January 2021
Port of Seattle T-25 South Design Characterization

Port of Seattle

Draft Data Report: Soil and Subsurface Sediment Characterization

Prepared for U.S. Environmental Protection Agency

DRAFT

January 2021
Port of Seattle T-25 South Design Characterization

Draft Data Report: Soil and Subsurface Sediment Characterization

Prepared for
U.S. Environmental Protection Agency
Region 10
Seattle, Washington

Prepared by
Anchor QEA, LLC
1201 Third Avenue, Suite 2600
Seattle, Washington 98101

Project Number: 160003-03.03
\\lujj\anchor\Projects\Port of Seattle\160003-03 - POS Maritime Env Site Mgmt\T-25\Deliverables\Data Report\Dec 2020 Draft\T25S_DataReport_DRAFT_01-25-2021_clean.docx

DRAFT

TABLE OF CONTENTS

1 Introduction 1
1.1 Restoration Project Description and Background 1
1.2 Regulatory Context 2
1.3 Data Quality Objectives 3
1.4 Document Organization 3
2 Field Sampling Summary 5
2.1 2019 Upland Sampling and Processing 5
2.2 2020 Supplemental Upland Sampling 6
2.3 Sediment Sampling and Processing 7
3 Data Quality Assessment 9
3.1 Field Data Quality 9
3.2 Analytical Data Quality 9
3.3 Data Completeness 9
4 Upland Analytical Results 10
4.1 Excavation Intervals 10
4.2 Post-Excavation Surface Intervals 10
4.3 Post-Excavation Substrate 12
4.4 Upland PCB Delineation 14
5 Sediment Analytical Results 16
5.1 Dredge Intervals 16
5.2 Post-Dredge Surface Intervals 16
5.3 Nature and Extent 17
6 Geotechnical Results 19
6.1 Moisture Content 19
6.2 Grain Size 19
6.3 Specific Gravity 19
6.4 Density 19
7 Next Steps 20
8 References 21

ED_006289_00002549-00003

DRAFT

TABLES

Table 1	Upland Soil Boring Samples and Analyses
Table 2	Sediment Core Samples and Analyses
Table 3	Upland Boring Excavation Interval Analytical Results
Table 4	Upland Boring Post-Excavation Surface Interval Analytical Results
Table 5	Upland Boring Volatile Organic Compound Analytical Results
Table 6	Upland Post-Excavation Summary
Table 7	Sediment Dredge Interval Analytical Results
Table 8	Sediment Analytical Results
Table 9	Sediment Post-Dredge Summary
Table 10	Upland Boring Geotechnical Results

FIGURES

Figure 1	Vicinity Map
Figure 2	Actual Sampling Locations
Figure 3	Upland and Shoreline Investigation Results
Figure 4	Upland and Shoreline Investigation Dioxin/Furan Results
Figure 5	Upland PCB Delineation Results
Figure 6	Project Elevation Changes
Figure 6a	Cross Sections A and B
Figure 6b	Cross Sections C and D
Figure 6c	Cross Sections E and F

APPENDICES

Appendix A	Field Data
Appendix B	Laboratory Data Reports
Appendix C	Data Validation Reports
Appendix D	QAPP Addendum No. 2

ED_006289_00002549-00004

DRAFT

ABBREVIATIONS

µg/kg	micrograms per kilogram
AET	Apparent Effects Threshold
ARI	Analytical Resources, Inc.
ASTM	American Society for Testing and Materials International
bgs	below ground surface
CFR	Code of Federal Regulations
CSL	Cleanup Screening Level
EPA	U.S. Environmental Protection Agency
EWRAL	East Waterway Remedial Action Level
FS	Feasibility Study
mg/kg	milligrams per kilogram
MLLW	mean lower low water
MTCA	Model Toxics Control Act
ng/kg	nanograms per kilogram
OC	organic carbon normalized
PAH	polycyclic aromatic hydrocarbon
PCB	polychlorinated biphenyl
pcf	pounds per cubic foot
PID	photoionization detector
Port	Port of Seattle
QAPP	Quality Assurance Project Plan
RCRA	Resource Conservation Recovery Act
SCO	Sediment Cleanup Objective
SMS	Washington State Sediment Management Standards
SRI	Supplemental Remedial Investigation
SVOC	semivolatile organic compound
T-25 S	Terminal 25 South
TCLP	toxicity characteristic leaching procedure
TEQ	toxic equivalents quotient
TOC	total organic carbon
TPH	total petroleum hydrocarbons
TSCA	Toxic Substances Control Act
VOC	volatile organic compound

ED_006289_00002549-00005

DRAFT

1 Introduction

This Data Report describes the results of testing soil borings and sediment cores along the Port of Seattle (Port) Terminal 25 South (T-25S; Figure 1) to support the habitat restoration project being proposed by the Port at this location. Results of this chemical and geotechnical investigation will be used to support habitat restoration planning and waste characterization for soil and sediment. This Data Report describes data collection efforts, data quality, and sample results.

1.1 Restoration Project Description and Background

The T-25S restoration project includes restoration of intertidal and shallow subtidal habitat within and around the footprint of a derelict creosote-piling dock structure, in addition to fill removal from more than 5 acres of adjacent uplands, to create off-channel emergent marsh and riparian habitat. The project will be significant in that it is located in a critical estuarine and marine transition area, important to juvenile salmon. In addition, fine-grained intertidal habitat is rare in the East Waterway and no emergent marsh or riparian resources are present.

As described in the Quality Assurance Project Plan (QAPP; Anchor QEA and Windward 2019), preliminary design has been completed for the restoration project. The project will involve removal of the remaining creosote timber piling, connecting timbers, concrete decking, and associated structures within the footprint of the former dock, which is located between -30 and +10 feet mean lower low water (MLLW). In addition, approximately 250 cubic yards of in-water rubble, riprap, debris, and abandoned material will be removed from intertidal and shallow subtidal areas.

Existing topography in the upland area ranges from +12 to +16 feet MLLW. Soil excavation will extend between 400 and 750 feet landward from the ordinary high water mark, depending on final design, to achieve off-channel emergent marsh elevations of between +5.5 feet MLLW to +12 feet MLLW. The Port anticipates removing up to 60,000 cubic yards of previously filled upland soil to create the off-channel marsh. All excavation areas will be backfilled with 1 to 2 feet of imported substrate to support habitat functions, depending on the location and elevations of each area. The inlet and outlet of the off-channel habitat will be graded to +5.5 feet MLLW, while the off-channel area will be graded to have a central high point, or saddle, at +9.5 feet MLLW to ensure drainage and prevent fish isolation during extreme low tides. A riparian buffer will line the landward margin of the site and be densely planted with native trees and shrubs.

An intertidal berm will extend along the current waterward margin of the site with wide channel openings at the north and south boundary. The berm will crest at approximately +13 feet MLLW and will be constructed of anchored and partially buried large woody debris, interplanted with native emergent and transitional vegetation. Off-channel habitat will extend from the berm landward at a 10:1 to 25:1 slope throughout the off-channel area. The on-channel slope will not exceed 6:1 and will

ED_006289_00002549-00006

DRAFT

gradually transition to existing subtidal slope conditions of the East Waterway with a series of flat intertidal and subtidal benches.

Along the east side of the restoration area, a stormwater pond may be installed that will retain and treat stormwater from the nearby developed areas and be released as a source of freshwater to the restoration area. Public access and a potential trail may also be added to the south and east edges of the project area.

1.2 Regulatory Context

The sediments within the East Waterway are part of the East Waterway Operable Unit of the Harbor Island Superfund Site. The U.S. Environmental Protection Agency (EPA) is overseeing the completion of a Supplemental Remedial Investigation/Feasibility Study (SRI/FS) for the East Waterway Operable Unit. The SRI was approved by EPA in 2014 (Windward and Anchor QEA 2014), which included the baseline ecological risk assessment, baseline human health risk assessment, and assembled data to identify the nature and extent of contamination in the East Waterway, evaluate sediment transport processes, and identify potential sources and pathways of contamination to the East Waterway. The FS was approved by EPA in 2019 and develops and evaluates East Waterway-wide remedial alternatives to address risks posed by contaminants of concern within the East Waterway. EPA is planning to release a Proposed Plan in 2021 that will identify a preferred remedial alternative for the East Waterway. After public, state, and tribal comments on the Proposed Plan, EPA will select the final remedial alternative in the Record of Decision.

Information from the SRI on the nature and extent of contamination of the sediments in the vicinity of T-25S is summarized in QAPP Section 2.5, which was used to develop the sampling program. Remedial technologies that could be employed to address sediment contamination at T-25S are described in the FS. Specifically, all active remedial alternatives include removal of approximately 1,000 treated piles along T-25S (piling field) and removal of contaminated sediment in the piling field area. Two technologies are evaluated for contaminated sediments in the T-25S area: 1) removal; or 2) partial removal and cap (with partial dredging depths assumed to be equivalent to the cap thickness). While the selected remedy in this area has not been identified, the data collected that are described in this Data Report are intended to support planning and design of the T-25S restoration project so that it is compatible with any of the remedial alternatives that will be selected by EPA. While construction of the T-25S project may occur prior to cleanup of the entire East Waterway, the Port will coordinate with EPA, Washington Department of Ecology, and the Elliott Bay Trustee Council during future restoration planning and design to support completion of this project to be protective of human health and the environment without limiting future cleanup actions in the East Waterway.

ED_006289_00002549-00007

DRAFT

One upland exploration (soil boring) conducted in January 2019 contained total polychlorinated biphenyl (PCB) concentrations above the Toxic Substances Control Act (TSCA) PCB remediation waste threshold of 50 parts per million (equivalent to 50,000 micrograms per kilogram [µg/kg]). Additional upland explorations were conducted in August 2020 according to a QAPP Addendum (Anchor QEA 2020) to delineate PCB concentrations above 50,000 µg/kg in this area. The Port is planning to coordinate with the EPA Region 10 PCB Coordinator during habitat restoration design to characterize, remove, and dispose of PCB remediation waste in accordance with TSCA regulations (40 Code of Federal Regulations [CFR] 761.61).

1.3 Data Quality Objectives

The data quality objectives for this investigation were discussed in the QAPP and QAPP Addendum (Anchor QEA 2020). Data collected from upland borings and sediment cores were intended to characterize the pre-construction conditions at T-25S prior to the restoration. The following are the data quality objectives:

1. Characterize ~~the excavated~~ sediment and soil for disposal
2. Characterize the post-excavation surface ~~prior to the placement of fill material~~
3. Characterize the sediment and soil geotechnical properties for static and seismic stability evaluations
4. As part of the supplemental 2020 investigation, characterize the lateral and vertical extent of PCB remediation waste (i.e., PCBs exceeding 50,000 µg/kg) encountered during the first phase of investigation at upland soil boring location T25-SB03
5. As part of the supplemental 2020 investigation, characterize excavated soils for disposal in the location of a proposed oil/water separator (i.e., at T25-SB-16)

1.4 Document Organization

This Data Report is organized into the following sections:

- **Section 1 – Introduction**
- **Section 2 – Field Sampling Summary**: Provides an overview of 2019 and 2020 field sampling components, including any deviations from the QAPP and QAPP Addendum
- **Section 3 – Data Quality Assessment**: Presents a summary of the data quality objectives and the results of data validation
- **Sections 4 to 6 – Sample Results**: Presents the chemical and geotechnical testing results for the upland and sediment borings, including a summary of results that exceed Marine Washington State Sediment Management Standards (SMS) sediment quality criteria, Washington State Model Toxics Control Act (MTCA) soil cleanup levels, Resource Conservation and Recovery Act (RCRA) disposal criteria, and the PCB remediation waste threshold in TSCA, as applicable

ED_006289_00002549-00008

DRAFT

- **Section 7 – Next Steps**: Provides a summary of the next phase of work and EPA coordination
- **Section 8 – References**: Lists references cited in the development of this Data Report
- **Tables and Figures**
- **Appendices**: Field Data, Laboratory Data Reports, Data Validation Reports, and the QAPP Addendum No. 2

ED_006289_00002549-00009

DRAFT

2 Field Sampling Summary

Sampling was conducted in accordance with the approved QAPP and QAPP Addendum. The QAPP and QAPP Addendum provide the sampling design, target sampling locations, procedures for sample collection and processing, data quality control, and data reporting requirements. The QAPP and QAPP Addendum were written in accordance with EPA guidance for preparing QAPPs (EPA 2002). Any deviations from the QAPP or QAPP Addendum are discussed in this section.

2.1 2019 Upland Sampling and Processing

Soil borings were collected from 15 upland locations from January 15 to 18, 2019 (Figure 2; Table 1). Borings were collected using sonic boring collection methods performed by Holocene Drilling using a track-mounted sonic drill rig with a 4-inch borehole diameter steel core barrel. Soil within the core barrel was extruded into disposable plastic liners using low-frequency sonic vibrations to minimize sample disturbance before being transferred to the upland processing area. Two soil borings were advanced for location T25-SB04 because of poor recovery due to concrete debris in the proposed post-excavation surface interval in the first attempt (T25-SB04A). The second attempt (T25-SB04B) successfully retrieved the post-excavation surface interval.

Sample processing was conducted in accordance with the QAPP, with a few exceptions. Each soil boring was processed the same day it was collected. For each collection interval, the plastic liner was cut lengthwise and opened for processing. All cores were logged for major lithological features in accordance with American Society for Testing and Materials International (ASTM) method D2488 and photographed (Appendix A). Field screening also included photoionization detector (PID) monitoring in 1-foot intervals.

Volatile organic compound (VOC) samples were not planned but were collected from six borings. A pair of VOC samples were collected from six borings with PID readings above instrument baseline (T25-SB02, T25-SB04B, T25-SB07, T25-SB08, T25-SB09, and T25-SB10). For each boring, one sample was collected within the detected PID interval, and the other sample was obtained from an interval below with a baseline PID reading to potentially bound the reading. After collection, the field observations were reviewed and two locations (T25-SB07 and T25-SB09) were selected for VOC analyses due to the presence of elevated readings combined with hydrocarbon-like or solvent-like odor.

Discrete samples were collected per the analytical testing scheme described in the QAPP. Some sample intervals were adjusted due to field conditions encountered or lithology of the boring. Samples were collected from material in excavation areas, which was sampled for waste characterization parameters, including toxicity characteristic leaching procedure (TCLP); post-excavation surface material, which represents the exposed surface after habitat project

ED_006289_00002549-00010

DRAFT

excavation; and geotechnical samples that will provide subsurface conditions to support subsequent phases of design.

Samples were placed in decontaminated stainless-steel bowls and mixed until homogenous in color and texture using a stainless-steel spoon. The soil was then spooned into laboratory-supplied jars for analyses. A chain-of-custody form was logged by the processing staff and relinquished to the laboratory staff (Appendix A). Soil samples collected and submitted to Analytical Resources, Inc. (ARI) for analyses and archive are listed in Table 1.

Geotechnical testing was conducted at four upland locations: T25-SB02, T25-SB03, T25-SB04A, and T25-SB05. Standard penetration testing was conducted at these locations using a split spoon sampler in accordance with ASTM D1586.

2.2 2020 Supplemental Upland Sampling

Additional soil borings were collected from August 5 to August 6, 2020, to characterize the lateral and vertical extent of PCB remediation waste (i.e., PCBs exceeding 50,000 µg/kg) encountered during the first phase of the investigation at upland boring location T25-SB03 and to characterize excavated soil for disposal in the location of a proposed oil/water separator. Ten borings (T25-SB-03A to T25-SB-03G) were collected in the area surrounding T25-SB03, and one boring (T25-SB-16) was collected near the southern property boundary (Figure 2).

The supplemental borings were collected by Holt Services, Inc. using a track-mounted sonic drill rig with a 4-inch diameter steel core barrel. All borings were advanced to 20 feet below ground surface (bgs). Soil within the core barrel was extruded into disposable plastic liners using low-frequency sonic vibrations for processing on site. Additional borings were advanced at stations T25-SB-03B and T25-SB-03D due to poor recovery at 10 to 15 feet bgs in the original locations. Boring T25-SB-03BB successfully retrieved the target intervals. Boring T25-SB-03DD retrieved soil from all but the 10- to 11-foot bgs depth interval.

Sample processing was conducted in accordance with the QAPP and QAPP Addendum. The PCB delineation borings (i.e., T-25-SB-03A to T25-SB-03G) were sampled in 1-foot increments for the entire length of the boring. Three samples per boring in the four locations closest to T25-SB03 (i.e., T25-SB-03B, -03D, -03E, and -03G) were submitted for PCB analysis, starting at 7-8 feet bgs, just above where PCBs were highest at T25-SB03, and extending to 10 feet bgs, just below where PCBs were highest at T25-SB03. The remaining sample intervals were initially archived. Additional samples were triggered for PCB analysis at borings T25-SB-03E and T25-SB-03F following review of preliminary PCB data.

The proposed excavation interval at boring T25-SB-16 (0 to 10 feet bgs) was sampled to characterize the soil for disposal (Table 1). The composite sample was analyzed for waste characterization

ED_006289_00002549-00011

DRAFT

parameters including TCLP. One-foot intervals to the bottom of the boring were also sampled and archived for potential future analysis.

All samples were submitted to ARI for analyses and archive as listed in Table 1.

2.3 Sediment Sampling and Processing

Sediment cores were collected from nine in-water locations from March 24 to 26, 2019 (Figure 2; Table 2). Cores were collected by Gravity Marine Services using a vibracorer. The vibracorer was deployed by two methods: 1) for cores T25-SC01 through T25-SC05, the vibracorer was deployed on a remote floating platform in order to navigate between the narrow spacing of the old piling, and 2) cores T25-SC06 through T25-SC09 were collected using a vessel-mounted vibracorer. A differential global positioning system unit was used for positioning (accuracy ±2 feet) to navigate to the proposed sampling stations and record the actual sampling position at the time of sampling. Coordinates were recorded digitally and on core collection field logs in latitude and longitude as decimal minutes using the World Geodetic System of 1984 (Appendix A).

Water depth was measured using either a lead line from the bow or the vessel's depth sounder. Preliminary predicted tidal elevations (feet MLLW) for Seattle, Washington (National Oceanic and Atmospheric Administration Station 9447130), was recorded at the time of core collection. The mudline elevation (feet MLLW) was calculated by subtracting the tidal elevation from the water depth. At each sampling station, water depth, tidal elevation, and elevation to the nearest tenth of a foot were recorded on core collection logs (Appendix A) and are summarized in Table 2.

Multiple cores were driven at each location until the core acceptance criteria described in the QAPP was achieved. Cores T25-SC01 through T25-SC05 and T25-SC09 were offset from their target locations due to substantial debris obstructing the target locations. At location T25-SC09, the fifth attempt was accepted on March 24, 2019, with 56% recovery and samples were archived. An additional sixth attempt was made on March 26, 2019, with improved recovery depth and percent recovery, which replaced the original samples collected. The actual core locations, date, drive penetration, recovery measurements, and distance from target locations for the accepted cores are provided in Table 2.

Sediment cores were processed on board the vessel. When processed, the entire core length contained within the polyethylene liner was extracted from the core tube, with the ends tied off and laid in a core processing tray across the bow of the vessel. The liner was cut open using a decontaminated stainless-steel knife. Field staff remeasured the cores and delineated elevation depths and sampling intervals based on the calculated mudline elevation. Core lengths and sample intervals were based on in situ depth and were corrected for compaction based on core recovery. All cores were logged for major lithological features in accordance with ASTM procedures

ED_006289_00002549-00012

DRAFT

(ASTM D 2488 and ASTM D 2487 – United Soil Classification System) and photographed (Appendix A). Field screening also included PID monitoring in 1-foot intervals.

Discrete samples were collected per the analytical testing scheme described in the QAPP. Samples were placed in decontaminated stainless-steel bowls and mixed until homogenous in color and texture using a stainless-steel spoon. The soil was then spooned into laboratory-supplied jars for analyses. A chain-of-custody form was logged by the processing staff and relinquished to the laboratory staff (Appendix A) upon sample transfer. Sediment samples collected and submitted to ARI for analyses and archive are listed in Table 2.

ED_006289_00002549-00013

DRAFT

3 Data Quality Assessment

This section provides information on the data quality, including field and laboratory quality control measures, data validation findings, and completeness. Analytical laboratory reports and data validation reports are provided as Appendix B and Appendix C, respectively.

3.1 Field Data Quality

Field data were checked for completeness and accuracy prior to submittal to the database. Soil boring and sediment cores were processed following the QAPP and submitted for the appropriate chemical and physical analyses. Chain-of-custody protocols were followed and no deviations from the QAPP were identified. Elevation depths and sampling intervals were determined based on the calculated mudline elevation for sediment core samples, ensuring the appropriate depth intervals were used for disposal characterization.

3.2 Analytical Data Quality

Detailed data quality objectives and QA procedures are provided in the QAPP. Laboratory data packages were validated by Laboratory Data Consultants, Inc. under EPA National Functional Guidelines for Data Review (EPA 2016, 2017a, 2017b) and using the data quality objectives described in the QAPP. Validation reports are in Appendix C. Data qualifiers applied to results during validation have been incorporated into the final database for this project. Data qualifiers assigned as a result of the data validation and their definitions are shown on the analytical results tables (Tables 3, 4, 5, 7, and 8). Some data were qualified as estimated based on a method, validation, or project-specific criterion. Most data were considered useable as reported or as qualified. Four benzoic acid results in four sediment core samples were rejected due to very low recoveries in the laboratory control sample.

Reporting limits were acceptable as reported and no reporting limits exceeded screening criteria for results below detection.

3.3 Data Completeness

Samples were collected from all locations and samples were submitted to the laboratory for analyses or archive as required in the QAPP and QAPP Addendum. The laboratory followed the specified analytical methods and all requested sample analyses were completed. Analytical completeness is a measure of the amount of data determined to be valid in proportion to the amount of data collected. Data qualified as estimated are considered valid and rejected data are considered not valid. The majority of results were valid and four sediment benzoic acid results were rejected. Greater than 99% of data are valid; the completeness goal of 95% was met.

ED_006289_00002549-00014

DRAFT

4 Upland Analytical Results

The preliminary design for the habitat restoration includes some upland areas that will be excavated below existing elevations and other areas that will be left at grade with minimal change in elevation. The sampling design was developed to conduct waste characterization testing to inform management of excavated material during construction. It also includes analysis of the post-excavation surface interval to inform the habitat design. This section summarizes the analytical results for the upland samples, including discussion of any exceedances of applicable screening criteria. Table 1 includes a summary of upland soil borings, samples collected and analyzed, design subgrade elevations, and sample interval elevations.

4.1 Excavation Intervals

Excavation intervals were tested for TCLP metals, semivolatile organic compounds (SVOCs), polycyclic aromatic hydrocarbons (PAHs), PCB Aroclors, and total petroleum hydrocarbons (TPH; diesel and motor oil range). Table 3 presents results that are screened against MTCA Method A Unrestricted and Industrial Land Use cleanup levels, RCRA criteria, and the PCB remediation waste threshold of 50,000 µg/kg in TSCA. These data will inform excavation best management practices and options for soil management and disposal.

No TCLP metals concentrations exceeded RCRA thresholds. No SVOC or TPH concentrations exceeded MTCA or RCRA criteria within the excavated intervals. Benzo(a)pyrene and total carcinogenic PAH toxic equivalents quotient (TEQ) concentrations exceeded MTCA criteria in three samples: T25-SB02 exceeded industrial criteria for each, and T25-SB05 and T25-SB11 exceeded unrestricted criteria for each. PCBs were above industrial MTCA criteria in T25-SB11 (10,500 µg/kg) and above unrestricted MTCA criteria in T25-SB02 and T25-SB03 (1,130 and 1,400 µg/kg, respectively). No PCB concentrations in excavation intervals (composite samples) exceeded the TSCA PCB remediation waste threshold of 50,000 µg/kg.

The excavation interval at T25-SB-16 (0 to 10 feet bgs), the location of a proposed oil/water separator, was also tested for TCLP metals, SVOCs, PAHs, PCBs, and TPH. No TCLP metals concentrations exceeded RCRA thresholds. No SVOC, PAH, PCB or TPH concentrations exceeded MTCA or RCRA criteria at this location. The total PCB concentration was well below 50,000 µg/kg.

4.2 Post-Excavation Surface Intervals

Table 4 presents results of post-excavation intervals for borings T25-SB01 through T25-SB09 and T25-SB11, which are located within the restoration footprint of the conceptual habitat restoration design. Borings T25-SB10, T25-SB12, T25-SB13, and T25-SB15 are located in the potential habitat restoration expansion area; these borings were tested only in the 0- to 2-foot interval. T25-SB14 is located within the potential footprint for the stormwater pond and was tested only in the 3- to

ED_006289_00002549-00015

DRAFT

5-foot interval. Sample results for PCB delineation borings (i.e., T25-SB-03B, T25-SB-03D, T25-SB-03E, T25-SB-03F, and T25-SB-03G), also presented in Table 4, are discussed in Section 4.4.

Results were compared to the appropriate SMS Sediment Cleanup Objective (SCO) and Cleanup Screening Level (CSL) or Apparent Effects Threshold (AET) SCO and CSL, depending on total organic carbon (TOC) concentrations (i.e., for samples with TOC below 0.5% or above 3.5%, the AET criteria were used for screening), and to the Remedial Action Level used in the East Waterway Superfund Site Feasibility Study (EWRAL). Figure 3 shows sample intervals compared to SMS criteria for all analyses conducted. Figure 4 shows sample intervals analyzed for dioxin/furans compared to the EWRAL. Some additional intervals were tested below the excavation surface interval in order to further delineate the extent of elevated concentrations within the excavation surface. Additional intervals were analyzed for contaminants that exceeded SMS criteria in T25-SB02 (PAHs, PCBs), T25-SB03 (PCBs), and T25-SB09 (metals, SVOCs, PAHs, PCBs, dioxin/furans).

Post-excavation surface interval results were below the SCO and CSL at locations T25-SB01, T25-SB04, T25-SB05, T25-SB07, T25-SB10, T25-SB13, and T25-SB14. The remaining location results exceeded the SMS SCO or CSL for SVOCs, PAHs, PCBs, or dioxin/furans. Additional archive testing of deeper intervals was not conducted for the following borings with low post-excavation surface intervals:

- **T25-SB06:** The 0- to 2-foot interval contained phenanthrene slightly above SCO (130 milligrams per kilogram organic carbon normalized [mg/kg OC]) but had low TOC (0.83%).
- **T25-SB08:** The 12- to 14-foot interval contained benzoic acid above the CSL (120 µg/kg) and PCBs above SCO (25 mg/kg OC; 600 µg/kg).
- **T25-SB11:** The 9- to 11-foot interval contained PCBs above the CSL (720 mg/kg OC; 4,800 µg/kg).
- **T25-SB12** (outside current conceptual design footprint): The 0- to 2-foot interval contained diethyl phthalate above the SCO (358 µg/kg), fluoranthene above the SCO (2,330 µg/kg), phenanthrene above the AET CSL (3,810 µg/kg), and total low-molecular-weight PAHs above the AET CSL (5,800 µg/kg).
- **T25-SB15** (outside current conceptual design footprint): The 0- to 2-foot interval contained butylbenzyl phthalate above the AET SCO (73.5 µg/kg).

Archived intervals below the post-excavation surface intervals were triggered for additional analyses in the following three borings:

- **T25-SB02:** Fluoranthene, phenanthrene, and PCBs were above SCO in the 3- to 5-foot interval but were not above the SCO in the 5- to 7-foot interval.
- **T25-SB03:** In the 7.5- to 9.5-foot interval, phenanthrene was slightly above the SCO (105 mg/kg OC), PCBs were above the CSL and TSCA threshold (3,620 mg/kg OC; 62,300 µg/kg), and dioxin/furans were above the EWRAL (1,000 nanograms per kilogram [ng/kg]

ED_006289_00002549-00016

DRAFT

TEQ). PCBs were analyzed in the next three lower intervals and measured below the TSCA threshold at 48,000 µg/kg (9.04% TOC) in the 9.5- to 11.5-foot interval, 16,900 µg/kg in the 11.5- to 13.5-foot interval, and 346 µg/kg in the 14.2- to 16.2-foot interval. PCB results are presented in Figure 5.

- **T25-SB09:** In the design post-excavation surface interval (8 to 9.1 feet), only PCBs exceeded the AET SCO. However, additional testing was conducted below this interval due to the high PCB concentrations in T25-SB03, which is nearby. In the 9.1- to 10-foot interval, benzoic acid exceeded the CSL (9.31% TOC), PCBs exceeded the AET CSL (14,000 µg/kg), and dioxin/furans exceeded the EWRAL (310 ng/kg TEQ). PCBs in the 10- to 13-foot interval were below the SCO (7 mg/kg OC; 130 µg/kg).

Four samples from two locations were submitted for VOC analyses due to elevated PID readings and field observations, as described in Section 2.1. Results are presented in Table 5 and were either below detection or were detected at very low levels, with the exception of 4-isopropyltoluene. This compound was detected at 15.7 mg/kg in the 13.4- to 13.5-foot interval of location T25-SB07 and 72.9 mg/kg in the 9.9- to 10-foot interval of location T25-SB09. The intervals below these samples were also analyzed for VOCs and the 4-isopropyltoluene concentrations were significantly lower than those in the intervals above them. These concentrations bound the elevated 4-isopropyltoluene vertically, and low PID readings in adjacent borings bound it laterally.

4.3 Post-Excavation Substrate

Figure 6 shows the planned project elevation changes and locations of the cross sections presented in Figures 6a through 6c. These cross sections show multiple cores and borings historically collected and as part of this investigation (Appendix A). The cross sections depict the existing grade, proposed grade, proposed subgrade (equivalent to the post-excavation surface), approximate thickness of wood debris, and the native sediment elevation based on boring and sediment core observations. Cross sections run generally northwest to southeast and are labeled A through F from the south to north areas. Figure 3 also shows wood debris, design subgrade, and native sediment elevation in comparison to the chemical testing results. This information is also summarized in Table 6.

Native contact ranged generally from -3.6 feet MLLW at T25-SB06 to +1.7 feet MLLW at T25-SB05 in the design area. The one exception was at location T25-SB02, which encountered native material at -6 feet MLLW. The native elevation was fairly consistent across all borings and significantly below the proposed subgrade surface.

Wood debris was observed in the following borings:

- **T25-SB02:** Wood debris was observed from 17.7 to 18.8 feet, immediately above the native surface. The post-excavation design interval is 3 to 5 feet, which contains SCO exceedances.

ED_006289_00002549-00017

DRAFT

The 5- to 7-foot interval is below SCO, which is 12.7 feet above the wood debris layer and 12 feet above the native surface.

- **T25-SB03:** Wood debris was observed from 13.5 to 14.2 feet and the native surface was at 19 feet. The post-excavation design interval is 7.5 to 9.5 feet; however, that interval and the two intervals below it (9.5 to 11.5 feet and 11.5 to 13.5 feet) exceeded the CSL for PCBs. The 14.2- to 16.2-foot interval was below the wood debris layer and below the PCB CSL but above the SCO. No further testing was conducted.
- **T25-SB-03B**: A wood debris interval was not observed, and the native surface was observed at 18.3 feet. The post-excavation design interval is 8 to 9 feet; however, that interval exceeded the SCO for PCBs. The interval above and below it (7 to 8 feet and 9 to 10 feet) exceeded the CSL for PCBs. No further testing was conducted.
- **T25-SB-03C**: Wood debris was observed from 14.6 to 15 feet and the native surface was at 16.6 feet. The post-excavation design depth is 7.6 feet. No testing was conducted in this boring.
- **T25-SB-03D**: Wood debris was observed from 15 to 16 feet, and the native surface was observed at 18.8 feet. The post-excavation design surface is 8 to 9 feet; however, that interval exceeded the SCO for PCBs. The interval above and below it (7 to 8 feet and 9 to 10 feet) exceeded the CSL for PCBs. No further testing was conducted.
- **T25-SB-03E**: Wood debris was observed from 10 to 14 feet, and the native surface was observed at 17.1 feet. The post-excavation design surface is 8 to 9 feet; however, that interval and the interval below it (9 to 10 feet) exceeded the CSL and TSCA threshold for PCB remediation waste. Additionally, sample intervals from 7 to 8 feet and 10 to 11 feet exceeded the CSL for PCBs. No further testing was conducted.
- **T25-SB-03F**: Wood debris was observed from 10 to 15 feet, and the native surface was observed at 17.9 feet. The post-excavation design surface is 8 to 9 feet and had no exceedances. The 7- to 8-foot interval exceeded the CSL for PCBs. The 9- to 10-foot interval exceeded the CSL and TSCA threshold for PCB remediation waste. The 10- to 11-foot interval exceeded the SCO for PCBs. No further testing was conducted.
- **T25-SB-03G**: Wood debris was observed from 14.7 to 15 feet, and the native surface was observed at 17.7 feet. The post-excavation design surface is 8 to 9 feet; however, that interval and the interval above and below it (7 to 8 feet and 9 to 10 feet) exceeded the CSL for PCBs. No further testing was conducted.
- **T25-SB-03H:** Wood debris was observed from 11.3 to 15 feet, and the native surface was observed at 17.3 feet. The post-excavation design depth is 8.3 feet. No testing was conducted in this boring.
- **T25-SB06:** Wood debris was observed from 12 to 14 feet, directly above the native surface at 14 feet. The post-excavation design interval is 0 to 2 feet, which is 10 feet above the wood

ED_006289_00002549-00018

DRAFT

debris layer and 12 feet above the native surface. The 0- to 2-foot interval was slightly above the SCO for phenanthrene. No further testing was conducted.

- **T25-SB07:** Wood debris was observed from 13.5 to 15 feet, directly above the native surface at 15 feet. The excavation design surface is 8 to 10 feet, which was below the SCO. The clean excavation design surface is 5.5 feet above the wood debris interval.
- **T25-SB08:** Wood debris was observed from 14.7 to 15.3 feet and the native surface was observed at 18.2 feet. The post-excavation design surface interval is 12 to 14 feet, which is just above the wood debris interval, above the CSL for benzyl alcohol, and above the SCO for PCBs. No further testing was conducted.
- **T25-SB09:** Wood debris was observed from 13 to 15 feet, directly above the native surface at 15 feet. The post-excavation design surface interval was 8 to 9.1 feet and was above the SCO for PCBs. The interval directly below that was above the CSL for benzoic acid and PCBs. In addition, the dioxin/furan TEQ value was above the EWRAL. The 10- to 13-foot interval was below the SCO for PCBs, which is directly above the wood debris layer.
- **T25-SB10:** Wood debris was observed from 13.5 to 15 feet, directly above the native surface. The post-excavation design surface interval is 0 to 2 feet, which was below the SCO.
- **T25-SB11:** A layer of wood debris was observed at 11 to 12.5 feet, and the native surface was at 19 feet. The post-excavation design surface interval was 9 to 11 feet, which was above the CSL for PCBs and immediately above the wood debris layer. No additional testing was conducted.
- **T25-SB-16**: Wood debris was observed from 10 to 12.6 feet and the native surface was observed at 19 feet. The post-excavation design interval is 10 to 11 feet. Only the excavation interval of 0 to 10 feet was analyzed. No additional testing was conducted.

4.4 Upland PCB Delineation

Supplemental soil borings were collected in August 2020 to characterize the lateral and vertical extent of PCB concentrations exceeding the TSCA PCB remediation waste threshold of 50,000 µg/kg encountered during the first phase of the investigation at upland boring location T25-SB03.

Ten step-out PCB delineation borings (i.e., T-25-SB03A to T25-SB03G) were performed at eight locations in the area surrounding T25-SB03 (Figure 2). Three samples per boring in the four locations closest to T25-SB03 (i.e., T25-SB-03B, -03D, -03E, and -03G) were initially submitted for PCB analysis, starting at 7 to 8 feet, just above where PCBs were highest at T25-SB03, and extending to 10 feet, just below where PCBs were highest at T25-SB03. Additional samples were triggered for PCB analysis at borings T25-SB-03E and T25-SB-03F following review of preliminary PCB data. Sample results for PCB delineation borings (i.e., T25-SB-03B, T25-SB-03D, T25-SB-03E, T25-SB-03F, and T25-SB-03G) are presented in Table 4 and shown in Figure 5.

ED_006289_00002549-00019

DRAFT

Total PCB concentrations were below 50,000 µg/kg at T25-SB-03B (north of T25-SB03), T25-SB-03D (west of T25-SB03), and at T25-SB-03G (south of T25-SB03). PCB concentrations exceeded 50,000 µg/kg in samples from the two stations east (landward) of T25-SB03, as follows:

- **T25-SB-03E**: Total PCB concentrations in the 8- to 9-foot interval and 9- to 10-foot interval (279,100 µg/kg and 644,300 µg/kg, respectively) exceeded 50,000 µg/kg. PCB concentrations in the sample intervals above (7 to 8 feet) and below (10 to 11 feet) were both below 50,000 µg/kg.
- **T25-SB-03F**: Total PCB concentrations in the 9- to 10-foot interval (68,610 µg/kg) exceeded 50,000 µg/kg. PCB concentrations in the sample intervals above (7 to 8 feet and 8 to 9 feet) and below (10 to 11 feet) were below 50,000 µg/kg.

e Port will coordinate with the EPA Region 10 PCB Coordinator during habitat restoration design to characterize, remove, and dispose of PCB remediation waste in accordance with TSCA regulations (40 CFR 761.61).

ED_006289_00002549-00020

DRAFT

5 Sediment Analytical Results

Nearshore sediments will be dredged as part of the habitat restoration project. ~~Like the upland areas, t~~he sampling design included characterization testing of planned dredge ~~material~~ and of the post-dredge (Z-layer) surface for five cores (T25-SC01 through T25-SC05) ~~and~~ four additional cores (T25-SC06 through T25-SC09) to support further contaminant nature and extent characterization ~~where cores were not collected as part of the East Waterway Superfund Site investigation~~. All results were compared to SMS; however, only ~~a selection of~~ samples (dredge intervals from T25-SC02, T25-SC03, and T25-SC04) were screened for waste disposal ~~like the upland excavated material~~, ~~b~~ecause the sediment portion of the site is part of the East Waterway Superfund Site, ~~which are~~ presumed ~~to~~ be sent to an upland landfill once removed. Some additional sediment intervals were analyzed below the post-dredge surface based on coordination with EPA to further map the nature and extent of contamination in this area. This section summarizes the analytical results for the nearshore samples, including discussion of any exceedances of applicable screening criteria. Table 2 includes a summary of sediment cores, samples collected and analyzed, design subgrade elevation, and sample interval elevation.

5.1 Dredge Intervals

The QAPP included five sediment cores (T25-SC01 through T25-SC05) in the preliminary design dredge areas. As discussed in Section 2.2, these cores were collected farther out from the target locations due to the presence of substantial debris. Cores T25-SC01 and T25- SC05 were collected outside of the dredge area and therefore did not have any sample representative of waste disposal material. In addition, T25-SC01 encountered refusal due to debris and was able to collect no more than 2 feet of sediment. The excavation material from cores T25-SC02, T25-SC03, and T25-SC04 were tested for TCLP metals, SVOCs, PAHs, and PCB Aroclors. TPH was analyzed in samples from cores T25-SC03 and T25-SC04. All samples were screened against RCRA criteria and results are presented in Table 7. No concentrations were above RCRA criteria. Figure 3 shows wood debris, design subgrade, and native sediment elevation alongside dredge interval chemical testing results (Table 7) and post-dredge and nature and extent chemical results (Table 8). This information is also summarized in Table 9, along with estimated dredge depth.

5.2 Post-Dredge Surface Intervals

Cores T25-SC02 and T25-SC04 had sufficient penetration to acquire Z-layer samples that provide information on post-dredge ~~sample~~ concentrations. Table 8 presents the full SMS suite of analyses plus dioxin/furans analyzed on the Z-layer samples ~~and any other~~ results ~~that were archived and~~

ED_006289_00002549-00021

DRAFT

~~tested~~ following consultation with EPA. The following is a summary of the results of cores intended to best characterize post-dredge conditions:

- **T25-SC01:** Due to debris and refusal, only 2 feet of sediment was collected farther offshore than the target location. Following consultation with EPA, no testing was conducted at T25-SC01.
- **T25-SC02:** The Z-layer sample results (4.6 to 5.6 feet) were below SMS criteria with the exception of a slight SCO exceedance of acenaphthene. Following consultation with EPA, no further testing was completed on deeper samples from T25-SC02.
- **T25-SC03:** Core T25-SC03 did not achieve the post-dredge surface (6.9 feet). The bottom-most layer sample results (5.7 to 6.2 feet) were below all SMS and the dioxin/furan EWRAL. To better define the extent of contamination, the uppermost poorly graded sand interval was tested for the full suite of testing (see Section 5.3).
- **T25-SC04:** The Z-layer sample results (4 to 5 feet) exceeded the CSL for mercury and total PCBs, exceeded the SCO for 1,2,4-trichlorobenzene, and exceeded the EWRAL for dioxin/furan TEQ. Each of the two intervals below the Z-layer (5 to 6 feet and 6 to 6.7 feet) were subsequently analyzed and exceeded either the SCO or CSL for several PAHs and PCBs and exceeded the dioxin/furan EWRAL. Concentrations decreased with depth, but no additional intervals were available to verify the bottom of contamination.
- **T25-SC05:** This core was located outside of the dredge design area and is discussed in Section 5.3.

5.3 Nature and Extent

Cores T25-SC06 through T25-SC09 were collected to provide additional information on the nature and extent of contamination within and adjacent to the preliminary habitat design footprint. When possible, cores within the project footprint were collected deeper than the Z-layer elevation. Cores T25-SC07, T25-SC08, and T25-SC09 were located outside of the project boundary. These cores were sampled in 1-foot increments from top to bottom and were analyzed using a tiered approach. Following review of preliminary data, in consultation with EPA, the next interval down was triggered for analyses that exceeded SMS in the interval above. Besides nature and extent testing of cores T25-SC06 through T25-SC09, additional testing was conducted in T25-SC03 to refine the vertical extent of contamination above the post-dredge elevation and in T25-SC05, which did not reach the design elevation. The following is a summary of the results of nature and extent testing presented in Table 8:

- **T25-SC03:** Following testing of the Z-layer from 5.7 to 6.2 feet, the uppermost poorly graded sand interval was tested for the full suite of ~~testing~~. The sample interval from 3.7 to 4.7 feet contained 2,4-dimethylphenol, several PAHs, and PCBs above the SCO, plus anthracene above the CSL. The sample interval from 4.7 to 5.7 feet contained fluoranthene, phenanthrene, and

ED_006289_00002549-00022

DRAFT

PCBs above the AET SCO and CSL. The vertical extent of contamination was therefore located at the original Z-layer (5.7 to 6.2 feet).

- **T25-SC05:** The uppermost interval of this core (0 to 1 feet) contained PCBs above the SCO. The only other interval in this core was collected (1 to 2 feet), which also contained PCBs above the SCO.
- **T25-SC06:** T25-SC06 is located slightly outside the dredge boundary. The equivalent Z-layer elevation from the nearby area within the dredge boundary was tested (1.5 to 2.5 feet), which exceeded the CSL for 1,2,4-trichlorobenzene, 1,4-dichlorobenzene, pyrene, and total PCBs. Fluoranthene, total benzofluoranthenes, and total high-molecular-weight PAHs exceeded the SCO, and dioxin/furan TEQ exceeded the EWRAL. The lowest interval (2.5 to 3.3 feet) was triggered for analysis and exceeded the CSL for total PCBs, 1,2,4-trichlorobenzene, and 1,4-dichlorobenzene, and exceeded the dioxin/furan TEQ EWRAL. No additional deeper intervals were available for subsequent testing. Wood debris was present from 1.5 to 3.3 feet (Table 9).
- **T25-SC07:** T25-SC07 was located outside the dredge boundary. Testing of the uppermost interval was conducted (0 to 1 foot), which contained elevated PCBs above the SCO and dioxin/furans above the EWRAL. Anthropogenic debris was present at 3.5 feet, so the next interval below was tested (5 to 6 feet), which contained elevated anthracene above the CSL, fluoranthene above SCO, PCBs above SCO AET, and dioxin/furans above the EWRAL. The next interval below (6 to 7 feet) contained elevated mercury above the CSL, elevated PCBs, and dioxin/furans, but not PAHs. No deeper sample intervals were available. Each of the lowest intervals contained 15% TOC.
- **T25-SC08:** T25-SC08 is located outside the dredge boundary. Testing of the uppermost interval (0 to 1 foot) contained elevated PAHs above the SCO and CSL, PCBs above SCO, and dioxin/furans above the EWRAL. A hydrocarbon-like odor was present at 6 feet, so the next interval below the odor was tested (7 to 8 feet), which contained elevated 2,4-dimethylphenol above the CSL, numerous PAHs above the CSL, PCBs above the SCO, and dioxin/furans above the EWRAL. PAH exceedances were present in each of the next two intervals down (8 to 9 feet and 9 to 10 feet), but no other exceedances were below 8 feet.
- **T25-SC09:** T25-SC09 is located outside the dredge boundary. Elevated concentrations were present for mercury above CSL and PAHs above the CSL in the 0- to 1-foot, 2- to 3-foot, and 3- to 4-foot intervals. Dioxin/furans were present above the EWRAL in the 0- to 1-foot interval but not in the 2- to 3-foot interval or 3- to 4-foot interval.

ED_006289_00002549-00023

DRAFT

6 Geotechnical Results

Geotechnical testing for index parameters was conducted on 24 samples from four stations: T25-SB02, T25-SB03, T25-SB04A, and T25-SB05. The following sections provide a summary of the results for moisture content, grain size, specific gravity, and density. Results are provided in Table 10.

6.1 Moisture Content

Moisture content was tested on 21 laboratory samples (Table 10). The average moisture content was 27.5%, ranging from 8.9% to 38.3%.

6.2 Grain Size

Sieve analysis was conducted on 22 laboratory samples (excluding two duplicates; Table 10). Of these samples, 19 were determined to consist mainly of coarse-grained particles (sand and gravel) and three of fine-grained particles (silt and clay). Two of the three fine-grained samples were located at depth (below 40 feet) in boring T25-SB03, while the third was shallow at T25-SB05 (8 to 9 feet). Gravel was detected in only four samples that exceeded 5% and occurred exclusively in the near-surface samples having depth intervals fewer than 10 feet. All samples were determined to be non-plastic.

6.3 Specific Gravity

Specific gravity of upland boring testing is presented in Table 10. Four sediment samples were also tested for specific gravity (Table 8). Upland specific gravities ranged between 2.60 and 2.74, with an average of 2.67 for 22 samples tested. Sediment specific gravities ranged from 2.36 to 2.65.

6.4 Density

Wet density and dry density test results are presented in Table 10. Twenty-one samples had an average dry density of 91.4 pounds per cubic foot (pcf), with a minimum of 77.5 pcf and a maximum of 118.6 pcf. Those same samples had an average wet density of 116 pcf, with a minimum of 105 pcf and a maximum of 129 pcf.

ED_006289_00002549-00024

DRAFT

7 Next Steps

In 2021, the Port anticipates the following actions associated with the T-25 habitat restoration project:

- Coordinating EPA Region 10 Comprehensive Environmental Response, Compensation, and Liability Act to plan and conduct supplemental sampling in sediment areas
- Coordinating with the EPA Region 10 PCB Coordinator to characterize, remove, and dispose of PCB remediation waste in accordance with TSCA
- Installing a new oil/water separator near the southern property boundary (i.e., at T25-SB-16)
- Conducting habitat restoration design activities

ED_006289_00002549-00025

DRAFT

8 References

Anchor QEA and Windward (Anchor QEA, LLC, and Windward Environmental, LLC), 2019. *Quality Assurance Project Plan: Soil and Subsurface Sediment Characterization*. Prepared for Port of Seattle, Seattle, Washington. January 2019.

Anchor QEA, 2020. *Terminal 25 Phase 2 Quality Assurance Project Plan Addendum*. Prepared for the Port of Seattle. July 2020.

EPA (U.S. Environmental Protection Agency), 2002. Guidance for Quality Assurance Project Plans. QA/G-5. EPA/240/R-02/009. Office of Environmental Information, U.S. Environmental Protection Agency, Washington, DC.

EPA, 2016. National Functional Guidelines for High Resolution Superfund Methods Data Review. Office of Superfund Remediation and Technology Innovation. EPA-542-B-16-001. April 2016.

EPA, 2017a. National Functional Guidelines for Inorganic Superfund Methods Data Review. Office of Superfund Remediation and Technology Innovation. EPA-540-R-2017-001; OLEM 9355.0-135. January 2017.

EPA, 2017b. National Functional Guidelines for Organic Superfund Methods Data Review. Office of Superfund Remediation and Technology Innovation. EPA-540-R-2017-002; OLEM 9355.0-136. January 2017.

Windward and Anchor QEA, 2014. *East Waterway Operable Unit Supplemental Remedial Investigation and Feasibility Study, Final Supplemental Remedial Investigation Report*. Prepared for U.S. Environmental Protection Agency. January 2014.

ED_006289_00002549-00026

Tables

Table 1
Upland Soil Boring Samples and Analyses

Location ID	Coordinates		Elevation (ft MLLW)	Design Subgrade Elevation (ft MLLW)	Estimated Excavation Depth (ft bgs)	Sample ID	Sample Interval (ft bgs)	Designation	Analyses								
	Easting	Northing							Metals	SVOCs	PAHs	D/F	PCBs	TCLP Metals	TPH	TOC	TS
T25-SB01	1267861	212686	15.977	6.2	9.9	T25-SB01-0-10	0 - 10	Excavation		X	X		X	X	X	X	X
						T25-SB01-10-12	10 - 12	Post-Excavation Surface	X	X	X	X	X			X	X
						T25-SB01-12-14	12 - 14	Archive									
						T25-SB01-14-16	14 - 16	Archive									
						T25-SB01-16-18	16 - 18	Archive									
						T25-SB01-18-20	18 - 20	Archive									
T25-SB02	1267649	212488	12.38	9.3	2.7	T25-SB02-0-1.5	0 - 1.5	Geotech[1]									
						T25-SB02-0-3	0 - 3	Excavation		X	X		X	X	X	X	X
						T25-SB02-3-5	3 - 5	Post-Excavation Surface	X	X	X	X	X			X	X
						T25-SB02-5-7	5 - 7	Triggered archive			X		X			X	X
						T25-SB02-7-9	7 - 9	Archive									
						T25-SB02-9-11	9 - 11	Archive									
						T25-SB02-10-11.5	10 - 11.5	Geotech[1]									
						T25-SB02-11-13	11 - 13	Archive									
						T25-SB02-13-15	13 - 15	Archive									
						T25-SB02-15-16.5	15 - 16.5	Geotech[1]									
						T25-SB02-15-17	15 - 17	Archive									
						T25-SB02-17-19	17 - 19	Archive									
						T25-SB02-18-18.1	18 - 18.1	Archive									
						T25-SB02-19-21	19 - 21	Archive									
						T25-SB02-20-20.1	20 - 20.1	Archive									
						T25-SB02-20-21.5	20 - 21.5	Geotech[1]									
						T25-SB02-21-23	21 - 23	Archive									
T25-SB03	1267739	212415	15.83	8.0	7.6	T25-SB03-1-2.5	1 - 2.5	Geotech[1]									
						T25-SB03-5-6.5	5 - 6.5	Geotech[1]									
						T25-SB03-0-7.5	0 - 7.5	Excavation		X	X		X	X	X	X	X
						T25-SB03-7.5-9.5	7.5 - 9.5	Post-Excavation Surface	X	X	X	X	X			X	X
						T25-SB03-9.5-11.5	9.5 - 11.5	Triggered archive					X			X	X
						T25-SB03-11.5-13.5	11.5 - 13.5	Triggered archive					X				X
						T25-SB03-14.2-16.2	14.2 - 16.2	Triggered archive					X				X
						T25-SB03-15-16.5	15 - 16.5	Geotech[1]									
						T25-SB03-16.2-18.2	16.2 - 18.2	Archive									
						T25-SB03-18.2-20.2	18.2 - 20.2	Archive									
						T25-SB03-20-21.5	20 - 21.5	Geotech[1]									
						T25-SB03-25-26.5	25 - 26.5	Geotech[1]									
						T25-SB03-30-31.5	30 - 31.5	Archive									
						T25-SB03-40-41.5	40 - 41.5	Geotech[1]									
						T25-SB03-44-45	44 - 45	Archive									
						T25-SB03-45-47	45 - 47	Geotech[1]									
						T25-SB03-50-51.5	50 - 51.5	Geotech[1]									
						T25-SB03-55-56.5	55 - 56.5	Geotech[1]									
						T25-SB03-59-60.5	59 - 60.5	Geotech[1]									
						T25-SB03-65-66.5	65 - 66.5	Archive									
						T25-SB03-70-71.5	70 - 71.5	Geotech[1]									
						T25-SB03-75-76.5	75 - 76.5	Geotech[1]									

Table 1
Upland Soil Boring Samples and Analyses

Location ID	Coordinates		Elevation (ft MLLW)	Design Subgrade Elevation (ft MLLW)	Estimated Excavation Depth (ft bgs)	Sample ID	Sample Interval (ft bgs)	Designation	Analyses								
	Easting	Northing							Metals	SVOCs	PAHs	D/F	PCBs	TCLP Metals	TPH	TOC	TS
T25-SB-03A	1267751	212463	14.9	7.1	7.8	T25-SB-03A-0-1	0 - 1	Archive									
						T25-SB-03A-1-2	1 - 2	Archive									
						T25-SB-03A-2-3	2 - 3	Archive									
						T25-SB-03A-3-4	3 - 4	Archive									
						T25-SB-03A-4-5	4 - 5	Archive									
						T25-SB-03A-5-6	5 - 6	Archive									
						T25-SB-03A-6-7	6 - 7	Archive									
						T25-SB-03A-7-8	7 - 8	Archive									
						T25-SB-03A-8-9	8 - 9	Archive; Post-Excavation Surface									
						T25-SB-03A-9-10	9 - 10	Archive									
						T25-SB-03A-10-11	10 - 11	Archive									
						T25-SB-03A-11-12	11 - 12	Archive									
						T25-SB-03A-13-14	13 - 14	Archive									
						T25-SB-03A-14-15	14 - 15	Archive									
						T25-SB-03A-15-16	15 - 16	Archive									
						T25-SB-03A-16-17	16 - 17	Archive									
						T25-SB-03A-17-18	17 - 18	Archive									
						T25-SB-03A-18-19	18 - 19	Archive									
						T25-SB-03A-19-20	19 - 20	Archive									
T25-SB-03B	1267749	212439	15.3	7.7	7.6	T25-SB-03B-0-1	0 - 1	Archive									
						T25-SB-03B-1-2	1 - 2	Archive									
						T25-SB-03B-2-3	2 - 3	Archive									
						T25-SB-03B-3-4	3 - 4	Archive									
						T25-SB-03B-4-5	4 - 5	Archive									
						T25-SB-03B-5-6	5 - 6	Archive									
						T25-SB-03B-6-7	6 - 7	Archive									
						T25-SB-03B-7-8	7 - 8	PCB Delineation					X			X	X
						T25-SB-03B-8-9	8 - 9	PCB Delineation; Post-Excavation Surface					X			X	X
						T25-SB-03B-9-10	9 - 10	PCB Delineation					X			X	X
						T25-SB-03B-13-14	13 - 14	Archive									
						T25-SB-03B-14-15	14 - 15	Archive									
						T25-SB-03B-15-16	15 - 16	Archive									
						T25-SB-03B-16-17	16 - 17	Archive									
						T25-SB-03B-17-18	17 - 18	Archive									
						T25-SB-03B-18-19	18 - 19	Archive									
						T25-SB-03B-19-20	19 - 20	Archive									
T25-SB-03BB	1267746	212439	15.4	7.7	7.6	T25-SB-03BB-10-11	10 - 11	Archive									
						T25-SB-03BB-11-12	11 - 12	Archive									
						T25-SB-03BB-12-13	12 - 13	Archive									

Table 1
Upland Soil Boring Samples and Analyses

Location ID	Coordinates		Elevation (ft MLLW)	Design Subgrade Elevation (ft MLLW)	Estimated Excavation Depth (ft bgs)	Sample ID	Sample Interval (ft bgs)	Designation	Analyses								
	Easting	Northing							Metals	SVOCs	PAHs	D/F	PCBs	TCLP Metals	TPH	TOC	TS
T25-SB-03C	1267689	212421	15.8	8.2	7.6	T25-SB-03C-0-1	0 - 1	Archive									
						T25-SB-03C-1-2	1 - 2	Archive									
						T25-SB-03C-2-3	2 - 3	Archive									
						T25-SB-03C-3-4	3 - 4	Archive									
						T25-SB-03C-4-5	4 - 5	Archive									
						T25-SB-03C-5-6	5 - 6	Archive									
						T25-SB-03C-6-7	6 - 7	Archive									
						T25-SB-03C-7-8	7 - 8	Archive									
						T25-SB-03C-8-9	8 - 9	Archive; Post-Excavation Surface									
						T25-SB-03C-9-10	9 - 10	Archive									
						T25-SB-03C-10-11	10 - 11	Archive									
						T25-SB-03C-11-12	11 - 12	Archive									
						T25-SB-03C-12-13	12 - 13	Archive									
						T25-SB-03C-13-14	13 - 14	Archive									
						T25-SB-03C-14-15	14 - 15	Archive									
						T25-SB-03C-15-16	15 - 16	Archive									
						T25-SB-03C-16-17	16 - 17	Archive									
						T25-SB-03C-17-18	17 - 18	Archive									
						T25-SB-03C-18-19	18 - 19	Archive									
						T25-SB-03C-19-20	19 - 20	Archive									
T25-SB-03D	1267718	212419	15.6	8.0	7.6	T25-SB-03D-0-1	0 - 1	Archive									
						T25-SB-03D-1-2	1 - 2	Archive									
						T25-SB-03D-2-3	2 - 3	Archive									
						T25-SB-03D-3-4	3 - 4	Archive									
						T25-SB-03D-4-5	4 - 5	Archive									
						T25-SB-03D-5-6	5 - 6	Archive									
						T25-SB-03D-6-7	6 - 7	Archive									
						T25-SB-03D-7-8	7 - 8	PCB Delineation					X			X	X
						T25-SB-03D-8-9	8 - 9	PCB Delineation; Post-Excavation Surface					X			X	X
						T25-SB-03D-9-10	9 - 10	PCB Delineation					X			X	X
						T25-SB-03D-14-15	14 - 15	Archive									
						T25-SB-03D-16-17	16 - 17	Archive									
						T25-SB-03D-17-18	17 - 18	Archive									
						T25-SB-03D-18-19	18 - 19	Archive									
						T25-SB-03D-19-20	19 - 20	Archive									
T25-SB-03DD	1267719	212417	15.6	8.0	7.6	T25-SB-03DD-11-12	11 - 12	Archive									
						T25-SB-03DD-12-13	12 - 13	Archive									
						T25-SB-03DD-13-14	13 - 14	Archive									
T25-SB-03E	1267772	212409	15.9	8.0	7.9	T25-SB-03E-0-1	0 - 1	Archive									
						T25-SB-03E-1-2	1 - 2	Archive									
						T25-SB-03E-2-3	2 - 3	Archive									
						T25-SB-03E-3-4	3 - 4	Archive									
						T25-SB-03E-4-5	4 - 5	Archive									
						T25-SB-03E-5-6	5 - 6	Archive									
						T25-SB-03E-6-7	6 - 7	Archive									
						T25-SB-03E-7-8	7 - 8	PCB Delineation					X			X	X
						T25-SB-03E-8-9	8 - 9	PCB Delineation; Post-Excavation Surface					X			X	X
						T25-SB-03E-9-10	9 - 10	PCB Delineation					X			X	X
						T25-SB-03E-10-11	10 - 11	PCB Delineation					X			X	X
						T25-SB-03E-11-12	11 - 12	Archive									
						T25-SB-03E-12-13	12 - 13	Archive									
						T25-SB-03E-13-14	13 - 14	Archive									
						T25-SB-03E-14-15	14 - 15	Archive									
						T25-SB-03E-15-16	15 - 16	Archive									
						T25-SB-03E-16-17	16 - 17	Archive									
						T25-SB-03E-17-18	17 - 18	Archive									
						T25-SB-03E-18-19	18 - 19	Archive									
						T25-SB-03E-19-20	19 - 20	Archive									

Table 1
Upland Soil Boring Samples and Analyses

Location ID	Coordinates		Elevation (ft MLLW)	Design Subgrade Elevation (ft MLLW)	Estimated Excavation Depth (ft bgs)	Sample ID	Sample Interval (ft bgs)	Designation	Analyses								
	Easting	Northing							Metals	SVOCs	PAHs	D/F	PCBs	TCLP Metals	TPH	TOC	TS
T25-SB-03F	1267796	212404	15.9	8.0	8.0	T25-SB-03F-0-1	0 - 1	Archive									
						T25-SB-03F-1-2	1 - 2	Archive									
						T25-SB-03F-2-3	2 - 3	Archive									
						T25-SB-03F-3-4	3 - 4	Archive									
						T25-SB-03F-4-5	4 - 5	Archive									
						T25-SB-03F-5-6	5 - 6	Archive									
						T25-SB-03F-6-7	6 - 7	Archive									
						T25-SB-03F-7-8	7 - 8	PCB Delineation					X			X	X
						T25-SB-03F-8-9	8 - 9	PCB Delineation; Post-Excavation Surface					X			X	X
						T25-SB-03F-9-10	9 - 10	PCB Delineation					X			X	X
						T25-SB-03F-10-11	10 - 11	PCB Delineation					X			X	X
						T25-SB-03F-11-12	11 - 12	Archive									
						T25-SB-03F-12-13	12 - 13	Archive									
						T25-SB-03F-13-14	13 - 14	Archive									
						T25-SB-03F-14-15	14 - 15	Archive									
						T25-SB-03F-15-16	15 - 16	Archive									
						T25-SB-03F-16-17	16 - 17	Archive									
						T25-SB-03F-17-18	17 - 18	Archive									
						T25-SB-03F-18-19	18 - 19	Archive									
						T25-SB-03F-19-20	19 - 20	Archive									
T25-SB-03G	1267741	212387	16.1	8.0	8.1	T25-SB-03G-0-1	0 - 1	Archive									
						T25-SB-03G-1-2	1 - 2	Archive									
						T25-SB-03G-2-3	2 - 3	Archive									
						T25-SB-03G-3-4	3 - 4	Archive									
						T25-SB-03G-4-5	4 - 5	Archive									
						T25-SB-03G-5-6	5 - 6	Archive									
						T25-SB-03G-6-7	6 - 7	Archive									
						T25-SB-03G-7-8	7 - 8	PCB Delineation					X			X	X
						T25-SB-03G-8-9	8 - 9	PCB Delineation; Post-Excavation Surface					X			X	X
						T25-SB-03G-9-10	9 - 10	PCB Delineation					X			X	X
						T25-SB-03G-10-11	10 - 11	Archive									
						T25-SB-03G-11-12	11 - 12	Archive									
						T25-SB-03G-12-13	12 - 13	Archive									
						T25-SB-03G-13-14	13 - 14	Archive									
						T25-SB-03G-14-15	14 - 15	Archive									
						T25-SB-03G-15-16	15 - 16	Archive									
						T25-SB-03G-16-17	16 - 17	Archive									
						T25-SB-03G-17-18	17 - 18	Archive									
						T25-SB-03G-18-19	18 - 19	Archive									
						T25-SB-03G-19-20	19 - 20	Archive									
T25-SB-03H	1267735	212355	16.3	8.0	8.3	T25-SB-03H-0-1	0 - 1	Archive									
						T25-SB-03H-1-2	1 - 2	Archive									
						T25-SB-03H-2-3	2 - 3	Archive									
						T25-SB-03H-3-4	3 - 4	Archive									
						T25-SB-03H-4-5	4 - 5	Archive									
						T25-SB-03H-5-6	5 - 6	Archive									
						T25-SB-03H-6-7	6 - 7	Archive									
						T25-SB-03H-7-8	7 - 8	Archive									
						T25-SB-03H-8-9	8 - 9	Archive; Post-Excavation Surface									
						T25-SB-03H-9-10	9 - 10	Archive									
						T25-SB-03H-10-11	10 - 11	Archive									
						T25-SB-03H-11-12	11 - 12	Archive									
						T25-SB-03H-12-13	12 - 13	Archive									
						T25-SB-03H-13-14	13 - 14	Archive									
						T25-SB-03H-14-15	14 - 15	Archive									
						T25-SB-03H-15-16	15 - 16	Archive									
						T25-SB-03H-16-17	16 - 17	Archive									
						T25-SB-03H-17-18	17 - 18	Archive									
						T25-SB-03H-18-19	18 - 19	Archive									
						T25-SB-03H-19-20	19 - 20	Archive									

Table 1
Upland Soil Boring Samples and Analyses

Location ID	Coordinates		Elevation (ft MLLW)	Design Subgrade Elevation (ft MLLW)	Estimated Excavation Depth (ft bgs)	Sample ID	Sample Interval (ft bgs)	Designation	Analyses								
	Easting	Northing							Metals	SVOCs	PAHs	D/F	PCBs	TCLP Metals	TPH	TOC	TS
T25-SB04A	1267516	212258	16.42	5.8	10.8	T25-SB04A-0-11	0 - 11	Excavation		X	X		X	X	X	X	X
						T25-SB04A-5-6.5	5 - 6.5	Geotech[1]									
						T25-SB04A-9-9.7	9 - 9.7	Geotech[1]									
						T25-SB04A-11-13	11 - 13	Archive									
						T25-SB04A-15-16.5	15 - 16.5	Geotech[1]									
						T25-SB04A-20-21.5	20 - 21.5	Geotech[1]									
						T25-SB04A-24-25	24 - 25	Geotech[1]									
T25-SB04B	1267525	212254	16.493	5.8	10.8	T25-SB04B-11-13	11 - 13	Post-Excavation Surface	X	X	X	X	X			X	X
						T25-SB04B-12.3-12.4	12.3 - 12.4	Archive									
						T25-SB04B-13-15	13 - 15	Archive									
						T25-SB04B-15-17	15 - 17	Archive									
						T25-SB04B-15.7-15.8	15.7 - 15.8	Archive									
						T25-SB04B-17-19	17 - 19	Archive									
						T25-SB04B-19-21	19 - 21	Archive									
T25-SB05	1267696	212720	10.676	6.9	3.7	T25-SB05-0-4	0 - 4	Excavation		X	X		X	X	X	X	X
						T25-SB05-4-6	4 - 6	Post-Excavation Surface	X	X	X	X	X			X	X
						T25-SB05-6-8	6 - 8	Archive									
						T25-SB05-8-9	8 - 9	Geotech[1]									
						T25-SB05-8-10	8 - 10	Archive									
						T25-SB05-10-12	10 - 12	Archive									
						T25-SB05-12-14	12 - 14	Archive									
						T25-SB05-14-16	14 - 16	Archive									
						T25-SB05-16-18	16 - 18	Archive									
						T25-SB05-18-20	18 - 20	Archive									
T25-SB06	1267669	212606	10.402	10.0	0.2	T25-SB06-0-2	0 - 2	Post-Excavation Surface	X	X	X	X	X			X	X
						T25-SB06-2-4	2 - 4	Archive									
						T25-SB06-4-6	4 - 6	Archive									
						T25-SB06-6-8	6 - 8	Archive									
						T25-SB06-8-10	8 - 10	Archive									
						T25-SB06-10-14	10 - 14	Archive									
						T25-SB06-14-16	14 - 16	Archive									
						T25-SB06-16-18	16 - 18	Archive									
						T25-SB06-18-20	18 - 20	Archive									
T25-SB07	1267846	212478	14.853	7.1	8.1	T25-SB07-0-8	0 - 8	Excavation		X	X		X	X	X	X	X
						T25-SB07-8-10	8 - 10	Post-Excavation Surface	X	X	X	X	X			X	X
						T25-SB07-10-12	10 - 12	Archive									
						T25-SB07-12-14	12 - 14	Archive									
						T25-SB07-13.4-13.5	13.4 - 13.5	Archive									
						T25-SB07-15-17	15 - 17	Archive									
						T25-SB07-16-16.1	16 - 16.1	Archive									
						T25-SB07-17-19	17 - 19	Archive									
						T25-SB07-19-21	19 - 21	Archive									

Table 1
Upland Soil Boring Samples and Analyses

Location ID	Coordinates		Elevation (ft MLLW)	Design Subgrade Elevation (ft MLLW)	Estimated Excavation Depth (ft bgs)	Sample ID	Sample Interval (ft bgs)	Designation	Analyses								
	Easting	Northing							Metals	SVOCs	PAHs	D/F	PCBs	TCLP Metals	TPH	TOC	TS
T25-SB08	1267536	212430	16.391	4.1	12.4	T25-SB08-0-12	0 - 12	Excavation		X	X		X	X	X	X	X
						T25-SB08-10-12	10 - 12	Archive									
						T25-SB08-12-14	12 - 14	Post-Excavation Surface	X	X	X	X	X			X	X
						T25-SB08-14.2-14.3	14.2 - 14.3	Archive									
						T25-SB08-14-16	14 - 16	Archive									
						T25-SB08-16-18	16 - 18	Archive									
						T25-SB08-17.2-17.3	17.2 - 17.3	Archive									
						T25-SB08-18-20	18 - 20	Archive									
T25-SB09	1267692	212374	15.63	7.1	7.6	T25-SB09-0-8	0 - 8	Excavation		X	X		X	X	X	X	X
						T25-SB09-8-9.1	8 - 9.1	Post-Excavation Surface	X	X	X	X	X			X	X
						T25-SB09-9.1-10	9.1 - 10	Triggered archive	X	X	X	X	X			X	X
						T25-SB09-9.9-10	9.9 - 10	Archive									
						T25-SB09-10-13	10 - 13	Triggered archive					X				
						T25-SB09-15.5-15.6	15.5 - 15.6	Archive									
						T25-SB09-15-17	15 - 17	Archive									
						T25-SB09-17-19	17 - 19	Archive									
						T25-SB09-19-20	19 - 20	Archive									
T25-SB10	1267921	212294	16.396	13.5	3.0	T25-SB10-0-2	0 - 2	Post-Excavation Surface	X	X	X	X	X			X	X
						T25-SB10-2-4	2 - 4	Archive									
						T25-SB10-4-6	4 - 6	Archive									
						T25-SB10-6-8	6 - 8	Archive									
						T25-SB10-8-10	8 - 10	Archive									
						T25-SB10-9.5-9.6	9.5 - 9.6	Archive									
						T25-SB10-10.2-10.3	10.2 - 10.3	Archive									
						T25-SB10-10-12	10 - 12	Archive									
						T25-SB10-12-14	12 - 14	Archive									
						T25-SB10-14-16	14 - 16	Archive									
						T25-SB10-16-18	16 - 18	Archive									
						T25-SB10-18-20	18 - 20	Archive									
T25-SB11	1267637	212234	17.021	8.7	8.5	T25-SB11-0-9	0 - 9	Excavation		X	X		X	X	X	X	X
						T25-SB11-9-11	9 - 11	Post-Excavation Surface	X	X	X	X	X			X	X
						T25-SB11-11-14	11 - 14	Archive									
						T25-SB11-14-16	14 - 16	Archive									
						T25-SB11-16-18	16 - 18	Archive									
						T25-SB11-18-20	18 - 20	Archive									
T25-SB12	1267990	212682	16.569	15.4	1.0	T25-SB12-0-2	0 - 2	Post-Excavation Surface	X	X	X	X	X			X	X
						T25-SB12-2-4	2 - 4	Archive									
						T25-SB12-4-6	4 - 6	Archive									
						T25-SB12-6-8	6 - 8	Archive									
						T25-SB12-8-10	8 - 10	Archive									
						T25-SB12-10-12	10 - 12	Archive									
						T25-SB12-12-13.5	12 - 13.5	Archive									
						T25-SB12-13.5-15.5	13.5 - 15.5	Archive									
						T25-SB12-15.5-17.5	15.5 - 17.5	Archive									

Table 1
Upland Soil Boring Samples and Analyses

Location ID	Coordinates		Elevation (ft MLLW)	Design Subgrade Elevation (ft MLLW)	Estimated Excavation Depth (ft bgs)	Sample ID	Sample Interval (ft bgs)	Designation	Analyses								
	Easting	Northing							Metals	SVOCs	PAHs	D/F	PCBs	TCLP Metals	TPH	TOC	TS
T25-SB13	1267986	212440	14.936	14.0	1.0	T25-SB13-0-2	0 - 2	Post-Excavation Surface	X	X	X	X	X			X	X
						T25-SB13-2-4	2 - 4	Archive									
						T25-SB13-4-6	4 - 6	Archive									
						T25-SB13-6-8	6 - 8	Archive									
						T25-SB13-8-10	8 - 10	Archive									
						T25-SB13-10-12	10 - 12	Archive									
						T25-SB13-12-14	12 - 14	Archive									
T25-SB14	1268163	212611	15.087	15.4	1.0	T25-SB14-0-3	0 - 3	Archive									
						T25-SB14-3-5	3 - 5	Post-Excavation Surface	X	X	X	X	X			X	X
						T25-SB14-5-7	5 - 7	Archive									
						T25-SB14-7-9	7 - 9	Archive									
						T25-SB14-9-11	9 - 11	Archive									
T25-SB15	1268106	212395	16.636	14.0	1.0	T25-SB15-0-2	0 - 2	Post-Excavation Surface	X	X	X	X	X			X	X
						T25-SB15-2-4	2 - 4	Archive									
						T25-SB15-4-6	4 - 6	Archive									
						T25-SB15-6-8	6 - 8	Archive									
						T25-SB15-8-10	8 - 10	Archive									
T25-SB-16	1267690	212269	17.0	7.3	9.7	T25-SB-16-0-10	0 - 10	Excavation		X	X		X	X	X		X
						T25-SB-16-10-11	10 - 11	Archive; Post-Excavation Surface									
						T25-SB-16-11-12	11 - 12	Archive									
						T25-SB-16-12-13	12 - 13	Archive									
						T25-SB-16-13-14	13 - 14	Archive									
						T25-SB-16-14-15	14 - 15	Archive									
						T25-SB-16-15-16	15 - 16	Archive									
						T25-SB-16-16-17	16 - 17	Archive									
						T25-SB-16-17-18	17 - 18	Archive									
						T25-SB-16-18-19	18 - 19	Archive									
						T25-SB-16-19-20	19 - 20	Archive									

Notes:
Coordinates are in North American Datum of 1983 (NAD83) Washington State Plane North, U.S. Feet.
1. Geotechnical analyses included standard penetration test (SPT), water content, density, specific gravity, and grain size.
bgs: below ground surface
D/F: dioxin/furans
ft: feet
ID: identification
MLLW: mean lower low water
PAH: polycyclic aromatic hydrocarbon
PCB: polychlorinated biphenyl Aroclor
SVOC: semivolatile organic compound
TCLP: toxicity characteristic leaching procedure
TOC: total organic carbon
TPH: total petroleum hydrocarbons
TS: total solids

Table 2
Sediment Core Samples and Analyses

Location ID	Coordinates		Drive Penetration (ft)	Recovery (ft)	Distance from Target (ft)	Design Subgrade Elevation (ft MLLW)	Estimated Dredge Depth (ft)	Sample ID	Depth (ft)	Analyses													
	Easting	Northing								Metals	TCLP Metals	Mercury	SVOCs	PAHs	D/F	PCBs	TPH	TOC	TS	SG	MC	GS	Archive
T25-SC01A	1267792	212838	1.5	1.4	26	2.6	3.4	T25-SC01A-0-1	0 - 1														X
T25-SC01B	1267792	212871	2.0	2.0	58	2.6	3.4	T25-SC01B-0-1	0 - 1														X
								T25-SC01B-1-2	1 - 2														X
T25-SC02	1267668	212812	7.5	7.0	35	-7.3[b]	4.6[b]	T25-SC02-0-4.6	0 - 4.6		X		X	X		X			X				
								T25-SC02-0-1	0 - 1														X
								T25-SC02-1-2	1 - 2														X
								T25-SC02-2-3	2 - 3														X
								T25-SC02-3-4.6	3 - 4.6														X
								T25-SC02-4.6-5.6	4.6 - 5.6	X		X	X	X	X	X		X	X			X	
								T25-SC02-5.6-7	5.6 - 7														X
T25-SC03	1267651	212756	8.0	6.8	27	-6.3[b]	6.9[b]	T25-SC03-0-5.7	0 - 5.7		X		X	X		X	X		X				
								T25-SC03-0-1.7	0 - 1.7														X
								T25-SC03-1.7-2.7	1.7 - 2.7														X
								T25-SC03-2.7-3.7	2.7 - 3.7														X
								T25-SC03-3.7-4.7	3.7 - 4.7	X		X	X	X	X	X		X	X				
								T25-SC03-4.7-5.7	4.7 - 5.7				X	X		X		X	X				
								T25-SC03-5.7-6.2	5.7 - 6.2	X		X	X	X	X	X		X	X				
T25-SC04	1267598	212603	7.9	7.2	25	-5.8[b]	4[b]	T25-SC04-0-4	0 - 4		X		X	X		X	X		X				
								T25-SC04-0-1	0 - 1														X
								T25-SC04-1-2	1 - 2														X
								T25-SC04-2-3	2 - 3											X	X	X	
								T25-SC04-3-4	3 - 4														X
								T25-SC04-4-5	4 - 5	X		X	X	X	X	X		X	X			X	
								T25-SC04-5-5.6	5 - 5.6											X	X	X	
								T25-SC04-5-6	5 - 6			X	X	X	X	X		X	X				
								T25-SC04-6-6.7	6 - 6.7					X	X	X		X	X				
T25-SC-05	1267419	212412	2.0	2.0	47	--[a]	--[a]	T25-SC05-0-1	0 - 1	X		X	X	X	X	X		X	X			X	
								T25-SC05-1-2	1 - 2							X		X	X				
T25-SC-06	1267526	212519	4.0	3.4	3.6	--[a]	--[a]	T25-SC06-0-1	0 - 1	X		X	X	X	X	X		X	X			X	
								T25-SC06-1-1.5	1 - 1.5														X
								T25-SC06-1.5-2.5	1.5 - 2.5				X	X	X	X		X	X				
								T25-SC06-2.5-3.3	2.5 - 3.3				X	X	X	X		X	X				
T25-SC07	1267572	212704	9.5	7.4	6.3	--[a]	--[a]	T25-SC07-0-1	0 - 1	X		X	X	X	X	X		X	X			X	
								T25-SC07-1-2	1 - 2											X	X	X	
								T25-SC07-2-3	2 - 3														X
								T25-SC07-3-4	3 - 4														X
								T25-SC07-4-5	4 - 5														X
								T25-SC07-5-6	5 - 6					X	X	X		X	X				
								T25-SC07-6-7	6 - 7			X	X	X	X	X		X	X				

Table 2
Sediment Core Samples and Analyses

Location ID	Coordinates		Drive Penetration (ft)	Recovery (ft)	Distance from Target (ft)	Design Subgrade Elevation (ft MLLW)	Estimated Dredge Depth (ft)	Sample ID	Depth (ft)	Analyses													
	Easting	Northing								Metals	TCLP Metals	Mercury	SVOCs	PAHs	D/F	PCBs	TPH	TOC	TS	SG	MC	GS	Archive
T25-SC08	1267625	212882	12.0	10.6	8.0	--[a]	--[a]	T25-SC08-0-1	0 - 1	X		X	X	X	X	X		X	X			X	
								T25-SC08-1-2	1 - 2														X
								T25-SC08-2-3	2 - 3														X
								T25-SC08-3-4	3 - 4														X
								T25-SC08-4-5	4 - 5														X
								T25-SC08-5-6	5 - 6														X
								T25-SC08-6-7	6 - 7														X
								T25-SC08-7-8	7 - 8				X	X	X	X		X	X				
								T25-SC08-8-9	8 - 9				X	X	X	X		X	X				
								T25-SC08-9-10	9 - 10					X				X	X				
T25-SC09A	1267739	212899	2.7	1.5	5.6	--[a]	--[a]	T25-SC09-0-1	0 - 1														X
								T25-SC09-1-1.5	1 - 1.5														X
T25-SC-09B	1267749	212874	5.0	4.4	31	--[a]	--[a]	T25-SC09B-0-1	0 - 1	X		X	X	X	X	X		X	X			X	
								T25-SC09B-1-2	1 - 2														X
								T25-SC09B-2-3	2 - 3			X	X	X	X			X	X	X	X	X	
								T25-SC09B-3-4	3 - 4			X		X		X		X	X				

Notes:
Coordinates are in North American Datum of 1983 (NAD83) Washington State Plane North, U.S. Feet.
a. Location is outside of proposed dredge area.
b. Design subgrade elevation and estimated dredged depth updated using actual core location.
D/F: dioxin/furans
ft: feet
GS: grain size
ID: identification
MC: moisture content
MLLW: mean lower low water
PAH: polycyclic aromatic hydrocarbon
PCB: polychlorinated biphenyl Aroclor
SG: specific gravity
SVOC: semivolatile organic compound
TCLP: toxicity characteristic leaching procedure
TOC: total organic carbon
TPH: total petroleum hydrocarbons
TS: total solids

Table 3
Upland Boring Excavation Interval Analytical Results

				Location ID	T25-SB01	T25-SB02	T25-SB03	T25-SB04A	T25-SB05	T25-SB07	T25-SB07	T25-SB08	T25-SB09	T25-SB11	T25-SB-16	T25-SB-16
				Sample ID	T25-SB01-0-10	T25-SB02-0-3	T25-SB03-0-7.5	T25-SB04A-0-11	T25-SB05-0-4	T25-SB07-0-8	T25-SB57-0-8	T25-SB08-0-12	T25-SB09-0-8	T25-SB11-0-9	T25-SB-16-0-10	T25-SB-56-0-10
				Sample Date	1/15/2019	1/15/2019	1/18/2019	1/16/2019	1/15/2019	1/15/2019	1/15/2019	1/17/2019	1/17/2019	1/17/2019	8/6/2020	8/6/2020
				Depth	0 - 10 ft	0 - 3 ft	0 - 7.5 ft	0 - 11 ft	0 - 4 ft	0 - 8 ft	0 - 8 ft	0 - 12 ft	0 - 8 ft	0 - 9 ft	0 - 10 ft	0 - 10 ft
				Sample Type	N	N	N	N	N	N	FD	N	N	N	N	FD
				Matrix	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO
Parameter	**Method**	**MTCA A Unrestricted**	**MTCA A Industrial**	**RCRA Criteria**												
Conventional Parameters (percent)																
Total Solids	SM2540G				**83.51**	**83.94**	**93.76**	**87.66**	**66.66**	**86.36**	**87.24**	**86.51**	**93.43**	**87.93**	**85.71**	**87.72**
Metals (TCLP Method SW1311) (µg/L)																
Arsenic	SW6010C	--	--	5000	250 U	250 U	250 U	**15.1 J**	250 U	250 U	250 U	250 U	250 U	250 U	**20.8 J**	250 U
Barium	SW6010C	--	--	100000	129 U	276 U	**605**	**740**	131 U	255 U	278 U	347 U	**363 J**	**500 J**	**481**	**429**
Cadmium	SW6010C	--	--	1000	10 U	10 U	**1.2 J**	10 U	10 U	10 U	10 U	10 U	**1.3 J**	10 U	10 U	10 U
Chromium	SW6010C	--	--	5000	25 U	**48.3**	25 U	25 U	25 U	**26.7**	**25.9**	**3.8 J**	**2.7 J**	25 U	25 U	25 U
Lead	SW6010C	--	--	5000	100 U	**434**	100 U	100 U	100 U	100 U	100 U	**15.6 J**	100 U	100 U	100 U	100 U
Mercury	SW7470A	--	--	200	0.1 U	**0.183**	**0.007 J**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Selenium	SW6010C	--	--	1000	250 U	250 U	250 U	250 U	250 U	**154 J**	**133 J**	250 U	250 U	250 U	250 U	250 U
Silver	SW6010C	--	--	5000	15 U	15 U	15 U	15 U	15 U	15 U	15 U	15 U	15 U	15 U	15 U	15 U
Semivolatile Organics (µg/kg)																
1,2,4-Trichlorobenzene	SW8270DSIM	--	--	--	5 U	14.7 U	4.8 U	**2.6 J**	5 U	4.8 U	4.8 U	4.8 U	4.9 U	4.7 U	5 U	5 U
1,2-Dichlorobenzene	SW8270DSIM	--	--	1000	5 U	14.7 U	4.8 U	4.7 U	5 U	4.8 U	4.8 U	4.8 U	4.9 U	**2.2 J**	**2 J**	5 U
1,4-Dichlorobenzene	SW8270DSIM	--	--	150000	5 U	14.7 U	4.8 U	4.7 U	5 U	4.8 U	4.8 U	4.8 U	**7**	4.7 U	**2.7 J**	**4.9 J**
2,4-Dimethylphenol	SW8270DSIM	--	--	--	24.9 UJ	**15.3 J**	24.1 UJ	23.6 UJ	**3 J**	24.1 UJ	23.8 UJ	24.1 UJ	24.3 UJ	23.7 UJ	**3.7 J**	**3.9 J**
2-Methylphenol (o-Cresol)	SW8270DSIM	--	--	4000000	5 U	14.7 U	4.8 U	4.7 U	**3.3 J**	4.8 U	4.8 U	4.8 U	4.9 U	4.7 U	5 U	5 U
4-Methylphenol (p-Cresol)	SW8270DSIM	--	--	4000000	**6.5**	**18.9**	4.8 U	**11.2**	**14**	4.8 U	4.8 U	**4.5 J**	**3.2 J**	**44.2**	**62.5**	**50.9**
Benzoic acid	SW8270DSIM	--	--	--	99.7 UJ	**167 J**	96.3 UJ	**52.8 J**	**57.8 J**	96.3 UJ	**36.3 J**	96.3 UJ	**287 J**	**55.4 J**	**76.6 J**	**182**
Benzyl alcohol	SW8270DSIM	--	--	--	19.9 U	58.6 U	19.3 U	18.9 U	19.9 U	19.3 U	19 U	19.3 U	19.4 U	19 U	20 U	20 U
bis(2-Ethylhexyl)phthalate	SW8270D	--	--	--	49.9 U	**208**	**32.9 J**	**30.3 J**	49.7 U	**43.4 J**	**53.7**	48.1 U	**34.7 J**	**30.1 J**	49.9 U	49.9 U
Butylbenzyl phthalate	SW8270D	--	--	--	19.9 U	58.6 U	19.3 U	18.9 U	19.9 U	19.3 U	19 U	19.3 U	19.4 U	19 U	20 U	20 U
Diethyl phthalate	SW8270DSIM	--	--	--	19.9 U	58.6 U	19.3 U	50.5 U	19.9 U	25 U	19.5 U	19.3 U	19.4 U	19 U	20 U	20 U
Dimethyl phthalate	SW8270DSIM	--	--	--	5 UJ	**22.1 J**	4.8 U	4.7 U	5 UJ	4.8 UJ	4.8 U	4.8 U	4.9 U	4.7 U	5 U	5 U
Di-n-butyl phthalate	SW8270D	--	--	--	**79.4**	**241**	72.2 U	**18 J**	**127**	**58.2**	**99.2**	88.1 U	213 U	62.7 U	20 U	20 U
Di-n-octyl phthalate	SW8270D	--	--	--	19.9 U	58.6 U	19.3 U	18.9 U	19.9 U	19.3 U	19 U	19.3 U	19.4 U	19 U	20 U	20 U
Hexachlorobenzene	SW8270DSIM	--	--	260	5 U	14.7 U	4.8 U	4.7 U	5 U	4.8 U	4.8 U	4.8 U	4.9 U	4.7 U	5 U	5 U
n-Nitrosodiphenylamine	SW8270DSIM	--	--	--	5 U	14.7 U	4.8 U	4.7 UJ	5 U	4.8 U	4.8 UJ	4.8 U	4.9 U	4.7 U	5 U	5 U
Pentachlorophenol	SW8270DSIM	--	--	2000000	19.9 UJ	**24.4 J**	19.3 UJ	**3.4 J**	19.9 UJ	19.3 UJ	**3.2 J**	19.3 UJ	**2.6 J**	19 UJ	**3.1 J**	**7 J**
Phenol	SW8270DSIM	--	--		5.3 U	21 U	4.8 UJ	15 UJ	10.8 U	4.8 U	5.4 UJ	5.1 U	8.9 U	9.8 UJ	**6.4**	**6.3**
Polycyclic Aromatic Hydrocarbons (µg/kg)																
2-Methylnaphthalene	SW8270D	--	--	--	**13.7 J**	**62.3**	19.3 U	**14.1 J**	**14.3 J**	**7.2 J**	19 U	19.3 U	**14.9 J**	**17.6 J**	**272**	**117**
Acenaphthene	SW8270D	--	--	--	**8.6 J**	**412**	19.3 U	**14.2 J**	**5.7 J**	**11.6 J**	**4.9 J**	**8.1 J**	**51.7**	**16 J**	**196**	**119**
Acenaphthylene	SW8270D	--	--	--	19.9 U	**181**	19.3 U	**12.2 J**	**21.8**	**4.9 J**	19 U	19.3 U	19.4 U	**27**	**18.5 J**	**14.1 J**
Anthracene	SW8270D	--	--	--	**15.7 J**	**929**	19.3 U	**15.1 J**	**30.2**	**25.9**	**10.6 J**	**7.1 J**	**26.9**	**32.2**	**94.1**	**97.5**
Benzo(a)anthracene	SW8270D	--	--	--	**7.4 J**	**2330**	19.3 U	**25.1**	**72**	**78.4**	**28.4**	**11.6 J**	**15.7 J**	**90.6**	**47.5**	**114**
Benzo(a)pyrene	SW8270D	100	2000	--	19.9 U	**2540**	19.3 U	**27.6**	**118**	**70.7**	**25.5**	19.3 U	**12.6 J**	**109**	**31.3**	**63.5**
Benzo(b,j,k)fluoranthenes	SW8270D	--	--	--	39.9 U	**4600**	**17.6 J**	**57.6**	**241**	**141**	**45.7**	**30.4 J**	**22 J**	**211**	**66.3**	**150**
Benzo(g,h,i)perylene	SW8270D	--	--	--	19.9 UJ	**875 J**	**9.4 J**	**11.5 J**	**59 J**	**31.5 J**	**12.7 J**	**12.3 J**	**9.7 J**	**52.8 J**	**24**	**39.9**
Chrysene	SW8270D	--	--	--	**8.8 J**	**2970**	**18 J**	**34.4**	**117**	**110**	**40.7**	**36.8**	**27.7**	**137**	**65.2**	**132**
Dibenzo(a,h)anthracene	SW8270DSIM	--	--	--	5 UJ	**364 J**	4.8 U	**5 J**	**18.2 J**	**11.4 J**	**12.2 J**	4.8 U	**3.2 J**	**15.2 J**	**5.3**	**11.6**
Dibenzofuran	SW8270D	--	--	--	**15.8 J**	**130**	19.3 U	**12.6 J**	**15.2 J**	**7.3 J**	19 U	**8 J**	**28.9**	**11.9 J**	**114**	**79.8**
Fluoranthene	SW8270D	--	--	--	**46.5**	**5640**	**8.7 J**	**85.5**	**166**	**257**	**100**	**28.2**	**74.5**	**285**	**281**	**334**
Fluorene	SW8270D	--	--	--	**14.9 J**	**290**	19.3 U	**15.2 J**	**9.5 J**	**5.8 J**	19 U	**8 J**	**50**	**20.3**	**175**	**128**
Indeno(1,2,3-c,d)pyrene	SW8270D	--	--	--	19.9 UJ	**966 J**	19.3 U	**8.3 J**	**54.8 J**	**29.3 J**	**10.5 J**	**7.4 J**	19.4 U	**48.9 J**	**15.8 J**	**33.1**
Naphthalene	SW8270D	--	--	--	**41.8**	**102**	19.3 U	**41.9**	**55**	**9.7 J**	**5 J**	**12.1 J**	**58.2**	**40.7**	**159**	**130**
Phenanthrene	SW8270D	--	--	--	**57.3**	**3940**	**8.6 J**	**82.4**	**123**	**134**	**47.4**	**13.7 J**	**119**	**200**	**453**	**406**
Pyrene	SW8270D	--	--	--	**28.8**	**5730**	**10.5 J**	**94.8**	**164**	**225**	**88.2**	**31.5**	**72.7**	**283**	**209**	**248**
Total cPAH TEQ (7 minimum CAEPA 2005) (U = 1/2	SW8270D	100	2000	--	**14 J**	**3400 J**	**14 J**	**38 J**	**158 J**	**98 J**	**35.6 J**	**15 J**	**18 J**	**147 J**	**45.4 J**	**95.7**
Total Naphthalenes	SW8270D	5000	5000	--	**55.5**	**164.3**	19.3 U	**56 J**	**69.3 J**	**16.9 J**	**10.5 J**	**12.1 J**	**73.1 J**	**58.3 J**	**431**	**247**

Table 3
Upland Boring Excavation Interval Analytical Results

				Location ID	T25-SB01	T25-SB02	T25-SB03	T25-SB04A	T25-SB05	T25-SB07	T25-SB07	T25-SB08	T25-SB09	T25-SB11	T25-SB-16	T25-SB-16
				Sample ID	T25-SB01-0-10	T25-SB02-0-3	T25-SB03-0-7.5	T25-SB04A-0-11	T25-SB05-0-4	T25-SB07-0-8	T25-SB57-0-8	T25-SB08-0-12	T25-SB09-0-8	T25-SB11-0-9	T25-SB-16-0-10	T25-SB-56-0-10
				Sample Date	1/15/2019	1/15/2019	1/18/2019	1/16/2019	1/15/2019	1/15/2019	1/15/2019	1/17/2019	1/17/2019	1/17/2019	8/6/2020	8/6/2020
				Depth	0 - 10 ft	0 - 3 ft	0 - 7.5 ft	0 - 11 ft	0 - 4 ft	0 - 8 ft	0 - 8 ft	0 - 12 ft	0 - 8 ft	0 - 9 ft	0 - 10 ft	0 - 10 ft
				Sample Type	N	N	N	N	N	N	FD	N	N	N	N	FD
				Matrix	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO
Parameter	**Method**	**MTCA A Unrestricted**	**MTCA A Industrial**	**RCRA Criteria**												
PCB Aroclors (µg/kg)																
Total PCB Aroclors (U = 1/2)	SW8082A	1000	10000	50000[a]	4 U	**1130**	**1400**	**110 J**	**18 J**	**199**	**140**	**900**	**210**	**10500**	**134 J**	--
Total Petroleum Hydrocarbons (mg/kg)																
Diesel range hydrocarbons	NWTPHDx	2000	2000	--	59.8 U	**87.2**	53.2 U	**59.6**	74.8 U	57.2 U	57 U	57.5 U	53.4 U	56.6 U	58.3 U	--
Motor oil range hydrocarbons	NWTPHDx	2000	2000	--	120 U	**382**	**362**	**115**	**206**	**216**	**133**	**239**	107 U	**209**	**241**	--

Notes:

Minimum significant figures applied to calculated totals

Detected concentration is greater than MTCA Method A Unrestricted cleanup level

Detected concentration is greater than MTCA Method A Industrial cleanup level

Detected concentration is greater than the TSCA threshold for PCB remediation waste

a. Toxics Substances Control Act (TSCA) threshold for PCB remediation waste

Bold: Detected result

µg/kg: micrograms per kilogram

µg/L: micrograms per liter

CAEPA: California Environmental Protection Agency

cPAH: carcinogenic polycyclic aromatic hydrocarbon

FD: field duplicate sample

ft: feet

ID: identification

J: Estimated value

mg/kg: milligrams per kilogram

MTCA: Model Toxics Control Act

N: normal environmental sample

PCB: polychlorinated biphenyl

RCRA: Resource Conservation and Recovery Act

SO: soil matrix

TCLP: toxicity characteristic leaching procedure

TEQ: Toxic Equivalents Quotient

U: Compound analyzed, but not detected above detection limit

UJ: Compound analyzed, but not detected above estimated detection limit

Table 4
Upland Boring Post-Excavation Surface Interval Analytical Results

					Location ID	T25-SB01	T25-SB02	T25-SB02	T25-SB03	T25-SB03	T25-SB03	T25-SB03	T25-SB-03B	T25-SB-03B
					Sample ID	T25-SB01-10-12	T25-SB02-3-5	T25-SB02-5-7	T25-SB03-7.5-9.5	T25-SB03-9.5-11.5	T25-SB03-11.5-13.5	T25-SB03-14.2-16.2	T25-SB-03B-7-8	T25-SB-53B-7-8
					Sample Date	1/15/2019	1/15/2019	1/15/2019	1/18/2019	1/18/2019	1/18/2019	1/18/2019	8/5/2020	8/5/2020
					Depth	10 - 12 ft	3 - 5 ft	5 - 7 ft	7.5 - 9.5 ft	9.5 - 11.5 ft	11.5 - 13.5 ft	14.2 - 16.2 ft	7 - 8 ft	7 - 8 ft
					Sample Type	N	N	N	N	N	N	N	N	FD
					Matrix	SO	SO	SO	SO	SO	SO	SO	SO	SO
Parameter	**Method**	**SMS SCO**	**SMS CSL**	**AET SCO**	**AET CSL**									
Conventional Parameters (percent)														
Total organic carbon	SW9060A	--	--	--	--	**0.35**	**1.13**	**0.3**	**1.72**	**9.04**	--	--	**3.3**	**2.18**
Total solids	SM2540G	--	--	--	--	**74.05**	**83.89**	**78.62**	**79.98**	**64.74**	**36.27**	**41.17**	**77.84**	**82.3**
Metals (mg/kg)														
Arsenic	SW6020A	57	93	57	93	**1.85**	**5.53**	--	**3.59**	--	--	--	--	--
Cadmium	SW6020A	5.1	6.7	5.1	6.7	**0.07 J**	**0.14**	--	**0.16**	--	--	--	--	--
Chromium	SW6020A	260	270	260	270	**7.72**	**16.7 J**	--	**25.2**	--	--	--	--	--
Copper	SW6020A	390	390	390	390	**7.64 J**	**17.4 J**	--	**32.2**	--	--	--	--	--
Lead	SW6020A	450	530	450	530	**2.53 J**	**99.5 J**	--	**37.8**	--	--	--	--	--
Mercury	SW7471B	0.41	0.59	0.41	0.59	0.0304 U	**0.0381 J**	--	**0.0705**	--	--	--	--	--
Silver	SW6020A	6.1	6.1	6.1	6.1	**0.03 J**	**0.09 J**	--	**0.1 J**	--	--	--	--	--
Zinc	SW6020A	410	960	410	960	**26.2**	**88.1**	--	**60.4**	--	--	--	--	--
Semivolatile Organics (mg/kg-OC)														
1,2,4-Trichlorobenzene	SW8270DSIM	0.81	1.8	--	--	1.4 U	0.44 U	--	0.28 U	--	--	--	--	--
1,2-Dichlorobenzene	SW8270DSIM	2.3	2.3	--	--	1.4 U	0.44 U	--	0.28 U	--	--	--	--	--
1,4-Dichlorobenzene	SW8270DSIM	3.1	9	--	--	1.4 U	0.44 U	--	0.28 U	--	--	--	--	--
bis(2-Ethylhexyl)phthalate	SW8270D	47	78	--	--	14 U	**7.83**	--	2.8 U	--	--	--	--	--
Butylbenzyl phthalate	SW8270D	4.9	64	--	--	5.5 U	1.75 U	--	1.12 U	--	--	--	--	--
Diethyl phthalate	SW8270DSIM	61	110	--	--	5.5 U	1.75 U	--	1.12 U	--	--	--	--	--
Dimethyl phthalate	SW8270DSIM	53	53	--	--	1.4 UJ	**0.32 J**	--	**0.21 J**	--	--	--	--	--
Di-n-butyl phthalate	SW8270D	220	1700	--	--	**43**	**6.53**	--	1.12 U	--	--	--	--	--
Di-n-octyl phthalate	SW8270D	58	4500	--	--	5.5 U	1.75 U	--	1.12 U	--	--	--	--	--
Hexachlorobenzene	SW8270DSIM	0.38	2.3	--	--	1.4 U	0.44 U	--	0.28 U	--	--	--	--	--
Hexachlorobutadiene	SW8270DSIM	3.9	6.2	--	--	1.4 U	0.44 U	--	0.28 U	--	--	--	--	--
n-Nitrosodiphenylamine	SW8270DSIM	11	11	--	--	1.4 U	0.44 U	--	0.28 U	--	--	--	--	--
Semivolatile Organics (µg/kg)														
1,2,4-Trichlorobenzene	SW8270DSIM	--	--	31	51	4.8 U	5 U	--	4.8 U	--	--	--	--	--
1,2-Dichlorobenzene	SW8270DSIM	--	--	35	50	4.8 U	5 U	--	4.8 U	--	--	--	--	--
1,4-Dichlorobenzene	SW8270DSIM	--	--	110	110	4.8 U	5 U	--	4.8 U	--	--	--	--	--
2,4-Dimethylphenol	SW8270DSIM	29	29	29	29	**2.9 J**	**2.8 J**	--	24 UJ	--	--	--	--	--
2-Methylphenol (o-Cresol)	SW8270DSIM	63	63	63	63	4.8 U	5 U	--	**2.6 J**	--	--	--	--	--
4-Methylphenol (p-Cresol)	SW8270DSIM	670	670	670	670	**42.3**	**4.6 J**	--	**16.5**	--	--	--	--	--
Benzoic acid	SW8270DSIM	650	650	650	650	95.8 UJ	**42.3 J**	--	**94.8 J**	--	--	--	--	--
Benzyl alcohol	SW8270DSIM	57	73	57	73	19.2 U	19.8 U	--	**7.1 J**	--	--	--	--	--
bis(2-Ethylhexyl)phthalate	SW8270D	--	--	1300	1900	47.9 U	**88.5**	--	48.1 U	--	--	--	--	--
Butylbenzyl phthalate	SW8270D	--	--	63	900	19.2 U	19.8 U	--	19.2 U	--	--	--	--	--
Diethyl phthalate	SW8270DSIM	--	--	200	1200	19.2 U	19.8 U	--	19.2 U	--	--	--	--	--
Dimethyl phthalate	SW8270DSIM	--	--	71	160	4.8 UJ	**3.6 J**	--	**3.6 J**	--	--	--	--	--
Di-n-butyl phthalate	SW8270D	--	--	1400	1400	**152**	**73.8**	--	19.2 U	--	--	--	--	--
Di-n-octyl phthalate	SW8270D	--	--	6200	6200	19.2 U	19.8 U	--	19.2 U	--	--	--	--	--
Hexachlorobenzene	SW8270DSIM	--	--	22	70	4.8 U	5 U	--	4.8 U	--	--	--	--	--
n-Nitrosodiphenylamine	SW8270DSIM	--	--	28	40	4.8 U	5 U	--	4.8 U	--	--	--	--	--
Pentachlorophenol	SW8270DSIM	360	690	360	690	19.2 UJ	**9.2 J**	--	**4.4 J**	--	--	--	--	--
Phenol	SW8270DSIM	420	1200	420	1200	7.1 U	6.6 U	--	4.8 U	--	--	--	--	--

Table 4
Upland Boring Post-Excavation Surface Interval Analytical Results

					Location ID	T25-SB01	T25-SB02	T25-SB02	T25-SB03	T25-SB03	T25-SB03	T25-SB03	T25-SB-03B	T25-SB-03B
					Sample ID	T25-SB01-10-12	T25-SB02-3-5	T25-SB02-5-7	T25-SB03-7.5-9.5	T25-SB03-9.5-11.5	T25-SB03-11.5-13.5	T25-SB03-14.2-16.2	T25-SB-03B-7-8	T25-SB-53B-7-8
					Sample Date	1/15/2019	1/15/2019	1/15/2019	1/18/2019	1/18/2019	1/18/2019	1/18/2019	8/5/2020	8/5/2020
					Depth	10 - 12 ft	3 - 5 ft	5 - 7 ft	7.5 - 9.5 ft	9.5 - 11.5 ft	11.5 - 13.5 ft	14.2 - 16.2 ft	7 - 8 ft	7 - 8 ft
					Sample Type	N	N	N	N	N	N	N	N	FD
					Matrix	SO	SO	SO	SO	SO	SO	SO	SO	SO
Parameter	**Method**	**SMS SCO**	**SMS CSL**	**AET SCO**	**AET CSL**									
Polycyclic Aromatic Hydrocarbons (mg/kg-OC)														
2-Methylnaphthalene	SW8270D	38	64	--	--	**4.9 J**	**2.04**	6.5 U	**3.33**	--	--	--	--	--
Acenaphthene	SW8270D	16	57	--	--	**6.9**	**12.1**	**2.8 J**	**13**	--	--	--	--	--
Acenaphthylene	SW8270D	66	66	--	--	5.5 U	**4.05**	6.5 U	**1.91**	--	--	--	--	--
Anthracene	SW8270D	220	1200	--	--	**4.6 J**	**24**	**9**	**17.3**	--	--	--	--	--
Benzo(a)anthracene	SW8270D	110	270	--	--	**2.8 J**	**68.9**	**20**	**8.26**	--	--	--	--	--
Benzo(a)pyrene	SW8270D	99	210	--	--	5.5 U	**76.8**	**21**	**5.99 J**	--	--	--	--	--
Benzo(g,h,i)perylene	SW8270D	31	78	--	--	5.5 UJ	**25.8 J**	**17**	**3.41 J**	--	--	--	--	--
Chrysene	SW8270D	110	460	--	--	**2.9 J**	**87.2**	**24**	**11.8**	--	--	--	--	--
Dibenzo(a,h)anthracene	SW8270DSIM	12	33	--	--	1.4 UJ	**10.7 J**	--	**0.884 J**	--	--	--	--	--
Dibenzofuran	SW8270D	15	58	--	--	**4.7 J**	**3.53**	--	**9.77**	--	--	--	--	--
Fluoranthene	SW8270D	160	1200	--	--	**15**	**173**	**42 J**	**70.9**	--	--	--	--	--
Fluorene	SW8270D	23	79	--	--	**8**	**8.5**	**3.2 J**	**22.4**	--	--	--	--	--
Indeno(1,2,3-c,d)pyrene	SW8270D	34	88	--	--	5.5 UJ	**28.6 J**	**13**	**2.88 J**	--	--	--	--	--
Naphthalene	SW8270D	99	170	--	--	**23**	**2.73**	**2.3 J**	**7.6**	--	--	--	--	--
Phenanthrene	SW8270D	100	480	--	--	**14**	**120**	**39**	**105**	--	--	--	--	--
Pyrene	SW8270D	1000	1400	--	--	**9.4**	**172**	**44 J**	**51.5**	--	--	--	--	--
Total Benzofluoranthenes (b,j,k) (U = 0)	SW8270D	230	450	--	--	11 U	**135**	**31**	**11.5 J**	--	--	--	--	--
Total HPAH (SMS) (U = 0)	SW8270D	960	5300	--	--	**31 J**	**778 J**	**210 J**	**167 J**	--	--	--	--	--
Total LPAH (SMS) (U = 0)	SW8270D	370	780	--	--	**56 J**	**172**	**56 J**	**170**	--	--	--	--	--
Polycyclic Aromatic Hydrocarbons (µg/kg)														
2-Methylnaphthalene	SW8270D	--	--	670	670	**17.3 J**	**23**	19.4 U	**57.3**	--	--	--	--	--
Acenaphthene	SW8270D	--	--	500	500	**24.1**	**137**	**8.4 J**	**220**	--	--	--	--	--
Acenaphthylene	SW8270D	--	--	1300	1300	19.2 U	**45.8**	19.4 U	**32.9**	--	--	--	--	--
Anthracene	SW8270D	--	--	960	960	**16.1 J**	**271**	**27**	**297**	--	--	--	--	--
Benzo(a)anthracene	SW8270D	--	--	1300	1600	**9.8 J**	**779**	**60.4**	**142**	--	--	--	--	--
Benzo(a)pyrene	SW8270D	--	--	1600	1600	19.2 U	**868**	**63.5**	**103 J**	--	--	--	--	--
Benzo(b,j,k)fluoranthenes	SW8270D	--	--			38.3 U	**1530**	**92.9**	**197 J**	--	--	--	--	--
Benzo(g,h,i)perylene	SW8270D	--	--	670	720	19.2 UJ	**291 J**	**50.7**	**58.7 J**	--	--	--	--	--
Chrysene	SW8270D	--	--	1400	2800	**10.2 J**	**985**	**71.2**	**203**	--	--	--	--	--
Dibenzo(a,h)anthracene	SW8270DSIM	--	--	230	230	4.8 UJ	**121 J**	--	**15.2 J**	--	--	--	--	--
Dibenzofuran	SW8270D	--	--	540	540	**16.4 J**	**39.9**	--	**168**	--	--	--	--	--
Fluoranthene	SW8270D	--	--	1700	2500	**54.2**	**1960**	**126 J**	**1220**	--	--	--	--	--
Fluorene	SW8270D	--	--	540	540	**28.1**	**96**	**9.7 J**	**386**	--	--	--	--	--
Indeno(1,2,3-c,d)pyrene	SW8270D	--	--	600	690	19.2 UJ	**323 J**	**39.5**	**49.6 J**	--	--	--	--	--
Naphthalene	SW8270D	--	--	2100	2100	**80.8**	**30.8**	**7 J**	**130**	--	--	--	--	--
Phenanthrene	SW8270D	--	--	1500	1500	**48.3**	**1360**	**116**	**1810**	--	--	--	--	--
Pyrene	SW8270D	--	--	2600	3300	**33**	**1940**	**133 J**	**885**	--	--	--	--	--
Total Benzofluoranthenes (b,j,k) (U = 0)	SW8270D	--	--	3200	3600	38.3 U	**1530**	**92.9**	**197 J**	--	--	--	--	--
Total HPAH (SMS) (U = 0)	SW8270D	--	--	12000	17000	**110 J**	**8800 J**	**637 J**	**2870 J**	--	--	--	--	--
Total LPAH (SMS) (U = 0)	SW8270D	--	--	5200	5200	**197 J**	**1940**	**170 J**	**2900**	--	--	--	--	--

Table 4
Upland Boring Post-Excavation Surface Interval Analytical Results

					Location ID	T25-SB01	T25-SB02	T25-SB02	T25-SB03	T25-SB03	T25-SB03	T25-SB03	T25-SB-03B	T25-SB-03B
					Sample ID	T25-SB01-10-12	T25-SB02-3-5	T25-SB02-5-7	T25-SB03-7.5-9.5	T25-SB03-9.5-11.5	T25-SB03-11.5-13.5	T25-SB03-14.2-16.2	T25-SB-03B-7-8	T25-SB-53B-7-8
					Sample Date	1/15/2019	1/15/2019	1/15/2019	1/18/2019	1/18/2019	1/18/2019	1/18/2019	8/5/2020	8/5/2020
					Depth	10 - 12 ft	3 - 5 ft	5 - 7 ft	7.5 - 9.5 ft	9.5 - 11.5 ft	11.5 - 13.5 ft	14.2 - 16.2 ft	7 - 8 ft	7 - 8 ft
					Sample Type	N	N	N	N	N	N	N	N	FD
					Matrix	SO	SO	SO	SO	SO	SO	SO	SO	SO
Parameter	**Method**	**SMS SCO**	**SMS CSL**	**AET SCO**	**AET CSL**									
Dioxin/Furans (ng/kg)														
2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	E1613B	--	--	--	--	0.071 U	**0.736 J**	--	**16.4 J**	--	--	--	--	--
1,2,3,7,8-Pentachlorodibenzo-p-dioxin (PeCDD)	E1613B	--	--	--	--	0.088 U	**5.74**	--	**223**	--	--	--	--	--
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B	--	--	--	--	0.061 U	**4.17**	--	**236**	--	--	--	--	--
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B	--	--	--	--	0.059 U	**27.7**	--	**2130**	--	--	--	--	--
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B	--	--	--	--	0.062 U	**9.51**	--	**1100**	--	--	--	--	--
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (HpCDD)	E1613B	--	--	--	--	**0.284 J**	**468**	--	**9150**	--	--	--	--	--
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	E1613B	--	--	--	--	**1.88 J**	**4120 J**	--	**8910**	--	--	--	--	--
2,3,7,8-Tetrachlorodibenzofuran (TCDF)	E1613B	--	--	--	--	0.099 U	**5.33**	--	**46 J**	--	--	--	--	--
1,2,3,7,8-Pentachlorodibenzofuran (PeCDF)	E1613B	--	--	--	--	0.066 U	**4.4 J**	--	**54.1**	--	--	--	--	--
2,3,4,7,8-Pentachlorodibenzofuran (PeCDF)	E1613B	--	--	--	--	0.061 U	**12.9**	--	**108**	--	--	--	--	--
1,2,3,4,7,8-Hexachlorodibenzofuran (HxCDF)	E1613B	--	--	--	--	0.053 U	**8.16**	--	**1380**	--	--	--	--	--
1,2,3,6,7,8-Hexachlorodibenzofuran (HxCDF)	E1613B	--	--	--	--	0.054 U	**8.26**	--	**488**	--	--	--	--	--
1,2,3,7,8,9-Hexachlorodibenzofuran (HxCDF)	E1613B	--	--	--	--	0.052 U	**3.69 J**	--	**613**	--	--	--	--	--
2,3,4,6,7,8-Hexachlorodibenzofuran (HxCDF)	E1613B	--	--	--	--	0.05 U	**7.2**	--	**531**	--	--	--	--	--
1,2,3,4,6,7,8-Heptachlorodibenzofuran (HpCDF)	E1613B	--	--	--	--	0.041 U	**62.8**	--	**1570**	--	--	--	--	--
1,2,3,4,7,8,9-Heptachlorodibenzofuran (HpCDF)	E1613B	--	--	--	--	0.054 U	**5.01**	--	**891**	--	--	--	--	--
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	E1613B	--	--	--	--	0.126 U	**102**	--	**3130**	--	--	--	--	--
Total Dioxin/Furan TEQ 2005 (Mammal) (U = 0)	E1613B	25 ng/kg TEQ		--	--	**0.0034 J**	**24.5 J**	--	**1000 J**	--	--	--	--	--
Total Dioxin/Furan TEQ 2005 (Mammal) (U = 1/2)	E1613B	25 ng/kg TEQ		--	--	**0.12 J**	**24.5 J**	--	**1000 J**	--	--	--	--	--
PCB Aroclors (mg/kg-OC)														
Total PCB Aroclors (SMS Marine 2013) (U = 0)	SW8082A	12	65	--	--	1.1 U	**22.1**	**4.1**	**3620**	**530**	--	--	**629 J**	**1330 J**
PCB Aroclors (µg/kg)														
Aroclor 1016	SW8082A	--	--	--	--	4 U	19.9 U	3.9 U	78.1 U	770 U	499 U	20 U	2000 U	3990 U
Aroclor 1221	SW8082A	--	--	--	--	4 U	19.9 U	3.9 U	78.1 U	770 U	499 U	20 U	2000 U	3990 U
Aroclor 1232	SW8082A	--	--	--	--	4 U	19.9 U	3.9 U	78.1 U	770 U	499 U	20 U	2000 U	3990 U
Aroclor 1242	SW8082A	--	--	--	--	4 U	19.9 U	3.9 U	78.1 U	770 U	499 U	20 U	2000 U	3990 U
Aroclor 1248	SW8082A	--	--	--	--	4 U	19.9 U	3.9 U	78.1 U	**19100**	499 U	20 U	2000 U	3990 U
Aroclor 1254	SW8082A	--	--	--	--	4 U	**151**	**7.6**	**62300**	**24500**	**13900 J**	**269**	**18400**	**25200**
Aroclor 1260	SW8082A	--	--	--	--	4 U	**98.9**	**4.6**	78.1 U	**4290**	**3030**	**77.4**	**2350 J**	**3790 J**
Aroclor 1262	SW8082A	--	--	--	--	4 U	19.9 U	3.9 U	78.1 U	770 U	499 U	20 U	2000 U	3990 U
Aroclor 1268	SW8082A	--	--	--	--	4 U	19.9 U	3.9 U	78.1 U	770 U	499 U	20 U	2000 U	3990 U
Total PCB Aroclors (SMS Marine 2013) (U = 0)	SW8082A	--	--	130	1000	4 U	**250**	**12**	**62300[a]**	**48000**	**16900 J**	**346**	**20750 J**	**28990 J**

Table 4
Upland Boring Post-Excavation Surface Interval Analytical Results

					Location ID	T25-SB-03B	T25-SB-03B	T25-SB-03D	T25-SB-03D	T25-SB-03D	T25-SB-03E	T25-SB-03E	T25-SB-03E	T25-SB-03E	T25-SB-03F
					Sample ID	T25-SB-03B-8-9	T25-SB-03B-9-10	T25-SB-03D-7-8	T25-SB-03D-8-9	T25-SB-03D-9-10	T25-SB-03E-7-8	T25-SB-03E-8-9	T25-SB-03E-9-10	T25-SB-03E-10-11	T25-SB-03F-7-8
					Sample Date	8/5/2020	8/5/2020	8/5/2020	8/5/2020	8/5/2020	8/6/2020	8/6/2020	8/6/2020	8/6/2020	8/6/2020
					Depth	8 - 9 ft	9 - 10 ft	7 - 8 ft	8 - 9 ft	9 - 10 ft	7 - 8 ft	8 - 9 ft	9 - 10 ft	10 - 11 ft	7 - 8 ft
					Sample Type	N	N	N	N	N	N	N	N	N	N
					Matrix	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO
Parameter	**Method**	**SMS SCO**	**SMS CSL**	**AET SCO**	**AET CSL**										
Conventional Parameters (percent)															
Total organic carbon	SW9060A	--	--	--	--	**5.7**	**24.5**	**0.18**	**0.3**	**1.13**	**1.13**	**15.4**	**24.6**	**48.4**	**0.15**
Total solids	SM2540G	--	--	--	--	**68.19**	**29.14**	**93.52**	**91.45**	**84.55**	**87.51**	**55.63**	**53.32**	**25.12**	**91.63**
Metals (mg/kg)															
Arsenic	SW6020A	57	93	57	93	--	--	--	--	--	--	--	--	--	--
Cadmium	SW6020A	5.1	6.7	5.1	6.7	--	--	--	--	--	--	--	--	--	--
Chromium	SW6020A	260	270	260	270	--	--	--	--	--	--	--	--	--	--
Copper	SW6020A	390	390	390	390	--	--	--	--	--	--	--	--	--	--
Lead	SW6020A	450	530	450	530	--	--	--	--	--	--	--	--	--	--
Mercury	SW7471B	0.41	0.59	0.41	0.59	--	--	--	--	--	--	--	--	--	--
Silver	SW6020A	6.1	6.1	6.1	6.1	--	--	--	--	--	--	--	--	--	--
Zinc	SW6020A	410	960	410	960	--	--	--	--	--	--	--	--	--	--
Semivolatile Organics (mg/kg-OC)															
1,2,4-Trichlorobenzene	SW8270DSIM	0.81	1.8	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	SW8270DSIM	2.3	2.3	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	SW8270DSIM	3.1	9	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Ethylhexyl)phthalate	SW8270D	47	78	--	--	--	--	--	--	--	--	--	--	--	--
Butylbenzyl phthalate	SW8270D	4.9	64	--	--	--	--	--	--	--	--	--	--	--	--
Diethyl phthalate	SW8270DSIM	61	110	--	--	--	--	--	--	--	--	--	--	--	--
Dimethyl phthalate	SW8270DSIM	53	53	--	--	--	--	--	--	--	--	--	--	--	--
Di-n-butyl phthalate	SW8270D	220	1700	--	--	--	--	--	--	--	--	--	--	--	--
Di-n-octyl phthalate	SW8270D	58	4500	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobenzene	SW8270DSIM	0.38	2.3	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene	SW8270DSIM	3.9	6.2	--	--	--	--	--	--	--	--	--	--	--	--
n-Nitrosodiphenylamine	SW8270DSIM	11	11	--	--	--	--	--	--	--	--	--	--	--	--
Semivolatile Organics (µg/kg)															
1,2,4-Trichlorobenzene	SW8270DSIM	--	--	31	51	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	SW8270DSIM	--	--	35	50	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	SW8270DSIM	--	--	110	110	--	--	--	--	--	--	--	--	--	--
2,4-Dimethylphenol	SW8270DSIM	29	29	29	29	--	--	--	--	--	--	--	--	--	--
2-Methylphenol (o-Cresol)	SW8270DSIM	63	63	63	63	--	--	--	--	--	--	--	--	--	--
4-Methylphenol (p-Cresol)	SW8270DSIM	670	670	670	670	--	--	--	--	--	--	--	--	--	--
Benzoic acid	SW8270DSIM	650	650	650	650	--	--	--	--	--	--	--	--	--	--
Benzyl alcohol	SW8270DSIM	57	73	57	73	--	--	--	--	--	--	--	--	--	--
bis(2-Ethylhexyl)phthalate	SW8270D	--	--	1300	1900	--	--	--	--	--	--	--	--	--	--
Butylbenzyl phthalate	SW8270D	--	--	63	900	--	--	--	--	--	--	--	--	--	--
Diethyl phthalate	SW8270DSIM	--	--	200	1200	--	--	--	--	--	--	--	--	--	--
Dimethyl phthalate	SW8270DSIM	--	--	71	160	--	--	--	--	--	--	--	--	--	--
Di-n-butyl phthalate	SW8270D	--	--	1400	1400	--	--	--	--	--	--	--	--	--	--
Di-n-octyl phthalate	SW8270D	--	--	6200	6200	--	--	--	--	--	--	--	--	--	--
Hexachlorobenzene	SW8270DSIM	--	--	22	70	--	--	--	--	--	--	--	--	--	--
n-Nitrosodiphenylamine	SW8270DSIM	--	--	28	40	--	--	--	--	--	--	--	--	--	--
Pentachlorophenol	SW8270DSIM	360	690	360	690	--	--	--	--	--	--	--	--	--	--
Phenol	SW8270DSIM	420	1200	420	1200	--	--	--	--	--	--	--	--	--	--

Table 4
Upland Boring Post-Excavation Surface Interval Analytical Results

					Location ID	T25-SB-03B	T25-SB-03B	T25-SB-03D	T25-SB-03D	T25-SB-03D	T25-SB-03E	T25-SB-03E	T25-SB-03E	T25-SB-03E	T25-SB-03F
					Sample ID	T25-SB-03B-8-9	T25-SB-03B-9-10	T25-SB-03D-7-8	T25-SB-03D-8-9	T25-SB-03D-9-10	T25-SB-03E-7-8	T25-SB-03E-8-9	T25-SB-03E-9-10	T25-SB-03E-10-11	T25-SB-03F-7-8
					Sample Date	8/5/2020	8/5/2020	8/5/2020	8/5/2020	8/5/2020	8/6/2020	8/6/2020	8/6/2020	8/6/2020	8/6/2020
					Depth	8 - 9 ft	9 - 10 ft	7 - 8 ft	8 - 9 ft	9 - 10 ft	7 - 8 ft	8 - 9 ft	9 - 10 ft	10 - 11 ft	7 - 8 ft
					Sample Type	N	N	N	N	N	N	N	N	N	N
					Matrix	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO
Parameter	**Method**	**SMS SCO**	**SMS CSL**	**AET SCO**	**AET CSL**										
Polycyclic Aromatic Hydrocarbons (mg/kg-OC)															
2-Methylnaphthalene	SW8270D	38	64	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthene	SW8270D	16	57	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthylene	SW8270D	66	66	--	--	--	--	--	--	--	--	--	--	--	--
Anthracene	SW8270D	220	1200	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)anthracene	SW8270D	110	270	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)pyrene	SW8270D	99	210	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(g,h,i)perylene	SW8270D	31	78	--	--	--	--	--	--	--	--	--	--	--	--
Chrysene	SW8270D	110	460	--	--	--	--	--	--	--	--	--	--	--	--
Dibenzo(a,h)anthracene	SW8270DSIM	12	33	--	--	--	--	--	--	--	--	--	--	--	--
Dibenzofuran	SW8270D	15	58	--	--	--	--	--	--	--	--	--	--	--	--
Fluoranthene	SW8270D	160	1200	--	--	--	--	--	--	--	--	--	--	--	--
Fluorene	SW8270D	23	79	--	--	--	--	--	--	--	--	--	--	--	--
Indeno(1,2,3-c,d)pyrene	SW8270D	34	88	--	--	--	--	--	--	--	--	--	--	--	--
Naphthalene	SW8270D	99	170	--	--	--	--	--	--	--	--	--	--	--	--
Phenanthrene	SW8270D	100	480	--	--	--	--	--	--	--	--	--	--	--	--
Pyrene	SW8270D	1000	1400	--	--	--	--	--	--	--	--	--	--	--	--
Total Benzofluoranthenes (b,j,k) (U = 0)	SW8270D	230	450	--	--	--	--	--	--	--	--	--	--	--	--
Total HPAH (SMS) (U = 0)	SW8270D	960	5300	--	--	--	--	--	--	--	--	--	--	--	--
Total LPAH (SMS) (U = 0)	SW8270D	370	780	--	--	--	--	--	--	--	--	--	--	--	--
Polycyclic Aromatic Hydrocarbons (µg/kg)															
2-Methylnaphthalene	SW8270D	--	--	670	670	--	--	--	--	--	--	--	--	--	--
Acenaphthene	SW8270D	--	--	500	500	--	--	--	--	--	--	--	--	--	--
Acenaphthylene	SW8270D	--	--	1300	1300	--	--	--	--	--	--	--	--	--	--
Anthracene	SW8270D	--	--	960	960	--	--	--	--	--	--	--	--	--	--
Benzo(a)anthracene	SW8270D	--	--	1300	1600	--	--	--	--	--	--	--	--	--	--
Benzo(a)pyrene	SW8270D	--	--	1600	1600	--	--	--	--	--	--	--	--	--	--
Benzo(b,j,k)fluoranthenes	SW8270D	--	--			--	--	--	--	--	--	--	--	--	--
Benzo(g,h,i)perylene	SW8270D	--	--	670	720	--	--	--	--	--	--	--	--	--	--
Chrysene	SW8270D	--	--	1400	2800	--	--	--	--	--	--	--	--	--	--
Dibenzo(a,h)anthracene	SW8270DSIM	--	--	230	230	--	--	--	--	--	--	--	--	--	--
Dibenzofuran	SW8270D	--	--	540	540	--	--	--	--	--	--	--	--	--	--
Fluoranthene	SW8270D	--	--	1700	2500	--	--	--	--	--	--	--	--	--	--
Fluorene	SW8270D	--	--	540	540	--	--	--	--	--	--	--	--	--	--
Indeno(1,2,3-c,d)pyrene	SW8270D	--	--	600	690	--	--	--	--	--	--	--	--	--	--
Naphthalene	SW8270D	--	--	2100	2100	--	--	--	--	--	--	--	--	--	--
Phenanthrene	SW8270D	--	--	1500	1500	--	--	--	--	--	--	--	--	--	--
Pyrene	SW8270D	--	--	2600	3300	--	--	--	--	--	--	--	--	--	--
Total Benzofluoranthenes (b,j,k) (U = 0)	SW8270D	--	--	3200	3600	--	--	--	--	--	--	--	--	--	--
Total HPAH (SMS) (U = 0)	SW8270D	--	--	12000	17000	--	--	--	--	--	--	--	--	--	--
Total LPAH (SMS) (U = 0)	SW8270D	--	--	5200	5200	--	--	--	--	--	--	--	--	--	--

Table 4
Upland Boring Post-Excavation Surface Interval Analytical Results

					Location ID	T25-SB-03B	T25-SB-03B	T25-SB-03D	T25-SB-03D	T25-SB-03D	T25-SB-03E	T25-SB-03E	T25-SB-03E	T25-SB-03E	T25-SB-03F
					Sample ID	T25-SB-03B-8-9	T25-SB-03B-9-10	T25-SB-03D-7-8	T25-SB-03D-8-9	T25-SB-03D-9-10	T25-SB-03E-7-8	T25-SB-03E-8-9	T25-SB-03E-9-10	T25-SB-03E-10-11	T25-SB-03F-7-8
					Sample Date	8/5/2020	8/5/2020	8/5/2020	8/5/2020	8/5/2020	8/6/2020	8/6/2020	8/6/2020	8/6/2020	8/6/2020
					Depth	8 - 9 ft	9 - 10 ft	7 - 8 ft	8 - 9 ft	9 - 10 ft	7 - 8 ft	8 - 9 ft	9 - 10 ft	10 - 11 ft	7 - 8 ft
					Sample Type	N	N	N	N	N	N	N	N	N	N
					Matrix	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO
Parameter	**Method**	**SMS SCO**	**SMS CSL**	**AET SCO**	**AET CSL**										
Dioxin/Furans (ng/kg)															
2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	E1613B	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3,7,8-Pentachlorodibenzo-p-dioxin (PeCDD)	E1613B	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (HpCDD)	E1613B	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	E1613B	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,3,7,8-Tetrachlorodibenzofuran (TCDF)	E1613B	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3,7,8-Pentachlorodibenzofuran (PeCDF)	E1613B	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,3,4,7,8-Pentachlorodibenzofuran (PeCDF)	E1613B	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3,4,7,8-Hexachlorodibenzofuran (HxCDF)	E1613B	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3,6,7,8-Hexachlorodibenzofuran (HxCDF)	E1613B	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3,7,8,9-Hexachlorodibenzofuran (HxCDF)	E1613B	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,3,4,6,7,8-Hexachlorodibenzofuran (HxCDF)	E1613B	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3,4,6,7,8-Heptachlorodibenzofuran (HpCDF)	E1613B	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3,4,7,8,9-Heptachlorodibenzofuran (HpCDF)	E1613B	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	E1613B	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total Dioxin/Furan TEQ 2005 (Mammal) (U = 0)	E1613B	25 ng/kg TEQ		--	--	--	--	--	--	--	--	--	--	--	--
Total Dioxin/Furan TEQ 2005 (Mammal) (U = 1/2)	E1613B	25 ng/kg TEQ		--	--	--	--	--	--	--	--	--	--	--	--
PCB Aroclors (mg/kg-OC)															
Total PCB Aroclors (SMS Marine 2013) (U = 0)	SW8082A	12	65	--	--	**3.99 J**	**32.8**	**1950 J**	**92.7 J**	**1295 J**	**2728 J**	**1812 J**	**2619 J**	**16.1**	**2435 J**
PCB Aroclors (µg/kg)															
Aroclor 1016	SW8082A	--	--	--	--	19.9 U	499 U	160 U	4 U	400 U	400 U	5000 U	5000 U	497 U	601 U
Aroclor 1221	SW8082A	--	--	--	--	19.9 U	499 U	160 U	4 U	400 U	400 U	5000 U	5000 U	497 U	601 U
Aroclor 1232	SW8082A	--	--	--	--	19.9 U	499 U	160 U	4 U	400 U	400 U	5000 U	5000 U	497 U	601 U
Aroclor 1242	SW8082A	--	--	--	--	19.9 U	499 U	160 U	4 U	400 U	400 U	5000 U	5000 U	497 U	601 U
Aroclor 1248	SW8082A	--	--	--	--	19.9 U	499 U	**2160 J**	**122 J**	**7590 J**	**17100 J**	**122000 J**	**312000 J**	497 U	601 U
Aroclor 1254	SW8082A	--	--	--	--	**193 J**	**8030**	**1150**	**126**	**6130**	**11600**	**132000**	**292000**	**5240**	**3340**
Aroclor 1260	SW8082A	--	--	--	--	**34.2 J**	499 U	**200**	**30**	**908**	**2130**	**25100**	**40300**	**2570**	**313 J**
Aroclor 1262	SW8082A	--	--	--	--	19.9 U	499 U	160 U	4 U	400 U	400 U	5000 U	5000 U	497 U	601 U
Aroclor 1268	SW8082A	--	--	--	--	19.9 U	499 U	160 U	4 U	400 U	400 U	5000 U	5000 U	497 U	601 U
Total PCB Aroclors (SMS Marine 2013) (U = 0)	SW8082A	--	--	130	1000	**227 J**	**8030**	**3510 J**	**278 J**	**14628 J**	**30830 J**	**279100* J**	**644300* J**	**7810**	**3653 J**

Table 4
Upland Boring Post-Excavation Surface Interval Analytical Results

					Location ID	T25-SB-03F	T25-SB-03F	T25-SB-03F	T25-SB-03G	T25-SB-03G	T25-SB-03G	T25-SB04B	T25-SB05	T25-SB06	T25-SB07
					Sample ID	T25-SB-03F-8-9	T25-SB-03F-9-10	T25-SB-03F-10-11	T25-SB-03G-7-8	T25-SB-03G-8-9	T25-SB-03G-9-10	T25-SB04B-11-13	T25-SB05-4-6	T25-SB06-0-2	T25-SB07-8-10
					Sample Date	8/6/2020	8/6/2020	8/6/2020	8/5/2020	8/5/2020	8/5/2020	1/17/2019	1/15/2019	1/15/2019	1/15/2019
					Depth	8 - 9 ft	9 - 10 ft	10 - 11 ft	7 - 8 ft	8 - 9 ft	9 - 10 ft	11 - 13 ft	4 - 6 ft	0 - 2 ft	8 - 10 ft
					Sample Type	N	N	N	N	N	N	N	N	N	N
					Matrix	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO
Parameter	**Method**	**SMS SCO**	**SMS CSL**	**AET SCO**	**AET CSL**										
Conventional Parameters (percent)															
Total organic carbon	SW9060A	--	--	--	--	0.06 U	**1.23**	**55.2**	0.07 U	**0.42**	**0.92**	**0.23 J**	**4.36**	**0.83**	**0.21**
Total solids	SM2540G	--	--	--	--	**89.04**	**83.24**	**22.18**	**91.73**	**88.52**	**89.25**	**90.78**	**51.72**	**77.9**	**81.81**
Metals (mg/kg)															
Arsenic	SW6020A	57	93	57	93	--	--	--	--	--	--	**2.99**	**9.36**	**5.82**	**3.87**
Cadmium	SW6020A	5.1	6.7	5.1	6.7	--	--	--	--	--	--	**0.08 J**	**0.19**	**0.08 J**	**0.06 J**
Chromium	SW6020A	260	270	260	270	--	--	--	--	--	--	**29.3**	**28.2 J**	**10 J**	**12.6**
Copper	SW6020A	390	390	390	390	--	--	--	--	--	--	**16**	**28.9 J**	**69.7 J**	**13.9 J**
Lead	SW6020A	450	530	450	530	--	--	--	--	--	--	**5.48**	**40 J**	**48.8 J**	**18.8 J**
Mercury	SW7471B	0.41	0.59	0.41	0.59	--	--	--	--	--	--	**0.0164 J**	**0.123 J**	**0.0569 J**	**0.0615 J**
Silver	SW6020A	6.1	6.1	6.1	6.1	--	--	--	--	--	--	**0.04 J**	**0.12 J**	**0.07 J**	**0.05 J**
Zinc	SW6020A	410	960	410	960	--	--	--	--	--	--	**38.6**	**93**	**175**	**49.8**
Semivolatile Organics (mg/kg-OC)															
1,2,4-Trichlorobenzene	SW8270DSIM	0.81	1.8	--	--	--	--	--	--	--	--	2.1 U	0.11 U	1.8 U	2.4 U
1,2-Dichlorobenzene	SW8270DSIM	2.3	2.3	--	--	--	--	--	--	--	--	2.1 U	0.11 U	1.8 U	2.4 U
1,4-Dichlorobenzene	SW8270DSIM	3.1	9	--	--	--	--	--	--	--	--	2.1 U	**0.1 J**	1.8 U	2.4 U
bis(2-Ethylhexyl)phthalate	SW8270D	47	78	--	--	--	--	--	--	--	--	21 U	1.1 U	18 U	**120**
Butylbenzyl phthalate	SW8270D	4.9	64	--	--	--	--	--	--	--	--	8.6 U	0.44 U	7.1 U	9.4 U
Diethyl phthalate	SW8270DSIM	61	110	--	--	--	--	--	--	--	--	8.6 U	0.466 U	7.1 U	9.4 U
Dimethyl phthalate	SW8270DSIM	53	53	--	--	--	--	--	--	--	--	2.1 U	0.11 UJ	1.8 UJ	2.4 UJ
Di-n-butyl phthalate	SW8270D	220	1700	--	--	--	--	--	--	--	--	54 U	**3.4**	**19**	**34**
Di-n-octyl phthalate	SW8270D	58	4500	--	--	--	--	--	--	--	--	8.6 U	0.44 U	7.1 U	**22**
Hexachlorobenzene	SW8270DSIM	0.38	2.3	--	--	--	--	--	--	--	--	2.1 U	0.11 U	1.8 U	2.4 U
Hexachlorobutadiene	SW8270DSIM	3.9	6.2	--	--	--	--	--	--	--	--	2.1 U	0.11 U	1.8 U	2.4 U
n-Nitrosodiphenylamine	SW8270DSIM	11	11	--	--	--	--	--	--	--	--	2.1 U	0.11 U	1.8 U	2.4 U
Semivolatile Organics (µg/kg)															
1,2,4-Trichlorobenzene	SW8270DSIM	--	--	31	51	--	--	--	--	--	--	4.9 U	4.8 U	14.7 U	5 U
1,2-Dichlorobenzene	SW8270DSIM	--	--	35	50	--	--	--	--	--	--	4.9 U	4.8 U	14.7 U	5 U
1,4-Dichlorobenzene	SW8270DSIM	--	--	110	110	--	--	--	--	--	--	4.9 U	**4.5 J**	14.7 U	5 U
2,4-Dimethylphenol	SW8270DSIM	29	29	29	29	--	--	--	--	--	--	24.7 UJ	**5.6 J**	73.5 UJ	24.8 UJ
2-Methylphenol (o-Cresol)	SW8270DSIM	63	63	63	63	--	--	--	--	--	--	4.9 U	**5.2**	14.7 U	5 U
4-Methylphenol (p-Cresol)	SW8270DSIM	670	670	670	670	--	--	--	--	--	--	**15.6**	**32**	14.7 U	5 U
Benzoic acid	SW8270DSIM	650	650	650	650	--	--	--	--	--	--	**20.8 J**	**94.1 J**	294 UJ	99.1 UJ
Benzyl alcohol	SW8270DSIM	57	73	57	73	--	--	--	--	--	--	19.8 U	19.2 U	58.8 U	19.8 U
bis(2-Ethylhexyl)phthalate	SW8270D	--	--	1300	1900	--	--	--	--	--	--	49.4 U	48 U	147 U	**243**
Butylbenzyl phthalate	SW8270D	--	--	63	900	--	--	--	--	--	--	19.8 U	19.2 U	58.8 U	19.8 U
Diethyl phthalate	SW8270DSIM	--	--	200	1200	--	--	--	--	--	--	19.8 U	20.3 U	58.8 U	19.8 U
Dimethyl phthalate	SW8270DSIM	--	--	71	160	--	--	--	--	--	--	4.9 U	4.8 UJ	14.7 UJ	5 UJ
Di-n-butyl phthalate	SW8270D	--	--	1400	1400	--	--	--	--	--	--	124 U	**150**	**160**	**70.6**
Di-n-octyl phthalate	SW8270D	--	--	6200	6200	--	--	--	--	--	--	19.8 U	19.2 U	58.8 U	**46.6**
Hexachlorobenzene	SW8270DSIM	--	--	22	70	--	--	--	--	--	--	4.9 U	4.8 U	14.7 U	5 U
n-Nitrosodiphenylamine	SW8270DSIM	--	--	28	40	--	--	--	--	--	--	4.9 U	4.8 U	14.7 U	5 U
Pentachlorophenol	SW8270DSIM	360	690	360	690	--	--	--	--	--	--	19.8 UJ	19.2 UJ	58.8 UJ	**5.2 J**
Phenol	SW8270DSIM	420	1200	420	1200	--	--	--	--	--	--	13.3 UJ	18.7 U	14.7 U	6.2 U

Table 4
Upland Boring Post-Excavation Surface Interval Analytical Results

					Location ID	T25-SB-03F	T25-SB-03F	T25-SB-03F	T25-SB-03G	T25-SB-03G	T25-SB-03G	T25-SB04B	T25-SB05	T25-SB06	T25-SB07
					Sample ID	T25-SB-03F-8-9	T25-SB-03F-9-10	T25-SB-03F-10-11	T25-SB-03G-7-8	T25-SB-03G-8-9	T25-SB-03G-9-10	T25-SB04B-11-13	T25-SB05-4-6	T25-SB06-0-2	T25-SB07-8-10
					Sample Date	8/6/2020	8/6/2020	8/6/2020	8/5/2020	8/5/2020	8/5/2020	1/17/2019	1/15/2019	1/15/2019	1/15/2019
					Depth	8 - 9 ft	9 - 10 ft	10 - 11 ft	7 - 8 ft	8 - 9 ft	9 - 10 ft	11 - 13 ft	4 - 6 ft	0 - 2 ft	8 - 10 ft
					Sample Type	N	N	N	N	N	N	N	N	N	N
					Matrix	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO
Parameter	**Method**	**SMS SCO**	**SMS CSL**	**AET SCO**	**AET CSL**										
Polycyclic Aromatic Hydrocarbons (mg/kg-OC)															
2-Methylnaphthalene	SW8270D	38	64	--	--	--	--	--	--	--	--	**5 J**	**0.374 J**	**3.7 J**	**8.6 J**
Acenaphthene	SW8270D	16	57	--	--	--	--	--	--	--	--	**8 J**	**0.275 J**	**10**	**9.8**
Acenaphthylene	SW8270D	66	66	--	--	--	--	--	--	--	--	8.6 U	**0.39 J**	7.1 U	9.4 U
Anthracene	SW8270D	220	1200	--	--	--	--	--	--	--	--	**3.7 J**	**0.764**	**28**	**16**
Benzo(a)anthracene	SW8270D	110	270	--	--	--	--	--	--	--	--	**6.9 J**	**0.844**	**48**	**33**
Benzo(a)pyrene	SW8270D	99	210	--	--	--	--	--	--	--	--	**7.5 J**	**1.15**	**58**	**29**
Benzo(g,h,i)perylene	SW8270D	31	78	--	--	--	--	--	--	--	--	**6 J**	**0.589 J**	**26 J**	**10 J**
Chrysene	SW8270D	110	460	--	--	--	--	--	--	--	--	**9.2**	**1.24**	**57**	**44**
Dibenzo(a,h)anthracene	SW8270DSIM	12	33	--	--	--	--	--	--	--	--	**1.3 J**	**0.18 J**	**6.4 J**	**3.7 J**
Dibenzofuran	SW8270D	15	58	--	--	--	--	--	--	--	--	**3.5 J**	**0.42 J**	**5 J**	**5 J**
Fluoranthene	SW8270D	160	1200	--	--	--	--	--	--	--	--	**24**	**2.43**	**140**	**110**
Fluorene	SW8270D	23	79	--	--	--	--	--	--	--	--	**4.4 J**	**0.33 J**	**11**	**4.1 J**
Indeno(1,2,3-c,d)pyrene	SW8270D	34	88	--	--	--	--	--	--	--	--	**4.2 J**	**0.466 J**	**22 J**	**8.9 J**
Naphthalene	SW8270D	99	170	--	--	--	--	--	--	--	--	**13**	**1.45**	**6.2 J**	**16**
Phenanthrene	SW8270D	100	480	--	--	--	--	--	--	--	--	**24**	**1.73**	**130**	**70**
Pyrene	SW8270D	1000	1400	--	--	--	--	--	--	--	--	**23**	**2.41**	**140**	**110**
Total Benzofluoranthenes (b,j,k) (U = 0)	SW8270D	230	450	--	--	--	--	--	--	--	--	**13 J**	**2.43**	**100**	**53**
Total HPAH (SMS) (U = 0)	SW8270D	960	5300	--	--	--	--	--	--	--	--	**95 J**	**12 J**	**600 J**	**400 J**
Total LPAH (SMS) (U = 0)	SW8270D	370	780	--	--	--	--	--	--	--	--	**53 J**	**4.95 J**	**180 J**	**120 J**
Polycyclic Aromatic Hydrocarbons (µg/kg)															
2-Methylnaphthalene	SW8270D	--	--	670	670	--	--	--	--	--	--	**11.6 J**	**16.3 J**	**30.8 J**	**18 J**
Acenaphthene	SW8270D	--	--	500	500	--	--	--	--	--	--	**18.4 J**	**12 J**	**82.8**	**20.6**
Acenaphthylene	SW8270D	--	--	1300	1300	--	--	--	--	--	--	19.8 U	**17 J**	58.8 U	19.8 U
Anthracene	SW8270D	--	--	960	960	--	--	--	--	--	--	**8.6 J**	**33.3**	**232**	**34**
Benzo(a)anthracene	SW8270D	--	--	1300	1600	--	--	--	--	--	--	**15.8 J**	**36.8**	**402**	**68.5**
Benzo(a)pyrene	SW8270D	--	--	1600	1600	--	--	--	--	--	--	**17.2 J**	**50.3**	**480**	**60.5**
Benzo(b,j,k)fluoranthenes	SW8270D	--	--			--	--	--	--	--	--	**29.7 J**	**106**	**836**	**112**
Benzo(g,h,i)perylene	SW8270D	--	--	670	720	--	--	--	--	--	--	**13.8 J**	**25.7 J**	**212 J**	**21 J**
Chrysene	SW8270D	--	--	1400	2800	--	--	--	--	--	--	**21.2**	**54.1**	**473**	**91.8**
Dibenzo(a,h)anthracene	SW8270DSIM	--	--	230	230	--	--	--	--	--	--	**2.9 J**	**7.8 J**	**53.5 J**	**7.7 J**
Dibenzofuran	SW8270D	--	--	540	540	--	--	--	--	--	--	**8.1 J**	**18.3 J**	**41.3 J**	**10.6 J**
Fluoranthene	SW8270D	--	--	1700	2500	--	--	--	--	--	--	**54.8**	**106**	**1170**	**237**
Fluorene	SW8270D	--	--	540	540	--	--	--	--	--	--	**10.1 J**	**14.4 J**	**91.5**	**8.7 J**
Indeno(1,2,3-c,d)pyrene	SW8270D	--	--	600	690	--	--	--	--	--	--	**9.6 J**	**20.3 J**	**181 J**	**18.6 J**
Naphthalene	SW8270D	--	--	2100	2100	--	--	--	--	--	--	**30.8**	**63.4**	**51.4 J**	**32.8**
Phenanthrene	SW8270D	--	--	1500	1500	--	--	--	--	--	--	**55.1**	**75.6**	**1040**	**147**
Pyrene	SW8270D	--	--	2600	3300	--	--	--	--	--	--	**52.6**	**105**	**1170**	**221**
Total Benzofluoranthenes (b,j,k) (U = 0)	SW8270D	--	--	3200	3600	--	--	--	--	--	--	**29.7 J**	**106**	**836**	**112**
Total HPAH (SMS) (U = 0)	SW8270D	--	--	12000	17000	--	--	--	--	--	--	**220 J**	**510 J**	**5000 J**	**840 J**
Total LPAH (SMS) (U = 0)	SW8270D	--	--	5200	5200	--	--	--	--	--	--	**120 J**	**216 J**	**1500 J**	**240 J**

Table 4
Upland Boring Post-Excavation Surface Interval Analytical Results

					Location ID	T25-SB-03F	T25-SB-03F	T25-SB-03F	T25-SB-03G	T25-SB-03G	T25-SB-03G	T25-SB04B	T25-SB05	T25-SB06	T25-SB07
					Sample ID	T25-SB-03F-8-9	T25-SB-03F-9-10	T25-SB-03F-10-11	T25-SB-03G-7-8	T25-SB-03G-8-9	T25-SB-03G-9-10	T25-SB04B-11-13	T25-SB05-4-6	T25-SB06-0-2	T25-SB07-8-10
					Sample Date	8/6/2020	8/6/2020	8/6/2020	8/5/2020	8/5/2020	8/5/2020	1/17/2019	1/15/2019	1/15/2019	1/15/2019
					Depth	8 - 9 ft	9 - 10 ft	10 - 11 ft	7 - 8 ft	8 - 9 ft	9 - 10 ft	11 - 13 ft	4 - 6 ft	0 - 2 ft	8 - 10 ft
					Sample Type	N	N	N	N	N	N	N	N	N	N
					Matrix	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO
Parameter	**Method**	**SMS SCO**	**SMS CSL**	**AET SCO**	**AET CSL**										
Dioxin/Furans (ng/kg)															
2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	E1613B	--	--	--	--	--	--	--	--	--	--	**0.559 J**	0.127 U	**0.65 J**	0.104 U
1,2,3,7,8-Pentachlorodibenzo-p-dioxin (PeCDD)	E1613B	--	--	--	--	--	--	--	--	--	--	**1.72**	0.239 U	**2.5**	**0.479 J**
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B	--	--	--	--	--	--	--	--	--	--	**0.986 J**	0.149 U	**1.52 J**	**0.516 J**
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B	--	--	--	--	--	--	--	--	--	--	**3.37**	**0.437 J**	**3.98**	**3.56**
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B	--	--	--	--	--	--	--	--	--	--	**2.05**	0.155 U	**2.59**	**1.5**
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (HpCDD)	E1613B	--	--	--	--	--	--	--	--	--	--	**78.4**	**14.7**	**66**	**89.4**
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	E1613B	--	--	--	--	--	--	--	--	--	--	**616**	**114**	**656**	**658**
2,3,7,8-Tetrachlorodibenzofuran (TCDF)	E1613B	--	--	--	--	--	--	--	--	--	--	**1.71 J**	**0.286 J**	**2**	**0.635 J**
1,2,3,7,8-Pentachlorodibenzofuran (PeCDF)	E1613B	--	--	--	--	--	--	--	--	--	--	**1.05 J**	**0.156 J**	0.697 U	0.107 U
2,3,4,7,8-Pentachlorodibenzofuran (PeCDF)	E1613B	--	--	--	--	--	--	--	--	--	--	**1.16 J**	**0.141 J**	**6.28**	**0.806 J**
1,2,3,4,7,8-Hexachlorodibenzofuran (HxCDF)	E1613B	--	--	--	--	--	--	--	--	--	--	**1.26**	0.108 U	**1.71**	**0.899 J**
1,2,3,6,7,8-Hexachlorodibenzofuran (HxCDF)	E1613B	--	--	--	--	--	--	--	--	--	--	**1.16**	0.109 U	**1.65 J**	**0.878 J**
1,2,3,7,8,9-Hexachlorodibenzofuran (HxCDF)	E1613B	--	--	--	--	--	--	--	--	--	--	**0.41 J**	0.131 U	**2.84 J**	**0.462 J**
2,3,4,6,7,8-Hexachlorodibenzofuran (HxCDF)	E1613B	--	--	--	--	--	--	--	--	--	--	**1.51**	0.117 U	0.43 U	**1.66**
1,2,3,4,6,7,8-Heptachlorodibenzofuran (HpCDF)	E1613B	--	--	--	--	--	--	--	--	--	--	**14.3**	**2.74**	**22.1**	**6.53**
1,2,3,4,7,8,9-Heptachlorodibenzofuran (HpCDF)	E1613B	--	--	--	--	--	--	--	--	--	--	**0.795 J**	0.167 U	**2.02 J**	**0.586 J**
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	E1613B	--	--	--	--	--	--	--	--	--	--	**27**	**13.1**	**103**	**16.6**
Total Dioxin/Furan TEQ 2005 (Mammal) (U = 0)	E1613B	25 ng/kg TEQ		--	--	--	--	--	--	--	--	**5.03 J**	**0.332 J**	**7.79 J**	**2.9 J**
Total Dioxin/Furan TEQ 2005 (Mammal) (U = 1/2)	E1613B	25 ng/kg TEQ		--	--	--	--	--	--	--	--	**5.03 J**	**0.554 J**	**7.82 J**	**2.95 J**
PCB Aroclors (mg/kg-OC)															
Total PCB Aroclors (SMS Marine 2013) (U = 0)	SW8082A	12	65	--	--	**106 J**	**5578**	**0.347 J**	**2326 J**	**673 J**	**850 J**	**13 J**	**0.14 J**	**4.3 J**	**48**
PCB Aroclors (µg/kg)															
Aroclor 1016	SW8082A	--	--	--	--	4 U	4840 U	22.5 U	200 U	99.9 U	200 U	3.9 U	4 U	4 U	4 U
Aroclor 1221	SW8082A	--	--	--	--	4 U	4840 U	22.5 U	200 U	99.9 U	200 U	3.9 U	4 U	4 U	4 U
Aroclor 1232	SW8082A	--	--	--	--	4 U	4840 U	22.5 U	200 U	99.9 U	200 U	3.9 U	4 U	4 U	4 U
Aroclor 1242	SW8082A	--	--	--	--	4 U	4840 U	22.5 U	200 U	99.9 U	200 U	3.9 U	4 U	4 U	4 U
Aroclor 1248	SW8082A	--	--	--	--	**27.4 J**	4840 U	**69.8 J**	200 U	99.9 U	200 U	**8.4**	4 U	4 U	**55**
Aroclor 1254	SW8082A	--	--	--	--	**30.8**	**61000**	**95.2**	**1350**	**2270**	**6610**	**17.1 J**	**2.7 J**	**20.4 J**	**45.2**
Aroclor 1260	SW8082A	--	--	--	--	**5.1 J**	**7610**	**26.3**	**278 J**	**555 J**	**1210 J**	**3.3 J**	**3.6 J**	**14.9**	4 U
Aroclor 1262	SW8082A	--	--	--	--	4 U	4840 U	22.5 U	200 U	99.9 U	200 U	3.9 U	4 U	4 U	4 U
Aroclor 1268	SW8082A	--	--	--	--	4 U	4840 U	22.5 U	200 U	99.9 U	200 U	3.9 U	4 U	4 U	4 U
Total PCB Aroclors (SMS Marine 2013) (U = 0)	SW8082A	--	--	130	1000	**63.3 J**	**68610[a]**	**191.3 J**	**1628 J**	**2825 J**	**7820 J**	**29 J**	**6.3 J**	**35 J**	**100**

Table 4
Upland Boring Post-Excavation Surface Interval Analytical Results

					Location ID	T25-SB08	T25-SB09	T25-SB09	T25-SB09	T25-SB10	T25-SB11	T25-SB12	T25-SB13	T25-SB14	T25-SB15
					Sample ID	T25-SB08-12-14	T25-SB09-8-9.1	T25-SB09-9.1-10	T25-SB09-10-13	T25-SB10-0-2	T25-SB11-9-11	T25-SB12-0-2	T25-SB13-0-2	T25-SB14-3-5	T25-SB15-0-2
					Sample Date	1/17/2019	1/17/2019	1/17/2019	1/17/2019	1/16/2019	1/17/2019	1/17/2019	1/16/2019	1/16/2019	1/16/2019
					Depth	12 - 14 ft	8 - 9.1 ft	9.1 - 10 ft	10 - 13 ft	0 - 2 ft	9 - 11 ft	0 - 2 ft	0 - 2 ft	3 - 5 ft	0 - 2 ft
					Sample Type	N	N	N	N	N	N	N	N	N	N
					Matrix	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO
Parameter	**Method**	**SMS SCO**	**SMS CSL**	**AET SCO**	**AET CSL**										
Conventional Parameters (percent)															
Total organic carbon	SW9060A	--	--	--	--	**2.41 J**	**0.24 J**	**9.31 J**	**1.88**	**0.51 J**	**0.67 J**	**0.2 J**	**0.61 J**	**1.09 J**	**0.15 J**
Total solids	SM2540G	--	--	--	--	**57.38**	**89.52**	**51.33**	**68.45**	**95.24**	**88.71**	**92.43**	**90.87**	**83.24**	**91.89**
Metals (mg/kg)															
Arsenic	SW6020A	57	93	57	93	**4.3**	**2.18**	**6.95**	--	**2.21 J**	**2.56**	**2.56**	**3.67 J**	**5.79 J**	**4.38 J**
Cadmium	SW6020A	5.1	6.7	5.1	6.7	**0.24**	**0.05 J**	**0.72**	--	**0.07 J**	**0.11**	**0.08 J**	**0.09 J**	**0.05 J**	**0.09 J**
Chromium	SW6020A	260	270	260	270	**24.5**	**26.4**	**38.7**	--	**25 J**	**39.7**	**10.4**	**18.8 J**	**15.9 J**	**19.6 J**
Copper	SW6020A	390	390	390	390	**26**	**14**	**93.3**	--	**21.2 J**	**15.7**	**13.3**	**26.7 J**	**19.4 J**	**24.4 J**
Lead	SW6020A	450	530	450	530	**20.1**	**2.9**	**198**	--	**3.62 J**	**4.4**	**10.9**	**11.8 J**	**12 J**	**9.14 J**
Mercury	SW7471B	0.41	0.59	0.41	0.59	**0.0839**	**0.016 J**	**0.263**	--	**0.0135 J**	**0.0123 J**	**0.00926 J**	**0.0125 J**	**0.017 J**	**0.0273**
Silver	SW6020A	6.1	6.1	6.1	6.1	**0.16 J**	**0.07 J**	**0.23 J**	--	**0.06 J**	**0.06 J**	**0.04 J**	**0.08 J**	**0.07 J**	**0.06 J**
Zinc	SW6020A	410	960	410	960	**52.5**	**34.4**	**236**	--	**46.8 J**	**43.5**	**38.7**	**51.6 J**	**34.6 J**	**50.3 J**
Semivolatile Organics (mg/kg-OC)															
1,2,4-Trichlorobenzene	SW8270DSIM	0.81	1.8	--	--	**0.456**	2.1 U	0.156 U	--	0.94 U	0.75 U	2.5 U	0.82 U	0.45 U	3.3 U
1,2-Dichlorobenzene	SW8270DSIM	2.3	2.3	--	--	0.2 U	2.1 U	0.156 U	--	0.94 U	0.75 U	2.5 U	0.82 U	0.45 U	3.3 U
1,4-Dichlorobenzene	SW8270DSIM	3.1	9	--	--	**0.427**	**2.6**	0.156 U	--	0.94 U	0.75 U	2.5 U	0.82 U	0.45 U	3.3 U
bis(2-Ethylhexyl)phthalate	SW8270D	47	78	--	--	**5.02**	**24**	1.56 U	--	9.3 U	**4.3 J**	25 U	8.1 U	**3.51 J**	33 U
Butylbenzyl phthalate	SW8270D	4.9	64	--	--	0.797 U	8.3 U	0.625 U	--	3.7 U	3 U	9.8 U	3.2 U	1.81 U	**49**
Diethyl phthalate	SW8270DSIM	61	110	--	--	0.797 U	8.3 U	0.625 U	--	3.7 U	3 U	**180**	3.2 U	1.81 U	17 U
Dimethyl phthalate	SW8270DSIM	53	53	--	--	0.2 U	2.1 U	0.156 U	--	0.94 U	0.75 U	2.5 U	0.82 U	0.45 U	3.3 U
Di-n-butyl phthalate	SW8270D	220	1700	--	--	4.03 U	41 U	0.625 U	--	**35 J**	13 U	41 U	**27**	**16.2**	**160**
Di-n-octyl phthalate	SW8270D	58	4500	--	--	0.797 U	8.3 U	0.625 U	--	3.7 U	3 U	9.8 U	3.2 U	1.81 U	**15**
Hexachlorobenzene	SW8270DSIM	0.38	2.3	--	--	0.2 U	2.1 U	0.156 U	--	0.94 U	0.75 U	2.5 U	0.82 U	0.45 U	3.3 U
Hexachlorobutadiene	SW8270DSIM	3.9	6.2	--	--	0.2 U	2.1 U	0.156 U	--	0.94 U	0.75 U	2.5 U	0.82 U	0.45 U	3.3 U
n-Nitrosodiphenylamine	SW8270DSIM	11	11	--	--	0.2 U	2.1 U	0.156 U	--	**1.7 J**	0.75 U	2.5 U	0.82 UJ	0.45 UJ	3.3 UJ
Semivolatile Organics (µg/kg)															
1,2,4-Trichlorobenzene	SW8270DSIM	--	--	31	51	**11**	5 U	14.5 U	--	4.8 U	5 U	4.9 U	5 U	4.9 U	4.9 U
1,2-Dichlorobenzene	SW8270DSIM	--	--	35	50	4.8 U	5 U	14.5 U	--	4.8 U	5 U	4.9 U	5 U	4.9 U	4.9 U
1,4-Dichlorobenzene	SW8270DSIM	--	--	110	110	**10.3**	**6.2**	14.5 U	--	4.8 U	5 U	4.9 U	5 U	4.9 U	4.9 U
2,4-Dimethylphenol	SW8270DSIM	29	29	29	29	24 UJ	24.8 UJ	72.7 UJ	--	23.8 UJ	**4.9 J**	24.5 UJ	24.8 UJ	24.7 UJ	24.7 UJ
2-Methylphenol (o-Cresol)	SW8270DSIM	63	63	63	63	**3.8 J**	5 U	14.5 U	--	4.8 U	5 U	4.9 U	5 UJ	4.9 U	4.9 U
4-Methylphenol (p-Cresol)	SW8270DSIM	670	670	670	670	**67.7**	**2.7 J**	**510**	--	4.8 U	**18.9**	4.9 U	5 UJ	**7**	4.9 U
Benzoic acid	SW8270DSIM	650	650	650	650	**204 J**	99.1 UJ	**1330 J**	--	**30.9 J**	**94.9 J**	98.1 UJ	99.1 UJ	**76.7 J**	98.8 UJ
Benzyl alcohol	SW8270DSIM	57	73	57	73	**120**	19.8 U	58.2 U	--	19.1 U	19.9 U	19.6 U	19.8 U	19.7 U	19.8 U
bis(2-Ethylhexyl)phthalate	SW8270D	--	--	1300	1900	**121**	**56.5**	145 U	--	47.6 U	**28.9 J**	49 U	49.6 U	**38.3 J**	49.4 U
Butylbenzyl phthalate	SW8270D	--	--	63	900	19.2 U	19.8 U	58.2 U	--	19.1 U	19.9 U	19.6 U	19.8 U	19.7 U	**73.5**
Diethyl phthalate	SW8270DSIM	--	--	200	1200	19.2 U	19.8 U	58.2 U	--	19.1 U	19.9 U	**358**	19.8 U	19.7 U	25.2 U
Dimethyl phthalate	SW8270DSIM	--	--	71	160	4.8 U	5 U	14.5 U	--	4.8 U	5 U	4.9 U	5 U	4.9 U	4.9 U
Di-n-butyl phthalate	SW8270D	--	--	1400	1400	97.2 U	99 U	58.2 U	--	**176 J**	88.9 U	81.4 U	**165**	**177**	**244**
Di-n-octyl phthalate	SW8270D	--	--	6200	6200	19.2 U	19.8 U	58.2 U	--	19.1 U	19.9 U	19.6 U	19.8 U	19.7 U	**22.5**
Hexachlorobenzene	SW8270DSIM	--	--	22	70	4.8 U	5 U	14.5 U	--	4.8 U	5 U	4.9 U	5 U	4.9 U	4.9 U
n-Nitrosodiphenylamine	SW8270DSIM	--	--	28	40	4.8 U	5 U	14.5 U	--	**8.8 J**	5 U	4.9 U	5 UJ	4.9 UJ	4.9 UJ
Pentachlorophenol	SW8270DSIM	360	690	360	690	**3.2 J**	19.8 UJ	58.2 UJ	--	19.1 UJ	19.9 UJ	19.6 UJ	19.8 UJ	**4.9 J**	19.8 UJ
Phenol	SW8270DSIM	420	1200	420	1200	38.3 UJ	5.7 UJ	14.5 U	--	4.8 UJ	13.3 U	10.7 UJ	5 UJ	7.6 U	4.9 UJ

Table 4
Upland Boring Post-Excavation Surface Interval Analytical Results

					Location ID	T25-SB08	T25-SB09	T25-SB09	T25-SB09	T25-SB10	T25-SB11	T25-SB12	T25-SB13	T25-SB14	T25-SB15
					Sample ID	T25-SB08-12-14	T25-SB09-8-9.1	T25-SB09-9.1-10	T25-SB09-10-13	T25-SB10-0-2	T25-SB11-9-11	T25-SB12-0-2	T25-SB13-0-2	T25-SB14-3-5	T25-SB15-0-2
					Sample Date	1/17/2019	1/17/2019	1/17/2019	1/17/2019	1/16/2019	1/17/2019	1/17/2019	1/16/2019	1/16/2019	1/16/2019
					Depth	12 - 14 ft	8 - 9.1 ft	9.1 - 10 ft	10 - 13 ft	0 - 2 ft	9 - 11 ft	0 - 2 ft	0 - 2 ft	3 - 5 ft	0 - 2 ft
					Sample Type	N	N	N	N	N	N	N	N	N	N
					Matrix	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO
Parameter	**Method**	**SMS SCO**	**SMS CSL**	**AET SCO**	**AET CSL**										
Polycyclic Aromatic Hydrocarbons (mg/kg-OC)															
2-Methylnaphthalene	SW8270D	38	64	--	--	**1**	**2.4 J**	**1.01**	--	3.7 U	3 U	**99**	3.2 U	**0.61 J**	13 U
Acenaphthene	SW8270D	16	57	--	--	**1.13**	**7.2 J**	**1.24**	--	3.7 U	**1.5 J**	**210**	3.2 U	1.81 U	13 U
Acenaphthylene	SW8270D	66	66	--	--	0.797 U	8.3 U	**1.8**	--	3.7 U	**1.2 J**	**7.9 J**	3.2 U	1.81 U	**3.5 J**
Anthracene	SW8270D	220	1200	--	--	**1.66**	**3.4 J**	**2.06**	--	3.7 U	**1.3 J**	**460**	**1.3 J**	**3.03**	13 U
Benzo(a)anthracene	SW8270D	110	270	--	--	**1.18**	**3 J**	**2.14**	--	**1 J**	**3.5**	**460**	**2.3 J**	**4.75**	**6.8 J**
Benzo(a)pyrene	SW8270D	99	210	--	--	**1.74**	8.3 U	**3.79 J**	--	**2.7 J**	**3.8**	**430**	**1.8 J**	**7.7**	**9.5 J**
Benzo(g,h,i)perylene	SW8270D	31	78	--	--	**2.28 J**	8.3 U	**2.27 J**	--	**1.2 J**	**2.3 J**	**150 J**	3.2 U	**1.87**	**4.8 J**
Chrysene	SW8270D	110	460	--	--	**2.72**	**3.7 J**	**3.93**	--	**6.2**	**5.4**	**470**	**3.7**	**12.5**	**11 J**
Dibenzo(a,h)anthracene	SW8270DSIM	12	33	--	--	**0.573 J**	2.1 U	**0.735 J**	--	0.94 UJ	**0.69 J**	**47 J**	**0.67 J**	**2.14 J**	**2.2 J**
Dibenzofuran	SW8270D	15	58	--	--	0.797 U	**3.8 J**	**1.46**	--	3.7 U	**0.85 J**	**62**	**1 J**	**0.61 J**	13 U
Fluoranthene	SW8270D	160	1200	--	--	**7.43**	**12**	**11.4**	--	**1.3 J**	**10**	**1200**	**7.7**	**8.85**	**10 J**
Fluorene	SW8270D	23	79	--	--	**0.855**	**5.3 J**	**2.16**	--	3.7 U	**1.2 J**	**240**	3.2 U	1.81 U	13 U
Indeno(1,2,3-c,d)pyrene	SW8270D	34	88	--	--	**1.54 J**	8.3 U	**1.63 J**	--	3.7 UJ	**2.1 J**	**150 J**	3.2 U	**2.33**	13 U
Naphthalene	SW8270D	99	170	--	--	**5.64**	**7.6 J**	**4.31**	--	3.7 U	**1.7 J**	**56**	3.2 U	**0.81 J**	13 U
Phenanthrene	SW8270D	100	480	--	--	**5.19**	**13**	**7.91**	--	**1.8 J**	**9.2**	**1900**	**7.7**	**4.66**	**4.4 J**
Pyrene	SW8270D	1000	1400	--	--	**7.1**	**11**	**11.7**	--	**2.8 J**	**11**	**1200**	**6.8**	**8.61**	**13 J**
Total Benzofluoranthenes (b,j,k) (U = 0)	SW8270D	230	450	--	--	**4.69**	**4.3 J**	**5.9 J**	--	**4.5 J**	**7.2**	**610**	**4.6 J**	**27.2**	**17 J**
Total HPAH (SMS) (U = 0)	SW8270D	960	5300	--	--	**29.2 J**	**34 J**	**43 J**	--	**20 J**	**46 J**	**4700 J**	**28 J**	**75.9 J**	**74 J**
Total LPAH (SMS) (U = 0)	SW8270D	370	780	--	--	**14.5**	**37 J**	**19**	--	**1.8 J**	**16 J**	**2900 J**	**9 J**	**8.5 J**	**7.9 J**
Polycyclic Aromatic Hydrocarbons (µg/kg)															
2-Methylnaphthalene	SW8270D	--	--	670	670	**24.2**	**5.8 J**	**93.6**	--	19.1 U	19.9 U	**197**	19.8 U	**6.7 J**	19.8 U
Acenaphthene	SW8270D	--	--	500	500	**27.3**	**17.3 J**	**115**	--	19.1 U	**10.2 J**	**426**	19.8 U	19.7 U	19.8 U
Acenaphthylene	SW8270D	--	--	1300	1300	19.2 U	19.8 U	**170**	--	19.1 U	**8.3 J**	**15.8 J**	19.8 U	19.7 U	**5.2 J**
Anthracene	SW8270D	--	--	960	960	**40**	**8.2 J**	**192**	--	19.1 U	**8.9 J**	**913**	**7.7 J**	**33**	19.8 U
Benzo(a)anthracene	SW8270D	--	--	1300	1600	**28.4**	**7.2 J**	**199**	--	**5.2 J**	**23.4**	**923**	**13.8 J**	**51.8**	**10.2 J**
Benzo(a)pyrene	SW8270D	--	--	1600	1600	**41.9**	19.8 U	**353 J**	--	**13.6 J**	**25.7**	**853**	**11.1 J**	**83.9**	**14.3 J**
Benzo(b,j,k)fluoranthenes	SW8270D	--	--			**113**	**10.2 J**	**550 J**	--	**22.7 J**	**48**	**1220**	**27.8 J**	**296**	**25.1 J**
Benzo(g,h,i)perylene	SW8270D	--	--	670	720	**54.9 J**	19.8 U	**211 J**	--	**6.3 J**	**15.2 J**	**303 J**	19.8 U	**20.4**	**7.2 J**
Chrysene	SW8270D	--	--	1400	2800	**65.6**	**8.8 J**	**366**	--	**31.6**	**36.1**	**947**	**22.7**	**136**	**16 J**
Dibenzo(a,h)anthracene	SW8270DSIM	--	--	230	230	**13.8 J**	5 U	**68.4 J**	--	4.8 UJ	**4.6 J**	**94.3 J**	**4.1 J**	**23.3 J**	**3.3 J**
Dibenzofuran	SW8270D	--	--	540	540	19.2 U	**9.1 J**	**136**	--	19.1 U	**5.7 J**	**123**	**6.1 J**	**6.7 J**	19.8 U
Fluoranthene	SW8270D	--	--	1700	2500	**179**	**29**	**1060**	--	**6.8 J**	**69.3**	**2330**	**47.1**	**96.5**	**15.7 J**
Fluorene	SW8270D	--	--	540	540	**20.6**	**12.8 J**	**201**	--	19.1 U	**8.2 J**	**480**	19.8 U	19.7 U	19.8 U
Indeno(1,2,3-c,d)pyrene	SW8270D	--	--	600	690	**37 J**	19.8 U	**152 J**	--	19.1 UJ	**14 J**	**297 J**	19.8 U	**25.4**	19.8 U
Naphthalene	SW8270D	--	--	2100	2100	**136**	**18.2 J**	**401**	--	19.1 U	**11.5 J**	**111**	19.8 U	**8.8 J**	19.8 U
Phenanthrene	SW8270D	--	--	1500	1500	**125**	**32.1**	**736**	--	**9.3 J**	**61.5**	**3810**	**47.1**	**50.8**	**6.6 J**
Pyrene	SW8270D	--	--	2600	3300	**171**	**26.9**	**1090**	--	**14.4 J**	**73.4**	**2480**	**41.3**	**93.8**	**19.2 J**
Total Benzofluoranthenes (b,j,k) (U = 0)	SW8270D	--	--	3200	3600	**113**	**10.2 J**	**550 J**	--	**22.7 J**	**48**	**1220**	**27.8 J**	**296**	**25.1 J**
Total HPAH (SMS) (U = 0)	SW8270D	--	--	12000	17000	**705 J**	**82 J**	**4000 J**	--	**100 J**	**310 J**	**9450 J**	**170 J**	**827 J**	**110 J**
Total LPAH (SMS) (U = 0)	SW8270D	--	--	5200	5200	**349**	**89 J**	**1800**	--	**9.3 J**	**110 J**	**5800 J**	**55 J**	**93 J**	**12 J**

Table 4
Upland Boring Post-Excavation Surface Interval Analytical Results

					Location ID	T25-SB08	T25-SB09	T25-SB09	T25-SB09	T25-SB10	T25-SB11	T25-SB12	T25-SB13	T25-SB14	T25-SB15
					Sample ID	T25-SB08-12-14	T25-SB09-8-9.1	T25-SB09-9.1-10	T25-SB09-10-13	T25-SB10-0-2	T25-SB11-9-11	T25-SB12-0-2	T25-SB13-0-2	T25-SB14-3-5	T25-SB15-0-2
					Sample Date	1/17/2019	1/17/2019	1/17/2019	1/17/2019	1/16/2019	1/17/2019	1/17/2019	1/16/2019	1/16/2019	1/16/2019
					Depth	12 - 14 ft	8 - 9.1 ft	9.1 - 10 ft	10 - 13 ft	0 - 2 ft	9 - 11 ft	0 - 2 ft	0 - 2 ft	3 - 5 ft	0 - 2 ft
					Sample Type	N	N	N	N	N	N	N	N	N	N
					Matrix	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO
Parameter	**Method**	**SMS SCO**	**SMS CSL**	**AET SCO**	**AET CSL**										
Dioxin/Furans (ng/kg)															
2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	E1613B	--	--	--	--	**0.291 J**	**0.168 J**	**5.49 J**	--	0.046 U	**2.82 J**	**0.158 J**	**0.164 J**	0.063 U	**0.172 J**
1,2,3,7,8-Pentachlorodibenzo-p-dioxin (PeCDD)	E1613B	--	--	--	--	**1.57 J**	**0.91 J**	**94.7**	--	0.104 U	**19.3**	**0.184 J**	**0.282 J**	**0.073 J**	**0.663 J**
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B	--	--	--	--	**1.06**	**0.862 J**	**55.4**	--	0.091 U	**11.7**	0.044 U	**0.212 J**	0.132 U	**0.829 J**
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B	--	--	--	--	**8.17**	**6.97**	**490**	--	0.088 U	**24.1**	**0.333 J**	**1.85**	**0.349 J**	**8.55**
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B	--	--	--	--	**2.99**	**3.86**	**223**	--	0.093 U	**17.5**	**0.209 J**	**1.05**	**0.294 J**	**3.15**
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (HpCDD)	E1613B	--	--	--	--	**187**	**33.9**	**2410**	--	**1.99 J**	**110**	**12.4**	**58.3**	**7.63**	**240**
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	E1613B	--	--	--	--	**1270**	**75.3**	**8160**	--	**18.4**	**188**	**133**	**514**	**63.7**	**1960**
2,3,7,8-Tetrachlorodibenzofuran (TCDF)	E1613B	--	--	--	--	**1.79 J**	**0.561 J**	1.97 U	--	**0.145 J**	**5.62 J**	**0.638 J**	**0.134 J**	**0.512 J**	**0.61 J**
1,2,3,7,8-Pentachlorodibenzofuran (PeCDF)	E1613B	--	--	--	--	**1.25**	**0.304 J**	**30.9 J**	--	0.076 U	**4.72 J**	**0.303 J**	**0.157 J**	**0.294 J**	**0.396 J**
2,3,4,7,8-Pentachlorodibenzofuran (PeCDF)	E1613B	--	--	--	--	**2.19**	**0.674 J**	**77.9**	--	0.073 U	**7.66**	**0.364 J**	**0.257 J**	**0.17 J**	**1.39 J**
1,2,3,4,7,8-Hexachlorodibenzofuran (HxCDF)	E1613B	--	--	--	--	**4.54**	**4.72**	**301**	--	0.09 U	**7.83 J**	**0.281 J**	**0.358 J**	**0.247 J**	**3.12**
1,2,3,6,7,8-Hexachlorodibenzofuran (HxCDF)	E1613B	--	--	--	--	**1.54**	**1.8**	**111**	--	0.092 U	**7.37**	**0.225 J**	**0.246 J**	**0.207 J**	**2.72**
1,2,3,7,8,9-Hexachlorodibenzofuran (HxCDF)	E1613B	--	--	--	--	**1.44 J**	**2.42**	**146**	--	0.114 U	**2.23**	0.113 U	0.292 U	0.145 U	**1.4**
2,3,4,6,7,8-Hexachlorodibenzofuran (HxCDF)	E1613B	--	--	--	--	**1.81 J**	**2.13**	**199**	--	0.096 U	**9.32**	**0.321 J**	**0.272 J**	**0.181 J**	**4.72**
1,2,3,4,6,7,8-Heptachlorodibenzofuran (HpCDF)	E1613B	--	--	--	--	**66**	**8.08**	**666**	--	**0.266 J**	**19.3**	**2.13**	**13.7**	**1.67**	**396**
1,2,3,4,7,8,9-Heptachlorodibenzofuran (HpCDF)	E1613B	--	--	--	--	**4.24 J**	**2.66 J**	**129 J**	--	0.264 U	**3.24 J**	**0.119 J**	**0.465 J**	0.119 U	**4.44**
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	E1613B	--	--	--	--	**319**	**18.4**	**2860**	--	**0.668 J**	**20.7**	**4.28**	**35.7**	**3.34**	**416**
Total Dioxin/Furan TEQ 2005 (Mammal) (U = 0)	E1613B	25 ng/kg TEQ		--	--	**7.94 J**	**4.1 J**	**310 J**	--	**0.043 J**	**35 J**	**0.85 J**	**1.83 J**	**0.42 J**	**11 J**
Total Dioxin/Furan TEQ 2005 (Mammal) (U = 1/2)	E1613B	25 ng/kg TEQ		--	--	**7.94 J**	**4.1 J**	**310 J**	--	**0.16 J**	**35 J**	**0.86 J**	**1.84 J**	**0.47 J**	**11 J**
PCB Aroclors (mg/kg-OC)															
Total PCB Aroclors (SMS Marine 2013) (U = 0)	SW8082A	12	65	--	--	**25 J**	**82**	**150**	**7 J**	**0.67 J**	**720 J**	**1.5 J**	**2.9 J**	**0.46 J**	**26**
PCB Aroclors (µg/kg)															
Aroclor 1016	SW8082A	--	--	--	--	4 U	4 U	7.8 U	4 U	4 U	4 U	3.9 U	3.9 U	4 U	3.8 U
Aroclor 1221	SW8082A	--	--	--	--	4 U	4 U	7.8 U	4 U	4 U	4 U	3.9 U	3.9 U	4 U	3.8 U
Aroclor 1232	SW8082A	--	--	--	--	4 U	4 U	7.8 U	4 U	4 U	4 U	3.9 U	3.9 U	4 U	3.8 U
Aroclor 1242	SW8082A	--	--	--	--	4 U	4 U	7.8 U	4 U	4 U	4 U	3.9 U	3.9 U	4 U	3.8 U
Aroclor 1248	SW8082A	--	--	--	--	4 U	4 U	7.8 U	4 U	**3.4 J**	4 U	3.9 U	**5.6**	4 U	3.8 U
Aroclor 1254	SW8082A	--	--	--	--	**304 J**	**168**	**12500**	**115 J**	4 U	**4830**	**1.6 J**	**9.7**	**3.7 J**	**20**
Aroclor 1260	SW8082A	--	--	--	--	**294**	**29.7**	**1620**	**16**	4 U	4 UJ	**1.4 J**	**2.3 J**	**1.3 J**	**18.7**
Aroclor 1262	SW8082A	--	--	--	--	4 U	4 U	7.8 U	4 U	4 U	4 U	3.9 U	3.9 U	4 U	3.8 U
Aroclor 1268	SW8082A	--	--	--	--	4 U	4 U	7.8 U	4 U	4 U	4 U	3.9 U	3.9 U	4 U	3.8 U
Total PCB Aroclors (SMS Marine 2013) (U = 0)	SW8082A	--	--	130	1000	**600 J**	**200**	**14000**	**130 J**	**3.4 J**	**4800 J**	**3 J**	**18 J**	**5 J**	**39**

Table 4
Upland Boring Post-Excavation Surface Interval Analytical Results

Notes:
Screening level exceedances were applied to OC-normalized results when TOC concentrations were within the normal range (as defined by SCUM [Ecology 2019]). They were applied to dry weight results when TOC was outside of the normal range.

TOC in range (0.5% - 3.5%)
Detected concentration is greater than SMS Marine SCO
Detected concentration is greater than SMS Marine CSL

TOC out of range
Detected concentration is greater than AET Marine SCO
Detected concentration is greater than AET Marine CSL

East Waterway Criteria
Detected concentration is greater than East Waterway Remedial Action Level (EWRAL)

a. Exceeds the Toxics Substances Control Act (TSCA) threshold for PCB remediation waste (50,000 µg/kg)

Bold: Detected result
µg/kg: micrograms per kilogram
AET: Apparent Effects Threshold
CSL: Cleanup Screening Level
ft: feet
HPAH: high molecular weight polycyclic aromatic hydrocarbon
J: Estimated value
LPAH: low molecular weight polycyclic aromatic hydrocarbon
mg/kg: milligrams per kilogram
mg/kg-OC: milligrams per kilogram organic carbon normalized
N: normal environmental sample
ng/kg: nanograms per kilogram
OC: organic carbon
PCB: polychlorinated biphenyl
SCO: Sediment Cleanup Objective
SCUM: Sediment Cleanup User's Manual
SMS: Sediment Management Standards
SO: soil matrix
TEQ: Toxic Equivalents Quotient
TOC: total organic carbon
U: Compound analyzed, but not detected above detection limit
UJ: Compound analyzed, but not detected above estimated detection limit

ED_006289_00002549-00051

Table 5
Upland Boring Volatile Organic Compound Analytical Results

				Location ID	T25-SB07	T25-SB07	T25-SB09	T25-SB09
				Sample ID	T25-SB07-13.4-13.5	T25-SB07-16-16.1	T25-SB09-9.9-10	T25-SB09-15.5-15.6
				Sample Date	1/15/2019	1/15/2019	1/17/2019	1/17/2019
				Depth	13.4 - 13.5 ft	16 - 16.1 ft	9.9 - 10 ft	15.5 - 15.6 ft
				Sample Type	N	N	N	N
				Matrix	SO	SO	SO	SO
Parameter	**Method**	**MTCA Unrestricted**	**MTCA Industrial**	**RCRA Screening**				
Volatile Organics (µg/kg)								
1,1,1,2-Tetrachloroethane	SW8260C	--	--	--	3.89 U	1.32 U	7.67 U	1.59 U
1,1,1-Trichloroethane	SW8260C	2000	2000	--	3.89 U	1.32 U	7.67 U	1.59 U
1,1,2,2-Tetrachloroethane	SW8260C	--	--	--	3.89 UJ	1.32 U	7.67 U	1.59 U
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	SW8260C	--	--	--	7.78 U	2.63 U	15.3 U	3.18 U
1,1,2-Trichloroethane	SW8260C	--	--	--	3.89 U	1.32 U	7.67 U	1.59 U
1,1-Dichloroethane	SW8260C	--	--	--	3.89 U	1.32 U	7.67 U	1.59 U
1,1-Dichloroethene	SW8260C	--	--	14000	3.89 U	1.32 U	7.67 U	1.59 U
1,1-Dichloropropene	SW8260C	--	--	--	3.89 U	1.32 U	7.67 U	1.59 U
1,2,3-Trichlorobenzene	SW8260C	--	--	--	19.4 UJ	6.58 U	38.3 U	7.95 U
1,2,3-Trichloropropane	SW8260C	--	--	--	7.78 UJ	2.63 U	15.3 U	3.18 U
1,2,4-Trichlorobenzene	SW8260C	--	--	--	19.4 UJ	6.58 U	38.3 U	7.95 U
1,2,4-Trimethylbenzene	SW8260C	--	--	--	3.89 UJ	1.32 U	7.67 U	1.59 U
1,2-Dibromo-3-chloropropane	SW8260C	--	--	--	19.4 UJ	6.58 U	38.3 U	7.95 U
1,2-Dichlorobenzene	SW8260C	--	--	1000	3.89 UJ	1.32 U	7.67 U	1.59 U
1,2-Dichloroethane	SW8260C	--	--	--	3.89 UJ	1.32 U	7.67 U	1.59 U
1,2-Dichloroethene, cis-	SW8260C	--	--	--	3.89 U	1.32 U	**2.06 J**	1.59 U
1,2-Dichloroethene, trans-	SW8260C	--	--	--	3.89 U	1.32 U	7.67 U	1.59 U
1,2-Dichloropropane	SW8260C	--	--	--	3.89 U	1.32 U	7.67 U	1.59 U
1,3,5-Trimethylbenzene (Mesitylene)	SW8260C	--	--	--	3.89 UJ	1.32 U	7.67 U	1.59 U
1,3-Dichlorobenzene	SW8260C	--	--	--	3.89 UJ	1.32 U	7.67 U	1.59 U
1,3-Dichloropropane	SW8260C	--	--	--	3.89 U	1.32 U	7.67 U	1.59 U
1,3-Dichloropropene, cis-	SW8260C	--	--	--	3.89 U	1.32 U	7.67 U	1.59 U
1,3-Dichloropropene, trans-	SW8260C	--	--	--	3.89 U	1.32 U	7.67 U	1.59 U
1,4-Dichloro-2-butene, trans-	SW8260C	--	--	--	19.4 UJ	6.58 U	38.3 U	7.95 U
1,4-Dichlorobenzene	SW8260C	--	--	150000	3.89 UJ	1.32 U	7.67 U	1.59 U
2-Chloroethylvinyl ether	SW8260C	--	--	--	19.4 U	6.58 U	38.3 U	7.95 U
2-Chlorotoluene	SW8260C	--	--	--	3.89 UJ	1.32 U	7.67 U	1.59 U
2-Hexanone (Methyl butyl ketone)	SW8260C	--	--	--	19.4 UJ	6.58 U	38.3 U	7.95 U
2-Pentanone	SW8260C	--	--	--	19.4 U	6.58 U	38.3 U	7.95 U
4-Chlorotoluene	SW8260C	--	--	--	3.89 UJ	1.32 U	7.67 U	1.59 U
4-Methyl-2-pentanone (Methyl isobutyl ketone)	SW8260C	--	--	--	19.4 U	6.58 U	38.3 U	7.95 U
Acetone	SW8260C	--	--	--	19.4 U	**61**	**3150**	**32.8**
Acrolein	SW8260C	--	--	--	19.4 U	6.58 U	38.3 U	7.95 U
Acrylonitrile	SW8260C	--	--	--	19.4 U	6.58 U	38.3 U	7.95 U
Benzene	SW8260C	30	30	10000	3.89 U	1.32 U	**7.08 J**	1.59 U
Bromobenzene	SW8260C	--	--	--	3.89 UJ	1.32 U	7.67 U	1.59 U
Bromochloromethane	SW8260C	--	--	--	3.89 U	1.32 U	7.67 U	1.59 U
Bromodichloromethane	SW8260C	--	--	--	3.89 U	1.32 U	7.67 U	1.59 U
Bromoform (Tribromomethane)	SW8260C	--	--	--	3.89 UJ	1.32 U	7.67 U	1.59 U
Bromomethane (Methyl bromide)	SW8260C	--	--	--	3.89 U	1.32 UJ	7.67 U	1.59 U
Carbon disulfide	SW8260C	--	--	--	3.89 UJ	**16.8**	**24.4**	**5.68**
Carbon tetrachloride (Tetrachloromethane)	SW8260C	--	--	10000	3.89 U	1.32 U	7.67 U	1.59 U
Chlorobenzene	SW8260C	--	--	--	3.89 U	1.32 U	7.67 U	1.59 U

Table 5
Upland Boring Volatile Organic Compound Analytical Results

				Location ID	T25-SB07	T25-SB07	T25-SB09	T25-SB09
				Sample ID	T25-SB07-13.4-13.5	T25-SB07-16-16.1	T25-SB09-9.9-10	T25-SB09-15.5-15.6
				Sample Date	1/15/2019	1/15/2019	1/17/2019	1/17/2019
				Depth	13.4 - 13.5 ft	16 - 16.1 ft	9.9 - 10 ft	15.5 - 15.6 ft
				Sample Type	N	N	N	N
				Matrix	SO	SO	SO	SO
Parameter	**Method**	**MTCA Unrestricted**	**MTCA Industrial**	**RCRA Screening**				
Chloroethane	SW8260C	--	--	--	3.89 U	1.32 UJ	7.67 U	1.59 U
Chloroform	SW8260C	--	--	120000	3.89 U	1.32 U	7.67 U	1.59 U
Chloromethane	SW8260C	--	--	--	3.89 U	1.32 U	7.67 U	1.59 U
Cymene, p- (4-Isopropyltoluene)	SW8260C	--	--	--	**15700**	**2.78**	**72900**	**1.22 J**
Dibromochloromethane	SW8260C	--	--	--	3.89 U	1.32 U	7.67 U	1.59 U
Dibromomethane	SW8260C	--	--	--	3.89 U	1.32 U	7.67 U	1.59 U
Dichlorodifluoromethane	SW8260C	--	--	--	3.89 U	1.32 U	7.67 U	1.59 U
Dichloromethane (Methylene chloride)	SW8260C	20	20	--	7.78 U	2.63 U	15.3 U	3.18 U
Ethyl bromide (Bromoethane)	SW8260C	--	--	--	7.78 U	2.63 U	15.3 U	3.18 U
Ethylbenzene	SW8260C	6000	6000	--	3.89 U	1.32 U	7.67 U	1.59 U
Ethylene dibromide (1,2-Dibromoethane)	SW8260C	5	5	--	3.89 U	1.32 U	7.67 U	1.59 U
Hexachlorobutadiene (Hexachloro-1,3-butadiene)	SW8260C	--	--	10000	19.4 UJ	6.58 U	38.3 U	7.95 U
Isopropylbenzene (Cumene)	SW8260C	--	--	--	3.89 UJ	1.32 U	7.67 U	1.59 U
m,p-Xylene	SW8260C	--	--	--	7.78 U	2.63 U	15.3 U	3.18 U
Methyl ethyl ketone (2-Butanone)	SW8260C	--	--	4000000	19.4 U	6.58 U	**124**	7.95 U
Methyl iodide (Iodomethane)	SW8260C	--	--	--	3.89 U	1.32 UJ	7.67 UJ	1.59 U
Methyl tert-butyl ether (MTBE)	SW8260C	100	100	--	3.89 U	1.32 U	7.67 U	1.59 U
Naphthalene	SW8260C	5000	5000	--	19.4 UJ	6.58 U	**21.3 J**	7.95 U
n-Butylbenzene	SW8260C	--	--	--	3.89 UJ	1.32 U	7.67 U	1.59 U
n-Propylbenzene	SW8260C	--	--	--	3.89 UJ	1.32 U	7.67 U	1.59 U
o-Xylene	SW8260C	--	--	--	3.89 U	1.32 U	7.67 U	1.59 U
sec-Butylbenzene	SW8260C	--	--	--	3.89 UJ	1.32 U	7.67 U	1.59 U
Styrene	SW8260C	--	--	--	3.89 U	1.32 U	7.67 U	1.59 U
tert-Butylbenzene	SW8260C	--	--	--	3.89 UJ	1.32 U	7.67 U	1.59 U
Tetrachloroethene (PCE)	SW8260C	50	50	14000	3.89 U	1.32 U	7.67 U	1.59 U
Toluene	SW8260C	7000	7000	--	**1.6 J**	1.32 U	**19.9**	1.59 U
Trichloroethene (TCE)	SW8260C	30	30	10000	3.89 U	1.32 U	7.67 U	1.59 U
Trichlorofluoromethane (Fluorotrichloromethane)	SW8260C	--	--	--	3.89 UJ	1.32 U	7.67 U	1.59 U
Vinyl acetate	SW8260C	--	--	--	19.4 U	6.58 U	38.3 U	7.95 U
Vinyl chloride	SW8260C	--	--	4000	3.89 U	1.32 U	7.67 U	1.59 U
Total xylenes	SW8260C	9000	9000	--	7.78 U	2.63 U	15.3 U	3.18 U

Notes:
No screening level exceedances
Volatile organic compounds were only analyzed on samples with elevated photoionization detector readings
Bold: Detected result
µg/kg: micrograms per kilogram
ft: feet
ID: identification
J: Estimated value
MTCA: Model Toxics Control Act
N: normal environmental sample
RCRA: Resource Conservation and Recovery Act
SO: soil matrix
TEQ: Toxic Equivalents Quotient
U: Compound analyzed, but not detected above detection limit
UJ: Compound analyzed, but not detected above estimated detection limit

Table 6
Upland Post-Excavation Summary

Location ID	Post-Excavation Interval (ft bgs)	Chemical Exceedances	Material Type	100% Wood Debris Interval (ft bgs)	Native Contact (ft bgs)
T25-SB01	10 - 12	None	Poorly graded sand	None	17
	12 - 17	N/A	Poorly graded sand with silt		
	17 - 20		Poorly graded sand		
T25-SB02	3 - 5	Fluoranthene, phenanthrene, and PCBs > SCO	Poorly graded sand	17.7 - 18.8	18.8
	5 - 7	None	Poorly graded sand		
	7 - 18.8	N/A	Poorly graded sand		
	18.8 - 25		Poorly graded sand with gravel		
T25-SB03	7.5 - 8.8	Phenanthrene > SCO, PCBs > CSL and TSCA; D/F > EWRAL	Poorly graded sand with silt	13.5 - 14.2	19.0
	8.8 - 9.5		Sandy silt		
	9.5 - 11.5	PCBs > CSL	Sandy silt		
	11.5 - 13.5	PCBs > CSL	Sandy silt		
	14.2 - 16.2	PCBs > SCO	Silty sand		
	15 - 19	N/A	Poorly graded sand with silt		
	19 - 41		Poorly graded sand		
	41 - 55		Sandy silt		
	59 - 75		Poorly graded sand		
T25-SB-03A	8 - 9	N/A	Silty sand	12.0 - 13.0	---
	9 - 10	N/A	Silty sand		
	10 - 11	N/A	Silty sand		
	11 - 12	N/A	Silty sand		
	13 - 14	N/A	Silty sand		
	14 - 15	N/A	Silty sand		
	15 - 16	N/A	Poorly graded sand with silt		
	16 - 17	N/A	Poorly graded sand with silt		
	17 - 18	N/A	Poorly graded sand with silt		
	18 - 19	N/A	Poorly graded sand with silt		
	19 - 20	N/A	Poorly graded sand with silt		
T25-SB-03B	7 - 8	PCBs > CSL	Poorly graded sand with silt	None	18.3
	8 - 9	PCBs > SCO	Silty sand		
	9 - 10	PCBs > CSL	Silty sand		
	13 - 14	N/A	Silty sand		
	14 - 15	N/A	Silty sand		
	15 - 16	N/A	Silty sand		
	16 - 17	N/A	Silty sand		
	17 - 18	N/A	Poorly graded sand with silt		
	18 - 19	N/A	Poorly graded sand		
	19 - 20	N/A	Poorly graded sand		
T25-SB-03BB	---	---	---	None	---
T25-SB-03C	8 - 9	N/A	Silty sand	14.6 - 15.0	16.0
	9 - 10	N/A	Silty sand		
	10 - 11	N/A	Silty sand		
	11 - 12	N/A	Silty sand		
	12 - 13	N/A	Silty sand		
	13 - 14	N/A	Poorly graded sand with silt		
	14 - 15	N/A	Poorly graded sand with silt		
	15 - 16	N/A	Poorly graded sand with silt		
	16 - 17	N/A	Poorly graded sand with silt		
	17 - 18	N/A	Poorly graded sand		
	18 - 19	N/A	Poorly graded sand		
	19 - 20	N/A	Poorly graded sand		
T25-SB-03D	7 - 8	PCBs > CSL	Poorly graded sand with silt	15.0 - 16.0	18.8
	8 - 9	PCBs > SCO	Poorly graded sand with silt		
	9 - 10	PCBs > CSL	Poorly graded sand with silt		
	14 - 15	N/A	Silty sand		
	16 - 17	N/A	Poorly graded sand with silt		
	17 - 18	N/A	Poorly graded sand with silt		
	18 - 19	N/A	Poorly graded sand with silt		
	19 - 20	N/A	Poorly graded sand		
T25-SB-03DD	---	---	---	13.6 - 14.0	---
T25-SB-03E	7 - 8	PCBs > CSL	Poorly graded sand with silt	10.0 - 14.0	17.1
	8 - 9	PCBs > CSL and TSCA	Silty sand		
	9 - 10	PCBs > CSL and TSCA	Silty sand		
	10 - 11	PCBs > CSL	Organic material		
	11 - 12	N/A	Organic material		
	12 - 13	N/A	Organic material		
	13 - 14	N/A	Organic material		
	14 - 15	N/A	Poorly graded sand with silt		
	15 - 16	N/A	Poorly graded sand with silt		
	16 - 17	N/A	Poorly graded sand with silt		
	17 - 18	N/A	Poorly graded sand		
	18 - 19	N/A	Poorly graded sand		
	19 - 20	N/A	Poorly graded sand		
T25-SB-03F	7 - 8	PCBs > CSL	Silty sand	10.0 - 15.0	17.9
	8 - 9	None	Poorly graded sand		
	9 - 10	PCBs > CSL and TSCA	Poorly graded sand		
	10 - 11	PCBs > SCO	Organic material		
	11 - 12	N/A	Organic material		
	12 - 13	N/A	Organic material		
	13 - 14	N/A	Organic material		
	14 - 15	N/A	Organic material		
	15 - 16	N/A	Silty sand		
	16 - 17	N/A	Silty sand		
	17 - 18	N/A	Poorly graded sand with silt		
	18 - 19	N/A	Poorly graded sand		
	19 - 20	N/A	Poorly graded sand		

ED_006289_00002549-00054

Table 6
Upland Post-Excavation Summary

Location ID	Post-Excavation Interval (ft bgs)	Chemical Exceedances	Material Type	100% Wood Debris Interval (ft bgs)	Native Contact (ft bgs)
T25-SB-03G	7 - 8	PCBs > CSL	Poorly graded sand with silt	14.7 - 15.0	17.7
	8 - 9	PCBs > CSL	Poorly graded sand with silt		
	9 - 10	PCBs > CSL	Silty sand		
	10 - 11	N/A	Silty sand		
	11 - 12	N/A	Silty sand		
	12 - 13	N/A	Silty sand		
	13 - 14	N/A	Silty sand		
	14 - 15	N/A	Silty sand		
	15 - 16	N/A	Poorly graded sand with silt		
	16 - 17	N/A	Poorly graded sand with silt		
	17 - 18	N/A	Poorly graded sand with silt		
	18 - 19	N/A	Poorly graded sand		
	19 - 20	N/A	Poorly graded sand		
T25-SB-03H	8 - 9	N/A	Poorly graded sand	11.3 - 15.0	17.3
	9 - 10	N/A	Silty sand		
	10 - 11	N/A	Silty sand		
	11 - 12	N/A	Organic material		
	12 - 13	N/A	Organic material		
	13 - 14	N/A	Organic material		
	14 - 15	N/A	Organic material		
	15 - 16	N/A	Silty sand		
	16 - 17	N/A	Poorly graded sand with silt		
	17 - 18	N/A	Poorly graded sand		
	18 - 19	N/A	Poorly graded sand		
	19 - 20	N/A	Poorly graded sand		
T25-SB04A	11-13	N/A	Poorly graded sand with gravel	None	16.5
	15-16.5		Poorly graded sand with silt		
	20-21.5		Poorly graded sand		
	24-25		Poorly graded sand		
T25-SB04B	11 - 13	None	Poorly graded sand	None	18.0
	13 - 14.2	N/A	Poorly graded sand		
	14.2 - 18		Silty sand		
	18 - 25		Poorly graded sand		
T25-SB05	4 - 6	None	Sandy silt	None	9.0
	6 - 9	N/A			
	9 - 20		Poorly graded sand		
T25-SB06	0 - 2	Phenanthrene > SCO	Poorly graded sand	12.0 - 14.0	14.0
	2 - 20	N/A			
T25-SB07	8 - 10	None	Poorly graded sand with gravel	13.5 - 15.0	15.0
	10 - 13.5	N/A			
	15 - 25		Poorly graded sand		
T25-SB08	12 - 12.7	Benzyl alcohol > CSL; PCBs > SCO	Sandy silt	9.0 -9.5 14.7 - 15.3	18.2
	12.7 - 13.9		Silty sand		
	13.9 - 14		Sandy silt		
	14 - 16.5	N/A			
	16.5 - 17.3		Silty sand		
	17.3 - 18.2		Poorly graded sand with silt		
	18.2 - 20		Poorly graded sand		
T25-SB09	8 - 9.1	PCBs > SCO	Poorly graded sand	13.0 - 15.0	15.0
	9.1 - 10	Benzoic acid, PCBs > CSL; D/F TEQ > EWRAL	Silty sand		
	10 - 12.2	None	Poorly graded sand		
	12.2 - 13		Silty sand		
	15 - 20	N/A	Poorly graded sand		
T25-SB10	0 - 2	None	Poorly graded sand with gravel	13.5 - 15	15.0
	2 - 5.4	N/A			
	5.4 - 6.4		Silty sand with gravel		
	6.4 - 7		Poorly graded sand		
	7 - 8.1		Silty sand with gravel		
	8.1 - 12		Poorly graded sand with silt		
	12 - 20		Poorly graded sand		
T25-SB11	9 - 10	PCBs > CSL	Poorly graded sand	11 - 12.5	19.0
	10 - 11		Sandy silt		
	11 - 14	N/A	Silt with sand		
	14 - 16.5		Silty sand		
	16.5 -19		Poorly graded sand with silt		
	19 - 20		Poorly graded sand		

ED_006289_00002549-00055

Table 6
Upland Post-Excavation Summary

Location ID	Post-Excavation Interval (ft bgs)	Chemical Exceedances	Material Type	100% Wood Debris Interval (ft bgs)	Native Contact (ft bgs)
T25-SB12	0 - 2	Diethyl phthalate, fluoranthene > CSL; phenanthrene, LPAH > SCO	Poorly graded sand	None	17.5
	2 - 10	N/A			
	10 - 11.3		Silt with sand		
	11.3 - 13.1		Poorly graded sand with silt		
	13.1 - 16.3		Silty sand		
	16.3 - 17.5		Poorly graded sand with silt		
	17.5 - 20		Poorly graded sand		
T25-SB13	0 - 1.8	None	Poorly graded sand with gravel	None	15.0
	1.8 - 2		Poorly graded sand		
	2 - 8.5	N/A			
	8.5 - 10		Sandy silt		
	10 - 15		Poorly graded sand with silt		
	15 - 20		Poorly graded sand		
T25-SB14	3 - 5	None	Poorly graded sand	None	15.0
	5 - 20	N/A			
T25-SB15	0 - 0.5	Butylbenzylphthalate > SCO	Poorly graded sand with gravel	None	17.0
	0.5 - 2		Poorly graded sand		
	2 - 6.2	N/A			
	6.2 - 15		Sandy silt		
	15 - 17		Silty sand		
	17 - 20		Poorly graded sand		
T25-SB-16	10 - 11	N/A	Organic material	10.0 - 12.6	19.0
	11 - 12	N/A	Organic material		
	12 - 13	N/A	Organic material		
	13 - 14	N/A	Silty sand		
	14 - 15	N/A	Silty sand		
	15 - 16	N/A	Poorly graded sand with silt		
	16 - 17	N/A	Silty sand		
	17 - 18	N/A	Silty sand		
	18 - 19	N/A	Poorly graded sand with silt		
	19 - 20	N/A	Poorly graded sand		

Notes:
bgs: below ground surface
CSL: Cleanup Screening Level
D/F: dioxin/furans
EWRAL: East Waterway Remedial Action Level
ft: feet
ID: identification
N/A: Not Analyzed
PCB: polychlorinated biphenyl Aroclor
SCO: Sediment Cleanup Objective
TSCA: Toxic Substances Control Act

ED_006289_00002549-00056

Table 7
Sediment Dredge Interval Analytical Results

		Location ID	T25-SC02	T25-SC02	T25-SC03	T25-SC04
		Sample ID	T25-SC02-0-4.6	T25-SC52-0-4.6	T25-SC-03-0-5.7	T25-SC-04-0-4
		Sample Date	3/25/2019	3/25/2019	3/24/2019	3/24/2019
		Depth	0 - 4.6 ft	0 - 4.6 ft	0 - 5.7 ft	0 - 4 ft
		Sample Type	N	FD	N	N
		Matrix	SE	SE	SE	SE
Parameter	**Method**	**RCRA Criteria**				
Conventional Parameters (percent)						
Total organic carbon	SW9060A	--	--	--	--	--
Total solids	SM2540G	--	**59.98**	**61.37**	**70.37**	**66.73**
TCLP Metals (µg/L)						
Arsenic	SW6010C	5000	250 U	--	**40.4 J**	**43.3 J**
Barium	SW6010C	100000	155 U	--	169 U	277 U
Cadmium	SW6010C	1000	10 U	--	10 U	10 U
Chromium	SW6010C	5000	25 U	--	25 U	**8 J**
Lead	SW6010C	5000	100 U	--	100 U	100 U
Mercury	SW7470A	200	10 U	--	**0.017 J**	0.1 U
Selenium	SW6010C	1000	250 U	--	250 U	250 U
Silver	SW6010C	5000	**3.2 J**	--	15 U	15 U
Semivolatile Organics (µg/kg)						
1,2,4-Trichlorobenzene	SW8270DSIM	--	5 U	5 U	49.1 U	49.9 U
1,2-Dichlorobenzene	SW8270DSIM	--	5 U	5 U	49.1 U	49.9 U
1,4-Dichlorobenzene	SW8270DSIM	--	5 U	5 U	49.1 U	49.9 U
2,4-Dimethylphenol	SW8270DSIM	--	**11.1 J**	**12.8 J**	**23.2 J**	200 U
2-Methylphenol (o-Cresol)	SW8270DSIM	--	**7.3**	**10.1**	49.1 U	49.9 U
4-Methylphenol (p-Cresol)	SW8270DSIM	--	**122**	**120**	**45.5 J**	**31.3 J**
Benzoic acid	SW8270DSIM	--	**147**	99.4 U	**-- R**	**-- R**
Benzyl alcohol	SW8270DSIM	--	19.9 U	19.9 U	197 U	200 U
bis(2-Ethylhexyl)phthalate	SW8270D	--	**54.8**	49.7 U	491 U	**650**
Butylbenzyl phthalate	SW8270D	--	19.9 U	19.9 U	197 UJ	200 UJ
Diethyl phthalate	SW8270DSIM	--	19.9 U	19.9 U	197 UJ	200 UJ
Dimethyl phthalate	SW8270DSIM	--	5 U	5 U	49.1 UJ	49.9 UJ
Di-n-butyl phthalate	SW8270D	--	69.3 U	66.6 U	197 U	200 U
Di-n-octyl phthalate	SW8270D	--	19.9 U	19.9 U	197 U	200 U
Hexachlorobenzene	SW8270DSIM	--	5 U	5 U	49.1 U	49.9 U
Hexachlorobutadiene (Hexachloro-1,3-butadiene)	SW8270DSIM	--	5 U	5 U	49.1 U	49.9 U
n-Nitrosodiphenylamine	SW8270DSIM	--	5 U	5 U	49.1 U	49.9 U
Pentachlorophenol	SW8270DSIM	--	**50.6**	19.9 U	197 U	200 U
Phenol	SW8270DSIM	--	**19.5**	**13.8**	**69.1**	**114**
Polycyclic Aromatic Hydrocarbons (µg/kg)						
2-Methylnaphthalene	SW8270D	--	**142**	**102**	**452 J**	**230**
Acenaphthene	SW8270D	--	**279**	**192**	**861 J**	**269**
Acenaphthylene	SW8270D	--	**217**	**77.2**	**80.1 J**	**270**
Anthracene	SW8270D	--	**877**	**388**	**1830 J**	**971**
Benzo(a)anthracene	SW8270D	--	--	**588**	**3070**	**2290**
Benzo(a)pyrene	SW8270D	--	--	**544**	**3260**	**2050**
Benzo(b,j,k)fluoranthenes	SW8270D	--	--	**998**	**4870**	**4550**
Benzo(g,h,i)perylene	SW8270D	--	**1140**	**205**	**2690**	**1300**
Chrysene	SW8270D	--	--	**837**	**3650**	**3580**
Dibenzo(a,h)anthracene	SW8270DSIM	--	**476**	**64.6**	**727 J**	**397**
Dibenzofuran	SW8270D	--	**195**	**117**	**634 J**	**192 J**
Fluoranthene	SW8270D	--	--	**1360**	**7740 J**	**10700 J**
Fluorene	SW8270D	--	**319**	**193**	**1720 J**	**697 J**
Indeno(1,2,3-c,d)pyrene	SW8270D	--	**1170**	**199**	**2170**	**1180**
Naphthalene	SW8270D	--	**332**	**470**	**1230 J**	**533**
Phenanthrene	SW8270D	--	--	**1110**	**9740**	**3960**
Pyrene	SW8270D	--	**7950**	**3160**	**8650 J**	**10300 J**
Total Benzofluoranthenes (b,j,k) (U = 0)	--	--	--	**998**	**4870**	**4550**
Total HPAH (SMS) (U = 0)	--	--	**10700**	**7960**	**36800 J**	**36000 J**
Total LPAH (SMS) (U = 0)	--	--	**2020**	**2400**	**15500 J**	**6700 J**
PCB Aroclors (µg/kg)						
Aroclor 1016	SW8082A	--	7.9 U	7.7 U	19.7 U	39.4 U
Aroclor 1221	SW8082A	--	7.9 U	7.7 U	19.7 U	39.4 U
Aroclor 1232	SW8082A	--	7.9 U	7.7 U	19.7 U	39.4 U
Aroclor 1242	SW8082A	--	7.9 U	7.7 U	19.7 U	39.4 U
Aroclor 1248	SW8082A	--	7.9 U	7.7 U	**60.2**	**266**
Aroclor 1254	SW8082A	--	**11.4**	**12.7**	**243**	**598**
Aroclor 1260	SW8082A	--	**17.8 J**	**44.1**	**229**	**523**
Aroclor 1262	SW8082A	--	7.9 U	7.7 U	19.7 U	39.4 U
Aroclor 1268	SW8082A	--	7.9 U	7.7 U	19.7 U	39.4 U
Total PCB Aroclors (SMS Marine 2013) (U = 0)	--	--	**29 J**	**57**	**532**	**1390**
Total Petroleum Hydrocarbons (mg/kg)						
Diesel range hydrocarbons	NWTPHDx	--	--	--	**221**	**554**
Motor oil range hydrocarbons	NWTPHDx	--	--	--	**345**	**1120**

ED_006289_00002549-00057

Table 7
Sediment Dredge Interval Analytical Results

Notes:
Horizontal coordinate datum is North American Datum of 1983 (NAD83) State Plane Washington North FIPS 4601 (U.S. Survey Feet).
All nondetect results are reported at the reporting limit or, for dioxin/furan analysis, at the estimated detection limit (EDL).
Totals are calculated as the sum of all detected results (U=0). If all results are not detected, the highest limit value is reported as the sum.
Totals are calculated as the sum of all detected results and half of the reporting limit of nondetect results (U=1/2). If all results are not detected, the highest limit value is reported as the sum.
USEPA Stage 2B and 4 data validation was completed by Laboratory Data Consultants (LDC).
Total LPAH are the total of acenaphthene, acenaphthylene, anthracene, fluorene, naphthalene, and phenanthrene. 2-Methylnapthalene is not included in the sum of LPAHs.
Total HPAH are the total of benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(g,h,i)perylene, chrysene, dibenzo(a,h)anthracene, fluoranthene, indeno(1,2,3-c,d)pyrene, and pyrene.
Total PCB Aroclors (SMS Marine 2013) does not include Aroclor 1262 and 1268.
Dioxin/furan TEQ values were calculated with 2005 World Health Organization (WHO) Toxic Equivalency Factor (TEF) values for mammals.

Bold: Detected result
--: results not reported or not applicable
-- R: result rejected
µg/kg: micrograms per kilogram
µg/L: micrograms per liter
FD: field duplicate sample
ft: feet
HPAH: high molecular weight PAH
ID: identification
J: Estimated value
LPAH: low molecular weight PAH
mg/kg: milligrams per kilogram
N: normal environmental sample
ng/kg: nanograms per kilogram
PCB: polychlorinated biphenyls
RCRA: Resource Conservation and Recovery Act
SE: sediment matrix
SMS: Sediment Management Standards
TCLP: toxicity characteristic leaching procedure
TEQ: Toxic Equivalents Quotient
U: Compound analyzed, but not detected above detection limit
UJ: Compound analyzed, but not detected above estimated detection limit

ED_006289_00002549-00058

Table 8
Sediment Analytical Results

					Location ID	T25-SC02	T25-SC03	T25-SC03	T25-SC03	T25-SC04	T25-SC04	T25-SC04	T25-SC04	T25-SC04	T25-SC-05	T25-SC-05
					Sample ID	T25-SC02-4.6-5.6	T25-SC03-3.7-4.7	T25-SC03-4.7-5.7	T25-SC03-5.7-6.2	T25-SC04-2-3	T25-SC04-4-5	T25-SC04-5-5.6	T25-SC04-5-6	T25-SC04-6-6.7	T25-SC05-0-1	T25-SC05-1-2
					Sample Date	3/25/2019	3/24/2019	3/24/2019	3/24/2019	3/24/2019	3/24/2019	3/24/2019	3/24/2019	3/24/2019	3/26/2019	3/26/2019
					Depth	4.6 - 5.6 ft	3.7 - 4.7 ft	4.7 - 5.7 ft	5.7 - 6.2 ft	2 - 3 ft	4 - 5 ft	5 - 5.6 ft	5 - 6 ft	6 - 6.7 ft	0 - 1 ft	1 - 2 ft
					Sample Type	N	N	N	N	N	N	N	N	N	N	N
					Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Parameter	**Method**	**SMS SCO**	**SMS CSL**	**AET SCO**	**AET CSL**											
Conventional Parameters (unitless)																
Specific gravity	D854	--	--	--	--	--	--	--	--	**2.57**	--	**2.65**	--	--	--	--
Conventional Parameters (percent)																
Moisture (water) content	D2216	--	--	--	--	--	--	--	--	**47.9**	--	**39.8**	--	--	--	--
Total organic carbon	SW9060A	--	--	--	--	**0.66 J**	**0.58 J**	**0.45 J**	**0.2 J**	--	**1.84**	--	**3.97 J**	**17.4 J**	**1.52**	**1.8 J**
Total solids	SM2540G	--	--	--	--	**74.94**	**72.82**	**76.73 J**	**78.74**	--	**69.91**	--	**63.22**	**38.55 J**	**61.65**	**64.91**
Grain Size (percent)																
Gravel	D422	--	--	--	--	**1.7**	--	--	--	**5.9**	**22.9**	**0.6**	--	--	**4.6**	--
Sand	D422	--	--	--	--	**88.2**	--	--	--	**83.7**	**70.2**	**95.2**	--	--	**70.3**	--
Silt	D422	--	--	--	--	**8.3**	--	--	--	**9.6**	**5.4**	**4.3**	--	--	**21.4**	--
Clay	D422	--	--	--	--	**0.8**	--	--	--	**0.8**	**1.2**	0.1 U	--	--	**1.8**	--
Metals (mg/kg)																
Arsenic	SW6020A	57	93	57	93	**3.28**	**12.4**	--	**4.59**	--	**5.45**	--	--	--	**8.04**	--
Cadmium	SW6020A	5.1	6.7	5.1	6.7	**0.29**	**0.38**	--	**0.11 J**	--	**0.5**	--	--	--	**0.49**	--
Chromium	SW6020A	260	270	260	270	**10.4**	**24 J**	--	**13.6**	--	**21.4 J**	--	--	--	**20.9 J**	--
Copper	SW6020A	390	390	390	390	**20.3**	**65.5 J**	--	**20.5**	--	**44.2**	--	--	--	**43.7**	--
Lead	SW6020A	450	530	450	530	**42.6 J**	**84.8**	--	**35.2**	--	**91.4**	--	--	--	**37.9**	--
Mercury	SW7471B	0.41	0.59	0.41	0.59	**0.205**	**0.0791 J**	--	**0.0165 J**	--	**0.627**	--	**0.154 J**	--	**0.134**	--
Silver	SW6020A	6.1	6.1	6.1	6.1	**0.14 J**	**0.3**	--	**0.1 J**	--	**0.4**	--	--	--	**0.38**	--
Zinc	SW6020A	410	960	410	960	**44.8 J**	**237 J**	--	**53.6**	--	**142**	--	--	--	**88.9**	--
Semivolatile Organics (mg/kg-OC)																
1,2,4-Trichlorobenzene	SW8270DSIM	0.81	1.8	--	--	0.74 U	0.86 U	1.1 U	**1.4 J**	--	**0.962 J**	--	**0.21 J**	--	**0.28 J**	--
1,2-Dichlorobenzene	SW8270DSIM	2.3	2.3	--	--	0.74 U	0.86 U	1.1 U	2.4 U	--	0.52 U	--	0.13 U	--	0.33 U	--
1,4-Dichlorobenzene	SW8270DSIM	3.1	9	--	--	0.74 U	0.86 U	1.1 U	2.4 U	--	**0.32 J**	--	**0.285 J**	--	**1 J**	--
bis(2-Ethylhexyl)phthalate	SW8270D	47	78	--	--	7.5 U	**24 J**	11 U	**29**	--	**10**	--	1.25 U	--	**20.7**	--
Butylbenzyl phthalate	SW8270D	4.9	64	--	--	3 U	3.4 U	4.4 U	9.7 UJ	--	2.07 UJ	--	0.499 U	--	1.31 UJ	--
Diethyl phthalate	SW8270DSIM	61	110	--	--	3 U	3.4 UJ	4.4 U	9.7 UJ	--	2.07 UJ	--	0.577 UJ	--	1.31 UJ	--
Dimethyl phthalate	SW8270DSIM	53	53	--	--	0.74 U	0.86 U	1.1 U	2.4 UJ	--	0.52 UJ	--	0.13 U	--	0.33 UJ	--
Di-n-butyl phthalate	SW8270D	220	1700	--	--	9.9 U	3.4 U	4.4 U	9.7 U	--	2.07 U	--	0.499 U	--	**0.776 J**	--
Di-n-octyl phthalate	SW8270D	58	4500	--	--	3 U	3.4 U	4.4 U	9.7 U	--	2.07 U	--	0.499 U	--	1.31 U	--
Hexachlorobenzene	SW8270DSIM	0.38	2.3	--	--	0.74 U	0.86 U	1.1 U	2.4 U	--	0.52 U	--	0.13 U	--	0.33 U	--
Hexachlorobutadiene (Hexachloro-1,3-butadiene)	SW8270DSIM	3.9	6.2	--	--	0.74 U	0.86 U	1.1 U	2.4 U	--	0.52 U	--	0.13 U	--	0.33 U	--
n-Nitrosodiphenylamine	SW8270DSIM	11	11	--	--	0.74 U	0.86 U	1.1 U	2.4 U	--	0.52 U	--	0.13 U	--	0.33 U	--
Semivolatile Organics (µg/kg)																
1,2,4-Trichlorobenzene	SW8270DSIM	--	--	31	51	4.9 U	5 U	5 U	**2.7 J**	--	**17.7 J**	--	**8.2 J**	--	**4.3 J**	--
1,2-Dichlorobenzene	SW8270DSIM	--	--	35	50	4.9 U	5 U	5 U	4.8 U	--	9.5 U	--	5 U	--	5 U	--
1,4-Dichlorobenzene	SW8270DSIM	--	--	110	110	4.9 U	5 U	5 U	4.8 U	--	**5.8 J**	--	**11.3 J**	--	**15.2 J**	--
2,4-Dimethylphenol	SW8270DSIM	29	29	29	29	**5.4 J**	**35.1 J**	**4.1 J**	**4.5 J**	--	**8.3 J**	--	**11 J**	--	**7.4 J**	--
2-Methylphenol (o-Cresol)	SW8270DSIM	63	63	63	63	**4.2 J**	**21.4 J**	5 U	4.8 U	--	**6.7 J**	--	**9 J**	--	**8.1 J**	--
4-Methylphenol (p-Cresol)	SW8270DSIM	670	670	670	670	**12.1**	**60.8 J**	**4.1 J**	**4.8 J**	--	**24.7 J**	--	**75.4 J**	--	**144 J**	--
Benzoic acid	SW8270DSIM	650	650	650	650	99 U	**85.1 J**	**33.5 J**	-- **R**	--	-- **R**	--	99.1 UJ	--	**130 J**	--
Benzyl alcohol	SW8270DSIM	57	73	57	73	19.8 U	19.9 U	19.9 U	**4.5 J**	--	38.1 U	--	19.8 U	--	19.9 U	--
bis(2-Ethylhexyl)phthalate	SW8270D	--	--	1300	1900	49.5 U	**137 J**	49.6 U	**58.9**	--	**184**	--	49.6 U	--	**314**	--
Butylbenzyl phthalate	SW8270D	--	--	63	900	19.8 U	19.9 U	19.9 U	19.4 UJ	--	38.1 UJ	--	19.8 U	--	19.9 UJ	--
Diethyl phthalate	SW8270DSIM	--	--	200	1200	19.8 U	19.9 UJ	19.9 U	19.4 UJ	--	38.1 UJ	--	22.9 UJ	--	19.9 UJ	--
Dimethyl phthalate	SW8270DSIM	--	--	71	160	4.9 U	5 U	5 U	4.8 UJ	--	9.5 UJ	--	5 U	--	5 UJ	--
Di-n-butyl phthalate	SW8270D	--	--	1400	1400	65.6 U	19.9 U	19.9 U	19.4 U	--	38.1 U	--	19.8 U	--	**11.8 J**	--
Di-n-octyl phthalate	SW8270D	--	--	6200	6200	19.8 U	19.9 U	19.9 U	19.4 U	--	38.1 U	--	19.8 U	--	19.9 U	--
Hexachlorobenzene	SW8270DSIM	--	--	22	70	4.9 U	5 U	5 U	4.8 U	--	9.5 U	--	5 U	--	5 U	--
Hexachlorobutadiene (Hexachloro-1,3-butadiene)	SW8270DSIM	--	--	11	120	4.9 U	5 U	5 U	4.8 U	--	9.5 U	--	5 U	--	5 U	--
n-Nitrosodiphenylamine	SW8270DSIM	--	--	28	40	4.9 U	5 U	5 U	4.8 U	--	9.5 U	--	5 U	--	5 U	--
Pentachlorophenol	SW8270DSIM	360	690	360	690	19.8 U	**4.2 J**	**4.6 J**	19.4 U	--	38.1 U	--	**14.3 J**	--	**6.5 J**	--
Phenol	SW8270DSIM	420	1200	420	1200	**8.2**	**53.9 J**	**10**	**11.5 J**	--	**43.4 J**	--	**25.2 J**	--	**242 J**	--

Table 8
Sediment Analytical Results

					Location ID	T25-SC02	T25-SC03	T25-SC03	T25-SC03	T25-SC04	T25-SC04	T25-SC04	T25-SC04	T25-SC04	T25-SC-05	T25-SC-05
					Sample ID	T25-SC02-4.6-5.6	T25-SC03-3.7-4.7	T25-SC03-4.7-5.7	T25-SC03-5.7-6.2	T25-SC04-2-3	T25-SC04-4-5	T25-SC04-5-5.6	T25-SC04-5-6	T25-SC04-6-6.7	T25-SC05-0-1	T25-SC05-1-2
					Sample Date	3/25/2019	3/24/2019	3/24/2019	3/24/2019	3/24/2019	3/24/2019	3/24/2019	3/24/2019	3/24/2019	3/26/2019	3/26/2019
					Depth	4.6 - 5.6 ft	3.7 - 4.7 ft	4.7 - 5.7 ft	5.7 - 6.2 ft	2 - 3 ft	4 - 5 ft	5 - 5.6 ft	5 - 6 ft	6 - 6.7 ft	0 - 1 ft	1 - 2 ft
					Sample Type	N	N	N	N	N	N	N	N	N	N	N
					Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Parameter	**Method**	**SMS SCO**	**SMS CSL**	**AET SCO**	**AET CSL**											
Polycyclic Aromatic Hydrocarbons (mg/kg-OC)																
2-Methylnaphthalene	SW8270D	38	64	--	--	8.3	200 J	9.9	9.7 J	--	4.12	--	8.11	0.891	2.35	--
Acenaphthene	SW8270D	16	57	--	--	19	460	39 J	26	--	5.18	--	20.1	1.74	2.99	--
Acenaphthylene	SW8270D	66	66	--	--	6	3.4 U	5	9 J	--	3.55	--	0.499 U	0.378	4.63	--
Anthracene	SW8270D	220	1200	--	--	22	780	81 J	58	--	14.6	--	43	3.52	13.3	--
Benzo(a)anthracene	SW8270D	110	270	--	--	22	1100	120 J	80	--	30	--	69.3	5.4	14.7	--
Benzo(a)pyrene	SW8270D	99	210	--	--	28	1200	140 J	90	--	32.9	--	74.8	5.8 J	25.6	--
Benzo(b,j,k)fluoranthenes	SW8270D	--	--	--	--	56	1800	230 J	170	--	67.4	--	116	11 J	62.9	--
Benzo(g,h,i)perylene	SW8270D	31	78	--	--	17	860	95 J	62	--	19.7	--	23.3	1.44 J	10.8	--
Chrysene	SW8270D	110	460	--	--	38	1200	170 J	140	--	41.1	--	78	7.01	33.9	--
Dibenzo(a,h)anthracene	SW8270D	12	33	--	--	--	--	--	--	--	--	--	--	0.493 J	--	--
Dibenzo(a,h)anthracene	SW8270DSIM	12	33	--	--	5.7	190 J	22	15 J	--	5.76 J	--	9.6 J	--	4.1 J	--
Dibenzofuran	SW8270D	15	58	--	--	7.4	290 J	16	15	--	4.57	--	10.4	--	2.7	--
Fluoranthene	SW8270D	160	1200	--	--	54	3900 J	500	410 J	--	101 J	--	220 J	11	26.6 J	--
Fluorene	SW8270D	23	79	--	--	8.7	500 J	35 J	42 J	--	9.18 J	--	17.2	2.49	5.74 J	--
Indeno(1,2,3-c,d)pyrene	SW8270D	34	88	--	--	15	660	74 J	51	--	16.9	--	22.2	1.4 J	11	--
Naphthalene	SW8270D	99	170	--	--	29	500	25 J	37	--	7.55	--	18.6	2	7.96	--
Phenanthrene	SW8270D	100	480	--	--	38	4500	390 J	230	--	51.2	--	179	15.7	13.2	--
Pyrene	SW8270D	1000	1400	--	--	190	3800 J	500	420 J	--	132 J	--	237 J	21.2	34.5 J	--
Total Benzofluoranthenes (b,j,k) (U = 0)	--	230	450	--	--	56	1800	230 J	170	--	67.4	--	116	11 J	62.9	--
Total HPAH (SMS) (U = 0)	--	960	5300	--	--	430	15000 J	1900 J	1400 J	--	400 J	--	850 J	65 J	220 J	--
Total LPAH (SMS) (U = 0)	--	370	780	--	--	120	6700 J	580 J	400 J	--	91.3 J	--	280	30	47.8 J	--
Polycyclic Aromatic Hydrocarbons (µg/kg)																
2-Methylnaphthalene	SW8270D	--	--	670	670	54.7	1160 J	44.5	19.3 J	--	75.8	--	322	155	35.7	--
Acenaphthene	SW8270D	--	--	500	500	124	2680	176 J	52.5	--	95.4	--	796	303	45.4	--
Acenaphthylene	SW8270D	--	--	1300	1300	39.3	19.9 U	22.3	18 J	--	65.4	--	19.8 U	65.8	70.4	--
Anthracene	SW8270D	--	--	960	960	146	4520	364 J	115	--	269	--	1700	612	202	--
Benzo(a)anthracene	SW8270D	--	--	1300	1600	144	6650	544 J	160	--	600	--	2750	939	223	--
Benzo(a)pyrene	SW8270D	--	--	1600	1600	184	7210	619 J	180	--	605	--	2970	1010 J	389	--
Benzo(b,j,k)fluoranthenes	SW8270D	--	--	--	--	371	10700	1030 J	334	--	1240	--	4610	1900 J	956	--
Benzo(g,h,i)perylene	SW8270D	--	--	670	720	109	4990	428 J	123	--	362	--	924	251 J	164	--
Chrysene	SW8270D	--	--	1400	2800	248	6990	782 J	275	--	756	--	3100	1220	515	--
Dibenzo(a,h)anthracene	SW8270D	--	--	230	230	--	--	--	--	--	--	--	--	85.7 J	--	--
Dibenzo(a,h)anthracene	SW8270DSIM	--	--	230	230	37.9	1120 J	98.8	29 J	--	106 J	--	380 J	--	62.3 J	--
Dibenzofuran	SW8270D	--	--	540	540	49.1	1660 J	70.7	29.5	--	84	--	411	--	41.1	--
Fluoranthene	SW8270D	--	--	1700	2500	357	22700 J	2250	817 J	--	1850 J	--	8730 J	1920	404 J	--
Fluorene	SW8270D	--	--	540	540	57.1	2900 J	159 J	84.5 J	--	169 J	--	683	434	87.3 J	--
Indeno(1,2,3-c,d)pyrene	SW8270D	--	--	600	690	98.9	3840	335 J	101	--	311	--	882	250 J	170	--
Naphthalene	SW8270D	--	--	2100	2100	192	2880	111 J	74.9	--	139	--	738	300	121	--
Phenanthrene	SW8270D	--	--	1500	1500	249	25900	1770 J	455	--	942	--	7110	2730	201	--
Pyrene	SW8270D	--	--	2600	3300	1280	22100 J	2260	835 J	--	2420 J	--	9390 J	3690	524 J	--
Total Benzofluoranthenes (b,j,k) (U = 0)		--	--	3200	3600	371	10700	1030 J	334	--	1240	--	4610	1900 J	956	--
Total HPAH (SMS) (U = 0)		--	--	12000	17000	2830	86300 J	8350 J	2900 J	--	8300 J	--	34000 J	11000 J	3400 J	--
Total LPAH (SMS) (U = 0)		--	--	5200	5200	807	39000 J	2600 J	800 J	--	1680 J	--	11000	4400	727 J	--

Table 8
Sediment Analytical Results

					Location ID	T25-SC02	T25-SC03	T25-SC03	T25-SC03	T25-SC04	T25-SC04	T25-SC04	T25-SC04	T25-SC04	T25-SC-05	T25-SC-05
					Sample ID	T25-SC02-4.6-5.6	T25-SC03-3.7-4.7	T25-SC03-4.7-5.7	T25-SC03-5.7-6.2	T25-SC04-2-3	T25-SC04-4-5	T25-SC04-5-5.6	T25-SC04-5-6	T25-SC04-6-6.7	T25-SC05-0-1	T25-SC05-1-2
					Sample Date	3/25/2019	3/24/2019	3/24/2019	3/24/2019	3/24/2019	3/24/2019	3/24/2019	3/24/2019	3/24/2019	3/26/2019	3/26/2019
					Depth	4.6 - 5.6 ft	3.7 - 4.7 ft	4.7 - 5.7 ft	5.7 - 6.2 ft	2 - 3 ft	4 - 5 ft	5 - 5.6 ft	5 - 6 ft	6 - 6.7 ft	0 - 1 ft	1 - 2 ft
					Sample Type	N	N	N	N	N	N	N	N	N	N	N
					Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Parameter	**Method**	**SMS SCO**	**SMS CSL**	**AET SCO**	**AET CSL**											
Dioxin Furans (ng/kg)																
2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	E1613B	--	--	--	--	0.235 UJ	0.903 U	--	**0.195 J**	--	**1.96 J**	--	1.05 U	**2.71**	**0.396 J**	--
1,2,3,7,8-Pentachlorodibenzo-p-dioxin (PeCDD)	E1613B	--	--	--	--	**0.298 J**	1.24 U	--	**0.658 J**	--	**20.3**	--	**13 J**	**14.5**	**1.82**	--
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B	--	--	--	--	0.103 U	**1.61 J**	--	**0.543 J**	--	**17.1**	--	**7.08 J**	**7.33**	**2.2**	--
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B	--	--	--	--	**0.325 J**	**10.9 J**	--	**3.89**	--	**108**	--	**60.7 J**	**19**	**10.6**	--
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B	--	--	--	--	**0.224 J**	**5.37 J**	--	**1.93**	--	**27.4**	--	**24 J**	**10.4**	**5.23**	--
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (HpCDD)	E1613B	--	--	--	--	**6.64**	**222 J**	--	**105**	--	**1130**	--	**920**	**278**	**319**	--
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	E1613B	--	--	--	--	**50.1**	**1730**	--	**956**	--	**6110 J**	--	**5300**	**1370**	**2930**	--
Total Tetrachlorodibenzo-p-dioxin (TCDD)	E1613B	--	--	--	--	**4.44 J**	**3.48 J**	--	**3.28 J**	--	**704 J**	--	**133**	**292**	**10.3 J**	--
Total Pentachlorodibenzo-p-dioxin (PeCDD)	E1613B	--	--	--	--	**2.75**	**12**	--	**5.6**	--	**442**	--	**154**	**197**	**12.4**	--
Total Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B	--	--	--	--	**4.74**	**78.4**	--	**36.2**	--	**1230**	--	**508**	**228**	**102**	--
Total Heptachlorodibenzo-p-dioxin (HpCDD)	E1613B	--	--	--	--	**15.8**	**556**	--	**308**	--	**2510**	--	**1860**	**608**	**870**	--
2,3,7,8-Tetrachlorodibenzofuran (TCDF)	E1613B	--	--	--	--	**0.732 J**	**2.35 J**	--	**0.526 J**	--	**7.09 J**	--	**9.53 J**	**9.44 J**	**1.4**	--
1,2,3,7,8-Pentachlorodibenzofuran (PeCDF)	E1613B	--	--	--	--	**0.411 J**	**1.69 J**	--	**0.504 J**	--	**5.96 J**	--	**5.67 J**	**6.51 J**	**1.12**	--
2,3,4,7,8-Pentachlorodibenzofuran (PeCDF)	E1613B	--	--	--	--	**0.487 J**	**2.06 J**	--	**0.74 J**	--	**9.78 J**	--	**7.63 J**	**8.16**	**1.78**	--
1,2,3,4,7,8-Hexachlorodibenzofuran (HxCDF)	E1613B	--	--	--	--	**0.338 J**	**6.98 J**	--	**2.08**	--	**35.2**	--	**23.5 J**	**10.7**	**5.15**	--
1,2,3,6,7,8-Hexachlorodibenzofuran (HxCDF)	E1613B	--	--	--	--	**0.294 J**	**3.73 J**	--	**0.804 J**	--	**17.5**	--	**15.1 J**	**10.6 J**	**1.88**	--
1,2,3,7,8,9-Hexachlorodibenzofuran (HxCDF)	E1613B	--	--	--	--	0.243 U	**1.88 J**	--	**0.873 J**	--	**15.3**	--	**10.5 J**	**2.68**	**1.24 J**	--
2,3,4,6,7,8-Hexachlorodibenzofuran (HxCDF)	E1613B	--	--	--	--	**0.379 J**	**1.5 J**	--	**0.461 J**	--	**10.8**	--	**23.1 J**	**13.9**	**1.45**	--
1,2,3,4,6,7,8-Heptachlorodibenzofuran (HpCDF)	E1613B	--	--	--	--	**3.35**	**57.7 J**	--	**24.8**	--	**321**	--	**714**	**203**	**58**	--
1,2,3,4,7,8,9-Heptachlorodibenzofuran (HpCDF)	E1613B	--	--	--	--	0.081 U	**5.29 J**	--	**1.58**	--	**28.5**	--	**26.8 J**	**6.41**	**3.81**	--
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	E1613B	--	--	--	--	**14.8**	**266**	--	**121**	--	**1220**	--	**3680**	**366**	**194**	--
Total Tetrachlorodibenzofuran (TCDF)	E1613B	--	--	--	--	**17.9**	**28.4**	--	**16.8**	--	**273**	--	**197**	**224**	**41.6**	--
Total Pentachlorodibenzofuran (PeCDF)	E1613B	--	--	--	--	**5.86**	**41.9**	--	**11.3**	--	**269**	--	**380**	**222**	**35.8**	--
Total Hexachlorodibenzofuran (HxCDF)	E1613B	--	--	--	--	**4.76**	**107**	--	**34.6 J**	--	**672**	--	**532**	**289**	**90 J**	--
Total Heptachlorodibenzofuran (HpCDF)	E1613B	--	--	--	--	**11.5**	**262**	--	**103**	--	**1230**	--	**2660**	**482**	**199**	--
Total Dioxin/Furan TEQ 2005 (Mammal) (U = 1/2)	--	25 ng/kg TEQ[2]		--	--	**0.94 J**	**8.62 J**	--	**3.84 J**	--	**66.2 J**	--	**53 J**	**33.7 J**	**10.4 J**	--
Total Dioxin/Furan TEQ 2005 (Mammal) (U = 0)	--	25 ng/kg TEQ[2]		--	--	**0.8 J**	**7.55 J**	--	**3.84 J**	--	**66.2 J**	--	**52 J**	**33.7 J**	**10.4 J**	--
PCB Aroclors (µg/kg)																
Aroclor 1016	SW8082A	--	--	--	--	3.9 U	4 U	4 U	4 U	--	39.7 U	--	4 U	4 U	4 U	40 U
Aroclor 1221	SW8082A	--	--	--	--	3.9 U	4 U	4 U	4 U	--	39.7 U	--	4 U	4 U	4 U	40 U
Aroclor 1232	SW8082A	--	--	--	--	3.9 U	4 U	4 U	4 U	--	39.7 U	--	4 U	4 U	4 U	40 U
Aroclor 1242	SW8082A	--	--	--	--	3.9 U	4 U	4 U	4 U	--	39.7 U	--	4 U	4 U	4 U	40 U
Aroclor 1248	SW8082A	--	--	--	--	3.9 U	**32.9**	**35 J**	**12.9**	--	39.7 U	--	**44.5**	**21.4 J**	**32.4**	**52.8**
Aroclor 1254	SW8082A	--	--	--	--	3.9 U	**98.7**	**93.4 J**	**50.5**	--	**541**	--	**107**	**54.7 J**	**92.7**	**99.8**
Aroclor 1260	SW8082A	--	--	--	--	3.9 U	**148**	**123 J**	**50.6**	--	**682**	--	**304**	**117 J**	**134**	**256**
Aroclor 1262	SW8082A	--	--	--	--	3.9 U	4 U	4 U	4 U	--	39.7 U	--	4 U	4 U	4 U	40 U
Aroclor 1268	SW8082A	--	--	--	--	3.9 U	4 U	4 U	4 U	--	39.7 U	--	4 U	4 U	4 U	40 U
Total PCB Aroclors (SMS Marine 2013) (U = 0)	--	--	--	130	1000	3.9 U	**280**	**250 J**	**110**	--	**1220**	--	**460**	**190 J**	**260**	**409**
PCB Aroclors (mg/kg-OC)																
Total PCB Aroclors (SMS Marine 2013) (U = 0)	--	12	65	--	--	0.59 U	**48**	**56 J**	**57**	--	**66.5**	--	**11**	**1.1 J**	**17**	**22.7**

Table 8
Sediment Analytical Results

					Location ID	T25-SC-06	T25-SC-06	T25-SC-06	T25-SC-06	T25-SC07	T25-SC07	T25-SC07	T25-SC07	T25-SC07	T25-SC08	T25-SC08
					Sample ID	T25-SC06-0-1	T25-SC56-0-1	T25-SC06-1.5-2.5	T25-SC06-2.5-3.3	T25-SC07-0-1	T25-SC57-0-1	T25-SC07-1-2	T25-SC07-5-6	T25-SC07-6-7	T25-SC08-0-1	T25-SC08-7-8
					Sample Date	3/26/2019	3/26/2019	3/26/2019	3/26/2019	3/25/2019	3/25/2019	3/25/2019	3/25/2019	3/25/2019	3/25/2019	3/25/2019
					Depth	0 - 1 ft	0 - 1 ft	1.5 - 2.5 ft	2.5 - 3.3 ft	0 - 1 ft	0 - 1 ft	1 - 2 ft	5 - 6 ft	6 - 7 ft	0 - 1 ft	7 - 8 ft
					Sample Type	N	FD	N	N	N	FD	N	N	N	N	N
					Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Parameter	**Method**	**SMS SCO**	**SMS CSL**	**AET SCO**	**AET CSL**											
Conventional Parameters (unitless)																
Specific gravity	D854	--	--	--	--	--	--	--	--	--	--	**2.46**	--	--	--	--
Conventional Parameters (percent)																
Moisture (water) content	D2216	--	--	--	--	--	--	--	--	--	--	**118.4**	--	--	--	--
Total organic carbon	SW9060A	--	--	--	--	**1.13**	--	**22.3 J**	**28.5 J**	**1.34 J**	**1.75 J**	--	**14.7 J**	**15 J**	**1.09 J**	**10.2 J**
Total solids	SM2540G	--	--	--	--	**70.08**	--	**29.45**	**29.27 J**	**48.94**	**48.66**	--	**33.91 J**	**32.56 J**	**42**	**44.16**
Grain Size (percent)																
Gravel	D422	--	--	--	--	**7.2**	**2.7**	--	--	**0.1**	--	**2.3**	--	--	**1.7**	--
Sand	D422	--	--	--	--	**76.7**	**80.5**	--	--	**24.3**	--	**36.4**	--	--	**31.9**	--
Silt	D422	--	--	--	--	**13.8**	**15.2**	--	--	**65**	--	**55.7**	--	--	**59.3**	--
Clay	D422	--	--	--	--	0.1 U	0.1 U	--	--	**3.6**	--	0.1 U	--	--	**1.4**	--
Metals (mg/kg)																
Arsenic	SW6020A	57	93	57	93	**5.8**	--	--	--	**21.4**	**16.7**	--	--	--	**13.2**	--
Cadmium	SW6020A	5.1	6.7	5.1	6.7	**0.32**	--	--	--	**0.99**	**1.02**	--	--	--	**0.65**	--
Chromium	SW6020A	260	270	260	270	**22.3**	--	--	--	**39.3**	**40.4**	--	--	--	**28.9**	--
Copper	SW6020A	390	390	390	390	**27.5**	--	--	--	**110**	**98.8**	--	--	--	**71.2**	--
Lead	SW6020A	450	530	450	530	**27.3**	--	--	--	**84 J**	**71.8 J**	--	--	--	**52.3 J**	--
Mercury	SW7471B	0.41	0.59	0.41	0.59	**0.0815**	--	--	--	**0.322**	**0.351**	--	--	**1.73 J**	**0.235**	--
Silver	SW6020A	6.1	6.1	6.1	6.1	**0.21 J**	--	--	--	**0.91 J**	**0.87 J**	--	--	--	**0.55 J**	--
Zinc	SW6020A	410	960	410	960	**71.8**	--	--	--	**185**	**181 J**	--	--	--	**135 J**	--
Semivolatile Organics (mg/kg-OC)																
1,2,4-Trichlorobenzene	SW8270DSIM	0.81	1.8	--	--	**0.32 J**	--	**0.85 J**	**0.239**	**0.31 J**	--	--	--	**0.153**	**0.27 J**	0.048 U
1,2-Dichlorobenzene	SW8270DSIM	2.3	2.3	--	--	0.43 U	--	0.0987 U	0.018 U	0.37 U	--	--	--	**0.0087 J**	0.45 U	0.048 U
1,4-Dichlorobenzene	SW8270DSIM	3.1	9	--	--	**8.79**	--	**10 J**	**2.36**	**2.2**	--	--	--	**0.0787**	**1.89**	**0.174**
bis(2-Ethylhexyl)phthalate	SW8270D	47	78	--	--	**37.3**	--	0.99 U	0.174 UJ	**34.8**	--	--	--	**0.509 J**	**45**	0.485 U
Butylbenzyl phthalate	SW8270D	4.9	64	--	--	**1.14 J**	--	0.396 U	0.0698 UJ	**1.98**	--	--	--	0.133 U	1.82 U	0.194 U
Diethyl phthalate	SW8270DSIM	61	110	--	--	1.75 U	--	**0.387 J**	0.0698 U	1.47 U	--	--	--	0.1 U	1.82 U	0.194 U
Dimethyl phthalate	SW8270DSIM	53	53	--	--	0.43 U	--	0.0987 U	0.018 U	**0.64**	--	--	--	**0.0893**	**0.34 J**	0.048 U
Di-n-butyl phthalate	SW8270D	220	1700	--	--	4.15 U	--	0.396 U	0.0698 U	3.95 U	--	--	--	**0.246**	6.47 U	0.194 U
Di-n-octyl phthalate	SW8270D	58	4500	--	--	1.75 U	--	0.396 U	0.0698 UJ	1.47 U	--	--	--	0.133 UJ	1.82 U	0.194 U
Hexachlorobenzene	SW8270DSIM	0.38	2.3	--	--	0.43 U	--	0.0987 U	0.018 U	0.37 U	--	--	--	0.033 U	0.45 U	0.048 U
Hexachlorobutadiene (Hexachloro-1,3-butadiene)	SW8270DSIM	3.9	6.2	--	--	0.43 U	--	0.0987 U	0.018 U	0.37 U	--	--	--	0.033 U	0.45 U	0.048 U
n-Nitrosodiphenylamine	SW8270DSIM	11	11	--	--	0.43 U	--	0.0987 U	0.018 U	**0.836**	--	--	--	0.033 U	0.45 U	0.048 U
Semivolatile Organics (µg/kg)																
1,2,4-Trichlorobenzene	SW8270DSIM	--	--	31	51	**3.6 J**	--	**190 J**	**68**	**4.1 J**	--	--	--	**23**	**2.9 J**	4.9 U
1,2-Dichlorobenzene	SW8270DSIM	--	--	35	50	4.9 U	--	22 U	5 U	4.9 U	--	--	--	**1.3 J**	4.9 U	4.9 U
1,4-Dichlorobenzene	SW8270DSIM	--	--	110	110	**99.3**	--	**2300 J**	**672**	**29.5**	--	--	--	**11.8**	**20.6**	**17.7**
2,4-Dimethylphenol	SW8270DSIM	29	29	29	29	**5.7 J**	--	**22.9 J**	**7.2 J**	**11.1 J**	--	--	--	**6.3 J**	**13 J**	**76.1**
2-Methylphenol (o-Cresol)	SW8270DSIM	63	63	63	63	**4.2 J**	--	**21.2 J**	**5 J**	**9.6**	--	--	--	5 U	**9.5**	**28.2**
4-Methylphenol (p-Cresol)	SW8270DSIM	670	670	670	670	**23.3**	--	**150 J**	**60.9**	**35.8**	--	--	--	**109**	**33**	**572**
Benzoic acid	SW8270DSIM	650	650	650	650	98.9 U	--	**281 J**	**13.5 J**	**42 J**	--	--	--	99.8 U	**36 J**	**152 J**
Benzyl alcohol	SW8270DSIM	57	73	57	73	**9.3 J**	--	88.2 U	**30.7**	**36.3**	--	--	--	20 UJ	**32.3**	19.8 U
bis(2-Ethylhexyl)phthalate	SW8270D	--	--	1300	1900	**421**	--	220 U	49.7 UJ	**466**	--	--	--	**76.4 J**	**490**	49.5 U
Butylbenzyl phthalate	SW8270D	--	--	63	900	**12.9 J**	--	88.2 U	19.9 UJ	**26.5**	--	--	--	20 U	19.8 U	19.8 U
Diethyl phthalate	SW8270DSIM	--	--	200	1200	19.8 U	--	**86.4 J**	19.9 U	19.7 U	--	--	--	20 U	19.8 U	19.8 U
Dimethyl phthalate	SW8270DSIM	--	--	71	160	4.9 U	--	22 U	5 U	**8.6**	--	--	--	**13.4**	**3.7 J**	4.9 U
Di-n-butyl phthalate	SW8270D	--	--	1400	1400	46.9 U	--	88.2 U	19.9 U	52.9 U	--	--	--	**36.9**	70.5 U	19.8 U
Di-n-octyl phthalate	SW8270D	--	--	6200	6200	19.8 U	--	88.2 U	19.9 UJ	19.7 U	--	--	--	20 UJ	19.8 U	19.8 U
Hexachlorobenzene	SW8270DSIM	--	--	22	70	4.9 U	--	22 U	5 U	4.9 U	--	--	--	5 U	4.9 U	4.9 U
Hexachlorobutadiene (Hexachloro-1,3-butadiene)	SW8270DSIM	--	--	11	120	4.9 U	--	22 U	5 U	4.9 U	--	--	--	5 U	4.9 U	4.9 U
n-Nitrosodiphenylamine	SW8270DSIM	--	--	28	40	4.9 U	--	22 U	5 U	**11.2**	--	--	--	5 U	4.9 U	4.9 U
Pentachlorophenol	SW8270DSIM	360	690	360	690	**8.6 J**	--	**74.6 J**	**23.8**	**21.2**	--	--	--	**17.6 J**	**9.6 J**	**15.7 J**
Phenol	SW8270DSIM	420	1200	420	1200	**15.7**	--	**203 J**	**34.4**	**30.2**	--	--	--	**23.1**	**24.2**	**101**

Table 8
Sediment Analytical Results

					Location ID	T25-SC-06	T25-SC-06	T25-SC-06	T25-SC-06	T25-SC07	T25-SC07	T25-SC07	T25-SC07	T25-SC07	T25-SC08	T25-SC08
					Sample ID	T25-SC06-0-1	T25-SC56-0-1	T25-SC06-1.5-2.5	T25-SC06-2.5-3.3	T25-SC07-0-1	T25-SC57-0-1	T25-SC07-1-2	T25-SC07-5-6	T25-SC07-6-7	T25-SC08-0-1	T25-SC08-7-8
					Sample Date	3/26/2019	3/26/2019	3/26/2019	3/26/2019	3/25/2019	3/25/2019	3/25/2019	3/25/2019	3/25/2019	3/25/2019	3/25/2019
					Depth	0 - 1 ft	0 - 1 ft	1.5 - 2.5 ft	2.5 - 3.3 ft	0 - 1 ft	0 - 1 ft	1 - 2 ft	5 - 6 ft	6 - 7 ft	0 - 1 ft	7 - 8 ft
					Sample Type	N	FD	N	N	N	FD	N	N	N	N	N
					Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Parameter	**Method**	**SMS SCO**	**SMS CSL**	**AET SCO**	**AET CSL**											
Polycyclic Aromatic Hydrocarbons (mg/kg-OC)																
2-Methylnaphthalene	SW8270D	38	64	--	--	2.5	--	0.668	0.169	2.9	--	--	0.367	0.283	4.61	23.4
Acenaphthene	SW8270D	16	57	--	--	4.45	--	1.5	0.414	2.66	--	--	0.769	1.23	7.23	84.5
Acenaphthylene	SW8270D	66	66	--	--	8.94	--	0.396 U	0.313	12.5	--	--	0.454	0.421	26	3.83
Anthracene	SW8270D	220	1200	--	--	33.3	--	2.89	1.15	29.6	--	--	7.07	6	60.8	63.2
Benzo(a)anthracene	SW8270D	110	270	--	--	48.2	--	4.03	2.48 J	49	--	--	4.48 J	3.84	96.3	59.3
Benzo(a)pyrene	SW8270D	99	210	--	--	64	--	6.1	2.77 J	80.6	--	--	3.71 J	2.89 J	--	28.8
Benzo(b,j,k)fluoranthenes	SW8270D	--	--	--	--	144	--	15.4	6.14 J	187	--	--	7.55 J	5.24 J	--	64.9
Benzo(g,h,i)perylene	SW8270D	31	78	--	--	20.3	--	1.5	0.368 J	20.4	--	--	0.553 J	1.01 J	100 J	3.15
Chrysene	SW8270D	110	460	--	--	119	--	5.29	3.31 J	109	--	--	7.76 J	5.6	--	79
Dibenzo(a,h)anthracene	SW8270D	12	33	--	--	--	--	--	--	--	--	--	0.31 J	--	--	--
Dibenzo(a,h)anthracene	SW8270DSIM	12	33	--	--	9.03	--	0.722 J	0.224 J	10.7	--	--	--	0.443 J	39.4	0.848 J
Dibenzofuran	SW8270D	15	58	--	--	4.13	--	1.77	0.375	2.6	--	--	--	0.813	9.72	28.3
Fluoranthene	SW8270D	160	1200	--	--	118	--	9.6	5.37	103	--	--	11.8	10	--	332
Fluorene	SW8270D	23	79	--	--	1.75 U	--	1.19	0.331	5.61	--	--	0.966	0.887	14.8	53
Indeno(1,2,3-c,d)pyrene	SW8270D	34	88	--	--	21.5	--	1.73	0.453 J	23.7	--	--	0.646 J	0.913 J	108	3.37
Naphthalene	SW8270D	99	170	--	--	6.59	--	2.68	0.4	4.81	--	--	0.721	0.549	7.57	432
Phenanthrene	SW8270D	100	480	--	--	36.1	--	3.13	2	40	--	--	4.88	2.73	--	66.3
Pyrene	SW8270D	1000	1400	--	--	138	--	25.5 J	5.65 J	221	--	--	11.2 J	9.07	815	213 J
Total Benzofluoranthenes (b,j,k) (U = 0)	--	230	450	--	--	144	--	15.4	6.14 J	187	--	--	7.55 J	5.24 J	--	64.9
Total HPAH (SMS) (U = 0)	--	960	5300	--	--	680	--	69.9 J	26.8 J	805	--	--	47.9 J	39 J	1200 J	780 J
Total LPAH (SMS) (U = 0)	--	370	780	--	--	89.4	--	11.4	5	90	--	--	14.9	10	120	700
Polycyclic Aromatic Hydrocarbons (µg/kg)																
2-Methylnaphthalene	SW8270D	--	--	670	670	28.2	--	149	48.1	38.8	--	--	54	42.5	50.2	2390
Acenaphthene	SW8270D	--	--	500	500	50.3	--	334	118	35.6	--	--	113	185	78.8	8620
Acenaphthylene	SW8270D	--	--	1300	1300	101	--	88.2 U	89.1	168	--	--	66.7	63.2	280	391
Anthracene	SW8270D	--	--	960	960	376	--	644	328	397	--	--	1040	900	663	6450
Benzo(a)anthracene	SW8270D	--	--	1300	1600	545	--	899	708 J	656	--	--	658 J	576	1050	6050
Benzo(a)pyrene	SW8270D	--	--	1600	1600	720	--	1360	789 J	1080	--	--	546 J	433 J	--	2940
Benzo(b,j,k)fluoranthenes	SW8270D	--	--	--	--	1630	--	3440	1750 J	2510	--	--	1110 J	786 J	--	6620
Benzo(g,h,i)perylene	SW8270D	--	--	670	720	229	--	334	105 J	274	--	--	81.3 J	151 J	1100 J	321
Chrysene	SW8270D	--	--	1400	2800	1340	--	1180	942 J	1460	--	--	1140 J	840	--	8100
Dibenzo(a,h)anthracene	SW8270D	--	--	230	230	--	--	--	--	--	--	--	45.5 J	--	--	--
Dibenzo(a,h)anthracene	SW8270DSIM	--	--	230	230	102	--	161 J	63.7 J	143	--	--	--	66.5 J	429	86.5 J
Dibenzofuran	SW8270D	--	--	540	540	46.7	--	395	107	34.8	--	--	--	122	106	2890
Fluoranthene	SW8270D	--	--	1700	2500	1330	--	2140	1530	1380	--	--	1730	1500	--	33900
Fluorene	SW8270D	--	--	540	540	19.8 U	--	265	94.3	75.2	--	--	142	133	161	5400
Indeno(1,2,3-c,d)pyrene	SW8270D	--	--	600	690	243	--	385	129 J	318	--	--	94.9 J	137 J	1180	344
Naphthalene	SW8270D	--	--	2100	2100	74.5	--	597	100	64.4	--	--	106	82.4	82.5	44100
Phenanthrene	SW8270D	--	--	1500	1500	408	--	697	580	500	--	--	717	409	--	6760
Pyrene	SW8270D	--	--	2600	3300	1560	--	5680 J	1610 J	2960	--	--	1640 J	1360	8880	21700 J
Total Benzofluoranthenes (b,j,k) (U = 0)		--	--	3200	3600	1630	--	3440	1750 J	2510	--	--	1110 J	786 J	--	6620
Total HPAH (SMS) (U = 0)		--	--	12000	17000	7700	--	15600 J	7630 J	10800	--	--	7050 J	5800 J	13000 J	80000 J
Total LPAH (SMS) (U = 0)		--	--	5200	5200	1010	--	2540	1300	1200	--	--	2180	1800	1300	72000

Table 8
Sediment Analytical Results

					Location ID	T25-SC-06	T25-SC-06	T25-SC-06	T25-SC-06	T25-SC07	T25-SC07	T25-SC07	T25-SC07	T25-SC07	T25-SC08	T25-SC08
					Sample ID	T25-SC06-0-1	T25-SC56-0-1	T25-SC06-1.5-2.5	T25-SC06-2.5-3.3	T25-SC07-0-1	T25-SC57-0-1	T25-SC07-1-2	T25-SC07-5-6	T25-SC07-6-7	T25-SC08-0-1	T25-SC08-7-8
					Sample Date	3/26/2019	3/26/2019	3/26/2019	3/26/2019	3/25/2019	3/25/2019	3/25/2019	3/25/2019	3/25/2019	3/25/2019	3/25/2019
					Depth	0 - 1 ft	0 - 1 ft	1.5 - 2.5 ft	2.5 - 3.3 ft	0 - 1 ft	0 - 1 ft	1 - 2 ft	5 - 6 ft	6 - 7 ft	0 - 1 ft	7 - 8 ft
					Sample Type	N	FD	N	N	N	FD	N	N	N	N	N
					Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Parameter	**Method**	**SMS SCO**	**SMS CSL**	**AET SCO**	**AET CSL**											
Dioxin Furans (ng/kg)																
2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	E1613B	--	--	--	--	**1.11 J**	--	**7.47 J**	**6.77**	0.735 U	**0.84 J**	--	**12.4 J**	**8.37**	1.01 U	**3.84 J**
1,2,3,7,8-Pentachlorodibenzo-p-dioxin (PeCDD)	E1613B	--	--	--	--	**2.73**	--	**144**	**98.3**	**5.64 J**	**4.3**	--	**95.1 J**	**74.3**	**3.96 J**	**15.1 J**
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B	--	--	--	--	**2.38 J**	--	**137**	**58.2**	**7.23 J**	**6.18**	--	**76.4 J**	**48.8**	**5.98 J**	**8.74 J**
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B	--	--	--	--	**51.8 J**	--	**1500**	**583**	**38 J**	**35.9**	--	**1180 J**	**420**	**26.4**	**26.5 J**
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B	--	--	--	--	**6.74**	--	**584**	**251**	**14.7 J**	**5**	--	**270 J**	**174**	**10.5**	**16.2 J**
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (HpCDD)	E1613B	--	--	--	--	**1650**	--	**16600**	**4950**	**1470**	**1420**	--	**27000**	--	**1190**	**364**
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	E1613B	--	--	--	--	**12200 J**	--	**93500 J**	**21500**	**12700**	**13200**	--	**160000**	--	**12300**	**2090**
Total Tetrachlorodibenzo-p-dioxin (TCDD)	E1613B	--	--	--	--	**276 J**	--	**734**	**337**	**31**	**22.3 J**	--	**385**	**289**	**6.81 J**	**173**
Total Pentachlorodibenzo-p-dioxin (PeCDD)	E1613B	--	--	--	--	**43.2**	--	**1370**	**841**	**40.7**	**26**	--	**916**	**562**	**18.5**	**220**
Total Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B	--	--	--	--	**340 J**	--	**11000**	**4490**	**467**	**455**	--	**5900**	**3280**	**346**	**317**
Total Heptachlorodibenzo-p-dioxin (HpCDD)	E1613B	--	--	--	--	**3500**	--	**33500**	**9960**	**5190**	**5470**	--	**51500**	**9900**	**4950**	**674**
2,3,7,8-Tetrachlorodibenzofuran (TCDF)	E1613B	--	--	--	--	**1.81 J**	--	**1150 J**	**46 J**	**11.9 J**	**3.51**	--	**242 J**	1.89 U	**2.19 J**	**50.4 J**
1,2,3,7,8-Pentachlorodibenzofuran (PeCDF)	E1613B	--	--	--	--	**1.23**	--	**35.7 J**	**29.8 J**	**3.28 J**	**2.25**	--	**32.6 J**	**30.2 J**	**1.82 J**	**8.68 J**
2,3,4,7,8-Pentachlorodibenzofuran (PeCDF)	E1613B	--	--	--	--	**2.31**	--	**132**	**72.5**	**5.12 J**	**3.92**	--	**62.8 J**	**54.4**	**2.55 J**	**15.8 J**
1,2,3,4,7,8-Hexachlorodibenzofuran (HxCDF)	E1613B	--	--	--	--	**8.72 J**	--	**334**	**245**	**15.5 J**	**11.3**	--	**242 J**	**195**	**7.63 J**	**19 J**
1,2,3,6,7,8-Hexachlorodibenzofuran (HxCDF)	E1613B	--	--	--	--	**5.39 J**	--	**206**	**128 J**	**5.63 J**	**4.77**	--	**105 J**	**102 J**	**2.97 J**	**19.5 J**
1,2,3,7,8,9-Hexachlorodibenzofuran (HxCDF)	E1613B	--	--	--	--	**2.07 J**	--	**250 J**	**93.9 J**	**3.39 J**	**3.02 J**	--	**90.4 J**	**70.9**	2.51 UJ	**4.51 J**
2,3,4,6,7,8-Hexachlorodibenzofuran (HxCDF)	E1613B	--	--	--	--	**2.3 J**	--	**328**	**161**	**5.57 J**	**3.86**	--	**190 J**	**82.5**	**3.17 J**	**31.3 J**
1,2,3,4,6,7,8-Heptachlorodibenzofuran (HpCDF)	E1613B	--	--	--	--	**360**	--	**4470**	**2530**	**169**	**151**	--	**8850**	--	**91.5**	**186**
1,2,3,4,7,8,9-Heptachlorodibenzofuran (HpCDF)	E1613B	--	--	--	--	**17.2 J**	--	**201**	**86.8**	**11.4 J**	**9.79**	--	**401 J**	**122**	**6.79 J**	**9.3 J**
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	E1613B	--	--	--	--	**1510**	--	**10800**	**3740**	**599**	**515**	--	**50500**	--	**334**	**641**
Total Tetrachlorodibenzofuran (TCDF)	E1613B	--	--	--	--	**51.2**	--	**5820**	**1420**	**90.9**	**60.1**	--	**2000**	**1830**	**40**	**501**
Total Pentachlorodibenzofuran (PeCDF)	E1613B	--	--	--	--	**62.1**	--	**11100**	**2450**	**101**	**59.1**	--	**3920**	**1820**	**50.9 J**	**911**
Total Hexachlorodibenzofuran (HxCDF)	E1613B	--	--	--	--	**480 J**	--	**6590**	**3830 J**	**252 J**	**273 J**	--	**7510**	**3650**	**150 J**	**494**
Total Heptachlorodibenzofuran (HpCDF)	E1613B	--	--	--	--	**1380 J**	--	**13400**	**5460**	**625**	**538**	--	**45200**	**8690**	**340**	**646**
Total Dioxin/Furan TEQ 2005 (Mammal) (U = 1/2)	--	25 ng/kg TEQ[2]		--	--	**37 J**	--	**890 J**	**368 J**	**38.3 J**	**33.7 J**	--	**790 J**	**210 J**	**28 J**	**48 J**
Total Dioxin/Furan TEQ 2005 (Mammal) (U = 0)	--	25 ng/kg TEQ[2]		--	--	**37 J**	--	**890 J**	**368 J**	**38 J**	**33.7 J**	--	**790 J**	**210 J**	**27.3 J**	**48 J**
PCB Aroclors (µg/kg)																
Aroclor 1016	SW8082A	--	--	--	--	39.6 U	--	566 U	140 U	7.8 U	--	--	1000 U	202 U	7.9 U	14.8 U
Aroclor 1221	SW8082A	--	--	--	--	39.6 U	--	566 U	140 U	7.8 U	--	--	1000 U	202 U	7.9 U	14.8 U
Aroclor 1232	SW8082A	--	--	--	--	39.6 U	--	566 U	140 U	7.8 U	--	--	1000 U	202 U	7.9 U	14.8 U
Aroclor 1242	SW8082A	--	--	--	--	39.6 U	--	566 U	140 U	7.8 U	--	--	1000 U	202 U	7.9 U	14.8 U
Aroclor 1248	SW8082A	--	--	--	--	**84.1 J**	--	566 U	140 U	**79.7**	--	--	1000 U	202 U	**45.9 J**	**40.5**
Aroclor 1254	SW8082A	--	--	--	--	**232 J**	--	**2600**	**2430 J**	**270**	--	--	**3450**	**4490**	**124 J**	**88.6**
Aroclor 1260	SW8082A	--	--	--	--	**222 J**	--	**9890**	**13000 J**	**389 J**	--	--	**13300**	**11700 J**	**212 J**	**222**
Aroclor 1262	SW8082A	--	--	--	--	39.6 U	--	566 U	140 U	7.8 U	--	--	1000 U	202 U	7.9 U	14.8 U
Aroclor 1268	SW8082A	--	--	--	--	39.6 U	--	566 U	140 U	7.8 U	--	--	1000 U	202 U	7.9 U	14.8 U
Total PCB Aroclors (SMS Marine 2013) (U = 0)	--	--	--	130	1000	**538 J**	--	**12000**	**15000 J**	**740 J**	--	--	**17000**	**16200 J**	**380 J**	**351**
PCB Aroclors (mg/kg-OC)																
Total PCB Aroclors (SMS Marine 2013) (U = 0)	--	12	65	--	--	**47.6 J**	--	**56**	**54 J**	**55 J**	--	--	**100**	**108 J**	**35 J**	**3.44**

Table 8
Sediment Analytical Results

					Location ID	T25-SC08	T25-SC08	T25-SC-09B	T25-SC-09B	T25-SC-09B
					Sample ID	T25-SC08-8-9	T25-SC08-9-10	T25-SC09B-0-1	T25-SC09B-2-3	T25-SC09B-3-4
					Sample Date	3/25/2019	3/25/2019	3/26/2019	3/26/2019	3/26/2019
					Depth	8 - 9 ft	9 - 10 ft	0 - 1 ft	2 - 3 ft	3 - 4 ft
					Sample Type	N	N	N	N	N
					Matrix	SE	SE	SE	SE	SE
Parameter	**Method**	**SMS SCO**	**SMS CSL**	**AET SCO**	**AET CSL**					
Conventional Parameters (unitless)										
Specific gravity	D854	--	--	--	--	--	--	--	**2.36**	--
Conventional Parameters (percent)										
Moisture (water) content	D2216	--	--	--	--	--	--	--	**128.6**	--
Total organic carbon	SW9060A	--	--	--	--	**12.7 J**	**3.3 J**	**21.8**	**6.29 J**	**5.56 J**
Total solids	SM2540G	--	--	--	--	**48.68 J**	**53.01 J**	**24.26**	**43.22**	**46.24 J**
Grain Size (percent)										
Gravel	D422	--	--	--	--	--	--	**1**	**0.8**	--
Sand	D422	--	--	--	--	--	--	**7.9**	**13.6**	--
Silt	D422	--	--	--	--	--	--	**78.8**	**79.1**	--
Clay	D422	--	--	--	--	--	--	**1**	**2.2**	--
Metals (mg/kg)										
Arsenic	SW6020A	57	93	57	93	--	--	**11.9**	--	--
Cadmium	SW6020A	5.1	6.7	5.1	6.7	--	--	**3.77**	--	--
Chromium	SW6020A	260	270	260	270	--	--	**36.7**	--	--
Copper	SW6020A	390	390	390	390	--	--	**105**	--	--
Lead	SW6020A	450	530	450	530	--	--	**391**	--	--
Mercury	SW7471B	0.41	0.59	0.41	0.59	--	--	**1.42**	**2.35 J**	**2.1 J**
Silver	SW6020A	6.1	6.1	6.1	6.1	--	--	**1.73**	--	--
Zinc	SW6020A	410	960	410	960	--	--	**300**	--	--
Semivolatile Organics (mg/kg-OC)										
1,2,4-Trichlorobenzene	SW8270DSIM	0.81	1.8	--	--	0.039 U	--	0.023 U	0.078 U	--
1,2-Dichlorobenzene	SW8270DSIM	2.3	2.3	--	--	0.039 U	--	0.023 U	0.078 U	--
1,4-Dichlorobenzene	SW8270DSIM	3.1	9	--	--	**0.011 J**	--	**0.022 J**	**0.496**	--
bis(2-Ethylhexyl)phthalate	SW8270D	47	78	--	--	0.392 UJ	--	0.228 U	0.787 U	--
Butylbenzyl phthalate	SW8270D	4.9	64	--	--	0.157 UJ	--	0.0913 U	0.315 U	--
Diethyl phthalate	SW8270DSIM	61	110	--	--	0.235 U	--	0.0913 U	0.315 U	--
Dimethyl phthalate	SW8270DSIM	53	53	--	--	0.039 U	--	0.023 U	0.078 U	--
Di-n-butyl phthalate	SW8270D	220	1700	--	--	0.157 UJ	--	0.0839 U	0.315 U	--
Di-n-octyl phthalate	SW8270D	58	4500	--	--	0.157 UJ	--	0.0913 U	0.315 U	--
Hexachlorobenzene	SW8270DSIM	0.38	2.3	--	--	0.039 U	--	0.023 U	0.078 U	--
Hexachlorobutadiene (Hexachloro-1,3-butadiene)	SW8270DSIM	3.9	6.2	--	--	0.039 U	--	0.023 U	0.078 U	--
n-Nitrosodiphenylamine	SW8270DSIM	11	11	--	--	0.039 U	--	0.023 U	0.078 U	--
Semivolatile Organics (µg/kg)										
1,2,4-Trichlorobenzene	SW8270DSIM	--	--	31	51	5 U	--	5 U	4.9 U	--
1,2-Dichlorobenzene	SW8270DSIM	--	--	35	50	5 U	--	5 U	4.9 U	--
1,4-Dichlorobenzene	SW8270DSIM	--	--	110	110	**1.4 J**	--	**4.7 J**	**31.2**	--
2,4-Dimethylphenol	SW8270DSIM	29	29	29	29	**9.1 J**	--	**15.8 J**	19.8 U	--
2-Methylphenol (o-Cresol)	SW8270DSIM	63	63	63	63	**7.5**	--	5 U	4.9 U	--
4-Methylphenol (p-Cresol)	SW8270DSIM	670	670	670	670	**65.5**	--	**309**	**568**	--
Benzoic acid	SW8270DSIM	650	650	650	650	99.6 U	--	99.4 U	99 UJ	--
Benzyl alcohol	SW8270DSIM	57	73	57	73	19.9 UJ	--	**15.1 J**	19.8 U	--
bis(2-Ethylhexyl)phthalate	SW8270D	--	--	1300	1900	49.8 UJ	--	49.7 U	49.5 U	--
Butylbenzyl phthalate	SW8270D	--	--	63	900	19.9 UJ	--	19.9 U	19.8 U	--
Diethyl phthalate	SW8270DSIM	--	--	200	1200	29.9 U	--	19.9 U	19.8 U	--
Dimethyl phthalate	SW8270DSIM	--	--	71	160	5 U	--	5 U	4.9 U	--
Di-n-butyl phthalate	SW8270D	--	--	1400	1400	19.9 UJ	--	18.3 U	19.8 U	--
Di-n-octyl phthalate	SW8270D	--	--	6200	6200	19.9 UJ	--	19.9 U	19.8 U	--
Hexachlorobenzene	SW8270DSIM	--	--	22	70	5 U	--	5 U	4.9 U	--
Hexachlorobutadiene (Hexachloro-1,3-butadiene)	SW8270DSIM	--	--	11	120	5 U	--	5 U	4.9 U	--
n-Nitrosodiphenylamine	SW8270DSIM	--	--	28	40	5 U	--	5 U	4.9 U	--
Pentachlorophenol	SW8270DSIM	360	690	360	690	**6.3 J**	--	19.9 U	19.8 UJ	--
Phenol	SW8270DSIM	420	1200	420	1200	**20.4**	--	**154**	**85.5**	--

Table 8
Sediment Analytical Results

					Location ID	T25-SC08	T25-SC08	T25-SC-09B	T25-SC-09B	T25-SC-09B
					Sample ID	T25-SC08-8-9	T25-SC08-9-10	T25-SC09B-0-1	T25-SC09B-2-3	T25-SC09B-3-4
					Sample Date	3/25/2019	3/25/2019	3/26/2019	3/26/2019	3/26/2019
					Depth	8 - 9 ft	9 - 10 ft	0 - 1 ft	2 - 3 ft	3 - 4 ft
					Sample Type	N	N	N	N	N
					Matrix	SE	SE	SE	SE	SE
Parameter	**Method**	**SMS SCO**	**SMS CSL**	**AET SCO**	**AET CSL**					
Polycyclic Aromatic Hydrocarbons (mg/kg-OC)										
2-Methylnaphthalene	SW8270D	38	64	--	--	**5.79 J**	**33.6 J**	**0.72**	**11.7**	**7.5**
Acenaphthene	SW8270D	16	57	--	--	**35.5**	**70.3**	**6.79**	**33.7**	**20.7**
Acenaphthylene	SW8270D	66	66	--	--	**1.04 J**	**5.24**	**0.592**	**6**	**5.11**
Anthracene	SW8270D	220	1200	--	--	**19.4**	**81.5**	**8.67**	**77.6**	**86**
Benzo(a)anthracene	SW8270D	110	270	--	--	**14.1 J**	**68.2**	**6.97**	**80.8**	**73**
Benzo(a)pyrene	SW8270D	99	210	--	--	**8.19 J**	**28 J**	**4.3**	**33.1**	**26.3**
Benzo(b,j,k)fluoranthenes	SW8270D	--	--	--	--	**18.7 J**	**61.8 J**	**8.85**	**68.2**	**66.2**
Benzo(g,h,i)perylene	SW8270D	31	78	--	--	**1.44 J**	**11.4 J**	**1**	**2.88**	**2.84**
Chrysene	SW8270D	110	460	--	--	**20**	**104**	**--**	**100**	**116**
Dibenzo(a,h)anthracene	SW8270D	12	33	--	--	**--**	**5.82**	**--**	**--**	**1.32**
Dibenzo(a,h)anthracene	SW8270DSIM	12	33	--	--	**0.761 J**	**--**	**0.5**	**0.712 J**	**--**
Dibenzofuran	SW8270D	15	58	--	--	**15.6**	**--**	**3**	**12.8**	**--**
Fluoranthene	SW8270D	160	1200	--	--	**89**	**229**	**--**	**456 J**	**310**
Fluorene	SW8270D	23	79	--	--	**21.9**	**53.6**	**5.18**	**31.5**	**29**
Indeno(1,2,3-c,d)pyrene	SW8270D	34	88	--	--	**1.8 J**	**10.9 J**	**1.07**	**2.97**	**3.79**
Naphthalene	SW8270D	99	170	--	--	**21**	**110**	**1.8**	**56.9**	**22.3**
Phenanthrene	SW8270D	100	480	--	--	**40.6**	**81.2**	**--**	**73**	**51.1**
Pyrene	SW8270D	1000	1400	--	--	**63.9**	**150**	**26.7**	**277 J**	**209**
Total Benzofluoranthenes (b,j,k) (U = 0)	--	230	450	--	--	**18.7 J**	**61.8 J**	**8.85**	**68.2**	**66.2**
Total HPAH (SMS) (U = 0)	--	960	5300	--	--	**220 J**	**670 J**	**50**	**1000 J**	**800**
Total LPAH (SMS) (U = 0)	--	370	780	--	--	**139 J**	**400**	**23**	**300**	**210**
Polycyclic Aromatic Hydrocarbons (µg/kg)										
2-Methylnaphthalene	SW8270D	--	--	670	670	**735 J**	**1110 J**	**157**	**735**	**417**
Acenaphthene	SW8270D	--	--	500	500	**4510**	**2320**	**1480**	**2120**	**1150**
Acenaphthylene	SW8270D	--	--	1300	1300	**132 J**	**173**	**129**	**400**	**284**
Anthracene	SW8270D	--	--	960	960	**2460**	**2690**	**1890**	**4880**	**4800**
Benzo(a)anthracene	SW8270D	--	--	1300	1600	**1790 J**	**2250**	**1520**	**5080**	**4060**
Benzo(a)pyrene	SW8270D	--	--	1600	1600	**1040 J**	**940 J**	**930**	**2080**	**1460**
Benzo(b,j,k)fluoranthenes	SW8270D	--	--	--	--	**2380 J**	**2040 J**	**1930**	**4290**	**3680**
Benzo(g,h,i)perylene	SW8270D	--	--	670	720	**183 J**	**377 J**	**220**	**181**	**158**
Chrysene	SW8270D	--	--	1400	2800	**2600**	**3440**	**--**	**6500**	**6450**
Dibenzo(a,h)anthracene	SW8270D	--	--	230	230	**--**	**192**	**--**	**--**	**73.4**
Dibenzo(a,h)anthracene	SW8270DSIM	--	--	230	230	**96.7 J**	**--**	**100**	**44.8 J**	**--**
Dibenzofuran	SW8270D	--	--	540	540	**1980**	**--**	**660**	**805**	**--**
Fluoranthene	SW8270D	--	--	1700	2500	**11300**	**7560**	**--**	**28700 J**	**17000**
Fluorene	SW8270D	--	--	540	540	**2780**	**1770**	**1130**	**1980**	**1600**
Indeno(1,2,3-c,d)pyrene	SW8270D	--	--	600	690	**228 J**	**359 J**	**234**	**187**	**211**
Naphthalene	SW8270D	--	--	2100	2100	**2670**	**3500**	**392**	**3580**	**1240**
Phenanthrene	SW8270D	--	--	1500	1500	**5150**	**2680**	**--**	**4590**	**2840**
Pyrene	SW8270D	--	--	2600	3300	**8110**	**4940**	**5830**	**17400 J**	**11600**
Total Benzofluoranthenes (b,j,k) (U = 0)		--	--	3200	3600	**2380 J**	**2040 J**	**1930**	**4290**	**3680**
Total HPAH (SMS) (U = 0)		--	--	12000	17000	**28000 J**	**22000 J**	**11000**	**64000 J**	**45000**
Total LPAH (SMS) (U = 0)		--	--	5200	5200	**17700 J**	**13000**	**5020**	**18000**	**12000**

Table 8
Sediment Analytical Results

					Location ID	T25-SC08	T25-SC08	T25-SC-09B	T25-SC-09B	T25-SC-09B
					Sample ID	T25-SC08-8-9	T25-SC08-9-10	T25-SC09B-0-1	T25-SC09B-2-3	T25-SC09B-3-4
					Sample Date	3/25/2019	3/25/2019	3/26/2019	3/26/2019	3/26/2019
					Depth	8 - 9 ft	9 - 10 ft	0 - 1 ft	2 - 3 ft	3 - 4 ft
					Sample Type	N	N	N	N	N
					Matrix	SE	SE	SE	SE	SE
Parameter	**Method**	**SMS SCO**	**SMS CSL**	**AET SCO**	**AET CSL**					
Dioxin Furans (ng/kg)										
2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	E1613B	--	--	--	--	0.627 U	--	1.43 U	1.16 U	--
1,2,3,7,8-Pentachlorodibenzo-p-dioxin (PeCDD)	E1613B	--	--	--	--	**2.21 J**	--	**13**	**2.65**	--
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B	--	--	--	--	0.843 U	--	**3.5 J**	0.756 U	--
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B	--	--	--	--	**3.2 J**	--	**15.6**	**2.42 J**	--
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B	--	--	--	--	**2.18**	--	**6.52**	**1.62**	--
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (HpCDD)	E1613B	--	--	--	--	**60.6**	--	**143**	**16.9**	--
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	E1613B	--	--	--	--	**320**	--	**941**	**77.4**	--
Total Tetrachlorodibenzo-p-dioxin (TCDD)	E1613B	--	--	--	--	**14.6**	--	**122**	**45.7**	--
Total Pentachlorodibenzo-p-dioxin (PeCDD)	E1613B	--	--	--	--	**12**	--	**108**	**20.1**	--
Total Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B	--	--	--	--	**20.3**	--	**171**	**43.8**	--
Total Heptachlorodibenzo-p-dioxin (HpCDD)	E1613B	--	--	--	--	**117**	--	**109**	**31.5**	--
2,3,7,8-Tetrachlorodibenzofuran (TCDF)	E1613B	--	--	--	--	**5.07**	--	**6.39**	1.02 U	--
1,2,3,7,8-Pentachlorodibenzofuran (PeCDF)	E1613B	--	--	--	--	**2.62 J**	--	**5.58**	**3.11 J**	--
2,3,4,7,8-Pentachlorodibenzofuran (PeCDF)	E1613B	--	--	--	--	**2.35**	--	**13.8**	**2.5**	--
1,2,3,4,7,8-Hexachlorodibenzofuran (HxCDF)	E1613B	--	--	--	--	**2.6**	--	**12.7**	**1.77**	--
1,2,3,6,7,8-Hexachlorodibenzofuran (HxCDF)	E1613B	--	--	--	--	**1.9 J**	--	**15.9**	**2.15**	--
1,2,3,7,8,9-Hexachlorodibenzofuran (HxCDF)	E1613B	--	--	--	--	**0.816 J**	--	**4.24**	0.6 U	--
2,3,4,6,7,8-Hexachlorodibenzofuran (HxCDF)	E1613B	--	--	--	--	**1.51**	--	**15**	**1.4 J**	--
1,2,3,4,6,7,8-Heptachlorodibenzofuran (HpCDF)	E1613B	--	--	--	--	**28.1**	--	**102**	**8.99**	--
1,2,3,4,7,8,9-Heptachlorodibenzofuran (HpCDF)	E1613B	--	--	--	--	**2.03**	--	**5.39 J**	**0.835 J**	--
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	E1613B	--	--	--	--	**161**	--	**439**	**26.2 J**	--
Total Tetrachlorodibenzofuran (TCDF)	E1613B	--	--	--	--	**78.6**	--	**455**	**73.9**	--
Total Pentachlorodibenzofuran (PeCDF)	E1613B	--	--	--	--	**14.6**	--	**618**	**39.3**	--
Total Hexachlorodibenzofuran (HxCDF)	E1613B	--	--	--	--	**40.5**	--	**465**	**23.5**	--
Total Heptachlorodibenzofuran (HpCDF)	E1613B	--	--	--	--	**114**	--	**292**	**21.9**	--
Total Dioxin/Furan TEQ 2005 (Mammal) (U = 1/2)	--	25 ng/kg TEQ[2]		--	--	**6.1 J**	--	**28.9 J**	**5.43 J**	--
Total Dioxin/Furan TEQ 2005 (Mammal) (U = 0)	--	25 ng/kg TEQ[2]		--	--	**5.8 J**	--	**28.2 J**	**4.73 J**	--
PCB Aroclors (µg/kg)										
Aroclor 1016	SW8082A	--	--	--	--	4 UJ	--	7.9 U	--	4 U
Aroclor 1221	SW8082A	--	--	--	--	4 UJ	--	7.9 U	--	4 U
Aroclor 1232	SW8082A	--	--	--	--	4 UJ	--	7.9 U	--	4 U
Aroclor 1242	SW8082A	--	--	--	--	4 UJ	--	7.9 U	--	4 U
Aroclor 1248	SW8082A	--	--	--	--	**8.8 J**	--	7.9 U	--	4 U
Aroclor 1254	SW8082A	--	--	--	--	**18.2 J**	--	**48.8 J**	--	4 U
Aroclor 1260	SW8082A	--	--	--	--	**51.8 J**	--	**74.5 J**	--	4 U
Aroclor 1262	SW8082A	--	--	--	--	4 UJ	--	7.9 U	--	4 U
Aroclor 1268	SW8082A	--	--	--	--	4 UJ	--	7.9 U	--	4 U
Total PCB Aroclors (SMS Marine 2013) (U = 0)	--	--	--	130	1000	**79 J**	--	**120 J**	--	4 U
PCB Aroclors (mg/kg-OC)										
Total PCB Aroclors (SMS Marine 2013) (U = 0)	--	12	65	--	--	**0.62 J**	--	**0.57 J**	--	0.072 U

Table 8
Sediment Analytical Results

Notes:

Horizontal coordinate datum is North American Datum of 1983 (NAD83) State Plane Washington North FIPS 4601 (U.S. Survey Feet).

All nondetect results are reported at the reporting limit or, for dioxin/furan analysis, at the estimated detection limit (EDL).

Totals are calculated as the sum of all detected results (U=0). If all results are not detected, the highest limit value is reported as the sum.

Totals are calculated as the sum of all detected results and half of the reporting limit of nondetect results (U=1/2). If all results are not detected, the highest limit value is reported as the sum.

USEPA Stage 2B and 4 data validation was completed by Laboratory Data Consultants (LDC).

Total LPAH are the total of acenaphthene, acenaphthylene, anthracene, fluorene, naphthalene, and phenanthrene. 2-Methylnapthalene is not included in the sum of LPAHs.

Total HPAH are the total of benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(g,h,i)perylene, chrysene, dibenzo(a,h)anthracene, fluoranthene, indeno(1,2,3-c,d)pyrene, and pyrene.

Total PCB Aroclors (SMS Marine 2013) does not include Aroclor 1262 and 1268.

Dioxin/furan TEQ values were calculated with 2005 World Health Organization (WHO) Toxic Equivalency Factor (TEF) values for mammals.

1. TOC concentrations are elevated (>10%) due to the presence of organic material (i.e., wood waste, white spongy material, etc.). See the boring logs for core descriptions.

2. East Waterway Remedial Action Level (EWRAL)

3. Screening level exceedances were applied to OC-normalized results when TOC exceedances were within the normal range (as defined by SCUM [Ecology 2019]). They were applied to dry weight results when TOC was outside of the normal range.

TOC in range (0.5% - 3.5%)

Detected concentration is greater than SMS Marine SCO

Detected concentration is greater than SMS Marine CSL

TOC out of range

Detected concentration is greater than AET Marine SCO

Detected concentration is greater than AET Marine CSL

East Waterway Criteria

Detected concnetration is greater than the East Waterway Remedial Action Level (EWRAL)

Bold: Detected result

--: results not reported or not applicable

µg/kg: micrograms per kilogram

AET: Apparent Effects Threshold

CSL: Cleanup Screening Level

D/F: dioxin furans

FD: field duplicate sample

ft: feet

HPAH: high molecular weight PAH

ID: identification

J: Estimated value

LPAH: low molecular weight PAH

mg/kg: milligrams per kilogram

mg/kg-OC: milligrams per kilogram organic carbon normalized

N: normal environmental sample

ng/kg: nanograms per kilogram

PCB: polychlorinated biphenyls

SCO: Sediment Cleanup Objective

SCUM: Sediment Cleanup User's Manual

SE: sediment matrix

SMS: Sediment Management Standards

TEQ: Toxic Equivalents Quotient

TOC: Total Organic Carbon

U: Compound analyzed, but not detected above detection limit

UJ: Compound analyzed, but not detected above estimated detection limit

Table 9
Sediment Post-Dredge Summary

Location ID	Estimated Dredge Depth (ft)	Interval (ft)	Chemical Exceedances	Material Type	Total Organic Carbon (%)	Wood Debris Interval (ft bgs)	Native Contact (ft bgs)
T25-SC02	4.6	4.6 - 5.6	Acenaphthene > SCO	Poorly graded sand	0.66	N/A	4.1
T25-SC03	6.9	3.7 - 4.7	PAHs, 2,4-dimethylphenol >CSL; PCBs > SCO	Poorly graded sand	0.58	N/A	N/A
		4.7 - 5.7	Phenanthrene > CSL; fluoranthene, PCBs > SCO		0.58		
		5.7 - 6.2	None		0.2		
T25-SC04	4.0	4 - 5	Mercury, PCBs > CSL; 1,2,4-trichlorobenzene > SCO; D/F TEQ > EWRAL	Poorly graded sand	1.84	N/A	N/A
		5 - 6	15 PAHs > CSL; PCBs > SCO; D/F TEQ > EWRAL		3.97		
		6 - 6.7	Phenanthrene, pyrene > CSL; fluoranthene, PCBs > SCO; D/F TEQ > EWRAL	Silt with organics	17.4		
T25-SC-05	--[a]	0 - 1	PCBs > SCO	Silty sand	1.52	N/A	N/A
		1 - 1.5	PCBs > SCO		1.8		
		1.5 - 2		Poorly graded sand			
T25-SC-06	--[a]	0 - 0.5	1,4-Dichlorobenzene, chrysene, PCBs > SCO; D/F TEQ > EWRAL	Silty sand	N/A	1.5 - 3.3	N/A
		0.5 - 1		Poorly graded sand	N/A		
		1.5 - 2.5	1,4-Dichlorobenzene, 1,2,4-trichlorobenzene, pyrene, PCBs > CSL; fluoranthene, benzofluoranthenes, LPAH > SCO; D/F TEQ > EWRAL	Slightly sandy organic material	22.3		
		2.5 - 3.3	1,4-Dichlorobenzene, 1,2,4-trichlorobenzene, PCBs > CSL; D/F TEQ > EWRAL		28.5		
T25-SC07	--[a]	0 - 1	PCBs > SCO; D/F TEQ > EWRAL	Silt	1.34	N/A	N/A
		2 - 5	N/A		--		
		5 - 6	Anthracene, PCBs > CSL; fluoranthene > SCO; D/F TEQ > EWRAL	Silt with organics	14.7		
		6 - 7	Mercury, PCBs > CSL; D/F TEQ > EWRAL		15		
T25-SC08	--[a]	0 - 1	3 PAHs > CSL; total LPAH, PCBs > SCO; D/F TEQ > EWRAL	Silt	1.09	N/A	N/A
		1 - 7	N/A		--		
		7 - 8	2,4-Dimethylphenol, 15 PAHs > CSL; PCBs > SCO; D/F TEQ > EWRAL		10.2		
		8 - 9	12 PAHs > CSL; chrysene > SCO		12.7		
		9 - 10	Acenaphthene > CSL; 4 PAHs > SCO		3.3		
T25-SC-09B	--[a]	0 - 1	Mercury, 5 PAHs > CSL; benzo(a)anthracene > SCO; D/F TEQ > EWRAL	Silt	21.8	N/A	N/A
		1 - 2	N/A		--		
		2 - 3	Mercury, 15 PAHs > CSL		6.29		
		3 - 4	Mercury, 11 PAHs > CSL		5.56		

ED_006289_00002549-00069

Table 9
Sediment Post-Dredge Summary

Notes:
a. Location is outside of proposed dredge area.
bgs: below ground surface
CSL: Cleanup Screening Level
D/F: dioxin/furans
EWRAL: East Waterway Remedial Action Level
D/F: dioxin/furans
ft: feet
ID: identification
LPAH: low molecular weight PAH
N/A: Not Analyzed
PAH: polycyclic aromatic hydrocarbon
PCB: polychlorinated biphenyl Aroclor
SCO: Sediment Cleanup Objective
TEQ: Toxic Equivalents Quotient

ED_006289_00002549-00070

Table 10
Upland Boring Geotechnical Results

	Location ID	T25-SB02	T25-SB02	T25-SB02	T25-SB02	T25-SB03	T25-SB03	T25-SB03	T25-SB03	T25-SB03	T25-SB03	T25-SB03	T25-SB03
	Sample ID	T25-SB02-0-1.5	T25-SB02-10-11.5	T25-SB02-15-16.5	T25-SB02-20-21.5	T25-SB03-1-2.5	T25-SB03-5-6.5	T25-SB03-15-16.5	T25-SB03-20-21.5	T25-SB03-25-26.5	T25-SB-53-25-26.5	T25-SB03-40-41.5	T25-SB03-45-47
	Sample Date	1/15/2019	1/15/2019	1/15/2019	1/15/2019	1/18/2019	1/18/2019	1/18/2019	1/18/2019	1/18/2019	1/18/2019	1/18/2019	1/18/2019
	Depth	0 - 1.5 ft	10 - 11.5 ft	15 - 16.5 ft	20 - 21.5 ft	1 - 2.5 ft	5 - 6.5 ft	15 - 16.5 ft	20 - 21.5 ft	25 - 26.5 ft	25 - 26.5 ft	40 - 41.5 ft	45 - 47 ft
	Sample Type	N	N	N	N	N	N	N	N	N	FD	N	N
	Matrix	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO
Parameter	**Method**												
Geotechnical Parameters													
Moisture (water) content (percent)	D2216	13.7	35.4	38.1	25.4	9.5	8.9	29	27.6	23	--	37.6	35.4
Density (dry) (lb/ft^3)	D2937	92.3	84.4	77.5	93.9	113.7	118.6	93	93.2	94.5	--	80.3	81.2
Density (wet) (lb/ft^3)	D2937	105	114.2	107	117.7	124.5	129.2	120	118.9	116.3	--	110.6	109.9
Atterberg Limits (percent)	D4318	non-plastic	non-plastic	non-plastic	non-plastic	non-plastic	non-plastic	non-plastic	non-plastic	non-plastic	--	non-plastic	non-plastic
Specific gravity (unitless)	D854	2.61	2.67	2.64	2.7	2.72	2.74	2.71	2.7	2.69	--	2.65	2.66
Grain Size (percent)													
Gravel	D422	24.8	1.2	4.5	0	15	10.1	0.4	0.2	0	0	0	0
Sand	D422	68.8	89.1	88.9	96.5	71.5	79	87.4	93.8	95.4	95.8	45.6	66
Silt	D422	5.4	8.5	5.3	3.5	9.4	8.2	11.1	3.5	3.8	3.3	50.4	30.9
Clay	D422	0.6	1.3	1.2	0	1.3	1.4	0	0	0.9	0	2	2

Notes:
--: Not Analyzed
FD: field duplicate sample
ft: feet
ID: identification
lb/ft^3: pounds per cubic foot
N: normal environmental sample
SO: soil matrix

Table 10
Upland Boring Geotechnical Results

	Location ID	T25-SB03	T25-SB03	T25-SB03	T25-SB03	T25-SB03	T25-SB03	T25-SB04A	T25-SB04A	T25-SB04A	T25-SB04A	T25-SB04A	T25-SB05
	Sample ID	T25-SB03-50-51.5	T25-SB-53-50-51.5	T25-SB03-55-56.5	T25-SB03-59-60.5	T25-SB03-70-71.5	T25-SB03-75-76.5	T25-SB04A-5-6.5	T25-SB04A-9-9.7	T25-SB04A-15-16.5	T25-SB04A-20-21.5	T25-SB04A-24-25	T25-SB05-8-9
	Sample Date	1/18/2019	1/18/2019	1/18/2019	1/18/2019	1/18/2019	1/18/2019	1/16/2019	1/16/2019	1/16/2019	1/16/2019	1/16/2019	1/15/2019
	Depth	50 - 51.5 ft	50 - 51.5 ft	55 - 56.5 ft	59 - 60.5 ft	70 - 71.5 ft	75 - 76.5 ft	5 - 6.5 ft	9 - 9.7 ft	15 - 16.5 ft	20 - 21.5 ft	24 - 25 ft	8 - 9 ft
	Sample Type	N	FD	N	N	N	N	N	N	N	N	N	N
	Matrix	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO
Parameter	**Method**												
Geotechnical Parameters													
Moisture (water) content (percent)	D2216	36.1	--	29.5	23.6	23.2	30.6	--	30.7	31.5	26.8	24.3	38.3
Density (dry) (lb/ft^3)	D2937	81.9	--	88.4	93.3	97.7	89	--	88.9	89.8	91.5	94.5	82.3
Density (wet) (lb/ft^3)	D2937	111.4	--	114.4	115.3	120.3	116.3	--	116.2	118.1	115.9	117.5	113.8
Atterberg Limits (percent)	D4318	non-plastic	--	non-plastic	non-plastic	non-plastic	non-plastic	non-plastic	non-plastic	non-plastic	non-plastic	non-plastic	non-plastic
Specific gravity (unitless)	D854	2.65	--	2.69	2.65	2.68	2.68	2.72	2.6	2.66	2.7	2.68	2.64
Grain Size (percent)													
Gravel	D422	0.1	0	0	0	0	0	3.8	15.9	1.5	0	0	0
Sand	D422	42.2	46.6	67.9	90.4	73.2	78.1	90.3	76.4	76.8	95.2	93.3	20.9
Silt	D422	52.5	49.7	28.2	7	22.8	17.9	4.4	7.8	19.9	4.8	5.8	73.5
Clay	D422	1.7	1.3	1.9	0.9	2	1	0.8	0	0.8	0	0.9	3.7

Notes:
--: Not Analyzed
FD: field duplicate sample
ft: feet
ID: identification
lb/ft^3: pounds per cubic foot
N: normal environmental sample
SO: soil matrix

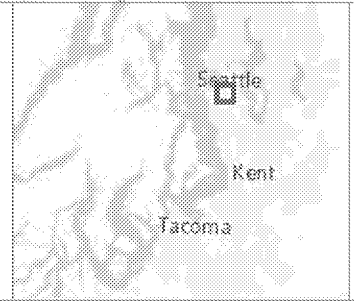
ED_006289_00002549-00072

Figures

DRAFT

LEGEND:

Project Boundary



0 2,000
Feet

Publish Date: 2021/01/26, 3:52 PM | User: adowell
Filepath: \\orcas\gis\Jobs\PortofSeattle_0003\SD01_T25_Wetland\Maps\DataReport\AQ_PoS_SD01_T25_VicinityMap_DR.mxd

ANCHOR QEA

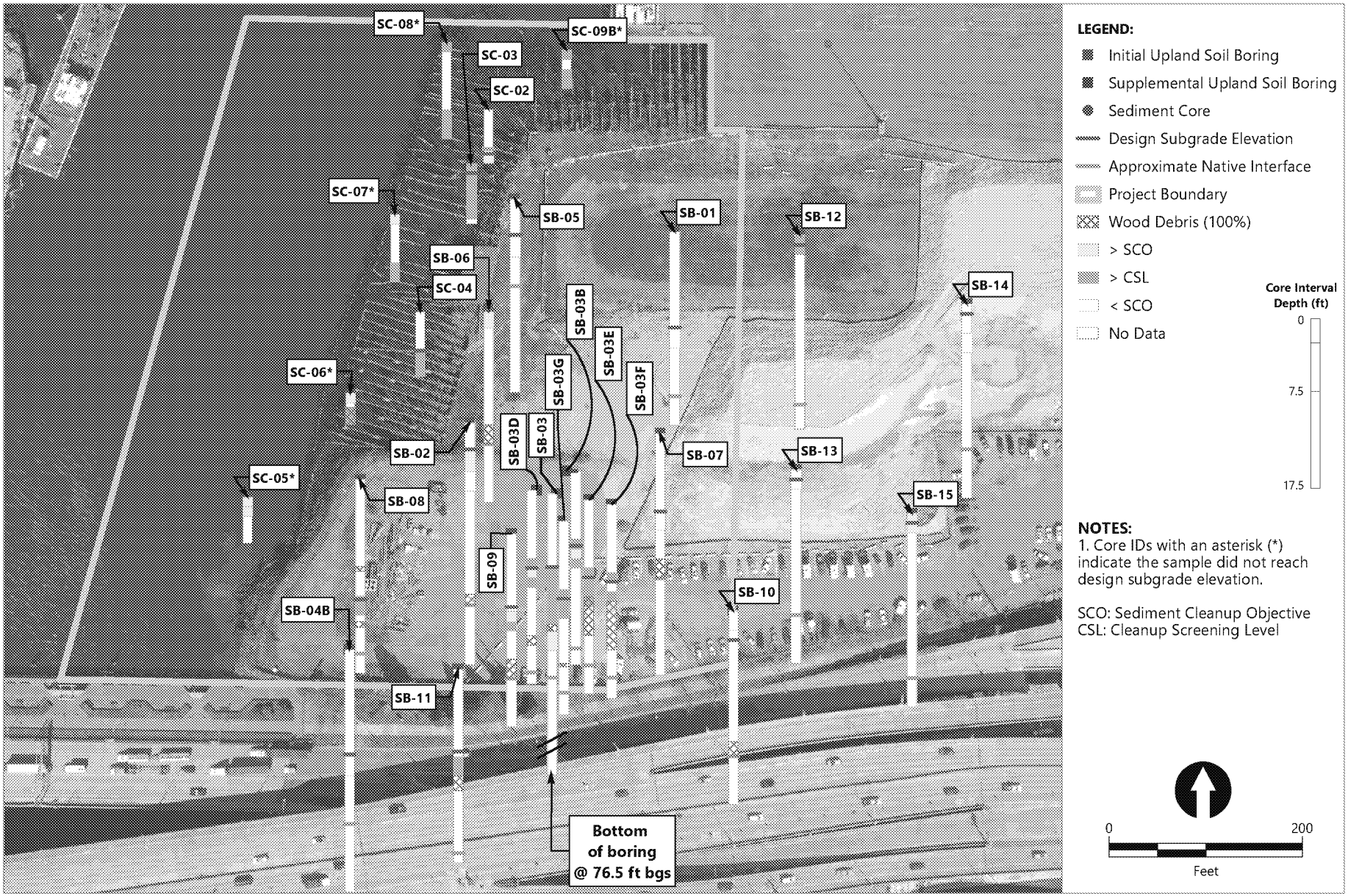
Figure 1
Vicinity Map
Data Report: Soil and Subsurface Sediment Characterization
Port of Seattle T-25 South Design Characterization

DRAFT

Publish Date: 2021/01/26, 3:53 PM | User: adowell
Filepath: \\orcad\qa\Jobs\Porto\Seattle_0003\SD01_T25_Wetland\Maps\DataReport\AQ_PoS_SD01_T25_ActualSampling_201903_DR.mxd

ANCHOR QEA

Figure 2
Actual Sampling Locations
Data Report: Soil and Subsurface Sediment Characterization
Port of Seattle T-25 South Design Characterization

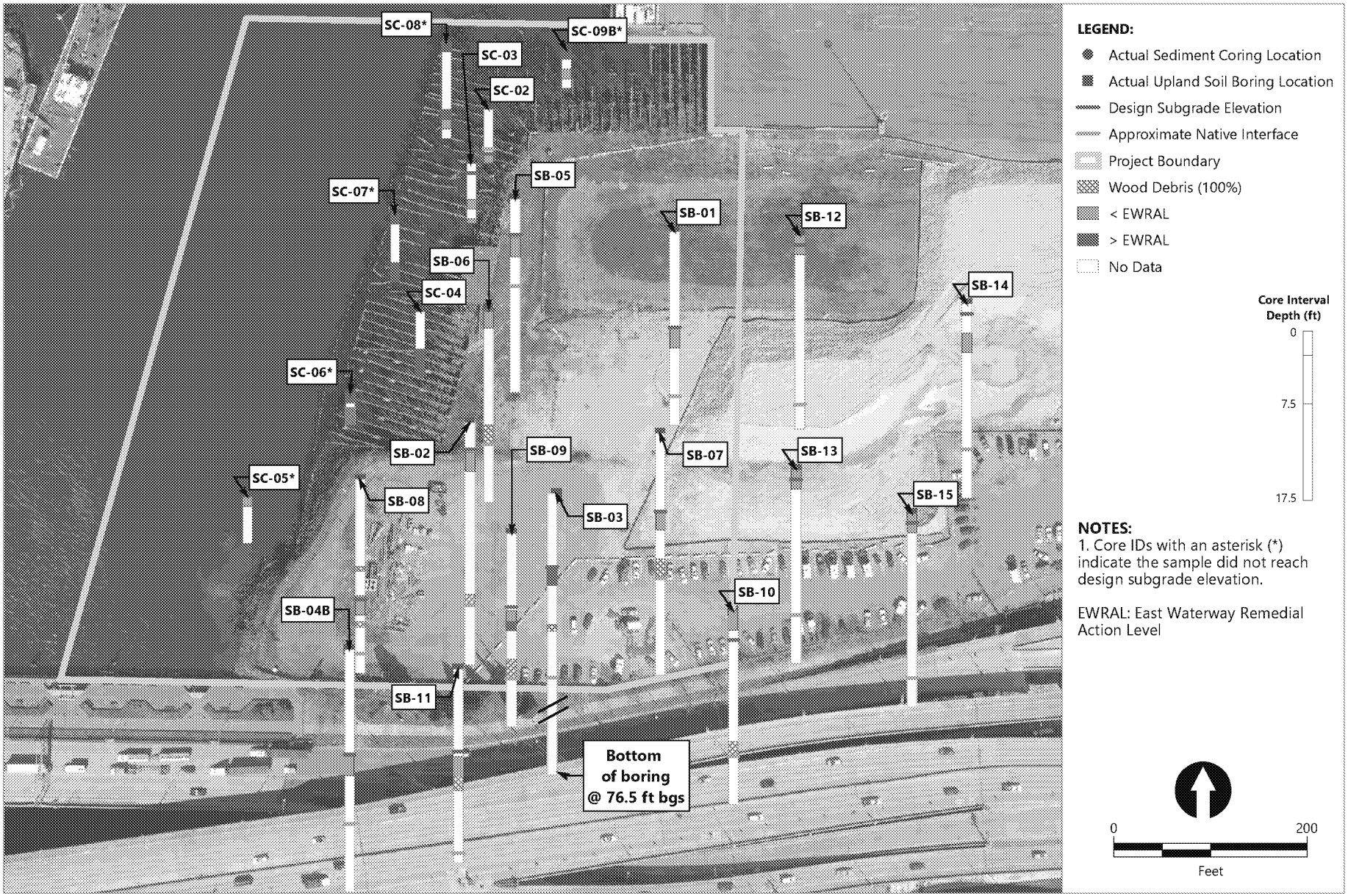


DRAFT

Publish Date: 2021/01/26, 3:57 PM | User: sdowell
Filepath: \\vercas\gis\Jobs\PortofSeattle_0003\SD01_T25_Wetland\Maps\DataReport_SoilSedimentCharacterization\AQ_Figure03_UplandShorelineInvestigationResults.mxd

ANCHOR QEA

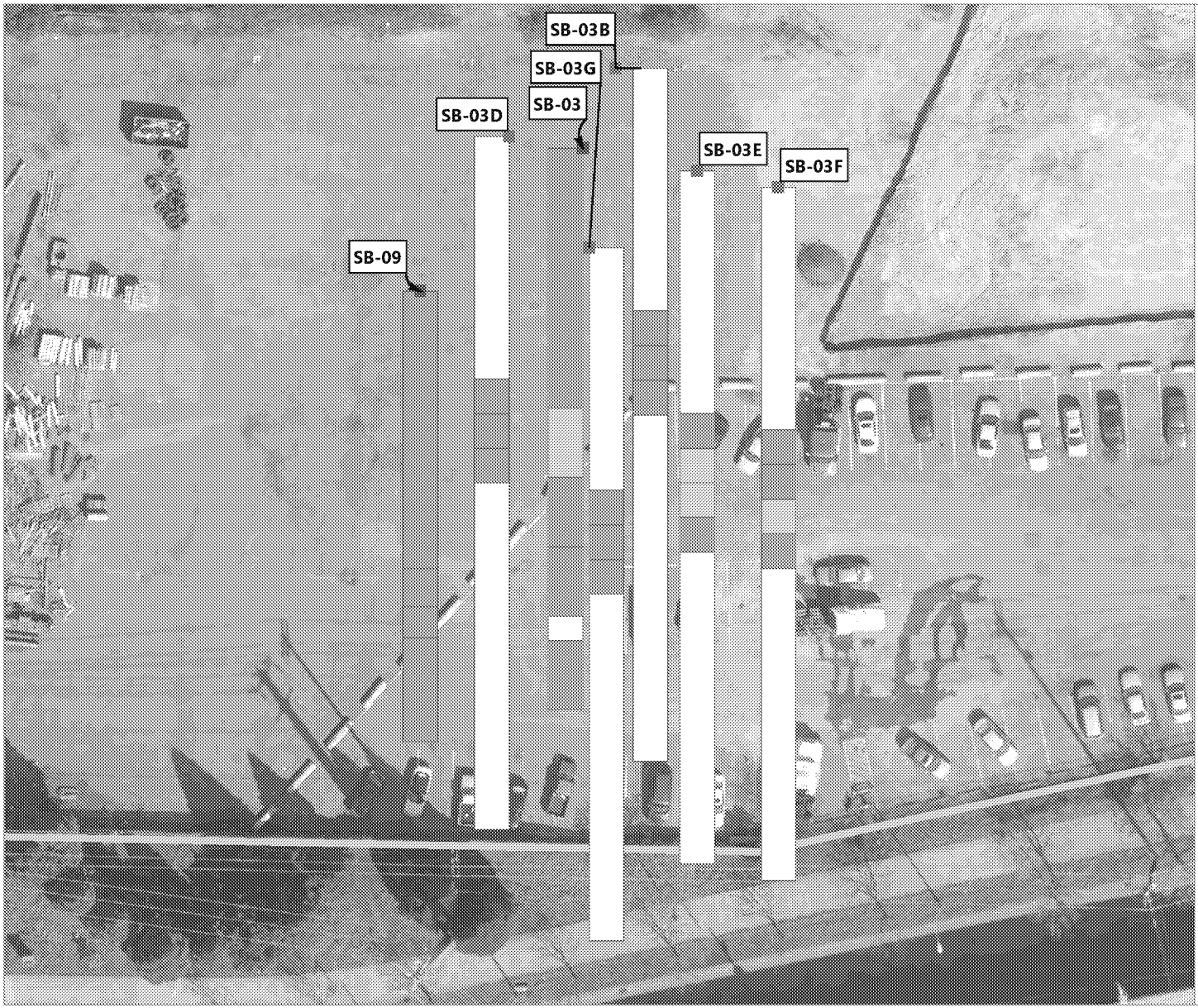
Figure 3
Upland and Shoreline Investigation Results
Data Report: Soil and Sediment Characterization
Port of Seattle T-25 South Design Characterization



Publish Date: 2021/01/26, 3:57 PM | User: sdowell
Filepath: \\ercsc\gis\Jobs\PortofSeattle_0003\SD01_T25_Wetland\Maps\DataReport_SoilSedimentCharacterization\AQ_Figure04_DioxinTEQs.mxd

ANCHOR QEA

Figure 4
Upland and Shoreline Investigation Dioxin/Furan Results
Data Report: Soil and Sediment Characterization
Port of Seattle T-25 South Design Characterization



LEGEND:

- Project Boundary
- Soil Boring Location (2019)
- PCB Delineation Location (2020)
- PCBs < 50,000 µg/kg
- PCBs > 50,000 µg/kg
- No Data

NOTE:
1. 50,000 µg/kg is the Toxic Substances Control Act (TSCA) threshold for PCB remediation waste.

PCBs: Polychlorinated biphenyls

µg/kg: micrograms per kilogram

Core Interval Depth (ft)

0
5
10
15

0 60
Feet

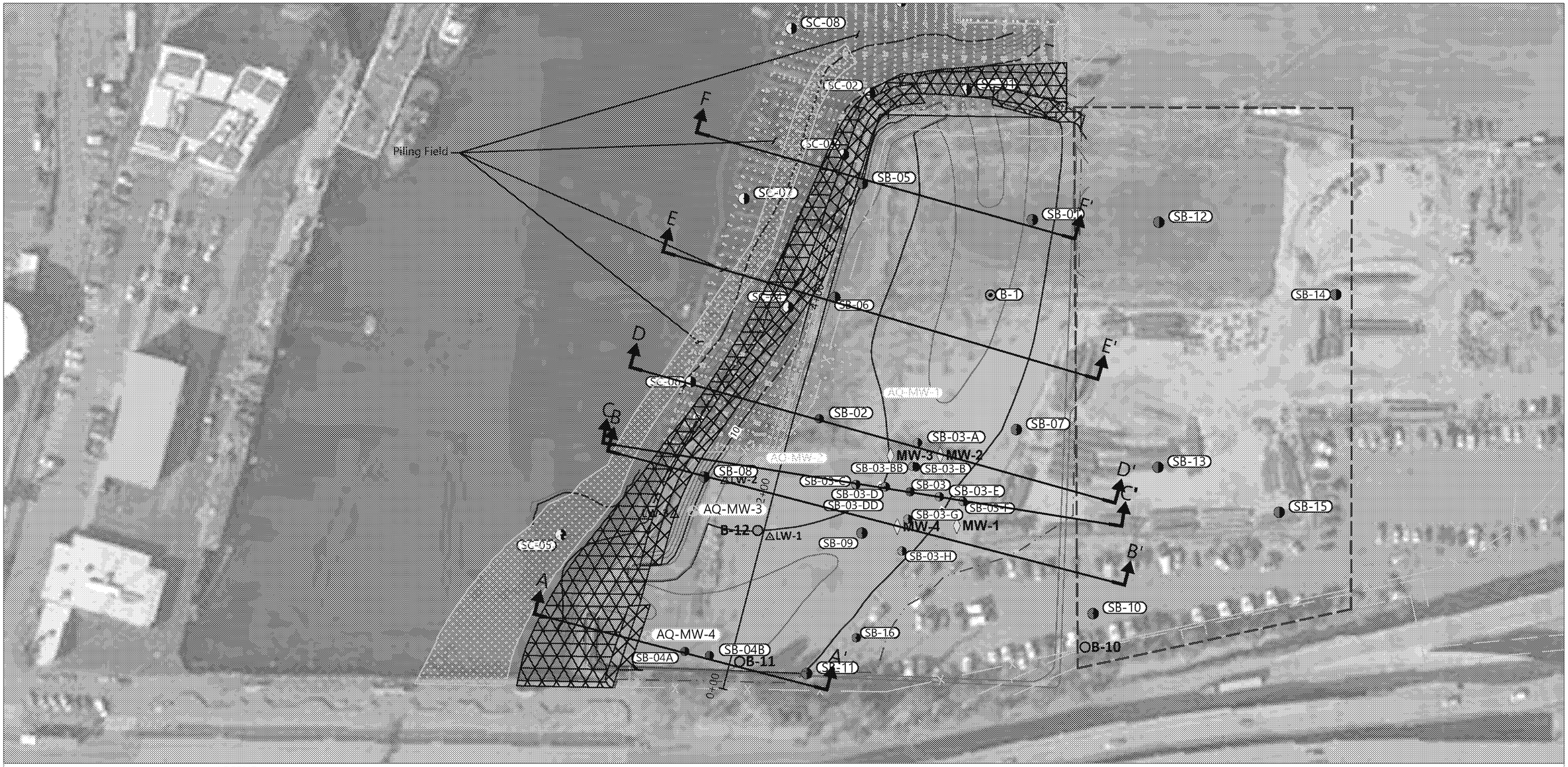
DRAFT

Publish Date: 2021/01/26, 3:57 PM | User: sdowell
Filepath: \\vercas\gis\Jobs\PortofSeattle_0003\SD01_T25_Wetland\Maps\DataReport_SoilSedimentCharacterization\AQ_Figure05_PCB_Delineation.mxd

ANCHOR QEA

Figure 5
Upland PCB Delineation Results
Data Report: Soil and Sediment Characterization
Port of Seattle T-25 South Design Characterization

DRAFT



SOURCE: Drawing prepared from survey by The Watershed Company. Bathymetry from the Port of Seattle, dated January-March 2018.
HORIZONTAL DATUM: Washington State Plane North, NAD83, U.S. Feet.
VERTICAL DATUM: Mean Lower Low Water (MLLW).

LEGEND

- Existing OHWM
- Proposed Contour (2-foot Interval)
- Proposed Mean Higher High Water
- Proposed Berm
- Proposed Intertidal Shelf
- Proposed Kelp Bench
- Potential Excavation Area
- A — Cross Section Location and Designation

UPLAND BORING LOCATIONS

- Chemistry
- Chemistry and Geotechnical
- PCB Delineation

SEDIMENT CORING LOCATIONS

- Sample Location

HISTORICAL BORINGS

- Geotech Boring (Shannon and Wilson, 2008)
- Soil Boring (Blymyer, 1989)
- Soil Boring and Monitoring Well (Landau, 1990)
- Soil Boring and Monitoring Well (Sweet-Edwards/Emcon, 1990)
- Soil Boring and Monitoring Well (Anchor QEA, 2012)
- Surface Sediment Composite (Anchor QEA, 2012)

0 100 Feet

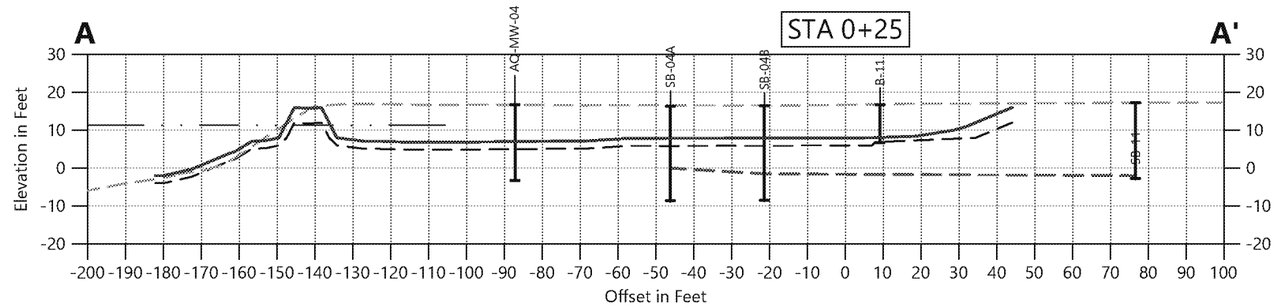
Publish Date: 2020/12/10 10:02 AM | User: cherwett
Filepath: K:\Projects\0005-Port of Seattle\PO5 SD-01 - T-25 Wetland\0003-WK-011 (Post-Sample XS With Updated Design.dwg F6_Land

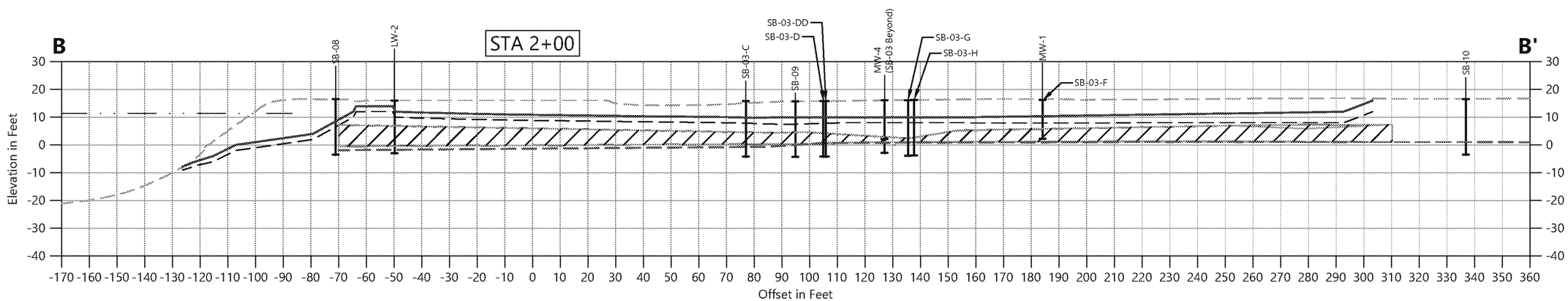
ANCHOR QEA

Figure 6
Project Elevation Changes

Data Report: Soil and Subsurface Sediment Characterization
Port of Seattle T-25 South Design Characterization

DRAFT





SOURCE: Drawing prepared from survey by The Watershed Company.
Bathymetry from the Port of Seattle, dated January-March 2018.
HORIZONTAL DATUM: Washington State Plane North, NAD83, U.S. Feet.
VERTICAL DATUM: Mean Lower Low Water (MLLW).

LEGEND:

- Existing Grade
- Approximate Existing MHHW (Elevation 11.3' MLLW)
- Proposed Subgrade
- 100% Wood Debris (Observed)
- Approximate Native Interface
- Approximate Habitat Restoration Design Surface (Port of Seattle)

0 40
Feet

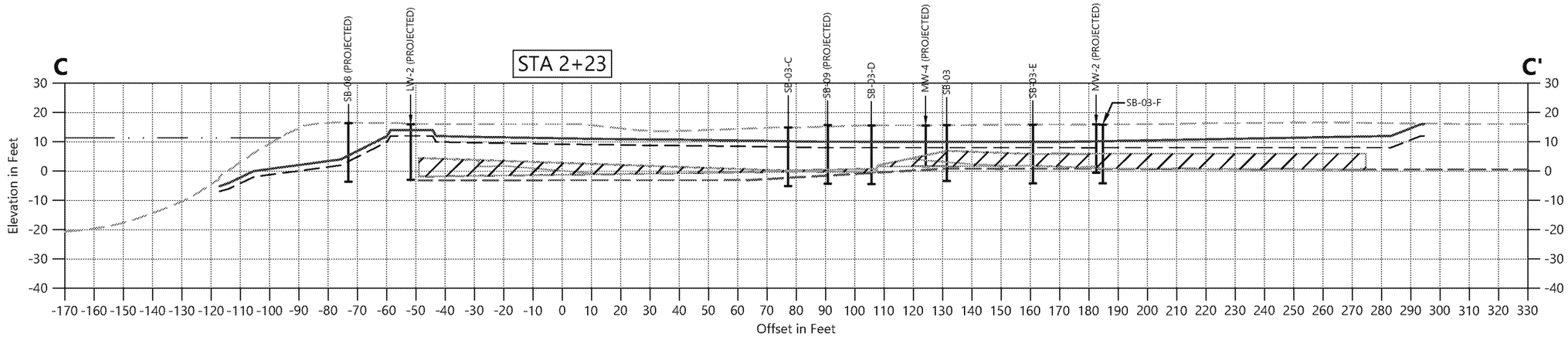
Publish Date: 2020/12/10 10:02 AM | User: cherwett
Filepath: K:\Projects\0005-Port of Seattle\PGS SD-01 - T-25 Wetland\0003-WK-011 (Post-Sample XS With Updated Design).dwg Figure 6a

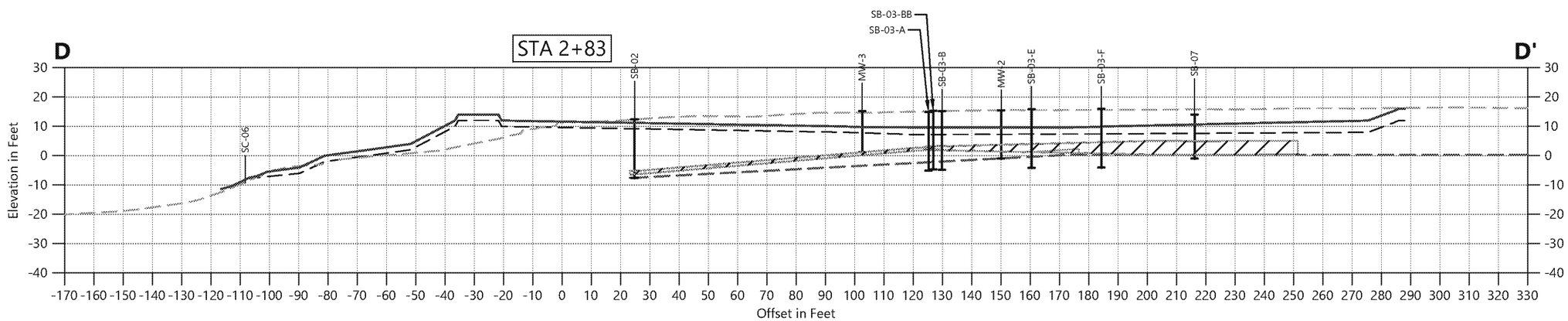
ANCHOR QEA

Figure 6a
Cross Sections A and B

Data Report: Soil and Subsurface Sediment Characterization
Port of Seattle T-25 South Design Characterization

DRAFT





SOURCE: Drawing prepared from survey by The Watershed Company. Bathymetry from the Port of Seattle, dated January-March 2018.
HORIZONTAL DATUM: Washington State Plane North, NAD83, U.S. Feet.
VERTICAL DATUM: Mean Lower Low Water (MLLW).

LEGEND:

- Existing Grade
- Approximate Existing MHHW (Elevation 11.3' MLLW)
- Proposed Subgrade
- 100% Wood Debris (Observed)
- Approximate Native Interface
- Approximate Habitat Restoration Design Surface (Port of Seattle)

0 40
Feet

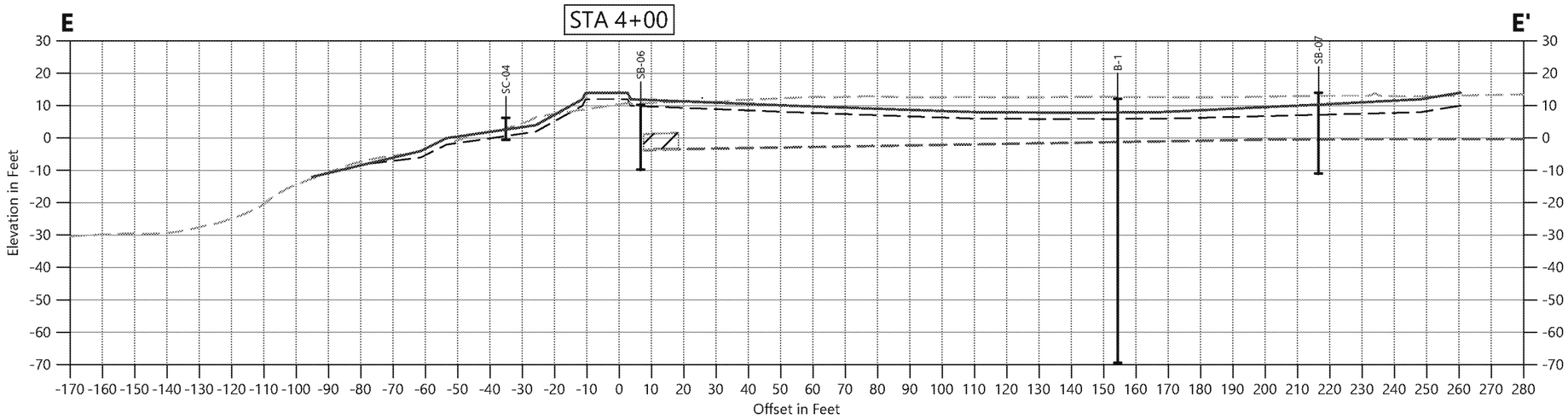
Publish Date: 2020/12/10 10:02 AM | User: cherwett
Filepath: K:\Projects\0003-Port of Seattle\P05 SD-01 - T-25 Wetland\0003-WR-013 (Post-Sample XS_to PCE).dwg Figure 6b

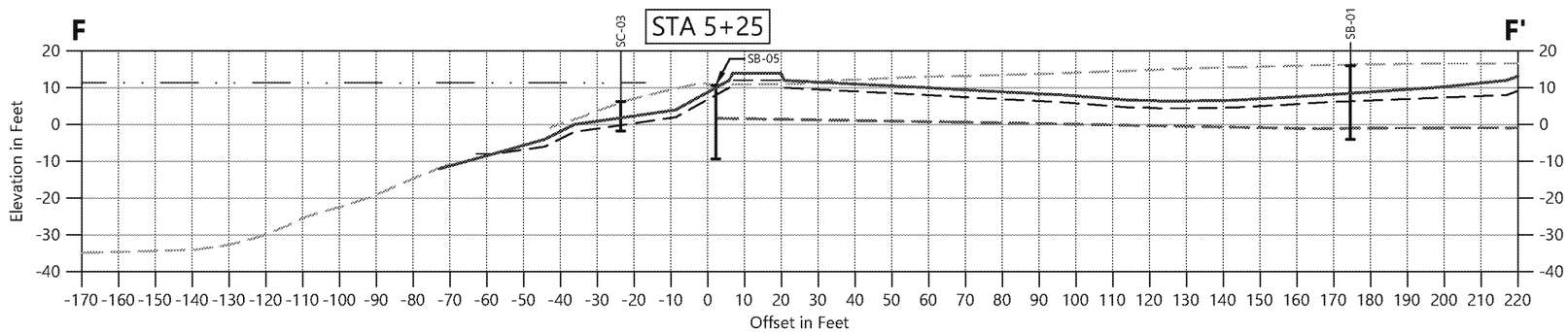
ANCHOR QEA

Figure 6b
Cross Sections C and D

Data Report: Soil and Subsurface Sediment Characterization
Port of Seattle T-25 South Design Characterization

DRAFT





SOURCE: Drawing prepared from survey by The Watershed Company. Bathymetry from the Port of Seattle, dated January-March 2018.
HORIZONTAL DATUM: Washington State Plane North, NAD83, U.S. Feet.
VERTICAL DATUM: Mean Lower Low Water (MLLW).

LEGEND:

- Existing Grade
- Approximate Existing MHHW (Elevation 11.3' MLLW)
- Proposed Subgrade
- 100% Wood Debris (Observed)
- Approximate Native Interface
- Approximate Habitat Restoration Design Surface (Port of Seattle)

0 40
Feet

Publish Date: 2020/12/10 10:02 AM | User: chewett
Filepath: K:\Projects\0003-Port of Seattle\P03 SD-01 - T-25 Wetland\0003-WK-011 (Post-Sample XS With Updated Design).dwg Figure 6c

ANCHOR QEA

Figure 6c
Cross Section E and F

Data Report: Soil and Subsurface Sediment Characterization
Port of Seattle T-25 South Design Characterization

Appendix A
Field Data

Field data provided separately due to large file sizes.

Appendix B
Laboratory Data Reports

Laboratory reports provided separately due to large file sizes.

Appendix C
Data Validation Reports

Data validation reports provided separately due to large file sizes.

Appendix D
QAPP Addendum No. 2

Addendum provided separately due to large file sizes.