

Phase II Investigation Work Plan

Area B: Parcel B19 Tradepoint Atlantic Sparrows Point, Maryland

Prepared for:

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ARM Project 150300M-15

Respectfully Submitted,



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1.0 INTRODUCTION

1.1 INTRODUCTION

ARM Group Inc. (ARM), on behalf of EnviroAnalytics Group (EAG), has prepared the following Work Plan to complete a Phase II site investigation on a portion of the Tradepoint Atlantic property that has been designated as Area B, Parcel B19 (the Site). Parcel B19 is comprised of approximately 86 acres of the approximately 3,100-acre former plant property located as shown on **Figure 1**.

Site characterization of Parcel B19 will be performed 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 Site into the Maryland Department of the Environment Voluntary Cleanup Program (MDE-VCP) was submitted to MDE on September 10, 2014. The Site's current and anticipated future use is Tier 3 (Industrial), and plans for the Site include demolition and redevelopment over the next several years.

Parcel B19 is part of the acreage that was removed (Carveout Area) from inclusion in 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. Based on this agreement, EPA has determined that no further investigation or corrective measures will be required under the terms of the Consent Decree for the Carveout Area. However, the SA reflects that the property within the Carveout Area will remain subject to the EPA's RCRA Corrective Action authorities.

1.2. SITE BACKGROUND

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 the Facility ceased in fall 2012.

Groundcover at the Site is comprised of approximately 84% natural soils and 16% 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). Parcel B19 was formerly occupied by the Pennwood Storage Tank Farm and the Maryland Pig Plant. A small area of private property (not owned by Tradepoint Atlantic) is located in the center of the parcel, and was excluded from the established parcel boundary provided by EAG. There are several existing wooded sections which occupy large areas of the Site. A network of unpaved roadways (not field verified) is present within the existing wooded areas. Although not indicated on the available historical drawing sets, historic aerial images from NETR Online indicate that this area was formerly occupied by residential housing for mill workers. ARM currently occupies a former electrical department storage building as an investigation-derived waste (IDW) management building in the southwestern corner of the parcel. Sampling equipment and other project equipment is also stored at this location.

According to recent aerial images, several buildings have been demolished (those associated with the Maryland Pig Plant). The concrete slabs remain on grade. There were no apparent subgrade structures identified from the historical documents associated with Parcel B19. The main components of Parcel B19 (the Pennwood Storage Tank Farm and Maryland Pig Plant) are discussed in greater detail below:

Pennwood Storage Tank Farm:

Several large ASTs are located in the Pennwood Storage Tank Farm, directly north of the Pennwood Power Station. The power station operated four boilers to generate electricity and steam for general plant use, and was operated on a variety of fuels including blast furnace gas, No. 6 Fuel Oil, used oil or waste combustible fluids, and natural gas. The tanks in the AST farm formerly held fuel oil and recycled oil. One additional fuel oil AST was formerly located directly east of the Pennwood Storage Tank Farm, but recent aerial images show that this tank has been removed. Further information about the tank farm is included in the discussion of RECs in Section 1.3 (Sampling Design and Rationale).

Maryland Pig Plant:

To extract iron from ore and other iron-rich recyclable materials, the blast furnaces were used to reduce iron and melt it so that product could be cast from the furnace in molten form. This molten iron is referred to as pig iron or hot-metal. Blast air, injectants, coke, and iron ore react together to generate pig iron. Impurities in the pig iron were discharged as slag from the furnaces. Liquid iron produced in the blast furnace was cast at periodic intervals through an iron notch, flowing down runners into transfer cars. The hot-metal was transferred either directly to the Basic Oxygen Furnace (BOF), to the Maryland Pig Plant for casting into iron “pigs”, or beached (cooled/stored) in the No. 3 Mould Yard. Iron pigs are an intermediate product of the steel making process, cast into small ingots intended for remelting. Cast house emissions were controlled with a baghouse. Once all the hot-metal had been cast and was allowed to cool, it was charged into the BOF for further processing.

Prior to the Area B Groundwater Investigation (conducted in accordance with the approved Work Plan dated October 6, 2015) there were no site-wide groundwater wells located within the Parcel B19 boundaries to provide relevant historical groundwater data. Several new wells were installed within and surrounding the parcel, and these locations (along with two redeveloped historical wells located south of the parcel boundary) were sampled during the Area B groundwater field investigation. The results from the recent groundwater sampling events (December 2015 through February 2016) are provided in **Appendix A**. Note that the results in Table 1 have undergone data validation and the results in Table 2 for shallow well SW-052-MWS are non-validated. Aqueous Project Action Limit (PAL) exceedances in the groundwater data are highlighted. The appendix also indicates the screened interval for each of the existing wells, as well as the hydrogeologic zone. There is no historical soil or soil gas sampling data available from this parcel.

1.3. SAMPLING DESIGN AND RATIONALE

Across the whole Tradepoint Atlantic property, several buildings and facilities may have been historical sources of environmental contamination. These areas were identified as targets for sampling through a careful review of historical documents. When a sampling target was identified, at least two borings were placed at or around its location using GIS software (ArcMap Version 10.2.2). The first sampling targets to be identified were Recognized Environmental Conditions (RECs) located within the Site boundaries, as shown on the REC Location Map provided in the Phase I Environmental Site Assessment (ESA) prepared by Weaver Boos Consultants dated May 19, 2014. Weaver Boos completed site visits of Sparrows Point from February 19 through 21, 2014, for the purpose of characterizing current conditions at the former steel plant. All RECs were targeted with at least three (3) borings. Based on the review of historical documents and aerial images, REC boundaries are adjusted, as appropriate, from the original positions shown on the REC Location Map. The following REC was identified within the Site boundaries:

Pennwood Storage Tank Farm ASTs (REC 19, Finding 266):

Several large ASTs are located in the Pennwood Storage Tank Farm, directly north of the Pennwood Power Station. The Phase I ESA indicates that these tanks formerly held fuel oil and recycled oil. At the time of Weaver Boos' site visit, there were no apparent leaks or staining, but the age of the tanks increases the risk that corrosion and releases may have occurred in the past. The Phase I ESA indicated that based on interview comments, residual oil/water (up to 2 feet) may have been present in the tanks at the time of reporting. Weaver Boos' review of aerial photographs from 1952 indicated a dark area inside a berm which may have indicated a past release. The possible presence of subsurface and surface impacts led Weaver Boos to qualify the tank farm as a REC.

Following the identification and evaluation of all RECs at the Site, Solid Waste Management Units (SWMUs) and Areas of Concern (AOCs) were identified from the DCC report Figure 3-1. **Figure 3** shows the proposed borings overlain on the DCC figure, which shows the SWMUs, AOCs, and main facility areas within the property boundaries. There were no additional SWMUs or AOCs that were identified at the Site based on this figure, and no additional units were identified from the DCC report Table 3-1.

Following the identification of all RECs, SWMUs, and AOCs, four (4) sets of historical site drawings were reviewed to identify additional sampling targets. These site drawings included the 5000 Set (Plant Arrangement), the 5100 Set (Plant Index), the 5500 Set (Plant Sewer Lines), and a set of drawings indicating coke oven gas distribution drip leg locations. Drip legs are points throughout the distribution system where coke oven gas condensate was removed from the gas pipelines. The condensate from the drip legs was typically discharged to drums, although it is possible some spilled out of the drums and on to the ground. There were no drip legs identified within the parcel boundaries based on this final drawing set. **Figures 4 through 6** show the proposed borings and the parcel boundary overlain on the 5000 Set, 5100 Set, and 5500 Set, respectively. Careful review of these geospatially referenced figures and review of other historical documents (previously discussed) yielded the proposed boring locations. A summary of the specific drawings covering the Site is presented in the table below:

Parcel B19 Historical Site Drawings Details				
<u>Set Name</u>	<u>Typical Features Shown</u>	<u>Drawing Number</u>	<u>Original Date Drawn</u>	<u>Latest Revision Date</u>
Plant Arrangement	Roads, water bodies, building/structure footprints, electric lines, above-ground pipelines (e.g.: steam, nitrogen, etc.)	5017	7/7/1958	3/12/1982
		5023	9/8/1958	3/11/1982
		5024	9/1/1958	3/11/1982
		5029	8/25/1959	3/11/1982
		5030	8/2/1958	3/11/1982
Plant Index	Roads, water bodies, demolished buildings/structures, electric lines, above-ground pipelines	5117	<i>Unknown</i>	8/14/2008
		5123	<i>Unknown</i>	11/7/2008
		5124	<i>Unknown</i>	5/3/2007
		5129	<i>Unknown</i>	9/10/2009
		5130	<i>Unknown</i>	6/26/2008
Plant Sewer Lines	Same as above plus trenches, sumps, underground piping (includes pipe materials)	5517	8/21/1959	2/9/1982
		5523	<i>Unknown</i>	2/24/1982
		5524	<i>Unknown</i>	2/24/1982
		5529	8/26/1959	7/14/1992
		5530	8/15/1959	3/29/1976
Drip Legs	Coke Oven Gas Drip Legs Locations	5886B	<i>Unknown</i>	Sept. 1988

Sampling target locations were identified if the historical site drawings depicted industrial activities or a specific feature at a location that may have been a source of environmental contamination that impacted the Site. Based on this criterion, the following sampling targets were identified at the Site: Former Fire Training Area, Oil Trap, Former Fuel Oil Storage Tank and Berm Area, Pig Plant Caster Building, Pig Plant Caster Machine, Pig Plant Storage Area, AST Pump Houses, Rail Car Dumper, and Weir/Oil Barrier. ARM received a list of former PCB-containing transformer equipment from Tradepoint Atlantic personnel, for inclusion as additional targets. There were no possible PCB-contaminated areas identified in the parcel based on this information. The number of proposed borings that targeted a specific feature is directly related to the size and likely historical presence of materials that could have impacted the Site. The full list of sampling targets, along with the specific rationale for sampling each, is provided as **Appendix B**.

Sample locations were added to fill in areas with insufficient coverage (large spatial gaps between proposed borings) within the Site and to meet the sample density requirements set forth in the Quality Assurance Project Plan (QAPP) Worksheet 17 – Sampling Design and Rationale. Parcel B19 contains a total of 85.6 acres: 80.4 acres without engineered barriers and 5.2 acres with current engineered barriers (parking/roads or building slabs). In accordance with the

relevant sampling density requirements, a minimum of 35 soil boring locations are required in the areas without engineered barriers, and a minimum of 3 soil boring locations are required in the areas currently with engineered barriers. A total of 35 borings have been proposed in areas without engineered barriers. A total of 3 borings have been proposed in areas with engineered barriers. **Figure 7** shows the proposed borings on an aerial image to indicate locations of borings with regard to landmarks and physical obstructions (woods). Site-wide borings in the sampling plan were specifically located along former unpaved roadways to allow access for field personnel and avoid restrictions in the wooded areas.

Tradepoint Atlantic has developed an initial master plan for the entire site that shows potential future development areas across the entire Tradepoint Atlantic property. This master plan is a working document and it is expected to undergo subsequent revisions in the future. In its current iteration, the plan shows that roughly 3% of the total area within Parcel B19 is proposed for paving, although some additional existing roadways and/or building slabs may be preserved. **Figure 8** shows the current and future (proposed) engineered barriers within Parcel B19.

Groundwater at the Site was investigated as described in the Area B Groundwater Investigation Work Plan. The groundwater sample locations from this separate plan are shown on **Figure 9**. Groundwater analytical data has been provided in **Appendix A** for each of the identified wells.

2.0 PROJECT ORGANIZATION AND RESPONSIBILITIES

2.1. PROJECT PERSONNEL

The site characterization of Area B Parcel B19 will be conducted by ARM under a contract with EAG. ARM will provide project planning, field sampling and reporting support. The required drilling, Geoprobe[®] and laboratory services will be contracted directly by EAG. The management, field, and laboratory responsibilities of key project personnel are defined in this section.

The ARM Project Manager, Mr. Eric Magdar is responsible for ensuring that all activities are conducted in accordance with this Work Plan and the contract requirements. Mr. Magdar will provide technical coordination with the MDE, EPA and EAG. The ARM Project Manager is responsible for managing all operations conducted for this project including:

- Ensure all personnel assigned to this project review the technical project plans before initiation of all tasks associated with the project.
- Review of project plans in a timely manner.
- Ensure proper methods and procedures are implemented to collect representative samples.
- Monitor the project budget and schedule and ensure the availability of necessary personnel, equipment, subcontractors, and other necessary services.

The lead ARM Project Scientist, Mr. Nicholas Kurtz, will be responsible for coordinating field activities including the collection, preservation, documentation and shipment of samples. Mr. Kurtz will directly communicate with the ARM Project Manager and Laboratory Project Manager on issues pertaining to sample shipments, schedules, container requirements, and other necessary issues. Mr. Kurtz is also responsible for ensuring the accuracy of sample documentation including the completion of the chain-of-custody (CoC) forms.

Pace Analytical Services, Inc. (PACE) of Greensburg, Pennsylvania will provide the analytical services for this project. The address for the laboratory is as follows:

Pace Analytical
1638 Roseytown Road
Greensburg, PA 15601

During the field activities, the Laboratory Project Manager will coordinate directly with the ARM Project Manager on issues regarding sample shipments, schedules, container requirements, and other field-laboratory logistics. The Laboratory Project Manager will monitor the daily activities of the laboratory, coordinate all production activities, and ensure that work is being

conducted as specified in this document. Ms. Samantha Bayura will be the Laboratory Project Manager for PACE on this project.

2.2. HEALTH AND SAFETY ISSUES

Because of the potential presence of metals, petroleum hydrocarbons and chlorinated hydrocarbons in the soil and groundwater at the Site, the investigation will be conducted under a site-specific Health and Safety Plan to protect investigation workers from possible exposure to contaminated materials. The site-specific HASP for Parcel B19 is provided as **Appendix C**.

Based on information provided to ARM, the planned site activities will be conducted under modified Level D personal protection. The requirements of the modified Level D protection are defined in ARM's site specific Health and Safety Plan. All field personnel assigned for work at the Site have been trained in accordance with the Occupational Safety and Health Administration (OSHA) Hazardous Waste Operations and Emergency Response standard (29 CFR 1910.120) and other applicable OSHA training standards. All field staff will be experienced in hazardous waste site work, use of personal protective equipment (PPE), and emergency response procedures.

3.0 FIELD ACTIVITIES AND PROCEDURES

3.1. UTILITY CLEARANCE

ARM will take appropriate precautions to avoid subsurface utilities and structures during the site investigation. Prior to initiating any subsurface investigations, ARM will attempt to determine the location of utilities in the project area using the Miss Utility system. Additionally, any required state or local permits will be acquired prior to the commencement of site activities.

In addition to the Miss Utility system, EAG will clear each proposed boring with utility personnel currently working on the property. To facilitate this, ARM will locate with a GPS and mark all proposed boring locations in the field. ARM will coordinate the staking of borings in the field with Tradepoint Atlantic utility personnel to avoid conflicts. Historical utility drawings which may be relevant include the 5600 Set (Plant Water Lines) and 5800 Set (Plant Gas Lines).

3.2. SAMPLING PLAN

The purpose of this site characterization is to identify any existing hazardous conditions across the entire Site. A summary of the RECs and other areas of concern that will be investigated, along with the proposed boring identification number and the analyses being performed, has been provided as **Appendix B**.

This Work Plan presents the methods and protocols to be used to complete the site characterization. These methods and procedures follow the MDE-VCP and EPA guidelines. Information regarding the project organization, field activities and sampling methods, sampling equipment, sample handling and management procedures, the laboratory analytical methods and selected laboratory, quality control and quality assurance procedures, investigation-derived waste (IDW) management methods, reporting requirements are described in detail in the QAPP that has been developed to support the investigation and remediation of the Tradepoint Atlantic Site (Quality Assurance Project Plan, ARM Group Inc., October 2, 2015).

The proposed schedule of this investigation is contained in this work plan (Section 8.0). All site characterization activities will be conducted under the site-specific HASP (**Appendix C**).

3.3. SOIL INVESTIGATION

Soil samples will be collected from the locations identified on **Figures 3 through 8**, and in accordance with procedures referenced in the QAPP Worksheet 21 – Field SOPs (Standard Operating Procedures), SOP No. 009 – Sub-surface Soil Sampling. Regarding soil sampling depth, a shallow sample will be collected from the 0 to 1 foot depth interval, and a deeper sample will be collected from the 4 to 5 foot depth interval. One additional set of samples will also be collected from the 9 to 10 foot depth interval if groundwater has not been encountered; however,

these samples will be held by the laboratory pending the analysis of the 0 to 1 and 4 to 5 foot depth interval samples. If the PID or other field observations indicate contamination to exist at a depth greater than 3 feet bgs but less than 9 feet bgs, and is above the water table, the sample from the deeper 4-5 foot interval may be shifted to the depth interval indicated by the PID response. It should be noted that no soil samples will be collected from a depth that is below the water table.

After soil sampling has been concluded at a location, all down-hole soil sampling equipment will be decontaminated according to procedures referenced in the QAPP Worksheet 21 – Field SOPs, SOP No. 016 Equipment Decontamination. The decontamination procedures that will be used during the course of this investigation include Decontamination Area (Section 3.1 of the SOP), Decontamination of Sampling Equipment (Section 3.5), Decontamination of Measurement Devices & Monitoring Equipment (Section 3.7), Decontamination of Subsurface Drilling Equipment (Section 3.8), and Document and Record Keeping (Section 5).

All soil samples will be analyzed for TCL-SVOCs, TAL-Metals, TPH-DRO, TPH-GRO, hexavalent chromium, and cyanide. Soil samples associated with the Fire Training Area, Oil Trap, Former Fuel Oil Storage Tank and Bermed Area, Pennwood Storage Tank Farm ASTs, Pump Houses, and Weir and Oil Barrier will also be analyzed for Oil & Grease. Additionally, the shallow soil samples collected across the Site from the 0-1 foot bgs interval will also be analyzed for PCBs. The MDE initially specified that the former Fire Training Area must also be analyzed for perfluorinated chemicals due to concerns that perfluorooctanoic acid (PFOA) and/or perfluorooctane sulfonate (PFOS) may have been used in some firefighting materials. However, based on research conducted by the Baltimore County Fire Department, these materials have never been used at the Site. The letter received from Fire Chief John Hohman which provides this information has been included as **Appendix D**. Analytical methods, sample containers, preservatives, and holding times for the sample analyses are listed in the QAPP Worksheet 19 & 30 – Sample Containers, Preservation, and Holding Times.

3.4. GROUNDWATER INVESTIGATION

The groundwater sampling plan for Parcel B19 is covered by the Area B Groundwater Investigation Work Plan (Revision 3), dated October 6, 2015. The sample locations from this groundwater Work Plan are indicated on **Figure 9**. The groundwater investigation included six groundwater sample locations within the parcel boundaries. An additional six wells are located just beyond the parcel boundaries, with four in the approximate down-gradient directions (as indicated in the Area B Groundwater Work Plan). Of the 11 total groundwater sample locations associated with the parcel, eight wells were installed in the shallow water bearing unit. Two locations along the eastern perimeter (SW-043-MWI and SW-074-MWI) are located in the intermediate hydrogeologic zone, and one location (SW16-PZM067) is screened in the lower zone. The Pennwood Storage Tank Farm ASTs (REC 19) located within Parcel B19 will be

adequately characterized by the downgradient wells SW-051-MWS, SW-052-MWS, SW16-PZM003, and SW16-PZM067. Based on the coverage specified in the Area B Groundwater Investigation Work Plan, no additional groundwater samples are warranted.

3.5. NAPL DELINEATION

In the event that NAPL bearing soils are identified in a soil boring, a temporary piezometer will be installed according to the specifications identified in SOP No. 28 – Direct Push Installation and Construction of Temporary Groundwater Sample Collection Points. ARM will immediately check the piezometer for the presence of NAPL using an oil-water interface probe in accordance with methods referenced in the SOP No. 19 – Depth to Groundwater and NAPL Measurements. If NAPL is not detected, the piezometer will be allowed to equilibrate for at least 48 hours prior to a second measurement. If no measureable product is detected after 48 hours, the piezometer will be emptied, removed and discarded, and the borehole will be abandoned in accordance with Maryland abandonment standards as stated in COMAR 26.04.04.34 through 36. If measureable NAPL is detected during either check, another measurement will be made after a 30 day (minimum) equilibration period to determine NAPL thickness.

If measureable NAPL is present in the initial piezometer, ARM will remobilize (following utility clearance) to install and inspect additional soil borings and shallow, temporary piezometers to the north, south, east, and west of the detection point at distances of 25 feet. Delineation piezometers will extend into adjacent parcels (if applicable) but will not be installed off of Tradepoint Atlantic property and will only be installed up to the edge of existing buildings. At each location, continuous core soil samples will be screened with a hand-held PID and inspected for evidence of NAPL, and the additional temporary piezometers will be installed to a final depth determined by ARM personnel.

Each additional piezometer installed to delineate the NAPL will be checked for the presence of product with an oil-water interface probe immediately after installation, 48 hours after installation, and again after a 30 day equilibration period. If measureable NAPL is present within any of the piezometers, additional borings/piezometers will be added as necessary to complete the delineation. The MDE will be notified within 48 hours if NAPL is detected within the temporary piezometers. Once the MDE has given approval to abandon the additional piezometers, each piezometer will be emptied, removed and discarded. All boreholes will be abandoned in accordance with Maryland abandonment standards as stated in COMAR 26.04.04.34 through 36. A full report documenting the results of the delineation, including NAPL thickness, will be submitted to the MDE within 30 days of completing the field activities.

3.6. SAMPLE DOCUMENTATION

3.6.1. Sample Numbering

Samples will be numbered in accordance with the QAPP Appendix C – Data Management Plan.

3.6.2. Sample Labels & Chain-of-Custody Forms

Samples will be labeled and recorded on the Chain-of-Custody form in accordance with methods referenced in the QAPP Worksheet 26 & 27 – Sample Handling, Custody and Disposal.

3.7. LABORATORY ANALYSIS

EAG has contracted PACE of Greensburg, Pennsylvania to perform the laboratory analysis for this project. All sample analyses to be performed are listed in **Appendix B**. The samples will be submitted for analysis with a standard turnaround time (approximately 5 work days). The specific list of compounds and analytes that the soil samples will be analyzed for, as well as the quantitation limits and project action limits, is provided in QAPP Worksheet 15 – Project Action Limits and Laboratory-Specific Detection/Quantitation Limits.

4.0 QUALITY ASSURANCE AND QUALITY CONTROL PROCEDURES

All soil samples will be collected using dedicated equipment including new soil core liners and sampling kits. Each cooler temperature will be measured and documented by the laboratory upon receipt.

Quality control (QC) samples are collected during field studies for various purposes, among which are to isolate site effects (control samples), to define background conditions (background sample), and to evaluate field/laboratory variability (spikes and blanks, trip blanks, duplicates, etc.).

The following QC samples will be submitted for analysis to support the data validation:

- Blind Field Duplicate – at a rate of one duplicate per twenty samples
 - Soil – SVOCs, Metals, TPH-DRO, TPH-GRO, Oil and Grease PCBs, Hexavalent Chromium, and Cyanide
- Matrix Spike/Matrix Spike Duplicate – at a rate of one per twenty samples
 - Soil – SVOCs, Metals, TPH-DRO, TPH-GRO, Oil and Grease PCBs, and Hexavalent Chromium
- Field Blank and Equipment Blank
 - Soil – SVOCs, Metals, TPH-DRO, TPH-GRO, Oil and Grease Hexavalent Chromium, and Cyanide

The QC samples will be 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.

5.0 MANAGEMENT OF INVESTIGATION-DERIVED WASTE

All investigation derived waste (IDW) procedures will be carried out in accordance with methods referenced in the QAPP Worksheet 21 – Field SOPs, SOP No. 5 – Investigation-Derived Wastes Management.

6.0 DATA VALIDATION

All data validation procedures will be carried out in accordance with the QAPP Worksheet 34 – Data Verification and Validation Inputs, QAPP Worksheet 35 – Data Verification Procedures, and QAPP Worksheet 36 – Data Validation Procedures.

7.0 REPORTING

Following the receipt of all sampling results from “Area B Parcel B19”, ARM will prepare a Phase II Site Investigation Report that will document the sample collection procedures and supporting rationale, and present and interpret the analytical results. All results will be presented in tabular and graphical formats as appropriate to best summarize the data for future use. The sample results will be compared against relevant criteria such as the MDE Generic Numeric Cleanup Standards and the EPA Regional Screening Levels, considering appropriate land use factors and institutional controls, to identify contaminants and exposure pathways of potential concern. ARM will also present recommendations for any additional site investigation activities if warranted.

8.0 SCHEDULE

The field activities below (including sample analysis and data validation) are planned so that they may be completed within six (6) months of agency approval of this Work Plan. In addition, the investigation report will be submitted to the regulatory authorities within two (2) months of completion of the field activities in accordance with these approximate timeframes:

- the sample collection activities will take approximately three (3) weeks to complete (including mobilization activities) once approval of the work plan is received;
- the soil sample analysis, data validation and review is expected to require an additional 10 weeks to complete; and
- the preparation of the investigation report, including an internal Quality Assurance Review cycle, will require another six (6) weeks.

FIGURES



Image courtesy of USGS Earthstar Geographics SIO © 2016 Microsoft Corporation

bing™

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**

August 1, 2016

EnviroAnalytics Group

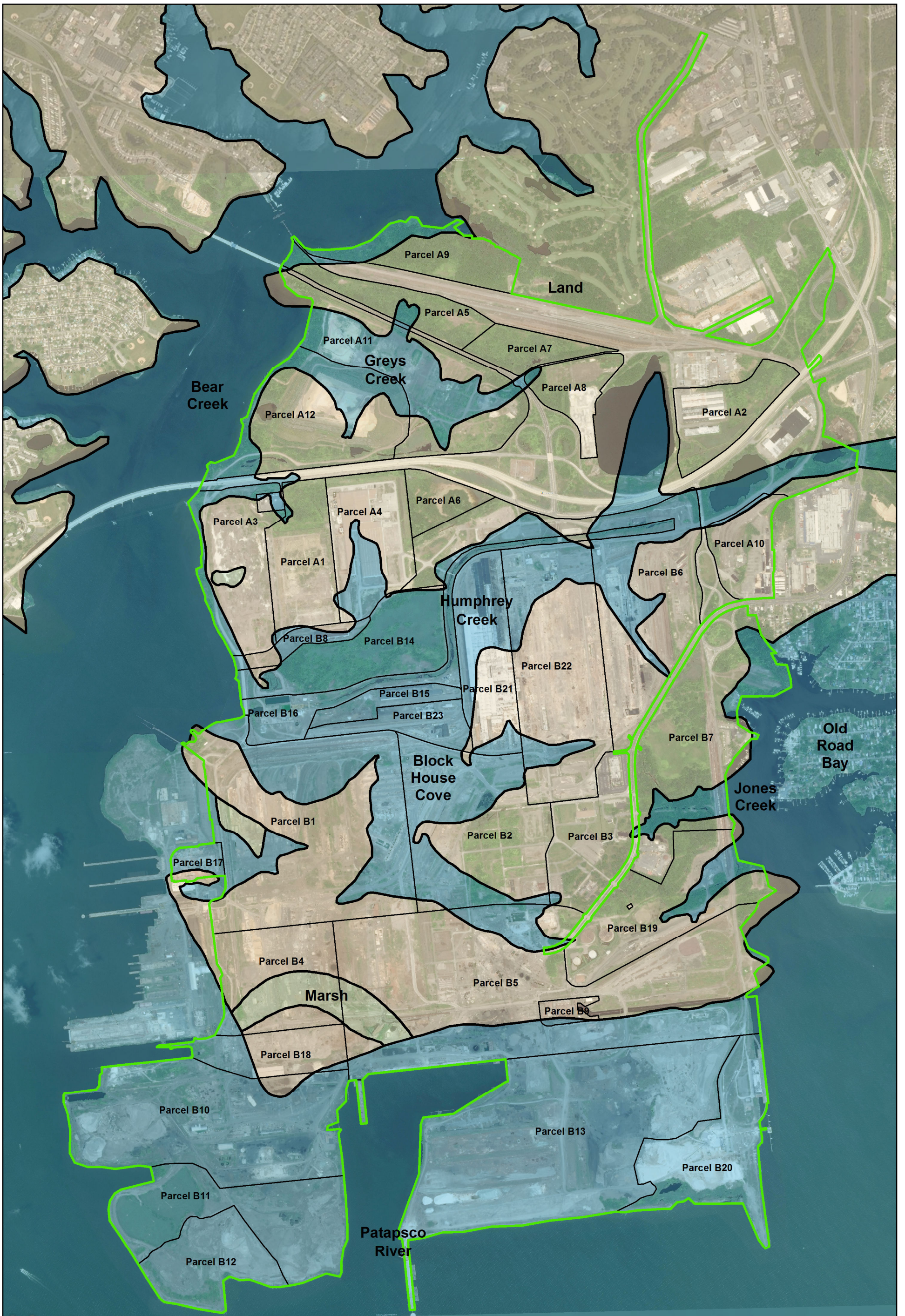
Area A: Project 150298M
Area B: Project 150300M

Tradepoint Atlantic

Baltimore County, MD

Figure

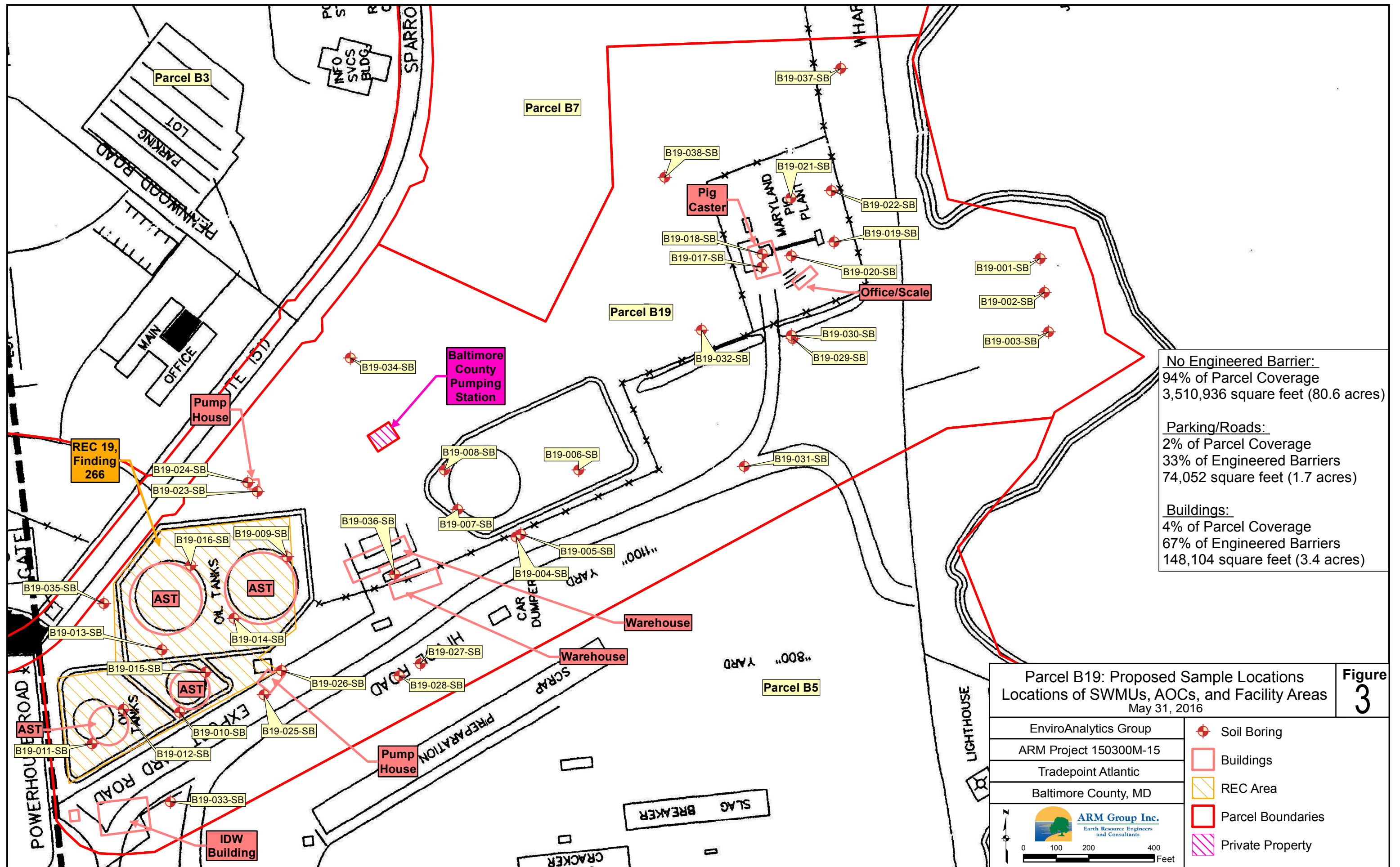
1



bing™

Image courtesy of USGS Earthstar Geographics SIO © 2016 Microsoft Corporation

		Site Boundary	Land	Approximate Shoreline 1916 August 1, 2016	EnviroAnalytics Group	Tradepoint Atlantic	Figure 2
		Area A Boundaries	Marsh		Adapted from Figure 2-5 of the Description of Current Conditions Report prepared by Rust Environmental and Infrastructure, dated January 1998	Area A: Project 150298M Area B: Project 150300M	

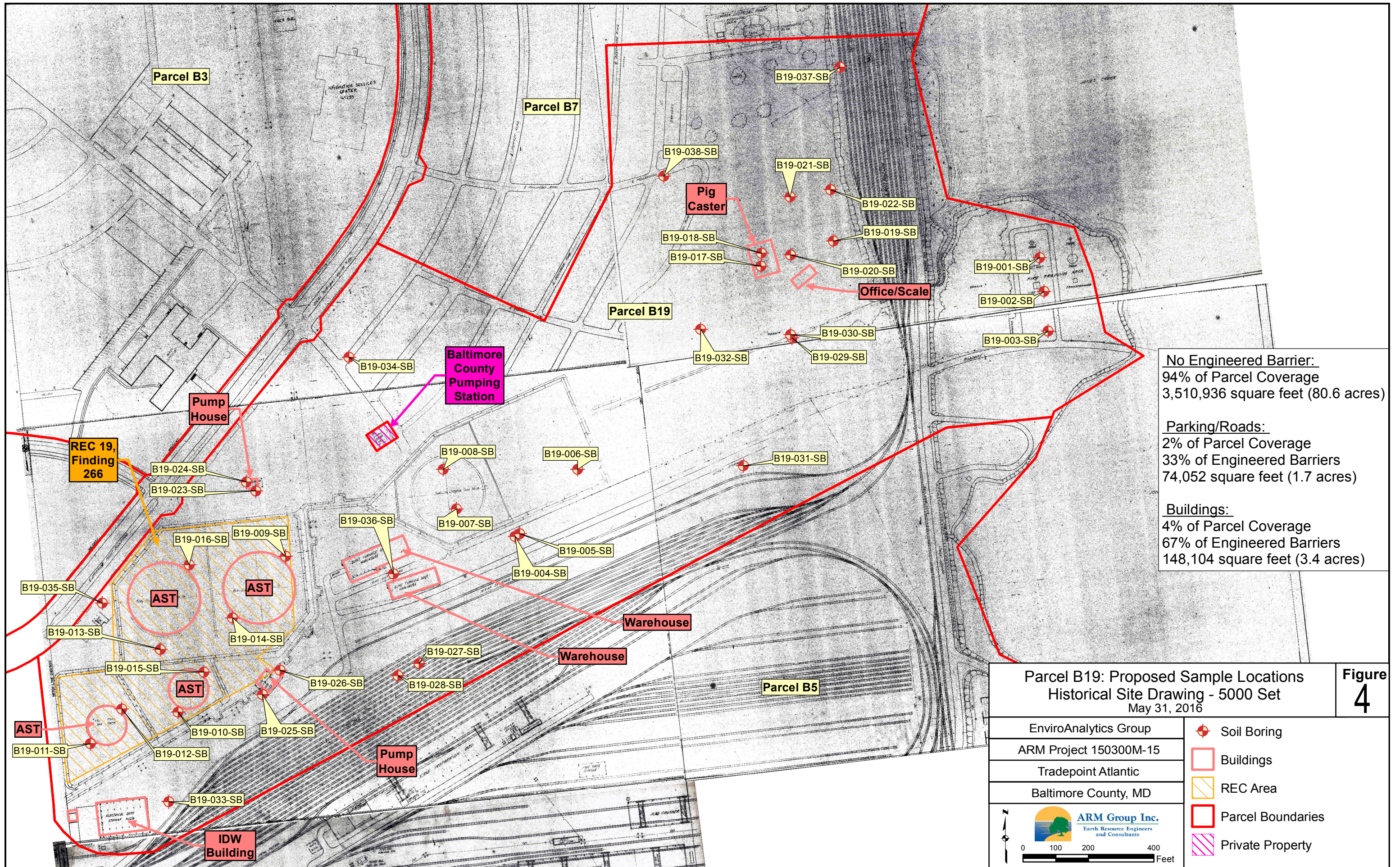


No Engineered Barrier:
 94% of Parcel Coverage
 3,510,936 square feet (80.6 acres)

Parking/Roads:
 2% of Parcel Coverage
 33% of Engineered Barriers
 74,052 square feet (1.7 acres)

Buildings:
 4% of Parcel Coverage
 67% of Engineered Barriers
 148,104 square feet (3.4 acres)

Parcel B19: Proposed Sample Locations Locations of SWMUs, AOCs, and Facility Areas May 31, 2016		Figure 3
EnviroAnalytics Group ARM Project 150300M-15 Tradepoint Atlantic Baltimore County, MD		
		<ul style="list-style-type: none"> ◆ Soil Boring Buildings REC Area Parcel Boundaries Private Property




No Engineered Barrier:
 94% of Parcel Coverage
 3,510,936 square feet (80.6 acres)

Parking/Roads:
 2% of Parcel Coverage
 33% of Engineered Barriers
 74,052 square feet (1.7 acres)

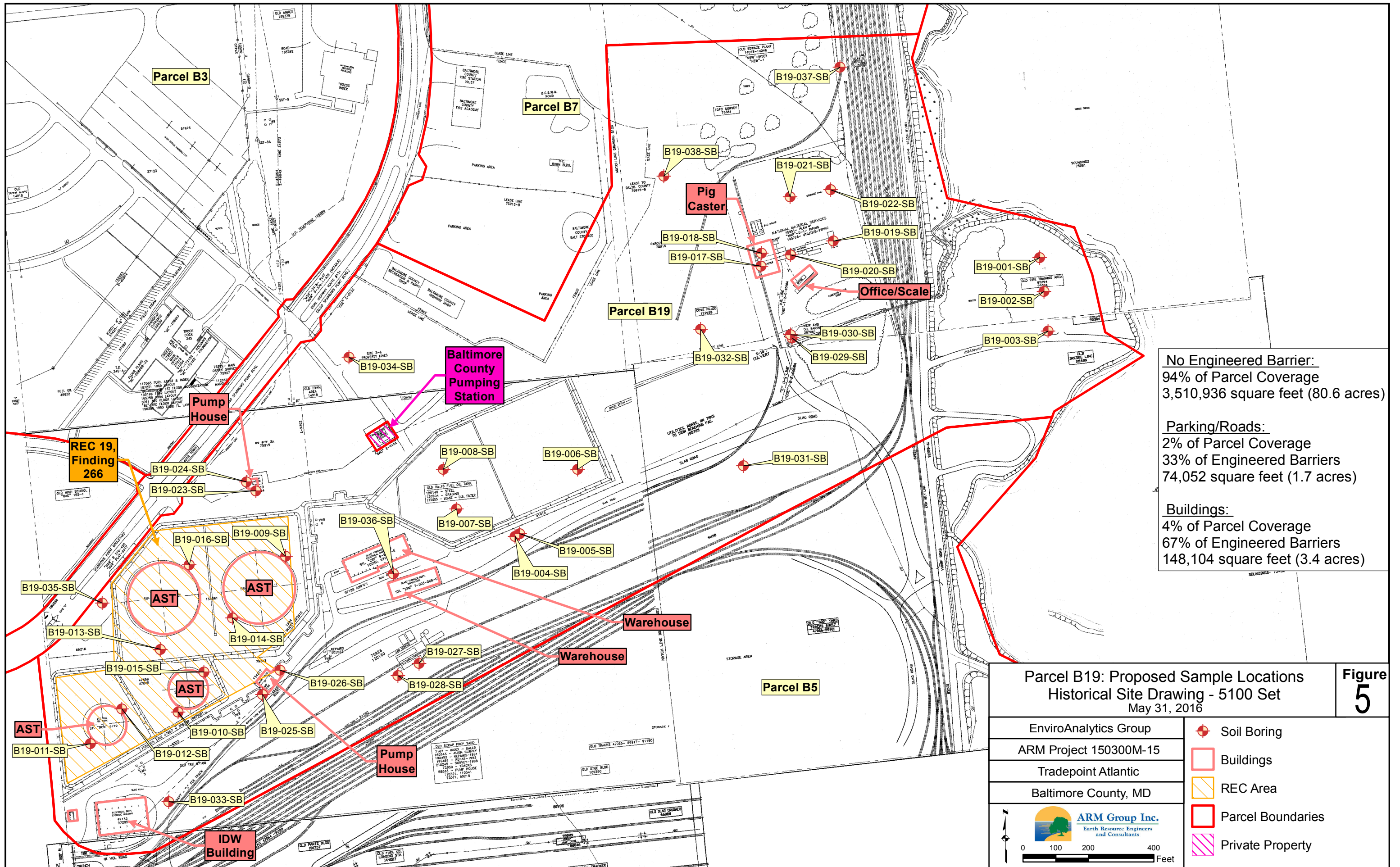
Buildings:
 4% of Parcel Coverage
 67% of Engineered Barriers
 148,104 square feet (3.4 acres)

Parcel B19: Proposed Sample Locations
 Historical Site Drawing - 5000 Set
 May 31, 2016

Figure
4

EnviroAnalytics Group	Soil Boring
ARM Project 150300M-15	Buildings
Tradepoint Atlantic	REC Area
Baltimore County, MD	Parcel Boundaries
 ARM Group Inc. Earth Resource Engineers and Consultants	Private Property

0 100 200 400 Feet

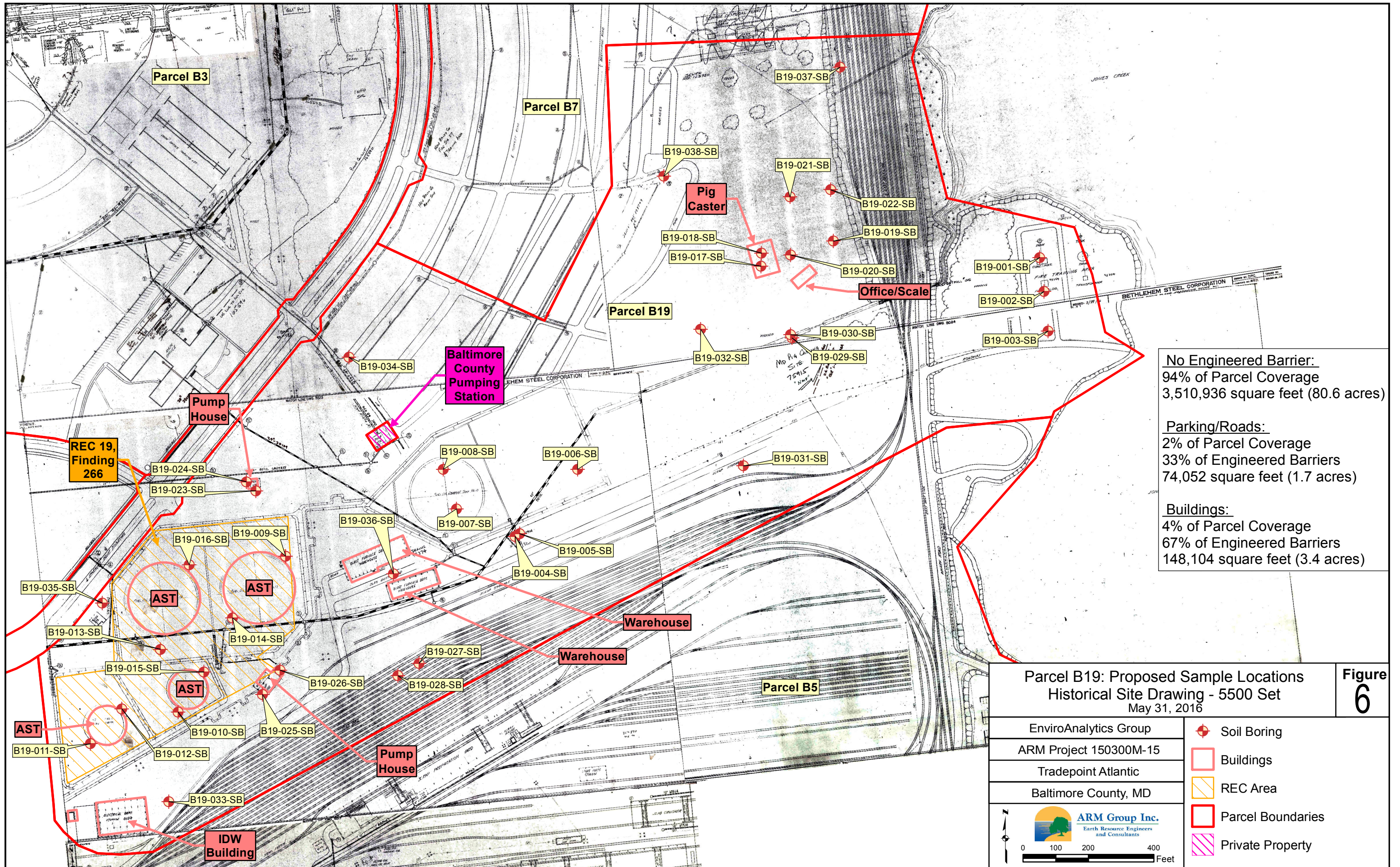


No Engineered Barrier:
 94% of Parcel Coverage
 3,510,936 square feet (80.6 acres)

Parking/Roads:
 2% of Parcel Coverage
 33% of Engineered Barriers
 74,052 square feet (1.7 acres)

Buildings:
 4% of Parcel Coverage
 67% of Engineered Barriers
 148,104 square feet (3.4 acres)

Figure 5




No Engineered Barrier:
 94% of Parcel Coverage
 3,510,936 square feet (80.6 acres)

Parking/Roads:
 2% of Parcel Coverage
 33% of Engineered Barriers
 74,052 square feet (1.7 acres)

Buildings:
 4% of Parcel Coverage
 67% of Engineered Barriers
 148,104 square feet (3.4 acres)

Parcel B19: Proposed Sample Locations
 Historical Site Drawing - 5500 Set
 May 31, 2016

Figure
6

EnviroAnalytics Group	Soil Boring
ARM Project 150300M-15	Buildings
Tradepoint Atlantic	REC Area
Baltimore County, MD	Parcel Boundaries
 ARM Group Inc. Earth Resource Engineers and Consultants	Private Property

0 100 200 400 Feet




No Engineered Barrier:
 94% of Parcel Coverage
 3,510,936 square feet (80.6 acres)

Parking/Roads:
 2% of Parcel Coverage
 33% of Engineered Barriers
 74,052 square feet (1.7 acres)

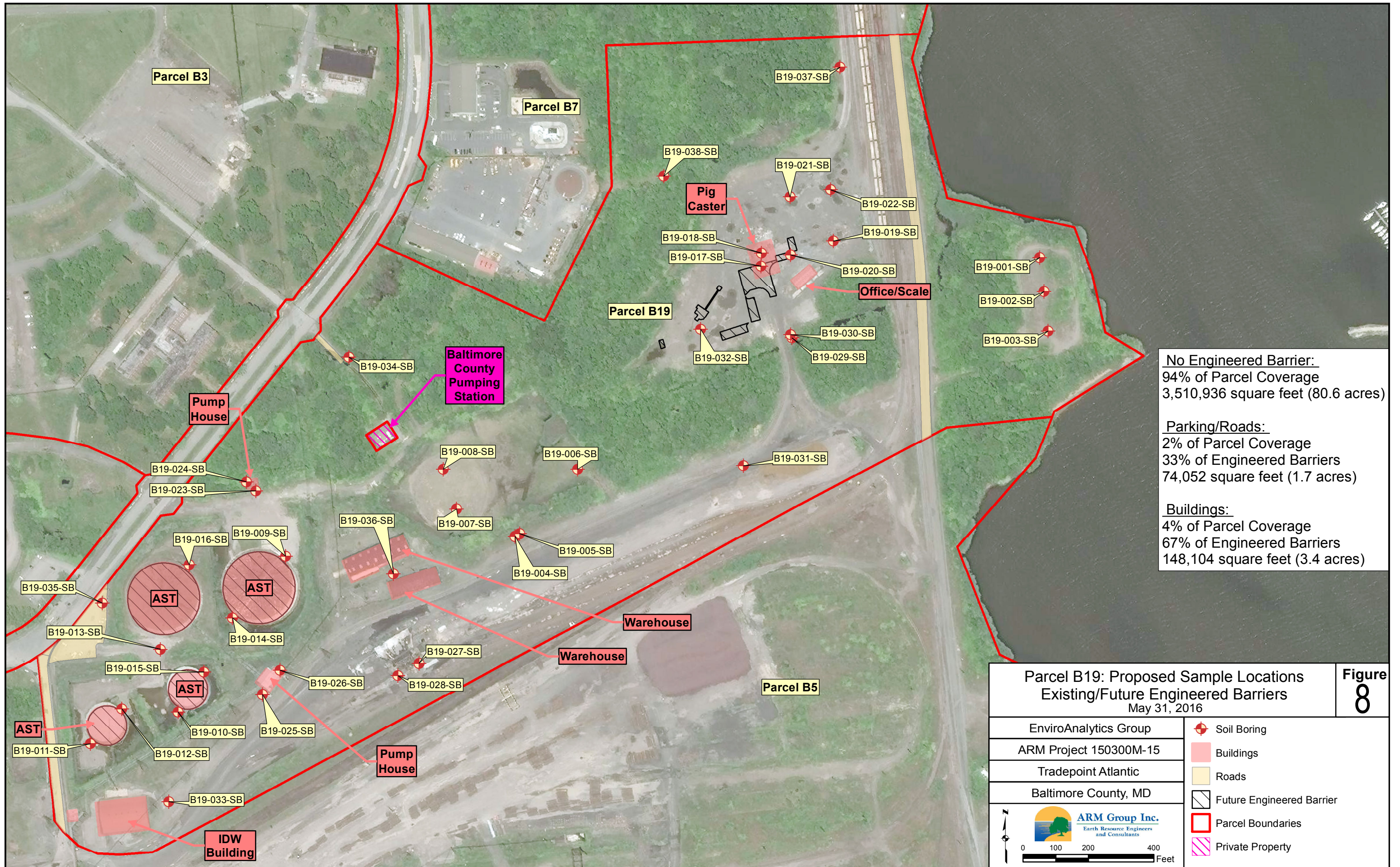
Buildings:
 4% of Parcel Coverage
 67% of Engineered Barriers
 148,104 square feet (3.4 acres)

Parcel B19: Proposed Sample Locations
 Aerial View
 May 31, 2016

Figure
 7

EnviroAnalytics Group	Soil Boring
ARM Project 150300M-15	Buildings
Tradepoint Atlantic	REC Area
Baltimore County, MD	Parcel Boundaries
 ARM Group Inc. Earth Resource Engineers and Consultants	Private Property

0 100 200 400 Feet





No Engineered Barrier:
 94% of Parcel Coverage
 3,510,936 square feet (80.6 acres)

Parking/Roads:
 2% of Parcel Coverage
 33% of Engineered Barriers
 74,052 square feet (1.7 acres)

Buildings:
 4% of Parcel Coverage
 67% of Engineered Barriers
 148,104 square feet (3.4 acres)

Parcel B19: Groundwater Locations
 Aerial View (From Groundwater Work Plan)
 May 31, 2016

Figure 9

EnviroAnalytics Group		Existing Near-field Well Existing Perimeter Well Existing Historic Well	Buildings Parcel Boundaries Private Property REC Area
ARM Project 150300M-15			
Tradepoint Atlantic			
Baltimore County, MD		ARM Group Inc. Earth Resource Engineers and Consultants	
		0 100 200 400 Feet	

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APPENDIX A

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Table 1
Area B Groundwater Investigation Well Data (Validated)
Former Sparrows Point Steel Mill
Sparrows Point, Maryland

Well ID	Zone	Screen Interval (feet bgs)	Parameter	CAS	Sample Date	LOQ	Result (ug/L)	Final Flag	PAL	Exceeds PAL?
SW-043-MWI	Intermediate	43.3-53.3	1,1,1-Trichloroethane	71-55-6	1/28/2016	1	1	U	200	no
SW-043-MWI	Intermediate	43.3-53.3	1,1,2,2-Tetrachloroethane	79-34-5	1/28/2016	1	1	U	0.076	no
SW-043-MWI	Intermediate	43.3-53.3	1,1,2-Trichloroethane	79-00-5	1/28/2016	1	1	U	5	no
SW-043-MWI	Intermediate	43.3-53.3	1,1,2-Trichlorotrifluoroethane	76-13-1	1/28/2016	50	50	U	55,000	no
SW-043-MWI	Intermediate	43.3-53.3	1,1-Biphenyl	92-52-4	1/28/2016	1	1	U	0.83	no
SW-043-MWI	Intermediate	43.3-53.3	1,1-Dichloroethane	75-34-3	1/28/2016	1	1	U	2.7	no
SW-043-MWI	Intermediate	43.3-53.3	1,1-Dichloroethene	75-35-4	1/28/2016	1	1	U	7	no
SW-043-MWI	Intermediate	43.3-53.3	1,2,3-Trichlorobenzene	87-61-6	1/28/2016	2	2	U	7	no
SW-043-MWI	Intermediate	43.3-53.3	1,2,4,5-Tetrachlorobenzene	95-94-3	1/28/2016	1	1	U	1.7	no
SW-043-MWI	Intermediate	43.3-53.3	1,2,4-Trichlorobenzene	120-82-1	1/28/2016	1	1	U	70	no
SW-043-MWI	Intermediate	43.3-53.3	1,2-Dibromo-3-chloropropane	96-12-8	1/28/2016	5	5	U	0.2	no
SW-043-MWI	Intermediate	43.3-53.3	1,2-Dibromoethane	106-93-4	1/28/2016	1	1	U	0.0075	no
SW-043-MWI	Intermediate	43.3-53.3	1,2-Dichlorobenzene	95-50-1	1/28/2016	1	1	U	600	no
SW-043-MWI	Intermediate	43.3-53.3	1,2-Dichloroethane	107-06-2	1/28/2016	1	1	U	5	no
SW-043-MWI	Intermediate	43.3-53.3	1,2-Dichloroethene (Total)	540-59-0	1/28/2016	2	2	U	70	no
SW-043-MWI	Intermediate	43.3-53.3	1,2-Dichloropropane	78-87-5	1/28/2016	1	1	U	5	no
SW-043-MWI	Intermediate	43.3-53.3	1,3-Dichlorobenzene	541-73-1	1/28/2016	1	1	U		no
SW-043-MWI	Intermediate	43.3-53.3	1,4-Dichlorobenzene	106-46-7	1/28/2016	1	1	U	75	no
SW-043-MWI	Intermediate	43.3-53.3	1,4-Dioxane	123-91-1	1/28/2016	0.1	0.1	U	0.46	no
SW-043-MWI	Intermediate	43.3-53.3	2,3,4,6-Tetrachlorophenol	58-90-2	1/28/2016	1	1	U	240	no
SW-043-MWI	Intermediate	43.3-53.3	2,4,5-Trichlorophenol	95-95-4	1/28/2016	2.5	2.5	U	1,200	no
SW-043-MWI	Intermediate	43.3-53.3	2,4,6-Trichlorophenol	88-06-2	1/28/2016	1	1	U	4	no
SW-043-MWI	Intermediate	43.3-53.3	2,4-Dichlorophenol	120-83-2	1/28/2016	1	1	U	46	no
SW-043-MWI	Intermediate	43.3-53.3	2,4-Dimethylphenol	105-67-9	1/28/2016	1	1	U	360	no
SW-043-MWI	Intermediate	43.3-53.3	2,4-Dinitrophenol	51-28-5	1/28/2016	2.5	2.5	U	39	no
SW-043-MWI	Intermediate	43.3-53.3	2,4-Dinitrotoluene	121-14-2	1/28/2016	1	1	U	0.24	no
SW-043-MWI	Intermediate	43.3-53.3	2,6-Dinitrotoluene	606-20-2	1/28/2016	1	1	U	0.048	no
SW-043-MWI	Intermediate	43.3-53.3	2-Butanone (MEK)	78-93-3	1/28/2016	10	10	U	5,600	no
SW-043-MWI	Intermediate	43.3-53.3	2-Chloronaphthalene	91-58-7	1/28/2016	1	1	U	750	no
SW-043-MWI	Intermediate	43.3-53.3	2-Chlorophenol	95-57-8	1/28/2016	1	1	U	91	no
SW-043-MWI	Intermediate	43.3-53.3	2-Hexanone	591-78-6	1/28/2016	10	10	U	38	no
SW-043-MWI	Intermediate	43.3-53.3	2-Methylnaphthalene	91-57-6	1/28/2016	0.1	0.1	U	36	no
SW-043-MWI	Intermediate	43.3-53.3	2-Methylphenol	95-48-7	1/28/2016	1	1	U	930	no
SW-043-MWI	Intermediate	43.3-53.3	2-Nitroaniline	88-74-4	1/28/2016	2.5	2.5	U	190	no
SW-043-MWI	Intermediate	43.3-53.3	3&4-Methylphenol(m&p Cresol)	108-39-4/106-44-5	1/28/2016	2	2	U	930	no
SW-043-MWI	Intermediate	43.3-53.3	3,3'-Dichlorobenzidine	91-94-1	1/28/2016	1	1	U	0.12	no
SW-043-MWI	Intermediate	43.3-53.3	4-Chloroaniline	106-47-8	1/28/2016	1	1	U	0.36	no
SW-043-MWI	Intermediate	43.3-53.3	4-Methyl-2-pentanone (MIBK)	108-10-1	1/28/2016	10	10	U	1,200	no
SW-043-MWI	Intermediate	43.3-53.3	4-Nitroaniline	100-01-6	1/28/2016	2.5	2.5	U	3.8	no
SW-043-MWI	Intermediate	43.3-53.3	Acenaphthene	83-32-9	1/28/2016	0.1	0.1	U	530	no
SW-043-MWI	Intermediate	43.3-53.3	Acenaphthylene	208-96-8	1/28/2016	0.1	0.1	U	530	no
SW-043-MWI	Intermediate	43.3-53.3	Acetone	67-64-1	1/28/2016	10	20.3	U	14,000	no
SW-043-MWI	Intermediate	43.3-53.3	Acetophenone	98-86-2	1/28/2016	1	1	U	1,900	no
SW-043-MWI	Intermediate	43.3-53.3	Aluminum (D)	7429-90-5	1/28/2016	50	18.9	B	20,000	no
SW-043-MWI	Intermediate	43.3-53.3	Aluminum (T)	7429-90-5	1/28/2016	50	119	U	20,000	no
SW-043-MWI	Intermediate	43.3-53.3	Anthracene	120-12-7	1/28/2016	0.1	0.1	U	1,800	no
SW-043-MWI	Intermediate	43.3-53.3	Antimony (D)	7440-36-0	1/28/2016	6	6	U	6	no
SW-043-MWI	Intermediate	43.3-53.3	Antimony (T)	7440-36-0	1/28/2016	6	6	U	6	no
SW-043-MWI	Intermediate	43.3-53.3	Arsenic (D)	7440-38-2	1/28/2016	5	3.3	B	10	no
SW-043-MWI	Intermediate	43.3-53.3	Arsenic (T)	7440-38-2	1/28/2016	5	2.9	B	10	no
SW-043-MWI	Intermediate	43.3-53.3	Barium (D)	7440-39-3	1/28/2016	10	173	U	2,000	no
SW-043-MWI	Intermediate	43.3-53.3	Barium (T)	7440-39-3	1/28/2016	10	175	U	2,000	no
SW-043-MWI	Intermediate	43.3-53.3	Benzaldehyde	100-52-7	1/28/2016	1	1	U	1,900	no
SW-043-MWI	Intermediate	43.3-53.3	Benzene	71-43-2	1/28/2016	1	1	U	5	no
SW-043-MWI	Intermediate	43.3-53.3	Benzo[a]anthracene	56-55-3	1/28/2016	0.1	0.1	U	0.012	no
SW-043-MWI	Intermediate	43.3-53.3	Benzo[a]pyrene	50-32-8	1/28/2016	0.1	0.1	U	0.2	no
SW-043-MWI	Intermediate	43.3-53.3	Benzo[b]fluoranthene	205-99-2	1/28/2016	0.1	0.1	U	0.034	no
SW-043-MWI	Intermediate	43.3-53.3	Benzo[g,h,i]perylene	191-24-2	1/28/2016	0.1	0.1	U		no
SW-043-MWI	Intermediate	43.3-53.3	Benzo[k]fluoranthene	207-08-9	1/28/2016	0.1	0.1	U	0.34	no
SW-043-MWI	Intermediate	43.3-53.3	Beryllium (D)	7440-41-7	1/28/2016	1	1	U	4	no
SW-043-MWI	Intermediate	43.3-53.3	Beryllium (T)	7440-41-7	1/28/2016	1	1	U	4	no
SW-043-MWI	Intermediate	43.3-53.3	bis(2-chloroethoxy)methane	111-91-1	1/28/2016	1	1	U	59	no
SW-043-MWI	Intermediate	43.3-53.3	bis(2-Chloroethyl)ether	111-44-4	1/28/2016	1	1	U	0.014	no
SW-043-MWI	Intermediate	43.3-53.3	bis(2-Chloroisopropyl)ether	108-60-1	1/28/2016	1	1	U	0.36	no
SW-043-MWI	Intermediate	43.3-53.3	bis(2-Ethylhexyl)phthalate	117-81-7	1/28/2016	1	1	U	6	no
SW-043-MWI	Intermediate	43.3-53.3	Bromodichloromethane	75-27-4	1/28/2016	1	1	U	0.13	no
SW-043-MWI	Intermediate	43.3-53.3	Bromoform	75-25-2	1/28/2016	1	1	U	3.3	no
SW-043-MWI	Intermediate	43.3-53.3	Bromomethane	74-83-9	1/28/2016	1	1	UJ	7.5	no
SW-043-MWI	Intermediate	43.3-53.3	Cadmium (D)	7440-43-9	1/28/2016	3	3	U	5	no
SW-043-MWI	Intermediate	43.3-53.3	Cadmium (T)	7440-43-9	1/28/2016	3	3	U	5	no
SW-043-MWI	Intermediate	43.3-53.3	Caprolactam	105-60-2	1/28/2016	2.5	2.5	U	9,900	no
SW-043-MWI	Intermediate	43.3-53.3	Carbazole	86-74-8	1/28/2016	1	1	U		no
SW-043-MWI	Intermediate	43.3-53.3	Carbon disulfide	75-15-0	1/28/2016	1	1	U	810	no
SW-043-MWI	Intermediate	43.3-53.3	Carbon tetrachloride	56-23-5	1/28/2016	1	1	U	5	no
SW-043-MWI	Intermediate	43.3-53.3	Chlorobenzene	108-90-7	1/28/2016	1	1	U	100	no
SW-043-MWI	Intermediate	43.3-53.3	Chloroethane	75-00-3	1/28/2016	1	1	U	21,000	no
SW-043-MWI	Intermediate	43.3-53.3	Chloroform	67-66-3	1/28/2016	1	2.6	U	0.22	YES
SW-043-MWI	Intermediate	43.3-53.3	Chloromethane	74-87-3	1/28/2016	1	1	UJ	190	no
SW-043-MWI	Intermediate	43.3-53.3	Chromium (D)	7440-47-3	1/28/2016	5	1.3	B	100	no
SW-043-MWI	Intermediate	43.3-53.3	Chromium (T)	7440-47-3	1/28/2016	5	1.3	J	100	no

Table 1
Area B Groundwater Investigation Well Data (Validated)
Former Sparrows Point Steel Mill
Sparrows Point, Maryland

Well ID	Zone	Screen Interval (feet bgs)	Parameter	CAS	Sample Date	LOQ	Result (ug/L)	Final Flag	PAL	Exceeds PAL?
SW-043-MWI	Intermediate	43.3-53.3	Chromium VI (T)	18540-29-9	1/28/2016	10	10	U	0.035	no
SW-043-MWI	Intermediate	43.3-53.3	Chrysene	218-01-9	1/28/2016	0.1	0.1	U	3.4	no
SW-043-MWI	Intermediate	43.3-53.3	cis-1,2-Dichloroethene	156-59-2	1/28/2016	1	1	U	70	no
SW-043-MWI	Intermediate	43.3-53.3	cis-1,3-Dichloropropene	10061-01-5	1/28/2016	1	1	U	no	no
SW-043-MWI	Intermediate	43.3-53.3	Cobalt (D)	7440-48-4	1/28/2016	5	2	B	6	no
SW-043-MWI	Intermediate	43.3-53.3	Cobalt (T)	7440-48-4	1/28/2016	5	2	B	6	no
SW-043-MWI	Intermediate	43.3-53.3	Copper (D)	7440-50-8	1/28/2016	5	5	U	1,300	no
SW-043-MWI	Intermediate	43.3-53.3	Copper (T)	7440-50-8	1/28/2016	5	5	U	1,300	no
SW-043-MWI	Intermediate	43.3-53.3	Cyanide	57-12-5	1/28/2016	10	10	U	200	no
SW-043-MWI	Intermediate	43.3-53.3	Cyclohexane	110-82-7	1/28/2016	10	10	U	13,000	no
SW-043-MWI	Intermediate	43.3-53.3	Dibenz[a,h]anthracene	53-70-3	1/28/2016	0.1	0.1	U	0.0034	no
SW-043-MWI	Intermediate	43.3-53.3	Dibromochloromethane	124-48-1	1/28/2016	1	1	U	0.17	no
SW-043-MWI	Intermediate	43.3-53.3	Dichlorodifluoromethane	75-71-8	1/28/2016	1	1	U	200	no
SW-043-MWI	Intermediate	43.3-53.3	Diesel Range Organics	DRO	1/28/2016	106	191	J	47	YES
SW-043-MWI	Intermediate	43.3-53.3	Diethylphthalate	84-66-2	1/28/2016	1	1	U	15,000	no
SW-043-MWI	Intermediate	43.3-53.3	Di-n-butylphthalate	84-74-2	1/28/2016	1	1	U	900	no
SW-043-MWI	Intermediate	43.3-53.3	Di-n-octylphthalate	117-84-0	1/28/2016	1	1	U	200	no
SW-043-MWI	Intermediate	43.3-53.3	Ethylbenzene	100-41-4	1/28/2016	1	1	U	700	no
SW-043-MWI	Intermediate	43.3-53.3	Fluoranthene	206-44-0	1/28/2016	0.1	0.1	U	800	no
SW-043-MWI	Intermediate	43.3-53.3	Fluorene	86-73-7	1/28/2016	0.1	0.1	U	290	no
SW-043-MWI	Intermediate	43.3-53.3	Gasoline Range Organics	GRO	1/28/2016	200	200	U	47	no
SW-043-MWI	Intermediate	43.3-53.3	Hexachlorobenzene	118-74-1	1/28/2016	1	1	U	1	no
SW-043-MWI	Intermediate	43.3-53.3	Hexachlorobutadiene	87-68-3	1/28/2016	1	1	U	0.14	no
SW-043-MWI	Intermediate	43.3-53.3	Hexachlorocyclopentadiene	77-47-4	1/28/2016	1	1	U	50	no
SW-043-MWI	Intermediate	43.3-53.3	Hexachloroethane	67-72-1	1/28/2016	1	1	U	0.33	no
SW-043-MWI	Intermediate	43.3-53.3	Indeno[1,2,3-c,d]pyrene	193-39-5	1/28/2016	0.1	0.1	U	0.034	no
SW-043-MWI	Intermediate	43.3-53.3	Iron (D)	7439-89-6	1/28/2016	70	14,800	U	14,000	YES
SW-043-MWI	Intermediate	43.3-53.3	Iron (T)	7439-89-6	1/28/2016	70	15,100	U	14,000	YES
SW-043-MWI	Intermediate	43.3-53.3	Isophorone	78-59-1	1/28/2016	1	1	U	78	no
SW-043-MWI	Intermediate	43.3-53.3	Isopropylbenzene	98-82-8	1/28/2016	1	1	U	450	no
SW-043-MWI	Intermediate	43.3-53.3	Lead (D)	7439-92-1	1/28/2016	5	5	U	15	no
SW-043-MWI	Intermediate	43.3-53.3	Lead (T)	7439-92-1	1/28/2016	5	5	U	15	no
SW-043-MWI	Intermediate	43.3-53.3	Manganese (D)	7439-96-5	1/28/2016	5	1,020	U	430	YES
SW-043-MWI	Intermediate	43.3-53.3	Manganese (T)	7439-96-5	1/28/2016	5	1,010	U	430	YES
SW-043-MWI	Intermediate	43.3-53.3	Mercury (D)	7439-97-6	1/28/2016	0.2	0.2	UJ	2	no
SW-043-MWI	Intermediate	43.3-53.3	Mercury (T)	7439-97-6	1/28/2016	0.2	0.2	UJ	2	no
SW-043-MWI	Intermediate	43.3-53.3	Methyl Acetate	79-20-9	1/28/2016	5	5	U	20,000	no
SW-043-MWI	Intermediate	43.3-53.3	Methyl tert-butyl ether (MTBE)	1634-04-4	1/28/2016	1	1	U	14	no
SW-043-MWI	Intermediate	43.3-53.3	Methylene Chloride	75-09-2	1/28/2016	1	1	U	5	no
SW-043-MWI	Intermediate	43.3-53.3	Naphthalene	91-20-3	1/28/2016	0.1	0.1	U	0.17	no
SW-043-MWI	Intermediate	43.3-53.3	Nickel (D)	7440-02-0	1/28/2016	10	4.3	B	390	no
SW-043-MWI	Intermediate	43.3-53.3	Nickel (T)	7440-02-0	1/28/2016	10	5	B	390	no
SW-043-MWI	Intermediate	43.3-53.3	Nitrobenzene	98-95-3	1/28/2016	1	1	U	0.14	no
SW-043-MWI	Intermediate	43.3-53.3	N-Nitroso-di-n-propylamine	621-64-7	1/28/2016	1	1	U	0.011	no
SW-043-MWI	Intermediate	43.3-53.3	N-Nitrosodiphenylamine	86-30-6	1/28/2016	1	1	U	12	no
SW-043-MWI	Intermediate	43.3-53.3	Pentachlorophenol	87-86-5	1/28/2016	2.5	2.5	U	1	no
SW-043-MWI	Intermediate	43.3-53.3	Phenanthrene	85-01-8	1/28/2016	0.1	0.1	U	no	no
SW-043-MWI	Intermediate	43.3-53.3	Phenol	108-95-2	1/28/2016	1	1	U	5,800	no
SW-043-MWI	Intermediate	43.3-53.3	Pyrene	129-00-0	1/28/2016	0.1	0.1	U	120	no
SW-043-MWI	Intermediate	43.3-53.3	Selenium (D)	7782-49-2	1/28/2016	8	8	U	50	no
SW-043-MWI	Intermediate	43.3-53.3	Selenium (T)	7782-49-2	1/28/2016	8	8	U	50	no
SW-043-MWI	Intermediate	43.3-53.3	Silver (D)	7440-22-4	1/28/2016	6	6	U	94	no
SW-043-MWI	Intermediate	43.3-53.3	Silver (T)	7440-22-4	1/28/2016	6	0.57	B	94	no
SW-043-MWI	Intermediate	43.3-53.3	Styrene	100-42-5	1/28/2016	1	1	U	100	no
SW-043-MWI	Intermediate	43.3-53.3	Tetrachloroethene	127-18-4	1/28/2016	1	1	U	5	no
SW-043-MWI	Intermediate	43.3-53.3	Thallium (D)	7440-28-0	1/28/2016	10	10	U	2	no
SW-043-MWI	Intermediate	43.3-53.3	Thallium (T)	7440-28-0	1/28/2016	10	10	U	2	no
SW-043-MWI	Intermediate	43.3-53.3	Toluene	108-88-3	1/28/2016	1	1	U	1,000	no
SW-043-MWI	Intermediate	43.3-53.3	trans-1,2-Dichloroethene	156-60-5	1/28/2016	1	1	U	100	no
SW-043-MWI	Intermediate	43.3-53.3	trans-1,3-Dichloropropene	10061-02-6	1/28/2016	1	1	U	no	no
SW-043-MWI	Intermediate	43.3-53.3	Trichloroethene	79-01-6	1/28/2016	1	1	U	5	no
SW-043-MWI	Intermediate	43.3-53.3	Trichlorofluoromethane	75-69-4	1/28/2016	1	1	U	1,100	no
SW-043-MWI	Intermediate	43.3-53.3	Vanadium (D)	7440-62-2	1/28/2016	5	5	U	86	no
SW-043-MWI	Intermediate	43.3-53.3	Vanadium (T)	7440-62-2	1/28/2016	5	0.93	J	86	no
SW-043-MWI	Intermediate	43.3-53.3	Vinyl chloride	75-01-4	1/28/2016	1	1	U	2	no
SW-043-MWI	Intermediate	43.3-53.3	Xylenes	1330-20-7	1/28/2016	3	3	U	10,000	no
SW-043-MWI	Intermediate	43.3-53.3	Zinc (D)	7440-66-6	1/28/2016	10	6.4	B	6,000	no
SW-043-MWI	Intermediate	43.3-53.3	Zinc (T)	7440-66-6	1/28/2016	10	6.9	B	6,000	no
SW-043-MWS	Shallow	5.5-15.5	1,1,1-Trichloroethane	71-55-6	12/14/2015	1	1	U	200	no
SW-043-MWS	Shallow	5.5-15.5	1,1,1,2-Tetrachloroethane	79-34-5	12/14/2015	1	1	U	0.076	no
SW-043-MWS	Shallow	5.5-15.5	1,1,1,2-Trichloroethane	79-00-5	12/14/2015	1	1	U	5	no
SW-043-MWS	Shallow	5.5-15.5	1,1,2-Trichlorotrifluoroethane	76-13-1	12/14/2015	50	50	U	55,000	no
SW-043-MWS	Shallow	5.5-15.5	1,1-Biphenyl	92-52-4	12/14/2015	1	1	U	0.83	no
SW-043-MWS	Shallow	5.5-15.5	1,1-Dichloroethane	75-34-3	12/14/2015	1	1	U	2.7	no
SW-043-MWS	Shallow	5.5-15.5	1,1-Dichloroethene	75-35-4	12/14/2015	1	1	U	7	no
SW-043-MWS	Shallow	5.5-15.5	1,2,3-Trichlorobenzene	87-61-6	12/14/2015	2	2	U	7	no
SW-043-MWS	Shallow	5.5-15.5	1,2,4,5-Tetrachlorobenzene	95-94-3	12/14/2015	1	1	U	1.7	no
SW-043-MWS	Shallow	5.5-15.5	1,2,4-Trichlorobenzene	120-82-1	12/14/2015	1	1	U	70	no
SW-043-MWS	Shallow	5.5-15.5	1,2-Dibromo-3-chloropropane	96-12-8	12/14/2015	5	5	U	0.2	no
SW-043-MWS	Shallow	5.5-15.5	1,2-Dibromoethane	106-93-4	12/14/2015	1	1	U	0.0075	no

Table 1
Area B Groundwater Investigation Well Data (Validated)
Former Sparrows Point Steel Mill
Sparrows Point, Maryland

Well ID	Zone	Screen Interval (feet bgs)	Parameter	CAS	Sample Date	LOQ	Result (ug/L)	Final Flag	PAL	Exceeds PAL?
SW-043-MWS	Shallow	5.5-15.5	1,2-Dichlorobenzene	95-50-1	12/14/2015	1	1	U	600	no
SW-043-MWS	Shallow	5.5-15.5	1,2-Dichloroethane	107-06-2	12/14/2015	1	1	U	5	no
SW-043-MWS	Shallow	5.5-15.5	1,2-Dichloroethene (Total)	540-59-0	12/14/2015	2	2	U	70	no
SW-043-MWS	Shallow	5.5-15.5	1,2-Dichloropropane	78-87-5	12/14/2015	1	1	U	5	no
SW-043-MWS	Shallow	5.5-15.5	1,3-Dichlorobenzene	541-73-1	12/14/2015	1	1	U		no
SW-043-MWS	Shallow	5.5-15.5	1,4-Dichlorobenzene	106-46-7	12/14/2015	1	1	U	75	no
SW-043-MWS	Shallow	5.5-15.5	1,4-Dioxane	123-91-1	12/14/2015	0.1	0.1	U	0.46	no
SW-043-MWS	Shallow	5.5-15.5	2,3,4,6-Tetrachlorophenol	58-90-2	12/14/2015	1	1	U	240	no
SW-043-MWS	Shallow	5.5-15.5	2,4,5-Trichlorophenol	95-95-4	12/14/2015	2.6	2.6	U	1,200	no
SW-043-MWS	Shallow	5.5-15.5	2,4,6-Trichlorophenol	88-06-2	12/14/2015	1	1	U	4	no
SW-043-MWS	Shallow	5.5-15.5	2,4-Dichlorophenol	120-83-2	12/14/2015	1	1	U	46	no
SW-043-MWS	Shallow	5.5-15.5	2,4-Dimethylphenol	105-67-9	12/14/2015	1	1	U	360	no
SW-043-MWS	Shallow	5.5-15.5	2,4-Dinitrophenol	51-28-5	12/14/2015	2.6	2.6	UJ	39	no
SW-043-MWS	Shallow	5.5-15.5	2,4-Dinitrotoluene	121-14-2	12/14/2015	1	1	U	0.24	no
SW-043-MWS	Shallow	5.5-15.5	2,6-Dinitrotoluene	606-20-2	12/14/2015	1	1	U	0.048	no
SW-043-MWS	Shallow	5.5-15.5	2-Butanone (MEK)	78-93-3	12/14/2015	10	10	U	5,600	no
SW-043-MWS	Shallow	5.5-15.5	2-Chloronaphthalene	91-58-7	12/14/2015	1	1	U	750	no
SW-043-MWS	Shallow	5.5-15.5	2-Chlorophenol	95-57-8	12/14/2015	1	1	U	91	no
SW-043-MWS	Shallow	5.5-15.5	2-Hexanone	591-78-6	12/14/2015	10	10	U	38	no
SW-043-MWS	Shallow	5.5-15.5	2-Methylnaphthalene	91-57-6	12/14/2015	0.1	0.1	U	36	no
SW-043-MWS	Shallow	5.5-15.5	2-Methylphenol	95-48-7	12/14/2015	1	1	U	930	no
SW-043-MWS	Shallow	5.5-15.5	2-Nitroaniline	88-74-4	12/14/2015	2.6	2.6	U	190	no
SW-043-MWS	Shallow	5.5-15.5	3&4-Methylphenol(m&p Cresol)	108-39-4/106-44-5	12/14/2015	2	2	U	930	no
SW-043-MWS	Shallow	5.5-15.5	4-Chloroaniline	106-47-8	12/14/2015	1	1	U	0.36	no
SW-043-MWS	Shallow	5.5-15.5	4-Methyl-2-pentanone (MIBK)	108-10-1	12/14/2015	10	10	U	1,200	no
SW-043-MWS	Shallow	5.5-15.5	4-Nitroaniline	100-01-6	12/14/2015	2.6	2.6	UJ	3.8	no
SW-043-MWS	Shallow	5.5-15.5	Acenaphthene	83-32-9	12/14/2015	0.1	0.1	U	530	no
SW-043-MWS	Shallow	5.5-15.5	Acenaphthylene	208-96-8	12/14/2015	0.1	0.1	U	530	no
SW-043-MWS	Shallow	5.5-15.5	Acetone	67-64-1	12/14/2015	10	10	UJ	14,000	no
SW-043-MWS	Shallow	5.5-15.5	Acetophenone	98-86-2	12/14/2015	1	1	U	1,900	no
SW-043-MWS	Shallow	5.5-15.5	Aluminum (D)	7429-90-5	12/14/2015	50	1,540		20,000	no
SW-043-MWS	Shallow	5.5-15.5	Aluminum (T)	7429-90-5	12/14/2015	50	1,560		20,000	no
SW-043-MWS	Shallow	5.5-15.5	Anthracene	120-12-7	12/14/2015	0.1	0.1	U	1,800	no
SW-043-MWS	Shallow	5.5-15.5	Antimony (D)	7440-36-0	12/14/2015	6	6	U	6	no
SW-043-MWS	Shallow	5.5-15.5	Antimony (T)	7440-36-0	12/14/2015	6	6	U	6	no
SW-043-MWS	Shallow	5.5-15.5	Arsenic (D)	7440-38-2	12/14/2015	5	5	U	10	no
SW-043-MWS	Shallow	5.5-15.5	Arsenic (T)	7440-38-2	12/14/2015	5	5	U	10	no
SW-043-MWS	Shallow	5.5-15.5	Barium (D)	7440-39-3	12/14/2015	10	22.1		2,000	no
SW-043-MWS	Shallow	5.5-15.5	Barium (T)	7440-39-3	12/14/2015	10	21.7		2,000	no
SW-043-MWS	Shallow	5.5-15.5	Benzaldehyde	100-52-7	12/14/2015	1	1	U	1,900	no
SW-043-MWS	Shallow	5.5-15.5	Benzene	71-43-2	12/14/2015	1	1	U	5	no
SW-043-MWS	Shallow	5.5-15.5	Benzo[a]anthracene	56-55-3	12/14/2015	0.1	0.1	U	0.012	no
SW-043-MWS	Shallow	5.5-15.5	Benzo[a]pyrene	50-32-8	12/14/2015	0.1	0.1	U	0.2	no
SW-043-MWS	Shallow	5.5-15.5	Benzo[b]fluoranthene	205-99-2	12/14/2015	0.1	0.1	U	0.034	no
SW-043-MWS	Shallow	5.5-15.5	Benzo[g,h,i]perylene	191-24-2	12/14/2015	0.1	0.1	U		no
SW-043-MWS	Shallow	5.5-15.5	Benzo[k]fluoranthene	207-08-9	12/14/2015	0.1	0.1	U	0.34	no
SW-043-MWS	Shallow	5.5-15.5	Beryllium (D)	7440-41-7	12/14/2015	1	2.7		4	no
SW-043-MWS	Shallow	5.5-15.5	Beryllium (T)	7440-41-7	12/14/2015	1	2.7		4	no
SW-043-MWS	Shallow	5.5-15.5	bis(2-chloroethoxy)methane	111-91-1	12/14/2015	1	1	U	59	no
SW-043-MWS	Shallow	5.5-15.5	bis(2-Chloroethyl)ether	111-44-4	12/14/2015	1	1	U	0.014	no
SW-043-MWS	Shallow	5.5-15.5	bis(2-Chloroisopropyl)ether	108-60-1	12/14/2015	1	1	U	0.36	no
SW-043-MWS	Shallow	5.5-15.5	bis(2-Ethylhexyl)phthalate	117-81-7	12/14/2015	1	1	U	6	no
SW-043-MWS	Shallow	5.5-15.5	Bromodichloromethane	75-27-4	12/14/2015	1	1	U	0.13	no
SW-043-MWS	Shallow	5.5-15.5	Bromoform	75-25-2	12/14/2015	1	1	U	3.3	no
SW-043-MWS	Shallow	5.5-15.5	Bromomethane	74-83-9	12/14/2015	1	1	U	7.5	no
SW-043-MWS	Shallow	5.5-15.5	Cadmium (D)	7440-43-9	12/14/2015	3	0.79	J	5	no
SW-043-MWS	Shallow	5.5-15.5	Cadmium (T)	7440-43-9	12/14/2015	3	0.79	B	5	no
SW-043-MWS	Shallow	5.5-15.5	Caprolactam	105-60-2	12/14/2015	2.6	2.6	UJ	9,900	no
SW-043-MWS	Shallow	5.5-15.5	Carbazole	86-74-8	12/14/2015	1	1	U		no
SW-043-MWS	Shallow	5.5-15.5	Carbon disulfide	75-15-0	12/14/2015	1	1	U	810	no
SW-043-MWS	Shallow	5.5-15.5	Carbon tetrachloride	56-23-5	12/14/2015	1	1	U	5	no
SW-043-MWS	Shallow	5.5-15.5	Chlorobenzene	108-90-7	12/14/2015	1	1	U	100	no
SW-043-MWS	Shallow	5.5-15.5	Chloroethane	75-00-3	12/14/2015	1	1	U	21,000	no
SW-043-MWS	Shallow	5.5-15.5	Chloroform	67-66-3	12/14/2015	1	1	U	0.22	no
SW-043-MWS	Shallow	5.5-15.5	Chloromethane	74-87-3	12/14/2015	1	1	U	190	no
SW-043-MWS	Shallow	5.5-15.5	Chromium (D)	7440-47-3	12/14/2015	5	1.1	J	100	no
SW-043-MWS	Shallow	5.5-15.5	Chromium (T)	7440-47-3	12/14/2015	5	1.1	B	100	no
SW-043-MWS	Shallow	5.5-15.5	Chromium VI (T)	18540-29-9	12/14/2015	10	10	U	0.035	no
SW-043-MWS	Shallow	5.5-15.5	Chrysene	218-01-9	12/14/2015	0.1	0.1	U	3.4	no
SW-043-MWS	Shallow	5.5-15.5	cis-1,2-Dichloroethene	156-59-2	12/14/2015	1	0.42	J	70	no
SW-043-MWS	Shallow	5.5-15.5	cis-1,3-Dichloropropene	10061-01-5	12/14/2015	1	1	U		no
SW-043-MWS	Shallow	5.5-15.5	Cobalt (D)	7440-48-4	12/14/2015	5	30.9		6	YES
SW-043-MWS	Shallow	5.5-15.5	Cobalt (T)	7440-48-4	12/14/2015	5	29.8		6	YES
SW-043-MWS	Shallow	5.5-15.5	Copper (D)	7440-50-8	12/14/2015	5	7.4	B	1,300	no
SW-043-MWS	Shallow	5.5-15.5	Copper (T)	7440-50-8	12/14/2015	5	7.2		1,300	no
SW-043-MWS	Shallow	5.5-15.5	Cyanide	57-12-5	12/14/2015	10	10	U	200	no
SW-043-MWS	Shallow	5.5-15.5	Cyclohexane	110-82-7	12/14/2015	10	10	U	13,000	no
SW-043-MWS	Shallow	5.5-15.5	Dibenz[a,h]anthracene	53-70-3	12/14/2015	0.1	0.1	U	0.0034	no
SW-043-MWS	Shallow	5.5-15.5	Dibromochloromethane	124-48-1	12/14/2015	1	1	U	0.17	no
SW-043-MWS	Shallow	5.5-15.5	Dichlorodifluoromethane	75-71-8	12/14/2015	1	1	U	200	no

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SW-043-MWS	Shallow	5.5-15.5	Diesel Range Organics	DRO	12/14/2015	101	55	B	47	YES
SW-043-MWS	Shallow	5.5-15.5	Diethylphthalate	84-66-2	12/14/2015	1	1	U	15,000	no
SW-043-MWS	Shallow	5.5-15.5	Di-n-butylphthalate	84-74-2	12/14/2015	1	1	U	900	no
SW-043-MWS	Shallow	5.5-15.5	Di-n-octylphthalate	117-84-0	12/14/2015	1	1	U	200	no
SW-043-MWS	Shallow	5.5-15.5	Ethylbenzene	100-41-4	12/14/2015	1	1	U	700	no
SW-043-MWS	Shallow	5.5-15.5	Fluoranthene	206-44-0	12/14/2015	0.1	0.1	U	800	no
SW-043-MWS	Shallow	5.5-15.5	Fluorene	86-73-7	12/14/2015	0.1	0.1	U	290	no
SW-043-MWS	Shallow	5.5-15.5	Gasoline Range Organics	GRO	12/14/2015	200	200	U	47	no
SW-043-MWS	Shallow	5.5-15.5	Hexachlorobenzene	118-74-1	12/14/2015	1	1	U	1	no
SW-043-MWS	Shallow	5.5-15.5	Hexachlorobutadiene	87-68-3	12/14/2015	1	1	U	0.14	no
SW-043-MWS	Shallow	5.5-15.5	Hexachlorocyclopentadiene	77-47-4	12/14/2015	1	1	U	50	no
SW-043-MWS	Shallow	5.5-15.5	Hexachloroethane	67-72-1	12/14/2015	1	1	U	0.33	no
SW-043-MWS	Shallow	5.5-15.5	Indeno[1,2,3-c,d]pyrene	193-39-5	12/14/2015	0.1	0.1	U	0.034	no
SW-043-MWS	Shallow	5.5-15.5	Iron (D)	7439-89-6	12/14/2015	70	11,100	U	14,000	no
SW-043-MWS	Shallow	5.5-15.5	Iron (T)	7439-89-6	12/14/2015	70	10,700	U	14,000	no
SW-043-MWS	Shallow	5.5-15.5	Isophorone	78-59-1	12/14/2015	1	1	U	78	no
SW-043-MWS	Shallow	5.5-15.5	Isopropylbenzene	98-82-8	12/14/2015	1	1	U	450	no
SW-043-MWS	Shallow	5.5-15.5	Lead (D)	7439-92-1	12/14/2015	5	5	U	15	no
SW-043-MWS	Shallow	5.5-15.5	Lead (T)	7439-92-1	12/14/2015	5	5	U	15	no
SW-043-MWS	Shallow	5.5-15.5	Manganese (D)	7439-96-5	12/14/2015	5	1,170	J	430	YES
SW-043-MWS	Shallow	5.5-15.5	Manganese (T)	7439-96-5	12/14/2015	5	1,070	U	430	YES
SW-043-MWS	Shallow	5.5-15.5	Mercury (D)	7439-97-6	12/14/2015	0.2	0.2	U	2	no
SW-043-MWS	Shallow	5.5-15.5	Mercury (T)	7439-97-6	12/14/2015	0.2	0.2	U	2	no
SW-043-MWS	Shallow	5.5-15.5	Methyl Acetate	79-20-9	12/14/2015	5	5	U	20,000	no
SW-043-MWS	Shallow	5.5-15.5	Methyl tert-butyl ether (MTBE)	1634-04-4	12/14/2015	1	1	U	14	no
SW-043-MWS	Shallow	5.5-15.5	Methylene Chloride	75-09-2	12/14/2015	1	1	U	5	no
SW-043-MWS	Shallow	5.5-15.5	Naphthalene	91-20-3	12/14/2015	0.1	0.044	B	0.17	no
SW-043-MWS	Shallow	5.5-15.5	Nickel (D)	7440-02-0	12/14/2015	10	30.3	J	390	no
SW-043-MWS	Shallow	5.5-15.5	Nickel (T)	7440-02-0	12/14/2015	10	30.3	J	390	no
SW-043-MWS	Shallow	5.5-15.5	Nitrobenzene	98-95-3	12/14/2015	1	1	U	0.14	no
SW-043-MWS	Shallow	5.5-15.5	N-Nitroso-di-n-propylamine	621-64-7	12/14/2015	1	1	U	0.011	no
SW-043-MWS	Shallow	5.5-15.5	N-Nitrosodiphenylamine	86-30-6	12/14/2015	1	1	U	12	no
SW-043-MWS	Shallow	5.5-15.5	Pentachlorophenol	87-86-5	12/14/2015	2.6	2.6	U	1	no
SW-043-MWS	Shallow	5.5-15.5	Phenanthrene	85-01-8	12/14/2015	0.1	0.1	U	no	no
SW-043-MWS	Shallow	5.5-15.5	Phenol	108-95-2	12/14/2015	1	1	U	5,800	no
SW-043-MWS	Shallow	5.5-15.5	Pyrene	129-00-0	12/14/2015	0.1	0.1	U	120	no
SW-043-MWS	Shallow	5.5-15.5	Selenium (D)	7782-49-2	12/14/2015	8	8	U	50	no
SW-043-MWS	Shallow	5.5-15.5	Selenium (T)	7782-49-2	12/14/2015	8	4	B	50	no
SW-043-MWS	Shallow	5.5-15.5	Silver (D)	7440-22-4	12/14/2015	6	6	U	94	no
SW-043-MWS	Shallow	5.5-15.5	Silver (T)	7440-22-4	12/14/2015	6	6	U	94	no
SW-043-MWS	Shallow	5.5-15.5	Styrene	100-42-5	12/14/2015	1	1	U	100	no
SW-043-MWS	Shallow	5.5-15.5	Tetrachloroethene	127-18-4	12/14/2015	1	1	U	5	no
SW-043-MWS	Shallow	5.5-15.5	Thallium (D)	7440-28-0	12/14/2015	10	10	U	2	no
SW-043-MWS	Shallow	5.5-15.5	Thallium (T)	7440-28-0	12/14/2015	10	10	U	2	no
SW-043-MWS	Shallow	5.5-15.5	Toluene	108-88-3	12/14/2015	1	1	U	1,000	no
SW-043-MWS	Shallow	5.5-15.5	trans-1,2-Dichloroethene	156-60-5	12/14/2015	1	1	U	100	no
SW-043-MWS	Shallow	5.5-15.5	trans-1,3-Dichloropropene	10061-02-6	12/14/2015	1	1	U	no	no
SW-043-MWS	Shallow	5.5-15.5	Trichloroethene	79-01-6	12/14/2015	1	0.47	J	5	no
SW-043-MWS	Shallow	5.5-15.5	Trichlorofluoromethane	75-69-4	12/14/2015	1	1	U	1,100	no
SW-043-MWS	Shallow	5.5-15.5	Vanadium (D)	7440-62-2	12/14/2015	5	0.85	J	86	no
SW-043-MWS	Shallow	5.5-15.5	Vanadium (T)	7440-62-2	12/14/2015	5	1.1	B	86	no
SW-043-MWS	Shallow	5.5-15.5	Vinyl chloride	75-01-4	12/14/2015	1	1	U	2	no
SW-043-MWS	Shallow	5.5-15.5	Xylenes	1330-20-7	12/14/2015	3	3	U	10,000	no
SW-043-MWS	Shallow	5.5-15.5	Zinc (D)	7440-66-6	12/14/2015	10	162	U	6,000	no
SW-043-MWS	Shallow	5.5-15.5	Zinc (T)	7440-66-6	12/14/2015	10	160	U	6,000	no
SW-044-MWS	Shallow	6.3-16.3	1,1,1-Trichloroethane	71-55-6	1/20/2016	1	1	U	200	no
SW-044-MWS	Shallow	6.3-16.3	1,1,2,2-Tetrachloroethane	79-34-5	1/20/2016	1	1	U	0.076	no
SW-044-MWS	Shallow	6.3-16.3	1,1,2-Trichloroethane	79-00-5	1/20/2016	1	1	U	5	no
SW-044-MWS	Shallow	6.3-16.3	1,1,2-Trichlorotrifluoroethane	76-13-1	1/20/2016	50	50	U	55,000	no
SW-044-MWS	Shallow	6.3-16.3	1,1-Biphenyl	92-52-4	1/20/2016	1.4	1.4	U	0.83	no
SW-044-MWS	Shallow	6.3-16.3	1,1-Dichloroethane	75-34-3	1/20/2016	1	1	U	2.7	no
SW-044-MWS	Shallow	6.3-16.3	1,1-Dichloroethene	75-35-4	1/20/2016	1	1	U	7	no
SW-044-MWS	Shallow	6.3-16.3	1,2,3-Trichlorobenzene	87-61-6	1/20/2016	2	2	U	7	no
SW-044-MWS	Shallow	6.3-16.3	1,2,4,5-Tetrachlorobenzene	95-94-3	1/20/2016	1.4	1.4	U	1.7	no
SW-044-MWS	Shallow	6.3-16.3	1,2,4-Trichlorobenzene	120-82-1	1/20/2016	1	1	U	70	no
SW-044-MWS	Shallow	6.3-16.3	1,2-Dibromo-3-chloropropane	96-12-8	1/20/2016	5	5	U	0.2	no
SW-044-MWS	Shallow	6.3-16.3	1,2-Dibromoethane	106-93-4	1/20/2016	1	1	U	0.0075	no
SW-044-MWS	Shallow	6.3-16.3	1,2-Dichlorobenzene	95-50-1	1/20/2016	1	1	U	600	no
SW-044-MWS	Shallow	6.3-16.3	1,2-Dichloroethane	107-06-2	1/20/2016	1	1	U	5	no
SW-044-MWS	Shallow	6.3-16.3	1,2-Dichloroethene (Total)	540-59-0	1/20/2016	2	2	U	70	no
SW-044-MWS	Shallow	6.3-16.3	1,2-Dichloropropane	78-87-5	1/20/2016	1	1	U	5	no
SW-044-MWS	Shallow	6.3-16.3	1,3-Dichlorobenzene	541-73-1	1/20/2016	1	1	U	no	no
SW-044-MWS	Shallow	6.3-16.3	1,4-Dichlorobenzene	106-46-7	1/20/2016	1	1	U	75	no
SW-044-MWS	Shallow	6.3-16.3	1,4-Dioxane	123-91-1	1/20/2016	0.11	0.11	U	0.46	no
SW-044-MWS	Shallow	6.3-16.3	2,3,4,6-Tetrachlorophenol	58-90-2	1/20/2016	1.4	1.4	U	240	no
SW-044-MWS	Shallow	6.3-16.3	2,4,5-Trichlorophenol	95-95-4	1/20/2016	3.4	3.4	U	1,200	no
SW-044-MWS	Shallow	6.3-16.3	2,4,6-Trichlorophenol	88-06-2	1/20/2016	1.4	1.4	U	4	no
SW-044-MWS	Shallow	6.3-16.3	2,4-Dichlorophenol	120-83-2	1/20/2016	1.4	1.4	U	46	no
SW-044-MWS	Shallow	6.3-16.3	2,4-Dimethylphenol	105-67-9	1/20/2016	1.4	1.4	U	360	no
SW-044-MWS	Shallow	6.3-16.3	2,4-Dinitrophenol	51-28-5	1/20/2016	3.4	3.4	U	39	no

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Former Sparrows Point Steel Mill
Sparrows Point, Maryland

Well ID	Zone	Screen Interval (feet bgs)	Parameter	CAS	Sample Date	LOQ	Result (ug/L)	Final Flag	PAL	Exceeds PAL?
SW-044-MWS	Shallow	6.3-16.3	2,4-Dinitrotoluene	121-14-2	1/20/2016	1.4	1.4	U	0.24	no
SW-044-MWS	Shallow	6.3-16.3	2,6-Dinitrotoluene	606-20-2	1/20/2016	1.4	1.4	U	0.048	no
SW-044-MWS	Shallow	6.3-16.3	2-Butanone (MEK)	78-93-3	1/20/2016	10	10	U	5,600	no
SW-044-MWS	Shallow	6.3-16.3	2-Chloronaphthalene	91-58-7	1/20/2016	1.4	1.4	U	750	no
SW-044-MWS	Shallow	6.3-16.3	2-Chlorophenol	95-57-8	1/20/2016	1.4	1.4	U	91	no
SW-044-MWS	Shallow	6.3-16.3	2-Hexanone	591-78-6	1/20/2016	10	10	U	38	no
SW-044-MWS	Shallow	6.3-16.3	2-Methylnaphthalene	91-57-6	1/20/2016	0.11	0.11	U	36	no
SW-044-MWS	Shallow	6.3-16.3	2-Methylphenol	95-48-7	1/20/2016	1.4	1.4	U	930	no
SW-044-MWS	Shallow	6.3-16.3	2-Nitroaniline	88-74-4	1/20/2016	3.4	3.4	U	190	no
SW-044-MWS	Shallow	6.3-16.3	3&4-Methylphenol(m&p Cresol)	108-39-4/106-44-5	1/20/2016	2.7	2.7	U	930	no
SW-044-MWS	Shallow	6.3-16.3	3,3'-Dichlorobenzidine	91-94-1	1/20/2016	1.4	1.4	U	0.12	no
SW-044-MWS	Shallow	6.3-16.3	4-Chloroaniline	106-47-8	1/20/2016	1.4	1.4	UJ	0.36	no
SW-044-MWS	Shallow	6.3-16.3	4-Methyl-2-pentanone (MIBK)	108-10-1	1/20/2016	10	10	U	1,200	no
SW-044-MWS	Shallow	6.3-16.3	4-Nitroaniline	100-01-6	1/20/2016	3.4	3.4	U	3.8	no
SW-044-MWS	Shallow	6.3-16.3	Acenaphthene	83-32-9	1/20/2016	0.11	0.11	U	530	no
SW-044-MWS	Shallow	6.3-16.3	Acenaphthylene	208-96-8	1/20/2016	0.11	0.11	U	530	no
SW-044-MWS	Shallow	6.3-16.3	Acetone	67-64-1	1/20/2016	10	10	U	14,000	no
SW-044-MWS	Shallow	6.3-16.3	Acetophenone	98-86-2	1/20/2016	1.4	1.4	U	1,900	no
SW-044-MWS	Shallow	6.3-16.3	Aluminum (D)	7429-90-5	1/20/2016	50	55.7		20,000	no
SW-044-MWS	Shallow	6.3-16.3	Aluminum (T)	7429-90-5	1/20/2016	50	425		20,000	no
SW-044-MWS	Shallow	6.3-16.3	Anthracene	120-12-7	1/20/2016	0.11	0.11	U	1,800	no
SW-044-MWS	Shallow	6.3-16.3	Antimony (D)	7440-36-0	1/20/2016	6	6	U	6	no
SW-044-MWS	Shallow	6.3-16.3	Antimony (T)	7440-36-0	1/20/2016	6	6	U	6	no
SW-044-MWS	Shallow	6.3-16.3	Arsenic (D)	7440-38-2	1/20/2016	5	5	U	10	no
SW-044-MWS	Shallow	6.3-16.3	Arsenic (T)	7440-38-2	1/20/2016	5	5	U	10	no
SW-044-MWS	Shallow	6.3-16.3	Barium (D)	7440-39-3	1/20/2016	10	91.1		2,000	no
SW-044-MWS	Shallow	6.3-16.3	Barium (T)	7440-39-3	1/20/2016	10	108		2,000	no
SW-044-MWS	Shallow	6.3-16.3	Benzaldehyde	100-52-7	1/20/2016	1.4	1.4	U	1,900	no
SW-044-MWS	Shallow	6.3-16.3	Benzene	71-43-2	1/20/2016	1	1	U	5	no
SW-044-MWS	Shallow	6.3-16.3	Benzo[a]anthracene	56-55-3	1/20/2016	0.11	0.11	U	0.012	no
SW-044-MWS	Shallow	6.3-16.3	Benzo[a]pyrene	50-32-8	1/20/2016	0.11	0.11	U	0.2	no
SW-044-MWS	Shallow	6.3-16.3	Benzo[b]fluoranthene	205-99-2	1/20/2016	0.11	0.11	U	0.034	no
SW-044-MWS	Shallow	6.3-16.3	Benzo[g,h,i]perylene	191-24-2	1/20/2016	0.11	0.11	U		no
SW-044-MWS	Shallow	6.3-16.3	Benzo[k]fluoranthene	207-08-9	1/20/2016	0.11	0.11	U	0.34	no
SW-044-MWS	Shallow	6.3-16.3	Beryllium (D)	7440-41-7	1/20/2016	1	1	U	4	no
SW-044-MWS	Shallow	6.3-16.3	Beryllium (T)	7440-41-7	1/20/2016	1	1	U	4	no
SW-044-MWS	Shallow	6.3-16.3	bis(2-chloroethoxy)methane	111-91-1	1/20/2016	1.4	1.4	U	59	no
SW-044-MWS	Shallow	6.3-16.3	bis(2-Chloroethyl)ether	111-44-4	1/20/2016	1.4	1.4	U	0.014	no
SW-044-MWS	Shallow	6.3-16.3	bis(2-Chloroisopropyl)ether	108-60-1	1/20/2016	1.4	1.4	U	0.36	no
SW-044-MWS	Shallow	6.3-16.3	bis(2-Ethylhexyl)phthalate	117-81-7	1/20/2016	1.4	1.4	U	6	no
SW-044-MWS	Shallow	6.3-16.3	Bromodichloromethane	75-27-4	1/20/2016	1	1	U	0.13	no
SW-044-MWS	Shallow	6.3-16.3	Bromoform	75-25-2	1/20/2016	1	1	U	3.3	no
SW-044-MWS	Shallow	6.3-16.3	Bromomethane	74-83-9	1/20/2016	1	1	U	7.5	no
SW-044-MWS	Shallow	6.3-16.3	Cadmium (D)	7440-43-9	1/20/2016	3	1.3	B	5	no
SW-044-MWS	Shallow	6.3-16.3	Cadmium (T)	7440-43-9	1/20/2016	3	1.1	B	5	no
SW-044-MWS	Shallow	6.3-16.3	Caprolactam	105-60-2	1/20/2016	3.4	3.4	U	9,900	no
SW-044-MWS	Shallow	6.3-16.3	Carbazole	86-74-8	1/20/2016	1.4	1.4	UJ		no
SW-044-MWS	Shallow	6.3-16.3	Carbon disulfide	75-15-0	1/20/2016	1	1	U	810	no
SW-044-MWS	Shallow	6.3-16.3	Carbon tetrachloride	56-23-5	1/20/2016	1	1	U	5	no
SW-044-MWS	Shallow	6.3-16.3	Chlorobenzene	108-90-7	1/20/2016	1	1	U	100	no
SW-044-MWS	Shallow	6.3-16.3	Chloroethane	75-00-3	1/20/2016	1	1	U	21,000	no
SW-044-MWS	Shallow	6.3-16.3	Chloroform	67-66-3	1/20/2016	1	1	U	0.22	no
SW-044-MWS	Shallow	6.3-16.3	Chloromethane	74-87-3	1/20/2016	1	1	U	190	no
SW-044-MWS	Shallow	6.3-16.3	Chromium (D)	7440-47-3	1/20/2016	5	5	U	100	no
SW-044-MWS	Shallow	6.3-16.3	Chromium (T)	7440-47-3	1/20/2016	5	5	U	100	no
SW-044-MWS	Shallow	6.3-16.3	Chromium VI (T)	18540-29-9	1/20/2016	10	10	U	0.035	no
SW-044-MWS	Shallow	6.3-16.3	Chrysene	218-01-9	1/20/2016	0.11	0.11	U	3.4	no
SW-044-MWS	Shallow	6.3-16.3	cis-1,2-Dichloroethene	156-59-2	1/20/2016	1	1	U	70	no
SW-044-MWS	Shallow	6.3-16.3	cis-1,3-Dichloropropene	10061-01-5	1/20/2016	1	1	U		no
SW-044-MWS	Shallow	6.3-16.3	Cobalt (D)	7440-48-4	1/20/2016	25	6.4	J	6	YES
SW-044-MWS	Shallow	6.3-16.3	Cobalt (T)	7440-48-4	1/20/2016	25	7.7	J	6	YES
SW-044-MWS	Shallow	6.3-16.3	Copper (D)	7440-50-8	1/20/2016	5	5	U	1,300	no
SW-044-MWS	Shallow	6.3-16.3	Copper (T)	7440-50-8	1/20/2016	5	5	U	1,300	no
SW-044-MWS	Shallow	6.3-16.3	Cyanide	57-12-5	1/20/2016	10	10	U	200	no
SW-044-MWS	Shallow	6.3-16.3	Cyclohexane	110-82-7	1/20/2016	10	10	U	13,000	no
SW-044-MWS	Shallow	6.3-16.3	Dibenz[a,h]anthracene	53-70-3	1/20/2016	0.11	0.11	U	0.0034	no
SW-044-MWS	Shallow	6.3-16.3	Dibromochloromethane	124-48-1	1/20/2016	1	1	U	0.17	no
SW-044-MWS	Shallow	6.3-16.3	Dichlorodifluoromethane	75-71-8	1/20/2016	1	1	U	200	no
SW-044-MWS	Shallow	6.3-16.3	Diesel Range Organics	DRO	1/20/2016	117	48.5	J	47	YES
SW-044-MWS	Shallow	6.3-16.3	Diethylphthalate	84-66-2	1/20/2016	1.4	1.4	U	15,000	no
SW-044-MWS	Shallow	6.3-16.3	Di-n-butylphthalate	84-74-2	1/20/2016	1.4	1.4	U	900	no
SW-044-MWS	Shallow	6.3-16.3	Di-n-octylphthalate	117-84-0	1/20/2016	1.4	1.4	UJ	200	no
SW-044-MWS	Shallow	6.3-16.3	Ethylbenzene	100-41-4	1/20/2016	1	1	U	700	no
SW-044-MWS	Shallow	6.3-16.3	Fluoranthene	206-44-0	1/20/2016	0.11	0.024	J	800	no
SW-044-MWS	Shallow	6.3-16.3	Fluorene	86-73-7	1/20/2016	0.11	0.11	U	290	no
SW-044-MWS	Shallow	6.3-16.3	Gasoline Range Organics	GRO	1/20/2016	200	200	U	47	no
SW-044-MWS	Shallow	6.3-16.3	Hexachlorobenzene	118-74-1	1/20/2016	1.4	1.4	U	1	no
SW-044-MWS	Shallow	6.3-16.3	Hexachlorobutadiene	87-68-3	1/20/2016	1.4	1.4	U	0.14	no
SW-044-MWS	Shallow	6.3-16.3	Hexachlorocyclopentadiene	77-47-4	1/20/2016	1.4	1.4	U	50	no
SW-044-MWS	Shallow	6.3-16.3	Hexachloroethane	67-72-1	1/20/2016	1.4	1.4	U	0.33	no

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SW-044-MWS	Shallow	6.3-16.3	Indeno[1,2,3-c,d]pyrene	193-39-5	1/20/2016	0.11	0.11	U	0.034	no
SW-044-MWS	Shallow	6.3-16.3	Iron (D)	7439-89-6	1/20/2016	350	53,700		14,000	YES
SW-044-MWS	Shallow	6.3-16.3	Iron (T)	7439-89-6	1/20/2016	350	63,400		14,000	YES
SW-044-MWS	Shallow	6.3-16.3	Isophorone	78-59-1	1/20/2016	1.4	1.4	U	78	no
SW-044-MWS	Shallow	6.3-16.3	Isopropylbenzene	98-82-8	1/20/2016	1	1	U	450	no
SW-044-MWS	Shallow	6.3-16.3	Lead (D)	7439-92-1	1/20/2016	25	25	U	15	no
SW-044-MWS	Shallow	6.3-16.3	Lead (T)	7439-92-1	1/20/2016	25	25	U	15	no
SW-044-MWS	Shallow	6.3-16.3	Manganese (D)	7439-96-5	1/20/2016	5	3,430		430	YES
SW-044-MWS	Shallow	6.3-16.3	Manganese (T)	7439-96-5	1/20/2016	5	3,060		430	YES
SW-044-MWS	Shallow	6.3-16.3	Mercury (D)	7439-97-6	1/20/2016	0.2	0.2	U	2	no
SW-044-MWS	Shallow	6.3-16.3	Mercury (T)	7439-97-6	1/20/2016	0.2	0.2	U	2	no
SW-044-MWS	Shallow	6.3-16.3	Methyl Acetate	79-20-9	1/20/2016	5	5	U	20,000	no
SW-044-MWS	Shallow	6.3-16.3	Methyl tert-butyl ether (MTBE)	1634-04-4	1/20/2016	1	1	U	14	no
SW-044-MWS	Shallow	6.3-16.3	Methylene Chloride	75-09-2	1/20/2016	1	1	U	5	no
SW-044-MWS	Shallow	6.3-16.3	Naphthalene	91-20-3	1/20/2016	0.11	0.091	B	0.17	no
SW-044-MWS	Shallow	6.3-16.3	Nickel (D)	7440-02-0	1/20/2016	10	14.4		390	no
SW-044-MWS	Shallow	6.3-16.3	Nickel (T)	7440-02-0	1/20/2016	10	15.4		390	no
SW-044-MWS	Shallow	6.3-16.3	Nitrobenzene	98-95-3	1/20/2016	1.4	1.4	U	0.14	no
SW-044-MWS	Shallow	6.3-16.3	N-Nitroso-di-n-propylamine	621-64-7	1/20/2016	1.4	1.4	U	0.011	no
SW-044-MWS	Shallow	6.3-16.3	N-Nitrosodiphenylamine	86-30-6	1/20/2016	1.4	1.4	U	12	no
SW-044-MWS	Shallow	6.3-16.3	Pentachlorophenol	87-86-5	1/20/2016	3.4	3.4	U	1	no
SW-044-MWS	Shallow	6.3-16.3	Phenanthrene	85-01-8	1/20/2016	0.11	0.017	J		no
SW-044-MWS	Shallow	6.3-16.3	Phenol	108-95-2	1/20/2016	1.4	1.4	U	5,800	no
SW-044-MWS	Shallow	6.3-16.3	Pyrene	129-00-0	1/20/2016	0.11	0.11	U	120	no
SW-044-MWS	Shallow	6.3-16.3	Selenium (D)	7782-49-2	1/20/2016	8	8	U	50	no
SW-044-MWS	Shallow	6.3-16.3	Selenium (T)	7782-49-2	1/20/2016	8	8	U	50	no
SW-044-MWS	Shallow	6.3-16.3	Silver (D)	7440-22-4	1/20/2016	6	6	U	94	no
SW-044-MWS	Shallow	6.3-16.3	Silver (T)	7440-22-4	1/20/2016	6	6	U	94	no
SW-044-MWS	Shallow	6.3-16.3	Styrene	100-42-5	1/20/2016	1	1	U	100	no
SW-044-MWS	Shallow	6.3-16.3	Tetrachloroethene	127-18-4	1/20/2016	1	1	U	5	no
SW-044-MWS	Shallow	6.3-16.3	Thallium (D)	7440-28-0	1/20/2016	50	50	U	2	no
SW-044-MWS	Shallow	6.3-16.3	Thallium (T)	7440-28-0	1/20/2016	50	50	U	2	no
SW-044-MWS	Shallow	6.3-16.3	Toluene	108-88-3	1/20/2016	1	1	U	1,000	no
SW-044-MWS	Shallow	6.3-16.3	trans-1,2-Dichloroethene	156-60-5	1/20/2016	1	1	U	100	no
SW-044-MWS	Shallow	6.3-16.3	trans-1,3-Dichloropropene	10061-02-6	1/20/2016	1	1	U		no
SW-044-MWS	Shallow	6.3-16.3	Trichloroethene	79-01-6	1/20/2016	1	1	U	5	no
SW-044-MWS	Shallow	6.3-16.3	Trichlorofluoromethane	75-69-4	1/20/2016	1	1	U	1,100	no
SW-044-MWS	Shallow	6.3-16.3	Vanadium (D)	7440-62-2	1/20/2016	5	2.2	J	86	no
SW-044-MWS	Shallow	6.3-16.3	Vanadium (T)	7440-62-2	1/20/2016	5	2.7	J	86	no
SW-044-MWS	Shallow	6.3-16.3	Vinyl chloride	75-01-4	1/20/2016	1	1	U	2	no
SW-044-MWS	Shallow	6.3-16.3	Xylenes	1330-20-7	1/20/2016	3	3	U	10,000	no
SW-044-MWS	Shallow	6.3-16.3	Zinc (D)	7440-66-6	1/20/2016	10	44		6,000	no
SW-044-MWS	Shallow	6.3-16.3	Zinc (T)	7440-66-6	1/20/2016	10	37.4		6,000	no
SW-049-MWS	Shallow	5.1-15.1	1,1,1-Trichloroethane	71-55-6	1/20/2016	1	1	U	200	no
SW-049-MWS	Shallow	5.1-15.1	1,1,2,2-Tetrachloroethane	79-34-5	1/20/2016	1	1	U	0.076	no
SW-049-MWS	Shallow	5.1-15.1	1,1,2-Trichloroethane	79-00-5	1/20/2016	1	1	U	5	no
SW-049-MWS	Shallow	5.1-15.1	1,1,2-Trichlorotrifluoroethane	76-13-1	1/20/2016	50	50	U	55,000	no
SW-049-MWS	Shallow	5.1-15.1	1,1-Biphenyl	92-52-4	1/20/2016	1.1	1.1	U	0.83	no
SW-049-MWS	Shallow	5.1-15.1	1,1-Dichloroethane	75-34-3	1/20/2016	1	1	U	2.7	no
SW-049-MWS	Shallow	5.1-15.1	1,1-Dichloroethene	75-35-4	1/20/2016	1	1	U	7	no
SW-049-MWS	Shallow	5.1-15.1	1,2,3-Trichlorobenzene	87-61-6	1/20/2016	2	2	U	7	no
SW-049-MWS	Shallow	5.1-15.1	1,2,4,5-Tetrachlorobenzene	95-94-3	1/20/2016	1.1	1.1	U	1.7	no
SW-049-MWS	Shallow	5.1-15.1	1,2,4-Trichlorobenzene	120-82-1	1/20/2016	1	1	U	70	no
SW-049-MWS	Shallow	5.1-15.1	1,2-Dibromo-3-chloropropane	96-12-8	1/20/2016	5	5	U	0.2	no
SW-049-MWS	Shallow	5.1-15.1	1,2-Dibromoethane	106-93-4	1/20/2016	1	1	U	0.0075	no
SW-049-MWS	Shallow	5.1-15.1	1,2-Dichlorobenzene	95-50-1	1/20/2016	1	1	U	600	no
SW-049-MWS	Shallow	5.1-15.1	1,2-Dichloroethane	107-06-2	1/20/2016	1	1	U	5	no
SW-049-MWS	Shallow	5.1-15.1	1,2-Dichloroethene (Total)	540-59-0	1/20/2016	2	2	U	70	no
SW-049-MWS	Shallow	5.1-15.1	1,2-Dichloropropane	78-87-5	1/20/2016	1	1	U	5	no
SW-049-MWS	Shallow	5.1-15.1	1,3-Dichlorobenzene	541-73-1	1/20/2016	1	1	U		no
SW-049-MWS	Shallow	5.1-15.1	1,4-Dichlorobenzene	106-46-7	1/20/2016	1	1	U	75	no
SW-049-MWS	Shallow	5.1-15.1	1,4-Dioxane	123-91-1	1/20/2016	0.11	0.11	U	0.46	no
SW-049-MWS	Shallow	5.1-15.1	2,3,4,6-Tetrachlorophenol	58-90-2	1/20/2016	1.1	1.1	U	240	no
SW-049-MWS	Shallow	5.1-15.1	2,4,5-Trichlorophenol	95-95-4	1/20/2016	2.6	2.6	U	1,200	no
SW-049-MWS	Shallow	5.1-15.1	2,4,6-Trichlorophenol	88-06-2	1/20/2016	1.1	1.1	U	4	no
SW-049-MWS	Shallow	5.1-15.1	2,4-Dichlorophenol	120-83-2	1/20/2016	1.1	1.1	U	46	no
SW-049-MWS	Shallow	5.1-15.1	2,4-Dimethylphenol	105-67-9	1/20/2016	1.1	1.1	U	360	no
SW-049-MWS	Shallow	5.1-15.1	2,4-Dinitrophenol	51-28-5	1/20/2016	2.6	2.6	U	39	no
SW-049-MWS	Shallow	5.1-15.1	2,4-Dinitrotoluene	121-14-2	1/20/2016	1.1	1.1	U	0.24	no
SW-049-MWS	Shallow	5.1-15.1	2,6-Dinitrotoluene	606-20-2	1/20/2016	1.1	1.1	U	0.048	no
SW-049-MWS	Shallow	5.1-15.1	2-Butanone (MEK)	78-93-3	1/20/2016	10	10	U	5,600	no
SW-049-MWS	Shallow	5.1-15.1	2-Chloronaphthalene	91-58-7	1/20/2016	1.1	1.1	U	750	no
SW-049-MWS	Shallow	5.1-15.1	2-Chlorophenol	95-57-8	1/20/2016	1.1	1.1	U	91	no
SW-049-MWS	Shallow	5.1-15.1	2-Hexanone	591-78-6	1/20/2016	10	10	U	38	no
SW-049-MWS	Shallow	5.1-15.1	2-Methylnaphthalene	91-57-6	1/20/2016	0.11	0.11	U	36	no
SW-049-MWS	Shallow	5.1-15.1	2-Methylphenol	95-48-7	1/20/2016	1.1	1.1	U	930	no
SW-049-MWS	Shallow	5.1-15.1	2-Nitroaniline	88-74-4	1/20/2016	2.6	2.6	U	190	no
SW-049-MWS	Shallow	5.1-15.1	3&4-Methylphenol(m&p Cresol)	108-39-4/106-44-5	1/20/2016	2.1	2.1	U	930	no
SW-049-MWS	Shallow	5.1-15.1	3,3'-Dichlorobenzidine	91-94-1	1/20/2016	1.1	1.1	U	0.12	no
SW-049-MWS	Shallow	5.1-15.1	4-Chloroaniline	106-47-8	1/20/2016	1.1	1.1	U	0.36	no

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SW-049-MWS	Shallow	5.1-15.1	4-Methyl-2-pentanone (MIBK)	108-10-1	1/20/2016	10	10	U	1,200	no
SW-049-MWS	Shallow	5.1-15.1	4-Nitroaniline	100-01-6	1/20/2016	2.6	2.6	UJ	3.8	no
SW-049-MWS	Shallow	5.1-15.1	Acenaphthene	83-32-9	1/20/2016	0.11	0.11	U	530	no
SW-049-MWS	Shallow	5.1-15.1	Acenaphthylene	208-96-8	1/20/2016	0.11	0.11	U	530	no
SW-049-MWS	Shallow	5.1-15.1	Acetone	67-64-1	1/20/2016	10	10	U	14,000	no
SW-049-MWS	Shallow	5.1-15.1	Acetophenone	98-86-2	1/20/2016	1.1	1.1	U	1,900	no
SW-049-MWS	Shallow	5.1-15.1	Aluminum (D)	7429-90-5	1/20/2016	50	15,200		20,000	no
SW-049-MWS	Shallow	5.1-15.1	Aluminum (T)	7429-90-5	1/20/2016	50	15,000		20,000	no
SW-049-MWS	Shallow	5.1-15.1	Anthracene	120-12-7	1/20/2016	0.11	0.11	U	1,800	no
SW-049-MWS	Shallow	5.1-15.1	Antimony (D)	7440-36-0	1/20/2016	6	6	U	6	no
SW-049-MWS	Shallow	5.1-15.1	Antimony (T)	7440-36-0	1/20/2016	6	6	U	6	no
SW-049-MWS	Shallow	5.1-15.1	Arsenic (D)	7440-38-2	1/20/2016	5	5	U	10	no
SW-049-MWS	Shallow	5.1-15.1	Arsenic (T)	7440-38-2	1/20/2016	5	5	U	10	no
SW-049-MWS	Shallow	5.1-15.1	Barium (D)	7440-39-3	1/20/2016	10	17.5		2,000	no
SW-049-MWS	Shallow	5.1-15.1	Barium (T)	7440-39-3	1/20/2016	10	18.7		2,000	no
SW-049-MWS	Shallow	5.1-15.1	Benzaldehyde	100-52-7	1/20/2016	1.1	1.1	U	1,900	no
SW-049-MWS	Shallow	5.1-15.1	Benzene	71-43-2	1/20/2016	1	1	U	5	no
SW-049-MWS	Shallow	5.1-15.1	Benzo[a]anthracene	56-55-3	1/20/2016	0.11	0.11	U	0.012	no
SW-049-MWS	Shallow	5.1-15.1	Benzo[a]pyrene	50-32-8	1/20/2016	0.11	0.11	U	0.2	no
SW-049-MWS	Shallow	5.1-15.1	Benzo[b]fluoranthene	205-99-2	1/20/2016	0.11	0.11	U	0.034	no
SW-049-MWS	Shallow	5.1-15.1	Benzo[g,h,i]perylene	191-24-2	1/20/2016	0.11	0.11	U		no
SW-049-MWS	Shallow	5.1-15.1	Benzo[k]fluoranthene	207-08-9	1/20/2016	0.11	0.11	U	0.34	no
SW-049-MWS	Shallow	5.1-15.1	Beryllium (D)	7440-41-7	1/20/2016	1	15.7		4	YES
SW-049-MWS	Shallow	5.1-15.1	Beryllium (T)	7440-41-7	1/20/2016	1	15.6		4	YES
SW-049-MWS	Shallow	5.1-15.1	bis(2-chloroethoxy)methane	111-91-1	1/20/2016	1.1	1.1	U	59	no
SW-049-MWS	Shallow	5.1-15.1	bis(2-Chloroethyl)ether	111-44-4	1/20/2016	1.1	1.1	U	0.014	no
SW-049-MWS	Shallow	5.1-15.1	bis(2-Chloroisopropyl)ether	108-60-1	1/20/2016	1.1	1.1	U	0.36	no
SW-049-MWS	Shallow	5.1-15.1	bis(2-Ethylhexyl)phthalate	117-81-7	1/20/2016	1.1	1.1	U	6	no
SW-049-MWS	Shallow	5.1-15.1	Bromodichloromethane	75-27-4	1/20/2016	1	1	U	0.13	no
SW-049-MWS	Shallow	5.1-15.1	Bromoform	75-25-2	1/20/2016	1	1	U	3.3	no
SW-049-MWS	Shallow	5.1-15.1	Bromomethane	74-83-9	1/20/2016	1	1	U	7.5	no
SW-049-MWS	Shallow	5.1-15.1	Cadmium (D)	7440-43-9	1/20/2016	3	2.7	B	5	no
SW-049-MWS	Shallow	5.1-15.1	Cadmium (T)	7440-43-9	1/20/2016	3	3	B	5	no
SW-049-MWS	Shallow	5.1-15.1	Caprolactam	105-60-2	1/20/2016	2.6	2.6	U	9,900	no
SW-049-MWS	Shallow	5.1-15.1	Carbazole	86-74-8	1/20/2016	1.1	1.1	UJ		no
SW-049-MWS	Shallow	5.1-15.1	Carbon disulfide	75-15-0	1/20/2016	1	1	U	810	no
SW-049-MWS	Shallow	5.1-15.1	Carbon tetrachloride	56-23-5	1/20/2016	1	1	U	5	no
SW-049-MWS	Shallow	5.1-15.1	Chlorobenzene	108-90-7	1/20/2016	1	1	U	100	no
SW-049-MWS	Shallow	5.1-15.1	Chloroethane	75-00-3	1/20/2016	1	1	U	21,000	no
SW-049-MWS	Shallow	5.1-15.1	Chloroform	67-66-3	1/20/2016	1	1	U	0.22	no
SW-049-MWS	Shallow	5.1-15.1	Chloromethane	74-87-3	1/20/2016	1	1	U	190	no
SW-049-MWS	Shallow	5.1-15.1	Chromium (D)	7440-47-3	1/20/2016	5	2.5	B	100	no
SW-049-MWS	Shallow	5.1-15.1	Chromium (T)	7440-47-3	1/20/2016	5	2.7	B	100	no
SW-049-MWS	Shallow	5.1-15.1	Chromium VI (T)	18540-29-9	1/20/2016	10	10	U	0.035	no
SW-049-MWS	Shallow	5.1-15.1	Chrysene	218-01-9	1/20/2016	0.11	0.11	U	3.4	no
SW-049-MWS	Shallow	5.1-15.1	cis-1,2-Dichloroethene	156-59-2	1/20/2016	1	1	U	70	no
SW-049-MWS	Shallow	5.1-15.1	cis-1,3-Dichloropropene	10061-01-5	1/20/2016	1	1	U		no
SW-049-MWS	Shallow	5.1-15.1	Cobalt (D)	7440-48-4	1/20/2016	5	355		6	YES
SW-049-MWS	Shallow	5.1-15.1	Cobalt (T)	7440-48-4	1/20/2016	5	354		6	YES
SW-049-MWS	Shallow	5.1-15.1	Copper (D)	7440-50-8	1/20/2016	5	8.5		1,300	no
SW-049-MWS	Shallow	5.1-15.1	Copper (T)	7440-50-8	1/20/2016	5	10.1		1,300	no
SW-049-MWS	Shallow	5.1-15.1	Cyanide	57-12-5	1/20/2016	10	10	U	200	no
SW-049-MWS	Shallow	5.1-15.1	Cyclohexane	110-82-7	1/20/2016	10	10	U	13,000	no
SW-049-MWS	Shallow	5.1-15.1	Dibenz[a,h]anthracene	53-70-3	1/20/2016	0.11	0.11	U	0.0034	no
SW-049-MWS	Shallow	5.1-15.1	Dibromochloromethane	124-48-1	1/20/2016	1	1	U	0.17	no
SW-049-MWS	Shallow	5.1-15.1	Dichlorodifluoromethane	75-71-8	1/20/2016	1	1	U	200	no
SW-049-MWS	Shallow	5.1-15.1	Diesel Range Organics	DRO	1/20/2016	104	104	UJ	47	no
SW-049-MWS	Shallow	5.1-15.1	Diethylphthalate	84-66-2	1/20/2016	1.1	1.1	U	15,000	no
SW-049-MWS	Shallow	5.1-15.1	Di-n-butylphthalate	84-74-2	1/20/2016	1.1	1.1	U	900	no
SW-049-MWS	Shallow	5.1-15.1	Di-n-octylphthalate	117-84-0	1/20/2016	1.1	1.1	UJ	200	no
SW-049-MWS	Shallow	5.1-15.1	Ethylbenzene	100-41-4	1/20/2016	1	1	U	700	no
SW-049-MWS	Shallow	5.1-15.1	Fluoranthene	206-44-0	1/20/2016	0.11	0.11	U	800	no
SW-049-MWS	Shallow	5.1-15.1	Fluorene	86-73-7	1/20/2016	0.11	0.11	U	290	no
SW-049-MWS	Shallow	5.1-15.1	Gasoline Range Organics	GRO	1/20/2016	200	200	U	47	no
SW-049-MWS	Shallow	5.1-15.1	Hexachlorobenzene	118-74-1	1/20/2016	1.1	1.1	U	1	no
SW-049-MWS	Shallow	5.1-15.1	Hexachlorobutadiene	87-68-3	1/20/2016	1.1	1.1	U	0.14	no
SW-049-MWS	Shallow	5.1-15.1	Hexachlorocyclopentadiene	77-47-4	1/20/2016	1.1	1.1	U	50	no
SW-049-MWS	Shallow	5.1-15.1	Hexachloroethane	67-72-1	1/20/2016	1.1	1.1	U	0.33	no
SW-049-MWS	Shallow	5.1-15.1	Indeno[1,2,3-c,d]pyrene	193-39-5	1/20/2016	0.11	0.11	U	0.034	no
SW-049-MWS	Shallow	5.1-15.1	Iron (D)	7439-89-6	1/20/2016	70	29,000		14,000	YES
SW-049-MWS	Shallow	5.1-15.1	Iron (T)	7439-89-6	1/20/2016	70	27,400		14,000	YES
SW-049-MWS	Shallow	5.1-15.1	Isophorone	78-59-1	1/20/2016	1.1	1.1	U	78	no
SW-049-MWS	Shallow	5.1-15.1	Isopropylbenzene	98-82-8	1/20/2016	1	1	U	450	no
SW-049-MWS	Shallow	5.1-15.1	Lead (D)	7439-92-1	1/20/2016	5	5.8		15	no
SW-049-MWS	Shallow	5.1-15.1	Lead (T)	7439-92-1	1/20/2016	5	7.2		15	no
SW-049-MWS	Shallow	5.1-15.1	Manganese (D)	7439-96-5	1/20/2016	25	4,870		430	YES
SW-049-MWS	Shallow	5.1-15.1	Manganese (T)	7439-96-5	1/20/2016	25	4,420		430	YES
SW-049-MWS	Shallow	5.1-15.1	Mercury (D)	7439-97-6	1/20/2016	0.2	0.2	U	2	no
SW-049-MWS	Shallow	5.1-15.1	Mercury (T)	7439-97-6	1/20/2016	0.2	0.2	U	2	no
SW-049-MWS	Shallow	5.1-15.1	Methyl Acetate	79-20-9	1/20/2016	5	5	U	20,000	no

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SW-049-MWS	Shallow	5.1-15.1	Methyl tert-butyl ether (MTBE)	1634-04-4	1/20/2016	1	1	U	14	no
SW-049-MWS	Shallow	5.1-15.1	Methylene Chloride	75-09-2	1/20/2016	1	1	U	5	no
SW-049-MWS	Shallow	5.1-15.1	Naphthalene	91-20-3	1/20/2016	0.11	0.059	B	0.17	no
SW-049-MWS	Shallow	5.1-15.1	Nickel (D)	7440-02-0	1/20/2016	10	519		390	YES
SW-049-MWS	Shallow	5.1-15.1	Nickel (T)	7440-02-0	1/20/2016	10	522		390	YES
SW-049-MWS	Shallow	5.1-15.1	Nitrobenzene	98-95-3	1/20/2016	1.1	1.1	U	0.14	no
SW-049-MWS	Shallow	5.1-15.1	N-Nitroso-di-n-propylamine	621-64-7	1/20/2016	1.1	1.1	U	0.011	no
SW-049-MWS	Shallow	5.1-15.1	N-Nitrosodiphenylamine	86-30-6	1/20/2016	1.1	1.1	U	12	no
SW-049-MWS	Shallow	5.1-15.1	Pentachlorophenol	87-86-5	1/20/2016	2.6	1.1	J	1	YES
SW-049-MWS	Shallow	5.1-15.1	Phenanthrene	85-01-8	1/20/2016	0.11	0.11	U		no
SW-049-MWS	Shallow	5.1-15.1	Phenol	108-95-2	1/20/2016	1.1	1.1	U	5,800	no
SW-049-MWS	Shallow	5.1-15.1	Pyrene	129-00-0	1/20/2016	0.11	0.11	U	120	no
SW-049-MWS	Shallow	5.1-15.1	Selenium (D)	7782-49-2	1/20/2016	8	8	U	50	no
SW-049-MWS	Shallow	5.1-15.1	Selenium (T)	7782-49-2	1/20/2016	8	8	U	50	no
SW-049-MWS	Shallow	5.1-15.1	Silver (D)	7440-22-4	1/20/2016	6	6	U	94	no
SW-049-MWS	Shallow	5.1-15.1	Silver (T)	7440-22-4	1/20/2016	6	6	U	94	no
SW-049-MWS	Shallow	5.1-15.1	Styrene	100-42-5	1/20/2016	1	1	U	100	no
SW-049-MWS	Shallow	5.1-15.1	Tetrachloroethene	127-18-4	1/20/2016	1	1	U	5	no
SW-049-MWS	Shallow	5.1-15.1	Thallium (D)	7440-28-0	1/20/2016	10	10	U	2	no
SW-049-MWS	Shallow	5.1-15.1	Thallium (T)	7440-28-0	1/20/2016	10	10	U	2	no
SW-049-MWS	Shallow	5.1-15.1	Toluene	108-88-3	1/20/2016	1	1	U	1,000	no
SW-049-MWS	Shallow	5.1-15.1	trans-1,2-Dichloroethene	156-60-5	1/20/2016	1	1	U	100	no
SW-049-MWS	Shallow	5.1-15.1	trans-1,3-Dichloropropene	10061-02-6	1/20/2016	1	1	U		no
SW-049-MWS	Shallow	5.1-15.1	Trichloroethene	79-01-6	1/20/2016	1	1	U	5	no
SW-049-MWS	Shallow	5.1-15.1	Trichlorofluoromethane	75-69-4	1/20/2016	1	1	U	1,100	no
SW-049-MWS	Shallow	5.1-15.1	Vanadium (D)	7440-62-2	1/20/2016	5	2.4	J	86	no
SW-049-MWS	Shallow	5.1-15.1	Vanadium (T)	7440-62-2	1/20/2016	5	2.5	J	86	no
SW-049-MWS	Shallow	5.1-15.1	Vinyl chloride	75-01-4	1/20/2016	1	1	U	2	no
SW-049-MWS	Shallow	5.1-15.1	Xylenes	1330-20-7	1/20/2016	3	3	U	10,000	no
SW-049-MWS	Shallow	5.1-15.1	Zinc (D)	7440-66-6	1/20/2016	10	1,280		6,000	no
SW-049-MWS	Shallow	5.1-15.1	Zinc (T)	7440-66-6	1/20/2016	10	1,250		6,000	no
SW-050-MWS	Shallow	3.1-13.1	1,1,1-Trichloroethane	71-55-6	1/20/2016	1	1	U	200	no
SW-050-MWS	Shallow	3.1-13.1	1,1,2,2-Tetrachloroethane	79-34-5	1/20/2016	1	1	U	0.076	no
SW-050-MWS	Shallow	3.1-13.1	1,1,2-Trichloroethane	79-00-5	1/20/2016	1	1	U	5	no
SW-050-MWS	Shallow	3.1-13.1	1,1,2-Trichlorotrifluoroethane	76-13-1	1/20/2016	50	50	U	55,000	no
SW-050-MWS	Shallow	3.1-13.1	1,1-Biphenyl	92-52-4	1/20/2016	1	1	U	0.83	no
SW-050-MWS	Shallow	3.1-13.1	1,1-Dichloroethane	75-34-3	1/20/2016	1	1	U	2.7	no
SW-050-MWS	Shallow	3.1-13.1	1,1-Dichloroethene	75-35-4	1/20/2016	1	1	U	7	no
SW-050-MWS	Shallow	3.1-13.1	1,2,3-Trichlorobenzene	87-61-6	1/20/2016	2	2	U	7	no
SW-050-MWS	Shallow	3.1-13.1	1,2,4,5-Tetrachlorobenzene	95-94-3	1/20/2016	1	1	U	1.7	no
SW-050-MWS	Shallow	3.1-13.1	1,2,4-Trichlorobenzene	120-82-1	1/20/2016	1	1	U	70	no
SW-050-MWS	Shallow	3.1-13.1	1,2-Dibromo-3-chloropropane	96-12-8	1/20/2016	5	5	U	0.2	no
SW-050-MWS	Shallow	3.1-13.1	1,2-Dibromoethane	106-93-4	1/20/2016	1	1	U	0.0075	no
SW-050-MWS	Shallow	3.1-13.1	1,2-Dichlorobenzene	95-50-1	1/20/2016	1	1	U	600	no
SW-050-MWS	Shallow	3.1-13.1	1,2-Dichloroethane	107-06-2	1/20/2016	1	1	U	5	no
SW-050-MWS	Shallow	3.1-13.1	1,2-Dichloroethene (Total)	540-59-0	1/20/2016	2	2	U	70	no
SW-050-MWS	Shallow	3.1-13.1	1,2-Dichloropropane	78-87-5	1/20/2016	1	1	U	5	no
SW-050-MWS	Shallow	3.1-13.1	1,3-Dichlorobenzene	541-73-1	1/20/2016	1	1	U		no
SW-050-MWS	Shallow	3.1-13.1	1,4-Dichlorobenzene	106-46-7	1/20/2016	1	1	U	75	no
SW-050-MWS	Shallow	3.1-13.1	1,4-Dioxane	123-91-1	1/20/2016	0.11	0.1	J	0.46	no
SW-050-MWS	Shallow	3.1-13.1	2,3,4,6-Tetrachlorophenol	58-90-2	1/20/2016	10.1	11.9		240	no
SW-050-MWS	Shallow	3.1-13.1	2,4,5-Trichlorophenol	95-95-4	1/20/2016	2.5	0.9	J	1,200	no
SW-050-MWS	Shallow	3.1-13.1	2,4,6-Trichlorophenol	88-06-2	1/20/2016	1	1	U	4	no
SW-050-MWS	Shallow	3.1-13.1	2,4-Dichlorophenol	120-83-2	1/20/2016	1	1	U	46	no
SW-050-MWS	Shallow	3.1-13.1	2,4-Dimethylphenol	105-67-9	1/20/2016	1	1	U	360	no
SW-050-MWS	Shallow	3.1-13.1	2,4-Dinitrophenol	51-28-5	1/20/2016	2.5	2.5	U	39	no
SW-050-MWS	Shallow	3.1-13.1	2,4-Dinitrotoluene	121-14-2	1/20/2016	1	1	U	0.24	no
SW-050-MWS	Shallow	3.1-13.1	2,6-Dinitrotoluene	606-20-2	1/20/2016	1	1	U	0.048	no
SW-050-MWS	Shallow	3.1-13.1	2-Butanone (MEK)	78-93-3	1/20/2016	10	10	U	5,600	no
SW-050-MWS	Shallow	3.1-13.1	2-Chloronaphthalene	91-58-7	1/20/2016	1	0.83	J	750	no
SW-050-MWS	Shallow	3.1-13.1	2-Chlorophenol	95-57-8	1/20/2016	1	1	U	91	no
SW-050-MWS	Shallow	3.1-13.1	2-Hexanone	591-78-6	1/20/2016	10	10	U	38	no
SW-050-MWS	Shallow	3.1-13.1	2-Methylnaphthalene	91-57-6	1/20/2016	0.11	0.086	J	36	no
SW-050-MWS	Shallow	3.1-13.1	2-Methylphenol	95-48-7	1/20/2016	1	1	U	930	no
SW-050-MWS	Shallow	3.1-13.1	2-Nitroaniline	88-74-4	1/20/2016	2.5	2.5	U	190	no
SW-050-MWS	Shallow	3.1-13.1	3&4-Methylphenol(m&p Cresol)	108-39-4/106-44-5	1/20/2016	2	2	U	930	no
SW-050-MWS	Shallow	3.1-13.1	3,3'-Dichlorobenzidine	91-94-1	1/20/2016	1	1	U	0.12	no
SW-050-MWS	Shallow	3.1-13.1	4-Chloroaniline	106-47-8	1/20/2016	1	1	U	0.36	no
SW-050-MWS	Shallow	3.1-13.1	4-Methyl-2-pentanone (MIBK)	108-10-1	1/20/2016	10	10	U	1,200	no
SW-050-MWS	Shallow	3.1-13.1	4-Nitroaniline	100-01-6	1/20/2016	2.5	2.5	UJ	3.8	no
SW-050-MWS	Shallow	3.1-13.1	Acenaphthene	83-32-9	1/20/2016	0.11	0.11	U	530	no
SW-050-MWS	Shallow	3.1-13.1	Acenaphthylene	208-96-8	1/20/2016	0.11	0.11	U	530	no
SW-050-MWS	Shallow	3.1-13.1	Acetone	67-64-1	1/20/2016	10	10	U	14,000	no
SW-050-MWS	Shallow	3.1-13.1	Acetophenone	98-86-2	1/20/2016	1	1	U	1,900	no
SW-050-MWS	Shallow	3.1-13.1	Aluminum (D)	7429-90-5	1/20/2016	50	558		20,000	no
SW-050-MWS	Shallow	3.1-13.1	Aluminum (T)	7429-90-5	1/20/2016	50	575		20,000	no
SW-050-MWS	Shallow	3.1-13.1	Anthracene	120-12-7	1/20/2016	0.11	0.014	J	1,800	no
SW-050-MWS	Shallow	3.1-13.1	Antimony (D)	7440-36-0	1/20/2016	6	6	U	6	no
SW-050-MWS	Shallow	3.1-13.1	Antimony (T)	7440-36-0	1/20/2016	6	6	U	6	no
SW-050-MWS	Shallow	3.1-13.1	Arsenic (D)	7440-38-2	1/20/2016	5	5	U	10	no

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Former Sparrows Point Steel Mill
Sparrows Point, Maryland

Well ID	Zone	Screen Interval (feet bgs)	Parameter	CAS	Sample Date	LOQ	Result (ug/L)	Final Flag	PAL	Exceeds PAL?
SW-050-MWS	Shallow	3.1-13.1	Arsenic (T)	7440-38-2	1/20/2016	5	5	U	10	no
SW-050-MWS	Shallow	3.1-13.1	Barium (D)	7440-39-3	1/20/2016	10	19	U	2,000	no
SW-050-MWS	Shallow	3.1-13.1	Barium (T)	7440-39-3	1/20/2016	10	18.5	U	2,000	no
SW-050-MWS	Shallow	3.1-13.1	Benzaldehyde	100-52-7	1/20/2016	1	1	U	1,900	no
SW-050-MWS	Shallow	3.1-13.1	Benzene	71-43-2	1/20/2016	1	1	U	5	no
SW-050-MWS	Shallow	3.1-13.1	Benzo[a]anthracene	56-55-3	1/20/2016	0.11	0.11	U	0.012	no
SW-050-MWS	Shallow	3.1-13.1	Benzo[a]pyrene	50-32-8	1/20/2016	0.11	0.11	U	0.2	no
SW-050-MWS	Shallow	3.1-13.1	Benzo[b]fluoranthene	205-99-2	1/20/2016	0.11	0.11	U	0.034	no
SW-050-MWS	Shallow	3.1-13.1	Benzo[g,h,i]perylene	191-24-2	1/20/2016	0.11	0.11	U	no	no
SW-050-MWS	Shallow	3.1-13.1	Benzo[k]fluoranthene	207-08-9	1/20/2016	0.11	0.11	U	0.34	no
SW-050-MWS	Shallow	3.1-13.1	Beryllium (D)	7440-41-7	1/20/2016	1	1.7	U	4	no
SW-050-MWS	Shallow	3.1-13.1	Beryllium (T)	7440-41-7	1/20/2016	1	1.6	U	4	no
SW-050-MWS	Shallow	3.1-13.1	bis(2-chloroethoxy)methane	111-91-1	1/20/2016	1	1	U	59	no
SW-050-MWS	Shallow	3.1-13.1	bis(2-Chloroethyl)ether	111-44-4	1/20/2016	1	1	U	0.014	no
SW-050-MWS	Shallow	3.1-13.1	bis(2-Chloroisopropyl)ether	108-60-1	1/20/2016	1	1	U	0.36	no
SW-050-MWS	Shallow	3.1-13.1	bis(2-Ethylhexyl)phthalate	117-81-7	1/20/2016	1	1	U	6	no
SW-050-MWS	Shallow	3.1-13.1	Bromodichloromethane	75-27-4	1/20/2016	1	1	U	0.13	no
SW-050-MWS	Shallow	3.1-13.1	Bromoform	75-25-2	1/20/2016	1	1	U	3.3	no
SW-050-MWS	Shallow	3.1-13.1	Bromomethane	74-83-9	1/20/2016	1	1	U	7.5	no
SW-050-MWS	Shallow	3.1-13.1	Cadmium (D)	7440-43-9	1/20/2016	3	0.57	B	5	no
SW-050-MWS	Shallow	3.1-13.1	Cadmium (T)	7440-43-9	1/20/2016	3	3	U	5	no
SW-050-MWS	Shallow	3.1-13.1	Caprolactam	105-60-2	1/20/2016	2.5	2.5	U	9,900	no
SW-050-MWS	Shallow	3.1-13.1	Carbazole	86-74-8	1/20/2016	1	1	UJ	no	no
SW-050-MWS	Shallow	3.1-13.1	Carbon disulfide	75-15-0	1/20/2016	1	1	U	810	no
SW-050-MWS	Shallow	3.1-13.1	Carbon tetrachloride	56-23-5	1/20/2016	1	1	U	5	no
SW-050-MWS	Shallow	3.1-13.1	Chlorobenzene	108-90-7	1/20/2016	1	1	U	100	no
SW-050-MWS	Shallow	3.1-13.1	Chloroethane	75-00-3	1/20/2016	1	1	U	21,000	no
SW-050-MWS	Shallow	3.1-13.1	Chloroform	67-66-3	1/20/2016	1	1	U	0.22	no
SW-050-MWS	Shallow	3.1-13.1	Chloromethane	74-87-3	1/20/2016	1	1	U	190	no
SW-050-MWS	Shallow	3.1-13.1	Chromium (D)	7440-47-3	1/20/2016	5	0.93	B	100	no
SW-050-MWS	Shallow	3.1-13.1	Chromium (T)	7440-47-3	1/20/2016	5	0.97	B	100	no
SW-050-MWS	Shallow	3.1-13.1	Chromium VI (T)	18540-29-9	1/20/2016	10	10	U	0.035	no
SW-050-MWS	Shallow	3.1-13.1	Chrysene	218-01-9	1/20/2016	0.11	0.11	U	3.4	no
SW-050-MWS	Shallow	3.1-13.1	cis-1,2-Dichloroethene	156-59-2	1/20/2016	1	1	U	70	no
SW-050-MWS	Shallow	3.1-13.1	cis-1,3-Dichloropropene	10061-01-5	1/20/2016	1	1	U	no	no
SW-050-MWS	Shallow	3.1-13.1	Cobalt (D)	7440-48-4	1/20/2016	5	48.2	U	6	YES
SW-050-MWS	Shallow	3.1-13.1	Cobalt (T)	7440-48-4	1/20/2016	5	47.4	U	6	YES
SW-050-MWS	Shallow	3.1-13.1	Copper (D)	7440-50-8	1/20/2016	5	2	J	1,300	no
SW-050-MWS	Shallow	3.1-13.1	Copper (T)	7440-50-8	1/20/2016	5	1.8	J	1,300	no
SW-050-MWS	Shallow	3.1-13.1	Cyanide	57-12-5	1/20/2016	10	10	U	200	no
SW-050-MWS	Shallow	3.1-13.1	Cyclohexane	110-82-7	1/20/2016	10	10	U	13,000	no
SW-050-MWS	Shallow	3.1-13.1	Dibenz[a,h]anthracene	53-70-3	1/20/2016	0.11	0.11	U	0.0034	no
SW-050-MWS	Shallow	3.1-13.1	Dibromochloromethane	124-48-1	1/20/2016	1	1	U	0.17	no
SW-050-MWS	Shallow	3.1-13.1	Dichlorodifluoromethane	75-71-8	1/20/2016	1	1	U	200	no
SW-050-MWS	Shallow	3.1-13.1	Diesel Range Organics	DRO	1/20/2016	118	118	UJ	47	no
SW-050-MWS	Shallow	3.1-13.1	Diethylphthalate	84-66-2	1/20/2016	1	1	U	15,000	no
SW-050-MWS	Shallow	3.1-13.1	Di-n-butylphthalate	84-74-2	1/20/2016	1	1	U	900	no
SW-050-MWS	Shallow	3.1-13.1	Di-n-ocetylphthalate	117-84-0	1/20/2016	1	1	UJ	200	no
SW-050-MWS	Shallow	3.1-13.1	Ethylbenzene	100-41-4	1/20/2016	1	1	U	700	no
SW-050-MWS	Shallow	3.1-13.1	Fluoranthene	206-44-0	1/20/2016	0.11	0.11	U	800	no
SW-050-MWS	Shallow	3.1-13.1	Fluorene	86-73-7	1/20/2016	0.11	0.11	U	290	no
SW-050-MWS	Shallow	3.1-13.1	Gasoline Range Organics	GRO	1/20/2016	200	200	U	47	no
SW-050-MWS	Shallow	3.1-13.1	Hexachlorobenzene	118-74-1	1/20/2016	1	1	U	1	no
SW-050-MWS	Shallow	3.1-13.1	Hexachlorobutadiene	87-68-3	1/20/2016	1	1	U	0.14	no
SW-050-MWS	Shallow	3.1-13.1	Hexachlorocyclopentadiene	77-47-4	1/20/2016	1	1	U	50	no
SW-050-MWS	Shallow	3.1-13.1	Hexachloroethane	67-72-1	1/20/2016	1	1	U	0.33	no
SW-050-MWS	Shallow	3.1-13.1	Indeno[1,2,3-c,d]pyrene	193-39-5	1/20/2016	0.11	0.11	U	0.034	no
SW-050-MWS	Shallow	3.1-13.1	Iron (D)	7439-89-6	1/20/2016	70	24,400	U	14,000	YES
SW-050-MWS	Shallow	3.1-13.1	Iron (T)	7439-89-6	1/20/2016	70	21,700	U	14,000	YES
SW-050-MWS	Shallow	3.1-13.1	Isophorone	78-59-1	1/20/2016	1	1	U	78	no
SW-050-MWS	Shallow	3.1-13.1	Isopropylbenzene	98-82-8	1/20/2016	1	1	U	450	no
SW-050-MWS	Shallow	3.1-13.1	Lead (D)	7439-92-1	1/20/2016	5	5	U	15	no
SW-050-MWS	Shallow	3.1-13.1	Lead (T)	7439-92-1	1/20/2016	5	5	U	15	no
SW-050-MWS	Shallow	3.1-13.1	Manganese (D)	7439-96-5	1/20/2016	5	868	U	430	YES
SW-050-MWS	Shallow	3.1-13.1	Manganese (T)	7439-96-5	1/20/2016	5	866	U	430	YES
SW-050-MWS	Shallow	3.1-13.1	Mercury (D)	7439-97-6	1/20/2016	0.2	0.2	U	2	no
SW-050-MWS	Shallow	3.1-13.1	Mercury (T)	7439-97-6	1/20/2016	0.2	0.2	U	2	no
SW-050-MWS	Shallow	3.1-13.1	Methyl Acetate	79-20-9	1/20/2016	5	5	U	20,000	no
SW-050-MWS	Shallow	3.1-13.1	Methyl tert-butyl ether (MTBE)	1634-04-4	1/20/2016	1	1	U	14	no
SW-050-MWS	Shallow	3.1-13.1	Methylene Chloride	75-09-2	1/20/2016	1	1	U	5	no
SW-050-MWS	Shallow	3.1-13.1	Naphthalene	91-20-3	1/20/2016	0.11	0.16	U	0.17	no
SW-050-MWS	Shallow	3.1-13.1	Nickel (D)	7440-02-0	1/20/2016	10	60.7	U	390	no
SW-050-MWS	Shallow	3.1-13.1	Nickel (T)	7440-02-0	1/20/2016	10	57.8	U	390	no
SW-050-MWS	Shallow	3.1-13.1	Nitrobenzene	98-95-3	1/20/2016	1	1	U	0.14	no
SW-050-MWS	Shallow	3.1-13.1	N-Nitroso-di-n-propylamine	621-64-7	1/20/2016	1	1	U	0.011	no
SW-050-MWS	Shallow	3.1-13.1	N-Nitrosodiphenylamine	86-30-6	1/20/2016	1	1	U	12	no
SW-050-MWS	Shallow	3.1-13.1	Pentachlorophenol	87-86-5	1/20/2016	25.1	59.1	U	1	YES
SW-050-MWS	Shallow	3.1-13.1	Phenanthrene	85-01-8	1/20/2016	0.11	0.11	U	no	no
SW-050-MWS	Shallow	3.1-13.1	Phenol	108-95-2	1/20/2016	1	1	U	5,800	no
SW-050-MWS	Shallow	3.1-13.1	Pyrene	129-00-0	1/20/2016	0.11	0.11	U	120	no

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SW-050-MWS	Shallow	3.1-13.1	Selenium (D)	7782-49-2	1/20/2016	8	4.2	B	50	no
SW-050-MWS	Shallow	3.1-13.1	Selenium (T)	7782-49-2	1/20/2016	8	8	U	50	no
SW-050-MWS	Shallow	3.1-13.1	Silver (D)	7440-22-4	1/20/2016	6	6	U	94	no
SW-050-MWS	Shallow	3.1-13.1	Silver (T)	7440-22-4	1/20/2016	6	6	U	94	no
SW-050-MWS	Shallow	3.1-13.1	Styrene	100-42-5	1/20/2016	1	1	U	100	no
SW-050-MWS	Shallow	3.1-13.1	Tetrachloroethene	127-18-4	1/20/2016	1	1	U	5	no
SW-050-MWS	Shallow	3.1-13.1	Thallium (D)	7440-28-0	1/20/2016	10	10	U	2	no
SW-050-MWS	Shallow	3.1-13.1	Thallium (T)	7440-28-0	1/20/2016	10	10	U	2	no
SW-050-MWS	Shallow	3.1-13.1	Toluene	108-88-3	1/20/2016	1	1	U	1,000	no
SW-050-MWS	Shallow	3.1-13.1	trans-1,2-Dichloroethene	156-60-5	1/20/2016	1	1	U	100	no
SW-050-MWS	Shallow	3.1-13.1	trans-1,3-Dichloropropene	10061-02-6	1/20/2016	1	1	U		no
SW-050-MWS	Shallow	3.1-13.1	Trichloroethene	79-01-6	1/20/2016	1	1	U	5	no
SW-050-MWS	Shallow	3.1-13.1	Trichlorofluoromethane	75-69-4	1/20/2016	1	1	U	1,100	no
SW-050-MWS	Shallow	3.1-13.1	Vanadium (D)	7440-62-2	1/20/2016	5	1.1	J	86	no
SW-050-MWS	Shallow	3.1-13.1	Vanadium (T)	7440-62-2	1/20/2016	5	0.82	J	86	no
SW-050-MWS	Shallow	3.1-13.1	Vinyl chloride	75-01-4	1/20/2016	1	1	U	2	no
SW-050-MWS	Shallow	3.1-13.1	Xylenes	1330-20-7	1/20/2016	3	3	U	10,000	no
SW-050-MWS	Shallow	3.1-13.1	Zinc (D)	7440-66-6	1/20/2016	10	115		6,000	no
SW-050-MWS	Shallow	3.1-13.1	Zinc (T)	7440-66-6	1/20/2016	10	109		6,000	no
SW-051-MWS	Shallow	5-15	1,1,1-Trichloroethane	71-55-6	2/8/2016	1	1	U	200	no
SW-051-MWS	Shallow	5-15	1,1,2,2-Tetrachloroethane	79-34-5	2/8/2016	1	1	U	0.076	no
SW-051-MWS	Shallow	5-15	1,1,2-Trichloroethane	79-00-5	2/8/2016	1	1	U	5	no
SW-051-MWS	Shallow	5-15	1,1,2-Trichlorotrifluoroethane	76-13-1	2/8/2016	50	50	U	55,000	no
SW-051-MWS	Shallow	5-15	1,1-Biphenyl	92-52-4	2/8/2016	1	1	U	0.83	no
SW-051-MWS	Shallow	5-15	1,1-Dichloroethane	75-34-3	2/8/2016	1	1	U	2.7	no
SW-051-MWS	Shallow	5-15	1,1-Dichloroethene	75-35-4	2/8/2016	1	1	U	7	no
SW-051-MWS	Shallow	5-15	1,2,3-Trichlorobenzene	87-61-6	2/8/2016	2	2	U	7	no
SW-051-MWS	Shallow	5-15	1,2,4,5-Tetrachlorobenzene	95-94-3	2/8/2016	1	1	U	1.7	no
SW-051-MWS	Shallow	5-15	1,2,4-Trichlorobenzene	120-82-1	2/8/2016	1	1	U	70	no
SW-051-MWS	Shallow	5-15	1,2-Dibromo-3-chloropropane	96-12-8	2/8/2016	5	5	U	0.2	no
SW-051-MWS	Shallow	5-15	1,2-Dibromoethane	106-93-4	2/8/2016	1	1	U	0.0075	no
SW-051-MWS	Shallow	5-15	1,2-Dichlorobenzene	95-50-1	2/8/2016	1	1	U	600	no
SW-051-MWS	Shallow	5-15	1,2-Dichloroethane	107-06-2	2/8/2016	1	1	U	5	no
SW-051-MWS	Shallow	5-15	1,2-Dichloroethene (Total)	540-59-0	2/8/2016	2	2	U	70	no
SW-051-MWS	Shallow	5-15	1,2-Dichloropropane	78-87-5	2/8/2016	1	1	U	5	no
SW-051-MWS	Shallow	5-15	1,3-Dichlorobenzene	541-73-1	2/8/2016	1	1	U		no
SW-051-MWS	Shallow	5-15	1,4-Dichlorobenzene	106-46-7	2/8/2016	1	1	U	75	no
SW-051-MWS	Shallow	5-15	1,4-Dioxane	123-91-1	2/8/2016	0.1	0.044	J	0.46	no
SW-051-MWS	Shallow	5-15	2,3,4,6-Tetrachlorophenol	58-90-2	2/8/2016	1	1	U	240	no
SW-051-MWS	Shallow	5-15	2,4,5-Trichlorophenol	95-95-4	2/8/2016	2.5	2.5	U	1,200	no
SW-051-MWS	Shallow	5-15	2,4,6-Trichlorophenol	88-06-2	2/8/2016	1	1	U	4	no
SW-051-MWS	Shallow	5-15	2,4-Dichlorophenol	120-83-2	2/8/2016	1	1	U	46	no
SW-051-MWS	Shallow	5-15	2,4-Dimethylphenol	105-67-9	2/8/2016	1	1	U	360	no
SW-051-MWS	Shallow	5-15	2,4-Dinitrophenol	51-28-5	2/8/2016	2.5	2.5	U	39	no
SW-051-MWS	Shallow	5-15	2,4-Dinitrotoluene	121-14-2	2/8/2016	1	1	U	0.24	no
SW-051-MWS	Shallow	5-15	2,6-Dinitrotoluene	606-20-2	2/8/2016	1	1	U	0.048	no
SW-051-MWS	Shallow	5-15	2-Butanone (MEK)	78-93-3	2/8/2016	10	10	U	5,600	no
SW-051-MWS	Shallow	5-15	2-Chloronaphthalene	91-58-7	2/8/2016	1	1	U	750	no
SW-051-MWS	Shallow	5-15	2-Chlorophenol	95-57-8	2/8/2016	1	1	U	91	no
SW-051-MWS	Shallow	5-15	2-Hexanone	591-78-6	2/8/2016	10	10	U	38	no
SW-051-MWS	Shallow	5-15	2-Methylnaphthalene	91-57-6	2/8/2016	0.1	0.1	U	36	no
SW-051-MWS	Shallow	5-15	2-Methylphenol	95-48-7	2/8/2016	1	1	U	930	no
SW-051-MWS	Shallow	5-15	2-Nitroaniline	88-74-4	2/8/2016	2.5	2.5	U	190	no
SW-051-MWS	Shallow	5-15	3&4-Methylphenol(m&p Cresol)	108-39-4/106-44-5	2/8/2016	2	2	U	930	no
SW-051-MWS	Shallow	5-15	3,3'-Dichlorobenzidine	91-94-1	2/8/2016	1	1	UJ	0.12	no
SW-051-MWS	Shallow	5-15	4-Chloroaniline	106-47-8	2/8/2016	1	1	U	0.36	no
SW-051-MWS	Shallow	5-15	4-Methyl-2-pentanone (MIBK)	108-10-1	2/8/2016	10	10	U	1,200	no
SW-051-MWS	Shallow	5-15	4-Nitroaniline	100-01-6	2/8/2016	2.5	2.5	U	3.8	no
SW-051-MWS	Shallow	5-15	Acenaphthene	83-32-9	2/8/2016	0.1	0.1	U	530	no
SW-051-MWS	Shallow	5-15	Acenaphthylene	208-96-8	2/8/2016	0.1	0.1	U	530	no
SW-051-MWS	Shallow	5-15	Acetophenone	98-86-2	2/8/2016	1	1	U	1,900	no
SW-051-MWS	Shallow	5-15	Aluminum (D)	7429-90-5	2/8/2016	50	1,730		20,000	no
SW-051-MWS	Shallow	5-15	Aluminum (T)	7429-90-5	2/8/2016	50	2,340		20,000	no
SW-051-MWS	Shallow	5-15	Anthracene	120-12-7	2/8/2016	0.1	0.1	U	1,800	no
SW-051-MWS	Shallow	5-15	Antimony (D)	7440-36-0	2/8/2016	6	6	U	6	no
SW-051-MWS	Shallow	5-15	Antimony (T)	7440-36-0	2/8/2016	6	6	U	6	no
SW-051-MWS	Shallow	5-15	Arsenic (D)	7440-38-2	2/8/2016	5	5	U	10	no
SW-051-MWS	Shallow	5-15	Arsenic (T)	7440-38-2	2/8/2016	5	5	U	10	no
SW-051-MWS	Shallow	5-15	Barium (D)	7440-39-3	2/8/2016	10	10.4		2,000	no
SW-051-MWS	Shallow	5-15	Barium (T)	7440-39-3	2/8/2016	10	13		2,000	no
SW-051-MWS	Shallow	5-15	Benzaldehyde	100-52-7	2/8/2016	1	1	U	1,900	no
SW-051-MWS	Shallow	5-15	Benzene	71-43-2	2/8/2016	1	1	U	5	no
SW-051-MWS	Shallow	5-15	Benzo[a]anthracene	56-55-3	2/8/2016	0.1	0.1	U	0.012	no
SW-051-MWS	Shallow	5-15	Benzo[a]pyrene	50-32-8	2/8/2016	0.1	0.1	U	0.2	no
SW-051-MWS	Shallow	5-15	Benzo[b]fluoranthene	205-99-2	2/8/2016	0.1	0.1	U	0.034	no
SW-051-MWS	Shallow	5-15	Benzo[g,h,i]perylene	191-24-2	2/8/2016	0.1	0.1	U		no
SW-051-MWS	Shallow	5-15	Benzo[k]fluoranthene	207-08-9	2/8/2016	0.1	0.1	U	0.34	no
SW-051-MWS	Shallow	5-15	Beryllium (D)	7440-41-7	2/8/2016	1	1.6		4	no
SW-051-MWS	Shallow	5-15	Beryllium (T)	7440-41-7	2/8/2016	1	1.8		4	no
SW-051-MWS	Shallow	5-15	bis(2-chloroethoxy)methane	111-91-1	2/8/2016	1	1	U	59	no

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Former Sparrows Point Steel Mill
Sparrows Point, Maryland

Well ID	Zone	Screen Interval (feet bgs)	Parameter	CAS	Sample Date	LOQ	Result (ug/L)	Final Flag	PAL	Exceeds PAL?
SW-051-MWS	Shallow	5-15	bis(2-Chloroethyl)ether	111-44-4	2/8/2016	1	1	U	0.014	no
SW-051-MWS	Shallow	5-15	bis(2-Chloroisopropyl)ether	108-60-1	2/8/2016	1	1	U	0.36	no
SW-051-MWS	Shallow	5-15	bis(2-Ethylhexyl)phthalate	117-81-7	2/8/2016	1	1	U	6	no
SW-051-MWS	Shallow	5-15	Bromodichloromethane	75-27-4	2/8/2016	1	1	U	0.13	no
SW-051-MWS	Shallow	5-15	Bromoform	75-25-2	2/8/2016	1	1	U	3.3	no
SW-051-MWS	Shallow	5-15	Bromomethane	74-83-9	2/8/2016	1	1	U	7.5	no
SW-051-MWS	Shallow	5-15	Cadmium (D)	7440-43-9	2/8/2016	3	0.71	B	5	no
SW-051-MWS	Shallow	5-15	Cadmium (T)	7440-43-9	2/8/2016	3	0.69	J	5	no
SW-051-MWS	Shallow	5-15	Caprolactam	105-60-2	2/8/2016	2.5	2.5	U	9,900	no
SW-051-MWS	Shallow	5-15	Carbazole	86-74-8	2/8/2016	1	1	U	no	no
SW-051-MWS	Shallow	5-15	Carbon disulfide	75-15-0	2/8/2016	1	1	U	810	no
SW-051-MWS	Shallow	5-15	Carbon tetrachloride	56-23-5	2/8/2016	1	1	U	5	no
SW-051-MWS	Shallow	5-15	Chlorobenzene	108-90-7	2/8/2016	1	1	U	100	no
SW-051-MWS	Shallow	5-15	Chloroethane	75-00-3	2/8/2016	1	1	U	21,000	no
SW-051-MWS	Shallow	5-15	Chloroform	67-66-3	2/8/2016	1	1	U	0.22	no
SW-051-MWS	Shallow	5-15	Chloromethane	74-87-3	2/8/2016	1	1	U	190	no
SW-051-MWS	Shallow	5-15	Chromium (D)	7440-47-3	2/8/2016	5	0.8	B	100	no
SW-051-MWS	Shallow	5-15	Chromium (T)	7440-47-3	2/8/2016	5	1.4	B	100	no
SW-051-MWS	Shallow	5-15	Chromium VI (T)	18540-29-9	2/8/2016	10	10	U	0.035	no
SW-051-MWS	Shallow	5-15	Chrysene	218-01-9	2/8/2016	0.1	0.1	U	3.4	no
SW-051-MWS	Shallow	5-15	cis-1,2-Dichloroethene	156-59-2	2/8/2016	1	0.44	J	70	no
SW-051-MWS	Shallow	5-15	cis-1,3-Dichloropropene	10061-01-5	2/8/2016	1	1	U	no	no
SW-051-MWS	Shallow	5-15	Cobalt (D)	7440-48-4	2/8/2016	5	49.8	U	6	YES
SW-051-MWS	Shallow	5-15	Cobalt (T)	7440-48-4	2/8/2016	5	57.6	U	6	YES
SW-051-MWS	Shallow	5-15	Copper (D)	7440-50-8	2/8/2016	5	3.1	B	1,300	no
SW-051-MWS	Shallow	5-15	Copper (T)	7440-50-8	2/8/2016	5	5	U	1,300	no
SW-051-MWS	Shallow	5-15	Cyanide	57-12-5	2/8/2016	10	10	U	200	no
SW-051-MWS	Shallow	5-15	Cyclohexane	110-82-7	2/8/2016	10	10	U	13,000	no
SW-051-MWS	Shallow	5-15	Dibenz[a,h]anthracene	53-70-3	2/8/2016	0.1	0.1	U	0.0034	no
SW-051-MWS	Shallow	5-15	Dibromochloromethane	124-48-1	2/8/2016	1	1	U	0.17	no
SW-051-MWS	Shallow	5-15	Dichlorodifluoromethane	75-71-8	2/8/2016	1	1	U	200	no
SW-051-MWS	Shallow	5-15	Diesel Range Organics	DRO	2/8/2016	104	934	J	47	YES
SW-051-MWS	Shallow	5-15	Diethylphthalate	84-66-2	2/8/2016	1	1	U	15,000	no
SW-051-MWS	Shallow	5-15	Di-n-butylphthalate	84-74-2	2/8/2016	1	1	U	900	no
SW-051-MWS	Shallow	5-15	Di-n-octylphthalate	117-84-0	2/8/2016	1	1	U	200	no
SW-051-MWS	Shallow	5-15	Ethylbenzene	100-41-4	2/8/2016	1	1	U	700	no
SW-051-MWS	Shallow	5-15	Fluoranthene	206-44-0	2/8/2016	0.1	0.1	U	800	no
SW-051-MWS	Shallow	5-15	Fluorene	86-73-7	2/8/2016	0.1	0.024	J	290	no
SW-051-MWS	Shallow	5-15	Gasoline Range Organics	GRO	2/8/2016	200	200	U	47	no
SW-051-MWS	Shallow	5-15	Hexachlorobenzene	118-74-1	2/8/2016	1	1	U	1	no
SW-051-MWS	Shallow	5-15	Hexachlorobutadiene	87-68-3	2/8/2016	1	1	U	0.14	no
SW-051-MWS	Shallow	5-15	Hexachlorocyclopentadiene	77-47-4	2/8/2016	1	1	U	50	no
SW-051-MWS	Shallow	5-15	Hexachloroethane	67-72-1	2/8/2016	1	1	U	0.33	no
SW-051-MWS	Shallow	5-15	Indeno[1,2,3-c,d]pyrene	193-39-5	2/8/2016	0.1	0.1	U	0.034	no
SW-051-MWS	Shallow	5-15	Iron (D)	7439-89-6	2/8/2016	70	7,700	U	14,000	no
SW-051-MWS	Shallow	5-15	Iron (T)	7439-89-6	2/8/2016	70	9,350	U	14,000	no
SW-051-MWS	Shallow	5-15	Isophorone	78-59-1	2/8/2016	1	1	U	78	no
SW-051-MWS	Shallow	5-15	Isopropylbenzene	98-82-8	2/8/2016	1	1	U	450	no
SW-051-MWS	Shallow	5-15	Lead (D)	7439-92-1	2/8/2016	5	5	U	15	no
SW-051-MWS	Shallow	5-15	Lead (T)	7439-92-1	2/8/2016	5	5	U	15	no
SW-051-MWS	Shallow	5-15	Manganese (D)	7439-96-5	2/8/2016	5	1,700	U	430	YES
SW-051-MWS	Shallow	5-15	Manganese (T)	7439-96-5	2/8/2016	5	1,910	U	430	YES
SW-051-MWS	Shallow	5-15	Mercury (D)	7439-97-6	2/8/2016	0.2	0.2	UJ	2	no
SW-051-MWS	Shallow	5-15	Mercury (T)	7439-97-6	2/8/2016	0.2	0.2	UJ	2	no
SW-051-MWS	Shallow	5-15	Methyl Acetate	79-20-9	2/8/2016	5	5	U	20,000	no
SW-051-MWS	Shallow	5-15	Methyl tert-butyl ether (MTBE)	1634-04-4	2/8/2016	1	1	U	14	no
SW-051-MWS	Shallow	5-15	Methylene Chloride	75-09-2	2/8/2016	1	1	U	5	no
SW-051-MWS	Shallow	5-15	Naphthalene	91-20-3	2/8/2016	0.1	0.024	B	0.17	no
SW-051-MWS	Shallow	5-15	Nickel (D)	7440-02-0	2/8/2016	10	83.5	U	390	no
SW-051-MWS	Shallow	5-15	Nickel (T)	7440-02-0	2/8/2016	10	90.3	U	390	no
SW-051-MWS	Shallow	5-15	Nitrobenzene	98-95-3	2/8/2016	1	1	U	0.14	no
SW-051-MWS	Shallow	5-15	N-Nitroso-di-n-propylamine	621-64-7	2/8/2016	1	1	U	0.011	no
SW-051-MWS	Shallow	5-15	N-Nitrosodiphenylamine	86-30-6	2/8/2016	1	1	U	12	no
SW-051-MWS	Shallow	5-15	Pentachlorophenol	87-86-5	2/8/2016	2.5	2.5	U	1	no
SW-051-MWS	Shallow	5-15	Phenanthrene	85-01-8	2/8/2016	0.1	0.1	U	no	no
SW-051-MWS	Shallow	5-15	Phenol	108-95-2	2/8/2016	1	1	U	5,800	no
SW-051-MWS	Shallow	5-15	Pyrene	129-00-0	2/8/2016	0.1	0.1	U	120	no
SW-051-MWS	Shallow	5-15	Selenium (D)	7782-49-2	2/8/2016	8	8	U	50	no
SW-051-MWS	Shallow	5-15	Selenium (T)	7782-49-2	2/8/2016	8	8	U	50	no
SW-051-MWS	Shallow	5-15	Silver (D)	7440-22-4	2/8/2016	6	6	U	94	no
SW-051-MWS	Shallow	5-15	Silver (T)	7440-22-4	2/8/2016	6	6	U	94	no
SW-051-MWS	Shallow	5-15	Styrene	100-42-5	2/8/2016	1	1	U	100	no
SW-051-MWS	Shallow	5-15	Tetrachloroethene	127-18-4	2/8/2016	1	1	U	5	no
SW-051-MWS	Shallow	5-15	Thallium (D)	7440-28-0	2/8/2016	10	10	U	2	no
SW-051-MWS	Shallow	5-15	Thallium (T)	7440-28-0	2/8/2016	10	10	U	2	no
SW-051-MWS	Shallow	5-15	Toluene	108-88-3	2/8/2016	1	1	U	1,000	no
SW-051-MWS	Shallow	5-15	trans-1,2-Dichloroethene	156-60-5	2/8/2016	1	1	U	100	no
SW-051-MWS	Shallow	5-15	trans-1,3-Dichloropropene	10061-02-6	2/8/2016	1	1	U	no	no
SW-051-MWS	Shallow	5-15	Trichloroethene	79-01-6	2/8/2016	1	1	U	5	no
SW-051-MWS	Shallow	5-15	Trichlorofluoromethane	75-69-4	2/8/2016	1	1	U	1,100	no

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Well ID	Zone	Screen Interval (feet bgs)	Parameter	CAS	Sample Date	LOQ	Result (ug/L)	Final Flag	PAL	Exceeds PAL?
SW-051-MWS	Shallow	5-15	Vanadium (D)	7440-62-2	2/8/2016	5	5	U	86	no
SW-051-MWS	Shallow	5-15	Vanadium (T)	7440-62-2	2/8/2016	5	5	U	86	no
SW-051-MWS	Shallow	5-15	Vinyl chloride	75-01-4	2/8/2016	1	1	U	2	no
SW-051-MWS	Shallow	5-15	Xylenes	1330-20-7	2/8/2016	3	3	U	10,000	no
SW-051-MWS	Shallow	5-15	Zinc (D)	7440-66-6	2/8/2016	10	173	U	6,000	no
SW-051-MWS	Shallow	5-15	Zinc (T)	7440-66-6	2/8/2016	10	189	U	6,000	no
SW-054-MWS	Shallow	9.5-19.5	1,1,1-Trichloroethane	71-55-6	05-Feb-16	1	1	U	200	no
SW-054-MWS	Shallow	9.5-19.5	1,1,2,2-Tetrachloroethane	79-34-5	05-Feb-16	1	1	U	0.076	no
SW-054-MWS	Shallow	9.5-19.5	1,1,2,2-Tetrachloroethane	79-34-5	05-Feb-16	50	50	U	55,000	no
SW-054-MWS	Shallow	9.5-19.5	1,1,2-Trichloroethane	79-00-5	05-Feb-16	1	1	U	5	no
SW-054-MWS	Shallow	9.5-19.5	1,1-Biphenyl	92-52-4	05-Feb-16	1	1	U	0.83	no
SW-054-MWS	Shallow	9.5-19.5	1,1-Dichloroethane	75-34-3	05-Feb-16	1	1	U	2.7	no
SW-054-MWS	Shallow	9.5-19.5	1,1-Dichloroethene	75-35-4	05-Feb-16	1	1	U	7	no
SW-054-MWS	Shallow	9.5-19.5	1,2,3-Trichlorobenzene	87-61-6	05-Feb-16	2	2	U	7	no
SW-054-MWS	Shallow	9.5-19.5	1,2,4,5-Tetrachlorobenzene	95-94-3	05-Feb-16	1	1	U	1.7	no
SW-054-MWS	Shallow	9.5-19.5	1,2,4-Trichlorobenzene	120-82-1	05-Feb-16	1	1	U	70	no
SW-054-MWS	Shallow	9.5-19.5	1,2-Dibromo-3-chloropropane	96-12-8	05-Feb-16	5	5	U	0.2	no
SW-054-MWS	Shallow	9.5-19.5	1,2-Dibromoethane	106-93-4	05-Feb-16	1	1	U	0.0075	no
SW-054-MWS	Shallow	9.5-19.5	1,2-Dichlorobenzene	95-50-1	05-Feb-16	1	1	U	600	no
SW-054-MWS	Shallow	9.5-19.5	1,2-Dichloroethane	107-06-2	05-Feb-16	1	1	U	5	no
SW-054-MWS	Shallow	9.5-19.5	1,2-Dichloroethene (Total)	540-59-0	05-Feb-16	2	2	U	70	no
SW-054-MWS	Shallow	9.5-19.5	1,2-Dichloropropane	78-87-5	05-Feb-16	1	1	U	5	no
SW-054-MWS	Shallow	9.5-19.5	1,3-Dichlorobenzene	541-73-1	05-Feb-16	1	1	U		no
SW-054-MWS	Shallow	9.5-19.5	1,4-Dichlorobenzene	106-46-7	05-Feb-16	1	1	U	75	no
SW-054-MWS	Shallow	9.5-19.5	1,4-Dioxane	123-91-1	05-Feb-16	0.1	0.1	U	0.46	no
SW-054-MWS	Shallow	9.5-19.5	2,3,4,6-Tetrachlorophenol	58-90-2	05-Feb-16	1	1	U	240	no
SW-054-MWS	Shallow	9.5-19.5	2,4,5-Trichlorophenol	95-95-4	05-Feb-16	2.5	2.5	U	1,200	no
SW-054-MWS	Shallow	9.5-19.5	2,4,6-Trichlorophenol	88-06-2	05-Feb-16	1	1	U	4	no
SW-054-MWS	Shallow	9.5-19.5	2,4-Dichlorophenol	120-83-2	05-Feb-16	1	1	U	46	no
SW-054-MWS	Shallow	9.5-19.5	2,4-Dimethylphenol	105-67-9	05-Feb-16	1	1	U	360	no
SW-054-MWS	Shallow	9.5-19.5	2,4-Dinitrophenol	51-28-5	05-Feb-16	2.5	2.5	UJ	39	no
SW-054-MWS	Shallow	9.5-19.5	2,4-Dinitrotoluene	121-14-2	05-Feb-16	1	1	U	0.24	no
SW-054-MWS	Shallow	9.5-19.5	2,6-Dinitrotoluene	606-20-2	05-Feb-16	1	1	U	0.048	no
SW-054-MWS	Shallow	9.5-19.5	2-Butanone (MEK)	78-93-3	05-Feb-16	10	10	U	5,600	no
SW-054-MWS	Shallow	9.5-19.5	2-Chloronaphthalene	91-58-7	05-Feb-16	1	1	U	750	no
SW-054-MWS	Shallow	9.5-19.5	2-Chlorophenol	95-57-8	05-Feb-16	1	1	U	91	no
SW-054-MWS	Shallow	9.5-19.5	2-Hexanone	591-78-6	05-Feb-16	10	10	U	38	no
SW-054-MWS	Shallow	9.5-19.5	2-Methylnaphthalene	91-57-6	05-Feb-16	0.1	0.1	U	36	no
SW-054-MWS	Shallow	9.5-19.5	2-Methylphenol	95-48-7	05-Feb-16	1	1	U	930	no
SW-054-MWS	Shallow	9.5-19.5	2-Nitroaniline	88-74-4	05-Feb-16	2.5	2.5	U	190	no
SW-054-MWS	Shallow	9.5-19.5	3&4-Methylphenol(m&p Cresol)	108-39-4/106-44-5	05-Feb-16	2	2	U	930	no
SW-054-MWS	Shallow	9.5-19.5	3,3'-Dichlorobenzidine	91-94-1	05-Feb-16	1	1	U	0.12	no
SW-054-MWS	Shallow	9.5-19.5	4-Chloroaniline	106-47-8	05-Feb-16	1	1	U	0.36	no
SW-054-MWS	Shallow	9.5-19.5	4-Methyl-2-pentanone (MIBK)	108-10-1	05-Feb-16	10	10	U	1,200	no
SW-054-MWS	Shallow	9.5-19.5	4-Nitroaniline	100-01-6	05-Feb-16	2.5	2.5	U	3.8	no
SW-054-MWS	Shallow	9.5-19.5	Acenaphthene	83-32-9	05-Feb-16	0.1	0.1	U	530	no
SW-054-MWS	Shallow	9.5-19.5	Acenaphthylene	208-96-8	05-Feb-16	0.1	0.1	U	530	no
SW-054-MWS	Shallow	9.5-19.5	Acetone	67-64-1	05-Feb-16	10	10	U	14,000	no
SW-054-MWS	Shallow	9.5-19.5	Acetophenone	98-86-2	05-Feb-16	1	1	U	1,900	no
SW-054-MWS	Shallow	9.5-19.5	Aluminum (D)	7429-90-5	05-Feb-16	50	515	U	20,000	no
SW-054-MWS	Shallow	9.5-19.5	Aluminum (T)	7429-90-5	05-Feb-16	50	621	U	20,000	no
SW-054-MWS	Shallow	9.5-19.5	Anthracene	120-12-7	05-Feb-16	0.1	0.1	U	1,800	no
SW-054-MWS	Shallow	9.5-19.5	Antimony (D)	7440-36-0	05-Feb-16	6	6	U	6	no
SW-054-MWS	Shallow	9.5-19.5	Antimony (T)	7440-36-0	05-Feb-16	6	6	U	6	no
SW-054-MWS	Shallow	9.5-19.5	Arsenic (D)	7440-38-2	05-Feb-16	5	5	U	10	no
SW-054-MWS	Shallow	9.5-19.5	Arsenic (T)	7440-38-2	05-Feb-16	5	5	U	10	no
SW-054-MWS	Shallow	9.5-19.5	Barium (D)	7440-39-3	05-Feb-16	10	22.6	U	2,000	no
SW-054-MWS	Shallow	9.5-19.5	Barium (T)	7440-39-3	05-Feb-16	10	25.9	U	2,000	no
SW-054-MWS	Shallow	9.5-19.5	Benzaldehyde	100-52-7	05-Feb-16	1	1	U	1,900	no
SW-054-MWS	Shallow	9.5-19.5	Benzene	71-43-2	05-Feb-16	1	1	U	5	no
SW-054-MWS	Shallow	9.5-19.5	Benzo[a]anthracene	56-55-3	05-Feb-16	0.1	0.1	U	0.012	no
SW-054-MWS	Shallow	9.5-19.5	Benzo[a]pyrene	50-32-8	05-Feb-16	0.1	0.1	U	0.2	no
SW-054-MWS	Shallow	9.5-19.5	Benzo[b]fluoranthene	205-99-2	05-Feb-16	0.1	0.1	U	0.034	no
SW-054-MWS	Shallow	9.5-19.5	Benzo[g,h,i]perylene	191-24-2	05-Feb-16	0.1	0.1	U		no
SW-054-MWS	Shallow	9.5-19.5	Benzo[k]fluoranthene	207-08-9	05-Feb-16	0.1	0.1	U	0.34	no
SW-054-MWS	Shallow	9.5-19.5	Beryllium (D)	7440-41-7	05-Feb-16	1	2.2	U	4	no
SW-054-MWS	Shallow	9.5-19.5	Beryllium (T)	7440-41-7	05-Feb-16	1	2.4	U	4	no
SW-054-MWS	Shallow	9.5-19.5	bis(2-chloroethoxy)methane	111-91-1	05-Feb-16	1	1	UJ	59	no
SW-054-MWS	Shallow	9.5-19.5	bis(2-Chloroethyl)ether	111-44-4	05-Feb-16	1	1	U	0.014	no
SW-054-MWS	Shallow	9.5-19.5	bis(2-Chloroisopropyl)ether	108-60-1	05-Feb-16	1	1	U	0.36	no
SW-054-MWS	Shallow	9.5-19.5	bis(2-Ethylhexyl)phthalate	117-81-7	05-Feb-16	1	1	U	6	no
SW-054-MWS	Shallow	9.5-19.5	Bromodichloromethane	75-27-4	05-Feb-16	1	1	U	0.13	no
SW-054-MWS	Shallow	9.5-19.5	Bromoform	75-25-2	05-Feb-16	1	1	U	3.3	no
SW-054-MWS	Shallow	9.5-19.5	Bromomethane	74-83-9	05-Feb-16	1	1	U	7.5	no
SW-054-MWS	Shallow	9.5-19.5	Cadmium (D)	7440-43-9	05-Feb-16	3	0.63	B	5	no
SW-054-MWS	Shallow	9.5-19.5	Cadmium (T)	7440-43-9	05-Feb-16	3	3	U	5	no
SW-054-MWS	Shallow	9.5-19.5	Caprolactam	105-60-2	05-Feb-16	2.5	2.5	U	9,900	no
SW-054-MWS	Shallow	9.5-19.5	Carbazole	86-74-8	05-Feb-16	1	1	U		no
SW-054-MWS	Shallow	9.5-19.5	Carbon disulfide	75-15-0	05-Feb-16	1	1	U	810	no
SW-054-MWS	Shallow	9.5-19.5	Carbon tetrachloride	56-23-5	05-Feb-16	1	1	U	5	no

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Area B Groundwater Investigation Well Data (Validated)
Former Sparrows Point Steel Mill
Sparrows Point, Maryland

Well ID	Zone	Screen Interval (feet bgs)	Parameter	CAS	Sample Date	LOQ	Result (ug/L)	Final Flag	PAL	Exceeds PAL?
SW-054-MWS	Shallow	9.5-19.5	Chlorobenzene	108-90-7	05-Feb-16	1	1	U	100	no
SW-054-MWS	Shallow	9.5-19.5	Chloroethane	75-00-3	05-Feb-16	1	1	U	21,000	no
SW-054-MWS	Shallow	9.5-19.5	Chloroform	67-66-3	05-Feb-16	1	1	U	0.22	no
SW-054-MWS	Shallow	9.5-19.5	Chloromethane	74-87-3	05-Feb-16	1	1	U	190	no
SW-054-MWS	Shallow	9.5-19.5	Chromium (D)	7440-47-3	05-Feb-16	5	1.2	B	100	no
SW-054-MWS	Shallow	9.5-19.5	Chromium (T)	7440-47-3	05-Feb-16	5	5	U	100	no
SW-054-MWS	Shallow	9.5-19.5	Chromium VI (T)	18540-29-9	05-Feb-16	10	10	U	0.035	no
SW-054-MWS	Shallow	9.5-19.5	Chrysene	218-01-9	05-Feb-16	0.1	0.1	U	3.4	no
SW-054-MWS	Shallow	9.5-19.5	cis-1,2-Dichloroethene	156-59-2	05-Feb-16	1	1	U	70	no
SW-054-MWS	Shallow	9.5-19.5	cis-1,3-Dichloropropene	10061-01-5	05-Feb-16	1	1	U		no
SW-054-MWS	Shallow	9.5-19.5	Cobalt (D)	7440-48-4	05-Feb-16	5	25.5		6	YES
SW-054-MWS	Shallow	9.5-19.5	Cobalt (T)	7440-48-4	05-Feb-16	5	27.1		6	YES
SW-054-MWS	Shallow	9.5-19.5	Copper (D)	7440-50-8	05-Feb-16	5	3.5	B	1,300	no
SW-054-MWS	Shallow	9.5-19.5	Copper (T)	7440-50-8	05-Feb-16	5	5	U	1,300	no
SW-054-MWS	Shallow	9.5-19.5	Cyanide	57-12-5	05-Feb-16	10	10	U	200	no
SW-054-MWS	Shallow	9.5-19.5	Cyclohexane	110-82-7	05-Feb-16	10	10	U	13,000	no
SW-054-MWS	Shallow	9.5-19.5	Dibenz[a,h]anthracene	53-70-3	05-Feb-16	0.1	0.1	U	0.0034	no
SW-054-MWS	Shallow	9.5-19.5	Dibromochloromethane	124-48-1	05-Feb-16	1	1	U	0.17	no
SW-054-MWS	Shallow	9.5-19.5	Dichlorodifluoromethane	75-71-8	05-Feb-16	1	1	U	200	no
SW-054-MWS	Shallow	9.5-19.5	Diesel Range Organics	DRO	05-Feb-16	103	103	UJ	47	no
SW-054-MWS	Shallow	9.5-19.5	Diethylphthalate	84-66-2	05-Feb-16	1	1	U	15,000	no
SW-054-MWS	Shallow	9.5-19.5	Di-n-butylphthalate	84-74-2	05-Feb-16	1	1	U	900	no
SW-054-MWS	Shallow	9.5-19.5	Di-n-octylphthalate	117-84-0	05-Feb-16	1	1	U	200	no
SW-054-MWS	Shallow	9.5-19.5	Ethylbenzene	100-41-4	05-Feb-16	1	1	U	700	no
SW-054-MWS	Shallow	9.5-19.5	Fluoranthene	206-44-0	05-Feb-16	0.1	0.1	U	800	no
SW-054-MWS	Shallow	9.5-19.5	Fluorene	86-73-7	05-Feb-16	0.1	0.1	U	290	no
SW-054-MWS	Shallow	9.5-19.5	Gasoline Range Organics	GRO	05-Feb-16	200	200	U	47	no
SW-054-MWS	Shallow	9.5-19.5	Hexachlorobenzene	118-74-1	05-Feb-16	1	1	U	1	no
SW-054-MWS	Shallow	9.5-19.5	Hexachlorobutadiene	87-68-3	05-Feb-16	1	1	U	0.14	no
SW-054-MWS	Shallow	9.5-19.5	Hexachlorocyclopentadiene	77-47-4	05-Feb-16	1	1	U	50	no
SW-054-MWS	Shallow	9.5-19.5	Hexachloroethane	67-72-1	05-Feb-16	1	1	U	0.33	no
SW-054-MWS	Shallow	9.5-19.5	Indeno[1,2,3-c,d]pyrene	193-39-5	05-Feb-16	0.1	0.1	U	0.034	no
SW-054-MWS	Shallow	9.5-19.5	Iron (D)	7439-89-6	05-Feb-16	70	3,600		14,000	no
SW-054-MWS	Shallow	9.5-19.5	Iron (T)	7439-89-6	05-Feb-16	70	4,530		14,000	no
SW-054-MWS	Shallow	9.5-19.5	Isophorone	78-59-1	05-Feb-16	1	1	U	78	no
SW-054-MWS	Shallow	9.5-19.5	Isopropylbenzene	98-82-8	05-Feb-16	1	1	U	450	no
SW-054-MWS	Shallow	9.5-19.5	Lead (D)	7439-92-1	05-Feb-16	5	5	U	15	no
SW-054-MWS	Shallow	9.5-19.5	Lead (T)	7439-92-1	05-Feb-16	5	5	U	15	no
SW-054-MWS	Shallow	9.5-19.5	Manganese (D)	7439-96-5	05-Feb-16	5	848		430	YES
SW-054-MWS	Shallow	9.5-19.5	Manganese (T)	7439-96-5	05-Feb-16	5	928		430	YES
SW-054-MWS	Shallow	9.5-19.5	Mercury (D)	7439-97-6	05-Feb-16	0.2	0.2	UJ	2	no
SW-054-MWS	Shallow	9.5-19.5	Mercury (T)	7439-97-6	05-Feb-16	0.2	0.2	UJ	2	no
SW-054-MWS	Shallow	9.5-19.5	Methyl Acetate	79-20-9	05-Feb-16	5	5	U	20,000	no
SW-054-MWS	Shallow	9.5-19.5	Methyl tert-butyl ether (MTBE)	1634-04-4	05-Feb-16	1	1	U	14	no
SW-054-MWS	Shallow	9.5-19.5	Methylene Chloride	75-09-2	05-Feb-16	1	1	U	5	no
SW-054-MWS	Shallow	9.5-19.5	Naphthalene	91-20-3	05-Feb-16	0.1	0.018	B	0.17	no
SW-054-MWS	Shallow	9.5-19.5	Nickel (D)	7440-02-0	05-Feb-16	10	46.3		390	no
SW-054-MWS	Shallow	9.5-19.5	Nickel (T)	7440-02-0	05-Feb-16	10	48		390	no
SW-054-MWS	Shallow	9.5-19.5	Nitrobenzene	98-95-3	05-Feb-16	1	1	U	0.14	no
SW-054-MWS	Shallow	9.5-19.5	N-Nitroso-di-n-propylamine	621-64-7	05-Feb-16	1	1	U	0.011	no
SW-054-MWS	Shallow	9.5-19.5	N-Nitrosodiphenylamine	86-30-6	05-Feb-16	1	1	U	12	no
SW-054-MWS	Shallow	9.5-19.5	Pentachlorophenol	87-86-5	05-Feb-16	2.5	2.5	U	1	no
SW-054-MWS	Shallow	9.5-19.5	Phenanthrene	85-01-8	05-Feb-16	0.1	0.1	U		no
SW-054-MWS	Shallow	9.5-19.5	Phenol	108-95-2	05-Feb-16	1	1	U	5,800	no
SW-054-MWS	Shallow	9.5-19.5	Pyrene	129-00-0	05-Feb-16	0.1	0.1	U	120	no
SW-054-MWS	Shallow	9.5-19.5	Selenium (D)	7782-49-2	05-Feb-16	8	8	U	50	no
SW-054-MWS	Shallow	9.5-19.5	Selenium (T)	7782-49-2	05-Feb-16	8	5.1	B	50	no
SW-054-MWS	Shallow	9.5-19.5	Silver (D)	7440-22-4	05-Feb-16	6	6	U	94	no
SW-054-MWS	Shallow	9.5-19.5	Silver (T)	7440-22-4	05-Feb-16	6	6	U	94	no
SW-054-MWS	Shallow	9.5-19.5	Styrene	100-42-5	05-Feb-16	1	1	U	100	no
SW-054-MWS	Shallow	9.5-19.5	Tetrachloroethene	127-18-4	05-Feb-16	1	1	U	5	no
SW-054-MWS	Shallow	9.5-19.5	Thallium (D)	7440-28-0	05-Feb-16	10	10	U	2	no
SW-054-MWS	Shallow	9.5-19.5	Thallium (T)	7440-28-0	05-Feb-16	10	10	U	2	no
SW-054-MWS	Shallow	9.5-19.5	Toluene	108-88-3	05-Feb-16	1	1	U	1,000	no
SW-054-MWS	Shallow	9.5-19.5	trans-1,2-Dichloroethene	156-60-5	05-Feb-16	1	1	U	100	no
SW-054-MWS	Shallow	9.5-19.5	trans-1,3-Dichloropropene	10061-02-6	05-Feb-16	1	1	U		no
SW-054-MWS	Shallow	9.5-19.5	Trichloroethene	79-01-6	05-Feb-16	1	1	U	5	no
SW-054-MWS	Shallow	9.5-19.5	Trichlorofluoromethane	75-69-4	05-Feb-16	1	1	U	1,100	no
SW-054-MWS	Shallow	9.5-19.5	Vanadium (D)	7440-62-2	05-Feb-16	5	5	U	86	no
SW-054-MWS	Shallow	9.5-19.5	Vanadium (T)	7440-62-2	05-Feb-16	5	5	U	86	no
SW-054-MWS	Shallow	9.5-19.5	Vinyl chloride	75-01-4	05-Feb-16	1	1	U	2	no
SW-054-MWS	Shallow	9.5-19.5	Xylenes	1330-20-7	05-Feb-16	3	3	U	10,000	no
SW-054-MWS	Shallow	9.5-19.5	Zinc (D)	7440-66-6	05-Feb-16	10	87.3		6,000	no
SW-054-MWS	Shallow	9.5-19.5	Zinc (T)	7440-66-6	05-Feb-16	10	91		6,000	no
SW-074-MWI	Intermediate	45.5-75.5	1,1,1-Trichloroethane	71-55-6	1/21/2016	1	1	U	200	no
SW-074-MWI	Intermediate	45.5-75.5	1,1,1,2-Tetrachloroethane	79-34-5	1/21/2016	1	1	U	0.076	no
SW-074-MWI	Intermediate	45.5-75.5	1,1,2-Trichloroethane	79-00-5	1/21/2016	1	1	U	5	no
SW-074-MWI	Intermediate	45.5-75.5	1,1,2-Trichlorotrifluoroethane	76-13-1	1/21/2016	50	50	U	55,000	no
SW-074-MWI	Intermediate	45.5-75.5	1,1-Biphenyl	92-52-4	1/21/2016	1	1	U	0.83	no
SW-074-MWI	Intermediate	45.5-75.5	1,1-Dichloroethane	75-34-3	1/21/2016	1	1	U	2.7	no

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SW-074-MWI	Intermediate	45.5-75.5	1,1-Dichloroethene	75-35-4	1/21/2016	1	1	U	7	no
SW-074-MWI	Intermediate	45.5-75.5	1,2,3-Trichlorobenzene	87-61-6	1/21/2016	2	2	U	7	no
SW-074-MWI	Intermediate	45.5-75.5	1,2,4,5-Tetrachlorobenzene	95-94-3	1/21/2016	1	1	U	1.7	no
SW-074-MWI	Intermediate	45.5-75.5	1,2,4-Trichlorobenzene	120-82-1	1/21/2016	1	1	U	70	no
SW-074-MWI	Intermediate	45.5-75.5	1,2-Dibromo-3-chloropropane	96-12-8	1/21/2016	5	5	U	0.2	no
SW-074-MWI	Intermediate	45.5-75.5	1,2-Dibromoethane	106-93-4	1/21/2016	1	1	U	0.0075	no
SW-074-MWI	Intermediate	45.5-75.5	1,2-Dichlorobenzene	95-50-1	1/21/2016	1	1	U	600	no
SW-074-MWI	Intermediate	45.5-75.5	1,2-Dichloroethane	107-06-2	1/21/2016	1	1	U	5	no
SW-074-MWI	Intermediate	45.5-75.5	1,2-Dichloroethene (Total)	540-59-0	1/21/2016	2	2	U	70	no
SW-074-MWI	Intermediate	45.5-75.5	1,2-Dichloropropane	78-87-5	1/21/2016	1	1	U	5	no
SW-074-MWI	Intermediate	45.5-75.5	1,3-Dichlorobenzene	541-73-1	1/21/2016	1	1	U		no
SW-074-MWI	Intermediate	45.5-75.5	1,4-Dichlorobenzene	106-46-7	1/21/2016	1	1	U	75	no
SW-074-MWI	Intermediate	45.5-75.5	1,4-Dioxane	123-91-1	1/21/2016	0.1	0.1	U	0.46	no
SW-074-MWI	Intermediate	45.5-75.5	2,3,4,6-Tetrachlorophenol	58-90-2	1/21/2016	1	1	U	240	no
SW-074-MWI	Intermediate	45.5-75.5	2,4,5-Trichlorophenol	95-95-4	1/21/2016	2.5	2.5	U	1,200	no
SW-074-MWI	Intermediate	45.5-75.5	2,4,6-Trichlorophenol	88-06-2	1/21/2016	1	1	U	4	no
SW-074-MWI	Intermediate	45.5-75.5	2,4-Dichlorophenol	120-83-2	1/21/2016	1	1	U	46	no
SW-074-MWI	Intermediate	45.5-75.5	2,4-Dimethylphenol	105-67-9	1/21/2016	1	1	U	360	no
SW-074-MWI	Intermediate	45.5-75.5	2,4-Dinitrophenol	51-28-5	1/21/2016	2.5	2.5	U	39	no
SW-074-MWI	Intermediate	45.5-75.5	2,4-Dinitrotoluene	121-14-2	1/21/2016	1	1	U	0.24	no
SW-074-MWI	Intermediate	45.5-75.5	2,6-Dinitrotoluene	606-20-2	1/21/2016	1	1	U	0.048	no
SW-074-MWI	Intermediate	45.5-75.5	2-Butanone (MEK)	78-93-3	1/21/2016	10	7.2	J	5,600	no
SW-074-MWI	Intermediate	45.5-75.5	2-Chloronaphthalene	91-58-7	1/21/2016	1	1	U	750	no
SW-074-MWI	Intermediate	45.5-75.5	2-Chlorophenol	95-57-8	1/21/2016	1	1	U	91	no
SW-074-MWI	Intermediate	45.5-75.5	2-Hexanone	591-78-6	1/21/2016	10	10	U	38	no
SW-074-MWI	Intermediate	45.5-75.5	2-Methylnaphthalene	91-57-6	1/21/2016	0.1	0.1	U	36	no
SW-074-MWI	Intermediate	45.5-75.5	2-Methylphenol	95-48-7	1/21/2016	1	1	U	930	no
SW-074-MWI	Intermediate	45.5-75.5	2-Nitroaniline	88-74-4	1/21/2016	2.5	2.5	U	190	no
SW-074-MWI	Intermediate	45.5-75.5	3&4-Methylphenol(m&p Cresol)	108-39-4/106-44-5	1/21/2016	2	2	U	930	no
SW-074-MWI	Intermediate	45.5-75.5	3,3'-Dichlorobenzidine	91-94-1	1/21/2016	1	1	U	0.12	no
SW-074-MWI	Intermediate	45.5-75.5	4-Chloroaniline	106-47-8	1/21/2016	1	1	U	0.36	no
SW-074-MWI	Intermediate	45.5-75.5	4-Methyl-2-pentanone (MIBK)	108-10-1	1/21/2016	10	10	U	1,200	no
SW-074-MWI	Intermediate	45.5-75.5	4-Nitroaniline	100-01-6	1/21/2016	2.5	2.5	UJ	3.8	no
SW-074-MWI	Intermediate	45.5-75.5	Acenaphthene	83-32-9	1/21/2016	0.1	0.1	U	530	no
SW-074-MWI	Intermediate	45.5-75.5	Acenaphthylene	208-96-8	1/21/2016	0.1	0.1	U	530	no
SW-074-MWI	Intermediate	45.5-75.5	Acetone	67-64-1	1/21/2016	10	80.6		14,000	no
SW-074-MWI	Intermediate	45.5-75.5	Acetophenone	98-86-2	1/21/2016	1	1	U	1,900	no
SW-074-MWI	Intermediate	45.5-75.5	Aluminum (D)	7429-90-5	1/21/2016	50	59.7		20,000	no
SW-074-MWI	Intermediate	45.5-75.5	Aluminum (T)	7429-90-5	1/21/2016	50	176		20,000	no
SW-074-MWI	Intermediate	45.5-75.5	Anthracene	120-12-7	1/21/2016	0.1	0.1	U	1,800	no
SW-074-MWI	Intermediate	45.5-75.5	Antimony (D)	7440-36-0	1/21/2016	6	6	U	6	no
SW-074-MWI	Intermediate	45.5-75.5	Antimony (T)	7440-36-0	1/21/2016	6	6	U	6	no
SW-074-MWI	Intermediate	45.5-75.5	Arsenic (D)	7440-38-2	1/21/2016	5	5	U	10	no
SW-074-MWI	Intermediate	45.5-75.5	Arsenic (T)	7440-38-2	1/21/2016	5	3.8	B	10	no
SW-074-MWI	Intermediate	45.5-75.5	Barium (D)	7440-39-3	1/21/2016	10	51.5		2,000	no
SW-074-MWI	Intermediate	45.5-75.5	Barium (T)	7440-39-3	1/21/2016	10	51.4		2,000	no
SW-074-MWI	Intermediate	45.5-75.5	Benzaldehyde	100-52-7	1/21/2016	1	1	U	1,900	no
SW-074-MWI	Intermediate	45.5-75.5	Benzene	71-43-2	1/21/2016	1	1	U	5	no
SW-074-MWI	Intermediate	45.5-75.5	Benzo[a]anthracene	56-55-3	1/21/2016	0.1	0.1	U	0.012	no
SW-074-MWI	Intermediate	45.5-75.5	Benzo[a]pyrene	50-32-8	1/21/2016	0.1	0.1	U	0.2	no
SW-074-MWI	Intermediate	45.5-75.5	Benzo[b]fluoranthene	205-99-2	1/21/2016	0.1	0.1	U	0.034	no
SW-074-MWI	Intermediate	45.5-75.5	Benzo[g,h,i]perylene	191-24-2	1/21/2016	0.1	0.1	U		no
SW-074-MWI	Intermediate	45.5-75.5	Benzo[k]fluoranthene	207-08-9	1/21/2016	0.1	0.1	U	0.34	no
SW-074-MWI	Intermediate	45.5-75.5	Beryllium (D)	7440-41-7	1/21/2016	1	1	U	4	no
SW-074-MWI	Intermediate	45.5-75.5	Beryllium (T)	7440-41-7	1/21/2016	1	1	U	4	no
SW-074-MWI	Intermediate	45.5-75.5	bis(2-chloroethoxy)methane	111-91-1	1/21/2016	1	1	U	59	no
SW-074-MWI	Intermediate	45.5-75.5	bis(2-Chloroethyl)ether	111-44-4	1/21/2016	1	1	U	0.014	no
SW-074-MWI	Intermediate	45.5-75.5	bis(2-Chloroisopropyl)ether	108-60-1	1/21/2016	1	1	U	0.36	no
SW-074-MWI	Intermediate	45.5-75.5	bis(2-Ethylhexyl)phthalate	117-81-7	1/21/2016	1	1	U	6	no
SW-074-MWI	Intermediate	45.5-75.5	Bromodichloromethane	75-27-4	1/21/2016	1	1	U	0.13	no
SW-074-MWI	Intermediate	45.5-75.5	Bromoform	75-25-2	1/21/2016	1	1	U	3.3	no
SW-074-MWI	Intermediate	45.5-75.5	Bromomethane	74-83-9	1/21/2016	1	1	U	7.5	no
SW-074-MWI	Intermediate	45.5-75.5	Cadmium (D)	7440-43-9	1/21/2016	3	0.63	B	5	no
SW-074-MWI	Intermediate	45.5-75.5	Cadmium (T)	7440-43-9	1/21/2016	3	0.64	J	5	no
SW-074-MWI	Intermediate	45.5-75.5	Caprolactam	105-60-2	1/21/2016	2.5	2.5	U	9,900	no
SW-074-MWI	Intermediate	45.5-75.5	Carbazole	86-74-8	1/21/2016	1	1	UJ		no
SW-074-MWI	Intermediate	45.5-75.5	Carbon disulfide	75-15-0	1/21/2016	1	1	U	810	no
SW-074-MWI	Intermediate	45.5-75.5	Carbon tetrachloride	56-23-5	1/21/2016	1	1	U	5	no
SW-074-MWI	Intermediate	45.5-75.5	Chlorobenzene	108-90-7	1/21/2016	1	1	U	100	no
SW-074-MWI	Intermediate	45.5-75.5	Chloroethane	75-00-3	1/21/2016	1	1	U	21,000	no
SW-074-MWI	Intermediate	45.5-75.5	Chloroform	67-66-3	1/21/2016	1	1	U	0.22	no
SW-074-MWI	Intermediate	45.5-75.5	Chloromethane	74-87-3	1/21/2016	1	1	U	190	no
SW-074-MWI	Intermediate	45.5-75.5	Chromium (D)	7440-47-3	1/21/2016	5	5	U	100	no
SW-074-MWI	Intermediate	45.5-75.5	Chromium (T)	7440-47-3	1/21/2016	5	5	U	100	no
SW-074-MWI	Intermediate	45.5-75.5	Chromium VI (T)	18540-29-9	1/21/2016	10	10	U	0.035	no
SW-074-MWI	Intermediate	45.5-75.5	Chrysene	218-01-9	1/21/2016	0.1	0.1	U	3.4	no
SW-074-MWI	Intermediate	45.5-75.5	cis-1,2-Dichloroethene	156-59-2	1/21/2016	1	1	U	70	no
SW-074-MWI	Intermediate	45.5-75.5	cis-1,3-Dichloropropene	10061-01-5	1/21/2016	1	1	U		no
SW-074-MWI	Intermediate	45.5-75.5	Cobalt (D)	7440-48-4	1/21/2016	5	60.2		6	YES
SW-074-MWI	Intermediate	45.5-75.5	Cobalt (T)	7440-48-4	1/21/2016	5	55.6		6	YES

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Well ID	Zone	Screen Interval (feet bgs)	Parameter	CAS	Sample Date	LOQ	Result (ug/L)	Final Flag	PAL	Exceeds PAL?
SW-074-MWI	Intermediate	45.5-75.5	Copper (D)	7440-50-8	1/21/2016	5	5	U	1,300	no
SW-074-MWI	Intermediate	45.5-75.5	Copper (T)	7440-50-8	1/21/2016	5	5	U	1,300	no
SW-074-MWI	Intermediate	45.5-75.5	Cyanide	57-12-5	1/21/2016	10	10	U	200	no
SW-074-MWI	Intermediate	45.5-75.5	Cyclohexane	110-82-7	1/21/2016	10	10	U	13,000	no
SW-074-MWI	Intermediate	45.5-75.5	Dibenz[a,h]anthracene	53-70-3	1/21/2016	0.1	0.1	U	0.0034	no
SW-074-MWI	Intermediate	45.5-75.5	Dibromochloromethane	124-48-1	1/21/2016	1	1	U	0.17	no
SW-074-MWI	Intermediate	45.5-75.5	Dichlorodifluoromethane	75-71-8	1/21/2016	1	1	U	200	no
SW-074-MWI	Intermediate	45.5-75.5	Diesel Range Organics	DRO	1/21/2016	105	122	U	47	YES
SW-074-MWI	Intermediate	45.5-75.5	Diethylphthalate	84-66-2	1/21/2016	1	1	U	15,000	no
SW-074-MWI	Intermediate	45.5-75.5	Di-n-butylphthalate	84-74-2	1/21/2016	1	1	U	900	no
SW-074-MWI	Intermediate	45.5-75.5	Di-n-octylphthalate	117-84-0	1/21/2016	1	1	UJ	200	no
SW-074-MWI	Intermediate	45.5-75.5	Ethylbenzene	100-41-4	1/21/2016	1	1	U	700	no
SW-074-MWI	Intermediate	45.5-75.5	Fluoranthene	206-44-0	1/21/2016	0.1	0.1	U	800	no
SW-074-MWI	Intermediate	45.5-75.5	Fluorene	86-73-7	1/21/2016	0.1	0.1	U	290	no
SW-074-MWI	Intermediate	45.5-75.5	Gasoline Range Organics	GRO	1/21/2016	200	200	U	47	no
SW-074-MWI	Intermediate	45.5-75.5	Hexachlorobenzene	118-74-1	1/21/2016	1	1	U	1	no
SW-074-MWI	Intermediate	45.5-75.5	Hexachlorobutadiene	87-68-3	1/21/2016	1	1	U	0.14	no
SW-074-MWI	Intermediate	45.5-75.5	Hexachlorocyclopentadiene	77-47-4	1/21/2016	1	1	U	50	no
SW-074-MWI	Intermediate	45.5-75.5	Hexachloroethane	67-72-1	1/21/2016	1	1	U	0.33	no
SW-074-MWI	Intermediate	45.5-75.5	Indeno[1,2,3-c,d]pyrene	193-39-5	1/21/2016	0.1	0.1	U	0.034	no
SW-074-MWI	Intermediate	45.5-75.5	Iron (D)	7439-89-6	1/21/2016	70	9,650	U	14,000	no
SW-074-MWI	Intermediate	45.5-75.5	Iron (T)	7439-89-6	1/21/2016	70	9,070	U	14,000	no
SW-074-MWI	Intermediate	45.5-75.5	Isophorone	78-59-1	1/21/2016	1	0.49	J	78	no
SW-074-MWI	Intermediate	45.5-75.5	Isopropylbenzene	98-82-8	1/21/2016	1	1	U	450	no
SW-074-MWI	Intermediate	45.5-75.5	Lead (D)	7439-92-1	1/21/2016	5	5	U	15	no
SW-074-MWI	Intermediate	45.5-75.5	Lead (T)	7439-92-1	1/21/2016	5	5	U	15	no
SW-074-MWI	Intermediate	45.5-75.5	Manganese (D)	7439-96-5	1/21/2016	5	2,450	U	430	YES
SW-074-MWI	Intermediate	45.5-75.5	Manganese (T)	7439-96-5	1/21/2016	5	2,420	U	430	YES
SW-074-MWI	Intermediate	45.5-75.5	Mercury (D)	7439-97-6	1/21/2016	0.2	0.2	U	2	no
SW-074-MWI	Intermediate	45.5-75.5	Mercury (T)	7439-97-6	1/21/2016	0.2	0.2	U	2	no
SW-074-MWI	Intermediate	45.5-75.5	Methyl Acetate	79-20-9	1/21/2016	5	5	U	20,000	no
SW-074-MWI	Intermediate	45.5-75.5	Methyl tert-butyl ether (MTBE)	1634-04-4	1/21/2016	1	1	U	14	no
SW-074-MWI	Intermediate	45.5-75.5	Methylene Chloride	75-09-2	1/21/2016	1	1	U	5	no
SW-074-MWI	Intermediate	45.5-75.5	Naphthalene	91-20-3	1/21/2016	0.1	0.059	B	0.17	no
SW-074-MWI	Intermediate	45.5-75.5	Nickel (D)	7440-02-0	1/21/2016	10	35.4	U	390	no
SW-074-MWI	Intermediate	45.5-75.5	Nickel (T)	7440-02-0	1/21/2016	10	31.4	U	390	no
SW-074-MWI	Intermediate	45.5-75.5	Nitrobenzene	98-95-3	1/21/2016	1	1	U	0.14	no
SW-074-MWI	Intermediate	45.5-75.5	N-Nitroso-di-n-propylamine	621-64-7	1/21/2016	1	1	U	0.011	no
SW-074-MWI	Intermediate	45.5-75.5	N-Nitrosodiphenylamine	86-30-6	1/21/2016	1	1	U	12	no
SW-074-MWI	Intermediate	45.5-75.5	Pentachlorophenol	87-86-5	1/21/2016	2.5	2.5	U	1	no
SW-074-MWI	Intermediate	45.5-75.5	Phenanthrene	85-01-8	1/21/2016	0.1	0.1	U	no	no
SW-074-MWI	Intermediate	45.5-75.5	Phenol	108-95-2	1/21/2016	1	1	U	5,800	no
SW-074-MWI	Intermediate	45.5-75.5	Pyrene	129-00-0	1/21/2016	0.1	0.1	U	120	no
SW-074-MWI	Intermediate	45.5-75.5	Selenium (D)	7782-49-2	1/21/2016	8	8	U	50	no
SW-074-MWI	Intermediate	45.5-75.5	Selenium (T)	7782-49-2	1/21/2016	8	8	U	50	no
SW-074-MWI	Intermediate	45.5-75.5	Silver (D)	7440-22-4	1/21/2016	6	6	U	94	no
SW-074-MWI	Intermediate	45.5-75.5	Silver (T)	7440-22-4	1/21/2016	6	6	U	94	no
SW-074-MWI	Intermediate	45.5-75.5	Styrene	100-42-5	1/21/2016	1	1	U	100	no
SW-074-MWI	Intermediate	45.5-75.5	Tetrachloroethene	127-18-4	1/21/2016	1	1	U	5	no
SW-074-MWI	Intermediate	45.5-75.5	Thallium (D)	7440-28-0	1/21/2016	10	10	U	2	no
SW-074-MWI	Intermediate	45.5-75.5	Thallium (T)	7440-28-0	1/21/2016	10	10	U	2	no
SW-074-MWI	Intermediate	45.5-75.5	Toluene	108-88-3	1/21/2016	1	1	U	1,000	no
SW-074-MWI	Intermediate	45.5-75.5	trans-1,2-Dichloroethene	156-60-5	1/21/2016	1	1	U	100	no
SW-074-MWI	Intermediate	45.5-75.5	trans-1,3-Dichloropropene	10061-02-6	1/21/2016	1	1	U	no	no
SW-074-MWI	Intermediate	45.5-75.5	Trichloroethene	79-01-6	1/21/2016	1	1	U	5	no
SW-074-MWI	Intermediate	45.5-75.5	Trichlorofluoromethane	75-69-4	1/21/2016	1	1	U	1,100	no
SW-074-MWI	Intermediate	45.5-75.5	Vanadium (D)	7440-62-2	1/21/2016	5	2.1	J	86	no
SW-074-MWI	Intermediate	45.5-75.5	Vanadium (T)	7440-62-2	1/21/2016	5	2.2	J	86	no
SW-074-MWI	Intermediate	45.5-75.5	Vinyl chloride	75-01-4	1/21/2016	1	1	U	2	no
SW-074-MWI	Intermediate	45.5-75.5	Xylenes	1330-20-7	1/21/2016	3	3	U	10,000	no
SW-074-MWI	Intermediate	45.5-75.5	Zinc (D)	7440-66-6	1/21/2016	10	11.3	U	6,000	no
SW-074-MWI	Intermediate	45.5-75.5	Zinc (T)	7440-66-6	1/21/2016	10	34.4	U	6,000	no
SW-074-MWS	Shallow	4.1-14.1	1,1,1-Trichloroethane	71-55-6	2/8/2016	1	1	U	200	no
SW-074-MWS	Shallow	4.1-14.1	1,1,2,2-Tetrachloroethane	79-34-5	2/8/2016	1	1	U	0.076	no
SW-074-MWS	Shallow	4.1-14.1	1,1,2-Trichloroethane	79-00-5	2/8/2016	1	1	U	5	no
SW-074-MWS	Shallow	4.1-14.1	1,1,2-Trichlorotrifluoroethane	76-13-1	2/8/2016	50	50	U	55,000	no
SW-074-MWS	Shallow	4.1-14.1	1,1-Biphenyl	92-52-4	2/8/2016	1	1	U	0.83	no
SW-074-MWS	Shallow	4.1-14.1	1,1-Dichloroethane	75-34-3	2/8/2016	1	1	U	2.7	no
SW-074-MWS	Shallow	4.1-14.1	1,1-Dichloroethene	75-35-4	2/8/2016	1	1	U	7	no
SW-074-MWS	Shallow	4.1-14.1	1,2,3-Trichlorobenzene	87-61-6	2/8/2016	2	2	U	7	no
SW-074-MWS	Shallow	4.1-14.1	1,2,4,5-Tetrachlorobenzene	95-94-3	2/8/2016	1	1	U	1.7	no
SW-074-MWS	Shallow	4.1-14.1	1,2,4-Trichlorobenzene	120-82-1	2/8/2016	1	1	U	70	no
SW-074-MWS	Shallow	4.1-14.1	1,2-Dibromo-3-chloropropane	96-12-8	2/8/2016	5	5	U	0.2	no
SW-074-MWS	Shallow	4.1-14.1	1,2-Dibromoethane	106-93-4	2/8/2016	1	1	U	0.0075	no
SW-074-MWS	Shallow	4.1-14.1	1,2-Dichlorobenzene	95-50-1	2/8/2016	1	1	U	600	no
SW-074-MWS	Shallow	4.1-14.1	1,2-Dichloroethane	107-06-2	2/8/2016	1	1	U	5	no
SW-074-MWS	Shallow	4.1-14.1	1,2-Dichloroethene (Total)	540-59-0	2/8/2016	2	2	U	70	no
SW-074-MWS	Shallow	4.1-14.1	1,2-Dichloropropane	78-87-5	2/8/2016	1	1	U	5	no
SW-074-MWS	Shallow	4.1-14.1	1,3-Dichlorobenzene	541-73-1	2/8/2016	1	1	U	no	no
SW-074-MWS	Shallow	4.1-14.1	1,4-Dichlorobenzene	106-46-7	2/8/2016	1	1	U	75	no

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SW-074-MWS	Shallow	4.1-14.1	1,4-Dioxane	123-91-1	2/8/2016	0.1	0.1	U	0.46	no
SW-074-MWS	Shallow	4.1-14.1	2,3,4,6-Tetrachlorophenol	58-90-2	2/8/2016	1	1	U	240	no
SW-074-MWS	Shallow	4.1-14.1	2,4,5-Trichlorophenol	95-95-4	2/8/2016	2.5	2.5	U	1,200	no
SW-074-MWS	Shallow	4.1-14.1	2,4,6-Trichlorophenol	88-06-2	2/8/2016	1	1	U	4	no
SW-074-MWS	Shallow	4.1-14.1	2,4-Dichlorophenol	120-83-2	2/8/2016	1	1	U	46	no
SW-074-MWS	Shallow	4.1-14.1	2,4-Dimethylphenol	105-67-9	2/8/2016	1	1	U	360	no
SW-074-MWS	Shallow	4.1-14.1	2,4-Dinitrophenol	51-28-5	2/8/2016	2.5	2.5	U	39	no
SW-074-MWS	Shallow	4.1-14.1	2,4-Dinitrotoluene	121-14-2	2/8/2016	1	1	U	0.24	no
SW-074-MWS	Shallow	4.1-14.1	2,6-Dinitrotoluene	606-20-2	2/8/2016	1	1	U	0.048	no
SW-074-MWS	Shallow	4.1-14.1	2-Butanone (MEK)	78-93-3	2/8/2016	10	10	U	5,600	no
SW-074-MWS	Shallow	4.1-14.1	2-Chloronaphthalene	91-58-7	2/8/2016	1	1	U	750	no
SW-074-MWS	Shallow	4.1-14.1	2-Chlorophenol	95-57-8	2/8/2016	1	1	U	91	no
SW-074-MWS	Shallow	4.1-14.1	2-Hexanone	591-78-6	2/8/2016	10	10	U	38	no
SW-074-MWS	Shallow	4.1-14.1	2-Methylnaphthalene	91-57-6	2/8/2016	0.1	0.1	U	36	no
SW-074-MWS	Shallow	4.1-14.1	2-Methylphenol	95-48-7	2/8/2016	1	1	U	930	no
SW-074-MWS	Shallow	4.1-14.1	2-Nitroaniline	88-74-4	2/8/2016	2.5	2.5	U	190	no
SW-074-MWS	Shallow	4.1-14.1	3&4-Methylphenol(m&p Cresol)	108-39-4/106-44-5	2/8/2016	2	2	U	930	no
SW-074-MWS	Shallow	4.1-14.1	3,3'-Dichlorobenzidine	91-94-1	2/8/2016	1	1	UJ	0.12	no
SW-074-MWS	Shallow	4.1-14.1	4-Chloroaniline	106-47-8	2/8/2016	1	1	U	0.36	no
SW-074-MWS	Shallow	4.1-14.1	4-Methyl-2-pentanone (MIBK)	108-10-1	2/8/2016	10	10	U	1,200	no
SW-074-MWS	Shallow	4.1-14.1	4-Nitroaniline	100-01-6	2/8/2016	2.5	2.5	U	3.8	no
SW-074-MWS	Shallow	4.1-14.1	Acenaphthene	83-32-9	2/8/2016	0.1	0.1	U	530	no
SW-074-MWS	Shallow	4.1-14.1	Acenaphthylene	208-96-8	2/8/2016	0.1	0.1	U	530	no
SW-074-MWS	Shallow	4.1-14.1	Acetophenone	98-86-2	2/8/2016	1	1	U	1,900	no
SW-074-MWS	Shallow	4.1-14.1	Aluminum (D)	7429-90-5	2/8/2016	50	51	U	20,000	no
SW-074-MWS	Shallow	4.1-14.1	Aluminum (T)	7429-90-5	2/8/2016	50	118	U	20,000	no
SW-074-MWS	Shallow	4.1-14.1	Anthracene	120-12-7	2/8/2016	0.1	0.11	U	1,800	no
SW-074-MWS	Shallow	4.1-14.1	Antimony (D)	7440-36-0	2/8/2016	6	6	U	6	no
SW-074-MWS	Shallow	4.1-14.1	Antimony (T)	7440-36-0	2/8/2016	6	6	U	6	no
SW-074-MWS	Shallow	4.1-14.1	Arsenic (D)	7440-38-2	2/8/2016	5	5	U	10	no
SW-074-MWS	Shallow	4.1-14.1	Arsenic (T)	7440-38-2	2/8/2016	5	5	U	10	no
SW-074-MWS	Shallow	4.1-14.1	Barium (D)	7440-39-3	2/8/2016	10	27.8	U	2,000	no
SW-074-MWS	Shallow	4.1-14.1	Barium (T)	7440-39-3	2/8/2016	10	30.6	U	2,000	no
SW-074-MWS	Shallow	4.1-14.1	Benzaldehyde	100-52-7	2/8/2016	1	1	U	1,900	no
SW-074-MWS	Shallow	4.1-14.1	Benzene	71-43-2	2/8/2016	1	1	U	5	no
SW-074-MWS	Shallow	4.1-14.1	Benzo[a]anthracene	56-55-3	2/8/2016	0.1	0.1	U	0.012	no
SW-074-MWS	Shallow	4.1-14.1	Benzo[a]pyrene	50-32-8	2/8/2016	0.1	0.1	U	0.2	no
SW-074-MWS	Shallow	4.1-14.1	Benzo[b]fluoranthene	205-99-2	2/8/2016	0.1	0.1	U	0.034	no
SW-074-MWS	Shallow	4.1-14.1	Benzo[g,h,i]perylene	191-24-2	2/8/2016	0.1	0.1	U	no	no
SW-074-MWS	Shallow	4.1-14.1	Benzo[k]fluoranthene	207-08-9	2/8/2016	0.1	0.1	U	0.34	no
SW-074-MWS	Shallow	4.1-14.1	Beryllium (D)	7440-41-7	2/8/2016	1	1	U	4	no
SW-074-MWS	Shallow	4.1-14.1	Beryllium (T)	7440-41-7	2/8/2016	1	1	U	4	no
SW-074-MWS	Shallow	4.1-14.1	bis(2-chloroethoxy)methane	111-91-1	2/8/2016	1	1	U	59	no
SW-074-MWS	Shallow	4.1-14.1	bis(2-Chloroethyl)ether	111-44-4	2/8/2016	1	1	U	0.014	no
SW-074-MWS	Shallow	4.1-14.1	bis(2-Chloroisopropyl)ether	108-60-1	2/8/2016	1	1	U	0.36	no
SW-074-MWS	Shallow	4.1-14.1	bis(2-Ethylhexyl)phthalate	117-81-7	2/8/2016	1	1	U	6	no
SW-074-MWS	Shallow	4.1-14.1	Bromodichloromethane	75-27-4	2/8/2016	1	1	U	0.13	no
SW-074-MWS	Shallow	4.1-14.1	Bromoform	75-25-2	2/8/2016	1	1	U	3.3	no
SW-074-MWS	Shallow	4.1-14.1	Bromomethane	74-83-9	2/8/2016	1	1	U	7.5	no
SW-074-MWS	Shallow	4.1-14.1	Cadmium (D)	7440-43-9	2/8/2016	3	3	U	5	no
SW-074-MWS	Shallow	4.1-14.1	Cadmium (T)	7440-43-9	2/8/2016	3	3	U	5	no
SW-074-MWS	Shallow	4.1-14.1	Caprolactam	105-60-2	2/8/2016	2.5	2.5	U	9,900	no
SW-074-MWS	Shallow	4.1-14.1	Carbazole	86-74-8	2/8/2016	1	1	U	no	no
SW-074-MWS	Shallow	4.1-14.1	Carbon disulfide	75-15-0	2/8/2016	1	1	U	810	no
SW-074-MWS	Shallow	4.1-14.1	Carbon tetrachloride	56-23-5	2/8/2016	1	1	U	5	no
SW-074-MWS	Shallow	4.1-14.1	Chlorobenzene	108-90-7	2/8/2016	1	1	U	100	no
SW-074-MWS	Shallow	4.1-14.1	Chloroethane	75-00-3	2/8/2016	1	1	U	21,000	no
SW-074-MWS	Shallow	4.1-14.1	Chloroform	67-66-3	2/8/2016	1	1	U	0.22	no
SW-074-MWS	Shallow	4.1-14.1	Chloromethane	74-87-3	2/8/2016	1	1	U	190	no
SW-074-MWS	Shallow	4.1-14.1	Chromium (D)	7440-47-3	2/8/2016	5	8.3	U	100	no
SW-074-MWS	Shallow	4.1-14.1	Chromium (T)	7440-47-3	2/8/2016	5	8.6	U	100	no
SW-074-MWS	Shallow	4.1-14.1	Chromium VI (T)	18540-29-9	2/8/2016	10	7	J	0.035	YES
SW-074-MWS	Shallow	4.1-14.1	Chrysene	218-01-9	2/8/2016	0.1	0.1	U	3.4	no
SW-074-MWS	Shallow	4.1-14.1	cis-1,2-Dichloroethene	156-59-2	2/8/2016	1	1	U	70	no
SW-074-MWS	Shallow	4.1-14.1	cis-1,3-Dichloropropene	10061-01-5	2/8/2016	1	1	U	no	no
SW-074-MWS	Shallow	4.1-14.1	Cobalt (D)	7440-48-4	2/8/2016	5	2.6	J	6	no
SW-074-MWS	Shallow	4.1-14.1	Cobalt (T)	7440-48-4	2/8/2016	5	3.8	B	6	no
SW-074-MWS	Shallow	4.1-14.1	Copper (D)	7440-50-8	2/8/2016	5	5	U	1,300	no
SW-074-MWS	Shallow	4.1-14.1	Copper (T)	7440-50-8	2/8/2016	5	5	U	1,300	no
SW-074-MWS	Shallow	4.1-14.1	Cyanide	57-12-5	2/8/2016	10	10	U	200	no
SW-074-MWS	Shallow	4.1-14.1	Cyclohexane	110-82-7	2/8/2016	10	10	U	13,000	no
SW-074-MWS	Shallow	4.1-14.1	Dibenz[a,h]anthracene	53-70-3	2/8/2016	0.1	0.1	U	0.0034	no
SW-074-MWS	Shallow	4.1-14.1	Dibromochloromethane	124-48-1	2/8/2016	1	1	U	0.17	no
SW-074-MWS	Shallow	4.1-14.1	Dichlorodifluoromethane	75-71-8	2/8/2016	1	1	U	200	no
SW-074-MWS	Shallow	4.1-14.1	Diesel Range Organics	DRO	2/8/2016	105	58.5	J	47	YES
SW-074-MWS	Shallow	4.1-14.1	Diethylphthalate	84-66-2	2/8/2016	1	1	U	15,000	no
SW-074-MWS	Shallow	4.1-14.1	Di-n-butylphthalate	84-74-2	2/8/2016	1	1	U	900	no
SW-074-MWS	Shallow	4.1-14.1	Di-n-octylphthalate	117-84-0	2/8/2016	1	1	U	200	no
SW-074-MWS	Shallow	4.1-14.1	Ethylbenzene	100-41-4	2/8/2016	1	1	U	700	no
SW-074-MWS	Shallow	4.1-14.1	Fluoranthene	206-44-0	2/8/2016	0.1	0.1	U	800	no

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Sparrows Point, Maryland

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SW-074-MWS	Shallow	4.1-14.1	Fluorene	86-73-7	2/8/2016	0.1	0.1	U	290	no
SW-074-MWS	Shallow	4.1-14.1	Gasoline Range Organics	GRO	2/8/2016	200	200	U	47	no
SW-074-MWS	Shallow	4.1-14.1	Hexachlorobenzene	118-74-1	2/8/2016	1	1	U	1	no
SW-074-MWS	Shallow	4.1-14.1	Hexachlorobutadiene	87-68-3	2/8/2016	1	1	U	0.14	no
SW-074-MWS	Shallow	4.1-14.1	Hexachlorocyclopentadiene	77-47-4	2/8/2016	1	1	U	50	no
SW-074-MWS	Shallow	4.1-14.1	Hexachloroethane	67-72-1	2/8/2016	1	1	U	0.33	no
SW-074-MWS	Shallow	4.1-14.1	Indeno[1,2,3-c,d]pyrene	193-39-5	2/8/2016	0.1	0.1	U	0.034	no
SW-074-MWS	Shallow	4.1-14.1	Iron (D)	7439-89-6	2/8/2016	70	70	U	14,000	no
SW-074-MWS	Shallow	4.1-14.1	Iron (T)	7439-89-6	2/8/2016	70	176	U	14,000	no
SW-074-MWS	Shallow	4.1-14.1	Isophorone	78-59-1	2/8/2016	1	1	U	78	no
SW-074-MWS	Shallow	4.1-14.1	Isopropylbenzene	98-82-8	2/8/2016	1	1	U	450	no
SW-074-MWS	Shallow	4.1-14.1	Lead (D)	7439-92-1	2/8/2016	5	5	U	15	no
SW-074-MWS	Shallow	4.1-14.1	Lead (T)	7439-92-1	2/8/2016	5	5	U	15	no
SW-074-MWS	Shallow	4.1-14.1	Manganese (D)	7439-96-5	2/8/2016	5	215	U	430	no
SW-074-MWS	Shallow	4.1-14.1	Manganese (T)	7439-96-5	2/8/2016	5	275	U	430	no
SW-074-MWS	Shallow	4.1-14.1	Mercury (D)	7439-97-6	2/8/2016	0.2	0.2	UJ	2	no
SW-074-MWS	Shallow	4.1-14.1	Mercury (T)	7439-97-6	2/8/2016	0.2	0.2	UJ	2	no
SW-074-MWS	Shallow	4.1-14.1	Methyl Acetate	79-20-9	2/8/2016	5	5	U	20,000	no
SW-074-MWS	Shallow	4.1-14.1	Methyl tert-butyl ether (MTBE)	1634-04-4	2/8/2016	1	1	U	14	no
SW-074-MWS	Shallow	4.1-14.1	Methylene Chloride	75-09-2	2/8/2016	1	1	U	5	no
SW-074-MWS	Shallow	4.1-14.1	Naphthalene	91-20-3	2/8/2016	0.1	0.1	U	0.17	no
SW-074-MWS	Shallow	4.1-14.1	Nickel (D)	7440-02-0	2/8/2016	10	3.4	B	390	no
SW-074-MWS	Shallow	4.1-14.1	Nickel (T)	7440-02-0	2/8/2016	10	3.8	B	390	no
SW-074-MWS	Shallow	4.1-14.1	Nitrobenzene	98-95-3	2/8/2016	1	1	U	0.14	no
SW-074-MWS	Shallow	4.1-14.1	N-Nitroso-di-n-propylamine	621-64-7	2/8/2016	1	1	U	0.011	no
SW-074-MWS	Shallow	4.1-14.1	N-Nitrosodiphenylamine	86-30-6	2/8/2016	1	1	U	12	no
SW-074-MWS	Shallow	4.1-14.1	Pentachlorophenol	87-86-5	2/8/2016	2.5	2.5	U	1	no
SW-074-MWS	Shallow	4.1-14.1	Phenanthrene	85-01-8	2/8/2016	0.1	0.1	U	no	no
SW-074-MWS	Shallow	4.1-14.1	Phenol	108-95-2	2/8/2016	1	1	U	5,800	no
SW-074-MWS	Shallow	4.1-14.1	Pyrene	129-00-0	2/8/2016	0.1	0.1	U	120	no
SW-074-MWS	Shallow	4.1-14.1	Selenium (D)	7782-49-2	2/8/2016	8	8	U	50	no
SW-074-MWS	Shallow	4.1-14.1	Selenium (T)	7782-49-2	2/8/2016	8	5.1	B	50	no
SW-074-MWS	Shallow	4.1-14.1	Silver (D)	7440-22-4	2/8/2016	6	6	U	94	no
SW-074-MWS	Shallow	4.1-14.1	Silver (T)	7440-22-4	2/8/2016	6	6	U	94	no
SW-074-MWS	Shallow	4.1-14.1	Styrene	100-42-5	2/8/2016	1	1	U	100	no
SW-074-MWS	Shallow	4.1-14.1	Tetrachloroethene	127-18-4	2/8/2016	1	1	U	5	no
SW-074-MWS	Shallow	4.1-14.1	Thallium (D)	7440-28-0	2/8/2016	10	10	U	2	no
SW-074-MWS	Shallow	4.1-14.1	Thallium (T)	7440-28-0	2/8/2016	10	10	U	2	no
SW-074-MWS	Shallow	4.1-14.1	Toluene	108-88-3	2/8/2016	1	1	U	1,000	no
SW-074-MWS	Shallow	4.1-14.1	trans-1,2-Dichloroethene	156-60-5	2/8/2016	1	1	U	100	no
SW-074-MWS	Shallow	4.1-14.1	trans-1,3-Dichloropropene	10061-02-6	2/8/2016	1	1	U	no	no
SW-074-MWS	Shallow	4.1-14.1	Trichloroethene	79-01-6	2/8/2016	1	1	U	5	no
SW-074-MWS	Shallow	4.1-14.1	Trichlorofluoromethane	75-69-4	2/8/2016	1	1	U	1,100	no
SW-074-MWS	Shallow	4.1-14.1	Vanadium (D)	7440-62-2	2/8/2016	5	91	U	86	YES
SW-074-MWS	Shallow	4.1-14.1	Vanadium (T)	7440-62-2	2/8/2016	5	89.9	U	86	YES
SW-074-MWS	Shallow	4.1-14.1	Vinyl chloride	75-01-4	2/8/2016	1	1	U	2	no
SW-074-MWS	Shallow	4.1-14.1	Xylenes	1330-20-7	2/8/2016	3	3	U	10,000	no
SW-074-MWS	Shallow	4.1-14.1	Zinc (D)	7440-66-6	2/8/2016	10	4.6	B	6,000	no
SW-074-MWS	Shallow	4.1-14.1	Zinc (T)	7440-66-6	2/8/2016	10	5.5	B	6,000	no
SW16-PZM003	Shallow	5-15	1,1,1-Trichloroethane	71-55-6	12/9/2015	1	1	U	200	no
SW16-PZM003	Shallow	5-15	1,1,2,2-Tetrachloroethane	79-34-5	12/9/2015	1	1	U	0.076	no
SW16-PZM003	Shallow	5-15	1,1,2-Trichloroethane	79-00-5	12/9/2015	1	1	U	5	no
SW16-PZM003	Shallow	5-15	1,1,2-Trichlorotrifluoroethane	76-13-1	12/9/2015	50	50	U	55,000	no
SW16-PZM003	Shallow	5-15	1,1-Biphenyl	92-52-4	12/9/2015	1	1	U	0.83	no
SW16-PZM003	Shallow	5-15	1,1-Dichloroethane	75-34-3	12/9/2015	1	0.38	J	2.7	no
SW16-PZM003	Shallow	5-15	1,1-Dichloroethene	75-35-4	12/9/2015	1	1	U	7	no
SW16-PZM003	Shallow	5-15	1,2,3-Trichlorobenzene	87-61-6	12/9/2015	2	2	U	7	no
SW16-PZM003	Shallow	5-15	1,2,4,5-Tetrachlorobenzene	95-94-3	12/9/2015	1	1	U	1.7	no
SW16-PZM003	Shallow	5-15	1,2,4-Trichlorobenzene	120-82-1	12/9/2015	1	1	U	70	no
SW16-PZM003	Shallow	5-15	1,2-Dibromo-3-chloropropane	96-12-8	12/9/2015	5	5	U	0.2	no
SW16-PZM003	Shallow	5-15	1,2-Dibromoethane	106-93-4	12/9/2015	1	1	U	0.0075	no
SW16-PZM003	Shallow	5-15	1,2-Dichlorobenzene	95-50-1	12/9/2015	1	1	U	600	no
SW16-PZM003	Shallow	5-15	1,2-Dichloroethane	107-06-2	12/9/2015	1	1	U	5	no
SW16-PZM003	Shallow	5-15	1,2-Dichloroethene (Total)	540-59-0	12/9/2015	2	2	U	70	no
SW16-PZM003	Shallow	5-15	1,2-Dichloropropane	78-87-5	12/9/2015	1	1	U	5	no
SW16-PZM003	Shallow	5-15	1,3-Dichlorobenzene	541-73-1	12/9/2015	1	1	U	no	no
SW16-PZM003	Shallow	5-15	1,4-Dichlorobenzene	106-46-7	12/9/2015	1	1	U	75	no
SW16-PZM003	Shallow	5-15	1,4-Dioxane	123-91-1	12/9/2015	0.1	0.36	U	0.46	no
SW16-PZM003	Shallow	5-15	2,3,4,6-Tetrachlorophenol	58-90-2	12/9/2015	1	1	U	240	no
SW16-PZM003	Shallow	5-15	2,4,5-Trichlorophenol	95-95-4	12/9/2015	2.5	2.5	U	1,200	no
SW16-PZM003	Shallow	5-15	2,4,6-Trichlorophenol	88-06-2	12/9/2015	1	1	U	4	no
SW16-PZM003	Shallow	5-15	2,4-Dichlorophenol	120-83-2	12/9/2015	1	1	U	46	no
SW16-PZM003	Shallow	5-15	2,4-Dimethylphenol	105-67-9	12/9/2015	1	1	U	360	no
SW16-PZM003	Shallow	5-15	2,4-Dinitrophenol	51-28-5	12/9/2015	2.5	2.5	U	39	no
SW16-PZM003	Shallow	5-15	2,4-Dinitrotoluene	121-14-2	12/9/2015	1	1	U	0.24	no
SW16-PZM003	Shallow	5-15	2,6-Dinitrotoluene	606-20-2	12/9/2015	1	1	U	0.048	no
SW16-PZM003	Shallow	5-15	2-Butanone (MEK)	78-93-3	12/9/2015	10	10	U	5,600	no
SW16-PZM003	Shallow	5-15	2-Chloronaphthalene	91-58-7	12/9/2015	1	1	U	750	no
SW16-PZM003	Shallow	5-15	2-Chlorophenol	95-57-8	12/9/2015	1	1	U	91	no
SW16-PZM003	Shallow	5-15	2-Hexanone	591-78-6	12/9/2015	10	10	U	38	no

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SW16-PZM003	Shallow	5-15	2-Methylnaphthalene	91-57-6	12/9/2015	0.1	0.1	U	36	no
SW16-PZM003	Shallow	5-15	2-Methylphenol	95-48-7	12/9/2015	1	1	U	930	no
SW16-PZM003	Shallow	5-15	2-Nitroaniline	88-74-4	12/9/2015	2.5	2.5	U	190	no
SW16-PZM003	Shallow	5-15	3&4-Methylphenol(m&p Cresol)	108-39-4/106-44-5	12/9/2015	2	2	U	930	no
SW16-PZM003	Shallow	5-15	4-Chloroaniline	106-47-8	12/9/2015	1	1	UJ	0.36	no
SW16-PZM003	Shallow	5-15	4-Methyl-2-pentanone (MIBK)	108-10-1	12/9/2015	10	10	U	1,200	no
SW16-PZM003	Shallow	5-15	4-Nitroaniline	100-01-6	12/9/2015	2.5	2.5	UJ	3.8	no
SW16-PZM003	Shallow	5-15	Acenaphthene	83-32-9	12/9/2015	0.1	0.1	U	530	no
SW16-PZM003	Shallow	5-15	Acenaphthylene	208-96-8	12/9/2015	0.1	0.1	U	530	no
SW16-PZM003	Shallow	5-15	Acetophenone	98-86-2	12/9/2015	1	1	U	1,900	no
SW16-PZM003	Shallow	5-15	Aluminum (D)	7429-90-5	12/9/2015	50	4,260		20,000	no
SW16-PZM003	Shallow	5-15	Aluminum (T)	7429-90-5	12/9/2015	50	4,370		20,000	no
SW16-PZM003	Shallow	5-15	Anthracene	120-12-7	12/9/2015	0.1	0.034	J	1,800	no
SW16-PZM003	Shallow	5-15	Antimony (D)	7440-36-0	12/9/2015	6	6	U	6	no
SW16-PZM003	Shallow	5-15	Antimony (T)	7440-36-0	12/9/2015	6	6	U	6	no
SW16-PZM003	Shallow	5-15	Arsenic (D)	7440-38-2	12/9/2015	5	5	U	10	no
SW16-PZM003	Shallow	5-15	Arsenic (T)	7440-38-2	12/9/2015	5	5	U	10	no
SW16-PZM003	Shallow	5-15	Barium (D)	7440-39-3	12/9/2015	10	13		2,000	no
SW16-PZM003	Shallow	5-15	Barium (T)	7440-39-3	12/9/2015	10	13.1		2,000	no
SW16-PZM003	Shallow	5-15	Benzaldehyde	100-52-7	12/9/2015	1	1	U	1,900	no
SW16-PZM003	Shallow	5-15	Benzene	71-43-2	12/9/2015	1	1	U	5	no
SW16-PZM003	Shallow	5-15	Benzo[a]anthracene	56-55-3	12/9/2015	0.1	0.1	U	0.012	no
SW16-PZM003	Shallow	5-15	Benzo[a]pyrene	50-32-8	12/9/2015	0.1	0.1	U	0.2	no
SW16-PZM003	Shallow	5-15	Benzo[b]fluoranthene	205-99-2	12/9/2015	0.1	0.1	U	0.034	no
SW16-PZM003	Shallow	5-15	Benzo[g,h,i]perylene	191-24-2	12/9/2015	0.1	0.1	U		no
SW16-PZM003	Shallow	5-15	Benzo[k]fluoranthene	207-08-9	12/9/2015	0.1	0.1	U	0.34	no
SW16-PZM003	Shallow	5-15	Beryllium (D)	7440-41-7	12/9/2015	1	5.2		4	YES
SW16-PZM003	Shallow	5-15	Beryllium (T)	7440-41-7	12/9/2015	1	5.1		4	YES
SW16-PZM003	Shallow	5-15	bis(2-chloroethoxy)methane	111-91-1	12/9/2015	1	1	U	59	no
SW16-PZM003	Shallow	5-15	bis(2-Chloroethyl)ether	111-44-4	12/9/2015	1	1	U	0.014	no
SW16-PZM003	Shallow	5-15	bis(2-Chloroisopropyl)ether	108-60-1	12/9/2015	1	1	U	0.36	no
SW16-PZM003	Shallow	5-15	bis(2-Ethylhexyl)phthalate	117-81-7	12/9/2015	1	1	U	6	no
SW16-PZM003	Shallow	5-15	Bromodichloromethane	75-27-4	12/9/2015	1	1	U	0.13	no
SW16-PZM003	Shallow	5-15	Bromoform	75-25-2	12/9/2015	1	1	U	3.3	no
SW16-PZM003	Shallow	5-15	Bromomethane	74-83-9	12/9/2015	1	1	U	7.5	no
SW16-PZM003	Shallow	5-15	Cadmium (D)	7440-43-9	12/9/2015	3	1.6	J	5	no
SW16-PZM003	Shallow	5-15	Cadmium (T)	7440-43-9	12/9/2015	3	1.8	J	5	no
SW16-PZM003	Shallow	5-15	Caprolactam	105-60-2	12/9/2015	2.5	2.5	UJ	9,900	no
SW16-PZM003	Shallow	5-15	Carbazole	86-74-8	12/9/2015	1	1	U		no
SW16-PZM003	Shallow	5-15	Carbon disulfide	75-15-0	12/9/2015	1	1	U	810	no
SW16-PZM003	Shallow	5-15	Carbon tetrachloride	56-23-5	12/9/2015	1	1	U	5	no
SW16-PZM003	Shallow	5-15	Chlorobenzene	108-90-7	12/9/2015	1	1	U	100	no
SW16-PZM003	Shallow	5-15	Chloroethane	75-00-3	12/9/2015	1	1	U	21,000	no
SW16-PZM003	Shallow	5-15	Chloroform	67-66-3	12/9/2015	1	1	U	0.22	no
SW16-PZM003	Shallow	5-15	Chloromethane	74-87-3	12/9/2015	1	1	UJ	190	no
SW16-PZM003	Shallow	5-15	Chromium (D)	7440-47-3	12/9/2015	5	1.8	B	100	no
SW16-PZM003	Shallow	5-15	Chromium (T)	7440-47-3	12/9/2015	5	1.7	J	100	no
SW16-PZM003	Shallow	5-15	Chromium VI (T)	18540-29-9	12/9/2015	10	10	U	0.035	no
SW16-PZM003	Shallow	5-15	Chrysene	218-01-9	12/9/2015	0.1	0.1	U	3.4	no
SW16-PZM003	Shallow	5-15	cis-1,2-Dichloroethene	156-59-2	12/9/2015	1	1	U	70	no
SW16-PZM003	Shallow	5-15	cis-1,3-Dichloropropene	10061-01-5	12/9/2015	1	1	U		no
SW16-PZM003	Shallow	5-15	Cobalt (D)	7440-48-4	12/9/2015	5	153		6	YES
SW16-PZM003	Shallow	5-15	Cobalt (T)	7440-48-4	12/9/2015	5	158		6	YES
SW16-PZM003	Shallow	5-15	Copper (D)	7440-50-8	12/9/2015	5	18.8		1,300	no
SW16-PZM003	Shallow	5-15	Copper (T)	7440-50-8	12/9/2015	5	22.6		1,300	no
SW16-PZM003	Shallow	5-15	Cyanide	57-12-5	12/9/2015	10	10	U	200	no
SW16-PZM003	Shallow	5-15	Cyclohexane	110-82-7	12/9/2015	10	10	U	13,000	no
SW16-PZM003	Shallow	5-15	Dibenz[a,h]anthracene	53-70-3	12/9/2015	0.1	0.1	U	0.0034	no
SW16-PZM003	Shallow	5-15	Dibromochloromethane	124-48-1	12/9/2015	1	1	U	0.17	no
SW16-PZM003	Shallow	5-15	Dichlorodifluoromethane	75-71-8	12/9/2015	1	1	U	200	no
SW16-PZM003	Shallow	5-15	Diesel Range Organics	DRO	12/9/2015	103	225	J	47	YES
SW16-PZM003	Shallow	5-15	Diethylphthalate	84-66-2	12/9/2015	1	1	U	15,000	no
SW16-PZM003	Shallow	5-15	Di-n-butylphthalate	84-74-2	12/9/2015	1	1	U	900	no
SW16-PZM003	Shallow	5-15	Di-n-ocetylphthalate	117-84-0	12/9/2015	1	1	U	200	no
SW16-PZM003	Shallow	5-15	Ethylbenzene	100-41-4	12/9/2015	1	1	U	700	no
SW16-PZM003	Shallow	5-15	Fluoranthene	206-44-0	12/9/2015	0.1	0.052	J	800	no
SW16-PZM003	Shallow	5-15	Fluorene	86-73-7	12/9/2015	0.1	0.061	J	290	no
SW16-PZM003	Shallow	5-15	Gasoline Range Organics	GRO	12/9/2015	200	200	UJ	47	no
SW16-PZM003	Shallow	5-15	Hexachlorobenzene	118-74-1	12/9/2015	1	1	U	1	no
SW16-PZM003	Shallow	5-15	Hexachlorobutadiene	87-68-3	12/9/2015	1	1	U	0.14	no
SW16-PZM003	Shallow	5-15	Hexachlorocyclopentadiene	77-47-4	12/9/2015	1	1	U	50	no
SW16-PZM003	Shallow	5-15	Hexachloroethane	67-72-1	12/9/2015	1	1	U	0.33	no
SW16-PZM003	Shallow	5-15	Indeno[1,2,3-c,d]pyrene	193-39-5	12/9/2015	0.1	0.1	U	0.034	no
SW16-PZM003	Shallow	5-15	Iron (D)	7439-89-6	12/9/2015	70	8,840		14,000	no
SW16-PZM003	Shallow	5-15	Iron (T)	7439-89-6	12/9/2015	70	8,680		14,000	no
SW16-PZM003	Shallow	5-15	Isophorone	78-59-1	12/9/2015	1	1	U	78	no
SW16-PZM003	Shallow	5-15	Isopropylbenzene	98-82-8	12/9/2015	1	1	U	450	no
SW16-PZM003	Shallow	5-15	Lead (D)	7439-92-1	12/9/2015	5	5	U	15	no
SW16-PZM003	Shallow	5-15	Lead (T)	7439-92-1	12/9/2015	5	5	U	15	no
SW16-PZM003	Shallow	5-15	Manganese (D)	7439-96-5	12/9/2015	5	2,280	J	430	YES

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Former Sparrows Point Steel Mill
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Well ID	Zone	Screen Interval (feet bgs)	Parameter	CAS	Sample Date	LOQ	Result (ug/L)	Final Flag	PAL	Exceeds PAL?
SW16-PZM003	Shallow	5-15	Manganese (T)	7439-96-5	12/9/2015	5	2,360		430	YES
SW16-PZM003	Shallow	5-15	Mercury (D)	7439-97-6	12/9/2015	0.2	0.2	U	2	no
SW16-PZM003	Shallow	5-15	Mercury (T)	7439-97-6	12/9/2015	0.2	0.06	B	2	no
SW16-PZM003	Shallow	5-15	Methyl tert-butyl ether (MTBE)	1634-04-4	12/9/2015	1	1	U	14	no
SW16-PZM003	Shallow	5-15	Methylene Chloride	75-09-2	12/9/2015	1	1	U	5	no
SW16-PZM003	Shallow	5-15	Naphthalene	91-20-3	12/9/2015	0.1	0.027	B	0.17	no
SW16-PZM003	Shallow	5-15	Nickel (D)	7440-02-0	12/9/2015	10	212	J	390	no
SW16-PZM003	Shallow	5-15	Nickel (T)	7440-02-0	12/9/2015	10	220	J	390	no
SW16-PZM003	Shallow	5-15	Nitrobenzene	98-95-3	12/9/2015	1	1	U	0.14	no
SW16-PZM003	Shallow	5-15	N-Nitroso-di-n-propylamine	621-64-7	12/9/2015	1	1	U	0.011	no
SW16-PZM003	Shallow	5-15	N-Nitrosodiphenylamine	86-30-6	12/9/2015	1	1	U	12	no
SW16-PZM003	Shallow	5-15	Pentachlorophenol	87-86-5	12/9/2015	2.5	2.5	U	1	no
SW16-PZM003	Shallow	5-15	Phenanthrene	85-01-8	12/9/2015	0.1	0.21			no
SW16-PZM003	Shallow	5-15	Phenol	108-95-2	12/9/2015	1	1	U	5,800	no
SW16-PZM003	Shallow	5-15	Pyrene	129-00-0	12/9/2015	0.1	0.038	J	120	no
SW16-PZM003	Shallow	5-15	Selenium (D)	7782-49-2	12/9/2015	8	8	U	50	no
SW16-PZM003	Shallow	5-15	Selenium (T)	7782-49-2	12/9/2015	8	8	U	50	no
SW16-PZM003	Shallow	5-15	Silver (D)	7440-22-4	12/9/2015	6	6	U	94	no
SW16-PZM003	Shallow	5-15	Silver (T)	7440-22-4	12/9/2015	6	6	U	94	no
SW16-PZM003	Shallow	5-15	Styrene	100-42-5	12/9/2015	1	1	U	100	no
SW16-PZM003	Shallow	5-15	Tetrachloroethene	127-18-4	12/9/2015	1	1	U	5	no
SW16-PZM003	Shallow	5-15	Thallium (D)	7440-28-0	12/9/2015	10	10	U	2	no
SW16-PZM003	Shallow	5-15	Thallium (T)	7440-28-0	12/9/2015	10	10	U	2	no
SW16-PZM003	Shallow	5-15	Toluene	108-88-3	12/9/2015	1	1	U	1,000	no
SW16-PZM003	Shallow	5-15	trans-1,2-Dichloroethene	156-60-5	12/9/2015	1	1	U	100	no
SW16-PZM003	Shallow	5-15	trans-1,3-Dichloropropene	10061-02-6	12/9/2015	1	1	U		no
SW16-PZM003	Shallow	5-15	Trichloroethene	79-01-6	12/9/2015	1	1	U	5	no
SW16-PZM003	Shallow	5-15	Trichlorofluoromethane	75-69-4	12/9/2015	1	1	U	1,100	no
SW16-PZM003	Shallow	5-15	Vanadium (D)	7440-62-2	12/9/2015	5	1.4	B	86	no
SW16-PZM003	Shallow	5-15	Vanadium (T)	7440-62-2	12/9/2015	5	1.6	B	86	no
SW16-PZM003	Shallow	5-15	Vinyl chloride	75-01-4	12/9/2015	1	1	U	2	no
SW16-PZM003	Shallow	5-15	Xylenes	1330-20-7	12/9/2015	3	3	U	10,000	no
SW16-PZM003	Shallow	5-15	Zinc (D)	7440-66-6	12/9/2015	10	388	J	6,000	no
SW16-PZM003	Shallow	5-15	Zinc (T)	7440-66-6	12/9/2015	10	403		6,000	no
SW16-PZM067	Lower	76-79	1,1,1-Trichloroethane	71-55-6	2/17/2016	1	1	U	200	no
SW16-PZM067	Lower	76-79	1,1,2,2-Tetrachloroethane	79-34-5	2/17/2016	1	1	U	0.076	no
SW16-PZM067	Lower	76-79	1,1,2-Trichloroethane	79-00-5	2/17/2016	1	1	U	5	no
SW16-PZM067	Lower	76-79	1,1,2-Trichlorotrifluoroethane	76-13-1	2/17/2016	50	50	U	55,000	no
SW16-PZM067	Lower	76-79	1,1-Biphenyl	92-52-4	2/17/2016	1	1	U	0.83	no
SW16-PZM067	Lower	76-79	1,1-Dichloroethane	75-34-3	2/17/2016	1	1	U	2.7	no
SW16-PZM067	Lower	76-79	1,1-Dichloroethene	75-35-4	2/17/2016	1	1	U	7	no
SW16-PZM067	Lower	76-79	1,2,3-Trichlorobenzene	87-61-6	2/17/2016	2	2	U	7	no
SW16-PZM067	Lower	76-79	1,2,4,5-Tetrachlorobenzene	95-94-3	2/17/2016	1	1	U	1.7	no
SW16-PZM067	Lower	76-79	1,2,4-Trichlorobenzene	120-82-1	2/17/2016	1	1	U	70	no
SW16-PZM067	Lower	76-79	1,2-Dibromo-3-chloropropane	96-12-8	2/17/2016	5	5	U	0.2	no
SW16-PZM067	Lower	76-79	1,2-Dibromoethane	106-93-4	2/17/2016	1	1	U	0.0075	no
SW16-PZM067	Lower	76-79	1,2-Dichlorobenzene	95-50-1	2/17/2016	1	1	U	600	no
SW16-PZM067	Lower	76-79	1,2-Dichloroethane	107-06-2	2/17/2016	1	1	U	5	no
SW16-PZM067	Lower	76-79	1,2-Dichloroethene (Total)	540-59-0	2/17/2016	2	2	U	70	no
SW16-PZM067	Lower	76-79	1,2-Dichloropropane	78-87-5	2/17/2016	1	1	U	5	no
SW16-PZM067	Lower	76-79	1,3-Dichlorobenzene	541-73-1	2/17/2016	1	1	U		no
SW16-PZM067	Lower	76-79	1,4-Dichlorobenzene	106-46-7	2/17/2016	1	1	U	75	no
SW16-PZM067	Lower	76-79	1,4-Dioxane	123-91-1	2/17/2016	0.1	0.1	U	0.46	no
SW16-PZM067	Lower	76-79	2,3,4,6-Tetrachlorophenol	58-90-2	2/17/2016	1	1	U	240	no
SW16-PZM067	Lower	76-79	2,4,5-Trichlorophenol	95-95-4	2/17/2016	2.5	2.5	U	1,200	no
SW16-PZM067	Lower	76-79	2,4,6-Trichlorophenol	88-06-2	2/17/2016	1	1	U	4	no
SW16-PZM067	Lower	76-79	2,4-Dichlorophenol	120-83-2	2/17/2016	1	1	U	46	no
SW16-PZM067	Lower	76-79	2,4-Dimethylphenol	105-67-9	2/17/2016	1	1	U	360	no
SW16-PZM067	Lower	76-79	2,4-Dinitrophenol	51-28-5	2/17/2016	2.5	2.5	U	39	no
SW16-PZM067	Lower	76-79	2,4-Dinitrotoluene	121-14-2	2/17/2016	1	1	U	0.24	no
SW16-PZM067	Lower	76-79	2,6-Dinitrotoluene	606-20-2	2/17/2016	1	1	U	0.048	no
SW16-PZM067	Lower	76-79	2-Butanone (MEK)	78-93-3	2/17/2016	10	10	U	5,600	no
SW16-PZM067	Lower	76-79	2-Chloronaphthalene	91-58-7	2/17/2016	1	1	U	750	no
SW16-PZM067	Lower	76-79	2-Chlorophenol	95-57-8	2/17/2016	1	1	U	91	no
SW16-PZM067	Lower	76-79	2-Hexanone	591-78-6	2/17/2016	10	10	U	38	no
SW16-PZM067	Lower	76-79	2-Methylnaphthalene	91-57-6	2/17/2016	0.1	0.023	J	36	no
SW16-PZM067	Lower	76-79	2-Methylphenol	95-48-7	2/17/2016	1	1	U	930	no
SW16-PZM067	Lower	76-79	2-Nitroaniline	88-74-4	2/17/2016	2.5	2.5	U	190	no
SW16-PZM067	Lower	76-79	3&4-Methylphenol(m&p Cresol)	108-39-4/106-44-5	2/17/2016	2	2	U	930	no
SW16-PZM067	Lower	76-79	3,3'-Dichlorobenzidine	91-94-1	2/17/2016	1	1	UJ	0.12	no
SW16-PZM067	Lower	76-79	4-Chloroaniline	106-47-8	2/17/2016	1	1	U	0.36	no
SW16-PZM067	Lower	76-79	4-Methyl-2-pentanone (MIBK)	108-10-1	2/17/2016	10	10	U	1,200	no
SW16-PZM067	Lower	76-79	4-Nitroaniline	100-01-6	2/17/2016	2.5	2.5	U	3.8	no
SW16-PZM067	Lower	76-79	Acenaphthene	83-32-9	2/17/2016	0.1	0.1	U	530	no
SW16-PZM067	Lower	76-79	Acenaphthylene	208-96-8	2/17/2016	0.1	0.1	U	530	no
SW16-PZM067	Lower	76-79	Acetone	67-64-1	2/17/2016	10	10	U	14,000	no
SW16-PZM067	Lower	76-79	Acetophenone	98-86-2	2/17/2016	1	1	U	1,900	no
SW16-PZM067	Lower	76-79	Aluminum (D)	7429-90-5	2/17/2016	50	50	U	20,000	no
SW16-PZM067	Lower	76-79	Aluminum (T)	7429-90-5	2/17/2016	50	50	U	20,000	no
SW16-PZM067	Lower	76-79	Anthracene	120-12-7	2/17/2016	0.1	0.1	U	1,800	no

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Well ID	Zone	Screen Interval (feet bgs)	Parameter	CAS	Sample Date	LOQ	Result (ug/L)	Final Flag	PAL	Exceeds PAL?
SW16-PZM067	Lower	76-79	Antimony (D)	7440-36-0	2/17/2016	6	6	U	6	no
SW16-PZM067	Lower	76-79	Antimony (T)	7440-36-0	2/17/2016	6	6	U	6	no
SW16-PZM067	Lower	76-79	Arsenic (D)	7440-38-2	2/17/2016	5	5	U	10	no
SW16-PZM067	Lower	76-79	Arsenic (T)	7440-38-2	2/17/2016	5	5	U	10	no
SW16-PZM067	Lower	76-79	Barium (D)	7440-39-3	2/17/2016	10	27.4		2,000	no
SW16-PZM067	Lower	76-79	Barium (T)	7440-39-3	2/17/2016	10	28.2		2,000	no
SW16-PZM067	Lower	76-79	Benzaldehyde	100-52-7	2/17/2016	1	1	U	1,900	no
SW16-PZM067	Lower	76-79	Benzene	71-43-2	2/17/2016	1	1	U	5	no
SW16-PZM067	Lower	76-79	Benzo[a]anthracene	56-55-3	2/17/2016	0.1	0.1	U	0.012	no
SW16-PZM067	Lower	76-79	Benzo[a]pyrene	50-32-8	2/17/2016	0.1	0.1	U	0.2	no
SW16-PZM067	Lower	76-79	Benzo[b]fluoranthene	205-99-2	2/17/2016	0.1	0.1	U	0.034	no
SW16-PZM067	Lower	76-79	Benzo[g,h,i]perylene	191-24-2	2/17/2016	0.1	0.1	U		no
SW16-PZM067	Lower	76-79	Benzo[k]fluoranthene	207-08-9	2/17/2016	0.1	0.1	U	0.34	no
SW16-PZM067	Lower	76-79	Beryllium (D)	7440-41-7	2/17/2016	1	1	U	4	no
SW16-PZM067	Lower	76-79	Beryllium (T)	7440-41-7	2/17/2016	1	1	U	4	no
SW16-PZM067	Lower	76-79	bis(2-chloroethoxy)methane	111-91-1	2/17/2016	1	1	U	59	no
SW16-PZM067	Lower	76-79	bis(2-Chloroethyl)ether	111-44-4	2/17/2016	1	1	U	0.014	no
SW16-PZM067	Lower	76-79	bis(2-Chloroisopropyl)ether	108-60-1	2/17/2016	1	1	U	0.36	no
SW16-PZM067	Lower	76-79	bis(2-Ethylhexyl)phthalate	117-81-7	2/17/2016	1	1	UJ	6	no
SW16-PZM067	Lower	76-79	Bromodichloromethane	75-27-4	2/17/2016	1	1	U	0.13	no
SW16-PZM067	Lower	76-79	Bromoform	75-25-2	2/17/2016	1	1	U	3.3	no
SW16-PZM067	Lower	76-79	Bromomethane	74-83-9	2/17/2016	1	1	U	7.5	no
SW16-PZM067	Lower	76-79	Cadmium (D)	7440-43-9	2/17/2016	3	3	U	5	no
SW16-PZM067	Lower	76-79	Cadmium (T)	7440-43-9	2/17/2016	3	3	U	5	no
SW16-PZM067	Lower	76-79	Caprolactam	105-60-2	2/17/2016	2.5	2.5	U	9,900	no
SW16-PZM067	Lower	76-79	Carbazole	86-74-8	2/17/2016	1	1	U		no
SW16-PZM067	Lower	76-79	Carbon disulfide	75-15-0	2/17/2016	1	1	U	810	no
SW16-PZM067	Lower	76-79	Carbon tetrachloride	56-23-5	2/17/2016	1	1	U	5	no
SW16-PZM067	Lower	76-79	Chlorobenzene	108-90-7	2/17/2016	1	1	U	100	no
SW16-PZM067	Lower	76-79	Chloroethane	75-00-3	2/17/2016	1	1	U	21,000	no
SW16-PZM067	Lower	76-79	Chloroform	67-66-3	2/17/2016	1	1	U	0.22	no
SW16-PZM067	Lower	76-79	Chloromethane	74-87-3	2/17/2016	1	1	U	190	no
SW16-PZM067	Lower	76-79	Chromium (D)	7440-47-3	2/17/2016	5	0.83	B	100	no
SW16-PZM067	Lower	76-79	Chromium (T)	7440-47-3	2/17/2016	5	0.84	B	100	no
SW16-PZM067	Lower	76-79	Chromium VI (T)	18540-29-9	2/17/2016	10	10	U	0.035	no
SW16-PZM067	Lower	76-79	Chrysene	218-01-9	2/17/2016	0.1	0.1	U	3.4	no
SW16-PZM067	Lower	76-79	cis-1,2-Dichloroethene	156-59-2	2/17/2016	1	1	U	70	no
SW16-PZM067	Lower	76-79	cis-1,3-Dichloropropene	10061-01-5	2/17/2016	1	1	U		no
SW16-PZM067	Lower	76-79	Cobalt (D)	7440-48-4	2/17/2016	5	5	U	6	no
SW16-PZM067	Lower	76-79	Cobalt (T)	7440-48-4	2/17/2016	5	5	U	6	no
SW16-PZM067	Lower	76-79	Copper (D)	7440-50-8	2/17/2016	5	8.8		1,300	no
SW16-PZM067	Lower	76-79	Copper (T)	7440-50-8	2/17/2016	5	5	U	1,300	no
SW16-PZM067	Lower	76-79	Cyanide	57-12-5	2/17/2016	10	10	U	200	no
SW16-PZM067	Lower	76-79	Cyclohexane	110-82-7	2/17/2016	10	10	U	13,000	no
SW16-PZM067	Lower	76-79	Dibenz[a,h]anthracene	53-70-3	2/17/2016	0.1	0.1	U	0.0034	no
SW16-PZM067	Lower	76-79	Dibromochloromethane	124-48-1	2/17/2016	1	1	U	0.17	no
SW16-PZM067	Lower	76-79	Dichlorodifluoromethane	75-71-8	2/17/2016	1	1	U	200	no
SW16-PZM067	Lower	76-79	Diesel Range Organics	DRO	2/17/2016	101	101	UJ	47	no
SW16-PZM067	Lower	76-79	Diethylphthalate	84-66-2	2/17/2016	1	1	U	15,000	no
SW16-PZM067	Lower	76-79	Di-n-butylphthalate	84-74-2	2/17/2016	1	1	U	900	no
SW16-PZM067	Lower	76-79	Di-n-ocetylphthalate	117-84-0	2/17/2016	1	1	UJ	200	no
SW16-PZM067	Lower	76-79	Ethylbenzene	100-41-4	2/17/2016	1	1	U	700	no
SW16-PZM067	Lower	76-79	Fluoranthene	206-44-0	2/17/2016	0.1	0.1	U	800	no
SW16-PZM067	Lower	76-79	Fluorene	86-73-7	2/17/2016	0.1	0.1	U	290	no
SW16-PZM067	Lower	76-79	Gasoline Range Organics	GRO	2/17/2016	200	200	U	47	no
SW16-PZM067	Lower	76-79	Hexachlorobenzene	118-74-1	2/17/2016	1	1	U	1	no
SW16-PZM067	Lower	76-79	Hexachlorobutadiene	87-68-3	2/17/2016	1	1	U	0.14	no
SW16-PZM067	Lower	76-79	Hexachlorocyclopentadiene	77-47-4	2/17/2016	1	1	U	50	no
SW16-PZM067	Lower	76-79	Hexachloroethane	67-72-1	2/17/2016	1	1	U	0.33	no
SW16-PZM067	Lower	76-79	Indeno[1,2,3-c,d]pyrene	193-39-5	2/17/2016	0.1	0.1	U	0.034	no
SW16-PZM067	Lower	76-79	Iron (D)	7439-89-6	2/17/2016	70	6,530		14,000	no
SW16-PZM067	Lower	76-79	Iron (T)	7439-89-6	2/17/2016	70	6,770		14,000	no
SW16-PZM067	Lower	76-79	Isophorone	78-59-1	2/17/2016	1	1	U	78	no
SW16-PZM067	Lower	76-79	Isopropylbenzene	98-82-8	2/17/2016	1	1	U	450	no
SW16-PZM067	Lower	76-79	Lead (D)	7439-92-1	2/17/2016	5	5	U	15	no
SW16-PZM067	Lower	76-79	Lead (T)	7439-92-1	2/17/2016	5	5	U	15	no
SW16-PZM067	Lower	76-79	Manganese (D)	7439-96-5	2/17/2016	5	1,880		430	YES
SW16-PZM067	Lower	76-79	Manganese (T)	7439-96-5	2/17/2016	5	1,960		430	YES
SW16-PZM067	Lower	76-79	Mercury (D)	7439-97-6	2/17/2016	0.2	0.2	U	2	no
SW16-PZM067	Lower	76-79	Mercury (T)	7439-97-6	2/17/2016	0.2	0.2	U	2	no
SW16-PZM067	Lower	76-79	Methyl Acetate	79-20-9	2/17/2016	5	5	U	20,000	no
SW16-PZM067	Lower	76-79	Methyl tert-butyl ether (MTBE)	1634-04-4	2/17/2016	1	1	U	14	no
SW16-PZM067	Lower	76-79	Methylene Chloride	75-09-2	2/17/2016	1	1	U	5	no
SW16-PZM067	Lower	76-79	Naphthalene	91-20-3	2/17/2016	0.1	0.032	B	0.17	no
SW16-PZM067	Lower	76-79	Nickel (D)	7440-02-0	2/17/2016	10	10	U	390	no
SW16-PZM067	Lower	76-79	Nickel (T)	7440-02-0	2/17/2016	10	10	U	390	no
SW16-PZM067	Lower	76-79	Nitrobenzene	98-95-3	2/17/2016	1	1	U	0.14	no
SW16-PZM067	Lower	76-79	N-Nitroso-di-n-propylamine	621-64-7	2/17/2016	1	1	U	0.011	no
SW16-PZM067	Lower	76-79	N-Nitrosodiphenylamine	86-30-6	2/17/2016	1	1	U	12	no
SW16-PZM067	Lower	76-79	Pentachlorophenol	87-86-5	2/17/2016	2.5	2.5	U	1	no

Table 1
 Area B Groundwater Investigation Well Data (Validated)
 Former Sparrows Point Steel Mill
 Sparrows Point, Maryland

Well ID	Zone	Screen Interval (feet bgs)	Parameter	CAS	Sample Date	LOQ	Result (ug/L)	Final Flag	PAL	Exceeds PAL?
SW16-PZM067	Lower	76-79	Phenanthrene	85-01-8	2/17/2016	0.1	0.1	U		no
SW16-PZM067	Lower	76-79	Phenol	108-95-2	2/17/2016	1	1	U	5,800	no
SW16-PZM067	Lower	76-79	Pyrene	129-00-0	2/17/2016	0.1	0.1	U	120	no
SW16-PZM067	Lower	76-79	Selenium (D)	7782-49-2	2/17/2016	8	8	U	50	no
SW16-PZM067	Lower	76-79	Selenium (T)	7782-49-2	2/17/2016	8	8	U	50	no
SW16-PZM067	Lower	76-79	Silver (D)	7440-22-4	2/17/2016	6	6	U	94	no
SW16-PZM067	Lower	76-79	Silver (T)	7440-22-4	2/17/2016	6	6	U	94	no
SW16-PZM067	Lower	76-79	Styrene	100-42-5	2/17/2016	1	1	U	100	no
SW16-PZM067	Lower	76-79	Tetrachloroethene	127-18-4	2/17/2016	1	1	U	5	no
SW16-PZM067	Lower	76-79	Thallium (D)	7440-28-0	2/17/2016	10	10	U	2	no
SW16-PZM067	Lower	76-79	Thallium (T)	7440-28-0	2/17/2016	10	10	U	2	no
SW16-PZM067	Lower	76-79	Toluene	108-88-3	2/17/2016	1	1	U	1,000	no
SW16-PZM067	Lower	76-79	trans-1,2-Dichloroethene	156-60-5	2/17/2016	1	1	U	100	no
SW16-PZM067	Lower	76-79	trans-1,3-Dichloropropene	10061-02-6	2/17/2016	1	1	U		no
SW16-PZM067	Lower	76-79	Trichloroethene	79-01-6	2/17/2016	1	1	U	5	no
SW16-PZM067	Lower	76-79	Trichlorofluoromethane	75-69-4	2/17/2016	1	1	U	1,100	no
SW16-PZM067	Lower	76-79	Vanadium (D)	7440-62-2	2/17/2016	5	5	U	86	no
SW16-PZM067	Lower	76-79	Vanadium (T)	7440-62-2	2/17/2016	5	5	U	86	no
SW16-PZM067	Lower	76-79	Vinyl chloride	75-01-4	2/17/2016	1	1	U	2	no
SW16-PZM067	Lower	76-79	Xylenes	1330-20-7	2/17/2016	3	3	U	10,000	no
SW16-PZM067	Lower	76-79	Zinc (D)	7440-66-6	2/17/2016	10	10	U	6,000	no
SW16-PZM067	Lower	76-79	Zinc (T)	7440-66-6	2/17/2016	10	10	U	6,000	no

Highlighted values indicate PAL exceedances

Metals:

D = Dissolved Metal (field filtered)

T = Total Metal

Validated Data Qualifiers:

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

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

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

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

Table 2
Area B Groundwater Investigation Well Data (Non-Validated)
Former Sparrows Point Steel Mill
Sparrows Point, Maryland

Well ID	Zone	Screen Interval (feet bgs)	Parameter	CAS	Sample Date	LOQ	Result (ug/L)	Final Flag	PAL	Exceeds PAL?
SW-052-MWS	Shallow	4-14	1,1,1-Trichloroethane	71-55-6	1/22/2016	1	1	U	200	no
SW-052-MWS	Shallow	4-14	1,1,2,2-Tetrachloroethane	79-34-5	1/22/2016	1	1	U	0.076	no
SW-052-MWS	Shallow	4-14	1,1,2-Trichloroethane	79-00-5	1/22/2016	1	1	U	5	no
SW-052-MWS	Shallow	4-14	1,1,2-Trichlorotrifluoroethane	76-13-1	1/22/2016	50	50	U	55,000	no
SW-052-MWS	Shallow	4-14	1,1-Dichloroethane	75-34-3	1/22/2016	1	1	U	2.7	no
SW-052-MWS	Shallow	4-14	1,1-Dichloroethene	75-35-4	1/22/2016	1	1	U	7	no
SW-052-MWS	Shallow	4-14	1,2,3-Trichlorobenzene	87-61-6	1/22/2016	2	2	U	7	no
SW-052-MWS	Shallow	4-14	1,2,4,5-Tetrachlorobenzene	95-94-3	1/22/2016	1	1	U1c	1.7	no
SW-052-MWS	Shallow	4-14	1,2,4-Trichlorobenzene	120-82-1	1/22/2016	1	1	U	70	no
SW-052-MWS	Shallow	4-14	1,2-Dibromo-3-chloropropane	96-12-8	1/22/2016	5	5	U	0.2	no
SW-052-MWS	Shallow	4-14	1,2-Dibromoethane (EDB)	106-93-4	1/22/2016	1	1	U	0.008	no
SW-052-MWS	Shallow	4-14	1,2-Dichlorobenzene	95-50-1	1/22/2016	1	1	U	600	no
SW-052-MWS	Shallow	4-14	1,2-Dichloroethane	107-06-2	1/22/2016	1	1	U	5	no
SW-052-MWS	Shallow	4-14	1,2-Dichloroethene (Total)	540-59-0	1/22/2016	2	2	U	70	no
SW-052-MWS	Shallow	4-14	1,2-Dichloropropane	78-87-5	1/22/2016	1	1	U	5	no
SW-052-MWS	Shallow	4-14	1,3-Dichlorobenzene	541-73-1	1/22/2016	1	1	U		no
SW-052-MWS	Shallow	4-14	1,4-Dichlorobenzene	106-46-7	1/22/2016	1	1	U	75	no
SW-052-MWS	Shallow	4-14	1,4-Dioxane (p-Dioxane)	123-91-1	1/22/2016	0.1	0.1	U1c		no
SW-052-MWS	Shallow	4-14	2,3,4,6-Tetrachlorophenol	58-90-2	1/22/2016	1	1	U1c	240	no
SW-052-MWS	Shallow	4-14	2,4,5-Trichlorophenol	95-95-4	1/22/2016	2.5	2.5	U1c	1,200	no
SW-052-MWS	Shallow	4-14	2,4,6-Trichlorophenol	88-06-2	1/22/2016	1	1	U1c	4	no
SW-052-MWS	Shallow	4-14	2,4-Dichlorophenol	120-83-2	1/22/2016	1	1	U1c	46	no
SW-052-MWS	Shallow	4-14	2,4-Dimethylphenol	105-67-9	1/22/2016	1	1	U1c	360	no
SW-052-MWS	Shallow	4-14	2,4-Dinitrophenol	51-28-5	1/22/2016	2.5	2.5	U1c	39	no
SW-052-MWS	Shallow	4-14	2,4-Dinitrotoluene	121-14-2	1/22/2016	1	1	U1c	0.24	no
SW-052-MWS	Shallow	4-14	2,6-Dinitrotoluene	606-20-2	1/22/2016	1	1	U1c	0.048	no
SW-052-MWS	Shallow	4-14	2-Butanone (MEK)	78-93-3	1/22/2016	10	10	U	5,600	no
SW-052-MWS	Shallow	4-14	2-Chloronaphthalene	91-58-7	1/22/2016	1	1	U1c	750	no
SW-052-MWS	Shallow	4-14	2-Chlorophenol	95-57-8	1/22/2016	1	1	U1c	91	no
SW-052-MWS	Shallow	4-14	2-Hexanone	591-78-6	1/22/2016	10	10	U	38	no
SW-052-MWS	Shallow	4-14	2-Methylnaphthalene	91-57-6	1/22/2016	1	1	U1c	36	no
SW-052-MWS	Shallow	4-14	2-Methylnaphthalene	91-57-6	1/22/2016	0.1	0.031	J1c	36	no
SW-052-MWS	Shallow	4-14	2-Methylphenol(o-Cresol)	95-48-7	1/22/2016	1	1	U1c	930	no
SW-052-MWS	Shallow	4-14	2-Nitroaniline	88-74-4	1/22/2016	2.5	2.5	U1c	190	no
SW-052-MWS	Shallow	4-14	3&4-Methylphenol(m&p Cresol)	108-39-4/106-44-5	1/22/2016	2	2	U1c	930	no
SW-052-MWS	Shallow	4-14	3,3'-Dichlorobenzidine	91-94-1	1/22/2016	1	1	U1c	0.12	no
SW-052-MWS	Shallow	4-14	4-Chloroaniline	106-47-8	1/22/2016	1	1	U1c	0.36	no
SW-052-MWS	Shallow	4-14	4-Methyl-2-pentanone (MIBK)	108-10-1	1/22/2016	10	10	U	1,200	no
SW-052-MWS	Shallow	4-14	4-Nitroaniline	100-01-6	1/22/2016	2.5	2.5	U1c	3.8	no
SW-052-MWS	Shallow	4-14	Acenaphthene	83-32-9	1/22/2016	1	1	U1c	530	no
SW-052-MWS	Shallow	4-14	Acenaphthene	83-32-9	1/22/2016	0.1	0.1	U1c	530	no
SW-052-MWS	Shallow	4-14	Acenaphthylene	208-96-8	1/22/2016	1	1	U1c	530	no
SW-052-MWS	Shallow	4-14	Acenaphthylene	208-96-8	1/22/2016	0.1	0.1	U1c	530	no
SW-052-MWS	Shallow	4-14	Acetone	67-64-1	1/22/2016	10	10	U	14,000	no
SW-052-MWS	Shallow	4-14	Acetophenone	98-86-2	1/22/2016	1	1	U1c	1,900	no
SW-052-MWS	Shallow	4-14	Aluminum	7429-90-5	1/22/2016	50	12,300	M1	20,000	no
SW-052-MWS	Shallow	4-14	Aluminum, Dissolved	7429-90-5	1/22/2016	50	53.2		20,000	no
SW-052-MWS	Shallow	4-14	Anthracene	120-12-7	1/22/2016	1	1	U1c	1,800	no
SW-052-MWS	Shallow	4-14	Anthracene	120-12-7	1/22/2016	0.1	0.062	J1c	1,800	no
SW-052-MWS	Shallow	4-14	Antimony	7440-36-0	1/22/2016	6	6	U	6	no
SW-052-MWS	Shallow	4-14	Antimony, Dissolved	7440-36-0	1/22/2016	6	6	U	6	no
SW-052-MWS	Shallow	4-14	Arsenic	7440-38-2	1/22/2016	5	4.2	J	10	no
SW-052-MWS	Shallow	4-14	Arsenic, Dissolved	7440-38-2	1/22/2016	5	5	U	10	no
SW-052-MWS	Shallow	4-14	Barium	7440-39-3	1/22/2016	10	109		2,000	no
SW-052-MWS	Shallow	4-14	Barium, Dissolved	7440-39-3	1/22/2016	10	42.3		2,000	no
SW-052-MWS	Shallow	4-14	Benzaldehyde	100-52-7	1/22/2016	1	1	U1c	1,900	no
SW-052-MWS	Shallow	4-14	Benzene	71-43-2	1/22/2016	1	1	U	5	no
SW-052-MWS	Shallow	4-14	Benzo(a)anthracene	56-55-3	1/22/2016	1	1	U1c	0.012	no
SW-052-MWS	Shallow	4-14	Benzo(a)anthracene	56-55-3	1/22/2016	0.1	0.08	J1c	0.012	YES
SW-052-MWS	Shallow	4-14	Benzo(a)pyrene	50-32-8	1/22/2016	1	1	U1c	0.2	no
SW-052-MWS	Shallow	4-14	Benzo(a)pyrene	50-32-8	1/22/2016	0.1	0.07	JL11c	0.2	no
SW-052-MWS	Shallow	4-14	Benzo(b)fluoranthene	205-99-2	1/22/2016	1	1	U1c	0.034	no

Table 2
Area B Groundwater Investigation Well Data (Non-Validated)
Former Sparrows Point Steel Mill
Sparrows Point, Maryland

Well ID	Zone	Screen Interval (feet bgs)	Parameter	CAS	Sample Date	LOQ	Result (ug/L)	Final Flag	PAL	Exceeds PAL?
SW-052-MWS	Shallow	4-14	Benzo(b)fluoranthene	205-99-2	1/22/2016	0.1	0.097	J1c	0.034	YES
SW-052-MWS	Shallow	4-14	Benzo(g,h,i)perylene	191-24-2	1/22/2016	1	1	U1c		no
SW-052-MWS	Shallow	4-14	Benzo(g,h,i)perylene	191-24-2	1/22/2016	0.1	0.058	J1c		YES
SW-052-MWS	Shallow	4-14	Benzo(k)fluoranthene	207-08-9	1/22/2016	1	1	U1c	0.34	no
SW-052-MWS	Shallow	4-14	Benzo(k)fluoranthene	207-08-9	1/22/2016	0.1	0.057	J1c	0.34	no
SW-052-MWS	Shallow	4-14	Beryllium	7440-41-7	1/22/2016	1	0.46	J	4	no
SW-052-MWS	Shallow	4-14	Beryllium, Dissolved	7440-41-7	1/22/2016	1	1	U	4	no
SW-052-MWS	Shallow	4-14	Biphenyl (Diphenyl)	92-52-4	1/22/2016	1	1	U1c	0.83	no
SW-052-MWS	Shallow	4-14	bis(2-chloroethoxy)methane	111-91-1	1/22/2016	1	1	U1c	59	no
SW-052-MWS	Shallow	4-14	bis(2-Chloroethyl) ether	111-44-4	1/22/2016	1	1	U1c	0.014	no
SW-052-MWS	Shallow	4-14	bis(2-Chloroisopropyl) ether	108-60-1	1/22/2016	1	1	U1c	0.36	no
SW-052-MWS	Shallow	4-14	bis(2-Ethylhexyl)phthalate	117-81-7	1/22/2016	1	1	U1c	6	no
SW-052-MWS	Shallow	4-14	Bromodichloromethane	75-27-4	1/22/2016	1	1	U	0.13	no
SW-052-MWS	Shallow	4-14	Bromoform	75-25-2	1/22/2016	1	1	U	3.3	no
SW-052-MWS	Shallow	4-14	Bromomethane	74-83-9	1/22/2016	1	1	U	7.5	no
SW-052-MWS	Shallow	4-14	Cadmium	7440-43-9	1/22/2016	3	0.71	J	5	no
SW-052-MWS	Shallow	4-14	Cadmium, Dissolved	7440-43-9	1/22/2016	3	3	U	5	no
SW-052-MWS	Shallow	4-14	Caprolactam	105-60-2	1/22/2016	2.5	2.5	U1c	9,900	no
SW-052-MWS	Shallow	4-14	Carbazole	86-74-8	1/22/2016	1	1	U1c		no
SW-052-MWS	Shallow	4-14	Carbon disulfide	75-15-0	1/22/2016	1	1	U	810	no
SW-052-MWS	Shallow	4-14	Carbon tetrachloride	56-23-5	1/22/2016	1	1	U	5	no
SW-052-MWS	Shallow	4-14	Chlorobenzene	108-90-7	1/22/2016	1	1	U	100	no
SW-052-MWS	Shallow	4-14	Chloroethane	75-00-3	1/22/2016	1	1	U	21,000	no
SW-052-MWS	Shallow	4-14	Chloroform	67-66-3	1/22/2016	1	1	U	0.22	no
SW-052-MWS	Shallow	4-14	Chloromethane	74-87-3	1/22/2016	1	1	U	190	no
SW-052-MWS	Shallow	4-14	Chromium	7440-47-3	1/22/2016	5	59.9		100	no
SW-052-MWS	Shallow	4-14	Chromium, Dissolved	7440-47-3	1/22/2016	5	27.4		100	no
SW-052-MWS	Shallow	4-14	Chromium, Hexavalent	18540-29-9	1/22/2016	10	10	U	0.035	no
SW-052-MWS	Shallow	4-14	Chrysene	218-01-9	1/22/2016	1	1	UL31c	3.4	no
SW-052-MWS	Shallow	4-14	Chrysene	218-01-9	1/22/2016	0.1	0.076	J1c	3.4	no
SW-052-MWS	Shallow	4-14	cis-1,2-Dichloroethene	156-59-2	1/22/2016	1	1	U	70	no
SW-052-MWS	Shallow	4-14	cis-1,3-Dichloropropene	10061-01-5	1/22/2016	1	1	U		no
SW-052-MWS	Shallow	4-14	Cobalt	7440-48-4	1/22/2016	5	2.3	J	6	no
SW-052-MWS	Shallow	4-14	Cobalt, Dissolved	7440-48-4	1/22/2016	5	5	U	6	no
SW-052-MWS	Shallow	4-14	Copper	7440-50-8	1/22/2016	5	9.9		1,300	no
SW-052-MWS	Shallow	4-14	Copper, Dissolved	7440-50-8	1/22/2016	5	5	U	1,300	no
SW-052-MWS	Shallow	4-14	Cyanide	57-12-5	1/22/2016	10	10	U	200	no
SW-052-MWS	Shallow	4-14	Cyclohexane	110-82-7	1/22/2016	10	10	U	13,000	no
SW-052-MWS	Shallow	4-14	Dibenz(a,h)anthracene	53-70-3	1/22/2016	1	1	U1c	0.003	no
SW-052-MWS	Shallow	4-14	Dibenz(a,h)anthracene	53-70-3	1/22/2016	0.1	0.1	U1c	0.003	no
SW-052-MWS	Shallow	4-14	Dibromochloromethane	124-48-1	1/22/2016	1	1	U	0.17	no
SW-052-MWS	Shallow	4-14	Dichlorodifluoromethane	75-71-8	1/22/2016	1	1	U	200	no
SW-052-MWS	Shallow	4-14	Diesel Range Organics	DRO	1/22/2016	104	60.8	JN21c	47	YES
SW-052-MWS	Shallow	4-14	Diethylphthalate	84-66-2	1/22/2016	1	1	U1c	15,000	no
SW-052-MWS	Shallow	4-14	Di-n-butylphthalate	84-74-2	1/22/2016	1	1	U1c	900	no
SW-052-MWS	Shallow	4-14	Di-n-octylphthalate	117-84-0	1/22/2016	1	1	U1c	200	no
SW-052-MWS	Shallow	4-14	Ethylbenzene	100-41-4	1/22/2016	1	1	U	700	no
SW-052-MWS	Shallow	4-14	Fluoranthene	206-44-0	1/22/2016	1	1	U1c	800	no
SW-052-MWS	Shallow	4-14	Fluoranthene	206-44-0	1/22/2016	0.1	0.1	J1c	800	no
SW-052-MWS	Shallow	4-14	Fluorene	86-73-7	1/22/2016	1	1	U1c	290	no

Table 2
Area B Groundwater Investigation Well Data (Non-Validated)
Former Sparrows Point Steel Mill
Sparrows Point, Maryland

Well ID	Zone	Screen Interval (feet bgs)	Parameter	CAS	Sample Date	LOQ	Result (ug/L)	Final Flag	PAL	Exceeds PAL?
SW-052-MWS	Shallow	4-14	Fluorene	86-73-7	1/22/2016	0.1	0.1	U1c	290	no
SW-052-MWS	Shallow	4-14	Gasoline Range Organics	GRO	1/22/2016	200	200	U	47	no
SW-052-MWS	Shallow	4-14	Hexachloro-1,3-butadiene	87-68-3	1/22/2016	1	1	U1c	0.14	no
SW-052-MWS	Shallow	4-14	Hexachlorobenzene	118-74-1	1/22/2016	1	1	U1c	1	no
SW-052-MWS	Shallow	4-14	Hexachlorocyclopentadiene	77-47-4	1/22/2016	1	1	U1c	50	no
SW-052-MWS	Shallow	4-14	Hexachloroethane	67-72-1	1/22/2016	1	1	U1c	0.33	no
SW-052-MWS	Shallow	4-14	Indeno(1,2,3-cd)pyrene	193-39-5	1/22/2016	1	1	U1c	0.034	no
SW-052-MWS	Shallow	4-14	Indeno(1,2,3-cd)pyrene	193-39-5	1/22/2016	0.1	0.039	J1c	0.034	YES
SW-052-MWS	Shallow	4-14	Iron	7439-89-6	1/22/2016	70	21,100		14,000	YES
SW-052-MWS	Shallow	4-14	Iron, Dissolved	7439-89-6	1/22/2016	70	52.4	J	14,000	no
SW-052-MWS	Shallow	4-14	Isophorone	78-59-1	1/22/2016	1	1	U1c	78	no
SW-052-MWS	Shallow	4-14	Isopropylbenzene (Cumene)	98-82-8	1/22/2016	1	1	U	450	no
SW-052-MWS	Shallow	4-14	Lead	7439-92-1	1/22/2016	5	42.2		15	YES
SW-052-MWS	Shallow	4-14	Lead, Dissolved	7439-92-1	1/22/2016	5	5	U	15	no
SW-052-MWS	Shallow	4-14	Manganese	7439-96-5	1/22/2016	5	714		430	YES
SW-052-MWS	Shallow	4-14	Manganese, Dissolved	7439-96-5	1/22/2016	5	3.1	J	430	no
SW-052-MWS	Shallow	4-14	Mercury	7439-97-6	1/22/2016	0.2	0.2	U	2	no
SW-052-MWS	Shallow	4-14	Mercury, Dissolved	7439-97-6	1/22/2016	0.2	0.2	U	2	no
SW-052-MWS	Shallow	4-14	Methyl Acetate	79-20-9	1/22/2016	5	5	U	20,000	no
SW-052-MWS	Shallow	4-14	Methylene Chloride	75-09-2	1/22/2016	1	1	U	5	no
SW-052-MWS	Shallow	4-14	Methyl-tert-butyl ether	1634-04-4	1/22/2016	1	1	U	14	no
SW-052-MWS	Shallow	4-14	Naphthalene	91-20-3	1/22/2016	1	1	U1c	0.17	no
SW-052-MWS	Shallow	4-14	Naphthalene	91-20-3	1/22/2016	0.1	0.068	JB1c	0.17	no
SW-052-MWS	Shallow	4-14	Nickel	7440-02-0	1/22/2016	10	9.2	J	390	no
SW-052-MWS	Shallow	4-14	Nickel, Dissolved	7440-02-0	1/22/2016	10	10	U	390	no
SW-052-MWS	Shallow	4-14	Nitrobenzene	98-95-3	1/22/2016	1	1	U1c	0.14	no
SW-052-MWS	Shallow	4-14	N-Nitroso-di-n-propylamine	621-64-7	1/22/2016	1	1	U1c	0.011	no
SW-052-MWS	Shallow	4-14	N-Nitrosodiphenylamine	86-30-6	1/22/2016	1	1	U1c	12	no
SW-052-MWS	Shallow	4-14	Pentachlorophenol	87-86-5	1/22/2016	2.5	2.5	U1c	1	no
SW-052-MWS	Shallow	4-14	Phenanthrene	85-01-8	1/22/2016	1	1	U1c		no
SW-052-MWS	Shallow	4-14	Phenanthrene	85-01-8	1/22/2016	0.1	0.067	J1c		YES
SW-052-MWS	Shallow	4-14	Phenol	108-95-2	1/22/2016	1	1	U1c	5,800	no
SW-052-MWS	Shallow	4-14	Pyrene	129-00-0	1/22/2016	1	1	UL31c	120	no
SW-052-MWS	Shallow	4-14	Pyrene	129-00-0	1/22/2016	0.1	0.1	J1c	120	no
SW-052-MWS	Shallow	4-14	Selenium	7782-49-2	1/22/2016	8	7.1	J	50	no
SW-052-MWS	Shallow	4-14	Selenium, Dissolved	7782-49-2	1/22/2016	8	7.4	J	50	no
SW-052-MWS	Shallow	4-14	Silver	7440-22-4	1/22/2016	6	6	U	94	no
SW-052-MWS	Shallow	4-14	Silver, Dissolved	7440-22-4	1/22/2016	6	6	U	94	no
SW-052-MWS	Shallow	4-14	Styrene	100-42-5	1/22/2016	1	1	U	100	no
SW-052-MWS	Shallow	4-14	Tetrachloroethene	127-18-4	1/22/2016	1	1	U	5	no
SW-052-MWS	Shallow	4-14	Thallium	7440-28-0	1/22/2016	10	10	U	2	no
SW-052-MWS	Shallow	4-14	Thallium, Dissolved	7440-28-0	1/22/2016	10	10	U	2	no
SW-052-MWS	Shallow	4-14	Toluene	108-88-3	1/22/2016	1	1	U	1,000	no
SW-052-MWS	Shallow	4-14	trans-1,2-Dichloroethene	156-60-5	1/22/2016	1	1	U	100	no
SW-052-MWS	Shallow	4-14	trans-1,3-Dichloropropene	10061-02-6	1/22/2016	1	1	U		no
SW-052-MWS	Shallow	4-14	Trichloroethene	79-01-6	1/22/2016	1	1	U	5	no
SW-052-MWS	Shallow	4-14	Trichlorofluoromethane	75-69-4	1/22/2016	1	1	U	1,100	no
SW-052-MWS	Shallow	4-14	Vanadium	7440-62-2	1/22/2016	5	180		86	YES
SW-052-MWS	Shallow	4-14	Vanadium, Dissolved	7440-62-2	1/22/2016	5	81.9		86	no
SW-052-MWS	Shallow	4-14	Vinyl chloride	75-01-4	1/22/2016	1	1	U	2	no
SW-052-MWS	Shallow	4-14	Xylene (Total)	1330-20-7	1/22/2016	3	3	U	10,000	no
SW-052-MWS	Shallow	4-14	Zinc	7440-66-6	1/22/2016	10	145		6,000	no
SW-052-MWS	Shallow	4-14	Zinc, Dissolved	7440-66-6	1/22/2016	10	0.71	J	6,000	no

Highlighted values indicate PAL exceedances

Metals:

D = Dissolved Metal (field filtered)

T = Total Metal

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APPENDIX B

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Parcel B19 Sampling Plan Summary
Former Sparrows Point Steel Mill
Sparrows Point, Maryland

Source Area/ Description	REC & Finding/ SWMU/ AOC	Figure or Drawing of Reference	RATIONALE	Number of Locations	Sample Locations	Boring Depth	Sample Depth	Analytical Parameters: Soil Samples
Fire Training Area		Drawings 5024 and 5030	Investigate potential impacts related to the former fire training area (potential leaks or releases).	3	B19-001 through B19-003	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.	SVOC, Metals, O&G, DRO/GRO, PCBs (0-1')
Oil Trap (sanitary line)		Drawing 5523	Investigate potential impacts related to the sanitary line oil trap (potential leaks or releases).	2	B19-004 and B19-005	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.	SVOC, Metals, O&G, DRO/GRO, PCBs (0-1')
Former Fuel Oil Storage Tank and Bermed Area		Drawing 5023	Investigate potential impacts related to the former fuel oil storage tank and associated bermed area (potential leaks or releases).	3	B19-006 through B19-008	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.	SVOC, Metals, O&G, DRO/GRO, PCBs (0-1')
Pennwood Storage Tank Farm ASTs (4)	REC 19/ Finding 266	REC Location Map/ Drawing 5023	Several large ASTs are located in the Pennwood Storage Tank Farm. The Phase I ESA indicates that these tanks formerly held fuel oil and recycled oil. At the time of Weaver Boos' site visit, there were no apparent leaks or staining, but the age of the tanks increases the risk that corrosion and releases may have occurred. The Phase I ESA indicated that residual oil/water (up to 2 feet) may have been present in the tanks at the time of reporting. Weaver Boos' review of aerial photographs from 1952 indicated a dark area inside a berm which may have indicated a past release.	8	B19-009 through B19-016	Total depth of 20 feet or groundwater.	0-1', 4-5', 9-10' bgs. 4-5' interval may be adjusted in the field based on observations or field screening.	SVOC, Metals, O&G, DRO/GRO, PCBs (0-1')

Parcel B19 Sampling Plan Summary
Former Sparrows Point Steel Mill
Sparrows Point, Maryland

Source Area/ Description	REC & Finding/ SWMU/ AOC	Figure or Drawing of Reference	RATIONALE	Number of Locations	Sample Locations	Boring Depth	Sample Depth	Analytical Parameters: Soil Samples
Pig Plant Caster Building		Drawing 5130	Investigate potential impacts related to the pig plant caster building (potential leaks or releases).	2	B19-017 and B19-018	Total depth of 20 feet or groundwater.	0-1', 4-5', 9-10' bgs. 4-5' interval may be adjusted in the field based on observations or field screening.	SVOC, Metals, DRO/GRO, PCBs (0-1')
Pig Plant Caster Machine		Drawing 5130	Investigate potential impacts related to the pig plant caster machine (potential leaks or releases).	2	B19-019 and B19-020	Total depth of 20 feet or groundwater.	0-1', 4-5', 9-10' bgs. 4-5' interval may be adjusted in the field based on observations or field screening.	SVOC, Metals, DRO/GRO, PCBs (0-1')
Pig Plant Storage Area		Drawing 5130	Investigate potential impacts related to the pig plant storage area (potential leaks or releases).	2	B19-021 and B19-022	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.	SVOC, Metals, DRO/GRO, PCBs (0-1')
Pump Houses (2)		Drawing 5023	Investigate potential impacts related to two pump houses present in the vicinity of the Pennwood Storage Tank Farm ASTs (potential leaks or releases).	4	B19-023 through B19-026	Total depth of 20 feet or groundwater.	0-1', 4-5', 9-10' bgs. 4-5' interval may be adjusted in the field based on observations or field screening.	SVOC, Metals, O&G, DRO/GRO, PCBs (0-1')
Rail Car Dumper		Drawing 5123	Investigate potential impacts related to the rail car dumper (potential leaks or releases).	2	B19-027 and B19-028	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.	SVOC, Metals, DRO/GRO, PCBs (0-1')
Weir and Oil Barrier		Drawing 5130	Investigate potential impacts related to the drainage ditch weir and oil barrier (potential leaks or releases).	2	B19-029 and B19-030	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.	SVOC, Metals, O&G, DRO/GRO, PCBs (0-1')

Parcel B19 Sampling Plan Summary
Former Sparrows Point Steel Mill
Sparrows Point, Maryland

Source Area/ Description	REC & Finding/ SWMU/ AOC	Figure or Drawing of Reference	RATIONALE	Number of Locations	Sample Locations	Boring Depth	Sample Depth	Analytical Parameters: Soil Samples
Parcel B19 Coverage			Investigate potential impacts related to any historical activities which may have occurred on the site (potential leaks or releases).	8	B19-031 through B19-038	Total depth of 20 feet or groundwater.	0-1', 4-5', 9-10' bgs. 4-5' interval may be adjusted in the field based on observations or field screening.	SVOC, Metals, DRO/GRO, PCBs (0-1')
			Total	38				

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

No Engineered Barrier (71-100 acres): 1 boring per 2.5 acres with no less than 35.

Engineered Barrier (1-15 acres): 0.5 boring per acre with no less than 2.

No Engineered Barrier (80.4 acres) = **35 borings required, 35 proposed**

Engineered Barrier (5.2 acres) = **3 borings required, 3 proposed**

Parking/Roads (1.73 acres)

Buildings (3.43 acres)

SVOCs - Semivolatile Organic Compounds (Target Compound List)

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

DRO/GRO - Diesel Range Organics/Gasoline Range

PCBs - Polychlorinated Biphenyls

O&G - Oil and Grease

bgs - Below Ground Surface

APPENDIX C

Health and Safety Plan

Area B: Parcel B19 Tradepoint Atlantic Sparrows Point, Maryland

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August 2016

ARM Project 150300M-15

Respectfully submitted,



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1.0 INTRODUCTION

This Health and Safety Plan (HASP) has been prepared by ARM Group Inc. (ARM) to address personnel health and safety requirements for employees of ARM and its subcontractors to complete a Phase II investigation on a portion of the Tradepoint Atlantic property that has been designated as Parcel B19. The on-site activities may include the following: installation of soil borings, collection of soil samples, and installation and gauging of temporary piezometers. ARM will comply with industry-standard health and safety protocol and Occupational Safety and Health Administration (OSHA) 29 CFR 1910.120 to prevent human exposure to volatile organic compounds (VOC), semi-volatile organic compounds (SVOC), petroleum hydrocarbons, polychlorinated biphenyls (PCB) and metals that may be present in site soil and groundwater.

2.0 GENERAL INFORMATION

2.1 Site Description

Parcel B19, which is comprised of 86 acres of the approximately 3,100-acre former plant property, is located off of Sparrows Point Boulevard in Sparrows Point, Maryland. Parcel B19 is one of several parcels that make up a larger area, known as Area B, of the Tradepoint Atlantic facility. Area B and its parcels are shown on **Figure 1**.

From the late 1800s until 2012, the Tradepoint Atlantic property was used for the production and manufacturing of steel. Iron and steel production operations and processes at the Site included raw material handling, coke production, sinter production, iron production, steel production, and semi-finished and finished product preparation. In 1970, it 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 the facility ceased in fall 2012.

2.2 Site Hazards

The following is a general description of the potential site hazards.

Chemical Hazards:

- VOCs, SVOCs, PCBs, petroleum hydrocarbons, and metals potentially present in soil and groundwater.

Explosive Hazards:

- VOC and petroleum hydrocarbon vapors in boreholes, piezometers and collection containers.

Physical Hazards:

- Slipping/tripping in work area
- Stress/fatigue from heat or cold temperatures
- Traffic/Railway Activity
- Driving on steep slopes and/or off-road conditions
- Insect and animal bites
- Hand tools

Mechanical/Electrical Hazards:

- Underground utilities
- Heavy equipment (Geoprobe)
- Locomotive/Railcar and Maintenance Vehicles (within 10 feet of track edge)
- Noise from heavy equipment operations
- Power tools

2.3 Utilities

Prior to initiating any subsurface investigations, all underground utilities will be cleared using the Miss Utility system. Additionally, EnviroAnalytics Group (EAG) will clear each proposed boring with utility personnel currently working on the property. The ARM staff will be responsible for avoiding any above ground utilities while operating vehicles on the site.

2.4 Waste Management

A small quantity of investigation derived waste (IDW) material will be generated as a result of the planned site work. These wastes could include decontamination fluids, soil cuttings, personal protective equipment (PPE) and disposable sampling equipment. All IDW will be containerized in steel 55-gallon drums for on-site treatment or off-site disposal, pending the receipt of analytical results. Specific procedures associated with the management of the IDW have been established in SOP 005, attached in Appendix A of the EPA approved Quality Assurance Project Plan (QAPP).

2.5 Site Controls and Security

It is the responsibility of ARM staff to keep unauthorized personnel away from the work areas during site work. All equipment used at the site must be secured or taken off-site. Subsurface intrusions should be covered to reduce any hazard that may be posed. Traffic cones, caution tape, physical barriers, or other such means as necessary shall be used to ensure that no unauthorized work area entry occurs.

3.0 OPERATING PROCEDURES

3.1 Air Monitoring

Due to the nature of the site activities and materials potentially present at the site, no vapor hazards are expected. If discernable odors are noted in the breathing zone, then work will be temporarily suspended and air monitoring will be initiated using a PID or explosive gas indicator. If sustained vapor concentrations are measured at or above action levels in the breathing zone, work will immediately cease until such time as appropriate action is established. This action may require the upgrade of PPE or reevaluation of the need to proceed.

3.2 Personnel Protection

Personnel health and safety protection shall follow the guidelines provided by this HASP. Modifications to the HASP may be made by the field supervisor with the approval of the ARM Project Manager on a day-to-day basis as conditions change, based on existing conditions. Any necessary revisions must be fully documented by the field supervisor to include the specifics and rationalizations for the change.

It is anticipated that a modified Level D of personal protection will be appropriate for the anticipated site activities. PPE associated with this designated level of protection (Level D), as established by the USEPA, is listed in a later section. The PPE listed for this level of protection should be available to all personnel.

PPE will be stored in a clean, dry environment prior to its usage. Disposable equipment shall remain, in as much as possible, its original manufacturer's packaging to ensure its integrity. PPE that is assigned to a specific end user is subject to inspection by the supervisor at any time.

3.2.1 Determination of Level of Protection Requirements

The appropriate level of personnel protection must be established on the basis of ambient air monitoring responses. Air monitoring action levels should be consistent with the primary compounds of concern as listed in Table 3-1 (below). Appropriate action should be taken if total organic vapor air concentrations are sustained at a concentration equal to or greater than the PEL listed on Table 3-1.

Table 3-1

Substance	CAS #	OSHA PEL (ppm)	IDLH (ppm)
Benzene	71-43-2	10	500
Toluene	108-88-3	200	500
Ethyl benzene	100-41-4	100	800
Xylenes	1330-20-7	100	900
Naphthalene	91-20-3	10	250
Tetrachloroethylene	127-18-4	100	150
Trichloroethylene	79-01-6	100	1,000

Notes: ppm = parts per million
PEL = Permissible Exposure Limit
IDLH = Immediately Dangerous to Life or Health

This criterion will be applicable to all activities unless specific protection requirement for a certain task are addressed separately. As previously stated, it is anticipated that a modified Level D will be appropriate for the anticipated site activities; which requires a regular worker uniform, steel-toed safety shoes, hardhat, safety glasses and long pants. Level D will be considered the minimum protection level for all work on-site.

Respiratory protection against dust must also be considered during site work. The usage of dust respirators (high efficiency particulate air [HEPA] filters) or NIOSH P100 filter paired with a half-mask respirator will be determined by site conditions and judgment of the field supervisor. Sprinklers may be used to control dust during work activities.

3.2.2 Dermal Protection

In general, dermal protection levels will correspond with the respiratory protection level in use during an activity as described in other sections. For most activities on the site, Level D dermal protection will be adequate. When work tasks are such that a higher level of personal protection is required, dermal protection may be upgraded to coated Tyvek (Saranex) or chemical-resistant rain suit or Tyvek. This determination will be made by the ARM Field Supervisor as required.

Chemical and abrasion-resistant outer gloves and inner chemical-resistant disposable gloves would be required in the work zone to provide adequate protection of hands and assist in preventing transfer of contaminants. As much of the investigation may require handling of possibly contaminated equipment, groundwater, or soil, chemical-resistant gloves should be required for all on-site work with these materials. Various operations, which require dexterity and do not necessitate the abrasion-resistant feature of outer gloves, could be performed with the inner gloves only, at the direction of the ARM Field Supervisor.

3.2.3 Eye Protection

Since many volatile contaminants are capable of penetrating skin tissues, the eyes provide a potential route of entry into the body. Typically, volatile organic vapors will be detected in the air-monitoring program. Dust and air-borne particulates will be monitored visually and nuisance dust standards will be applied. If exceeded, dust masks will be donned. Eye protection, beyond the use of safety glasses, must correspond to the respiratory protection level.

3.3 Task-Related Personnel Protection

At a minimum, all workers are required to wear long pants, steel toed shoes and a sleeved shirt at all times. Additional PPE will be required on a task-specific basis.

3.3.1 Installation of Geoprobe Soil Borings and Piezometers, Soil Logging and Soil Sampling Activities

All personnel should wear the following:

- Long pants and sleeved shirt/vest (high visibility)
- Steel toe safety boots
- Safety glasses with side shields
- Hearing protection
- Chemical resistant gloves

3.4 Explosion Prevention

Due to the potential presence of flammable materials at the site, the following safety guidelines must be followed to prevent the possibility of explosion:

- a. All monitoring equipment will be intrinsically safe or explosion-proof, if used in areas of possible explosive atmospheres.
- b. A fire extinguisher, first-aid kit, and an eye wash station will be located at the site within a short distance of site work.
- c. Any compressed gas cylinders or bottles will be stored safely as required by the OSHA regulations. In addition, metal barriers must be provided and installed between oxygen and acetylene bottles, extending above the height of the regulators. At the end of each work shift, regulators shall be removed and replaced with protective caps.
- d. No explosives, whatsoever, shall be used or stored on the premises.

- e. All cleaning fluids or solvents must be stored and transported in OSHA-approved safety containers.
- f. Propane, butane, or other heavier-than-air gases shall not be transported onto or used on-site unless prior approval is obtained in writing from the Project Manager and the Facility Operator.

4.0 DECONTAMINATION PROCEDURES

Decontamination procedures will be used on some field tasks, but not all, completed at the site. All decontamination operations may be performed at the sampling location unless the level of PPE is upgraded. If the level of PPE is upgraded, all decontamination operations will be performed in a central decontamination area and supervised by the ARM Field Supervisor. If necessary, a decontamination corridor will be set up adjacent to the area and equipped with brushes, plastic bags, and drum storage. Disposable outerwear and contaminated disposable equipment will be collected for future disposal. The ARM Field Supervisor would be required to inspect PPE and clothing to determine if decontamination procedures were sufficient to allow passage into the staging area.

The following decontamination facilities, as a minimum, will be provided in the staging area:

- a. Hand washing facilities
- b. First-aid kit
- c. Eye wash station
- d. Fire extinguisher

Proper on-site decontamination procedures, the use of disposable outer clothing, and field wash of hands and face as soon as possible after leaving the decontamination corridor could effectively minimize the opportunity for skin contact with contaminants.

4.1 Personnel Decontamination Procedures

Decontamination procedures should be as follows:

Level D decontamination will consist of:

1. Potable water wash and potable water rinse of boots and outer gloves (if worn).
2. Drum all visibly impacted disposable clothing.
3. Field wash of hands and face.

4.2 Equipment Decontamination

All equipment decontamination will be completed in accordance with the procedures referenced in QAPP Worksheet 21—Field SOPs, SOP No. 016 Equipment Decontamination. The decontamination procedures that will be used during the course of this investigation include Decontamination Area (Section 3.1 of the SOP), Decontamination of Sampling Equipment

(Section 3.5), Decontamination of Measurement Devices & Monitoring Equipment (Section 3.7), Decontamination of Subsurface Drilling Equipment (Section 3.8), and Document and Record Keeping (Section 5).

Level D personnel protection is required during equipment decontamination.

5.0 EMERGENCY CONTINGENCY INFORMATION

Pertinent emergency telephone numbers are listed in Table 5-1. This information must be reviewed by and provided to all personnel prior to site entry.

Table 5-1 Emergency Telephone Numbers	
Facility/Title	Telephone Number
Fire and Police	911
Ambulance	911
James Calenda, EnviroAnalytics Group	(314) 620-3056
Eric Magdar, ARM Manager	Office: (410) 290-7775 Cell: (301) 529-7140
Hospital – Johns Hopkins Bayview	(410) 550-0350

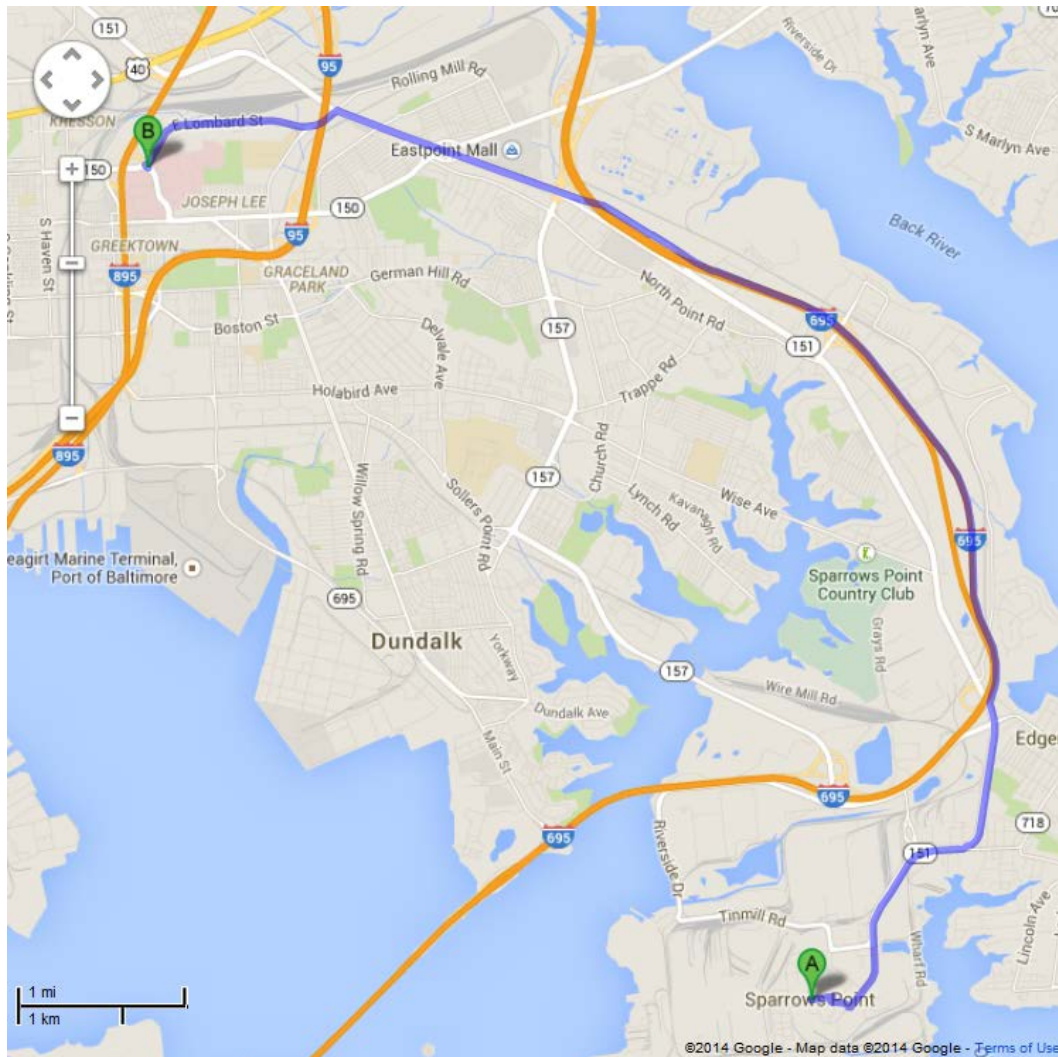
In the event of a fire or explosion, the site will be evacuated immediately and the appropriate emergency response groups notified. In the event of an environmental incident caused by spill or spread of contamination, personnel will attempt to contain the spread of contamination, if possible.

In the event of a personnel injury, emergency first aid would be applied on site by ARM as deemed necessary. The victim should be transported to the local medical facility if needed. The map to the hospital is provided below.

Hospital Route From Tradepoint Atlantic

Johns Hopkins Bayview
4940 Eastern Avenue
Baltimore, MD
(410) 550-0350

1. Start out going East on 7th Street.
2. Turn LEFT onto Sparrow Point Road.
3. Travel 1.4 miles and continue onto North Point Boulevard.
4. Travel 0.9 miles and turn slight right to merge onto I-695 North/Baltimore Beltway toward Essex.
5. Travel 3.4 miles and take EXIT 40 for MD-151/N. Pt. Blvd. N toward MD-150/East. Blvd W/Baltimore.
6. Travel 0.5 miles and merge onto MD-151 N/North Point Blvd.
7. Travel 2.0 miles and turn LEFT onto Kane Street.
8. Travel 0.2 miles and turn slight right onto E. Lombard Street.
9. Travel 1.2 miles and turn left onto Bayview Blvd.
10. Make a left at the emergency room of the hospital



APPENDIX D



KEVIN KAMENETZ
County Executive

JOHN J. HOHMAN, *Chief*
Fire Department

August 1, 2016

Mr. Aaron Tomarchio
VP, Corporate Affairs
Tradepoint Atlantic
1600 Sparrows Point Boulevard
Baltimore, Maryland 21219

Re: Fire Fighting Foam

Dear Mr. Tomarchio:

This letter is written confirmation that the Baltimore County Fire Department does not use EPA-regulated “foam” at the Fire-Rescue Academy (FRA) in Sparrows Point.

The U.S. Environmental Protection Agency (EPA) recently tightened regulations on chemical compounds found in some firefighting materials; i.e., perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS), both part of a group of chemicals known as perfluorinated chemicals (PFCs). Our research indicates that firefighting foam containing these chemicals has never been used at the FRA.

Sincerely,

A handwritten signature in black ink, appearing to read "John J. Hohman".

John J. Hohman
Fire Chief

JJH/mm