0062	U	0.0039	U	0.0057	U			0.0056	U	0.005	U	0.005	U1c	0.0046	U1c	0.0045	U	0.0066	U	0.0071	U1c
Toluene	mg/kg	47,000	**0.0028**	J	0.0051	U	0.0059	U	0.0082	U	0.0049	U	0.0062	U	0.0039	U	0.0057	U			0.0056	U	0.005	U	0.005	U1c	0.0046	U1c	0.0045	U	0.0066	U	0.0071	U1c
trans-1,2-Dichloroethene	mg/kg	23,000	0.0062	U	0.0051	U	0.0059	U	0.0082	U	0.0049	U	0.0062	U	0.0039	U	0.0057	U			0.0056	U	0.005	U	0.005	U1c	0.0046	U1c	0.0045	U	0.0066	U	0.0071	U1c
Trichloroethene	mg/kg	6	0.0062	U	0.0051	U	0.0059	U	0.0082	U	0.0049	U	0.0062	U	0.0039	U	0.0057	U			0.0056	U	0.005	U	0.005	U1c	0.0046	U1c	0.0045	U	0.0066	U	0.0071	U1c
Trichlorofluoromethane	mg/kg	3,100	0.0062	U	0.0051	U	0.0059	U	0.0082	U	0.0049	U	0.0062	U	0.0039	U	0.0057	U			0.0056	U	0.005	U	0.005	U1c	0.0046	U1c	0.0045	U	0.0066	U	0.0071	U1c
Vinyl chloride	mg/kg	1.7	0.0062	U	0.0051	U	0.0059	U	0.0082	U	0.0049	U	0.0062	U	0.0039	U	0.0057	U			0.0056	U	0.005	U	0.005	U1c	0.0046	U1c	0.0045	U	0.0066	U	0.0071	U1c
Xylene (Total)	mg/kg	2,800	**0.023**		0.015	U	0.018	U	0.025	U	0.015	U	0.019	U	**0.0047**	J	0.017	U			0.017	U	0.015	U	0.015	U	0.014	U	0.013	U	0.02	U	0.021	U
Semi-Volatile Organic Compounds*																																		
1,2,4,5-Tetrachlorobenzene	mg/kg	350	0.073	U	0.071	U	0.076	U	0.1	U	0.072	U	0.076	U	0.073	UL3	0.075	UL3			0.081	U	0.082	U	0.085	U	0.083	U	0.071	UL3	0.074	UL3	0.069	U
2,4-Dimethylphenol	mg/kg	16,000	0.073	U	0.071	U	**0.067**	J	0.1	U	0.072	U	0.076	U	0.073	U	0.075	U			0.081	U	0.082	U	**0.19**		0.083	U	0.071	U	0.074	U	0.069	U
2-Chloronaphthalene	mg/kg	60,000	0.073	U	0.071	U	0.076	U	0.1	U	0.072	U	0.076	U	0.073	U	0.075	U			0.081	U	0.082	U	0.085	U	0.083	U	0.071	U	0.074	U	0.069	U
2-Methylnaphthalene	mg/kg	3,000	**0.41**		**0.046**		**3**		**0.0064**	J	**0.092**		**0.065**	J	0.073	U	**0.0042**	J			0.0083	U	0.0083	U	**0.014**		0.0083	U	**0.0039**	J	0.0075	U	0.0067	U
2-Methylphenol(o-Cresol)	mg/kg	41,000	0.073	U	0.071	U	**0.02**	J	0.1	U	0.072	U	0.076	U	0.073	UL3	0.075	UL3			0.081	U	0.082	U	0.085	U	0.083	U	0.071	UL3	0.074	UL3	0.069	U
2-Nitroaniline	mg/kg	8,000	0.18	U	0.18	U	0.19	U	0.25	U	0.18	U	0.19	U	0.18	U	0.19	U			0.2	U	0.21	U	0.21	U	0.21	U	0.18	U	0.19	U	0.17	U
3&4-Methylphenol(m&p Cresol)	mg/kg	41,000	0.15	U	0.14	U	**0.16**		0.2	U	0.14	U	0.15	U	0.15	UL3	0.15	UL3			0.16	U	0.16	U	0.17	U	0.16	U	0.14	UL3	0.15	UL3	0.14	U
4-Nitroaniline	mg/kg	110	0.18	U	0.18	U	0.19	U	0.25	U	0.18	UL3	0.19	UL3	0.18	UL2	0.19	UL2			0.2	U	0.21	U	0.21	UL2	0.21	UL2	0.18	UL2	0.19	UL2	0.17	UL3
Acenaphthene	mg/kg	45,000	**0.08**		**0.012**		**7.3**		**0.00094**	J	**0.01**	J	**0.03**	J	0.073	U	**0.0019**	J			0.0083	U	**0.00065**	J	**0.058**		0.0083	U	0.0072	U	0.0075	U	**0.00049**	J
Acenaphthylene	mg/kg	45,000	**0.037**		**0.034**		**8.3**		**0.0047**	J	**0.026**	J	**0.023**	J	0.073	U	**0.0027**	J			0.0083	U	0.0083	U	0.0084	U	0.0083	U	**0.0011**	J	**0.0015**	J	**0.00095**	J
Acetophenone	mg/kg	120,000	0.073	U	0.071	U	**0.073**	J	0.1	U	0.072	U	0.076	U	0.073	UL3	0.075	UL3			0.081	U	0.082	U	0.085	U	0.083	U	0.071	UL3	0.074	UL3	0.069	U
Anthracene	mg/kg	230,000	**0.096**		**0.057**		**29**		0.01	U	**0.041**	J	**0.19**		**0.011**	J	**0.0025**	J			0.0083	U	**0.015**		**0.035**	M1	0.0083	U	**0.002**	J	**0.00087**	J	**0.0012**	JB
Benzaldehyde	mg/kg	120,000	0.073	UL2	0.071	UL2	**0.053**	JL2	0.1	UL2	0.072	UL2	0.076	UL2	**0.02**	JL2	0.075	UL2			0.081	U	0.082	U	**0.037**	JL2	0.083	UL2	0.071	UL2	0.074	UL2	0.069	UL2
Benzo(a)anthracene	mg/kg	2.9	**0.39**		**0.26**		82.3		**0.012**		**0.29**		**1.2**		**0.048**	J	0.0074	U			0.0083	U	**0.048**		**0.054**	M1	0.0083	U	**0.0097**		0.0075	U	**0.0052**	JB
Benzo(a)pyrene	mg/kg	0.29	**0.24**		**0.23**	IS	72		**0.009**	J	**0.28**		1.1		**0.04**	J	**0.088**	IS			0.0083	U	**0.03**		**0.044**	M1R1	0.0083	U	**0.01**		**0.028**		**0.0054**	J
Benzo(b)fluoranthene	mg/kg	2.9	**0.72**	ip	**0.59**	ISip	106		**0.029**	ip	**0.58**	ip	**2.5**	ip	**0.1**	ip	**0.16**	ISip			0.0083	U	**0.069**	ip	**0.096**	ipM1R1	**0.001**	J	**0.029**	ip	**0.015**	ip	**0.016**	ip
Benzo(g,h,i)perylene	mg/kg		**0.11**		**0.088**	IS	**23.9**		**0.004**	J	**0.21**		**0.49**		**0.028**	J	**0.0046**	JIS			0.0083	U	**0.022**		**0.017**		0.0083	U	**0.005**	J	**0.002**	J	**0.003**	J
Benzo(k)fluoranthene	mg/kg	29	**0.62**	ip	**0.51**	ISip	46		**0.024**	ip	**0.56**	ip	**2.4**	ip	**0.089**	ip	**0.14**	ISip			0.0083	U	**0.061**	ip	**0.083**	ipM1	0.0083	U	**0.026**	ip	**0.014**	ip	**0.015**	ip
Biphenyl (Diphenyl)	mg/kg	200	**0.096**		0.071	U	**0.94**		0.1	U	0.072	U	0.076	U	0.073	U	0.075	U			0.081	U	0.082	U	0.085	U	0.083	U	0.071	U	0.074	U	0.069	U
bis(2-Ethylhexyl)phthalate	mg/kg	160	0.073	UIS	**0.014**	JIS	**0.13**	ISL2	0.1	UL2	**0.044**	JIS	**0.016**	JIS	**0.03**	JISL2	0.075	UISL2			0.081	U	0.082	U	0.085	U	0.083	U	0.071	UL2	0.074	UL2	0.069	U
Carbazole	mg/kg		**0.035**	J	0.071	U	**10.3**	L2	**0.048**	JL2	0.072	U	**0.074**	J	0.073	UL2	0.075	UL2			0.081	U	0.082	U	0.085	U	0.083	U	0.071	UL2	0.074	UL2	0.069	U
Chrysene	mg/kg	290	**0.36**		**0.24**		**76.2**		**0.025**		**0.3**		**1.2**		**0.069**	J	**0.14**				0.0083	U	**0.044**		**0.049**	M1	**0.00084**	J	**0.018**		**0.032**		**0.0084**	B
Dibenz(a,h)anthracene	mg/kg	0.29	**0.045**		**0.031**	IS	9.6		**0.0016**	J	**0.054**	J	**0.15**		**0.01**	J	0.0074	UIS			0.0083	U	**0.0064**	J	**0.0063**	J	0.0083	U	**0.0017**	J	0.0075	U	0.0067	U
Diethylphthalate	mg/kg	660,000	0.073	U	0.071	U	0.076	U	0.1	U	0.072	U	0.076	U	0.073	U	0.075	U			0.081	U	0.082	U	0.085	U	0.083	U	0.071	U	0.074	U	0.069	UL3
Di-n-butylphthalate	mg/kg	82,000	0.073	U	0.071	U	0.076	UL2	0.1	UL2	0.072	U	0.076	U	**0.11**		0.075	U			0.081	U	0.082	U	0.085	U	0.083	U	0.071	U	0.074	U	0.069	UL3
Di-n-octylphthalate	mg/kg	8,200	0.073	UIS	0.071	UIS	0.076	UIS	0.1	U	0.072	UISL3	0.076	UISL3	0.073	UIS	0.075	UIS			0.081	U	0.082	U	0.085	UIS	0.083	U	0.071	UIS	0.074	UIS	0.069	UL3
Fluoranthene	mg/kg	30,000	**1.1**		**0.46**		**112**		**0.8**		**0.44**		**2**		**0.096**		**0.023**				**0.00056**	J	**0.11**		**0.11**	M1R1	**0.0024**	J	**0.021**		**0.0031**	J	**0.0095**	B
Fluorene	mg/kg	30,000	**0.043**		**0.0083**		**6.8**		**0.0013**	J	**0.008**	J	**0.018**	J	0.073	U	**0.0012**	J			0.0083	U	0.0083	U	**0.042**	M1	0.0083	U	0.0072	U	0.0075	U	**0.00073**	J
Hexachlorobenzene	mg/kg	0.96	0.073	U	0.071	U	0.076	U	0.1	U	0.072	U	0.076	U	0.073	U	0.075	U			0.081	U	0.082	U	0.085	U	0.083	U	0.071	U	0.074	U	0.069	U
Indeno(1,2,3-cd)pyrene	mg/kg	2.9	**0.11**		**0.097**	IS	26		**0.0037**	J	**0.19**		**0.52**		**0.024**	J	**0.0033**	JIS			0.0083	U	**0.019**		**0.018**	M1	0.0083	U	**0.005**	J	0.0075	U	**0.0027**	J
Naphthalene	mg/kg	17	**0.076**		**0.022**		**3.2**		**0.012**		**0.12**		**0.11**		0.073	U	**0.016**				0.0083	U	0.0083	U	**0.025**		0.0083	U	**0.004**	J	0.0075	U	**0.0019**	J
N-Nitroso-di-n-propylamine	mg/kg	0.33	0.073	U	0.071	U	0.076	U	0.1	U	0.072	U	0.076	U	0.073	UL3	0.075	UL3			0.081	U	0.082	U	0.085	U	0.083	U	0.071	UL3	0.074	UL3	0.069	U
N-Nitrosodiphenylamine	mg/kg	470	0.073	U	0.071	U	0.076	U	0.1	U	0.072	U	0.076	U	0.073	U	0.075	U			0.081	U	0.082	U	0.085	UL3	0.083	UL3	0.071	U	0.074	U	0.069	U
Pentachlorophenol	mg/kg	4	0.18	UL3	0.18	UL3	0.19	UL2	0.25	UL2	0.18	UL3	0.19	UL3	0.18	U	0.19	U			0.2	U	0.21	U	0.21	UL3	0.21	UL3	0.18	U	0.19	U	0.17	UL3
Phenanthrene	mg/kg		**1.3**		**0.31**		**108**		**0.58**		**0.17**		**0.67**		**0.056**	J	**0.028**				**0.0012**	J	**0.072**		**0.099**	M1R1	**0.0014**	J	**0.017**		**0.0027**	J	**0.0046**	JB
Phenol	mg/kg	250,000	0.073	U	0.071	U	**0.31**		0.1	U	0.072	U	0.076	U	0.073	UL3	0.075	UL3			0.081	U	0.082	U	0.085	U	0.083	U	0.071	UL3	0.074	UL3	0.069	U
Pyrene	mg/kg	23,000	**0.89**		**0.37**		**96.8**		**0.35**		**0.4**		**2**		**0.086**		**0.03**				0.0083	U	**0.079**		**0.097**	M1	**0.0013**	J	**0.017**		**0.0051**	J	**0.0081**	B
PCBs																																		
Aroclor 1242	mg/kg	0.97	0.0958	U			0.0541	U			0.0522	U			0.328	U					0.0634	U			1.94	U			0.0555	U			0.054	U
Aroclor 1248	mg/kg	0.94	**0.0901**	J			0.0541	U			0.0522	U			0.328	U					0.0634	U			**50.9**				0.0555	U			**0.0464**	J
Aroclor 1254	mg/kg	0.97	0.0958	U			**0.139**				**0.0287**	J			**0.379**						0.0634	U			1.94	U			0.0555	U			**0.0476**	J
Aroclor 1260	mg/kg	0.99	0.0958	U			0.0541	U			0.0522	U			0.328	U					0.0634	U			1.94	U			0.0555	U			0.054	U
Aroclor 1262	mg/kg		0.0958	U			**0.209**				**0.0499**	J			0.328	U					0.0634	U			**10.1**				0.0555	U			**0.235**	
Aroclor 1268	mg/kg		0.0958	U			0.0541	U			0.0522	U			**10.5**						0.0634	U			1.94	U			**0.877**				0.054	U
PCB, Total	mg/kg	0.97	**0.0901**	J			**0.348**				**0.0786**				**10.879**						0.0634	U			**61**				**0.877**				**0.329**	
TPH/Oil and Grease																																		
Diesel Range Organics	mg/kg	620	**149**	L2	**38.6**	L2	1,480	L2	**39.8**	L2	**50.9**	L2	**47.5**	L2	**48.5**	L2	1,030	L2	**506**	L2	**29.8**	L2	**76.1**	L2	**154**	L2	**6.9**	JL2	**25.4**	L2	**148**	L2	**61.7**	L2
Gasoline Range Organics	mg/kg	620	**37**		9.9	U	12.7	U	18.2	U	9.7	U	12.7	U	8.5	U	12.5	U			10.6	U	10	U	10.7	U	10	U	9.3	U	12.6	U	15.1	U

Detections in bold

Blank spaces indicate that the parameter was not analyzed for this sample

*PAH compounds were analyzed via SIM

A glossary of laboratory flag keys can be viewed in the attached laboratory reports

Values in Red indicate an exceedance of the Project Action Limit (PAL)

Table 5
Summary of Organics Detected in Soil
Parcel B22
Tradepoint Atlantic
Sparrows Point, Maryland

Parameter	Units	PAL	B22-067-SB-7		B22-067-SB-10		B22-068-SB-1		B22-068-SB-6		B22-069-SB-1		B22-069-SB-4		B22-069-SB-10		B22-070-SB-1		B22-070-SB-9		B22-071-SB-1		B22-071-SB-4		B22-072-SB-1		B22-073-SB-1		B22-073-SB-5		B22-074-SB-1		B22-075-SB-1		B22-075-SB-4	
			Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
			5/20/2016		5/20/2016		5/25/2016		5/25/2016		5/25/2016		5/25/2016		5/25/2016		5/25/2016		5/25/2016		5/18/2016		5/18/2016		6/1/2016		5/17/2016		5/17/2016		6/1/2016		6/3/2016		6/3/2016	
Volatile Organic Compounds																																		
1,1,1-Trichloroethane	mg/kg	36,000	0.0045	U1c			0.0051	U	0.0056	U	0.27	U1c	0.0052	U			0.29	U1c	**0.045**		0.003	U1c	0.0037	U1c	**0.0082**		0.0081	U	0.005	U	0.0054	U	0.0058	U	0.0054	U
1,1,2-Trichloroethane	mg/kg	5	0.0045	U1c			0.0051	U	0.0056	U	0.27	U1c	0.0052	U			0.29	U1c	**0.0023**	J	0.003	U1c	0.0037	U1c	0.007	U	0.0081	U	0.005	U	0.0054	U	0.0058	U	0.0054	U
1,1,2-Trichlorotrifluoroethane	mg/kg	170,000	0.045	U1c			0.051	U	0.056	U	2.7	U1c	0.052	U			2.9	U1c	0.051	U	0.03	U1c	0.037	U1c	0.07	U	0.081	U	0.05	U	0.054	U	0.058	U	0.054	U
1,1-Dichloroethane	mg/kg	16	0.0045	U1c			0.0051	U	0.0056	U	0.27	U1c	0.0052	U			44.7	1c	**1.4**	1c	0.003	U1c	0.0037	U1c	0.007	U	0.0081	U	0.005	U	0.0054	U	0.0058	U	0.0054	U
1,1-Dichloroethene	mg/kg	1,000	0.0045	U1c			0.0051	U	0.0056	U	0.27	U1c	0.0052	U			0.29	U1c	**0.22**		0.003	U1c	0.0037	U1c	0.007	U	0.0081	U	0.005	U	0.0054	U	0.0058	U	0.0054	U
1,2,3-Trichlorobenzene	mg/kg	930	0.0045	U1c			0.0051	U	0.0056	U	0.27	U1c	0.0052	U			0.29	U1c	0.0051	U	0.003	U1c	0.0037	U1c	0.007	U	0.0081	U	0.005	U	0.0054	U	0.0058	U	0.0054	U
1,2,4-Trichlorobenzene	mg/kg	110	0.0045	U1c			0.0051	U	0.0056	U	0.27	U1c	0.0052	U			0.29	U1c	0.0051	U	0.003	U1c	0.0037	U1c	0.007	U	0.0081	U	0.005	U	0.0054	U	0.0058	U	0.0054	U
1,2-Dichloroethane	mg/kg	2	0.0045	U1c			0.0051	U	0.0056	U	0.27	U1c	0.0052	U			0.29	U1c	**0.01**		0.003	U1c	0.0037	U1c	0.007	U	0.0081	U	0.005	U	0.0054	U	0.0058	U	0.0054	U
1,2-Dichloroethene (Total)	mg/kg	2,300	0.0091	U			0.01	U	0.011	U	0.53	U	0.01	U			**0.29**	J	**0.025**		0.006	U	0.0075	U	0.014	U	0.016	U	0.01	U	0.011	U	0.012	U	0.011	U
1,4-Dichlorobenzene	mg/kg	11	0.0045	U1c			0.0051	U	0.0056	U	0.27	U1c	0.0052	U			0.29	U1c	0.0051	U	0.003	U1c	0.0037	U1c	0.007	U	0.0081	U	0.005	U	0.0054	U	0.0058	U	0.0054	U
1,4-Dioxane	mg/kg	24	0.091	U1c			0.1	U	0.11	U	5.3	U1c	0.1	U			5.9	U1c	**1.4**		0.06	U1c	0.075	U1c	0.14	UL2	0.16	U	0.1	U	0.11	U	0.12	U	0.11	U
2-Butanone (MEK)	mg/kg	190,000	**0.0038**	J1c			0.01	U	0.011	U	0.53	U1c	0.01	U			**0.18**	J1c	0.01	U	0.006	U1c	0.0075	U1c	0.014	U	0.016	U	0.01	U	0.011	U	0.012	U	0.011	U
2-Hexanone	mg/kg	1,300	0.0091	UL31c			0.01	UL3	0.011	UL3	0.53	UL31c	0.01	UL3			0.59	UL31c	0.01	UL3	0.006	UL31c	0.0075	UL31c	0.014	UL3	0.016	UL3	0.01	UL3	0.011	U	0.012	U	0.011	U
4-Methyl-2-pentanone (MIBK)	mg/kg	56,000	0.0091	U1c			0.01	UL3	0.011	UL3	0.53	UL31c	0.01	UL3			0.59	UL31c	0.01	UL3	0.006	U1c	0.0075	U1c	0.014	U	0.016	U	0.01	U	0.011	U	0.012	U	0.011	U
Acetone	mg/kg	670,000	**0.018**	1c			0.01	U	0.011	U	0.53	U1c	0.01	U			0.59	U1c	0.01	U	**0.0037**	J1c	**0.0054**	J1c	**0.011**	J	0.016	U	0.01	U	0.011	U	0.012	U	0.011	U
Benzene	mg/kg	5.1	0.0045	U1c			0.0051	U	0.0056	U	0.27	U1c	0.0052	U			0.29	U1c	0.0051	U	0.003	U1c	0.0037	U1c	0.007	U	0.0081	U	0.005	U	0.0054	U	0.0058	U	0.0054	U
Chlorobenzene	mg/kg	1,300	0.0045	U1c			0.0051	U	0.0056	U	0.27	U1c	0.0052	U			0.29	U1c	0.0051	U	0.003	U1c	0.0037	U1c	0.007	U	0.0081	U	0.005	U	0.0054	U	0.0058	U	0.0054	U
Chloroethane	mg/kg	57,000	0.0045	U1c			0.0051	U	0.0056	U	0.27	U1c	0.0052	U			**0.78**	1c	**0.019**		0.003	U1c	0.0037	U1c	0.007	U	0.0081	U	0.005	U	0.0054	U	0.0058	U	0.0054	U
Chloroform	mg/kg	1.4	0.0045	U1c			0.0051	U	0.0056	U	0.27	U1c	0.0052	U			0.29	U1c	0.0051	U	0.003	U1c	0.0037	U1c	0.007	U	0.0081	U	0.005	U	0.0054	U	0.0058	U	0.0054	U
cis-1,2-Dichloroethene	mg/kg	2,300	0.0045	U1c			0.0051	U	0.0056	U	0.27	U1c	0.0052	U			**0.28**	J1c	**0.025**		0.003	U1c	0.0037	U1c	0.007	U	0.0081	U	0.005	U	0.0054	U	0.0058	U	0.0054	U
Cyclohexane	mg/kg	27,000	0.0091	U1c			0.01	U	0.011	U	0.53	U1c	0.01	U			0.59	U1c	0.01	U	0.006	U1c	0.0075	U1c	0.014	U	0.016	U	0.01	U	0.011	U	0.012	U	0.011	U
Ethylbenzene	mg/kg	25	0.0045	U1c			0.0051	U	0.0056	U	0.27	U1c	0.0052	U			0.29	U1c	0.0051	U	0.003	U1c	0.0037	U1c	0.007	U	0.0081	U	0.005	U	0.0054	U	0.0058	U	0.0054	U
Isopropylbenzene (Cumene)	mg/kg	9,900	**0.005**	1c			0.0051	U	0.0056	U	0.27	U1c	0.0052	U			0.29	U1c	0.0051	U	0.003	U1c	0.0037	U1c	0.007	U	0.0081	U	0.005	U	0.0054	U	0.0058	U	0.0054	U
Methyl acetate	mg/kg	1,200,000	0.045	U1c			0.051	U	0.056	U	**0.12**	J1c	0.052	U			2.9	U1c	0.051	U	0.03	U1c	0.037	U1c	0.07	UL2	0.081	U	0.05	U	0.054	U	0.058	U	0.054	U
Methylene Chloride	mg/kg	1,000	0.0045	U1c			0.0051	U	0.0056	U	0.27	U1c	0.0052	U			0.29	U1c	0.0051	U	0.003	U1c	0.0037	U1c	0.007	U	0.0081	U	0.005	U	0.0054	U	0.0058	U	0.0054	U
Styrene	mg/kg	35,000	0.0045	U1c			0.0051	U	0.0056	U	0.27	U1c	0.0052	U			0.29	U1c	0.0051	U	0.003	U1c	0.0037	U1c	0.007	U	0.0081	U	0.005	U	0.0054	U	0.0058	U	0.0054	U
Tetrachloroethene	mg/kg	100	0.0045	U1c			0.0051	U	0.0056	U	0.27	U1c	0.0052	U			0.29	U1c	0.0051	U	0.003	U1c	0.0037	U1c	**0.0074**		0.0081	U	0.005	U	0.0054	U	0.0058	U	0.0054	U
Toluene	mg/kg	47,000	0.0045	U1c			0.0051	U	0.0056	U	0.27	U1c	0.0052	U			**0.11**	J1c	**0.0017**	J	0.003	U1c	0.0037	U1c	0.007	U	**0.0051**	J	0.005	U	**0.0024**	J	0.0058	U	0.0054	U
trans-1,2-Dichloroethene	mg/kg	23,000	0.0045	U1c			0.0051	U	0.0056	U	0.27	U1c	0.0052	U			0.29	U1c	0.0051	U	0.003	U1c	0.0037	U1c	0.007	U	0.0081	U	0.005	U	0.0054	U	0.0058	U	0.0054	U
Trichloroethene	mg/kg	6	0.0045	U1c			0.0051	U	0.0056	U	0.27	U1c	0.0052	U			**2**	1c	**0.088**		0.003	U1c	0.0037	U1c	**0.0041**	J	0.0081	U	0.005	U	0.0054	U	0.0058	U	0.0054	U
Trichlorofluoromethane	mg/kg	3,100	0.0045	U1c			0.0051	U	0.0056	UR1	0.27	U1c	0.0052	U			0.29	U1c	0.0051	U	0.003	U1c	0.0037	U1c	0.007	U	0.0081	U	0.005	U	0.0054	U	0.0058	U	0.0054	U
Vinyl chloride	mg/kg	1.7	0.0045	U1c			0.0051	U	0.0056	U	0.27	U1c	0.0052	U			**1.6**	1c	**0.058**		0.003	U1c	0.0037	U1c	0.007	U	0.0081	U	0.005	U	0.0054	U	0.0058	U	0.0054	U
Xylene (Total)	mg/kg	2,800	0.014	U			0.015	U	0.017	U	0.8	U	0.016	U			**0.27**	J	0.015	U	0.009	U	0.011	U	0.021	U	**0.0079**	J	0.015	U	**0.0045**	J	0.018	U	0.016	U
Semi-Volatile Organic Compounds*																																		
1,2,4,5-Tetrachlorobenzene	mg/kg	350	0.075	U			0.085	U	0.081	U	0.072	U	0.083	U			0.38	U	0.083	U	0.075	U	0.076	U	0.079	U	0.08	U	0.085	U	0.073	U	0.07	UL3	0.083	UL3
2,4-Dimethylphenol	mg/kg	16,000	**0.37**				0.085	U	0.081	U	0.072	U	0.083	U			0.38	U	0.083	U	0.075	U	0.076	U	**0.035**	J	**0.036**	J	0.085	U	0.073	U	0.07	U	0.083	U
2-Chloronaphthalene	mg/kg	60,000	0.075	U			0.085	U	0.081	U	0.072	U	0.083	U			0.38	U	0.083	U	0.075	U	0.076	U	0.079	U	0.08	U	0.085	U	0.073	U	0.07	U	0.083	U
2-Methylnaphthalene	mg/kg	3,000	**0.057**				**0.016**		0.0082	U	**0.026**	J	0.0084	U			**4.2**		**0.0025**	J	**0.42**		**0.13**		**0.55**		**1.4**		**0.075**		**0.32**		**0.013**		0.0085	U
2-Methylphenol(o-Cresol)	mg/kg	41,000	0.075	U			0.085	U	0.081	U	0.072	U	0.083	U			0.38	U	0.083	U	0.075	UL3	0.076	UL3	**0.023**	J	0.08	U	0.085	U	0.073	U	0.07	U	0.083	U
2-Nitroaniline	mg/kg	8,000	0.19	U			0.21	U	0.2	UR1	0.18	U	0.21	U			0.96	U	0.21	U	0.19	UL3	0.19	UL3	0.2	U	0.2	U	0.21	U	0.18	U	0.18	U	0.21	U
3&4-Methylphenol(m&p Cresol)	mg/kg	41,000	0.15	U			0.17	U	0.16	U	0.14	U	0.17	U			0.77	U	0.17	U	0.15	UL3	0.15	UL3	**0.12**	J	**0.023**	J	0.17	U	0.15	U	0.14	UL3	0.17	UL3
4-Nitroaniline	mg/kg	110	0.19	UL3			0.21	UL3	0.2	UM0L3	0.18	UL3	0.21	UL3			0.96	UL3	0.21	UL3	0.19	UL3	0.19	UL3	0.2	U	0.2	UL3	0.21	UL3	0.18	U	0.18	UL2	0.21	UL2
Acenaphthene	mg/kg	45,000	**0.036**				**0.00098**	J	0.0082	U	0.073	U	0.0084	U			**0.17**		0.0084	U	**0.046**	J	**0.035**		**0.45**		**1.1**		**0.014**		**0.014**	J	**0.017**		0.0085	U
Acenaphthylene	mg/kg	45,000	**0.026**				**0.0017**	J	0.0082	U	0.073	U	0.0084	U			**0.21**		0.0084	U	**0.093**		**0.034**		**2**		**0.11**	J	**0.0077**	J	**0.014**	J	**0.0015**	J	0.0085	U
Acetophenone	mg/kg	120,000	**0.88**				0.085	U	0.081	U	0.072	U	0.083	U			0.38	U	0.083	U	**0.022**	J	0.076	U	0.079	U	**0.14**		0.085	U	**0.033**	J	0.07	UL3	0.083	UL3
Anthracene	mg/kg	230,000	**0.022**				**0.0071**	J	0.0082	U	**0.0063**	J	0.0084	U			**0.097**		0.0084	U	**0.2**		**0.23**		**2.6**		**2.5**		**0.037**		**0.07**	J	**0.012**		0.0085	U
Benzaldehyde	mg/kg	120,000	0.075	UL2			0.085	UL2	0.081	UL2	0.072	UL2	0.083	UL2			0.38	UL2	0.083	UL2	**0.042**	JL2	0.076	UL2	0.079	UL2	**0.22**	L2	0.085	UL2	**0.087**	L2	0.07	UL2	0.083	UL2
Benzo(a)anthracene	mg/kg	2.9	**0.019**				**0.016**		**0.0023**	J	0.073	U	0.0084	U			0.076	U	0.0084	U	**0.9**		**0.88**		**9.5**		**6**		**0.2**		**0.14**		**0.034**		0.0085	U
Benzo(a)pyrene	mg/kg	0.29	**0.011**				**0.012**	IS	**0.0013**	JIS	0.073	U	0.0084	U			0.076	UIS	0.0084	U	**0.94**		**1.4**		**13.7**		**5.1**		**0.18**		**0.13**		**0.014**		0.0085	U
Benzo(b)fluoranthene	mg/kg	2.9	0.0077	U			**0.03**	ISip	**0.0015**	JISR1	**0.033**	J	0.0084	U			**0.56**	ISip	0.0084	U	**2.2**	ip	**1.9**	ip	**25.3**	ip	**9.8**	ip	**0.34**	ip	**0.26**	ip	**0.06**	ip	**0.001**	JipB
Benzo(g,h,i)perylene	mg/kg		**0.012**				**0.0058**	JIS	0.0082	UISM1	0.073	U	0.0084	U			0.076	UIS	0.0084	U	**0.23**		**0.65**		**4.4**		**3.5**		**0.11**		**0.11**		**0.0076**		0.0085	U
Benzo(k)fluoranthene	mg/kg	29	0.0077	U			**0.026**	ISip	0.0082	UR1	**0.014**	J	0.0084	U			**0.5**	ISip	0.0084	U	**2.1**	ip	**1.6**	ip	**21.3**	ip	**9.6**	ip	**0.33**	ip	**0.22**	ip	**0.053**	ip	0.0085	Uip
Biphenyl (Diphenyl)	mg/kg	200	**0.059**	J			0.085	U	0.081	U	0.072	U	0.083	U			**0.18**	J	0.083	U	**0.049**	JL1	**0.017**	JL1	**0.19**		**0.34**		0.085	U	**0.045**	J	0.07	U	0.083	U
bis(2-Ethylhexyl)phthalate	mg/kg	160	0.075	U			0.085	UL3	**0.023**	JL1M0	0.072	UISL3	0.083	UL3			0.077	UISL3	0.083	UL3	0.075	UL3	0.076	UL3	**0.023**	JIS	**0.045**	J	0.085	U	**0.017**	JIS	0.07	U	0.083	U
Carbazole	mg/kg		0.075	U			0.085	U	0.081	U	0.072	U	0.083	U			0.077	U	0.083	U	**0.26**		**0.12**		**1.4**		**3**		0.085	U	**0.024**	J	0.07	U	0.083	U
Chrysene	mg/kg	290	**0.12**				**0.012**		**0.0014**	J	0.073	U	0.0084	U			**0.73**		0.0084	U	**0.93**		**0.92**		**9.7**		**6.7**		**0.21**		**0.12**		**0.032**		**0.00081**	J
Dibenz(a,h)anthracene	mg/kg	0.29	**0.0043**	J			**0.0015**	JIS	0.0082	UISM1	0.073	U	0.0084	U			0.076	UIS	0.0084	U	**0.091**		**0.29**		**2**		**0.99**		**0.033**		**0.033**	J	**0.0026**	J	0.0085	U
Diethylphthalate	mg/kg	660,000	0.075	UL3			0.085	UL3	0.081	UM0L3	0.072	UL3	0.083	UL3			0.38	UL3	0.083	UL3	0.075	UL3	0.076	UL3	0.079	U	0.08	U	0.085	U	0.073	U	0.07	U	0.083	U
Di-n-butylphthalate	mg/kg	82,000	0.075	UL3			0.085	UL3	0.081	UM0L3	**0.048**	JL1B	0.083	UL3			**0.041**	JL1B	0.083	UL3	0.075	UL3	0.076	UL3	0.079	U	0.08	U	0.085	U	0.073	U	0.07	U	0.083	U
Di-n-octylphthalate	mg/kg	8,200	0.075	UL3			0.085	UL3	0.081	UM0L3	0.072	UISL3	0.083	UL3			0.077	UISL3	0.083	UL3	0.075	UL3	0.076	UL3	0.079	UIS	0.08	UL3	0.085	UL3	0.073	UIS	0.07	U	0.083	U
Fluoranthene	mg/kg	30,000	**0.054**				**0.028**		**0.0023**	J	0.073	U	0.0084	U			**0.24**		**0.00053**	J	**1.5**		**1.4**		**14.9**		**16.7**		**0.44**		**0.26**		**0.11**		**0.0015**	JB
Fluorene	mg/kg	30,000	**0.041**				**0.0015**	J	0.0082	U	0.073	U	0.0084	U			**0.36**		0.0084	U	**0.043**	J	**0.022**		**0.63**		**0.86**		**0.0088**		**0.011**	J	**0.0036**	J	0.0085	U
Hexachlorobenzene	mg/kg	0.96	0.075	U			0.085	U	0.081	U	0.072	U	0.083	U			0.077	U	0.083	U	0.075	U	0.076	U	0.079	U	0.08	U	0.085	U	0.073	U	0.07	U	0.083	U
Indeno(1,2,3-cd)pyrene	mg/kg	2.9	**0.0092**				**0.0058**	JIS	0.0082	UISM1	0.073	U	0.0084	U			0.076	UIS	0.0084	U	**0.27**		**0.76**		**5**		**3.1**		**0.1**		**0.084**		**0.0068**	J	0.0085	U
Naphthalene	mg/kg	17	**0.31**				**0.017**		0.0082	U	0.073	U	**0.0034**	J			**1.4**		**0.0032**	J	**0.65**		**0.14**		**1.4**		**1.1**		**0.055**		**0.22**		**0.0075**	B	0.0085	U
N-Nitroso-di-n-propylamine	mg/kg	0.33	0.075	U			0.085	U	0.081	U	0.072	U	0.083	U			0.38	U	0.083	U	0.075	U	0.076	U	0.079	U	0.08	U	0.085	U	0.073	U	0.07	UL3	0.083	UL3
N-Nitrosodiphenylamine	mg/kg	470	0.075	U			0.085	U	0.081	U	0.072	U	0.083	U			0.077	U	0.083	U	0.075	U	0.076	U	0.079	U	**0.44**		0.085	U	0.073	U	0.07	UL3	0.083	UL3
Pentachlorophenol	mg/kg	4	0.19	UL3			0.21	UL3	0.2	UM0L3	0.18	UL3	0.21	UL3			0.19	UL3	0.21	UL3	0.19	UL3	0.19	UL3	0.2	U	0.2	UL3	0.21	UL3	0.18	U	0.18	UL2	0.21	UL2
Phenanthrene	mg/kg		**0.047**				**0.02**		**0.0016**	J	**0.015**	J	0.0084	U			**0.39**		**0.00066**	J	**0.79**		**0.9**		**8.1**		**12.5**		**0.22**		**0.32**		**0.1**		**0.001**	JB
Phenol	mg/kg	250,000	**0.21**				0.085	U	0.081	U	0.072	U	0.083	U			0.38	U	0.083	U	0.075	UL3	0.076	UL3	**0.14**		0.08	U	0.085	U	0.073	U	0.07	UL3	0.083	UL3
Pyrene	mg/kg	23,000	**0.067**				**0.023**		**0.002**	J	0.073	U	0.0084	U			**0.35**		0.0084	U	**1.3**		**1.5**		**11.1**		**13.3**		**0.42**		**0.24**		**0.081**		**0.00095**	JB
PCBs																																		
Aroclor 1242	mg/kg	0.97					0.0655	U			0.0554	U					0.116	U			0.0552	U			0.0585	U	0.0577	U			0.0546	U	0.0553	U		
Aroclor 1248	mg/kg	0.94					0.0655	U			**0.0382**	J					0.116	U			0.0552	U			0.0585	U	0.0577	U			0.0546	U	0.0553	U		
Aroclor 1254	mg/kg	0.97					**0.627**				0.0554	U					**3.65**				0.0552	U			0.0585	U	0.0577	U			0.0546	U	0.0553	U		
Aroclor 1260	mg/kg	0.99					0.0655	U			0.0554	U					0.116	U			**0.0272**	J			0.0585	U	0.0577	U			0.0546	U	0.0553	U		
Aroclor 1262	mg/kg						**0.631**				0.0554	U					**3.71**				0.0552	U			0.0585	U	0.0577	U			**0.084**		0.0553	U		
Aroclor 1268	mg/kg						0.0655	U			0.0554	U					0.116	U			0.0552	U			**0.144**		0.0577	U			0.0546	U	0.0553	U		
PCB, Total	mg/kg	0.97					**1.258**				**0.0382**	J					**7.36**				**0.0272**	J			**0.144**		0.0577	U			**0.084**		0.0553	U		
TPH/Oil and Grease																																		
Diesel Range Organics	mg/kg	620	**575**	L2			**96.5**	L2	**4.8**	JL2M0	**266**	L2	**5.5**	JL2			**6,620**	L2	**13.6**	L2	**70.7**	L2	**77.4**	L2	**236**	L2	**176**	L2	**118**	L2	**78.8**	L2	**13**	L2	**3.7**	JL2
Gasoline Range Organics	mg/kg	620	**150**				9.2	U	11	U	10.9	U	9.7	U			**36.3**		9.9	U	7.8	U	9.6	U	**19.2**		**45.5**		**5.9**	J	**20.2**		12.3	U	10.1	U

Detections in bold

Blank spaces indicate that the parameter was not analyzed for this sample

*PAH compounds were analyzed via SIM

A glossary of laboratory flag keys can be viewed in the attached laboratory reports

Values in Red indicate an exceedance of the Project Action Limit (PAL)

Table 5
Summary of Organics Detected in Soil
Parcel B22
Tradepoint Atlantic
Sparrows Point, Maryland

Parameter	Units	PAL	B22-076-SB-1 Soil 6/3/2016		B22-077-SB-1 Soil 6/2/2016		B22-077-SB-5 Soil 6/2/2016		B22-078-SB-1 Soil 5/17/2016		B22-078-SB-7.5 Soil 5/17/2016		B22-079-SB-1 Soil 6/2/2016		B22-079-SB-4 Soil 6/2/2016		B22-080-SB-1 Soil 6/3/2016		B22-080-SB-5 Soil 6/3/2016		B22-081-SB-1 Soil 6/3/2016		B22-081-SB-4 Soil 6/3/2016		B22-081-SB-10 Soil 6/3/2016		B22-082-SB-1 Soil 5/31/2016		B22-082-SB-4 Soil 5/31/2016		B22-083-SB-1 Soil 6/3/2016	
Volatile Organic Compounds																																
1,1,1-Trichloroethane	mg/kg	36,000	0.0059	U	0.0047	U	0.0061	U	0.0051	U	0.0051	U	0.0088	U	0.0088	U	0.0047	U	0.005	U	0.0058	U	0.0056	U			0.0053	U	0.0053	U	0.0054	U
1,1,2-Trichloroethane	mg/kg	5	0.0059	U	0.0047	U	0.0061	U	0.0051	U	0.0051	U	0.0088	U	0.0088	U	0.0047	U	0.005	U	0.0058	U	0.0056	U			0.0053	U	0.0053	U	0.0054	U
1,1,2-Trichlorotrifluoroethane	mg/kg	170,000	0.059	U	0.047	U	0.061	U	0.051	U	0.051	U	0.088	U	0.088	U	0.047	U	0.05	U	0.058	U	0.056	U			0.053	U	0.053	U	0.054	U
1,1-Dichloroethane	mg/kg	16	0.0059	U	0.0047	U	0.0061	U	0.0051	U	0.0051	U	0.0088	U	0.0088	U	0.0047	U	0.005	U	0.0058	U	0.0056	U			0.0053	U	0.0053	U	0.0054	U
1,1-Dichloroethene	mg/kg	1,000	0.0059	U	0.0047	U	0.0061	U	0.0051	U	0.0051	U	0.0088	U	0.0088	U	0.0047	U	0.005	U	0.0058	U	0.0056	U			0.0053	U	0.0053	U	0.0054	U
1,2,3-Trichlorobenzene	mg/kg	930	0.0059	U	0.0047	U	0.0061	U	0.0051	U	0.0051	U	0.0088	U	0.0088	U	0.0047	U	0.005	U	0.0058	U	0.0056	U			0.0053	U	0.0053	U	0.0054	U
1,2,4-Trichlorobenzene	mg/kg	110	0.0059	U	0.0047	U	0.0061	U	0.0051	U	0.0051	U	0.0088	U	0.0088	U	0.0047	U	0.005	U	0.0058	U	0.0056	U			0.0053	U	0.0053	U	0.0054	U
1,2-Dichloroethane	mg/kg	2	0.0059	U	0.0047	U	0.0061	U	0.0051	U	0.0051	U	0.0088	U	0.0088	U	0.0047	U	0.005	U	0.0058	U	0.0056	U			0.0053	U	0.0053	U	0.0054	U
1,2-Dichloroethene (Total)	mg/kg	2,300	0.012	U	0.0094	U	0.012	U	0.01	U	0.01	U	0.018	U	0.018	U	0.0093	U	0.01	U	0.012	U	0.011	U			0.011	U	0.011	U	0.011	U
1,4-Dichlorobenzene	mg/kg	11	0.0059	U	0.0047	U	0.0061	U	0.0051	U	0.0051	U	0.0088	U	0.0088	U	0.0047	U	0.005	U	0.0058	U	0.0056	U			0.0053	U	0.0053	U	0.0054	U
1,4-Dioxane	mg/kg	24	0.12	U	0.094	U	0.12	U	0.1	U	0.1	U	0.18	U	0.18	U	0.093	U	0.1	U	0.12	U	0.11	U			0.11	U	0.11	U	0.11	U
2-Butanone (MEK)	mg/kg	190,000	0.012	U	0.0094	U	0.012	U	**0.003**	J	0.01	U	0.018	U	0.018	U	0.0093	U	0.01	U	0.012	U	0.011	U			0.011	U	0.011	U	0.011	U
2-Hexanone	mg/kg	1,300	0.012	U	0.0094	U	0.012	U	0.01	UL3	0.01	UL3	0.018	UL3	0.018	UL3	0.0093	U	0.01	U	0.012	U	0.011	U			0.011	UL3	0.011	UL3	0.011	U
4-Methyl-2-pentanone (MIBK)	mg/kg	56,000	0.012	U	0.0094	U	0.012	U	0.01	U	0.01	U	0.018	U	0.018	U	0.0093	U	0.01	U	0.012	U	0.011	U			0.011	U	0.011	U	0.011	U
Acetone	mg/kg	670,000	0.012	U	**0.021**		0.012	U	**0.051**		0.01	U	0.018	U	0.018	U	0.0093	U	0.01	U	0.012	U	0.011	U			**0.0052**	J	0.011	U	0.011	U
Benzene	mg/kg	5.1	0.0059	U	0.0047	U	0.0061	U	0.0051	U	0.0051	U	0.0088	U	0.0088	U	0.0047	U	0.005	U	0.0058	U	0.0056	U			0.0053	U	0.0053	U	0.0054	U
Chlorobenzene	mg/kg	1,300	0.0059	U	0.0047	U	0.0061	U	0.0051	U	0.0051	U	0.0088	U	0.0088	U	0.0047	U	0.005	U	0.0058	U	0.0056	U			0.0053	U	0.0053	U	0.0054	U
Chloroethane	mg/kg	57,000	0.0059	U	0.0047	U	0.0061	U	0.0051	U	0.0051	U	0.0088	U	0.0088	U	0.0047	U	0.005	U	0.0058	U	0.0056	U			0.0053	U	0.0053	U	0.0054	U
Chloroform	mg/kg	1.4	0.0059	U	0.0047	U	0.0061	U	0.0051	U	0.0051	U	0.0088	U	0.0088	U	0.0047	U	0.005	U	0.0058	U	0.0056	U			0.0053	U	0.0053	U	0.0054	U
cis-1,2-Dichloroethene	mg/kg	2,300	0.0059	U	0.0047	U	0.0061	U	0.0051	U	0.0051	U	0.0088	U	0.0088	U	0.0047	U	0.005	U	0.0058	U	0.0056	U			0.0053	U	0.0053	U	0.0054	U
Cyclohexane	mg/kg	27,000	0.012	U	0.0094	U	0.012	U	0.01	U	0.01	U	0.018	U	0.018	U	0.0093	U	0.01	U	0.012	U	0.011	U			0.011	U	0.011	U	0.011	U
Ethylbenzene	mg/kg	25	0.0059	U	0.0047	U	0.0061	U	0.0051	U	0.0051	U	0.0088	U	0.0088	U	0.0047	U	0.005	U	0.0058	U	0.0056	U			0.0053	U	0.0053	U	0.0054	U
Isopropylbenzene (Cumene)	mg/kg	9,900	0.0059	U	0.0047	U	0.0061	U	0.0051	U	0.0051	U	0.0088	U	0.0088	U	0.0047	U	0.005	U	0.0058	U	0.0056	U			0.0053	U	0.0053	U	0.0054	U
Methyl acetate	mg/kg	1,200,000	0.059	U	0.047	U	0.061	U	0.051	U	0.051	U	0.088	U	0.088	U	0.047	U	0.05	U	0.058	U	0.056	U			0.053	U	0.053	U	0.054	U
Methylene Chloride	mg/kg	1,000	0.0059	U	0.0047	U	0.0061	U	0.0051	U	0.0051	U	0.0088	U	0.0088	U	0.0047	U	0.005	U	0.0058	U	0.0056	U			0.0053	U	0.0053	U	0.0054	U
Styrene	mg/kg	35,000	0.0059	U	0.0047	U	0.0061	U	0.0051	U	0.0051	U	0.0088	U	0.0088	U	0.0047	U	0.005	U	0.0058	U	0.0056	U			0.0053	U	0.0053	U	0.0054	U
Tetrachloroethene	mg/kg	100	0.0059	U	0.0047	U	0.0061	U	0.0051	U	0.0051	U	0.0088	U	0.0088	U	0.0047	U	0.005	U	0.0058	U	0.0056	U			0.0053	U	0.0053	U	0.0054	U
Toluene	mg/kg	47,000	0.0059	U	0.0047	U	0.0061	U	0.0051	U	0.0051	U	0.0088	U	0.0088	U	0.0047	U	0.005	U	0.0058	U	0.0056	U			0.0053	U	0.0053	U	0.0054	U
trans-1,2-Dichloroethene	mg/kg	23,000	0.0059	U	0.0047	U	0.0061	U	0.0051	U	0.0051	U	0.0088	U	0.0088	U	0.0047	U	0.005	U	0.0058	U	0.0056	U			0.0053	U	0.0053	U	0.0054	U
Trichloroethene	mg/kg	6	0.0059	U	0.0047	U	0.0061	U	0.0051	U	0.0051	U	0.0088	U	0.0088	U	0.0047	U	0.005	U	0.0058	U	0.0056	U			0.0053	U	0.0053	U	0.0054	U
Trichlorofluoromethane	mg/kg	3,100	0.0059	U	0.0047	U	0.0061	U	0.0051	U	0.0051	U	0.0088	U	0.0088	U	0.0047	U	0.005	U	0.0058	U	0.0056	U			0.0053	U	0.0053	U	0.0054	U
Vinyl chloride	mg/kg	1.7	0.0059	U	0.0047	U	0.0061	U	0.0051	U	0.0051	U	0.0088	U	0.0088	U	0.0047	U	0.005	U	0.0058	U	0.0056	U			0.0053	U	0.0053	U	0.0054	U
Xylene (Total)	mg/kg	2,800	0.018	U	0.014	U	0.018	U	0.015	U	0.015	U	0.026	U	0.026	U	0.014	U	0.015	U	0.018	U	0.017	U			0.016	U	0.016	U	0.016	U
Semi-Volatile Organic Compounds*																																
1,2,4,5-Tetrachlorobenzene	mg/kg	350	0.075	UL3	0.076	U	0.074	U	0.075	U	0.084	U	0.082	UL3	0.082	UL3	0.081	UL3	0.086	UL3	0.079	UL3	0.086	UL3			0.088	U	0.084	U	0.075	UL3
2,4-Dimethylphenol	mg/kg	16,000	0.075	U	0.076	U	0.074	U	0.075	U	0.084	U	0.082	U	0.082	U	0.081	U	0.086	U	0.079	U	0.086	U			0.088	U	0.084	U	0.075	U
2-Chloronaphthalene	mg/kg	60,000	0.075	U	0.076	U	0.074	U	0.075	U	0.084	U	0.082	U	0.082	U	0.081	U	0.086	U	0.079	U	0.086	U			0.088	U	0.084	U	0.075	U
2-Methylnaphthalene	mg/kg	3,000	**0.0063**	J	**0.12**		**0.0091**		**0.12**		0.0083	U	0.0084	U	0.0084	U	**1.7**		0.0088	U	**0.0028**	J	0.0087	U			**0.0095**		0.0086	U	**0.046**	J
2-Methylphenol(o-Cresol)	mg/kg	41,000	0.075	U	0.076	U	0.074	U	0.075	U	0.084	U	0.082	UL3	0.082	UL3	0.081	U	0.086	U	0.079	U	0.086	U			0.088	U	0.084	U	0.075	U
2-Nitroaniline	mg/kg	8,000	0.19	U	0.19	U	0.18	U	0.19	U	0.21	U	0.21	U	0.21	U	0.2	U	0.22	U	0.2	U	0.22	U			0.22	U	0.21	U	0.19	U
3&4-Methylphenol(m&p Cresol)	mg/kg	41,000	0.15	UL3	0.15	U	0.15	U	0.15	U	0.17	U	0.16	UL3	0.16	UL3	0.16	UL3	0.17	UL3	0.16	UL3	0.17	UL3			0.18	U	0.17	U	0.15	UL3
4-Nitroaniline	mg/kg	110	0.19	UL2	0.19	U	0.18	U	0.19	UL3	0.21	UL3	0.21	UL2	0.21	UL2	0.2	UL2	0.22	UL2	0.2	UL2	0.22	UL2			0.22	UL2	0.21	UL2	0.19	UL2
Acenaphthene	mg/kg	45,000	**0.0033**	J	**0.012**		**0.0012**	J	**0.02**		0.0083	U	**0.0014**	J	**0.0014**	J	**4.1**		0.0088	U	**0.0061**	J	**0.001**	J			**0.0052**	J	0.0086	U	**0.084**	
Acenaphthylene	mg/kg	45,000	**0.0014**	J	**0.04**		**0.0054**	J	**0.072**		**0.00089**	J	**0.045**		**0.045**		**0.25**		0.0088	U	**0.0039**	J	0.0087	U			**0.0064**	J	0.0086	U	**0.047**	J
Acetophenone	mg/kg	120,000	0.075	UL3	0.076	U	0.074	U	**0.021**	J	0.084	U	0.082	UL3	0.082	UL3	0.081	UL3	0.086	UL3	0.079	UL3	0.086	UL3			0.088	U	0.084	U	0.075	UL3
Anthracene	mg/kg	230,000	**0.0049**	J	**0.1**		**0.0081**		**0.12**		**0.00086**	J	**0.055**		**0.055**		**11.8**		**0.0011**	J	**0.037**		**0.0085**	J			**0.026**		**0.0019**	J	**0.34**	
Benzaldehyde	mg/kg	120,000	0.075	UL2	**0.02**	JL2	0.074	UL2	**0.055**	JL2	0.084	UL2	0.082	UL2	0.082	UL2	**0.024**	JL2	0.086	UL2	0.079	UL2	0.086	UL2			0.088	U	0.084	U	0.075	UL2
Benzo(a)anthracene	mg/kg	2.9	**0.091**		**0.3**		**0.027**		**0.48**		**0.0039**	J	**0.24**		**0.24**		44.2		**0.0061**	J	**0.075**		**0.0099**				**0.088**		**0.0057**	J	**1.1**	
Benzo(a)pyrene	mg/kg	0.29	**0.076**		**0.27**		**0.027**		0.37		**0.0036**	J	**0.2**		**0.2**		35.3		**0.0057**	J	**0.051**		**0.004**	J			**0.043**		**0.0023**	J	0.42	
Benzo(b)fluoranthene	mg/kg	2.9	**0.21**	ip	**0.67**	ip	**0.06**	ip	**0.95**	ip	**0.0067**	Jip	**0.48**	ip	**0.48**	ip	69.8	ip	**0.013**	ipB	**0.2**	ip	**0.021**	ip			**0.16**	ip	**0.0099**	ip	**2.1**	ip
Benzo(g,h,i)perylene	mg/kg		**0.028**		**0.24**		**0.022**		**0.29**		**0.0027**	J	**0.06**		**0.06**		**9.2**	IS	**0.0049**	J	**0.026**		**0.002**	J			**0.04**		**0.0025**	J	**0.2**	
Benzo(k)fluoranthene	mg/kg	29	**0.18**	ip	**0.59**	ip	**0.052**	ip	**0.91**	ip	**0.0065**	Jip	**0.42**	ip	**0.42**	ip	60.6	ip	**0.012**	ip	**0.17**	ip	**0.018**	ip			**0.14**	ip	**0.0086**	ip	**1.9**	ip
Biphenyl (Diphenyl)	mg/kg	200	0.075	U	**0.032**	J	0.074	U	**0.066**	J	0.084	U	0.082	U	0.082	U	**0.048**	J	0.086	U	0.079	U	0.086	U			0.088	U	0.084	U	**0.029**	J
bis(2-Ethylhexyl)phthalate	mg/kg	160	0.075	U	0.076	U	0.074	U	**0.02**	J	0.084	U	0.082	UL2	0.082	UL2	**0.061**	JIS	0.086	U	0.079	U	0.086	U			0.088	U	0.084	U	**0.052**	J
Carbazole	mg/kg		0.075	U	**0.03**	J	0.074	U	**0.1**		0.084	U	0.082	UL2	0.082	UL2	**0.74**		0.086	U	**0.022**	J	0.086	U			0.088	U	0.084	U	**0.1**	
Chrysene	mg/kg	290	**0.092**		**0.34**		**0.026**		**0.6**		**0.0043**	J	**0.21**		**0.21**		**39.7**		**0.0073**	J	**0.1**		**0.012**				**0.11**		**0.0061**	J	**1.4**	
Dibenz(a,h)anthracene	mg/kg	0.29	**0.013**		**0.068**		**0.0062**	J	**0.085**		0.0083	U	**0.021**		**0.021**		2.7	IS	0.0088	U	**0.0082**		0.0087	U			**0.012**		0.0086	U	**0.074**	J
Diethylphthalate	mg/kg	660,000	0.075	U	0.076	U	0.074	U	0.075	U	0.084	U	0.082	U	0.082	U	0.081	U	0.086	U	0.079	U	0.086	U			0.088	U	0.084	U	0.075	U
Di-n-butylphthalate	mg/kg	82,000	0.075	U	0.076	UL3	0.074	UL3	0.075	U	0.084	U	0.082	U	0.082	U	0.081	U	0.086	U	0.079	U	0.086	U			0.088	U	0.084	U	0.075	U
Di-n-octylphthalate	mg/kg	8,200	0.075	U	0.076	UL3	0.074	UISL3	0.075	UL3	0.084	UL3	0.082	U	0.082	U	0.081	UIS	0.086	U	0.079	UIS	0.086	U			0.088	U	0.084	U	0.075	UIS
Fluoranthene	mg/kg	30,000	**0.064**		**0.8**		**0.041**		**0.006**	J	**0.55**		**0.55**		**117**		**0.015**		**0.27**		**0.031**						**0.28**		**0.015**		**3.7**	
Fluorene	mg/kg	30,000	**0.00073**	J	**0.019**		**0.0014**	J	**0.023**		0.0083	U	**0.009**		**0.009**		**3.1**		0.0088	U	**0.0047**	J	**0.001**	J			**0.0062**	J	0.0086	U	**0.075**	
Hexachlorobenzene	mg/kg	0.96	0.075	U	0.076	U	0.074	U	0.075	U	0.084	U	0.082	U	0.082	U	0.081	U	0.086	U	0.079	U	0.086	U			0.088	U	0.084	U	0.075	U
Indeno(1,2,3-cd)pyrene	mg/kg	2.9	**0.028**		**0.21**		**0.019**		**0.28**		**0.0022**	J	**0.067**		**0.067**		8.8	IS	**0.0032**	J	**0.026**		**0.0022**	J			**0.034**		**0.0019**	J	**0.2**	
Naphthalene	mg/kg	17	**0.017**	B	**0.4**		**0.018**		**0.42**		**0.0021**	J	**0.0064**	J	**0.0064**	J	**3.2**		0.0088	U	**0.0034**	J	0.0087	U			**0.0088**	J	0.0086	U	**0.075**	JB
N-Nitroso-di-n-propylamine	mg/kg	0.33	0.075	UL3	0.076	U	0.074	U	0.075	U	0.084	U	0.082	UL3	0.082	UL3	0.081	UL3	0.086	UL3	0.079	UL3	0.086	UL3			0.088	U	0.084	U	0.075	UL3
N-Nitrosodiphenylamine	mg/kg	470	0.075	UL3	0.076	U	0.074	U	0.075	U	0.084	U	0.082	U	0.082	U	0.081	UL3	0.086	UL3	0.079	UL3	0.086	UL3			0.088	U	0.084	U	0.075	UL3
Pentachlorophenol	mg/kg	4	0.19	UL2	0.19	UL3	0.18	UL3	0.19	UL3	0.21	UL3	0.21	U	0.21	U	0.2	UL2	0.22	UL2	0.2	UL2	0.22	UL2			0.22	U	0.21	U	0.19	UL2
Phenanthrene	mg/kg		**0.023**		**0.59**		**0.025**		**0.98**		**0.0045**	J	**0.26**		**0.26**		**84.2**		**0.0068**	JB	**0.37**		**0.05**				**0.17**		**0.0082**	J	**3**	
Phenol	mg/kg	250,000	0.075	UL3	0.076	U	0.074	U	0.075	U	0.084	U	0.082	UL3	0.082	UL3	0.081	UL3	0.086	UL3	0.079	UL3	0.086	UL3			0.088	U	0.084	U	0.075	UL3
Pyrene	mg/kg	23,000	**0.046**		**0.61**		**0.036**		**1.1**		**0.0052**	J	**0.37**		**0.37**		**95.3**		**0.012**		**0.22**		**0.028**				**0.23**		**0.012**		**3**	
PCBs																																
Aroclor 1242	mg/kg	0.97	0.0577	U	0.0653	U			**0.159**				0.0544	U			0.0626	U			0.06	U					0.0629	U			0.0542	U
Aroclor 1248	mg/kg	0.94	0.0577	U	0.0653	U			0.0558	U			0.0544	U			**0.278**				0.06	U					0.0629	U			0.0542	U
Aroclor 1254	mg/kg	0.97	0.0577	U	**0.0876**				**0.136**				**0.0283**	J			0.0626	U			0.06	U					0.0629	U			0.0542	U
Aroclor 1260	mg/kg	0.99	0.0577	U	0.0653	U			0.0558	U			0.0544	U			0.0626	U			0.06	U					0.0629	U			0.0542	U
Aroclor 1262	mg/kg		0.0577	U	**0.26**				**0.312**				**0.0565**				0.0626	U			0.06	U					0.0629	U			0.0542	U
Aroclor 1268	mg/kg		0.0577	U	0.0653	U			0.0558	U			0.0544	U			0.0626	U			0.06	U					0.0629	U			0.0542	U
PCB, Total	mg/kg	0.97	0.0577	U	**0.3476**				**0.607**				**0.0848**				**0.278**				0.06	U					0.0629	U			0.0542	U
TPH/Oil and Grease																																
Diesel Range Organics	mg/kg	620	**24.5**	L2	**48.2**	L2	**9.9**	L2	**83.5**	L2	**7.5**	JL2	**6.2**	JL2	**6.2**	JL2	**442**	L2	**3.3**	JL2	**9.5**	L2	8.5	UL2			**63.8**	L2	**5.1**	JCHL2	**198**	L2
Gasoline Range Organics	mg/kg	620	10.5	U	10.2	U	12	U	10.7	U	10.5	U	19	U	19	U	11.5	U	10.6	U	10.6	U	11.3	U			10.6	U	10.1	U	11.2	U

Detections in bold

Blank spaces indicate that the parameter was not analyzed for this sample

*PAH compounds were analyzed via SIM

A glossary of laboratory flag keys can be viewed in the attached laboratory reports

Values in Red indicate an exceedance of the Project Action Limit (PAL)

Table 5
Summary of Organics Detected in Soil
Parcel B22
Tradepoint Atlantic
Sparrows Point, Maryland

Parameter	Units	PAL	B22-083-SB-4		B22-084-SB-1		B22-085-SB-1		B22-086-SB-1		B22-086-SB-5		B22-086-SB-10		B22-087-SB-1		B22-087-SB-5		B22-087-SB-10		B22-088-SB-1		B22-088-SB-6		B22-089-SB-1		B22-089-SB-5		B22-090-SB-1		B22-090-SB-5		B22-091-SB-1	
			Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
			6/3/2016		5/26/2016		5/26/2016		5/26/2016		5/26/2016		5/26/2016		5/25/2016		5/25/2016		5/25/2016		5/25/2016		5/25/2016		5/25/2016		5/25/2016		6/3/2016		6/3/2016		6/2/2016	
Volatile Organic Compounds																																	
1,1,1-Trichloroethane	mg/kg	36,000	0.0049	U	0.0057	U	0.0059	U	**0.025**		0.0067	U			0.0074	U	0.0053	U			0.0047	U	0.0047	U	0.0055	U	0.0061	U	0.0065	U1c	0.0052	U1c	0.0055	U
1,1,2-Trichloroethane	mg/kg	5	0.0049	U	0.0057	U	0.0059	U	0.0058	U	0.0067	U			0.0074	U	0.0053	U			0.0047	U	0.0047	U	0.0055	U	0.0061	U	0.0065	U1c	0.0052	U1c	0.0055	U
1,1,2-Trichlorotrifluoroethane	mg/kg	170,000	0.049	U	0.057	U	0.059	U	0.058	U	0.067	U			0.074	U	0.053	U			0.047	U	0.047	U	0.055	U	0.061	U	0.065	U1c	0.052	U1c	0.055	U
1,1-Dichloroethane	mg/kg	16	0.0049	U	0.0057	U	0.0059	U	**0.0039**	J	0.0067	U			0.0074	U	0.0053	U			0.0047	U	0.0047	U	0.0055	U	0.0061	U	0.0065	U1c	0.0052	U1c	0.0055	U
1,1-Dichloroethene	mg/kg	1,000	0.0049	U	0.0057	U	0.0059	U	0.0058	U	0.0067	U			0.0074	U	0.0053	U			0.0047	U	0.0047	U	0.0055	U	0.0061	U	0.0065	U1c	0.0052	U1c	0.0055	U
1,2,3-Trichlorobenzene	mg/kg	930	0.0049	U	0.0057	U	0.0059	U	0.0058	U	0.0067	U			0.0074	U	0.0053	U			0.0047	U	0.0047	U	0.0055	U	0.0061	U	0.0065	U1c	0.0052	U1c	0.0055	U
1,2,4-Trichlorobenzene	mg/kg	110	0.0049	U	0.0057	U	0.0059	U	0.0058	U	0.0067	U			0.0074	U	0.0053	U			0.0047	U	0.0047	U	0.0055	U	0.0061	U	0.0065	U1c	0.0052	U1c	0.0055	U
1,2-Dichloroethane	mg/kg	2	0.0049	U	0.0057	U	0.0059	U	0.0058	U	0.0067	U			0.0074	U	0.0053	U			0.0047	U	0.0047	U	0.0055	U	0.0061	U	0.0065	U1c	0.0052	U1c	0.0055	U
1,2-Dichloroethene (Total)	mg/kg	2,300	0.0099	U	0.011	U	0.012	U	0.012	U	0.013	U			0.015	U	0.011	U			0.0094	U	0.0095	U	0.011	U	0.012	U	0.013	U	0.01	U	0.011	U
1,4-Dichlorobenzene	mg/kg	11	0.0049	U	0.0057	U	0.0059	U	0.0058	U	0.0067	U			0.0074	U	0.0053	U			0.0047	U	0.0047	U	0.0055	U	0.0061	U	0.0065	U1c	0.0052	U1c	0.0055	U
1,4-Dioxane	mg/kg	24	0.099	U	0.11	U	0.12	U	0.12	U	0.13	U			0.15	U	0.11	U			0.094	U	0.095	U	0.11	U	0.12	U	0.13	U1c	0.1	U1c	0.11	U
2-Butanone (MEK)	mg/kg	190,000	0.0099	U	0.011	U	**0.021**		0.012	U	0.013	U			0.015	U	0.011	U			0.0094	U	0.0095	U	0.011	U	0.012	U	0.013	U1c	0.01	U1c	0.011	U
2-Hexanone	mg/kg	1,300	0.0099	U	0.011	UL3	0.012	UL3	0.012	UL3	0.013	UL3			0.015	UL3	0.011	UL3			0.0094	UL3	0.0095	UL3	0.011	UL3	0.012	UL3	0.013	U1c	0.01	U1c	0.011	U
4-Methyl-2-pentanone (MIBK)	mg/kg	56,000	0.0099	U	0.011	U	**0.0051**	J	0.012	U	0.013	U			0.015	UL3	0.011	UL3			0.0094	UL3	0.0095	UL3	0.011	UL3	0.012	UL3	0.013	U1c	0.01	U1c	0.011	U
Acetone	mg/kg	670,000	0.0099	U	**0.0078**	J	**0.15**		0.012	U	0.013	U			0.015	U	0.011	U			0.0094	U	0.0095	U	0.011	U	0.012	U	**0.01**	J1c	**0.015**	1c	0.011	U
Benzene	mg/kg	5.1	0.0049	U	0.0057	U	0.0059	U	0.0058	U	0.0067	U			0.0074	U	0.0053	U			0.0047	U	0.0047	U	0.0055	U	0.0061	U	**0.0043**	J1c	0.0052	U1c	0.0055	U
Chlorobenzene	mg/kg	1,300	0.0049	U	0.0057	U	0.0059	U	0.0058	U	0.0067	U			0.0074	U	0.0053	U			0.0047	U	0.0047	U	0.0055	U	0.0061	U	0.0065	U1c	0.0052	U1c	0.0055	U
Chloroethane	mg/kg	57,000	0.0049	U	0.0057	U	0.0059	U	0.0058	U	0.0067	U			0.0074	U	0.0053	U			0.0047	U	0.0047	U	0.0055	U	0.0061	U	0.0065	U1c	0.0052	U1c	0.0055	U
Chloroform	mg/kg	1.4	0.0049	U	0.0057	U	0.0059	U	0.0058	U	0.0067	U			0.0074	U	0.0053	U			0.0047	U	0.0047	U	0.0055	U	0.0061	U	0.0065	U1c	0.0052	U1c	0.0055	U
cis-1,2-Dichloroethene	mg/kg	2,300	0.0049	U	0.0057	U	0.0059	U	0.0058	U	0.0067	U			0.0074	U	0.0053	U			0.0047	U	0.0047	U	0.0055	U	0.0061	U	0.0065	U1c	0.0052	U1c	0.0055	U
Cyclohexane	mg/kg	27,000	0.0099	U	0.011	U	0.012	U	0.012	U	0.013	U			0.015	U	0.011	U			0.0094	U	0.0095	U	0.011	U	0.012	U	0.013	U1c	0.01	U1c	0.011	U
Ethylbenzene	mg/kg	25	0.0049	U	0.0057	U	0.0059	U	0.0058	U	0.0067	U			0.0074	U	0.0053	U			0.0047	U	0.0047	U	0.0055	U	0.0061	U	0.0065	U1c	0.0052	U1c	0.0055	U
Isopropylbenzene (Cumene)	mg/kg	9,900	0.0049	U	0.0057	U	0.0059	U	0.0058	U	0.0067	U			0.0074	U	0.0053	U			0.0047	U	0.0047	U	0.0055	U	0.0061	U	0.0065	U1c	0.0052	U1c	0.0055	U
Methyl acetate	mg/kg	1,200,000	0.049	U	0.057	U	0.059	U	0.058	U	0.067	U			0.074	U	0.053	U			0.047	U	0.047	U	0.055	U	0.061	U	0.065	U1c	0.052	U1c	0.055	U
Methylene Chloride	mg/kg	1,000	0.0049	U	0.0057	U	0.0059	U	0.0058	U	0.0067	U			0.0074	U	0.0053	U			0.0047	U	0.0047	U	0.0055	U	0.0061	U	0.0065	U1c	0.0052	U1c	0.0055	U
Styrene	mg/kg	35,000	0.0049	U	0.0057	UL2	0.0059	UL2	0.0058	UL2	0.0067	UL2			0.0074	U	0.0053	U			0.0047	U	0.0047	U	0.0055	U	0.0061	U	0.0065	U1c	0.0052	U1c	0.0055	U
Tetrachloroethene	mg/kg	100	0.0049	U	0.0057	U	0.0059	U	0.0058	U	0.0067	U			0.0074	U	0.0053	U			0.0047	U	0.0047	U	0.0055	U	0.0061	U	0.0065	U1c	0.0052	U1c	0.0055	U
Toluene	mg/kg	47,000	0.0049	U	0.0057	U	0.0059	U	0.0058	U	0.0067	U			0.0074	U	0.0053	U			0.0047	U	0.0047	U	0.0055	U	0.0061	U	0.0065	U1c	0.0052	U1c	0.0055	U
trans-1,2-Dichloroethene	mg/kg	23,000	0.0049	U	0.0057	U	0.0059	U	0.0058	U	0.0067	U			0.0074	U	0.0053	U			0.0047	U	0.0047	U	0.0055	U	0.0061	U	0.0065	U1c	0.0052	U1c	0.0055	U
Trichloroethene	mg/kg	6	0.0049	U	0.0057	U	0.0059	U	0.0058	U	0.0067	U			0.0074	U	0.0053	U			0.0047	U	0.0047	U	0.0055	U	0.0061	U	0.0065	U1c	0.0052	U1c	0.0055	U
Trichlorofluoromethane	mg/kg	3,100	0.0049	U	0.0057	U	0.0059	U	0.0058	U	0.0067	U			0.0074	U	0.0053	U			0.0047	U	0.0047	U	0.0055	U	0.0061	U	0.0065	U1c	0.0052	U1c	0.0055	U
Vinyl chloride	mg/kg	1.7	0.0049	U	0.0057	U	0.0059	U	0.0058	U	0.0067	U			0.0074	U	0.0053	U			0.0047	U	0.0047	U	0.0055	U	0.0061	U	0.0065	U1c	0.0052	U1c	0.0055	U
Xylene (Total)	mg/kg	2,800	0.015	U	0.017	U	0.018	U	0.017	U	0.02	U			0.022	U	0.016	U			0.014	U	0.014	U	0.017	U	0.018	U	0.019	U	0.016	U	0.016	U
Semi-Volatile Organic Compounds*																																	
1,2,4,5-Tetrachlorobenzene	mg/kg	350	0.085	UL3	0.076	UL3	0.078	UL3	0.078	UL3	0.087	UL3			0.07	U	0.079	U			0.067	U	0.068	U	0.075	U	0.07	U	0.077	U	0.082	U	0.076	U
2,4-Dimethylphenol	mg/kg	16,000	0.085	U	0.076	U	**0.075**	J	0.078	U	0.087	U			0.07	U	0.079	U			0.067	U	**0.13**		0.075	U	0.07	U	0.077	U	0.082	U	0.076	U
2-Chloronaphthalene	mg/kg	60,000	0.085	U	0.076	U	0.078	U	0.078	U	0.087	U			0.07	U	0.079	U			0.067	U	0.068	U	0.075	U	0.07	U	0.077	U	0.082	U	0.076	U
2-Methylnaphthalene	mg/kg	3,000	0.0085	U	**0.16**		**0.41**		**0.25**		0.0087	U			**0.034**		0.0077	U			**0.055**		**0.11**	J	**0.0042**	J	0.0072	U	0.078	U	0.0083	U	**0.087**	
2-Methylphenol(o-Cresol)	mg/kg	41,000	0.085	U	0.076	UL3	**0.023**	JL1	0.078	UL3	0.087	UL3			0.07	U	0.079	U			0.067	U	**0.07**		0.075	U	0.07	U	0.077	U	0.082	U	0.076	U
2-Nitroaniline	mg/kg	8,000	0.21	U	0.19	U	0.2	U	0.19	U	0.22	U			0.17	U	0.2	U			0.17	U	0.17	U	0.19	U	0.18	U	0.19	U	0.21	U	0.19	U
3&4-Methylphenol(m&p Cresol)	mg/kg	41,000	0.17	UL3	0.15	U	**0.12**	J	0.16	U	0.17	U			0.14	U	0.16	U			0.13	U	**0.18**		0.15	U	0.14	U	0.15	U	0.16	U	0.15	U
4-Nitroaniline	mg/kg	110	0.21	UL2	0.19	UL3	0.2	UL3	0.19	UL3	0.22	UL3			0.17	UL3	0.2	UL3			0.17	UL3	0.17	UL3	0.19	UL3	0.18	UL3	0.19	UL2	0.21	UL2	0.19	U
Acenaphthene	mg/kg	45,000	0.0085	U	**1.1**		**2**		**0.046**		0.0087	U			**0.002**	J	0.0077	U			**0.013**		**0.11**	J	0.0075	U	0.0072	U	**0.0075**	J	0.0083	U	**0.099**	
Acenaphthylene	mg/kg	45,000	0.0085	U	**0.23**		**0.33**		**0.02**		0.0087	U			**0.039**		0.0077	U			**0.0093**		**0.025**	J	0.0075	U	**0.0018**	J	**0.009**	J	0.0083	U	**0.06**	J
Acetophenone	mg/kg	120,000	0.085	UL3	0.076	U	**0.048**	J	**0.03**	J	0.087	U			0.07	U	0.079	U			0.067	U	0.068	U	0.075	U	0.07	U	0.077	U	0.082	U	0.076	U
Anthracene	mg/kg	230,000	**0.00077**	J	**6.4**		**7.7**		**0.26**		0.0087	U			**0.052**		0.0077	U			**0.06**		**0.25**		**0.0025**	J	**0.0029**	J	**0.044**	J	0.0083	U	**0.33**	
Benzaldehyde	mg/kg	120,000	0.085	UL2	**0.097**	L2	**0.096**	L2	0.078	UL2	0.087	UL2			0.07	UL2	0.079	UL2			0.067	UL2	0.068	UL2	0.075	UL2	0.07	UL2	0.077	UL2	0.082	UL2	0.076	UL2
Benzo(a)anthracene	mg/kg	2.9	0.0085	U	**34.6**		**30.1**		**1.4**		0.0087	U			**0.29**		**0.0011**	J			**0.29**		**2.8**		**0.01**		**0.014**		**0.12**		0.0083	U	**0.78**	
Benzo(a)pyrene	mg/kg	0.29	0.0085	UIS	**24.5**		**23.7**		**1**		0.0087	U			**0.32**	IS	0.0077	UIS			**0.34**		**3.1**		**0.007**	J	**0.008**		**0.084**		0.0083	U	**0.7**	
Benzo(b)fluoranthene	mg/kg	2.9	**0.0024**	JISipB	**50.3**	ip	**48.8**	ip	**3.4**	ip	**0.00066**	J			**0.86**	ISip	**0.0012**	JISip			**0.69**	ip	**5.6**	ip	**0.021**	ip	**0.023**	ip	**0.18**	ip	0.0083	Uip	**1.4**	ip
Benzo(g,h,i)perylene	mg/kg		0.0085	UIS	**11.5**		**7.6**		**0.51**		0.0087	U			**0.13**	IS	0.0077	UIS			**0.24**		**0.83**		**0.0081**		**0.008**		**0.046**	J	0.0083	U	**0.24**	
Benzo(k)fluoranthene	mg/kg	29	**0.0022**	JISipB	**43.7**	ip	**42.4**	ip	**3**	ip	0.0087	U			**0.74**	ISip	0.0077	UISip			**0.6**	ip	**4.8**	ip	**0.018**	ip	**0.02**	ip	**0.13**	ip	0.0083	Uip	**1.2**	ip
Biphenyl (Diphenyl)	mg/kg	200	0.085	U	**0.037**	J	**0.35**		**0.049**	J	0.087	U			0.07	U	0.079	U			**0.014**	J	**0.037**	J	0.075	U	0.07	U	0.077	U	0.082	U	0.076	U
bis(2-Ethylhexyl)phthalate	mg/kg	160	0.085	U	**0.024**	JISL1	**0.89**	ISL1	**0.055**	JISL1	0.087	UL3			0.07	UL3	0.079	UL3			0.067	UL3	**0.029**	JISL1	0.075	UL3	0.07	UL3	**0.05**	JIS	0.082	U	0.076	UISL2
Carbazole	mg/kg		0.085	U	**0.69**		**7.5**		**0.17**		0.087	U			0.07	U	0.079	U			**0.025**	J	**0.28**		0.075	U	0.07	U	0.077	U	0.082	U	**0.049**	JISL2
Chrysene	mg/kg	290	**0.0011**	J	**29.1**		**27.2**		**1.2**		**0.00087**	J			**0.28**		0.0077	U			**0.33**		**2.4**		**0.01**		**0.019**		**0.093**		0.0083	U	**0.83**	
Dibenz(a,h)anthracene	mg/kg	0.29	0.0085	UIS	**4.8**		**3.2**		**0.22**		0.0087	U			**0.055**	IS	0.0077	UIS			**0.097**		**0.43**		**0.0021**	J	**0.0022**	J	**0.015**	J	0.0083	U	**0.11**	
Diethylphthalate	mg/kg	660,000	0.085	U	0.076	UL3	0.078	UL3	0.078	UL3	0.087	UL3			0.07	UL3	0.079	UL3			0.067	UL3	0.068	UL3	0.075	UL3	0.07	UL3	0.077	U	0.082	U	0.076	U
Di-n-butylphthalate	mg/kg	82,000	0.085	U	0.076	UL3	0.078	UL3	0.078	UL3	0.087	UL3			0.07	UL3	0.079	UL3			0.067	UL3	0.068	UL3	0.075	UL3	0.07	UL3	0.077	U	0.082	U	0.076	UISL2
Di-n-octylphthalate	mg/kg	8,200	0.085	UIS	0.076	UISL3	0.078	UISL3	0.078	UISL3	0.087	UL3			0.07	UISL3	0.079	UL3			0.067	UISL3	0.068	UISL3	0.075	UL3	0.07	UL3	0.077	UIS	0.082	U	0.076	UIS
Fluoranthene	mg/kg	30,000	**0.0022**	JB	**58.6**		**61.8**		**4.4**		**0.002**	J			**0.36**	J	**0.00067**	J			**0.42**		**2.2**		**0.014**		**0.02**		**0.24**		**0.0028**	J	**1.7**	
Fluorene	mg/kg	30,000	0.0085	U	**0.94**		**2.1**		**0.052**		0.0087	U			**0.0041**	J	0.0077	U			**0.0044**	J	**0.05**	J	0.0075	U	0.0072	U	**0.0078**	J	0.0083	U	**0.096**	
Hexachlorobenzene	mg/kg	0.96	0.085	U	0.076	UL3	0.078	UL3	0.078	UL3	0.087	UL3			0.07	U	0.079	U			0.067	U	0.068	U	0.075	U	0.07	U	0.077	U	0.082	U	0.076	UIS
Indeno(1,2,3-cd)pyrene	mg/kg	2.9	0.0085	UIS	**11.7**		**8.2**		**0.54**		0.0087	U			**0.15**	IS	0.0077	UIS			**0.23**		**0.92**		**0.0067**	J	**0.0071**	J	**0.041**	J	0.0083	U	**0.25**	
Naphthalene	mg/kg	17	0.0085	U	**0.19**		**0.64**		**0.4**		0.0087	U			**0.037**		0.0077	U			**0.12**		**0.3**		**0.0045**	J	**0.0025**	J	0.078	U	0.0083	U	**0.16**	
N-Nitroso-di-n-propylamine	mg/kg	0.33	0.085	UL3	0.076	U	0.078	U	0.078	U	0.087	U			0.07	U	0.079	U			0.067	U	0.068	U	0.075	U	0.07	U	0.077	U	0.082	U	0.076	U
N-Nitrosodiphenylamine	mg/kg	470	0.085	UL3	0.076	U	0.078	U	0.078	U	0.087	U			0.07	U	0.079	U			0.067	U	0.068	U	0.075	U	0.07	U	0.077	UL3	0.082	UL3	0.076	UIS
Pentachlorophenol	mg/kg	4	0.21	UL2	0.19	UL3	0.2	UL3	0.19	UL3	0.22	UL3			0.17	UL3	0.2	UL3			0.17	UL3	0.17	UL3	0.19	UL3	0.18	UL3	0.19	UL3	0.21	UL3	0.19	UISL2
Phenanthrene	mg/kg		**0.0018**	JB	**13.7**		**32.3**		**1.5**		**0.0017**	J			**0.17**		**0.00059**	J			**0.26**		**0.7**		**0.0086**		**0.0061**	J	**0.17**		0.0083	U	**1.3**	
Phenol	mg/kg	250,000	0.085	UL3	0.076	UL3	**0.06**	JL1	**0.058**	JL1	0.087	UL3			0.07	U	0.079	U			0.067	U	**0.061**	J	0.075	U	0.07	U	0.077	U	0.082	U	0.076	U
Pyrene	mg/kg	23,000	**0.002**	JB	**49.6**		**49**		**3.6**		**0.0015**	J			**0.26**		0.0077	U			**0.31**		**2.1**		**0.011**		**0.015**		**0.2**		**0.0019**	J	**1.4**	
PCBs																																	
Aroclor 1242	mg/kg	0.97			0.0548	U	**0.257**		0.0605	U					0.0576	U					0.0518	U			**0.249**				0.0573	U			0.0608	U
Aroclor 1248	mg/kg	0.94			0.0548	U	0.0607	U	0.0605	U					0.0576	U					0.0518	U			0.055	U			0.0573	U			0.0608	U
Aroclor 1254	mg/kg	0.97			0.0548	U	**0.146**		0.0605	U					0.0576	U					0.0518	U			0.055	U			**0.086**				0.0608	U
Aroclor 1260	mg/kg	0.99			0.0548	U	0.0607	U	0.0605	U					0.0576	U					0.0518	U			0.055	U			0.0573	U			0.0608	U
Aroclor 1262	mg/kg				0.0548	U	**0.235**		0.0605	U					0.0576	U					0.0518	U			**0.0856**				0.0573	U			0.0608	U
Aroclor 1268	mg/kg				0.0548	U	0.0607	U	0.0605	U					0.0576	U					**0.086**				0.055	U			**0.145**				0.0608	U
PCB, Total	mg/kg	0.97			0.0548	U	**0.638**		0.0605	U					0.0576	U					**0.086**				**0.3346**				**0.231**				0.0608	U
TPH/Oil and Grease																																	
Diesel Range Organics	mg/kg	620	8.6	UL2	**246**	L2	**1,200**	L2	**240**	L2	**4.9**	JL2			**129**	L2	**3.4**	JL2			**80.3**	L2	**109**	L2	**45.6**	L2	**33.1**	L2	**55.8**	L2	**6.1**	JL2	**351**	L2
Gasoline Range Organics	mg/kg	620	10.9	U	12	U	12.2	U	12.5	U	11.5	U			15.3	U	10.1	U			9.9	U	**6.1**	J	12	U	13.6	U	11.7	U	10.2	U	13.9	U

Detections in bold

Blank spaces indicate that the parameter was not analyzed for this sample

*PAH compounds were analyzed via SIM

A glossary of laboratory flag keys can be viewed in the attached laboratory reports

Values in Red indicate an exceedance of the Project Action Limit (PAL)

Table 5
Summary of Organics Detected in Soil
Parcel B22
Tradepoint Atlantic
Sparrows Point, Maryland

Parameter	Units	PAL	B22-091-SB-4 Soil 6/2/2016		B22-092-SB-1 Soil 6/2/2016		B22-092-SB-4 Soil 6/2/2016		B22-093-SB-1 Soil 6/2/2016		B22-093-SB-5 Soil 6/2/2016		B22-093-SB-10 Soil 6/2/2016		B22-094-SB-1 Soil 6/3/2016		B22-094-SB-4 Soil 6/3/2016		B22-095-SB-1 Soil 6/3/2016		B22-095-SB-6 Soil 6/3/2016		B22-096-SB-1 Soil 5/24/2016		B22-096-SB-9 Soil 5/24/2016		B22-096-SB-10 Soil 5/24/2016		B22-097-SB-1 Soil 5/24/2016		B22-097-SB-9 Soil 5/24/2016		B22-098-SB-1 Soil 5/24/2016		B22-098-SB-4 Soil 5/24/2016	
Volatile Organic Compounds																																							
1,1,1-Trichloroethane	mg/kg	36,000	0.0041	U	0.0064	U	0.0058	U	0.0048	U	0.0046	U			0.0053	U1c	0.005	U1c	0.0048	U	0.0045	U	0.0058	U	0.0051	U			0.0068	U	0.0069	U	0.0058	U	0.0049	U		
1,1,2-Trichloroethane	mg/kg	5	0.0041	U	0.0064	U	0.0058	U	0.0048	U	0.0046	U			0.0053	U1c	0.005	U1c	0.0048	U	0.0045	U	0.0058	U	0.0051	U			0.0068	U	0.0069	U	0.0058	U	0.0049	U		
1,1,2-Trichlorotrifluoroethane	mg/kg	170,000	0.041	U	0.064	U	0.058	U	0.048	U	0.046	U			0.053	U1c	0.05	U1c	0.048	U	0.045	U	0.058	U	0.051	U			0.068	U	0.069	U	0.058	U	0.049	U		
1,1-Dichloroethane	mg/kg	16	0.0041	U	0.0064	U	0.0058	U	0.0048	U	0.0046	U			0.0053	U1c	0.005	U1c	0.0048	U	0.0045	U	0.0058	U	0.0051	U			0.0068	U	0.0069	U	0.0058	U	0.0049	U		
1,1-Dichloroethene	mg/kg	1,000	0.0041	U	0.0064	U	0.0058	U	0.0048	U	0.0046	U			0.0053	U1c	0.005	U1c	0.0048	U	0.0045	U	0.0058	U	0.0051	U			0.0068	U	0.0069	U	0.0058	U	0.0049	U		
1,2,3-Trichlorobenzene	mg/kg	930	0.0041	U	0.0064	U	0.0058	U	0.0048	U	0.0046	U			0.0053	U1c	0.005	U1c	0.0048	U	0.0045	U	0.0058	U	0.0051	U			0.0068	U	0.0069	U	0.0058	U	0.0049	U		
1,2,4-Trichlorobenzene	mg/kg	110	0.0041	U	0.0064	U	0.0058	U	0.0048	U	0.0046	U			0.0053	U1c	0.005	U1c	0.0048	U	0.0045	U	0.0058	U	0.0051	U			0.0068	U	0.0069	U	0.0058	U	0.0049	U		
1,2-Dichloroethane	mg/kg	2	0.0041	U	0.0064	U	0.0058	U	0.0048	U	0.0046	U			0.0053	U1c	0.005	U1c	0.0048	U	0.0045	U	0.0058	U	0.0051	U			0.0068	U	0.0069	U	0.0058	U	0.0049	U		
1,2-Dichloroethene (Total)	mg/kg	2,300	0.0082	U	0.013	U	0.012	U	0.0097	U	0.0092	U			0.011	U	0.01	U	0.0096	U	0.009	U	0.012	U	0.01	U			0.014	U	0.014	U	0.012	U	0.0099	U		
1,4-Dichlorobenzene	mg/kg	11	0.0041	U	0.0064	U	0.0058	U	0.0048	U	0.0046	U			0.0053	U1c	0.005	U1c	0.0048	U	0.0045	U	0.0058	U	0.0051	U			0.0068	U	0.0069	U	0.0058	U	0.0049	U		
1,4-Dioxane	mg/kg	24	0.082	U	0.13	U	0.12	U	0.097	U	0.092	U			0.11	U1c	0.1	U1c	0.096	U	0.09	U	0.12	U	0.1	U			0.14	U	0.14	U	0.12	U	0.099	U		
2-Butanone (MEK)	mg/kg	190,000	0.0082	U	**0.01**	J	0.012	U	0.0097	U	0.0092	U			0.011	U1c	0.01	U1c	0.0096	U	0.009	U	0.012	U	0.01	U			0.014	U	0.014	U	0.012	U	0.0099	U		
2-Hexanone	mg/kg	1,300	0.0082	U	0.013	U	0.012	U	0.0097	U	0.0092	U			0.011	U1c	0.01	U1c	0.0096	UL3	0.009	UL3	0.012	UL3	0.01	UL3			0.014	UL3	0.014	UL3	0.012	UL3	0.0099	UL3		
4-Methyl-2-pentanone (MIBK)	mg/kg	56,000	0.0082	U	0.013	U	0.012	U	0.0097	U	0.0092	U			0.011	U1c	0.01	U1c	0.0096	U	0.009	U	0.012	U	0.01	U			0.014	U	0.014	U	0.012	U	0.0099	U		
Acetone	mg/kg	670,000	0.0082	U	0.013	U	0.012	U	0.0097	U	0.0092	U			**0.0072**	J1c	0.01	U1c	**0.0069**	J	**0.0047**	J	0.012	U	0.01	U			0.014	U	0.014	U	0.012	U	0.0099	U		
Benzene	mg/kg	5.1	0.0041	U	0.0064	U	0.0058	U	**0.0018**	J	0.0046	U			0.0053	U1c	**0.0058**	1c	0.0048	U	0.0045	U	0.0058	U	0.0051	U			0.0068	U	0.0069	U	**0.0016**	J	0.0049	U		
Chlorobenzene	mg/kg	1,300	0.0041	U	0.0064	U	0.0058	U	0.0048	U	0.0046	U			0.0053	U1c	0.005	U1c	0.0048	U	0.0045	U	0.0058	U	0.0051	U			0.0068	U	0.0069	U	0.0058	U	0.0049	U		
Chloroethane	mg/kg	57,000	0.0041	U	0.0064	U	0.0058	U	0.0048	U	0.0046	U			0.0053	U1c	0.005	U1c	0.0048	U	0.0045	U	0.0058	U	0.0051	U			0.0068	U	0.0069	U	0.0058	U	0.0049	U		
Chloroform	mg/kg	1.4	0.0041	U	0.0064	U	0.0058	U	0.0048	U	0.0046	U			0.0053	U1c	0.005	U1c	0.0048	U	0.0045	U	0.0058	U	0.0051	U			0.0068	U	0.0069	U	0.0058	U	0.0049	U		
cis-1,2-Dichloroethene	mg/kg	2,300	0.0041	U	0.0064	U	0.0058	U	0.0048	U	0.0046	U			0.0053	U1c	0.005	U1c	0.0048	U	0.0045	U	0.0058	U	0.0051	U			0.0068	U	0.0069	U	0.0058	U	0.0049	U		
Cyclohexane	mg/kg	27,000	0.0082	U	**0.0052**	J	0.012	U	0.0097	U	0.0092	U			0.011	U1c	0.01	U1c	0.0096	U	0.009	U	0.012	U	0.01	U			0.014	U	0.014	U	0.012	U	0.0099	U		
Ethylbenzene	mg/kg	25	0.0041	U	0.0064	U	0.0058	U	0.0048	U	0.0046	U			0.0053	U1c	0.005	U1c	0.0048	U	0.0045	U	0.0058	U	0.0051	U			0.0068	U	0.0069	U	0.0058	U	0.0049	U		
Isopropylbenzene (Cumene)	mg/kg	9,900	0.0041	U	0.0064	U	0.0058	U	0.0048	U	0.0046	U			0.0053	U1c	0.005	U1c	0.0048	U	0.0045	U	0.0058	U	0.0051	U			0.0068	U	0.0069	U	0.0058	U	0.0049	U		
Methyl acetate	mg/kg	1,200,000	0.041	U	0.064	U	0.058	U	0.048	U	0.046	U			0.053	U1c	0.05	U1c	0.048	U	0.045	U	0.058	U	0.051	U			0.068	U	0.069	U	0.058	U	0.049	U		
Methylene Chloride	mg/kg	1,000	0.0041	U	0.0064	U	0.0058	U	0.0048	U	0.0046	U			0.0053	U1c	0.005	U1c	0.0048	U	0.0045	U	0.0058	U	0.0051	U			0.0068	U	0.0069	U	0.0058	U	0.0049	U		
Styrene	mg/kg	35,000	0.0041	U	0.0064	U	0.0058	U	0.0048	U	0.0046	U			0.0053	U1c	0.005	U1c	0.0048	U	0.0045	U	0.0058	U	0.0051	U			0.0068	U	0.0069	U	0.0058	U	0.0049	U		
Tetrachloroethene	mg/kg	100	0.0041	U	0.0064	U	0.0058	U	0.0048	U	0.0046	U			0.0053	U1c	0.005	U1c	0.0048	U	0.0045	U	0.0058	U	0.0051	U			0.0068	U	0.0069	U	0.0058	U	0.0049	U		
Toluene	mg/kg	47,000	0.0041	U	0.0064	U	0.0058	U	0.0048	U	0.0046	U			0.0053	U1c	0.005	U1c	0.0048	U	0.0045	U	0.0058	U	0.0051	U			0.0068	U	0.0069	U	**0.0022**	J	0.0049	U		
trans-1,2-Dichloroethene	mg/kg	23,000	0.0041	U	0.0064	U	0.0058	U	0.0048	U	0.0046	U			0.0053	U1c	0.005	U1c	0.0048	U	0.0045	U	0.0058	U	0.0051	U			0.0068	U	0.0069	U	0.0058	U	0.0049	U		
Trichloroethene	mg/kg	6	0.0041	U	0.0064	U	0.0058	U	0.0048	U	0.0046	U			0.0053	U1c	0.005	U1c	0.0048	U	0.0045	U	0.0058	U	0.0051	U			0.0068	U	0.0069	U	0.0058	U	0.0049	U		
Trichlorofluoromethane	mg/kg	3,100	0.0041	U	0.0064	U	0.0058	U	0.0048	U	0.0046	U			0.0053	U1c	0.005	U1c	0.0048	U	0.0045	U	0.0058	U	0.0051	U			0.0068	U	0.0069	U	0.0058	U	0.0049	U		
Vinyl chloride	mg/kg	1.7	0.0041	U	0.0064	U	0.0058	U	0.0048	U	0.0046	U			0.0053	U1c	0.005	U1c	0.0048	U	0.0045	U	0.0058	U	0.0051	U			0.0068	U	0.0069	U	0.0058	U	0.0049	U		
Xylene (Total)	mg/kg	2,800	0.012	U	**0.0078**	J	0.017	U	0.015	U	0.014	U			0.016	U	0.015	U	0.014	U	0.014	U	0.017	U	0.015	U			0.02	U	0.021	U	0.017	U	0.015	U		
Semi-Volatile Organic Compounds*																																						
1,2,4,5-Tetrachlorobenzene	mg/kg	350	0.08	U	0.072	U	0.074	U	0.078	U	0.078	UM1			0.074	U	0.083	U	0.074	U	0.079	U	0.084	UL3	0.083	UL3			**0.1**	L1	0.072	UL3	0.073	UL3	**0.058**	JL1		
2,4-Dimethylphenol	mg/kg	16,000	0.08	U	0.072	U	0.074	U	0.078	U	0.078	U			0.074	U	0.083	U	0.074	U	0.079	U	0.084	U	0.083	U			0.071	U	0.072	U	0.073	U	0.07	U		
2-Chloronaphthalene	mg/kg	60,000	0.08	U	0.072	U	0.074	U	0.078	U	0.078	U			0.074	U	0.083	U	0.074	U	0.079	U	0.084	UL3	0.083	UL3			**0.051**	JL1	0.072	UL3	0.073	UL3	**0.054**	JL1		
2-Methylnaphthalene	mg/kg	3,000	0.0081	U	0.073	U	0.0074	U	0.079	U	0.0079	U			0.072	U	**0.053**		**0.021**	J	0.008	U	**0.079**	JIS	0.0082	UIS			**19.2**		**0.65**	IS	**0.062**		**0.057**			
2-Methylphenol(o-Cresol)	mg/kg	41,000	0.08	U	0.072	U	0.074	U	0.078	U	0.078	UM1			0.074	U	0.083	U	0.074	U	0.079	U	0.084	U	0.083	UR1			0.071	U	0.072	U	0.073	U	0.07	U		
2-Nitroaniline	mg/kg	8,000	0.2	U	0.18	U	0.19	U	0.2	U	0.2	U			0.18	U	0.21	U	0.19	U	0.2	U	0.21	UL3	0.21	UL3			0.18	UL3	0.18	UL3	0.18	UL3	0.17	UL3		
3&4-Methylphenol(m&p Cresol)	mg/kg	41,000	0.16	U	0.14	U	0.15	U	0.16	U	0.16	UM1			0.15	U	0.17	U	**0.18**		0.16	U	0.17	U	0.17	U			0.14	U	0.14	U	0.15	U	0.14	U		
4-Nitroaniline	mg/kg	110	0.2	U	0.18	U	0.19	U	0.2	U	0.2	U			0.18	UL2	0.21	UL2	0.19	UL2	0.2	UL2	0.21	UL3	0.21	UL3			0.18	UL3	0.18	UL3	0.18	UL3	0.17	UL3		
Acenaphthene	mg/kg	45,000	0.0081	U	0.073	U	0.0074	U	**0.0069**	J	0.0079	U			0.072	U	**0.014**		**0.0062**	J	0.008	U	**0.028**	J	0.0082	U			**0.25**		**0.0084**	J	**0.002**	J	**0.0014**	J		
Acenaphthylene	mg/kg	45,000	0.0081	U	0.073	U	0.0074	U	**0.02**	J	0.0079	U			0.072	U	**0.038**		**0.0088**	J	0.008	U	**0.66**		0.0082	U			**0.066**		**0.24**		**0.0077**		**0.0034**	J		
Acetophenone	mg/kg	120,000	0.08	U	0.072	U	0.074	U	0.078	U	0.078	U			0.074	U	0.083	U	0.074	U	0.079	U	0.084	U	0.083	U			0.071	U	**0.093**		0.073	U	0.07	U		
Anthracene	mg/kg	230,000	0.0081	U	**0.0083**	J	**0.00068**	J	**0.041**	J	0.0079	U			0.072	U	**0.051**		**0.037**	J	**0.001**	J	**0.27**		0.0082	U			**0.081**		**0.058**	J	**0.027**		**0.0056**	J		
Benzaldehyde	mg/kg	120,000	0.08	UL2	0.072	UL2	0.074	UL2	0.078	UL2	0.078	UL2M0			0.074	UL2	0.083	UL2	**0.046**	JL2	0.079	UL2R1	**0.024**	JL2	0.083	UL2M0			**0.047**	JL2	**0.12**	L2	0.073	UL2	**0.049**	JL2		
Benzo(a)anthracene	mg/kg	2.9	0.0081	U	**0.026**	J	**0.0021**	J	**0.12**		0.0079	U			0.072	U	**0.17**		**0.12**		**0.0021**	J	**0.99**		0.0082	U			**0.4**		**0.14**		**0.19**		**0.018**			
Benzo(a)pyrene	mg/kg	0.29	0.0081	U	**0.017**	J	**0.0013**	J	**0.096**		0.0079	U			0.14	U	**0.17**		**0.098**		**0.001**	J	**0.82**		0.0082	U			**0.2**		**0.097**		**0.12**		**0.015**			
Benzo(b)fluoranthene	mg/kg	2.9	**0.0006**	Jip	**0.038**	Jip	**0.0032**	Jip	**0.21**	ip	0.0079	U			**0.029**	J	**0.39**	ip	**0.23**	ip	**0.0024**	Jip	**1.8**	ip	0.0082	U			**0.76**	ip	**0.2**	ip	**0.42**	ip	**0.049**	ip		
Benzo(g,h,i)perylene	mg/kg		0.0081	U	**0.01**	J	0.0074	U	**0.047**	J	0.0079	U			0.14	U	**0.11**		**0.058**	J	0.008	U	**0.45**		0.0082	U			**0.14**		**0.11**		**0.088**		**0.02**			
Benzo(k)fluoranthene	mg/kg	29	0.0081	Uip	**0.032**	Jip	**0.0025**	Jip	**0.18**	ip	0.0079	U			**0.023**	J	**0.29**	ip	**0.17**	ip	**0.0018**	Jip	**1.6**	ip	0.0082	U			**0.66**	ip	**0.17**	ip	**0.37**	ip	**0.043**	ip		
Biphenyl (Diphenyl)	mg/kg	200	0.08	U	0.072	U	0.074	U	0.078	U	0.078	U			0.074	U	0.083	U	0.074	U	0.079	U	0.084	U	0.083	U			**0.062**	J	**0.049**	J	0.073	U	0.07	U		
bis(2-Ethylhexyl)phthalate	mg/kg	160	0.08	UL2	**0.073**	ISL2	0.074	UL2	**0.085**	ISL2	0.078	U			**0.09**	IS	0.083	U	**0.07**	JIS	0.079	U	0.084	UIS	0.083	UM1			0.071	U	0.072	UIS	0.073	U	0.07	U		
Carbazole	mg/kg		0.08	UL2	0.072	UL2	0.074	UL2	0.078	UL2	0.078	U			0.074	U	0.083	U	**0.033**	J	0.079	U	**0.036**	J	0.083	UM1			**0.055**	J	**0.025**	J	0.073	U	0.07	U		
Chrysene	mg/kg	290	0.0081	U	**0.024**	J	**0.0018**	J	**0.11**		0.0079	U			**0.011**	J	**0.17**		**0.11**		**0.0012**	J	**0.83**		0.0082	U			**0.55**		**0.13**		**0.2**		**0.057**			
Dibenz(a,h)anthracene	mg/kg	0.29	0.0081	U	0.073	U	0.0074	U	**0.016**	J	0.0079	U			0.14	U	**0.038**		**0.02**	J	0.008	U	**0.18**		0.0082	U			**0.076**		**0.021**	J	**0.038**		**0.0069**			
Diethylphthalate	mg/kg	660,000	0.08	U	0.072	U	0.074	U	0.078	U	0.078	U			0.074	U	0.083	U	0.074	U	0.079	U	0.084	UL3	0.083	UL3			0.071	UL3	0.072	UL3	0.073	UL3	0.07	UL3		
Di-n-butylphthalate	mg/kg	82,000	0.08	UL2	0.072	UL2	0.074	UL2	**0.1**	L2	0.078	UL3			0.074	U	0.083	U	0.074	U	0.079	U	0.084	U	0.083	UM1			0.071	U	0.072	U	0.073	U	0.07	U		
Di-n-octylphthalate	mg/kg	8,200	0.08	U	0.072	UIS	0.074	U	0.078	UIS	0.078	UISM0L3			0.074	UIS	0.083	UIS	**0.07**	JIS	0.079	U	0.084	UIS	0.083	UM1R1			0.071	UIS	0.072	UIS	0.073	U	0.07	U		
Fluoranthene	mg/kg	30,000	**0.00057**	J	**0.042**	J	**0.0031**	J	**0.2**		0.0079	U			**0.018**	J	**0.4**		**0.21**		**0.0029**	J	**1.6**		0.0082	U			**0.93**		**0.26**		**0.21**		**0.038**			
Fluorene	mg/kg	30,000	0.0081	U	0.073	U	0.0074	U	**0.0074**	J	0.0079	U			0.072	U	**0.018**		0.074	U	0.008	U	**0.041**	J	0.0082	U			**0.15**		**0.014**	J	**0.0015**	J	**0.0018**	J		
Hexachlorobenzene	mg/kg	0.96	0.08	U	0.072	U	0.074	U	0.078	U	0.078	UM1			0.074	U	0.083	U	0.074	U	0.079	U	0.084	UL3	0.083	UL3			0.071	UL3	0.072	UL3	0.073	UL3	0.07	UL3		
Indeno(1,2,3-cd)pyrene	mg/kg	2.9	0.0081	U	0.073	U	0.0074	U	**0.042**	J	0.0079	U			0.14	U	**0.11**		**0.051**	J	0.008	U	**0.44**		0.0082	U			**0.15**		**0.066**	J	**0.096**		**0.014**			
Naphthalene	mg/kg	17	0.0081	U	0.073	U	0.0074	U	**0.023**	J	0.0079	U			**0.018**	J	**0.056**		**0.026**	J	0.008	U	**0.26**	IS	0.0082	UIS			**2.9**		**0.8**	IS	**0.038**		**0.04**			
N-Nitroso-di-n-propylamine	mg/kg	0.33	0.08	U	0.072	U	0.074	U	0.078	U	0.078	U			0.074	U	0.083	U	0.074	U	0.079	U	0.084	U	0.083	U			0.071	U	0.072	U	0.073	U	0.07	U		
N-Nitrosodiphenylamine	mg/kg	470	0.08	U	0.072	U	0.074	U	0.078	U	0.078	UM1R1			0.074	UL3	0.083	UL3	0.074	UL3	0.079	UL3	0.084	U	0.083	UM1			0.071	U	0.072	U	0.073	U	0.07	U		
Pentachlorophenol	mg/kg	4	0.2	UL2	0.18	UL2	0.19	UL2	0.2	UL2	0.2	UL3			0.18	UL3	0.21	UL3	0.19	UL3	0.2	UM0L3	0.21	UL3	0.21	UM0L3			0.18	UL3	0.18	UL3	0.18	UL3	0.17	UL3		
Phenanthrene	mg/kg		0.0081	U	**0.033**	J	**0.0021**	J	**0.12**		0.0079	U			**0.012**	JB	**0.27**		**0.13**		**0.0019**	J	**0.78**		**0.00079**	J			**0.94**		**0.44**		**0.097**		**0.083**			
Phenol	mg/kg	250,000	0.08	U	0.072	U	0.074	U	0.078	U	0.078	UM1			0.074	U	0.083	U	**0.02**	J	0.079	U	0.084	U	0.083	U			**0.049**	J	0.072	U	0.073	U	0.07	U		
Pyrene	mg/kg	23,000	0.0081	U	**0.037**	J	**0.0028**	J	**0.17**		0.0079	U			**0.02**	J	**0.32**		**0.18**		**0.0026**	J	**1.2**		0.0082	U			**0.64**		**0.26**		**0.17**		**0.032**			
PCBs																																						
Aroclor 1242	mg/kg	0.97			0.105	U			0.0586	U					0.224	U			0.0545	U			0.0612	U					0.054	U			0.0561	U				
Aroclor 1248	mg/kg	0.94			0.105	U			0.0586	U					0.224	U			0.0545	U			0.0612	U					0.054	U			0.0561	U				
Aroclor 1254	mg/kg	0.97			0.105	U			0.0586	U					**1.01**				0.0545	U			0.0612	U					0.054	U			0.0561	U				
Aroclor 1260	mg/kg	0.99			0.105	U			0.0586	U					0.224	U			0.0545	U			0.0612	U					0.054	U			0.0561	U				
Aroclor 1262	mg/kg				0.105	U			**0.0451**	J					0.224	U			**0.037**	J			0.0612	U					0.054	U			0.0561	U				
Aroclor 1268	mg/kg				**3.18**				0.0586	U					**6.68**				0.0545	U			**0.418**						**0.0603**				0.0561	U				
PCB, Total	mg/kg	0.97			**3.18**				**0.0451**	J					**7.69**				**0.037**	J			**0.418**						**0.0603**				0.0561	U				
TPH/Oil and Grease																																						
Diesel Range Organics	mg/kg	620	8	UL2	**47.1**	L2	**6.3**	JL2	**37.4**	L2	**4.1**	JL2M0			**316**	L2	**99.7**	L2	**158**	L2	**93.1**	L2M0R1	**95.6**	L2	**4.2**	JL2M0			**38.5**	L2	**70**	L2	**39.2**	L2	**24.1**	L2		
Gasoline Range Organics	mg/kg	620	9.9	U	13.1	U	10.6	U	13.9	U	9	U			11.8	U	10.5	U	11.2	U	9.1	U	13.2	U	9.8	U			13.9	U	**7.8**	J	14.8	U	11.4	U		

Detections in bold

Blank spaces indicate that the parameter was not analyzed for this sample

*PAH compounds were analyzed via SIM

A glossary of laboratory flag keys can be viewed in the attached laboratory reports

Values in Red indicate an exceedance of the Project Action Limit (PAL)

Table 5
Summary of Organics Detected in Soil
Parcel B22
Tradepoint Atlantic
Sparrows Point, Maryland

Parameter	Units	PAL	B22-098-SB-10		B22-099-SB-1		B22-099-SB-7		B22-099-SB-9.5		B22-100-SB-1		B22-100-SB-6		B22-100-SB-10		B22-101-SB-1		B22-101-SB-5		B22-102-SB-1		B22-102-SB-5		B22-103-SB-1		B22-103-SB-4		B22-104-SB-1		B22-104-SB-4	
			Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		
			5/24/2016		5/19/2016		5/19/2016		5/19/2016		5/18/2016		5/18/2016		5/18/2016		5/20/2016		5/20/2016		5/20/2016		5/20/2016		5/31/2016		5/31/2016		5/31/2016		5/31/2016		
Volatile Organic Compounds																																
1,1,1-Trichloroethane	mg/kg	36,000			0.0052	U	0.0055	U			0.0052	U	0.006	U			0.0052	U	0.0049	U	0.0056	U	0.0049	U	0.0057	U	**0.0058**		0.011	U	0.0049	U
1,1,2-Trichloroethane	mg/kg	5			0.0052	U	0.0055	U			0.0052	U	0.006	U			0.0052	U	0.0049	U	0.0056	U	0.0049	U	0.0057	U	0.0053	U	0.011	U	0.0049	U
1,1,2-Trichlorotrifluoroethane	mg/kg	170,000			0.052	U	0.055	U			0.052	U	0.06	U			0.052	U	0.049	U	0.056	U	0.049	U	0.057	U	0.053	U	0.11	U	0.049	U
1,1-Dichloroethane	mg/kg	16			0.0052	U	0.0055	U			0.0052	U	0.006	U			0.0052	U	0.0049	U	0.0056	U	**0.32**		**0.014**		**0.05**		0.011	U	0.0049	U
1,1-Dichloroethene	mg/kg	1,000			0.0052	U	0.0055	U			0.0052	U	0.006	U			0.0052	U	0.0049	U	0.0056	U	**0.018**		**0.008**		**0.027**		0.011	U	0.0049	U
1,2,3-Trichlorobenzene	mg/kg	930			0.0052	U	0.0055	U			0.0052	U	0.006	U			0.0052	U	0.0049	U	0.0056	U	0.0049	U	0.0057	U	0.0053	U	0.011	U	0.0049	U
1,2,4-Trichlorobenzene	mg/kg	110			0.0052	U	0.0055	U			0.0052	U	0.006	U			0.0052	U	0.0049	U	0.0056	U	0.0049	U	0.0057	U	0.0053	U	0.011	U	0.0049	U
1,2-Dichloroethane	mg/kg	2			0.0052	U	0.0055	U			0.0052	U	0.006	U			0.0052	U	0.0049	U	0.0056	U	0.0049	U	0.0057	U	0.0053	U	0.011	U	0.0049	U
1,2-Dichloroethene (Total)	mg/kg	2,300			0.01	U	0.011	U			0.01	U	0.012	U			0.01	U	0.0097	U	0.011	U	0.0097	U	**0.021**		**0.064**		0.023	U	0.0098	U
1,4-Dichlorobenzene	mg/kg	11			0.0052	U	0.0055	U			0.0052	U	0.006	U			0.0052	U	0.0049	U	0.0056	U	0.0049	U	0.0057	U	0.0053	U	0.011	U	0.0049	U
1,4-Dioxane	mg/kg	24			0.1	U	0.11	U			0.1	U	0.12	U			0.1	U	0.097	U	0.11	U	0.097	U	0.11	U	0.11	U	0.23	U	0.098	U
2-Butanone (MEK)	mg/kg	190,000			0.01	U	0.011	U			0.01	U	0.012	U			0.01	U	0.0097	U	0.011	U	0.0097	U	0.011	U	0.011	U	0.023	U	0.0098	U
2-Hexanone	mg/kg	1,300			0.01	UL3	0.011	UL3			0.01	U	0.012	U			0.01	U	0.0097	U	0.011	U	0.0097	U	0.011	U	0.011	U	0.023	U	0.0098	U
4-Methyl-2-pentanone (MIBK)	mg/kg	56,000			0.01	UL3	0.011	UL3			0.01	U	0.012	U			0.01	U	0.0097	U	0.011	U	0.0097	U	0.011	U	0.011	U	0.023	U	0.0098	U
Acetone	mg/kg	670,000			**0.0079**	J	**0.0083**	J			0.01	U	0.012	U			0.01	U	0.0097	U	0.011	U	0.0097	U	0.011	U	0.011	U	0.023	U	0.0098	U
Benzene	mg/kg	5.1			0.0052	U	0.0055	U			0.0052	U	0.006	U			0.0052	U	0.0049	U	0.0056	U	0.0049	U	0.0057	U	0.0053	U	0.011	U	0.0049	U
Chlorobenzene	mg/kg	1,300			0.0052	U	0.0055	U			0.0052	U	0.006	U			0.0052	U	0.0049	U	0.0056	U	0.0049	U	0.0057	U	0.0053	U	0.011	U	0.0049	U
Chloroethane	mg/kg	57,000			0.0052	U	0.0055	U			0.0052	U	0.006	U			0.0052	U	0.0049	U	0.0056	U	0.0049	U	0.0057	U	0.0053	U	0.011	U	0.0049	U
Chloroform	mg/kg	1.4			0.0052	U	0.0055	U			0.0052	U	0.006	U			0.0052	U	0.0049	U	0.0056	U	0.0049	U	0.0057	U	0.0053	U	0.011	U	0.0049	U
cis-1,2-Dichloroethene	mg/kg	2,300			0.0052	U	0.0055	U			0.0052	U	0.006	U			0.0052	U	0.0049	U	0.0056	U	0.0049	U	**0.021**		**0.064**		0.011	U	0.0049	U
Cyclohexane	mg/kg	27,000			0.01	U	0.011	U			0.01	U	0.012	U			0.01	U	0.0097	U	0.011	U	0.0097	U	0.011	U	0.011	U	0.023	U	0.0098	U
Ethylbenzene	mg/kg	25			0.0052	U	0.0055	U			0.0052	U	0.006	U			0.0052	U	0.0049	U	0.0056	U	0.0049	U	0.0057	U	0.0053	U	0.011	U	0.0049	U
Isopropylbenzene (Cumene)	mg/kg	9,900			0.0052	U	0.0055	U			0.0052	U	0.006	U			0.0052	U	0.0049	U	0.0056	U	0.0049	U	0.0057	U	0.0053	U	0.011	U	0.0049	U
Methyl acetate	mg/kg	1,200,000			0.052	U	0.055	U			0.052	U	0.06	U			0.052	U	0.049	U	0.056	U	0.049	U	0.057	U	0.053	U	0.11	U	0.049	U
Methylene Chloride	mg/kg	1,000			0.0052	U	0.0055	U			0.0052	U	0.006	U			0.0052	U	0.0049	U	0.0056	U	0.0049	U	0.0057	U	0.0053	U	0.011	U	0.0049	U
Styrene	mg/kg	35,000			0.0052	U	0.0055	U			0.0052	U	0.006	U			0.0052	UL2	0.0049	UL2	0.0056	UL2	0.0049	UL2	**0.0063**		**0.011**		0.011	U	0.0049	U
Tetrachloroethene	mg/kg	100			**0.014**		0.0055	U			0.0052	U	0.006	U			0.0052	U	0.0049	U	0.0056	U	0.0049	U	**0.19**		**0.32**		0.011	U	0.0049	U
Toluene	mg/kg	47,000			0.0052	U	0.0055	U			0.0052	U	0.006	U			0.0052	U	0.0049	U	0.0056	U	0.0049	U	0.0057	U	0.0053	U	0.011	U	0.0049	U
trans-1,2-Dichloroethene	mg/kg	23,000			0.0052	U	0.0055	U			0.0052	U	0.006	U			0.0052	U	0.0049	U	0.0056	U	0.0049	U	0.0057	U	0.0053	U	0.011	U	0.0049	U
Trichloroethene	mg/kg	6			0.0052	U	0.0055	U			0.0052	U	0.006	U			0.0052	U	0.0049	U	0.0056	U	0.0049	U	**0.06**		**0.12**		0.011	U	0.0049	U
Trichlorofluoromethane	mg/kg	3,100			0.0052	U	0.0055	U			0.0052	U	0.006	U			0.0052	U	0.0049	U	0.0056	U	0.0049	U	0.0057	U	0.0053	U	0.011	U	0.0049	U
Vinyl chloride	mg/kg	1.7			0.0052	U	0.0055	U			0.0052	U	0.006	U			0.0052	U	0.0049	U	0.0056	U	0.0049	U	0.0057	U	0.0053	U	0.011	U	0.0049	U
Xylene (Total)	mg/kg	2,800			0.016	U	0.017	U			0.016	U	0.018	U			0.016	U	0.015	U	0.017	U	0.015	U	0.017	U	0.016	U	0.034	U	0.015	U
Semi-Volatile Organic Compounds*																																
1,2,4,5-Tetrachlorobenzene	mg/kg	350			0.071	U	0.071	U			0.074	U	0.072	U			0.075	U	0.082	U	0.073	U	0.08	U	0.083	U	0.087	U	0.085	U	0.079	U
2,4-Dimethylphenol	mg/kg	16,000			0.071	U	0.071	U			0.074	U	**0.014**	J			0.075	U	0.082	U	0.073	U	0.08	U	0.083	U	0.087	U	0.085	U	0.079	U
2-Chloronaphthalene	mg/kg	60,000			0.071	U	0.071	U			0.074	U	0.072	U			0.075	U	0.082	U	0.073	U	0.08	U	0.083	U	0.087	U	**0.1**		0.079	U
2-Methylnaphthalene	mg/kg	3,000			**0.084**		**0.024**				**0.16**		**0.1**				0.076	U	0.0082	U	0.075	U	0.082	U	**0.032**	J	**0.028**	J	**0.015**		0.008	U
2-Methylphenol(o-Cresol)	mg/kg	41,000			0.071	UL3	0.071	UL3			0.074	U	0.072	U			0.075	U	0.082	U	0.073	U	0.08	U	0.083	U	0.087	U	0.085	U	0.079	U
2-Nitroaniline	mg/kg	8,000			0.18	UL3	0.18	UL3			0.19	U	0.18	U			0.19	U	0.21	U	0.18	U	0.2	U	**0.037**	J	0.22	U	0.21	U	0.2	U
3&4-Methylphenol(m&p Cresol)	mg/kg	41,000			0.14	UL3	0.14	UL3			**0.028**	J	0.14	U			0.15	U	0.16	U	0.15	U	0.16	U	0.17	U	0.17	U	0.17	U	0.16	U
4-Nitroaniline	mg/kg	110			0.18	U	0.18	U			0.19	UL3	0.18	UL3			0.19	U	0.21	UM1	0.18	U	0.2	U	0.21	U	0.22	U	0.21	U	0.2	U
Acenaphthene	mg/kg	45,000			**0.02**	J	**0.011**				**0.029**	J	**0.11**				0.076	U	0.0082	U	0.075	U	0.082	U	**0.86**		**0.18**		**0.0035**	J	0.008	U
Acenaphthylene	mg/kg	45,000			**0.41**		**0.02**				**0.062**	J	**0.04**	J			**0.029**	J	0.0082	U	**0.043**	J	**0.0087**	J	**13**		**3.5**		**0.21**		0.008	U
Acetophenone	mg/kg	120,000			0.071	U	0.071	U			0.074	U	0.072	U			0.075	U	0.082	U	**0.18**		0.08	U	0.083	U	0.087	U	0.085	U	0.079	U
Anthracene	mg/kg	230,000			**0.36**		**0.077**				**0.23**		**0.41**				**0.022**	J	0.0082	UR1	**0.074**	J	**0.012**	J	0.084	U	0.089	U	**0.054**		0.008	U
Benzaldehyde	mg/kg	120,000			**0.023**	JL2	0.071	UL2			0.074	UL2	0.072	UL2			**0.037**	JL2	0.082	UL2M0	**0.45**	L2	0.08	UL2	0.083	U	0.087	U	0.085	U	0.079	U
Benzo(a)anthracene	mg/kg	2.9			**1.5**		**0.81**				**0.5**		**0.82**				**0.056**	J	**0.0016**	JR1	**0.99**		**0.065**	J	0.084	U	**0.094**		**0.12**		**0.0021**	J
Benzo(a)pyrene	mg/kg	0.29			**1.6**		**0.98**		**0.1**		**0.35**		**0.66**		**0.47**		**0.051**	J	0.0082	UR1	**0.76**		**0.051**	J	**0.25**		**0.13**		**0.094**		0.008	U
Benzo(b)fluoranthene	mg/kg	2.9			**4.3**	ip	**2.1**	ip			**0.77**	ip	**1.3**	ip			**0.16**	ip	**0.0022**	Jip	**2.1**	ip	**0.13**	ip	**0.45**	ip	**0.34**	ip	**0.18**	ip	**0.0021**	Jip
Benzo(g,h,i)perylene	mg/kg				**0.67**		**0.83**				**0.22**		**0.43**				**0.03**	J	0.0082	UM1R1	**0.19**		**0.017**	J	**0.37**		**0.17**		**0.072**		0.008	U
Benzo(k)fluoranthene	mg/kg	29			**3.6**	ip	**2.1**	ip			**0.73**	ip	**1.2**	ip			**0.13**	ip	**0.0018**	Jip	**1.8**	ip	**0.11**	ip	**0.39**	ip	**0.3**	ip	**0.16**	ip	**0.0018**	Jip
Biphenyl (Diphenyl)	mg/kg	200			**0.016**	J	0.071	U			**0.063**	J	**0.028**	J			0.075	U	0.082	U	0.073	U	0.08	U	**0.023**	J	0.087	U	0.085	U	0.079	U
bis(2-Ethylhexyl)phthalate	mg/kg	160			0.071	UISL3	0.071	UL3			**0.026**	JIS	**0.026**	JIS			**0.031**	JIS	0.082	U	**0.44**	IS	0.08	UIS	0.083	UIS	**0.033**	JIS	0.085	U	0.079	U
Carbazole	mg/kg				**0.072**		**0.034**	J			**0.051**	J	**0.16**				0.075	U	0.082	U	**0.095**		0.08	U	0.083	U	0.087	U	0.085	U	0.079	U
Chrysene	mg/kg	290			**1.6**		**0.88**				**0.56**		**0.74**				**0.045**	J	**0.00088**	JR1	**0.97**		**0.062**	J	0.084	U	**0.056**	J	**0.1**		**0.0014**	J
Dibenz(a,h)anthracene	mg/kg	0.29			**0.33**		**0.27**				**0.057**	J	**0.12**				0.076	U	0.0082	UM1	**0.086**		0.082	U	**0.079**	J	**0.042**	J	**0.017**		0.008	U
Diethylphthalate	mg/kg	660,000			**0.15**	L1	0.071	UL3			0.074	U	0.072	U			0.075	U	0.082	U	0.073	U	0.08	U	0.083	U	0.087	U	0.085	U	0.079	U
Di-n-butylphthalate	mg/kg	82,000			0.071	UL3	0.071	UL3			0.074	U	0.072	U			0.075	U	0.082	U	**0.021**	J	0.08	U	0.083	U	0.087	U	0.085	U	0.079	U
Di-n-octylphthalate	mg/kg	8,200			0.071	UISL3	0.071	UL3			0.074	UISL3	0.072	UISL3			0.075	UIS	0.082	UM1R1	0.073	UIS	0.08	UIS	0.083	UIS	0.087	UIS	0.085	U	0.079	U
Fluoranthene	mg/kg	30,000			**1.5**		**1**				**1.2**		**1.8**				**0.046**	J	**0.0015**	JM1R1	**1.2**		**0.095**		**0.018**	J	**0.033**	J	**0.25**		**0.0027**	J
Fluorene	mg/kg	30,000			**0.036**	J	**0.0058**	J			**0.15**		**0.18**				0.076	U	0.0082	U	0.075	U	0.082	U	0.084	U	0.089	U	**0.0091**		0.008	U
Hexachlorobenzene	mg/kg	0.96			0.071	U	0.071	U			0.074	U	0.072	U			0.075	U	0.082	U	0.073	U	0.08	U	0.083	U	0.087	U	0.085	U	0.079	U
Indeno(1,2,3-cd)pyrene	mg/kg	2.9			**0.71**		**0.75**				**0.21**		**0.4**				**0.026**	J	0.0082	UM1R1	**0.19**		**0.014**	J	**0.3**		**0.14**		**0.055**		0.008	U
Naphthalene	mg/kg	17			**0.094**		**0.029**				**0.39**		**0.17**				0.076	U	0.0082	U	0.075	U	0.082	U	**0.057**	J	**0.05**	J	**0.36**		0.008	U
N-Nitroso-di-n-propylamine	mg/kg	0.33			0.071	U	0.071	U			0.074	U	0.072	U			0.075	U	0.082	U	0.073	U	0.08	U	0.083	U	0.087	U	0.085	U	0.079	U
N-Nitrosodiphenylamine	mg/kg	470			0.071	U	0.071	U			0.074	U	0.072	U			0.075	U	0.082	U	0.073	U	0.08	U	0.083	U	0.087	U	0.085	U	0.079	U
Pentachlorophenol	mg/kg	4			0.18	UL3	0.18	UL3			0.19	UL3	0.18	UL3			0.19	U	0.21	UM1	0.18	U	0.2	U	0.21	U	0.22	U	0.21	U	0.2	U
Phenanthrene	mg/kg				**0.38**		**0.28**				**0.66**		**1.4**				**0.028**	J	**0.002**	JM1R1	**0.14**		**0.04**	J	0.084	U	0.089	U	**0.3**		**0.0015**	J
Phenol	mg/kg	250,000			**0.025**	JL1	0.071	UL3			**0.023**	J	0.072	U			**0.024**	J	0.082	U	**0.024**	J	0.08	U	0.083	U	0.087	U	0.085	U	0.079	U
Pyrene	mg/kg	23,000			**1.5**		**1.1**				**0.93**		**1.5**				**0.053**	J	**0.0015**	JM1R1	**1.2**		**0.085**		**0.073**	J	**0.061**	J	**0.25**		**0.0021**	J
PCBs																																
Aroclor 1242	mg/kg	0.97			0.0524	U					0.0561	U					0.0549	U			0.0598	U			0.0637	U			0.0592	U		
Aroclor 1248	mg/kg	0.94			0.0524	U					0.0561	U					**0.16**				0.0598	U			0.0637	U			0.0592	U		
Aroclor 1254	mg/kg	0.97			0.0524	U					**0.0294**	J					**0.216**				**0.132**				0.0637	U			0.0592	U		
Aroclor 1260	mg/kg	0.99			0.0524	U					0.0561	U					0.0549	U			0.0598	U			0.0637	U			0.0592	U		
Aroclor 1262	mg/kg				**0.167**						**0.0658**						**0.22**				**0.187**				0.0637	U			0.0592	U		
Aroclor 1268	mg/kg				0.0524	U					0.0561	U					0.0549	U			0.0598	U			0.0637	U			0.0592	U		
PCB, Total	mg/kg	0.97			**0.167**						**0.0952**						**0.596**				**0.319**				0.0637	U			0.0592	U		
TPH/Oil and Grease																																
Diesel Range Organics	mg/kg	620			**122**	L2	**89**	L2			**268**	L2	**366**	L2			**136**	L2	**3.4**	JL2M0	**274**	L2	**24.8**	L2	**4,590**	L2	**1,720**	L2	**26.3**	L2	8	UL2
Gasoline Range Organics	mg/kg	620			10.2	U	10	U			11.8	U	10.1	U			13.3	U	9.6	U	10.8	U	9.9	U	12.2	U	11.4	U	25.7	U	10.9	U

Detections in bold

Blank spaces indicate that the parameter was not analyzed for this sample

*PAH compounds were analyzed via SIM

A glossary of laboratory flag keys can be viewed in the attached laboratory reports

Values in Red indicate an exceedance of the Project Action Limit (PAL)

Table 5
Summary of Organics Detected in Soil
Parcel B22
Tradepoint Atlantic
Sparrows Point, Maryland

Parameter	Units	PAL	B22-105-SB-1 Soil 5/31/2016		B22-105-SB-4 Soil 5/31/2016		B22-105-SB-10 Soil 5/31/2016		B22-106-SB-1 Soil 5/25/2016		B22-106-SB-8.5 Soil 5/25/2016		B22-107-SB-1 Soil 5/26/2016		B22-107-SB-5 Soil 5/26/2016		B22-107-SB-10 Soil 5/26/2016		B22-108-SB-1 Soil 5/26/2016		B22-108-SB-5 Soil 5/26/2016		B22-109-SB-1 Soil 5/20/2016		B22-109-SB-4.5 Soil 5/20/2016		B22-110-SB-1 Soil 5/20/2016		B22-110-SB-4 Soil 5/20/2016		B22-111-SB-1 Soil 5/25/2016		B22-111-SB-8 Soil 5/25/2016		B22-112-SB-1 Soil 5/20/2016	
Volatile Organic Compounds																																						
1,1,1-Trichloroethane	mg/kg	36,000	0.0048	U	0.0046	U			0.0066	U	0.0045	U	0.0044	U	0.0049	U			**0.012**		**0.031**		**0.023**		**0.0063**		0.0072	U	0.0065	U	0.006	U	0.0048	U	0.0054	U
1,1,2-Trichloroethane	mg/kg	5	0.0048	U	0.0046	U			0.0066	U	0.0045	U	0.0044	U	0.0049	U			0.0052	U	0.0059	U	0.0053	U	0.006	U	0.0072	U	0.0065	U	0.006	U	0.0048	U	0.0054	U
1,1,2-Trichlorotrifluoroethane	mg/kg	170,000	0.048	U	0.046	U			0.066	U	0.045	U	0.044	U	0.049	U			0.052	U	0.059	U	0.053	U	0.06	U	0.072	U	0.065	U	0.06	U	0.048	U	0.054	U
1,1-Dichloroethane	mg/kg	16	0.0048	U	0.0046	U			0.0066	U	0.0045	U	0.0044	U	0.0049	U			**0.0052**		**0.062**		**0.1**		**0.018**		0.0072	U	0.0065	U	0.006	U	0.0048	U	0.0054	U
1,1-Dichloroethene	mg/kg	1,000	0.0048	U	0.0046	U			0.0066	U	0.0045	U	0.0044	U	0.0049	U			0.0052	U	0.0059	U	0.0053	U	0.006	U	0.0072	U	0.0065	U	0.006	U	0.0048	U	0.0054	U
1,2,3-Trichlorobenzene	mg/kg	930	0.0048	U	0.0046	U			0.0066	U	0.0045	U	0.0044	U	0.0049	U			0.0052	U	0.0059	U	0.0053	U	0.006	U	0.0072	U	0.0065	U	0.006	U	0.0048	U	0.0054	U
1,2,4-Trichlorobenzene	mg/kg	110	0.0048	U	0.0046	U			0.0066	U	0.0045	U	0.0044	U	0.0049	U			0.0052	U	0.0059	U	0.0053	U	0.006	U	0.0072	U	0.0065	U	0.006	U	0.0048	U	0.0054	U
1,2-Dichloroethane	mg/kg	2	0.0048	U	0.0046	U			0.0066	U	0.0045	U	0.0044	U	0.0049	U			0.0052	U	0.0059	U	0.0053	U	0.006	U	0.0072	U	0.0065	U	0.006	U	0.0048	U	0.0054	U
1,2-Dichloroethene (Total)	mg/kg	2,300	0.0096	U	0.0091	U			0.013	U	0.0091	U	0.0089	U	0.0098	U			0.01	U	0.012	U	0.011	U	0.012	U	0.014	U	0.013	U	0.012	U	0.0096	U	0.011	U
1,4-Dichlorobenzene	mg/kg	11	0.0048	U	0.0046	U			0.0066	U	0.0045	U	0.0044	U	0.0049	U			0.0052	U	0.0059	U	0.0053	U	0.006	U	0.0072	U	0.0065	U	0.006	U	0.0048	U	0.0054	U
1,4-Dioxane	mg/kg	24	0.096	U	0.091	U			0.13	U	0.091	U	0.089	U	0.098	U			**0.23**		0.12	U	0.11	U	0.12	U	0.14	U	0.13	U	0.12	U	0.096	U	0.11	U
2-Butanone (MEK)	mg/kg	190,000	0.0096	U	0.0091	U			0.013	U	0.0091	U	0.0089	U	0.0098	U			**0.005**	J	0.012	U	0.011	U	0.012	U	**0.1**		**0.006**	J	0.012	U	0.0096	U	0.011	U
2-Hexanone	mg/kg	1,300	0.0096	U	0.0091	U			0.013	U	0.0091	U	0.0089	UL3	0.0098	U			0.01	UL3	0.012	UL3	0.011	U	0.012	U	**0.019**		0.013	U	0.012	U	0.0096	U	0.011	U
4-Methyl-2-pentanone (MIBK)	mg/kg	56,000	0.0096	U	0.0091	U			0.013	U	0.0091	U	0.0089	UL3	0.0098	U			0.01	UL3	0.012	UL3	0.011	U	0.012	U	**0.0069**	J	0.013	U	0.012	U	0.0096	U	0.011	U
Acetone	mg/kg	670,000	0.0096	U	0.0091	U			0.013	U	0.0091	U	**0.007**	J	0.0098	U			**0.028**		**0.013**		0.011	U	0.012	U	**0.37**		**0.0079**	J	0.012	U	0.0096	U	0.011	U
Benzene	mg/kg	5.1	0.0048	U	0.0046	U			0.0066	U	0.0045	U	0.0044	U	0.0049	U			0.0052	U	0.0059	U	0.0053	U	0.006	U	**0.0046**	J	**0.0019**	J	0.006	U	0.0048	U	0.0054	U
Chlorobenzene	mg/kg	1,300	0.0048	U	0.0046	U			0.0066	U	0.0045	U	0.0044	U	0.0049	U			0.0052	U	0.0059	U	0.0053	U	0.006	U	0.0072	U	0.0065	U	0.006	U	0.0048	U	0.0054	U
Chloroethane	mg/kg	57,000	0.0048	U	0.0046	U			0.0066	U	0.0045	U	0.0044	U	0.0049	U			0.0052	U	0.0059	U	0.0053	U	0.006	U	0.0072	U	0.0065	U	0.006	U	0.0048	U	0.0054	U
Chloroform	mg/kg	1.4	0.0048	U	0.0046	U			0.0066	U	0.0045	U	0.0044	U	0.0049	U			0.0052	U	0.0059	U	0.0053	U	0.006	U	0.0072	U	0.0065	U	0.006	U	0.0048	U	0.0054	U
cis-1,2-Dichloroethene	mg/kg	2,300	0.0048	U	0.0046	U			0.0066	U	0.0045	U	0.0044	U	0.0049	U			0.0052	U	0.0059	U	0.0053	U	0.006	U	0.0072	U	0.0065	U	0.006	U	0.0048	U	0.0054	U
Cyclohexane	mg/kg	27,000	0.0096	U	0.0091	U			0.013	U	0.0091	U	0.0089	U	0.0098	U			0.01	U	0.012	U	0.011	U	0.012	U	0.014	U	0.013	U	0.012	U	0.0096	U	0.011	U
Ethylbenzene	mg/kg	25	0.0048	U	0.0046	U			0.0066	U	0.0045	U	0.0044	U	0.0049	U			0.0052	U	0.0059	U	0.0053	U	0.006	U	**0.0069**	J	0.0065	U	0.006	U	0.0048	U	0.0054	U
Isopropylbenzene (Cumene)	mg/kg	9,900	0.0048	U	0.0046	U			0.0066	U	0.0045	U	0.0044	U	0.0049	U			0.0052	U	0.0059	U	0.0053	U	0.006	U	0.0072	U	0.0065	U	0.006	U	0.0048	U	0.0054	U
Methyl acetate	mg/kg	1,200,000	0.048	U	0.046	U			0.066	U	0.045	U	0.044	U	0.049	U			0.052	U	0.059	U	0.053	U	0.06	U	**0.0085**	J	0.065	U	0.06	U	0.048	U	0.054	U
Methylene Chloride	mg/kg	1,000	0.0048	U	0.0046	U			0.0066	U	0.0045	U	0.0044	U	0.0049	U			0.0052	U	0.0059	U	0.0053	U	0.006	U	0.0072	U	0.0065	U	0.006	U	0.0048	U	0.0054	U
Styrene	mg/kg	35,000	0.0048	U	0.0046	U			0.0066	U	0.0045	U	0.0044	UL2	0.0049	U			0.0052	UL2	0.0059	UL2	0.0053	UL2	0.006	UL2	**0.065**	L2	0.0065	UL2	0.006	U	0.0048	U	0.0054	UL2
Tetrachloroethene	mg/kg	100	0.0048	U	0.0046	U			0.0066	U	0.0045	U	0.0044	U	0.0049	U			0.0052	U	0.0059	U	0.0053	U	0.006	U	0.0072	U	0.0065	U	0.006	U	0.0048	U	0.0054	U
Toluene	mg/kg	47,000	0.0048	U	0.0046	U			0.0066	U	0.0045	U	0.0044	U	0.0049	U			0.0052	U	0.0059	U	0.0053	U	0.006	U	**0.0029**	J	0.0065	U	0.006	U	0.0048	U	0.0054	U
trans-1,2-Dichloroethene	mg/kg	23,000	0.0048	U	0.0046	U			0.0066	U	0.0045	U	0.0044	U	0.0049	U			0.0052	U	0.0059	U	0.0053	U	0.006	U	0.0072	U	0.0065	U	0.006	U	0.0048	U	0.0054	U
Trichloroethene	mg/kg	6	0.0048	U	0.0046	U			0.0066	U	0.0045	U	0.0044	U	0.0049	U			0.0052	U	0.0059	U	**0.037**		**0.0073**		**0.02**		0.0065	U	0.006	U	0.0048	U	**0.016**	
Trichlorofluoromethane	mg/kg	3,100	0.0048	U	0.0046	U			0.0066	U	0.0045	U	0.0044	U	0.0049	U			0.0052	U	0.0059	U	0.0053	U	0.006	U	0.0072	U	0.0065	U	0.006	U	0.0048	U	0.0054	U
Vinyl chloride	mg/kg	1.7	0.0048	U	0.0046	U			0.0066	U	0.0045	U	0.0044	U	0.0049	U			0.0052	U	0.0059	U	0.0053	U	0.006	U	0.0072	U	0.0065	U	0.006	U	0.0048	U	0.0054	U
Xylene (Total)	mg/kg	2,800	0.014	U	0.014	U			0.02	U	0.014	U	0.013	U	0.015	U			0.016	U	0.018	U	0.016	U	0.018	U	0.022	U	0.02	U	0.018	U	0.014	U	0.016	U
Semi-Volatile Organic Compounds*																																						
1,2,4,5-Tetrachlorobenzene	mg/kg	350	0.079	U	0.08	U			0.078	U	0.081	U	0.076	U	0.083	U			0.075	U	0.077	U	0.081	U	0.086	U	0.074	U	0.077	U	0.075	U	0.082	U	0.075	U
2,4-Dimethylphenol	mg/kg	16,000	0.079	U	0.08	U			0.078	U	0.081	U	0.076	U	0.083	U			0.075	U	0.077	U	0.081	U	0.086	U	0.074	U	0.077	U	0.075	U	0.082	U	0.075	U
2-Chloronaphthalene	mg/kg	60,000	0.079	U	0.08	U			0.078	U	0.081	U	0.076	U	0.083	U			0.075	U	0.077	U	0.081	U	0.086	U	0.074	U	0.077	U	0.075	U	0.082	U	0.075	U
2-Methylnaphthalene	mg/kg	3,000	0.0079	U	0.0081	U			**0.004**	J	0.008	U	**0.047**	J	0.0083	U			**0.17**		**0.078**		0.082	U	0.0086	U	**0.02**	J	**0.12**		**0.0062**	J	0.0082	U	**0.021**	J
2-Methylphenol(o-Cresol)	mg/kg	41,000	0.079	U	0.08	U			0.078	U	0.081	U	0.076	U	0.083	U			0.075	U	0.077	U	0.081	U	0.086	U	0.074	U	0.077	U	0.075	U	0.082	U	0.075	U
2-Nitroaniline	mg/kg	8,000	0.2	U	0.2	U			0.2	U	0.2	U	0.19	U	0.21	U			0.19	U	0.19	U	0.2	U	0.21	U	0.19	U	0.19	U	0.19	U	0.21	U	0.19	U
3&4-Methylphenol(m&p Cresol)	mg/kg	41,000	0.16	U	0.16	U			0.16	U	0.16	U	0.15	U	0.17	U			0.15	U	0.15	U	0.16	U	0.17	U	0.15	U	**1.5**		0.15	U	0.16	U	0.15	U
4-Nitroaniline	mg/kg	110	0.2	U	0.2	U			0.2	UL3	0.2	UL3	0.19	U	0.21	U			0.19	U	0.19	U	0.2	U	0.21	U	0.19	U	0.19	U	0.19	UL3	0.21	UL3	**0.69**	L1
Acenaphthene	mg/kg	45,000	0.0079	U	0.0081	U			**0.0023**	J	0.008	U	**0.082**		**0.003**	J			**0.037**	J	**0.011**	J	**0.0091**	J	0.0086	U	**0.0093**	J	**0.014**	J	**0.0017**	J	**0.00083**	J	**0.011**	J
Acenaphthylene	mg/kg	45,000	0.0079	U	0.0081	U			**0.0012**	J	0.008	U	**0.023**	J	**0.0013**	J			**0.085**		**0.0086**	J	**0.02**	J	0.0086	U	**0.034**	J	**0.11**		**0.0031**	J	0.0082	U	**0.05**	J
Acetophenone	mg/kg	120,000	0.079	U	0.08	U			0.078	U	0.081	U	0.076	U	0.083	U			**0.023**	J	**0.021**	J	0.081	U	0.086	U	**1.9**		0.077	U	0.075	U	0.082	U	0.075	U
Anthracene	mg/kg	230,000	**0.0012**	J	0.0081	U			**0.01**		0.008	U	**0.21**		**0.011**				**0.31**		**0.038**	J	**0.06**	J	**0.0022**	J	**0.056**	J	**0.17**		**0.013**		**0.0062**	J	**0.08**	B
Benzaldehyde	mg/kg	120,000	0.079	U	0.08	U			0.078	UL2	0.081	UL2	**0.026**	JL2	0.083	UL2			0.075	UL2	**0.063**	JL2	0.081	UL2	0.086	UL2	**0.35**	L2	**0.12**	L2	0.075	UL2	0.082	UL2	0.075	UL2
Benzo(a)anthracene	mg/kg	2.9	0.0079	U	0.0081	U			**0.033**		**0.0019**	J	**0.81**		**0.052**				**0.85**		**0.17**		**0.2**		**0.0093**		**0.12**		**0.53**		**0.051**		**0.0038**	J	**0.4**	
Benzo(a)pyrene	mg/kg	0.29	0.0079	U	0.0081	U			**0.029**		0.008	U	0.8		**0.053**				0.68		**0.13**	IS	**0.18**		**0.0061**	J	**0.17**		0.54		**0.038**		**0.0023**	J	0.4	IS
Benzo(b)fluoranthene	mg/kg	2.9	0.0079	U	0.0081	U			**0.057**	ip	**0.0012**	J	**2**	ip	**0.15**	ip			**1.4**	ip	**0.36**	ISip	**0.4**	ip	**0.018**	ip	**0.51**	ip	**1.2**	ip	**0.12**	ip	**0.006**	Jip	**1**	ISip
Benzo(g,h,i)perylene	mg/kg		0.0079	U	0.0081	U			**0.018**		0.008	U	**0.59**		**0.051**				**0.29**		**0.07**	JIS	**0.077**	J	**0.0023**	J	**0.1**		**0.19**		**0.038**		0.0082	U	**0.11**	IS
Benzo(k)fluoranthene	mg/kg	29	0.0079	U	0.0081	U			**0.049**	ip	0.008	U	**2**	ip	**0.14**	ip			**1.4**	ip	**0.34**	ISip	**0.33**	ip	**0.015**	ip	**0.43**	ip	**0.98**	ip	**0.1**	ip	**0.0052**	Jip	**0.87**	ISip
Biphenyl (Diphenyl)	mg/kg	200	0.079	U	0.08	U			0.078	U	0.081	U	0.076	U	0.083	U			0.075	U	0.077	U	0.081	U	0.086	U	0.074	U	**0.05**	J	0.075	U	0.082	U	0.075	U
bis(2-Ethylhexyl)phthalate	mg/kg	160	0.079	U	0.08	U			0.078	UL3	0.081	UL3	**0.47**	IS	**0.018**	J			0.075	UIS	0.077	UIS	0.081	U	0.086	U	**1.6**	CL	0.077	U	**0.018**	JL1	**0.064**	JL1	0.075	UIS
Carbazole	mg/kg		0.079	U	0.08	U			0.078	U	0.081	U	**0.1**		**0.034**	J			**0.026**	J	0.077	UIS	0.081	U	0.086	U	**0.02**	J	**0.035**	J	0.075	U	0.082	U	**0.03**	J
Chrysene	mg/kg	290	0.0079	U	0.0081	U			**0.029**		**0.0014**	J	**1**		**0.073**				**0.9**		**0.17**		**0.17**		**0.0079**	J	**0.27**		**0.5**		**0.065**		**0.0064**	J	**0.33**	
Dibenz(a,h)anthracene	mg/kg	0.29	0.0079	U	0.0081	U			**0.0058**	J	0.008	U	**0.16**		**0.013**				**0.1**		**0.015**	JIS	**0.026**	J	**0.0014**	J	**0.034**	J	**0.078**		**0.011**		0.0082	U	**0.047**	JIS
Diethylphthalate	mg/kg	660,000	0.079	U	0.08	U			0.078	UL3	0.081	UL3	0.076	U	0.083	U			0.075	U	0.077	U	0.081	U	0.086	U	0.074	U	0.077	U	0.075	UL3	0.082	UL3	0.075	UL3
Di-n-butylphthalate	mg/kg	82,000	0.079	U	0.08	U			**0.049**	JL1B	**0.054**	JL1B	**0.019**	J	0.083	U			0.075	U	0.077	UIS	0.081	U	0.086	U	**0.92**		0.077	U	**0.029**	JL1B	**0.089**	L1B	0.075	UL3
Di-n-octylphthalate	mg/kg	8,200	0.079	U	0.08	U			0.078	UL3	0.081	UL3	0.076	UIS	0.083	U			0.075	UIS	0.077	UIS	0.081	UIS	0.086	U	**0.27**	IS	0.077	UIS	0.075	UISL3	0.082	UL3	0.075	UISL3
Fluoranthene	mg/kg	30,000	0.0079	U	0.0081	U			**0.068**		**0.0027**	J	**1.5**		**0.089**				**1.7**		**0.3**		**0.34**		**0.012**		**0.35**		**0.74**		**0.092**		**0.025**		**0.52**	
Fluorene	mg/kg	30,000	0.0079	U	0.0081	U			**0.0016**	J	0.008	U	**0.07**	J	**0.0023**	J			**0.049**	J	**0.011**	J	**0.0087**	J	0.0086	U	**0.012**	J	**0.023**	J	**0.002**	J	0.0082	U	**0.0083**	J
Hexachlorobenzene	mg/kg	0.96	0.079	U	0.08	U			0.078	U	0.081	U	0.076	U	0.083	U			0.075	U	0.077	UIS	0.081	U	0.086	U	0.074	U	0.077	U	0.075	U	0.082	U	0.075	U
Indeno(1,2,3-cd)pyrene	mg/kg	2.9	0.0079	U	0.0081	U			**0.015**		0.008	U	**0.57**		**0.046**				**0.28**		**0.044**	JIS	**0.067**	J	**0.0021**	J	**0.079**		**0.21**		**0.033**		0.0082	U	**0.13**	IS
Naphthalene	mg/kg	17	0.0079	U	0.0081	U			**0.0051**	J	0.008	U	**0.039**	J	0.0083	U			**0.12**		**0.042**	J	0.082	U	0.0086	U	**0.02**	J	**0.24**		**0.0068**	J	0.0082	U	**0.045**	J
N-Nitroso-di-n-propylamine	mg/kg	0.33	0.079	U	0.08	U			0.078	U	0.081	U	0.076	U	0.083	U			0.075	U	0.077	U	0.081	U	0.086	U	0.074	U	0.077	U	0.075	U	0.082	U	0.075	U
N-Nitrosodiphenylamine	mg/kg	470	0.079	U	0.08	U			0.078	U	0.081	U	0.076	U	0.083	U			0.075	U	**0.016**	JIS	0.081	U	0.086	U	0.074	U	0.077	U	0.075	U	0.082	U	0.075	U
Pentachlorophenol	mg/kg	4	0.2	U	0.2	U			0.2	UL3	0.2	UL3	0.19	UL3	0.21	UL3			0.19	UL3	0.19	UISL3	0.2	U	0.21	U	0.19	U	0.19	U	0.19	UL3	0.21	UL3	0.19	UL3
Phenanthrene	mg/kg		**0.0062**	J	0.0081	U			**0.037**		**0.0019**	J	**0.93**		**0.039**				**1.6**		**0.2**		**0.16**		**0.0052**	J	**0.18**		**0.33**		**0.044**		**0.0042**	J	**0.18**	B
Phenol	mg/kg	250,000	0.079	U	0.08	U			0.078	U	0.081	U	0.076	U	0.083	U			0.075	U	0.077	U	0.081	U	0.086	U	**0.22**		**0.035**	J	0.075	U	0.082	U	0.075	U
Pyrene	mg/kg	23,000	**0.003**	J	0.0081	U			**0.054**		**0.0023**	J	**1.4**		**0.086**				**1.7**		**0.24**		**0.29**		**0.0096**		**0.38**		**0.59**		**0.078**		**0.019**		**0.43**	
PCBs																																						
Aroclor 1242	mg/kg	0.97	0.0618	U					0.0638	U			**0.0502**	J					0.054	U			0.0615	U			0.0562	U			0.0592	U			0.0556	U
Aroclor 1248	mg/kg	0.94	0.0618	U					0.0638	U			0.0593	U					0.054	U			0.0615	U			**1.12**	P			0.0592	U			0.0556	U
Aroclor 1254	mg/kg	0.97	0.0618	U					0.0638	U			0.0593	U					0.054	U			0.0615	U			**0.347**				0.0592	U			0.0556	U
Aroclor 1260	mg/kg	0.99	0.0618	U					0.0638	U			0.0593	U					0.054	U			0.0615	U			0.0562	U			0.0592	U			0.0556	U
Aroclor 1262	mg/kg		0.0618	U					0.0638	U			**0.158**						0.054	U			0.0615	U			**1.19**				0.0592	U			0.0556	U
Aroclor 1268	mg/kg		0.0618	U					0.0638	U			0.0593	U					0.054	U			0.0615	U			0.0562	U			0.0592	U			**0.158**	
PCB, Total	mg/kg	0.97	0.0618	U					0.0638	U			**0.2082**						0.054	U			0.0615	U			**2.657**				0.0592	U			**0.158**	
TPH/Oil and Grease																																						
Diesel Range Organics	mg/kg	620	**11.6**	L2	8.1	UL2			**10.5**	L2	**17.7**	L2	**372**	L2	**10**	L2			813	L2	5,490	L2	**22.5**	L2	**5.5**	JL2	**567**	L2	**97.6**	L2	**147**	L2	**19.5**	L2	**65.4**	L2
Gasoline Range Organics	mg/kg	620	9.8	U	10.4	U			11.2	U	10.1	U	10.3	U	8.3	U			10.6	U	11.3	U	10.2	U	10.8	U	**8**	J	14.4	U	5.2	U	9.7	U	12	U

Detections in bold

Blank spaces indicate that the parameter was not analyzed for this sample

*PAH compounds were analyzed via SIM

A glossary of laboratory flag keys can be viewed in the attached laboratory reports

Values in Red indicate an exceedance of the Project Action Limit (PAL)

Table 5
Summary of Organics Detected in Soil
Parcel B22
Tradepoint Atlantic
Sparrows Point, Maryland

Parameter	Units	PAL	B22-112-SB-4		B22-112-SB-10		B22-113-SB-1		B22-113-SB-4		B22-114-SB-1		B22-114-SB-8		B22-114-SB-10		B22-115-SB-1		B22-115-SB-8.5		B22-116-SB-1		B22-116-SB-8.5		B22-117-SB-1		B22-117-SB-4		B22-117-SB-10		B22-118-SB-1	
			Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
			5/20/2016		5/20/2016		5/20/2016		5/20/2016		5/19/2016		5/19/2016		5/19/2016		5/19/2016		5/19/2016		5/19/2016		5/19/2016		5/18/2016		5/18/2016		5/18/2016		5/18/2016	
Volatile Organic Compounds																																
1,1,1-Trichloroethane	mg/kg	36,000	0.0052	U			0.0048	U	0.008	U	0.0046	U1c	0.0051	U1c			0.0051	U	0.0048	U	0.0074	U1c	0.0055	U1c	0.005	U	0.0057	U			0.0045	U1c
1,1,2-Trichloroethane	mg/kg	5	0.0052	U			0.0048	U	0.008	U	0.0046	U1c	0.0051	U1c			0.0051	U	0.0048	U	0.0074	U1c	0.0055	U1c	0.005	U	0.0057	U			0.0045	U1c
1,1,2-Trichlorotrifluoroethane	mg/kg	170,000	0.052	U			0.048	U	**0.0091**	J	0.046	U1c	0.051	U1c			0.051	U	0.048	U	0.074	U1c	0.055	U1c	0.05	U	0.057	U			0.045	U1c
1,1-Dichloroethane	mg/kg	16	0.0052	U			0.0048	U	0.008	U	0.0046	U1c	0.0051	U1c			0.0051	U	0.0048	U	0.0074	U1c	0.0055	U1c	0.005	U	0.0057	U			0.0045	U1c
1,1-Dichloroethene	mg/kg	1,000	0.0052	U			0.0048	U	0.008	U	0.0046	U1c	0.0051	U1c			0.0051	U	0.0048	U	0.0074	U1c	0.0055	U1c	0.005	U	0.0057	U			0.0045	U1c
1,2,3-Trichlorobenzene	mg/kg	930	0.0052	U			0.0048	U	0.008	U	0.0046	U1c	0.0051	U1c			0.0051	U	0.0048	U	0.0074	U1c	0.0055	U1c	0.005	U	0.0057	U			0.0045	U1c
1,2,4-Trichlorobenzene	mg/kg	110	0.0052	U			0.0048	U	0.008	U	0.0046	U1c	0.0051	U1c			0.0051	U	0.0048	U	0.0074	U1c	0.0055	U1c	0.005	U	0.0057	U			0.0045	U1c
1,2-Dichloroethane	mg/kg	2	0.0052	U			0.0048	U	0.008	U	0.0046	U1c	0.0051	U1c			0.0051	U	0.0048	U	0.0074	U1c	0.0055	U1c	0.005	U	0.0057	U			0.0045	U1c
1,2-Dichloroethene (Total)	mg/kg	2,300	**0.0093**	J			0.0096	U	0.016	U	0.0091	U	0.01	U			0.01	U	0.0096	U	0.015	U	**0.059**		0.0099	U	0.011	U			0.009	U
1,4-Dichlorobenzene	mg/kg	11	0.0052	U			0.0048	U	0.008	U	0.0046	U1c	0.0051	U1c			0.0051	U	0.0048	U	0.0074	U1c	0.0055	U1c	0.005	U	0.0057	U			0.0045	U1c
1,4-Dioxane	mg/kg	24	0.1	U			0.096	U	0.16	U	0.091	U1c	0.1	U1c			0.1	UL2	0.096	UL2	0.15	U1c	0.11	U1c	0.099	U	0.11	U			0.09	U1c
2-Butanone (MEK)	mg/kg	190,000	0.01	U			0.0096	U	0.016	U	**0.003**	J1c	0.01	U1c			0.01	U	**0.0026**	J	**0.0061**	J1c	**0.0027**	J1c	0.0099	U	**0.0028**	J			0.009	U1c
2-Hexanone	mg/kg	1,300	0.01	U			0.0096	U	0.016	U	0.0091	UL31c	0.01	UL31c			0.01	U	0.0096	U	0.015	UL31c	0.011	UL31c	0.0099	U	0.011	U			0.009	UL31c
4-Methyl-2-pentanone (MIBK)	mg/kg	56,000	0.01	U			0.0096	U	0.016	U	0.0091	U1c	0.01	U1c			0.01	U	0.0096	U	0.015	U1c	0.011	U1c	0.0099	U	0.011	U			0.009	U1c
Acetone	mg/kg	670,000	0.01	U			0.0096	U	0.016	U	**0.026**	1c	0.01	U1c			0.01	U	**0.0095**	J	0.015	U1c	0.011	U1c	0.0099	U	0.011	U			**0.0089**	J1c
Benzene	mg/kg	5.1	0.0052	U			0.0048	U	0.008	U	0.0046	U1c	0.0051	U1c			0.0051	U	0.0048	U	0.0074	U1c	**0.0059**	1c	0.005	U	0.0057	U			0.0045	U1c
Chlorobenzene	mg/kg	1,300	0.0052	U			0.0048	U	0.008	U	0.0046	U1c	0.0051	U1c			0.0051	U	0.0048	U	0.0074	U1c	0.0055	U1c	0.005	U	0.0057	U			0.0045	U1c
Chloroethane	mg/kg	57,000	0.0052	U			0.0048	U	0.008	U	0.0046	U1c	0.0051	U1c			0.0051	U	0.0048	U	0.0074	U1c	0.0055	U1c	0.005	U	0.0057	U			0.0045	U1c
Chloroform	mg/kg	1.4	0.0052	U			0.0048	U	0.008	U	0.0046	U1c	0.0051	U1c			0.0051	U	0.0048	U	0.0074	U1c	0.0055	U1c	0.005	U	0.0057	U			0.0045	U1c
cis-1,2-Dichloroethene	mg/kg	2,300	**0.0071**				0.0048	U	0.008	U	0.0046	U1c	0.0051	U1c			0.0051	U	0.0048	U	0.0074	U1c	**0.055**	1c	0.005	U	0.0057	U			0.0045	U1c
Cyclohexane	mg/kg	27,000	0.01	U			0.0096	U	0.016	U	0.0091	U1c	0.01	U1c			0.01	U	0.0096	U	0.015	U1c	0.011	U1c	0.0099	U	0.011	U			0.009	U1c
Ethylbenzene	mg/kg	25	0.0052	U			0.0048	U	0.008	U	0.0046	U1c	0.0051	U1c			0.0051	U	0.0048	U	0.0074	U1c	0.0055	U1c	0.005	U	0.0057	U			0.0045	U1c
Isopropylbenzene (Cumene)	mg/kg	9,900	0.0052	U			0.0048	U	0.008	U	0.0046	U1c	0.0051	U1c			0.0051	U	0.0048	U	0.0074	U1c	0.0055	U1c	0.005	U	0.0057	U			0.0045	U1c
Methyl acetate	mg/kg	1,200,000	0.052	U			0.048	U	0.08	U	0.046	U1c	0.051	U1c			0.051	U	0.048	U	0.074	U1c	0.055	U1c	0.05	U	0.057	U			0.045	U1c
Methylene Chloride	mg/kg	1,000	0.0052	U			0.0048	U	0.008	U	0.0046	U1c	0.0051	U1c			0.0051	U	0.0048	U	0.0074	U1c	0.0055	U1c	0.005	U	0.0057	U			0.0045	U1c
Styrene	mg/kg	35,000	0.0052	UL2			0.0048	UL2	0.008	UL2	0.0046	U1c	0.0051	U1c			0.0051	U	0.0048	U	0.0074	U1c	0.0055	U1c	0.005	U	0.0057	U			0.0045	U1c
Tetrachloroethene	mg/kg	100	0.0052	U			0.0048	U	0.008	U	0.0046	U1c	0.0051	U1c			0.0051	U	0.0048	U	0.0074	U1c	0.0055	U1c	0.005	U	0.0057	U			**0.0044**	J1c
Toluene	mg/kg	47,000	0.0052	U			0.0048	U	0.008	U	0.0046	U1c	0.0051	U1c			0.0051	U	0.0048	U	0.0074	U1c	0.0055	U1c	0.005	U	0.0057	U			0.0045	U1c
trans-1,2-Dichloroethene	mg/kg	23,000	0.0052	U			0.0048	U	0.008	U	0.0046	U1c	0.0051	U1c			0.0051	U	0.0048	U	0.0074	U1c	**0.0035**	J1c	0.005	U	0.0057	U			0.0045	U1c
Trichloroethene	mg/kg	6	**4.3**	1c			0.0048	U	0.008	U	0.0046	U1c	0.0051	U1c			0.0051	U	0.0048	U	0.0074	U1c	0.0055	U1c	0.005	U	0.0057	U			0.0045	U1c
Trichlorofluoromethane	mg/kg	3,100	0.0052	U			0.0048	U	0.008	U	0.0046	U1c	0.0051	U1c			0.0051	U	0.0048	U	0.0074	U1c	0.0055	U1c	0.005	U	0.0057	U			0.0045	U1c
Vinyl chloride	mg/kg	1.7	0.0052	U			0.0048	U	0.008	U	0.0046	U1c	0.0051	U1c			0.0051	U	0.0048	U	0.0074	U1c	**0.014**	1c	0.005	U	0.0057	U			0.0045	U1c
Xylene (Total)	mg/kg	2,800	0.016	U			0.014	U	0.024	U	0.014	U	0.015	U			0.015	U	0.014	U	0.022	U	**0.0046**	J	0.015	U	0.017	U			0.014	U
Semi-Volatile Organic Compounds*																																
1,2,4,5-Tetrachlorobenzene	mg/kg	350	0.072	U			0.076	U	0.072	UM1	0.072	U	0.084	U			0.084	UL3	0.08	UL3	0.074	U	0.079	U	0.072	U	0.074	U			0.075	U
2,4-Dimethylphenol	mg/kg	16,000	0.072	U			0.076	U	0.072	UM1	0.072	U	0.084	U			0.084	U	0.08	U	0.074	U	0.079	U	0.072	U	0.074	U			0.075	U
2-Chloronaphthalene	mg/kg	60,000	0.072	U			0.076	U	0.072	UM1	0.072	U	0.084	U			0.084	U	0.08	U	0.074	U	0.079	U	0.072	U	0.074	U			0.075	U
2-Methylnaphthalene	mg/kg	3,000	0.073	U			**0.011**		**0.2**	M6R1	**0.022**		**0.055**				**0.013**		**0.61**		**0.0083**		0.0081	U	**0.097**		**0.56**		**0.024**		**0.029**	
2-Methylphenol(o-Cresol)	mg/kg	41,000	0.072	U			0.076	U	0.072	U	0.072	UL3	0.084	UL3			0.084	UL3	0.08	UL3	0.074	UL3	0.079	UL3	0.072	U	0.074	U			0.075	UL3
2-Nitroaniline	mg/kg	8,000	0.18	U			0.19	U	0.18	U	0.18	UL3	0.21	UL3			0.21	UL3	0.2	UL3	0.19	UL3	0.2	UL3	0.18	U	0.18	U			0.19	UL3
3&4-Methylphenol(m&p Cresol)	mg/kg	41,000	0.14	U			0.15	U	0.14	U	0.14	UL3	0.17	UL3			0.17	UL3	0.16	UL3	0.15	UL3	**0.035**	JL1	0.14	U	**0.022**	J			0.15	UL3
4-Nitroaniline	mg/kg	110	0.18	UL3			0.19	UL3	0.18	UM0L3	0.18	U	0.21	U			0.21	UL3	0.2	UL3	0.19	U	0.2	U	0.18	UL3	0.18	UL3			0.19	UL3
Acenaphthene	mg/kg	45,000	**0.0085**	J			**0.0039**	J	**0.016**	J	**0.0046**	J	**0.052**				**0.0028**	J	**0.72**		**0.042**		0.0081	U	**0.042**	J	**0.16**		**0.0055**	J	**0.031**	
Acenaphthylene	mg/kg	45,000	**0.05**	J			**0.0013**	J	**0.017**	J	**0.0098**		**0.023**				**0.009**		**0.042**	J	**0.014**		0.0081	U	**0.18**		**1.7**		**0.011**		**0.37**	
Acetophenone	mg/kg	120,000	0.072	U			0.076	U	0.072	U	0.072	U	0.084	U			0.084	U	0.08	U	0.074	U	0.079	U	0.072	U	0.074	U			0.075	U
Anthracene	mg/kg	230,000	**0.14**				**0.01**		**0.097**	M6	**0.023**		**0.072**				**0.0053**	J	**0.92**		**0.21**		**0.019**		**0.36**		**3.7**		**0.047**		**0.45**	
Benzaldehyde	mg/kg	120,000	0.072	UL2			**0.022**	JL2	**0.063**	JL2M0	0.072	UL2	0.084	UL2			0.084	UL2	0.08	UL2	0.074	UL2	0.079	UL2	0.072	UL2	**0.021**	JL2			0.075	UL2
Benzo(a)anthracene	mg/kg	2.9	**0.61**				**0.018**	B	**0.57**	M6	**0.048**		**0.14**				**0.022**		**1.4**		**0.97**		**0.065**		**1.5**		**13.4**		**0.16**		**2.3**	
Benzo(a)pyrene	mg/kg	0.29	**0.56**		**0.068**	JISM6R1	**0.014**		**0.66**	M6	**0.035**		**0.15**				**0.026**		**1.5**		**0.77**		**0.056**		**1.2**		**10.7**		**0.15**		**1.7**	
Benzo(b)fluoranthene	mg/kg	2.9	**1.4**	ip			**0.034**	ip	**1.5**	ipM6	**0.09**	ip	**0.37**	ip			**0.044**		**1.8**		**1.3**	ip	**0.14**	ip	**2.7**	ip	**20.7**	ip	**0.33**	ip	**3.8**	ip
Benzo(g,h,i)perylene	mg/kg		**0.14**				**0.0044**	J	**0.21**	M6	**0.015**		**0.055**				**0.026**		**0.96**		**0.22**		**0.022**		**0.85**		**5.8**		**0.073**		**0.77**	
Benzo(k)fluoranthene	mg/kg	29	**1.3**	ip			**0.03**	ip	**1.3**	ipM6	**0.075**	ip	**0.3**	ip			**0.02**		**0.86**		**1.5**	ip	**0.11**	ip	**2.6**	ip	**20.3**	ip	**0.28**	ip	**0.92**	
Biphenyl (Diphenyl)	mg/kg	200	**0.015**	J			0.076	U	**0.044**	JM1	0.072	U	0.084	U			0.084	U	**0.48**		0.074	U	**5.7**		**0.033**	J	**0.17**				**0.027**	JL1
bis(2-Ethylhexyl)phthalate	mg/kg	160	**0.015**	JISCL			**1.4**		0.072	UIS	**0.051**	JISL1	0.084	UL3			**0.017**	JIS	0.08	UIS	**0.022**	JISL1	0.079	UISL3	0.072	UIS	**0.032**	JIS			**0.051**	JISL1
Carbazole	mg/kg		**0.091**				0.076	U	**0.051**	J	0.072	U	0.084	U			0.084	U	**0.63**		**0.044**	J	**0.019**	J	**0.072**		**1.2**				**0.33**	
Chrysene	mg/kg	290	**0.54**				**0.041**		**0.55**	M6	**0.051**		**0.18**				**0.036**		**1.6**		**0.86**		**0.083**		**1.5**		**12.5**		**0.18**		**2**	
Dibenz(a,h)anthracene	mg/kg	0.29	**0.06**	J			**0.0015**	J	**0.072**	JM6	**0.0053**	J	**0.021**				**0.0052**	J	**0.23**		**0.11**		**0.0093**		**0.27**		**2.1**		**0.029**		**0.31**	
Diethylphthalate	mg/kg	660,000	0.072	UL3			0.076	UL3	0.072	UM0L3	0.072	UL3	0.084	UL3			0.084	UL3	0.08	UL3	0.074	UL3	0.079	UL3	0.072	U	0.074	U			0.075	UL3
Di-n-butylphthalate	mg/kg	82,000	0.072	UL3			0.076	UL3	0.072	UM0L3	0.072	UL3	0.084	UL3			0.084	UL3	**0.043**	JL1	0.074	UL3	0.079	UL3	0.072	U	0.074	U			0.075	UL3
Di-n-octylphthalate	mg/kg	8,200	0.072	UISL3			0.076	UL3	0.072	UISM0L3	0.072	UISL3	0.084	UL3			0.084	UISL3	0.08	UISL3	0.074	UISL3	0.079	UISL3	**0.046**	JISL1	0.074	UISL3			0.075	UISL3
Fluoranthene	mg/kg	30,000	**1**				**0.037**		**0.77**	M6	**0.13**		**0.27**				**0.036**		**3.1**		**1.3**		**0.13**		**2.7**		**25.9**		**0.21**		**4.2**	
Fluorene	mg/kg	30,000	**0.012**	J			**0.0038**	J	**0.017**	J	**0.0041**	J	**0.082**				**0.0055**	J	**0.7**		**0.062**		**0.017**		**0.071**	J	**1.6**		**0.0082**		**0.075**	
Hexachlorobenzene	mg/kg	0.96	0.072	U			0.076	U	0.072	UM1	0.072	U	0.084	U			0.084	U	0.08	U	0.074	U	0.079	U	0.072	U	0.074	U			0.075	U
Indeno(1,2,3-cd)pyrene	mg/kg	2.9	**0.17**				**0.0035**	J	**0.19**	M6	**0.015**		**0.056**				**0.022**	L2	**0.89**	L2	**0.24**		**0.022**		**0.83**		**6.2**		**0.072**		**0.81**	
Naphthalene	mg/kg	17	**0.049**	J			**0.0045**	J	**0.19**		**0.027**		**0.12**				**0.061**		**0.92**		**0.0067**	J	**0.065**		**0.26**		**1.1**		**0.11**		**0.062**	
N-Nitroso-di-n-propylamine	mg/kg	0.33	0.072	U			0.076	U	0.072	U	0.072	U	0.084	U			0.084	UL3	0.08	UL3	0.074	U	0.079	U	0.072	U	0.074	U			0.075	U
N-Nitrosodiphenylamine	mg/kg	470	0.072	U			0.076	U	0.072	UM1	0.072	U	0.084	U			0.084	U	0.08	U	0.074	U	0.079	U	0.072	U	0.074	U			0.075	U
Pentachlorophenol	mg/kg	4	0.18	UL3			0.19	UL3	0.18	UM0L3	0.18	UL3	0.21	UL3			0.21	UL3	**0.058**	JL1	0.19	UL3	0.2	UL3	0.18	UL3	0.18	UL3			0.19	UL3
Phenanthrene	mg/kg		**0.43**				**0.047**		**0.43**	M6R1	**0.12**		**0.28**				**0.026**		**3.5**		**0.75**		**0.1**		**1.4**		**13.6**		**0.15**		**1.4**	
Phenol	mg/kg	250,000	0.072	U			0.076	U	0.072	U	0.072	UL3	0.084	UL3			0.084	UL3	0.08	UL3	0.074	UL3	**0.045**	JL1	0.072	U	**0.037**	J			0.075	UL3
Pyrene	mg/kg	23,000	**0.74**				**0.053**		**0.71**	M6	**0.11**		**0.26**				**0.042**		**2.6**		**1.3**		**0.11**		**2.8**		**20.5**		**0.19**		**3.3**	
PCBs																																
Aroclor 1242	mg/kg	0.97					0.0552	U			0.0515	U					0.0578	U			0.0553	U			0.0546	U					0.0642	U
Aroclor 1248	mg/kg	0.94					0.0552	U			0.0515	U					0.0578	U			0.0553	U			0.0546	U					0.0642	U
Aroclor 1254	mg/kg	0.97					0.0552	U			0.0515	U					0.0578	U			0.0553	U			**0.0681**						0.0642	U
Aroclor 1260	mg/kg	0.99					0.0552	U			0.0515	U					0.0578	U			0.0553	U			0.0546	U					0.0642	U
Aroclor 1262	mg/kg						0.0552	U			0.0515	U					0.0578	U			**0.0268**	J			**0.041**	J					0.0642	U
Aroclor 1268	mg/kg						**0.0098**				0.0515	U					0.0578	U			0.0553	U			0.0546	U					0.0642	U
PCB, Total	mg/kg	0.97					**0.0098**				0.0515	U					0.0578	U			**0.0268**	J			**0.1091**						0.0642	U
TPH/Oil and Grease																																
Diesel Range Organics	mg/kg	620	**72**	L2			**45**	L2	**48**	L2M0	**54.8**	L2	**324**	L2			**152**	L2	**232**	L2	**104**	L2	**321**	L2	**328**	L2	**417**	L2			**334**	L2
Gasoline Range Organics	mg/kg	620	11.3	U			10.5	U	15.1	U	10.7	U	10.5	U			11.6	U	**34.7**		14.4	U	8.6	U	11.5	U	11.4	U			11.8	U

Detections in bold

Blank spaces indicate that the parameter was not analyzed for this sample

*PAH compounds were analyzed via SIM

A glossary of laboratory flag keys can be viewed in the attached laboratory reports

Values in Red indicate an exceedance of the Project Action Limit (PAL)

Table 5
Summary of Organics Detected in Soil
Parcel B22
Tradepoint Atlantic
Sparrows Point, Maryland

Parameter	Units	PAL	B22-118-SB-9		B22-118-SB-10		B22-119-SB-1		B22-119-SB-9		B22-119-SB-10		B22-120-SB-1		B22-120-SB-8		B22-121-SB-1		B22-121-SB-9		B22-121-SB-10		B22-122-SB-1		B22-123-SB-1		B22-124-SB-1		B22-124-SB-4		B22-125-SB-1		B22-125-SB-4	
			Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
			5/18/2016		5/18/2016		5/19/2016		5/19/2016		5/19/2016		5/19/2016		5/19/2016		5/19/2016		5/19/2016		5/19/2016		6/1/2016		6/1/2016		6/1/2016		6/1/2016		5/18/2016		5/18/2016	
Volatile Organic Compounds																																		
1,1,1-Trichloroethane	mg/kg	36,000	0.0057	U1c			0.0056	U	0.007	U			0.0053	U1c	0.0056	U1c	0.0049	U1c	0.0061	U1c			**0.059**		0.0061	U	0.0065	U	0.006	U	0.0049	U	0.0052	U
1,1,2-Trichloroethane	mg/kg	5	0.0057	U1c			0.0056	U	0.007	U			0.0053	U1c	0.0056	U1c	0.0049	U1c	0.0061	U1c			0.0084	U	0.0061	U	0.0065	U	0.006	U	0.0049	U	0.0052	U
1,1,2-Trichlorotrifluoroethane	mg/kg	170,000	0.057	U1c			0.056	U	0.07	U			0.053	U1c	0.056	U1c	0.049	U1c	0.061	U1c			0.084	U	0.061	U	0.065	U	0.06	U	0.049	U	0.052	U
1,1-Dichloroethane	mg/kg	16	0.0057	U1c			0.0056	U	0.007	U			0.0053	U1c	0.0056	U1c	0.0049	U1c	0.0061	U1c			**0.0094**		0.0061	U	0.0065	U	0.006	U	0.0049	U	0.0052	U
1,1-Dichloroethene	mg/kg	1,000	0.0057	U1c			0.0056	U	0.007	U			0.0053	U1c	0.0056	U1c	0.0049	U1c	0.0061	U1c			0.0084	U	0.0061	U	0.0065	U	0.006	U	0.0049	U	0.0052	U
1,2,3-Trichlorobenzene	mg/kg	930	0.0057	U1c			0.0056	U	0.007	U			0.0053	U1c	0.0056	U1c	0.0049	U1c	0.0061	U1c			0.0084	U	0.0061	U	0.0065	U	0.006	U	0.0049	U	0.0052	U
1,2,4-Trichlorobenzene	mg/kg	110	0.0057	U1c			0.0056	U	0.007	U			0.0053	U1c	0.0056	U1c	0.0049	U1c	0.0061	U1c			0.0084	U	0.0061	U	0.0065	U	0.006	U	0.0049	U	0.0052	U
1,2-Dichloroethane	mg/kg	2	0.0057	U1c			0.0056	U	0.007	U			0.0053	U1c	0.0056	U1c	0.0049	U1c	0.0061	U1c			0.0084	U	0.0061	U	0.0065	U	0.006	U	0.0049	U	0.0052	U
1,2-Dichloroethene (Total)	mg/kg	2,300	0.011	U			0.011	U	0.014	U			0.011	U	0.011	U	0.0097	U	0.012	U			0.017	U	0.012	U	0.013	U	0.012	U	0.0098	U	0.01	U
1,4-Dichlorobenzene	mg/kg	11	0.0057	U1c			0.0056	U	0.007	U			0.0053	U1c	0.0056	U1c	0.0049	U1c	0.0061	U1c			0.0084	U	0.0061	U	0.0065	U	0.006	U	0.0049	U	0.0052	U
1,4-Dioxane	mg/kg	24	0.11	U1c			0.11	UL2	0.14	UL2			0.11	U1c	0.11	U1c	0.097	U1c	0.12	U1c			0.17	U	0.12	UL2	0.13	UL2	0.12	UL2	0.098	U	0.1	U
2-Butanone (MEK)	mg/kg	190,000	0.011	U1c			0.011	U	**0.0061**	J			0.011	U1c	0.011	U1c	0.0097	U1c	**0.0056**	J1c			0.017	U	0.012	U	0.013	U	0.012	U	0.0098	U	0.01	U
2-Hexanone	mg/kg	1,300	0.011	UL31c			0.011	U	0.014	U			0.011	UL31c	0.011	UL31c	0.0097	UL31c	0.012	UL31c			0.017	U	0.012	UL3	0.013	UL3	0.012	UL3	0.0098	U	0.01	U
4-Methyl-2-pentanone (MIBK)	mg/kg	56,000	0.011	U1c			0.011	U	0.014	U			0.011	U1c	0.011	U1c	0.0097	U1c	0.012	U1c			0.017	U	0.012	U	0.013	U	0.012	U	0.0098	U	0.01	U
Acetone	mg/kg	670,000	**0.0071**	J1c			0.011	U	**0.023**	M1R1			0.011	U1c	0.011	U1c	0.0097	U1c	**0.022**	1c			0.017	U	**0.016**		0.013	U	0.012	U	0.0098	U	0.01	U
Benzene	mg/kg	5.1	0.0057	U1c			0.0056	U	**3.9**	M1			0.0053	U1c	0.0056	U1c	0.0049	U1c	0.0061	U1c			0.0084	U	0.0061	U	0.0065	U	0.006	U	0.0049	U	0.0052	U
Chlorobenzene	mg/kg	1,300	0.0057	U1c			0.0056	U	0.007	U			0.0053	U1c	0.0056	U1c	0.0049	U1c	0.0061	U1c			0.0084	U	0.0061	U	0.0065	U	0.006	U	0.0049	U	0.0052	U
Chloroethane	mg/kg	57,000	0.0057	U1c			0.0056	U	0.007	U			0.0053	U1c	0.0056	U1c	0.0049	U1c	0.0061	U1c			0.0084	U	0.0061	U	0.0065	U	0.006	U	0.0049	U	0.0052	U
Chloroform	mg/kg	1.4	0.0057	U1c			0.0056	U	0.007	U			0.0053	U1c	0.0056	U1c	0.0049	U1c	0.0061	U1c			0.0084	U	0.0061	U	0.0065	U	0.006	U	0.0049	U	0.0052	U
cis-1,2-Dichloroethene	mg/kg	2,300	0.0057	U1c			0.0056	U	0.007	U			0.0053	U1c	0.0056	U1c	0.0049	U1c	0.0061	U1c			0.0084	U	0.0061	U	0.0065	U	0.006	U	0.0049	U	0.0052	U
Cyclohexane	mg/kg	27,000	0.011	U1c			0.011	U	0.014	U			0.011	U1c	0.011	U1c	0.0097	U1c	0.012	U1c			0.017	U	0.012	U	0.013	U	0.012	U	0.0098	U	0.01	U
Ethylbenzene	mg/kg	25	0.0057	U1c			0.0056	U	**0.096**	M1R1			0.0053	U1c	0.0056	U1c	0.0049	U1c	0.0061	U1c			0.0084	U	0.0061	U	0.0065	U	0.006	U	0.0049	U	0.0052	U
Isopropylbenzene (Cumene)	mg/kg	9,900	0.0057	U1c			0.0056	U	**0.018**				0.0053	U1c	0.0056	U1c	0.0049	U1c	0.0061	U1c			0.0084	U	0.0061	U	0.0065	U	0.006	U	0.0049	U	0.0052	U
Methyl acetate	mg/kg	1,200,000	0.057	U1c			0.056	U	0.07	U			0.053	U1c	0.056	U1c	0.049	U1c	0.061	U1c			0.084	U	0.061	UL2	0.065	UL2	0.06	UL2	0.049	U	0.052	U
Methylene Chloride	mg/kg	1,000	0.0057	U1c			0.0056	U	0.007	U			0.0053	U1c	0.0056	U1c	0.0049	U1c	0.0061	U1c			0.0084	U	0.0061	U	0.0065	U	0.006	U	0.0049	U	0.0052	U
Styrene	mg/kg	35,000	0.0057	U1c			0.0056	U	**0.032**	M1R1			0.0053	U1c	0.0056	U1c	0.0049	U1c	0.0061	U1c			0.0084	U	0.0061	U	0.0065	U	0.006	U	0.0049	U	0.0052	U
Tetrachloroethene	mg/kg	100	0.0057	U1c			0.0056	U	0.007	U			0.0053	U1c	0.0056	U1c	0.0049	U1c	0.0061	U1c			**0.0056**	J	0.0061	U	0.0065	U	0.006	U	0.0049	U	0.0052	U
Toluene	mg/kg	47,000	0.0057	U1c			0.0056	U	**1.4**	M1			0.0053	U1c	0.0056	U1c	0.0049	U1c	0.0061	U1c			**0.0027**	J	0.0061	U	0.0065	U	0.006	U	0.0049	U	0.0052	U
trans-1,2-Dichloroethene	mg/kg	23,000	0.0057	U1c			0.0056	U	0.007	U			0.0053	U1c	0.0056	U1c	0.0049	U1c	0.0061	U1c			0.0084	U	0.0061	U	0.0065	U	0.006	U	0.0049	U	0.0052	U
Trichloroethene	mg/kg	6	0.0057	U1c			0.0056	U	0.007	U			0.0053	U1c	0.0056	U1c	0.0049	U1c	0.0061	U1c			0.0084	U	0.0061	U	0.0065	U	0.006	U	0.0049	U	0.0052	U
Trichlorofluoromethane	mg/kg	3,100	0.0057	U1c			0.0056	U	0.007	U			0.0053	U1c	0.0056	U1c	0.0049	U1c	0.0061	U1c			0.0084	U	0.0061	U	0.0065	U	0.006	U	0.0049	U	0.0052	U
Vinyl chloride	mg/kg	1.7	0.0057	U1c			0.0056	U	0.007	U			0.0053	U1c	0.0056	U1c	0.0049	U1c	0.0061	U1c			0.0084	U	0.0061	U	0.0065	U	0.006	U	0.0049	U	0.0052	U
Xylene (Total)	mg/kg	2,800	0.017	U			0.017	U	**0.75**	MS			0.016	U	0.017	U	0.015	U	0.018	U			0.025	U	0.018	U	0.02	U	0.018	U	0.015	U	0.016	U
Semi-Volatile Organic Compounds*																																		
1,2,4,5-Tetrachlorobenzene	mg/kg	350	0.071	U			0.07	UL3	0.099	UM0L3			0.07	U	0.08	U	0.07	U	0.081	U			0.077	U	**0.041**	J	0.078	U	0.075	U	0.074	U	0.083	U
2,4-Dimethylphenol	mg/kg	16,000	0.071	U			0.07	U	**0.96**	M6			0.07	U	0.08	U	0.07	U	0.081	U			**0.065**	J	0.072	U	0.078	U	0.075	U	0.074	U	0.083	U
2-Chloronaphthalene	mg/kg	60,000	0.071	U			0.07	U	0.099	U			0.07	U	0.08	U	0.07	U	0.081	U			0.077	U	**0.055**	J	0.078	U	0.075	U	0.074	U	0.083	U
2-Methylnaphthalene	mg/kg	3,000	**0.11**				0.072	U	**1.7**	M1M6R1			**0.069**	J	0.081	U	**0.11**		**0.061**	J			**1.5**		**0.039**	J	**0.045**	J	**0.31**		**0.068**	J	**0.2**	
2-Methylphenol(o-Cresol)	mg/kg	41,000	0.071	UL3			0.07	UL3	**1.5**	L1M6			0.07	UL3	0.08	UL3	0.07	UL3	0.081	UL3			0.077	U	0.072	U	0.078	U	0.075	U	0.074	U	0.083	U
2-Nitroaniline	mg/kg	8,000	0.18	UL3			0.18	UL3	0.25	UR1L3			0.17	UL3	0.2	UL3	0.17	UL3	0.2	UL3			0.19	U	0.18	U	0.19	U	0.19	U	0.19	U	0.21	U
3&4-Methylphenol(m&p Cresol)	mg/kg	41,000	0.14	UL3			0.14	UL3	**1.4**	L1M0			0.14	UL3	0.16	UL3	0.14	UL3	**0.057**	JL1			0.15	U	0.14	U	0.16	U	0.15	U	0.15	U	0.17	U
4-Nitroaniline	mg/kg	110	0.18	UL3			0.18	UL3	0.25	UM0R1L3			0.17	U	0.2	U	0.17	U	0.2	U			0.19	U	0.18	U	0.19	U	0.19	U	0.19	UL3	0.21	UL3
Acenaphthene	mg/kg	45,000	**0.049**				0.072	U	**0.38**	M1R1			**0.015**	J	**0.11**		**0.027**		**0.1**				**0.062**	J	**0.15**		**0.01**	J	**0.018**	J	**0.012**	J	**0.045**	J
Acenaphthylene	mg/kg	45,000	**0.31**				**0.011**	J	**0.72**	M1R1			**0.58**		**0.026**	J	**0.052**		**0.054**	J			**0.37**		**0.019**	J	**0.012**	J	**0.034**	J	**0.037**	J	**0.074**	J
Acetophenone	mg/kg	120,000	0.071	U			0.07	U	0.099	U			0.07	U	0.08	U	0.07	U	0.081	U			**0.53**		0.072	U	**0.063**	J	0.075	U	0.074	U	0.083	U
Anthracene	mg/kg	230,000	**0.6**				**0.025**	J	**0.42**	M1			**0.21**		**0.68**		**0.13**		**0.21**				**0.18**		**0.55**		**0.045**	J	**0.089**		**0.047**	J	**0.27**	
Benzaldehyde	mg/kg	120,000	0.071	UL2			0.07	UL2	0.099	UL2R1			**0.017**	JL2	0.08	UL2	**0.021**	JL2	**0.023**	JL2			**0.83**	L2	**0.074**	L2	**0.26**	L2	**0.071**	JL2	0.074	UL2	**0.066**	JL2
Benzo(a)anthracene	mg/kg	2.9	**1.9**				**0.2**		**0.35**	M1R1			**0.51**		**1.5**		**0.52**		**0.43**				**0.94**		**1**		**0.2**		**0.32**		**0.24**		**1**	
Benzo(a)pyrene	mg/kg	0.29	**2.2**		**0.27**		**0.16**		**0.26**	M1R1	**84.9**		**0.57**		**1.3**		**0.47**		**0.39**		**0.9**	IS	**0.53**		**0.91**		**0.18**		**0.36**		**0.38**		**0.87**	
Benzo(b)fluoranthene	mg/kg	2.9	**0.58**				**0.4**	ip	**0.57**	ipM1R1			**1.3**	ip	**2.8**	ip	**1.1**	ip	**0.86**	ip			**1.5**	ip	**2**	ip	**0.42**	ip	**1**	ip	**0.85**	ip	**1.9**	ip
Benzo(g,h,i)perylene	mg/kg		**0.96**				**0.058**	J	**0.082**	M1			**0.36**		**0.42**		**0.16**		**0.15**				**0.19**		**0.26**		**0.07**	J	**0.17**		**0.16**		**0.31**	
Benzo(k)fluoranthene	mg/kg	29	**0.016**	JL1			**0.33**	ip	**0.47**	ipM1R1			**1.1**	ip	**2.3**	ip	**0.92**	ip	**0.71**	ip			**1.3**	ip	**1.8**	ip	**0.35**	ip	**0.88**	ip	**0.81**	ip	**1.8**	ip
Biphenyl (Diphenyl)	mg/kg	200	0.071	UL3			0.07	U	**0.18**	M1			**0.055**	J	**0.023**	J	**0.017**	J	**0.025**	J			**0.79**		**0.035**	J	0.078	U	**0.051**	J	0.074	U	**0.059**	J
bis(2-Ethylhexyl)phthalate	mg/kg	160	**0.17**				**0.028**	JCL	0.099	U			**0.038**	JISL1	0.08	UISL3	**0.018**	JISL1	0.081	UISL3			**0.56**	IS	**0.056**	JIS	**0.37**	IS	**0.034**	JIS	**0.057**	JIS	0.083	UIS
Carbazole	mg/kg		**1.9**				0.07	U	**1.8**	M6			**0.032**	J	**0.26**		**0.04**	J	**0.11**				**0.13**		**0.49**		**0.043**	J	**0.088**		0.074	U	**0.13**	
Chrysene	mg/kg	290	**0.31**				**0.21**		**0.27**	M1R1			**0.47**		**1.2**		**0.48**		**0.38**				**0.88**		**0.85**		**0.17**		**0.3**		**0.3**		**1**	
Dibenz(a,h)anthracene	mg/kg	0.29	0.071	UL3	**0.057**		**0.018**	J	**0.03**	M1			**0.091**		**0.16**		**0.073**		**0.048**	J			**0.095**		**0.1**		**0.018**	J	**0.056**	J	**0.064**	J	**0.13**	
Diethylphthalate	mg/kg	660,000	0.071	UL3			0.07	UL3	0.099	UL3			**0.17**	L1	0.08	UL3	0.07	UL3	0.081	UL3			0.077	U	0.072	U	0.078	U	0.075	U	0.074	U	0.083	U
Di-n-butylphthalate	mg/kg	82,000	0.071	UL3			0.07	UL3	0.099	UL3			0.07	UL3	0.08	UL3	0.07	UL3	0.081	UL3			**0.22**		**0.031**	J	0.078	U	0.075	U	0.074	U	0.083	U
Di-n-octylphthalate	mg/kg	8,200	**3.7**				0.07	UISL3	0.099	UM0L3			0.07	UISL3	0.08	UISL3	0.07	UISL3	0.081	UISL3			0.077	UIS	0.072	UIS	0.078	UIS	0.075	UIS	0.074	UISL3	0.083	UISL3
Fluoranthene	mg/kg	30,000	**0.3**				**0.27**		**1.5**	M1			**0.8**		**3.2**		**1**		**1.3**				**1.2**		**2.2**		**0.32**		**0.52**		**0.26**		**1.7**	
Fluorene	mg/kg	30,000	0.071	U			0.072	U	**1.2**	M6R1			**0.038**	J	**0.15**		**0.036**		**0.12**				**0.063**	J	**0.15**		**0.011**	J	**0.013**	J	**0.0092**	J	**0.09**	
Hexachlorobenzene	mg/kg	0.96	**0.74**				0.07	U	0.099	U			0.07	U	0.08	U	0.07	U	0.081	U			0.077	U	0.072	U	0.078	U	0.075	U	0.074	U	0.083	U
Indeno(1,2,3-cd)pyrene	mg/kg	2.9	**0.34**				**0.049**	JL2	**0.086**	L2M0			**0.28**		**0.42**		**0.17**		**0.14**				**0.16**		**0.28**		**0.057**	J	**0.16**		**0.18**		**0.34**	
Naphthalene	mg/kg	17	0.071	U			0.072	U	32.8	M6R1	**2,040**		**0.2**		**0.031**	J	**0.092**		**0.11**				**1.6**		**0.094**		**0.036**	J	**0.21**		**0.082**		**0.51**	
N-Nitroso-di-n-propylamine	mg/kg	0.33	0.071	U			0.07	UL3	0.099	UM0L3			0.07	U	0.08	U	0.07	U	0.081	U			0.077	U	0.072	U	0.078	U	0.075	U	0.074	U	0.083	U
N-Nitrosodiphenylamine	mg/kg	470	0.18	UL3			0.07	U	0.099	U			0.07	U	0.08	U	0.07	U	0.081	U			0.077	U	0.072	U	0.078	U	0.075	U	0.074	U	0.083	U
Pentachlorophenol	mg/kg	4	**2**				0.18	UL3	0.25	UM0L3			0.17	UL3	0.2	UL3	0.17	UL3	0.2	UL3			0.19	U	0.18	U	0.19	U	0.19	U	0.19	UL3	0.21	UL3
Phenanthrene	mg/kg		0.071	UL3			**0.046**	J	**2.5**	M6R1			**0.44**	J	**1.9**		**0.62**		**0.8**				**1.4**		**1.6**		**0.22**		**0.43**		**0.14**		**0.86**	
Phenol	mg/kg	250,000	**2.7**				0.07	UL3	**1.1**	L1M6			**0.019**	JL1	0.08	UL3	0.07	UL3	0.081	UL3			**0.041**	J	0.072	U	0.078	U	0.075	U	0.074	U	0.083	U
Pyrene	mg/kg	23,000	**46**	L2			**0.25**		**1**	M1			**0.66**		**2.7**		**0.85**		**0.94**				**0.96**		**1.7**		**0.26**		**0.42**		**0.25**		**1.4**	
PCBs																																		
Aroclor 1242	mg/kg	0.97					0.0556	U					**0.269**				0.0549	U					**0.0397**	J	0.0548	U	0.326	U			0.0535	U		
Aroclor 1248	mg/kg	0.94					0.0556	U					0.0548	U			0.0549	U					0.0559	U	**0.0211**	J	0.326	U			0.0535	U		
Aroclor 1254	mg/kg	0.97					0.0556	U					**0.206**				**0.0375**	J					0.0559	U	0.0548	U	0.326	U			0.0535	U		
Aroclor 1260	mg/kg	0.99					0.0556	U					**0.378**				0.0549	U					0.0559	U	0.0548	U	0.326	U			0.0535	U		
Aroclor 1262	mg/kg						0.0556	U					0.0548	U			**0.0482**	J					0.0559	U	0.0548	U	0.326	U			**0.0594**			
Aroclor 1268	mg/kg						0.0556	U					0.0548	U			0.0549	U					**0.236**		**0.179**		**13**				0.0535	U		
PCB, Total	mg/kg	0.97					0.0556	U					**0.853**				**0.0857**						**0.2757**		**0.2001**		**13**				**0.0594**			
TPH/Oil and Grease																																		
Diesel Range Organics	mg/kg	620	10.5	U			**20.5**	L2	**124**	L2M0			**151**	L2	**124**	L2	**105**	L2	**557**	L2			**349**	L2	**48.1**	L2	**108**	L2	**579**	L2	**36.9**	L2	**786**	L2
Gasoline Range Organics	mg/kg	620	**14,000**				13	U	**11.1**	J			10.8	U	11.1	U	10.7	U	**7.8**	J			16.2	U	8	U	**25.8**		13.9	U	11.2	U	11.9	U

Detections in bold

Blank spaces indicate that the parameter was not analyzed for this sample

*PAH compounds were analyzed via SIM

A glossary of laboratory flag keys can be viewed in the attached laboratory reports

Values in Red indicate an exceedance of the Project Action Limit (PAL)

Table 5
Summary of Organics Detected in Soil
Parcel B22
Tradepoint Atlantic
Sparrows Point, Maryland

Parameter	Units	PAL	B22-125-SB-10		B22-126-SB-1		B22-126-SB-6		B22-126-SB-10		B22-127-SB-1		B22-127-SB-7		B22-128-SB-1		B22-129-SB-1		B22-129-SB-4		B22-130-SB-1		B22-130-SB-4		B22-131-SB-1		B22-131-SB-5		B22-132-SB-1		B22-132-SB-5		B22-133-SB-1	
			Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
			5/18/2016		5/18/2016		5/18/2016		5/18/2016		5/18/2016		5/18/2016		6/2/2016		6/2/2016		6/2/2016		6/1/2016		6/1/2016		5/17/2016		5/17/2016		5/17/2016		5/17/2016		5/31/2016	
Volatile Organic Compounds																																
1,1,1-Trichloroethane	mg/kg	36,000			0.0069	U1c	0.0054	U1c			0.0056	U	0.0054	U	0.0051	U	0.0054	U	0.0057	U	0.0057	U	0.0044	U	0.0046	U	0.0048	U	0.0053	U	0.0048	U	0.0062	U
1,1,2-Trichloroethane	mg/kg	5			0.0069	U1c	0.0054	U1c			0.0056	U	0.0054	U	0.0051	U	0.0054	U	0.0057	U	0.0057	U	0.0044	U	0.0046	U	0.0048	U	0.0053	U	0.0048	U	0.0062	U
1,1,2-Trichlorotrifluoroethane	mg/kg	170,000			0.069	U1c	0.054	U1c			0.056	U	0.054	U	0.051	U	0.054	U	0.057	U	0.057	U	0.044	U	0.046	U	0.048	U	0.053	U	0.048	U	0.062	U
1,1-Dichloroethane	mg/kg	16			0.0069	U1c	0.0054	U1c			0.0056	U	**0.004**	J	0.0051	U	0.0054	U	0.0057	U	0.0057	U	0.0044	U	0.0046	U	0.0048	U	0.0053	U	0.0048	U	0.0062	U
1,1-Dichloroethene	mg/kg	1,000			0.0069	U1c	0.0054	U1c			0.0056	U	0.0054	U	0.0051	U	0.0054	U	0.0057	U	0.0057	U	0.0044	U	0.0046	U	0.0048	U	0.0053	U	0.0048	U	0.0062	U
1,2,3-Trichlorobenzene	mg/kg	930			0.0069	U1c	0.0054	U1c			0.0056	U	0.0054	U	0.0051	U	0.0054	U	0.0057	U	0.0057	U	0.0044	U	0.0046	U	0.0048	U	0.0053	U	0.0048	U	0.0062	U
1,2,4-Trichlorobenzene	mg/kg	110			0.0069	U1c	0.0054	U1c			0.0056	U	0.0054	U	0.0051	U	0.0054	U	0.0057	U	0.0057	U	0.0044	U	0.0046	U	0.0048	U	0.0053	U	0.0048	U	0.0062	U
1,2-Dichloroethane	mg/kg	2			0.0069	U1c	0.0054	U1c			0.0056	U	0.0054	U	0.0051	U	0.0054	U	0.0057	U	0.0057	U	0.0044	U	0.0046	U	0.0048	U	0.0053	U	0.0048	U	0.0062	U
1,2-Dichloroethene (Total)	mg/kg	2,300			0.014	U	0.011	U			0.011	U	0.011	U	0.01	U	0.011	U	0.011	U	0.011	U	0.0088	U	0.0092	U	0.0097	U	0.011	U	0.0095	U	0.012	U
1,4-Dichlorobenzene	mg/kg	11			0.0069	U1c	0.0054	U1c			0.0056	U	0.0054	U	0.0051	U	0.0054	U	0.0057	U	0.0057	U	0.0044	U	0.0046	U	0.0048	U	0.0053	U	0.0048	U	0.0062	U
1,4-Dioxane	mg/kg	24			0.14	U1c	0.11	U1c			0.11	U	0.11	U	0.1	U	0.11	U	0.11	U	0.11	U	0.088	U	0.092	U	0.097	U	0.11	U	0.095	U	0.12	U
2-Butanone (MEK)	mg/kg	190,000			0.014	U1c	**0.0046**	J1c			0.011	U	**0.0089**	J	0.01	U	0.011	U	0.011	U	0.011	U	0.0088	U	0.0092	U	0.0097	U	0.011	U	0.0095	U	0.012	U
2-Hexanone	mg/kg	1,300			0.014	UL31c	0.011	UL31c			0.011	U	0.011	U	0.01	UL3	0.011	UL3	0.011	UL3	0.011	U	0.0088	U	0.0092	UL3	0.0097	UL3	0.011	UL3	0.0095	UL3	0.012	UL3
4-Methyl-2-pentanone (MIBK)	mg/kg	56,000			0.014	U1c	0.011	U1c			0.011	U	0.011	U	0.01	U	0.011	U	0.011	U	0.011	U	0.0088	U	0.0092	U	0.0097	U	0.011	U	0.0095	U	0.012	U
Acetone	mg/kg	670,000			0.014	U1c	**0.031**	1c			0.011	U	**0.037**		**0.0097**	J	**0.013**		**0.0058**	J	0.011	U	0.0088	U	0.0092	U	0.0097	U	0.011	U	0.0095	U	**0.0072**	J
Benzene	mg/kg	5.1			0.0069	U1c	0.0054	U1c			0.0056	U	0.0054	U	0.0051	U	0.0054	U	0.0057	U	0.0057	U	0.0044	U	0.0046	U	0.0048	U	0.0053	U	0.0048	U	0.0062	U
Chlorobenzene	mg/kg	1,300			0.0069	U1c	0.0054	U1c			0.0056	U	0.0054	U	0.0051	U	0.0054	U	0.0057	U	0.0057	U	0.0044	U	0.0046	U	0.0048	U	0.0053	U	0.0048	U	0.0062	U
Chloroethane	mg/kg	57,000			0.0069	U1c	0.0054	U1c			0.0056	U	0.0054	U	0.0051	U	0.0054	U	0.0057	U	0.0057	U	0.0044	U	0.0046	U	0.0048	U	0.0053	U	0.0048	U	0.0062	U
Chloroform	mg/kg	1.4			0.0069	U1c	0.0054	U1c			0.0056	U	0.0054	U	0.0051	U	0.0054	U	0.0057	U	0.0057	U	0.0044	U	0.0046	U	0.0048	U	0.0053	U	0.0048	U	0.0062	U
cis-1,2-Dichloroethene	mg/kg	2,300			0.0069	U1c	0.0054	U1c			0.0056	U	0.0054	U	0.0051	U	0.0054	U	0.0057	U	0.0057	U	0.0044	U	0.0046	U	0.0048	U	0.0053	U	0.0048	U	0.0062	U
Cyclohexane	mg/kg	27,000			0.014	U1c	0.011	U1c			0.011	U	0.011	U	0.01	U	0.011	U	0.011	U	0.011	U	0.0088	U	0.0092	U	0.0097	U	0.011	U	0.0095	U	0.012	U
Ethylbenzene	mg/kg	25			0.0069	U1c	0.0054	U1c			0.0056	U	0.0054	U	0.0051	U	0.0054	U	0.0057	U	0.0057	U	0.0044	U	0.0046	U	0.0048	U	0.0053	U	0.0048	U	0.0062	U
Isopropylbenzene (Cumene)	mg/kg	9,900			0.0069	U1c	0.0054	U1c			0.0056	U	0.0054	U	0.0051	U	0.0054	U	0.0057	U	0.0057	U	0.0044	U	0.0046	U	0.0048	U	0.0053	U	0.0048	U	0.0062	U
Methyl acetate	mg/kg	1,200,000			0.069	U1c	0.054	U1c			0.056	U	0.054	U	0.051	U	0.054	U	0.057	U	0.057	U	0.044	U	0.046	U	0.048	U	0.053	U	0.048	U	0.062	U
Methylene Chloride	mg/kg	1,000			0.0069	U1c	0.0054	U1c			0.0056	U	0.0054	U	0.0051	U	0.0054	U	0.0057	U	0.0057	U	0.0044	U	0.0046	U	0.0048	UR1	0.0053	U	0.0048	U	0.0062	U
Styrene	mg/kg	35,000			0.0069	U1c	0.0054	U1c			0.0056	U	0.0054	U	0.0051	U	0.0054	U	0.0057	U	0.0057	U	0.0044	U	0.0046	U	0.0048	U	0.0053	U	0.0048	U	0.0062	U
Tetrachloroethene	mg/kg	100			0.0069	U1c	0.0054	U1c			0.0056	U	0.0054	U	0.0051	U	0.0054	U	0.0057	U	0.0057	U	0.0044	U	0.0046	U	0.0048	U	0.0053	U	0.0048	U	0.0062	U
Toluene	mg/kg	47,000			0.0069	U1c	0.0054	U1c			0.0056	U	0.0054	U	0.0051	U	0.0054	U	0.0057	U	0.0057	U	0.0044	U	0.0046	U	0.0048	U	0.0053	U	0.0048	U	**0.0027**	J
trans-1,2-Dichloroethene	mg/kg	23,000			0.0069	U1c	0.0054	U1c			0.0056	U	0.0054	U	0.0051	U	0.0054	U	0.0057	U	0.0057	U	0.0044	U	0.0046	U	0.0048	U	0.0053	U	0.0048	U	0.0062	U
Trichloroethene	mg/kg	6			0.0069	U1c	0.0054	U1c			0.0056	U	0.0054	U	0.0051	U	0.0054	U	0.0057	U	0.0057	U	0.0044	U	0.0046	U	0.0048	U	0.0053	U	0.0048	U	0.0062	U
Trichlorofluoromethane	mg/kg	3,100			0.0069	U1c	0.0054	U1c			0.0056	U	0.0054	U	0.0051	U	0.0054	U	0.0057	U	0.0057	U	0.0044	U	0.0046	U	0.0048	U	0.0053	U	0.0048	U	0.0062	U
Vinyl chloride	mg/kg	1.7			0.0069	U1c	0.0054	U1c			0.0056	U	0.0054	U	0.0051	U	0.0054	U	0.0057	U	0.0057	U	0.0044	U	0.0046	U	0.0048	U	0.0053	U	0.0048	U	0.0062	U
Xylene (Total)	mg/kg	2,800			0.021	U	0.016	U			0.017	U	0.016	U	0.015	U	0.016	U	0.017	U	0.017	U	0.013	U	0.014	U	0.015	U	0.016	U	0.014	U	0.019	U
Semi-Volatile Organic Compounds*																																
1,2,4,5-Tetrachlorobenzene	mg/kg	350			0.081	U	0.084	U			0.073	U	0.085	U	0.073	UL3	0.074	UL3	0.075	UL3	0.073	UL3	0.078	U	0.078	U	0.081	U	0.076	U	0.081	U	0.077	U
2,4-Dimethylphenol	mg/kg	16,000			0.081	U	0.084	U			0.073	U	0.085	U	0.073	U	0.074	U	0.075	U	0.073	U	0.078	U	0.078	U	0.081	U	0.076	U	0.081	U	0.077	U
2-Chloronaphthalene	mg/kg	60,000			0.081	U	0.084	U			0.073	U	0.085	U	0.073	U	0.074	U	0.075	U	0.073	UL3	0.078	U	0.078	U	0.081	U	0.076	U	0.081	U	0.077	U
2-Methylnaphthalene	mg/kg	3,000			**0.08**	J	0.0084	U			**0.062**	J	0.0085	U	0.074	U	0.075	U	**0.0052**	J	**0.051**		**0.0044**	J	0.079	U	0.0081	U	**0.021**	J	**0.0041**	J	**1.1**	
2-Methylphenol(o-Cresol)	mg/kg	41,000			0.081	UL3	0.084	UL3			0.073	U	0.085	U	0.073	UL3	0.074	UL3	0.075	UL3	0.073	UL3	0.078	U	0.078	U	0.081	U	0.076	U	0.081	U	0.077	U
2-Nitroaniline	mg/kg	8,000			0.2	UL3	0.21	UL3			0.18	U	0.21	U	0.18	U	0.19	U	0.19	U	0.18	UL3	0.2	U	0.2	U	0.2	UM1	0.19	U	0.2	U	0.19	U
3&4-Methylphenol(m&p Cresol)	mg/kg	41,000			0.16	UL3	0.17	UL3			0.15	U	0.17	U	0.15	UL3	0.15	UL3	0.15	UL3	0.15	UL3	0.16	U	0.16	U	0.16	UM1	0.15	U	0.16	U	0.15	U
4-Nitroaniline	mg/kg	110			0.2	UL3	0.21	UL3			0.18	UL3	0.21	UL3	0.18	UL2	0.19	UL2	0.19	UL2	0.18	U	0.2	U	0.2	UL3	0.2	UM0L3	0.19	UL3	0.2	UL3	0.19	UL2
Acenaphthene	mg/kg	45,000			**0.0073**	J	0.0084	U			**0.0072**	J	**0.0046**	J	0.074	U	0.075	U	**0.017**		**0.057**		**0.0026**	J	**0.0054**	J	0.0081	U	**0.0074**	J	**0.00083**	J	**0.029**	
Acenaphthylene	mg/kg	45,000			**0.025**	J	0.0084	U			**0.017**	J	0.0085	U	0.074	U	0.075	U	**0.022**		**0.022**		**0.0017**	J	**0.0096**	J	0.0081	U	**0.024**	J	**0.0037**	J	**0.082**	
Acetophenone	mg/kg	120,000			0.081	U	0.084	U			0.073	U	0.085	U	0.073	UL3	0.074	UL3	0.075	UL3	0.073	U	0.078	U	0.078	U	0.081	U	0.076	U	0.081	U	**0.068**	J
Anthracene	mg/kg	230,000			**0.052**	J	**0.00081**	J			**0.024**	J	**0.001**	J	**0.0073**	J	**0.007**	J	**0.092**		**0.066**		**0.0031**	J	**0.0088**	J	0.0081	U	**0.029**	J	**0.0049**	J	**0.12**	
Benzaldehyde	mg/kg	120,000			**0.37**	L2	0.084	UL2			**0.019**	JL2	0.085	UL2M0	**0.017**	JL2	0.074	UL2	0.075	UL2	0.073	UL2	0.078	UL2	0.078	UL2	0.081	UL2M0	0.076	UL2	0.081	UL2	**0.098**	
Benzo(a)anthracene	mg/kg	2.9			**0.13**		**0.0034**	J			**0.1**		**0.0019**	J	**0.039**	J	**0.02**	J	**0.25**		**0.36**		**0.01**		**0.02**	J	0.0081	U	**0.12**		**0.031**		**0.34**	
Benzo(a)pyrene	mg/kg	0.29	0.0082	U	**0.1**		**0.0018**	J			**0.11**		0.0085	U	**0.039**	J	**0.016**	J	**0.16**		0.43		**0.01**		**0.012**	J	0.0081	U	**0.1**		**0.032**		**0.27**	
Benzo(b)fluoranthene	mg/kg	2.9			**0.19**		**0.0042**	Jip			**0.23**	ip	**0.0012**	J	**0.13**	ip	**0.062**	Jip	**0.34**	ip	**1.1**	ip	**0.025**	ip	**0.015**	J	0.0081	U	**0.21**	ip	**0.062**	ip	**0.69**	ip
Benzo(g,h,i)perylene	mg/kg				**0.021**	J	**0.0014**	J			**0.078**		0.0085	U	**0.042**	J	**0.022**	J	**0.071**		**0.2**		**0.0033**	J	**0.011**	J	0.0081	U	**0.039**	J	**0.022**		**0.12**	
Benzo(k)fluoranthene	mg/kg	29			**0.083**		**0.004**	Jip			**0.22**	ip	0.0085	U	**0.11**	ip	**0.055**	Jip	**0.3**	ip	**0.92**	ip	**0.021**	ip	0.079	U	0.0081	U	**0.2**	ip	**0.06**	ip	**0.58**	ip
Biphenyl (Diphenyl)	mg/kg	200			0.081	UL3	0.084	UL3			0.073	U	0.085	U	0.073	U	0.074	U	0.075	U	0.073	UL3	0.078	U	0.078	U	0.081	U	0.076	U	0.081	U	**0.11**	
bis(2-Ethylhexyl)phthalate	mg/kg	160			0.081	UISL3	0.084	UL3			0.073	UIS	0.085	UM1	**0.091**	ISL2	**0.035**	JISL2	0.075	UL2	**0.13**	ISL1	0.078	UL2	0.078	U	0.081	UM1	0.076	UIS	0.081	UIS	0.077	U
Carbazole	mg/kg				0.081	U	0.084	U			0.073	U	0.085	U	0.073	UL2	0.074	UL2	**0.077**	L2	0.073	U	0.078	UL2	0.078	U	0.081	U	0.076	U	0.081	U	**0.063**	J
Chrysene	mg/kg	290			**0.13**		**0.0022**	J			**0.11**		**0.00082**	J	**0.091**		**0.048**	J	**0.22**		**1.1**		**0.014**		**0.014**	J	0.0081	U	**0.11**		**0.035**		**0.45**	
Dibenz(a,h)anthracene	mg/kg	0.29			0.083	U	0.0084	U			**0.02**	J	0.0085	U	**0.011**	J	0.075	U	**0.033**		**0.067**		**0.0015**	J	0.079	U	0.0081	U	**0.019**	J	**0.0064**	J	**0.049**	
Diethylphthalate	mg/kg	660,000			0.081	UL3	0.084	UL3			0.073	U	0.085	U	0.073	U	0.074	U	0.075	U	0.073	UL3	0.078	U	0.078	U	0.081	UM1	0.076	U	0.081	U	0.077	U
Di-n-butylphthalate	mg/kg	82,000			0.081	UL3	0.084	UL3			0.073	U	0.085	UM1	0.073	U	0.074	U	0.075	U	0.073	UL3	0.078	UL2	0.078	U	0.081	UM1	0.076	U	0.081	U	0.077	U
Di-n-octylphthalate	mg/kg	8,200			0.081	UISL3	0.084	UL3			0.073	UISL3	0.085	UM0L3	**0.36**	IS	0.074	UIS	0.075	UIS	0.073	UISL3	0.078	U	0.078	UL3	0.081	UM0L3	0.076	UISL3	0.081	UISL3	0.077	UIS
Fluoranthene	mg/kg	30,000			**0.22**		**0.0046**	J			**0.13**		**0.0033**	J	**0.11**		**0.078**		**0.5**		**1**		**0.017**		**0.015**	J	0.0081	U	**0.17**		**0.055**		**0.7**	
Fluorene	mg/kg	30,000			**0.02**	J	0.0084	U			**0.0086**	J	**0.0049**	J	0.074	U	0.075	U	**0.026**		**0.026**		**0.0017**	J	**0.0076**	J	0.0081	U	**0.01**	J	**0.001**	J	**0.036**	
Hexachlorobenzene	mg/kg	0.96			0.081	U	0.084	U			0.073	U	0.085	U	0.073	U	0.074	U	0.075	U	0.073	U	0.078	U	0.078	U	0.081	U	0.076	U	0.081	U	0.077	U
Indeno(1,2,3-cd)pyrene	mg/kg	2.9			**0.026**	J	**0.0012**	J			**0.065**	J	0.0085	U	**0.033**	J	**0.016**	J	**0.08**		**0.16**		**0.0033**	J	0.079	U	0.0081	U	**0.039**	J	**0.02**		**0.12**	
Naphthalene	mg/kg	17			**0.14**		**0.003**	J			**0.055**	J	**0.0061**	J	0.074	U	0.075	U	**0.0053**	J	**0.06**		**0.012**		**0.048**	J	0.0081	U	**0.06**	J	**0.0056**	J	**1.9**	
N-Nitroso-di-n-propylamine	mg/kg	0.33			0.081	U	0.084	U			0.073	U	0.085	U	0.073	UL3	0.074	UL3	0.075	UL3	0.073	UL3	0.078	U	0.078	U	0.081	U	0.076	U	0.081	U	0.077	U
N-Nitrosodiphenylamine	mg/kg	470			0.081	U	0.084	U			0.073	U	0.085	U	0.073	U	0.074	U	0.075	U	0.073	UL3	0.078	U	0.078	U	0.081	U	0.076	U	0.081	U	0.077	U
Pentachlorophenol	mg/kg	4			0.2	UL3	0.21	UL3			0.18	UL3	0.21	UM0L3	0.18	U	0.19	U	0.19	U	0.18	U	0.2	UL2	0.2	UL3	0.2	UM0L3	0.19	UL3	0.2	UL3	0.19	U
Phenanthrene	mg/kg				**0.18**		**0.0033**	J			**0.092**		**0.0072**	J	**0.061**	J	**0.06**	J	**0.41**		**1.4**		**0.011**		**0.017**	J	0.0081	U	**0.074**	J	**0.021**		**1.1**	
Phenol	mg/kg	250,000			**0.024**	JL1	0.084	UL3			0.073	U	0.085	U	0.073	UL3	0.074	UL3	0.075	UL3	0.073	UL3	0.078	U	0.078	U	0.081	UM1	0.076	U	0.081	U	0.077	U
Pyrene	mg/kg	23,000			**0.18**		**0.0039**	J			**0.12**		**0.0025**	J	**0.12**		**0.072**	J	**0.36**		**1.6**		**0.014**		**0.015**	J	0.0081	U	**0.14**		**0.05**		**0.63**	
PCBs																																
Aroclor 1242	mg/kg	0.97			0.0765	U					0.0577	U			**0.123**		**0.226**				**0.43**				0.0596	U			0.0568	U			0.0559	U
Aroclor 1248	mg/kg	0.94			0.0765	U					0.0577	U			0.0562	U	0.0581	U			0.0563	U			0.0596	U			0.0568	U			**0.0349**	J
Aroclor 1254	mg/kg	0.97			0.0765	U					0.0577	U			**0.99**		**1.04**				**1.15**				0.0596	U			0.0568	U			0.0559	U
Aroclor 1260	mg/kg	0.99			0.0765	U					0.0577	U			0.0562	U	0.0581	U			0.0563	U			0.0596	U			0.0568	U			0.0559	U
Aroclor 1262	mg/kg				0.0765	U					**0.0431**	J			**0.518**		**0.601**				**0.629**				0.0596	U			0.0568	U			0.0559	U
Aroclor 1268	mg/kg				0.0765	U					0.0577	U			0.0562	U	0.0581	U			0.0563	U			0.0596	U			0.0568	U			**0.476**	
PCB, Total	mg/kg	0.97			0.0765	U					**0.0431**	J			**1.631**		**1.867**				**2.209**				0.0596	U			0.0568	U			**0.5109**	
TPH/Oil and Grease																																
Diesel Range Organics	mg/kg	620	**6.5**	JL2	**16.7**	L2	**8.4**	L2			**487**	L2	**13.5**	L2	**70**	L2	**184**	L2	**23.7**	L2	**201**	L2	**10.9**	L2	**7.5**	JL2	8.1	UL2M0	**30.4**	L2	**9.8**	L2	**139**	L2
Gasoline Range Organics	mg/kg	620			14.6	U	10.2	U			13.4	U	10.3	U	11.6	U	10	U	15.5	U	12.3	U	9.3	U	10.3	U	10.6	U	11.3	U	10.5	U	**16.3**	

Detections in bold

Blank spaces indicate that the parameter was not analyzed for this sample

*PAH compounds were analyzed via SIM

A glossary of laboratory flag keys can be viewed in the attached laboratory reports

Values in Red indicate an exceedance of the Project Action Limit (PAL)

Table 5
Summary of Organics Detected in Soil
Parcel B22
Tradepoint Atlantic
Sparrows Point, Maryland

Parameter	Units	PAL	B22-133-SB-5 Soil 5/31/2016		B22-134-SB-1 Soil 6/1/2016		B22-134-SB-7 Soil 6/1/2016		B22-135-SB-1 Soil 6/1/2016		B22-135-SB-8 Soil 6/1/2016		B22-136-SB-1 Soil 5/31/2016		B22-136-SB-5 Soil 5/31/2016		B22-137-SB-1 Soil 5/16/2016		B22-137-SB-8 Soil 5/16/2016		B22-138-SB-1 Soil 5/16/2016		B22-138-SB-8 Soil 5/16/2016		B22-138-SB-10 Soil 5/16/2016		B22-139-SB-1 Soil 5/16/2016		B22-139-SB-4 Soil 5/16/2016		B22-140-SB-1 Soil 5/16/2016		B22-140-SB-5 Soil 5/16/2016	
Volatile Organic Compounds																																		
1,1,1-Trichloroethane	mg/kg	36,000	0.0055	U	0.006	U	0.0057	U	0.0052	U	0.0059	U	0.0064	U	0.0087	U	0.0042	U	0.0052	U	0.0065	U	0.0051	U			0.0051	U	0.0049	U	0.005	U	0.005	U
1,1,2-Trichloroethane	mg/kg	5	0.0055	U	0.006	U	0.0057	U	0.0052	U	0.0059	U	0.0064	U	0.0087	U	0.0042	U	0.0052	U	0.0065	U	0.0051	U			0.0051	U	0.0049	U	0.005	U	0.005	U
1,1,2-Trichlorotrifluoroethane	mg/kg	170,000	0.055	U	0.06	U	0.057	U	0.052	U	0.059	U	0.064	U	0.087	U	0.042	U	0.052	U	0.065	U	0.051	U			0.051	U	0.049	U	0.05	U	0.05	U
1,1-Dichloroethane	mg/kg	16	0.0055	U	0.006	U	0.0057	U	0.0052	U	0.0059	U	0.0064	U	0.0087	U	0.0042	U	0.0052	U	0.0065	U	0.0051	U			0.0051	U	0.0049	U	0.005	U	0.005	U
1,1-Dichloroethene	mg/kg	1,000	0.0055	U	0.006	U	0.0057	U	0.0052	U	0.0059	U	0.0064	U	0.0087	U	0.0042	U	0.0052	U	0.0065	U	0.0051	U			0.0051	U	0.0049	U	0.005	U	0.005	U
1,2,3-Trichlorobenzene	mg/kg	930	0.0055	U	0.006	U	0.0057	U	0.0052	U	0.0059	U	0.0064	U	0.0087	U	0.0042	U	0.0052	U	0.0065	U	0.0051	U			0.0051	U	0.0049	U	0.005	U	0.005	U
1,2,4-Trichlorobenzene	mg/kg	110	0.0055	U	0.006	U	0.0057	U	0.0052	U	0.0059	U	0.0064	U	0.0087	U	0.0042	U	0.0052	U	0.0065	U	0.0051	U			0.0051	U	0.0049	U	0.005	U	0.005	U
1,2-Dichloroethane	mg/kg	2	0.0055	U	0.006	U	0.0057	U	0.0052	U	0.0059	U	0.0064	U	0.0087	U	0.0042	U	0.0052	U	0.0065	U	0.0051	U			0.0051	U	0.0049	U	0.005	U	0.005	U
1,2-Dichloroethene (Total)	mg/kg	2,300	0.011	U	0.012	U	0.011	U	0.01	U	0.012	U	0.013	U	0.017	U	0.0085	U	0.01	U	0.013	U	0.01	U			0.01	U	0.0098	U	0.01	U	0.0099	U
1,4-Dichlorobenzene	mg/kg	11	0.0055	U	0.006	U	0.0057	U	0.0052	U	0.0059	U	0.0064	U	0.0087	U	0.0042	U	0.0052	U	0.0065	U	0.0051	U			0.0051	U	0.0049	U	0.005	U	0.005	U
1,4-Dioxane	mg/kg	24	0.11	U	0.12	UL2	0.11	UL2	0.1	UL2	0.12	UL2	0.13	U	0.17	U	0.085	U	0.1	U	0.13	U	0.1	U			0.1	U	0.098	U	0.1	U	0.099	U
2-Butanone (MEK)	mg/kg	190,000	0.011	U	0.012	U	0.011	U	0.01	U	**0.0056**	J	0.013	U	**0.011**	J	0.0085	U	0.01	U	0.013	U	0.01	U			0.01	U	**0.003**	J	0.01	U	**0.003**	J
2-Hexanone	mg/kg	1,300	0.011	U	0.012	UL3	0.011	UL3	0.01	UL3	0.012	UL3	0.013	UL3	0.017	UL3	0.0085	UL3	0.01	UL3	0.013	UL3	0.01	UL3			0.01	UL3	0.0098	UL3	0.01	UL3	0.0099	UL3
4-Methyl-2-pentanone (MIBK)	mg/kg	56,000	0.011	U	0.012	U	0.011	U	0.01	U	0.012	U	0.013	U	0.017	U	0.0085	U	0.01	U	0.013	U	0.01	U			0.01	U	0.0098	U	0.01	U	0.0099	U
Acetone	mg/kg	670,000	**0.028**		**0.013**		**0.014**		**0.013**		**0.029**		0.013	U	**0.047**		0.0085	U	0.01	U	0.013	U	0.01	U			0.01	U	**0.018**		0.01	U	**0.0067**	J
Benzene	mg/kg	5.1	0.0055	U	0.006	U	0.0057	U	0.0052	U	**0.0022**	J	0.0064	U	**0.0037**	J	0.0042	U	0.0052	U	0.0065	U	0.0051	U			0.0051	U	0.0049	U	0.005	U	0.005	U
Chlorobenzene	mg/kg	1,300	0.0055	U	0.006	U	0.0057	U	0.0052	U	0.0059	U	0.0064	U	0.0087	U	0.0042	U	0.0052	U	0.0065	U	0.0051	U			0.0051	U	0.0049	U	0.005	U	0.005	U
Chloroethane	mg/kg	57,000	0.0055	U	0.006	U	0.0057	U	0.0052	U	0.0059	U	0.0064	U	0.0087	U	0.0042	U	0.0052	U	0.0065	U	0.0051	U			0.0051	U	0.0049	U	0.005	U	0.005	U
Chloroform	mg/kg	1.4	0.0055	U	0.006	U	0.0057	U	0.0052	U	0.0059	U	0.0064	U	0.0087	U	0.0042	U	0.0052	U	0.0065	U	0.0051	U			0.0051	U	0.0049	U	0.005	U	0.005	U
cis-1,2-Dichloroethene	mg/kg	2,300	0.0055	U	0.006	U	0.0057	U	0.0052	U	0.0059	U	0.0064	U	0.0087	U	0.0042	U	0.0052	U	0.0065	U	0.0051	U			0.0051	U	0.0049	U	0.005	U	0.005	U
Cyclohexane	mg/kg	27,000	0.011	U	0.012	U	0.011	U	0.01	U	**0.0059**	J	0.013	U	**0.0087**	J	0.0085	U	0.01	U	0.013	U	0.01	U			0.01	U	0.0098	U	0.01	U	0.0099	U
Ethylbenzene	mg/kg	25	0.0055	U	0.006	U	0.0057	U	0.0052	U	0.0059	U	0.0064	U	0.0087	U	0.0042	U	0.0052	U	0.0065	U	0.0051	U			**0.0013**	J	0.0049	U	0.005	U	0.005	U
Isopropylbenzene (Cumene)	mg/kg	9,900	0.0055	U	0.006	U	0.0057	U	0.0052	U	0.0059	U	0.0064	U	0.0087	U	0.0042	U	0.0052	U	0.0065	U	0.0051	U			0.0051	U	0.0049	U	0.005	U	0.005	U
Methyl acetate	mg/kg	1,200,000	0.055	U	0.06	U	0.057	U	0.052	U	0.059	U	0.064	U	0.087	U	0.042	U	0.052	U	0.065	U	0.051	U			0.051	U	0.049	U	0.05	U	0.05	U
Methylene Chloride	mg/kg	1,000	0.0055	U	0.006	U	0.0057	U	0.0052	U	0.0059	U	0.0064	U	0.0087	U	0.0042	U	0.0052	U	0.0065	U	0.0051	U			0.0051	U	0.0049	U	0.005	U	0.005	U
Styrene	mg/kg	35,000	0.0055	U	0.006	U	0.0057	U	0.0052	U	0.0059	U	0.0064	U	0.0087	U	0.0042	U	0.0052	U	0.0065	U	0.0051	U			0.0051	U	0.0049	U	0.005	U	0.005	U
Tetrachloroethene	mg/kg	100	0.0055	U	0.006	U	0.0057	U	0.0052	U	0.0059	U	0.0064	U	0.0087	U	0.0042	U	0.0052	U	0.0065	U	0.0051	U			0.0051	U	0.0049	U	0.005	U	0.005	U
Toluene	mg/kg	47,000	**0.0021**	J	0.006	U	0.0057	U	0.0052	U	**0.0028**	J	0.0064	U	**0.005**	J	0.0042	U	0.0052	U	0.0065	U	0.0051	U			**0.0026**	J	0.0049	U	0.005	U	0.005	U
trans-1,2-Dichloroethene	mg/kg	23,000	0.0055	U	0.006	U	0.0057	U	0.0052	U	0.0059	U	0.0064	U	0.0087	U	0.0042	U	0.0052	U	0.0065	U	0.0051	U			0.0051	U	0.0049	U	0.005	U	0.005	U
Trichloroethene	mg/kg	6	0.0055	U	0.006	U	0.0057	U	0.0052	U	0.0059	U	0.0064	U	0.0087	U	0.0042	U	0.0052	U	0.0065	U	0.0051	U			0.0051	U	0.0049	U	0.005	U	0.005	U
Trichlorofluoromethane	mg/kg	3,100	0.0055	U	0.006	U	0.0057	U	0.0052	U	0.0059	U	0.0064	U	0.0087	U	0.0042	U	0.0052	U	0.0065	U	0.0051	U			0.0051	U	0.0049	U	0.005	U	0.005	U
Vinyl chloride	mg/kg	1.7	0.0055	U	0.006	U	0.0057	U	0.0052	U	0.0059	U	0.0064	U	0.0087	U	0.0042	U	0.0052	U	0.0065	U	0.0051	U			0.0051	U	0.0049	U	0.005	U	0.005	U
Xylene (Total)	mg/kg	2,800	**0.0033**	J	0.018	U	0.017	U	0.015	U	0.018	U	0.019	U	**0.0051**	J	0.013	U	0.015	U	0.019	U	0.015	U			0.015	U	0.015	U	0.015	U	0.015	U
Semi-Volatile Organic Compounds*																																		
1,2,4,5-Tetrachlorobenzene	mg/kg	350	0.079	U	0.077	UL3	0.077	UL3	0.072	UL3	0.078	UL3	0.073	U	0.11	U	0.071	U	0.076	U	0.087	U	0.077	U			0.075	U	0.073	U	0.074	U	0.075	U
2,4-Dimethylphenol	mg/kg	16,000	**0.016**	J	0.077	U	**0.07**	J	0.072	U	**0.024**	J	0.073	U	**0.18**		0.071	U	0.076	U	0.087	U	0.077	UM1			0.075	U	0.073	U	0.074	U	**0.16**	
2-Chloronaphthalene	mg/kg	60,000	0.079	U	0.077	UL3	0.077	UL3	0.072	UL3	0.078	UL3	0.073	U	0.11	U	0.071	U	0.076	U	0.087	U	0.077	UM1			0.075	U	0.073	U	0.074	U	0.075	U
2-Methylnaphthalene	mg/kg	3,000	**0.71**		**0.1**		**0.055**	J	**0.0028**	J	**2.3**		**0.0039**	J	**2.8**		**0.0055**	J	0.0077	U	**0.063**	J	0.0078	U			**0.097**		**0.084**		**0.0032**	J	0.076	U
2-Methylphenol(o-Cresol)	mg/kg	41,000	0.079	U	0.077	UL3	0.077	UL3	0.072	UL3	0.078	UL3	0.073	U	**0.12**		0.071	U	0.076	U	0.087	U	0.077	UM1			0.075	U	0.073	U	0.074	U	0.075	U
2-Nitroaniline	mg/kg	8,000	0.2	U	0.19	UL3	0.19	UL3	0.18	UL3	0.19	UL3	0.18	U	0.26	U	0.18	U	0.19	U	0.22	U	0.19	UM1			0.19	U	0.18	U	0.18	U	0.19	U
3&4-Methylphenol(m&p Cresol)	mg/kg	41,000	0.16	U	0.15	UL3	0.15	UL3	0.14	UL3	**0.027**	JL1	0.15	U	**0.19**	J	0.14	U	0.15	U	0.17	U	0.15	UM1			0.15	U	0.15	U	0.15	U	0.15	U
4-Nitroaniline	mg/kg	110	0.2	UL2	0.19	U	0.19	U	0.18	U	0.19	U	0.18	UL2	0.26	UL2	0.18	UL3	0.19	UL3	0.22	UL3	0.19	UM0L3			0.19	UL3	0.18	UL3	0.18	UL3	0.19	UL3
Acenaphthene	mg/kg	45,000	**0.041**		**0.012**	J	**0.076**	J	**0.00054**	J	**0.97**		**0.00063**	J	**0.75**		**0.0012**	J	0.0077	U	**0.11**		0.0078	U			**0.022**		**0.022**	J	0.0074	U	0.076	U
Acenaphthylene	mg/kg	45,000	**0.13**		**0.057**	J	**0.045**	J	**0.0017**	J	**0.3**		**0.0014**	J	**0.25**		**0.0027**	J	**0.00066**	J	**0.018**	J	0.0078	U			**0.034**		**0.036**	J	0.0074	U	0.076	U
Acetophenone	mg/kg	120,000	**0.1**		0.077	U	0.077	U	0.072	U	**0.07**	J	0.073	U	**0.25**		0.071	U	0.076	U	0.087	U	0.077	UM1			0.075	U	0.073	U	0.074	U	0.075	U
Anthracene	mg/kg	230,000	**0.28**		**0.064**	J	**0.19**		**0.0055**	J	**1.6**		**0.0035**	J	**1.1**		**0.0033**	J	0.0077	U	**0.23**		0.0078	U			**0.067**		**0.056**	J	**0.0011**	J	0.076	U
Benzaldehyde	mg/kg	120,000	**0.096**		0.077	UL2	**0.047**	JL2	0.072	UL2	**0.093**	L2	0.073	U	**0.64**		0.071	UL2	0.076	UL2	**0.034**	JL2	0.077	UL2			**0.025**	JL2	**0.059**	JL2	0.074	UL2	0.075	UL2
Benzo(a)anthracene	mg/kg	2.9	**0.51**		**0.17**		**0.39**		**0.031**		**1.5**		**0.012**		**1.7**		**0.033**		0.0077	U	**0.61**		0.0078	U			**0.27**		**0.18**		**0.008**		**0.033**	J
Benzo(a)pyrene	mg/kg	0.29	**0.42**		**0.16**		**0.3**		**0.0069**	J	**1.2**		**0.011**		**1.5**		**0.03**		0.0077	U	**0.5**		0.0078	U			**0.17**		**0.15**		**0.0041**	J	**0.022**	J
Benzo(b)fluoranthene	mg/kg	2.9	**0.98**	ip	**0.42**	ip	**0.63**	ip	**0.11**	ip	**2.5**	ip	**0.033**	ip	**3**	ip	**0.079**	ip	**0.00068**	Jip	**0.99**	ip	0.0078	Uip			**0.47**	ip	**0.28**	ip	**0.015**	ip	**0.049**	Jip
Benzo(g,h,i)perylene	mg/kg		**0.17**		**0.19**		**0.2**		**0.02**		**0.89**		**0.0094**		**1.1**		**0.034**		0.0077	U	**0.2**		0.0078	U			**0.13**		**0.083**		**0.0072**	J	**0.018**	J
Benzo(k)fluoranthene	mg/kg	29	**0.83**	ip	**0.35**	ip	**0.53**	ip	**0.094**	ip	**2.1**	ip	**0.028**	ip	**2.6**	ip	**0.076**	ip	0.0077	Uip	**0.95**	ip	0.0078	Uip			**0.45**	ip	**0.26**	ip	**0.014**	ip	**0.046**	Jip
Biphenyl (Diphenyl)	mg/kg	200	**0.13**		**0.017**	JL1	0.077	UL3	0.072	UL3	**0.41**	L1	0.073	U	**0.75**		0.071	U	0.076	U	0.087	U	0.077	UM1			**0.036**	J	**0.026**	J	0.074	U	0.075	U
bis(2-Ethylhexyl)phthalate	mg/kg	160	0.079	U	**0.33**	ISL1	**0.34**	ISL1	**0.039**	JISL1	**0.098**	ISL1	0.073	U	**0.1**	JIS	0.071	UL3	0.076	UL3	**0.19**	ISL1	0.077	UM0L3			0.075	UL3	**0.18**	ISL1	0.074	UL3	**0.016**	JL1
Carbazole	mg/kg		**0.14**		**0.018**	J	**0.1**		0.072	U	**0.39**		0.073	U	**0.89**		0.071	U	0.076	U	**0.056**	J	0.077	UM1			**0.045**	J	**0.021**	J	0.074	U	0.075	U
Chrysene	mg/kg	290	**0.55**		**0.24**		**0.38**		**0.1**		**1.7**		**0.02**		**1.5**		**0.055**		0.0077	U	**0.62**		0.0078	U			**0.34**		**0.23**		**0.02**		**0.025**	J
Dibenz(a,h)anthracene	mg/kg	0.29	**0.064**		**0.051**	J	**0.069**	J	**0.0055**	J	**0.27**		**0.0027**	J	**0.27**		**0.008**		0.0077	U	**0.071**	J	0.0078	U			**0.038**		**0.029**	J	**0.0016**	J	0.076	U
Diethylphthalate	mg/kg	660,000	0.079	U	0.077	UL3	0.077	UL3	0.072	UL3	0.078	UL3	0.073	U	0.11	U	0.071	UL3	0.076	UL3	0.087	UL3	0.077	UM0L3			0.075	UL3	0.073	UL3	0.074	UL3	0.075	UL3
Di-n-butylphthalate	mg/kg	82,000	0.079	U	0.077	UL3	**0.17**	L1	0.072	UL3	0.078	UL3	0.073	U	0.11	U	0.071	UL3	0.076	UL3	0.087	UL3	0.077	UM0L3			0.075	UL3	0.073	UL3	0.074	UL3	0.075	UL3
Di-n-octylphthalate	mg/kg	8,200	0.079	UIS	0.077	UISL3	0.077	UISL3	0.072	UISL3	0.078	UISL3	0.073	U	0.11	UIS	0.071	UL3	0.076	UL3	0.087	UISL3	0.077	UM0L3			0.075	UL3	0.073	UISL3	0.074	UL3	0.075	UL3
Fluoranthene	mg/kg	30,000	**1.3**		**0.39**		**0.89**		**0.093**		**4**		**0.029**		**4**		**0.065**		**0.0012**	J	**1.3**		**0.00067**	J			**0.74**		**0.41**		**0.014**		**0.045**	J
Fluorene	mg/kg	30,000	**0.048**		**0.032**	J	**0.091**		0.0071	U	**0.73**		0.0072	U	**0.71**		0.0071	U	0.0077	U	**0.12**		0.0078	U			**0.012**		**0.033**	J	0.0074	U	0.076	U
Hexachlorobenzene	mg/kg	0.96	0.079	U	0.077	U	0.077	U	0.072	U	0.078	U	0.073	U	0.11	U	0.071	U	0.076	U	0.087	U	0.077	UM1			0.075	U	0.073	U	0.074	U	0.075	U
Indeno(1,2,3-cd)pyrene	mg/kg	2.9	**0.18**		**0.17**		**0.19**		**0.018**		**0.81**		**0.0083**		**0.87**		**0.026**		0.0077	U	**0.2**		0.0078	U			**0.12**		**0.068**	J	**0.0036**	J	**0.015**	J
Naphthalene	mg/kg	17	**1**		**0.23**		**0.25**		**0.0038**	J	**2.5**		**0.0047**	J	**5.9**		**0.0031**	J	0.0077	U	**0.077**	J	0.0078	U			**0.32**		**0.28**		**0.0037**	J	**0.021**	J
N-Nitroso-di-n-propylamine	mg/kg	0.33	0.079	U	0.077	UL3	0.077	UL3	0.072	UL3	0.078	UL3	0.073	U	0.11	U	0.071	U	0.076	U	0.087	U	0.077	UM1			0.075	U	0.073	U	0.074	U	0.075	U
N-Nitrosodiphenylamine	mg/kg	470	0.079	U	0.077	UL3	0.077	UL3	0.072	UL3	0.078	UL3	0.073	U	0.11	U	0.071	U	0.076	U	0.087	U	0.077	U			0.075	U	0.073	U	0.074	U	0.075	U
Pentachlorophenol	mg/kg	4	0.2	U	0.19	U	0.19	U	0.18	U	0.19	U	0.18	U	0.26	U	0.18	UL3	0.19	UL3	0.22	UL3	0.19	UM0L3			0.19	UL3	0.18	UL3	0.18	UL3	0.19	UL3
Phenanthrene	mg/kg		**1.3**		**0.27**		**0.81**		**0.026**		**4.9**		**0.017**		**3.9**		**0.04**		**0.0013**	J	**0.86**		**0.00063**	J			**0.6**		**0.35**		**0.013**		**0.026**	J
Phenol	mg/kg	250,000	0.079	U	0.077	UL3	0.077	UL3	0.072	UL3	0.078	UL3	0.073	U	**0.05**	J	0.071	U	0.076	U	**0.055**	J	0.077	UM1			0.075	U	**0.026**	J	0.074	U	0.075	U
Pyrene	mg/kg	23,000	**1**		**0.43**		**0.72**		**0.27**		**3.5**		**0.024**		**3.4**		**0.058**		**0.00091**	J	**1.2**		0.0078	U			**0.58**		**0.37**		**0.017**		**0.038**	J
PCBs																																		
Aroclor 1242	mg/kg	0.97			0.0578	U			0.0539	U			0.0518	U			0.0553	U			**0.0447**	J					0.0554	U			**6.64**			
Aroclor 1248	mg/kg	0.94			0.0578	U			0.0539	U			0.0518	U			0.0553	U			0.057	U					0.0554	U			0.232	U		
Aroclor 1254	mg/kg	0.97			**0.0591**				0.0539	U			0.0518	U			0.0553	U			**0.099**						0.0554	U			0.232	U		
Aroclor 1260	mg/kg	0.99			0.0578	U			0.0539	U			0.0518	U			0.0553	U			**0.0444**	J					0.0554	U			0.232	U		
Aroclor 1262	mg/kg				0.0578	U			0.0539	U			**0.0245**	J			0.0553	U			0.057	U					0.0554	U			0.232	U		
Aroclor 1268	mg/kg				**2.58**				**2.04**				0.0518	U			0.0553	U			0.057	U					0.0554	U			0.232	U		
PCB, Total	mg/kg	0.97			**2.6391**				**2.04**				**0.0245**	J			0.0553	U			**0.1881**						0.0554	U			**6.64**			
TPH/Oil and Grease																																		
Diesel Range Organics	mg/kg	620	**130**	L2	**535**	L2	**155**	L2	**42**	L2	**268**	L2	**15.5**	L2	**723**	L2	**12.7**	L2	7.6	UL2	**115**	L2	7.8	UL2M0			**21.8**	L2	**178**	L2	**12.9**	L2	**30.1**	JL22c
Gasoline Range Organics	mg/kg	620	12.8	U	12.9	U	11.9	U	12.2	U	11.6	U	15	U	19.6	U	8.9	U	10.5	U	12.1	U	9.5	U			10.7	U	12	U	8.8	U	11.5	U

Detections in bold

Blank spaces indicate that the parameter was not analyzed for this sample

*PAH compounds were analyzed via SIM

A glossary of laboratory flag keys can be viewed in the attached laboratory reports

Values in Red indicate an exceedance of the Project Action Limit (PAL)

Table 5
Summary of Organics Detected in Soil
Parcel B22
Tradepoint Atlantic
Sparrows Point, Maryland

Parameter	Units	PAL	B22-140-SB-10		B22-141-SB-1		B22-141-SB-5		B22-142-SB-1		B22-142-SB-5		B22-143-SB-1		B22-143-SB-5		B22-143-SB-10		B22-144-SB-1		B22-144-SB-7		B22-145-SB-1		B22-145-SB-4		B22-145-SB-10		B22-146-SB-1		B22-146-SB-5		B22-147-SB-1	
			Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
			5/16/2016		5/16/2016		5/16/2016		5/16/2016		5/16/2016		5/16/2016		5/16/2016		5/16/2016		5/20/2016		5/20/2016		5/20/2016		5/20/2016		5/20/2016		6/1/2016		6/1/2016		6/1/2016	
Volatile Organic Compounds																																		
1,1,1-Trichloroethane	mg/kg	36,000			0.0058	U	0.0052	U	0.0054	U	0.0044	U	0.0049	U	0.0051	U			0.0085	U1c	0.0043	U1c	0.0047	U1c	0.0065	U1c			**0.016**		0.0046	U	**0.0084**	
1,1,2-Trichloroethane	mg/kg	5			0.0058	U	0.0052	U	0.0054	U	0.0044	U	0.0049	U	0.0051	U			0.0085	U1c	0.0043	U1c	0.0047	U1c	0.0065	U1c			0.011	U	0.0046	U	0.0083	U
1,1,2-Trichlorotrifluoroethane	mg/kg	170,000			0.058	U	0.052	U	0.054	U	0.044	U	0.049	U	0.051	U			0.085	U1c	0.043	U1c	0.047	U1c	0.065	U1c			0.11	U	0.046	U	0.083	U
1,1-Dichloroethane	mg/kg	16			0.0058	U	0.0052	U	0.0054	U	0.0044	U	0.0049	U	0.0051	U			0.0085	U1c	0.0043	U1c	0.0047	U1c	0.0065	U1c			**0.021**		0.0046	U	0.0083	U
1,1-Dichloroethene	mg/kg	1,000			0.0058	U	0.0052	U	0.0054	U	0.0044	U	0.0049	U	0.0051	U			0.0085	U1c	0.0043	U1c	0.0047	U1c	0.0065	U1c			0.011	U	0.0046	U	0.0083	U
1,2,3-Trichlorobenzene	mg/kg	930			0.0058	U	0.0052	U	0.0054	U	0.0044	U	0.0049	U	0.0051	U			0.0085	U1c	0.0043	U1c	0.0047	U1c	0.0065	U1c			0.011	U	0.0046	U	0.0083	U
1,2,4-Trichlorobenzene	mg/kg	110			0.0058	U	0.0052	U	0.0054	U	0.0044	U	0.0049	U	0.0051	U			0.0085	U1c	0.0043	U1c	0.0047	U1c	0.0065	U1c			0.011	U	0.0046	U	0.0083	U
1,2-Dichloroethane	mg/kg	2			0.0058	U	0.0052	U	0.0054	U	0.0044	U	0.0049	U	0.0051	U			0.0085	U1c	0.0043	U1c	0.0047	U1c	0.0065	U1c			0.011	U	0.0046	U	0.0083	U
1,2-Dichloroethene (Total)	mg/kg	2,300			0.012	U	0.01	U	0.011	U	0.0087	U	0.0097	U	0.01	U			0.017	U	0.0086	U	0.0094	U	0.013	U			0.022	U	0.0092	U	0.017	U
1,4-Dichlorobenzene	mg/kg	11			0.0058	U	0.0052	U	0.0054	U	0.0044	U	0.0049	U	0.0051	U			0.0085	U1c	0.0043	U1c	0.0047	U1c	0.0065	U1c			0.011	U	0.0046	U	0.0083	U
1,4-Dioxane	mg/kg	24			0.12	U	0.1	U	0.11	U	0.087	U	0.097	U	0.1	U			0.17	U1c	0.086	U1c	0.094	U1c	0.13	U1c			0.22	UL2	0.092	UL2	0.17	UL2
2-Butanone (MEK)	mg/kg	190,000			0.012	U	0.01	U	0.011	U	0.0087	U	0.0097	U	0.01	U			0.017	U1c	0.0086	U1c	0.0094	U1c	**0.013**	J1c			0.022	U	0.0092	U	0.017	U
2-Hexanone	mg/kg	1,300			0.012	UL3	0.01	UL3	0.011	UL3	0.0087	UL3	0.0097	UL3	0.01	UL3			0.017	UL31c	0.0086	UL31c	0.0094	UL31c	0.013	UL31c			0.022	UL3	0.0092	UL3	0.017	UL3
4-Methyl-2-pentanone (MIBK)	mg/kg	56,000			0.012	U	0.01	U	0.011	U	0.0087	U	0.0097	U	0.01	U			0.017	U1c	0.0086	U1c	0.0094	U1c	0.013	U1c			0.022	U	0.0092	U	0.017	U
Acetone	mg/kg	670,000			0.012	U	0.01	U	0.011	U	0.0087	U	0.0097	U	0.01	U			0.017	U1c	**0.015**	1c	0.0094	U1c	**0.065**	1c			0.022	U	**0.017**		0.017	U
Benzene	mg/kg	5.1			0.0058	U	0.0052	U	0.0054	U	0.0044	U	0.0049	U	0.0051	U			0.0085	U1c	0.0043	U1c	0.0047	U1c	0.0065	U1c			0.011	U	0.0046	U	0.0083	U
Chlorobenzene	mg/kg	1,300			0.0058	U	0.0052	U	0.0054	U	0.0044	U	0.0049	U	0.0051	U			0.0085	U1c	0.0043	U1c	0.0047	U1c	0.0065	U1c			0.011	U	0.0046	U	0.0083	U
Chloroethane	mg/kg	57,000			0.0058	U	0.0052	U	0.0054	U	0.0044	U	0.0049	U	0.0051	U			0.0085	U1c	0.0043	U1c	0.0047	U1c	0.0065	U1c			0.011	U	0.0046	U	0.0083	U
Chloroform	mg/kg	1.4			0.0058	U	0.0052	U	0.0054	U	0.0044	U	0.0049	U	0.0051	U			0.0085	U1c	0.0043	U1c	0.0047	U1c	0.0065	U1c			**0.014**		0.0046	U	0.0083	U
cis-1,2-Dichloroethene	mg/kg	2,300			0.0058	U	0.0052	U	0.0054	U	0.0044	U	0.0049	U	0.0051	U			0.0085	U1c	0.0043	U1c	0.0047	U1c	0.0065	U1c			0.011	U	0.0046	U	0.0083	U
Cyclohexane	mg/kg	27,000			0.012	U	0.01	U	0.011	U	0.0087	U	0.0097	U	0.01	U			0.017	U1c	0.0086	U1c	0.0094	U1c	0.013	U1c			0.022	U	0.0092	U	0.017	U
Ethylbenzene	mg/kg	25			0.0058	U	0.0052	U	0.0054	U	0.0044	U	0.0049	U	0.0051	U			0.0085	U1c	0.0043	U1c	0.0047	U1c	0.0065	U1c			0.011	U	0.0046	U	0.0083	U
Isopropylbenzene (Cumene)	mg/kg	9,900			0.0058	U	0.0052	U	0.0054	U	0.0044	U	0.0049	U	0.0051	U			0.0085	U1c	0.0043	U1c	0.0047	U1c	0.0065	U1c			0.011	U	0.0046	U	0.0083	U
Methyl acetate	mg/kg	1,200,000			0.058	U	0.052	U	0.054	U	0.044	U	0.049	U	0.051	U			0.085	U1c	0.043	U1c	0.047	U1c	0.065	U1c			0.11	UL2	0.046	UL2	0.083	UL2
Methylene Chloride	mg/kg	1,000			0.0058	U	0.0052	U	0.0054	U	0.0044	U	0.0049	U	0.0051	U			0.0085	U1c	0.0043	U1c	0.0047	U1c	0.0065	U1c			0.011	U	0.0046	U	0.0083	U
Styrene	mg/kg	35,000			0.0058	U	0.0052	U	0.0054	U	0.0044	U	0.0049	U	0.0051	U			0.0085	U1c	0.0043	U1c	0.0047	U1c	0.0065	U1c			0.011	U	0.0046	U	0.0083	U
Tetrachloroethene	mg/kg	100			0.0058	U	0.0052	U	0.0054	U	0.0044	U	0.0049	U	0.0051	U			0.0085	U1c	0.0043	U1c	0.0047	U1c	0.0065	U1c			0.011	U	0.0046	U	0.0083	U
Toluene	mg/kg	47,000			0.0058	U	0.0052	U	0.0054	U	0.0044	U	0.0049	U	0.0051	U			0.0085	U1c	0.0043	U1c	0.0047	U1c	0.0065	U1c			0.011	U	0.0046	U	0.0083	U
trans-1,2-Dichloroethene	mg/kg	23,000			0.0058	U	0.0052	U	0.0054	U	0.0044	U	0.0049	U	0.0051	U			0.0085	U1c	0.0043	U1c	0.0047	U1c	0.0065	U1c			0.011	U	0.0046	U	0.0083	U
Trichloroethene	mg/kg	6			0.0058	U	0.0052	U	0.0054	U	0.0044	U	0.0049	U	0.0051	U			0.0085	U1c	0.0043	U1c	0.0047	U1c	0.0065	U1c			0.011	U	0.0046	U	0.0083	U
Trichlorofluoromethane	mg/kg	3,100			0.0058	U	0.0052	U	0.0054	U	0.0044	U	0.0049	U	0.0051	U			0.0085	U1c	0.0043	U1c	0.0047	U1c	0.0065	U1c			0.011	U	0.0046	U	0.0083	U
Vinyl chloride	mg/kg	1.7			0.0058	U	0.0052	U	0.0054	U	0.0044	U	0.0049	U	0.0051	U			0.0085	U1c	0.0043	U1c	0.0047	U1c	0.0065	U1c			0.011	U	0.0046	U	0.0083	U
Xylene (Total)	mg/kg	2,800			0.017	U	0.016	U	0.016	U	0.013	U	0.015	U	0.015	U			0.025	U	0.013	U	0.014	U	0.019	U			0.032	U	0.014	U	0.025	U
Semi-Volatile Organic Compounds*																																		
1,2,4,5-Tetrachlorobenzene	mg/kg	350			0.072	U	0.078	U	0.071	U	0.076	U	0.071	U	0.075	U			0.095	U	0.079	U	0.072	U	0.08	U			0.083	U	0.082	U	0.08	U
2,4-Dimethylphenol	mg/kg	16,000			0.072	U	0.078	U	0.071	U	0.076	U	0.071	U	0.075	U			0.095	U	0.079	U	0.072	U	0.08	U			**0.19**		0.082	U	**0.049**	J
2-Chloronaphthalene	mg/kg	60,000			0.072	U	0.078	U	0.071	U	0.076	U	0.071	U	0.075	U			0.095	U	0.079	U	0.072	U	0.08	U			**0.089**		0.082	U	0.08	U
2-Methylnaphthalene	mg/kg	3,000			0.073	U	0.0079	U	**0.036**	J	**0.23**		**0.056**		**0.17**				0.096	U	**0.14**		0.073	U	**0.047**	J			**1.2**		0.0081	UR1	**0.75**	
2-Methylphenol(o-Cresol)	mg/kg	41,000			0.072	U	0.078	U	0.071	U	0.076	U	0.071	U	0.075	U			0.095	U	0.079	U	0.072	U	0.08	U			**0.22**		0.082	U	**0.02**	J
2-Nitroaniline	mg/kg	8,000			0.18	U	0.19	U	0.18	U	0.19	U	0.18	U	0.19	U			0.24	U	0.2	U	0.18	U	0.2	U			0.21	U	0.2	U	0.2	U
3&4-Methylphenol(m&p Cresol)	mg/kg	41,000			0.14	U	0.16	U	0.14	U	0.15	U	0.14	U	0.15	U			0.19	U	**0.051**	J	0.14	U	**0.032**	J			**0.53**		0.16	U	**0.06**	J
4-Nitroaniline	mg/kg	110			0.18	UL3	0.19	UL3	0.18	UL3	0.19	UL3	0.18	UL3	0.19	UL3			0.24	UL3	0.2	UL3	0.18	UL3	0.2	UL3			0.21	U	0.2	UCLM1	0.2	U
Acenaphthene	mg/kg	45,000			0.073	U	0.0079	U	0.073	U	**0.1**		**0.0022**	J	**0.069**	J			0.096	U	**0.18**		0.073	U	**0.0073**	J			**0.9**		0.0081	UR1	**0.2**	
Acenaphthylene	mg/kg	45,000			**0.0096**	J	0.0079	U	**0.0071**	J	**0.77**		**0.0084**		**0.0083**	J			**0.019**	J	**0.91**		**0.016**	J	**0.049**	J			**0.11**		0.0081	UR1	**0.047**	J
Acetophenone	mg/kg	120,000			0.072	U	0.078	U	0.071	U	0.076	U	0.071	U	0.075	U			0.095	U	0.079	U	0.072	U	0.08	U			**0.093**		0.082	U	**0.063**	J
Anthracene	mg/kg	230,000			**0.01**	J	0.0079	U	**0.014**	J	**1.3**		**0.02**		**0.03**	J			**0.033**	JB	**2.7**		**0.026**	JB	**0.15**				**2.1**		0.0081	U	**0.81**	
Benzaldehyde	mg/kg	120,000			0.072	UL2	0.078	UL2	**0.02**	JL2	0.076	UL2	0.071	UL2	0.075	UL2			0.095	UL2	0.079	UL2	**0.3**	L2	**0.2**	L2			**0.89**	L2	0.082	UL2R1	**0.28**	L2
Benzo(a)anthracene	mg/kg	2.9			**0.069**	J	0.0079	U	**0.082**		**5**		**0.072**		**0.07**	J			**0.14**	B	**5.5**		**0.11**	B	**0.4**				**5.5**		0.0081	U	**2**	
Benzo(a)pyrene	mg/kg	0.29			**0.076**		0.0079	U	**0.056**	J	**4.7**		**0.059**		**0.052**	J			**0.11**		**4.5**		**0.077**		**0.33**		**0.0015**	JIS	**4.7**		0.0081	U	**1.6**	
Benzo(b)fluoranthene	mg/kg	2.9			**0.17**	ip	0.0079	U	**0.13**	ip	**9.1**	ip	**0.14**	ip	**0.11**	ip			**0.29**	ip	**9.2**	ip	**0.23**	ip	**0.78**	ip			**10.8**	ip	0.0081	U	**3.5**	ip
Benzo(g,h,i)perylene	mg/kg				**0.065**	J	0.0079	U	**0.094**		**1.9**		**0.057**		**0.04**	J			**0.042**	J	**1.3**		**0.045**	J	**0.091**				**1.3**		0.0081	UM1	**0.5**	
Benzo(k)fluoranthene	mg/kg	29			**0.16**	ip	0.0079	U	**0.12**	ip	**8.7**	ip	**0.14**	ip	**0.1**	ip			**0.25**	ip	**8**	ip	**0.2**	ip	**0.69**	ip			**9.4**	ip	0.0081	U	**3**	ip
Biphenyl (Diphenyl)	mg/kg	200			0.072	U	0.078	U	0.071	U	**0.17**		0.071	U	**0.05**	J			**0.023**	J	**0.16**		0.072	U	0.08	U			**0.33**		0.082	U	**0.12**	
bis(2-Ethylhexyl)phthalate	mg/kg	160			0.072	UL3	0.078	UL3	0.071	UISL3	**0.045**	JISL1	0.071	UL3	0.075	UL3			**0.15**	ISCL	**0.051**	JISCL	**1.8**	IS	0.4	U			**0.044**	JIS	0.082	U	**0.12**	IS
Carbazole	mg/kg				0.072	U	0.078	U	0.071	U	**0.54**		0.071	U	**0.031**	J			0.095	U	**0.85**		0.072	U	0.4	U			**2.5**		0.082	UM1	**0.83**	
Chrysene	mg/kg	290			**0.087**		0.0079	U	**0.18**		**4.9**		**0.096**		**0.084**				**0.11**	B	**4.1**		**0.11**	B	**0.47**				**5.6**		0.0081	U	**1.7**	
Dibenz(a,h)anthracene	mg/kg	0.29			**0.016**	J	0.0079	U	**0.016**	J	**0.4**		**0.015**		**0.011**	J			**0.02**	J	**0.52**		**0.013**	J	**0.042**	J			**0.63**		0.0081	UM1	**0.21**	
Diethylphthalate	mg/kg	660,000			0.072	UL3	0.078	UL3	0.071	UL3	0.076	UL3	0.071	UL3	0.075	UL3			0.095	UL3	0.079	UL3	0.072	UL3	0.08	UL3			0.083	U	0.082	U	0.08	U
Di-n-butylphthalate	mg/kg	82,000			0.072	UL3	0.078	UL3	0.071	UL3	0.076	UL3	0.071	UL3	0.075	UL3			**0.031**	JL1	0.079	UL3	**0.032**	JL1	0.4	UL3			0.083	U	0.082	U	0.08	U
Di-n-octylphthalate	mg/kg	8,200			0.072	UL3	0.078	UL3	0.071	UISL3	0.076	UISL3	0.071	UL3	0.075	UL3			0.095	UISL3	0.079	UISL3	0.072	UISL3	0.08	UISL3			0.083	UIS	0.082	U	0.08	UIS
Fluoranthene	mg/kg	30,000			**0.069**	J	0.0079	U	**0.17**		**14.7**		**0.14**		**0.22**				**0.26**	B	**12.1**		**0.16**	B	**0.65**				**12.1**		**0.00092**	J	**3.8**	
Fluorene	mg/kg	30,000			0.073	U	0.0079	U	0.073	U	**0.27**		**0.0021**	J	**0.0098**	J			**0.012**	J	**1.2**		0.073	U	**0.019**	J			**0.94**		0.0081	UR1	**0.2**	
Hexachlorobenzene	mg/kg	0.96			0.072	U	0.078	U	0.071	U	0.076	U	0.071	U	0.075	U			0.095	U	0.079	U	0.072	U	0.4	U			0.083	U	0.082	U	0.08	U
Indeno(1,2,3-cd)pyrene	mg/kg	2.9			**0.053**	J	0.0079	U	**0.029**	J	**1.9**		**0.046**		**0.033**	J			**0.044**	J	**1.5**		**0.037**	J	**0.12**				**1.4**		0.0081	UM1	**0.5**	
Naphthalene	mg/kg	17			0.073	U	0.0079	U	**0.03**	J	**1.1**		**0.091**		**0.049**	J			0.096	U	**0.85**		0.073	U	**0.051**	J			**0.79**		0.0081	UR1	**0.55**	
N-Nitroso-di-n-propylamine	mg/kg	0.33			0.072	U	0.078	U	0.071	U	0.076	U	0.071	U	0.075	U			0.095	U	0.079	U	0.072	U	0.08	U			0.083	U	0.082	U	0.08	U
N-Nitrosodiphenylamine	mg/kg	470			0.072	U	0.078	U	0.071	U	0.076	U	0.071	U	0.075	U			0.095	U	0.079	U	0.072	U	0.4	U			0.083	U	0.082	UM1	0.08	U
Pentachlorophenol	mg/kg	4			0.18	UL3	0.19	UL3	0.18	UL3	0.19	UL3	0.18	UL3	0.19	UL3			0.24	UL3	0.2	UL3	0.18	UL3	1	UL3			0.21	U	0.2	UM1	0.2	U
Phenanthrene	mg/kg				**0.031**	J	0.0079	U	**0.12**		**11.3**		**0.13**		**0.4**				**0.13**	B	**8.4**		**0.077**	B	**0.3**				**11.5**		**0.0013**	J	**3.3**	
Phenol	mg/kg	250,000			0.072	U	0.078	U	0.071	U	0.076	U	0.071	U	0.075	U			0.095	U	**0.041**	J	0.072	U	0.08	U			**0.31**		0.082	U	**0.025**	J
Pyrene	mg/kg	23,000			**0.076**		0.0079	U	**0.24**		**11.8**		**0.12**		**0.17**				**0.21**	B	**8.1**		**0.17**	B	**0.49**				**9.4**		0.0081	U	**3.1**	
PCBs																																		
Aroclor 1242	mg/kg	0.97			0.0533	U			0.0551	U			0.0529	U					0.143	U			0.0552	U					0.062	U			0.062	U
Aroclor 1248	mg/kg	0.94			0.0533	U			0.0551	U			0.0529	U					**1.48**				**0.121**						0.062	U			0.062	U
Aroclor 1254	mg/kg	0.97			0.0533	U			0.0551	U			0.0529	U					**0.978**				**0.148**						0.062	U			0.062	U
Aroclor 1260	mg/kg	0.99			**0.0259**	J			0.0551	U			0.0529	U					0.143	U			0.0552	U					0.062	U			0.062	U
Aroclor 1262	mg/kg				0.0533	U			0.0551	U			0.0529	U					**2.32**				**1.29**						**0.059**	J			0.062	U
Aroclor 1268	mg/kg				0.0533	U			0.0551	U			0.0529	U					0.143	U			0.0552	U					0.062	U			0.062	U
PCB, Total	mg/kg	0.97			**0.0259**	J			0.0551	U			0.0529	U					**4.778**				**1.559**						**0.059**	J			0.062	U
TPH/Oil and Grease																																		
Diesel Range Organics	mg/kg	620			**11.6**	L2	7.9	UL2	**76.7**	L2	**87.4**	L2	**30.2**	L2	**24.3**	L2			**75.1**	L2	**106**	L2	**545**	L2	**5,150**	L2	**62.9**	L21c	**296**	L2	**3.4**	JL2	**156**	L2
Gasoline Range Organics	mg/kg	620			10.3	U	10.1	U	9.8	U	9.6	U	11.2	U	10.4	U			16.8	U	9.7	U	11.4	U	10.1	U			21.1	U	10.1	U	17.3	U

Detections in bold

Blank spaces indicate that the parameter was not analyzed for this sample

*PAH compounds were analyzed via SIM

A glossary of laboratory flag keys can be viewed in the attached laboratory reports

Values in Red indicate an exceedance of the Project Action Limit (PAL)

Table 5
Summary of Organics Detected in Soil
Parcel B22
Tradepoint Atlantic
Sparrows Point, Maryland

Parameter	Units	PAL	B22-147-SB-5.5		B22-148-SB-1		B22-148-SB-6		B22-148-SB-10		B22-149-SB-1		B22-149-SB-8		B22-150-SB-1		B22-150-SB-5		B22-151-SB-1		B22-152-SB-1		B22-152-SB-6		B22-153-SB-1		B22-153-SB-4		B22-154-SB-1		B22-154-SB-5	
			Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		
			6/1/2016		5/19/2016		5/19/2016		5/19/2016		5/19/2016		5/19/2016		6/1/2016		6/1/2016		6/1/2016		5/19/2016		5/19/2016		5/19/2016		5/19/2016		5/20/2016		5/20/2016		
Volatile Organic Compounds																																
1,1,1-Trichloroethane	mg/kg	36,000	0.0048	U	0.0049	U	0.0054	U			0.0084	U	0.005	U	0.0073	U	0.006	U	0.0065	U	0.0051	U	0.25	U	0.0057	U	0.24	U	0.0053	U1c	0.006	U1c
1,1,2-Trichloroethane	mg/kg	5	0.0048	U	0.0049	U	0.0054	U			0.0084	U	0.005	U	0.0073	U	0.006	U	0.0065	U	0.0051	U	0.25	U	0.0057	U	0.24	U	0.0053	U1c	0.006	U1c
1,1,2-Trichlorotrifluoroethane	mg/kg	170,000	0.048	U	0.049	U	0.054	U			0.084	U	0.05	U	0.073	U	0.06	U	0.065	U	0.051	U	2.5	U	0.057	U	2.4	U	0.053	U1c	0.06	U1c
1,1-Dichloroethane	mg/kg	16	0.0048	U	0.0049	U	0.0054	U			0.0084	U	0.005	U	0.0073	U	0.006	U	0.0065	U	0.0051	U	0.25	U	0.0057	U	0.24	U	0.0053	U1c	0.006	U1c
1,1-Dichloroethene	mg/kg	1,000	0.0048	U	0.0049	U	0.0054	U			0.0084	U	0.005	U	0.0073	U	0.006	U	0.0065	U	0.0051	U	0.25	U	0.0057	U	0.24	U	0.0053	U1c	0.006	U1c
1,2,3-Trichlorobenzene	mg/kg	930	0.0048	U	0.0049	U	0.0054	U			0.0084	U	0.005	U	0.0073	U	0.006	U	0.0065	U	0.0051	U	0.25	U	0.0057	U	0.24	U	0.0053	U1c	0.006	U1c
1,2,4-Trichlorobenzene	mg/kg	110	0.0048	U	0.0049	U	0.0054	U			0.0084	U	0.005	U	0.0073	U	0.006	U	0.0065	U	0.0051	U	0.25	U	0.0057	U	0.24	U	0.0053	U1c	0.006	U1c
1,2-Dichloroethane	mg/kg	2	0.0048	U	0.0049	U	0.0054	U			0.0084	U	0.005	U	0.0073	U	0.006	U	0.0065	U	0.0051	U	0.25	U	0.0057	U	0.24	U	0.0053	U1c	0.006	U1c
1,2-Dichloroethene (Total)	mg/kg	2,300	0.0096	U	0.0098	U	0.011	U			0.017	U	0.01	U	0.015	U	0.012	U	0.013	U	0.01	U	0.5	U	0.011	U	0.48	U	0.011	U	0.012	U
1,4-Dichlorobenzene	mg/kg	11	0.0048	U	0.0049	U	0.0054	U			0.0084	U	0.005	U	0.0073	U	0.006	U	0.0065	U	0.0051	U	0.25	U	0.0057	U	0.24	U	0.0053	U1c	0.006	U1c
1,4-Dioxane	mg/kg	24	0.096	UL2	0.098	U	0.11	U			0.17	U	0.1	U	0.15	UL2	0.12	UL2	0.13	UL2	0.1	U	5	U	0.11	UL2	4.8	UL2	0.11	U1c	0.12	U1c
2-Butanone (MEK)	mg/kg	190,000	**0.0094**	J	0.0098	U	0.011	U			0.017	U	0.01	U	0.015	U	0.012	U	0.013	U	0.01	U	0.5	U	0.011	U	0.48	U	0.011	U1c	0.012	U1c
2-Hexanone	mg/kg	1,300	0.0096	UL3	0.0098	UL3	0.011	UL3			0.017	UL3	0.01	UL3	0.015	UL3	0.012	UL3	0.013	UL3	0.01	UL3	0.5	UL3	0.011	U	0.48	U	0.011	UL31c	0.012	UL31c
4-Methyl-2-pentanone (MIBK)	mg/kg	56,000	0.0096	U	0.0098	UL3	0.011	UL3			0.017	UL3	0.01	UL3	0.015	U	0.012	U	0.013	U	0.01	UL3	0.5	UL3	0.011	U	0.48	U	0.011	U1c	0.012	U1c
Acetone	mg/kg	670,000	**0.053**		**0.0054**	J	**0.02**				**0.014**	J	**0.006**	J	0.015	U	**0.011**	J	**0.0073**	J	0.01	U	0.5	U	0.011	U	0.48	U	**0.0058**	J1c	**0.006**	J1c
Benzene	mg/kg	5.1	0.0048	U	0.0049	U	**0.012**				0.0084	U	0.005	U	0.0073	U	0.006	U	0.0065	U	0.0051	U	0.25	U	0.0057	U	0.24	U	**0.0048**	J1c	0.006	U1c
Chlorobenzene	mg/kg	1,300	0.0048	U	0.0049	U	0.0054	U			0.0084	U	0.005	U	0.0073	U	0.006	U	0.0065	U	0.0051	U	0.25	U	0.0057	U	0.24	U	0.0053	U1c	0.006	U1c
Chloroethane	mg/kg	57,000	0.0048	U	0.0049	U	0.0054	U			0.0084	U	0.005	U	0.0073	U	0.006	U	0.0065	U	0.0051	U	0.25	U	0.0057	U	0.24	U	0.0053	U1c	0.006	U1c
Chloroform	mg/kg	1.4	0.0048	U	0.0049	U	0.0054	U			0.0084	U	**0.0075**		0.0073	U	0.006	U	0.0065	U	0.0051	U	0.25	U	0.0057	U	0.24	U	0.0053	U1c	0.006	U1c
cis-1,2-Dichloroethene	mg/kg	2,300	0.0048	U	0.0049	U	0.0054	U			0.0084	U	0.005	U	0.0073	U	0.006	U	0.0065	U	0.0051	U	0.25	U	0.0057	U	0.24	U	0.0053	U1c	0.006	U1c
Cyclohexane	mg/kg	27,000	0.0096	U	0.0098	U	**0.092**				0.017	U	0.01	U	0.015	U	0.012	U	0.013	U	0.01	U	0.5	U	0.011	U	0.48	U	0.011	U1c	0.012	U1c
Ethylbenzene	mg/kg	25	0.0048	U	0.0049	U	**0.027**				0.0084	U	0.005	U	0.0073	U	0.006	U	0.0065	U	0.0051	U	**0.15**	J	0.0057	U	**0.18**	J	0.0053	U1c	0.006	U1c
Isopropylbenzene (Cumene)	mg/kg	9,900	0.0048	U	0.0049	U	**0.012**	IS			0.0084	U	0.005	U	0.0073	U	0.006	U	0.0065	U	0.0051	U	**0.32**		0.0057	U	**0.17**	J	0.0053	U1c	0.006	U1c
Methyl acetate	mg/kg	1,200,000	0.048	UL2	0.049	U	0.054	U			0.084	U	0.05	U	0.073	UL2	0.06	UL2	0.065	UL2	0.051	U	2.5	U	0.057	U	**1.3**	J	0.053	U1c	0.06	U1c
Methylene Chloride	mg/kg	1,000	0.0048	U	0.0049	U	0.0054	U			0.0084	U	0.005	U	0.0073	U	0.006	U	0.0065	U	0.0051	U	0.25	U	0.0057	U	0.24	U	0.0053	U1c	0.006	U1c
Styrene	mg/kg	35,000	0.0048	U	0.0049	U	0.0054	U			0.0084	U	0.005	U	0.0073	U	0.006	U	0.0065	U	0.0051	U	0.25	U	0.0057	U	0.24	U	0.0053	U1c	0.006	U1c
Tetrachloroethene	mg/kg	100	0.0048	U	0.0049	U	0.0054	U			0.0084	U	0.005	U	0.0073	U	0.006	U	0.0065	U	0.0051	U	0.25	U	0.0057	U	0.24	U	0.0053	U1c	0.006	U1c
Toluene	mg/kg	47,000	0.0048	U	0.0049	U	**0.026**				0.0084	U	0.005	U	0.0073	U	0.006	U	0.0065	U	0.0051	U	0.25	U	0.0057	U	0.24	U	0.0053	U1c	0.006	U1c
trans-1,2-Dichloroethene	mg/kg	23,000	0.0048	U	0.0049	U	0.0054	U			0.0084	U	0.005	U	0.0073	U	0.006	U	0.0065	U	0.0051	U	0.25	U	0.0057	U	0.24	U	0.0053	U1c	0.006	U1c
Trichloroethene	mg/kg	6	0.0048	U	0.0049	U	0.0054	U			0.0084	U	0.005	U	0.0073	U	0.006	U	0.0065	U	0.0051	U	0.25	U	0.0057	U	0.24	U	0.0053	U1c	0.006	U1c
Trichlorofluoromethane	mg/kg	3,100	0.0048	U	0.0049	U	0.0054	U			0.0084	U	0.005	U	0.0073	U	0.006	U	0.0065	U	0.0051	U	0.25	U	0.0057	U	0.24	U	0.0053	U1c	0.006	U1c
Vinyl chloride	mg/kg	1.7	0.0048	U	0.0049	U	0.0054	U			0.0084	U	0.005	U	0.0073	U	0.006	U	0.0065	U	0.0051	U	0.25	U	0.0057	U	0.24	U	0.0053	U1c	0.006	U1c
Xylene (Total)	mg/kg	2,800	0.014	U	0.015	U	**0.11**				0.025	U	0.015	U	0.022	U	0.018	U	0.02	U	0.015	U	**0.93**		0.017	U	**0.96**		0.016	U	0.018	U
Semi-Volatile Organic Compounds*																																
1,2,4,5-Tetrachlorobenzene	mg/kg	350	0.081	U	0.068	U	0.086	U			0.069	U	0.073	U	0.088	U	0.083	U	0.073	U	0.083	U	0.35	U	0.086	UL3	0.073	UL3	0.071	U	0.074	U
2,4-Dimethylphenol	mg/kg	16,000	0.081	U	0.068	U	**0.053**	J			0.069	U	**0.026**	J	0.088	U	0.083	U	0.073	U	0.083	U	0.35	U	0.086	U	0.37	U	0.071	U	0.074	U
2-Chloronaphthalene	mg/kg	60,000	0.081	U	0.068	U	0.086	U			0.069	U	0.073	U	0.088	U	0.083	U	0.073	U	0.083	U	0.35	U	0.086	U	0.073	U	0.071	U	0.074	U
2-Methylnaphthalene	mg/kg	3,000	**0.012**		**0.15**		**0.79**				**0.14**		**1.9**		0.088	U	0.0085	U	0.073	U	**0.1**		**66.1**		**0.046**	J	**10.6**		**0.18**		**0.0029**	J
2-Methylphenol(o-Cresol)	mg/kg	41,000	0.081	U	0.068	UL3	0.086	UL3			0.069	UL3	**0.03**	JL1	0.088	U	0.083	U	0.073	U	0.083	UL3	0.35	UL3	0.086	UL3	0.073	UL3	0.071	U	0.074	U
2-Nitroaniline	mg/kg	8,000	0.2	U	0.17	UL3	0.22	UL3			0.17	UL3	0.18	UL3	0.22	U	0.21	U	0.18	U	0.21	UL3	0.88	UL3	0.21	UL3	0.18	UL3	0.18	U	0.19	U
3&4-Methylphenol(m&p Cresol)	mg/kg	41,000	0.16	U	0.14	UL3	**0.045**	JL1			0.14	UL3	**0.12**	JL1	0.18	U	0.17	U	0.15	U	0.17	UL3	0.7	UL3	0.17	UL3	0.15	UL3	0.14	U	0.15	U
4-Nitroaniline	mg/kg	110	0.2	U	0.17	U	0.22	U			0.17	U	0.18	U	0.22	U	0.21	U	0.18	U	0.21	U	0.88	U	0.21	UL3	0.18	UL3	0.18	UL3	0.19	UL3
Acenaphthene	mg/kg	45,000	**0.09**		**0.76**		**0.21**				**0.36**		**2.3**		**0.019**	J	0.0085	U	**0.0072**	J	0.082	U	**3.8**		0.088	U	**1**		**0.17**		**0.0069**	J
Acenaphthylene	mg/kg	45,000	**0.004**	J	**0.21**		**0.05**	J			**0.25**		**8**		0.088	U	0.0085	U	0.073	U	**0.037**	J	**0.66**		**0.018**	J	**0.19**		**0.14**		**0.0046**	J
Acetophenone	mg/kg	120,000	0.081	U	0.068	U	**0.034**	J			0.069	U	**0.02**	J	0.088	U	0.083	U	0.073	U	0.083	U	0.35	U	0.086	U	0.073	U	**0.034**	J	0.074	U
Anthracene	mg/kg	230,000	**0.24**		**1.9**		**0.28**				**1.5**		**23.4**		**0.091**		0.0085	U	**0.058**	J	**0.057**	J	**1.4**		**0.03**	J	**0.8**		**0.33**		**0.044**	
Benzaldehyde	mg/kg	120,000	0.081	UL2	0.068	UL2	**0.03**	JL2			0.069	UL2	**0.034**	JL2	0.088	UL2	0.083	UL2	0.073	UL2	**0.065**	JL2	0.35	UL2	**0.023**	JL2	0.073	UL2	**0.022**	JL2	0.074	UL2
Benzo(a)anthracene	mg/kg	2.9	**0.52**		**5.3**		**0.94**				**4.2**		**60.4**		**0.33**		0.0085	U	**0.25**		**0.034**	J	**1.2**		**0.033**	J	**0.18**		**1.8**		**0.37**	
Benzo(a)pyrene	mg/kg	0.29	**0.39**		**4.6**		**0.54**		**9.5**		**3.7**		**47.1**		**0.32**		0.0085	U	**0.22**		**0.05**	J	**0.91**		**0.027**	J	**0.14**		**2.5**		**0.38**	
Benzo(b)fluoranthene	mg/kg	2.9	**0.82**	ip	**10.3**	ip	**2.8**	ip			**8.5**	ip	**92.5**	ip	**0.68**	ip	0.0085	U	**0.46**	ip	**0.11**	ip	**2**	ip	**0.069**	Jip	**0.28**	ip	**4.7**	ip	**0.9**	ip
Benzo(g,h,i)perylene	mg/kg		**0.12**		**1.6**		**0.24**				**1.2**		**11.7**		**0.12**		0.0085	U	**0.07**	J	**0.4**		**0.62**		**0.026**	J	**0.047**	J	**1**		**0.22**	
Benzo(k)fluoranthene	mg/kg	29	**0.71**	ip	**8.6**	ip	**2.3**	ip			**7**	ip	**89.3**	ip	**0.59**	ip	0.0085	U	**0.4**	ip	**0.093**	ip	**1.9**	ip	**0.058**	Jip	**0.23**	ip	**3.9**	ip	**0.78**	ip
Biphenyl (Diphenyl)	mg/kg	200	0.081	U	**0.063**	J	**0.15**				**0.033**	J	**0.26**		0.088	U	0.083	U	0.073	U	**0.03**	J	**3.2**		0.086	U	**0.4**		**0.068**	J	0.074	U
bis(2-Ethylhexyl)phthalate	mg/kg	160	0.081	U	**0.023**	JISL1	0.086	UISL3			**0.086**	ISL1	0.073	UISL3	0.088	UIS	0.083	U	**0.039**	JIS	0.083	UISL3	**0.15**	ISL1	**0.026**	JCL	0.073	UISCL	**0.039**	JISCL	0.074	U
Carbazole	mg/kg		0.081	U	**0.56**		**0.1**				**0.39**		**5**		**0.097**		0.083	U	0.073	U	0.083	U	0.35	U	0.086	U	0.073	U	**0.098**		**0.063**	J
Chrysene	mg/kg	290	**0.42**		**4.6**		**1.6**				**3.7**		**59**		**0.32**		0.0085	U	**0.24**		**0.037**	J	**1.5**		**0.03**	J	**0.25**		**1.9**		**0.32**	
Dibenz(a,h)anthracene	mg/kg	0.29	**0.054**		**0.63**		**0.084**	J			**0.5**		**5.2**		**0.044**	J	0.0085	U	**0.027**	J	**0.048**	J	**0.19**		0.088	U	**0.018**	J	**0.38**		**0.085**	
Diethylphthalate	mg/kg	660,000	0.081	U	0.068	UL3	0.086	UL3			0.069	UL3	0.073	UL3	0.088	U	0.083	U	0.073	U	0.083	UL3	0.35	UL3	0.086	UL3	0.073	UL3	0.071	UL3	0.074	UL3
Di-n-butylphthalate	mg/kg	82,000	0.081	U	0.068	UL3	0.086	UL3			0.069	UL3	0.073	UL3	0.088	U	0.083	U	0.073	U	**0.031**	JL1	0.35	UL3	0.086	UL3	0.073	UL3	0.071	UL3	0.074	UL3
Di-n-octylphthalate	mg/kg	8,200	0.081	U	0.068	UISL3	**0.17**	ISL1			0.069	UISL3	0.073	UISL3	0.088	UIS	0.083	U	0.073	UIS	0.083	UISL3	0.07	UISL3	0.086	UISL3	0.073	UISL3	0.071	UISL3	0.074	UL3
Fluoranthene	mg/kg	30,000	**1.1**		**10.8**		**2.2**				**8**		**147**		**0.56**		0.0085	U	**0.37**		**0.041**	J	**3.1**		**0.04**	J	**0.46**		**2.7**		**0.45**	
Fluorene	mg/kg	30,000	**0.088**		**0.58**		**0.49**				**0.45**		**7.4**		**0.011**	J	0.0085	U	0.073	U	**0.019**	J	**5.1**		**0.012**	J	**0.86**		**0.061**		**0.0059**	J
Hexachlorobenzene	mg/kg	0.96	0.081	U	0.068	U	0.086	U			0.069	U	0.073	U	0.088	U	0.083	U	0.073	U	0.083	U	0.35	U	0.086	U	0.073	U	0.071	U	0.074	U
Indeno(1,2,3-cd)pyrene	mg/kg	2.9	**0.12**		**1.7**		**0.25**				**1.3**		**13.2**		**0.1**		0.0085	U	**0.067**	J	**0.02**	J	**0.55**		**0.016**	JL2	**0.034**	JL2	**1.1**		**0.24**	
Naphthalene	mg/kg	17	**0.019**		**0.27**		**0.27**				**0.21**		**3.6**		**0.025**	J	0.0085	U	0.073	U	**0.057**	J	**10**		**0.039**	J	**1.1**		**0.25**		**0.013**	
N-Nitroso-di-n-propylamine	mg/kg	0.33	0.081	U	0.068	U	0.086	U			0.069	U	0.073	U	0.088	U	0.083	U	0.073	U	0.083	U	0.35	U	0.086	UL3	0.073	UL3	0.071	U	0.074	U
N-Nitrosodiphenylamine	mg/kg	470	0.081	U	0.068	U	0.086	U			0.069	U	0.073	U	0.088	U	0.083	U	0.073	U	0.083	U	0.35	U	0.086	U	0.073	U	0.071	U	0.074	U
Pentachlorophenol	mg/kg	4	0.2	U	0.17	UL3	0.22	UL3			0.17	UL3	**0.073**	JL1	0.22	U	0.21	U	0.18	U	0.21	UL3	0.88	UL3	0.21	UL3	0.18	UL3	0.18	UL3	0.19	UL3
Phenanthrene	mg/kg		**1.1**		**7.6**		**2.1**				**5.5**		**96**		**0.32**		0.0085	U	**0.18**		**0.045**	J	**13.2**		**0.039**	J	**3.6**		**0.96**		**0.17**	
Phenol	mg/kg	250,000	0.081	U	0.068	UL3	**0.029**	JL1			0.069	UL3	**0.16**	L1	0.088	U	0.083	U	0.073	U	0.083	UL3	0.35	UL3	0.086	UL3	0.073	UL3	0.071	U	0.074	U
Pyrene	mg/kg	23,000	**0.85**		**8.6**		**1.9**				**6.5**		**111**		**0.48**		0.0085	U	**0.35**		**0.049**	J	**3.3**		**0.041**	J	**0.74**		**2.6**		**0.35**	
PCBs																																
Aroclor 1242	mg/kg	0.97			0.0644	U					0.0548	U			0.0596	U			0.0534	U	0.0541	U			**1.01**				0.0545	U		
Aroclor 1248	mg/kg	0.94			0.0644	U					0.0548	U			**0.165**				0.0534	U	0.0541	U			0.0657	U			0.0545	U		
Aroclor 1254	mg/kg	0.97			0.0644	U					0.0548	U			**0.635**				0.0534	U	0.0541	U			0.0657	U			**0.0902**			
Aroclor 1260	mg/kg	0.99			0.0644	U					0.0548	U			0.0596	U			0.0534	U	0.0541	U			0.0657	U			0.0545	U		
Aroclor 1262	mg/kg				0.0644	U					**0.0884**				**0.834**				0.0534	U	0.0541	U			**0.0271**	J			0.0545	U		
Aroclor 1268	mg/kg				**1.98**						0.0548	U			0.0596	U			**0.16**		0.0541	U			0.0657	U			**0.23**			
PCB, Total	mg/kg	0.97			**1.98**						**0.0884**				**1.634**				**0.16**		0.0541	U			**1.0371**				**0.3202**			
TPH/Oil and Grease																																
Diesel Range Organics	mg/kg	620	**8.7**	L2	**198**	L2	**6,670**	L2	**835**	L21c	**233**	L2	**855**	L2	**39.7**	L2	**3.9**	JL2	**54.8**	L2	**859**	L2	**6,610**	L2	**339**	L2	**2,630**	L2	**213**	L2	**17.3**	L2
Gasoline Range Organics	mg/kg	620	9.7	U	9.6	U	**22.6**				10.4	U	9.3	U	15.6	U	11.4	U	13.1	U	11.2	U	**93.4**		11.3	U	**75.1**		9.3	U	13.4	U

Detections in bold

Blank spaces indicate that the parameter was not analyzed for this sample

*PAH compounds were analyzed via SIM

A glossary of laboratory flag keys can be viewed in the attached laboratory reports

Values in Red indicate an exceedance of the Project Action Limit (PAL)

Table 5
Summary of Organics Detected in Soil
Parcel B22
Tradepoint Atlantic
Sparrows Point, Maryland

Parameter	Units	PAL	B22-155-SB-1 Soil 5/20/2016		B22-155-SB-5 Soil 5/20/2016		B22-156-SB-1 Soil 5/20/2016		B22-156-SB-4.5 Soil 5/20/2016		B22-157-SB-1 Soil 5/20/2016		B22-158-SB-1 Soil 5/18/2016		B22-158-SB-8 Soil 5/18/2016		B22-158-SB-10 Soil 5/18/2016		B22-159-SB-1 Soil 5/19/2016		B22-160-SB-1 Soil 6/1/2016		B22-161-SB-1 Soil 6/1/2016		B22-161-SB-4.5 Soil 6/1/2016		B22-162-SB-1 Soil 6/3/2016		B22-162-SB-5 Soil 6/3/2016		B22-163-SB-1 Soil 6/3/2016		B22-163-SB-5 Soil 6/3/2016		B22-164-SB-1 Soil 6/3/2016	
Volatile Organic Compounds																																						
1,1,1-Trichloroethane	mg/kg	36,000	0.0049	U1c	0.0048	U1c	0.0049	U	0.0047	U	0.0062	U	0.0045	U1c	0.0049	U1c			0.0055	U	0.0074	U	0.006	U	0.0078	U	0.31	U	0.0044	U	0.005	U1c	0.0046	U1c	0.0055	U1c
1,1,2-Trichloroethane	mg/kg	5	0.0049	U1c	0.0048	U1c	0.0049	U	0.0047	U	0.0062	U	0.0045	U1c	0.0049	U1c			0.0055	U	0.0074	U	0.006	U	0.0078	U	0.31	U	0.0044	U	0.005	U1c	0.0046	U1c	0.0055	U1c
1,1,2-Trichlorotrifluoroethane	mg/kg	170,000	0.049	U1c	0.048	U1c	0.049	U	0.047	U	0.062	U	0.045	U1c	0.049	U1c			0.055	U	0.074	U	0.06	U	0.078	U	3.1	U	0.044	U	0.05	U1c	0.046	U1c	0.055	U1c
1,1-Dichloroethane	mg/kg	16	0.0049	U1c	0.0048	U1c	0.0049	U	0.0047	U	0.0062	U	0.0045	U1c	0.0049	U1c			0.0055	U	0.0074	U	0.006	U	0.0078	U	0.31	U	0.0044	U	**0.0031**	J1c	0.0046	U1c	0.0055	U1c
1,1-Dichloroethene	mg/kg	1,000	0.0049	U1c	0.0048	U1c	0.0049	U	0.0047	U	0.0062	U	0.0045	U1c	0.0049	U1c			0.0055	U	0.0074	U	0.006	U	0.0078	U	0.31	U	0.0044	U	0.005	U1c	0.0046	U1c	0.0055	U1c
1,2,3-Trichlorobenzene	mg/kg	930	0.0049	U1c	0.0048	U1c	0.0049	U	0.0047	U	0.0062	U	0.0045	U1c	0.0049	U1c			0.0055	U	0.0074	U	0.006	U	0.0078	U	0.31	U	0.0044	U	0.005	U1c	0.0046	U1c	0.0055	U1c
1,2,4-Trichlorobenzene	mg/kg	110	0.0049	U1c	0.0048	U1c	0.0049	U	0.0047	U	0.0062	U	0.0045	U1c	0.0049	U1c			0.0055	U	0.0074	U	0.006	U	0.0078	U	0.31	U	0.0044	U	0.005	U1c	0.0046	U1c	0.0055	U1c
1,2-Dichloroethane	mg/kg	2	0.0049	U1c	0.0048	U1c	0.0049	U	0.0047	U	0.0062	U	0.0045	U1c	0.0049	U1c			0.0055	U	0.0074	U	0.006	U	0.0078	U	0.31	U	0.0044	U	0.005	U1c	0.0046	U1c	0.0055	U1c
1,2-Dichloroethene (Total)	mg/kg	2,300	0.0098	U	0.0095	U	0.0098	U	0.0094	U	0.012	U	0.0089	U	0.0098	U			0.011	U	0.015	U	0.012	U	0.016	U	0.61	U	0.0088	U	**0.006**	J	0.0093	U	0.011	U
1,4-Dichlorobenzene	mg/kg	11	0.0049	U1c	0.0048	U1c	0.0049	U	0.0047	U	0.0062	U	0.0045	U1c	0.0049	U1c			0.0055	U	0.0074	U	0.006	U	0.0078	U	**0.18**	J	0.0044	U	0.005	U1c	0.0046	U1c	0.0055	U1c
1,4-Dioxane	mg/kg	24	0.098	U1c	0.095	U1c	0.098	U	0.094	U	0.12	U	0.089	U1c	0.098	U1c			0.11	UL2	0.15	UL2	0.12	UL2	0.16	UL2	6.1	U	0.088	U	0.1	U1c	0.093	U1c	0.11	U1c
2-Butanone (MEK)	mg/kg	190,000	0.0098	U1c	0.0095	U1c	0.0098	U	**0.0024**	J	**0.0078**	J	0.0089	U1c	0.0098	U1c			0.011	U	**0.015**		**0.011**	J	0.016	U	**0.17**	J	**0.0025**	J	0.01	U1c	**0.0043**	J1c	0.011	U1c
2-Hexanone	mg/kg	1,300	0.0098	UL31c	0.0095	UL31c	0.0098	U	0.0094	U	**0.0023**	J	0.0089	UL31c	0.0098	UL31c			0.011	U	0.015	UL3	**0.0036**	JL1	0.016	UL3	0.61	U	0.0088	UL3	0.01	U1c	0.0093	U1c	0.011	U1c
4-Methyl-2-pentanone (MIBK)	mg/kg	56,000	0.0098	U1c	0.0095	U1c	0.0098	U	0.0094	U	0.012	U	0.0089	U1c	0.0098	U1c			0.011	U	0.015	U	0.012	U	0.016	U	**0.61**	J	0.0088	U	0.01	U1c	0.0093	U1c	0.011	U1c
Acetone	mg/kg	670,000	0.0098	U1c	**0.0058**	J1c	0.0098	U	**0.015**		**0.075**		**0.0065**	J1c	**0.0076**	J1c			0.011	U	**0.086**		**0.048**		0.016	U	**0.46**	J	**0.023**		**0.023**	1c	**0.034**	1c	**0.014**	1c
Benzene	mg/kg	5.1	**0.003**	J1c	0.0048	U1c	0.0049	U	0.0047	U	0.0062	U	0.0045	U1c	0.0049	U1c			0.0055	U	0.0074	U	0.006	U	0.0078	U	0.31	U	**0.0019**	J	**0.0099**	1c	0.0046	U1c	0.0055	U1c
Chlorobenzene	mg/kg	1,300	0.0049	U1c	0.0048	U1c	0.0049	U	0.0047	U	0.0062	U	0.0045	U1c	0.0049	U1c			0.0055	U	0.0074	U	0.006	U	0.0078	U	0.31	U	0.0044	U	0.005	U1c	0.0046	U1c	0.0055	U1c
Chloroethane	mg/kg	57,000	0.0049	U1c	0.0048	U1c	0.0049	U	0.0047	U	0.0062	U	0.0045	U1c	0.0049	U1c			0.0055	U	0.0074	U	0.006	U	0.0078	U	0.31	U	0.0044	U	0.005	U1c	0.0046	U1c	0.0055	U1c
Chloroform	mg/kg	1.4	0.0049	U1c	0.0048	U1c	0.0049	U	0.0047	U	0.0062	U	0.0045	U1c	0.0049	U1c			0.0055	U	0.0074	U	0.006	U	0.0078	U	0.31	U	0.0044	U	0.005	U1c	0.0046	U1c	0.0055	U1c
cis-1,2-Dichloroethene	mg/kg	2,300	0.0049	U1c	0.0048	U1c	0.0049	U	0.0047	U	0.0062	U	0.0045	U1c	0.0049	U1c			0.0055	U	0.0074	U	0.006	U	0.0078	U	0.31	U	0.0044	U	**0.006**	1c	0.0046	U1c	0.0055	U1c
Cyclohexane	mg/kg	27,000	0.0098	U1c	0.0095	U1c	0.0098	U	0.0094	U	0.012	U	0.0089	U1c	0.0098	U1c			0.011	U	0.015	U	0.012	U	0.016	U	0.61	U	0.0088	U	**0.025**	1c	0.0093	U1c	0.011	U1c
Ethylbenzene	mg/kg	25	0.0049	U1c	0.0048	U1c	0.0049	U	0.0047	U	0.0062	U	0.0045	U1c	0.0049	U1c			0.0055	U	0.0074	U	0.006	U	0.0078	U	**1.7**		**0.0093**		**0.01**	1c	**0.006**	1c	0.0055	U1c
Isopropylbenzene (Cumene)	mg/kg	9,900	0.0049	U1c	0.0048	U1c	0.0049	U	0.0047	U	0.0062	U	0.0045	U1c	0.0049	U1c			0.0055	U	0.0074	U	0.006	U	0.0078	U	**1.9**		**0.005**		**0.0026**	J1c	**0.0057**	1c	0.0055	U1c
Methyl acetate	mg/kg	1,200,000	0.049	U1c	0.048	U1c	0.049	U	0.047	U	0.062	U	0.045	U1c	0.049	U1c			0.055	U	0.074	UL2	0.06	UL2	0.078	UL2	**0.19**	J	0.044	U	0.05	U1c	0.046	U1c	0.055	U1c
Methylene Chloride	mg/kg	1,000	0.0049	U1c	0.0048	U1c	0.0049	U	0.0047	U	0.0062	U	0.0045	U1c	0.0049	U1c			0.0055	U	0.0074	U	0.006	U	0.0078	U	**0.41**		0.0044	U	0.005	U1c	0.0046	U1c	0.0055	U1c
Styrene	mg/kg	35,000	0.0049	U1c	0.0048	U1c	0.0049	UL2	0.0047	UL2	0.0062	UL2	0.0045	U1c	0.0049	U1c			0.0055	U	0.0074	U	0.006	U	0.0078	U	0.31	U	0.0044	U	0.005	U1c	0.0046	U1c	0.0055	U1c
Tetrachloroethene	mg/kg	100	0.0049	U1c	0.0048	U1c	0.0049	U	0.0047	U	0.0062	U	0.0045	U1c	0.0049	U1c			0.0055	U	0.0074	U	0.006	U	0.0078	U	0.31	U	0.0044	U	**0.011**	1c	0.0046	U1c	0.0055	U1c
Toluene	mg/kg	47,000	0.0049	U1c	0.0048	U1c	0.0049	U	0.0047	U	0.0062	U	0.0045	U1c	0.0049	U1c			0.0055	U	0.0074	U	0.006	U	0.0078	U	**0.1**	J	0.0044	U	**0.0072**	1c	**0.0014**	J1c	0.0055	U1c
trans-1,2-Dichloroethene	mg/kg	23,000	0.0049	U1c	0.0048	U1c	0.0049	U	0.0047	U	0.0062	U	0.0045	U1c	0.0049	U1c			0.0055	U	0.0074	U	0.006	U	0.0078	U	0.31	U	0.0044	U	0.005	U1c	0.0046	U1c	0.0055	U1c
Trichloroethene	mg/kg	6	0.0049	U1c	0.0048	U1c	0.0049	U	0.0047	U	0.0062	U	0.0045	U1c	0.0049	U1c			0.0055	U	0.0074	U	0.006	U	0.0078	U	0.31	U	0.0044	U	0.005	U1c	0.0046	U1c	0.0055	U1c
Trichlorofluoromethane	mg/kg	3,100	0.0049	U1c	0.0048	U1c	0.0049	U	0.0047	U	0.0062	U	0.0045	U1c	0.0049	U1c			0.0055	U	0.0074	U	0.006	U	0.0078	U	0.31	U	0.0044	U	0.005	U1c	0.0046	U1c	0.0055	U1c
Vinyl chloride	mg/kg	1.7	0.0049	U1c	0.0048	U1c	0.0049	U	0.0047	U	0.0062	U	0.0045	U1c	0.0049	U1c			0.0055	U	0.0074	U	0.006	U	0.0078	U	0.31	U	0.0044	U	0.005	U1c	**0.0061**	1c	0.0055	U1c
Xylene (Total)	mg/kg	2,800	0.015	U	0.014	U	0.015	U	0.014	U	**0.0052**	J	0.013	U	0.015	U			0.017	U	0.022	U	0.018	U	0.024	U	**1.2**		**0.0061**	J	**0.026**		**0.015**		0.017	U
Semi-Volatile Organic Compounds*																																						
1,2,4,5-Tetrachlorobenzene	mg/kg	350	0.072	U	0.075	U	0.073	U	0.081	U	0.078	U	0.071	U	0.07	U			0.073	UL3	0.081	U	0.081	U	0.086	U	1.3	U	0.081	U	0.081	U	0.082	U	0.08	U
2,4-Dimethylphenol	mg/kg	16,000	0.072	U	0.075	U	0.073	U	0.081	U	0.078	U	0.071	U	0.07	U			0.073	U	0.081	U	0.081	U	0.086	U	1.3	U	0.081	U	0.081	U	0.082	U	0.08	U
2-Chloronaphthalene	mg/kg	60,000	0.072	U	0.075	U	0.073	U	0.081	U	0.078	U	0.071	U	0.07	U			0.073	U	0.081	U	0.081	U	0.086	U	1.3	U	0.081	U	0.081	U	0.082	U	0.08	U
2-Methylnaphthalene	mg/kg	3,000	**0.68**		**0.039**	J	0.074	U	0.0081	U	**0.043**	J	**0.066**		**0.048**	IS			**0.018**		0.081	U	**0.05**	J	**0.32**		**23.3**		**0.42**		**0.065**	J	**3.4**		0.008	U
2-Methylphenol(o-Cresol)	mg/kg	41,000	0.072	U	0.075	U	0.073	U	0.081	U	0.078	U	0.071	UL3	0.07	UL3			0.073	UL3	0.081	U	0.081	U	0.086	U	1.3	U	0.081	U	0.081	U	0.082	U	0.08	U
2-Nitroaniline	mg/kg	8,000	0.18	U	0.19	U	0.18	U	0.2	U	0.19	U	0.18	UL3	0.18	UM0L3			0.18	UL3	0.2	U	0.2	U	0.21	U	3.3	U	0.2	U	0.2	U	0.21	U	0.2	U
3&4-Methylphenol(m&p Cresol)	mg/kg	41,000	0.14	U	0.15	U	0.14	U	0.16	U	0.16	U	0.14	UL3	0.14	UL3			0.14	UL3	0.16	U	0.16	U	**0.03**	J	2.7	U	0.16	U	0.16	U	0.16	U	0.16	U
4-Nitroaniline	mg/kg	110	0.18	UL3	0.19	UL3	0.18	U	0.2	U	0.19	U	0.18	UL3	0.18	UL3			0.18	UL3	0.2	U	0.2	U	0.21	U	3.3	UL2	0.2	UL2	0.2	UL2	0.21	UL2	0.2	UL2
Acenaphthene	mg/kg	45,000	**1.8**		0.075	U	0.074	U	0.0081	U	**0.0068**	J	**0.0035**	J	**0.0049**	JIS			**0.0015**	J	0.081	U	0.082	U	**0.24**		**3.1**		**0.079**		**0.016**	J	**0.45**		**0.00078**	J
Acenaphthylene	mg/kg	45,000	**0.25**		**0.0078**	J	**0.013**	J	0.0081	U	**0.032**	J	**0.018**		**0.0089**	IS			**0.0031**	J	0.081	U	**0.017**	J	**0.063**	J	**0.55**		**0.014**		**0.0093**	J	**0.064**	J	0.008	U
Acetophenone	mg/kg	120,000	**0.026**	J	0.075	U	0.073	U	0.081	U	0.078	U	0.071	U	0.07	U			0.073	U	0.081	U	0.081	U	0.086	U	1.3	U	0.081	U	0.081	U	0.082	U	0.08	U
Anthracene	mg/kg	230,000	**4.3**		**0.0065**	JB	**0.036**	J	0.0081	U	**0.046**	J	**0.02**		**0.031**	IS			**0.009**		0.081	U	**0.023**	J	**0.21**		**2.8**		**0.017**		**0.042**	J	**0.38**		**0.0022**	J
Benzaldehyde	mg/kg	120,000	**0.022**	JL2	0.075	UL2	**0.029**	JL2	0.081	UL2	**0.022**	JL2	0.071	UL2	0.07	UL2M0			0.073	UL2	0.081	UL2	0.081	UL2	0.086	UL2	1.3	UL2	0.081	UL2	0.081	UL2	0.082	UL2	0.08	UL2
Benzo(a)anthracene	mg/kg	2.9	**7.3**		**0.041**	JB	**0.15**		0.0081	U	**0.2**		**0.099**		**0.14**	IS			**0.056**		0.081	U	**0.071**	J	**0.55**		**0.72**		**0.0063**	J	**0.17**		**0.068**	J	**0.0071**	J
Benzo(a)pyrene	mg/kg	0.29	**6**		**0.04**	J	**0.098**		0.0081	U	**0.19**		**0.14**		**0.15**	IS			**0.072**		**0.018**	J	**0.084**		**0.53**		**0.53**		**0.0016**	J	**0.16**		**0.053**	J	**0.0045**	J
Benzo(b)fluoranthene	mg/kg	2.9	**11.9**	ip	**0.095**	ipB	**0.26**	ip	0.0081	Uip	**0.43**	ip	**0.3**	ip	**0.31**	ISip			**0.16**	ip	0.081	U	**0.22**	ip	**1.4**	ip	**1.6**	ip	**0.0048**	Jip	**0.35**	ip	**0.1**	ip	**0.0091**	ip
Benzo(g,h,i)perylene	mg/kg		**2.9**		**0.036**	J	**0.046**	J	0.0081	U	**0.059**	J	**0.075**		**0.11**	IS			**0.036**		**0.016**	J	**0.052**	J	**0.24**		**0.56**		0.008	U	**0.12**		**0.033**	J	**0.0024**	J
Benzo(k)fluoranthene	mg/kg	29	**10.3**	ip	**0.083**	ip	**0.22**	ip	0.0081	Uip	**0.35**	ip	**0.28**	ip	**0.27**	ISip			**0.14**	ip	0.081	U	**0.19**	ip	**1.2**	ip	**1.4**	ip	**0.0038**	Jip	**0.26**	ip	**0.077**	Jip	**0.0068**	Jip
Biphenyl (Diphenyl)	mg/kg	200	**0.12**		0.075	U	0.073	U	0.081	U	0.078	U	**0.021**	JL1	**0.016**	JL1			0.073	U	0.081	UIS	0.081	U	**0.065**	J	**3.8**		**0.14**		**0.018**	J	**0.73**		0.08	U
bis(2-Ethylhexyl)phthalate	mg/kg	160	**0.066**	JISCL	**0.042**	JISCL	**0.048**	J	0.081	U	0.078	U	0.071	UL3	0.07	UM0L3			0.073	U	0.081	U	0.081	UIS	**0.022**	JIS	0.27	UIS	0.081	U	**0.26**	IS	0.082	UIS	0.08	U
Carbazole	mg/kg		**0.43**		0.075	U	**0.019**	J	0.081	U	0.078	U	0.071	U	0.07	U			0.073	U	0.081	U	0.081	U	**0.024**	J	1.3	U	0.081	U	0.081	U	0.082	U	0.08	U
Chrysene	mg/kg	290	**5.9**		**0.034**	JB	**0.13**	J	0.0081	U	**0.18**		**0.12**		**0.14**	IS			**0.056**		0.081	U	**0.067**	J	**0.49**		**1**		**0.0036**	J	**0.12**		**0.1**		**0.0048**	J
Dibenz(a,h)anthracene	mg/kg	0.29	**0.83**		0.075	U	**0.014**	J	0.0081	U	0.078	U	**0.026**		**0.027**	IS			**0.011**		0.081	U	**0.02**	J	**0.1**		**0.21**	J	0.008	U	**0.038**	J	0.082	U	0.008	U
Diethylphthalate	mg/kg	660,000	0.072	UL3	0.075	UL3	0.073	U	0.081	U	0.078	U	0.071	UL3	0.07	UM0L3			0.073	UL3	0.081	U	0.081	U	0.086	U	1.3	U	0.081	U	0.081	U	0.082	U	0.08	U
Di-n-butylphthalate	mg/kg	82,000	0.072	UL3	0.075	UL3	**0.028**	J	0.081	U	0.078	U	0.071	UL3	0.07	UM0L3			0.073	UL3	0.081	UIS	0.081	U	0.086	U	1.3	U	0.081	U	0.081	U	0.082	U	0.08	U
Di-n-octylphthalate	mg/kg	8,200	0.072	UISL3	0.075	UISL3	0.073	UIS	0.081	U	0.078	UIS	0.071	UL3	0.07	UM0L3			0.073	UL3	0.081	U	0.081	UIS	0.086	UIS	0.27	UIS	0.081	U	0.081	UIS	0.082	UIS	0.08	U
Fluoranthene	mg/kg	30,000	**16**		**0.039**	JB	**0.29**		0.0081	U	**0.32**		**0.13**		**0.21**	IS			**0.065**		0.081	U	**0.09**		**0.68**		**1.9**		**0.019**		**0.25**		**0.15**		**0.012**	
Fluorene	mg/kg	30,000	**1.4**		0.075	U	0.074	U	0.0081	U	**0.01**	J	**0.0037**	J	**0.0071**	IS			**0.0013**	J	0.081	U	0.082	U	**0.29**		**4.6**		**0.12**		**0.017**	J	**0.64**		**0.001**	J
Hexachlorobenzene	mg/kg	0.96	0.072	U	0.075	U	0.073	U	0.081	U	0.078	U	0.071	U	0.07	U			0.073	U	0.081	U	0.081	U	0.086	U	1.3	U	0.081	U	0.081	U	0.082	U	0.08	U
Indeno(1,2,3-cd)pyrene	mg/kg	2.9	**2.9**		**0.026**	J	**0.037**	J	0.0081	U	**0.06**	J	**0.081**		**0.1**	IS			**0.032**	L2	0.081	U	**0.049**	J	**0.24**		**0.45**		0.008	U	**0.1**		**0.02**	J	**0.002**	J
Naphthalene	mg/kg	17	**0.35**		0.075	U	**0.026**	J	0.0081	U	**0.036**	J	**0.054**		**0.027**	IS			**0.02**		0.081	U	**0.042**	J	**0.45**		**5.3**		**0.054**		**0.042**	J	**0.65**		0.008	U
N-Nitroso-di-n-propylamine	mg/kg	0.33	0.072	U	0.075	U	0.073	U	0.081	U	0.078	U	0.071	U	0.07	U			0.073	UL3	0.081	U	0.081	U	0.086	U	1.3	U	0.081	U	0.081	U	0.082	U	0.08	U
N-Nitrosodiphenylamine	mg/kg	470	0.072	U	0.075	U	0.073	U	0.081	U	0.078	U	0.071	U	0.07	U			0.073	U	0.2	U	0.081	U	0.086	U	1.3	U	0.081	UL3	0.081	UL3	0.082	UL3	0.08	UL3
Pentachlorophenol	mg/kg	4	0.18	UL3	0.19	UL3	0.18	U	0.2	U	0.19	U	0.18	UL3	0.18	UM0L3			0.18	UL3	0.081	U	0.2	U	0.21	U	3.3	UL3	0.2	UL3	0.2	UL3	0.21	UL3	0.2	UL3
Phenanthrene	mg/kg		**12.5**		**0.03**	JB	**0.11**		**0.00074**	J	**0.18**		**0.078**		**0.12**	IS			**0.037**		0.081	U	**0.14**		**1.2**		**8.7**		**0.26**		**0.17**		**1.4**		**0.01**	
Phenol	mg/kg	250,000	0.072	U	0.075	U	0.073	U	0.081	U	0.078	U	0.071	UL3	0.07	UL3			0.073	UL3	**0.013**	J	0.081	U	0.086	U	1.3	U	0.081	U	0.081	U	0.082	U	0.08	U
Pyrene	mg/kg	23,000	**14.1**		**0.036**	JB	**0.31**		0.0081	U	**0.27**		**0.12**		**0.19**	IS			**0.059**		**2.020**	L2	**0.064**	J	**0.5**		**3.8**		**0.044**		**0.26**		**0.31**		**0.0095**	
PCBs																																						
Aroclor 1242	mg/kg	0.97	0.0593	U			0.0551	U			0.0598	U	0.0583	U					0.055	U	0.0701	U	0.0555	U			0.061	U			0.0616	U			0.0598	U
Aroclor 1248	mg/kg	0.94	0.0593	U			**0.0719**				0.0598	U	0.0583	U					0.055	U	0.0701	U	0.0555	U			0.061	U			0.0616	U			0.0598	U
Aroclor 1254	mg/kg	0.97	**0.0647**				**0.0463**	J			0.0598	U	0.0583	U					0.055	U	0.0701	U	0.0555	U			0.061	U			0.0616	U			0.0598	U
Aroclor 1260	mg/kg	0.99	0.0593	U			0.0551	U			0.0598	U	0.0583	U					0.055	U	0.0701	U	0.0555	U			0.061	U			0.0616	U			0.0598	U
Aroclor 1262	mg/kg		0.0593	U			**0.0556**				0.0598	U	**0.0405**	J					**0.0547**	J	**0.094**		0.0555	U			0.061	U			0.0616	U			0.0598	U
Aroclor 1268	mg/kg		**0.412**				0.0551	U			**0.133**		0.0583	U					0.055	U	0.0701	U	0.0555	U			**0.0939**				**1**				0.0598	U
PCB, Total	mg/kg	0.97	**0.4767**				**0.1738**				**0.133**		**0.0405**	J					**0.0547**	J	**0.094**		0.0555	U			**0.0939**				**1**				0.0598	U
TPH/Oil and Grease																																						
Diesel Range Organics	mg/kg	620	**216**	L2	**82.9**	L2	**55.7**	L2	**3.3**	JL2	**207**	L2	**38.8**	L2	**67.7**	L2			**31.7**	L2	17.8	U	**247**	L2	**210**	L2	**39,100**	L2P3	**266**	L2	**67**	L2	**8,400**	L2	**29.1**	L2
Gasoline Range Organics	mg/kg	620	9.8	U	11	U	9.9	U	9.6	U	10.5	U	9.8	U	10.5	U			10.5	U	**29,000**		**10.1**	J	14.4	U	**110**		9.3	U	8.8	U	9	U	11	U

Detections in bold

Blank spaces indicate that the parameter was not analyzed for this sample

*PAH compounds were analyzed via SIM

A glossary of laboratory flag keys can be viewed in the attached laboratory reports

Values in Red indicate an exceedance of the Project Action Limit (PAL)

Table 5
Summary of Organics Detected in Soil
Parcel B22
Tradepoint Atlantic
Sparrows Point, Maryland

Parameter	Units	PAL	B22-164-SB-6		B22-165-SB-1		B22-165-SB-4		B22-166-SB-1		B22-166-SB-4		B22-167-SB-1		B22-167-SB-5		B22-167-SB-10		B22-168-SB-1		B22-168-SB-4		B22-169-SB-1		B22-169-SB-4		B22-170-SB-1		B22-170-SB-4		B22-171-SB-1	
			Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
			6/3/2016		6/3/2016		6/3/2016		5/19/2016		5/19/2016		5/18/2016		5/18/2016		5/18/2016		5/26/2016		5/26/2016		5/26/2016		5/26/2016		6/1/2016		6/1/2016		5/17/2016	
Volatile Organic Compounds																																
1,1,1-Trichloroethane	mg/kg	36,000	0.0046	U1c	0.36	U	0.0048	U1c	0.0043	U	0.0067	U	0.0063	U	0.0043	U			0.37	U1c	0.0051	U	0.0071	U	0.0059	U	0.0058	U	0.0056	U	0.0053	U
1,1,2-Trichloroethane	mg/kg	5	0.0046	U1c	0.36	U	0.0048	U1c	0.0043	U	0.0067	U	0.0063	U	0.0043	U			0.37	U1c	0.0051	U	0.0071	U	0.0059	U	0.0058	U	0.0056	U	0.0053	U
1,1,2-Trichlorotrifluoroethane	mg/kg	170,000	0.046	U1c	3.6	U	0.048	U1c	0.043	U	0.067	U	0.063	U	0.043	U			3.7	U1c	0.051	U	0.071	U	0.059	U	0.058	U	0.056	U	0.053	U
1,1-Dichloroethane	mg/kg	16	**0.22**	1c	**0.22**	J	0.0048	U1c	0.0043	U	0.0067	U	0.0063	U	0.0043	U			0.37	U1c	0.0051	U	0.0071	U	0.0059	U	0.0058	U	0.0056	U	0.0053	U
1,1-Dichloroethene	mg/kg	1,000	**0.011**	1c	0.36	U	0.0048	U1c	0.0043	U	0.0067	U	0.0063	U	0.0043	U			0.37	U1c	0.0051	U	0.0071	U	0.0059	U	0.0058	U	0.0056	U	0.0053	U
1,2,3-Trichlorobenzene	mg/kg	930	0.0046	U1c	0.36	U	0.0048	U1c	0.0043	U	0.0067	U	0.0063	U	0.0043	U			0.37	U1c	0.0051	U	0.0071	U	0.0059	U	0.0058	U	0.0056	U	0.0053	U
1,2,4-Trichlorobenzene	mg/kg	110	0.0046	U1c	0.36	U	0.0048	U1c	0.0043	U	0.0067	U	0.0063	U	0.0043	U			0.37	U1c	0.0051	U	0.0071	U	0.0059	U	0.0058	U	0.0056	U	0.0053	U
1,2-Dichloroethane	mg/kg	2	0.0046	U1c	0.36	U	0.0048	U1c	0.0043	U	0.0067	U	0.0063	U	0.0043	U			0.37	U1c	0.0051	U	0.0071	U	0.0059	U	0.0058	U	0.0056	U	0.0053	U
1,2-Dichloroethene (Total)	mg/kg	2,300	0.0092	U	0.72	U	0.0096	U	0.0086	U	0.013	U	0.013	U	0.0085	U			0.75	U	0.01	U	0.014	U	0.012	U	0.012	U	0.011	U	0.011	U
1,4-Dichlorobenzene	mg/kg	11	0.0046	U1c	0.36	U	0.0048	U1c	0.0043	U	0.0067	U	0.0063	U	0.0043	U			**0.2**	J1c	0.0051	U	0.0071	U	0.0059	U	0.0058	U	0.0056	U	0.0053	U
1,4-Dioxane	mg/kg	24	0.092	U1c	7.2	U	0.096	U1c	0.086	UL2	0.13	UL2	0.13	U	0.085	U			7.5	U1c	0.1	U	0.14	U	0.12	U	0.12	UL2	0.11	UL2	0.11	U
2-Butanone (MEK)	mg/kg	190,000	**0.0026**	J1c	0.72	U	**0.0037**	J1c	0.0086	U	0.013	U	0.013	U	0.0085	U			0.75	U1c	0.01	U	0.014	U	0.012	U	0.012	U	0.011	U	**0.0042**	J
2-Hexanone	mg/kg	1,300	0.0092	U1c	0.72	U	0.0096	U1c	0.0086	U	0.013	U	0.013	U	0.0085	U			0.75	U1c	0.01	UL3	0.014	U	0.012	UL3	0.012	UL3	0.011	UL3	0.011	UL3
4-Methyl-2-pentanone (MIBK)	mg/kg	56,000	0.0092	U1c	0.72	U	0.0096	U1c	0.0086	U	0.013	U	0.013	U	0.0085	U			0.75	U1c	0.01	U	0.014	U	0.012	U	0.012	U	0.011	U	0.011	U
Acetone	mg/kg	670,000	**0.041**	1c	0.72	U	**0.055**	1c	0.0086	U	0.013	U	0.013	U	0.0085	U			0.75	U1c	0.01	U	0.014	U	0.012	U	**0.0064**	J	**0.011**		**0.016**	
Benzene	mg/kg	5.1	0.0046	U1c	0.36	U	0.0048	U1c	0.0043	U	0.0067	U	0.0063	U	0.0043	U			0.37	U1c	0.0051	U	0.0071	U	0.0059	U	0.0058	U	0.0056	U	0.0053	U
Chlorobenzene	mg/kg	1,300	0.0046	U1c	0.36	U	0.0048	U1c	0.0043	U	0.0067	U	0.0063	U	0.0043	U			0.37	U1c	0.0051	U	0.0071	U	0.0059	U	0.0058	U	0.0056	U	0.0053	U
Chloroethane	mg/kg	57,000	0.0046	U1c	0.36	U	0.0048	U1c	0.0043	U	0.0067	U	0.0063	U	0.0043	U			0.37	U1c	0.0051	UR1	0.0071	U	0.0059	U	0.0058	U	0.0056	U	0.0053	U
Chloroform	mg/kg	1.4	0.0046	U1c	0.36	U	0.0048	U1c	0.0043	U	0.0067	U	0.0063	U	0.0043	U			0.37	U1c	0.0051	U	0.0071	U	0.0059	U	0.0058	U	0.0056	U	0.0053	U
cis-1,2-Dichloroethene	mg/kg	2,300	0.0046	U1c	0.36	U	0.0048	U1c	0.0043	U	0.0067	U	0.0063	U	0.0043	U			0.37	U1c	0.0051	U	0.0071	U	0.0059	U	0.0058	U	0.0056	U	0.0053	U
Cyclohexane	mg/kg	27,000	0.0092	U1c	0.72	U	0.0096	U1c	0.0086	U	0.013	U	0.013	U	0.0085	U			0.75	U1c	0.01	U	0.014	U	0.012	U	0.012	U	0.011	U	0.011	U
Ethylbenzene	mg/kg	25	0.0046	U1c	0.36	U	0.0048	U1c	0.0043	U	0.0067	U	0.0063	U	0.0043	U			0.37	U1c	0.0051	U	0.0071	U	0.0059	U	0.0058	U	0.0056	U	0.0053	U
Isopropylbenzene (Cumene)	mg/kg	9,900	0.0046	U1c	0.36	U	0.0048	U1c	0.0043	U	0.0067	U	0.0063	U	0.0043	U			0.37	U1c	0.0051	U	0.0071	U	0.0059	U	0.0058	U	0.0056	U	0.0053	U
Methyl acetate	mg/kg	1,200,000	0.046	U1c	**1.3**	J	0.048	U1c	0.043	U	0.067	U	0.063	U	0.043	U			3.7	U1c	0.051	U	0.071	U	0.059	U	0.058	U	0.056	U	0.053	U
Methylene Chloride	mg/kg	1,000	0.0046	U1c	**0.47**		0.0048	U1c	0.0043	U	0.0067	U	0.0063	U	0.0043	U			0.37	U1c	0.0051	U	0.0071	U	0.0059	U	0.0058	U	0.0056	U	0.0053	U
Styrene	mg/kg	35,000	0.0046	U1c	0.36	U	0.0048	U1c	0.0043	U	0.0067	U	0.0063	U	0.0043	U			0.37	U1c	0.0051	UL2	0.0071	U	0.0059	UL2	0.0058	U	0.0056	U	0.0053	U
Tetrachloroethene	mg/kg	100	0.0046	U1c	0.36	U	0.0048	U1c	0.0043	U	0.0067	U	0.0063	U	0.0043	U			0.37	U1c	0.0051	U	0.0071	U	0.0059	U	0.0058	U	0.0056	U	0.0053	U
Toluene	mg/kg	47,000	0.0046	U1c	0.36	U	0.0048	U1c	0.0043	U	0.0067	U	0.0063	U	0.0043	U			0.37	U1c	0.0051	U	0.0071	U	0.0059	U	0.0058	U	0.0056	U	0.0053	U
trans-1,2-Dichloroethene	mg/kg	23,000	0.0046	U1c	0.36	U	0.0048	U1c	0.0043	U	0.0067	U	0.0063	U	0.0043	U			0.37	U1c	0.0051	U	0.0071	U	0.0059	U	0.0058	U	0.0056	U	0.0053	U
Trichloroethene	mg/kg	6	0.0046	U1c	0.36	U	0.0048	U1c	0.0043	U	0.0067	U	0.0063	U	0.0043	U			0.37	U1c	0.0051	U	0.0071	U	0.0059	U	0.0058	U	0.0056	U	0.0053	U
Trichlorofluoromethane	mg/kg	3,100	0.0046	U1c	0.36	U	0.0048	U1c	0.0043	U	0.0067	U	0.0063	U	0.0043	U			0.37	U1c	0.0051	U	0.0071	U	0.0059	U	0.0058	U	0.0056	U	0.0053	U
Vinyl chloride	mg/kg	1.7	**0.0042**	J1c	0.36	U	0.0048	U1c	0.0043	U	0.0067	U	0.0063	U	0.0043	U			0.37	U1c	0.0051	U	0.0071	U	0.0059	U	0.0058	U	0.0056	U	0.0053	U
Xylene (Total)	mg/kg	2,800	0.014	U	1.1	U	0.014	U	0.013	U	0.02	U	0.019	U	0.013	U			1.1	U	0.015	U	0.021	U	0.018	U	0.017	U	0.017	U	0.016	U
Semi-Volatile Organic Compounds*																																
1,2,4,5-Tetrachlorobenzene	mg/kg	350	0.08	U	0.082	U	0.084	U	0.072	UL3	0.083	UL3	0.073	U	0.078	U			0.078	UL3	0.082	UM0L3	0.076	UL3	0.088	UL3	0.074	UL3	0.082	UL3	0.074	U
2,4-Dimethylphenol	mg/kg	16,000	0.08	U	0.082	U	0.084	U	0.072	U	0.083	U	0.073	U	0.078	U			0.078	U	0.082	UM1	0.076	U	0.088	U	0.074	U	0.082	U	0.074	U
2-Chloronaphthalene	mg/kg	60,000	0.08	U	0.082	U	0.084	U	0.072	U	0.083	U	0.073	U	0.078	U			0.078	U	0.082	UM1	0.076	U	0.088	U	0.074	UL3	0.082	UL3	0.074	U
2-Methylnaphthalene	mg/kg	3,000	0.0081	U	0.0083	U	0.0085	U	**0.016**		**0.0067**	J	0.0073	U	0.0078	U			**0.0044**	J	0.0082	UR1	0.0077	U	0.0089	U	**0.047**	J	**0.22**		0.0073	U
2-Methylphenol(o-Cresol)	mg/kg	41,000	0.08	U	0.082	U	0.084	U	0.072	UL3	0.083	UL3	0.073	U	0.078	U			0.078	UL3	0.082	UM0L3	0.076	UL3	0.088	UL3	0.074	UL3	0.082	UL3	0.074	U
2-Nitroaniline	mg/kg	8,000	0.2	U	0.21	U	0.21	U	0.18	UL3	0.21	UL3	0.18	U	0.19	U			0.2	U	0.2	UM1	0.19	U	0.22	U	0.19	UL3	0.2	UL3	0.18	U
3&4-Methylphenol(m&p Cresol)	mg/kg	41,000	0.16	U	0.16	U	0.17	U	0.14	UL3	0.17	UL3	0.15	U	0.15	U			0.16	U	0.16	UM1	0.15	U	0.18	U	0.15	UL3	0.16	UL3	0.15	U
4-Nitroaniline	mg/kg	110	0.2	UL2	0.21	UL2	0.21	UL2	0.18	UL3	0.21	UL3	0.18	UL3	0.19	UL3			0.2	UL3	0.2	UM0L3	0.19	UL3	0.22	UL3	0.19	U	0.2	U	0.18	UL3
Acenaphthene	mg/kg	45,000	0.0081	U	0.0083	U	**0.0012**	J	**0.0033**	J	0.0083	U	0.0073	U	0.0078	U			**0.005**	J	**0.0019**	JR1	0.0077	U	0.0089	U	**0.036**	J	**0.063**		0.0073	U
Acenaphthylene	mg/kg	45,000	0.0081	U	**0.001**	J	**0.0016**	J	**0.042**		**0.0041**	J	0.0073	U	0.0078	U			**0.00064**	J	0.0082	U	**0.0013**	J	0.0089	U	**0.052**	J	**0.06**		0.0073	U
Acetophenone	mg/kg	120,000	0.08	U	0.082	U	0.084	U	0.072	U	0.083	U	0.073	U	0.078	U			0.078	U	0.082	UM1	0.076	U	0.088	U	0.074	U	0.082	U	0.074	U
Anthracene	mg/kg	230,000	0.0081	U	**0.00095**	J	**0.0058**	J	**0.037**		**0.0039**	J	0.0073	U	0.0078	U			**0.0055**	J	**0.0042**	J	**0.0016**	J	0.0089	U	**0.19**		**0.18**		0.0073	U
Benzaldehyde	mg/kg	120,000	0.08	UL2	0.082	UL2	0.084	UL2	0.072	UL2	0.083	UL2	0.073	UL2	0.078	UL2			0.078	UL2	0.082	UL2	0.076	UL2	0.088	UL2	0.074	UL2	0.082	UL2	0.074	UL2
Benzo(a)anthracene	mg/kg	2.9	0.0081	U	**0.0049**	J	**0.017**		**0.17**		**0.012**		**0.0038**	J	0.0078	U			**0.013**		**0.011**		**0.0043**	J	**0.0017**	J	**0.51**		**0.21**		**0.0014**	J
Benzo(a)pyrene	mg/kg	0.29	0.0081	U	**0.0031**	J	**0.013**		**0.23**		**0.014**		0.0073	U	0.0078	U	0.0085	U	**0.0043**	J	**0.0031**	J	**0.0045**	J	0.0089	U	**0.4**		**0.18**		0.0073	U
Benzo(b)fluoranthene	mg/kg	2.9	**0.0015**	Jip	**0.0067**	Jip	**0.028**	ip	**0.39**		**0.023**		**0.0068**	Jip	0.0078	U	0.0085	U	**0.056**	ip	**0.015**	ip	**0.017**	ip	**0.00092**	J	**1**	ip	**0.37**	ip	**0.001**	Jip
Benzo(g,h,i)perylene	mg/kg		0.0081	U	**0.0024**	J	**0.0075**	J	**0.14**		**0.014**		**0.00091**	J	0.0078	U			**0.015**		**0.0043**	J	**0.012**		0.0089	U	**0.11**		**0.06**		0.0073	U
Benzo(k)fluoranthene	mg/kg	29	0.0081	Uip	**0.005**	Jip	**0.021**	ip	**0.13**		**0.011**		**0.0065**	Jip	0.0078	U			**0.047**	ip	**0.013**	ip	**0.015**	ip	0.0089	U	**0.87**	ip	**0.31**	ip	0.0073	Uip
Biphenyl (Diphenyl)	mg/kg	200	0.08	U	0.082	U	0.084	U	0.072	U	0.083	U	0.073	U	0.078	U			0.078	U	0.082	UM1	0.076	U	0.088	U	0.074	UL3	**0.053**	JL1	0.074	U
bis(2-Ethylhexyl)phthalate	mg/kg	160	0.08	U	0.082	U	0.084	U	0.072	U	0.083	U	0.073	U	0.078	U			0.078	UL3	0.082	UM0L3	0.076	UL3	0.088	UL3	0.074	UISL3	0.082	UL3	0.074	U
Carbazole	mg/kg		0.08	U	0.082	U	0.084	U	0.072	U	0.083	U	0.073	U	0.078	U			0.078	U	0.082	U	0.076	U	0.088	U	**0.038**	J	**0.42**		0.074	U
Chrysene	mg/kg	290	**0.001**	J	**0.0034**	J	**0.012**		**0.19**		**0.019**		**0.0061**	J	0.0078	U			**0.028**		**0.0082**	J	**0.006**	J	**0.001**	J	**0.61**		**0.21**		**0.00085**	J
Dibenz(a,h)anthracene	mg/kg	0.29	0.0081	U	0.0083	U	**0.0028**	J	**0.04**		**0.003**	J	0.0073	U	0.0078	U			**0.004**	J	**0.0015**	J	**0.0027**	J	0.0089	U	**0.042**	J	**0.024**		0.0073	U
Diethylphthalate	mg/kg	660,000	0.08	U	0.082	U	0.084	U	0.072	UL3	0.083	UL3	0.073	U	0.078	U			0.078	UL3	0.082	UM0L3	0.076	UL3	0.088	UL3	0.074	UL3	0.082	UL3	0.074	U
Di-n-butylphthalate	mg/kg	82,000	0.08	U	0.082	U	0.084	U	0.072	UL3	0.083	UL3	0.073	U	0.078	U			0.078	UL3	0.082	UM0L3	0.076	UL3	0.088	UL3	0.074	UL3	0.082	UL3	0.074	U
Di-n-octylphthalate	mg/kg	8,200	0.08	U	0.082	U	0.084	U	0.072	UL3	0.083	UL3	0.073	UL3	0.078	UL3			0.078	UL3	0.082	UM0L3	0.076	UL3	0.088	UL3	0.074	UISL3	0.082	UISL3	0.074	UL3
Fluoranthene	mg/kg	30,000	**0.0017**	J	**0.0068**	J	**0.027**		**0.18**		**0.017**		**0.0073**	J	0.0078	U			**0.06**		**0.036**		**0.0097**		**0.0026**	J	**1.1**		**0.61**		**0.0012**	J
Fluorene	mg/kg	30,000	0.0081	U	0.0083	U	**0.0014**	J	**0.0085**		**0.0019**	J	0.0073	U	0.0078	U			**0.0029**	J	**0.0018**	JR1	0.0077	U	0.0089	U	**0.028**	J	**0.28**		0.0073	U
Hexachlorobenzene	mg/kg	0.96	0.08	U	0.082	U	0.084	U	0.072	U	0.083	U	0.073	U	0.078	U			0.078	UL3	0.082	UM0L3	0.076	UL3	0.088	UL3	0.074	U	0.082	U	0.074	U
Indeno(1,2,3-cd)pyrene	mg/kg	2.9	0.0081	U	**0.0019**	J	**0.0069**	J	**0.14**	L2	**0.012**	L2	0.0073	U	0.0078	U			**0.013**		**0.0035**	J	**0.0087**		0.0089	U	**0.099**		**0.065**		0.0073	U
Naphthalene	mg/kg	17	0.0081	U	0.0083	U	0.0085	U	**0.042**		**0.0098**		**0.0023**	J	0.0078	U			0.0079	U	0.0082	UR1	**0.0019**	J	0.0089	U	**0.11**		**2.3**		0.0073	U
N-Nitroso-di-n-propylamine	mg/kg	0.33	0.08	U	0.082	U	0.084	U	0.072	UL3	0.083	UL3	0.073	U	0.078	U			0.078	U	0.082	UM1	0.076	U	0.088	U	0.074	UL3	0.082	UL3	0.074	U
N-Nitrosodiphenylamine	mg/kg	470	0.08	UL3	0.082	UL3	0.084	UL3	0.072	U	0.083	U	0.073	U	0.078	U			0.078	U	0.082	UM1	0.076	U	0.088	U	0.074	UL3	0.082	UL3	0.074	U
Pentachlorophenol	mg/kg	4	0.2	UL3	0.21	UL3	0.21	UL3	0.18	UL3	0.21	UL3	0.18	UL3	0.19	UL3			0.2	UL3	0.2	UM0L3	0.19	UL3	0.22	UL3	0.19	U	0.2	U	0.18	UL3
Phenanthrene	mg/kg		**0.0016**	J	**0.0035**	J	**0.021**		**0.078**		**0.019**		**0.0028**	J	0.0078	U			**0.026**		**0.02**		**0.0095**		**0.0024**	J	**0.84**		**0.97**		**0.0022**	J
Phenol	mg/kg	250,000	0.08	U	0.082	U	0.084	U	0.072	UL3	0.083	UL3	0.073	U	0.078	U			0.078	UL3	0.082	UM0L3	0.076	UL3	0.088	UL3	0.074	UL3	0.082	UL3	0.074	U
Pyrene	mg/kg	23,000	**0.0017**	J	**0.0061**	J	**0.032**		**0.18**		**0.013**		**0.0045**	J	0.0078	U			**0.13**		**0.038**	M1	**0.0044**	J	**0.0015**	J	**1**		**0.44**		**0.001**	J
PCBs																																
Aroclor 1242	mg/kg	0.97			0.0633	U			0.0581	U			0.0538	U					0.0591	U			**0.0744**				0.0564	U			0.0546	U
Aroclor 1248	mg/kg	0.94			0.0633	U			0.0581	U			0.0538	U					0.0591	U			0.0606	U			0.0564	U			0.0546	U
Aroclor 1254	mg/kg	0.97			0.0633	U			0.0581	U			0.0538	U					0.0591	U			0.0606	U			0.0564	U			0.0546	U
Aroclor 1260	mg/kg	0.99			0.0633	U			0.0581	U			0.0538	U					0.0591	U			0.0606	U			0.0564	U			0.0546	U
Aroclor 1262	mg/kg				0.0633	U			0.0581	U			0.0538	U					0.0591	U			0.0606	U			0.0564	U			0.0546	U
Aroclor 1268	mg/kg				0.0633	U			0.0581	U			0.0538	U					0.0591	U			0.0606	U			0.0564	U			0.0546	U
PCB, Total	mg/kg	0.97			0.0633	U			0.0581	U			0.0538	U					0.0591	U			**0.0744**				0.0564	U			0.0546	U
TPH/Oil and Grease																																
Diesel Range Organics	mg/kg	620	**9.1**	L2	**5.4**	JL2	**12.4**	L2	**44.3**	L2	**23**	L2	**6.5**	JL2	**3**	JL2			**96.5**	L2	**9.9**	L2M0	**6.4**	JL2	8.9	UL2	**436**	L2	**117**	L2	7.3	UL2
Gasoline Range Organics	mg/kg	620	9.6	U	**82.6**		10.8	U	**23.3**		13.5	U	**18.5**		9.2	U			14.9	U	10	U	17	U	11.3	U	11.6	U	10.3	U	12.6	U

Detections in bold

Blank spaces indicate that the parameter was not analyzed for this sample

*PAH compounds were analyzed via SIM

A glossary of laboratory flag keys can be viewed in the attached laboratory reports

Values in Red indicate an exceedance of the Project Action Limit (PAL)

Table 5
Summary of Organics Detected in Soil
Parcel B22
Tradepoint Atlantic
Sparrows Point, Maryland

Parameter	Units	PAL	B22-171-SB-5 Soil 5/17/2016		B22-171-SB-10 Soil 5/17/2016		B22-172-SB-1 Soil 5/16/2016		B22-172-SB-5 Soil 5/16/2016		B22-173-SB-1 Soil 6/2/2016		B22-173-SB-4 Soil 6/2/2016		B22-174-SB-1 Soil 6/3/2016		B22-174-SB-4 Soil 6/3/2016		B22-175-SB-1 Soil 6/3/2016		B22-175-SB-4 Soil 6/3/2016	
Volatile Organic Compounds																						
1,1,1-Trichloroethane	mg/kg	36,000	0.011	U			0.0047	U	0.0053	U	0.0053	U	0.0095	U	0.0065	U1c	0.0053	U1c	0.005	U	0.0051	U
1,1,2-Trichloroethane	mg/kg	5	0.011	U			0.0047	U	0.0053	U	0.0053	U	0.0095	U	0.0065	U1c	0.0053	U1c	0.005	U	0.0051	U
1,1,2-Trichlorotrifluoroethane	mg/kg	170,000	0.11	U			0.047	U	0.053	U	0.053	U	0.095	U	0.065	U1c	0.053	U1c	0.05	U	0.051	U
1,1-Dichloroethane	mg/kg	16	0.011	U			0.0047	U	0.0053	U	0.0053	U	0.0095	U	0.0065	U1c	0.0053	U1c	0.005	U	0.0051	U
1,1-Dichloroethene	mg/kg	1,000	0.011	U			0.0047	U	0.0053	U	0.0053	U	0.0095	U	0.0065	U1c	0.0053	U1c	0.005	U	0.0051	U
1,2,3-Trichlorobenzene	mg/kg	930	0.011	U			0.0047	U	0.0053	U	0.0053	U	0.0095	U	0.0065	U1c	0.0053	U1c	0.005	U	0.0051	U
1,2,4-Trichlorobenzene	mg/kg	110	0.011	U			0.0047	U	0.0053	U	0.0053	U	0.0095	U	0.0065	U1c	0.0053	U1c	0.005	U	0.0051	U
1,2-Dichloroethane	mg/kg	2	0.011	U			0.0047	U	0.0053	U	0.0053	U	0.0095	U	0.0065	U1c	0.0053	U1c	0.005	U	0.0051	U
1,2-Dichloroethene (Total)	mg/kg	2,300	0.022	U			0.0095	U	0.011	U	0.011	U	0.019	U	0.013	U	0.011	U	0.0099	U	0.01	U
1,4-Dichlorobenzene	mg/kg	11	0.011	U			0.0047	U	0.0053	U	0.0053	U	0.0095	U	0.0065	U1c	0.0053	U1c	0.005	U	0.0051	U
1,4-Dioxane	mg/kg	24	0.22	U			0.095	U	0.11	U	0.11	U	0.19	U	0.13	U1c	0.11	U1c	0.099	U	0.1	U
2-Butanone (MEK)	mg/kg	190,000	0.022	U			0.0095	U	0.011	U	0.011	U	0.019	U	0.013	U1c	0.011	U1c	**0.033**		0.01	U
2-Hexanone	mg/kg	1,300	0.022	UL3			0.0095	UL3	0.011	UL3	0.011	U	0.019	U	0.013	U1c	0.011	U1c	0.0099	UL3	0.01	UL3
4-Methyl-2-pentanone (MIBK)	mg/kg	56,000	0.022	U			0.0095	U	0.011	U	0.011	U	0.019	U	0.013	U1c	0.011	U1c	**0.0018**	J	0.01	U
Acetone	mg/kg	670,000	0.022	U			0.0095	U	**0.012**		0.011	U	0.019	U	**0.013**	J1c	**0.0063**	J1c	**0.18**		0.01	U
Benzene	mg/kg	5.1	0.011	U			0.0047	U	0.0053	U	0.0053	U	0.0095	U	0.0065	U1c	0.0053	U1c	0.005	U	**0.0042**	J
Chlorobenzene	mg/kg	1,300	0.011	U			0.0047	U	0.0053	U	0.0053	U	0.0095	U	0.0065	U1c	0.0053	U1c	0.005	U	0.0051	U
Chloroethane	mg/kg	57,000	0.011	U			0.0047	U	0.0053	U	0.0053	U	0.0095	U	0.0065	U1c	0.0053	U1c	0.005	U	0.0051	U
Chloroform	mg/kg	1.4	0.011	U			0.0047	U	0.0053	U	0.0053	U	0.0095	U	0.0065	U1c	0.0053	U1c	0.005	U	0.0051	U
cis-1,2-Dichloroethene	mg/kg	2,300	0.011	U			0.0047	U	0.0053	U	0.0053	U	0.0095	U	0.0065	U1c	0.0053	U1c	0.005	U	0.0051	U
Cyclohexane	mg/kg	27,000	0.022	U			0.0095	U	0.011	U	0.011	U	0.019	U	0.013	U1c	0.011	U1c	0.0099	U	0.01	U
Ethylbenzene	mg/kg	25	0.011	U			0.0047	U	0.0053	U	0.0053	U	0.0095	U	0.0065	U1c	0.0053	U1c	0.005	U	0.0051	U
Isopropylbenzene (Cumene)	mg/kg	9,900	0.011	U			0.0047	U	0.0053	U	0.0053	U	0.0095	U	0.0065	U1c	0.0053	U1c	0.005	U	0.0051	U
Methyl acetate	mg/kg	1,200,000	0.11	U			**0.0024**	J	0.053	U	0.053	U	0.095	U	0.065	U1c	0.053	U1c	0.05	U	0.051	U
Methylene Chloride	mg/kg	1,000	0.011	U			0.0047	U	0.0053	U	0.0053	U	0.0095	U	0.0065	U1c	0.0053	U1c	0.005	U	0.0051	U
Styrene	mg/kg	35,000	0.011	U			0.0047	U	0.0053	U	0.0053	U	0.0095	U	0.0065	U1c	0.0053	U1c	0.005	U	0.0051	U
Tetrachloroethene	mg/kg	100	0.011	U			0.0047	U	0.0053	U	0.0053	U	0.0095	U	0.0065	U1c	0.0053	U1c	0.005	U	0.0051	U
Toluene	mg/kg	47,000	0.011	U			0.0047	U	0.0053	U	0.0053	U	**0.0036**	J	0.0065	U1c	0.0053	U1c	0.005	U	0.0051	U
trans-1,2-Dichloroethene	mg/kg	23,000	0.011	U			0.0047	U	0.0053	U	0.0053	U	0.0095	U	0.0065	U1c	0.0053	U1c	0.005	U	0.0051	U
Trichloroethene	mg/kg	6	0.011	U			0.0047	U	0.0053	U	0.0053	U	0.0095	U	0.0065	U1c	0.0053	U1c	0.005	U	0.0051	U
Trichlorofluoromethane	mg/kg	3,100	0.011	U			0.0047	U	0.0053	U	0.0053	U	0.0095	U	0.0065	U1c	0.0053	U1c	0.005	U	0.0051	U
Vinyl chloride	mg/kg	1.7	0.011	U			0.0047	U	0.0053	U	0.0053	U	0.0095	U	0.0065	U1c	0.0053	U1c	0.005	U	0.0051	U
Xylene (Total)	mg/kg	2,800	0.032	U			0.014	U	0.016	U	0.016	U	0.028	U	0.019	U	0.016	U	0.015	U	0.015	U
Semi-Volatile Organic Compounds*																						
1,2,4,5-Tetrachlorobenzene	mg/kg	350	**0.095**				0.077	U	0.08	U	0.075	U	**0.27**		0.076	U	0.082	U	0.077	U	0.074	U
2,4-Dimethylphenol	mg/kg	16,000	0.088	U			0.077	U	**0.052**	J	0.075	U	0.081	U	0.076	U	0.082	U	**0.016**	J	**0.017**	J
2-Chloronaphthalene	mg/kg	60,000	**0.15**				0.077	U	0.08	U	0.075	U	**0.21**		0.076	U	0.082	U	0.077	U	0.074	U
2-Methylnaphthalene	mg/kg	3,000	**0.16**				0.0078	U	0.0081	U	**0.014**		**0.35**		**0.024**	J	0.081	U	**0.34**		**0.76**	
2-Methylphenol(o-Cresol)	mg/kg	41,000	0.088	U			0.077	U	0.08	U	0.075	U	**0.017**	J	0.076	U	0.082	U	**0.021**	J	**0.033**	J
2-Nitroaniline	mg/kg	8,000	0.22	U			0.19	U	0.2	U	0.19	U	0.2	U	0.19	U	0.21	U	0.19	U	0.18	U
3&4-Methylphenol(m&p Cresol)	mg/kg	41,000	**0.023**	J			0.15	U	0.16	U	0.15	U	**0.05**	J	0.15	U	0.16	U	**0.074**	J	**0.13**	J
4-Nitroaniline	mg/kg	110	0.22	UL3			0.19	UL3	0.2	UL3	0.19	U	0.2	U	0.19	U	0.21	U	0.19	UL2	0.18	UL2
Acenaphthene	mg/kg	45,000	**0.011**				0.0078	U	0.0081	U	**0.0071**	J	**0.011**		0.077	U	**0.0082**	J	**0.15**		**0.72**	
Acenaphthylene	mg/kg	45,000	**0.057**				**0.0011**	J	**0.009**		**0.0098**		**0.35**		**0.02**	J	**0.031**	J	**3.1**		**4.2**	
Acetophenone	mg/kg	120,000	0.088	U			0.077	U	0.08	U	0.075	U	0.081	U	0.076	U	0.082	U	**0.034**	J	**0.031**	J
Anthracene	mg/kg	230,000	**0.05**				0.0078	U	0.0081	U	**0.034**		**0.065**		**0.051**	J	**0.058**	J	**3.1**		**6.9**	
Benzaldehyde	mg/kg	120,000	**0.14**	L2			0.077	UL2	0.08	UL2	0.075	UL2	**0.1**	L2	**0.017**	JL2	0.082	UL2	**0.044**	JL2	**0.023**	JL2
Benzo(a)anthracene	mg/kg	2.9	**0.035**				**0.0043**	J	0.0081	U	**0.065**		**0.14**		**0.52**		**0.44**		**13.9**		**19**	
Benzo(a)pyrene	mg/kg	0.29	**0.027**				**0.0047**	J	0.0081	U	**0.058**		**0.17**		**0.57**		**0.52**		**11.1**		**14.9**	
Benzo(b)fluoranthene	mg/kg	2.9	**0.056**	ip			**0.0095**	ip	0.0081	U	**0.16**	ip	**0.44**	ip	**1.2**	ip	**1.1**	ip	**21.6**	ip	**31.1**	ip
Benzo(g,h,i)perylene	mg/kg		**0.028**				**0.0045**	J	0.0081	U	**0.022**		**0.073**		**0.38**		**0.27**		**5.3**		**6.5**	
Benzo(k)fluoranthene	mg/kg	29	**0.054**	ip			**0.009**	ip	0.0081	U	**0.14**	ip	**0.37**	ip	**0.93**	ip	**0.96**	ip	**18.8**	ip	**27.3**	ip
Biphenyl (Diphenyl)	mg/kg	200	**0.049**	J			0.077	U	0.08	U	0.075	U	**0.038**	J	**0.16**		**0.019**	J	**0.18**		**0.4**	
bis(2-Ethylhexyl)phthalate	mg/kg	160	0.088	U			0.077	UL3	0.08	UL3	0.075	UL2	0.081	UL2	**0.062**	JISL2	0.082	UISL2	**0.34**	IS	**0.053**	JIS
Carbazole	mg/kg		0.088	U			0.077	U	0.08	U	0.075	UL2	**0.033**	JL2	0.076	UL2	0.082	UL2	**1.1**		**3.3**	
Chrysene	mg/kg	290	**0.11**				**0.0036**	J	0.0081	U	**0.079**		**0.2**		**0.44**		**0.44**		**10.4**		**14.8**	
Dibenz(a,h)anthracene	mg/kg	0.29	**0.013**				**0.0012**	J	0.0081	U	**0.0083**		**0.03**		**0.12**		**0.089**		**2.2**		**3**	
Diethylphthalate	mg/kg	660,000	0.088	U			0.077	UL3	0.08	UL3	0.075	U	0.081	U	0.076	U	0.082	U	0.077	U	0.074	U
Di-n-butylphthalate	mg/kg	82,000	0.088	U			0.077	UL3	0.08	UL3	0.075	UL2	0.081	UL2	0.076	UL2	0.082	UL2	0.077	U	0.074	U
Di-n-octylphthalate	mg/kg	8,200	0.088	UL3			0.077	UL3	0.08	UL3	0.075	U	0.081	UIS	0.076	UIS	0.082	UIS	0.077	UIS	0.074	UIS
Fluoranthene	mg/kg	30,000	**0.08**				**0.0049**	J	0.0081	U	**0.15**		**0.26**		**0.52**		**0.38**		**23.4**		**51**	
Fluorene	mg/kg	30,000	**0.022**				0.0078	U	0.0081	U	**0.01**		**0.029**		0.077	U	**0.01**	J	**0.68**		**3.8**	
Hexachlorobenzene	mg/kg	0.96	0.088	U			0.077	U	0.08	U	0.075	U	0.081	U	0.076	U	0.082	U	0.077	U	0.074	U
Indeno(1,2,3-cd)pyrene	mg/kg	2.9	**0.014**				**0.0037**	J	0.0081	U	**0.023**		**0.084**		**0.33**		**0.25**		**6**		**7.6**	
Naphthalene	mg/kg	17	**0.18**				**0.0025**	J	**0.002**	J	**0.014**		**0.65**		**0.022**	J	**0.033**	J	**2.4**		**2.8**	
N-Nitroso-di-n-propylamine	mg/kg	0.33	0.088	U			0.077	U	0.08	U	0.075	U	0.081	U	0.076	U	0.082	U	0.077	U	0.074	U
N-Nitrosodiphenylamine	mg/kg	470	0.088	U			0.077	U	0.08	U	0.075	U	0.081	U	0.076	U	0.082	U	0.077	UL3	0.074	UL3
Pentachlorophenol	mg/kg	4	0.22	UL3			0.19	UL3	0.2	UL3	0.19	UL2	0.2	UL2	0.19	UL2	0.21	UL2	0.19	UL3	0.18	UL3
Phenanthrene	mg/kg		**0.36**				**0.0023**	J	0.0081	U	**0.12**		**0.48**		**0.14**		**0.16**		**12.2**		**35.9**	
Phenol	mg/kg	250,000	0.088	U			0.077	U	0.08	U	0.075	U	**0.023**	J	0.076	U	0.082	U	**0.076**	J	**0.17**	
Pyrene	mg/kg	23,000	**0.079**				**0.0047**	J	0.0081	U	**0.11**		**0.24**		**0.5**		**0.34**		**17.5**		**33.8**	
PCBs																						
Aroclor 1242	mg/kg	0.97					0.0568	U			0.0553	U			0.231	U			0.058	U		
Aroclor 1248	mg/kg	0.94					0.0568	U			0.0553	U			0.231	U			0.058	U		
Aroclor 1254	mg/kg	0.97					0.0568	U			0.0553	U			**6.63**				**1.22**			
Aroclor 1260	mg/kg	0.99					0.0568	U			0.0553	U			**2.72**				0.058	U		
Aroclor 1262	mg/kg						0.0568	U			**0.0244**	J			0.231	U			0.058	U		
Aroclor 1268	mg/kg						0.0568	U			0.0553	U			0.231	U			0.058	U		
PCB, Total	mg/kg	0.97					0.0568	U			**0.0244**	J			**9.35**				**1.22**			
TPH/Oil and Grease																						
Diesel Range Organics	mg/kg	620	**18.9**	L2			**3.6**	JL2	**706**	L2	**34.3**	L2	**99.2**	L2	**149**	L2	**257**	L2	**803**	L2	**508**	L2
Gasoline Range Organics	mg/kg	620	19.3	U			13.6	U	**7.5**	J	11.5	U	20.3	U	11.2	U	11.2	U	11.3	U	10.5	U

Detections in bold

Blank spaces indicate that the parameter was not analyzed for this sample

*PAH compounds were analyzed via SIM

A glossary of laboratory flag keys can be viewed in the attached laboratory reports

Values in Red indicate an exceedance of the Project Action Limit (PAL)

Table 5
Summary of Organics Detected in Soil
Parcel B22
Tradepoint Atlantic
Sparrows Point, Maryland

Parameter	Units	PAL	B22-176-SB-1 Soil 6/6/2016		B22-176-SB-8 Soil 6/6/2016		B22-177-SB-1 Soil 6/6/2016		B22-177-SB-5 Soil 6/6/2016		B22-178-SB-1 Soil 6/3/2016		B22-178-SB-6 Soil 6/3/2016		B22-179-SB-1 Soil 6/6/2016		B22-179-SB-6 Soil 6/6/2016	
Volatile Organic Compounds																		
1,1,1-Trichloroethane	mg/kg	36,000	0.0047	U	0.0048	U	0.0061	U	0.005	U	0.005	U1c	0.0042	U1c	0.0061	U	0.006	U
1,1,2-Trichloroethane	mg/kg	5	0.0047	U	0.0048	U	0.0061	U	0.005	U	0.005	U1c	0.0042	U1c	0.0061	U	0.006	U
1,1,2-Trichlorotrifluoroethane	mg/kg	170,000	0.047	U	0.048	U	0.061	U	0.05	U	0.05	U1c	0.042	U1c	0.061	U	0.06	U
1,1-Dichloroethane	mg/kg	16	0.0047	U	0.0048	U	0.0061	U	0.005	U	0.005	U1c	0.0042	U1c	0.0061	U	0.006	U
1,1-Dichloroethene	mg/kg	1,000	0.0047	U	0.0048	U	0.0061	U	0.005	U	0.005	U1c	0.0042	U1c	0.0061	U	0.006	U
1,2,3-Trichlorobenzene	mg/kg	930	0.0047	U	0.0048	U	0.0061	U	0.005	U	0.005	U1c	0.0042	U1c	0.0061	U	0.006	U
1,2,4-Trichlorobenzene	mg/kg	110	0.0047	U	0.0048	U	0.0061	U	0.005	U	0.005	U1c	0.0042	U1c	0.0061	U	0.006	U
1,2-Dichloroethane	mg/kg	2	0.0047	U	0.0048	U	0.0061	U	0.005	U	0.005	U1c	0.0042	U1c	0.0061	U	0.006	U
1,2-Dichloroethene (Total)	mg/kg	2,300	0.0093	U	0.0096	U	0.012	U	0.0099	U	0.01	U	0.0084	U	0.012	U	0.012	U
1,4-Dichlorobenzene	mg/kg	11	0.0047	U	0.0048	U	0.0061	U	0.005	U	0.005	U1c	0.0042	U1c	0.0061	U	0.006	U
1,4-Dioxane	mg/kg	24	0.093	U	0.096	U	0.12	U	0.099	U	0.1	U1c	0.084	U1c	0.12	U	0.12	U
2-Butanone (MEK)	mg/kg	190,000	0.0093	U	**0.0037**	J	0.012	U	**0.018**		**0.0024**	J1c	0.0084	U1c	0.012	U	0.012	U
2-Hexanone	mg/kg	1,300	0.0093	UL3	0.0096	UL3	0.012	UL3	0.0099	UL3	0.01	U1c	0.0084	U1c	0.012	UL3	0.012	UL3
4-Methyl-2-pentanone (MIBK)	mg/kg	56,000	0.0093	U	0.0096	U	0.012	U	0.0099	U	0.01	U1c	0.0084	U1c	0.012	U	0.012	U
Acetone	mg/kg	670,000	**0.0067**	J	**0.034**		0.012	U	**0.085**		**0.0058**	J1c	**0.0059**	J1c	0.012	U	0.012	U
Benzene	mg/kg	5.1	0.0047	U	0.0048	U	0.0061	U	**0.0027**	J	**0.0051**	1c	0.0042	U1c	0.0061	U	0.006	U
Chlorobenzene	mg/kg	1,300	0.0047	U	0.0048	U	0.0061	U	0.005	U	0.005	U1c	0.0042	U1c	0.0061	U	0.006	U
Chloroethane	mg/kg	57,000	0.0047	U	0.0048	U	0.0061	U	0.005	U	0.005	U1c	0.0042	U1c	0.0061	U	0.006	U
Chloroform	mg/kg	1.4	0.0047	U	0.0048	U	0.0061	U	0.005	U	0.005	U1c	0.0042	U1c	0.0061	U	0.006	U
cis-1,2-Dichloroethene	mg/kg	2,300	0.0047	U	0.0048	U	0.0061	U	0.005	U	0.005	U1c	0.0042	U1c	0.0061	U	0.006	U
Cyclohexane	mg/kg	27,000	0.0093	U	0.0096	U	0.012	U	0.0099	U	0.01	U1c	0.0084	U1c	0.012	U	0.012	U
Ethylbenzene	mg/kg	25	0.0047	U	0.0048	U	0.0061	U	**0.011**		0.005	U1c	0.0042	U1c	0.0061	U	0.006	U
Isopropylbenzene (Cumene)	mg/kg	9,900	0.0047	U	0.0048	U	0.0061	U	**0.0036**	J	0.005	U1c	0.0042	U1c	0.0061	U	0.006	U
Methyl acetate	mg/kg	1,200,000	0.047	U	0.048	U	0.061	U	0.05	U	0.05	U1c	0.042	U1c	0.061	U	0.06	U
Methylene Chloride	mg/kg	1,000	0.0047	U	0.0048	U	0.0061	U	0.005	U	0.005	U1c	0.0042	U1c	0.0061	U	0.006	U
Styrene	mg/kg	35,000	0.0047	U	0.0048	U	0.0061	U	0.005	U	0.005	U1c	0.0042	U1c	0.0061	U	0.006	U
Tetrachloroethene	mg/kg	100	0.0047	U	0.0048	U	0.0061	U	0.005	U	0.005	U1c	0.0042	U1c	0.0061	U	0.006	U
Toluene	mg/kg	47,000	0.0047	U	0.0048	U	0.0061	U	**0.0038**	J	**0.0039**	J1c	0.0042	U1c	0.0061	U	0.006	U
trans-1,2-Dichloroethene	mg/kg	23,000	0.0047	U	0.0048	U	0.0061	U	0.005	U	0.005	U1c	0.0042	U1c	0.0061	U	0.006	U
Trichloroethene	mg/kg	6	0.0047	U	0.0048	U	0.0061	U	0.005	U	0.005	U1c	0.0042	U1c	0.0061	U	0.006	U
Trichlorofluoromethane	mg/kg	3,100	0.0047	U	0.0048	U	0.0061	U	0.005	U	0.005	U1c	0.0042	U1c	0.0061	U	0.006	U
Vinyl chloride	mg/kg	1.7	0.0047	U	0.0048	U	0.0061	U	0.005	U	0.005	U1c	0.0042	U1c	0.0061	U	0.006	U
Xylene (Total)	mg/kg	2,800	0.014	U	0.014	U	0.018	U	**0.04**		0.015	U	0.013	U	0.018	U	0.018	U
Semi-Volatile Organic Compounds*																		
1,2,4,5-Tetrachlorobenzene	mg/kg	350	0.072	U	0.077	U	0.071	U	0.082	U	0.069	U	0.067	U	0.075	U	0.078	U
2,4-Dimethylphenol	mg/kg	16,000	0.072	U	0.077	U	0.071	U	0.082	U	0.069	U	0.067	U	0.075	U	**0.032**	J
2-Chloronaphthalene	mg/kg	60,000	0.072	U	0.077	U	0.071	U	0.082	U	0.069	U	0.067	U	0.075	U	0.078	U
2-Methylnaphthalene	mg/kg	3,000	**0.11**		**0.074**	J	**0.0079**		**0.0047**	J	**0.032**		**0.022**		0.0075	U	**0.43**	
2-Methylphenol(o-Cresol)	mg/kg	41,000	0.072	U	0.077	U	0.071	U	0.082	U	0.069	U	0.067	U	0.075	U	0.078	U
2-Nitroaniline	mg/kg	8,000	0.18	U	0.19	U	0.18	U	0.2	U	0.17	U	0.17	U	0.19	U	0.19	U
3&4-Methylphenol(m&p Cresol)	mg/kg	41,000	0.14	U	0.15	U	0.14	U	0.16	U	0.14	U	0.13	U	0.15	U	0.16	U
4-Nitroaniline	mg/kg	110	0.18	UL2	0.19	UL2	0.18	UL2M0	0.2	UL2	0.17	U	0.17	U	0.19	UL2	0.19	UL2
Acenaphthene	mg/kg	45,000	**0.29**		**0.014**	J	0.0072	U	**0.00086**	J	**0.099**		**0.024**		0.0075	U	**0.41**	
Acenaphthylene	mg/kg	45,000	**0.018**		**0.22**		**0.0038**	J	**0.0015**	J	**0.011**		**0.011**		0.0075	U	**0.032**	
Acetophenone	mg/kg	120,000	0.072	U	0.077	U	0.071	U	0.082	U	0.069	U	0.067	U	0.075	U	0.078	U
Anthracene	mg/kg	230,000	**0.69**		**0.35**		**0.0023**	J	**0.002**	J	**0.03**		**0.011**		**0.0008**	J	**0.041**	
Benzaldehyde	mg/kg	120,000	0.072	UL2	0.077	UL2	0.071	UL2M0	0.082	UL2	0.069	UL2	0.067	UL2	0.075	UL2	0.078	UL2
Benzo(a)anthracene	mg/kg	2.9	**0.93**		**2.4**		**0.0099**		**0.0089**		**0.17**		**0.054**		**0.0047**	J	**0.28**	
Benzo(a)pyrene	mg/kg	0.29	**0.61**		**2.2**		**0.0098**		**0.0071**	J	**0.34**		**0.1**		**0.0042**	J	**0.16**	
Benzo(b)fluoranthene	mg/kg	2.9	**1.3**	ip	**4.6**	ip	**0.026**	ip	**0.02**	ip	**0.61**	ip	**0.21**	ip	**0.0097**	ip	**0.5**	ip
Benzo(g,h,i)perylene	mg/kg		**0.3**		**1.3**		**0.0093**		**0.0054**	J	**0.23**		**0.064**		**0.0026**	J	**0.068**	
Benzo(k)fluoranthene	mg/kg	29	**1.1**	ip	**4**	ip	**0.023**	ip	**0.018**	ip	**0.51**	ip	**0.18**	ip	**0.0085**	ip	**0.44**	ip
Biphenyl (Diphenyl)	mg/kg	200	0.072	U	0.077	U	0.071	U	0.082	U	0.069	U	0.067	U	0.075	U	**0.096**	
bis(2-Ethylhexyl)phthalate	mg/kg	160	0.072	U	0.077	UIS	0.071	U	0.082	U	0.069	UISL2	**0.024**	JISL2	0.075	U	0.078	U
Carbazole	mg/kg		0.072	U	**0.081**		0.071	U	0.082	U	0.069	UL2	0.067	UL2	0.075	U	**0.14**	
Chrysene	mg/kg	290	**0.85**		**2.3**		**0.014**		**0.011**		**0.18**		**0.069**		**0.0041**	J	**0.45**	
Dibenz(a,h)anthracene	mg/kg	0.29	**0.14**		**0.49**		**0.0026**	J	**0.0019**	J	**0.089**		**0.024**		0.0075	U	**0.028**	
Diethylphthalate	mg/kg	660,000	0.072	U	0.077	U	0.071	U	0.082	U	0.069	U	0.067	U	0.075	U	0.078	U
Di-n-butylphthalate	mg/kg	82,000	0.072	U	0.077	U	0.071	U	0.082	U	0.069	UL2	0.067	UL2	0.075	U	0.078	U
Di-n-octylphthalate	mg/kg	8,200	0.072	U	0.077	UIS	0.071	UM1	0.082	U	0.069	UIS	0.067	UIS	0.075	U	0.078	U
Fluoranthene	mg/kg	30,000	**1.5**		**3.7**		**0.019**		**0.019**		**0.15**		**0.059**		**0.0064**	J	**0.52**	
Fluorene	mg/kg	30,000	**0.34**		**0.048**	J	0.0072	U	**0.0014**	J	**0.012**		**0.0043**	J	0.0075	U	**0.1**	
Hexachlorobenzene	mg/kg	0.96	0.072	U	0.077	U	0.071	UM1	0.082	U	0.069	U	0.067	U	0.075	U	0.078	U
Indeno(1,2,3-cd)pyrene	mg/kg	2.9	**0.32**		**1.3**		**0.0075**		**0.0051**	J	**0.22**		**0.061**		**0.0024**	J	**0.074**	
Naphthalene	mg/kg	17	**0.074**		**0.14**		**0.0082**		**0.0057**	J	**0.08**		**0.086**		0.0075	U	**3.6**	
N-Nitroso-di-n-propylamine	mg/kg	0.33	0.072	U	0.077	U	0.071	U	0.082	U	0.069	U	0.067	U	0.075	U	0.078	U
N-Nitrosodiphenylamine	mg/kg	470	0.072	U	0.077	U	0.071	UM1	0.082	U	0.069	U	0.067	U	0.075	U	0.078	U
Pentachlorophenol	mg/kg	4	0.18	UL3	0.19	UL3	0.18	UM0L3	0.2	UL3	0.17	UL2	0.17	UL2	0.19	UL3	0.19	UL3
Phenanthrene	mg/kg		**1.8**		**0.64**		**0.012**		**0.009**		**0.081**		**0.039**		**0.004**	J	**0.17**	
Phenol	mg/kg	250,000	0.072	U	0.077	U	0.071	UM1	0.082	U	0.069	U	0.067	U	0.075	U	0.078	U
Pyrene	mg/kg	23,000	**1.1**		**2.9**		**0.015**		**0.014**		**0.16**		**0.058**		**0.0055**	J	**0.41**	
PCBs																		
Aroclor 1242	mg/kg	0.97	0.0539	U			0.0541	U			0.0578	U			0.0532	U		
Aroclor 1248	mg/kg	0.94	0.0539	U			0.0541	U			0.0578	U			0.0532	U		
Aroclor 1254	mg/kg	0.97	0.0539	U			0.0541	U			0.0578	U			0.0532	U		
Aroclor 1260	mg/kg	0.99	0.0539	U			0.0541	U			**0.332**				0.0532	U		
Aroclor 1262	mg/kg		0.0539	U			0.0541	U			0.0578	U			0.0532	U		
Aroclor 1268	mg/kg		0.0539	U			0.0541	U			0.0578	U			0.0532	U		
PCB, Total	mg/kg	0.97	0.0539	U			0.0541	U			**0.332**				0.0532	U		
TPH/Oil and Grease																		
Diesel Range Organics	mg/kg	620	**102**	L2	**112**	L2	**36.8**	L2	**11.3**	L2	**125**	L2	**105**	L2	**6.6**	JL2	**14**	L2
Gasoline Range Organics	mg/kg	620	9.6	U	9.2	U	13.6	U	10.1	U	10.1	U	11.3	U	13.3	U	14.3	U

Detections in bold

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Values in Red indicate an exceedance of the Project Action Limit (PAL)

Table 6
Summary of Inorganics Detected in Soil
Parcel B22
Tradepoint Atlantic
Sparrows Point, Maryland

Parameter	Units	PAL	B22-001-SB-1 Soil 6/2/2016		B22-001-SB-4 Soil 6/3/2016		B22-002-SB-1 Soil 6/4/2016		B22-002-SB-7 Soil 6/5/2016		B22-002-SB-10 Soil 6/6/2016		B22-003-SB-1 Soil 5/31/2016		B22-003-SB-4 Soil 5/31/2016	
Metals																
Aluminum	mg/kg	1,100,000	**15,800**		**1,860**		**3,050**		**15,800**	M6			**15,200**		**11,200**	
Antimony	mg/kg	470	2.5	U	2.8	U	2.5	U	2.9	UM1			3	U	3	U
Arsenic	mg/kg	3	**9.3**		**17.6**		**11.6**		**7.6**		2.2	U	**4.3**		**5.7**	
Barium	mg/kg	220,000	**324**		**114**		**70.5**		**57.2**	M1R1			**73**		**17.6**	
Beryllium	mg/kg	2,300	**1.7**		0.94	U	**0.27**	J	**1.1**				**0.78**	J	**0.87**	J
Cadmium	mg/kg	980	**0.5**	JB	1.4	U	**1.1**	JB	**0.2**	JB			1.5	U	1.5	U
Chromium	mg/kg	120,000	**89.7**		**101**		**123**		**32.7**				**18.7**		**14.2**	
Chromium VI	mg/kg	6.3	**0.29**	JB	**0.39**	JB	**0.42**	JB	**0.34**	JBM1			**0.38**	JB	**0.35**	JB
Cobalt	mg/kg	350	**30.1**		**20.7**		**35.2**		**5.9**				**2.7**	J	**2.1**	J
Copper	mg/kg	47,000	**297**		**268**		**244**		**16**				**10.5**		**10.5**	
Iron	mg/kg	820,000	**232,000**		**179,000**		**313,000**		**26,800**	M6R1			**8,150**		**6,930**	
Lead	mg/kg	800	**138**		**65.4**		**183**		**23.2**				**10.4**		**10.1**	
Manganese	mg/kg	26,000	**3,780**		**875**		**2,010**		**129**	M1			**29.6**		**17.5**	
Mercury	mg/kg	350	**0.013**	J	**0.013**	J	**0.018**	J	**0.043**	JM1			0.13	U	**0.0033**	J
Nickel	mg/kg	22,000	**115**		**185**		**87.9**		**17.2**				**9.3**	JB	**9.4**	JB
Selenium	mg/kg	5,800	3.3	U	3.8	U	3.3	U	3.8	U			4	U	4	U
Silver	mg/kg	5,800	**2.5**	J	**2.3**	J	**4.5**		2.9	U			3	U	3	U
Thallium	mg/kg	12	8.4	U	9.4	U	8.3	U	9.6	U			9.9	U	9.9	U
Vanadium	mg/kg	5,800	**21.1**		**17.3**		**30.9**		**44.1**	M1R1			**20.2**		**19.5**	
Zinc	mg/kg	350,000	**62.3**		**24.2**		**73.9**		**58.3**	M1			**23.3**		**17.6**	
Other																
Cyanide	mg/kg	150	**0.095**	J	**0.05**	J	**0.36**	J	**0.49**	JM1			0.66	U	**0.074**	J

Detections in bold

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Values in Red indicate an exceedance of the Project Action Limit (PAL)

Table 6
Summary of Inorganics Detected in Soil
Parcel B22
Tradepoint Atlantic
Sparrows Point, Maryland

Parameter	Units	PAL	B22-004-SB-1 Soil 5/31/2016		B22-004-SB-4 Soil 5/31/2016		B22-005-SB-1 Soil 5/20/2016		B22-005-SB-4 Soil 5/20/2016		B22-005-SB-10 Soil 5/20/2016		B22-006-SB-1 Soil 5/20/2016		B22-006-SB-7 Soil 5/20/2016	
Metals																
Aluminum	mg/kg	1,100,000	**13,900**		**15,200**		**34,400**		**11,600**				**8,060**		**10,900**	
Antimony	mg/kg	470	2.6	U	2.9	U	2.7	U	3	U			3.2	U	3.2	U
Arsenic	mg/kg	3	**3.8**		2.4	U	**4.7**		**10.1**		**4.8**		**3**		**3.8**	
Barium	mg/kg	220,000	**83.4**		**92**		**311**		**103**				**82.9**		**45.1**	
Beryllium	mg/kg	2,300	**0.57**	J	**0.54**	J	**5**		**0.4**	J			**0.27**	J	**0.51**	J
Cadmium	mg/kg	980	**1.8**	B	1.4	U	**0.99**	JB	**5.8**				**0.55**	JB	1.6	U
Chromium	mg/kg	120,000	**21.2**		**31.3**		**84.7**		**784**				**1,310**		**22**	
Chromium VI	mg/kg	6.3	**0.33**	JB	**0.4**	JB	**0.35**	JB	**0.97**	JB			**0.7**	JB	**0.33**	JB
Cobalt	mg/kg	350	**4.1**	J	**3.4**	J	**6.1**		**10.4**				**6.8**		**3.2**	J
Copper	mg/kg	47,000	**35.7**		**10.4**		**62.6**		**258**				**51.6**		**15.6**	B
Iron	mg/kg	820,000	**18,500**		**25,600**		**57,200**		**92,100**				**188,000**		**15,100**	
Lead	mg/kg	800	**181**		**11.8**		**60.3**		**555**				**67.1**		**12.9**	
Manganese	mg/kg	26,000	**334**		**29.5**		**4,800**		**18,400**				**22,600**		**299**	
Mercury	mg/kg	350	**0.04**	J	**0.063**	J	0.1	U	**0.26**				**0.5**		**0.016**	J
Nickel	mg/kg	22,000	**10.8**	B	**7**	JB	**27**		**36.9**				**32.3**		**8.8**	J
Selenium	mg/kg	5,800	3.5	U	3.8	U	**3.5**	J	4	U			4.2	U	4.3	U
Silver	mg/kg	5,800	2.6	U	2.9	U	2.7	U	3	U			3.2	U	3.2	U
Thallium	mg/kg	12	8.7	U	9.6	U	8.9	U	**15.4**		8	U	**6.8**	J	10.7	U
Vanadium	mg/kg	5,800	**27**		**57.4**		**170**		**5,420**				**3,070**		**90.7**	
Zinc	mg/kg	350,000	**5,610**		**49**		**186**		**1,320**				**185**		**79.6**	
Other																
Cyanide	mg/kg	150	**0.23**	J	**0.055**	J	**0.57**	JB	**0.89**				**2.7**		**0.12**	JB

Detections in bold

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Table 6
Summary of Inorganics Detected in Soil
Parcel B22
Tradepoint Atlantic
Sparrows Point, Maryland

Parameter	Units	PAL	B22-007-SB-1 Soil 5/31/2016		B22-007-SB-4 Soil 5/31/2016		B22-008-SB-1 Soil 5/31/2016		B22-008-SB-4 Soil 5/31/2016		B22-009-SB-1 Soil 5/31/2016		B22-009-SB-6 Soil 5/31/2016		B22-010-SB-1 Soil 5/31/2016	
Metals																
Aluminum	mg/kg	1,100,000	**26,000**		**19,200**		**39,800**		**68,500**		**39,400**		**41,700**		**20,900**	
Antimony	mg/kg	470	2.7	U	3.1	U	2.9	U	2.5	U	2.7	U	2.8	U	2.4	U
Arsenic	mg/kg	3	2.3	U	2.6	U	2.4	U	2.1	U	2.3	U	**2.1**	J	**6.9**	
Barium	mg/kg	220,000	**255**		**210**		**491**		**98.1**		**334**		**347**		**415**	
Beryllium	mg/kg	2,300	**2.9**		**2.5**		**6**		**0.28**	J	**6.6**		**6.8**		**1.1**	
Cadmium	mg/kg	980	**0.42**	JB	**0.37**	JB	**0.29**	JB	**0.31**	JB	**0.38**	JB	**0.56**	JB	**0.51**	JB
Chromium	mg/kg	120,000	**737**		**364**		**71.5**		**945**		**104**		**91.4**		**59.7**	
Chromium VI	mg/kg	6.3	**0.39**	JB	**0.41**	JB	**0.37**	JB	**0.35**	JB	**0.34**	JB	**0.44**	JB	**0.32**	JB
Cobalt	mg/kg	350	**1.2**	J	**1**	J	**1.1**	J	**0.82**	J	**1.3**	J	**1.9**	J	**6.9**	
Copper	mg/kg	47,000	**22.5**		**12.5**		**7.9**		**23**		**15.5**		**23.9**		**133**	
Iron	mg/kg	820,000	**134,000**		**51,800**		**32,800**		**154,000**		**21,500**		**29,900**		**28,900**	
Lead	mg/kg	800	**6.8**		**6**		**2.5**		2.1	U	**28.3**		**57.4**		**85.9**	
Manganese	mg/kg	26,000	**19,000**		**8,040**		**4,680**		**26,700**		**4,640**		**4,020**		**1,710**	
Mercury	mg/kg	350	**0.004**	J	**0.011**	J	0.13	U	0.1	U	0.1	U	0.11	U	**0.23**	
Nickel	mg/kg	22,000	**10.5**	B	**7**	JB	**6.4**	JB	**9.7**	B	**6.8**	JB	**10.1**		**29.4**	
Selenium	mg/kg	5,800	3.6	U	4.1	U	**3.1**	J	3.3	U	3.6	U	**2.3**	J	**3**	J
Silver	mg/kg	5,800	2.7	U	3.1	U	2.9	U	**0.64**	J	2.7	U	2.8	U	2.4	U
Thallium	mg/kg	12	9.1	U	10.3	U	9.6	U	8.2	U	9.1	U	9.3	U	8.1	U
Vanadium	mg/kg	5,800	**407**		**187**		**46.3**		**478**		**57.1**		**50.3**		**45.3**	
Zinc	mg/kg	350,000	**83.8**		**126**		**25.2**		**67.4**		**171**		**164**		**229**	
Other																
Cyanide	mg/kg	150	**0.2**	J	**1.9**		**0.43**	J	**0.1**	J	**0.48**	J	**0.43**	J	**0.91**	

Detections in bold

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Table 6
Summary of Inorganics Detected in Soil
Parcel B22
Tradepoint Atlantic
Sparrows Point, Maryland

Parameter	Units	PAL	B22-010-SB-4 Soil 5/31/2016		B22-011-SB-1 Soil 5/20/2016		B22-011-SB-4 Soil 5/20/2016		B22-012-SB-1 Soil 5/19/2016		B22-012-SB-4 Soil 5/19/2016		B22-013-SB-1 Soil 5/26/2016		B22-013-SB-4 Soil 5/26/2016	
Metals																
Aluminum	mg/kg	1,100,000	**25,700**		**7,520**		**8,390**		8810		35100		15200		14500	
Antimony	mg/kg	470	2.6	U	3	U	3	U	3.1	U	2	J	2.8	U	2.7	U
Arsenic	mg/kg	3	**11.2**		**7.7**		**3.4**		6		7.6		3.7		2.2	U
Barium	mg/kg	220,000	**485**		**75.3**		**86.5**		86.5		995		214		46.8	
Beryllium	mg/kg	2,300	**2.7**		**0.24**	J	**0.46**	J	1	U	3.3		0.78	J	0.29	J
Cadmium	mg/kg	980	**0.3**	JB	**0.6**	JB	**0.58**	JB	0.39	J	0.7	J	0.8	JB	1.3	U
Chromium	mg/kg	120,000	**68.3**		**1,100**		**1,440**		1030		57.2		69.6		24.1	
Chromium VI	mg/kg	6.3	**0.27**	JB	**0.65**	JB	**0.53**	JB	1.1	JB	0.42	JB	0.48	JB	0.64	JB
Cobalt	mg/kg	350	**17.7**		**5.4**		**3.7**	J	6.6		24.9		4.3	J	1.5	J
Copper	mg/kg	47,000	**119**		**43.5**		**43.8**		51.1		61.8		72		6.7	
Iron	mg/kg	820,000	**31,500**		**143,000**		**163,000**		140000		19000		23500		9760	
Lead	mg/kg	800	**20**		**42.7**		**61.4**		64.4		456		173		11.6	
Manganese	mg/kg	26,000	**2,910**		**25,900**		**32,000**		21500		7180		1800		10.9	
Mercury	mg/kg	350	**0.023**	J	**0.027**	J	**0.037**	J	0.041	J	0.11	U	0.9		0.03	J
Nickel	mg/kg	22,000	**110**		**24.5**		**18.6**		38.9		8.4	J	13		4.6	J
Selenium	mg/kg	5,800	3.4	U	4.1	U	4	U	4.2	U	4.1	U	3.7	U	3.5	U
Silver	mg/kg	5,800	2.6	U	3	U	3	U	3.1	U	3.1	U	2.8	U	2.7	U
Thallium	mg/kg	12	8.5	U	**5**	J	**10**	J	10.4	U	10.3	U	9.4	U	8.8	U
Vanadium	mg/kg	5,800	**19**		**2,940**		**4,880**		2070		215		55.5		27.5	
Zinc	mg/kg	350,000	**33**		**134**		**101**		272		163		182		15.4	
Other																
Cyanide	mg/kg	150	**5.9**		**0.97**		**0.8**		**0.82**		**1**		**1.1**		**0.078**	JB

Detections in bold

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Values in Red indicate an exceedance of the Project Action Limit (PAL)

Table 6
Summary of Inorganics Detected in Soil
Parcel B22
Tradepoint Atlantic
Sparrows Point, Maryland

Parameter	Units	PAL	B22-014-SB-1 Soil 5/26/2016		B22-014-SB-5 Soil 5/26/2016		B22-014-SB-10 Soil 5/26/2016		B22-015-SB-1 Soil 6/3/2016		B22-015-SB-4 Soil 6/3/2016		B22-016-SB-1 Soil 6/3/2016		B22-016-SB-5 Soil 6/3/2016		B22-017-SB-1 Soil 6/3/2016	
Metals																		
Aluminum	mg/kg	1,100,000	**14,900**		**12,000**				**16,600**		**16,800**		**10,500**		**12,300**		**11,900**	
Antimony	mg/kg	470	2.8	U	2.8	U			2.3	U	2.7	U	2.5	U	2.6	U	2.5	U
Arsenic	mg/kg	3	**5.4**		**4.3**		**8.2**		**5.5**		**6.8**		**7.5**		**7.6**		**4.1**	
Barium	mg/kg	220,000	**246**		**197**				**149**		**101**		**82.5**		**110**		**144**	
Beryllium	mg/kg	2,300	**0.79**	J	**0.58**	J			**0.68**	J	**0.72**	J	**0.35**	J	**0.4**	J	**0.63**	J
Cadmium	mg/kg	980	**0.33**	JB	**0.46**	JB			**0.92**	J	**0.41**	J	**0.44**	J	**0.42**	J	**4.7**	
Chromium	mg/kg	120,000	**32.6**		**67.8**				**778**		**876**		**859**		**895**		**77.3**	
Chromium VI	mg/kg	6.3	**0.37**	JB	**0.63**	JB			**0.44**	JB	**0.42**	JB	**0.36**	J	**0.42**	JB	**0.33**	J
Cobalt	mg/kg	350	**6.4**		**5.3**				**3.6**	J	**3.1**	J	**4.1**		**3.9**	J	**5.4**	
Copper	mg/kg	47,000	**68.2**		**70.1**				**43.8**		**36.7**		**44.5**		**51.6**		**38.3**	
Iron	mg/kg	820,000	**24,800**		**27,900**				**159,000**		**215,000**		**248,000**		**256,000**		**19,400**	
Lead	mg/kg	800	**75.2**		**101**				**60.1**		**20.5**		**23.9**		**21.7**		**42**	
Manganese	mg/kg	26,000	**977**		**2,070**				**20,400**		**21,100**		**23,800**		**21,500**		**321**	
Mercury	mg/kg	350	**0.14**		**0.26**				**0.11**		**0.037**	J	**0.1**	J	**0.027**	J	**0.068**	J
Nickel	mg/kg	22,000	**21.3**		**28.9**				**36.3**		**27.9**		**37**		**36.7**		**29.4**	
Selenium	mg/kg	5,800	3.7	U	3.8	U			3.1	U	3.5	U	3.3	U	3.5	U	3.3	U
Silver	mg/kg	5,800	2.8	U	2.8	U			**0.9**	J	**1.6**	J	**1.3**	J	**2.1**	J	2.5	U
Thallium	mg/kg	12	9.3	U	9.4	U			7.8	U	8.9	U	8.2	U	8.6	U	8.3	U
Vanadium	mg/kg	5,800	**34.1**		**49.3**				**687**		**667**		**880**		**645**		**19.9**	
Zinc	mg/kg	350,000	**72.6**		**125**				**664**		**181**		**168**		**255**		**5,020**	
Other																		
Cyanide	mg/kg	150	**0.39**	JB	**0.35**	JB			**0.29**	J	**0.16**	J	**0.49**	J	**0.15**	JM1	**6.2**	

Detections in bold

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Table 6
Summary of Inorganics Detected in Soil
Parcel B22
Tradepoint Atlantic
Sparrows Point, Maryland

Parameter	Units	PAL	B22-017-SB-6 Soil 6/3/2016		B22-017-SB-10 Soil 6/3/2016		B22-018-SB-1 Soil 6/3/2016		B22-018-SB-6 Soil 6/3/2016		B22-018-SB-10 Soil 6/3/2016		B22-019-SB-1 Soil 5/31/2016		B22-019-SB-6 Soil 5/31/2016	
Metals																
Aluminum	mg/kg	1,100,000	**15,300**				**19,200**		**14,900**	M6			**18,600**		**15,800**	M6
Antimony	mg/kg	470	3	U			3.2	U	2.8	UM1R1			2.9	U	2.4	UM1
Arsenic	mg/kg	3	**5.4**		**5**		**3.6**		**19.2**		**8.4**		**2.7**		**25.3**	
Barium	mg/kg	220,000	**75.1**				**93.3**		**56.1**	M1			**88.6**		**41.8**	M1
Beryllium	mg/kg	2,300	**0.81**	J			**1.5**		**0.88**	J			**0.68**	J	**0.71**	J
Cadmium	mg/kg	980	1.5	U			1.6	U	1.4	U			1.4	U	1.2	U
Chromium	mg/kg	120,000	**28.7**				**21**		**31.3**				**24.8**		**39.2**	
Chromium VI	mg/kg	6.3	**0.77**	J			**0.41**	J	**0.46**	JM1			**0.33**	JB	**0.39**	JBM1
Cobalt	mg/kg	350	**3.5**	J			**6.2**		**5.6**				**6**		**3.1**	J
Copper	mg/kg	47,000	**14.5**				**15.2**		**10.8**				**10.9**		**15.6**	
Iron	mg/kg	820,000	**30,300**				**10,200**		**22,600**	M6R1			**15,700**		**29,700**	M6
Lead	mg/kg	800	**14.8**				**14.1**		**13.2**				**11.9**		**15.7**	
Manganese	mg/kg	26,000	**43**				**82**		**43.4**	M1R1			**152**		**55.4**	M1
Mercury	mg/kg	350	**0.0039**	J			**0.0047**	J	0.12	U			**0.057**	J	**0.013**	J
Nickel	mg/kg	22,000	**9**	J			**20.4**		**12.7**				**13**		**8.1**	B
Selenium	mg/kg	5,800	4	U			4.2	U	3.8	U			3.9	U	3.2	U
Silver	mg/kg	5,800	3	U			3.2	U	2.8	U			2.9	U	2.4	U
Thallium	mg/kg	12	10	U			10.6	U	9.4	U			9.6	U	8	U
Vanadium	mg/kg	5,800	**24.9**				**20.1**		**36.3**				**32**		**53.1**	M1
Zinc	mg/kg	350,000	**46.2**				**131**		**44.5**	M1R1			**31**		**33.7**	
Other																
Cyanide	mg/kg	150	0.67	U			0.61	U	0.78	UM1			**0.045**	J	**0.053**	J

Detections in bold

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Table 6
Summary of Inorganics Detected in Soil
Parcel B22
Tradepoint Atlantic
Sparrows Point, Maryland

Parameter	Units	PAL	B22-019-SB-10		B22-020-SB-1		B22-020-SB-4		B22-020-SB-10		B22-021-SB-1		B22-021-SB-5		B22-022-SB-1	
			Soil		Soil		Soil		Soil		Soil		Soil		Soil	
			5/31/2016		5/31/2016		5/31/2016		5/31/2016		5/31/2016		5/31/2016		5/31/2016	
Metals																
Aluminum	mg/kg	1,100,000			**26,900**		**26,800**				**17,500**		**19,100**		**42,000**	
Antimony	mg/kg	470			2.6	U	2.5	U			2.9	U	3.1	U	2.5	U
Arsenic	mg/kg	3	**7.2**		**5.9**		**110**		**14**		**6.4**		**2.5**	J	2.1	U
Barium	mg/kg	220,000			**291**		**602**				**57**		**80.5**		**345**	
Beryllium	mg/kg	2,300			**2.1**		**2.6**				**0.79**	J	**0.57**	J	**6.4**	
Cadmium	mg/kg	980			**0.25**	JB	**1.1**	JB			1.4	U	1.5	U	**0.27**	JB
Chromium	mg/kg	120,000			**31.2**		**88.7**				**26.3**		**24.2**		**18.6**	
Chromium VI	mg/kg	6.3			**0.31**	JB	**0.31**	JB			**0.34**	JB	**1.2**	JB	**0.31**	JB
Cobalt	mg/kg	350			**11.2**		**17**				**7.3**		**3.9**	J	**0.52**	J
Copper	mg/kg	47,000			**55.5**		**185**				**12.7**		**10.3**		**4.8**	
Iron	mg/kg	820,000			**23,200**		**90,300**				**24,800**		**15,400**		**17,700**	
Lead	mg/kg	800			**30.2**		**43.5**				**10.6**		**9.2**		**6.7**	
Manganese	mg/kg	26,000			**3,690**		**5,080**				**136**		**64.8**		**3,130**	
Mercury	mg/kg	350			**0.026**	J	0.11	U			**0.094**	J	0.12	U	0.11	U
Nickel	mg/kg	22,000			**20.9**		**86.8**				**15.4**		**12.4**		**2.6**	JB
Selenium	mg/kg	5,800			3.5	U	**2**	J			3.8	U	4.1	U	**4.5**	
Silver	mg/kg	5,800			2.6	U	**0.68**	J			2.9	U	3.1	U	2.5	U
Thallium	mg/kg	12			8.8	U	8.3	U			9.6	U	10.3	U	8.3	U
Vanadium	mg/kg	5,800			**61.9**		**71.6**				**38.6**		**24.4**		**23.5**	
Zinc	mg/kg	350,000			**85.7**		**346**				**46.5**		**28.4**		**14.6**	
Other																
Cyanide	mg/kg	150			**0.3**	J	**1.3**				0.73	U	0.73	U	**0.23**	J

Detections in bold

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Table 6
Summary of Inorganics Detected in Soil
Parcel B22
Tradepoint Atlantic
Sparrows Point, Maryland

Parameter	Units	PAL	B22-022-SB-7		B22-023-SB-1		B22-023-SB-9		B22-023-SB-10		B22-024-SB-1		B22-024-SB-4		B22-025-SB-4		B22-026-SB-1	
			Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
			5/31/2016		5/23/2016		5/23/2016		5/23/2016		5/23/2016		5/23/2016		5/23/2016		5/23/2016	
Metals																		
Aluminum	mg/kg	1,100,000	**39,200**		**16,800**		**8,220**				**18,600**		**18,100**		**27,600**		**17,400**	
Antimony	mg/kg	470	2.8	U	2.6	U	2.4	U			2.5	U	2.8	U	2.6	U	2.9	U
Arsenic	mg/kg	3	2.3	U	**21.4**		**10.5**		2.1		**5.9**		**15.2**		**3.8**		**16.3**	
Barium	mg/kg	220,000	**340**		**315**		**47.4**				**427**		**296**		**271**		**581**	
Beryllium	mg/kg	2,300	**6.3**		**1.1**		0.82	U			**1.9**		**1.5**		**4.2**		**1**	
Cadmium	mg/kg	980	**0.39**	JB	**0.86**	JB	**1.9**	B			**1.2**	JB	**0.96**	JB	**0.95**	JB	**4.8**	
Chromium	mg/kg	120,000	**16.3**		**915**		**857**				**517**		**414**		**283**		**225**	
Chromium VI	mg/kg	6.3	**0.21**	JB	**0.38**	JB	**1**	JB			**0.62**	JB	**0.75**	JB	**0.43**	JB	**29.5**	
Cobalt	mg/kg	350	**0.32**	J	**15**		**15.9**				**6.2**		**14.6**		**9.4**		**25**	
Copper	mg/kg	47,000	**5.4**		**183**		**170**				**105**		**229**		**37.9**		**366**	
Iron	mg/kg	820,000	**4,700**		**109,000**		**133,000**				**50,200**		**146,000**		**53,200**		**122,000**	
Lead	mg/kg	800	**6.9**		**336**		**86.9**				**237**		**186**		**85.2**		**6,870**	
Manganese	mg/kg	26,000	**3,280**		**17,400**		**13,200**				**14,000**		**9,390**		**8,920**		**4,980**	
Mercury	mg/kg	350	0.11	U	**0.08**	J	**0.025**	J			**0.0079**	J	**0.1**	J	**0.06**	J	**0.079**	J
Nickel	mg/kg	22,000	**1.4**	JB	**33.3**		**43.5**				**21.6**		**39.8**		**15.2**		**92.8**	
Selenium	mg/kg	5,800	**3.2**	J	3.4	U	3.3	U			3.4	U	3.7	U	3.5	U	3.8	U
Silver	mg/kg	5,800	2.8	U	2.6	U	2.4	U			2.5	U	2.8	U	2.6	U	**2.9**	J
Thallium	mg/kg	12	9.2	U	8.6	U	8.2	U			8.4	U	9.3	U	8.7	U	9.6	U
Vanadium	mg/kg	5,800	**21**		**3,370**		**4,100**				**2,050**		**1,850**		**819**		**262**	
Zinc	mg/kg	350,000	**8.5**		**275**		**1,040**				**353**		**314**		**335**		**3,420**	
Other																		
Cyanide	mg/kg	150	**0.27**	J	**0.85**		**0.14**	JB			**0.68**		**0.33**	JB	**3.6**		**6.4**	

Detections in bold

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Table 6
Summary of Inorganics Detected in Soil
Parcel B22
Tradepoint Atlantic
Sparrows Point, Maryland

Parameter	Units	PAL	B22-026-SB-9 Soil 5/23/2016		B22-027-SB-1 Soil 5/24/2016		B22-027-SB-5 Soil 5/24/2016		B22-028-SB-1 Soil 5/24/2016		B22-029-SB-1 Soil 5/24/2016		B22-029-SB-6 Soil 5/24/2016		B22-030-SB-1 Soil 5/24/2016		B22-030-SB-5 Soil 5/24/2016	
Metals																		
Aluminum	mg/kg	1,100,000	**4,410**		**24,800**		**43,700**		**26,000**		**40,600**		**34,900**		**17,100**		**36,800**	
Antimony	mg/kg	470	2.8	U	2.6	U	2.7	U	2.8	U	2.5	U	2.4	U	2.5	U	2.4	U
Arsenic	mg/kg	3	**11.7**		**2.8**		**2.2**	J	**3**		**2.4**		**3.1**		**6.7**		**5.9**	
Barium	mg/kg	220,000	**102**		**214**		**320**		**363**		**296**		**272**		**186**		**437**	
Beryllium	mg/kg	2,300	**0.38**	J	**4.3**		**7**		**2.1**		**6.4**		**5.5**		**1.5**		**1.9**	
Cadmium	mg/kg	980	**3.5**		**0.3**	JB	**0.29**	JB	**3.1**		**0.25**	JB	**0.35**	JB	**0.93**	JB	**1**	JB
Chromium	mg/kg	120,000	**88.2**		**24**		**13.1**		**63.6**		**12.9**		**31.5**		**219**		**288**	
Chromium VI	mg/kg	6.3	**0.36**	JB	**0.33**	JB	**0.3**	JB	**0.69**	JB	**0.35**	JB	**0.35**	JB	**0.53**	JB	**0.49**	JB
Cobalt	mg/kg	350	**11.1**		**1.1**	J	4.5	U	**4.6**	J	**0.43**	J	**1.6**	J	**10.1**		**8.7**	
Copper	mg/kg	47,000	**315**		**11.8**		**2.6**	J	**149**		**1.6**	J	**28.8**		**153**		**105**	
Iron	mg/kg	820,000	**57,400**		**39,900**		**4,290**		**22,400**		**2,370**		**21,700**		**71,100**		**55,500**	
Lead	mg/kg	800	**522**		**4.2**		2.3	U	**816**		2.1	U	**29.2**		**235**		**476**	
Manganese	mg/kg	26,000	**1,810**		**2,860**		**3,650**		**1,370**		**3,720**		**3,400**		**4,370**		**5,500**	
Mercury	mg/kg	350	**0.012**	J	**0.0038**	J	0.1	U	0.11	U	0.1	U	0.11	U	**0.069**	J	**0.022**	J
Nickel	mg/kg	22,000	**38.3**		**10.9**		9	U	**26.2**		8.3	U	**6.9**	J	**29.2**		**34.5**	
Selenium	mg/kg	5,800	3.7	U	3.5	U	**2.7**	J	**3.4**	J	**3.2**	J	**2.6**	J	**2.3**	J	3.2	U
Silver	mg/kg	5,800	**1.1**	J	2.6	U	2.7	U	2.8	U	2.5	U	2.4	U	2.5	U	2.4	U
Thallium	mg/kg	12	9.2	U	8.7	U	9	U	9.2	U	8.3	U	7.9	U	8.3	U	7.9	U
Vanadium	mg/kg	5,800	**112**		**16.6**		**13**		**57.3**		**17.7**		**48.1**		**816**		**951**	
Zinc	mg/kg	350,000	**1,300**		**4.4**	B	**4**	JB	**5,060**		**3.3**	JB	**50.7**		**432**		**7,540**	
Other																		
Cyanide	mg/kg	150	**0.55**	JB	**0.87**	B	**0.15**	JB	**3**		**0.75**	B	**0.41**	JB	**0.78**	B	**4.2**	

Detections in bold

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Parcel B22
Tradepoint Atlantic
Sparrows Point, Maryland

Parameter	Units	PAL	B22-030-SB-10		B22-031-SB-1		B22-031-SB-4		B22-031-SB-10		B22-032-SB-1		B22-032-SB-4		B22-032-SB-10		B22-033-SB-1	
			Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
			5/24/2016		5/19/2016		5/19/2016		5/19/2016		5/23/2016		5/23/2016		5/23/2016		5/24/2016	
Metals																		
Aluminum	mg/kg	1,100,000			**11,900**		**17,200**	M1M6R1			**10,000**		**29,900**	M6R1			**11,100**	
Antimony	mg/kg	470			3.2	U	2.8	UM1			2.3	U	2.6	UM1R1			2.5	U
Arsenic	mg/kg	3	2.2	U	**11.4**		**9.8**		**22.8**		**8.7**		**3.8**		**5.3**		**4.8**	
Barium	mg/kg	220,000			**248**		**248**	M1R1			**197**		**605**	M1R1			**63.3**	
Beryllium	mg/kg	2,300			**0.37**	J	**1.5**				0.77	U	**2.3**				0.82	U
Cadmium	mg/kg	980			**2.1**		**1.9**				**3.3**		**0.57**	JB			**0.78**	JB
Chromium	mg/kg	120,000			**1,040**		**542**	M1R1			**1,180**		**377**	M1R1			**1,160**	
Chromium VI	mg/kg	6.3			**0.51**	JB	**0.5**	JBM1			**0.47**	JB	**0.43**	JBM1			**12.5**	
Cobalt	mg/kg	350			**7.8**		**12.8**				**6.1**		**4.2**	J			**2.3**	J
Copper	mg/kg	47,000			**132**		**125**	M1			**71.5**		**30.7**	M1R1			**55.3**	
Iron	mg/kg	820,000			**118,000**		**144,000**	M6			**134,000**		**47,300**	M6R1			**243,000**	
Lead	mg/kg	800			**159**		**212**	M1			**89**		**22.5**	M1			**7.2**	
Manganese	mg/kg	26,000			**51,900**		**22,800**	M6			**46,600**		**20,000**	M6R1			**29,400**	
Mercury	mg/kg	350			**0.032**	J	**0.08**	JM1			**0.045**	J	0.1	UM1			**0.048**	J
Nickel	mg/kg	22,000			**68.2**		**51.5**	M1			**24.1**		**10.7**	B			**49.2**	
Selenium	mg/kg	5,800			4.3	U	3.7	U			3.1	U	**2.5**	J			3.3	U
Silver	mg/kg	5,800			3.2	U	2.8	U			2.3	U	2.6	U			**4.7**	
Thallium	mg/kg	12			10.7	U	9.2	UM1			7.7	U	8.8	UM1R1			8.2	U
Vanadium	mg/kg	5,800			**3,090**		**1,250**	M1			**3,820**		**1,430**	M1R1			**621**	
Zinc	mg/kg	350,000			**667**		**712**	M1R1			**522**		**96.9**	M1			**149**	
Other																		
Cyanide	mg/kg	150			**1.9**		**0.54**	B			**1.7**		**0.58**	B			**0.32**	JB

Detections in bold

Blank spaces indicate that the parameter was not analyzed for this sample

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Values in Red indicate an exceedance of the Project Action Limit (PAL)

Table 6
Summary of Inorganics Detected in Soil
Parcel B22
Tradepoint Atlantic
Sparrows Point, Maryland

Parameter	Units	PAL	B22-034-SB-1 Soil 5/25/2016		B22-035-SB-1 Soil 5/26/2016		B22-036-SB-1 Soil 5/26/2016		B22-036-SB-4 Soil 5/26/2016		B22-037-SB-1 Soil 6/3/2016		B22-038-SB-1 Soil 6/3/2016		B22-039A-SB-3 Soil 6/1/2016		B22-039-SB-1 Soil 6/1/2016		B22-039-SB-4 Soil 6/1/2016		B22-040-SB-1 Soil 6/1/2016	
Metals																						
Aluminum	mg/kg	1,100,000	**12,700**		**24,700**		**19,700**		**14,000**		**41,000**	M6	**8,280**		**19,300**		**21,400**		**49,000**		**40,000**	
Antimony	mg/kg	470	2.3	U	2.8	U	2.4	U	2.5	U	2.7	UM1	2.7	U	2.9	U	2.2	U	2.9	U	2.9	U
Arsenic	mg/kg	3	**3.7**		**5.9**		**4.4**		**3.1**		**4.2**		**11.3**		**4.8**		**4.4**		**2.4**		2.4	U
Barium	mg/kg	220,000	**69.2**		**261**		**64.7**		**62.9**		**597**	M1	**63.1**		**231**		**230**		**600**		**641**	
Beryllium	mg/kg	2,300	0.77	U	**2.1**		0.79	U	0.82	U	**4.9**		**0.31**	J	**2.5**		**2.5**		**8**		**6.8**	
Cadmium	mg/kg	980	**0.88**	JB	**0.59**	JB	**0.66**	JB	**0.79**	JB	**0.37**	J	**0.63**	J	**0.45**	J	**0.42**	J	**0.24**	J	**0.57**	J
Chromium	mg/kg	120,000	**1,200**		**57**		**1,160**		**1,220**		**15.6**	M1R1	**1,110**		**789**		**827**		**19**		**77.7**	
Chromium VI	mg/kg	6.3	**10.8**		**0.28**	JB	**5.4**		**5**		**0.36**	JB	**0.44**	JB	**0.58**	JB	**0.3**	JB	**0.32**	JB	**0.32**	JB
Cobalt	mg/kg	350	**1.1**	J	**5.7**		**0.69**	J	4.1	U	**1.8**	J	**5.8**		**3.7**	J	**1.7**	J	**0.65**	J	**0.84**	J
Copper	mg/kg	47,000	**41.3**		**33.7**		**32.2**		**25.8**		**11.2**		**44.6**		**37.8**		**32.3**		4.8	U	**6**	
Iron	mg/kg	820,000	**191,000**		**23,900**		**210,000**		**182,000**		**9,860**	M1R1	**281,000**		**45,300**		**169,000**		**4,170**		**18,300**	
Lead	mg/kg	800	**36.1**		**59.7**		**23**		**11.5**		**14.1**		**42.7**		**42.6**		**3.9**		2.4	U	**34.7**	
Manganese	mg/kg	26,000	**27,500**		**5,660**		**27,000**		**31,500**		**4,390**	M6	**18,800**		**5,890**		**17,500**		**4,430**		**5,240**	
Mercury	mg/kg	350	**0.07**	J	**0.032**	J	**0.084**	J	**0.0058**	J	0.11	UM1	**0.064**	J	0.13	U	0.099	U	0.11	U	0.11	U
Nickel	mg/kg	22,000	**28.5**		**12.3**		**14.7**		**11.5**		**3.6**	J	**55.7**		**3,110**		**13**		9.6	U	**2.1**	J
Selenium	mg/kg	5,800	3.1	U	3.7	U	3.1	U	3.3	U	**3.1**	J	3.6	U	3.9	U	3	U	**3.4**	J	**3.3**	J
Silver	mg/kg	5,800	**2.8**		2.8	U	**3.2**		**3.6**		2.7	U	**1.8**	J	2.9	U	**1.2**	J	2.9	U	2.9	U
Thallium	mg/kg	12	7.7	U	9.2	U	7.9	U	8.2	U	8.9	U	8.9	U	9.8	U	7.5	U	9.6	U	9.6	U
Vanadium	mg/kg	5,800	**633**		**143**		**601**		**730**		**57.7**		**880**		**124**		**401**		**19.3**		**40.1**	
Zinc	mg/kg	350,000	**162**		**244**		**212**		**222**		**21.8**	M1	**175**		**164**		**66.7**		**19.2**		**93.5**	
Other																						
Cyanide	mg/kg	150	**0.15**	JB	**0.18**	JB	**0.15**	JB	**0.17**	JB	**0.96**		**0.84**		**1.9**		**2.3**		**4.6**		**4.1**	

Detections in bold

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Values in Red indicate an exceedance of the Project Action Limit (PAL)

Table 6
Summary of Inorganics Detected in Soil
Parcel B22
Tradepoint Atlantic
Sparrows Point, Maryland

Parameter	Units	PAL	B22-040-SB-4 Soil 6/1/2016		B22-041-SB-1 Soil 5/17/2016		B22-041-SB-5 Soil 5/17/2016		B22-041-SB-10 Soil 5/17/2016		B22-042-SB-1 Soil 6/1/2016		B22-042-SB-4 Soil 6/1/2016		B22-042-SB-10 Soil 6/1/2016		B22-043-SB-1 Soil 5/18/2016		B22-043-SB-4 Soil 5/18/2016	
Metals																				
Aluminum	mg/kg	1,100,000	**47,200**		**11,500**		**14,100**				**38,500**		**19,600**				**23,100**	M6	**15,900**	
Antimony	mg/kg	470	2.5	U	2.8	U	3.3	U			**1.3**	J	3.1	U			**27.1**	M1	3.4	U
Arsenic	mg/kg	3	2.1	U	**9.5**		**4.9**		**5.3**		**3.9**		**4.8**		**20.1**		**15.3**		2.8	U
Barium	mg/kg	220,000	**535**		**239**		**94.4**				**1,140**		**87.9**				**408**	M1R1	**82.6**	
Beryllium	mg/kg	2,300	**8.9**		**1.9**		**0.62**	J			**3.5**		**0.87**	J			**2**		**0.51**	J
Cadmium	mg/kg	980	**0.21**	J	**0.49**	JB	1.7	U			**1.7**		1.5	U			**2.3**		1.7	U
Chromium	mg/kg	120,000	**71.2**		**623**		**79.8**				**28.3**		**27.6**				**93.7**	M1	**32.4**	
Chromium VI	mg/kg	6.3	**0.31**	JB	**0.39**	JB	**0.34**	JB			**0.31**	JB	**0.33**	JB			**0.46**	JB	**0.46**	JB
Cobalt	mg/kg	350	**0.78**	J	**1.5**	J	**3.8**	J			**2.4**	J	**9.1**				**12.4**		**3.4**	J
Copper	mg/kg	47,000	**3**	J	**215**		**155**				**25.3**		**15.2**				**202**	M1	**26**	
Iron	mg/kg	820,000	**20,300**		**79,200**		**21,600**				**12,200**		**22,800**				**82,900**	M6R1	**10,200**	
Lead	mg/kg	800	2.1	U	**8.5**		**16.1**				**85.8**		**16.1**				**580**	M1	**55.2**	
Manganese	mg/kg	26,000	**5,960**		**71,600**		**1,790**				**11,100**		**499**				**5,080**	M6R1	**119**	
Mercury	mg/kg	350	0.11	U	**0.0068**	J	**0.013**	J			0.1	U	**0.014**	J			0.11	UM1	**0.1**	J
Nickel	mg/kg	22,000	**1.9**	J	**12.4**		**10**	J			**6.1**	J	**15.6**				**71**	M1R1	**9.9**	J
Selenium	mg/kg	5,800	**3.3**	J	3.7	U	4.4	U			**1.9**	J	4.1	U			4	U	4.5	U
Silver	mg/kg	5,800	2.5	U	**8.3**		3.3	U			2.5	U	3.1	U			3	U	3.4	U
Thallium	mg/kg	12	8.4	U	9.2	U	11.1	U			8.2	U	10.2	U			10	U	11.2	U
Vanadium	mg/kg	5,800	**49**		**768**		**61.9**				**140**		**42.7**				**224**	M1	**34.7**	
Zinc	mg/kg	350,000	**22**		**38.9**		**41.9**				**784**		**62.7**				**744**	M1R1	**68.5**	
Other																				
Cyanide	mg/kg	150	**3.8**		**0.13**	J	**0.099**	J			**0.5**	J	**0.13**	J			**0.32**	JB	**0.48**	JB

Detections in bold

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Values in Red indicate an exceedance of the Project Action Limit (PAL)

Table 6
Summary of Inorganics Detected in Soil
Parcel B22
Tradepoint Atlantic
Sparrows Point, Maryland

Parameter	Units	PAL	B22-043-SB-10		B22-044-SB-1		B22-044-SB-4		B22-045-SB-1		B22-046-SB-1		B22-046-SB-4		B22-047-SB-1		B22-047-SB-5		B22-047-SB-10	
			Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
			5/18/2016		6/1/2016		6/1/2016		6/1/2016		6/1/2016		6/1/2016		5/18/2016		5/18/2016		5/18/2016	
Metals																				
Aluminum	mg/kg	1,100,000			**37,600**		**43,700**		**36,400**		**20,000**	M6	**22,500**		**7,790**		**13,800**			
Antimony	mg/kg	470			2.5	U	2.4	U	2.4	U	2.5	UM1	3	U	**9.6**		3.7	U		
Arsenic	mg/kg	3			**3.4**		**2.4**		**12**		**4.9**		**6.7**		**14.2**		**6.7**		**5**	
Barium	mg/kg	220,000			**403**		**406**		**355**		**509**	M1	**134**		**1,060**		**123**			
Beryllium	mg/kg	2,300			**6.7**		**7.7**		**6.2**		**1.7**		**1.3**		**0.61**	J	**0.76**	J		
Cadmium	mg/kg	980			**1.2**	J	**0.27**	J	**7.7**		**0.55**	J	**0.21**	J	**3.8**		**0.65**	J		
Chromium	mg/kg	120,000			**130**		**27.1**		**93.4**		**403**	M1R1	**53.9**		**190**		**37.3**			
Chromium VI	mg/kg	6.3			**0.3**	JB	**0.3**	JB	**0.69**	JB	**0.53**	JBM1	**0.65**	JB	**17**		**0.4**	JB		
Cobalt	mg/kg	350			**0.66**	J	**0.85**	J	**4.1**		**1.2**	J	**6.4**		**19.3**		**7.4**			
Copper	mg/kg	47,000			**51.4**		**6.2**		**119**		**21.1**		**19.1**		**221**		**37.2**			
Iron	mg/kg	820,000			**23,400**		**9,470**		**25,800**		**55,200**	M6R1	**22,000**		**95,900**		**27,800**			
Lead	mg/kg	800			**48.3**		**4**		**112**		**13.3**	M1	**24.9**		**6,600**		**129**			
Manganese	mg/kg	26,000			**5,530**		**3,050**		**3,450**		**52,300**	M6R1	**1,200**		**2,530**		**737**			
Mercury	mg/kg	350			0.11	U	0.11	U	0.11	U	0.11	UM1	**0.016**	J	**0.38**		**0.041**	J		
Nickel	mg/kg	22,000			**3.4**	J	**3.1**	J	**18.8**		**15**	M1	**13.2**		**55.2**		**18.1**			
Selenium	mg/kg	5,800			**3.7**		**2.8**	J	**3**	J	3.4	U	4	U	4.2	U	4.9	U		
Silver	mg/kg	5,800			2.5	U	2.4	U	2.4	U	**2.5**	J	3	U	3.1	U	3.7	U		
Thallium	mg/kg	12			8.2	U	8	U	8.1	U	8.4	UM1R1	10	U	10.4	U	9.8	U		
Vanadium	mg/kg	5,800			**67.8**		**20.5**		**38.8**		**582**	M1R1	**84**		**90.9**		**54.9**			
Zinc	mg/kg	350,000			**290**		**45.6**		**6,280**		**98.2**	M1	**71.5**		**959**		**142**			
Other																				
Cyanide	mg/kg	150			**0.55**	J	**0.49**	J	**1**		**0.22**	J	**0.31**	J	**0.65**	JB	**1**			

Detections in bold

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Values in Red indicate an exceedance of the Project Action Limit (PAL)

Table 6
Summary of Inorganics Detected in Soil
Parcel B22
Tradepoint Atlantic
Sparrows Point, Maryland

Parameter	Units	PAL	B22-048-SB-1		B22-048-SB-5		B22-048-SB-10		B22-049-SB-1		B22-049-SB-5		B22-050-SB-1		B22-050-SB-4.5		B22-051-SB-1	
			Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
			5/17/2016		5/17/2016		5/17/2016		6/2/2016		6/2/2016		6/2/2016		6/2/2016		5/26/2016	
Metals																		
Aluminum	mg/kg	1,100,000	**31,400**		**17,100**				**31,500**		**45,300**		**34,700**		**18,100**	M6	**11,300**	
Antimony	mg/kg	470	**2.2**	J	**3.1**	J			2.6	U	2.4	U	2.4	U	2.8	UM1	2.7	U
Arsenic	mg/kg	3	**6.3**		**5.2**		**9.8**		**2.2**		**2.1**		**5.9**		**3.7**		**14**	
Barium	mg/kg	220,000	**530**		**149**				**332**		**473**		**482**		**125**	M1	**109**	
Beryllium	mg/kg	2,300	**2**		**0.26**	J			**5.8**		**9.3**		**4.4**		**1.1**		**0.54**	J
Cadmium	mg/kg	980	**0.52**	JB	**0.18**	JB			**0.51**	J	**0.25**	JB	**2.1**		**0.28**	J	**0.22**	J
Chromium	mg/kg	120,000	**1,330**		**492**				**14.7**		**10.5**		**68.9**		**32.1**	M1R1	**56.2**	
Chromium VI	mg/kg	6.3	**0.43**	JB	**0.86**	JB			**0.3**	JB	**0.31**	JB	**0.4**	JB	**0.36**	JBM1R1	**0.5**	JB
Cobalt	mg/kg	350	**3**	J	**3.9**	J			**1.8**	J	**0.4**	J	**5.9**		**8.3**		**12.3**	
Copper	mg/kg	47,000	**24.6**		**15.5**				**18.6**		**1.7**	J	**157**		**21.3**		**141**	
Iron	mg/kg	820,000	**68,100**		**43,100**				**5,770**		**1,850**		**33,100**		**18,600**	M6	**42,400**	
Lead	mg/kg	800	**15.4**		**13.9**				**14.3**		2	U	**179**		**30.5**		**108**	
Manganese	mg/kg	26,000	**27,800**		**11,200**				**1,820**		**2,420**		**5,520**		**1,060**	M1	**515**	
Mercury	mg/kg	350	0.1	U	0.11	U			0.1	U	**0.0021**	J	**0.25**		**0.074**	J	**0.055**	J
Nickel	mg/kg	22,000	**10.8**		**8.9**	J			**2.9**	J	8	U	**16.4**		**15.8**		**48.1**	
Selenium	mg/kg	5,800	**2.9**	J	4.4	U			3.5	U	**4.8**		**2.5**	J	3.7	U	3.6	U
Silver	mg/kg	5,800	2.7	U	3.3	U			2.6	U	2.4	U	2.4	U	2.8	U	2.7	U
Thallium	mg/kg	12	9	U	11	U			8.6	U	8	U	7.9	U	9.4	U	9.1	U
Vanadium	mg/kg	5,800	**5,420**		**3,750**				**10.2**		**6.3**		**189**		**31.9**	M1	**23.7**	
Zinc	mg/kg	350,000	**79**		**27.4**				**899**		**2.4**	JB	**464**		**99.3**	M1	**88.8**	
Other																		
Cyanide	mg/kg	150	**0.15**	J	**0.16**	J			**0.45**	J	**0.5**	J	**0.16**	J	**0.056**	J	**0.28**	J

Detections in bold

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Summary of Inorganics Detected in Soil
Parcel B22
Tradepoint Atlantic
Sparrows Point, Maryland

Parameter	Units	PAL	B22-051-SB-6 Soil 5/26/2016		B22-052-SB-1 Soil 5/26/2016		B22-052-SB-8 Soil 5/26/2016		B22-053-SB-1 Soil 5/26/2016		B22-053-SB-8 Soil 5/26/2016		B22-053-SB-10 Soil 5/26/2016		B22-054-SB-1 Soil 5/26/2016		B22-054-SB-4 Soil 5/26/2016		B22-054-SB-10 Soil 5/26/2016	
Metals																				
Aluminum	mg/kg	1,100,000	**12,200**		**17,700**		**15,200**		**6,360**		**13,600**				**17,600**		**17,600**	M6		
Antimony	mg/kg	470	3	U	2.8	U	2.7	U	2.5	U	2.8	U			2.7	U	2.3	UM1		
Arsenic	mg/kg	3	**2.2**	J	2.4	U	**3.6**		**19.1**		**5.9**		**9.7**		2.3	U	**3.3**		**10.6**	
Barium	mg/kg	220,000	**19.4**		**213**		**31.1**		**82**		**30.4**				**272**		**39.5**			
Beryllium	mg/kg	2,300	**0.35**	J	**0.85**	J	**0.71**	J	**0.39**	J	**0.44**	J			**1.4**		**0.52**	J		
Cadmium	mg/kg	980	1.5	U	**0.34**	J	**0.85**	J	**1.9**	B	1.4	U			**0.47**	JB	**0.14**	JB		
Chromium	mg/kg	120,000	**20.3**		**32.3**		**40.3**		**208**		**23.1**				**85.7**		**28.7**			
Chromium VI	mg/kg	6.3	**0.58**	JB	**0.38**	JB	**0.46**	JB	**1**	JB	**1**	JB			**0.35**	JB	**0.71**	JBM1		
Cobalt	mg/kg	350	**4.1**	J	**5.9**		**7.5**		**20**		**4**	J			**3.4**	J	**6.9**			
Copper	mg/kg	47,000	**5.8**		**33.4**		**83.5**		**187**		**7.9**				**25.7**		**12.9**			
Iron	mg/kg	820,000	**11,200**		**12,800**		**13,500**		**238,000**		**15,300**				**26,700**		**25,700**	M6		
Lead	mg/kg	800	**10.4**		**42.2**		**34.9**		**1,500**		**12.2**				**73.7**		**9.6**			
Manganese	mg/kg	26,000	**18.8**		**729**		**141**		**3,240**		**55.9**				**4,440**		**140**	M1		
Mercury	mg/kg	350	**0.0051**	J	**6**		**0.031**	J	**0.057**	J	**0.0059**	J			**0.054**	J	**0.063**	J		
Nickel	mg/kg	22,000	**7.7**	J	**12.2**		**12.7**		**85.8**		**11.1**				**13.7**		**13.9**			
Selenium	mg/kg	5,800	3.9	U	3.8	U	3.6	U	3.3	U	3.7	U			3.6	U	3.1	U		
Silver	mg/kg	5,800	3	U	2.8	U	2.7	U	**3.5**		2.8	U			2.7	U	2.3	U		
Thallium	mg/kg	12	9.9	U	9.4	U	9.1	U	8.4	U	9.3	U			9	U	7.8	U		
Vanadium	mg/kg	5,800	**24.2**		**24.4**		**37.5**		**95**		**21.7**				**129**		**39.3**			
Zinc	mg/kg	350,000	**40.1**		**81.9**		**357**		**1,320**		**40.1**				**111**		**39.4**			
Other																				
Cyanide	mg/kg	150	**0.083**	J	**0.98**		0.62	U	**0.84**		**0.081**	JB			**0.25**	JB	**0.071**	JB		

Detections in bold

Blank spaces indicate that the parameter was not analyzed for this sample

*PAH compounds were analyzed via SIM

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Values in Red indicate an exceedance of the Project Action Limit (PAL)

Table 6
Summary of Inorganics Detected in Soil
Parcel B22
Tradepoint Atlantic
Sparrows Point, Maryland

Parameter	Units	PAL	B22-055-SB-1		B22-055-SB-8.5		B22-056-SB-1		B22-056-SB-5		B22-057-SB-1		B22-058-SB-1		B22-058-SB-7		B22-058-SB-10	
			Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
			6/2/2016		6/2/2016		6/2/2016		6/2/2016		5/31/2016		5/31/2016		5/31/2016		5/31/2016	
Metals																		
Aluminum	mg/kg	1,100,000	**18,900**		**17,100**		**28,500**		**33,600**		**41,000**		**23,500**		**15,200**	M6		
Antimony	mg/kg	470	2.9	U	2.5	U	2.7	U	3	U	2.7	U	2.8	U	3.1	UM1R1		
Arsenic	mg/kg	3	**18.9**		**5.9**		**2.2**	J	**2.5**	J	2.2	U	**2.3**	J	**22.3**		**4.4**	
Barium	mg/kg	220,000	**312**		**62.4**		**223**		**367**		**1,630**		**109**		**18.9**	M1		
Beryllium	mg/kg	2,300	**1.8**		**0.6**	J	**2**		**1.8**		**3.5**		**0.75**	J	**1.1**			
Cadmium	mg/kg	980	**1.5**	B	1.3	U	**0.39**	JB	**0.32**	JB	**0.39**	JB	1.4	U	1.6	U		
Chromium	mg/kg	120,000	**36.7**		**23.4**		**21**		**88.8**		**13.8**		**35.1**		**34.8**	M1		
Chromium VI	mg/kg	6.3	**0.33**	JB	**0.34**	JB	**0.39**	JB	**0.42**	JB	**0.32**	JB	**0.77**	JB	**0.85**	JBM1		
Cobalt	mg/kg	350	**8**		**6.6**		**4.2**	J	**3.8**	J	**1.8**	J	**5**		**5.7**			
Copper	mg/kg	47,000	**566**		**10.5**		**17.9**		**33**		**6.6**		**13.3**		**14.6**			
Iron	mg/kg	820,000	**31,700**		**15,500**		**16,700**		**16,700**		**7,880**		**16,300**		**24,400**	M6R1		
Lead	mg/kg	800	**205**		**11.1**		**43.7**		**29.7**		2.2	U	**8.7**		**18.7**			
Manganese	mg/kg	26,000	**2,760**		**82.4**		**950**		**3,990**		**15,900**		**88.7**		**36.6**			
Mercury	mg/kg	350	**0.058**	J	**0.026**	J	**0.038**	J	0.12	U	0.11	U	**0.094**	J	**0.0071**	J		
Nickel	mg/kg	22,000	**30.2**		**16.3**		**11.5**		**13.1**		**2.3**	JB	**13.2**		**13.4**			
Selenium	mg/kg	5,800	3.9	U	3.4	U	**2.9**	J	4	U	3.6	U	3.8	U	4.2	U		
Silver	mg/kg	5,800	2.9	U	2.5	U	2.7	U	3	U	2.7	U	2.8	U	3.1	U		
Thallium	mg/kg	12	9.7	U	8.5	U	9	U	10	U	8.9	U	9.5	U	10.4	U		
Vanadium	mg/kg	5,800	**68.3**		**32.7**		**42.8**		**327**		**202**		**34.7**		**40.4**	M1		
Zinc	mg/kg	350,000	**610**		**33.9**		**46.2**		**30.6**		**2.2**	JB	**42.8**		**40.4**			
Other																		
Cyanide	mg/kg	150	**1.7**		**0.088**	J	**1.9**		**1.9**		**0.092**	J	**0.075**	J	**0.041**	J		

Detections in bold

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Values in Red indicate an exceedance of the Project Action Limit (PAL)

Table 6
Summary of Inorganics Detected in Soil
Parcel B22
Tradepoint Atlantic
Sparrows Point, Maryland

Parameter	Units	PAL	B22-059-SB-1 Soil 5/23/2016		B22-059-SB-4 Soil 5/23/2016		B22-060-SB-1 Soil 5/23/2016		B22-060-SB-4 Soil 5/23/2016		B22-061-SB-1 Soil 6/2/2016		B22-061-SB-5 Soil 6/2/2016		B22-062-SB-1 Soil 5/18/2016		B22-062-SB-4 Soil 5/18/2016		B22-063-SB-1 Soil 6/2/2016	
Metals																				
Aluminum	mg/kg	1,100,000	**29,900**		**31,800**		**38,300**		**14,700**		**37,900**		**42,400**		**26,700**		**22,000**		**26,700**	
Antimony	mg/kg	470	2.8	U	2.7	U	**1.7**	J	2.3	U	2.6	U	3.4	U	3.3	U	3.4	U	2.6	U
Arsenic	mg/kg	3	**13.1**		**18.6**		**2.1**	J	**8.7**		**11.1**		**5.8**		**3.5**		**4.9**		**8.3**	
Barium	mg/kg	220,000	**722**		**434**		**468**		**281**		**896**		**2,150**		**369**		**303**		**144**	
Beryllium	mg/kg	2,300	**2.4**		**2.3**		**5.3**		**0.46**	J	**3.2**		**3.6**		**3.9**		**1.4**		**1**	
Cadmium	mg/kg	980	**5.6**		**7.1**		**0.31**	JB	**1.1**	JB	**1.1**	J	**6.1**		**2.4**		**3**		**0.9**	JB
Chromium	mg/kg	120,000	**168**		**149**		**63.2**		**1,240**		**168**		**33.3**		**375**		**1,090**		**899**	
Chromium VI	mg/kg	6.3	**0.38**	JB	**0.42**	JB	**0.35**	JB	**0.57**	JB	**0.41**	JB	**0.48**	JB	**0.43**	JB	**0.5**	JB	**7.2**	
Cobalt	mg/kg	350	**33.9**		**34.7**		**1.8**	J	**5.9**		**23.3**		**2.5**	J	**4.9**	J	**6**		**3**	J
Copper	mg/kg	47,000	**359**		**301**		**14.3**		**55.1**		**248**		**23.8**		**51.4**		**60.7**		**51.5**	
Iron	mg/kg	820,000	**104,000**		**84,700**		**22,400**		**88,700**		**64,300**		**9,200**		**59,700**		**104,000**		**169,000**	
Lead	mg/kg	800	**1,230**		**976**		**57**		**245**		**151**		**162**		**149**		**205**		**191**	
Manganese	mg/kg	26,000	**11,900**		**14,200**		**7,240**		**43,800**		**7,300**		**14,300**		**14,500**		**29,400**		**20,000**	
Mercury	mg/kg	350	0.11	U	**0.0082**	J	0.11	U	**0.085**	J	**0.0061**	J	0.14	U	0.11	U	0.11	U	**0.056**	J
Nickel	mg/kg	22,000	**169**		**130**		**4.2**	JB	**17.7**		**167**		**11.3**	J	**17.3**		**25.2**		**22.8**	
Selenium	mg/kg	5,800	3.7	U	3.7	U	3.5	U	3.1	U	3.5	U	**3.1**	J	4.4	U	4.6	U	3.4	U
Silver	mg/kg	5,800	**2.6**	J	**2.2**	J	2.6	U	2.3	U	2.6	U	3.4	U	3.3	U	3.4	U	**1.5**	J
Thallium	mg/kg	12	9.2	U	9.2	U	8.6	U	7.7	U	8.8	U	11.3	U	10.9	U	11.5	U	8.6	U
Vanadium	mg/kg	5,800	**160**		**118**		**214**		**2,400**		**132**		**52.5**		**717**		**1,730**		**476**	
Zinc	mg/kg	350,000	**3,400**		**3,650**		**217**		**592**		**236**		**1,470**		**400**		**408**		**158**	
Other																				
Cyanide	mg/kg	150	**2.5**		**2.5**		**0.72**		**1.5**		**0.77**		**0.87**		**0.84**		**0.64**	JB	**0.17**	J

Detections in bold

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Values in Red indicate an exceedance of the Project Action Limit (PAL)

Table 6
Summary of Inorganics Detected in Soil
Parcel B22
Tradepoint Atlantic
Sparrows Point, Maryland

Parameter	Units	PAL	B22-063-SB-9 Soil 6/2/2016		B22-063-SB-10 Soil 6/2/2016		B22-064-SB-1 Soil 5/31/2016		B22-064-SB-7 Soil 5/31/2016		B22-065-SB-1 Soil 6/3/2016		B22-065-SB-7 Soil 6/3/2016		B22-066-SB-1 Soil 6/2/2016		B22-066-SB-9 Soil 6/2/2016		B22-067-SB-1 Soil 5/20/2016	
Metals																				
Aluminum	mg/kg	1,100,000	**11,600**				**14,200**		**15,000**		**8,260**		**12,900**		**13,200**		**4,070**		**23,500**	
Antimony	mg/kg	470	2.7	U			2.8	U	3.2	U	2.8	U	2.8	U	2.4	U	2.5	U	2.9	U
Arsenic	mg/kg	3	**3.8**		2.2	U	**2.3**		**2.4**	J	2.4	U	2.3	U	**6.4**		**2.9**		2.4	U
Barium	mg/kg	220,000	**179**				**101**		**96.2**		**61.1**		**17.1**		**76.8**		**90**		**315**	
Beryllium	mg/kg	2,300	**1.3**				**1.2**		**0.73**	J	**0.34**	J	**0.6**	J	0.8	U	0.85	U	**3.2**	
Cadmium	mg/kg	980	**0.38**	JB			**0.15**	JB	1.6	U	1.4	U	1.4	U	**0.44**	JB	1.3	U	**0.4**	JB
Chromium	mg/kg	120,000	**29**				**28**		**24**		**9.5**		**25.3**		**1,230**		**13.6**		**66.1**	
Chromium VI	mg/kg	6.3	**0.32**	JB			**0.53**	JB	**0.6**	JB	**0.77**	JB	**0.6**	JB	**2.9**		**0.76**	JB	**0.41**	JB
Cobalt	mg/kg	350	**3.6**	J			**15**		**3.8**	J	**3.5**	J	**8.2**		**1.5**	J	**1.7**	J	**11.5**	
Copper	mg/kg	47,000	**40.1**				**15.2**		**8.4**		**7.5**		**4.9**		**40.1**		**12.2**		**23.9**	B
Iron	mg/kg	820,000	**52,900**				**13,000**		**8,330**		**5,660**		**14,100**		**222,000**		**7,990**		**149,000**	
Lead	mg/kg	800	**35.5**				**11.9**		**5.4**		**9.7**		**11.4**		**39.4**		**54.7**		**11.8**	
Manganese	mg/kg	26,000	**1,560**				**270**		**110**		**63.2**		**40**		**25,300**		**282**		**7,410**	
Mercury	mg/kg	350	**0.038**	J			**0.027**	J	**0.049**	J	**0.031**	J	**0.0026**	J	**0.0065**	J	**0.042**	J	0.1	U
Nickel	mg/kg	22,000	**11.7**				**21.8**		**9.1**	J	**3.8**	J	**13.9**		**19.7**		**3.7**	J	**9.7**	
Selenium	mg/kg	5,800	3.6	U			3.7	U	4.3	U	3.8	U	**2.4**	J	3.2	U	3.4	U	**3.2**	J
Silver	mg/kg	5,800	2.7	U			2.8	U	3.2	U	2.8	U	2.8	U	**2.1**	J	2.5	U	**0.71**	J
Thallium	mg/kg	12	8.9	U			9.2	U	10.7	U	9.4	U	9.3	U	8	U	8.5	U	9.7	U
Vanadium	mg/kg	5,800	**16.2**				**24.2**		**24**		**17.7**		**29.8**		**772**		**9.3**		**207**	
Zinc	mg/kg	350,000	**56.4**				**60.4**		**28**		**23.6**		**35.6**		**90.8**		**8.1**		**14.4**	B
Other																				
Cyanide	mg/kg	150	**0.36**	J			**0.16**	J	**0.061**	J	**0.21**	J	0.65	U	**0.14**	J	**0.081**	J	**0.25**	JB

Detections in bold

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Table 6
Summary of Inorganics Detected in Soil
Parcel B22
Tradepoint Atlantic
Sparrows Point, Maryland

Parameter	Units	PAL	B22-067-SB-7 Soil 5/20/2016		B22-067-SB-10 Soil 5/20/2016		B22-068-SB-1 Soil 5/25/2016		B22-068-SB-6 Soil 5/25/2016		B22-069-SB-1 Soil 5/25/2016		B22-069-SB-4 Soil 5/25/2016		B22-069-SB-10 Soil 5/25/2016		B22-070-SB-1 Soil 5/25/2016		B22-070-SB-9 Soil 5/25/2016	
Metals																				
Aluminum	mg/kg	1,100,000	**14,800**				**13,600**		**12,600**	M6	**28,900**		**14,600**				**34,500**		**16,500**	
Antimony	mg/kg	470	3.1	U			3.4	U	2.7	UM1	2.7	U	2.7	U			2.5	U	2.7	U
Arsenic	mg/kg	3	**5.2**		**5**		**3.3**		**2.3**		2.3	U	**7.5**		**39.8**		**4.3**		**2.7**	
Barium	mg/kg	220,000	**209**				**175**		**25.2**		**407**		**20.8**				**1,010**		**50**	
Beryllium	mg/kg	2,300	**1**				**2**		**0.68**	J	**4**		**0.78**	J			**2.8**		**0.66**	J
Cadmium	mg/kg	980	**0.51**	JB			**0.3**	JB	1.4	U	**0.35**	JB	1.4	U			**0.97**	JB	1.3	U
Chromium	mg/kg	120,000	**107**				**38.5**		**25.7**		**25.2**		**24**				**40.9**		**27.5**	
Chromium VI	mg/kg	6.3	**0.37**	JB			**0.35**	JB	**0.39**	JB	**0.39**	JB	**0.9**	JB			**0.5**	JB	**0.79**	JB
Cobalt	mg/kg	350	**12**				**3**	J	**8.3**		**2**	J	**4.3**	J			**3.7**	J	**7.2**	
Copper	mg/kg	47,000	**282**				**44.5**		**9.6**		**10.2**		**12.7**				**53**		**11.4**	
Iron	mg/kg	820,000	**24,700**				**66,500**		**24,000**	M6	**14,900**		**26,500**				**20,800**		**21,800**	
Lead	mg/kg	800	**280**				**26**		**14.5**		2.3	U	**13.8**				**157**		**12.3**	
Manganese	mg/kg	26,000	**1,180**				**1,810**		**87.6**		**3,910**		**92**				**7,000**		**88.5**	
Mercury	mg/kg	350	**0.04**	J			**0.0037**	J	**0.0024**	J	0.11	U	**0.015**	J			0.12	U	0.12	U
Nickel	mg/kg	22,000	**18.1**				**14.3**	B	**14.9**	B	**3.6**	JB	**11.7**	B			**10.1**	B	**14.8**	B
Selenium	mg/kg	5,800	**2.6**	J			4.5	U	3.7	U	**3.5**	J	3.7	U			3.3	U	3.6	U
Silver	mg/kg	5,800	3.1	U			3.4	U	2.7	U	2.7	U	2.7	U			2.5	U	2.7	U
Thallium	mg/kg	12	10.2	U			11.2	U	9.1	U	9	U	9.2	U			8.2	U	9	U
Vanadium	mg/kg	5,800	**170**				**17.2**		**63.1**	M1	**47.2**		**33.4**				**193**		**32.3**	
Zinc	mg/kg	350,000	**229**				**80.8**		**57.3**		**42.1**		**31.2**				**189**		**56.2**	
Other																				
Cyanide	mg/kg	150	**0.15**	JB			**0.24**	JB	**0.065**	JB	**0.095**	JB	**0.13**	JB			**0.36**	JB	0.63	U

Detections in bold

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Table 6
Summary of Inorganics Detected in Soil
Parcel B22
Tradepoint Atlantic
Sparrows Point, Maryland

Parameter	Units	PAL	B22-071-SB-1 Soil 5/18/2016		B22-071-SB-4 Soil 5/18/2016		B22-072-SB-1 Soil 6/1/2016		B22-073-SB-1 Soil 5/17/2016		B22-073-SB-5 Soil 5/17/2016		B22-074-SB-1 Soil 6/1/2016		B22-075-SB-1 Soil 6/3/2016		B22-075-SB-4 Soil 6/3/2016		B22-076-SB-1 Soil 6/3/2016	
Metals																				
Aluminum	mg/kg	1,100,000	**32,700**		**11,400**		**47,400**		**20,700**		**17,800**		**5,980**		**40,600**		**16,200**		**41,800**	
Antimony	mg/kg	470	3.2	U	3.1	U	3.5	U	3.5	U	3.3	U	2.7	U	2.5	U	3	U	2.8	U
Arsenic	mg/kg	3	**4.8**		**6.6**		**6.6**		**13.4**		**14.3**		**672**		**3.7**		**10.8**		2.3	U
Barium	mg/kg	220,000	**251**		**223**		**387**		**294**		**95.9**		**57.7**		**322**		**30.6**		**374**	
Beryllium	mg/kg	2,300	**4.9**		**0.55**	J	**2.1**		**1.1**	J	**1**	J	**0.24**	J	**6.8**		**1.1**		**7.4**	
Cadmium	mg/kg	980	**2.5**		**8.9**		**1.5**	J	**1.7**	JB	**0.23**	JB	**0.87**	JB	**0.52**	JB	1.5	U	**0.27**	JB
Chromium	mg/kg	120,000	**536**		**1,460**		**95.7**		**104**		**47.2**		**4,080**		**16.6**		**40.8**		**11.7**	
Chromium VI	mg/kg	6.3	**0.5**	JB	**0.45**	JB	**0.33**	JB	**0.38**	JB	**0.55**	JB	**0.69**	JB	**0.3**	J	**1.3**		**0.33**	J
Cobalt	mg/kg	350	**3.4**	J	**10.2**		**7.6**		**12.1**		**8**		**123**		**0.82**	J	**2.8**	J	**0.41**	J
Copper	mg/kg	47,000	**61.5**		**114**		**146**		**156**		**67.5**		**358**		**9.7**		**16.9**		**9.4**	
Iron	mg/kg	820,000	**78,400**		**126,000**		**17,700**		**45,600**		**35,000**		**168,000**		**12,600**		**37,900**		**8,180**	
Lead	mg/kg	800	**128**		**465**		**132**		**161**		**37.2**		**66.9**		**64.8**		**19.6**		**3.8**	
Manganese	mg/kg	26,000	**15,300**		**40,800**		**3,360**		**1,280**		**574**		**2,430**		**3,390**		**63**		**3,240**	
Mercury	mg/kg	350	**0.28**		**0.043**	J	0.12	U	**0.58**		**0.034**	J	**0.042**	J	0.1	U	**0.029**	J	0.11	U
Nickel	mg/kg	22,000	**16.7**		**48.1**		**37.9**		**58.5**		**25.8**		**1,170**		**4**	J	**9.3**	J	9.3	U
Selenium	mg/kg	5,800	4.3	U	4.2	U	4.7	U	4.6	U	4.5	U	3.6	U	3.3	U	4	U	**2.1**	JB
Silver	mg/kg	5,800	3.2	U	3.1	U	3.5	U	3.5	U	3.3	U	**2.2**	J	2.5	U	3	U	2.8	U
Thallium	mg/kg	12	10.7	U	10.5	U	11.7	U	11.6	U	11.2	U	8.9	U	8.3	U	10	U	9.3	U
Vanadium	mg/kg	5,800	**337**		**3,600**		**58.9**		**55**		**79.4**		**143**		**23.5**		**68**		**12.9**	
Zinc	mg/kg	350,000	**539**		**995**		**439**		**602**		**77.5**		**134**		**111**		**41.6**		**2**	JB
Other																				
Cyanide	mg/kg	150	**2.7**		**0.47**	JB	**1**		**2.5**		**0.46**	J	**0.19**	J	**0.1**	J	0.67	U	**0.18**	J

Detections in bold

Blank spaces indicate that the parameter was not analyzed for this sample

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Values in Red indicate an exceedance of the Project Action Limit (PAL)

Table 6
Summary of Inorganics Detected in Soil
Parcel B22
Tradepoint Atlantic
Sparrows Point, Maryland

Parameter	Units	PAL	B22-077-SB-1 Soil 6/2/2016		B22-077-SB-5 Soil 6/2/2016		B22-078-SB-1 Soil 5/17/2016		B22-078-SB-7.5 Soil 5/17/2016		B22-079-SB-1 Soil 6/2/2016		B22-079-SB-4 Soil 6/2/2016		B22-080-SB-1 Soil 6/3/2016		B22-080-SB-5 Soil 6/3/2016		B22-081-SB-1 Soil 6/3/2016	
Metals																				
Aluminum	mg/kg	1,100,000	**13,100**		**43,100**		**15,400**		**20,600**		**35,800**		**35,800**		**17,100**		**14,800**		**19,700**	
Antimony	mg/kg	470	2.8	U	2.8	U	2.9	U	3.4	U	2.9	U	2.9	U	2.7	U	3	U	2.9	U
Arsenic	mg/kg	3	**3.9**		**3**		**8.3**		**7.3**		2.4	U	2.4	U	**7.1**		**18.9**		**4.5**	
Barium	mg/kg	220,000	**59.5**		**1,830**		**92.3**		**77.1**		**2,700**		**2,700**		**87.8**		**52.7**		**65.1**	
Beryllium	mg/kg	2,300	0.94	U	**2.3**		**0.45**	J	**0.87**	J	**3.4**		**3.4**		**0.89**		**0.45**	J	**0.44**	J
Cadmium	mg/kg	980	**0.59**	JB	**0.48**	JB	**0.67**	JB	**0.26**	JB	**0.23**	JB	**0.23**	JB	**0.47**	JB	**0.23**	JB	1.4	U
Chromium	mg/kg	120,000	**1,180**		**67.2**		**729**		**104**		**6**		**6**		**55.5**		**31.5**		**24**	
Chromium VI	mg/kg	6.3	**0.5**	JB	**0.4**	JB	**0.4**	JB	**0.75**	JB	**0.4**	JB	**0.4**	JB	**0.89**	J	**0.62**	J	**0.72**	J
Cobalt	mg/kg	350	**0.63**	J	**2.1**	J	**8**		**9.1**		**1.1**	J	**1.1**	J	**9.7**		**3.7**	J	**4**	J
Copper	mg/kg	47,000	**28.4**		**30**		**54**		**38.3**		**20.6**		**20.6**		**50.3**		**37.3**		**13.3**	
Iron	mg/kg	820,000	**186,000**		**10,300**		**191,000**		**35,500**		**4,910**		**4,910**		**22,200**		**29,000**		**15,100**	
Lead	mg/kg	800	**27.7**		**55.9**		**47.9**		**54.9**		**44.9**		**44.9**		**41.8**		**19.5**		**15.8**	
Manganese	mg/kg	26,000	**25,300**		**11,300**		**20,100**		**1,180**		**683**		**683**		**376**		**297**		**78.7**	
Mercury	mg/kg	350	**0.01**	J	0.1	U	**0.14**		**0.057**	J	0.12	U	0.12	U	**0.11**	J	**0.012**	J	**0.025**	J
Nickel	mg/kg	22,000	**14.4**		**3.3**	J	**30**		**24.2**		9.5	U	9.5	U	**23.6**		**9.9**	J	**13**	
Selenium	mg/kg	5,800	3.7	U	3.8	U	3.9	U	4.5	U	**4.4**		**4.4**		3.5	U	4	U	3.8	U
Silver	mg/kg	5,800	**2.4**	J	2.8	U	**2.8**	J	3.4	U	2.9	U	2.9	U	2.7	U	3	U	2.9	U
Thallium	mg/kg	12	9.4	U	9.4	U	9.8	U	11.3	U	9.5	U	9.5	U	8.9	U	10.1	U	9.5	U
Vanadium	mg/kg	5,800	**746**		**461**		**513**		**40.7**		**51.1**		**51.1**		**32.2**		**49.7**		**31.9**	
Zinc	mg/kg	350,000	**195**		**85.8**		**301**		**97.3**		**3.6**	J	**3.6**	J	**323**		**98.8**		**33.7**	
Other																				
Cyanide	mg/kg	150	**0.16**	J	**0.25**	J	**0.42**	J	**0.045**	J	**2.1**		**2.1**		0.6	U	0.69	U	0.61	U

Detections in bold

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Table 6
Summary of Inorganics Detected in Soil
Parcel B22
Tradepoint Atlantic
Sparrows Point, Maryland

Parameter	Units	PAL	B22-081-SB-4 Soil 6/3/2016		B22-081-SB-10 Soil 6/3/2016		B22-082-SB-1 Soil 5/31/2016		B22-082-SB-4 Soil 5/31/2016		B22-083-SB-1 Soil 6/3/2016		B22-083-SB-4 Soil 6/3/2016		B22-084-SB-1 Soil 5/26/2016		B22-085-SB-1 Soil 5/26/2016		B22-086-SB-1 Soil 5/26/2016	
Metals																				
Aluminum	mg/kg	1,100,000	**10,600**				**23,300**		**18,400**		**36,400**		**14,800**		**17,000**		**8,520**		**31,300**	
Antimony	mg/kg	470	2.8	U			3	U	2.8	U	2.5	U	2.7	U	2.6	U	2.5	U	2.6	U
Arsenic	mg/kg	3	**6.2**		**8.5**		**11.7**		2.3	U	2.1	U	**3**		**10.6**		**5.8**		**4**	
Barium	mg/kg	220,000	**36.7**				**52.2**		**40.3**		**939**		**63.2**		**167**		**84.2**		**203**	
Beryllium	mg/kg	2,300	**0.31**	J			**1.2**		**0.48**	J	**3.7**		**0.71**	J	**1.5**		0.85	U	**1.2**	
Cadmium	mg/kg	980	1.4	U			1.5	U	1.4	U	**0.57**	JB	1.3	U	**0.38**	J	**5.5**		**0.31**	J
Chromium	mg/kg	120,000	**19.8**				**41.3**		**29.6**		**31.3**		**22.3**		**35.9**		**581**		**210**	
Chromium VI	mg/kg	6.3	**0.67**	J			**0.37**	JB	**0.35**	JB	**0.31**	J	**0.78**	J	**0.37**	JB	**0.33**	JB	**0.41**	JB
Cobalt	mg/kg	350	**1.2**	J			**4.5**	J	**2.8**	J	**1.5**	J	**7.4**		**10.3**		**3.4**	J	**4.6**	
Copper	mg/kg	47,000	**8.1**				**15.5**		**6.8**		**16.1**		**14.2**		**83.4**		**73.8**		**28.4**	
Iron	mg/kg	820,000	**22,200**				**45,700**		**9,280**		**15,500**		**17,800**		**39,300**		**108,000**		**16,100**	
Lead	mg/kg	800	**10.9**				**16**		**13.2**		**52**		**17.4**		**49.5**		**226**		**21.3**	
Manganese	mg/kg	26,000	**24**				**55.1**		**39.8**		**8,500**		**307**		**1,690**		**15,400**		**1,710**	
Mercury	mg/kg	350	**0.022**	J			**0.047**	J	**0.013**	J	0.11	U	**0.031**	J	**0.044**	J	**1.8**		**0.028**	J
Nickel	mg/kg	22,000	**3.8**	J			**9.8**	JB	**6.2**	JB	**6**	J	**15.3**		**28.2**		**25.4**		**16.5**	
Selenium	mg/kg	5,800	3.8	U			4	U	3.7	U	**3**	JB	3.6	U	3.5	U	3.4	U	**2.6**	J
Silver	mg/kg	5,800	2.8	U			3	U	2.8	U	2.5	U	2.7	U	2.6	U	**1.6**	J	2.6	U
Thallium	mg/kg	12	9.4	U			10	U	9.3	U	8.3	U	9	U	8.6	U	8.5	U	8.8	U
Vanadium	mg/kg	5,800	**31**				**46.5**		**41.3**		**134**		**26.2**		**57.7**		**743**		**25.3**	
Zinc	mg/kg	350,000	**14.2**				**28.5**		**21.5**		**117**		**51.6**		**86.1**		**424**		**63.4**	
Other																				
Cyanide	mg/kg	150	0.78	U			**0.084**	J	0.62	U	**0.45**	J	0.71	U	**0.46**	J	**1.2**		**1.8**	

Detections in bold

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Table 6
Summary of Inorganics Detected in Soil
Parcel B22
Tradepoint Atlantic
Sparrows Point, Maryland

Parameter	Units	PAL	B22-086-SB-5 Soil 5/26/2016		B22-086-SB-10 Soil 5/26/2016		B22-087-SB-1 Soil 5/25/2016		B22-087-SB-5 Soil 5/25/2016		B22-087-SB-10 Soil 5/25/2016		B22-088-SB-1 Soil 5/25/2016		B22-088-SB-6 Soil 5/25/2016		B22-089-SB-1 Soil 5/25/2016		B22-089-SB-5 Soil 5/25/2016	
Metals																				
Aluminum	mg/kg	1,100,000	**28,600**				**12,800**		**11,500**				**13,600**		**10,400**		**32,600**		**37,600**	
Antimony	mg/kg	470	2.9	U			2.7	U	2.8	U			2.3	U	2.5	U	2.7	U	2.3	U
Arsenic	mg/kg	3	**6.3**		**23.8**		**5.2**		**4.5**		**2.6**		**28.7**		**10.8**		**3.9**		1.9	U
Barium	mg/kg	220,000	**122**				**156**		**55.5**				**104**		**102**		**453**		**504**	
Beryllium	mg/kg	2,300	**1.6**				**0.84**	J	**0.74**	J			**0.45**	J	**0.34**	J	**4.2**		**4.9**	
Cadmium	mg/kg	980	1.5	U			**1.6**	B	1.4	U			**1.8**	B	**2.5**		**0.53**	JB	**0.21**	JB
Chromium	mg/kg	120,000	**31.1**				**69.5**		**15.4**				**1,400**		**820**		**199**		**9.1**	
Chromium VI	mg/kg	6.3	**1**	JB			**0.42**	JB	**0.62**	JB			**0.53**	JB	**0.37**	JB	**0.35**	JB	**0.3**	JB
Cobalt	mg/kg	350	**7.1**				**7.8**		**10.2**				**6.1**		**10.8**		**2.6**	J	**1.8**	J
Copper	mg/kg	47,000	**17.8**				**65.5**		**10.7**				**101**		**100**		**19.9**		**10.4**	
Iron	mg/kg	820,000	**9,440**				**31,300**		**12,000**				**165,000**		**127,000**		**29,300**		**11,500**	
Lead	mg/kg	800	**19.8**				**338**		**30**				**123**		**297**		**13.6**		**2**	
Manganese	mg/kg	26,000	**18.8**				**1,670**		**248**				**46,000**		**31,800**		**9,730**		**6,100**	
Mercury	mg/kg	350	**0.091**	J			0.1	U	**0.034**	J			**0.037**	J	**0.037**	J	0.11	U	0.11	U
Nickel	mg/kg	22,000	**19.4**				**24.1**		**14.8**	B			**18.4**	B	**24.6**		**6**	JB	**1.9**	JB
Selenium	mg/kg	5,800	3.9	U			3.5	U	3.8	U			3.1	U	3.3	U	**2.6**	J	**3.3**	
Silver	mg/kg	5,800	2.9	U			2.7	U	2.8	U			**0.82**	J	**0.93**	J	2.7	U	2.3	U
Thallium	mg/kg	12	9.8	U			8.8	U	9.4	U			7.7	U	8.2	U	8.9	U	7.6	U
Vanadium	mg/kg	5,800	**30**				**257**		**22.3**				**1,720**		**1,280**		**342**		**26.1**	
Zinc	mg/kg	350,000	**42.1**				**555**		**49.7**				**341**		**803**		**55.8**		**8.2**	
Other																				
Cyanide	mg/kg	150	0.72	U			**0.34**	JB	**0.077**	JB			**0.76**		**1**		**0.18**	JB	**0.13**	JB

Detections in bold

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Table 6
Summary of Inorganics Detected in Soil
Parcel B22
Tradepoint Atlantic
Sparrows Point, Maryland

Parameter	Units	PAL	B22-090-SB-1 Soil 6/3/2016		B22-090-SB-5 Soil 6/3/2016		B22-091-SB-1 Soil 6/2/2016		B22-091-SB-4 Soil 6/2/2016		B22-092-SB-1 Soil 6/2/2016		B22-092-SB-4 Soil 6/2/2016		B22-093-SB-1 Soil 6/2/2016		B22-093-SB-5 Soil 6/2/2016		B22-093-SB-10 Soil 6/2/2016	
Metals																				
Aluminum	mg/kg	1,100,000	**41,900**		**19,300**		**19,200**		**15,200**		**44,200**		**41,900**		**17,800**		**20,600**	M6		
Antimony	mg/kg	470	2.8	U	2.7	U	**2.5**	J	2.7	U	2.6	U	2.4	U	2.9	U	2.7	UM1		
Arsenic	mg/kg	3	2.3	U	**5**		**15.4**		**5.7**		2.2	U	2	U	**7.6**		**6.6**		**21.7**	
Barium	mg/kg	220,000	**546**		**105**		**374**		**54.6**		**372**		**354**		**153**		**61.5**			
Beryllium	mg/kg	2,300	**6.7**		**1.5**		**2**		**0.6**	J	**7.2**		**6.9**		**1.7**		**0.45**	J		
Cadmium	mg/kg	980	**0.33**	J	1.3	U	**4.2**		1.3	U	**0.36**	J	**0.29**	JB	**1.5**		1.3	U		
Chromium	mg/kg	120,000	**7.1**		**27**		**128**		**20.5**		**13.5**		**5.1**		**152**		**30.1**			
Chromium VI	mg/kg	6.3	**0.37**	JB	**0.44**	JB	**0.37**	JB	**0.43**	JB	**0.3**	JB	**0.31**	JB	**0.48**	JB	**0.38**	JBM1		
Cobalt	mg/kg	350	**2.3**	J	**2.8**	J	**23.6**		**6.9**		**1**	J	**0.48**	J	**9.3**		**3.9**	J		
Copper	mg/kg	47,000	**5.7**		**9.6**		**1,290**		**7.2**		**20.9**		**3**	J	**124**		**10.4**			
Iron	mg/kg	820,000	**10,200**		**13,200**		**56,900**		**17,700**		**10,900**		**4,300**		**59,500**		**20,400**	M1		
Lead	mg/kg	800	**6.9**		**17.9**		**696**		**9.2**		**35.5**		2	U	**639**		**11.8**	M1R1		
Manganese	mg/kg	26,000	**4,950**		**112**		**3,580**		**104**		**2,140**		**1,950**		**3,540**		**132**	M1		
Mercury	mg/kg	350	0.11	U	**0.01**	J	**2.8**		**0.083**	J	0.11	U	**0.0023**	J	**0.26**		**0.055**	JM1		
Nickel	mg/kg	22,000	**1.7**	J	**10**		**82.6**		**12.9**		**2**	J	8.1	U	**35.5**		**10.7**			
Selenium	mg/kg	5,800	**5.3**		3.6	U	3.6	U	3.6	U	**2.7**	J	**6**		3.9	U	3.6	U		
Silver	mg/kg	5,800	2.8	U	2.7	U	2.7	U	2.7	U	2.6	U	2.4	U	2.9	U	2.7	U		
Thallium	mg/kg	12	9.2	U	9	U	8.9	U	8.9	U	8.7	U	8.1	U	9.7	U	8.9	U		
Vanadium	mg/kg	5,800	**37.8**		**36.1**		**125**		**30.8**		**16.4**		**8**		**105**		**49.6**	M1		
Zinc	mg/kg	350,000	**13.1**		**18.9**		**2,690**		**38.5**		**27.8**		**8.7**		**1,100**		**27.8**			
Other																				
Cyanide	mg/kg	150	0.59	U	0.71	U	**0.17**	J	0.73	U	**0.21**	J	**0.18**	J	**0.23**	J	0.6	U		

Detections in bold

Blank spaces indicate that the parameter was not analyzed for this sample

*PAH compounds were analyzed via SIM

A glossary of laboratory flag keys can be viewed in the attached laboratory reports

Values in Red indicate an exceedance of the Project Action Limit (PAL)

Table 6
Summary of Inorganics Detected in Soil
Parcel B22
Tradepoint Atlantic
Sparrows Point, Maryland

Parameter	Units	PAL	B22-094-SB-1 Soil 6/3/2016		B22-094-SB-4 Soil 6/3/2016		B22-095-SB-1 Soil 6/3/2016		B22-095-SB-6 Soil 6/3/2016		B22-096-SB-1 Soil 5/24/2016		B22-096-SB-9 Soil 5/24/2016		B22-096-SB-10 Soil 5/24/2016		B22-097-SB-1 Soil 5/24/2016		B22-097-SB-9 Soil 5/24/2016	
Metals																				
Aluminum	mg/kg	1,100,000	**37,100**		**14,800**		**27,600**		**14,500**	M6	**15,700**		**16,000**	M6			**15,700**		**8,660**	
Antimony	mg/kg	470	2.5	U	3.2	U	2.8	U	2.8	UM1	3.1	U	2.8	UM1			2.3	U	2.7	U
Arsenic	mg/kg	3	2.1	U	**6.6**		**8.6**		**3.9**		**4.1**		**4.1**		**7.8**		**8.1**		**20.9**	
Barium	mg/kg	220,000	**1,070**		**79.9**		**821**		**40.6**		**171**		**25.6**	M1			**255**		**720**	
Beryllium	mg/kg	2,300	**4.8**		**0.94**	J	**3.9**		**0.71**	J	**0.57**	J	**0.64**	J			**1**		**0.63**	J
Cadmium	mg/kg	980	**0.44**	J	1.6	U	**9.6**		1.4	U	**2.6**		1.4	U			**0.83**	JB	**4.9**	
Chromium	mg/kg	120,000	**22.6**		**27.2**		**93.4**		**23.7**		**120**		**26.6**				**1,010**		**218**	
Chromium VI	mg/kg	6.3	**0.39**	JB	**0.4**	JB	**0.45**	J	**0.48**	JBM1	**0.95**	JB	**0.5**	JB			**0.56**	JB	**0.48**	JB
Cobalt	mg/kg	350	**3.2**	J	**6.4**		**6.1**		**5.2**		**6.4**		**5**				**29.3**		**17.2**	
Copper	mg/kg	47,000	**11.3**		**21.4**		**2,270**		**7.5**		**321**		**10.3**				**963**		**769**	
Iron	mg/kg	820,000	**20,900**		**18,200**		**36,600**		**19,500**	M6	**27,400**		**10,600**	M1			**86,400**		**97,200**	
Lead	mg/kg	800	**13**		**27.2**		**352**		**12.9**		**103**		**12.6**				**448**		**1,960**	
Manganese	mg/kg	26,000	**11,300**		**271**		**6,750**		**52.7**		**1,240**		**63.2**	M1			**5,790**		**16,200**	
Mercury	mg/kg	350	0.11	U	**0.042**	J	**0.17**		**0.0028**	J	**0.12**	J	**0.0034**	J			**0.035**	J	**0.014**	J
Nickel	mg/kg	22,000	**4.7**	J	**13.5**		**24.7**		**9.8**		**17.9**		**6.8**	J			**239**		**66.7**	
Selenium	mg/kg	5,800	**3.5**		4.2	U	3.8	U	3.7	U	4.1	U	3.7	U			3	U	3.6	U
Silver	mg/kg	5,800	2.5	U	3.2	U	**16.5**		2.8	U	3.1	U	2.8	U			2.3	U	**3**	
Thallium	mg/kg	12	8.4	U	10.6	U	9.4	U	9.2	U	10.2	U	9.2	U			7.6	U	8.9	U
Vanadium	mg/kg	5,800	**200**		**37.7**		**196**		**31.9**	M1	**256**		**27.8**				**1,690**		**1,230**	
Zinc	mg/kg	350,000	**19.7**		**59.3**		**16,200**		**33.7**	M1	**686**		**23.5**				**1,490**		**2,400**	
Other																				
Cyanide	mg/kg	150	0.53	U	**0.6**	J	**0.78**		**0.07**	J	**2.9**		**0.18**	J			**0.95**		**1**	

Detections in bold

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Values in Red indicate an exceedance of the Project Action Limit (PAL)

Table 6
Summary of Inorganics Detected in Soil
Parcel B22
Tradepoint Atlantic
Sparrows Point, Maryland

Parameter	Units	PAL	B22-098-SB-1 Soil 5/24/2016		B22-098-SB-4 Soil 5/24/2016		B22-098-SB-10 Soil 5/24/2016		B22-099-SB-1 Soil 5/19/2016		B22-099-SB-7 Soil 5/19/2016		B22-099-SB-9.5 Soil 5/19/2016		B22-100-SB-1 Soil 5/18/2016		B22-100-SB-6 Soil 5/18/2016		B22-100-SB-10 Soil 5/18/2016	
Metals																				
Aluminum	mg/kg	1,100,000	**7,360**		**6,980**				**15,700**		**12,700**				**13,100**		**11,800**			
Antimony	mg/kg	470	2.5	U	2.3	U			3.1	U	2.9	U			2.9	U	2.7	U		
Arsenic	mg/kg	3	**8.8**		**11.6**		**6.7**		**16.7**		**5.5**		**16**		**9.1**		**2.8**			
Barium	mg/kg	220,000	**131**		**150**				**294**		**92.5**				**152**		**119**			
Beryllium	mg/kg	2,300	**0.19**	J	**0.55**	J			**1.5**		**0.42**	J			**0.92**	J	**0.2**	J		
Cadmium	mg/kg	980	**0.47**	JB	**0.81**	JB			**2.9**		**2.4**				**2**		**5.5**			
Chromium	mg/kg	120,000	**542**		**165**				**634**		**391**				**887**		**1,950**			
Chromium VI	mg/kg	6.3	**0.68**	JB	**0.46**	JB			**0.65**	JB	**0.56**	JB			**0.45**	JB	**0.64**	JB		
Cobalt	mg/kg	350	**17.5**		**11.8**				**14.9**		**6.2**				**24.4**		**4.9**			
Copper	mg/kg	47,000	**209**		**130**				**367**		**47.4**				**158**		**72.5**			
Iron	mg/kg	820,000	**127,000**		**56,600**				**99,800**		**45,500**				**246,000**		**118,000**			
Lead	mg/kg	800	**279**		**1,790**		**16.2**		**658**		**153**				**147**		**174**			
Manganese	mg/kg	26,000	**12,400**		**4,710**				**8,670**		**7,480**				**22,300**		**29,100**		**9,320**	
Mercury	mg/kg	350	**0.011**	J	**0.044**	J			**0.19**		**0.035**	J			**0.058**	J	**0.1**	J		
Nickel	mg/kg	22,000	**48.8**		**41.7**				**186**		**21.1**				**58.9**		**29.5**			
Selenium	mg/kg	5,800	3.4	U	3	U			4.1	U	3.8	U			3.9	U	3.6	U		
Silver	mg/kg	5,800	2.5	U	2.3	U			3.1	U	2.9	U			2.9	U	2.7	U		
Thallium	mg/kg	12	8.5	U	7.5	U			10.4	U	9.5	U			9.8	U	**10.5**			
Vanadium	mg/kg	5,800	**1,500**		**612**				**1,080**		**1,230**				**725**		**4,270**			
Zinc	mg/kg	350,000	**97**		**171**				**1,930**		**505**				**582**		**739**			
Other																				
Cyanide	mg/kg	150	**0.44**	JB	**1.6**				**0.63**	B	**0.29**	JB			**0.55**	JB	**0.74**			

Detections in bold

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Values in Red indicate an exceedance of the Project Action Limit (PAL)

Table 6
Summary of Inorganics Detected in Soil
Parcel B22
Tradepoint Atlantic
Sparrows Point, Maryland

Parameter	Units	PAL	B22-101-SB-1 Soil 5/20/2016		B22-101-SB-5 Soil 5/20/2016		B22-102-SB-1 Soil 5/20/2016		B22-102-SB-5 Soil 5/20/2016		B22-103-SB-1 Soil 5/31/2016		B22-103-SB-4 Soil 5/31/2016		B22-104-SB-1 Soil 5/31/2016		B22-104-SB-4 Soil 5/31/2016		B22-105-SB-1 Soil 5/31/2016	
Metals																				
Aluminum	mg/kg	1,100,000	**17,700**		**13,500**	M1M6	**16,600**		**15,600**		**18,300**		**28,100**		**5,350**		**18,600**		**18,600**	
Antimony	mg/kg	470	2.9	U	3.2	UM1	2.9	U	3.1	U	3	U	3	U	3.3	U	2.6	U	3.1	U
Arsenic	mg/kg	3	**7.5**		**3.6**		**7.7**		**4.7**		**6.9**		**3.3**		**6.1**		**9.4**		**4.2**	
Barium	mg/kg	220,000	**277**		**54**	M1R1	**310**		**59.5**		**139**		**665**		**70.3**		**125**		**157**	
Beryllium	mg/kg	2,300	**1.7**		**0.43**	J	**1.6**		**0.98**	J	**0.88**	J	**2**		**0.58**	J	**1.9**		**0.57**	J
Cadmium	mg/kg	980	**9.6**		1.6	U	**79.5**		**0.25**	JB	**0.22**	JB	**0.45**	JB	1.6	U	1.3	U	1.5	U
Chromium	mg/kg	120,000	**51.2**		**21.2**		**902**		**28.8**		**29**		**31**		**8.1**		**28.3**		**24.5**	
Chromium VI	mg/kg	6.3	**0.41**	JB	**0.63**	JB	**0.44**	JB	**0.34**	JB	**0.35**	JB	**0.37**	JB	**0.37**	JB	**0.72**	JB	**0.42**	JB
Cobalt	mg/kg	350	**17.5**		**3**	J	**21.2**		**17.3**		**4.3**	J	**2.9**	J	**4.9**	J	**8.1**		**3.5**	J
Copper	mg/kg	47,000	**205**		**20.4**	M1R1	**177**		**373**		**22.6**		**21**		**34**		**12.4**		**12**	
Iron	mg/kg	820,000	**124,000**		**12,500**	M1M6R1	**142,000**		**29,500**		**20,800**		**14,200**		**20,900**		**15,800**		**15,200**	
Lead	mg/kg	800	**726**		**12.4**		**590**		**47.4**		**34.5**		**73.6**		2.7	U	**12.7**		**5.6**	
Manganese	mg/kg	26,000	**3,620**		**81**	M1R1	**13,700**		**379**		**575**		**4,090**		**152**		**44.8**		**382**	
Mercury	mg/kg	350	**0.6**		**0.0067**	J	**1.1**		**0.034**	J	**0.092**	J	0.13	U	**0.015**	J	**0.0024**	J	**0.047**	J
Nickel	mg/kg	22,000	**53.5**		**6.1**	J	**84**		**23.6**		**13.9**		**10.2**		**16**		**19.2**		**9.6**	J
Selenium	mg/kg	5,800	**3.5**	JB	4.3	U	3.9	U	4.2	U	3.9	U	4	U	4.4	U	3.5	U	4.1	U
Silver	mg/kg	5,800	**1.2**	J	3.2	U	**0.84**	J	3.1	U	3	U	3	U	3.3	U	2.6	U	3.1	U
Thallium	mg/kg	12	9.8	U	10.6	U	9.7	U	10.5	U	9.9	U	9.9	U	10.9	U	8.8	U	10.2	U
Vanadium	mg/kg	5,800	**138**		**44.9**		**1,280**		**53.4**		**40.2**		**60.4**		**10.2**		**46.7**		**33.4**	
Zinc	mg/kg	350,000	**151**		**20.5**	M1	**401**		**64**		**61.5**		**68.2**		**35**		**82.5**		**25.4**	
Other																				
Cyanide	mg/kg	150	**0.31**	JB	**0.088**	JB	**2.1**		**0.16**	JB	**0.24**	J	**1.5**		**0.094**	J	**0.036**	J	**0.47**	J

Detections in bold

Blank spaces indicate that the parameter was not analyzed for this sample

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Values in Red indicate an exceedance of the Project Action Limit (PAL)

Table 6
Summary of Inorganics Detected in Soil
Parcel B22
Tradepoint Atlantic
Sparrows Point, Maryland

Parameter	Units	PAL	B22-105-SB-4 Soil 5/31/2016		B22-105-SB-10 Soil 5/31/2016		B22-106-SB-1 Soil 5/25/2016		B22-106-SB-8.5 Soil 5/25/2016		B22-107-SB-1 Soil 5/26/2016		B22-107-SB-5 Soil 5/26/2016		B22-107-SB-10 Soil 5/26/2016		B22-108-SB-1 Soil 5/26/2016		B22-108-SB-5 Soil 5/26/2016	
Metals																				
Aluminum	mg/kg	1,100,000	**19,700**				**35,600**		**19,300**		**16,800**		**14,100**				**12,500**		**19,900**	
Antimony	mg/kg	470	3	U			2.7	U	2.7	U	2.7	U	3.1	U			2.5	U	2.9	U
Arsenic	mg/kg	3	**4**		**7.7**		**3**		**4.3**		**9**		**4.4**		**7.3**		**5.1**		**6.2**	
Barium	mg/kg	220,000	**93**				**357**		**82.6**		**270**		**18.3**				**170**		**309**	
Beryllium	mg/kg	2,300	**1.1**				**2.7**		**0.61**	J	**1.3**		**0.56**	J			**0.65**	J	**1.7**	
Cadmium	mg/kg	980	1.5	U			**1.8**	B	1.3	U	**1.8**	B	**0.16**	JB			**0.89**	JB	**0.33**	JB
Chromium	mg/kg	120,000	**24.6**				**52.4**		**26.6**		**764**		**32.2**				**59.8**		**40**	
Chromium VI	mg/kg	6.3	**1.6**	B			**0.37**	JB	**0.34**	JB	**0.86**	JB	**1.7**	B			**0.76**	JB	**0.88**	JB
Cobalt	mg/kg	350	**3.9**	J			**3.5**	J	**4.5**		**19.2**		**3.6**	J			**8.9**		**5.2**	
Copper	mg/kg	47,000	**9.5**				**25.2**		**15.3**		**198**		**12.5**				**162**		**46.9**	
Iron	mg/kg	820,000	**18,600**				**13,100**		**15,300**		**92,000**		**14,500**				**36,900**		**16,400**	
Lead	mg/kg	800	**14.5**				**27.9**		**13.7**		**4,070**		**23.9**				**155**		**89.7**	
Manganese	mg/kg	26,000	**28.5**				**5,890**		**264**		**3,170**		**70**				**1,540**		**3,080**	
Mercury	mg/kg	350	**0.028**	J			0.11	U	**0.07**	J	**0.29**		**0.08**	J			**0.092**	J	**0.024**	J
Nickel	mg/kg	22,000	**10.2**				**7.1**	J	**10.9**		**47.1**		**8.3**	J			**18.1**		**10.6**	
Selenium	mg/kg	5,800	4	U			3.6	U	3.6	U	3.6	U	4.1	U			3.3	U	3.9	U
Silver	mg/kg	5,800	3	U			2.7	U	2.7	U	2.7	U	3.1	U			2.5	U	2.9	U
Thallium	mg/kg	12	10.1	U			9	U	8.9	U	8.9	U	10.3	U			8.2	U	9.7	U
Vanadium	mg/kg	5,800	**32.4**				**141**		**39.8**		**123**		**40.8**				**25.5**		**103**	
Zinc	mg/kg	350,000	**69.4**				**59.5**		**44.7**		**382**		**37.1**				**305**		**100**	
Other																				
Cyanide	mg/kg	150	0.67	U			**0.63**	JB	**0.35**	JB	**0.47**	J	**0.068**	JB			**0.27**	JB	**0.19**	JB

Detections in bold

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*PAH compounds were analyzed via SIM

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Values in Red indicate an exceedance of the Project Action Limit (PAL)

Table 6
Summary of Inorganics Detected in Soil
Parcel B22
Tradepoint Atlantic
Sparrows Point, Maryland

Parameter	Units	PAL	B22-109-SB-1 Soil 5/20/2016		B22-109-SB-4.5 Soil 5/20/2016		B22-110-SB-1 Soil 5/20/2016		B22-110-SB-4 Soil 5/20/2016		B22-111-SB-1 Soil 5/25/2016		B22-111-SB-8 Soil 5/25/2016		B22-112-SB-1 Soil 5/20/2016		B22-112-SB-4 Soil 5/20/2016		B22-112-SB-10 Soil 5/20/2016	
Metals																				
Aluminum	mg/kg	1,100,000	**16,700**		**17,600**		**14,700**		**15,100**		**23,100**		**16,900**		**17,400**		**8,260**			
Antimony	mg/kg	470	3.6	U	3.5	U	3.2	U	3.1	U	2.7	U	**1.9**	J	2.9	U	3	U		
Arsenic	mg/kg	3	**4.5**		**3.2**		**5.2**		**33.5**		**5.6**		**3.2**		**2.8**		**4.2**		**6**	
Barium	mg/kg	220,000	**146**		**81.8**		**209**		**301**		**301**		**41.9**		**235**		**78.7**			
Beryllium	mg/kg	2,300	**0.88**	J	**0.6**	J	**1.3**		**0.6**	J	**1.9**		**0.6**	J	**1.5**		**0.48**	J		
Cadmium	mg/kg	980	**1.5**	JB	**0.21**	JB	**14**		**10.4**		**0.52**	JB	**0.29**	JB	**0.66**	JB	**0.56**	JB		
Chromium	mg/kg	120,000	**20.3**		**25.1**		**588**		**206**		**49.2**		**28.1**		**798**		**415**			
Chromium VI	mg/kg	6.3	**0.73**	JB	**0.82**	JB	**0.31**	JB	**0.42**	JB	**0.41**	JBM1	**0.34**	JB	**0.58**	JB	**1.3**	B		
Cobalt	mg/kg	350	**5.1**	J	**7.3**		**6.6**		**44.1**		**6.5**		**7**		**5.8**		**9.8**			
Copper	mg/kg	47,000	**86.1**		**24.2**		**347**		**401**		**22**		**12.6**		**87**		**111**			
Iron	mg/kg	820,000	**15,600**		**22,800**		**46,200**		**206,000**		**22,400**		**15,000**		**163,000**		**82,900**			
Lead	mg/kg	800	**29.4**		**22.6**		**1,270**		**997**		**58**		**26.4**		**166**		**78.3**			
Manganese	mg/kg	26,000	**900**		**198**		**2,220**		**6,060**		**3,110**		**121**		**21,800**		**7,360**			
Mercury	mg/kg	350	**1.8**		**0.1**	J	**10.2**		**0.08**	J	**0.035**	J	**0.016**	J	**0.79**		**0.07**	J		
Nickel	mg/kg	22,000	**10.5**	J	**18.3**		**145**		**128**		**12.8**		**15**		**66.6**		**23.5**			
Selenium	mg/kg	5,800	**2.8**	JB	4.7	U	4.3	U	4.2	U	**2.4**	JB	3.8	U	3.9	U	4	U		
Silver	mg/kg	5,800	3.6	U	3.5	U	3.2	U	**4.6**		2.7	U	2.8	U	**1.6**	J	3	U		
Thallium	mg/kg	12	11.9	U	11.8	U	10.8	U	10.4	U	8.9	U	9.4	U	9.8	U	**10.5**			
Vanadium	mg/kg	5,800	**47.4**		**28.7**		**71.3**		**615**		**130**		**30.8**		**1,170**		**2,840**			
Zinc	mg/kg	350,000	**761**		**98.6**		**711**		**9,230**		**103**		**56**		**258**		**208**			
Other																				
Cyanide	mg/kg	150	**0.5**	JB	**1.1**		**2.2**		**0.67**	B	**0.34**	JB	**0.12**	JB	**0.77**		**0.51**	JB		

Detections in bold

Blank spaces indicate that the parameter was not analyzed for this sample

*PAH compounds were analyzed via SIM

A glossary of laboratory flag keys can be viewed in the attached laboratory reports

Values in Red indicate an exceedance of the Project Action Limit (PAL)

Table 6
Summary of Inorganics Detected in Soil
Parcel B22
Tradepoint Atlantic
Sparrows Point, Maryland

Parameter	Units	PAL	B22-113-SB-1 Soil 5/20/2016		B22-113-SB-4 Soil 5/20/2016		B22-114-SB-1 Soil 5/19/2016		B22-114-SB-8 Soil 5/19/2016		B22-114-SB-10 Soil 5/19/2016		B22-115-SB-1 Soil 5/19/2016		B22-115-SB-8.5 Soil 5/19/2016		B22-116-SB-1 Soil 5/19/2016		B22-116-SB-8.5 Soil 5/19/2016	
Metals																				
Aluminum	mg/kg	1,100,000	**13,200**		**17,400**	M1M6R1	**17,700**		**15,900**				**13,300**		**15,900**		**8,840**		**26,700**	
Antimony	mg/kg	470	3.4	U	3.1	UM1R1	2.8	U	3.6	U			3.4	U	3.1	U	3.1	U	3.1	U
Arsenic	mg/kg	3	2.9	U	**6.8**		**2.2**	J	**13.3**		**5.6**		**8.8**		**13.3**		**6.3**		**3.4**	
Barium	mg/kg	220,000	**81.2**		**261**	M1R1	**77.4**		**172**				**95.2**		**107**		**66.2**		**542**	
Beryllium	mg/kg	2,300	1.1	U	**1**		0.94	U	**0.94**	J			1.1	U	**0.86**	J	1	U	**2.5**	
Cadmium	mg/kg	980	**0.52**	JB	**0.45**	JB	**0.47**	JB	**1.1**	JB			**0.43**	J	**0.26**	J	**0.47**	JB	**0.45**	JB
Chromium	mg/kg	120,000	**933**		**227**	M1R1	**1,000**		**178**				**1,210**		**30**		**1,010**		**52.5**	
Chromium VI	mg/kg	6.3	**8.5**		**0.58**	JBM1	**0.39**	JB	**0.51**	JB			**1.1**	JB	**0.19**	JB	**2.9**	B	**0.39**	JB
Cobalt	mg/kg	350	**1.6**	J	**6.8**		**2.6**	J	**10.5**				**2.5**	J	**7.1**		**2**	J	**4.2**	J
Copper	mg/kg	47,000	**32.4**		**222**	M1R1	**51.8**		**218**				**46.2**		**30.1**		**37**		**103**	
Iron	mg/kg	820,000	**168,000**		**30,200**	M6R1	**192,000**		**60,600**				**190,000**		**20,500**		**170,000**		**21,100**	
Lead	mg/kg	800	**40.7**		**45.9**	M1R1	**24.9**		**100**				**16.4**		**37.2**		**31**		**2,850**	
Manganese	mg/kg	26,000	**24,700**		**6,340**	M6R1	**22,900**		**4,280**				**31,600**		**740**		**27,200**		**5,130**	
Mercury	mg/kg	350	**0.0052**	J	**0.029**	J	**0.019**	J	**0.088**	J			0.12	U	**0.036**	J	**0.0071**	J	0.12	U
Nickel	mg/kg	22,000	**16**		**27.8**	M1R1	**24.7**		**51.5**				**21.5**		**25.5**		**20.6**		**11.4**	B
Selenium	mg/kg	5,800	4.6	U	4.1	U	3.8	U	**3.1**	J			4.5	U	4.2	U	4.1	U	4.2	U
Silver	mg/kg	5,800	**3.3**	J	3.1	U	**3.1**		3.6	U			**3.2**	J	3.1	U	**2.6**	J	3.1	U
Thallium	mg/kg	12	11.4	U	10.2	U	9.4	U	11.9	U			11.2	U	10.4	U	10.3	U	10.4	U
Vanadium	mg/kg	5,800	**613**		**1,420**	M1R1	**523**		**148**				**723**		**45.6**		**577**		**95.8**	
Zinc	mg/kg	350,000	**206**		**113**	M1R1	**415**		**346**				**183**		**190**		**196**		**91.8**	
Other																				
Cyanide	mg/kg	150	**0.26**	JB	**0.22**	JB	**0.29**	JB	**0.23**	JB			**0.25**	JB	**0.49**	JB	**0.27**	JB	**0.3**	JB

Detections in bold

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Values in Red indicate an exceedance of the Project Action Limit (PAL)

Table 6
Summary of Inorganics Detected in Soil
Parcel B22
Tradepoint Atlantic
Sparrows Point, Maryland

Parameter	Units	PAL	B22-117-SB-1		B22-117-SB-4		B22-117-SB-10		B22-118-SB-1		B22-118-SB-9		B22-118-SB-10		B22-119-SB-1		B22-119-SB-9		B22-119-SB-10		B22-120-SB-1	
			Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
			5/18/2016		5/18/2016		5/18/2016		5/18/2016		5/18/2016		5/18/2016		5/19/2016		5/19/2016		5/19/2016		5/19/2016	
Metals																						
Aluminum	mg/kg	1,100,000	**17,300**		**10,900**				**21,500**		3.1	U			**8,780**		**17,500**	M1M6			**12,800**	
Antimony	mg/kg	470	3	U	2.9	U			3.1	U	**4.3**				3.1	U	4	UM1			2.8	U
Arsenic	mg/kg	3	**9.9**		**10.4**		**8.4**		**8.4**		**191**		**4.3**		**2.5**	J	**4.1**		**6.2**		**23.9**	
Barium	mg/kg	220,000	**377**		**176**				**270**		**0.49**	J			**81.1**		**103**	M1			**244**	
Beryllium	mg/kg	2,300	**1**		**0.89**	J			**2.6**		**1.2**	JB			**1.1**		**1.1**	J			**0.88**	J
Cadmium	mg/kg	980	**3.8**		**3**				**1.5**	JB	**1,810**				**1.1**	J	2	U			**2.9**	
Chromium	mg/kg	120,000	**552**		**511**				**340**		**0.78**	JB			**226**		**32**				**1,020**	
Chromium VI	mg/kg	6.3	**0.56**	JB	**0.57**	JB			**0.49**	JB	**5.1**	J			**0.43**	JB	1.5	UM1			**0.64**	JB
Cobalt	mg/kg	350	**11.2**		**17**				**8.2**		**112**				**3**	J	**13.4**				**20.2**	
Copper	mg/kg	47,000	**167**		**157**				**131**		**137,000**				**33.5**		**16.2**				**528**	
Iron	mg/kg	820,000	**94,700**		**177,000**				**101,000**		**63.6**				**49,700**		**25,600**	M1M6			**193,000**	
Lead	mg/kg	800	**372**		**338**				**292**		**41,400**				**76.5**		**12**				**246**	
Manganese	mg/kg	26,000	**20,000**		**19,500**				**12,500**		**0.085**	J	**45,400**		**16,100**		**204**	M1R1			**25,700**	
Mercury	mg/kg	350	**0.26**		**0.11**				**0.16**		**17.8**				**0.012**	J	**0.023**	JM1			**0.18**	
Nickel	mg/kg	22,000	**85.3**		**46.7**				**27.7**		4.1	U			**14.5**		**25.2**				**451**	
Selenium	mg/kg	5,800	4	U	3.9	U			4.2	U	3.1	U			4.1	U	5.3	U			3.7	U
Silver	mg/kg	5,800	3	U	2.9	U			3.1	U	10.3	U			3.1	U	4	U			**1.8**	J
Thallium	mg/kg	12	10.1	U	9.8	U			10.5	U	**1,870**				10.2	U	10.6	U			9.3	U
Vanadium	mg/kg	5,800	**1,240**		**1,070**				**728**		**283**				**477**		**38.2**				**1,310**	
Zinc	mg/kg	350,000	**1,380**		**1,110**				**444**		**0.69**	BM1			**300**		**69.6**				**1,010**	
Other																						
Cyanide	mg/kg	150	**2**		**4.9**				**0.43**	JB					**7.2**		**0.57**	JBM1			**0.42**	JB

Detections in bold

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Values in Red indicate an exceedance of the Project Action Limit (PAL)

Table 6
Summary of Inorganics Detected in Soil
Parcel B22
Tradepoint Atlantic
Sparrows Point, Maryland

Parameter	Units	PAL	B22-120-SB-8		B22-121-SB-1		B22-121-SB-9		B22-121-SB-10		B22-122-SB-1		B22-123-SB-1		B22-124-SB-1		B22-124-SB-4		B22-125-SB-1	
			Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
			5/19/2016		5/19/2016		5/19/2016		5/19/2016		6/1/2016		6/1/2016		6/1/2016		6/1/2016		5/18/2016	
Metals																				
Aluminum	mg/kg	1,100,000	**15,100**		**19,100**		**15,400**				**15,000**		**18,800**		**36,900**		**27,400**		**19,100**	
Antimony	mg/kg	470	3.1	U	3.1	U	3.7	U			**1.7**	J	2.5	U	2.6	U	2.6	U	3	U
Arsenic	mg/kg	3	**3.2**		**11**		**10.2**		**20.5**		**14.5**		**2.5**		**3.2**		**12.4**		**6.2**	
Barium	mg/kg	220,000	**90.5**		**229**		**175**				**215**		**65.8**		**517**		**1,440**		**478**	
Beryllium	mg/kg	2,300	**0.81**	J	**1.1**		**0.98**	J			**1.1**		0.83	U	**5.4**		**2.9**		**1.6**	
Cadmium	mg/kg	980	**0.19**	JB	**1.6**	B	**0.61**	J			**0.68**	JB	**0.83**	JB	**1**	JB	**13.6**		**1.2**	J
Chromium	mg/kg	120,000	**30.5**		**920**		**85.9**				**77.6**		**1,090**		**78.6**		**206**		**205**	
Chromium VI	mg/kg	6.3	**0.64**	JB	**0.39**	JB	**1.3**	B			**0.6**	JB	**2.9**		**0.5**	JB	**0.49**	JB	**0.41**	JB
Cobalt	mg/kg	350	**5.9**		**11.1**		**10**				**16.6**		**2.1**	J	**5.4**		**52.3**		**5.5**	
Copper	mg/kg	47,000	**105**		**128**		**106**				**3,030**		**41.1**		**117**		**1,010**		**105**	
Iron	mg/kg	820,000	**21,200**		**77,500**		**32,500**				**76,500**		**177,000**		**37,900**		**99,900**		**70,200**	
Lead	mg/kg	800	**59.4**		**163**		**101**				**415**		**43**		**84.3**		**724**		**139**	
Manganese	mg/kg	26,000	**559**		**17,100**		**1,980**				**1,570**		**23,300**		**6,380**		**5,930**		**8,380**	
Mercury	mg/kg	350	**0.09**	J	**0.086**	J	**0.11**	J			**0.23**		**0.059**	J	0.11	U	**0.12**		0.11	U
Nickel	mg/kg	22,000	**15.8**		**36.7**		**29.6**				**76.4**		**31.3**		**23.9**		**185**		**16.5**	
Selenium	mg/kg	5,800	4.1	U	4.1	U	4.9	U			4	U	3.3	U	3.5	U	3.4	U	4	U
Silver	mg/kg	5,800	3.1	U	3.1	U	3.7	U			**1.3**	J	**2.2**	J	2.6	U	**7**		3	U
Thallium	mg/kg	12	10.2	U	10.3	U	9.8	U			10	U	8.3	U	8.7	U	8.6	U	9.9	U
Vanadium	mg/kg	5,800	**52.7**		**2,890**		**180**				**22.3**		**608**		**151**		**48.8**		**1,240**	
Zinc	mg/kg	350,000	**169**		**449**		**294**				**443**		**273**		**195**		**15,900**		**405**	
Other																				
Cyanide	mg/kg	150	**0.35**	JB	**0.8**	B	**0.38**	JB			**3.6**		**0.59**	J	**0.41**	J	**0.57**	J	**0.21**	JB

Detections in bold

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Values in Red indicate an exceedance of the Project Action Limit (PAL)

Table 6
Summary of Inorganics Detected in Soil
Parcel B22
Tradepoint Atlantic
Sparrows Point, Maryland

Parameter	Units	PAL	B22-125-SB-4 Soil 5/18/2016		B22-125-SB-10 Soil 5/18/2016		B22-126-SB-1 Soil 5/18/2016		B22-126-SB-6 Soil 5/18/2016		B22-126-SB-10 Soil 5/18/2016		B22-127-SB-1 Soil 5/18/2016		B22-127-SB-7 Soil 5/18/2016		B22-128-SB-1 Soil 6/2/2016		B22-129-SB-1 Soil 6/2/2016	
Metals																				
Aluminum	mg/kg	1,100,000	**17,000**				**10,500**		**17,000**				**33,300**		**11,400**	M1	**11,900**		**40,900**	
Antimony	mg/kg	470	3.6	U			3.2	U	3.6	U			3.1	U	3.3	UM1	2.4	U	2.4	U
Arsenic	mg/kg	3	**6.5**		**6.2**		2.7	U	**6.8**		**7.1**		**3.7**		**2.9**		**4**		**9.9**	
Barium	mg/kg	220,000	**218**				**274**		**62.8**				**548**		**55.5**		**54.8**		**353**	
Beryllium	mg/kg	2,300	**2.3**				**1.6**		**0.89**	J			**4.9**		**0.83**	J	**0.28**	J	**6.3**	
Cadmium	mg/kg	980	**1.1**	J			**0.2**	JB	1.8	U			**1.4**	J	1.7	U	**0.46**	JB	**0.37**	JB
Chromium	mg/kg	120,000	**131**				**28**		**41.9**				**157**		**19.9**		**1,340**		**191**	
Chromium VI	mg/kg	6.3	**0.55**	JB			**0.35**	JBM1	**0.4**	JB			**0.39**	JB	**0.35**	JBM1	**1.8**	B	**1.1**	JB
Cobalt	mg/kg	350	**9.9**				**1.1**	J	**6.1**				**6.3**		**9.8**		**0.88**	J	**1.1**	J
Copper	mg/kg	47,000	**1,740**				**14.5**		**16.8**				**64**		**13.8**		**28.4**		**23.1**	
Iron	mg/kg	820,000	**56,700**				**25,300**		**16,200**				**59,600**		**18,800**	M1	**179,000**		**43,100**	
Lead	mg/kg	800	**311**				**39.1**		**48.8**				**116**		**11**		**68.7**		**31.4**	
Manganese	mg/kg	26,000	**6,420**				**598**		**95.2**				**12,100**		**252**	M1	**26,400**		**5,470**	
Mercury	mg/kg	350	**0.16**				**0.036**	J	**0.016**	J			**0.0038**	J	**0.015**	J	**0.44**		0.1	U
Nickel	mg/kg	22,000	**31.1**				**5**	J	**13.2**				**31.4**		**18.6**		**13.5**		**8.3**	
Selenium	mg/kg	5,800	4.8	U			**3.7**	JB	4.8	U			4.2	U	4.4	U	3.1	U	**4.1**	B
Silver	mg/kg	5,800	3.6	U			3.2	U	3.6	U			3.1	U	3.3	U	**1.6**	J	2.4	U
Thallium	mg/kg	12	11.9	U			10.6	U	11.9	U			10.4	U	11.1	U	7.9	U	8	U
Vanadium	mg/kg	5,800	**512**				**32.8**		**53.7**				**526**		**24.7**		**803**		**102**	
Zinc	mg/kg	350,000	**433**				**41.6**		**47.3**				**271**		**53.8**		**59.1**		**49.6**	
Other																				
Cyanide	mg/kg	150	**0.8**				**0.96**		**0.18**	JB			**0.23**	JB	**0.1**	JB	**0.1**	J	**0.46**	J

Detections in bold

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Values in Red indicate an exceedance of the Project Action Limit (PAL)

Table 6
Summary of Inorganics Detected in Soil
Parcel B22
Tradepoint Atlantic
Sparrows Point, Maryland

Parameter	Units	PAL	B22-129-SB-4 Soil 6/2/2016		B22-130-SB-1 Soil 6/1/2016		B22-130-SB-4 Soil 6/1/2016		B22-131-SB-1 Soil 5/17/2016		B22-131-SB-5 Soil 5/17/2016		B22-132-SB-1 Soil 5/17/2016		B22-132-SB-5 Soil 5/17/2016		B22-133-SB-1 Soil 5/31/2016		B22-133-SB-5 Soil 5/31/2016	
Metals																				
Aluminum	mg/kg	1,100,000	**31,900**		**17,800**		**8,220**		**16,700**		**13,000**	M1	**38,100**		**22,000**		**9,520**		**8,820**	
Antimony	mg/kg	470	2.6	U	2.4	U	2.6	U	3.4	U	3.3	UM1	3	U	3.6	U	2.9	U	2.8	U
Arsenic	mg/kg	3	**4.7**		**9.8**		**4.8**		**5.1**		**12.5**		**3**		**11.8**		**3.2**		**5.6**	
Barium	mg/kg	220,000	**478**		**65**		**62.8**		**101**		**26.4**	M1R1	**1,340**		**82**		**57.1**		**67.4**	
Beryllium	mg/kg	2,300	**3.6**		0.8	U	**0.59**	J	**1.5**		**0.9**	J	**2.6**		**0.83**	J	**0.43**	J	**0.44**	J
Cadmium	mg/kg	980	**0.27**	JB	**0.47**	J	1.3	U	**0.27**	JB	1.6	U	**0.39**	JB	**0.22**	J	**1.4**	JB	**1**	JB
Chromium	mg/kg	120,000	**30.6**		**1,240**		**16.1**		**21.4**		**26.1**		**23.4**		**35.4**		**549**		**844**	
Chromium VI	mg/kg	6.3	**0.32**	JB	**11.7**		**0.33**	JB	**0.33**	JB	**1.4**	B	**0.37**	JB	**0.49**	JB	**0.32**	JB	**0.38**	JB
Cobalt	mg/kg	350	**5.3**		**3.3**	J	**5.4**		**12**		**7**		**2.5**	J	**5.3**	J	**2.8**	J	**3.3**	J
Copper	mg/kg	47,000	**34.7**		**80.8**		**11.4**		**12.2**		**12.4**		**13.1**		**17.5**		**41.5**		**49.3**	
Iron	mg/kg	820,000	**31,200**		**151,000**		**14,100**		**20,800**		**25,800**	M6	**8,170**		**30,900**		**99,000**		**143,000**	
Lead	mg/kg	800	**16.3**		**170**		**32**		**14.2**		**12.3**		**23.5**		**20.1**		**104**		**130**	
Manganese	mg/kg	26,000	**5,050**		**29,100**		**506**		**305**		**75.9**		**4,470**		**186**		**13,300**		**19,400**	
Mercury	mg/kg	350	0.11	U	**0.13**		**0.02**	J	**0.014**	J	0.12	U	0.11	U	**0.022**	J	**0.1**	J	**0.12**	
Nickel	mg/kg	22,000	**18.9**		**39.2**		**8**	J	**22**		**13.1**		**4.3**	J	**13.1**		**22.2**		**29.7**	
Selenium	mg/kg	5,800	3.5	U	3.2	U	3.5	U	4.5	U	4.4	U	4	U	4.8	U	3.9	U	3.8	U
Silver	mg/kg	5,800	2.6	U	**2.5**		2.6	U	3.4	U	3.3	U	3	U	3.6	U	2.9	U	2.8	U
Thallium	mg/kg	12	8.7	U	8	U	8.7	U	11.2	U	11	U	9.9	U	11.9	U	9.7	U	9.4	U
Vanadium	mg/kg	5,800	**57.7**		**842**		**24.9**		**28.7**		**34.2**		**93.8**		**49.7**		**327**		**506**	
Zinc	mg/kg	350,000	**35.4**		**327**		**53**		**61.5**		**44.1**		**66.2**		**53.4**		**165**		**176**	
Other																				
Cyanide	mg/kg	150	**0.13**	J	**0.52**	J	**0.13**	J	**0.087**	J	0.64	U	**0.26**	J	**0.14**	J	**3.5**		**6.8**	

Detections in bold

Blank spaces indicate that the parameter was not analyzed for this sample

*PAH compounds were analyzed via SIM

A glossary of laboratory flag keys can be viewed in the attached laboratory reports

Values in Red indicate an exceedance of the Project Action Limit (PAL)

Table 6
Summary of Inorganics Detected in Soil
Parcel B22
Tradepoint Atlantic
Sparrows Point, Maryland

Parameter	Units	PAL	B22-134-SB-1 Soil 6/1/2016		B22-134-SB-7 Soil 6/1/2016		B22-135-SB-1 Soil 6/1/2016		B22-135-SB-8 Soil 6/1/2016		B22-136-SB-1 Soil 5/31/2016		B22-136-SB-5 Soil 5/31/2016		B22-137-SB-1 Soil 5/16/2016		B22-137-SB-8 Soil 5/16/2016		B22-138-SB-1 Soil 5/16/2016	
Metals																				
Aluminum	mg/kg	1,100,000	**19,900**		**18,900**		**9,260**		**20,600**		**16,100**		**11,600**		**11,100**		**8,370**		**11,800**	
Antimony	mg/kg	470	2.8	U	2.6	U	2.7	U	2.9	U	2.4	U	3.9	U	3	U	3	U	3.3	U
Arsenic	mg/kg	3	**6.8**		**6.4**		**9.9**		**8.5**		**3.1**		**8.8**		**5.5**		**5**		**4.7**	
Barium	mg/kg	220,000	**285**		**210**		**47.2**		**489**		**102**		**111**		**65.3**		**21.2**		**87.4**	
Beryllium	mg/kg	2,300	**2.3**		**2.4**		**0.19**	J	**2.3**		**0.61**	J	**0.84**	J	**0.67**	J	**0.38**	J	**0.68**	J
Cadmium	mg/kg	980	**1.6**		**0.98**	J	**0.52**	J	**1.3**	J	**0.48**	JB	**2.7**		1.5	U	1.5	U	**0.52**	J
Chromium	mg/kg	120,000	**472**		**664**		**1,030**		**1,150**		**852**		**360**		**1,130**		**8.4**		**35.2**	
Chromium VI	mg/kg	6.3	**2.3**	B	**1.1**	JB	**11**		**0.38**	JB	**1.6**	B	**0.51**	JB	**0.3**	JB	**0.37**	JB	**0.37**	JB
Cobalt	mg/kg	350	**3.9**	J	**2.9**	J	**2**	J	**7.4**		**1.1**	J	**6.9**		**1.1**	J	**2.6**	J	**10.7**	
Copper	mg/kg	47,000	**69**		**54.8**		**40.9**		**69.9**		**23.9**		**93.8**		**25.5**		**1.9**	J	**35.2**	
Iron	mg/kg	820,000	**102,000**		**105,000**		**175,000**		**114,000**		**148,000**		**92,600**		**195,000**		**13,200**		**23,100**	
Lead	mg/kg	800	**168**		**555**		**108**		**189**		**23.9**		**275**		2.5	U	**5.1**		**53.6**	
Manganese	mg/kg	26,000	**11,500**		**12,600**		**22,500**		**19,000**		**21,000**		**8,230**		**30,400**		**48.1**		**1,140**	
Mercury	mg/kg	350	**0.099**	J	**0.12**		**0.018**	J	**0.17**		**0.013**	J	**0.58**		0.1	U	0.11	U	**0.12**	J
Nickel	mg/kg	22,000	**31.2**		**18.2**		**20**		**25.1**		**11.1**	B	**42.9**		**16.5**		**6.3**	J	**18**	
Selenium	mg/kg	5,800	3.7	U	3.5	U	3.6	U	**2.2**	J	3.2	U	5.2	U	4	U	4	U	4.4	U
Silver	mg/kg	5,800	2.8	U	2.6	U	**1.9**	J	**1.2**	J	2.4	U	3.9	U	**2**	J	3	U	3.3	U
Thallium	mg/kg	12	9.3	U	8.8	U	8.9	U	9.8	U	8	U	10.4	U	9.9	U	10.1	U	11.1	U
Vanadium	mg/kg	5,800	**314**		**343**		**673**		**502**		**568**		**234**		**850**		**17.1**		**49.2**	
Zinc	mg/kg	350,000	**246**		**283**		**114**		**208**		**97.8**		**485**		**67.3**		**13.6**		**97.9**	
Other																				
Cyanide	mg/kg	150	**0.92**		**1**		**0.84**		**1.9**		**0.32**	J	**17.2**		**0.6**	J	**0.99**		**1.8**	

Detections in bold

Blank spaces indicate that the parameter was not analyzed for this sample

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Values in Red indicate an exceedance of the Project Action Limit (PAL)

Table 6
Summary of Inorganics Detected in Soil
Parcel B22
Tradepoint Atlantic
Sparrows Point, Maryland

Parameter	Units	PAL	B22-138-SB-8 Soil 5/16/2016		B22-138-SB-10 Soil 5/16/2016		B22-139-SB-1 Soil 5/16/2016		B22-139-SB-4 Soil 5/16/2016		B22-140-SB-1 Soil 5/16/2016		B22-140-SB-5 Soil 5/16/2016		B22-140-SB-10 Soil 5/16/2016		B22-141-SB-1 Soil 5/16/2016		B22-141-SB-5 Soil 5/16/2016	
Metals																				
Aluminum	mg/kg	1,100,000	**7,920**	M1			**6,120**		**23,100**		**21,200**		**28,700**				**32,000**		**19,300**	
Antimony	mg/kg	470	3.3	UM1			3.5	U	3.3	U	3	U	3.5	U			3.2	U	3.5	U
Arsenic	mg/kg	3	**4.9**		2.4	U	**17.5**		**8.8**		**2.4**	J	**6**		**2.8**		**4.2**		**6.1**	
Barium	mg/kg	220,000	**35.9**				**56.3**		**589**		**34**		**805**				**506**		**65.3**	
Beryllium	mg/kg	2,300	**0.56**	J			**0.43**	J	**2.4**		1	U	**2.1**				**4.8**		**0.83**	J
Cadmium	mg/kg	980	1.6	U			**0.35**	J	**0.39**	J	1.5	U	**0.57**	J			**0.52**	J	1.7	U
Chromium	mg/kg	120,000	**13.7**				**389**		**274**		**1,280**		**73.6**				**297**		**26.5**	
Chromium VI	mg/kg	6.3	**0.23**	JBM1			**0.27**	JB	**0.32**	JB	**7.8**		**0.27**	JB			**0.31**	JB	**0.42**	JB
Cobalt	mg/kg	350	**2**	J			**10.4**		**10.5**		**1.4**	J	**6.1**				**3.7**	J	**5.4**	J
Copper	mg/kg	47,000	**2.4**	J			**41.2**		**31.8**		**24.7**		**21.2**				**29.6**		**9.1**	
Iron	mg/kg	820,000	**21,500**	M6R1			**394,000**		**254,000**		**218,000**		**17,800**				**104,000**		**18,300**	
Lead	mg/kg	800	**7.2**				**10.6**		**43.1**		2.5	U	**46.5**				**20.2**		**11.1**	
Manganese	mg/kg	26,000	**40.7**				**9,830**		**9,120**		**29,900**		**5,970**				**9,510**		**98.5**	
Mercury	mg/kg	350	**0.0024**	J			0.11	U	**0.0023**	J	0.11	U	**0.0091**	J			0.1	U	0.11	U
Nickel	mg/kg	22,000	**4.9**	J			**70.7**		**73.1**		**22.6**		**11.9**				**20.3**		**14.1**	
Selenium	mg/kg	5,800	4.4	U			4.6	U	4.4	U	4	U	4.6	U			4.3	U	4.7	U
Silver	mg/kg	5,800	3.3	U			**6.3**		**2.4**	J	**2.2**	J	3.5	U			3.2	U	3.5	U
Thallium	mg/kg	12	10.9	U			11.5	U	11.1	U	10	U	11.5	U			10.7	U	11.6	U
Vanadium	mg/kg	5,800	**13.2**				**243**		**249**		**881**		**209**				**276**		**40.4**	
Zinc	mg/kg	350,000	**15**				**130**		**93.2**		**122**		**91.9**				**97.5**		**30.6**	
Other																				
Cyanide	mg/kg	150	**1.3**	M1			**0.65**		**0.88**		**0.59**	J	**2.7**				**0.92**		**1.6**	

Detections in bold

Blank spaces indicate that the parameter was not analyzed for this sample

*PAH compounds were analyzed via SIM

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Values in Red indicate an exceedance of the Project Action Limit (PAL)

Table 6
Summary of Inorganics Detected in Soil
Parcel B22
Tradepoint Atlantic
Sparrows Point, Maryland

Parameter	Units	PAL	B22-142-SB-1 Soil 5/16/2016		B22-142-SB-5 Soil 5/16/2016		B22-143-SB-1 Soil 5/16/2016		B22-143-SB-5 Soil 5/16/2016		B22-143-SB-10 Soil 5/16/2016		B22-144-SB-1 Soil 5/20/2016		B22-144-SB-7 Soil 5/20/2016		B22-145-SB-1 Soil 5/20/2016		B22-145-SB-4 Soil 5/20/2016	
Metals																				
Aluminum	mg/kg	1,100,000	**13,500**		**13,000**		**12,600**		**10,400**				**3,300**		**25,700**		**15,300**		**15,900**	
Antimony	mg/kg	470	3.2	U	3	U	2.7	U	3.1	U			4.3	U	3.1	U	2.8	U	3	U
Arsenic	mg/kg	3	**4.8**		**3**		**5.3**		**5.1**		**4**		2.9	U	2.6	U	**5.9**		**4.2**	
Barium	mg/kg	220,000	**56.6**		**34.6**		**41.5**		**55.1**				**584**		**86.8**		**269**		**291**	
Beryllium	mg/kg	2,300	1.1	U	1	U	0.89	U	**0.21**	J			1.4	U	**1.1**		**1.6**		**0.97**	J
Cadmium	mg/kg	980	**0.24**	J	1.5	U	1.3	U	1.5	U			2.2	U	**0.43**	JB	**2.3**	B	**2.2**	B
Chromium	mg/kg	120,000	**1,240**		**1,330**		**1,350**		**1,450**				**55.5**		**79.5**		**329**		**58.5**	
Chromium VI	mg/kg	6.3	**5**		**0.28**	JB	**3.6**		**0.31**	JB			**0.45**	JB	**0.72**	JB	**0.53**	JB	**0.62**	JB
Cobalt	mg/kg	350	**1.3**	J	5	U	4.5	U	**0.36**	J			**1.2**	J	**4.7**	J	**8.2**		**10.2**	
Copper	mg/kg	47,000	**19**		**12.3**		**13.2**		**13.5**				**17.6**	B	**13**	B	**136**		**87.4**	
Iron	mg/kg	820,000	**201,000**		**183,000**		**194,000**		**188,000**				**12,500**		**10,400**		**99,800**		**29,000**	
Lead	mg/kg	800	**3.1**		2.5	U	2.2	U	2.6	U			**114**		**97.3**		**900**		**578**	
Manganese	mg/kg	26,000	**28,500**		**28,600**		**30,600**		**27,900**		**165**		**759**		**281**		**6,480**		**2,370**	
Mercury	mg/kg	350	0.11	U	**0.0066**	J	0.1	U	0.11	U			**0.062**	J	**0.2**		**0.9**		**0.044**	J
Nickel	mg/kg	22,000	**20.6**		**7.1**	J	**11.5**		**12.5**				**6.3**	J	**18**		**55.3**		**24.8**	
Selenium	mg/kg	5,800	4.2	U	**2.3**	J	3.6	U	4.1	U			5.7	U	4.2	U	3.8	U	4	U
Silver	mg/kg	5,800	**2.5**	J	**1**	J	**2.2**	J	**2.2**	J			4.3	U	3.1	U	**1.6**	J	3	U
Thallium	mg/kg	12	10.5	U	10	U	8.9	U	10.2	U			11.5	U	10.5	U	9.4	U	10	U
Vanadium	mg/kg	5,800	**817**		**1,120**		**878**		**944**				**31.4**		**209**		**162**		**144**	
Zinc	mg/kg	350,000	**94**		**5.5**		**31.4**		**43**				**88.3**		**158**		**671**		**1,170**	
Other																				
Cyanide	mg/kg	150	**0.71**		**1.4**		**0.68**		**0.71**				**0.35**	JB	**1.1**		**0.61**	JB	**0.58**	JB

Detections in bold

Blank spaces indicate that the parameter was not analyzed for this sample

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Values in Red indicate an exceedance of the Project Action Limit (PAL)

Table 6
Summary of Inorganics Detected in Soil
Parcel B22
Tradepoint Atlantic
Sparrows Point, Maryland

Parameter	Units	PAL	B22-145-SB-10		B22-146-SB-1		B22-146-SB-5		B22-147-SB-1		B22-147-SB-5.5		B22-148-SB-1		B22-148-SB-6		B22-148-SB-10		B22-149-SB-1	
			Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
			5/20/2016		6/1/2016		6/1/2016		6/1/2016		6/1/2016		5/19/2016		5/19/2016		5/19/2016		5/19/2016	
Metals																				
Aluminum	mg/kg	1,100,000			**7,730**		**15,700**	M1M6	**29,000**		**18,000**		**8,910**		**2,410**				**10,400**	
Antimony	mg/kg	470			2.8	U	2.8	UM1	3	U	3.1	U	3	U	3.4	U			2.7	U
Arsenic	mg/kg	3	**3.3**		**13**		**3.8**		**7.9**		**5.5**		**8.2**		**40.8**		**7.5**		**16.3**	
Barium	mg/kg	220,000			**208**		**73.6**		**572**		**78**		**152**		**584**				**190**	
Beryllium	mg/kg	2,300			**0.85**	J	**0.59**	J	**2.3**		**0.8**	J	**0.54**	J	1.1	U			**0.59**	J
Cadmium	mg/kg	980			**1.6**	B	1.4	U	**1.5**	JB	1.5	U	**5.1**		**2.5**				**5.2**	
Chromium	mg/kg	120,000			**169**		**28.5**		**109**		**31.1**		**411**		**2,020**				**657**	
Chromium VI	mg/kg	6.3			**0.85**	JB	**0.58**	JBM1	**0.39**	JB	**0.45**	JB	**0.62**	JB	**0.57**	JB			**0.54**	JB
Cobalt	mg/kg	350			**5.2**		**7.6**		**7.3**		**6.1**		**11.5**		**41.1**				**15.2**	
Copper	mg/kg	47,000			**314**		**13.9**		**304**		**19**		**134**		**365**				**320**	
Iron	mg/kg	820,000			**65,200**		**27,600**	M6	**57,600**		**25,500**		**90,600**		**158,000**				**106,000**	
Lead	mg/kg	800			**116**		**8.5**		**103**		**12.6**		**1,030**		**282**				**396**	
Manganese	mg/kg	26,000			**736**		**160**	M1	**3,530**		**156**		**9,980**		**1,430**				**11,600**	
Mercury	mg/kg	350			**0.18**		**0.049**	J	**0.11**	J	**0.048**	J	**0.065**	J	**0.27**				**0.25**	
Nickel	mg/kg	22,000			**28.4**		**15.8**		**32.6**		**15**		**95.1**		**3,320**				**202**	
Selenium	mg/kg	5,800			3.7	U	3.8	U	4	U	4.1	U	4	U	4.5	U			3.6	U
Silver	mg/kg	5,800			2.8	U	2.8	U	3	U	3.1	U	3	U	**2.2**	J			2.7	U
Thallium	mg/kg	12			9.4	U	9.4	U	10.1	U	10.2	U	9.9	U	11.3	U			9	U
Vanadium	mg/kg	5,800			**49**		**37.1**		**132**		**35.8**		**925**		**163**				**1,380**	
Zinc	mg/kg	350,000			**905**		**66.4**	M1	**644**		**54.8**		**1,130**		**1,990**				**1,410**	
Other																				
Cyanide	mg/kg	150			**0.35**	J	**0.054**	J	**1.8**		**0.51**	J	**1**	B	**0.57**	JB			**1.1**	B

Detections in bold

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Values in Red indicate an exceedance of the Project Action Limit (PAL)

Table 6
Summary of Inorganics Detected in Soil
Parcel B22
Tradepoint Atlantic
Sparrows Point, Maryland

Parameter	Units	PAL	B22-149-SB-8 Soil 5/19/2016		B22-150-SB-1 Soil 6/1/2016		B22-150-SB-5 Soil 6/1/2016		B22-151-SB-1 Soil 6/1/2016		B22-152-SB-1 Soil 5/19/2016		B22-152-SB-6 Soil 5/19/2016		B22-153-SB-1 Soil 5/19/2016		B22-153-SB-4 Soil 5/19/2016		B22-154-SB-1 Soil 5/20/2016	
Metals																				
Aluminum	mg/kg	1,100,000	**7,360**		**30,400**		**21,600**		**41,600**		**16,100**		**11,600**		**19,000**		**18,700**		**8,950**	
Antimony	mg/kg	470	3	U	3	U	2.9	U	**1.5**	J	3.1	U	3	U	3.7	U	2.8	U	3.2	U
Arsenic	mg/kg	3	**24**		2.5	U	**6.1**		**1.9**	J	**11.1**		**13.7**		**5.1**		**9.8**		**3.9**	
Barium	mg/kg	220,000	**123**		**560**		**51.3**		**494**		**167**		**183**		**83.4**		**317**		**76.9**	
Beryllium	mg/kg	2,300	**0.27**	J	**2.3**		**0.5**	J	**6.4**		**0.79**	J	1	U	**0.97**	J	**0.4**	J	**0.4**	J
Cadmium	mg/kg	980	**4.6**		**0.84**	JB	1.5	U	**0.46**	JB	**2.8**		**5.4**		**1.6**	J	**10.3**		**0.53**	JB
Chromium	mg/kg	120,000	**564**		**45.2**		**29.3**		**70.2**		**979**		**1,660**		**66**		**1,270**		**1,150**	
Chromium VI	mg/kg	6.3	**0.67**	JB	**0.58**	JB	**0.4**	JB	**0.34**	JB	**0.59**	JB	**0.68**	JB	1.3	U	**0.7**	JB	**0.51**	JB
Cobalt	mg/kg	350	**24.4**		**3.8**	J	**6.1**		**2.3**	J	**22.7**		**6.3**		**9.3**		**8.6**		**4.5**	J
Copper	mg/kg	47,000	**341**		**229**		**12.3**		**45.4**		**126**		**106**		**45.9**		**96.1**		**58.3**	
Iron	mg/kg	820,000	**201,000**		**25,300**		**24,200**		**33,600**		**137,000**		**101,000**		**28,600**		**124,000**		**179,000**	
Lead	mg/kg	800	**449**		**342**		**10.4**		**47.5**		**120**		**276**		**866**		**232**		**59.4**	
Manganese	mg/kg	26,000	**12,600**		**6,100**		**133**		**3,440**		**31,900**		**37,900**		**849**		**27,400**		**21,300**	
Mercury	mg/kg	350	**0.11**	J	0.13	U	**0.036**	J	0.1	U	**0.043**	J	**0.3**		**0.099**	J	**0.022**	J	**0.043**	J
Nickel	mg/kg	22,000	**126**		**11.8**		**14.5**		**9.8**		**26.9**		**30.7**		**31.1**		**42.8**		**32.9**	
Selenium	mg/kg	5,800	4	U	4.1	U	3.9	U	3.3	U	4.2	U	4	U	4.9	U	3.8	U	4.2	U
Silver	mg/kg	5,800	**1.6**	J	3	U	2.9	U	2.5	U	3.1	U	3	U	3.7	U	2.8	U	3.2	U
Thallium	mg/kg	12	10	U	10.1	U	9.7	U	8.3	U	10.4	U	10	U	9.8	U	9.5	U	10.6	U
Vanadium	mg/kg	5,800	**1,580**		**125**		**40.5**		**42.7**		**1,300**		**4,520**		**85.3**		**3,240**		**2,110**	
Zinc	mg/kg	350,000	**927**		**212**		**39.6**		**77.1**		**834**		**1,170**		**758**		**658**		**145**	
Other																				
Cyanide	mg/kg	150	**0.84**	B	**0.21**	J	**0.078**	J	**0.55**	J	**0.27**	JB	**1.3**		**0.36**	JB	**0.81**		**0.81**	

Detections in bold

Blank spaces indicate that the parameter was not analyzed for this sample

*PAH compounds were analyzed via SIM

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Values in Red indicate an exceedance of the Project Action Limit (PAL)

Table 6
Summary of Inorganics Detected in Soil
Parcel B22
Tradepoint Atlantic
Sparrows Point, Maryland

Parameter	Units	PAL	B22-154-SB-5		B22-155-SB-1		B22-155-SB-5		B22-156-SB-1		B22-156-SB-4.5		B22-157-SB-1		B22-158-SB-1		B22-158-SB-8		B22-158-SB-10		B22-159-SB-1	
			Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
			5/20/2016		5/20/2016		5/20/2016		5/20/2016		5/20/2016		5/20/2016		5/18/2016		5/18/2016		5/18/2016		5/19/2016	
Metals																						
Aluminum	mg/kg	1,100,000	**48,500**		**8,250**		**24,100**		**16,600**		**14,400**		**40,400**		**17,500**		**9,890**		**9,030**		**16,000**	
Antimony	mg/kg	470	2.9	U	3	U	3.2	U	2.8	U	3.3	U	2.9	U	3.1	U	2.7	U	2.5	U	3	U
Arsenic	mg/kg	3	2.4	U	**3.4**		2.6	U	2.3	U	**5.8**		**5.1**		**7.9**		**9.7**		**4.9**		**11.7**	
Barium	mg/kg	220,000	**2,490**		**124**		**193**		**76**		**51.3**		**406**		**246**		**112**		**110**		**116**	
Beryllium	mg/kg	2,300	**3.9**		**0.3**	J	**2.8**		0.94	U	**1**	J	**3**		**2**		**0.55**	J	**0.22**	J	**0.19**	J
Cadmium	mg/kg	980	**0.46**	JB	**0.57**	JB	**1.2**	JB	**1.4**	JB	1.7	U	**0.9**	JB	**4.1**		**6.7**		**1.5**	B	**0.68**	J
Chromium	mg/kg	120,000	**33.9**		**1,450**		**848**		**999**		**19.5**		**32.2**		**679**		**1,200**		**1,300**		**2,360**	
Chromium VI	mg/kg	6.3	**0.4**	JB	**0.53**	JB	**0.71**	JB	**0.52**	JB	**0.39**	JB	**0.46**	JB	**0.43**	JB	**0.43**	JB			**0.7**	JB
Cobalt	mg/kg	350	**3.1**	J	**7.8**		**2.5**	J	**1.3**	J	**15.5**		**5**		**11**		**10.7**		**7.1**		**8.5**	
Copper	mg/kg	47,000	**18.8**	B	**44.5**		**30.1**		**32**		**11.9**		**48.9**		**92**		**107**		**67.8**		**56.2**	
Iron	mg/kg	820,000	**19,000**		**188,000**		**107,000**		**184,000**		**20,500**		**11,600**		**78,900**		**123,000**		**147,000**		**176,000**	
Lead	mg/kg	800	**12.6**		**39.1**		**63.4**		**62.2**		**18.8**		**97.1**		**250**		**520**		**86.5**		**23.3**	
Manganese	mg/kg	26,000	**8,090**		**21,500**		**17,500**		**31,400**		**162**		**3,050**		**17,600**		**41,100**		**51,000**		**59,500**	
Mercury	mg/kg	350	0.11	U	**0.076**	J	**0.01**	J	**0.21**		**0.043**	J	**0.029**	J	**0.063**	J	**0.052**	J			**0.0055**	J
Nickel	mg/kg	22,000	**10**		**43.3**		**12.5**		**13.8**		**14.1**		**11.7**		**45.6**		**30.5**		**19.8**		**12.5**	
Selenium	mg/kg	5,800	3.9	U	3.9	U	4.2	U	3.8	U	4.5	U	**2.6**	JB	4.2	U	3.6	U	3.3	U	4	U
Silver	mg/kg	5,800	2.9	U	3	U	**1.5**	J	**5.9**		3.3	U	2.9	U	3.1	U	2.7	U	2.5	U	3	U
Thallium	mg/kg	12	9.8	U	9.9	U	10.6	U	9.4	U	11.1	U	9.6	U	10.4	U	8.9	U	8.2	U	10.1	U
Vanadium	mg/kg	5,800	**256**		**2,270**		**482**		**490**		**33.5**		**81.6**		**1,730**		**1,690**		**2,730**		**2,380**	
Zinc	mg/kg	350,000	**57.8**		**192**		**254**		**149**		**47**		**206**		**766**		**1,280**		**386**		**203**	
Other																						
Cyanide	mg/kg	150	**0.18**	JB	**1.4**		**0.25**	JB	**0.63**	B	**0.13**	JB	**0.69**	JB	**0.64**	B	**0.49**	JB			**0.39**	JB

Detections in bold

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Values in Red indicate an exceedance of the Project Action Limit (PAL)

Table 6
Summary of Inorganics Detected in Soil
Parcel B22
Tradepoint Atlantic
Sparrows Point, Maryland

Parameter	Units	PAL	B22-160-SB-1 Soil 6/1/2016		B22-161-SB-1 Soil 6/1/2016		B22-161-SB-4.5 Soil 6/1/2016		B22-162-SB-1 Soil 6/3/2016		B22-162-SB-5 Soil 6/3/2016		B22-163-SB-1 Soil 6/3/2016		B22-163-SB-5 Soil 6/3/2016		B22-164-SB-1 Soil 6/3/2016		B22-164-SB-6 Soil 6/3/2016	
Metals																				
Aluminum	mg/kg	1,100,000	2.8	U	**14,400**		**23,000**		**10,800**		**14,200**		**18,800**		**15,600**		**23,800**		**14,300**	
Antimony	mg/kg	470	2.3	U	2.7	U	2.8	U	3	U	2.8	U	3.1	U	2.8	U	2.8	U	3	U
Arsenic	mg/kg	3	**349**		**6**		**5**		**8.7**		**3.9**		**4.2**		**7.8**		**3.2**		**6**	
Barium	mg/kg	220,000	**3.3**		**182**		**369**		**106**		**33.2**		**62.7**		**71.7**		**185**		**147**	
Beryllium	mg/kg	2,300	**0.3**	JB	0.89	U	**1.4**		**0.6**	J	**1.4**		**0.5**	J	**0.53**	J	**2.3**		**1.7**	
Cadmium	mg/kg	980	**24.2**		**1.5**	B	**1.8**		**0.59**	J	1.4	U	**0.2**	J	**0.18**	J	**0.24**	J	1.5	U
Chromium	mg/kg	120,000	**0.86**	JB	**1,730**		**118**		**45**		**14.5**		**25.2**		**27.1**		**22.1**		**27**	
Chromium VI	mg/kg	6.3	**1.3**	J	**1.1**	JB	**1.1**	JB	**0.58**	JB	**0.53**	J	**0.43**	JB	**0.45**	JB	**0.38**	JB	**0.38**	JB
Cobalt	mg/kg	350	**21.7**		**4.5**		**14.4**		**16.9**		**3.8**	J	**4.4**	J	**7.8**		**5.8**		**10.9**	
Copper	mg/kg	47,000	**8,910**		**72**		**397**		**4,400**		**5.5**		**317**		**2,090**		**21.2**		**10**	
Iron	mg/kg	820,000	**24**		**78,700**		**65,800**		**162,000**		**17,200**		**23,100**		**51,500**		**11,900**		**19,700**	
Lead	mg/kg	800	**5,790**		**189**		**277**		**538**		**15.3**		**30.6**		**174**		**18.9**		**12.1**	
Manganese	mg/kg	26,000	0.12	U	**36,500**		**4,370**		**738**		**26.6**		**199**		**316**		**1,270**		**97.5**	
Mercury	mg/kg	350	**2**	J	**0.057**	J	**0.25**		**0.08**	J	**0.003**	J	**0.11**	J	**0.024**	J	**0.0089**	J	**0.0024**	J
Nickel	mg/kg	22,000	3.7	U	**16.5**		**32.3**		**31.8**		**7.6**	J	**11.7**		**20.2**		**11.3**		**17.8**	
Selenium	mg/kg	5,800	2.8	U	3.5	U	3.8	U	4	U	3.8	U	4.1	U	3.8	U	3.8	U	4	U
Silver	mg/kg	5,800	9.3	U	2.7	U	2.8	U	**2.1**	J	2.8	U	3.1	U	2.8	U	2.8	U	3	U
Thallium	mg/kg	12	**23.9**		**11**		9.4	U	10	U	9.4	U	10.2	U	9.5	U	9.4	U	10.1	U
Vanadium	mg/kg	5,800	**50.3**		**6,800**		**915**		**45.1**		**31.2**		**38.7**		**46.1**		**38.6**		**47.4**	
Zinc	mg/kg	350,000	**1.1**		**361**		**816**		**148**		**14.9**		**41.4**		**77.5**		**40.4**		**42.4**	
Other																				
Cyanide	mg/kg	150	**0.72**		**0.16**	J	**0.34**	J	**0.66**	J	0.74	U	0.59	U	0.6	U	**0.29**	J	**0.22**	J

Detections in bold

Blank spaces indicate that the parameter was not analyzed for this sample

*PAH compounds were analyzed via SIM

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Values in Red indicate an exceedance of the Project Action Limit (PAL)

Table 6
Summary of Inorganics Detected in Soil
Parcel B22
Tradepoint Atlantic
Sparrows Point, Maryland

Parameter	Units	PAL	B22-165-SB-1 Soil 6/3/2016		B22-165-SB-4 Soil 6/3/2016		B22-166-SB-1 Soil 5/19/2016		B22-166-SB-4 Soil 5/19/2016		B22-167-SB-1 Soil 5/18/2016		B22-167-SB-5 Soil 5/18/2016		B22-167-SB-10 Soil 5/18/2016		B22-168-SB-1 Soil 5/26/2016		B22-168-SB-4 Soil 5/26/2016	
Metals																				
Aluminum	mg/kg	1,100,000	**20,000**		**18,600**		**13,500**		**14,500**		**29,400**		**14,500**				**12,400**		**14,400**	M6
Antimony	mg/kg	470	3	U	2.6	U	2.6	U	3.2	U	2.9	U	2.9	U			2.8	U	2.7	UM1
Arsenic	mg/kg	3	**4.3**		**5.5**		**10.7**		**11.3**		**3.8**		2.5	U	**12.3**		**2.3**	J	2.2	U
Barium	mg/kg	220,000	**50.2**		**57.6**		**223**		**181**		**568**		**48.3**				**43.9**		**123**	M1R1
Beryllium	mg/kg	2,300	**0.52**	J	**1.4**		**0.2**	J	**0.36**	J	**3.2**		**0.82**	J			**0.47**	J	**0.55**	J
Cadmium	mg/kg	980	1.5	U	1.3	U	**1.5**		**3.1**		**0.28**	J	1.5	U			1.4	U	1.3	U
Chromium	mg/kg	120,000	**31.9**		**34.8**		**2,020**		**1,690**		**377**		**18**				**14.9**		**25.3**	
Chromium VI	mg/kg	6.3	**0.79**	JB	**0.45**	JB	**1.2**	B	**1.6**	B	**0.3**	JB	**0.7**	JB			**0.75**	JB	**0.63**	JB
Cobalt	mg/kg	350	**5**		**9.3**		**7.6**		**4.8**	J	**3.6**	J	**2.5**	J			**2.8**	J	**4.8**	
Copper	mg/kg	47,000	**10.6**		**22.7**		**87.6**		**77.4**		**20**		**7.8**				**5.2**		**6.7**	
Iron	mg/kg	820,000	**17,300**		**35,700**		**147,000**		**149,000**		**49,400**		**6,980**				**6,360**		**13,100**	M1
Lead	mg/kg	800	**7.6**		**13.2**		**72.1**		**138**		**4.1**		**5.6**				**9.1**		**13.7**	
Manganese	mg/kg	26,000	**49.2**		**119**		**47,600**		**48,600**		**25,600**		**367**		**65.2**		**174**		**112**	M1R1
Mercury	mg/kg	350	**0.03**	J	**0.012**	J	**0.027**	J	**0.026**	J	0.11	U	**0.0024**	J			**0.0082**	J	0.12	U
Nickel	mg/kg	22,000	**12.2**		**21.5**		**40.1**		**30.7**		**9.1**	J	**6.7**	J			**7.3**	J	**9.7**	
Selenium	mg/kg	5,800	4	U	3.5	U	3.5	U	4.3	U	**3.8**	JB	3.9	U			3.7	U	3.6	U
Silver	mg/kg	5,800	3	U	2.6	U	2.6	U	3.2	U	2.9	U	2.9	U			2.8	U	2.7	U
Thallium	mg/kg	12	10.1	U	8.8	U	8.8	U	10.7	U	9.7	U	9.8	U			9.2	U	8.9	U
Vanadium	mg/kg	5,800	**38.3**		**44.9**		**9,940**		**2,450**		**317**		**16.5**				**91.9**		**26.8**	
Zinc	mg/kg	350,000	**41.6**		**49.8**		**314**		**744**		**6.7**		**15.9**				**20.9**		**35.6**	
Other																				
Cyanide	mg/kg	150	0.75	U	**0.081**	J	**0.48**	JB	**0.55**	JB	**0.24**	JB	**0.22**	JB			**0.74**		0.74	U

Detections in bold

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Values in Red indicate an exceedance of the Project Action Limit (PAL)

Table 6
Summary of Inorganics Detected in Soil
Parcel B22
Tradepoint Atlantic
Sparrows Point, Maryland

Parameter	Units	PAL	B22-169-SB-1 Soil 5/26/2016		B22-169-SB-4 Soil 5/26/2016		B22-170-SB-1 Soil 6/1/2016		B22-170-SB-4 Soil 6/1/2016		B22-171-SB-1 Soil 5/17/2016		B22-171-SB-5 Soil 5/17/2016		B22-171-SB-10 Soil 5/17/2016		B22-172-SB-1 Soil 5/16/2016		B22-172-SB-5 Soil 5/16/2016	
Metals																				
Aluminum	mg/kg	1,100,000	**41,800**		**11,900**		**29,000**		**16,200**		**9,800**		**14,500**				**14,500**		**16,700**	
Antimony	mg/kg	470	2.8	U	3	U	2.8	U	2.7	U	2.8	U	4	U			3.2	U	3	U
Arsenic	mg/kg	3	2.3	U	**2.3**	J	**3.9**		**12.2**		**6.5**		**14**		**3.5**		**5.9**		**3.9**	
Barium	mg/kg	220,000	**1,050**		**39.7**		**485**		**71.4**		**54.6**		**165**				**70.2**		**58.3**	
Beryllium	mg/kg	2,300	**2.5**		**0.43**	J	**3**		**0.98**		0.93	U	**1.4**				**0.37**	J	**0.31**	J
Cadmium	mg/kg	980	**0.4**	J	1.5	U	**0.53**	J	1.4	U	**0.31**	JB	**0.51**	J			1.6	U	1.5	U
Chromium	mg/kg	120,000	**34.2**		**15.2**		**188**		**63.5**		**1,480**		**45.3**				**19.2**		**18.3**	
Chromium VI	mg/kg	6.3	**0.41**	JB	**0.81**	JB	**0.4**	JB	**0.35**	JB	**11.4**		**0.53**	JB			**0.32**	JB	**0.29**	JB
Cobalt	mg/kg	350	**2.7**	J	**4.5**	J	**3.9**	J	**5.4**		**1.9**	J	**16.8**				**2.8**	J	**3**	J
Copper	mg/kg	47,000	**25.8**		**8.1**		**40.9**		**50.5**		**21.2**		**69.4**				**6.7**		**8.2**	
Iron	mg/kg	820,000	**12,600**		**10,900**		**29,700**		**37,000**		**203,000**		**31,000**				**15,300**		**15,700**	
Lead	mg/kg	800	**76.4**		**7.5**		**47.2**		**32.8**		2.3	U	**23.3**				**8.1**		**12.3**	
Manganese	mg/kg	26,000	**2,130**		**77.2**		**6,450**		**984**		**35,900**		**1,030**				**356**		**31.3**	
Mercury	mg/kg	350	0.11	U	**0.015**	J	0.1	U	**0.058**	J	0.1	U	**0.0099**	J			**0.025**	J	**0.018**	J
Nickel	mg/kg	22,000	**5.5**	J	**8.8**	J	**13.2**		**14.5**		**26**		**55.8**				**5.9**	J	**7.3**	J
Selenium	mg/kg	5,800	**4.5**		4	U	**3.3**	J	3.6	U	3.7	U	5.4	U			4.3	U	4	U
Silver	mg/kg	5,800	2.8	U	3	U	2.8	U	2.7	U	**3.5**		4	U			3.2	U	3	U
Thallium	mg/kg	12	9.3	U	10	U	9.3	U	9.1	U	9.3	U	10.8	U			10.8	U	10	U
Vanadium	mg/kg	5,800	**162**		**26.2**		**175**		**223**		**979**		**34.4**				**30.8**		**25.3**	
Zinc	mg/kg	350,000	**60**		**37.4**		**116**		**104**		**31.3**		**96.7**				**20.2**		**21.8**	
Other																				
Cyanide	mg/kg	150	**0.79**		0.81	U	**0.5**	J	**0.65**	J	**0.091**	J	**1.2**				**0.8**		**2**	

Detections in bold

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Table 6
Summary of Inorganics Detected in Soil
Parcel B22
Tradepoint Atlantic
Sparrows Point, Maryland

Parameter	Units	PAL	B22-173-SB-1 Soil 6/2/2016		B22-173-SB-4 Soil 6/2/2016		B22-174-SB-1 Soil 6/3/2016		B22-174-SB-4 Soil 6/3/2016		B22-175-SB-1 Soil 6/3/2016		B22-175-SB-4 Soil 6/3/2016		B22-176-SB-1 Soil 6/6/2016		B22-176-SB-8 Soil 6/6/2016	
Metals																		
Aluminum	mg/kg	1,100,000	**19,200**		**20,800**		**19,900**		**25,700**		**31,500**		**32,400**		**37,900**		**33,600**	
Antimony	mg/kg	470	2.6	U	3	U	2.6	U	2.8	U	2.6	U	2.4	U	2.3	U	**5.7**	
Arsenic	mg/kg	3	**5.6**		**3.4**		**6.5**		**9.8**		**2.1**	J	**5.8**		**4.4**		**7.2**	
Barium	mg/kg	220,000	**177**		**431**		**227**		**386**		**912**		**1,290**		**418**		**918**	
Beryllium	mg/kg	2,300	**1.3**		**1.1**		**2.8**		**2.7**		**1.7**		**2.1**		**5.9**		**4.6**	
Cadmium	mg/kg	980	**0.42**	J	**0.36**	J	**1.3**		**1.8**		**1.4**	B	**1.3**	B	**2.1**		**12.8**	
Chromium	mg/kg	120,000	**677**		**23.2**		**565**		**463**		**327**		**52.6**		**39.2**		**85.2**	
Chromium VI	mg/kg	6.3	**0.84**	JB	**0.44**	JB	**0.6**	JB	**0.63**	JB	**0.28**	J	**0.35**	J	**0.39**	JBM1	**0.5**	JB
Cobalt	mg/kg	350	**4.7**		**5.1**		**4.9**		**19.9**		**5.4**		**9.1**		**3.3**	J	**5.8**	
Copper	mg/kg	47,000	**48.8**		**33.3**		**112**		**174**		**65.9**		**45.4**		**72.8**		**905**	
Iron	mg/kg	820,000	**225,000**		**22,400**		**102,000**		**178,000**		**53,700**		**21,700**		**20,500**		**46,800**	
Lead	mg/kg	800	**21.8**		**40**		**300**		**195**		**192**		**3,340**		**126**		**687**	
Manganese	mg/kg	26,000	**20,600**		**1,600**		**12,500**		**11,600**		**12,500**		**1,170**		**3,310**		**5,610**	
Mercury	mg/kg	350	**0.009**	J	**0.12**	J	**0.02**	J	**0.012**	J	**0.24**		0.1	U	0.1	U	**0.0038**	J
Nickel	mg/kg	22,000	**31.1**		**13.6**		**31.6**		**58.6**		**25.3**		**38.2**		**12.1**		**28.6**	
Selenium	mg/kg	5,800	3.5	U	4	U	3.5	U	3.8	U	3.5	U	**3.1**	JB	**2.3**	JB	3.4	U
Silver	mg/kg	5,800	**3.3**		3	U	2.6	U	2.8	U	**0.64**	J	2.4	U	2.3	U	2.5	U
Thallium	mg/kg	12	8.8	U	10	U	8.8	U	9.4	U	**17.3**		8.1	U	7.8	U	8.4	U
Vanadium	mg/kg	5,800	**413**		**40.2**		**346**		**1,080**		**2,000**		**172**		**110**		**139**	
Zinc	mg/kg	350,000	**72.5**		**121**		**1,030**		**668**		**413**		**599**		**121**		**908**	
Other																		
Cyanide	mg/kg	150	**0.18**	J	**1.1**		**0.082**	J	**1**		**1.2**		**3.7**		**0.27**	J	**0.34**	J

Detections in bold

Blank spaces indicate that the parameter was not analyzed for this sample

*PAH compounds were analyzed via SIM

A glossary of laboratory flag keys can be viewed in the attached laboratory reports

Values in Red indicate an exceedance of the Project Action Limit (PAL)

Table 6
Summary of Inorganics Detected in Soil
Parcel B22
Tradepoint Atlantic
Sparrows Point, Maryland

Parameter	Units	PAL	B22-177-SB-1 Soil 6/6/2016		B22-177-SB-5 Soil 6/6/2016		B22-178-SB-1 Soil 6/3/2016		B22-178-SB-6 Soil 6/3/2016		B22-179-SB-1 Soil 6/6/2016		B22-179-SB-6 Soil 6/6/2016	
Metals														
Aluminum	mg/kg	1,100,000	**36,900**		**15,800**		**22,800**		**24,100**		**55,100**		**18,100**	
Antimony	mg/kg	470	2.4	U	2.7	U	2.5	U	2.5	U	2.5	U	2.7	U
Arsenic	mg/kg	3	**2.3**		**5.5**		**10.3**		**7.5**		**2**	J	**3.6**	
Barium	mg/kg	220,000	**513**		**62.3**		**262**		**279**		**463**		**82**	
Beryllium	mg/kg	2,300	**4.3**		**0.65**	J	**3**		**3.4**		**8.1**		**0.65**	J
Cadmium	mg/kg	980	**0.57**	J	**0.16**	J	**1.4**		**1.1**	J	**0.32**	J	**0.19**	J
Chromium	mg/kg	120,000	**432**		**25.9**		**784**		**671**		**17.5**		**25.2**	
Chromium VI	mg/kg	6.3	**0.43**	JB	**0.43**	JB	**0.46**	JB	**0.41**	JB	**0.36**	JB	**0.38**	JB
Cobalt	mg/kg	350	**2**	J	**6.1**		**6.6**		**6.6**		**0.34**	J	**6.7**	
Copper	mg/kg	47,000	**28.8**		**315**		**74.4**		**65.9**		**4.8**		**13**	
Iron	mg/kg	820,000	**75,900**		**21,100**		**150,000**		**132,000**		**26,200**		**18,100**	
Lead	mg/kg	800	**61.8**		**27.9**		**136**		**120**		**5.8**		**23.8**	
Manganese	mg/kg	26,000	**15,400**		**174**		**27,300**		**23,300**		**2,420**		**142**	
Mercury	mg/kg	350	0.1	UM1	**0.024**	J	**0.033**	J	**0.031**	J	0.11	U	**0.027**	J
Nickel	mg/kg	22,000	**23.3**		**13.3**		**56.7**		**33.5**		**2.3**	J	**14.2**	
Selenium	mg/kg	5,800	3.1	U	3.6	U	3.3	U	3.3	U	**6.8**	B	3.6	U
Silver	mg/kg	5,800	2.4	U	2.7	U	2.5	U	2.5	U	2.5	U	2.7	U
Thallium	mg/kg	12	**4.3**	J	9.1	U	8.3	U	8.2	U	8.2	U	9	U
Vanadium	mg/kg	5,800	**346**		**39.7**		**1,250**		**1,310**		**22**		**37.4**	
Zinc	mg/kg	350,000	**56.8**		**61.2**		**497**		**340**		**7.3**		**58.1**	
Other														
Cyanide	mg/kg	150	**0.56**	J	0.7	U	**0.58**		**0.35**	J	**0.21**	J	0.59	U

Detections in bold

Blank spaces indicate that the parameter was not analyzed for this sample

*PAH compounds were analyzed via SIM

A glossary of laboratory flag keys can be viewed in the attached laboratory reports

Values in Red indicate an exceedance of the Project Action Limit (PAL)

TABLE 7
SUMMARY OF SOIL COPCs

Parameter	CAS#	Frequency of Detections (%)	Sample ID of Max Result	Unit	PAL Solid	Max Result
1,1-Dichloroethane	75-34-3	7	B22-070-SB-1	mg/kg	16	44.7
Aroclor 1242	53469-21-9	11	B22-140-SB-1	mg/kg	0.97	6.64
Aroclor 1248	12672-29-6	14	B22-065-SB-1	mg/kg	0.94	50.9
Aroclor 1254	11097-69-1	26	B22-037-SB-1	mg/kg	0.97	7.93
Aroclor 1260	11096-82-5	4	B22-042-SB-1	mg/kg	0.99	21.1
Arsenic	7440-38-2	88	B22-074-SB-1	mg/kg	3	672
Benzo(a)anthracene	56-55-3	88	B22-061-SB-1	mg/kg	2.9	82.3
Benzo(a)pyrene	50-32-8	85	B22-119-SB-10	mg/kg	0.29	84.9
Benzo(b)fluoranthene	205-99-2	93	B22-061-SB-1	mg/kg	2.9	106
Benzo(k)fluoranthene	207-08-9	89	B22-149-SB-8	mg/kg	29	89.3
Chromium VI	18540-29-9	99	B22-026-SB-1	mg/kg	6.3	29.5
Dibenz(a,h)anthracene	53-70-3	74	B22-061-SB-1	mg/kg	0.29	9.6
Diesel Range Organics	DRO	96	B22-162-SB-1	mg/kg	620	39,100
Indeno(1,2,3-cd)pyrene	193-39-5	81	B22-061-SB-1	mg/kg	2.9	26
Lead	7439-92-1	95	B22-026-SB-1	mg/kg	800	6,870
Manganese	7439-96-5	100	B22-041-SB-1	mg/kg	26,000	71,600
Naphthalene	91-20-3	77	B22-119-SB-10	mg/kg	17	2,040
PCB, Total	1336-36-3	67	B22-028-SB-1	mg/kg	0.97	74.4
Thallium	7440-28-0	3	B22-175-SB-1	mg/kg	12	17.3
Vanadium	7440-62-2	100	B22-166-SB-1	mg/kg	5,800	9,940

TABLE 8
SOIL PAL EXCEEDANCES FOR SPECIFIC TARGETS

Target Feature	Boring ID	Sample Depth (ft)	Parameter	PAL (mg/kg)	Result (mg/kg)	Flag
Former 1991 PCB Spill Area - AOC A	B22-001-SB	1	Arsenic	3	9.3	
		1	Benzo(a)pyrene	0.29	0.76	
		1	Diesel Range Organics	620	1,220	L2
		4	Arsenic	3	17.6	
		4	Benzo(a)pyrene	0.29	0.62	IS
		4	Diesel Range Organics	620	1,330	L2
	B22-002-SB	1	Arsenic	3	11.6	
		7	Arsenic	3	7.6	
Former PCB Spill Area (Sheet Mill) - AOC D	B22-003-SB	1	Arsenic	3	4.3	
		4	Arsenic	3	5.7	
	B22-004-SB	1	Arsenic	3	3.8	
		1	Benzo(a)pyrene	0.29	0.61	
Truck Dock #9 Former Diesel Spil Area and Diesel Fuel UST - AOC K	B22-005-SB	1	Arsenic	3	4.7	
		1	PCB, Total	0.97	2.96	
		4	Arsenic	3	10.1	
		4	Benzo(a)pyrene	0.29	2.1	
		4	Benzo(b)fluoranthene	2.9	4.6	ip
		4	Dibenz(a,h)anthracene	0.29	0.3	
		4	Thallium	12	15.4	
		10	Arsenic	3	4.8	
		10	Benzo(a)pyrene	0.29	0.8	IS
	B22-006-SB	1	Benzo(a)pyrene	0.29	2.1	
		1	Benzo(b)fluoranthene	2.9	4	ip
		1	Dibenz(a,h)anthracene	0.29	0.3	
		1	PCB, Total	0.97	0.991	
		7	Arsenic	3	3.8	
Former Chromic Acid Spill Area - AOC S	B22-008-SB	4	Manganese	26,000	26,700	
Former Diesel Fuel UST (Cold Sheet Mill) - AOC T	B22-010-SB	1	Arsenic	3	6.9	
		1	Benzo(a)anthracene	2.9	3.1	
		1	Benzo(a)pyrene	0.29	2.4	
		1	Benzo(b)fluoranthene	2.9	4.5	ip
		1	Dibenz(a,h)anthracene	0	0	
		4	Arsenic	3	11.2	
		4	Benzo(a)pyrene	0.29	1.4	
		4	Dibenz(a,h)anthracene	0	0	
Former Spent Pickle Liquor Tanks - AOC V	B22-011-SB	1	Arsenic	3	7.7	
		1	Benzo(a)pyrene	0.29	1.3	
		4	Arsenic	3	3.4	
		4	Benzo(a)pyrene	0.29	1.8	
		4	Benzo(b)fluoranthene	2.9	3.5	ip
		4	Dibenz(a,h)anthracene	0.29	0.36	
		4	Manganese	26,000	32,000	
	B22-012-SB	1	Arsenic	3	6	
		1	Benzo(a)pyrene	0	3	
		1	Benzo(b)fluoranthene	2.9	3.9	
		1	Dibenz(a,h)anthracene	0.29	0.53	
		4	Arsenic	3	7.6	

TABLE 8
SOIL PAL EXCEEDANCES FOR SPECIFIC TARGETS

Target Feature	Boring ID	Sample Depth (ft)	Parameter	PAL (mg/kg)	Result (mg/kg)	Flag
Drip Legs	B22-013-SB	1	Arsenic	3	3.7	
		1	Benzo(a)anthracene	2.9	11.4	
		1	Benzo(a)pyrene	0.29	7.7	
		1	Benzo(b)fluoranthene	2.9	14.6	ip
		1	Dibenz(a,h)anthracene	0.29	0.91	
		1	PCB, Total	0.97	1.949	
		4	Benzo(a)pyrene	0.29	0.41	
	B22-014-SB	1	Arsenic	3	5.4	
		1	Benzo(a)pyrene	0.29	0.95	
		5	Arsenic	3	4.3	
		10	Arsenic	3	8.2	
	B22-015-SB	1	Arsenic	3	5.5	
		1	Benzo(a)pyrene	0.29	0.31	
		4	Arsenic	3	6.8	
		4	Benzo(a)pyrene	0.29	0.69	
	B22-016-SB	1	Arsenic	3	7.5	
		1	Benzo(a)pyrene	0.29	0.67	
		5	Arsenic	3	7.6	
		5	Benzo(a)pyrene	0.29	0.41	
	B22-017-SB	1	Arsenic	3	4.1	
		1	Benzo(a)pyrene	0.29	0.31	
		6	Arsenic	3	5.4	
		10	Arsenic	3	5	
	B22-018-SB	1	Arsenic	3	3.6	
		6	Arsenic	3	19.2	
		10	Arsenic	3	8.4	
	B22-019-SB	1	Aroclor 1242	0.97	2.64	
		1	PCB, Total	0.97	2.64	
		6	Arsenic	3	25.3	
		10	Arsenic	3	7.2	
	B22-020-SB	1	Arsenic	3	5.9	
		1	Benzo(a)pyrene	0.29	1.2	
		4	Arsenic	3	110	
		4	Benzo(a)pyrene	0.29	0.43	
		10	Arsenic	3	14	
	B22-021-SB	1	Arsenic	3	6.4	
	B22-023-SB	1	Arsenic	3	21.4	
		1	Benzo(a)pyrene	0.29	0.43	
		9	Arsenic	3	10.5	
		9	Benzo(a)anthracene	2.9	4.9	
		9	Benzo(a)pyrene	0.29	3.5	
		9	Benzo(b)fluoranthene	2.9	5.6	
		9	Dibenz(a,h)anthracene	0.29	0.84	
		10	Benzo(a)pyrene	0.29	0.57	
	B22-024-SB	1	Arsenic	3	5.9	
		4	Arsenic	3	15.2	
		4	Benzo(a)pyrene	0.29	1.7	
		4	Benzo(b)fluoranthene	2.9	3.6	ip
		4	Dibenz(a,h)anthracene	0.29	0.41	
	B22-025-SB	4	Arsenic	3	3.8	

TABLE 8
SOIL PAL EXCEEDANCES FOR SPECIFIC TARGETS

Target Feature	Boring ID	Sample Depth (ft)	Parameter	PAL (mg/kg)	Result (mg/kg)	Flag
Drip Legs *(continued)*	B22-026-SB	1	Arsenic	3	16.3	
		1	Benzo(a)pyrene	0.29	0.88	
		1	Chromium VI	6.3	29.5	
		1	Lead	800	6,870	
		9	Arsenic	3	11.7	
	B22-028-SB	1	Lead	800	816	
		1	PCB, Total	0.97	74.4	
	B22-029-SB	6	Arsenic	3	3.1	
		6	Benzo(a)pyrene	0.29	1.2	
		6	Benzo(b)fluoranthene	2.9	3.2	ip
	B22-030-SB	1	Arsenic	3	6.7	
		5	Arsenic	3	5.9	
		5	Benzo(a)pyrene	0.29	0.54	
	B22-031-SB	1	Arsenic	3	11.4	
		1	Manganese	26,000	51,900	
		4	Arsenic	3	9.8	
		4	Benzo(a)pyrene	0.29	0.49	M1
		10	Arsenic	3	22.8	
		10	Benzo(a)pyrene	0.29	0.52	
	B22-032-SB	1	Aroclor 1248	0.94	14.9	
		1	Arsenic	3	8.7	
		1	Manganese	26,000	46,600	
		1	PCB, Total	0.97	14.9	
		4	Arsenic	3	3.8	
		10	Arsenic	3	5.3	
	B22-033-SB	1	Arsenic	3	4.8	
		1	Chromium VI	6.3	12.5	
		1	Manganese	26,000	29,400	
	B22-034-SB	1	Arsenic	3	3.7	
		1	Chromium VI	6.3	10.8	
		1	Manganese	26,000	27,500	
	B22-035-SB	1	Arsenic	3	5.9	
	B22-036-SB	1	Arsenic	3	4.4	
		1	Manganese	26,000	27,000	
		4	Arsenic	3	3.1	
		4	Manganese	26,000	31,500	
	B22-037-SB	1	Aroclor 1254	0.97	7.93	
		1	Arsenic	3	4.2	
		1	PCB, Total	0.97	7.93	
	B22-038-SB	1	Arsenic	3	11.3	
		1	Benzo(a)pyrene	0.29	1.1	
		1	PCB, Total	0.97	0.99	
	B22-039A-SB	3	Arsenic	3	4.8	
	B22-039-SB	1	Aroclor 1248	0.94	4.87	
		1	Arsenic	3	4.4	
		1	PCB, Total	0.97	5.159	
	B22-040-SB	1	PCB, Total	0.97	1.458	

TABLE 8
SOIL PAL EXCEEDANCES FOR SPECIFIC TARGETS

Target Feature	Boring ID	Sample Depth (ft)	Parameter	PAL (mg/kg)	Result (mg/kg)	Flag
Electric Sub-Stations	B22-041-SB	1	Arsenic	3	9.5	
		1	Manganese	26,000	71,600	
		5	Arsenic	3	4.9	
		10	Arsenic	3	5.3	
	B22-042-SB	1	Aroclor 1248	0.94	3.06	
		1	Aroclor 1260	0.99	21.1	
		1	Arsenic	3	3.9	
		1	PCB, Total	0.97	24.16	
		4	Arsenic	3	4.8	
		10	Arsenic	3	20.1	
	B22-043-SB	1	Arsenic	3	15.3	
		1	Benzo(a)pyrene	0.29	0.55	M6
		4	Benzo(a)pyrene	0.29	2.4	
		4	Benzo(b)fluoranthene	2.9	5.4	ip
	B22-044-SB	1	Arsenic	3	3.4	
	B22-045-SB	1	Aroclor 1248	0.94	3.68	
		1	Aroclor 1254	0.97	1.63	
		1	Arsenic	3	12	
		1	PCB, Total	0.97	9.43	
	B22-046-SB	1	Arsenic	3	4.9	
		1	Manganese	26,000	52,300	M6R1
		4	Arsenic	3	6.7	
	B22-047-SB	1	Aroclor 1254	0.97	2.17	
		1	Arsenic	3	14.2	
		1	Benzo(a)pyrene	0.29	1.6	
		1	Benzo(b)fluoranthene	2.9	3.4	ip
		1	Chromium VI	6.3	17	
		1	Diesel Range Organics	620	715	L2
		1	Lead	800	6,600	
		1	PCB, Total	0.97	13.37	
		5	Arsenic	3	6.7	
		10	Arsenic	3	5	
	B22-048-SB	1	Arsenic	3	6.3	
		1	Manganese	26,000	27,800	
		5	Arsenic	3	5.2	
		10	Arsenic	3	9.8	
Electric Transformer	B22-049-SB	1	PCB, Total	0.97	1.03	
	B22-050-SB	1	Arsenic	3	5.9	
		1	Benzo(a)pyrene	0.29	0.85	
		1	PCB, Total	0.97	1.7124	
		4.5	Arsenic	3	3.7	
Fuel Department	B22-051-SB	1	Arsenic	3	14	
	B22-052-SB	1	Benzo(a)pyrene	0.29	0.94	
		8	Arsenic	3	3.6	

TABLE 8
SOIL PAL EXCEEDANCES FOR SPECIFIC TARGETS

Target Feature	Boring ID	Sample Depth (ft)	Parameter	PAL (mg/kg)	Result (mg/kg)	Flag
Fuel Station (Tractor)	B22-053-SB	1	Arsenic	3	19.1	
		1	Lead	800	1,500	
		1	PCB, Total	0.97	7.32	
		8	Arsenic	3	5.9	
		10	Arsenic	3	9.7	
	B22-054-SB	4	Arsenic	3	3.3	
		10	Arsenic	3	10.6	
Grease Trap	B22-055-SB	1	Arsenic	3	18.9	
		1	Benzo(a)pyrene	0.29	0.57	
		8.5	Arsenic	3	5.9	
Lube Oil Rooms/Shops	B22-058-SB	7	Arsenic	3	22.3	
		10	Arsenic	3	4.4	
	B22-059-SB	1	Arsenic	3	13.1	
		1	Lead	800	1,230	
		4	Arsenic	3	18.6	
		4	Benzo(a)pyrene	0.29	0.42	
		4	Lead	800	976	
	B22-060-SB	4	Arsenic	3	8.7	
		4	Manganese	26,000	43,800	
Oil Houses	B22-061-SB	1	Arsenic	3	11.1	
		1	Benzo(a)anthracene	2.9	82.3	
		1	Benzo(a)pyrene	0.29	72	
		1	Benzo(b)fluoranthene	2.9	106	
		1	Benzo(k)fluoranthene	29	46	
		1	Dibenz(a,h)anthracene	0.29	9.6	
		1	Diesel Range Organics	620	1,480	L2
		1	Indeno(1,2,3-cd)pyrene	2.9	26	
		5	Arsenic	3	5.8	
	B22-062-SB	1	Arsenic	3	3.5	
		4	Arsenic	3	4.9	
		4	Benzo(a)pyrene	0.29	1.1	
		4	Manganese	26,000	29,400	
	B22-063-SB	1	Arsenic	3	8.3	
		1	Chromium VI	6.3	7.2	
		1	PCB, Total	0.97	10.879	
		9	Arsenic	3	3.8	
		9	Diesel Range Organics	620	1,030	L2
	B22-065-SB	1	Aroclor 1248	0.94	50.9	
		1	PCB, Total	0.97	61	
	B22-066-SB	1	Arsenic	3	6.4	
	B22-067-SB	7	Arsenic	3	5.2	
		10	Arsenic	3	5	
	B22-068-SB	1	Arsenic	3	3.3	
		1	PCB, Total	0.97	1.258	
	B22-069-SB	4	Arsenic	3	7.5	
		10	Arsenic	3	39.8	

TABLE 8
SOIL PAL EXCEEDANCES FOR SPECIFIC TARGETS

Target Feature	Boring ID	Sample Depth (ft)	Parameter	PAL (mg/kg)	Result (mg/kg)	Flag
Oil Houses *(continued)*	B22-070-SB	1	1,1-Dichloroethane	16	44.7	1c
		1	Aroclor 1254	0.97	3.65	
		1	Arsenic	3	4.3	
		1	Diesel Range Organics	620	6,620	L2
		1	PCB, Total	0.97	7.36	
	B22-071-SB	1	Arsenic	3	4.8	
		1	Benzo(a)pyrene	0.29	0.94	
		4	Arsenic	3	6.6	
		4	Benzo(a)pyrene	0.29	1.4	
		4	Manganese	26,000	40,800	
	B22-072-SB	1	Arsenic	3	6.6	
		1	Benzo(a)anthracene	2.9	9.5	
		1	Benzo(a)pyrene	0.29	13.7	
		1	Benzo(b)fluoranthene	2.9	25.3	ip
		1	Dibenz(a,h)anthracene	0.29	2	
		1	Indeno(1,2,3-cd)pyrene	2.9	5	
Mech. Maintenance Shop	B22-073-SB	1	Arsenic	3	13.4	
		1	Benzo(a)anthracene	2.9	6	
		1	Benzo(a)pyrene	0.29	5.1	
		1	Benzo(b)fluoranthene	2.9	9.8	ip
		1	Dibenz(a,h)anthracene	0.29	0.99	
		1	Indeno(1,2,3-cd)pyrene	2.9	3.1	
		5	Arsenic	3	14.3	
	B22-074-SB	1	Arsenic	3	672	
Possible PCB-Contaminated Areas	B22-075-SB	1	Arsenic	3	3.7	
		4	Arsenic	3	10.8	
	B22-077-SB	1	Arsenic	3	3.9	
	B22-078-SB	1	Arsenic	3	8.3	
		1	Benzo(a)pyrene	0.29	0.37	
		7.5	Arsenic	3	7.3	
	B22-079-SB	1	Arsenic	3	7.1	
	B22-080-SB	1	Arsenic	3	7.1	
		1	Benzo(a)anthracene	2.9	44.2	
		1	Benzo(a)pyrene	0.29	35.3	
		1	Benzo(b)fluoranthene	2.9	69.8	ip
		1	Benzo(k)fluoranthene	29	60.6	ip
		1	Dibenz(a,h)anthracene	0.29	2.7	IS
		1	Indeno(1,2,3-cd)pyrene	2.9	8.8	IS
		5	Arsenic	3	18.9	
	B22-081-SB	1	Arsenic	3	4.5	
		4	Arsenic	3	6.2	
		10	Arsenic	3	8.5	
	B22-082-SB	1	Arsenic	3	11.7	
	B22-083-SB	1	Benzo(a)pyrene	0.29	0.42	
	B22-084-SB	1	Arsenic	3	10.6	
		1	Benzo(a)anthracene	2.9	34.6	
		1	Benzo(a)pyrene	0.29	24.5	
		1	Benzo(b)fluoranthene	2.9	50.3	ip
		1	Benzo(k)fluoranthene	29	43.7	ip
		1	Dibenz(a,h)anthracene	0.29	4.8	
		1	Indeno(1,2,3-cd)pyrene	2.9	11.7	

TABLE 8
SOIL PAL EXCEEDANCES FOR SPECIFIC TARGETS

Target Feature	Boring ID	Sample Depth (ft)	Parameter	PAL (mg/kg)	Result (mg/kg)	Flag
Possible PCB-Contaminated Areas *(continued)*	B22-085-SB	1	Arsenic	3	5.8	
		1	Benzo(a)anthracene	2.9	30.1	
		1	Benzo(a)pyrene	0.29	23.7	
		1	Benzo(b)fluoranthene	2.9	48.8	ip
		1	Benzo(k)fluoranthene	29	42.4	ip
		1	Dibenz(a,h)anthracene	0.29	3.2	
		1	Diesel Range Organics	620	1,200	L2
		1	Indeno(1,2,3-cd)pyrene	2.9	8.2	
	B22-086-SB	1	Arsenic	3	4	
		1	Benzo(a)pyrene	0.29	1	
		1	Benzo(b)fluoranthene	2.9	3.4	ip
		5	Arsenic	3	6.3	
		10	Arsenic	3	23.8	
	B22-087-SB	1	Arsenic	3	5.2	
		1	Benzo(a)pyrene	0.29	0.32	IS
		5	Arsenic	3	4.5	
	B22-088-SB	1	Arsenic	3	28.7	
		1	Benzo(a)pyrene	0.29	0.34	
		1	Manganese	26,000	46,000	
		6	Arsenic	3	10.8	
		6	Benzo(a)pyrene	0.29	3.1	
		6	Benzo(b)fluoranthene	2.9	5.6	ip
		6	Dibenz(a,h)anthracene	0.29	0.43	
		6	Manganese	26,000	31,800	
	B22-089-SB	1	Arsenic	3	3.9	
	B22-090-SB	5	Arsenic	3	5	
	B22-091-SB	1	Arsenic	3	15.4	
		1	Benzo(a)pyrene	0.29	0.7	
		4	Arsenic	3	5.7	
	B22-092-SB	1	PCB, Total	0.97	3.18	
	B22-093-SB	1	Arsenic	3	7.6	
		5	Arsenic	3	6.6	
		10	Arsenic	3	21.7	
	B22-094-SB	1	Aroclor 1254	0.97	1.01	
		1	PCB, Total	0.97	7.69	
		4	Arsenic	3	6.6	
	B22-095-SB	1	Arsenic	3	8.6	
		6	Arsenic	3	3.9	
	B22-096-SB	1	Arsenic	3	4.1	
		1	Benzo(a)pyrene	0.29	0.82	
		9	Arsenic	3	4.1	
		10	Arsenic	3	7.8	
	B22-097-SB	1	Arsenic	3	8.1	
		9	Arsenic	3	20.9	
		9	Lead	800	1,960	
	B22-098-SB	1	Arsenic	3	8.8	
		4	Arsenic	3	11.6	
		4	Lead	800	1,790	
		10	Arsenic	3	6.7	

TABLE 8
SOIL PAL EXCEEDANCES FOR SPECIFIC TARGETS

Target Feature	Boring ID	Sample Depth (ft)	Parameter	PAL (mg/kg)	Result (mg/kg)	Flag
Possible PCB-Contaminated Areas *(continued)*	B22-175-SB	1	Aroclor 1254	0.97	1.22	
		1	Benzo(a)anthracene	2.9	13.9	
		1	Benzo(a)pyrene	0.29	11.1	
		1	Benzo(b)fluoranthene	2.9	21.6	ip
		1	Dibenz(a,h)anthracene	0.29	2.2	
		1	Diesel Range Organics	620	803	L2
		1	Indeno(1,2,3-cd)pyrene	2.9	6	
		1	PCB, Total	0.97	1.22	
		1	Thallium	12	17.3	
		4	Arsenic	3	5.8	
		4	Benzo(a)anthracene	2.9	19	
		4	Benzo(a)pyrene	0.29	14.9	
		4	Benzo(b)fluoranthene	2.9	31.1	ip
		4	Dibenz(a,h)anthracene	0.29	3	
		4	Indeno(1,2,3-cd)pyrene	2.9	7.6	
		4	Lead	800	3,340	
Fuel/Gas Pump Houses	B22-099-SB	1	Arsenic	3	16.7	
		1	Benzo(a)pyrene	0.29	1.6	
		1	Benzo(b)fluoranthene	2.9	4.3	ip
		1	Dibenz(a,h)anthracene	0.29	0.33	
		7	Arsenic	3	5.5	
		7	Benzo(a)pyrene	0.29	0.98	
		9.5	Arsenic	3	16	
	B22-100-SB	1	Arsenic	3	9.1	
		1	Benzo(a)pyrene	0.29	0.35	
		6	Benzo(a)pyrene	0.29	0.66	
		6	Manganese	26,000	29,100	
		10	Benzo(a)pyrene	0.29	0.47	
	B22-101-SB	1	Arsenic	3	7.5	
		5	Arsenic	3	3.6	
	B22-102-SB	1	Arsenic	3	7.7	
		1	Benzo(a)pyrene	0.29	0.76	
		5	Arsenic	3	4.7	
	B22-176-SB	1	Arsenic	3	4.4	
		1	Benzo(a)pyrene	0.29	0.61	
		8	Arsenic	3	7.2	
		8	Benzo(a)pyrene	0.29	2.2	
		8	Benzo(b)fluoranthene	2.9	4.6	ip
		8	Dibenz(a,h)anthracene	0.29	0.49	
Coating Lines Blind Sumps - REC 1I/SWMU 54	B22-103-SB	1	Arsenic	3	6.9	
		1	Diesel Range Organics	620	4,590	L2
		4	Arsenic	3	3.3	
		4	Diesel Range Organics	620	1,720	L2
	B22-104-SB	1	Arsenic	3	6.1	
		4	Arsenic	3	9.4	
	B22-105-SB	1	Arsenic	3	4.2	
		4	Arsenic	3	4	
		10	Arsenic	3	7.7	

TABLE 8
SOIL PAL EXCEEDANCES FOR SPECIFIC TARGETS

Target Feature	Boring ID	Sample Depth (ft)	Parameter	PAL (mg/kg)	Result (mg/kg)	Flag
Cold Sheet Mill Piping - REC 1J/SWMU 58	B22-106-SB	8.5	Arsenic	3	4.3	
	B22-107-SB	1	Arsenic	3	9	
		1	Benzo(a)pyrene	0.29	0.8	
		1	Lead	800	4,070	
		5	Arsenic	3	4.4	
		10	Arsenic	3	7.3	
	B22-108-SB	1	Arsenic	3	5.1	
		1	Benzo(a)pyrene	0.29	0.68	
		1	Diesel Range Organics	620	813	L2
		5	Arsenic	3	6.2	
		5	Diesel Range Organics	620	5,490	L2
Tandem Mill Trench System - REC 1K/SWMU 59	B22-109-SB	1	Arsenic	3	4.5	
		4.5	Arsenic	3	3.2	
	B22-110-SB	1	Aroclor 1248	0.94	1.12	P
		1	Arsenic	3	5.2	
		1	Lead	800	1,270	
		1	PCB, Total	0.97	2.657	
		4	Arsenic	3	33.5	
		4	Benzo(a)pyrene	0.29	0.54	
		4	Lead	800	997	
	B22-111-SB	1	Arsenic	3	5.6	
		8	Arsenic	3	3.2	
PORI Oil/Water Separator - REC 1O/SWMU 71	B22-112-SB	1	Benzo(a)pyrene	0.29	0.4	IS
		4	Arsenic	3	4.2	
		4	Benzo(a)pyrene	0.29	0.56	
		10	Arsenic	3	6	
	B22-113-SB	1	Chromium VI	6.3	8.5	
		4	Arsenic	3	6.8	
		4	Benzo(a)pyrene	0.29	0.66	M6
	B22-114-SB	8	Arsenic	3	13.3	
		10	Arsenic	3	5.6	

TABLE 8
SOIL PAL EXCEEDANCES FOR SPECIFIC TARGETS

Target Feature	Boring ID	Sample Depth (ft)	Parameter	PAL (mg/kg)	Result (mg/kg)	Flag
PORI Holding Tank - REC 1P/SWMU 72	B22-115-SB	1	Arsenic	3	8.8	
		1	Manganese	26,000	31,600	
		8.5	Arsenic	3	13.3	
		8.5	Benzo(a)pyrene	0.29	1.5	
	B22-116-SB	1	Arsenic	3	6.3	
		1	Benzo(a)pyrene	0.29	0.77	
		1	Manganese	26,000	27,200	
		8.5	Arsenic	3	3.4	
		8.5	Lead	800	2,850	
	B22-117-SB	1	Arsenic	3	9.9	
		1	Benzo(a)pyrene	0.29	1.2	
		4	Arsenic	3	10.4	
		4	Benzo(a)anthracene	2.9	13.4	
		4	Benzo(a)pyrene	0.29	10.7	
		4	Benzo(b)fluoranthene	2.9	20.7	ip
		4	Dibenz(a,h)anthracene	0.29	2.1	
		4	Indeno(1,2,3-cd)pyrene	2.9	6.2	
		10	Arsenic	3	8.4	
	B22-118-SB	1	Arsenic	3	8.4	
		1	Benzo(a)pyrene	0.29	1.7	
		1	Benzo(b)fluoranthene	2.9	3.8	ip
		1	Dibenz(a,h)anthracene	0.29	0.31	
		9	Arsenic	3	4.3	
		9	Dibenz(a,h)anthracene	0.29	0.31	
		9	Manganese	26,000	41,400	
		10	Arsenic	3	4.3	
		10	Manganese	26,000	45,400	
PORI Lagoon - REC 1Q/SWMU 73	B22-119-SB	9	Arsenic	3	4.1	
		9	Naphthalene	17	32.8	M6R1
		10	Arsenic	3	6.2	
		10	Benzo(a)pyrene	0.29	84.9	
		10	Naphthalene	17	2,040	
	B22-120-SB	1	Arsenic	3	23.9	
		1	Benzo(a)pyrene	0.29	0.57	
		8	Arsenic	3	3.2	
		8	Benzo(a)pyrene	0.29	1.3	
	B22-121-SB	1	Arsenic	3	11	
		1	Benzo(a)pyrene	0.29	0.47	
		9	Arsenic	3	10.2	
		9	Benzo(a)pyrene	0.29	0.39	
		10	Arsenic	3	20.5	
		10	Benzo(a)pyrene	0.29	0.9	IS
	B22-174-SB	1	Aroclor 1254	0.97	6.63	
		1	Aroclor 1260	0.99	2.72	
		1	Arsenic	3	6.5	
		1	Benzo(a)pyrene	0.29	0.57	
		1	PCB, Total	0.97	9.35	
		4	Arsenic	3	9.8	
		4	Benzo(a)pyrene	0.29	0.52	

TABLE 8
SOIL PAL EXCEEDANCES FOR SPECIFIC TARGETS

Target Feature	Boring ID	Sample Depth (ft)	Parameter	PAL (mg/kg)	Result (mg/kg)	Flag
Acid Tanks - REC 1V/ AOC J & Tin Mill Sump (Acid Area Monitoring) - REC 1S/SWMU 86	B22-122-SB	1	Arsenic	3	14.5	
		1	Benzo(a)pyrene	0.29	0.53	
	B22-123-SB	1	Benzo(a)pyrene	0.29	0.91	
	B22-124-SB	1	Arsenic	3	3.2	
		1	PCB, Total	0.97	13	
		4	Arsenic	3	12.4	
		4	Benzo(a)pyrene	0.29	0.36	
Spent Pickle Liquor Tanks - REC 1W/AOC W & Spent Pickle Liquor Sump/Trench System - REC 1U/SWMU 198	B22-125-SB	1	Arsenic	3	6.2	
		1	Benzo(a)pyrene	0.29	0.38	
		4	Arsenic	3	6.5	
		4	Benzo(a)pyrene	0.29	0.87	
		4	Diesel Range Organics	620	786	L2
		10	Arsenic	3	6.2	
	B22-126-SB	6	Arsenic	3	6.8	
		10	Arsenic	3	7.1	
	B22-127-SB	1	Arsenic	3	3.7	
Hot Strip Mill Drum Handling Area - REC 1Y	B22-128-SB	1	Aroclor 1254	0.97	0.99	
		1	Arsenic	3	4	
		1	Manganese	26,000	26,400	
		1	PCB, Total	0.97	1.631	
	B22-129-SB	1	Aroclor 1254	0.97	1.04	
		1	Arsenic	3	9.9	
		1	PCB, Total	0.97	1.867	
		4	Arsenic	3	4.7	
	B22-130-SB	1	Aroclor 1254	0.97	1.15	
		1	Arsenic	3	9.8	
		1	Benzo(a)pyrene	0.29	0.43	
		1	Chromium VI	6.3	11.7	
		1	Manganese	26,000	29,100	
		1	PCB, Total	0.97	2.209	
		4	Arsenic	3	4.8	
SAH Sewer Pump Station	B22-131-SB	1	Arsenic	3	5.1	
		5	Arsenic	3	12.5	
	B22-132-SB	5	Arsenic	3	11.8	
Scale Pits	B22-133-SB	1	Arsenic	3	3.2	
		5	Arsenic	3	5.6	
		5	Benzo(a)pyrene	0.29	0.42	
	B22-134-SB	1	Arsenic	3	6.8	
		1	PCB, Total	0.97	2.6391	
		7	Arsenic	3	6.4	
		7	Benzo(a)pyrene	0.29	0.3	
	B22-135-SB	1	Arsenic	3	9.9	
		1	Chromium VI	6.3	11	
		1	PCB, Total	0.97	2.04	
		8	Arsenic	3	8.5	
		8	Benzo(a)pyrene	0.29	1.2	
	B22-136-SB	1	Arsenic	3	3.1	
		5	Arsenic	3	8.8	
		5	Benzo(a)pyrene	0.29	1.5	
		5	Benzo(b)fluoranthene	2.9	3	ip
		5	Diesel Range Organics	620	723	L2

TABLE 8
SOIL PAL EXCEEDANCES FOR SPECIFIC TARGETS

Target Feature	Boring ID	Sample Depth (ft)	Parameter	PAL (mg/kg)	Result (mg/kg)	Flag
Slab Storage Area	B22-137-SB	1	Arsenic	3	5.5	
		1	Manganese	26,000	30,400	
		8	Arsenic	3	5	
	B22-138-SB	1	Arsenic	3	4.7	
		1	Benzo(a)pyrene	0.29	0.5	
		8	Arsenic	3	4.9	
	B22-139-SB	1	Arsenic	3	17.5	
		4	Arsenic	3	8.8	
	B22-140-SB	1	Aroclor 1242	0.97	6.64	
		1	Chromium VI	6.3	7.8	
		1	Manganese	26,000	29,900	
		1	PCB, Total	0.97	6.64	
		5	Arsenic	3	6	
	B22-141-SB	1	Arsenic	3	4.2	
		5	Arsenic	3	6.1	
	B22-142-SB	1	Arsenic	3	4.8	
		1	Manganese	26,000	28,500	
		5	Benzo(a)anthracene	2.9	5	
		5	Benzo(a)pyrene	0.29	4.7	
		5	Benzo(b)fluoranthene	2.9	9.1	ip
		5	Dibenz(a,h)anthracene	0.29	0.4	
		5	Manganese	26,000	28,600	
	B22-143-SB	1	Arsenic	3	5.3	
		1	Manganese	26,000	30,600	
		5	Arsenic	3	5.1	
		5	Manganese	26,000	27,900	
		10	Arsenic	3	4	
Acid Tanks	B22-144-SB	1	Aroclor 1248	0.94	1.48	
		1	Aroclor 1254	0.97	0.978	
		1	PCB, Total	0.97	4.778	
		7	Benzo(a)anthracene	2.9	5.5	
		7	Benzo(a)pyrene	0.29	4.5	
		7	Benzo(b)fluoranthene	2.9	9.2	ip
		7	Dibenz(a,h)anthracene	0.29	0.52	
	B22-145-SB	1	Arsenic	3	5.9	
		1	Lead	800	900	
		1	PCB, Total	0.97	1.559	
		4	Arsenic	3	4.2	
		4	Benzo(a)pyrene	0.29	0.33	
		4	Diesel Range Organics	620	5,150	L2
		10	Arsenic	3	3.3	
	B22-146-SB	1	Arsenic	3	13	
		1	Benzo(a)anthracene	2.9	5.5	
		1	Benzo(a)pyrene	0.29	4.7	
		1	Benzo(b)fluoranthene	2.9	10.8	ip
		1	Dibenz(a,h)anthracene	0.29	0.63	
		5	Arsenic	3	3.8	
	B22-147-SB	1	Arsenic	3	7.9	
		1	Benzo(a)pyrene	0.29	1.6	
		1	Benzo(b)fluoranthene	2.9	3.5	ip
		5.5	Arsenic	3	5.5	
		5.5	Benzo(a)pyrene	0.29	0.39	

TABLE 8
SOIL PAL EXCEEDANCES FOR SPECIFIC TARGETS

Target Feature	Boring ID	Sample Depth (ft)	Parameter	PAL (mg/kg)	Result (mg/kg)	Flag
Caustic Tanks	B22-148-SB	1	Arsenic	3	8.2	
		1	Benzo(a)anthracene	2.9	5.3	
		1	Benzo(a)pyrene	0.29	4.6	
		1	Benzo(b)fluoranthene	2.9	10.3	ip
		1	Dibenz(a,h)anthracene	0.29	0.63	
		1	Lead	800	1,030	
		1	PCB, Total	0.97	1.98	
		6	Arsenic	3	40.8	
		6	Benzo(a)pyrene	0.29	0.54	
		6	Diesel Range Organics	620	6,670	L2
		10	Arsenic	3	7.5	
		10	Benzo(a)pyrene	0.29	9.5	
		10	Diesel Range Organics	620	835	L21c
	B22-149-SB	1	Arsenic	3	16.3	
		1	Benzo(a)anthracene	2.9	4.2	
		1	Benzo(a)pyrene	0.29	3.7	
		1	Benzo(b)fluoranthene	2.9	8.5	ip
		1	Dibenz(a,h)anthracene	0.29	0.5	
		8	Arsenic	3	24	
		8	Benzo(a)anthracene	2.9	60.4	
		8	Benzo(a)pyrene	0.29	47.1	
		8	Benzo(b)fluoranthene	2.9	92.5	ip
		8	Benzo(k)fluoranthene	29	89.3	ip
		8	Dibenz(a,h)anthracene	0.29	5.2	
		8	Diesel Range Organics	620	855	L2
		8	Indeno(1,2,3-cd)pyrene	2.9	13.2	
	B22-150-SB	1	Benzo(a)pyrene	0.29	0.32	
		1	PCB, Total	0.97	1.634	
		5	Arsenic	3	6.1	
Fuel/Oil Tanks	B22-152-SB	1	Arsenic	3	11.1	
		1	Diesel Range Organics	620	859	L2
		1	Manganese	26,000	31,900	
		6	Arsenic	3	13.7	
		6	Benzo(a)pyrene	0.29	0.91	
		6	Diesel Range Organics	620	6,610	L2
		6	Manganese	26,000	37,900	
	B22-153-SB	1	Aroclor 1242	0.97	1.01	
		1	Arsenic	3	5.1	
		1	Lead	800	866	
		1	PCB, Total	0.97	1.0371	
		4	Arsenic	3	9.8	
		4	Diesel Range Organics	620	2,630	L2
		4	Manganese	26,000	27,400	
	B22-154-SB	1	Arsenic	3	3.9	
		1	Benzo(a)pyrene	0.29	2.5	
		1	Benzo(b)fluoranthene	2.9	4.7	ip
		1	Dibenz(a,h)anthracene	0.29	0.38	
		5	Benzo(a)pyrene	0.29	0.38	
	B22-155-SB	1	Arsenic	3	3.4	
		1	Benzo(a)anthracene	2.9	7.3	
		1	Benzo(a)pyrene	0.29	6	
		1	Benzo(b)fluoranthene	2.9	11.9	ip
		1	Dibenz(a,h)anthracene	0.29	0.83	

TABLE 8
SOIL PAL EXCEEDANCES FOR SPECIFIC TARGETS

Target Feature	Boring ID	Sample Depth (ft)	Parameter	PAL (mg/kg)	Result (mg/kg)	Flag
Palm Oil Tanks	B22-156-SB	1	Manganese	26,000	31,400	
		4.5	Arsenic	3	5.8	
	B22-157-SB	1	Arsenic	3	5.1	
	B22-158-SB	1	Arsenic	3	7.9	
		8	Arsenic	3	9.7	
		8	Manganese	26,000	41,100	
		10	Arsenic	3	4.9	
		10	Manganese	26,000	51,000	
	B22-159-SB	1	Arsenic	3	11.7	
		1	Manganese	26,000	59,500	
	B22-160-SB	1	Diesel Range Organics	620	2,020	L2
	B22-161-SB	1	Arsenic	3	6	
		1	Manganese	26,000	36,500	
		1	Vanadium	5,800	6,800	
		4.5	Arsenic	3	5	
		4.5	Benzo(a)pyrene	0.29	0.53	
Tanks - Unknown Contents	B22-162-SB	1	Arsenic	3	8.7	
		1	Benzo(a)pyrene	0.29	0.53	
		1	Diesel Range Organics	620	39,100	L2P3
		5	Arsenic	3	3.9	
	B22-163-SB	1	Arsenic	3	4.2	
		1	PCB, Total	0.97	1	
		5	Arsenic	3	7.8	
		5	Diesel Range Organics	620	8,400	L2
	B22-164-SB	1	Arsenic	3	3.2	
		6	Arsenic	3	6	
	B22-165-SB	1	Arsenic	3	4.3	
		4	Arsenic	3	5.5	
Pump Houses/Stations (MDE Request)	B22-177-SB	5	Arsenic	3	5.5	
	B22-178-SB	1	Arsenic	3	10.3	
		1	Benzo(a)pyrene	0.29	0.34	
		1	Manganese	26,000	27,300	
		6	Arsenic	3	7.5	
	B22-179-SB	6	Arsenic	3	3.6	

A glossary of laboratory flag keys can be viwed in the attached laboratory reports.

TABLE 9
POTENTIAL HOT SPOTS DETECTED IN SOIL

Target Feature	Sample ID	Parameter	Hot Spot Criteria (mg/kg)	Result (mg/kg)	Flag
Mech. Maintenance Shop	B22-074-SB-1	Arsenic	300	672	
Possible PCB-Contaminated Area	B22-080-SB-1	Benzo(a)pyrene	29	35.3	
Casutic Tanks	B22-149-SB-8	Benzo(a)pyrene	29	47.1	
Oil Houses	B22-061-SB-1	Benzo(a)pyrene	29	72	
PORI Lagoon	B22-119-SB-10	Benzo(a)pyrene	29	84.9	
PORI Lagoon	B22-119-SB-10	Naphthalene	1,700	2,040	
PORI Holding Tank	B22-116-SB-8.5	Lead	2,000	2,850	
Possible PCB-Contaminated Area	B22-175-SB-4	Lead	2,000	3,340	
Cold Sheet Mill Piping	B22-107-SB-1	Lead	2,000	4,070	
Electric Substations	B22-047-SB-1	Lead	2,000	6,600	
Drip Legs	B22-026-SB-1	Lead	2,000	6,870	

Space Reserved for Table 10 - Rejected Analytical Soil Results

(Pending Receipt of Validated Data)

APPENDIX A

Parcel B22 Sampling Plan Summary
Former Sparrows Point Steel Mill
Sparrows Point, Maryland

Table 1 - Soil Sampling Summary

Source Area/ Description	REC & Finding/ SWMU/ AOC	Figure or Drawing of Reference	RATIONALE	Number of Locations	Sample Locations	Boring Depth	Sample Depth	Analytical Parameters: Soil Samples
Former 1991 PCB Spill Area	AOC A	DCC Figure 3-1/ Drawing 5041	On March 21, 1991, a 55 gallon drum of PCB oil was ruptured against a transformer enclosure when a hoist lost power while transporting the drum. The spill occurred inside a motor room of the hot strip mill building, and the area was reportedly isolated, cleaned, and sampled. Wipe samples of the area were collected in July 1992, and indicated that concentrations were below the applicable cleanup standards. The area was sealed with epoxy paint, and no further action was proposed.	2	B22-001 and B22-002	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')
Former PCB Spill Area (Sheet Mill)	AOC D	DCC Figure 3-1/ Drawing 5041	On January 28, 1986, an oil-bearing transformer leak was detected near the #1 and #2 Galvanizers inside the Cold Sheet Mill Building. The concrete floor was scrubbed with kerosene and soap and water during a three month period. Despite the cleanup, contamination persisted in the concrete to a depth of 4 inches. No further remediation activity was reported, but the area was sealed with epoxy paint. Due to the low potential for an environmental release, no further action was proposed.	2	B22-003 and B22-004	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')
Truck Dock #9's Former Diesel Spill and Diesel Fuel UST Area	AOC K	DCC Figure 3-1	A spill of unknown quantity occurred at the #9 Truck Dock when a fuel line or valve broke during a transfer between a truck and the tank at the dock. Records indicate that either a 10,000 gallon diesel UST or 8,000 gallon fuel oil UST was removed between 1989 and 1990. Although corrosion pitting was observed on the exterior, no apparent integrity problems were noted. Water and soil samples showed no detectable concentrations of BTEX, and no further action was proposed.	2	B22-005 and B22-006	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')
Former Chromic Acid Spill Area	AOC S	DCC Figure 3-1	In September 1990, between 26,000 and 27,000 gallons of chromic acid overflowed from a process tank in the Coating Lines Section of the Cold Sheet Mill Building and discharged to a sump. The acid overflowed the sump and formed a thin stream which flowed beneath the #4 Coating Line into a basement. The sump and basement were pumped out and cleaned during remediation activities. Since the release was a one-time event which occurred indoors, no further action was proposed.	2	B22-007 and B22-008	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')

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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
Former Diesel Fuel UST (Cold Sheet Mill)	AOC T	DCC Figure 3-1/ Drawing 5141	The former diesel UST was located outside of the southwest corner of the Cold Sheet Mill Building, near Truck Dock 51A. The 10,000 gallon steel tank was removed on November 27, 1989. The tank exterior and end seams showed corrosion pitting, but no apparent integrity problems were noted. Some soil samples contained low detectable levels of BTEX constituents, but BTEX concentrations in groundwater were below detectable levels. After the tank was removed, no further action was proposed for AOC T.	2	B22-009 and B22-010	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')
Former Spent Pickle Liquor Tanks	AOC V	DCC Figure 3-1/ Drawing 5046	Two spent pickle liquor tanks were located outside of the northern end of the Hot Strip Mill. The ASTs were removed around 1986, and gravel in the vicinity of the tanks was observed to have undefined staining during a 1991 VSI. The former tanks were designated as non-releasing units, and no further action was proposed.	2	B22-011 and B22-012	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')
Drip Legs		Drip Leg Drawings 5886B and 5888	Coke oven gas condensate was removed from the gas pipelines at drip legs located throughout the distribution system. The condensate was typically discharged to drums, although it is possible some spilled out of the drums and on to the ground.	28	B22-013 through B22-040	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')
Electric Sub-Stations		Drawings 5035, 5040, 5041, 5050, 5140, and 5141	Investigate potential impacts related to electric sub-stations (potential leaks or releases).	8	B22-041 through B22-048	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 Transformer		Drawings 5035, 5041, and 5141	Investigate potential impacts related to electric transformers (potential leaks or releases).	2	B22-049 through B22-050	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 Department		Drawing 5041	Investigate potential impacts related to the Fuel Department (potential leaks or releases).	2	B22-051 and B22-052	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 Station (Tractor)		Drawing 5045	Investigate potential impacts related to fuel stations (potential leaks for releases).	2	B22-053 and B22-054	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 B22 Sampling Plan Summary
Former Sparrows Point Steel Mill
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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
Grease Trap		Drawing 5541	Investigate potential impacts related to the grease trap (potential leaks or releases).	2	B22-055 and B22-056	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 Rooms/Shops		Drawings 5041 and 5145	Investigate potential impacts related to lube oil rooms and shops (potential leaks or releases).	4	B22-057 through B22-060	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')
Oil Houses		Drawings 5040, 5041, 5046 and 5050	Investigate potential impacts related to oil houses (potential leaks or releases).	12	B22-061 through B22-072	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')
Mech. Maintenance Shop		Drawing 5041	Investigate potential impacts related to the mechanical maintenance shop (potential leaks or releases).	2	B22-073 and B22-074	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).	25	B22-075 through B22-098; B22-175	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/Gas Pump Houses		Drawings 5046 and 5050	Investigate potential impacts related to pump houses used for fuel or gas (potential leaks or releases).	5	B22-099 through B22-102; B22-176	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')
Coating Lines Blind Sumps	REC 1I, Finding 19/ SWMU 54	DCC Figure 3-1	The coating lines blind sumps were located in the Coating Lines Area of the Cold Sheet Mill. The Cold Sheet Mill was located in the central portion of the Finishing Mills Area. This unit managed wastewaters within the Coating Lines Area, and included a concrete-lined pit in the basement floor for the containment of spills or leaks from the process area located on the floor above. Further evaluation was proposed regarding SWMU 54.	3	B22-103 through B22-105	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 B22 Sampling Plan Summary
Former Sparrows Point Steel Mill
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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
Cold Sheet Mill Piping	REC 1J, Finding 23/ SWMU 58	DCC Figure 3-1	The piping within the Cold Sheet Mill transported process wastewater to the Tin Mill Canal discharge piping. Wastewater was transferred to the PORI Area (SWMUs 71 to 73). The system consisted primarily of concrete trenches with some brick sewers, and some open/box trenches. Further evaluation was proposed regarding SWMU 58.	3	B22-106 through B22-108	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')
Tandem Mill Trench System	REC 1K, Finding 24/ SWMU 59	DCC Figure 3-1	The trench system within the Tandem Mill transported oily process wastewater to the Tin Mill Canal discharge piping. Wastewater was transferred to the PORI Area (SWMUs 71 to 73). The system consisted primarily of concrete trenches with some brick sewers. Further evaluation was proposed regarding SWMU 59.	3	B22-109 through B22-111	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')
PORI Oil/Water Separator	REC 1O, Finding 36/ SWMU 71	DCC Figure 3-1/ Drawing 5051	The PORI Area was located in the northern section of the Finishing Mills Area. The oil/water separator received waste oil and water from the cold rolling operations across the facility. Including external sources, the unit received and processed nearly 1 million gallons of waste oil per month. There were no known or reported releases from the oil/water separator, but all of the PORI units were recommended for further evaluation.	3	B22-112 through B22-114	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')
PORI Holding Tank	REC 1P, Finding 37/ SWMU 72	DCC Figure 3-1/ Drawing 5051	After passing through the oil/water separator, the recovered oil was transferred to the PORI holding tanks. There were no known or reported releases from the holding tanks, but all of the PORI units were recommended for further evaluation.	4	B22-115 through B22-118	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')
PORI Lagoon	REC 1Q, Finding 38/ SWMU 73	DCC Figure 3-1/ Drawing 5051	After passing through the oil/water separator, the wastewater was then piped to the lagoon. Within this feature, additional waste oil was skimmed and transferred back to the oil/water separator. Water from the lagoon was discharged to the Tin Mill Canal through a permitted outfall. During the 1991 VSI, the lagoon was observed to have oil-stained sides indicating the presence of oil and possible releases. All of the PORI units were recommended for further evaluation.	4	B22-119 through B22-121; B22-174	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 Tanks	REC 1V, Finding 53/AOC J	DCC Figures 3-1/ Drawing 5040	Six sulfuric acid tanks were located outside of the Tin Mill. The tanks were noted to be approximately 30 years old and in poor condition, and two tanks were decommissioned due to leaks in 1990. The sump and gravel below the tanks had undefined staining. Further evaluation was proposed regarding AOC J.	3	B22-122 through B22-124	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')

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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
Tin Mill Sump (Acid Area Monitoring)	REC 1S, Finding 41/ SWMU 86	DCC Figure 3-1/ Drawing 5040	The sump in the acid monitoring area handled pickling wastewater. It was located beneath the acid tanks associated with AOC J, and discharged to the Tin Mill Canal. The sump was observed to have undefined staining during the 1991 VSI, and further evaluation was proposed regarding SWMU 86.		*Same as previous*	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')
Spent Pickle Liquor Tanks	REC 1W, Finding 58/AOC W	DCC Figure 3-1	Two spent pickle liquor tanks (60,000 gallon rubber-lined steel tanks) were located outside of the Cold Sheet Mill Building at the north end. During the 1991 VSI, the gravel/soil below the tanks was observed to have heavy (undefined) staining. The gravel underneath the tanks was made from limestone to help neutralize the pickle liquor should a leak occur. The tanks were initially observed to be bulging, buckling, and rusty during the VSI.	3	B22-125 through B22-127	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')
Spent Pickle Liquor Sump/Trench System	REC 1U, Finding 48/SWMU 198	DCC Figure 3-1	The sump and trench system associated with the liquor tanks is located in the north-central part of the Finishing Mills Area. The unit was associated with piping designed to transport spent pickle solution from the Cold Sheet and Tin Mills to the pickle liquor ASTs (AOC W). Spent pickle liquor from the tanks is transported to the Tin Mill discharge location by additional piping.		*Same as previous*	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 Drum Handling Area	REC 1Y, Finding 60	DCC Figure 3-1	The Drum Handling Area is located outside of the Hot Strip Mill in from of the pump house at Truck Dock 5. As many as 150 drums of solvents, pit/sump materials, waste oils, and floor sweepings were stored in the area. Further evaluation was proposed, to determine if any releases occurred as a result of the drum storage and handling.	3	B22-128 through B22-130	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')
SAH Sewer Pump Station		Drawing 5034	Investigate potential impacts related to the SAH Sewer Pump Station (potential leaks or releases).	2	B22-131 and B22-132	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	B22-133 through B22-136	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')
Slab Storage Area		Drawing 5135	Investigate potential impacts related to the slab storage area (potential leaks or releases).	7	B22-137 through B22-143	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')

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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
Acid Tanks		Drawings 5040 and 5146	Investigate potential impacts related to acid tanks (potential leaks or releases).	4	B22-144 through B22-147	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')
Caustic Tanks		Drawings 5040 and 5051	Investigate potential impacts related to tanks holding caustic fluids (potential leaks or releases).	4	B22-148 through B22-151	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 5050 and 5146	Investigate potential impacts related to fuel and oil tanks (potential leaks or releases).	4	B22-152 and B22-155	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')
Palm Oil Tanks		Drawings 5040, 5050, and 5146	Investigate potential impacts related to palm oil tanks (potential leaks or releases).	6	B22-156 through B22-161	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 5040	Investigate potential impacts related to tanks containing unknown substances (potential leaks or releases).	4	B22-162 through B22-165	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 B22 Coverage			Investigate potential impacts related to unknown historical activities, and characterize soil in areas not previously sampled.	8	B22-166 through B22-173	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')
Pump Houses/Stations (MDE Request)		Drawings 5535, 5541, and 5551	MDE Requests. Investigate potential impacts related to pump houses and stations (potential leaks or releases).	3	B22-177 through B22-179	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')
			Total:	179				

Soil Borings Sampling Density Requirements (from Worksheet 17 - Sampling Design and Rationale)
No Engineered Barrier (16-40 acres): 1 boring per 1.5 acres with no less than 15.
Engineered Barrier (>100 acres): 1 boring per 6 acres with no less than 20.
No Engineered Barrier (26.6 acres) = **18 borings required, 59 proposed**
Engineered Barrier (104.2 acres) = **20 borings required, 120 proposed**
Parking/Roads (39.3 acres)
Buildings (64.9 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
bgs - Below Ground Surface

APPENDIX B

ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-001-SB

(page 1 of 1)

Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: J. Yaple, P.G.
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Kevin Pumphrey
Drilling Equipment	: Geoprobe 7822DT

Date	: 6/2/2016
Weather	: 70s, Cloudy
Northing (US ft)	: 569198.8
Easting (US ft)	: 1462331.5

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		-	B22-001-SB-1	(0-5.5') Silty SAND and well graded slag GRAVEL, dark brown, dry to wet, dense, non plastic, non cohesive	SW/GW	
		3.3				
	83	233.6				Heavy oil in soil from 3-4' bgs
		34.6	B22-001-SB-4			
		4.2				Wet @ 4.5' bgs
5	100	0.3		(5.5-6.5') CLAY with trace SAND, grayish green, wet, soft, cohesive, medium plasticity	CL	
		0.2				Boring refusal at 6.5 bgs
10						

Total Borehole Depth: 6.5' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-002-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: J. Yaple, P.G.
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Kevin Pumphrey
Drilling Equipment	: Geoprobe 7822DT

Date	: 6/2/2016
Weather	: 80s, Cloudy
Northing (US ft)	: 569,250.99
Easting (US ft)	: 1,462,328.46

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		-		(0-4') Well graded SAND and GRAVEL, dark brown, dry, medium dense, non plastic, non cohesive	SW/GW	Fill material from 0-4' bgs
		19.4	B22-002-SB-1			
		8.5				
	87	1.6				
		1.6		(4.0-15') CLAY, brown, grayish green, moist, soft, cohesive, high plasticity, redoximorphic features present		
5		-				
		5.5				
	78	3.9	B22-002-SB-7			
		4.7				
		2.8	B22-002-SB-10		CH	
10		<0.4				
		<0.4				
	100	<0.4				
		<0.4				
		<0.4				
15		<0.4		(15-20') CLAY, tan to dark gray, wet, very soft, cohesive, high plasticity		Wet @ 15' bgs
		<0.4				
		<0.4				
	100	<0.4			CH	
		<0.4				
		<0.4				
20						Boring terminated at 20' bgs

Total Borehole Depth: 20.0' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-003-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: J. Yaple, P.G.
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Kevin Pumphrey
Drilling Equipment	: Geoprobe 7822DT

Date	: 6/2/2016
Weather	: 70s, Cloudy
Northing (US ft)	: 569,214.36
Easting (US ft)	: 1,461,739.86

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0						
		-		(0-1') Concrete, dry, hard	---	
		-	B22-003-SB-1	(1.0-3.0') Well graded SAND and slag GRAVEL, dark gray, moist, loose, non plastic, non cohesive	SW/GW	
	50	15.8				
		18.6	B22-003-SB-4	(3.0-4.5') Sandy SILT, light to dark brown, dry, stiff, non plastic, non cohesive	ML	
		20.0		(4.5-5.5') Silty SAND, dark brown, wet, dense, non plastic, non cohesive	SM	Wet @ 4.5' bgs
5		1.9		(5.5-10.0') CLAY, light brown to brownish orange, moist to wet, very stiff, cohesive, high plasticity, redoximorphic features present	CH	
		2.4				
	100	2.3				
		2.7				
		3.3				Boring terminated at 10' bgs
10						

Total Borehole Depth: 10' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-004-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: J. Yaple, P.G.
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Kevin Pumphrey
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/31/2016
Weather	: 70s, Cloudy
Northing (US ft)	: B22-004-SB
Easting (US ft)	: 1,461,745.63

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		-		(0-1') Concrete, dry, hard	---	
		100.2	B22-004-SB-1	(1.0-2.0') Sandy SILT, brown, dry, very stiff, non plastic, non cohesive, redoximorphic features present	ML	
	87	126.8		(2.0-3.5') SILTY SAND, brown, moist to wet, dense, cohesive	SM	Wet @ 3.0-3.5' bgs
		86.6	B22-004-SB-4	(3.5-10.0') CLAY, brown, moist, stiff, cohesive, high plasticity, redoximorphic features present	CH	
5		11.6				
		61.2				
		44.0				
	97	45.9				
		41.0				
		27.1				
10		10.1		(10.0-15.0') CLAY, brown and gray, moist to wet, very soft, cohesive, high plasticity		Wet @ 10.0' bgs
		3.6				
	100	1.9			CH	
		2.0				
		2.1				
15						Boring terminated at 15' bgs

Total Borehole Depth: 15' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-005-SB

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Client	: EnviroAnalytics Group	Date	: 5/20/2016
ARM Project No.	: 150300M-20-3	Weather	: 70s, sunny
Project Description	: Sparrows Point - Parcel B22		
Site Location	: Sparrows Point, MD		
ARM Representative	: L. Perrin		
Checked by	: P. Vogel, P.G.	Northing (US ft)	: 570,865.96
Drilling Company	: Green Services, Inc	Easting (US ft)	: 1,462,065.80
Driller	: Ali Berenbrok- Tim Niblett		
Drilling Equipment	: Geoprobe 7822DT		

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0					GP	
		0.8	B22-005-SB-1	(0-0.2') Brick GRAVEL, yellow, dry, loose, no cohesion, no plasticity		
		1.7		(0.2-2.5') SILT, brown to grayish brown, trace sand and smal gravel, moist, soft, non plastic, non cohesive	ML	Small lenses of clayey silt
	100	3.5		(2.5-9) SILT, grayish brown to brown, with small gravel, dry, loose, non plastic, non cohesive		
		38.9	B22-005-SB-4			
5		5.4			ML	
		-				
		-				
	40	-				
		2.1				
		1.7	B22-005-SB-10	(9-9.5') SILT, black to olive, moist, firm, cohesive, low plasticity	ML	Large pieces of gravel/slag
10					ML	
		1.1		(9.5-10') Sandy SILT, yellowish brown, moist, soft to firm, cohesive, low plasticity	CH	Wet @ 10.5' bgs
		0.6		(10-11') CLAY, yellow and pale olive, wet, soft to firm, cohesive, high plasticity	CH	
	100	0.1		(11-12') CLAY, light olive brown with yellowish red streaks, moist to dry, firm, cohesive, high plasticity	CH	
		1.6		(12-13') CLAY, yellow and pale olive, wet, soft to firm, cohesive, high plasticity		
		1.2		(13-15') CLAY, light olive brown with yellowish red streaks, moist to dry, firm, cohesive, high plasticity	CH	
15		-		(15-17') CLAY, yellow with pale olive, wet, soft to very soft, cohesive, high plasticity	CH	
		-				
	80	-		(17-20') CLAY, yellow and pale olive and gray, dry, firm, cohesive, high plasticity		
		-			CH	
		-				
20						Boring terminated at 20' bgs

Total Borehole Depth: 20' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-006-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Ali Berenbrok-Tim Niblett
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/20/2016
Weather	: 60s, sunny
Northing (US ft)	: 570,916.62
Easting (US ft)	: 1,462,060.91

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		-		(0-4') SILT, olive brown, dry, soft, non plastic, non cohesive	ML	
		1.3	B22-006-SB-1			
	70	1.5				Water in hole @ 3' bgs
		2.4				
		4.4		(4-6') SILT, greenish gray, with sand and gravel slag, dry, loose, non plastic, non cohesive	ML	
5		11.0				
		43.2	B22-006-SB-7	(6-10') Sandy SILT, olive, moist to wet, firm to soft, cohesive, low plasticity		Wet @ 7' bgs
	100	0.5			ML	
		0.7				
		0.6				Boring terminated at 10' bgs
10						

Total Borehole Depth: 10' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-007-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: J. Yaple, P.G.
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Kevin Pumphrey
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/31/2016
Weather	: 80s, Cloudy
Northing (US ft)	: 568,863.21
Easting (US ft)	: 1,461,773.49

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0						
		-		(0-3') Well graded SAND and slag GRAVEL, dark brown, dry, very loose, non cohesive		Fill material from 0-10' bgs
		0.2	B22-007-SB-1		SW/GW	
	82	0.3				
		1.2	B22-007-SB-4	(3.0-8.5') Well graded SAND, brownish gray to light brownish green, wet, very loose, non cohesive		
		3.2				Wet @ 4.5' bgs
5		-			SW	
		0.2				
	70	0.2				
		0.3		(8.5-10') Well graded GRAVEL, gray and red, wet, very loose, non cohesive		
		0.2			GW	
10						Boring terminated at 10' bgs

Total Borehole Depth: 10.0' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-008-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: J. Yaple, P.G.
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Kevin Pumphrey
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/31/2016
Weather	: 80s, Cloudy
Northing (US ft)	: 568,946.38
Easting (US ft)	: 1,461,765.38

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0						
		-		(0-3.5') Well graded SAND and GRAVEL, SLAG, dark gray, dry, very loose, non cohesive		Fill material from 0-10' bgs
		2.7	B22-008-SB-1		SW/GW	
	93	3.4				
		2.7	B22-008-SB-4			
				(3.5-10.0') Well graded GRAVEL, light brown, red and bluish gray, dry to wet, non cohesive		
		0.9				Wet @ 4.5' bgs
5		-				
		-			GW	
	57	0.2				
		0.3				
		0.2				
10						Boring terminated at 10' bgs

Total Borehole Depth: 10.0' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-009-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/31/2016
Weather	: 90s, sunny
Northing (US ft)	: 568,922.44
Easting (US ft)	: 1,461,397.93

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0						
		-		(0-2.5') SILT, olive brown, with gravel slag, dry, soft, non plastic, non cohesive	ML	
		0.4	B22-009-SB-1			
	80	13.5		(2.5-6) Slag and SAND, brown, dry, loose, non plastic, non cohesive	SP/GP	
		1.9				
		0.3				
5		2.0	B22-009-SB-6			
		37.0		(6-10') Slag, brown grading to gray, coarse to very coarse gravel sized, wet, loose, non plastic, non cohesive		Wet @ 6' bgs
	100	5.0			SP/GP	
		-				
		-				Boring terminated at 10' bgs
10						

Total Borehole Depth: 10' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-010-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/23/2016
Weather	: 70s, sunny
Northing (US ft)	: 568,924.59
Easting (US ft)	: 1,461,416.35

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0						
		-		(0-0.7') Asphalt, black, dry loose, non plastic, non cohesive	-	
				(0.7-2.5') Sandy SILT, brown, dry, soft, non plastic, non cohesive	ML	
		0.4	B22-010-SB-1			
	70	5.2		(2.5-3.5') SILT, brown, dry, hard, cohesive, medium plasticity	ML	
		4.6	B22-010-SB-4	(3.5-4') Silty SAND, brown, very moist, loose, non plastic, non cohesive	SM	Wet @ 4' bgs
		0.9		(4-4.9') CLAY, brown, wet, soft, cohesive, high plasticity	CH	
5				(4.9-5.5') SAND, Poorly Graded, brown to black, wet, loose, non plastic, non cohesive	SP	
		-		(5.5-7.5') Sandy CLAY, dark grayish black, wet, very soft, cohesive, high plasticity	CH	
		-				
	100	-		(7.5-10') CLAY, very pale brown and reddish yellow mottling, dry, hard to very firm, cohesive, high plasticity	CH	
		-				
		-				Boring terminated at 10' bgs
10						

Total Borehole Depth: 10' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-011-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Ali Berenkbrok-Tim Niblett
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/20/2016
Weather	: 60s, sunny
Northing (US ft)	: 570,947.85
Easting (US ft)	: 1,462,102.45

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		-		(0-4') SILT, brown, with gravel, dry, loose, non plastic, non cohesive	ML	Little green granules at approx. 3-4' bgs
		0.5	B22-011-SB-1			
	70	2.1				
		7.5	B22-011-SB-4			
		4.1		(4-6.5') SAND, Well Graded, light olive brown, fine to medium grained,dry, loose, non plastic, non cohesive	SW	
5		-				
		29.9		(6.5-7.5') SILT, brown, with gravel, dry, loose, non plastic, non cohesive	ML	
	70	36.1		(7.5-10') Slag, gray, sand and gravel sized, wet, loose, non plastic, non cohesive	GP/SP	Wet @ 8' bgs
		-				
		-				
10		-		(10-14.1') Slag, dark gray, sand and gravel sized, wet, loose, non plastic, non cohesive	GP/SP	
		-				
	60	-				
		-				
		-		(14.1-15') Sandy CLAY, dark gray, with gravel, wet, cohesive, high plasticity	CH	Boring terminated at 15' bgs
15						

Total Borehole Depth: 15' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-012-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Kevin Pumphrey
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/19/2016
Weather	: 60s, sunny
Northing (US ft)	: 570,972.06
Easting (US ft)	: 1,462,100.75

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0						
		-	B22-012-SB-1	(0-2.6') SILT, reddish brown, dry, non plastic, non cohesive	ML	
		1.8				
	80	21.4		(2.6-3') Concrete, pale yellow, dry, loose, non plastic, non cohesive	GP	
		14.1	B22-012-SB-4	(3-4') Sandy SILT with GRAVEL, loose, non plastic, non cohesive	ML	
		4.7		(4-5') SANDY GRAVEL, yellowish brown, wet, loose, no cohesion, no plasticity	GP	
5		-		(5-7') CLAY with GRAVEL, reddish yellow, moist to wet, firm, cohesive, no plasticity to high plasticity	CL/CH	
		0.0				Wet at 7' bgs
	90	0.1		(7-10') Slag and Brick, dark greenish gray, loose, non cohesive	GP	
		-				
		-				Boring terminated at 10' bgs
10		-				

Total Borehole Depth: 10' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-013-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/26/2016
Weather	: 80s, sunny
Northing (US ft)	: 569,885.05
Easting (US ft)	: 1,461,348.69

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0					-	
		0.7	B22-014-SB-1	(0-0.1') Concrete, white, dry, loose, non plastic, non cohesive	SM	
				(0.1-0.5') Silty SAND, Poorly Graded, brown, dry to moist, loose, non plastic, non cohesive		
		1.1		(0.5-7') CLAY, pale olive, trace sand, dry, soft to firm, cohesive, high plasticity		
	100	1.4				
		1.2	B22-014-SB-4		CH	
		0.3				
5		0.8				
		1.1				
				(7-8') SAND, Poorly Graded, reddish yellow, wet, loose, no cohesion, no plasticity		Wet @ 7' bgs
	100	1.1			SP	
				(8-10') CLAY, reddish yellow, very moist to wet, soft, cohesive, high plasticity		
		0.7			CH	Saturated clay
		0.2				
10						Boring terminated at 10' bgs

Total Borehole Depth: 10' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-014-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/26/2016
Weather	: 80s, sunny
Northing (US ft)	: 569,935.75
Easting (US ft)	: 1,461,346.17

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		-		(0-4') Sandy SILT, light brown, dry to moist, soft, non plastic, non cohesive	ML	
		0.4	B22-014-SB-1			
	50	0.9				
		1.1				
		-	B22-014-SB-5	(4-5') Sandy CLAY, light brown, with large brick and gravel, very moist, soft, cohesive, high plasticity	CH	
5		0.6		(5-11.5') CLAY, light olive gray, moist to dry, firm, cohesive, high plasticity	CH	Iron staining
	100	0.3				
		0.3				
		0.6				
		0.2	B22-014-SB-10			
10		0.0				
		0.0				Wet @ 11.5' bgs
		0.0		(11.5-15') CLAY, light olive gray to grayish brown, very moist to wet, very soft, cohesive, high plasticity	CH	
	100	0.0				
		0.0				
		0.0				
15						Boring terminated at 15' bgs

Total Borehole Depth: 15' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-015-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: J. Yaple, P.G.
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Kevin Pumphrey
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/26 - 5/27/2016
Weather	: 80s, Cloudy
Northing (US ft)	: 569,547.61
Easting (US ft)	: 1,461,628.52

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		-		(0-1.5') Concrete, hard, dry	-	First two boring attempts had refusal at 2' bgs
	70	6.8	B22-015-SB-1	(1.5-4.0') Slag, silty SAND, dark brown, dry to wet, non cohesive	SM	
		5.4				
		0.9	B22-015-SB-4			Wet @ 3.5' bgs
		5.7		(4.0-9.0') Poorly graded slag GRAVEL, brick and concrete, tan and red, wet, non cohesive	GP	
5		0.1				
		0.0				
	90	0.0				
		0.0				
		0.0		(9.0-10.0') Slag, silty SAND,gray, loose, non cohesive	SM	
10						Boring terminated at 10' bgs

Total Borehole Depth: 10.0' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-016-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: J. Yaple, P.G.
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Kevin Pumphrey
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/27/2016
Weather	: 80s, sunny
Northing (US ft)	: 569,525.14
Easting (US ft)	: 1,461,631.50

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		-		(0-2') Concrete, dry, loose, non plastic, non cohesive (No recovery)	-	
		-				
	40	-	B22-040-SB-1	(2-10') Slag SAND, dark gray, with silt, dry, loose, non plastic, non cohesive		
		4.0				
		1.0	B22-040-SB-5			
5		0.1			SW-SM	Wet @ 5' bgs
		0.0				
	100	0.0				
		0.1				
		0.0				Boring terminated at 10' bgs
10						

Total Borehole Depth: 10' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-017-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: J. Yaple, P.G.
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Kevin Pumphrey
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/27/2016
Weather	: 80s, Cloudy
Northing (US ft)	: 569,412.47
Easting (US ft)	: 1,461,702.87

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		231		(0-0.5') Concrete, dry, hard	-	
				(0.5-1.5') Slag SAND with GRAVEL and SILT, gray, tan, black, moist, cohesive, low plasticity	GM/SM	
		103.0	B22-017-SB-1			
				(1.5-3.0') SILT, dark brown, dry, stiff, cohesive, low plasticity	ML	
	100	47.0				
		31.0		(3.0-12.5') CLAY, tan-gray, medium stiff, moist, cohesive, medium plasticity, redoximorphic features present		
		1.2				
5		94.5	B22-017-SB-6			
		74.6				
	100	59.0			CL	
		63.7				
		53.0	B22-017-SB-10			
10		-				
		1.1				
	80	1.8				Wet @ 12.5' bgs
				(12.5-15.0') CLAY, tan, wet, soft, cohesive, high plasticity, redoximorphic features present		
		2.1			CH	
		2.2				
15						Boring terminated at 15' bgs

Total Borehole Depth: 15' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-018-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: J. Yaple, P.G.
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Kevin Pumphrey
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/27/2016
Weather	: 80s, Sunny
Northing (US ft)	: 569,389.68
Easting (US ft)	: 1,461,703.86

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		133.0		(0-1.0') Concrete, dry, hard	-	
		161.2	B22-018-SB-1	(1.0-2.0') Slag, SAND and GRAVEL, Well Graded, light blue, gray, wet, non plastic, non cohesive	SW/GW	
	100	95.2		(2.0-3.5') SILT, dark brown grade to tan, dry, very stiff, non plastic, non cohesive	ML	
		18.1		(3.5-10.0') CLAY, tan with coarse orange mottles, soft, dry, cohesive, low plasticity, redoximorphic features present	CL	
		6.4				
5		93.3	B22-018-SB-6			
		69.3				
	100	87.3				
		63.8				
		9.1	B22-018-SB-10			
10		1.0		(10.0-15.0') CLAY, tan, wet, very soft, cohesive, high plasticity, redoximorphic features present	CH	Wet @ 10' bgs
		1.1				
	100	2.1				
		3.8				
		4.2				
15						Boring terminated at 15' bgs

Total Borehole Depth: 15' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-019-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: J. Yaple, P.G.
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Kevin Pumphrey
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/31/2016
Weather	: 80s, Sunny
Northing (US ft)	: 568,919.60
Easting (US ft)	: 1,461,949.33

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		-		(0-1.0') Concrete, dry, hard	-	
		7.0	B22-019-SB-1	(1.0-3.0') CLAY, tan, blue-green, dry, very stiff, cohesive, medium plasticity	CL	
	90	5.9				
		1.5		(3.0-5.5') SILT, tan-orange, dry, stiff, cohesive, low plasticity	ML	
		0.1				
5		4.0	B22-019-SB-6			
		5.0		(5.5-10.0') CLAY, tan with orange, soft, moist, cohesive, medium plasticity, redoximorphic features present	CL	
	100	3.7				
		3.2				
		2.3	B22-019-SB-10			
10		1.2		(10.0-15.0') CLAY, tan with orange, moist, medium soft, cohesive, medium plasticity, redoximorphic features present	CH	
		1.1				
	90	0.2				
		0.2				
		0.2				
15		0.2		(15.0-20.0') CLAY, tan to dark gray, wet, soft, cohesive, medium plasticity,	CH	Wet @ 15' bgs
		0.2				
		0.2				
	92	0.2				
		0.2				
		0.2				
20						Boring terminated at 20' bgs

Total Borehole Depth: 20' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-020-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: J. Yaple, P.G.
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Kevin Pumphrey
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/31/2016
Weather	: 80s, Sunny
Northing (US ft)	: 568,899.12
Easting (US ft)	: 1,461,954.19

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		-		(0-1.0') Concrete, dry, hard	---	
		-	B22-020-SB-1	(1.0-3.5') Well graded SAND and GRAVEL, slag, tan, bluish gray, dry, loose, non cohesive	SW/GW	
	70	19.0				
		22.0	B22-020-SB-4			
		0.6		(3.5-5.5') SILT, tan, moist, soft, cohesive, low plasticity	ML	
5		-				
		1.0		(5.5-14.5') CLAY, tan, dry, very stiff, cohesive, medium plasticity, redoximporhic features present		
	90	1.2				
		0.8				
		1.0	B22-020-SB-10			
10		0.3			CL	
		0.3				
	100	0.3				
		0.3				
		0.3				Wet @ 14.5' bgs
15				(14.5-15.0') CLAY, tan to gray, wet, soft, cohesive, high plasticity, redoximorphic features present	CH	Boring terminated at 15' bgs

Total Borehole Depth: 15' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-021-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/31/2016
Weather	: 80s, sunny
Northing (US ft)	: 568,951.92
Easting (US ft)	: 1,461,494.13

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0						
		-		(0-1') Concrete, white, dry, loose, non plastic, non cohesive	-	
		0.4	B22-021-SB-1	(1-5.5') CLAY, very pale brown and reddish yellow mottled, dry to moist at bottom, hard to soft at bottom, cohesive, high plasticity		
	80	0.2				
		0.2			CH	
		0.0	B22-021-SB-5			
5		2.0		(5.5-6.5') Sandy CLAY, brown and black, wet, soft, cohesive, high plasticity	CH	Wet @ 5.5' bgs Very saturdated clay, strong odor
		0.8		(6.5-10') CLAY, very pale brown and reddish yellow mottled, dry, cohesive, high plasticity		
	100	0.6				
		1.0			CH	
		0.5				Boring terminated at 10' bgs
10						

Total Borehole Depth: 10' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-022-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/31/2016
Weather	: 90s, sunny
Northing (US ft)	: 568,948.97
Easting (US ft)	: 1,461,474.47

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0						
	40	-		(0-3.5') Concrete, white, dry, loose, non plastic, non cohesive	-	
		-				
		-				
		3.7		(3.5-5') SAND and Slag GRAVEL, light gray, dry, loose, non plastic, non cohesive	SP/GP	
		1.0	B22-022-SB-1			Trace iron staining
5				(5-8') SAND and Slag GRAVEL, light gray to yellow, dry to wet at bottom, loose, non plastic, non cohesive		
		-				
	83	1.5	B22-022-SB-7		SP/GP	
						Wet @ 7' bgs
		0.8				
						Boring terminated at 8' bgs
10						

Total Borehole Depth: 8' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-023-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Tim Niblett
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/23/2016
Weather	: 70s, sunny
Northing (US ft)	: 570,831.46
Easting (US ft)	: 1,461,474.47

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		-		(0-0.6') Concrete, gray, sand sized, very moist, loose, non plastic, non cohesive	-	No Recovery from 0-0.7' bgs
		18.2	B22-023-SB-1	(0.6-2.3') Sandy SILT, dark greenish gray, moist, soft, cohesive, low plasticity	ML	
	87	4.7		(2.3-3.5') SILT, very dark greenish brown, dry, loose, non plastic, non cohesive	ML	
		0.9		(3.5-4') CLAY, dark grayish brown, dry, very firm, cohesive, high plasticity	CH	
		3.1		(4-4.7') CLAY, light brownish gray, very moist to wet, very soft, cohesive, high plasticity	CH	Wet at 4' bgs (perched)
5		-		(4.7-6') SILT, dark gray, dry, loose, non plastic, non cohesive	ML	
		7.8		(6-8') Sandy CLAY, light brownish gray, with brick gravel, moist, firm to soft, cohesive, medium plasticity	CL	
	80	4.9				
		92.0	B22-023-SB-9	(8-8.2') RUBBLE, pale brown, dry, loose, non plastic, non cohesive	- CL	
		376	B22-023-SB-10	(8.2-8.5') Sandy CLAY, yellowish red to yellowish brown, moist, soft, cohesive, medium plasticity		
10		-		(8.5-12') Silty SAND, Poorly Graded, dark gray, fine to coarse grained, dry, loose, non plastic, non cohesive	SP	
		-				
	60	wet		(12-15') Slag, very dark gray, sand and gravel sized, wet, non plastic, non cohesive	GP/SP	Wet @ 12' bgs
		-				
15		-				Boring terminated at 15' bgs

Total Borehole Depth: 15' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-024-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/23/2016
Weather	: 70s, overcast
Northing (US ft)	: 570,798.15
Easting (US ft)	: 1,461,017.72

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0						
		-		(0-1.5') Concrete and Sandy SILT, olive brown, wet, soft, cohesive, low plasticity	GP/ML	Drilled through puddle. Driller estimated 8" of concrete at surface
		-	B22-024-SB-1	(1.5-4.5') Silty SAND, olive brown, dry to moist, loose, non plastic, non cohesive		
	50	0.5			SP	
		22.5				5" lens of orange clay, small area of bluish gray, and few large slag
		1.0	B22-024-SB-4			
				(4.5-5') Cinder ballast, black, dry, loose, non plastic, non cohesive	GP/SP	
5		-		(5-10') Silty SAND, olive brown, with very small gravel, wet, loose, non plastic, non cohesive		Wet @ 5.5' bgs Strong pungent odor throughout
		-				
	90	-			SM	
		-				
		-				
10						Boring terminated at 10' bgs

Total Borehole Depth: 10' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-025-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/23/2016
Weather	: 70s, sunny
Northing (US ft)	: 570,527.12
Easting (US ft)	: 1,460,859.86

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		-		(0-2.6') Concrete, white, sand sized, dry loose, non plastic, non cohesive	-	
		1.6				
	60	1.0		(2.6-3.2') Rubble, light gray, gravel and sand sized, dry, loose, non plastic, non cohesive	GP	
		1.3	B22-025-SB-4	(3.2-4.5') Silty SAND, gray and dark yellowish brown, with rubble gravel, dry, loose, non plastic, non cohesive	SW/GP	
		0.3		(4.5-5.5') CONCRETE and RUBBLE, white and dark yellowish brown, dry, loose, non plastic, non cohesive	GP	
5	100	1.7		(5.5-6.5') CONCRETE white, dry, loose, non plastic, non cohesive	GP	Wet @ 6.7' bgs
		0.5		(6.5-6.7') SAND, Well Graded, brown, fine grained, dry, loose, non plastic, non cohesive	SW	
				(6.7-7) Sandy GRAVEL, brown, wet, loose, non plastic, non cohesive	GP/SP	Refusal at 7' bgs
10						

Total Borehole Depth: 7' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-026-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Ali Berenkbrok-Tim Niblett
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/23/2016
Weather	: 70s, sunny
Northing (US ft)	: 570,486.65
Easting (US ft)	: 1,460,880.95

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		-		(0-2.2') Concrete, light gray, sand sized, dry, loose, non plastic, non cohesive	-	
		-				
	60	0.5	B22-026-SB-1	(2.2-9.5') SAND, Well Graded, dark yellowish brown very pale brown and black, with slag, medium to coarse grained, dry to moist, loose, non plastic, non cohesive	SW	Clay lenses between 2.2' and 5.0' bgs
		0.3				
		0.1				
5		-				
		-				
	60	0.3				
		2.7	B22-26-SB-9			
		0.5		(9.5-10') CLAY, olive yellow and red, with brick gravel, wet, very soft, cohesive, high plasticity	CH/GP	Wet @ 9.5' bgs Boring terminated at 10' bgs
10						

Total Borehole Depth: 10' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-027-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Ali Berenbrok-Niblet
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/24/2016
Weather	: 80s, sunny
Northing (US ft)	: 570,324.02
Easting (US ft)	: 1,461,074.32

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		-		(0-1') Concrete, white, dry, loose, non plastic, non cohesive	-	
		-	B22-027-SB-1	(1-7') Gravelly SILT, light brownish gray, with sand, dry to moist, loose, non plastic, non cohesive		
	80	1.5				
		0.4				
		0.0	B22-027-SB-5		ML	
5		-				
	100	0.1				Wet @ 7' bgs Refusal at 7' bgs
10						

Total Borehole Depth: 7' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-028-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Tim Niblett
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/24/2016
Weather	: 70s, sunny
Northing (US ft)	: 570,331.43
Easting (US ft)	: 1,461,007.22

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0						
		-		(0-1.5') SILT, very dark brown, moist, soft, non plastic, non cohesive	ML	
		-	B22-028-SB-1	(1.5-3.5') CONCRETE, white, dry, loose, non plastic, non cohesive	GP	
	60	0.1				
		0.1		(3.5-7') Slag, light gray, gravel and sand sized, loose, non plastic, non cohesive	GP/SP	
		0.2				
5		-				
	100	0.1				Wet at 7' bgs Refusal at 7' bgs
10						

Total Borehole Depth: 7' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-029-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Ali Berenbrok-Tim Niblett
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/24/2016
Weather	: 80s, sunny
Northing (US ft)	: 570,350.64
Easting (US ft)	: 1,461,083.68

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		-		(0-1') Concrete, white, dry, loose, non plastic, non cohesive	-	
		-	B22-029-SB-1	(1-6.9') Sandy SILT, greenish gray, with gravel, loose, non plastic, non cohesive	ML	
	60	5.3				
		3.3				
		0.3				
5		2.9	B22-029-SB-6			
	100	1.7				
		3.0		(6.9-7.5') CLAY, brown, with sand, wet, very soft, cohesive, high plasticity	CH	Wet @ 7' bgs Boring terminated at 7.5' bgs
10						

Total Borehole Depth: 7.5' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-030-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Ali Berenkbrok-Tim Niblett
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/24/2016
Weather	: 70s, sunny
Northing (US ft)	: 570,358.24
Easting (US ft)	: 1,461,031.10

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		-		(0-1') Concrete, white, dry, loose, non plastic, non cohesive	-	
		-	B22-030-SB-1	(1-4') Slag and SAND, light gray, dry, loose, non plastic, non cohesive		
	50	5.4			SP/GP	
		0.9				
		2.1	B22-030-SB-5	(4-5') SAND, loose, yellow, dry, non plastic, non cohesive	SP	
5		0.1		(5-10') CLAY, yellow, dry to moist, firm, cohesive, high plasticity		
		0.1				
	100	0.1			CH	
		0.0				
		0.1	B22-030-SB-10			
10		1.0		(10-15') CLAY, pale olive, moist, soft, cohesive, high plasticity		
		1.4				
	100	1.0			CH	
		2.0				
		1.0				
15		0.0		(15-17') CLAY, pale olive, moist, soft, cohesive, high plasticity	CH	
		0.0				
	100	0.0		(17-20') CLAY, light greenish gray, wet, very soft, cohesive, high plasticity	CH	Wet @ 17' bgs
		0.0				
		0.0				
20						Boring terminated at 20' bgs

Total Borehole Depth: 20' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-031-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: C. Burger, P.G.
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/19/2016
Weather	: 60s, partly sunny
Northing (US ft)	: 571,099.00
Easting (US ft)	: 1,460,870.97

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0						
		34.2	B22-031-SB-1	(0-5') Slag GRAVEL with SILT and SAND, grey-brown-black, non cohesive		
		10.5				
	80	3.2			GM	
		38.6	B22-031-SB-4			
		0.6				
5		11.2		(5-8') Slag GRAVEL with SILT and SAND and brick, grey-brown-black, non cohesive		
		6.9			GM	
	100	7.4				
		3.8		(8-9') Concrete, loose, dry	GP	
		0.4	B22-031-SB-10	(9-10') Slag GRAVEL, black, dry, loose, non cohesive	GW	
10		-		(10-15) Slag GRAVEL and SAND, wet, loose, non cohesive		
		-				
	50	-			GM	
		-				Wet at 13" bgs
		-				Musty odor
15						Boring terminated at 15' bgs

Total Borehole Depth: 15' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-032-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/23/2016
Weather	: 70s, sunny
Northing (US ft)	: 570,921.79
Easting (US ft)	: 1,460,905.97

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0						
		-		(0-1') CONCRETE, loose, light gray, dry, non plastic, non cohesive	-	
		15.8	B22-032-SB-1	(1-2.5') SILT with SAND, loose, brown, dry, non plastic	ML	
	83	5.6		(2.5-4') Silty slag GRAVEL, loose, brown, dry to moist, non plastic	GM	
		12.1	B22-032-SB-4			
		0.4		(4-5') Silty CLAY, very firm, brown, dry, cohesive, low plasticity	CL	Iron staining Small area of grayish green
5		7.1		(5-6.5') CLAY, firm, dark greenish grey, dry, high plasticity, cohesive	CH	
		2.1		(6.5-6.6') Quartzite GRAVEL , loose, white, dry, non plastic, non cohesive	GP	
	100	5.4		(6.6'-10') CLAY, very firm, dark greenish gray, dry, high plasticity, cohesive	CH	Few large intermittent slag gravel Greenish gray mottling
		7.6				
		2.4	B22-032-SB-10			
10						

Total Borehole Depth: 20' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-032-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/23/2016
Weather	: 70s, sunny
Northing (US ft)	: 570,921.79
Easting (US ft)	: 1,460,905.97

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
10		-		(10-15') CLAY, soft to very soft, light grayish olive with light olive brown mottling, moist to very moist, high plasticity, cohesive		
		-				
	70	0.2			CH	
		0.1				
		0.1				
15		-		(15-17') CLAY, very soft, dark greenish gray, wet, high plasticity, cohesive	CH	Wet at 16.5' bgs
		-				
				(17-17.3') Gravelly SAND with CLAY, dark greenish gray, wet, non plastic, cohesive	SP	
	70	-		(17.3-18') CLAY, very soft, dark greenish gray, wet, high plasticity, cohesive	CH	
				(18-19') CLAY, very soft, olive yellow with yellowish brown mottling, wet, high plasticity, cohesive	CH	
		-				
				(19-19.5') Gravelly SAND with CLAY, dark greenish gray, wet, non plastic, cohesive	SP	
		-		(19.5-20') CLAY, very soft, dark greenish gray, wet, high plasticity, cohesive	CH	Boring terminated at 20' bgs
20						

Total Borehole Depth: 20' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-033-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Ali Berenkbrok-Tim Niblett
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/24/2016
Weather	: 80s, sunny
Northing (US ft)	: 570,370.05
Easting (US ft)	: 1,461,244.20

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0						
		-	B22-033-SB-1	(0-4.0') SILT with small GRAVEL, , dark yellowish brown, dry to wet, soft, non cohesive, low plasticity		
		0.9			ML	
	83	2.2				Wet at 2.5' bgs
		0.7				
		3.5		(4.0-5.0') SILT with small GRAVEL, BRICK and WOOD fragments, dark brown, wet, soft, non plastic, non cohesive	ML	
5				(5-10') SILT with large BRICK, GRAVEL, black, wet, soft, non plastic, non cohesive		
		-				
		-				
	56	-			ML	Strong odor with dark non-viscous liquid/water with sheen
		-				Amber material in bottom of hole
						Boring terminated at 9.5' bgs
10						

Total Borehole Depth: 9.5' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-034-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Don Marehose
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/25/2016
Weather	: 80s, Sunny
Northing (US ft)	: 570,352.17
Easting (US ft)	: 1,461,250.85

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0						
	57	-	B22-034-SB-1	(0-3.0') SILT with small GRAVEL, brown, dry, loose, non plastic, non cohesive	ML	
		-				
		0.8				Wet @ 2.5' bgs
		12.3		(3.0-5.0') Gravelly SILT, brown, wet, soft, cohesive, low plasticity	ML	
		2.1				
5		-		(5.0-7.0') Sandy CLAY with small GRAVEL, brown, wet, very soft, cohesive	CH	
	100	1.7				
		0.7		(7.0-9.0') CLAY, brown, wet, very soft	CH	
		0.8				Sheen and strong odor
						Borehole terminated at 9' bgs
10						

Total Borehole Depth: 9' bgs

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-035-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Don Marehose
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/26/2016
Weather	: 80s, Sunny
Northing (US ft)	: 570,085.96
Easting (US ft)	: 1,461,248.51

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0	60	-	B22-035-SB-1	(0-3.5') Sandy CLAY with GRAVEL, brown, moist, loose, very soft, cohesive, medium plasticity	CL	
		-				
		94.4				
		0.6		(3.5-4.0') Slag GRAVEL, gray, wet, loose, non plastic, non cohesive	GP	Wet @ 3.5' bgs
		0.5		(4.0-5.0') Sandy CLAY with SLAG, brown, wet, soft, cohesive, high plasticity	CH	
5	60	-		(5-8.5') CLAY with SAND, brown, moist, very soft, cohesive, high plasticity	CH	Iron Staining @ 7-8.5' bgs
		-				
		-				
		-				
		-		(8.5-10.0') Slag GRAVEL with CLAY, brown, wet, loose, non plastic, non cohesive	GP	
10						Borehole terminated at 10' bgs

Total Borehole Depth: 10' bgs

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-036-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/27/2016
Weather	: 80s, sunny
Northing (US ft)	: 570,115.84
Easting (US ft)	: 1,461,299.77

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0						
	60	-	B22-036-SB-1	(0-3') SILT, brown, dry soft, non plastic, non cohesive	ML	
		-				
		0.5				
		0.3	B22-036-SB-4	(3-4.2') SILT, brown, moist, soft, non plastic, non cohesive	ML	
		0.7		(4.2-4.5') CONCRETE, white, dry, loose, non plastic, non cohesive	GP	Wet @ 4.5' bgs
5				(4.5-5') Sandy SILT, brown, with brick gravel, wet, soft, non plastic, non cohesive	ML/GP	
		-		(5-10') Silty GRAVEL, brown, wet, loose, non plastic, non cohesive		
		-				
	30	-			GW-GM	
		-				
		0.2				Boring terminated at 10' bgs
10						

Total Borehole Depth: 10' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-037-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: J. Yaple, P.G.
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Kevin Pumphrey
Drilling Equipment	: Geoprobe 7822DT

Date	: 6/3/2016
Weather	: 70s, Cloudy, Light rain
Northing (US ft)	: 569,471.75
Easting (US ft)	: 1,461,309.25

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0						
	45	-	B22-037-SB-1	(0-7') SAND and GRAVEL with CLAY, light to dark gray, dry to wet, medium dense, non plastic, non cohesive		
		-				
		-				
		1.7			SW/GW	Wet @ 3' bgs
		1.9				
5		-				
		2.6				
	83	2.7		(7-10') CLAY, tan with orange brown mottles, wet, soft, cohesive, high plasticity, Redoximorphic Features Present		
		2.4			CH	
		6.4				Boring terminated at 10' bgs
10						

Total Borehole Depth: 10' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-038-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/27/2016
Weather	: 80s, sunny
Northing (US ft)	: 569,517.63
Easting (US ft)	: 1,461,243.11

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0	60	-	B22-038-SB-1	(0-5') SILT, dark brown, with little slage gravel, dry between 0 and 3.5', soft, non plastic, non cohesive	ML	
		-				
		2.6				
		1.4				Wet @ 3.5' bgs
		2.2				
5		-		(5-9.5') Gravelly SAND, Poorly Graded, dark brown, dry, loose, non plastic, non cohesive	SP	
		-				
		-				
		-				Boring terminated at 9.5' bgs
10						

Total Borehole Depth: 9.5' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-039-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: J. Yaple, P.G.
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Kevin Pumphrey
Drilling Equipment	: Geoprobe 7822DT

Date	: 6/1/2016
Weather	: 80s, Sunny
Northing (US ft)	: 568,704.32
Easting (US ft)	: 1,461,770.19

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		-	B22-039-SB-1	(0-2') SAND and slag GRAVEL	SW/GP	4 boring attempts at this location
		-				
	63	6.5		(2-4') Poorly graded SAND, tan, moist, loose, no cohesion, no plasticitynon plastic, non cohesive	SP	
		422.6	B22-039-SB-4			
		92.7		(4-5') BRICK, coarse (Fill)	GP	Refusal at 5' bgs
5						
10						

Total Borehole Depth: 5' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-040-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: J. Yaple, P.G.
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Kevin Pumphrey
Drilling Equipment	: Geoprobe 7822DT

Date	: 6/1/2016
Weather	: 80s, sunny
Northing (US ft)	: 568,695.26
Easting (US ft)	: 1,461,796.78

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0						
		-		(0-1.5') Concrete, hard, dry	-	First two boring attempts had refusal at 0.5' bgs
		-	B22-040-SB-1	(1.5-5') SAND, Poorly Graded, tan, coarse grained, dry, loose, non plastic, non cohesive		
	66	7.8				
		78.4	B22-040-SB-4		SP	
		6.4				
5				(5-10') SAND, Poorly Graded, gray green, coarse grained, wet, loose, non plastic, non cohesive		
		1.4				Wet @ 5.5' bgs
		1.2				
	90	<0.4			SP	
		<0.4				
		<0.4				Boring terminated at 10' bgs
10						

Total Borehole Depth: 10' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-041-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Kevin Pumphrey
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/17/2016
Weather	: 60s, Cloudy
Northing (US ft)	: 568,235.73
Easting (US ft)	: 1,461,480.51

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		-	B22-041-SB-1	(0-2.5') SILTY slag GRAVEL with CLAY, brown, dry, loose, non plastic, non cohesive	GM	
		0.0				
	70	2.9				
		2.7		(2.5-4') Sandy slag GRAVEL with SILT and CLAY, brownish orange, moist, loose, non plastic, non cohesive	GP/SP	
		0.2	B22-041-SB-5	(4-5') Sandy fat CLAY, soft, brown, moist, cohesive, high plasticity	CH	
5		-		(5-7.5') Sandy lean CLAY, brownish orange, soft to firm, very moist, cohesive, medium plasticity, soil redoximorphic features present	CL	
		0.9				
	100	0.7				
		0.0		(7.5-9') FAT CLAY WITH SAND, dark brown, wet, very soft, cohesive, high plasticity	CH	
		0.0	B22-041-SB-10	(9-10') FAT CLAY WITH SAND, grayish brown, wet, soft, cohesive, high plasticity	CH	
10		-		(10-15') Fat CLAY with SAND, light grayish orange, soft to firm, moist, cohesive, high plasticity, redoximorphic features present	CH	
		-				
	20	-				
		-				
		0.0				
15		-		(15-20') Fat CLAY with SAND, light grayish orange, soft to firm, wet, cohesive, high plasticity, redoximorphic features present	CH	
		0.0				
	80	0.0				
		0.0				
		0.0				
20						Boring terminated at 20' bgs

Total Borehole Depth: 20' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-042-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: J. Yaple, P.G.
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Kevin Pumphrey
Drilling Equipment	: Geoprobe 7822DT

Date	: 6/1/2016
Weather	: 80s, Sunny
Northing (US ft)	: 568,857.42
Easting (US ft)	: 1,461,553.40

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		6.9	B22-042-SB-1	(0-2') Well graded SAND and GRAVEL with trace SILT and slag, dark gray, light tan, dry, loose, fine to large, angular, non plastic, non cohesive	SW/GW	
		225.2				
	100	792.8		(2-4') SILT, hard, gray-green, dark gray, dry, non plastic, non cohesive, with WOOD fragements at 2.5'	ML	
		1247.0	B22-042-SB-4			
		358.0		(4.0-6.5') CLAY, gray-tan, moist, very stiff, cohesive, medium plasticity	CL	
5		-				
		126.3		(6.5-8.0') SAND with SILT, loose, dark brown, wet, fine grained, non plastic, non cohesive	SM	
	90	1.8				
		75.2		(8-18') CLAY, medium stiff, tan with orange mottles, moist, cohesive, high plasticity, Redoximorphic Features Present	CH	
		3.7	B22-042-SB-10			
10		1.2				
		1.1				
	100	0.8				
		0.1				
		0.1				
15		0.2				
		0.1				
	100	0.1				
		0.1		(18-20') CLAY, soft, tan grading to dark gray, wet, cohesive, high plasticity	CH	Wet @ 18' bgs
		0.1				
20						Boring terminated at 20' bgs

Total Borehole Depth: 20' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-043-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Kevin Pumphrey
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/18/2016
Weather	: 60s, cloudy
Northing (US ft)	: 569,542.10
Easting (US ft)	: 1,462,083.14

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		-	B22-043-SB-1	(0-1.5') Slag GRAVEL and SAND, loose, gray and dark yellowish brown, dry, non plastic, non cohesive	GW/SW	
		6.3		(1.5-2') Silty SAND grading to medium SAND, loose, brown and black, non plastic, non cohesive	SM/SP	
	90	9.8		(2-3.5') Clayey SILT, light brownish gray, moist, cohesive, low plasticity	ML	
		10.9	B22-043-SB-4	(3.5-7') CLAY, greenish gray and yellowish brown, moist, firm, cohesive, highly plastic, with some medium brown SAND between 5.5' and 7'	CH	
5		5.4				
		7.4				
		8.2				
	90	2.8		(7-10') CLAY, brown and light gray, wet, very soft, cohesive, high plasticity	CH	
		3.4				
		2.8	B22-043-SB-10			
10		0.0		(10-14') CLAY, yellowish brown, wet, very soft, cohesive, high plasticity	CH	
		0.0				
	100	0.0				
		0.0				
		0.0		(14-22.5') CLAY, dark gray, wet, soft, cohesive, high plasticity	CH	
15		0.0				
		0.0				
	100	0.0				
		0.0				
		0.0				
20		0.0				
		0.0				
	100	0.0		(22.5-23.2') SAND, dark gray, wet, medium dense, non plastic, non cohesive	SP	
		0.0		(23.2-25') FAT CLAY, ldark gray, wet, very soft, cohesive, high plasticity	CH	
		0.0				
25						Boring terminated at 25' bgs

Total Borehole Depth: 25' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-044-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: J. Yaple, P.G.
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Kevin Pumphrey
Drilling Equipment	: Geoprobe 7822DT

Date	: 6/1/2016
Weather	: 80s, sunny
Northing (US ft)	: 568,784.13
Easting (US ft)	: 1,461,655.95

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		-	B22-044-SB-1	(0-8') GRAVEL and SAND, well graded, dark brown gray gray-blue, dry to wet, loose, non plastic, non cohesive		
		4.0				
	86	9.9				
		10.7	B22-044-SB-4		GW-SW	
		1.6				Wet @ 4.5' bgs
5		-				
		<0.3				
	75	<0.3				
				(8-10') CLAY, blue gray, wet, stiff, cohesive, high plasticity		
		<0.3			CH	
		<0.3				Boring terminated at 10' bgs
10						

Total Borehole Depth: 10' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-045-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: J. Yaple, P.G.
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Kevin Pumphrey
Drilling Equipment	: Geoprobe 7822DT

Date	: 6/1/2016
Weather	: 80s, sunny
Northing (US ft)	: 568,831.47
Easting (US ft)	: 1,461,581.05

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		-	B22-045-SB-1	(0-3') GRAVEL and SAND, well graded, dark brown dark gray, with silt, dry, loose, non plastic, non cohesive	GW/SW	
		12.0				
	86	102.5				
				(3-5') Silty GRAVEL, dark brown dark gray, wet, very loose, non plastic, non cohesive		Wet @ 3' bgs
		128.4			GM	
		4.4				
5				(5-10') Silty CLAY, light brown graded to gray green, wet, soft, cohesive, medium plasticity		
		-				
		1.8				
	90	<2.2			CL	
		2.8				
		3.7				
10						Boring terminated at 10' bgs

Total Borehole Depth: 10' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-046-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: J. Yaple, P.G.
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Kevin Pumphrey
Drilling Equipment	: Geoprobe 7822DT

Date	: 6/1/2016
Weather	: 80s, Sunny
Northing (US ft)	: 568,768.48
Easting (US ft)	: 1,461,689.79

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0						
	83	-	B22-046-SB-1	(0-4.5') Well graded SAND and slag GRAVEL, dark brown, blue-gray, gray, dry, loose, sub angular, non plastic, non cohesive	SW/GW	
		0.8				
		5.1				
		3.7	B22-046-SB-4			
		1.0				Wet @ 4.5' bgs
				(5.5-5') Silty CLAY, tan, wet, soft, cohesive, low plasticity	CL	
5				(5-10') Silty GRAVEL, brown, grades to dark gray, wet, large, loose, angular, non plastic, non cohesive		
		-				
		-				
	60	<0.2			GM	
		<0.2				
		<0.2				
10						Boring terminated at 10' bgs

Total Borehole Depth: 10' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-047-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: C. Burger, P.G.
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/18/2016
Weather	: 50s, Cloudy
Northing (US ft)	: 569,511.53
Easting (US ft)	: 1,462,106.60

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		0.3	B22-047-SB-1	(0-3.2') Fine grained SAND, brown, dry, with brick/building material, red/tan, dry, non cohesive	SP	
	75	0.7				
		5.8				
		0.9		(3.2-4.2') Slag GRAVEL and fine grained SAND, gray, dry, non cohesive. Wood debris	GP	
		0.2	B22-047-SB-5	(4.2-7') Silty CLAY, gray/olive, tan mottling, dry, medium plasticity, cohesive; grading into a medium grained, gravelly SAND, tan, dry, medium plasticity, cohesive	CL/SP	
5		1.2				
		0.5				
	92	0.2		(7-9.2') Silty CLAY, soft, gray, dry, high plasticity; grading into a sandy CLAY, fine grained, stiff, gray, dry, low plasticity, tan mottling	CH/CL	
		0.2				
		0.1	B22-047-SB-10	(9.2-11') sandy to silty CLAY, very fine grained, soft, olive, moist, cohesive, high plasticity, tan mottling	CH	
10		0.1				
		0.1		(11-15.4') Silty CLAY, soft, light gray, moist, cohesive, high plasticity, tan mottling	CH	
	92	0.1				
		0.1				
		0.1				
15		0.1		(15.4-20') Silty CLAY, soft, dark gray, dry, cohesive, high plasticity	CH	
		0.1				
	100	0.1				
		0.1				
		0.2				Boring terminated at 20' bgs
20						

Total Borehole Depth: 20' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-048-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Kevin Pumphrey
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/17/2016
Weather	: 50s, scattered showers
Northing (US ft)	: 568,291.32
Easting (US ft)	: 1,461,561.99

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		-	B22-048-SB-1	(0-1.5') Poorly graded Slag GRAVEL and SAND, black and dark brown, dry, loose, non plastic, non cohesive	GP/SP	
		1.1		(1.5-4.5') Poorly graded Slag GRAVEL and SAND, brown and gray, dry to moist, loose, non plastic, non cohesive	GP/SP	
	80	1.2				
		5.1				
		1.7	B22-048-SB-5			
5		-		(4.5-8') LEAN CLAY, light gray and tan, moist, firm, cohesive, low plasticity	CL	
		-				
	8	-				
		-		(8-10') LEAN CLAY, light gray and tan, moist, soft, cohesive, medium plasticity	CL	
		0.1	B22-048-SB-10			
10		-		(10-15') FAT CLAY, dark brownish gray to light gray, wet, very soft, cohesive, high plasticity	CH	
		-				
	50	0.0				
		0.0				
		0.0				
15		-		(15-20') FAT CLAY, light gray and tank, wet, very soft to soft, cohesive, high plasticity, redoximorphic features present	CH	
		-				
	70	0.0				
		0.0				
		0.0				
20						Boring terminated at 20' bgs

Total Borehole Depth: 20' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-049-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 6/2/2016
Weather	: 80s, Cloudy
Northing (US ft)	: 569,019.62
Easting (US ft)	: 1,461,130.28

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0						
		-	B22-049-SB-1	(0-2.5') Poorly graded SAND and Slag GRAVEL, very pale brown, dry, loose, non plastic, non cohesive	SP/GP	No recovery from 0-2'
		-				
	60	4.3		(2.5-2.9') CONCRETE, white, dry, loose, non plastic, non cohesive	-	
		18.4		(2.9-4.9') Poorly graded SAND and Slag GRAVEL, very pale brown, moist, loose, non plastic, non cohesive	SP/GP	Trace plastic type white fibers present @ 3' bgs
		95.9	B22-049-SB-5			
5				(4.9-5') SAND, very pale brown, wet, medium grained, loose, non plastic, non cohesive	SP	
		0.1		(5-6') Poorly graded SAND and Slag GRAVEL, very pale brown, moist, loose, non plastic, non cohesive	SP/GP	Wet @ 6' bgs
		0.4		(6-7') CLAY, pale brown to light brown, wet, soft, cohesive, high plasticity	CH	
	100	0.3		(7-10') CLAY, very pale brown, dry, hard, cohesive, high plasticity		
		6.7			CH	
		5.5				Boring terminated at 10' bgs
10						

Total Borehole Depth: 10' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-050-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 6/2/2016
Weather	: 80s, Cloudy
Northing (US ft)	: 569,037.43
Easting (US ft)	: 1,461,128.80

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0						
		-	B22-050-SB-1	(0-2') Sandy SILT with slag GRAVEL, soft, brown, dry, no plasticity, no cohesiveness	ML	
		2.4				
	80	3.4		(2-4.5') CLAY, very firm but soft in spots, pale brown, moderate cohesiveness,high plasticity	CH	
		2.2				
		0.1				Wet at 4.5' bgs
5				(4.5-8.5') CLAY, very soft, pale brown, high cohesiveness,high plasticity		
		-	B22-050-SB-4.5			
		-			CH	
	50	2.3				
		8.1		(8.5-10') Slag, gravel sized, loose, brown, wet, no plasticity		
		3.8			GP	
10						Boring terminated at 10' bgs

Total Borehole Depth: 10' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-051-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: J. Yaple, P.G.
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/26/2016
Weather	: 80s
Northing (US ft)	: 569,651.07
Easting (US ft)	: 1,461,362.49

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		-		(0-1') Concrete, hard, dry	-	
		0.3	B22-051-SB-1	(1-2') Well graded GRAVEL Slag, loose, tan and dark brown, moist, non cohesive, small to large	GW	First attempt refusal at 2.5' bgs
	80	4.5		(2-3') Concrete, hard, dry	-	
		0.2		(3-4') CLAY, medium stiff, dark brown, moist, moderate plasticity, cohesive	CL	
		0.2		(4-7') Silty CLAY, medium soft, tan with orange mottling, moist, low plasticity, cohesive, trace sand at 6'		
5		41.3	B22-051-SB-6		CL	
		7.6				
	100	14.2		(7-10') CLAY, medium soft, orange mottled with tan, moist, moderate plasticity, cohesive		
		12.1			CL	
		3.9				
10		0.2		(10-12') Poorly graded SAND, very loose, tan, wet, fine, non cohesive		Wet at 10' bgs
		0.2			SP	
	100	0.3		(12-15') CLAY, medium soft, tan with orange and small mottles, wet, low plasticity, cohesive		
		0.4			CL	
		1.5				
15						Boring terminated at 15' bgs

Total Borehole Depth: 15' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-052-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: J. Yaple, P.G.
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Kevin Pumphrey
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/26/2016
Weather	: 80s, Sunny
Northing (US ft)	: 569,622.88
Easting (US ft)	: 1,461,368.78

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		-		(0-2.0') Concrete and GRAVEL, hard, dry	-	
		-				
	70	0.3	B22-052-SB-1	(2-4') SILT, brownish gray, dry, very stiff, non plastic, non cohesive	ML	
		1.4				
				(4-4.5') Well graded SAND and GRAVEL, dark brown, wet, loose, non cohesive	SW/GW	
		0.2		(4.5-8.0') SILT, tan to gray-green, dry, very stiff, cohesive, non plastic, redoximorphic features present	ML	
5		0.3				
		1.6				
	100	8.2	B22-052-SB-8			Wet at 8' bgs
		8.5		(8.0-10.0') CLAY, tan to gray-green, wet, medium soft, cohesive, low plasticity, redoximorphic features present, some silty SAND lenses at 9' bgs	CL	
		11.2				Boring terminated at 10' bgs
10						

Total Borehole Depth: 10' bgs

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-053-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/26/2016
Weather	: 80s, Sunny
Northing (US ft)	: 570,067.02
Easting (US ft)	: 1,461,124.93

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		0.4	B22-053-SB-1	(0-1') SILT, dark brown, moist, no cohesion, no plasticity	ML	
		3.8		(1-1.5') CONCRETE, white, dry, loose, no cohesion, no plasticity	---	
	90	2.5		(1.5-3') CLAY with trace SAND, black and brown, moist, soft, cohesive, high plasticity	CH	
		0.8		(3-6') SANDY CLAY, very moist, soft to very soft, cohesive		
		0.7			CH	
5		-				
		0.4		(6-7') CLAY, very soft, light gray to brownish yellow, very moist to wet, high plasticity, cohesive	CH	
	100	1.4	B22-053-SB-8	(7-12') CLAY, brownish yellow and light gray, dry, very firm, cohesive, high plasticity		
		0.7				
		0.2	B22-053-SB-10		CH	
10		0.0				
		0.1				Wet at 12' bgs
	100	0.0		(12-15') CLAY, brownish yellow and light greenish gray, wet, very soft, cohesive		
		0.0			CH	
		0.0				Boring terminated at 15' bgs
15						

Total Borehole Depth: 15' bgs

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-054-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/26/2016
Weather	: 80s, Sunny
Northing (US ft)	: 570,091.44
Easting (US ft)	: 1,461,121.36

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		4.3	B22-054-SB-1	(0.0-2.0) SILT with slag, brown and gray, dry, medium dense, non plastic, non cohesive	ML	
		3.0				
	100	0.9		(2.0-5.0') SILT, dark yellowish brown to buish yellow, dry, hard, cohesive, low plasticity	ML	Iron Staining
		2.7	B22-054-SB-4			
		0.3				
5		0.7		(5.0-6.0') Clayey SILT, olive yellow, dry, hard, cohesive, low plasticity	ML	
		1.3		(6.0-7.0') Sandy CLAY, greenish gray, wet, very soft, cohesive, high plasticity	CH	
	100	0.6		(7.0-12.0') CLAY with traces of SAND, light grayish green and reddish yellow, dry to moist, firm, cohesive, high plasticity		
		0.2				
		0.2	B22-054-SB-10		CH	
10		0.1				
		0.0				Wet @ 12' bgs
	100	0.0		(12.0-15.0') CLAY, reddish yellow and gray, wet to very moist, cohesive, high plasticity		
		0.0			CH	
		0.0				
15						Boring terminated at 15' bgs

Total Borehole Depth: 15' bgs

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-055-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 6/2/2016
Weather	: 80s, Cloudy
Northing (US ft)	: 568,578.12
Easting (US ft)	: 1,461,401.48

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		-		(0-2') Concrete, loose, light gray, dry, non plastic, non cohesive	-	
		10.7				
	70	9.8	B22-055-SB-1	(2-4') Sandy SILT grading to silty SAND, loose, dark brown to black, dry, non plastic, non cohesive	ML/SM	
		2.7				
		1.0		(4-5') CLAY, soft, light gray and pale brown, moist, high plasticity, cohesive	CH	
5		-		(5-9') CLAY, soft, light gray and pale brown, moist, high plasticity, cohesive	CH	
		-				
	50	7.4				
		2.5	B22-055-SB-8.5			
		3.6		(9-10') CLAY with trace gravel, very soft, light gray, wet, high plasticity, cohesive	CH	Wet @ 9' bgs
10						Boring terminated at 10' bgs

Total Borehole Depth: 10' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-056-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 6/2/2016
Weather	: 80s, Cloudy
Northing (US ft)	: 568,574.44
Easting (US ft)	: 1,461,406.87

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		-		(0-1') Concrete, loose, light gray, dry, non plastic, non cohesive	-	
		14.2	B22-056-SB-1	(1-2.5') SILT, soft, black moist, non plastic, non cohesive	ML	
	70	15.3		(2.5-2.8') Slag, loose, light greenish gray, dry, non plastic, non cohesive	GP	
				(2.8-3.5') SAND with small slag, fine grained, loose, black, moist, non plastic, non cohesive	SP	
		11.2		(3.5-5') SAND and slag GRAVEL, loose, moist, non plastic, non cohesive	GP/SP	Iron staining
		43.1	B22-055-SB-5			
5		-		(5-7.5') GRAVEL slag, loose, gray, wet, non plastic, non cohesive	GP	Wet @ 7' bgs
		-				
	60	-		(7.5-10') SAND and slag GRAVEL, loose, black, wet, non plastic, non cohesive	SP/GP	
		-				
		-				Boring terminated at 10' bgs
10						

Total Borehole Depth: 10' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-057-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Don Marehose
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/31/2016
Weather	: 80s, Cloudy
Northing (US ft)	: 569,346.63
Easting (US ft)	: 1,461,367.74

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		-	B22-057-SB-1	(0-2.7') CLAY with SAND, brown, moist, soft, cohesive, high plasticity	CH	
		-				
	50	0.7				
				(2.7-3.7') CONCRETE, white, loose, non plastic, non cohesive	---	
		0.1				
				(3.7-5.0') SAND with SILT, brown, moist to wet, fine to coarse, non cohesive	SW	Wet @ 4.0' bgs
		0.3				
5				(5.0-9.0') SAND, brown, wet, loose, medium to very coarse, non plastic, non cohesive		
		0.2				
		0.1			SW	
	100	0.1				
		0.6				
				(9.0-9.7') CONCRETE, white, wet, loose, non plastic, non cohesive	---	Sheen and odor
		0.7				
10				(9.7-10.0') CLAY with SAND, greenish gray, wet, very soft, cohesive, high plasticity	CH	Boring terminated at 10' bgs

Total Borehole Depth: 10' bgs

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-058-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/31/2016
Weather	: 80s, cloudy
Northing (US ft)	: 569,357.30
Easting (US ft)	: 1,461,403.06

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0					-	
		2.7	B22-058-SB-1	(0-0.2') CONCRETE, white, dry, loose, non plastic, non cohesive		
		3.2		(0.2-3') CLAY, very pale brown and reddish yellow mottled, dry, firm, cohesive, high plasticity, redoximorphic features present	CH	
	100	3.2				
		2.9		(3-5') Sandy CLAY, reddish yellow with pale brown mottling, dry, firm, cohesive, high plasticity, redoximorphic features present	CH	
5		0.7				
		1.2		(5-10') CLAY, very pale brown and reddish yellow mottled, dry, firm, cohesive, high plasticity, redoximorphic features present		
		3.0	B22-058-SB-7			
	100	2.6			CH	
		2.0				
		1.4	B22-058-SB-10			
10		-		(10-15') CLAY, light brownish gray grading to gray, very moist to wet, soft, cohesive, high plasticity		
		-				Wet @ 12' bgs
	60	0.4			CH	
		0.6				Very saturated clay
		1.5				
15						Boring terminated at 15' bgs

Total Borehole Depth: 15' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-059-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/23/2016
Weather	: 70s, sunny
Northing (US ft)	: 570,223.85
Easting (US ft)	: 1,460,805.68

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0						
		-		(0-0.5') CONCRETE, light gray, sand sized, moist, loose, non plastic, non cohesive	-	
		-	B22-059-SB-1	(0.5-7.5') Silty SAND, dark grayish brown, with slag gravel , dry, loose, non plastic, non cohesive		
	50	5.4				
		7.8				
		2.7	B22-059-SB-4		SM	
5						
		-				
		-				
	60	0.6				
				(7.5-9.5') SLAG and brick with SILT, gray brownish yellow and dark brown, with silt, moist to very moist, loose, non plastic, non cohesive		
		3.1			GP	
		0.2				Wet @ 9.5' bgs
10						Boring terminated at 10' bgs

Total Borehole Depth: 10' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-060-SB

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Client	: EnviroAnalytics Group	Date	: 5/23/2016
ARM Project No.	: 150300M-20-3	Weather	: 70s, Sunny
Project Description	: Sparrows Point - Parcel B22		
Site Location	: Sparrows Point, MD		
ARM Representative	: L. Perrin		
Checked by	: P. Vogel, P.G.	Northing (US ft)	: 570,200.88
Drilling Company	: Green Services, Inc	Easting (US ft)	: 1,460,804.77
Driller	: Don Marchese		
Drilling Equipment	: Geoprobe 7822DT		

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0						
		-		(0-0.5') Concrete, loose, white	-	
		241	B22-060-SB-1	(0.5-5') Silty SAND with slag GRAVEL, loose, dark brown and bluish gray, moist to dry, non plastic, non cohesive		
	70	348			SM	
		20.1	B22-060-SB-4			
		2.8				
5				(5-8.5') Silty SAND with slag GRAVEL, loose, dark brown and bluish gray, dry, non plastic, non cohesive		
		-				
		-			SM	
	50	3.1				
		4.0		(8.5-10.0') SAND with SILT and slag GRAVEL, loose, dark brown, wet, coarse grained, non plastic, non cohesive		Wet @ 8.5' bgs
		2.3			SP	
10						Boring terminated at 10' bgs

Total Borehole Depth: 10' bgs

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-061-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 6/2/2016
Weather	: 80s, Cloudy
Northing (US ft)	: 568,682.18
Easting (US ft)	: 1,460,991.38

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0						
		-		(0-1.5') Concrete, loose, white, dry, non plastic, non cohesive	-	
		0.1				
	80	1.3	B22-061-SB-1	(1.5-2') Silty fine SAND, loose, brown, dry, non plastic, non cohesive	SP	
				(2-3') SAND and slag GRAVEL, loose, black to pale brown, moist, non plastic, non cohesive	SP/GP	
		0.4		(3-5') Silty SAND with slag GRAVEL, loose, pale brown and white, moist, non plastic, non cohesive	SP/GP	
		0.8	B22-061-SB-5			
5				(5-9.5') Fill and slag gravel, loose, gray and pale brown, wet, non plastic, non cohesive	GP	Wet at 7.5' bgs
		-				
		-				
	50	14.7				
		23.1				
		1.4				
				(9.5-10') SAND, fine to coarse, loose, black, wet, non plastic, non cohesive	SW	Boring terminated at 10' bgs
10						

Total Borehole Depth: 10' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-062-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: C. Burger, P.G.
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/189/2016
Weather	: 60s, Partly Sunny
Northing (US ft)	: 571,142.87
Easting (US ft)	: 1,460,689.34

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0						
		0.1	B22-062-SB-1	(0-5') Slag GRAVEL, with SILT and SAND, brown and gray, dry, loose, non cohesive		
		0.8				
	80	4.4			GM	
		3.8	B22-062-SB-4			
		0.2				
5		0.9		(5-8') Medium grained SAND, gray, dry, loose, non cohesive		
		1.6			SP	
	80	3.5				
		0.7		(8-10') Slag GRAVEL, with fine grained SAND and SILT, loose, gray to brown, dry to wet, non cohesive		
		0.8			GM	Wet at 9' bgs
10		-		(10-15') Well graded slag GRAVEL, gray/brown, wet, loose, non cohesive,		
		-				
	40	-			GW	
		1.5				
		1.0				
15						Boring terminated at 15' bgs

Total Borehole Depth: 15' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-063-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: J. Yaple, P.G.
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Kevin Pumphrey
Drilling Equipment	: Geoprobe 7822DT

Date	: 6/2/2016
Weather	: 70s, Cloudy
Northing (US ft)	: 569,057.38
Easting (US ft)	: 1,462,219.13

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		-	B22-063-SB-1	(0-3') Well graded SAND and slag GRAVEL, subangular, loose, light brown, dry, non plastic, non cohesive	SW/GW	
		-				
	70	2.3				
		5.3		(3-4') CONCRETE, hard, dry	-	
		0.7		(4-5') Well graded SAND and GRAVEL, subangular, loose, light frown, dry, non plastic, non cohesive	SW/GW	
5		-		(5-8.5') Well graded GRAVEL, angular, loose, milky white and red, small to large, dry, non plastic, non cohesive	GW	
		-				
	43	-				
		8.6	B22-063-SB-9	(8.5-12') Well graded SAND and GRAVEL, loose, light tan and gray, dry to 10.5', non plastic, non cohesive		
		21.3	B22-063-SB-10			
10					SW/GW	
		1.2				Wet at 10.5' bgs
	100	0.4				Refusal at 12' bgs

Total Borehole Depth: 12' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-064-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/31/2016
Weather	: 80s, Cloudy
Northing (US ft)	: 569,470.20
Easting (US ft)	: 1,461,387.69

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0						
		-		(0-1') Concrete, loose, white, non plastic, non cohesive	---	
		-	B22-064-SB-1	(1-4') Slag, loose, white, wet, non plastic, non cohesive		
	40	-			GP	
		1.2				
		1.1		(4.0-7.0') CLAY, firm, very pale brown, dry to moist at 6', cohesive, high plasticity		
5		-			CH	
		0.7	B22-064-SB-7			
	80	0.7		(7.0-7.8') CLAY, very soft, pale brown, wet, cohesive, high plasticity	CH	Wet @ 7.0' bgs
		0.3		(7.8-10.0') CLAY with traces of SAND, very firm, very pale brown, dry, cohesive, high plasticity	CH	
		0.7				
10						Boring terminated at 10' bgs

Total Borehole Depth: 10' bgs

ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-065-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/27/2016
Weather	: 80s, Sunny
Northing (US ft)	: 569,455.07
Easting (US ft)	: 1,461,387.50

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		-		(0-1') Concrete, loose, white, dry, non plastic, non cohesive	-	
		2.9	B22-065-SB-1	(1-2') SILT, soft, black and light gray, dry, non plastic, non cohesive	ML	
	80	4.9		(2-4.5') CLAY, firm, reddish yellow, dry, high plasticity, cohesive	CH	
		2.6				
		0.2		(4.5-5.5') CLAY, very soft, grayish brown, dry, high plasticity, cohesive	CH	
5		6.2		(5.5-10') CLAY, firm but soft at 8', gray and reddish yellow, moist, high plasticity, cohesive	CH	
		3.0	B22-065-SB-7			
	100	0.6				
		0.9				
		0.7				
10		0.1		(10-15') CLAY, very soft, gray, wet, high plasticity, cohesive	CH	
		0.0				
	100	0.0				
		0.0				
		0.2				Boring terminated at 15' bgs
15						

Total Borehole Depth: 15' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-066-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: J. Yaple, P.G.
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Kevin Pumphrey
Drilling Equipment	: Geoprobe 7822DT

Date	: 6/2/2016
Weather	: 70s, Cloudy
Northing (US ft)	: 569,086.76
Easting (US ft)	: 1,462,215.98

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		-	B22-066-SB-1	(0-8') Well graded SAND and GRAVEL with SILT, loose, brown and trace red, dry, non plastic, non cohesive	SM/GW	
		-				
	60	9.3				
		10.4				
		1.1				
5		-				
		2.5				
	78	9.3				
		10.8	B22-066-SB-9	(8-9') Well graded SAND and GRAVEL, loose, milky white and tan, dry, gravel is well rounded, non plastic, non cohesive	SW/GW	
		9.8		(9-10') Poorly graded GRAVEL, large, sub-angular, loose, tan to white,	GP	
10		-		(10-14.5') CLAY, soft, brown to gray green, high plasticity, cohesive	CH	
		-				
	44	0.7				
		0.3				Wet at 13.5' bgs
		0.2				Boring terminated at 14.5' bgs
15						

Total Borehole Depth: 14.5' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-067-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Ali Berenbrok - Tim Niblett
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/20/2016
Weather	: 70s, Sunny
Northing (US ft)	: 570,698.50
Easting (US ft)	: 1,461,876.76

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		-	B22-067-SB-1	(0-4.5') SAND and slag GRAVEL, loose, gray, dry, non plastic, non cohesive	GP/SP	
	40	464				
		665				
		637				
5		-		(4.5-6') Slag GRAVEL with SILT, loose, gray and yellowish brown, dry, non plastic, non cohesive	GP/GM	
		240	B22-067-SB-7	(6-6.5') Sandy GRAVEL, loose, black, very moist, non plastic, non cohesive	GP	Amber product, strong odor thin but greasy
	100	587		(6.5-7.5') CLAY, firm to very firm, greenish gray, dry, high plasticity, cohesive	CH	
		48.5		(7.5-10') CLAY, firm to very firm, light yellowish brown and light olive brown, dry, high plasticity, cohesive	CH	
		158	B22-067-SB-10			
10		-		(10-19') CLAY, very soft, yellowish brown, very moist to wet, high plasticity, cohesive	CH	Wet at 12' bgs
	100	-				
		-				
		-				
15						Boring terminated at 19' bgs
20						

Total Borehole Depth: 19' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-068-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: J. Yaple, P.G.
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Ali Berenbrok-Tim Niblett
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/25/2016
Weather	: 70s, sunny
Northing (US ft)	: 570,375.91
Easting (US ft)	: 1,462,012.96

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		-	B22-068-SB-1	(0-2') Slag GRAVEL with silt, loose, gray green, wet, non plastic, non cohesive	GM	
		0.6				
	80	2.6		(2-4') SILT, very stiff, orange gray, non plastic, non cohesive	ML	
		0.6				
		0.1		(4-12') SILT, medium stiff, tan orange, non plastic, non cohesive	ML	
5		2.1	B22-068-SB-6	(12-15') SILT, soft, tan, moist to wet, low plasticity, cohesive		
		1.3				
	90	0.6				
		0.2				
		0.1				
10		-			ML	
		0.3				Wet @ 12' bgs
	80	0.1				
		0.1				
		0.2				
15						Boring terminated at 15' bgs

Total Borehole Depth: 15' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-069-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: J. Yaple, P.G.
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Ali Berenbrok-Tim Niblett
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/25/2016
Weather	: 70s, sunny
Northing (US ft)	: 570,655.90
Easting (US ft)	: 1,461,886.72

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		1.0	B22-069-SB-1	(0-2') Slag GRAVEL with coarse sand, dense, gray dark gray light brown, dry to moist, non plastic, non cohesive	GW-SW	
		70.3				
	100	52.5		(2-5') SILT, stiff, gray green and tan orange mottling, non plastic, non cohesive	ML	
		39.3	B22-069-SB-4			
		1.4				
5		10.9		(5-15') SILT, stiff to very soft, tan orange, dry to wet, non plastic, non cohesive		
		11.1				
	90	9.6				
		4.5				
		1.4	B22-069-SB-10			
10		5.1			ML	
		2.2				
	100	0.7				
		0.7				Wet @ 13' bgs
		0.1				
15						Boring terminated at 15'

Total Borehole Depth: 15' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-070-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: J. Yaple, P.G.
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Ali Berenbrok - Tim Niblett
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/20/2016
Weather	: 80s, Sunny
Northing (US ft)	: 570,371.85
Easting (US ft)	: 1,462,040.19

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		-	B22-070-SB-1	(0-1.5') Silty slag GRAVEL, angular, loose, gray green, wet, non plastic, non cohesive	GM	Strong petroleum odor 0.5-1.5' bgs
		128.6		(1.5-4') SILT, very stiff, tan with orange laminations, moist, non plastic, non cohesive	ML	
	90	6.2				
		13.4				
		25.4		(5-5') Silty SAND, medium dense, tan,fine grained, non cohesive	SM	Musty odor (organic) 4-5' bgs
5		-		(5-10') SILT, medium stiff, tan-gray with orange laminations, moist, low plasticity, cohesive	ML	
		-				
	50	144.8				
		145.0	B22-070-SB-9			
		85.8				
10		99.2		(10-13') CLAY, medium stiff, gray, moist, moderate plasticity, cohesive	CL	
		69.8				
	90	54.3				
		15.2		(13-15') Silty CLAY, soft, tan, wet, moderate plasticity, moderate cohesiveness	CL	Wet at 13' bgs
		0.1				
15						Boring terminated at 15' bgs

Total Borehole Depth: 15' bgs.

ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-071-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Kevin Pumphrey
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/18/2016
Weather	: 60s, Sunny
Northing (US ft)	: 571,153.02
Easting (US ft)	: 1,460,687.93

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		-	B22-071-SB-1	(0-3.0') SILT, soft, brown, dry, non plastic, non cohesive		
		1.6			ML	
	80	2.4				
		2.9	B22-071-SB-4	(3-4') SILT, firm, yellowish brown, dry, cohesive, low plasticity	ML	
		0.6		(4-5') Slag GRAVEL and SAND, loose, non cohesive	GP/SP	Some white coating
5		-		(5-10.0') Well graded slag GRAVEL, loose, gray to yellowish red, dry to wet, non plastic, non cohesive		
		-				
	50	0.3			GW	
		0.3				
		0.3				
10		-		(10-16) Poorly graded slag GRAVEL and SAND, loose, gray, wet, non plastic, non cohesive		Wet @ 10' bgs
		-				
	27	-			GP/SP	
		0.0				
		0.0				Product noted at 14.8' bgs, no odor noted, oily feel, brownish-red
15	50	0.0				Boring refusal at 16' bgs

Total Borehole Depth: 16' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-072-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 6/1/2016
Weather	: 80s, Sunny
Northing (US ft)	: 568,683.17
Easting (US ft)	: 1,461,001.75

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0						
		-		(0-1.5') Concrete, loose, white, non plastic, non cohesive	-	
		8.0	B22-072-SB-1	(1.5-3') SILT with slag GRAVEL, soft, dark brown, dry, non plastic, non cohesive	ML	
	80	1.7				
		0.7		(3-7') Slag GRAVEL and SAND, loose, white and gray, dry to moist, non plastic, non cohesive		Soft white matrix
		0.1				
5		-			GP/SP	
		-				
						Wet at 7' bgs
	70	-		(7-10') Slag GRAVEL and SAND, loose, light gray to dark gray, wet, non plastic, non cohesive		
		-			GP/SP	
		-				
10						Boring terminated at 10' bgs

Total Borehole Depth: 10' bgs

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-073-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Kevin Pumphrey
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/17/2016
Weather	: 50s, Rainy
Northing (US ft)	: 568,974.97
Easting (US ft)	: 1,461,314.39

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		-		(0-1') Concrete, loose, light beige, sand sized, dry, non plastic, non cohesive	-	
		1.4	B22-073-SB-1	(1-3.5') Well graded SAND, loose, dark brown and black, fine to medium grained, dry, non plastic, non cohesive	SW	
	70	4.0				
		3.7		(3.5-4.2') CLAY, very soft, tan, moist, cohesive, high plasticity	CH	
		0.8	B22-073-SB-5	(4.2-4.4') Brick GRAVEL and SAND, loose, beige, non plastic	GP	
					CH	
5				(4.4-5') CLAY with SAND, soft, brown and dark brown, moist to wet at the bottom, high plasticity		Wet at 5' bgs
		-		(5-8.5) Brick GRAVEL, loose, black and beige, wet, non plastic, non cohesive	GP	
		-				
	50	0.4				
		1.8				Black product present, strong odor with sheen
				(8.5-9.8') Slag GRAVEL and SAND, loose, black, wet, non plastic, non cohesive	GP/SP	
		0.2				
10				(9.8-10') CLAY with fine slag GRAVEL, very soft, greenish biege, wet, cohesive, high plasticity	CH	
		0.0		(10-13') CLAY, soft, light biege and light orange, moist, cohesive, high plasticity		
	100	0.0			CH	
		0.0				Boring terminated at 13' bgs
15						

Total Borehole Depth: 13' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-074-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: P. Vogel
Drilling Company	: Green Services, Inc
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/1/2016
Weather	: 80s, Sunny
Northing (US ft)	: 569,077.12
Easting (US ft)	: 1,461,314.55

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0				(0-0.5') Asphalt, loose, gray, dry, non plastic, non cohesive	-	
		-				
		0.8	B22-074-SB-1	(0.5-4.5') Fill, loose, dark reddish brown, dry, non plastic, non cohesive		
	80	0.9			GP	
		0.7				Wet at 3.5' bgs
		1.0				
				(4.5-5') CLAY, very soft to firm, light brownish gray, wet, high plasticity, cohesive	CH	
5		3.5		(5-8') CLAY, very soft, light brownish gray, wet, high plasticity, cohesive		
		6.8			CH	
	100	14.4				
		22.1		(8-9') Slag GRAVEL, loose, light brownish gray, wet, non plastic, non cohesive	GP	
		0.4		(9-10') CLAY, very soft, light brownish gray, wet, high plasticity, cohesive	CH	
10						Boring terminated at 10' bgs

Total Borehole Depth: 10' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-075-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: J. Yaple, P.G.
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Kevin Pumphrey
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/27/2016
Weather	: 80s, Sunny
Northing (US ft)	: 569,175.12
Easting (US ft)	: 1,461,933.81

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0						
		-		(0-1') Concrete, hard, dry	-	1st attempt refusal at 1' bgs
		-	B22-075-SB-1	(1-3.5') Well graded SAND and slag GRAVEL, loose, gray green and tan and dark brown, dry, non plastic, non cohesive	SW/GW	
	60	309.2				
		5.6	B22-075-SB-4	(3.5-9.5') CLAY, soft, tan, moist to 5' then wet to 9.5', high plasticity, cohesive		
		0.1				
5						Wet at 5' bgs
		-				
		-			CH	
	63	9.2				
		10.1				
		2.0				
				(9.5-10') Poorly graded slag GRAVEL, loose, gray and dark brown, wet, non plastic, non cohesive	GP	Boring terminated at 10' bgs
10						

Total Borehole Depth: 10' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-076-SB

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Client	: EnviroAnalytics Group	Date	: 5/27/2016
ARM Project No.	: 150300M-20-3	Weather	: 80s, Sunny
Project Description	: Sparrows Point - Parcel B22		
Site Location	: Sparrows Point, MD		
ARM Representative	: J. Yaple, P.G.		
Checked by	: P. Vogel, P.G.	Northing (US ft)	: 569,222.83
Drilling Company	: Green Services, Inc	Easting (US ft)	: 1,461,932.23
Driller	: Kevin Pumphrey		
Drilling Equipment	: Geoprobe 7822DT		

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		-		(0-2') Concrete, loose, white, dry	-	1st boring attempt had refusal at 1' bgs
		-				
	60	231.7	B22-076-SB-1	(2-5') Slag SAND, gray-brown, fine to coarse, dry to wet, non plastic, non cohesive		Wet @ 2.5' bgs
		68.7			SW	
		0.2				Boring terminated at 5' bgs
5						
10						

Total Borehole Depth: 5' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-077-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 6/2/2016
Weather	: 80s, Cloudy
Northing (US ft)	: 568,450.70
Easting (US ft)	: 1,461,454.60

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		0.3	B22-077-SB-1	(0-0.3') CLAY, soft, brownish yellow, moist, high plasticity, cohesive	CH	
				(0.3-1.5') SILT, soft, brown, dry, medium plasticity, cohesive	ML	
		0.3		(1.5-3') SILT, medium stiff, brown, dry, non plastic, non cohesive	ML	
	100	5.3				
		1.8		(3-3.7') SILT, stiff, brownish yellow and reddish yellow, dry, low plasticity, cohesive	ML	
		1.5	B22-077-SB-5	(3.7-5') Silty SAND and slag GRAVEL, loose, dark brown, dry, non plastic, non cohesive	SM/GM	
5	100	-		(5-6.9') SAND and slag GRAVEL, loose, gray and brown, moist then wet at 6' bgs, non plastic, non cohesive	SP/GP	Wet at 6' bgs
		0.3				Refusal at 7' bgs
				(6.9-7') SAND, loose, very pale brown, wet, non plastic, non cohesive	SP/GP	
10						

Total Borehole Depth: 7' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-078-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Kevin Pumphrey
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/17/2016
Weather	: 50s, Rainy
Northing (US ft)	: 568,352.86
Easting (US ft)	: 1,461,441.84

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		-	B22-078-SB-1	(0-3') Sandy SILT, soft, dark brown, dry, non plastic, non cohesive	ML	
		0.6				
	80	1.7				
		1.6		(3-5') CLAY with SAND and GRAVEL, firm, brown, moist, medium to high plasticity	CL-CH	
		1.1				
5		-		(5-9') CLAY, firm, light gray, moist, high plasticity, cohesive	CH	Water measured in hole at 7' bgs
		2.8				
	70	2.1	B22-073-SB-7.5			
		1.8				Wet at 9' bgs
		0.3		(9-15') Slag GRAVEL and SAND, loose, light gray and biege, wet, non plastic, non cohesive	GP/SP	
10		-				
		-				
	10	-				
		-				
		0.0				Boring terminated at 15' bgs
15						

Total Borehole Depth: 15' bgs.

ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-079-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: J. Yaple, P.G.
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Kevin Pumphrey
Drilling Equipment	: Geoprobe 7822DT

Date	: 6/2/2016
Weather	: 80s, Mostly Cloudy
Northing (US ft)	: 568,365.54
Easting (US ft)	: 1,461,559.34

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0						
		-	B22-079-SB-1	(0-9') Well graded SAND and GRAVEL, angular, medium dense, light brown and light gray and blue gray, dry, non plastic, non cohesive		
		2.2				
	80	5.0				
		2.4	B22-079-SB-4			Silt lense from 4.0-4.2' bgs
		0.7			SW/GW	Wet at 4.5' bgs
5		-				
		0.4				
	53	<0.3				
		<0.3				
				(9-10') Silty SAND, fine grained, loose, gray and green and tan, wet, cohesive		
		<0.3			SM	
10						Boring terminated at 10' bgs

Total Borehole Depth: 10' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-080-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: J. Yaple, P.G.
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Kevin Pumphrey
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/27/2016
Weather	: 80s, sunny
Northing (US ft)	: 569,214.43
Easting (US ft)	: 1,461,873.35

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0						
		0.3	B22-080-SB-1	(0-1') Well graded SAND and GRAVEL, loose, light brown, medium to coarse gravel, dry, non plastic, non cohesive	SW-GW	
		0.5		(1-5') CLAY, medium stiff, tan with orange mottling, trace coarse sand (3'-5'), cohesive, medium plasticity		
	96	1.7			CL	
		1.9				
		0.4	B22-080-SB-5			
5				(5-6') Poorly graded SAND, medium dense, tan orange, fine grained, wet, non plastic, non cohesive	SP	Wet @ 5' bgs
		0.2		(6-10') CLAY, stiff, tan gray with fine mottling, moist to wet, cohesive, high plasticity		
		1.2				
	100	0.2			CH	
		0.2				
		0.3				Boring terminated at 10' bgs
10						

Total Borehole Depth: 10' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-081-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: J. Yaple, P.G.
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Kevin Pumphrey
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/27/2016
Weather	: 80s, Sunny
Northing (US ft)	: 569,074.30
Easting (US ft)	: 1,461,899.91

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		-		(0-1') Concrete, loose, dry	-	1st two boring attempts had refusal at 0.5' bgs
		4.1	B22-081-SB-1	(1-3.5') SILT, hard, tan grades to orange tan, dry, non plastic, non cohesive	ML	
	70	3.7				
		1.0	B22-081-SB-4			
				(3.5-4.5') Silty SAND, dense, light brown, fine grained, moist, non plastic, non cohesive	SM	
		0.7		(4.5-13.5') CLAY, very stiff, tan with fine to coarse orange mottling dry, cohesive, low plasticity		
5		0.6				
		0.6				
	100	0.5				
		0.7			CL	
		0.5	B22-081-SB-10			
10		0.4				
		0.4				
	100	0.4				
		0.4				Wet @ 13.5' bgs
				(13.5-15') CLAY, soft, tan, wet, cohesive, high plasticity	CH	
		0.4				
15						Boring terminated at 15' bgs

Total Borehole Depth: 10' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-082-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: J. Yaple, P.G.
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Kevin Pumphrey
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/31/2016
Weather	: 70s, Mostly Sunny
Northing (US ft)	: 569,041.25
Easting (US ft)	: 1,461,904.73

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		-		(0-1') Concrete, hard, dry	-	First attempt refusal at 0.5'
		94.5	B22-082-SB-1	(1-2') CLAY, soft, tan-orange, moist, low plasticity, cohesive	CL	
	83	64.9		(2-3.5') Fine SAND, medium dense, tan-orange, moist, non cohesive	SP	
		53.9	B22-082-SB-4	(3.5-6.5') Sandy SILT, hard, tan, dry, non plastic, non cohesive	ML	
5		35.3				
		3.3				
		6.7		(6.5-10.5') CLAY, stiff, tan with fine mottling, dry, medium plasticity, cohesive	CL	
	100	8.2				
		10.8				
		6.8				
10		1.2		(10.5-15') CLAY, soft, tan with fine mottling to 13'5' then dark gray, wet, high plasticity, cohesive	CH	Wet at 10.5' bgs
		0.6				
	100	0.6				
		0.6				
		0.3				Boring terminated at 15' bgs
15						

Total Borehole Depth: 15' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-083-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: J. Yaple, P.G.
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Kevin Pumphrey
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/27/2016
Weather	: 80s, Sunny
Northing (US ft)	: 569,069.15
Easting (US ft)	: 1,461,961.69

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		-		(0-1') Concrete, hard, dry	-	
		-	B22-083-SB-1	(1-3') Well graded SAND and slag GRAVEL, fine to large, loose, blue gray, dry, non cohesive	SW/GW	
	63	0.4				
		0.3	B22-083-SB-4	(3-4.5') CLAY, medium stiff, tan with fine orange mottles, moist, medium plasticity, cohesive	CL	Wet at 4' bgs
		0.3				
5		0.4		(4.5-6.5') Well graded SAND and slag GRAVEL, loose, dark brown, wet, non cohesive	SW/GW	
		0.7		(6.5-10') CLAY, soft, tan with coarse mottles, moist, high plasticity, cohesive		
	87	0.3				
		0.3			CH	
		0.3				
10						Boring terminated at 10' bgs

Total Borehole Depth: 10' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-084-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: J. Yaple, P.G.
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Kevin Pumphrey
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/26/2016
Weather	: 80s, Sunny
Northing (US ft)	: 569,721.90
Easting (US ft)	: 1,461,547.01

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0	60	-		(0-3') Concrete and subbase, hard, dry	-	Refusal at original location
		-				
		5.1				
		7.0	B22-084-SB-1	(3-4') Well graded SAND with slag GRAVEL, coarse sand to coarse gravel, loose, light blue and tan, moist, non cohesive	GW/SW	Saturated at 4' bgs
		22.5		(4-5') Well graded gravel and cobbles, slag, sized, loose, blue gray and tan, wet, large sub-rounded quartz cobbles	GW	
5		7.6		(5-7.5') SILT, medium soft, tan, wet, cohesive, low plasticity	ML	
		22.6				
	100	15.6		(7.5-10') SILT, soft, tan with orange mottles, wet, low plasticity, cohesive, little medium grained sand in lenses thinly bedded	ML	
		8.3				
		3.6				Boring terminated at 10' bgs
10						

Total Borehole Depth: 10' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-085-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: J. Yaple, P.G.
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Kevin Pumphrey
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/26/2016
Weather	: 80s, Sunny
Northing (US ft)	: 569,748.69
Easting (US ft)	: 1,461,461.72

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		-		(0-2') Concrete and subgrade fill, hard, dry	-	1st attempt refusal at 5' bgs 2nd attempt refusal at surface 3rd attempt refusal at surface Logging and samples taken from 1st location
		-				
	60	9.1	B22-085-SB-1	(2-4.5') Slag GRAVEL, loose, red, dark gray, black, tan, large subangular gravel, dry, non cohesive, wood debris and brick	GM	
		23.8				
		5.4				4.5-5' Organic odor, musty
5				(4.5-5') Silty GRAVEL, loose, dark gray and tan, wet, non cohesive	GM	Refusal at 5' bgs
10						

Total Borehole Depth: 5' bgs.

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Boring ID: B22-086-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: J. Yaple, P.G.
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Kevin Pumphrey
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/26/2016
Weather	: 80s, Sunny
Northing (US ft)	: 569,706.39
Easting (US ft)	: 1,461,462.18

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		-		(0-1.5') Concrete, hard, dry, some gravel subbase	-	1st moved due to large puddle 2nd attempt refusal at 5' bgs
	90	1.5 1.3 0.8	B22-086-SB-1	(1.5-4.5') SILT, hard, gray and tan with orange brown mottles, dry, non plastic, non cohesive	ML	
5		0.8	B22-086-SB-5	(4.5-5.5') Silty CLAY, medium soft, dark brown, moist, medium plasticity, cohesive	CL	
	100	1.4 1.3 0.6 0.3		(5.5-12.5') CLAY, soft, tan and gray green with orange mottles, moist, medium plasticity, cohesive, fine loose sand lense at 7.5' in clay matrix	CL	
10		0.5 0.2 0.2	B22-086-SB-10			
	100	0.2 0.2 0.2 0.2		(12.5-15') CLAY, soft, orange brown, moist, medium plasticity, cohesive, fine loose sand lense at 7.5' in clay matrix	CL	
15		0.2 0.2 0.2		(15-20') CLAY, very soft, dark gray, moist to wet, medium plasticity, cohesive		
	100	0.2 0.2 0.2			CL	Wet at 17.5' bgs
20						Boring terminated at 20' bgs

Total Borehole Depth: 20' bgs.

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Boring ID: B22-087-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: J. Yaple, P.G.
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Ali Berenbrok - Tim Niblett
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/25/2016
Weather	: 70s, Sunny
Northing (US ft)	: 570,151.03
Easting (US ft)	: 1,462,127.76

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		1.1	B22-087-SB-1	(0-2') Asphalt, hard, dry	-	
		0.4				
	70	-		(2-4') Well graded slag GRAVEL, loose, gray-tan-white-rose, dry, non cohesive	GW	Metal debris
		1.6				
		0.4	B22-087-SB-5	(4-13.5') SILT, very stiff, orange-tan, dry except moist at 8-9', non plastic, non cohesive, mottled		
5		0.1				
		0.1				
	100	0.1				
		0.1			ML	
		0.1	B22-087-SB-10			
10		0.4				
		0.3				
	100	0.2				
		0.2				Wet at 13.5' bgs
		0.1		(13.5-20') CLAY, soft, orang-tan grades to dark gray at 18.5-20', wet, medium plasticity, cohesive		
15		0.2				
		0.2			CL	
	100	0.1				
		0.1				
20		0.1				Boring terminated at 20' bgs

Total Borehole Depth: 20' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-088-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: J. Yaple, P.G.
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Ali Berenbrok - Tim Niblett
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/25/2016
Weather	: 70s, Sunny
Northing (US ft)	: 570,205.39
Easting (US ft)	: 1,462,098.17

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		1.5	B22-088-SB-1	(0-1') Asphalt, loose, dry, non plastic, non cohesive	-	
	35	0.5 - - -		(1-10') Well graded slag GRAVEL and SAND, loose, gray, fine to coarse, dry to wet, non plastic, non cohesive		
5		-	B22-088-SB-6		GW-SW	
	70	- 1.3				Wet @ 8' bgs
		0.4				
		0.2				Boring terminated at 10' bgs
10						

Total Borehole Depth: 10' bgs.

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ARM Group Inc.
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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: J. Yaple, P.G.
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Ali Berenbrok-Tim Niblett
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/25/2016
Weather	: 70s, Sunny
Northing (US ft)	: 570,208.58
Easting (US ft)	: 1,462,171.94

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		-		(0-2.5') Asphalt, loose, dry	-	
		0.3	B22-089-SB-1			
	80	2.5		(2.5-6.5') Well graded slag GRAVEL and SAND, loose, gray and tan, dry, non plastic, non cohesive, some brick material		
		2.2				
		1.4	B22-089-SB-5		GW-SW	
5	100	0.1				Wet @ 5.5' bgs
		0.1				Boring refusal at 6.5' bgs
10						

Total Borehole Depth: 6.5' bgs.

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ARM Group Inc.
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Boring ID: B22-090-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/27/2016
Weather	: 80s, Sunny
Northing (US ft)	: 569,681.20
Easting (US ft)	: 1,461,175.34

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		-		(0.1.2') Asphalt, loose, light gray, dry, non plastic, non cohesive	-	
		48.7	B22-090-SB-1	(1.2-1.9') SILT with fine slag GRAVEL, soft, brown, non plastic, non cohesive	ML	
	80	10.1		(1.9-2.5') CLAY, firm, light yellowish brown, dry, cohesive, high plasticity	CH	
				(2.5-3') Slag GRAVEL and SAND, loose, light yellowish brown, dry, non plastic, non cohesive	GP/SP	
				(3-3.4') CLAY, soft, light yellowish brown, very moist, cohesive, high plasticity	CH	
		7.6		(3.4-4) Slag GRAVEL, loose, gray, wet, non plastic, non cohesive	GP	
		3.2	B22-090-SB-5	(4-5') CLAY, soft to very soft at bottom, light yellowish brown, very moist to wet at bottom, cohesive, high plasticity	CH	Wet @ 5' bgs Boring terminated at 5' bgs
5						
10						

Total Borehole Depth: 5' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 6/2/2016
Weather	: 80s, Cloudy
Northing (US ft)	: 569,135.58
Easting (US ft)	: 1,461,153.26

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0				(0-0.2') Asphalt, loose, black, dry,	-	
		-	B22-091-SB-1	(0.2-1.5') SILT, soft, dark brown, dry, non plastic	ML	
		0.3		(1.5-2.5') SILT, firm, dark brown, dry, low plasticity, cohesive	ML	
	70	1.0		(2.5-3') SAND with slag GRAVEL, coarse, dark brown and gray, dry, non plastic, non cohesive	SP	
		21.1	B22-091-SB-4	(3-4') CLAY, firm, brown to pale brown, dry to moist, medium plasticity, cohesive	CL	
		67.7		(4-4.5') CLAY, very soft, pale brown, wet, high plasticity, cohesive	CH	
				(4.5-5') CLAY, very soft, pale brown, dry, high plasticity, cohesive	CH	
5		3.4		(5-6') CLAY, very soft, brown, wet, high plasticity, cohesive	CH	Very saturated clay
		26.5		(6-8') Sandy CLAY, firm, very pale brown, moist, medium plasticity, cohesive	CL	Very saturated clay
	100	9.9				
		16.6		(8-10') CLAY, hard, very pale brown, dry, high plasticity, cohesive	CH	
		10.3				Boring terminated at 10' bgs
10						

Total Borehole Depth: 10' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-092-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 6/2/2016
Weather	: 80s, Cloudy
Northing (US ft)	: 569,135.58
Easting (US ft)	: 1,461,153.26

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0						
		-		(0-0.5') Asphalt, loose, dark gray, dry, non plastic	-	
		-	B22-092-SB-1	(0.5-4') SAND with small slag GRAVEL, fine to medium sand, pale brown, dry, non plastic, non cohesive		
	60	6.3			SW	
		4.0	B22-092-SB-4			
		2.5		(4-10') SAND and slag GRAVEL, loose, pale brown, dry to wet, non plastic, non cohesive		
5		-				
		0.0			SW/GP	Wet at 7' bgs
	80	56.4				
		0.4				
		0.8				
10						Boring terminated at 10' bgs

Total Borehole Depth: 10' bgs.

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ARM Group Inc.
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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 6/2/2016
Weather	: 80s, Cloudy
Northing (US ft)	: 569,155.72
Easting (US ft)	: 1,461,207.78

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		-	B22-093-SB-1	(0-2.5') SILT, firm, pale brown, dry, low plasticity, cohesive	ML	
		0.4				
	70	0.3		(2.5-2.8') SAND and slag GRAVEL, loose, black, moist, non plastic, non cohesive	GP/SP	Iron staining
		0.1		(2.8-5') CLAY, firm, pale brown and reddish yellow, dry, medium plasticity, cohesive	CL	
		0.0	B22-093-SB-5			
5		0.1		(5-6') CLAY, firm, light grayish green, moist, medium plasticity, cohesive	CL	
		0.8		(6-10') CLAY, very firm, light gray and pale brown, dry, medium plasticity, cohesive	CL	Iron staining
	100	0.7				
		0.8				
		0.5				
10		-	B22-093-SB-10	(10-14') CLAY, firm, pale brown, moist, high plasticity, cohesive	CH	
		0.0				
	100	0.0				
		0.0				Wet at 14' bgs
		0.0		(14-15') CLAY, very soft to soft, pale brown, very moist to wet, high plasticity, cohesive		
15						Boring terminated at 15' bgs

Total Borehole Depth: 15' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-094-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/27/2016
Weather	: 80s, Sunny
Northing (US ft)	: 569,655.95
Easting (US ft)	: 1,461,167.01

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0	70	-	B22-094-SB-1	(0-2.5') SILT with sand, soft, dark brown, dry, non plastic, non cohesive	ML	
		3.2				
		1.7		(2.5-3.5') CLAY, firm, pale olive, dry, cohesive, high plasticity	CH	
		1.0	B22-094-SB-4	(3.5-5') CLAY, soft to very soft, pale olive, very moist to wet at bottom, cohesive, high plasticity	CH	Wet @ 5' bgs Boring terminated at 5' bgs
		0.3				
5						
10						

Total Borehole Depth: 5' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-095-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 6/3/2016
Weather	: 80s, Cloudy
Northing (US ft)	: 569,706.33
Easting (US ft)	: 1,461,130.23

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0						
		-	B22-095-SB-1	(0-1.5') SAND and GRAVEL, loose, red and very pale brown, dry, non plastic	SW/GW	
		-		(1.5-2.5') SILT grading to sandy SILT, soft, brown, dry, non plastic, non cohesive	ML	
	60	0.4		(2.5-4') SILT, firm, pale brown, moist, low plasticity, cohesive	ML	
		0.6				
				(4-4.5') Concrete, loose, gray, dry, non plastic, non cohesive	GP	
		0.8		(4.5-5') Slag GRAVEL, loose, pale brown, wet, non plastic, non cohesive	GP	
5						
		3.7	B22-095-SB-6	(5-7.5') CLAY, very firm, pale brown and reddish yellow, moist, high plasticity, cohesive	CH	
		-				
	100	-		(7.5-7.6') SAND, loose, pale brown, wet, non plastic, non cohesive	SP	
		-		(7.6-9') CLAY, very firm, pale brown and reddish yellow, moist, high plasticity, cohesive	CH	
		0.7		(9-10') CLAY, very soft to very firm, very pale brown and reddish yellow, wet, high plasticity, cohesive	CH	Wet at 9' bgs
10						Boring terminated at 10' bgs

Total Borehole Depth: 10' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-096-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Tim Niblett
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/24/2016
Weather	: 70s, Sunny
Northing (US ft)	: 570,199.89
Easting (US ft)	: 1,460,989.45

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		-		(0-1') Concrete, loose, white, dry, non plastic, non cohesive	-	
		-	B22-096-SB-1	(1-3.7) Sandy SILT with large CLAY lenses, loose, very dark brown and yellowish brown, with large clay lenses, dry, non plastic, non cohesive	ML	
	60	0.2				
		0.4				
		0.4		(3.7-4.5') Sandy SILT, soft, very dark brown, moist, cohesive, low plasticity	ML	
		0.4		(4.5-5') Poorly graded silty SAND, loose, very dark brown, medium grained, very moist to wet, non plastic, non cohesive	SP	
5		0.1			CH	
		0.7		(5-5.7') CLAY, soft, light yellowish brown, very moist, cohesive, high plasticity		
	100	0.1		(5.7-10') CLAY, very firm to hard, light brownish gray and brownish yellow, dry, cohesive, high plasticity	CH	
		0.9	B22-096-SB-9			
		0.5	B22-096-SB-10			
10		-		(10-13.5') CLAY, firm, olive yellow and yellowish red, dry to moist, cohesive, high plasticity	CH	
		0.0				
	80	0.0				
		0.0		(13.5-15') CLAY, very soft, brownish yellow, wet, cohesive, high plasticity	CH	Wet @ 13.5' bgs
		0.0				
15						Boring terminated at 15' bgs

Total Borehole Depth: 15' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-097-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Tim Niblett
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/24/2016
Weather	: 70s, Sunny
Northing (US ft)	: 570,251.29
Easting (US ft)	: 1,460,906.79

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		-		(0-1.5') Concrete, loose, white, dry	-	
		-	B22-097-SB-1	(1.5-5') Sandy SILT, soft, very dark brown, dry, non plastic, non cohesive		
	40	-				
		7.9			ML	
		3.0				Dark gray gravel at 4.8' bgs
5		-		(5-9') Sandy SILT with few slag GRAVEL, soft, very dark brown, dry to wet at bottom, non plastic, non cohesive		
		0.7				
					ML	
	50	2.2				
		5.3	B22-097-SB-9			Wet @ 9' bgs Boring terminated at 9' bgs
10						

Total Borehole Depth: 9' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-098-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Tim Niblett
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/24/2016
Weather	: 70s, Overcast
Northing (US ft)	: 570,161.66
Easting (US ft)	: 1,460,922.29

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		-		(0-2') Concrete, loose, white, dry, non plastic	-	
		-				
	70	16.2	B22-098-SB-1	(2-2.7') Silty SAND, medium grained, loose, light yellowish brown and dark brown, non plastic, non cohesive	SM	
		8.3	B22-098-SB-4	(2.7-4') Slag GRAVEL with SAND, loose, gray and dark brown, dry, non plastic, non cohesive	GP/SC	
		0.6		(4-5') SILT with SAND, soft, very dark brown, dry, non plastic, non cohesive	ML	
5		0.1		(5-6') Slag GRAVEL and coarse SAND, loose, very dark brown, non plastic, non cohesive	GP/SP	
		0.7		(6-7') CLAY, soft, reddish yellow, moist, high plasticity, cohesive	CH	
	100	0.7		(7-10') CLAY, firm, reddish yellow, dry, high plasticity, cohesive	CH	
		0.5				
		0.4				
10		-	B22-098-SB-10	(10-15') CLAY, soft grading to firm, reddish yellow, dry, high plasticity, cohesive	CH	
		-				
	60	0.0				
		0.0				
		0.0				
15		0.0		(15-17') CLAY, firm to soft, reddish yellow, moist, high plasticity, cohesive	CH	
		0.0				
	100	0.0		(17-20') CLAY, very soft, light gray and reddish yellow, wet, high plasticity, cohesive	CH	Wet at 17' bgs
		0.0				
		0.0				
20						Boring terminated at 20' bgs

Total Borehole Depth: 20' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-099-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: C. Burger, P.G.
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/19/2016
Weather	: 50s, Cloudy
Northing (US ft)	: 571,229.98
Easting (US ft)	: 1,460,865.14

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		0.8	B22-099-SB-1	(0-3') Slag GRAVEL, loose, non cohesive, mixed with SILT and SAND, CLAY, soft, orangish brown, dry, high plasticity		Refusal on first 3 attempts
		8.2			GC	Wet at 1.5' bgs (perched)
	83	7.2				
		2.5		(3-15') Slag GRAVEL, with SILT and SAND, Brick, red/tan, dry, non cohesive		
		0.7				
5		6.1				
		17.1	B22-099-SB-7			
	83	11.7				
		10.0				
		0.0	B22-099-SB-9.5		GM	
10		60.9				Red brick/degris at 10' bgs
		51.7				Odor below 11' bgs Wet at 11.5' bgs
	100	114.9				Some visual signs of contamination (10-15') bgs
		197.0				
		-				
15						Boring terminated at 15' bgs

Total Borehole Depth: 15' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-100-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: C. Burger, P.G.
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/19/2016
Weather	: 60s, Partly Sunny
Northing (US ft)	: 571,254.10
Easting (US ft)	: 1,460,835.03

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		0.4	B22-100-SB-1	(0-5') Slag GRAVEL with SILT and SAND, loose, gray to black to brown, dry, non cohesive	GM	
		39.0				
	80	11.0				
		9.5				
		0.4				
5		452	B22-100-SB-6	(5-10') Slag GRAVEL with SILT and SAND, loose, gray to brown, dry, non cohesive, intermixed with tan brick	GM	
		7.6				
	90	18.8				
		0.7				
		0.4	B22-100-SB-10			
10		0.6		(10-12') Slag GRAVEL, gray, dry, loose, non cohesive	GM	
		0.4				
	100	0.2		(12-13.5') Silty/Sandy CLAY, black/brown/olive, wet, cohesive, low to high plasticity	CL	Wet at 12'bgs Sweet odor
		1.4		(13.5-15') Slag GRAVEL with SILT and SAND, gray, dry, brown to black, non cohesive	GM	
15		1.3				Boring terminated at 15' bgs

Total Borehole Depth: 15' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-101-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: C. Burger, P.G.
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/20/2016
Weather	: 70s, Partly Sunny
Northing (US ft)	: 570,716.76
Easting (US ft)	: 1,461,177.32

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0						
		-	B22-101-SB-1	(0-4') Brick/concrete GRAVEL with sitly CLAY, tan/brown, loose, dry, non cohesive		
		9.7			GC	
	80	7.8				
		4.8				
		0.0	B22-101-SB-5	(4-5') Silty CLAY with GRAVEL, soft to medium stiff, olive-brown and black staining throughout, medium plasticity, cohesive, some gray and yellowish brown mottling	CL	Black staining at (4-4.5') bgs
5				(5-10') Concrete GRAVEL with brick and glass, traces of silt and sand, brown tan and black, non plastic, non cohesive		
		0.4				
		1.5				
	90	0.9			GW	
		1.2				Wet at 9' bgs
		0.0				
10						Boring terminated at 10' bgs

Total Borehole Depth: 10' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-102-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: C. Burger, P.G.
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/20/2016
Weather	: 70s, Partly Sunny
Northing (US ft)	: 570,716.56
Easting (US ft)	: 1,461,172.85

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		2.9	B22-102-SB-1	(0-3.5') Brick and slag GRAVEL with some SILT and SAND, dry, loose, non cohesive	GW	
		2.1				
	90	2.7				Tan to white brick
		0.1				Wet at 3.5' bgs (perched)
				(3.5-5') Silty CLAY with GRAVEL, medium stiff, olive yellowish brown with black staining throughout, dry, medium plasticity, cohesive, some gray mottling	CL	
		0.0	B22-102-SB-5			
5		-		(5-10') GRAVEL with brick and glass, some SILT and SAND, loose, brown tan and black, moist to wet, non plastic, non cohesive		
		0.9				
	60	0.2			GP	Wet at 7.5' bgs
		0.5				
		0.0				Boring terminated at 10' bgs
10						

Total Borehole Depth: 10' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-103-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/31/2016
Weather	: 80s, Sunny
Northing (US ft)	: 569,121.98
Easting (US ft)	: 1,461,454.86

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0						
		-	B22-103-SB-1	(0-0.9') CLAY with SAND, very soft, dark grayish brown, very moist, cohesive, high plasticity	CH	
				(0.9-1.4') Concrete, loose, white, dry, non plastic, non cohesive	GP	
		4.5		(1.4-4') CLAY with trace SAND, very firm, very pale brown, dry, cohesive, high plasticity	CH	
	87	5.1				
		8.8	B22-103-SB-4			
		2.4		(4.0-8.8') CLAY, soft, very pale brown, very moist, cohesive, high plasticity	CH	(5-8') NO RECOVERY
5		-				
		-				
	30	-				
		21.9				
				(8.8-9.5') Concrete and brick, loose, white and yellow, dry, non plastic, non cohesive	GP	Wet @ 9.5' bgs
		14.1		(9.5-10.0') CLAY, very soft, bluish gray and dark gray, wet, cohesive, high plasticity	CH	Odor and black streaks at 9.5' bgs Boring terminated at 10' bgs
10						

Total Borehole Depth: 10' bgs

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ARM Group Inc.
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Boring ID: B22-104-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/31/2016
Weather	: 80s, Sunny
Northing (US ft)	: 569,321.57
Easting (US ft)	: 1,461,474.45

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0				(0-0.5') Concrete, loose, white, non plastic, non cohesive	---	
		-				
		-	B22-104-SB-1	(0.5-3.0') SAND with slag GRAVEL,loose, black, moist, non plastic, non cohesive		
					SP	
	60	9.0				
			B22-104-SB-4	(3.0-4.0') CLAY, hard, very pale brown, dry, cohesive, high plasticity	CH	
		5.1				Wet @ 4' bgs
				(4.0-5.5') Sandy CLAY, very soft, olive, wet, cohesive, high plasticity	CH	
5		0.3				
		0.5		(5.5-9.1') CLAY with some SAND, very firm, moist, cohesive, high plasticity		
		0.2				
	100	0.5			CH	
		0.5				
				(9.1-9.3') Sandy CLAY, very soft, pale brown, wet, cohesive, medium plasticity	CL	
		0.4		(9.3-10.0') CLAY with SAND, firm to soft, pale brown, moist, cohesive, medium plasticity	CL	
10						Boring terminated at 10' bgs

Total Borehole Depth: 10' bgs

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-105-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/31/2016
Weather	: 80s, Sunny
Northing (US ft)	: 569,213.46
Easting (US ft)	: 1,461,487.73

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		-		(0-1') Concrete, loose, white, dry	-	
		16.0	B22-105-SB-1	(1-4') CLAY, very firm, pale brown and yellowish red mottling, dry, high plasticity, cohesive		
	80	25.2			CH	
		22.2	B22-105-SB-4			
		1.9		(4-4.4') Sandy CLAY, soft, brown, moist, high plasticity, cohesive	CH	
5				(4.4-5') CLAY, very firm, pale brown and yellowish red mottling, dry, high plasticity, cohesive	CH	
		1.7		(5-10') CLAY, sandy in spots, hard to very firm, pale brown and reddish yellow mottling, dry, high plasticity, cohesive		
		2.8				
	100	2.8			CH	
		2.7				
		2.2	B22-105-SB-10			
10		0.1		(10-13') CLAY, sandy in spots, soft to firm, pale brown and reddish yellow mottling, dry, high plasticity, cohesive		
		0.2			CH	
	100	0.0				
		0.0		(13-15') CLAY, very soft, brownish yellow, very moist to wet, high plasticity, cohesive		Wet @ 13' bgs
		0.0			CH	
15						Boring terminated at 15' bgs

Total Borehole Depth: 15' bgs

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-106-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/25/2016
Weather	: 80s, Sunny
Northing (US ft)	: 570,437.30
Easting (US ft)	: 1,461,400.00

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		-		(0-2') Concrete, loose, white, dry	-	
		77.1				
	80	6.7	B22-106-SB-1	(2-5') CLAY with trace sand, very soft to firm, olive yellow, very moist to dry, high plasticity, high plasticity, cohesive	CH	
		1.6				
		0.4				
5		-		(5-9.8') CLAY with trace sand, very soft, olive yellow, very moist, high plasticity, high plasticity, cohesive	CH	
		-				
	50	5.6				
		1.1	B22-106-SB-8.5			
		1.1				
10		-		(9.8-17') SAND, loose, black, wet, non plastic, non cohesive	SP	Wet @ 10' bgs Strong odor PID 5.6 in shoe - possible product
		-				
	10	-				
		-				
		3.4				
15	0	-				Boring terminated at 17' bgs
		-				

Total Borehole Depth: 17' bgs

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-107-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/26/2016
Weather	: 80s, Sunny
Northing (US ft)	: 570,111.32
Easting (US ft)	: 1,461,422.39

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		-	B22-107-SB-1	(0-5') CLAY with trace sand, very firm, very pale brown, dry, high plasticity, cohesive		
		0.2				
	87	0.2			CH	
		0.2				
		0.3	B22-107-SB-5			
5		0.2		(5-12.5') CLAY with trace sand, slightly soft, very pale brown, moist, high plasticity, cohesive		
		0.2				
	100	0.4				
		0.6			CH	
		0.3	B22-107-SB-10			
10		-				
		0.1				
	80	0.0				Wet @ 12.5' bgs
		0.0		(12.5-15') CLAY, very soft, very pale brown, very moist to wet, high plasticity, cohesive	CH	
		0.0				
15						Boring terminated at 15' bgs

Total Borehole Depth: 15' bgs

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-108-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/26/2016
Weather	: 80s, Sunny
Northing (US ft)	: 569,897.81
Easting (US ft)	: 1,461,453.97

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0						
		-		(0-0.5') Concrete, loose, white, non plastic, non cohesive	-	
		-	B22-108-SB-1	(0.5-4.0') Sandy SILT with slag GRAVEL, loose, light gray to brown, dry, non plastic, non cohesive		
	60	1.1			ML	
		1.0				
		2.9	B22-108-SB-5	(4.0-5.0') Sandy SILT with slag and brick GRAVEL, loose, light gray to brown, dry, loose, non plastic, non cohesive	ML	
5		-		(5-9.1') CLAY, very soft, light brown, very moist to wet, cohesive, high plasticity		
		-			CH	
	30	-				
		3.4				Wet @ 8.5' bgs
		15.8		(9.1-10.0') SAND with large CLAY lenses, wood fragments, loose, black, wet, cohesive, non plastic	CL	
10						Boring terminated at 10' bgs

Total Borehole Depth: 10' bgs

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-109-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: C. Burger, P.G.
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/20/2016
Weather	: 70s, Sunny
Northing (US ft)	: 570,707.96
Easting (US ft)	: 1,461,383.70

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0						
		-		(0-1') Concrete GRAVEL, dry, loose	-	
		16.8	B22-109-SB-1	(1-4.5') Silty CLAY with intermixed gravelly CLAY, soft, yellowish brown with olive mottling, dry, medium plasticity, cohesive		
	60	8.4			CL	
		11.1				
		3.4	B22-109-SB-4.5			Wet at 4.5' bgs
				(4.5-5') Slag GRAVEL, loose, gray, wet, non cohesive	GP	Pungent odors and black staining
5				(5-8') Slag GRAVEL, gray, some wood, loose, wet, non cohesive		
	50	-				
		28.8			GP	
		0.5				Boring refusal at 8' bgs
10						

Total Borehole Depth: 8' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-110-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: C. Burger, P.G.
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/20/2016
Weather	: 70s, Sunny
Northing (US ft)	: 570,649.62
Easting (US ft)	: 1,461,234.41

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0						
		1.4		(0-1') Concrete	-	
		2.3	B22-110-SB-1	(1-4') Slag GRAVEL, loose, dry, non cohesive, with brick and concrete with trace SILT and SAND		
	90	2.0			GW	
		23.8	B22-110-SB-4			
		0.5		(4-4.5') Slag GRAVEL with CLAY, gray/brown, dry, non cohesive	GC	
				(4.5-5') Slag GRAVEL and brick, dry, non cohesive, minor CLAYs, brown, dry, cohesive,	GC	
5		0.2		(5-6') GRAVEL, SILT and SAND, brown with black staining, dry, non cohesive,	GM	
		1.0		(6-7') Silty CLAY with GRAVEL, brown, dry, stiff, low plasticity, cohesive, with dark gray mottling	CL	
				(7-10') Silty CLAY, soft, gray to olive, high plasticity, cohesive, with black staining throughout		Wet at 7' bgs
	100	0.0				Minor odor
		0.1			CH	
		0.2				
10						Boring terminated at 10' bgs

Total Borehole Depth: 10' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-111-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/25/2016
Weather	: 80s, Sunny
Northing (US ft)	: 570,453.91
Easting (US ft)	: 1,461,528.70

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		-	B22-111-SB-1	(0-2.5') Silty CLAY, hard, brownish yellow, dry, medium plasticity, cohesive	CL	
		0.1				
	80	0.1		(2.5-5') CLAY, hard to very firm, brownish yellow, dry, high plasticity, cohesive	CH	
		0.1				
		0.1				
5		0.5		(5-8') CLAY, trace sand, soft to very soft, pale olive and pale greenish gray, very moist, high plasticity, cohesive	CH	Very saturated
		6.2				
	100	9.1	B22-111-SB-8			Product present, slight sheen, light to moderate odor Wet at 8' bgs
		2.5		(8-9.2') Slag GRAVEL, loose, black, wet, non plastic, non cohesive	GP	
		0.6		(9.2-10') CLAY, trace sand, very firm, pale olive and pale greenish gray, dry, high plasticity, cohesive	CH	
10		-		(10-20') CLAY, very soft, light grayish olive, very moist, high plasticity, cohesive		
		-				
	100	0.1				
		0.1				
		0.1				
15		-			CH	
		-				
	100	-				
		-				
		-				
20						Boring terminated at 20' bgs

Total Borehole Depth: 20' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-112-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: C. Burger, P.G.
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/20/2016
Weather	: 50s, Sunny
Northing (US ft)	: 570,989.81
Easting (US ft)	: 1,461,314.91

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		0.0	B22-112-SB-1	(0-2') GRAVEL with SILT, SAND and trace CLAY, loose, brown, olive and yellowish brown, dry, non plastic, non cohesive	GM	
		0.1				
	90	2.2		(2-4') Slag GRAVEL with silty CLAY, stiff, gray to olive with some yellowish orange, dry, medium plasticity, cohesive	GC	
		4.2	B22-112-SB-4			
		15.8		(4-5') Concrete, SILT, SAND, Silty CLAY, CLAY soft, olive gray, yellowish brown, dry, low plasticity, cohesive	GC	
5		1.4		(5-10') GRAVEL, tan sandstone brick, SILT, SAND, and minimal CLAY, brown, moist, low cohesion, low plasticity		
		-				Wet at 14' bgs
	40	0.2			GW	
		0.4				
		2.4	B22-112-SB-10			
10		-		(10-15') GRAVEL, silty CLAY, CLAY, Soft, medium plasticity, cohesive, gray CLAY with heavy black staining throughout		
		-				
	20	-			GC	
		-				
		0.4				
15						Boring terminated at 15' bgs

Total Borehole Depth: 15' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-113-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: C. Burger, P.G.
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/20/2016
Weather	: 60s, Sunny
Northing (US ft)	: 570,986.44
Easting (US ft)	: 1,461,454.81

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		-	B22-113-SB-1	(0-2') Gravelly SILT, brown to black, dry, non plastic, non cohesive	ML	1st attempt refusal
		0.1				
	70	12.6		(2-2.5') Concrete, gray, dry	GP	
				(2.5-5') Gravelly SILT, brown to black, dry, non plastic, non cohesive, some slag		
		60.1	B22-113-SB-4		ML	
		36.1				
5		2.1		(5-7.5') Slag GRAVEL, gray, dry, non plastic, non cohesive	GM	
		12.1				
	80	7.3		(7.5-10') SILT with slag GRAVEL, dry, non plastic, non cohesive	ML	
		23.2				
		28.2				Wet at 9.5' bgs
10		-		(10-15') Silty to sandy, gravelly CLAY, light brown, stiff, dry, low plasticity, cohesive, olive mottling	CL	
		-				
	58	0.0				
		0.0				
		0.0				
15						Boring terminated at 15' bgs

Total Borehole Depth: 15' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-114-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: C. Burger, P.G.
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/19/2016
Weather	: 60s, Sunny
Northing (US ft)	: 571,099.92
Easting (US ft)	: 1,461,411.21

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		16.1	B22-114-SB-1	(0-4.5') Slag GRAVEL with SILT and SAND, gray, dry, non cohesive, non plastic	GM	
	80	5.6				
		6.5				
		3.1				
		0.2				
5		-		(4.5-10') Sandy CLAY with SILT and slag GRAVEL, dry, cohesive in clay, non cohesive in gravel, low plasticity	CL	Moist at 7' bgs
		31.2				
	60	21.3	B22-114-SB-8			
		21.4				Black staining 9-10' bgs Musty odor
		1.0	B22-114-SB-10			Wet at 10' bgs
10						Boring terminated at 10' bgs

Total Borehole Depth: 10' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-115-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Kevin Pumphrey
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/19/2016
Weather	: 60s, sunny
Northing (US ft)	: 571,401.51
Easting (US ft)	: 1,461,348.87

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		-	B22-115-SB-1	(0-1.5') Sandy SILT, soft, dark brown, dry, non plastic, non cohesive	ML	
		6.6		(1.5-1.9') Concrete, loose, light gray, dry, non plastic, non cohesive	GP	
					CL	
	80	2.7		(1.9-2.5') CLAY, very firm, gray and yellowish red, dry, cohesive, medium plasticity		
		14.1		(2.5-4.5') SAND and slag GRAVEL, loose, gray, wet, non plastic, non cohesive	GP/SP	
		1.2		(4.5-5') CLAY, very firm, greenish gray, dry, cohesive, low plasticity	CL	
5		-		(5-5.9') SAND and slag GRAVEL, very dark bluish gray, wet, non cohesive	GP/SP	Slight odor
		0.0		(5.9-7.5') Sandy CLAY, dark bluish gray, dry, hard, low plasticity	CL	
	100	0.1		(7.5-7.9') Well graded SAND with silt, fine to medium grained, loose, gray and dark bluish gray, dry, non plastic	SW	
		0.0	B22-115-SB-8.5	(7.9-8.5') Sandy CLAY, hard, dark bluish gray, dry, low plasticity	CL	Wet at 8.5' bgs
		-		(8.5-11') SAND and slag GRAVEL with CLAY lenses, very dark bluish gray, wet, non cohesive	GP/SP	
10		-				
		-		(11-13.9') CLAY, dark greenish gray, trace sand, moist, cohesive, medium plasticity	CL	
	50	-				
		-				
		-		(13.9-14') Well graded SAND, fine to medium grain size, soft, dark greenish gray, wet, non plastic, non cohesive	SW	Odor
					CL	Odor
				(14-14.5') CLAY, dark greenish gray, trace sand, moist, cohesive, medium plasticity	SW	Boring terminated at 15' bgs
15				(14.5-15') Well graded SAND, fine to medium grain size, soft, dark greenish gray, wet, non plastic, non cohesive		

Total Borehole Depth: 15' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-116-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: C. Burger, P.G.
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/19/2016
Weather	: 60s, Sunny
Northing (US ft)	: 571,235.95
Easting (US ft)	: 1,461,392.69

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		1.5	B22-116-SB-1	(0-5') Slag GRAVEL with SILT, gray/brown, dry, non cohesive, non plastic		
		5.3				
	80	13.2			GM	
		76.5				
		108.2				Wet at 4.5' bgs (perched) Black staining and sheen
5		50.1		(5-8') Slag GRAVEL with SILT, gray, wet, non cohesive, non plastic.		
		23.8			GM	
						Wet at 7' bgs
	70	67.4	B22-116-SB-8.5			
				(8-10') CLAY with GRAVEL, gray, cohesive, low plasticity		Some black staining at 8' and 9.5' bgs
		46.4				Pungent odor
					CL	
		1.4				
10						Boring terminated at 10' bgs

Total Borehole Depth: 10' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-117-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: C. Burger, P.G.
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/19/2016
Weather	: 60s, Partly Sunny
Northing (US ft)	:
Easting (US ft)	:

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		-	B22-117-SB-1	(0-5') Slag GRAVEL with SILT and SAND, brown/gray, dry, non cohesive, non plastic		
		0.5				
	60	1.4			GM	
		8.4	B22-117-SB-4			
		1.5				
5		-		(5-10') Slag GRAVEL with SILT, SAND, and brick, gray, tan, dry, non cohesive, non plastic		
		4.2				
	80	6.3			GM	
		6.6				
		1.8	B22-117-SB-10			
10		0.2		(10-11') Slag GRAVEL with SILT and SAND, brown, dry, non cohesive, non plastic.	GM	
		0.4		(11-12')Gravelly CLAY, brown, wet, cohesive, medium plasticity	CL	Wet at 12' bgs
	66	0.3		(12-13') Slag GRAVEL with organics and SAND, black, wet, non cohesive,	GW	Sweet odor (12-13') bgs Boring refusal at 13' bgs
15						

Total Borehole Depth: 13' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-118-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Kevin Pumphrey
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/18/2016
Weather	: 60s, Sunny
Northing (US ft)	: 571,245.56
Easting (US ft)	: 1,461,513.06

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		-	B22-118-SB-1	(0-1.3') SILT with GRAVEL, soft, brown, dry, non plastic, non cohesive	ML	
		3.0		(1.3-1.4') Concrete, loose, light gray, dry	GP	
	90	3.9		(1.4-2.5') SILT, soft, brown, dry, non plastic, non cohesive	ML	
		13.6		(2.5-2.9') Concrete, loose, gray, dry,	GP	
		6.5		(2.9-3.2') SILT, brown, dry, soft, no cohesion, no plasticity	ML	
5		-		(3.2-6.3') Silty CLAY, firm, brown, moist, non plastic, non cohesive	CL	
		2.5		(6.3-6.5') Concrete, loose, light gray, dry	GP	Some sand intermixed
	70	4.1		(6.5-8.5') Silty CLAY with some SAND, firm, brown, moist, cohesive, low plasticity	CL	
		18.1	B22-118-SB-9	(8.5-8.7') Brick GRAVEL, loose, light yellowish brown, moist, non plastic, non cohesive	GP	
		1.6	B22-118-SB-10	(8.7-10') Silty CLAY with SAND, soft, brown, moist, cohesive, non plastic	CL	
10		-		(10-15') Gravelly SAND, loose, greenish black, wet, non plastic, non cohesive	SP	
		-				
	20	-				
		-				Wet at 14' bgs
		0.0				
15		-		(15-18') CLAY with trace sand, very soft, greenish black, very moist, high plasticity	CH	
		0.0				
	70	0.0				
		0.0		(18-20') SAND, medium dense, greenish black, wet, non plastic, non cohesive	SP	
20		0.0				Boring terminated at 20' bgs

Total Borehole Depth: 20' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-119-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Kevin Pumphrey
Drilling Equipment	: Geoprobe 7822DT
Date	: 5/19/2016
Weather	: 60s, Sunny
Northing (US ft)	: 571,293.47
Easting (US ft)	: 1,461,187.62

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		-		(0-0.5') ORGANIC SOIL, soft, brown, dry, non plastic, non cohesive	OL	
			B22-119-SB-1	(0.5-2.5') SILT, loose, brown, dry, non plastic, non cohesive	ML	Small roots
	70	1.0		(2.5-2.7') Brick GRAVEL, loose, yellow, dry	GP	
		1.6		(2.7-4.1') SILT with trace SAND, loose, olive brown, dry, non plastic, non cohesive	ML	
5		6.2		(4.1-9') CLAY with slag GRAVEL, firm, moist to dry, olive brown, cohesive, high plasticity		
		17.4				
		49.1			CH	
	100	98.8				
		123	B22-119-SB-9			Wood fragments and black streaks
		115	B22-119-SB-10	(9-10') CLAY, soft, olive, moist to dry, cohesive, non plastic,	CH	Product present (9-10' bgs), black, viscous, sticky
10		-		(10-14.9') CLAY, soft, olive, moist to dry, cohesive, non plastic		
		-				
	50	33.3			CH	
		50.3				
		6.3				
15		0.1		(14.9-15') Clayey SAND, loose, olive, wet, non plastic, non cohesive	SP	Wet at 14.9' bgs Highly saturated CLAY
		0.0		(15-18') Gravelly sandy CLAY, very soft, olive, wet, cohesive, high plasticity	CH	
	100	0.0				
		0.0		(18-22') CLAY with trace SAND, soft, olive to pale olive, very moist, cohesive, high plasticity		
		0.0				
20		-			CH	
		-				Boring terminated at 22' bgs

Total Borehole Depth: 22' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-120-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: C. Burger, P.G.
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/19/2016
Weather	: 60s, Partly Cloudy
Northing (US ft)	: 571,161.52
Easting (US ft)	: 1,461,300.49

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0						
		2.0		(0-1') Topsoil, SILT, ORGANIC SOIL	OL	
		0.6	B22-120-SB-1	(1-3') Slag GRAVEL with SILT and SAND, dark brown, dry, large cobbles of slag at 2.5'	GM	
	80	0.1				
		0.1		(3-5') Silty to very fine grained sandy CLAY, soft, dry, olive with light gray to orangish brown mottling, medium plasticity, cohesive	CL	
		0.0				
5				(5-10') Silty to sandy CLAY, soft, olive with gray and orangish brown mottling, high plasticity, cohesive, some intermixed angular GRAVEL, Clay and GRAVEL dark gray at bottom of boring		
		-				
		2.7				
	60	5.3	B22-120-SB-8		CH	
		0.1				Wet at 8.5' bgs
		0.1				
10						Boring terminated at 10' bgs

Total Borehole Depth: 10' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-121-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: C. Burger, P.G.
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/19/2016
Weather	: 60s, Partly Cloudy
Northing (US ft)	: 571,200.99
Easting (US ft)	: 1,461,184.17

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		7.0	B22-121-SB-1	(0-4') Slag GRAVEL and silty CLAY with larger quartz GRAVEL, gray/brown, dry, gravel non cohesive, clay, cohesive, low plasticity	GC	
		16.2				
	90	1.3				
		7.4				
		3.7		(4-5') Silty to very fine grained SAND and CLAY with slag GRAVEL, soft,	SW/SC	Moist at 4' bgs
5		1.6		(5-9') Silty CLAY with gravel, olive, dry, cohesive, low plasticity, orangish brown mottling	CL	
		5.3				
	90	12.4				
		23.2	B22-121-SB-9			Black staining and pungent odor (8.5-10') bgs
		56.8	B22-121-SB-10	(9-10') Slag GRAVEL with wood, SILT and SAND, gray, wet, non cohesive, non plastic	GW	Wet at 9.5' bgs
10						Boring terminated at 10' bgs

Total Borehole Depth: 15' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-122-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 6/1/2016
Weather	: 80s, sunny
Northing (US ft)	: 568,875.49
Easting (US ft)	: 1,461,000.37

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		-	B22-122-SB-1	(0-2.3') SILT with GRAVEL, soft, brown, dry, non plastic, non cohesive	ML	
		-				
	60	0.6		(2.3-2.8') Quartzite GRAVEL, loose, white and olive yellow, dry, non plastic, non cohesive	GP	
				(2.8-4') Metallic slag, GRAVEL and SAND, loose, black, dry, non plastic, non cohesive	GP/SP	Trace roots
		0.3				
		2.7		(4-5') Slag GRAVEL, loose, gray and white, dry, non plastic, non cohesive	GP	
5		-		(5-8.5') Clayey SAND, loose, brown, dry, non plastic, non cohesive	SP	
		-				
	40	-				Wet at 8' bgs
		0.2		(8.5-10') CLAY, firm to very soft, brown wet, high plasticity, cohesive	CH	
		0.1				Boring terminated at 10' bgs
10						

Total Borehole Depth: 10' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-123-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 6/1/2016
Weather	: 80s, sunny
Northing (US ft)	: 568,849.06
Easting (US ft)	: 1,460,975.83

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		-	B22-123-SB-1	(0-1.9') SAND, fine to medium grained, loose, light brown, dry, non plastic, non cohesive	SW	
		0.0				
	70	0.2		(1.9-4') SILT, soft, brown, dry, non plastic, non cohesive	ML	
		1.1				
				(4-4.5') Quartzite GRAVEL, loose, white, dry, non plastic, non cohesive	GP	
		0.0		(4.5-5') SAND with GRAVEL, coarse grained, loose, yellowish red, wet, non plastic, non cohesive	SP	Wet at 4.5' bgs
5				(5-6') Sandy GRAVEL with silt, loose, light brown, wet, non plastic, non cohesive	GP/SP	
	100	0.0				Boring refusal at 6' bgs
10						

Total Borehole Depth: 6' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-124-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 6/1/2016
Weather	: 80s, sunny
Northing (US ft)	: 568,795.48
Easting (US ft)	: 1,461,014.07

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		-		(0-1') Concrete, loose, white, dry	-	
		2.0	B22-124-SB-1	(1-2.5') SILT with SAND, soft, brown, dry, non plastic, non cohesive	ML	
	77	5.0		(2.5-3') Slag GRAVEL, loose, gray, moist, non plastic, non cohesive	GP	
		7.1	B22-124-SB-4	(3-4.5') Silty SAND, medium grained with small metallic slag GRAVEL, brown, dry, non plastic, non cohesive	SP	
		4.4		(4.5-5') SAND, loose, yellowish brown, very moist, non plastic, non cohesive	SP	
5		-		(5-10') Slag SAND, coarse to very coarse, loose, yellowish red grading to black, wet, non plastic, non cohesive		Wet at 6.2' bgs
		9.3				
	77	10.3			SP	
		53.6				
		43.8				Boring terminated at 10' bgs
10						

Total Borehole Depth: 10' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-125-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: C. Burger, P.G.
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/18/2016
Weather	: 50s, Cloudy
Northing (US ft)	: 570,967.08
Easting (US ft)	: 1,461,735.21

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		0.1	B22-125-SB-1	(0-4') GRAVEL with SILTS and SANDS, asphalt and fill debris, dry, non cohesive	GM	
		0.5				
	83	0.6				
		1.9	B22-125-SB-4			
		12.8		(4-10') CLAY, gray to olive gray, dry, cohesive, med to high plasticity	CH	Wet at 8' bgs
5		0.3				
		0.3				
	100	1.1				
		0.2				
		0.1	B22-125-SB-10			Roots and plant material at 9.5' bgs
10		0.1		(10'-20') CLAY, gray, tan, olive, soft, stiff from 10'-13', moist 8'-9', dry at other intervals, cohesive, med to high plasticity, orangish brown and light gray mottling throughout		
		0.1				
	100	0.1				
		0.1				
		0.1				
15		0.1			CH	
		0.1				
		0.1				
	100	0.1				
		0.1				
		0.0				
20						Boring terminated at 20' bgs

Total Borehole Depth: 20 bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-126-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Kevin Pumphrey
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/18/2016
Weather	: 60s, cloudy
Northing (US ft)	: 570,963.61
Easting (US ft)	: 1,461,770.27

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		-		(0-2') Asphalt and Concrete, gray, moist, loose, non plastic, non cohesive	-	
		-				
	60	0.4	B22-126-SB-1	(2-3.7') Brick, gravel sized, loose, yellowish brown, wet, non plastic, non cohesive	-	Wet at 3' bgs
		1.2				
		0.5		(3.7-4.8') Brick, sand sized, loose, yellowish brown, wet, non plastic, non cohesive	-	
5		0.0	B22-126-SB-6	(4.8-5') Gravelly CLAY, very soft, light olive gray, wet, high plasticity, cohesive	CH	Mild sewage smell
		0.0		(5-6') Sandy CLAY, very soft, light grayish green grading to dark greenish gray, very moist, high plasticity, cohesive		
	100	0.0			CH	
		0.0		(6-10') Sandy CLAY, very soft, light grayish green grading to dark greenish gray, wet, high plasticity, cohesive		
		0.0	B22-126-SB-10			
10		-		(10-23.5') CLAY, soft, light grayish green with yellow-red mottling, moist to very moist, high plasticity, cohesive		
		-				
	60	0.0				
		0.0				
		0.0				
15		0.0				
		0.0			CH	
	100	0.0				
		0.0				
		0.0				
20		0.0				
		0.0				
	100	0.0				
		0.0		(23.5-30') CLAY, soft, dark gray, moist, high plasticity, cohesive		
25		0.0				
		0.0			CH	
	100	0.0				
		0.0				
		0.0				
30						Boring terminated at 30' bgs

Total Borehole Depth: 30' bgs.

ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-127-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: C. Burger, P.G.
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/18/2016
Weather	: 60s, Partly Sunny
Northing (US ft)	: 570,938.66
Easting (US ft)	: 1,461,738.88

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		0.4	B22-127-SB-1	(0-5') Slag GRAVEL with SILTS and SANDS, gray, olive, brown, dry, non cohesive	GM	
		32.2				
	80	2.6				
		2.8				
		5.6				
5		65.0		(5-6') GRAVEL with slag and SAND, loose, wet, non cohesive	GW	
		20.8	B22-127-SB-7	(6-20') CLAY, olive gray, dry, alternating soft and stiff intervals, cohesive, medium to high plasticity, light gray mottling throughout, minor organic material at 8.5'		Sweet odor at 7' bgs
	100	83.6				
		34.9				
		42.7				
10		24.0				
		3.4				
	60	8.1			CH	
		2.0				
		0.7				
15		0.5				
		0.7				
	100	0.8				
		0.5				
		0.3				Boring terminated at 20' bgs
20						

Total Borehole Depth: 20' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-128-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: J. Yaple, P.G.
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Kevin Pumphrey
Drilling Equipment	: Geoprobe 7822DT

Date	: 6/2/2016
Weather	: 70s, cloudy
Northing (US ft)	: 568,602.47
Easting (US ft)	: 1,462,229.45

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0	83	-	B22-128-SB-1	(0-2.5') Well graded SAND and GRAVEL, fine to coarse, loose, dark brown and gray, dry, sub angular, non plastic, non cohesive	SW/GW	
		2.2				
		4.4		(2.5-4') Well graded SAND and GRAVEL, fine to coarse, loose, light gray, dry, large gravel fragments, non plastic, non cohesive	SW/GW	
		5.2				
		9.0		(4-8') Fill debris, large chunks of wood mixed with large gravel in oil and grease matrix, crude oil type consistency	-	Oil and grease laden material 4-5'/ product Oil and sewage odor
5				(8-10') Poorly graded clayey SAND, sticky, fine grained, black, wet, cohesive, non plastic	SP/SC	
10						Boring refusal at 10' bgs

Total Borehole Depth: 10' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-129-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: J. Yaple, P.G.
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Kevin Pumphrey
Drilling Equipment	: Geoprobe 7822DT

Date	: 6/2/2016
Weather	: 70s, Cloudy
Northing (US ft)	: 568,628.22
Easting (US ft)	: 1,462,279.73

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		-	B22-129-SB-1	(0-3.5') Well graded SAND and slag GRAVEL, loose, light gray and light brown, dry, non plastic, non cohesive, some slag, subangular	SW/GW	First two attempts had refusal at 4'
	83	2.2				
		7.6				
		11.0	B22-129-SB-4			
		2.9		(3.5-7') Well graded SAND and slag GRAVEL, loose, light gray, dry, non plastic, non cohesive, significant slag, angular	SW/GW	
5		-				
		0.1				
	75	0.2		(7-10') Well graded silty SAND and GRAVEL, very loose, light brown, dry, non plastic, non cohesive	SW/GW	Wet at 7' bgs
		0.1				Oily product with sheen 9'-10' bgs
		0.2				
10				(10-13.5') Clayey SAND, soft, gray, fine grained, moist to very wet, cohesive, low plasticity	SC	
				(13.5-15') CLAY, soft, light to medium brown, moist to wet, cohesive, medium plasticity	CL	
15						Boring terminated at 15' bgs

Total Borehole Depth: 15' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-130-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: J. Yaple, P.G.
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Kevin Pumphrey
Drilling Equipment	: Geoprobe 7822DT

Date	: 6/1/2016
Weather	: 80s, Sunny
Northing (US ft)	: 568,562.98
Easting (US ft)	: 1,462,274.95

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		2.4	B22-130-SB-1	(0-3.5') Well graded SAND and slag GRAVEL, loose, blue-gray and dark brown and tan, subangular, dry, non plastic, non cohesive	SW/GW	
		11.5				
	93	13.1				
		6.1	B22-130-SB-4	(3.5-5) CLAY, stiff, tan and gray-green, low plasticity, cohesive	CL	
		0.5				
5		-		(5-9') CLAY, soft, brown and gray-green, moist to wet, high plasticity, cohesive	CH	
		-				
	60	0.2				Wet at 7.5' bgs
		0.2				
		0.5		(9-10') Well graded SAND and GRAVEL, loose, light gray, angular, moist, non cohesive	SW/GW	
10						Boring terminated at 10' bgs

Total Borehole Depth: 10' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-131-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Kevin Pumphrey
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/17/2016
Weather	: 50s, rainy
Northing (US ft)	: 568,111.05
Easting (US ft)	: 1,461,157.54

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0						
	100	0.1	B22-131-SB-1	(0-0.1') (Topsoil) ORGANIC SOIL, brown, dry, soft, no cohesion, no plasticity	OL	
				(0.1-0.5') CLAY, soft, brown, moist, cohesive, low plasticity	CL	Small plant roots
				(0.5-1.5') Silty SAND with slag GRAVEL, Poorly Graded, light brown, dry, non plastic, non cohesive	SP	
		0.3		(1.5-5) CLAY, soft, beige and orange mottled, moist, cohesive, high plasticity	CH	
		0.5				
		0.5				
		0.4	B22-131-SB-5			
5				(5-8') CLAY, soft, beige and orange mottled, very moist, very cohesive, high plasticity	CH	
		-				
		-				
	50	0.5				
				(8-8.3') SAND with gravel, poorly graded, brown, dry, non plastic, non cohesive	SP	
		0.7			CH	
				(8.3-8.5') CLAY, beige and orange mottled, very moist, very soft, cohesive, high plasticity	GP	Wet at 9' bgs
				(8.5-9.5') Slag GRAVEL, loose, brown, moist to wet, non plastic, non cohesive		
		0.4		(9.5-10') CLAY, dark beige, wet, soft, cohesive, high plasticity	CH	Boring terminated at 10' bgs
10		-				

Total Borehole Depth: 10' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-132-SB

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Client	: EnviroAnalytics Group	Date	: 5/17/2016
ARM Project No.	: 150300M-20-3	Weather	: 50s, Rainy
Project Description	: Sparrows Point - Parcel B22		
Site Location	: Sparrows Point, MD		
ARM Representative	: L. Perrin		
Checked by	: P. Vogel, P.G.	Northing (US ft)	: 568,115.79
Drilling Company	: Green Services, Inc	Easting (US ft)	: 1,461,198.25
Driller	: Kevin Pumphrey		
Drilling Equipment	: Geoprobe 7822DT		

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		-	B22-132-SB-1	(0-1.5') ORGANIC SOIL with gravel, soft, brown, dry, non plastic, non cohesive	OL	Small plant roots
		0.2		(1.5-3.5') Clayey SAND with slag GRAVEL, soft, brown, cohesive, low plasticity	SP-SC	
	70	0.6				
		3.2		(3.5-5') Sandy CLAY with slag GRAVEL, soft, light brown and orange mottled, moist, cohesive, high plasticity	CH	
		0.7	B22-132-SB-5			
5		-		(5-8.5') CLAY, very soft,dark brown, trace sand, wet, cohesive, high plasticity	CH	Wet at 7.5' bgs
		0.4				
	50	0.1				
		0.4		(8.5-10') CLAY, soft to firm, light gray and light orange mottled, trace sand, moist, cohesive, high plasticity	CH	
		0.1				
10						Boring terminated at 10' bgs

Total Borehole Depth: 10' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-133-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: J. Yaple, P.G.
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Kevin Pumphrey
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/31/2016
Weather	: 80s, Sunny
Northing (US ft)	: 569,074.27
Easting (US ft)	: 1,462,156.42

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0						
	85	-	B22-133-SB-1	(0-4.5') Well graded SAND and slag GRAVEL, dense, tan to dark brown to gray, moist, non plastic, non cohesive	SW/GW	
		2.3				
		1.8				
		1.7				
		0.9	B22-133-SB-5			
5				(4.5-10') Silty SAND with some GRAVEL, loose, tan to dark brown, moist to wet, cohesive, non plastic		Wet @ 6' bgs
		-				
		1.8				
	83	2.0			SM	
		1.7				
		0.7				
10						Boring terminated at 10' bgs

Total Borehole Depth: 10' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-134-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: J. Yaple, P.G.
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Kevin Pumphrey
Drilling Equipment	: Geoprobe 7822DT

Date	: 6/1/2016
Weather	: 70s, Sunny
Northing (US ft)	: 569,222.27
Easting (US ft)	: 1,462,138.96

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0						
		-	B22-134-SB-1	(0-7.5') Well graded SAND and GRAVEL with traces of SILT and slag, loose, light to dark gray, angular, dry, non plastic, non cohesive		
		8.9				
	92	4.8				
		2.8			SW/GW	
		0.3				
5		-				
		45.5	B22-134-SB-7			
	77	120.1		(7.5-10') Well graded GRAVEL with SILT, trace brick and slag, loose, red to gray, wet, no cohesion, no plasticity		Wet @ 7.5' bgs
		68.1			GW/GM	
		3.2				
10						Boring terminated at 10' bgs

Total Borehole Depth: 10' bgs.

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ARM Group Inc.
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Boring ID: B22-135-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: J. Yaple, P.G.
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Kevin Pumphrey
Drilling Equipment	: Geoprobe 7822DT

Date	: 6/1/2016
Weather	: 70s, Sunny
Northing (US ft)	: 569,247.79
Easting (US ft)	: 1,462,134.92

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0						
		-	B22-135-SB-1	(0-8') Well graded SAND and GRAVEL with trace of SILT some slag, dense, dark gray with red, angular, dry, non plastic, non cohesive		
		2.5				
	87	19.0				
		5.3				
		3.9			SW/GW	
5		-				
		-				
	70	6.2	B22-135-SB-8			
		6.0		(8-10') Well graded SAND and GRAVEL, some SILT and slag, loose, dark gray, wet, non plastic, non cohesive	SW/GW	Wet @ 8' bgs
		3.2				
10						Boring terminated at 10' bgs

Total Borehole Depth: 10' bgs.

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ARM Group Inc.
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Boring ID: B22-136-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: J. Yaple, P.G.
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Kevin Pumphrey
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/31/2016
Weather	: 80s, Sunny
Northing (US ft)	: 569,100.18
Easting (US ft)	: 1,462,152.27

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0						
		-	B22-136-SB-1	(0-4') Well graded SAND and GRAVEL with brick and slag, medium dense, dark gray to red to dark brown, angular, non plastic, non cohesive		
		1.6			SW/GW	
	90	8.6				
		5.6				
		14.1	B22-136-SB-5	(4-10') Silty SAND, medium dense, dark gray, fine to coarse, moist to wet, cohesive, no plasticity		
5		0.7				Wet @ 6' bgs
		0.2			SM	
	92	0.2				
		0.2				
		0.2				
10						Boring terminated at 10' bgs

Total Borehole Depth: 10' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-137-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Kevin Pumphrey
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/16/2016
Weather	: 50s, Sunny
Northing (US ft)	: 567,600.33
Easting (US ft)	: 1,461,709.52

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0						
		0.2	B22-137-SB-1	(0-2.5') SILT, with small slag GRAVEL, soft, brown, dry, non plastic, non cohesive	ML	
		0.3				
	100	3.2		(2.5-3') SAND with Slag GRAVEL, loose, brown, medium to coarse grained, dry to wet, non plastic, non cohesive	SW	
		2.4		(3-5') CLAY, hard, light brown, very dry, cohesive, low plasticty	CL	
		0.3				
5		-		(5-7') CLAY, very firm, light brown, moist, cohesive, high plasticity	CH	
		0.3				
	80	2.7	B22-137-SB-8	(7-8') SAND, medium dense, tan, moist, non plastic, non cohesive	SP	
		2.9		(8-8.5') SAND, loose, tan and orange, wet, non plastic, non cohesive	SP	Wet at 8' bgs
				(8.5-9') SAND, loose, orange, moist, non plastic, non cohesive	SP	
		0.3		(9-10') CLAY, soft, light brown, moist, cohesive, high plasticity	CH	
10		-		(10-13') CLAY, soft, brown-beige, moist, cohesive, high plasticity	CH	
		0.0				
	80	0.0				
		0.0		(13-14') Sandy CLAY, very soft, orange, wet, cohesive, medium plasticity	CL	
		0.0		(14-15') CLAY, very soft, dark gray, very moist, cohesive, high plasticty	CH	
15						Boring terminated at 15' bgs

Total Borehole Depth: 20' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-138-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Kevin Pumphrey
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/16/2016
Weather	: 50s, Sunny
Northing (US ft)	: 568,037.48
Easting (US ft)	: 1,461,730.94

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		4.1	B22-138-SB-1	(0-2') SILT with schist and brick gravel, soft to firm, brown, dry, non plastic, non cohesive	ML	Micas present throughout
		1.8				
	100	1.3		(2-3') SAND with fine slag GRAVEL, loose, brown, coarse grained, moist to wet, non plastic, non cohesive	SP	
		0.8		(3-5') CLAY, very firm, dark gray and brown, moist, cohesive, low plasticty	CL	
		0.0				
5		1.2		(5-7.5) CLAY, very firm, brown and light orange, moist, cohesive, high plasticity	CH	
		3.0				
	100	3.8	B22-138-SB-8	(7.5-10') Sandy CLAY, firm, light brown and dark orange, moist, cohesive, medium plasticity	CL	Iron-staining, mottled
		1.9				
		0.7	B22-138-SB-10			
10		3.7		(10-18') CLAY, firm, light brown with orange streaks, moist, cohesive, high plasticity	CH	
		2.6				
	100	3.8				
		3.1				
		0.3				
15		0.0				
		0.0				
	100	0.0				
		0.0		(18-19') CLAY, very soft, light brown, moist, cohesive, high plasticity	CH	
		0.0		(19-20') CLAY, very soft, gray-brown, very moist, cohesive, high plasticity	CH	Boring terminated at 20' bgs
20						

Total Borehole Depth: 20' bgs.

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ARM Group Inc.
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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Kevin Pumphrey
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/16/2016
Weather	: 50s, Sunny
Northing (US ft)	: 567,989.02
Easting (US ft)	: 1,461,962.71

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0						
	90	4.7	B22-139-SB-1	(0-4') SILT with trace SAND, soft, brown and black, dry, non plastic, non cohesive	ML	Trace oxidation and metallic specs throughout
		5.5				
		3.1				
		18.5	B22-139-SB-4			
		0.4		(4-4.5') Slag GRAVEL, loose, gray and tan, wet, non plastic, non cohesive	GP	
				(4.5-5') CLAY, hard, tan, dry, cohesive, low plasticty	CL	
5		6.2		(5-9') CLAY, very firm, tan and light orange, dry, cohesive, high plasticity	CH	
		8.0				
	100	9.3				
		4.3				
		0.4		(9-9.5) Clayey SAND, medium dense, tan, very moist, non plastic, non cohesive	SP-SC	Wet at 9.5' bgs
				(9.5-10') SAND, loose, tan, wet, non plastic, non cohesive	SP	Boring terminated at 10' bgs
10						

Total Borehole Depth: 10' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-140-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Kevin Pumphrey
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/16/2016
Weather	: 50s, Sunny, Windy
Northing (US ft)	: 567,806.12
Easting (US ft)	: 1,462,073.65

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		-	B22-140-SB-1	(0-4.5') Sandy SILT with trace slag gravel, soft, brown, dry, non plastic, non cohesive		
		0.1			ML	
	90	0.7				
		2.3				
		1.4	B22-140-SB-5			
				(4.5-5') SILT, hard, dark gray, dry, cohesive, low plasticity	ML	
5		-		(5-10') CLAY, firm to very firm, brown grading to gray, moist, cohesive, medium plasticity grading to high plasticity		
		0.3				
	70	0.5			CL/CH	
		0.4				
		0.1	B22-140-SB-10			
10		-		(10-13') SAND, loose, light gray, wet, non plastic, non cohesive		
		-			SP	
	50	-				Wet at 12.5' bgs
		-		(13-15') Sandy CLAY, very soft, light gray, very moist, cohesive, high plasticity		
		-			CH	
15		-				Boring terminated at 15' bgs

Total Borehole Depth: 15' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-141-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Kevin Pumphrey
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/16/2016
Weather	: 50s, Sunny
Northing (US ft)	: 567,603.61
Easting (US ft)	: 1,462,098.41

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		0.4	B22-141-SB-1	(0-1.5') SILT with sand and slag gravel, soft, brown, dry, non plastic, non cohesive	ML	
		1.1		(1.5-2.5') Slag GRAVEL with SAND, loose, brown, wet, non plastic, non cohesive	GW	
	100	0.2		(2.5-5') CLAY, hard, brown, dry, cohesive, medium plasticity	CL	
		0.0				
		0.0	B22-141-SB-5			
5		-		(5-9.5') Sandy CLAY, firm, brown to light brown, moist, cohesive, medium to high plasticity	CL	
		-				
	40	-				
		0.0				
		0.0				Wet at 9.5' bgs
10				(9.5-10') SAND, loose, beige, wet, non plastic, non cohesive	SP	Boring terminated at 10' bgs

Total Borehole Depth: 10' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-142-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Kevin Pumphrey
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/16/2016
Weather	: 50s, Sunny
Northing (US ft)	: 567,817.40
Easting (US ft)	: 1,461,772.75

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		0.2	B22-142-SB-1	(0-1') SILT with slag GRAVEL, soft, light brown, dry, non plastic, non cohesive	ML	
	100	0.5 0.5 0.3		(1-4') Sandy SILT with trace slag gravel, soft, brown, moist, non plastic, non cohesive	ML	
		0.2	B22-142-SB-5	(4-5') Silty SAND, loose, brown, wet, non plastic, non cohesive	SP	
5	50	- - 0.8 0.3		(5-9') CLAY, firm, gray-brown, moist, cohesive, high plasticity	CH	
		0.2		(9-9.5') Sandy CLAY, soft, dark gray, very moist, cohesive, high plasticitly	CH	Wet at 9.5' bgs
10				(9.5-10') SAND, medium dense, light beige, wet, non cohesive, non plastic	SP	Boring terminated at 10' bgs

Total Borehole Depth: 10' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-143-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Kevin Pumphrey
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/16/2016
Weather	: 50s, Sunny
Northing (US ft)	: 567,768.52
Easting (US ft)	: 1,461,528.09

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		-	B22-143-SB-1	(0-2') SILT with gravel, soft, light brown, dry, non plastic, non cohesive	ML	
		0.3				
	83	0.4		(2-3') Sandy SILT, soft, brown, dry, non plastic, non cohesive	ML	
		0.4		(3-3.5') Concrete, loose, gray, dry, non plastic, non cohesive	GP	
				(3.5-4') Silty SAND, loose, dark brown, moist to wet, non plastic, non cohesive	SM	
		1.9	B22-143-SB-5	(4-5') SAND with SILT, loose, dark brown, fine to medium grained, very moist, non plastic, non cohesive	SW	Green tinge
5		-		(5-10') CLAY, very firm, gray-brown, moist, cohesive, low plasticity		
		-				
	40	-			CL	
		0.6				
		0.4	B22-143-SB-10			
10		-				Wet at 10.5' bgs
				(10.5-11') SAND, loose, orange, wet to very moist, non plastic, non cohesive	SP	
		0.0		(11-11.2') Sandy CLAY, soft, orange, very moist, cohesive, low plasicity	CL	
	90	0.0		(11.2-15') CLAY, soft, beige and orange streaked, moist, cohesive, high plasticity	CH	
		0.0				
		0.0				
15						Boring terminated at 15' bgs

Total Borehole Depth: 15' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-144-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Ali Berenbrok - Tim Niblett
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/20/2016
Weather	: 70s, Sunny
Northing (US ft)	: 570,836.69
Easting (US ft)	: 1,461,848.29

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		26.1	B22-144-SB-1	(0-1') SILT, hard, brittle, light yellowish brown to dark brown, dry, non plastic, non cohesive	ML	
		4.4		(1-1.3') SILT, soft, white, dry, non plastic, non cohesive	ML	
				(1.3-1.8') Sandy GRAVEL, loose,dark yellowish brown to brownish yellow, dry, non plastic, non cohesive	GW	
	100	5.5		(1.8-5') CLAY, soft to very firm, yellowish brown and grayish green, moist to dry, high plasticity, cohesive	CH	
		4.3				
		0.4				
5		2.1		(5-8') CLAY, soft to firm, light olive brown with yellowish brown mottling, moist to very moist, high plasticity, cohesive	CH	Iron staining
		7.5	B22-144-SB-7			
	100	8.7				Wet at 8' bgs
		0.34		(8-10') CLAY, very soft, dark greenish gray and light olive, wet, high plasticity, cohesive	CH	Saturated clay, wet sheen
		1.5				
10						Boring terminated at 10' bgs

Total Borehole Depth: 10' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-145-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Ali Berenbrok - Tim Niblett
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/20/2016
Weather	: 70s, Sunny
Northing (US ft)	: 570,750.05
Easting (US ft)	: 1,461,847.08

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		-	B22-145-SB-1	(0-2.5') SILT with fine SAND, soft, brown, dry, non plastic, non cohesive	ML	
		1.6				
	70	10.4		(2.5-4.3') Concrete, loose, pinkish gray, dry, non plastic, non cohesive	GP	
		12.5				
		3.2	B22-145-SB-4	(4.3-5') Gravelly CLAY, very soft, black, wet, high plasticity, cohesive	CH	Moderate odor
5		0.4		(5-10') Sandy CLAY, firm but with few very soft spots, yellowish brown, dry to moist, high plasticity, cohesive		
		2.1				
	100	2.0			CH	
		0.4				
		0.6	B22-145-SB-10			
10		-		(10-12.5') Sandy CLAY, very soft, yellowish brown, wet,		Wet at 10.5' bgs
		0.3			CH	
	100	0.7		(12.5-15') CLAY, hard, yellowish brown, dry, high plasticity, cohesive		
		1.1			CH	
		1.0				
15						Boring terminated at 15' bgs

Total Borehole Depth: 15' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-146-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 6/1/2016
Weather	: 80s, Sunny
Northing (US ft)	: 569,032.17
Easting (US ft)	: 1,460,949.40

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0				(0-0.5') Concrete, loose, white, dry	-	
		-				
		0.6	B22-146-SB-1	(0.5-2.8') Sandy SILT with metallic slag GRAVEL, soft, brown to dark brown, dry to moist, non plastic, non cohesive	ML	
	70	0.8				
				(2.8-3.3') Sandy slag GRAVEL, loose, red, wet, non plastic, non cohesive	GP/SP	
		0.7		(3.3-7') Silty CLAY, firm, light yellowish brown to very dark gray, low plasticity, cohesive		
		0.0	B22-146-SB-5			
5					CL	
		0.2				
		0.4				
				(7-8.2') Sandy CLAY, very soft, light yellowish brown, wet, medium to high plasticity, cohesive		Wet at 7' bgs
	90	0.2			CL/CH	
		0.7		(8.2-10') CLAY, very firm, pale yellow, dry, high plasticity, cohesive		
					CH	
		0.2				
10						Boring terminated at 10' bgs

Total Borehole Depth: 10' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-147-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 6/1/2016
Weather	: 80s, Sunny
Northing (US ft)	: 569,042.82
Easting (US ft)	: 1,460,957.46

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0				(0-0.5') Concrete, loose, light gray, dry	-	
		-				
		-	B22-147-SB-1	(0.5-4') SAND and slag GRAVEL, loose, brown and yellowish brown, moist, non plastic, non cohesive		
	40	-			SP/GP	
		19.2				
		0.0	B22-147-SB-5.5	(4-5') Sand and GRAVEL, loose, brown and yellowish brown, wet, non plastic, non cohesive	SP/GP	
5				(5-5.5') CLAY, firm, dark grayish brown, moist, medium plasticity, cohesive	CL	
		0.5				Wet at 5.5' bgs
				(5.5-6.5') CLAY, very soft, dark grayish brown, wet, medium plasticity, cohesive	CL	
		0.7		(6.5-10') CLAY, hard to very firm, dark grayish brown grading to pale yellow, moist, medium plasticity, cohesive		
	100	0.2				
		0.1			CL	
		0.1				
10						Boring terminated at 10' bgs

Total Borehole Depth: 10' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-148-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: C. Burger, P.G.
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/18/2016
Weather	: 60s, Cloudy
Northing (US ft)	: 571,064.79
Easting (US ft)	: 1,461,082.72

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		6.4	B22-148-SB-1	(0-4') Slag GRAVEL with SILT and concrete/brick material, black, dry, non cohesive	GM	
		24.5				
	60	67.9				
		17.2				
		0.2		(4-6') Clayey GRAVEL, stiff, olive, dry, cohesive, low plasticity	GC	
5		2.4	B22-148-SB-6			Wet at 5.5' bgs (perched) Black staining and odor
		2.6		(6-10') Gravely CLAY, olive to brown, dry, stiff, cohesive, medium plasticity, orangish brown mottling	CL	
	100	1.3				
		20.8				
		10.5	B22-148-SB-10			
10		-		(10-15') Silty CLAY with GRAVEL, olive, soft, wet, cohesive, medium to high plasticity, orangish brown and dark gray mottling	CL	Wet at 11.5' bgs
		-				
	70	-				
		-				
		-				
15						Boring terminated at 15' bgs

Total Borehole Depth: 15' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-149-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: C. Burger, P.G.
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/19/2016
Weather	: 60s, Partly Sunny
Northing (US ft)	: 571,047.06
Easting (US ft)	: 1,461,084.20

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0						
		4.9	B22-149-SB-1	(0-5') Slag GRAVEL with SILT, loose, gray/brown, dry, non cohesive		
		1.8				
	80	4.8			GM	
		2.0				Wet at 4' bgs (perched)
		0.1				
5				(5-9.5') Gravelly CLAY with gray slag GRAVEL; CLAYS, soft, olive, dry, cohesive, low plasticity; GRAVEL, loose, gray/black, dry, non cohesive		
		-				
		16.1				
	60	45.2	B22-149-SB-8		CL/GC	
		13.8				
		0.1				Wet at 9.5' bgs
				(9.5-10') Clayey GRAVEL, brown/olive, wet, cohesive, low plasticity	GC	Boring terminated at 10' bgs
10						

Total Borehole Depth: 15' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-150-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 6/1/2016
Weather	: 80s, Sunny
Northing (US ft)	: 569,143.31
Easting (US ft)	: 1,460,967.15

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		-	B22-150-SB-1	(0-2') Sandy SILT, soft, brown, dry, non plastic, non cohesive	ML	
		1.7		(2-2.5') SILT, dense, black, moist, low plasticity, cohesive	ML	
	90	1.1		(2.5-2.8') Slag SAND, loose, black, very moist, non plastic, non cohesive	SP	
				(2.8-3.2') SAND, medium grained, loose, brown, wet, non plastic, non cohesive	SP	
		1.6		(3.2-5') Silty CLAY, soft to very firm, brown, low plasticity, cohesive	CL	
		0.7	B22-150-SB-5			
5		0.5		(5-6') CLAY, firm, brown, moist, medium plasticity, cohesive	CL	
		0.8		(6-7') CLAY, very soft, brown, wet, medium plasticity, cohesive	CL	Wet at 6' bgs
	100	0.0		(7-10') CLAY, firm, brown to light yellowish brown, moist to dry, medium plasticity grading to high, cohesive	CL/CH	
		0.0				
		0.1				
10						Boring terminated at 10' bgs

Total Borehole Depth: 10' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-151-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 6/1/2016
Weather	: 80s, Sunny
Northing (US ft)	: 569,097.44
Easting (US ft)	: 1,460,972.98

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		-	B22-151-SB-1	(0-2.2') SAND and slag GRAVEL, loose, light yellowish brown, dry, non plastic, non cohesive	GP/SP	
		3.6				
	70	3.2		(2.2-3.4') SILT, medium dense, light yellowish brown, dry, low plasticity, cohesive	ML	
		1.5		(3.4-5') SAND and slag GRAVEL, loose, dark brown to black, wet, non plastic, non cohesive	GP/SP	Wet at 3.5' bgs
		2.2				
5		9.2		(5-6') CLAY, very soft, dark brown, wet, medium plasticity, cohesive	CL	
	100	7.6		(6-8') CLAY, hard, brown, dry, medium plasticity, cohesive	CL	
		1.9				Refusal at 8' bgs
10						

Total Borehole Depth: 8 bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-152-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: C. Burger, P.G.
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/19/2016
Weather	: 50s, Partly Sunny
Northing (US ft)	: 571,252.89
Easting (US ft)	: 1,460,918.27

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0						
		3.8	B22-152-SB-1	(0-1') Silty CLAY, brown, dry, high plasticity, cohesive	CH	
		31.8		(1-5') Slag GRAVEL with SILT, SAND, and CLAY, dark brown to black, dry, low plasticity, cohesive	GC	
	90	51.5				
		59.4				
		78.8				
5		477	B22-152-SB-6	(5-9.6') Slag GRAVEL with SILT, SAND, and tan sandstone and brick, dark gray to black, dry from 5-9', non cohesive	GM	Strong odors from 5-10' bgs
		398				
	90	394				
		400				Wet at 9' bgs Sheen at 9' bgs
		173				
10				(9.6-10') CLAY, olive, wet, cohesive, medium plasticity, some light brown mottling	CL	Boring terminated at 10' bgs

Total Borehole Depth: 10' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-153-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Kevin Pumphrey
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/19/2016
Weather	: 60s, sunny
Northing (US ft)	: 571,347.23
Easting (US ft)	: 1,460,907.74

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0						
		9.1	B22-153-SB-1	(0-0.2) Organic silty CLAY, soft, brown, moist, cohesive, low to medium plasticity	OL	
				(0.2-1.2') CLAY, soft, strong brown, moist, cohesive, high plasticity	CH	
		152		(1.2-2.9) Gravelly SAND, loose, black grading to dark olive brown, moist, non plastic, non cohesive	SP	
	100	458				
		941	B22-153-SB-4	(2.9-3') CLAY, soft, strong brown, dry to moist, cohesive, high plasticity	CH	
				(3-5') SILT with GRAVEL, soft, olive brown, dry, non plastic, non cohesive	ML	
		451				
5		40.4		(5-9') SAND with GRAVEL, loose, dark brown, dry, non plastic, non cohesive	SP	
		23.4				
	100	11.8				
		10.7				
		9.7		(9-10') Sandy GRAVEL, loose, black, dry, non plastic, non cohesive	GW	Wet at 9' bgs
10		-		(10-15') Gravelly SAND, loose, dark red, wet, non plastic, non cohesive	SP	
		-				
	33	-				
		-				
		0.0				
15		0.0		(15-16') Sandy GRAVEL, loose, very dark brown, wet, non plastic, non cohesive	GP	Boring terminated at 16' bgs

Total Borehole Depth: 16' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-154-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Ali Berenbrok - Tim Niblett
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/20/2016
Weather	: 60s, Sunny
Northing (US ft)	: 570,923.64
Easting (US ft)	: 1,462,092.51

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		-	B22-154-SB-1	(0-3') SILT with trace SAND, soft, dark grayish brown, dry, non plastic, non cohesive		
		9.3			ML	
	80	4.6				
				(3-4') Silty SAND, fine to meduim grained, loose, dark grayish brown, dry, non plastic, non cohesive		
		1.7			SM	
				(4-4.3') Sandy CLAY, soft, light olive brown, moist, low plasticity, cohesive	CL	
		3.0	B22-154-SB-5	(4.3-5') SAND, fine to medium grained, loose, light olive brown, moist, non plastic, non cohesive	SW	
5				(5-10') Slag GRAVEL and SAND, loose, gray and strong brown grading to black, wet, non plastic, non cohesive		
		-				
		-				Wet at 7' bgs
	60	43.3			GP/SP	
		29.3				Moderate odor
		13.9				Boring terminated at 10' bgs
10						

Total Borehole Depth: 10 bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-155-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Kevin Pumphrey
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/20/2016
Weather	: 60s, Sunny
Northing (US ft)	: 570,923.21
Easting (US ft)	: 1,462,109.59

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		-	B22-155-SB-1	(0-3') SILT with fine GRAVEL, soft, olive brown to dark grayish brown, dry, non plastic, non cohesive		
		2.7			ML	
	70	3.7				
				(3-3.5') Brick and glass, loose, red, dry, non plastic, non cohesive	-	
		1.6		(3.5-5') SILT with SAND pockets, soft, dark grayish brown, dry, non plastic, non cohesive		
		2.1	B22-155-SB-5		ML	
5				(5-7.5') Slag and brick GRAVEL, loose, red and gray, moist, non plastic, non cohesive		
		-			GP	
		-				
	60	10.3		(7.5-10') Slag GRAVEL, loose, bluish gray, wet, non plastic, non cohesive		Wet at 7.5' bgs
		11.6			GW	
		26.8				Boring terminated at 10' bgs
10						

Total Borehole Depth: 10 bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-156-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: C. Burger, P.G.
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/20/2016
Weather	: 60s, Sunny
Northing (US ft)	: 570,742.20
Easting (US ft)	: 1,461,460.47

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0						
	100	2.2	B22-156-SB-1	(0-3.5') Concrete GRAVEL, SILT, brick fill, loose, brown, gray, red, dry, non cohesive	GM	Refusal on 1st two boring attempts
		1.3				
		1.0				
		0.1				
				(3.5-6') Silty CLAY, brown to olive, alternating stiff to soft, wet, cohesive, high plasticity, with yellowish brown mottling	CH	
		0.0	B22-156-SB-4.5			
5						
		0.8				
				(6-10') Silty CLAY, yellowish brown to olive, stiff, dry, cohesive, medium plasticity, gray to yellowish brown mottling		
		0.3				Wet at 4.5' bgs
	100	0.0			CL	
		0.0				
		0.1				Boring terminated at 10' bgs
10						

Total Borehole Depth: 10' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-157-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: C. Burger, P.G.
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/20/2016
Weather	: 60s, Sunny
Northing (US ft)	: 570,814.73
Easting (US ft)	: 1,461,454.47

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		-	B22-157-SB-1	(0-4') Concrete GRAVEL and SILT, dry, low cohesive	GM	
	50	90.8				
		31.6				
		7.5				
		32.2		(4-4.5') Silty CLAY, soft, olive to yellowish brown, dry, medium plasticity, cohesive	CL	Wet at 4.5' bgs Black staining and odors
				(4.5-5') GRAVEL with SAND, black, wet, loose, non cohesive	GM	
5		0.1		(5-6') Silty CLAY, yellowish brown, soft, dry, cohesive, high plasticity	CH	
		0.1		(6-9') Silty CLAY, stiff, yellowish brown, dry, cohesive, low plasticity, with gray and olive mottling	CL	
	100	0.2				
		0.1				
		0.1		(9-10') Silty CLAY, soft, olive to brown, moist, high plasticity, cohesive	CH	Boring terminated at 10' bgs
10						

Total Borehole Depth: 10' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-158-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Kevin Pumphrey
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/18/2016
Weather	: 60s, Overcast
Northing (US ft)	: 571,206.06
Easting (US ft)	: 1,460,798.71

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		-	B22-158-SB-1	(0-4') Silty SAND, fine to medium grained, loose, dark brown, dry to moist, non plastic, non cohesive	SW	0.5" layer of SP beige sand at 2' bgs
	70	4.3				
		21.7				
		16.5				
		1.8		(4- 4.1') Sandstone GRAVEL, loose, pale brown, dry, non plastic, non cohesive	GP	
5		-		(4.1-5') Silty SAND, fine to medium grained, loose, dark brown, dry to moist, non plastic, non cohesive	SW/SP	
		-		(5-9') SAND, fine to medium grained, loose, dark brown, moist, non plastic, non cohesive, little slag	SW	
	60	24.1	B22-158-SB-8			
		15.4				
		1.8	B22-158-SB-10	(9-10') Slag GRAVEL and SAND, loose, dark brown,moist to wet, non plastic, non cohesive	GP/SP	Some iron staining and large chunks of wood present Wet at 10' bgs
10		-		(10-12.5') Gravelly SAND, coarse, loose, dark yellowish brown, wet, non plastic, non cohesive	SP	
		0.0				
	70	0.0		(12.5-13') CLAY, soft, dark grayish olive, trace sand, moist, high plasticity, cohesive	CH	
		0.0		(13-15') Gravelly SAND grading to coarse SAND, loose, dark yellowish brown, wet, non plastic, non cohesive	SP	
15						Boring terminated at 15'

Total Borehole Depth: 15' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-159-SB

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Client	: EnviroAnalytics Group	Date	: 5/19/2016
ARM Project No.	: 150300M-20-3	Weather	: 60s, overcast
Project Description	: Sparrows Point - Parcel B22		
Site Location	: Sparrows Point, MD		
ARM Representative	: L. Perrin		
Checked by	: P. Vogel, P.G.	Northing (US ft)	: 571,310.51
Drilling Company	: Green Services, Inc	Easting (US ft)	: 1,460,784.42
Driller	: Kevin Pumphrey		
Drilling Equipment	: Geoprobe 7822DT		

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		5.6	B22-159-SB-1	(0-3') Silty SAND with little GRAVEL, loose, brown, dry to moist, non plastic, non cohesive		
	100	1.1			SP-SM	
		9.6				Moist at 2.5' bgs Boring refusal at 3' bgs
5						
10						

Total Borehole Depth: 3' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-160-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 6/1/2016
Weather	: 80s, Sunny
Northing (US ft)	: 569,159.25
Easting (US ft)	: 1,460,919.18

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		-		(0-1.5') Concrete, loose, white, dry	-	
	30	-	B22-160-SB-1	(1.5-4.6') SAND, loose, reddish yellow, moist, non plastic, non cohesive	SP	
		0.5				
		3.1		(4.6-4.8') SILT, soft, gray black and white, thinly liminated, very moist, low plasticity	ML	
5					SP	
		-		(4.8-5') SAND, loose, yellowish red, moist, non plastic, non cohesive	SM	
				(5-6') Silty SAND with GRAVEL, loose, brown, moist, non plastic, non cohesive		Wet at 6' bgs
		-		(6-9.5') SAND, medium grained, loose, gray, wet, non plastic, non cohesive		
	100	-			SP	Moderate odor, wood fragments
		-				
		-		(9.5-10') Sandy GRAVEL, loose, dark gray, wet, non plastic, non cohesive	GP	Boring terminated at 10' bgs
10						

Total Borehole Depth: 10 bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-161-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 6/1/2016
Weather	: 80s, Sunny
Northing (US ft)	: 569,186.58
Easting (US ft)	: 1,460,934.10

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0						
	60	-	B22-161-SB-1	(0-3.5') SILT, medium dense, brown, dry, low plasticity, cohesive	ML	Few gravel
		6.7				
		9.7		(3.5-4') Concrete, loose, gray, dry, non plastic, non cohesive	-	
		0.0	B22-161-SB-4.5	(4-5') Sandy SILT with GRAVEL, loose, dark brown to black, moist to wet, non plastic, non cohesive	ML	Wet at 4.5' bgs
5				(5-8.5') Sandy slag GRAVEL, loose, black, wet, non plastic, non cohesive	SP	Sheen, sweet smell
	30					
		0.1		(8.5-10') CLAY, slightly dense to dense, tan to light gray, slightly moist, medium to high plasticity, cohesive	CL	Boring terminated at 10' bgs
10						

Total Borehole Depth: 10 bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-162-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/27/2016
Weather	: 80s, Sunny
Northing (US ft)	: 569,622.76
Easting (US ft)	: 1,460,963.71

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		-	B22-162-SB-1	(0-2') Gravelly SILT, loose, brown and gray, dry, non plastic, non cohesive	ML	
		59.0				
	80	43.0		(2-2.5') CLAY, very soft, pale olive, very moist, cohesive, medium plasticity	CL	
		53.0		(2.5-6.0') CLAY, firm to very soft, pale olive, moist to very moist, cohesive, high plasticity	CH	
		102	B22-162-SB-5			
5		84.0				
		52.4		(6-8') CLAY, firm, light gray and olive yellow, moist, cohesive, high plasticity	CH	Strong odor
	100	46.6				Wet @ 8' bgs
		238		(8-15') CLAY, soft to very soft, light gray and olive yellow, very moist to wet, cohesive, high plasticity	CH	
		80.7				
10		1.1				
		0.8				
	100	0.8				
		0.8				
		0.9				
15						Boring terminated at 15' bgs

Total Borehole Depth: 15' bgs.

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ARM Group Inc.
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Boring ID: B22-163-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/27/2016
Weather	: 80s, Sunny
Northing (US ft)	: 569,621.04
Easting (US ft)	: 1,460,987.39

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0						
		-		(0-1') Concrete, loose, white, dry, non plastic, non cohesive	-	
		-	B22-163-SB-1	(1-4') Slag GRAVEL, loose, fine, brown, wet, non plastic, non cohesive		
	50	113			GP	
		169				
		86.1	B22-163-SB-5	(4-5') CLAY with SAND, soft, olive brown, very moist, cohesive, high plasticity	CH	
5				(5-8') CLAY with SAND, firm, olive brown, moist to dry, cohesive, high plasticity		
		-				
		17.8			CH	
	100	35.0				
				(8-10') CLAY with SAND, very soft to firm, olive brown, wet, cohesive, high plasticity		Wet @ 8' bgs
		70.7			CH	
		66.4				Boring terminated at 10' bgs
10						

Total Borehole Depth: 10' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-164-SB

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/27/2016
Weather	: 80s, Sunny
Northing (US ft)	: 569,559.56
Easting (US ft)	: 1,461,110.14

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0						
		-		(0-1') Concrete, loose, white, dry, non plastic, non cohesive	-	
		-	B22-164-SB-1	(1-2.5') Clayey SILT, soft, black, moist, cohesive, low plasticity	ML	
	70	47.9		(2.5-7') CLAY, soft to firm, pale green and light olive brown, moist, cohesive, high plasticity		
		19.8				
		1.9			CH	
5		103	B22-164-SB-6			
		92.5				Wet @ 7' bgs
	100	144		(7-8.5') CLAY, very soft, grayish green to brown, wet, cohesive, high plasticity	CH	
		21.4		(8.5-10') CLAY, very firm, light greenish gray, moist, cohesive, high plasticity	CH	
		0.4				Boring terminated at 10' bgs
10						

Total Borehole Depth: 10' bgs.

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ARM Group Inc.
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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/27/2016
Weather	: 80s, Sunny
Northing (US ft)	: 569,550.63
Easting (US ft)	: 1,461,131.23

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		1.3	B22-165-SB-1	(0-0.7') SAND, loose, very pale brown, dry, non plastic, non cohesive	SP	No recovery from 0-0.3'
		50.1		(0.7-5') Silty CLAY, soft, greenish gray, moist, cohesive, low plasticity	CL	
	93	48.5				
		43.2	B22-165-SB-4			
		29.3				
5		-		(5-8') CLAY, soft to firm, greenish gray, moist, cohesive, low to medium plasticity	CL/CH	
		-				
	70	18.9				
		1.0		(8-9') CLAY, very soft, greenish gray, wet, cohesive, high plasticity	CH	Wet @ 8' bgs
		12.3		(9-10') CLAY, firm, greenish gray, moist, cohesive, high plasticity	CH	
10						Boring terminated at 10' bgs

Total Borehole Depth: 10' bgs.

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ARM Group Inc.
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Boring ID: B22-166-SB

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Client	: EnviroAnalytics Group	Date	: 5/19/2016
ARM Project No.	: 150300M-20-3	Weather	: 60s, Sunny
Project Description	: Sparrows Point - Parcel B22		
Site Location	: Sparrows Point, MD		
ARM Representative	: L. Perrin		
Checked by	: P. Vogel, P.G.	Northing (US ft)	: 571,369.53
Drilling Company	: Green Services, Inc	Easting (US ft)	: 1,461,878.58
Driller	: Kevin Pumphrey		
Drilling Equipment	: Geoprobe 7822DT		

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0						
	70	-	B22-166-SB-1	(0-7.5') Sandy SILT with slag GRAVEL, loose, brown and light bluish gray, dry, non plastic, non cohesive	ML	
		0.8				
		15.4				
		15.8	B22-166-SB-4			
		1.4				
5		-				
		-				
	50	2.5		(7.5-10') Slag GRAVEL and SAND with brick, loose, dark olive brown, moist to wet, non plastic, non cohesive	GP/SP	Wet at 8' bgs
		6.5				
		15.4				Boring terminated at 10' bgs
10						

Total Borehole Depth: 10' bgs.

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ARM Group Inc.
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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: C. Burger, P.G.
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/18/2016
Weather	: 50s, Cloudy
Northing (US ft)	: 570,309.28
Easting (US ft)	: 1,461,779.48

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		14.1	B22-167-SB-1	(0-3') Slag GRAVEL with SILT and SAND, tan, dry, non cohesive	GM	
		4.2				
	100	29.7				Wet at 3' bgs (perched)
		1.9		(3-5') Silty to sandy CLAY, stiff, olive, dry, low to medium plasticity, brown mottling	CL	
		0.6	B22-167-SB-5			
5		0.4		(5-20') Silty to sandy CLAY, soft, olive gray, dry, cohesive, high plasticty, browm mottling		
		1.5				
	100	0.4				
		0.2				
		0.1	B22-167-SB-10			
10		0.2				
		0.1				
	67	0.1			CH	
		0.1				
		0.1				
15		0.1				
		0.1				
		0.1				
	100	0.1				
		0.1				
		0.1				
20						Boring terminated at 20' bgs

Total Borehole Depth: 20' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: J. Yaple, P.G.
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Kevin Pumphrey
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/26/2016
Weather	: 70s, Sunny
Northing (US ft)	: 569,885.52
Easting (US ft)	: 1,461,822.95

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0						
		-		(0-1') Concrete, dry, hard	-	
		90.8	B22-168-SB-1	(1-2') Slag GRAVEL, loose, coarse, dark gray-black, wet, non plastic, non cohesive	GP	
	90	22.7		(2-3') Silty SAND, dense, brown, moist, fine grained, non plastic, non cohesive	SM	
		16.8	B22-168-SB-4	(3-6.5') CLAY, medium stiff, tan with orange mottling, moist, cohesive, medium plasticity		
		10.8			CL	
5		-				
		14.5		(6.5-10') CLAY, soft, tan with orange mottled laminations, wet, medium plasticity, cohesive		Wet @ 6.5' bgs
	90	2.3				
		7.8			CL	
		6.5				Boring terminated at 10' bgs
10						

Total Borehole Depth: 10' bgs.

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ARM Group Inc.
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Client	: EnviroAnalytics Group	Date	: 5/26/2016
ARM Project No.	: 150300M-20-3	Weather	: 70s, Sunny
Project Description	: Sparrows Point - Parcel B22		
Site Location	: Sparrows Point, MD		
ARM Representative	: J. Yaple, P.G.		
Checked by	: P. Vogel, P.G.	Northing (US ft)	: 569,879.02
Drilling Company	: Green Services, Inc	Easting (US ft)	: 1,462,217.97
Driller	: Kevin Pumphrey		
Drilling Equipment	: Geoprobe 7822DT		

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0						
		-		(0-2') Concrete and subbase, hard, dry	-	
		10.6				
	80	37.6	B22-169-SB-1	(2-3') Well graded SAND and slag GRAVEL, loose, gray-light blue-tan, fine sand to coarse gravel, dry to 2.5' then wet to 3', non plastic, non cohesive	GW-SW	
		28.3	B22-169-SB-4	(3-7') SILT, very stiff, light tan with orange mottles, moist, non plastic, non cohesive	ML	
		1.6				
5		-				
		11.0				
	90	0.1		(7-8') SILT, soft, tan, wet, cohesive, low plasticity	ML	Wet @ 7' bgs
		-		(8-9') SAND with SILT, loose, fine to medium, tan, wet, non plastic, non cohesive	SM	
		0.1		(9-10') SILT, stiff, tan with orange mottles, moist, cohesive, non plastic	ML	
10						Boring terminated at 10' bgs

Total Borehole Depth: 10' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: J. Yaple, P.G.
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Kevin Pumphrey
Drilling Equipment	: Geoprobe 7822DT

Date	: 6/1/2016
Weather	: 80s, Sunny
Northing (US ft)	: 568,461.74
Easting (US ft)	: 1,461,920.58

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		3.4	B22-170-SB-1	(0-2') Well graded SAND and GRAVEL, loose, tan to dark brown to blue-gray, dry, non plastic, non cohesive	SW/GW	
		8.8				
	100	30.0		(2-7') Gravelly SILT, some large gravel fragments, stiff, gray-green to dark brown, moist, non plastic, cohesive		
		36.6	B22-170-SB-4			
		3.7			ML	
5		-				
		3.2				
	83	6.1		(7-9') CLAY, soft, dark gray-green, wet, cohesive, high plasticity	CH	Wet @ 7' bgs
		4.1				
		0.6		(9-10') CLAY, medium stiff, tan with orange brown mottles, moist, cohesive, high plasticity	CH	Boring terminated at 10' bgs
10						

Total Borehole Depth: 10' bgs.

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ARM Group Inc.
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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Kevin Pumphrey
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/16/2016
Weather	: 50s, cloudy
Northing (US ft)	: 567,694.00
Easting (US ft)	: 1,461,201.02

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		0.4	B22-171-SB-1	(0-0.2') ORGANIC SOIL, soft, medium brown, dry, non plastic, non cohesive	OL	
		0.4		(0.2-3.5') Sandy SILT, soft, medium brown, dry, non plastic, non cohesive	ML	
	100	0.9				
		0.9		(3.5-5') Silty SAND, loose, dark brown, dry to moist at bottom, non plastic, non cohesive	SP	
		1.1	B22-171-SB-5			
5		-		(5-8') Gravelly SAND, loose, dark brown, very moist, non plastic, non cohesive	SP	
		-				
	50	-				
		0.0		(8-10') CLAY, firm, gray-brown grading to light orange and tan, moist, cohesive, medium plasticity	CL	
		0.0	B22-171-SB-10			
10		0.4		(10-15') CLAY, soft, light beige and orange mottled, moist, cohesive, medium plasticity	CL	
		0.2				
	100	0.6				
		0.0				
		0.1				
15		0.0		(15-19') CLAY with trace sand, soft, light beige and orange mottled, very moist, cohesive, high plasticity	CH	
		0.0				
	100	0.0				
		0.0				
		0.0		(19-20') CLAY, very soft, dark gray, very moist, cohesive, high plasticity	CH	Very sticky Boring terminated at 20' bgs
20						

Total Borehole Depth: 20' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

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Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Kevin Pumphrey
Drilling Equipment	: Geoprobe 7822DT

Date	: 5/16/2016
Weather	: 50s, Sunny
Northing (US ft)	: 568,292.24
Easting (US ft)	: 1,462,215.49

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		-	B22-172-SB-1	(0-2') Gravelly SILT, soft, dark brown, dry, non plastic, non cohesive	ML	
		-				
				(2-2.5') Concrete, loose, light gray, dry, non plastic, non cohesive	GP	
	73	2.5		(2.5-4.2') Sandy CLAY,soft, tan, wet, medium plasticity, cohesive	CL	
		3.8				
		57.0	B22-172-SB-5	(4.2-5') Clayey SAND, medium dense, tan, moist, non plastic, cohesive	SP/SC	
5				(5-9.5') Sandy CLAY, soft, tan, moist, medium plasticity, cohesive		Petroleum odor
		-				
		-			CL	
	50	-				
		15.3				
		3.8				Wet 9.5' bgs
				(9.5-10') SAND, loose, tan, wet, non plastic, non cohesive	SP	
10						Boring terminated at 10' bgs

Total Borehole Depth: 10' bgs.

07-07-2016 P:\EnviroAnalytics Group\150300M EAG_Sparrows Point Area B\Documents\Parcel B22\Boring Logs\2_Bor Logs\B22-172-SB.bor

ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-173-SB

(page 1 of 1)

Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 6/2/2016
Weather	: 80s, Cloudy
Northing (US ft)	: 568,331.72
Easting (US ft)	: 1,461,018.26

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0		-	B22-173-SB-1	(0-2.5') SILT grading to Sandy SILT, soft, brown, dry, non plastic, non cohesive	ML	
		0.1				
	78	1.5		(2.5-4') SAND with Slag GRAVEL, loose, brown, dry, non plastic, non cohesive	SP	
		0.8	B22-173-SB-4			Iron staining
		0.6		(4-10') Slag GRAVEL and SAND, loose, white, moist to wet, non plastic, non cohesive	GP/SP	
5		-				
		-				Wet at 6.5' bgs
	70	0.5				
		0.4				Green stained slag
		-				
10						Boring terminated at 10' bgs

Total Borehole Depth: 10' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-174-SB

(page 1 of 1)

Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: J. Yaple, P.G.
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Kevin Dumphrey
Drilling Equipment	: Geoprobe 7822DT

Date	: 6/3/2016
Weather	: 78F, Mostly Cloudy
Northing (US ft)	: 571,259.37
Easting (US ft)	: 1,461,289.11

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0						
	77	-	B22-174-SB-1	(0-5') Well graded silty SAND and GRAVEL, loose, light tan, light gray, red, dark brown, dry to 4', moist 4-5', non cohesive,		
		0.4				
		4.3		Clay lense 2.8-3.0'	SM-GW	
		0.2	B22-174-SB-4			
		1.3				
5				(5-8') CLAY with trace GRAVEL, soft, brown and gray-green, wet, high plasticity, cohesive		Wet at 5'
		-				
		<0.2			CH	
	100	0.5				
				(8-10') CLAY, soft, gray-green, wet, high plasticity, cohesive, wood fragments		
		0.2			CH	
		0.2				Boring terminated at 10' bgs
10						

Total Borehole Depth: 10' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-175-SB

(page 1 of 1)

Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: L. Perrin
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Don Marchese
Drilling Equipment	: Geoprobe 7822DT

Date	: 6/3/2016
Weather	: 80s, Cloudy
Northing (US ft)	: 568,443.26
Easting (US ft)	: 1,461,545.00

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0						
		-	B22-175-SB-1	(0-2.5') Silty SAND and slag GRAVEL, soft, gray and brown, dry, non plastic, non cohesive	ML/GM	
		41.3				
	80	21.1		(2.5-3) Slag GRAVEL, loose, gray, dry, non plastic, non cohesive	GP	
				(3-3.5') CLAY, trace gravel, very soft, brown, very moist to wet, non plastic, non cohesive	CL	
		15.3	B22-175-SB-4	(3.5-5') Slag and brick GRAVEL and SAND, loose, yellow, gray and black, dry, non cohesive, non plastic	GP/SP	
		1.1				
5		-				Wet at 5.8' bgs
				(5.8-8.5') Slag GRAVEL and SAND, loose, light gray, wet, non plastic, non cohesive	GP/SP	
		15.5				
	93	20.3				
		9.8		(8.5-9.5') SILT, hard, gray, dry, cohesive, low plasticity	ML	
		8.4		(9.5-9.9') Brick GRAVEL, yellow, dry, loose, non cohesive, high plasticity	GP	Wet at 9.8' bgs
10				(9.9-10') CLAY with trace SAND, very soft, black, wet, high plasticity, cohesive	CH	Boring terminated at 10' bgs;

Total Borehole Depth: 10' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-176-SB

(page 1 of 1)

Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: B. Gehman
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Kevin Pumphrey
Drilling Equipment	: Geoprobe 7822DT

Date	: 6/6/2016
Weather	: 80s, Sunny, Windy
Northing (US ft)	: 570,733.53
Easting (US ft)	: 1,461,179.94

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0						
		-	B22-176-SB-1	(0-2') Concrete and cinders, white, dry	-	
		0.5				
	80	0.7		(2-5') GRAVEL with SAND and some slag, loose, gray to dark brown, dry to slightly moist, Slag is greenish gray.	SW/GW	
		0.0				
		0.0				
5				(5-9') SAND with GRAVEL, few cinder ballast gravels, dark brown, moist to wet at 8.5', non plastic, non cohesive		
		-				
		-			SW/GW	
	60	1.3	B22-176-SB-8			
		0.7				Wet at 8.5' bgs
		-		(9-9.5') SAND, fine grained, dark brown, wet, non plastic, non cohesive	SP	
				(9.5-10.0') GRAVEL with dark brown matrix, wet, non plastic, non cohesive	GW	Boring terminated at 10' bgs
10						

Total Borehole Depth: 10' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-177-SB

(page 1 of 1)

Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: B. Gehman
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Kevin Pumphrey
Drilling Equipment	: Geoprobe 7822DT

Date	: 6/6/2016
Weather	: 70s, Sunny, Windy
Northing (US ft)	: 568,573.79
Easting (US ft)	: 1,462,348.17

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0						
		1.2	B22-177-SB-1	(0-2.0') SILT with GRAVEL, dark brown, dry, non plastic, non cohesive	ML/GW	
		0.8				
	90	0.6		(2-3') GRAVEL with SAND and some clay, white to brown, slightly moist, non plastic, non cohesive	GW	
		0		(3-5') CLAY, soft to dense, brown to dark gray, moist, sticky, medium plasticity, cohesive	CL	
		0	B22-177-SB-5			
5		0		(5-7.5') CLAY, very soft, gray to greenish gray, moist to wet, sticky, medium plasticity, cohesive, some plant detritus	CL	Wet at 5'
	100	0.3				
		0				Boring refusal at 7.5'
10						

Total Borehole Depth: 7.5' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-178-SB

(page 1 of 1)

Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: J. Yaple, P.G.
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Kevin Pumphrey
Drilling Equipment	: Geoprobe 7822DT

Date	: 6/3/2016
Weather	: 75F, Cloudy, Light Rain
Northing (US ft)	: 571,494.17
Easting (US ft)	: 1,461,939.54

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0						
		-	B22-178-SB-1	(0-10') Well graded SAND and GRAVEL with traces silt and slag, medium dense, dark brown, dry to 7', sub rounded, non plastic, non cohesive		
		26.0				
	93	4.4				
		14.5				
		0.8				
5					SW/GW	
		-	B22-178-SB-6			
		24.5				
						Wet at 7' bgs
	87	10.5				
		10.4				
		9.5				
10						Boring terminated at 10' bgs

Total Borehole Depth: 10' bgs.

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ARM Group Inc.
Earth Resource Engineers and Consultants

Boring ID: B22-179-SB

(page 1 of 1)

Client	: EnviroAnalytics Group
ARM Project No.	: 150300M-20-3
Project Description	: Sparrows Point - Parcel B22
Site Location	: Sparrows Point, MD
ARM Representative	: B. Gehman
Checked by	: P. Vogel, P.G.
Drilling Company	: Green Services, Inc
Driller	: Kevin Pumphrey
Drilling Equipment	: Geoprobe 7822DT

Date	: 6/6/2016
Weather	: 80s, Sunny, Windy
Northing (US ft)	: 568,362.32
Easting (US ft)	: 1,462,045.27

Depth (ft.)	% Recovery	PID Reading (PPM)	Sample No/Interval	DESCRIPTION	USCS	REMARKS
0						
		-	B22-179-SB-1	(0-1.0') Well graded slag GRAVEL with SILT, loose, light gray, dry, non plastic, non cohesive	GW-GM	
		0.6		(1-4') SAND and GRAVEL with some slag, increasing gravel size, loose, dark brown, dry, non plastic, non cohesive Coarser gravel between 2'-4'		
	90	0.1			SW/GW	
		0.3				
		1.0		(4-7') CLAY, stiff, gray to dark gray, high plasticity, cohesive		
5		0.3	B22-179-SB-6		CH	
	90	3.2				
		2.2		(7-9') Fine grained SAND, orange to brown, wet, moderately cohesive, non plastic		Wet at 7' bgs
		0.1			SP	
		0.0		(9-10') Sandy CLAY, orangish brown, very moist, medium plasticity, cohesive	CL	
10						Boring terminated at 10' bgs

Total Borehole Depth: 10' bgs.

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APPENDIX C

PID CALIBRATION LOG

PROJECT NAME: Area B Parcel B22	SAMPLER NAME: L. Perrin, N. Kurtz, J. Yaple, B. Gehman, C. Burger
PROJECT NUMBER: 150300M-20-3	DATE: 6/28/2016 PAGE 1 of 1

DATE/TIME	PID SERIAL #	FRESH AIR CAL	STANDARD	STANDARD CONCENTRATION	METER READING	COMMENTS
5/16/2016 8:50	R3617	0.0	Isobutylene	100 ppm	100.0	NK
5/17/2016 7:50	R3617	0.0	Isobutylene	100 ppm	100.0	NK
5/18/2016 8:30	R3617	0.0	Isobutylene	100 ppm	100.0	LP
5/18/2016 8:35	592-913262	0.0	Isobutylene	100 ppm	99.7	LP
5/19/2016 8:10	592-913262	0.0	Isobutylene	100 ppm	104.7	LP
5/19/2016 8:15	R3617	0.0	Isobutylene	100 ppm	99.9	LP
5/20/2016 8:10	R3617	0.0	Isobutylene	100 ppm	98.9	LP
5/20/2016 8:15	592-913262	0.0	Isobutylene	100 ppm	98.9	CAB
5/23/2016 8:00	R3617	0.0	Isobutylene	100 ppm	99.8	LP
5/24/2016 7:50	R3617	0.0	Isobutylene	100 ppm	100.0	LP
5/25/2016 8:15	592-913262	0.0	Isobutylene	100 ppm	99.7	JY
5/25/2016 8:20	R3617	0.0	Isobutylene	100 ppm	100.0	LP
5/26/2016 8:00	592-913262	0.0	Isobutylene	100 ppm	100.0	JY
5/26/2016 8:00	R3617	0.0	Isobutylene	100 ppm	99.9	LP
5/27/2016 8:03	592-913262	0.0	Isobutylene	100 ppm	100.0	JY
5/27/2016 8:00	R3617	0.0	Isobutylene	100 ppm	99.9	LP
5/31/2016 8:10	592-913262	0.0	Isobutylene	100 ppm	100.0	JY
5/31/2016 8:15	R3617	0.0	Isobutylene	100 ppm	100.0	LP
6/1/2016 7:54	592-913262	0.0	Isobutylene	100 ppm	99.5	JY
6/1/2016 7:55	R3617	0.0	Isobutylene	100 ppm	100.0	LP
6/2/2016 7:30	R3617	0.0	Isobutylene	100 ppm	100.0	LP
6/2/2016 7:32	592-913262	0.0	Isobutylene	100 ppm	100.4	JY
6/3/2016 7:30	R3617	0.0	Isobutylene	100 ppm	103.0	LP
6/6/2016 8:20	R3617	0.0	Isobutylene	100 ppm	100.0	LP
6/6/2016 10:45	592-913262	0.0	Isobutylene	100 ppm	100.0	NK

APPENDIX D

EnviroAnalytics Group

Parcel B22 - IDW Drum Log
Phase II Investigation

Drum ID	Designation	Activity/Phase	Contents	Open Date
28-Hexane-10/13/15-B	Hazardous	Area B	Hexane	10/13/2015
493-Soil-5/16/16-B22	Non-haz.	Parcel B22	Soil	5/16/2016
494-Liners-5/16/16-B22	Non-haz.	Parcel B22	Liners	5/16/2016
495-PPE-5/16/16-B22	Non-haz.	Parcel B22	PPE	5/16/2016
496-Nitric Acid-5/16/16-B22	Non-haz.	Parcel B22	Nitric Acid	5/16/2016
497-Decon Water-5/16/16-B22	Non-haz.	Parcel B22	Decon Water	5/16/2016
498-PPE-5/18/16-B22	Non-haz.	Parcel B22	PPE	5/18/2016
499-Soil-5/18/16-B22	Non-haz.	Parcel B22	Soil	5/18/2016
500-Soil-5/20/16-B22	Non-haz.	Parcel B22	Soil	5/20/2016
501-Soil-5/19/16-B22	Non-haz.	Parcel B22	Soil	5/19/2016
502-Liners-5/19/16-B22	Non-haz.	Parcel B22	Liners	5/19/2016
505-PPE-5/24/16-B22	Non-haz.	Parcel B22	PPE	5/24/2016
506-Liners-5/26/16-B22	Non-haz.	Parcel B22	Liners	5/26/2016
507-Liners-5/26/16-B22	Non-haz.	Parcel B22	Liners	5/26/2016
508-Soil-5/26/16-B22	Non-haz.	Parcel B22	Soil	5/26/2016
509-Soil-5/26/16-B22	Non-haz.	Parcel B22	Soil	5/26/2016
510-Soil-5/31/16-B22	Non-haz.	Parcel B22	Soil	5/31/2016
511-Soil-5/31/16-B22	Non-haz.	Parcel B22	Soil	5/31/2016
512-Soil-5/31/16-B22	Non-haz.	Parcel B22	Soil	5/31/2016
513-PPE-5/31/16-B22	Non-haz.	Parcel B22	PPE	5/31/2016
514-Soil-6/1/16-B22	Non-haz.	Parcel B22	Soil	6/1/2016
515-Soil-6/2/16-B22	Non-haz.	Parcel B22	Soil	6/2/2016
516-PPE-6/2/16-B22	Non-haz.	Parcel B22	PPE	6/2/2016
517-Liners-6/2/16-B22	Non-haz.	Parcel B22	Liners	6/2/2016

Drum ID	Designation	Activity/Phase	Contents	Open Date
518-Liners-6/2/16-B22	Non-haz.	Parcel B22	Liners	6/2/2016
519-Liners-6/2/16-B22	Non-haz.	Parcel B22	Liners	6/2/2016
520-Soil-6/6/16-B22	Non-haz.	Parcel B22	Soil	6/6/2016

APPENDIX E

(Electronic Attachment)

APPENDIX F

(Electronic Attachment)

APPENDIX G

QA/QC Tracking Log - Set 1

Date:		Sample IDs		
5/16/2016	1)	B22-141-SB-1		
	2)	B22-141-SB-5		
	3)	B22-140-SB-1		
	4)	B22-140-SB-5		
	5)	B22-140-SB-10		
	6)	B22-139-SB-1		
	7)	B22-139-SB-4	Duplicate:	B22-139-SB-4
	8)	B22-172-SB-1	Date:	5/16/2016
	9)	B22-172-SB-5	MS/MSD:	B22-138-SB-8
	10)	B22-138-SB-1	Date:	5/16/2016
	11)	B22-138-SB-8	Field Blank:	
	12)	B22-138-SB-10	Date:	5/16/2016
	13)	B22-142-SB-1	Eq. Blank:	
	14)	B22-142-SB-5	Date:	5/16/2016
	15)	B22-137-SB-1		
	16)	B22-137-SB-8		
	17)	B22-143-SB-1		
	18)	B22-143-SB-5		
	19)	B22-143-SB-10		
5/17/2016	20)	B22-171-SB-1		

Date:		Sample IDs		
5/18/2016	1)	B22-043-SB-4		
	2)	B22-043-SB-10		
	3)	B22-167-SB-1		
	4)	B22-167-SB-5		
	5)	B22-167-SB-10		
	6)	B22-126-SB-1		
	7)	B22-126-SB-6	Duplicate:	B22-125-SB-4
	8)	B22-126-SB-10	Date:	5/18/2016
	9)	B22-125-SB-1	MS/MSD:	B22-127-SB-7
	10)	B22-125-SB-4	Date:	5/18/2016
	11)	B22-125-SB-10	Field Blank:	
	12)	B22-127-SB-1	Date:	5/18/2016
	13)	B22-127-SB-7	Eq. Blank:	
	14)	B22-127-SB-10	Date:	5/18/2016
	15)	B22-117-SB-1		
	16)	B22-117-SB-4		
	17)	B22-117-SB-10		
	18)	B22-118-SB-1		
	19)	B22-118-SB-9		
	20)	B22-118-SB-10		

5/17/2016	1)	B22-171-SB-5		
	2)	B22-171-SB-10		
	3)	B22-131-SB-1		
	4)	B22-131-SB-5		
	5)	B22-132-SB-1		
	6)	B22-132-SB-5		
	7)	B22-041-SB-1	Duplicate:	B22-078-SB-7.5
	8)	B22-041-SB-5	Date:	5/17/2016
	9)	B22-041-SB-10	MS/MSD:	B22-131-SB-5
	10)	B22-048-SB-1	Date:	5/17/2016
	11)	B22-048-SB-5	Field Blank:	
	12)	B22-048-SB-10	Date:	5/17/2016
	13)	B22-078-SB-1	Eq. Blank:	
	14)	B22-078-SB-7.5	Date:	5/17/2016
	15)	B22-073-SB-1		
	16)	B22-073-SB-5		
5/18/2016	17)	B22-048-SB-1		
	18)	B22-048-SB-5		
	19)	B22-048-SB-10		
	20)	B22-043-SB-1		

5/18/2016	1)	B22-062-SB-1		
	2)	B22-062-SB-4		
	3)	B22-071-SB-1		
	4)	B22-071-SB-4		
	5)	B22-100-SB-1		
	6)	B22-100-SB-6		
	7)	B22-100-SB-10	Duplicate:	B22-152-SB-6
	8)	B22-158-SB-1	Date:	5/19/2016
	9)	B22-158-SB-8	MS/MSD:	B22-031-SB-4
	10)	B22-158-SB-10	Date:	5/19/2016
5/19/2016	11)	B22-099-SB-1	Field Blank:	
	12)	B22-099-SB-7	Date:	5/18/2016
	13)	B22-099-SB-9.5	Eq. Blank:	
	14)	B22-152-SB-1	Date:	5/18/2016
	15)	B22-152-SB-6		
	16)	B22-031-SB-1		
	17)	B22-031-SB-4		
	18)	B22-031-SB-10		
	19)	B22-148-SB-1		
	20)	B22-148-SB-6		

Trip Blanks: 5/16/16 (2), 5/17/16 (2), 5/18/16 (3), 5/19/16 (2)

QA/QC Tracking Log - Set 1

Date:		Sample IDs		
5/19/2016	1)	B22-148-SB-10		
	2)	B22-149-SB-1		
	3)	B22-149-SB-8		
	4)	B22-121-SB-1		
	5)	B22-121-SB-9		
	6)	B22-121-SB-10		
	7)	B22-120-SB-1	Duplicate:	B22-114-SB-8
	8)	B22-120-SB-8	Date:	5/19/2016
	9)	B22-114-SB-1	MS/MSD:	B22-113-SB-4
	10)	B22-114-SB-8	Date:	5/20/2016
	11)	B22-114-SB-10	Field Blank:	1
	12)	B22-116-SB-1	Date:	5/19/2016
	13)	B22-116-SB-8.5	Eq. Blank:	
	14)	B22-116-SB-10	Date:	5/19/2016
5/20/2016	15)	B22-112-SB-1		
	16)	B22-112-SB-4		
	17)	B22-112-SB-10		
	18)	B22-113-SB-1		
	19)	B22-113-SB-4		
	20)	B22-157-SB-1		

Date:		Sample IDs		
5/26/2016	1)	B22-013-SB-1		
	2)	B22-013-SB-4		
	3)	B22-014-SB-1		
	4)	B22-014-SB-5		
	5)	B22-014-SB-10		
	6)	B22-036-SB-1		
	7)	B22-036-SB-4	Duplicate:	B22-053-SB-8
	8)	B22-035-SB-1	Date:	5/26/2016
	9)	B22-054-SB-1	MS/MSD:	B22-054-SB-4
	10)	B22-054-SB-4	Date:	5/26/2016
	11)	B22-054-SB-10	Field Blank:	
	12)	B22-053-SB-1	Date:	5/26/2016
	13)	B22-053-SB-8	Eq. Blank:	
	14)	B22-053-SB-10	Date:	5/27/2016
5/27/2016	15)	B22-037-SB-1		
	16)	B22-038-SB-1		
	17)	B22-165-SB-1		
	18)	B22-165-SB-4		
	19)	B22-164-SB-1		
	20)	B22-164-SB-6		

5/20/2016	1)	B22-156-SB-1		
	2)	B22-156-SB-4.5		
	3)	B22-109-SB-1		
	4)	B22-109-SB-4.5		
	5)	B22-110-SB-1		
	6)	B22-110-SB-4		
	7)	B22-101-SB-1	Duplicate:	B22-156-SB-4.5
	8)	B22-101-SB-5	Date:	5/20/2016
	9)	B22-102-SB-1	MS/MSD:	B22-101-SB-5
	10)	B22-102-SB-5	Date:	5/20/2016
5/25/2016	11)	B22-034-SB-1	Field Blank:	
	12)	B22-111-SB-1	Date:	5/20/2016
	13)	B22-111-SB-8	Eq. Blank:	
	14)	B22-106-SB-1	Date:	5/20/2016
	15)	B22-106-SB-8.5		
5/26/2016	16)	B22-107-SB-1		
	17)	B22-107-SB-5		
	18)	B22-107-SB-10		
	19)	B22-108-SB-1		
	20)	B22-108-SB-5		

5/27/2016	1)	B22-163-SB-1		
	2)	B22-163-SB-5		
	3)	B22-162-SB-1		
	4)	B22-162-SB-5		
	5)	B22-094-SB-1		
	6)	B22-094-SB-4		
	7)	B22-090-SB-1	Duplicate:	B22-090-SB-1
	8)	B22-090-SB-5	Date:	5/27/2016
	9)	B22-065-SB-1	MS/MSD:	B22-058-SB-7
	10)	B22-065-SB-7	Date:	5/31/2016
	11)	B22-065-SB-10	Field Blank:	
5/31/2016	12)	B22-057-SB-1	Date:	5/27/2016
	13)	B22-058-SB-1	Eq. Blank:	
	14)	B22-058-SB-7	Date:	5/27/2016
	15)	B22-058-SB-10		
	16)	B22-064-SB-1		
	17)	B22-064-SB-7		
	18)	B22-104-SB-1		
	19)	B22-104-SB-4		
	20)	B22-105-SB-1		

Trip Blanks: 5/19/16 (2), 5/20/16 (2), 5/25/16 (1), 5/26/16 (1), 5/27/16 (2), 5/31/16 (2)

QA/QC Tracking Log - Set 1

Date:		Sample IDs		
5/31/2016	1)	B22-105-SB-4		
	2)	B22-105-SB-10		
	3)	B22-103-SB-1		
	4)	B22-103-SB-4		
	5)	B22-021-SB-1		
	6)	B22-021-SB-4		
	7)	B22-022-SB-1	Duplicate:	B22-103-SB-4
	8)	B22-022-SB-7	Date:	5/31/2016
	9)	B22-010-SB-1	MS/MSD:	B22-146-SB-5
	10)	B22-010-SB-4	Date:	6/1/2016
	11)	B22-009-SB-1	Field Blank:	
	12)	B22-009-SB-6	Date:	5/31/2016
6/1/2016	13)	B22-074-SB-1	Eq. Blank:	
	14)	B22-146-SB-1	Date:	5/31/2016
	15)	B22-146-SB-5		
	16)	B22-147-SB-1		
	17)	B22-147-SB-5.5		
	18)	B22-151-SB-1		
	19)	B22-150-SB-1		
	20)	B22-150-SB-5		

Date:		Sample IDs		
6/2/2016	1)	B22-093-SB-1		
	2)	B22-093-SB-5		
	3)	B22-093-SB-10		
	4)	B22-077-SB-1		
	5)	B22-077-SB-5		
	6)	B22-056-SB-1		
	7)	B22-056-SB-5	Duplicate:	B22-077-SB-1
	8)	B22-055-SB-1	Date:	6/2/2016
	9)	B22-055-SB-8.5	MS/MSD:	B22-093-SB-5
6/3/2016	10)	B22-065-SB-1	Date:	6/2/2016
	11)	B22-065-SB-7	Field Blank:	
	12)	B22-065-SB-10	Date:	6/2/2016
	13)	B22-038-SB-1	Eq. Blank:	
	14)	B22-165-SB-1	Date:	6/2/2016
	15)	B22-165-SB-4		
	16)	B22-164-SB-1		
	17)	B22-164-SB-6		
	18)	B22-094-SB-1		
	19)	B22-094-SB-4		
	20)	B22-090-SB-1		

6/1/2016	1)	B22-160-SB-1		
	2)	B22-161-SB-1		
	3)	B22-161-SB-4.5		
	4)	B22-122-SB-1		
	5)	B22-123-SB-1		
	6)	B22-124-SB-1		
	7)	B22-124-SB-4	Duplicate:	B22-124-SB-4
	8)	B22-072-SB-1	Date:	6/1/2016
6/2/2016	9)	B22-061-SB-1	MS/MSD:	B22-050-SB-4.5
	10)	B22-061-SB-5	Date:	6/2/2016
	11)	B22-173-SB-1	Field Blank:	
	12)	B22-173-SB-4	Date:	6/1/2016
	13)	B22-049-SB-1	Eq. Blank:	
	14)	B22-049-SB-5	Date:	6/1/2016
	15)	B22-050-SB-1		
	16)	B22-050-SB-4.5		
	17)	B22-091-SB-1		
	18)	B22-091-SB-4		
	19)	B22-092-SB-1		
	20)	B22-092-SB-4		

6/3/2016	1)	B22-090-SB-5		
	2)	B22-163-SB-1		
	3)	B22-163-SB-5		
	4)	B22-162-SB-1		
	5)	B22-162-SB-5		
	6)	B22-095-SB-1		
	7)	B22-095-SB-6	Duplicate:	B22-175-SB-1
	8)	B22-175-SB-1	Date:	6/3/2016
	9)	B22-175-SB-4	MS/MSD:	B22-095-SB-6
6/6/2016	10)	B22-177-SB-1	Date:	6/3/2016
	11)	B22-177-SB-5	Field Blank:	
	12)	B22-179-SB-1	Date:	6/3/2016
	13)	B22-179-SB-6	Eq. Blank:	
	14)	B22-176-SB-1	Date:	6/3/2016
	15)	B22-176-SB-8		
	16)			
	17)			
	18)			
	19)			
	20)			

Trip Blanks: 5/31/16 (2), 6/1/16 (2), 6/2/16 (2), 6/3/16 (2), 6/6/16 (1)

QA/QC Tracking Log - Set 2

Date:		Sample IDs	
5/19/2016	1)	B22-159-SB-1	
	2)	B22-153-SB-1	
	3)	B22-153-SB-4	
	4)	B22-119-SB-1	
	5)	B22-119-SB-9	
	6)	B22-119-SB-10	
	7)	B22-115-SB-1	Duplicate: B22-166-SB-4
	8)	B22-115-SB-5	Date: 5/19/2016
	9)	B22-166-SB-1	MS/MSD: B22-119-SB-9
	10)	B22-166-SB-4	Date: 5/19/2016
	11)	B22-012-SB-1	Field Blank:
	12)	B22-012-SB-4	Date: 5/19/2016
5/20/2016	13)	B22-011-SB-1	Eq. Blank:
	14)	B22-011-SB-4	Date: 5/19/2016
	15)	B22-155-SB-1	
	16)	B22-155-SB-5	
	17)	B22-154-SB-1	
	18)	B22-154-SB-5	
	19)	B22-006-SB-1	
	20)	B22-006-SB-7	

Date:		Sample IDs	
5/23/2016	1)	B22-026-SB-9	
	2)	B22-025-SB-4	
	3)	B22-060-SB-1	
	4)	B22-060-SB-4	
	5)	B22-059-SB-1	
	6)	B22-059-SB-4	
5/24/2016	7)	B22-097-SB-1	Duplicate: B22-098-SB-4
	8)	B22-097-SB-9	Date: 5/24/2016
	9)	B22-098-SB-1	MS/MSD: B22-096-SB-9
	10)	B22-098-SB-4	Date: 5/24/2016
	11)	B22-098-SB-10	Field Blank:
	12)	B22-096-SB-1	Date: 5/24/2016
	13)	B22-096-SB-9	Eq. Blank:
	14)	B22-096-SB-10	Date: 5/24/2016
	15)	B22-028-SB-1	
	16)	B22-030-SB-1	
	17)	B22-030-SB-5	
	18)	B22-030-SB-10	
	19)	B22-029-SB-1	
	20)	B22-029-SB-6	

5/20/2016	1)	B22-005-SB-1	
	2)	B22-005-SB-4	
	3)	B22-005-SB-10	
	4)	B22-144-SB-1	
	5)	B22-144-SB-7	
	6)	B22-145-SB-1	
	7)	B22-145-SB-4	Duplicate: B22-023-SB-1
	8)	B22-145-SB-10	Date: 5/23/2016
	9)	B22-067-SB-1	MS/MSD: B22-032-SB-4
	10)	B22-067-SB-7	Date: 5/23/2016
	11)	B22-067-SB-10	Field Blank:
5/23/2016	12)	B22-024-SB-1	Date: 5/20/2016
	13)	B22-024-SB-4	Eq. Blank:
	14)	B22-023-SB-1	Date: 5/20/2016
	15)	B22-023-SB-9	
	16)	B22-023-SB-10	
	17)	B22-032-SB-1	
	18)	B22-032-SB-4	
	19)	B22-032-SB-10	
	20)	B22-026-SB-1	

5/24/2016	1)	B22-027-SB-1	
	2)	B22-027-SB-5	
	3)	B22-033-SB-1	
5/25/2016	4)	B22-069-SB-1	
	5)	B22-069-SB-4	
	6)	B22-069-SB-10	
	7)	B22-068-SB-1	Duplicate: B22-069-SB-4
	8)	B22-068-SB-6	Date: 5/25/2016
	9)	B22-068-SB-10	MS/MSD: B22-068-SB-6
	10)	B22-070-SB-1	Date: 5/25/2016
	11)	B22-070-SB-9	Field Blank:
	12)	B22-070-SB-10	Date: 5/25/2016
	13)	B22-088-SB-1	Eq. Blank:
	14)	B22-088-SB-6	Date: 5/25/2016
	15)	B22-087-SB-1	
	16)	B22-087-SB-5	
	17)	B22-087-SB-10	
	18)	B22-089-SB-1	
	19)	B22-089-SB-5	
5/26/2016	20)	B22-169-SB-1	

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Trip Blanks: 5/19/16 (1), 5/20/16 (2), 5/23/16 (1), 5/24/16 (2), 5/25/16 (2), 5/26/16 (1)

QA/QC Tracking Log - Set 2

Date:		Sample IDs	
5/26/2016	1)	B22-169-SB-4	
	2)	B22-168-SB-1	
	3)	B22-168-SB-4	
	4)	B22-084-SB-1	
	5)	B22-086-SB-1	
	6)	B22-086-SB-5	
	7)	B22-086-SB-10	Duplicate: B22-169-SB-4
	8)	B22-085-SB-1	Date: 5/26/2016
	9)	B22-051-SB-1	MS/MSD: B22-168-SB-4
	10)	B22-051-SB-6	Date: 5/26/2016
	11)	B22-051-SB-10	Field Blank:
	12)	B22-052-SB-1	Date: 5/26/2016
	13)	B22-052-SB-8	Eq. Blank:
5/27/2016	14)	B22-015-SB-1	Date: 5/26/2016
	15)	B22-015-SB-3	
	16)	B22-016-SB-1	
	17)	B22-016-SB-5	
	18)	B22-017-SB-1	
	19)	B22-017-SB-6	
	20)	B22-017-SB-10	

Date:		Sample IDs	
5/31/2016	1)	B22-003-SB-4	
	2)	B22-008-SB-1	
	3)	B22-008-SB-4	
	4)	B22-007-SB-1	
	5)	B22-007-SB-4	
	6)	B22-019-SB-1	
	7)	B22-019-SB-6	Duplicate: B22-008-SB-1
	8)	B22-019-SB-10	Date: 5/31/2016
	9)	B22-020-SB-1	MS/MSD: B22-019-SB-6
	10)	B22-020-SB-4	Date: 5/31/2016
	11)	B22-020-SB-10	Field Blank:
	12)	B22-136-SB-1	Date: 5/31/2016
	13)	B22-136-SB-5	Eq. Blank:
	14)	B22-133-SB-1	Date: 5/31/2016
	15)	B22-133-SB-5	
6/1/2016	16)	B22-135-SB-1	
	17)	B22-135-SB-8	
	18)	B22-134-SB-1	
	19)	B22-134-SB-7	
	20)	B22-042-SB-1	

5/27/2016	1)	B22-018-SB-1	
	2)	B22-018-SB-3	
	3)	B22-018-SB-10	
	4)	B22-080-SB-1	
	5)	B22-080-SB-5	
	6)	B22-076-SB-1	
	7)	B22-075-SB-1	Duplicate: B22-081-SB-3
	8)	B22-075-SB-3	Date: 5/27/2016
	9)	B22-081-SB-1	MS/MSD: B22-080-SB-5
	10)	B22-081-SB-3	Date: 5/27/2016
	11)	B22-081-SB-10	Field Blank:
	12)	B22-083-SB-1	Date: 5/27/2016
	13)	B22-083-SB-4	Eq. Blank:
5/31/2016	14)	B22-082-SB-1	Date: 5/27/2016
	15)	B22-082-SB-4	
	16)	B22-082-SB-10	
	17)	B22-004-SB-1	
	18)	B22-004-SB-4	
	19)	B22-004-SB-10	
	20)	B22-003-SB-1	

6/1/2016	1)	B22-042-SB-4	
	2)	B22-042-SB-10	
	3)	B22-045-SB-1	
	4)	B22-044-SB-1	
	5)	B22-044-SB-4	
	6)	B22-046-SB-1	
	7)	B22-046-SB-4	Duplicate: B22-042-SB-4
	8)	B22-039-SB-1	Date: 6/1/2016
	9)	B22-039-SB-4	MS/MSD: B22-046-SB-1
	10)	B22-039A-SB-3	Date: 6/1/2016
	11)	B22-040-SB-1	Field Blank:
	12)	B22-140-SB-4	Date: 6/1/2016
	13)	B22-170-SB-1	Eq. Blank:
	14)	B22-170-SB-4	Date: 6/1/2016
	15)	B22-130-SB-1	
	16)	B22-130-SB-4	
6/2/2016	17)	B22-128-SB-1	
	18)	B22-129-SB-1	
	19)	B22-129-SB-4	
	20)	B22-063-SB-1	

Trip Blanks: 5/26/16 (1), 5/27/16 (1), 5/31/16 (2), 6/1/16 (2), 6/2/16 (2)

QA/QC Tracking Log - Set 2

Date:		Sample IDs		
6/2/2016	1)	B22-063-SB-9		
	2)	B22-063-SB-10		
	3)	B22-066-SB-1		
	4)	B22-066-SB-9		
	5)	B22-001-SB-1		
	6)	B22-001-SB-4		
	7)	B22-002-SB-1	Duplicate:	B22-001-SB-4
	8)	B22-002-SB-7	Date:	6/2/2016
	9)	B22-002-SB-10	MS/MSD:	B22-002-SB-7
	10)	B22-079-SB-1	Date:	6/2/2016
	11)	B22-079-SB-4	Field Blank:	
	12)	B22-083-SB-1	Date:	6/2/2016
	13)	B22-083-SB-4	Eq. Blank:	
	14)	B22-081-SB-1	Date:	6/2/2016
6/3/2016	15)	B22-081-SB-4		
	16)	B22-081-SB-10		
	17)	B22-075-SB-1		
	18)	B22-075-SB-4		
	19)	B22-076-SB-1		
	20)	B22-080-SB-1		

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

6/3/2016	1)	B22-080-SB-5		
	2)	B22-018-SB-1		
	3)	B22-018-SB-6		
	4)	B22-018-SB-10		
	5)	B22-017-SB-1		
	6)	B22-017-SB-6		
	7)	B22-017-SB-10	Duplicate:	B22-080-SB-5
	8)	B22-016-SB-1	Date:	6/3/2016
	9)	B22-016-SB-5	MS/MSD:	B22-018-SB-6
	10)	B22-015-SB-1	Date:	6/3/2016
	11)	B22-015-SB-4	Field Blank:	
	12)	B22-037-SB-1	Date:	6/3/2016
	13)	B22-178-SB-1	Eq. Blank:	
	14)	B22-178-SB-6	Date:	6/3/2016
	15)	B22-174-SB-1		
	16)	B22-174-SB-4		
	17)			
	18)			
	19)			
	20)			

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

Trip Blanks: 6/2/16 (2), 6/3/16 (2)

APPENDIX H

Space Reserved for Evaluation of Data Completeness

(Pending Receipt of Validated Data)